



Product Specifications Reference Lenovo® ThinkCentre Desktops

Decemeber 2013 - Version 447



Lenovo ThinkCentre M92/M92p
(Tiny, Small, and Tower Form Factors with Lenovo ThinkVision Monitor)

Visit www.lenovo.com/psref for the latest version

Recently Launched Think Accessories



ThinkPad Compact Bluetooth Keyboard with Trackpoint
(PN: 0B47189)



Lenovo Wireless TouchPad for Windows 8
(PN: 0A33909)



ThinkPad Noise Cancelling Earbuds
(PN: 0B47313)

Additional Think Accessories



ThinkPad USB 3.0 Portable Secure HDD (500GB , 750GB, 1TB)
(PN: 0A65619, 0A65616, 0A65621)



Kensington MicroSaver Security Cable Lock from Lenovo
(PN: 73P2582)



Lenovo Ultralim Wireless Keyboard and Mouse Combo
(PN: 0A34032)

**AMPLIFY YOUR
DO MACHINE**

LENOVO THINK ACCESSORIES

Lenovo Quick Pick (<http://www.lenovoquickpick.com/>) is an options compatibility configurator for Lenovo systems.

For more information on the various ThinkCentre systems, please see below :

<u>ThinkCentre M72e</u> M72e Tiny 4004/3264/3267 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m72e-tiny M72e Small 0967/3598/3660/3664 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m72e-sff M72e Tower 0958/3675/3597/3655/3662 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m72e-tower	<u>ThinkCentre M91/M91p</u> M91/M91p Eco USFF 7519/7516/0266/5067 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m91-m91p-eco-usff M91/M91p Small 4480/4518/7033 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m91-m91p-sff M91/M91p Tower 7052/4524/7034 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m91-m91p-tower
<u>ThinkCentre M72z</u> M72z AIO 3543/3548/3554/3558/ www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m72z-aio	<u>ThinkCentre M92/M92p</u> M92/M92p Tiny 3234/3229/2121/3243/3238/3237 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m92-m92p-tiny
<u>ThinkCentre M77</u> M77 Small 2227/2209/1996/1997 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m77-sff M77 Tower 1995/1990/1982/1983 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m77-tower	M92/M92p Small 3207/2988/3209/3227 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m92-m92p-sff M92/M92p Tower 3208/2992/3212/3228 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m92-m92p-tower
<u>ThinkCentre M78</u> M78 Small 5100/4865/2113/2114 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m78-sff M78 Tower 2111/1766/1562/1565 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m78-tower	<u>ThinkCentre M92z</u> M92z AIO 3280/3291/3296/32989/3315/3318/3325/3327/3311/3314/3329 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m92z-aio
<u>ThinkCentre M82</u> M82 Small 3306/3395/2756/2929 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m82-sff M82 Tower 3302/3392/2697/2742 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m82-tower	<u>ThinkCentre Edge 72</u> Edge 72 Small 3493 www.lenovoquickpick.com/usa/system/thinkcentre/edge-series/edge-72-sff Edge 72 Tower 3484 www.lenovoquickpick.com/usa/system/thinkcentre/edge-series/edge-72-tower
<u>ThinkCentre M82</u> M82 Small 3306/3395/2756/2929 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m82-sff M82 Tower 3302/3392/2697/2742 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m82-tower	<u>ThinkCentre Edge 92z</u> Edge 92z AIO 3396/3399/3418/3426/3414/3417 www.lenovoquickpick.com/usa/system/thinkcentre/edge-series/edge-92z-aio
<u>ThinkCentre M90z</u> M90z AIO 3429/5205 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m90z-aio	



Lenovo ThinkCentre M32 Thin Client
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M32 Thin Client



Lenovo ThinkCentre M32 Thin Client



Lenovo ThinkCentre M32 Thin Client



Lenovo ThinkCentre M32 Thin Client
(inside view)



Lenovo ThinkCentre M32 Thin Client

ThinkCentre® M32 (10BV) - Thin Client (TopSeller) - 1-year depot

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 5.2 Global	OS preload	Ann date (mm/dd/yy)
10BV0006US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 09/03/13
10BV0009US	Celeron 807	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 09/03/13
10BV0007US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 09/03/13
10BV0008US	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 09/03/13
10BV000EUS	Celeron 847	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 12/10/13
10BV000FUS	Celeron 847	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 12/10/13
10BV000AUS	Celeron 847	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 12/10/13
10BV000BUS	Celeron 847	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 12/10/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year depot warranty

Positioning	Mainstream Thin Client with better security and manageability for the enterprise		Preloaded operating system
Processor	Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Celeron Processor 847 (2 cores / 2 threads, 1.1GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		<i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based)
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller		Preloaded applications (only some listed) - WES 7 only: ● Intel Management Engine Components ● RDP Client ● Citrix Client ● VMware Client ● Internet Explorer 9 ● Java ● Flash ● .Net Framework ● Microsoft® Silverlight ● Echo Agent ● Ultra VNC ● Adobe Reader ● Intel Manageability Engine Firmware Recovery Agent
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x2048 (DisplayPort) @60Hz; 2560x1600 (VGA) @60Hz Optional DisplayPort to Single-link DVI-D dongle		- LeTOS only: ● xFreeRDP ● Citrix ICA Client ● VMware View Client ● Java ● Mozilla Firefox ● NX NoMachine Client ● X11 Client ● VDI-In-A-Box Java Client ● AnyConnect VPN Client
DP dongle	Optional DisplayPort to Single-link DVI-D dongle		Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card		
Optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset		
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card		
eSATA port	None		
Chipset	Mobile Intel NM70 Express Chipset		
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort		
PCIe Mini Card	None		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec		
Speaker	None		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
VESA mount	Supports VESA 100mm mount standard		
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU		
Machine	● Business black color; USFF (2L) ● Fan-less, Cable-less Design ● (Without stand) 2.2" W X 6.7" D X 8.7" H ● (Without stand) 55mm W X 170mm D X 220mm H ● (Without stand) 3.3 lb (1.48 kg) in maximum configuration		
Protocols	Citrix: Microsoft: VMWare:	ICA, HDX (compatible with XenDesktop and XenApp) RDP, RemoteFX (WES 7 models only), RDS VMware Horizon View through RDP VMware Horizon View through PCoIP	EPEAT™ Gold rating (WES models) ENERGY STAR® 5.2 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models)
Limited Warranty	1-years, depot repair service / service upgrades available		For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US model(s) announced September 3, 2013 or December 10, 2013

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(CLVL1-3) December 2013

ThinkCentre® M32 (10BV) - Thin Client (TopSeller) - 1-year onsite

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 5.2 Global	OS preload	Ann date (mm/dd/yy)	
10BV0005US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	09/03/13
10BV0001US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7	09/03/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	Mainstream Thin Client with better security and manageability for the enterprise Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		Preloaded operating system <i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based)
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller		Preloaded applications (only some listed)
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x2048 (DisplayPort)@60Hz; 2560x1600 (VGA)@60Hz</i> Optional DisplayPort to Single-link DVI-D dongle		- WES 7 only: ● Intel Management Engine Components ● RDP Client ● Citrix Client ● VMware Client ● Internet Explorer 9 ● Java ● Flash ● .Net Framework ● Microsoft® Silverlight ● Echo Agent ● Ultra VNC ● Adobe Reader ● Intel Manageability Engine Firmware Recovery Agent
DP dongle			
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card		
Optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset		
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card		
eSATA port	None		
Chipset	Mobile Intel NM70 Express Chipset		
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort		
PCIe Mini Card	None		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec		
Speaker	None		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
VESA mount	Supports VESA 100mm mount standard		
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU		
Machine	● Business black color; USFF (2L) ● Fan-less, Cable-less Design ● (Without stand) 2.2" W X 6.7" D X 8.7" H ● (Without stand) 55mm W X 170mm D X 220mm H ● (Without stand) 3.3 lb (1.48 kg) in maximum configuration		Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website
Protocols	Citrix: Microsoft: VMWare:	ICA, HDX (compatible with XenDesktop and XenApp) RDP, RemoteFX (WES 7 models only), RDS VMware Horizon View through RDP VMware Horizon View through PCoIP	Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Serial port and parallel port disablement EPEAT™ Gold rating (WES models) ENERGY STAR® 5.2 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models)
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced September 3, 2013

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(CLVL1-1) September 2013

ThinkCentre® M32 (10BV) - Thin Client (TopSeller) - 3-year onsite

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 5.2 Global	OS preload	Ann date (mm/dd/yy)
10BV0004US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	09/03/13
10BV0000US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	09/03/13
10BV0002US	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	09/03/13
10BV0000GUS	Celeron 847	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	12/10/13
10BV000HUS	Celeron 847	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	12/10/13
10BV000CUS	Celeron 847	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	12/10/13
10BV000DUS	Celeron 847	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	12/10/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Mainstream Thin Client with better security and manageability for the enterprise Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Celeron Processor 847 (2 cores / 2 threads, 1.1GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		Preloaded operating system <i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based)
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller		Preloaded applications (only some listed) - WES 7 only: ● Intel Management Engine Components ● RDP Client ● Citrix Client ● VMware Client ● Internet Explorer 9 ● Java ● Flash ● .Net Framework ● Microsoft® Silverlight ● Echo Agent ● Ultra VNC ● Adobe Reader ● Intel Manageability Engine Firmware Recovery Agent
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x2048 (DisplayPort) @60Hz; 2560x1600 (VGA) @60Hz Optional DisplayPort to Single-link DVI-D dongle		- LeTOS only: ● xFreeRDP ● Citrix ICA Client ● VMware View Client ● Java ● Mozilla Firefox ● NX NoMachine Client ● X11 Client ● VDI-In-A-Box Java Client ● AnyConnect VPN Client Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website
DP dongle			
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card		
Optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset		
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card		
eSATA port	None		
Chipset	Mobile Intel NM70 Express Chipset		
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort		
PCIe Mini Card	None		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec		
Speaker	None		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
VESA mount	Supports VESA 100mm mount standard		
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU		
Machine	● Business black color; USFF (2L) ● Fan-less, Cable-less Design ● (Without stand) 2.2" W X 6.7" D X 8.7" H ● (Without stand) 55mm W X 170mm D X 220mm H ● (Without stand) 3.3 lb (1.48 kg) in maximum configuration		
Protocols	Citrix: Microsoft: VMWare:	ICA, HDX (compatible with XenDesktop and XenApp) RDP, RemoteFX (WES 7 models only), RDS VMware Horizon View through RDP VMware Horizon View through PCoIP	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US model(s) announced September 3, 2013 or December 10, 2013

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(CLVL1-2) December 2013

ThinkCentre® M32 (10BM) - Thin Client (1-year depot)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁶	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key- board/ Mouse	ENERGY STAR 5.2 Global	OS preload	Ann date (mm/dd/yy)	
10BM0001US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	09/03/13
10BM0004US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7	09/03/13
10BM000MUS	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7	09/03/13
10BM000TUS	Celeron 807	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	12/10/13
10BM0013US	Celeron 847	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	12/10/13
10BM0015US	Celeron 847	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	12/10/13
10BM000YUS	Celeron 847	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7	12/10/13
10BM0010US	Celeron 847	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7	12/10/13

• 1-year depot warranty

Positioning	<i>Mainstream Thin Client with better security and manageability for the enterprise</i>		Preloaded operating system <i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based)
Processor	Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Celeron Processor 847 (2 cores / 2 threads, 1.1GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller		
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x2048 (DisplayPort) @60Hz; 2560x1600 (VGA) @60Hz Optional DisplayPort to Single-link DVI-D dongle		Preloaded applications (only some listed) - WES 7 only: ● Intel Management Engine Components ● RDP Client ● Citrix Client ● VMware Client ● Internet Explorer 9 ● Java ● Flash ● .Net Framework ● Microsoft® Silverlight ● Echo Agent ● Ultra VNC ● Adobe Reader ● Intel Manageability Engine Firmware Recovery Agent - LeTOS only: ● xFreeRDP ● Citrix ICA Client ● VMware View Client ● Java ● Mozilla Firefox ● NX NoMachine Client ● X11 Client ● VDI-In-A-Box Java Client ● AnyConnect VPN Client Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website
DP dongle			
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card		
Optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset		
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card		
eSATA port	None		
Chipset	Mobile Intel NM70 Express Chipset		
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort		
PCIe Mini Card	None		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec		
Speaker	None		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
VESA mount	Supports VESA 100mm mount standard		
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU		
Machine	● Business black color; USFF (2L) ● Fan-less, Cable-less Design ● (Without stand) 2.2" W X 6.7" D X 8.7" H ● (Without stand) 55mm W X 170mm D X 220mm H ● (Without stand) 3.3 lb (1.48 kg) in maximum configuration		
Protocols	Citrix:	ICA, HDX (compatible with XenDesktop and XenApp)	Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Serial port and parallel port disablement EPEAT™ Gold rating (WES models) ENERGY STAR® 5.2 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models) For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
	Microsoft:	RDP, RemoteFX (WES 7 models only), RDS	
	VMWare:	VMware Horizon View through RDP	
		VMware Horizon View through PCoIP	
Limited Warranty	1-years, depot repair service / service upgrades available		

See footnotes for important warranty information

US model(s) announced September 3, 2013 or December 10, 2013

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ThinkCentre® M32 (10BM) - Thin Client (1-year onsite)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 5.2 Global	OS preload	Ann date (mm/dd/yy)	
10BM0000US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	09/03/13
10BM0002US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7	09/03/13

• 1-year limited warranty

Positioning	Processor		Mainstream Thin Client with better security and manageability for the enterprise		Preloaded operating system	
			Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		Some: Genuine Windows® Embedded Standard 7 (WES 7)	
Memory			4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller		Some: LeTOS (Lenovo Terminal Operating System, Linux-based)	
Graphics			Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x2048 (DisplayPort)@60Hz; 2560x1600 (VGA)@60Hz Optional DisplayPort to Single-link DVI-D dongle		Preloaded applications (only some listed)	
DP dongle					- WES 7 only:	
Flash Memory			1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card		● Intel Management Engine Components	
Optical			None		● RDP Client	
SATA controller			Serial ATA, SATA 3.0Gb/s support, integrated in chipset		● Citrix Client	
Onboard SATA			one SATA 3.0Gb/s connector for DOM Card		● VMware Client	
eSATA port			None		● Internet Explorer 9	
Chipset			Mobile Intel NM70 Express Chipset		● Java	
Front ports			Four USB 2.0, microphone (3.5mm), headphone (3.5mm)		● Flash	
Rear ports			Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort		● .Net Framework	
PCIe Mini Card			None		● Microsoft® Silverlight	
PCIe WLAN			None		● Echo Agent	
Bluetooth			None		● Ultra VNC	
Audio			High Definition (HD) Audio, Realtek® ALC662-VD codec		● Adobe Reader	
Speaker			None		● Intel Manageability Engine Firmware Recovery Agent	
IEEE 1394			None		- LeTOS only:	
Ethernet			One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®		● xFreeRDP	
Intel AMT			None		● Citrix ICA Client	
Modem			None		● VMware View Client	
Security chip			None		● Java	
Keyboard			Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		● Mozilla Firefox	
Mouse			Enhanced Optical USB Mouse, black, Lenovo logo		● NX NoMachine Client	
Floor Stand			System floor stand for vertical orientation		● X11 Client	
VESA mount			Supports VESA 100mm mount standard		● VDI-In-A-Box Java Client	
Power supply			65 watts adapter, autosensing 100-240V, 85% PSU		● AnyConnect VPN Client	
Machine			● Business black color; USFF (2L) ● Fan-less, Cable-less Design ● (Without stand) 2.2" W X 6.7" D X 8.7" H ● (Without stand) 55mm W X 170mm D X 220mm H ● (Without stand) 3.3 lb (1.48 kg) in maximum configuration		Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website	
Protocols			Citrix: ICA, HDX (compatible with XenDesktop and XenApp) Microsoft: RDP, RemoteFX (WES 7 models only), RDS VMWare: VMware Horizon View through RDP VMware Horizon View through PCoIP		Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Serial port and parallel port disablement	
Limited Warranty			1-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		EPEAT™ Gold rating (WES models) ENERGY STAR® 5.2 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models) For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US model(s) announced September 3, 2013

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ThinkCentre® M32 (10BM) - Thin Client (3-year onsite)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 5.2 Global	OS preload	Ann date (mm/dd/yy)
10BM0006US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 09/03/13
10BM0005US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 09/03/13
10BM0003US	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 09/03/13
10BM0008US	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 09/03/13
10BM000RUS	Celeron 847	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 12/10/13
10BM0014US	Celeron 847	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 12/10/13
10BM0011US	Celeron 847	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 12/10/13
10BM0012US	Celeron 847	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES52	None	WES 7 12/10/13

●3-year limited warranty

Positioning Processor	Mainstream Thin Client with better security and manageability for the enterprise Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Celeron Processor 847 (2 cores / 2 threads, 1.1GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		Preloaded operating system <i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based)
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller		Preloaded applications (only some listed) - WES 7 only: ● Intel Management Engine Components ● RDP Client ● Citrix Client ● VMware Client ● Internet Explorer 9 ● Java ● Flash ● .Net Framework ● Microsoft® Silverlight ● Echo Agent ● Ultra VNC ● Adobe Reader ● Intel Manageability Engine Firmware Recovery Agent
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x2048 (DisplayPort) @60Hz; 2560x1600 (VGA) @60Hz Optional DisplayPort to Single-link DVI-D dongle		- LeTOS only: ● xFreeRDP ● Citrix ICA Client ● VMware View Client ● Java ● Mozilla Firefox ● NX NoMachine Client ● X11 Client ● VDI-In-A-Box Java Client ● AnyConnect VPN Client
DP dongle	Optional DisplayPort to Single-link DVI-D dongle		Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card		
Optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset		
Onboard SATA eSATA port	one SATA 3.0Gb/s connector for DOM Card		
Chipset	Mobile Intel NM70 Express Chipset		Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Serial port and parallel port disablement
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)		EPEAT™ Gold rating (WES models) ENERGY STAR® 5.2 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models)
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort		
PCIe Mini Card	None		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec		
Speaker	None		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
VESA mount	Supports VESA 100mm mount standard		
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU		
Machine	● Business black color; USFF (2L) ● Fan-less, Cable-less Design ● (Without stand) 2.2" W X 6.7" D X 8.7" H ● (Without stand) 55mm W X 170mm D X 220mm H ● (Without stand) 3.3 lb (1.48 kg) in maximum configuration		
Protocols	Citrix: Microsoft: VMWare:	ICA, HDX (compatible with XenDesktop and XenApp) RDP, RemoteFX (WES 7 models only), RDS VMware Horizon View through RDP VMware Horizon View through PCoIP	
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information

US model(s) announced September 3, 2013 or December 10, 2013

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(CLVL1-5) December 2013

ThinkCentre® M32 (10BM) - Thin Client (GMP)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 5.2	Global (G) GMP (P)	OS preload	Ann date (mm/dd/yy)
10BM0009US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	DP to DVI	Floor stand	USB	None	G P	LeTOS	09/03/13
10BM000AUS	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	DP to DVI	Floor stand	USB	ES52	G P	WES 7	09/03/13
10BM000BUS	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	DP to DVI	Floor stand	USB	ES52	G P	WES 7	09/03/13

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- 3-year limited warranty

Positioning Processor	Mainstream Thin Client with better security and manageability for the enterprise Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		Preloaded operating system <i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based)
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller		Preloaded applications (only some listed)
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x2048 (DisplayPort)@60Hz; 2560x1600 (VGA)@60Hz Optional DisplayPort to Single-link DVI-D dongle		- WES 7 only: ● Intel Management Engine Components ● RDP Client ● Citrix Client ● VMware Client ● Internet Explorer 9 ● Java ● Flash ● .Net Framework ● Microsoft® Silverlight ● Echo Agent ● Ultra VNC ● Adobe Reader ● Intel Manageability Engine Firmware Recovery Agent
DP dongle			
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card		
Optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset		
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card		
eSATA port	None		
Chipset	Mobile Intel NM70 Express Chipset		
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort		
PCIe Mini Card	None		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec		
Speaker	None		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
VESA mount	Supports VESA 100mm mount standard		
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU		
Machine	● Business black color; USFF (2L) ● Fan-less, Cable-less Design ● (Without stand) 2.2" W X 6.7" D X 8.7" H ● (Without stand) 55mm W X 170mm D X 220mm H ● (Without stand) 3.3 lb (1.48 kg) in maximum configuration		Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website
Protocols	Citrix: Microsoft: VMWare:	ICA, HDX (compatible with XenDesktop and XenApp) RDP, RemoteFX (WES 7 models only), RDS VMware Horizon View through RDP VMware Horizon View through PCoIP	Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Serial port and parallel port disablement EPEAT™ Gold rating (WES models) ENERGY STAR® 5.2 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models)
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced September 3, 2013

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Lenovo ThinkCentre M72e Tiny
with Optional Serial Port



Lenovo ThinkCentre M72e Tiny, Small, and Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M72e Small



Lenovo ThinkCentre M72e Tiny
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M72e Tower



Lenovo ThinkCentre M72e Tiny
with External Optical Box

ThinkCentre® M72e Tiny (4004) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
4004-A1U	i3-2120T	4GBx1	320G 5400	DVD±RW	HD 2000	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
✕ 4004-A2U	G630T	4GBx1	320G 5400	DVD±RW	Intel HD	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
✕ 4004-A7U	G630T	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Pro 64 06/05/12
4004-A9U	i3-2120T	4GBx1	500G 5400	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 64 06/05/12
4004-B2U	i3-2120T	4GBx1	320G 5400	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 64 06/05/12
4004-C3U	i3-2120T	4GBx1	500G 7200	DVD±RW	HD 2000	None	Intel 2230 + BT	None	None	Mount	ES52	None	Pro 64 06/19/12
4004-C4U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 2230 + BT	None	Stand	Mount	ES52	None	Pro 64 06/19/12
4004-B8U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 64 07/10/12
4004-B5U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 32 07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G630T Processor (2 cores / 2 threads, 2.3GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Core™ i3-2120T Processor (2 cores / 4 threads, 2.6GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64
Implementation			Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>		• Rescue and Recovery™ • Password Manager Preloaded applications (only some listed)
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>		• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
DP dongle	None		
Disk	SATA 3.0Gb/s, 2.5" Wide		
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	<i>Some:</i> System floor stand for vertical orientation		
VESA mount	Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US models announced June 5, June 19, or July 10, 2012
 ✕ US model(s) withdrawn effective November 2013

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Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
4004-A8U	i5-3470T	4GBx1	750G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	06/05/12
4004-B1U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	06/05/12
4004-B4U	i5-3470T	4GBx2	750G 5400	None	HD 2500	None	None	None	Stand	None	ES52	None	Pro 64	06/05/12
4004-C1U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	Intel 2230 + BT	None	Stand	Mount	ES52	None	Pro 64	06/19/12
4004-C2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Pro 64	06/19/12
4004-B7U	i5-3470T	2GBx1	320G 7200	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	07/10/12
4004-B6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Pro 64	07/10/12
4004-E7U	i3-3220T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	09/04/12
4004-E8U	i3-3220T	4GBx1	500G 5400	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate
Processor	Intel® Core™ i3-3220T Processor (2 cores / 4 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)		
DP dongle	None		
Disk	SATA 3.0Gb/s, 2.5" Wide		
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Some: System floor stand for vertical orientation		
VESA mount	Some: Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information

US models announced June 5, June 19, July 10, or September 4, 2012

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(MOSI1-2) September 2012

ThinkCentre® M72e Tiny (4004) - TopSeller (Thin Client)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
✕ 4004-D1U	G460	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Emb 32	07/10/12
✕ 4004-E9U	G640T	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Emb 32	08/14/12
4004-K4U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	Intel 105	None	Stand	None	ES52	None	Emb 32	03/05/13
✕ 4004-K3U	G640T	2GBx1	8G SSD	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Emb 32	03/05/13
4004-LJU	G470	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	None	ES52	None	Emb 32	06/11/13
4004-LKU	G1610T	2GBx1	8G SSD	None	Intel HD	None	None	None	None	Mount	ES52	None	Emb 32	06/11/13
4004-LGU	G2020T	2GBx1	8G SSD	None	Intel HD	None	None	None	None	Mount	ES52	None	Emb 32	06/11/13
4004-LHU	G2020T	2GBx1	8G SSD	None	Intel HD	None	Intel 2230 + BT	None	None	Mount	ES52	None	Emb 32	06/11/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G470 Processor (1 core / 2 threads, 2.0GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G1610T Processor (2 core / 2 threads, 2.3GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G2020T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player	
Implementation				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>			
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz</i>			
DP dongle	None			
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide			
External optical	None			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar			
eSATA port	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement	
Speaker	Internal speaker for business audio			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	<i>Some:</i> System floor stand for vertical orientation			
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard			
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant	
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)		Supports ThinkVantage Technologies	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information

US models announced July 10, 2012, August 14, 2012, March 5, 2013, or June 11, 2013

✕ US model(s) withdrawn effective November 2013

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(MOSI1-22) June 2013

ThinkCentre® M72e Tiny (4004) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
4004-C6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win8 Pro64	10/23/12
4004-C7U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win8 Pro64	10/23/12
4004-C8U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Win8 Pro64	10/23/12
4004-F2U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Win8 Pro64	10/23/12
4004-F3U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win8 Pro64	10/23/12
4004-G6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-G7U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 105	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-G8U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-F1U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	Intel 105	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-H3U	i3-3220T	4GBx1	500G 5400	None	HD 2500	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	11/20/12
4004-H4U	i3-3220T	4GBx1	180G SSD	None	HD 2500	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	11/20/12
4004-J1U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	Intel 105	Serial	Stand	None	ES52	None	Win7 Pro64	12/25/12
4004-L2U	i5-3470T	4GBx2	180G SSD	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64	03/12/13

Positioning Processor	Essential business features, exceptional value Intel® Core™ i3-3220T Processor (2 cores / 4 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit	
Implementation	Processor in LGA1155 socket		Preloaded applications (only some listed)	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		- Windows 7 models	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>		● ThinkVantage® Product Recovery ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● Lenovo® Message Center Plus ● Lenovo SimpleTap ● Adobe® Reader® ● Windows Live™ Essentials ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
DP dongle	None		- Windows 8 models	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide		● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)	
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in		- All models	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		● ThinkVantage System Update ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Microsoft® Office preloaded; purchase a product key to activate ● Skype™	
Onboard SATA eSATA port	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar		Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	<i>Some:</i> System floor stand for vertical orientation			
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard			
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU			
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Mar 12, 2013

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(MOSI1-33) March 2013

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
4004-F1U	G640T	4GBx1	320G 7200	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Win8 Pro64	10/23/12
4004-G3U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	Stand	None	ES52	None	Win7 Pro64	10/23/12
4004-G4U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	10/23/12
4004-G5U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 2230 + BT	None	Stand	None	ES52	None	Win7 Pro64	10/23/12
4004-G9U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-H2U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-H5U	G645T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	11/20/12
4004-J2U	G645T	4GBx1	500G 7200	None	Intel HD	None	Intel 105	Serial	Stand	None	ES52	None	Win7 Pro64	12/25/12
4004-H6U	G1610T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	01/22/13
4004-H7U	G2020T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	01/22/13

Positioning	Essential business features, exceptional value		Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Processor	Intel® Celeron® G1610T Processor (2 cores / 2 threads, 2.3GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G645T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120T Processor (2 cores / 4 threads, 2.6GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook), System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)		
DP dongle	None		
Disk	SATA 3.0Gb/s, 2.5" Wide		
External optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Some: System floor stand for vertical orientation		
VESA mount	Some: Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Jan 22, 2013

⚡ US model withdrawn effective November 2013

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(MOSI1-38) February 2013

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3264-D7U	G630T	4GBx1	320G 5400	DVD±RW	Intel HD	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
3264-A1U	i3-2120T	4GBx1	320G 5400	None	HD 2000	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-A2U	G630T	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-A3U	G530T	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 32 06/05/12
3264-A4U	G460	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 32 06/05/12
3264-A5U	i3-2120T	4GBx1	500G 5400	None	HD 2000	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-P7U	i3-2120T	4GBx1	500G 7200	DVD±RW	HD 2000	None	Intel 105	None	None	Mount	ES52	None	Pro 64 06/19/12
3264-P8U	i3-2120T	4GBx1	500G 7200	DVD±RW	HD 2000	None	Intel 105	None	None	Mount	ES52	None	Prem 64 06/19/12
3264-N2U	i3-2120T	2GBx1	320G 7200	None	HD 2000	None	None	None	Stand	None	ES52	None	Pro 32 07/10/12
3264-N3U	i3-2120T	4GBx1	320G 7200	DVD±RW	HD 2000	None	None	None	None	Mount	ES52	None	Pro 32 07/10/12
3264-N4U	G630T	4GBx1	320G 7200	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 32 07/10/12

●3-year limited warranty

Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G530T Processor (2 cores / 2 threads, 2.0GHz, 2MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium® G630T Processor (2 cores / 2 threads, 2.3GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Core™ i3-2120T Processor (2 cores / 4 threads, 2.6GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket									Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 <i>Some:</i> Genuine Windows 7 Home Premium 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)			
Implementation													
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller												
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)												
DP dongle	None												
Disk	SATA 3.0Gb/s, 2.5" Wide												
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in												
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset												
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar												
eSATA port	None												
Chipset	Intel H61 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models) One PCI Express® Mini Card slot <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1												
PCIe Mini Card													
PCIe WLAN													
Bluetooth	None												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Intel AMT	None												
Modem	None												
Security chip	None												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	<i>Some:</i> System floor stand for vertical orientation												
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard												
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU												
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)									EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available									For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			

ThinkCentre® M72e Tiny (3264) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Chassis Intrusion switch	Security Cable	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3264-A7U	i5-3470T	4GBx1	500G 5400	DVD±RW	None	None	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
3264-B7U	i5-3470T	4GBx1	500G 5400	None	None	None	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-P9U	i5-3470T	4GBx1	500G 7200	DVD±RW	None	Intel 105	None	None	None	None	Mount	ES52	None	Pro 64 06/19/12
3264-Q1U	i5-3470T	4GBx1	500G 7200	DVD±RW	None	Intel 2230 + BT	None	None	None	None	Mount	ES52	None	Pro 64 06/19/12
3264-Q2U	i5-3470T	4GBx1	500G 7200	None	None	Intel 2230 + BT	None	None	None	Stand	Mount	ES52	None	Pro 64 06/19/12
3264-N5U	i5-3470T	4GBx1	500G 7200	None	None	None	None	None	None	Stand	None	ES52	None	Pro 64 07/10/12
3264-V1U	i5-3470T	4GBx2	180G SSD	DVD±RW	None	Intel 2230 + BT	None	Switch	Cable	None	Mount	ES52	None	Pro 64 11/06/12

●3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64			
Implementation											Ready to install applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)										• Rescue and Recovery™ • Password Manager			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)										Preloaded applications (only some listed)			
DP dongle	None										• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)			
Disk	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide													
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	Some: System floor stand for vertical orientation													
VESA mount	Some: Supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU													
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)										Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)			
											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information

US models announced June 5, June 19, July 10, or Nov 6, 2012

✗ US model withdrawn effective February 2013

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(MOSI1-4) November 2012

ThinkCentre® M72e Tiny (3264) - Thin Client

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3264-R3U	G460	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Emb 32 07/10/12
3264-R6U	G640T	4GBx1	8G SSD	None	Intel HD	None	None	None	None	Mount	ES52	None	Emb 32 09/04/12
3264-AMU	G640T	2GBx1	8G SSD	None	Intel HD	None	Intel 2230 + BT	None	Stand	None	ES52	None	Emb 32 03/05/13
3264-YSU	G2020T	2GBx1	8G SSD	None	Intel HD	None	Intel 2230 + BT	None	Stand	None	ES52	None	Emb 32 06/11/13
3264-YTU	G470	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	None	ES52	None	Emb 32 06/11/13

●3-year limited warranty

Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G470 Processor (1 core / 2 threads, 2.0GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G2020T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller		Preloaded operating system Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz</i>		
DP dongle	None		
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide		
External optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H61 Express Chipset		Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	<i>Some:</i> System floor stand for vertical orientation		
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information

US models announced July 10, 2012, September 4, 2012, March 5, 2013, or June 11, 2013

✗ US model(s) withdrawn effective November 2013

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(MOS11-21) June 2013

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Key- board/ Mouse	Global	Preload	Ann date (mm/dd/yy)
3264-Q5U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-R1U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	Stand	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-R2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-R8U	i3-3220T	4GBx1	320G 7200	None	HD 2500	None	None	None	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-R9U	i3-3220T	4GBx1	320G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-S1U	i5-3470T	4GBx1	320G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-S2U	i5-3470T	4GBx1	320G 7200	None	HD 2500	Intel 2230 + BT	None	None	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-T2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-T3U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	None	None	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-T4U	i3-3220T	4GBx1	500G 7200	None	HD 2500	Intel 105	None	None	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-T5U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-T7U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	Stand	None	ES52	USB	None	Win7 Pro64	10/23/12
3264-T9U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 105	None	None	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-U1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-U2U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	Stand	None	ES52	USB	None	Win7 Pro64	10/23/12
3264-U3U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-YRU	i3-3220T	4GBx1	500G 7200	None	HD 2500	Intel 105	None	None	Mount	ES52	2.4G	None	Win8 Pro64	05/28/13

Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Core™ i3-3220T Processor (2 cores / 4 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Implementation															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>														
DP dongle	None														
Disk	SATA 3.0Gb/s, 2.5" Wide														
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in														
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset														
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel H61 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®														
Intel AMT	None														
Modem	None														
Security chip	None														
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	<i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black														
Floor Stand	<i>Some:</i> System floor stand for vertical orientation														
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies				
											For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet				

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Key- board/ Mouse	Global	Preload	Ann date (mm/dd/yy)
3264-R7U	G640T	4GBx1	320G 7200	None	Intel HD	None	None	None	None	Mount	ES52	USB	None	Win8 Pro64	10/23/12
3264-T1U	G645T	4GBx1	500G 5400	DVD±RW	Intel HD	None	None	None	Stand	Mount	ES52	USB	None	Win7 Pro64	10/23/12
3264-T8U	G645T	2GBx1	500G 5400	None	Intel HD	None	None	None	Stand	None	ES52	USB	None	Win7 Pro64	10/23/12
3264-AEU	G645T	4GBx1	500G 7200	None	Intel HD	None	Intel 105	Serial	None	Mount	ES52	USB	None	Win7 Pro64	12/25/12
3264-V2U	G2020T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	USB	None	Win7 Pro64	01/22/13
3264-V3U	G1610T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	USB	None	Win7 Pro64	01/22/13
3264-YQU	G2020T	4GBx1	500G 7200	None	Intel HD	None	Intel 105	None	None	Mount	ES52	2.4G	None	Win8 Pro64	05/28/13

Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Celeron® G1610T Processor (2 cores / 2 threads, 2.3GHz, 2MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G645T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models ● ThinkVantage® Product Recovery ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● Lenovo® SimpleTap ● Adobe® Reader® ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) - Windows 8 models ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) - All models ● ThinkVantage System Update ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Microsoft® Office preloaded; purchase a product key to activate ● Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>	
DP dongle	None	
Disk	SATA 3.0Gb/s, 2.5" Wide	
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset	
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar	
eSATA port	None	
Chipset	Intel H61 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1	
Bluetooth	None	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Intel AMT	None	
Modem	None	
Security chip	None	
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Floor Stand	<i>Some:</i> System floor stand for vertical orientation	
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard	
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU	
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

See footnotes for important warranty information

US models announced Oct 23, 2012, Dec 25, 2012, Jan 22, 2013, or May 28, 2013

⚡ US model withdrawn effective November 2013

ThinkCentre® M72e Tiny (3267) - GMP

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3267-A1U	i5-3470T	4GBx1 1600MHz	320G 5400	DVD±RW	HD 2500	None	None	None	Mount	ES52	G P	Pro 64	06/05/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)		
DP dongle	None		
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm		
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN ⁴	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	None		
VESA mount	Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)		

See footnotes for important warranty information
US model announced June 5, 2012

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(MOSI1-5) June 2012

ThinkCentre® M72e Tiny (3267) - GMP (Thin Client)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
≈ 3267-A2U	G460	2GBx1	8G SSD	None	Intel HD	None	None	Serial	None	None	ES52	G P	Emb 32	07/10/12
≈ 3267-A5U	G465	2GBx1	8G SSD	None	Intel HD	None	None	Serial	None	None	ES52	G P	Emb 32	01/08/13
≈ 3267-A6U	G465	2GBx1	8G SSD	None	Intel HD	None	Intel 105	Serial	None	None	ES52	G P	Emb 32	03/12/13
3267-A7U	G470	2GBx1	8G SSD	None	Intel HD	None	Intel 105	Serial	None	None	ES52	G P	Emb 32	07/09/13
3267-A8U	G470	2GBx1	8G SSD	None	Intel HD	None	None	Serial	None	None	ES52	G P	Emb 32	07/09/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G465 Processor (1 core / 2 threads, 1.9GHz, 1.5MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G470 Processor (1 core / 2 threads, 2.0GHz, 1.5MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz</i>		
DP dongle	None		
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide		
External optical	None		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	None		
Mouse	None		
Floor Stand	None		
VESA mount	None		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

US models announced July 10, 2012, January 8, 2013, March 12, 2013, or July 9, 2013

≈ US model(s) withdrawn effective November 2013

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(MOSI1-23) July 2013

ThinkCentre® M72e Tiny (3267) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3267-A3U	i5-3470T	4GBx1 1600MHz	320G 5400	DVD±RW	HD 2500	None	None	None	Mount	ES52	G P	Win8 Pro64	10/23/12
3267-A4U	i5-3470T	4GBx1 1600MHz	320G 5400	DVD±RW	HD 2500	None	None	None	Mount	ES52	G P	Win7 Pro64	10/23/12

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system		
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit		
Implementation	Processor in LGA1155 socket										<i>Some:</i> Windows 8 Pro 64-bit		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										Preloaded applications (only some listed)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>										- Windows 7 models		
DP dongle	None										• ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)		
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm										- Windows 8 models		
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in										• Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										- All models		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar										• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™		
eSATA port	None												
Chipset	Intel H61 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)												
PCIe Mini Card	One PCI Express® Mini Card slot												
PCIe WLAN ⁴	None												
Bluetooth	None												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Intel AMT	None												
Modem	None												
Security chip	None												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	None												
VESA mount	Supports VESA 75mm and 100mm mount standard												
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU												
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box)												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
US models announced October 23, 2012

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(MOSI1-35) October 2012

ThinkCentre® M72e Small (0967) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
0967-A1U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 64	06/05/12
0967-A7U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

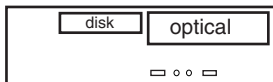
Positioning	Essential business features, exceptional value		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller		
Implementation	Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical		
Slot	Bay 2: 3.5", 1" high, no access, std disk		
	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max)		
	Slot 2: Low Profile, PCIe 2.0 x1		
	Slot 3: Low Profile, PCIe 2.0 x1		
	disk optical		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
	Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)		
	Cisco EnergyWise compatible		
	RoHS-compliant		
	Supports ThinkVantage Technologies		
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
US models announced June 5, or September 4, 2012

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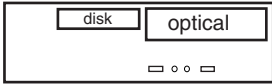
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
✕ 0967-A2U	3x2	G860	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Pro 64	06/19/12
✕ 0967-A3U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2000	None	Stand	None	None	Pro 64	06/19/12
0967-B2U	3x2	G640	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Implementation				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066 or 1333MHz DDR3 memory controller</i>			
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	None			
Bluetooth	None			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, active Power Factor Correction			
Machine	• Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk			
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	

ThinkCentre® M72e Small (0967) - TopSeller (Win 8)

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
0967-A8U	3x2	G870	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win8 Pro64	10/23/12
0967-A9U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win8 Pro64	10/23/12
0967-B1U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win8 Pro64	10/23/12
0967-B6U	3x2	G645	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B3U	3x2	G860	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B4U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B5U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B8U	3x2	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	12/04/12
0967-C1U	3x2	G2020	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	02/19/13
0967-B9U	3x2	G2120	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	02/19/13
0967-C2U	3x2	i7-3770	4GBx2 1600MHz	250G 7200	DVD±RW	HD 4000	None	Stand	None	None	Win7 Pro64	06/11/13
Positioning Processor	Essential business features, exceptional value Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz) Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™			
Implementation												
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics, Intel HD Graphics 2500, or Intel HD Graphics 4000 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, active Power Factor Correction											
Machine	• Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available								Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

US models announced October 23 or December 4, 2012 or February 19 or June 11, 2013

⚠ US model(s) withdrawn effective November 2013

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(MOSI1-24) June 2013

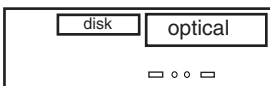
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3598-A5U	3x2	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 64	06/05/12
3598-E3U	3x2	i5-3570	4GBx1 1600MHz	250G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 32	06/05/12

●3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>		Preloaded operating system
Processor	Intel® Core™ i5-3550 Processor (4 cores / 4 threads , 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		<i>Some:</i> Genuine Windows® 7 Professional 32
Implementation	Intel Core i5-3570 Processor (4 cores / 4 threads , 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		<i>Some:</i> Genuine Windows 7 Professional 64
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		Ready to install applications (only some listed)
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (VGA) @60Hz; 1920x1200 (DVI-D) @60Hz		• Rescue and Recovery™ • Password Manager
Disk	SATA 3.0Gb/s 7200 rpm		Preloaded applications (only some listed)
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		• ThinkVantage® Product Recovery
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		• ThinkVantage System Update
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		• ThinkVantage Power Manager
eSATA port	None		• ThinkVantage Communication Utility
Media reader	None		• View Management Utility
Chipset	Intel H61 Express Chipset		• Lenovo Solution Center
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		• Lenovo Message Center Plus
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		• Lenovo Simple Tap
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		• Norton™ Internet Security (30 days of virus definitions)
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		• Adobe® Reader®
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		• Skype™ for Windows
PCIe WLAN ⁴	None		• Windows Live™ Essentials
Bluetooth	None		• Microsoft® Office preloaded; purchase a product key to activate
Speaker	Internal speaker for business audio		• Corel® Burn.Now™ (DVD±RW)
IEEE 1394	None		• Corel DVD MovieFactory® (DVD±RW)
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	• Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk		
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)
			Cisco EnergyWise compatible
			RoHS-compliant
			Supports ThinkVantage Technologies
			For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3598-F9U	3x2	G870	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win8 Pro64 10/23/12
3598-G9U	3x2	G640	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 10/23/12
3598-H1U	3x2	G870	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 10/23/12
3598-H2U	3x2	G640	2GBx1 1600MHz	250G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 10/23/12
3598-H3U	3x2	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win7 Pro64 10/23/12
3598-K2U	3x2	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 12/04/12
3598-PEU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win7 Pro64 06/25/13

●3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™	
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>			
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, HDCP, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	None			
Bluetooth	None			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, active Power Factor Correction			
Machine	• Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk			
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3660-C1U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Pro 32	06/05/12

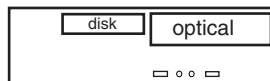
●3-year limited warranty

Positioning	Essential business features, exceptional value		Preloaded operating system Genuine Windows® 7 Professional 32 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz; 1920x1200 (DVI-D) @60Hz</i>		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	• Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk		
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
disk optical □ ○ ○ □			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3660-D3U	3x2	G645	2GBx1 1600MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D4U	3x2	G870	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-E2U	3x2	i3-2130	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2000	None	Stand	ES52	None	Win7 Pro64	10/23/12
3660-E3U	3x2	G2020	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES52	None	Win7 Pro64	01/22/13

●3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>								Preloaded operating system			
Processor	Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit			
Implementation									Preloaded applications (only some listed)			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>								- Windows 7 models - ThinkVantage® Product Recovery - ThinkVantage Power Manager - ThinkVantage Communication Utility - Lenovo® Message Center Plus - Lenovo SimpleTap - Adobe® Reader® - Windows Live™ Essentials - Corel® Burn.Now™ (DVD±RW) - Corel DVD MovieFactory® (DVD±RW)			
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>								- Windows 8 models - Lenovo Support - Lenovo Companion - Lenovo Cloud Storage - Norton™ Studio - AccuWeather - Evernote® - Cyberlink Power2Go (DVD±RW) - Cyberlink PowerProducer (DVD±RW)			
Disk	SATA 3.0Gb/s 7200 rpm								- All models			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive								- ThinkVantage System Update - Lenovo Solution Center - View Management Utility - Norton Internet Security (30 days of virus definitions) - Microsoft® Office preloaded; purchase a product key to activate - Skype™			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset								Security			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar								- One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable)			
eSATA port	None								- Power-on password - Administrator password - Hard disk password - Boot sequence control - Boot without keyboard and mouse - Serial port I/O control - Individual USB port disablement - Chassis intrusion switch on selected model(s)			
Media reader	None								EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Chipset	Intel H61 Express Chipset								Supports ThinkVantage Technologies			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)								For compatible accessories, please go to O-M72E sheet;			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D								For Lenovo service upgrade options, please go to S-TC sheet			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	- Business black color; metal case 13.2" W X 15.0" D X 3.9" H 335mm W X 382mm D X 101mm H 14.6 lb (6.6 kg) in maximum configuration - Highlighted optical drive button for easy access											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											



ThinkCentre® M72e Small (3660) - ES 5.2 (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3660-D5U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D6U	3x2	i3-3240	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D7U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D8U	3x2	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D9U	3x2	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	HD 7450	None	Stand	ES52	None	Win8 Pro64	10/23/12

●3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Windows® 8 Pro 64-bit Preloaded applications (only some listed) ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)	
Implementation	Processor in LGA1155 socket		Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets			
Graphics	<i>Some: Intel HD Graphics 2500</i> in processor, uses main memory, DirectX® 11 one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i> <i>Some: AMD Radeon™ HD 7450</i> , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	None			
Bluetooth	None			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk			
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

See footnotes for important warranty information
US models announced October 23, 2012

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(MOSI1-27) October 2012

ThinkCentre® M72e Small (3664) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3664-A1U	3x2	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	Switch	Stand	ES52	G P	Pro 64	06/05/12
3664-A2U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	G P	Pro 64	06/19/12
3664-A4U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	Switch	Stand	ES52	G P	Pro 64	08/21/12
3664-A6U	3x2	i3-3240	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	Switch	Stand	ES52	G P	Pro 64	05/28/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Essential business features, exceptional value		Preloaded operating system	
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation	Processor in LGA1155 socket		Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz; 1920x1200 (DVI-D) @60Hz</i>			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	None			
Bluetooth	None			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk			
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1			
disk optical □ ○ □				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

See footnotes for important warranty information

US models announced June 5, 2012, June 19, 2012, August 21, 2012, or May 28, 2013

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(MOS11-11) June 2013

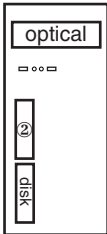
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3664-A3U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	Switch	Stand	ES52	G P	Win8 Pro64	10/23/12
3664-A5U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	G P	Win7 Pro64	10/23/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models ● ThinkVantage® Product Recovery ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● Lenovo® Message Center Plus ● Lenovo SimpleTap ● Adobe® Reader® ● Windows Live™ Essentials ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) - Windows 8 models ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) - All models ● ThinkVantage System Update ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Microsoft® Office preloaded; purchase a product key to activate ● Skype™
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz; 1920x1200 (DVI-D) @60Hz</i>		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk		
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
disk optical • • •			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)			
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			

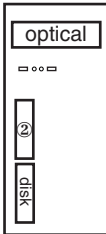
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
0958-A1U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	06/05/12
0958-A4U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, manual switch		
Machine	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk		
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1		
			
Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)			
Cisco EnergyWise compatible RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

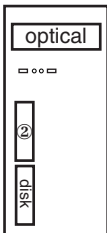
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
✖ 0958-A2U	3x3	G860	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Pro 64	06/19/12
✖ 0958-A3U	3x3	i3-2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	None	None	Pro 64	06/19/12
0958-A8U	3x3	G640	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Implementation				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066 or 1333MHz DDR3 memory controller</i>			
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	None			
Bluetooth	None			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts with variable speed fan, manual switch			
Machine	• Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk			
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	

ThinkCentre® M72e Tower (0958) - TopSeller (Win 8)

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
✖ 0958-A5U	3x3	G870	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win8 Pro64	10/23/12
0958-A6U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win8 Pro64	10/23/12
0958-A7U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win8 Pro64	10/23/12
✖ 0958-A9U	3x3	G860	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
0958-B1U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
0958-B2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
0958-B3U	3x3	G645	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
0958-B4U	3x3	G2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	12/04/12
0958-B5U	3x3	G2120	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	02/19/13
0958-B6U	3x3	G2020	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	02/19/13
0958-B7U	3x3	i7-3770	4GBx2 1600MHz	250G 7200	Bay	DVD±RW	HD 4000	None	None	None	Win7 Pro64	06/11/13
Positioning Processor	Essential business features, exceptional value Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache) , integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz) Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket									Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™		
Implementation Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics, Intel HD Graphics 2500, or Intel HD Graphics 4000 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA eSATA port	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, manual switch											
Machine	• Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

See footnotes for important warranty information

US models announced October 23 or December 4, 2012 or February 19 or June 11, 2013

✗ US model(s) withdrawn effective November 2013

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(MOSI1-29) June 2013

ThinkCentre® M72e Tower (3675) - ES 5.2 (TopSeller)

Personal Systems Reference (PSREF)

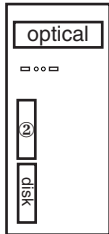
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3675-A1U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Pro 64	06/05/12

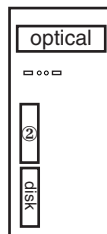
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Essential business features, exceptional value		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk		
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1		
optical □ □ □ □ Ⓢ disk			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3597-D4U	3x3	i5-3570	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 32	06/05/12
3597-C3U	3x3	i5-3550	4GBx2 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	06/05/12
3597-E3U	3x3	i5-3470	2GBx2 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	07/10/12
3597-E2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	07/10/12
3597-E9U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	09/04/12

●3-year limited warranty

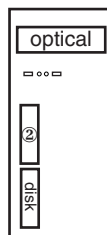
Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets			
Memory				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz; 1920x1200 (DVI-D) @60Hz</i>			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN [†]	None			
Bluetooth	None			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts with variable speed fan, manual switch			
Machine	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk			
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet	



ThinkCentre® M72e Tower (3597) - Windows 8

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3597-F4U	3x3	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	None	None	Win7 Pro64	10/23/12
3597-F5U	3x3	i5-3570	4GBx2 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-F6U	3x3	G870	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
3597-F7U	3x3	i5-3470	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-F8U	3x3	G640	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
3597-F9U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-G1U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-G2U	3x3	G2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	12/04/12
Positioning Processor	Essential business features, exceptional value Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo® Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)			
Implementation Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics, Intel HD Graphics 2000, or Intel HD Graphics 2500 in processor, uses main memory, HDCP, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, manual switch											
Machine	• Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											



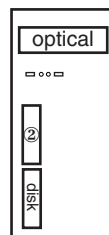
ThinkCentre® M72e Tower (3655) - ES 5.2 (Win 8)

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3655-D8U	3x3	G645	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win8 Pro64	10/23/12
3655-D9U	3x3	G870	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win8 Pro64	10/23/12
3655-E8U	3x3	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	ES52	None	Win7 Pro64	10/23/12
3655-F1U	3x3	G870	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win7 Pro64	10/23/12
3655-F3U	3x3	G2020	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win7 Pro64	01/22/13

• 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™			
Implementation												
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3, two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	• Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

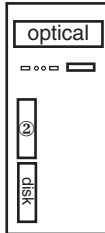


See footnotes for important warranty information
 US models announced October 23, 2012 or January 22, 2013
 ✕ US model(s) withdrawn effective November 2013

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Media reader	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3655-C1U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	ES52	None	Pro 32	06/05/12
3655-D2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	ES52	None	Pro 64	07/10/12
3655-F2U	3x4	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	HD 4000	Media	Switch	ES52	None	Pro 64	11/06/12

●3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64	
Implementation	Processor in LGA1155 socket		Ready to install applications (only some listed)	
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		● Rescue and Recovery™ ● Password Manager	
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>		Preloaded applications (only some listed)	
Disk	SATA 3.0Gb/s 7200 rpm		● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	<i>Some:</i> 9-in-1 media reader, internal USB 2.0			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	None			
Bluetooth	None			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts with variable speed fan, autosensing, 85% PSU			
Machine	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with media reader installed			
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			
		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant		
		Supports ThinkVantage Technologies		
		For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet		

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3655-E5U	3x3	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	HD 7450	None	ES52	None	Win8 Pro64	10/23/12
3655-E1U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E2U	3x3	i3-3240	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E3U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E4U	3x3	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E9U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win7 Pro64	10/23/12

●3-year limited warranty

Positioning	Essential business features, exceptional value		Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models - ThinkVantage® Product Recovery - ThinkVantage Power Manager - ThinkVantage Communication Utility - Lenovo® Message Center Plus - Lenovo SimpleTap - Adobe® Reader® - Windows Live™ Essentials - Corel® Burn.Now™ (DVD±RW) - Corel DVD MovieFactory® (DVD±RW) - Windows 8 models - Lenovo Support - Lenovo Companion - Lenovo Cloud Storage - Norton™ Studio - AccuWeather - Evernote® - Cyberlink Power2Go (DVD±RW) - Cyberlink PowerProducer (DVD±RW) - All models - ThinkVantage System Update - Lenovo Solution Center - View Management Utility - Norton Internet Security (30 days of virus definitions) - Microsoft® Office preloaded; purchase a product key to activate - Skype™ Security - One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) - Power-on password - Administrator password - Hard disk password - Boot sequence control - Boot without keyboard and mouse - Serial port I/O control - Individual USB port disablement - Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Some: Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11 one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, autosensing, 85% PSU		
Machine	- Business black color; metal case 6.3" W X 16.6" D X 15.3" H (with handle) 160mm W X 422mm D X 388mm H 20.7 lb (9.4 kg) in maximum configuration - Handle on top front - Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk		
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3662-A1U	3x3	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	Switch	ES52	G P	Pro 64	06/05/12
3662-A2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	G P	Pro 64	06/19/12
3662-A4U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	Switch	ES52	G P	Pro 64	08/21/12
3662-A6U	3x3	i3-3240	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	Switch	ES52	G P	Pro 64	05/28/13

• Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache) , Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet
Implementation			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz; 1920x1200 (DVI-D) @60Hz</i>		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA eSATA port	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk		
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

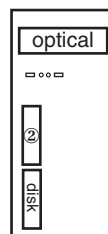
ThinkCentre® M72e Tower (3662) - ES 5.2 (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3662-A3U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	Switch	ES52	G P	Win8 Pro64	10/23/12
3662-A5U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	G P	Win7 Pro64	10/23/12

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit			
Implementation	Processor in LGA1155 socket								Preloaded applications (only some listed)			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets								- Windows 7 models			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>								• ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)			
Disk	SATA 3.0Gb/s 7200 rpm								- Windows 8 models			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive								• Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset								- All models			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar								• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™			
eSATA port	None								Security			
Media reader	None								• One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)			
Chipset	Intel H61 Express Chipset								EPEAT™ Gold rating			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)								ENERGY STAR® 5.2-compliant			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D								Cisco EnergyWise compatible			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)								GREENGUARD® certified			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)								RoHS-compliant			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec								Supports ThinkVantage Technologies			
PCIe WLAN ⁴	None								For compatible accessories, please go to O-M72E sheet;			
Bluetooth	None								For Lenovo service upgrade options, please go to S-TC sheet			
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	• Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											



Memory

Tiny 4004/3264/3267 use notebook memory:

2GB PC3-12800 DDR3 SODIMM	0A65722	ann	06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann	06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann	06/05/12

Small 0967/3598/3660/3664, and

Tower 0958/3675/3597/3655/3662 use desktop memory:

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

Small and Tower support:

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann	09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11

Storage and removable storage

Tiny support:

320GB 7200rpm SATA 3.0Gb/s 7mm 4K HDD	0A65635	ann	06/05/12
500GB 7200rpm SATA 3.0Gb/s 7mm 4K HDD	0A65632	ann	06/05/12

Small and Tower support:

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
180GB Solid State Drive	0B47308	ann	01/29/13

All:

USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 0967/3598/3660/3664 support Low Profile:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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Tower 0958/3675/3597/3655/3662 support 60 watts max:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
UltraSlim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁶²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Under Desk Mount

Tiny support:

ThinkCentre Tiny Under Desk Mount Bracket	0B47097	ann	08/07/12
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Monitors

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12

⁶⁹ DisplayPort cable is not included; use optional

DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Tiny support:

DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11

Small and Tower support:

Lenovo DVI to DVI Monitor Cable	0B47071		
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All:

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann	08/14/12
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



ThinkCentre M73 Tiny
with Optional WLAN



ThinkCentre M73 Tiny with
ThinkVision Monitor



ThinkCentre M73 Tiny
with optional I/O Box



ThinkCentre M73 Tiny with
ThinkVision Monitor



ThinkCentre M73 Tiny with
optional External Optical Box



ThinkCentre M73 Tiny

ThinkCentre® M73 Tiny (10AY) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical I/O box	Graphics	PCle Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Preload	Ann date (mm/dd/yy)
10AY0005US	i5-4570T	4GBx1	128G SSD	DVD±RW	HD 4600	Intel 2230	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY0006US	i7-4765T	4GBx1	128G SSD	DVD±RW	HD 4600	Intel 2230	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001RUS	i3-4130T	4GBx1	500G 7200	None	HD 4400	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AY001SUS	i3-4130T	4GBx1	500G Hybrid	None	HD 4400	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AY001TUS	G3220T	4GBx1	500G 7200	None	Intel HD	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AY001UUS	G3220T	4GBx1	500G Hybrid	None	Intel HD	Intel 105	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001VUS	i3-4130T	8GBx1	500G Hybrid	None	HD 4400	Intel 2230	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001WUS	i3-4130T	4GBx1	500G 7200	DVD±RW	HD 4400	Intel 105	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001XUS	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 105	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/22/13
10AY0004US	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	None	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/22/13
10AY0020US	i5-4570T	4GBx1	128G SSD	None	HD 4600	Intel 2230	None	None	Stand	None	USB	Win7 Pro64 (DG)	11/12/13
10AY001YUS	i5-4570T	4GBx1	500G Hybrid	None	HD 4600	Intel 2230	None	None	Stand	None	USB	Win7 Pro64 (DG)	11/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G3220T Processor (2 cores / 2 threads, 2.6GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager
Implementation			Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	<i>Some:</i> SATA 6.0Gb/s, 2.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide		
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in, via USB 2.0		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port		
PCle Mini Card	One PCI Express® Mini Card slot		
PCle WLAN	<i>Some:</i> 11b/g/n wireless, PCle Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCle Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Bluetooth	High Definition (HD) Audio, Realtek® ALC283 codec		
Audio	Internal speaker for business audio (1.5 watt)		
Speaker	Gigabit ethernet port, Intel I217-V, Wake on LAN®		
Ethernet	None		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional System floor stand for vertical orientation		
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU		
Mechanical	● Tiny (1L), business black color; metal case ● <i>M73 Tiny only:</i> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration ● <i>With VESA mount & optical box:</i>		Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US model(s) announced October 1, 2013, October 22, 2013, or November 12, 2013

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(MLM1N-1) November 2013

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Preload	Ann date (mm/dd/yy)
10AX001WUS	i5-4570T	4GBx1	500G 7200	DVD±RW	HD 4600	Intel 105	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AX001XUS	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 2230	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AX001YUS	i7-4765T	8GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 2230	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AX003WUS	i3-4130T	4GBx1	500G 7200	None	HD 4400	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AX003YUS	i3-4130T	4GBx1	500G 7200	DVD±RW	HD 4400	Intel 105	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AX0040US	G3220T	4GBx1	500G 7200	DVD±RW	Intel HD	Intel 105	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AX0041US	G3220T	4GBx1	500G 7200	None	Intel HD	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AX0042US	i3-4130T	4GBx1	500G Hybrid	None	HD 4400	Intel 2230	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13

●3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G3220T Processor (2 cores / 2 threads, 2.6GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>										
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										
DP dongle	None										
Disk	<i>Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory,</i> SATA 6.0Gb/s, 2.5" wide <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>										
External optical	<i>Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in, via USB 2.0</i> Serial ATA, SATA 6.0Gb/s support, integrated in chipset										
SATA controller	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar										
Onboard SATA	None										
eSATA port											
Chipset	Intel H81 Express Chipset										
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)										
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port										
PCIe Mini Card	One PCI Express® Mini Card slot										
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230,</i> Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</i> <i>Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter</i>										
Bluetooth	High Definition (HD) Audio, Realtek® ALC283 codec										
Audio	Internal speaker for business audio (1.5 watt)										
Speaker	Gigabit ethernet port, Intel I217-V, Wake on LAN®										
Ethernet	None										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	Optional System floor stand for vertical orientation										
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard										
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU										
Mechanical	● Tiny (1L), business black color; metal case ● <i>M73 Tiny only:</i> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration ● <i>With VESA mount & optical box:</i> 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration										Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

ThinkCentre® M73 Tiny (10AX) - 1-year depot

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Preload	Ann date (mm/dd/yy)
10AX003XUS	i3-4130T	4GBx1	500G 7200	None	HD 4400	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13

●A depot repair service 1-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Core™ i3-4130T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	<i>Some:</i> SATA 6.0Gb/s, 2.5" Wide, 7200 rpm		
External optical	None		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC283 codec		
Speaker	Internal speaker for business audio (1.5 watt)		
Ethernet	Gigabit ethernet port, Intel I217-V, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional System floor stand for vertical orientation		
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU		
Mechanical	● Tiny (1L), business black color; metal case ● <i>M73 Tiny only:</i> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration ● <i>With VESA mount & optical box:</i> 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration		
Limited Warranty	1-years - depot repair service / service upgrades available		

See footnotes for important warranty information
US model(s) announced October 1, 2013

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ThinkCentre® M73 Tiny (10AX) - GMP

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AX002UUS	G3420T	2GBx1	320G 5400	None	Intel HD	Intel 105	None	None	Stand	None	G P	Win7 Pro64	10/01/13
10AX002VUS	i3-4130T	4GBx1	500G 5400	None	HD 4400	Intel 2230	None	None	Stand	None	G P	Win7 Pro64 (DG)	10/01/13
10AX003DUS	i5-4570T	4GBx1	128G SSD	DVD±RW	HD 4600	Intel 2230	USB	Switch	None	Mount	G P	Win7 Pro64 (DG)	10/01/13
10AX0044US	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 2230	None	None	Stand	None	G P	Win7 Pro64 (DG)	10/22/13
10AX0045US	i3-4130T	4GBx1	500G 7200	None	HD 4400	Intel 105	None	None	Stand	None	G P	Win7 Pro64 (DG)	10/22/13

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>										Preloaded operating system		
Processor	Intel® Pentium® G3420T Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), Intel HD Graphics, 1600MHz DDR3 memory controller Intel Core™ i3-4130T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										<i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit		
Implementation											Ready to install applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>										- Rescue and Recovery™ - Password Manager		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										Preloaded applications (only some listed)		
DP dongle	None										- ThinkVantage® Product Recovery - ThinkVantage System Update - ThinkVantage Communication Utility - ThinkVantage Power Manager - View Management Utility - PC Device Stage - Lenovo Cloud Storage by SugarSync - Lenovo Solution Center - Lenovo Message Center Plus - Norton™ Internet Security (30 days of virus definitions) - Adobe® Reader® - Skype™ - Evernote® - Microsoft® Office preloaded; purchase a product key to activate - Cyberlink Power2Go (DVD±RW) - Cyberlink PowerProducer (DVD±RW) - Nitro Pro		
Disk	<i>Some:</i> SATA 3.0Gb/s, 2.5" Wide, 5400 rpm or 7200 rpm <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide												
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in, via USB 2.0												
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset												
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar												
eSATA port	None												
Chipset	Intel H81 Express Chipset												
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)												
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)												
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port												
PCIe Mini Card	One PCI Express® Mini Card slot												
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
Bluetooth	High Definition (HD) Audio, Realtek® ALC283 codec												
Audio	Internal speaker for business audio (1.5 watt)												
Speaker	Gigabit ethernet port, Intel I217-V, Wake on LAN®												
Ethernet	None												
Intel AMT	None												
Modem	None												
Security chip	None												
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo										Security		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - Power-on password - Administrator password - Hard disk password - Boot sequence control - Boot without keyboard and mouse - Individual USB port disablement - Chassis intrusion switch on selected model(s)		
Floor Stand	Optional System floor stand for vertical orientation												
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard												
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU												
Mechanical	- Tiny (1L), business black color; metal case <i>M73 Tiny only:</i> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration <i>With VESA mount & optical box:</i> 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
US model(s) announced October 1, 2013 or October 22, 2013

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ThinkCentre M73 Small
and Mini Tower



ThinkCentre M73 Small
with ThinkVision Monitor



ThinkCentre M73 Small



ThinkCentre M73 Mini Tower
with ThinkVision Monitor



ThinkCentre M73 Mini Tower



ThinkCentre M73 Mini Tower

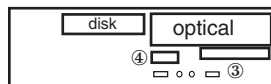
ThinkCentre® M73 Small (10B6) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
10B60008US	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B60009US	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B6000AUS	3x4	G3220	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B6000BUS	3x4	G3220	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B6000FUS	3x4	i3-4130	8GBx1	1TB 7200	DVD±RW	N105	None	GT620	None	Serial	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B6000GUS	3x4	G3220	4GBx1	500G Hybrid	DVD±RW	N105	None	Intel HD	None	Serial	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B6000PUS	3x4	i5-4570	4GBx1	128G SSD	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG)	11/12/13
10B6000QUS	3x4	i7-4770	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG)	11/12/13
10B6000RUS	3x4	i7-4770	4GBx1	500G Hybrid	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG)	11/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>											Preloaded operating system			
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager			
Implementation												Preloaded applications (only some listed)			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller											• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro			
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz</i> Some: NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i>														
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide														
Optical	Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset														
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar														
eSATA port	None														
Media reader	Optional 9-in-1 media reader, internal USB 2.0														
Chipset	Intel H81 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
PCIe WLAN ⁴	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1														
Bluetooth	None														
Speaker	Internal speaker for business audio (1 watt) (*No internal speaker for 10B6000PUS)														
IEEE 1394	None														
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®														
Manageability	Intel Standard Manageability														
Modem	None														
Security chip	None														
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	Optional system floor stand for vertical orientation														
Power supply	240 watts, autosensing, active PFC														
Machine	• Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed														
Slot	Slot 1: Low Profile, PCIe 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



- Security**
- One lock to secure both cover and entire system to fixed object:
 - Padlock loop (in rear for opt padlock)
 - Security slot (in rear for optional Kensington® MicroSaver® cable)
 - Power-on password
 - Administrator password
 - Hard disk password
 - Boot sequence control
 - Boot without keyboard and mouse
 - Serial port I/O control
 - Individual USB port disablement
 - Chassis intrusion switch on selected model(s)

Cisco EnergyWise compatible
 GREENGUARD® certified
 RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to TC-AQP sheet;
 For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US model(s) announced October 1, 2013 or November 12, 2013

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ThinkCentre® M73 Small (10B5) - ES 5.2 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
10B50001US	3x4	i5-4570	4GBx2	500G Hybrid DVD±RW	N2230	None	GT 620	None	S P	None	None	ES5.2	None	Win7 Pro64 (DG) 10/01/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

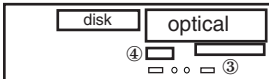
Positioning Processor	Essential business features, exceptional value Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro
Implementation			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz</i>		
Disk	<i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	<i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar		
eSATA port	None		
Media reader	Optional 9-in-1 media reader, internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	<i>Some:</i> 240 watts, autosensing, active PFC, 85% PSU		
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed		
Slot	Slot 1: Low Profile, PCIe 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
disk optical ④ ○ ○ ○ ③			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced October 1, 2013

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor Stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
10B7000SUS	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B7000TUS	3x4	i7-4770	8GBx1	500G Hybrid	DVD±RW	N2230	None	GT 620	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B7001RUS	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B7001TUS	3x4	i3-4130	4GBx1	500G Hybrid	DVD±RW	None	None	HD 4400	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B7001UUS	3x4	i3-4130	4GBx1	1TB 7200	DVD±RW	None	None	HD 4400	None	Serial	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B7001VUS	3x4	G3220	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	Serial	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B7001WUS	3x4	G3220	4GBx1	500G Hybrid	DVD±RW	None	None	Intel HD	None	Serial	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10B7001XUS	3x4	G3220	4GBx1	1TB 7200	DVD±RW	None	None	Intel HD	None	Serial	Stand	None	None	Win7 Pro64 (DG)	10/01/13

●3-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro	
Implementation	Processor in LGA1150 socket			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets			
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i></i>			
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide			
Optical	<i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar			
eSATA port	None			
Media reader	Optional 9-in-1 media reader, internal USB 2.0			
Chipset	Intel H81 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter			
Speaker	Internal speaker for business audio (1 watt)			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	Optional system floor stand for vertical orientation			
Power supply	<i>Some:</i> 240 watts, autosensing, active PFC			
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed			
Slot	Slot 1: Low Profile, PCIe 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

ThinkCentre® M73 Small (10B4) - ES 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
10B4000XUS	3x4	i7-4770	8GBx1	500G Hybrid DVD±RW	N2230	None	GT 620	None	S P	Stand	ES5.2	None	Win7 Pro64 (DG)	10/01/13

●3-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Core™ i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro
Implementation			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz</i>		
Disk	<i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	<i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar		
eSATA port	None		
Media reader	Optional 9-in-1 media reader, internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	<i>Some:</i> 240 watts, autosensing, active PFC, 85% PSU		
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed		
Slot	Slot 1: Low Profile, PCIe 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced October 1, 2013

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ThinkCentre® M73 Small (10B4) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10B4001FUS 3x4	G3420	2GBx1	500G 7200	DVD	None	None	Intel HD	None	None	None	None	ES5.2	G P	Win7 Pro64	10/01/13
10B4001GUS 3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	Stand	None	ES5.2	G P	Win7 Pro64 (DG)	10/01/13
10B4001HUS 3x4	i5-4570	4GBx1	1TB 7200	DVD±RW	N105	Media	HD 8470	Switch	None	None	None	ES5.2	G P	Win7 Pro64 (DG)	10/01/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Pentium® G3420 Processor (2 cores / 2 threads, 3.2GHz, 3MB cache), Intel HD Graphics, 1600MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro	
Implementation Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller			
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz <i>Some:</i> AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz			
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm			
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar			
eSATA port	None			
Media reader	Optional 9-in-1 media reader, internal USB 2.0			
Chipset	Intel H81 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1			
Bluetooth	None			
Speaker	Internal speaker for business audio (1 watt)			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	Optional system floor stand for vertical orientation			
Power supply	<i>Some:</i> 240 watts, autosensing, active PFC, 85% PSU			
Machine	● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed			
Slot	Slot 1: Low Profile, PCIe 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
 US model(s) announced October 1, 2013

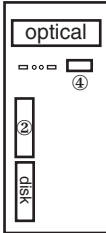
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ThinkCentre® M73 Mini Tower (10B0) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
10B00005US	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10B00006US	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10B00007US	3x4	G3220	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	S P	None	None	Win7 Pro64 (DG)	10/01/13
10B00008US	3x4	i7-4770	8GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	S P	None	None	Win7 Pro64 (DG)	10/01/13
10B0000GUS	3x4	i5-4570	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 Pro64 (DG)	10/22/13
10B0000HUS	3x4	i5-4570	4GBx1	128G SSD	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 Pro64 (DG)	11/12/13
10B0000JUS	3x4	i5-4570	4GBx1	1TB Hybrid	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 Pro64 (DG)	11/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro	
Implementation				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller			
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz</i>			
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide			
Optical	<i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar			
eSATA port	None			
Media reader	Optional 9-in-1 media reader, internal USB 2.0			
Chipset	Intel H81 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	None			
Bluetooth	None			
Speaker	Internal speaker for business audio (1.5 watt)			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, manual switch, passive PFC			
Mechanical	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk* Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed			
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

See footnotes for important warranty information

US model(s) announced October 1, 2013, October 22, 2013, or November 12, 2013

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(MLM1T-1) November 2013

ThinkCentre® M73 Mini Tower (10B2) - ES 5.2 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
10B20002US	3x4	i5-4670	4GBx2	500G Hybrid	DVD±RW	N2230	None	GT 620	None	S P	ES5.2	None	Win7 Pro64 (DG)	10/01/13

- *Small and medium business (SMB) model(s), part of the US TopSeller™ Program*
- *3-year limited warranty*

Positioning Processor	Essential business features, exceptional value Intel® Core™ i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro
Implementation			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz</i>		
Disk	<i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	<i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar		
eSATA port	None		
Media reader	Optional 9-in-1 media reader, internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Speaker	Internal speaker for business audio (1.5 watt)		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	<i>Some:</i> 280 watts, autosensing, active PFC, 85% PSU		
Mechanical	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk* Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed		
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

optical

④

②

disk

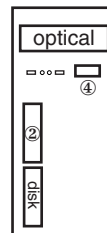
See footnotes for important warranty information
US model(s) announced October 1, 2013

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(MLM1T-2) October 2013

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCle WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
10B3000CUS	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10B3000DUS	3x4	i7-4770	8GBx1	500G Hybrid	DVD±RW	None	None	GT 620	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10B3000RUS	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10B3000SUS	3x4	i3-4130	4GBx1	500G Hybrid	DVD±RW	None	None	HD 4400	None	Serial	None	None	Win7 Pro64 (DG)	10/01/13
10B3000TUS	3x4	i3-4130	4GBx1	1TB 7200	DVD±RW	None	None	HD 4400	None	Serial	None	None	Win7 Pro64 (DG)	10/01/13
10B3000VUS	3x4	G3220	4GBx1	1TB 7200	DVD±RW	None	None	Intel HD	None	Serial	None	None	Win7 Pro64 (DG)	10/01/13
10B3000WUS	3x4	G3220	4GBx1	500G Hybrid	DVD±RW	None	None	Intel HD	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10B3000XUS	3x4	G3220	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	None	None	Win7 Pro64 (DG)	10/01/13

●3-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● PC Device Stage ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Evernote® ● Microsoft® Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro			
Implementation Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller													
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz <i>Some:</i> NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz													
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide													
Optical SATA controller Onboard SATA	<i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar													
eSATA port	None													
Media reader	Optional 9-in-1 media reader, internal USB 2.0													
Chipset	Intel H81 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
PCle WLAN ⁴	None													
Bluetooth	None													
Speaker	Internal speaker for business audio (1.5 watt)													
IEEE 1394	None													
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®													
Manageability	Intel Standard Manageability													
Modem	None													
Security chip	None													
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	<i>Some:</i> 280 watts, manual switch, passive PFC													
Mechanical	● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk* Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed													
Slot	Slot 1: full-length, full-height, PCIe 3.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													



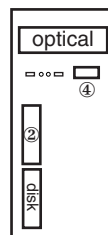
ThinkCentre® M73 Mini Tower (10B1) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10B10011US	3x4	G3420	2GBx1	500G 7200	DVD	None	None	Intel HD	None	None	ES5.2	G P	Win7 Pro64	10/01/13
10B10012US	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	ES5.2	G P	Win7 Pro64 (DG)	10/01/13
10B10017US	3x4	i5-4570	4GBx1	1TB 7200	DVD±RW	N105	Media	HD 8470	Switch	None	ES5.2	G P	Win7 Pro64 (DG)	10/01/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Essential business features, exceptional value Intel® Pentium® G3420 Processor (2 cores / 2 threads, 3.2GHz, 3MB cache), Intel HD Graphics, 1600MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	
Implementation	Processor in LGA1150 socket		Ready to install applications (only some listed)	
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller		• Rescue and Recovery™ • Password Manager	
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display, works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz <i>Some:</i> AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz		Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro	
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar			
eSATA port	None			
Media reader	Optional 9-in-1 media reader, internal USB 2.0			
Chipset	Intel H81 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1			
Bluetooth	None			
Speaker	Internal speaker for business audio (1.5 watt)			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	None			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	<i>Some:</i> 280 watts, autosensing, active PFC, 85% PSU			
Mechanical	• Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk* Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed			
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			



See footnotes for important warranty information
US model(s) announced October 1, 2013

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(MLM1T-4) October 2013



Lenovo ThinkCentre M72z with Frame Stand



Lenovo ThinkCentre M72z with Frame Stand



Lenovo ThinkCentre M72z with Monitor Stand



Lenovo ThinkCentre M72z with Monitor Stand



Dual Independent Display with Optional Lenovo ThinkVision Monitor

ThinkCentre® M72z (3543) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
3543-B6U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	Intel 105	Media	None	None	None	Frame	USB	None	Win7 Pro64 03/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>		Preloaded operating system²⁰ Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off		
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off		
Disk	Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	7-in-1 Single Slot SD media reader		
Chipset	Intel H61 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB		
Audio	High Definition (HD) Audio, Realtek ALC269Q		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)		
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model announced Mar 12, 2013

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(MTGI1-12) March 2013

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3548-A9U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	2.4G	None	Pro 64	06/05/12
3548-B1U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Pro 64	06/05/12
3548-B2U	i7-3770S	4GBx2 1600MHz	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Pro 64	06/05/12
3548-B3U	i7-3770S	4GBx2 1600MHz	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	2.4G	None	Pro 64	06/05/12
3548-C1U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	Serial	None	Monitor	USB	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Memory			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off		
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off		
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader		
Chipset	Intel H61 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB		
Audio	High Definition (HD) Audio, Realtek ALC269Q		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black		
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with Non multi-touch, Monitor stand:</i> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Supports ThinkVantage Technologies
For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3548-B4U	G640	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	Monitor	USB	None	Pro 64	07/24/12
3548-B9U	G640	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	None	None	Serial	None	Monitor	USB	None	Pro 64	08/14/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Mainstream All-In-One PC for the enterprise		Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook); <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>		
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off		
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off		
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB		
Audio	High Definition (HD) Audio, Realtek ALC269Q		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with Non multi-touch, Monitor stand:</i> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet		

ThinkCentre® M72z (3548) - TopSeller (Win 8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/ Mouse Global	Preload	Ann date (mm/dd/yy)
3548-C6U	i5-3470T	4GBx1 1600MHz	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3548-C7U	i7-3770S	4GBx2 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3548-C8U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-C9U	i3-3240	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-D1U	G640	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-D2U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
≠ 3548-D3U	G860	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-F2U	i3-3220	4GBx1 1600MHz	2.0M	180G SSD	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 11/20/12
3548-F4U	G2020	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 01/22/13
3548-F7U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 03/05/13
3548-F9U	i7-3770S	8GBx1 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 03/05/13
3548-G1U	i5-3470S	4GBx1 1600MHz	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 03/12/13
Positioning Processor	Mainstream All-In-One PC for the enterprise Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470S Processor (2 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) • InterVideo WinDVD® (DVD, DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>													
Graphics	Intel HD Graphics / 2500 / 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>													
DP dongle	None													
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio													
Multi-touch	None													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off													
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off													
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable													
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader													
Chipset	Intel H61 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)													
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB													
Audio	High Definition (HD) Audio, Realtek ALC269Q													
Speaker	Two internal stereo speakers (2watt x 2)													
Intel AMT	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	150 watts, autosensing, 85% PSU													
Machine	Model(s) with Non multi-touch, Monitor stand: • Business black color • 20.0" W X 8.9" D X 17.0" H • 507mm W X 227mm D X 431mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration • Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Support VESA mount (100mm)										Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 20, 2012, Jan 22, 2013, Mar 5, 2013, or Mar 12, 2013

≠ US model(s) withdrawn effective November 2013

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(MTG11-6) March 2013

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3548-H2U	i7-3770S	8GBx1 1600MHz	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	2.4G	None	Win7 Pro64	06/11/13
3548-H3U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	2.4G	None	Win7 Pro64	06/11/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i5-3470S Processor (4 cores / 4 threads , 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads , 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Memory		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Media reader	7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Mouse	Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with Non multi-touch, Monitor stand:</i> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
3548-E9U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 11/20/12
3548-F1U	G645	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 11/20/12
3548-F3U	G645	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	Serial	None	Frame	USB	None	Win7 Pro64 11/20/12
3548-F6U	G2120	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 12/04/12
3548-F5U	G2020	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 01/22/13
3548-F8U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 03/05/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Media reader	7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Processor	Memory ^a	Camera (mega- pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key- board/ Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3554-E2U	i7-3770S	4GBx2 1600MHz	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Pro 64	06/05/12
3554-E3U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Pro 64	06/05/12
3554-E4U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Prem 64	06/05/12
3554-E5U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Pro 64	06/05/12
3554-E6U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Prem 32	06/05/12

●3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Genuine Windows® 7 Home Premium 32 <i>Some:</i> Genuine Windows® 7 Home Premium 64 <i>Some:</i> Genuine Windows 7 Professional 64
Implementation		Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz	Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	EPEAT™ Gold rating
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	ENERGY STAR® 5.2-compliant
Power supply	150 watts, autosensing, 85% PSU	TCO Certified Edge
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm) <i>Model(s) with Non multi-touch, Monitor stand:</i> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm)	Cisco EnergyWise compatible
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	GREENGUARD® certified
		RoHS-compliant
		Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M72Z sheet;
		For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
3554-H2U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H3U	i3-3240	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H4U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H7U	i5-3570S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H8U	i7-3770S	4GBx1 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-M9U	i5-3470S	4GBx1 1600MHz	2.0M	180G SSD	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 11/20/12
3554-Q6U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 07/09/13

Positioning Processor	Mainstream All-In-One PC for the enterprise Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models ● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● Lenovo® Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Adobe® Reader® ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW) - Windows 8 models ● Lenovo Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) - All models ● ThinkVantage System Update ● ThinkVantage Automatic lock Utility ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Microsoft® Office preloaded; purchase a product key to activate ● Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Optical Media reader	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable <i>Some:</i> 7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with Non multi-touch, Monitor stand:</i> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm)	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● <i>Chassis intrusion switch on selected model(s)</i> EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
3554-H1U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-H5U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-H6U	i5-3570S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-H9U	i7-3770S	4GBx1 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-M7U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 11/20/12
3554-N1U	G2020	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 01/22/13

Positioning Processor	Mainstream All-In-One PC for the enterprise Intel® Pentium® G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) • InterVideo WinDVD® (DVD, DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Implementation	Processor in LGA1155 socket														
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) System automatically clocks down for processors with 1333MHz DDR3 memory controller														
Graphics	Intel HD Graphics / 2500 / 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off														
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off														
Disk	Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Media reader	Some: 7-in-1 Single Slot SD media reader														
Chipset	Intel H61 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB														
Audio	High Definition (HD) Audio, Realtek ALC269Q														
Speaker	Two internal stereo speakers (2watt x 2)														
Intel AMT	None														
Modem	None														
IEEE 1394	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	Model(s) with Non multi-touch, Frame stand: • Business black color • 20.0" W X 4.0" D X 16.2" H • 507mm W X 101mm D X 411mm H (including stand) • 14.6 lb (6.6 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm)										Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/ Mouse	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3558-A2U	i5-3550S	4GBx1 1600MHz	2.0M	250G 7200	HD 2500	11b/g/n	Media	Switch	None	None	Frame	USB	G P	Pro 64	06/05/12
3558-A4U	i5-3570S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	Switch	None	None	Frame	USB	G P	Pro 64	08/14/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i5-3550S Processor (4 cores / 4 threads , 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads , 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Memory			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort) @60Hz		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off		
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off		
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	7-in-1 Single Slot SD media reader		
Chipset	Intel H61 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB		
Audio	High Definition (HD) Audio, Realtek ALC269Q		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

ThinkCentre® M72z (3558) - GMP (Thin Client)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega- pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key- board/ Mouse	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
≈ 3558-A5U	G460	2GBx1 1600MHz	None	8G SSD	None	Intel HD	11b/g/n	None	Switch	Serial	None	Frame	USB	G P	Emb 32	11/20/12
≈ 3558-A7U	G465	2GBx1 1600MHz	None	8G SSD	None	Intel HD	11b/g/n	None	Switch	Serial	None	Frame	USB	G P	Emb 32	01/08/13
3558-A8U	G470	2GBx1 1600MHz	None	8G SSD	None	Intel HD	11b/g/n	None	Switch	Serial	None	Frame	USB	G P	Emb 32	06/11/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G465 Processor (1 core / 2 threads, 1.9GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G470 Processor (1 core / 2 threads, 2.0GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Processor in LGA1155 socket	Preloaded operating system ²⁰ Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player
Implementation	Processor in LGA1155 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	None	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide	
Optical	None	
Media reader	None	
Chipset	Intel H61 Express Chipset	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● <i>Chassis intrusion switch on selected model(s)</i> EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

See footnotes for important warranty information
 US models announced November 20, 2012 or January 8 or June 11, 2013
 ≈ US model(s) withdrawn effective November 2013

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ThinkCentre® M72z (3558) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/ Mouse	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3558-A3U	i5-3470S	4GBx1	1600MHz	2.0M	500G 7200 HD 2500	11b/g/n	Media	Switch	None	None	Frame	USB	G P	Win8 Pro64	10/23/12
3558-A6U	i5-3470S	4GBx1	1600MHz	2.0M	500G 7200 HD 2500	11b/g/n	Media	None	None	None	Frame	USB	G P	Win7 Pro64	10/23/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit
Implementation			Preloaded applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		- Windows 7 models
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>		● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● Lenovo® Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Adobe® Reader® ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
DP dongle	None		- Windows 8 models
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio		● Lenovo Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)
Multi-touch	None		- All models
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off		● ThinkVantage System Update ● ThinkVantage Automatic lock Utility ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Microsoft® Office preloaded; purchase a product key to activate ● Skype™
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off		
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	7-in-1 Single Slot SD media reader		
Chipset	Intel H61 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB		
Audio	High Definition (HD) Audio, Realtek ALC269Q		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
			EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
			Supports ThinkVantage Technologies
			For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US models announced October 23, 2012

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Memory

2GB PC3-12800 DDR3 SODIMM	0A65722	ann 06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann 06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann 06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann 02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann 02/08/11
Lenovo Headset P550	55Y2065	
Lenovo Headset P950 (black)	57Y6605	ann 02/08/11

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann 05/01/12

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann 08/14/12
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
ThinkCentre Extend Arm ⁷⁰	57Y4352	ann 07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

⁷⁰ Desk Mount only.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



ThinkCentre M73z with Frame Stand
and optional wireless keyboard and mouse



ThinkCentre M73z with Monitor Stand
and optional wireless keyboard and mouse



ThinkCentre M73z with Frame Stand
with optional PS/2 and Serial ports



ThinkCentre M73z with Monitor Stand
with optional PS/2 and Serial ports



ThinkCentre M73z with Frame Stand
with optional wireless keyboard and mouse



ThinkCentre M73z with Monitor Stand
with optional wireless keyboard and mouse

ThinkCentre® M73z (10BC) - TopSeller (1-year Onsite)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC0005US	i5-4430S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N105	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC000HUS	G3220	2GBx1 1600MHz	720p	500G 7200	Intel HD	N105	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller		Preloaded operating system²⁰ Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Processor in LGA1150 socket		Ready to install applications (only some listed)
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller		● Rescue and Recovery™ ● Password Manager
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz		Preloaded applications (only some listed)
DP dongle	None		● ThinkVantage® Product Recovery
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio		● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Nitro Pro
Multi-touch	None		
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off		
Controls	Side buttons for brightness up, brightness down, and power on/off		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high		
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Ethernet	One gigabit ethernet port, Intel I217-V		
Audio	High Definition (HD) Audio, Realtek ALC269VC		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		EPEAT™ Gold rating
Mouse	Enhanced Optical USB Mouse, Lenovo logo		ENERGY STAR® 5.2-compliant
Power supply	150 watts, autosensing, 85% PSU		Cisco EnergyWise compatible
Mechanical	● Business black color ● Carry handle in rear ● Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		GREENGUARD® certified
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		RoHS-compliant
			EuP 2013 Certified
			Supports ThinkVantage Technologies
			For compatible accessories, please go to TC-AQP sheet;
			For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced September 24, 2012

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(MDST1-4) September 2013

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC0001US	i7-4770S	8GBx1 1600MHz	720p	500G Hybrid	HD 4600	N2230	Media	None	S P	Monitor	2.4G	None	Win7 Pro64 DG	09/24/13
10BC0002US	i7-4770S	4GBx1 1600MHz	720p	1TB 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0003US	i5-4430S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	Media	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC0004US	i5-4570S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0006US	i5-4570S	4GBx1 1600MHz	720p	500G Hybrid	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0007US	i5-4570S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC0008US	i5-4570S	4GBx1 1600MHz	720p	180G SSD	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0009US	i5-4570S	4GBx1 1600MHz	720p	128G SSD	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Mainstream All-In-One PC for the enterprise Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system²⁰ Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook)		Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Nitro Pro
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio		
Multi-touch	None		
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off		
Controls	Side buttons for brightness up, brightness down, and power on/off		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide		
Optical Media reader	DVD burner, SATA 1.5Gb/s, 12.7mm high Optional 7-in-1 Single Slot media reader, via internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-V		
Audio	High Definition (HD) Audio, Realtek ALC269VC		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black		
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Power supply	150 watts, autosensing, 85% PSU		
Mechanical	● Business black color ● Carry handle in rear ● Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC000BUS	i5-4670S	8GBx1 1600MHz	720p	1TB 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000CUS	i7-4770S	8GBx1 1600MHz	720p	1TB 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000DUS	i3-4130	4GBx1 1600MHz	720p	500G 7200	HD 4400	N2230	None	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000EUS	i3-4130	4GBx1 1600MHz	720p	500G 7200	HD 4400	N2230	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC000FUS	i3-4130	4GBx1 1600MHz	720p	500G Hybrid	HD 4400	N2230	None	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000GUS	G3220	2GBx1 1600MHz	720p	500G 7200	Intel HD	N2230	None	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000QUS	i5-4570S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	Media	None	None	None	USB	None	Win7 Pro64 DG	11/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Mainstream All-In-One PC for the enterprise Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system²⁰ Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Nitro Pro
Implementation			Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant EuP 2013 Certified Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio		
Multi-touch	None		
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off		
Controls	Side buttons for brightness up, brightness down, and power on/off		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high		
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-V		
Audio	High Definition (HD) Audio, Realtek ALC269VC		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Mechanical	● Business black color ● Carry handle in rear ● Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

ThinkCentre® M73z (10BC) - TopSeller (Win8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/ Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC000AUS	i5-4570S	4GBx1 1600MHz	720p	500GB 7200	HD 4600	N2230	Media	None	None	Frame	USB	None	Win8 Pro64	09/24/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>										Preloaded operating system			
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller										Windows® 8 Pro 64-bit			
Implementation	Processor in LGA1150 socket										Web install applications (only some listed)			
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook)										• Password Manager			
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution: 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz</i>										Preloaded applications (only some listed)			
DP dongle	None										• ThinkVantage System Update • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Norton Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Intel AppUp • Nitro Pro • AccuWeather • Norton™ Studio			
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio													
Multi-touch	None													
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off													
Controls	Side buttons for brightness up, brightness down, and power on/off													
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high													
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0													
Chipset	Intel H81 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)													
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
Ethernet	One gigabit ethernet port, Intel I217-V													
Audio	High Definition (HD) Audio, Realtek ALC269VC													
Speaker	Two internal stereo speakers (2watt x 2)													
Intel AMT	None													
Modem	None													
IEEE 1394	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, Lenovo logo													
Power supply	150 watts, autosensing, 85% PSU													
Mechanical	• Business black color • Carry handle in rear • Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait										Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant EuP 2013 Certified Supports ThinkVantage Technologies			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
US model(s) announced September 24, 2012

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(MDST1-3) September 2013

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BB0000US	i7-4770S	8GBx1 1600MHz	720p	1TB Hybrid	HD 4600	N2230	Media	None	S P	Monitor	USB	None	Win7 Pro64	09/24/13
10BB000FUS	i5-4570S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64	DG 09/24/13
10BB000GUS	i7-4770S	8GBx1 1600MHz	720p	500G Hybrid	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64	DG 09/24/13
10BB000HUS	i5-4430S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N105	None	None	None	Frame	USB	None	Win7 Pro64	DG 09/24/13
10BB000JUS	i5-4570S	4GBx1 1600MHz	720p	500G Hybrid	HD 4600	N2230	Media	None	S P	Monitor	2.4G	None	Win7 Pro64	DG 09/24/13
10BB001EUS	i7-4770S	8GBx1 1600MHz	720p	1TB 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64	DG 09/24/13
10BB001FUS	i5-4570S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N105	None	None	None	Frame	USB	None	Win7 Pro64	DG 09/24/13
10BB0021US	i3-4130	4GBx1 1600MHz	720p	500G 7200	HD 4400	N2230	None	None	None	Monitor	USB	None	Win7 Pro64	DG 09/24/13
10BB0022US	G3220	2GBx1 1600MHz	720p	500G 7200	Intel HD	N105	None	None	None	Monitor	USB	None	Win7 Pro64	DG 09/24/13
10BB0023US	i3-4130	4GBx1 1600MHz	720p	500G Hybrid	HD 4400	N2230	None	None	None	Monitor	USB	None	Win7 Pro64	DG 09/24/13

●3-year limited warranty

Positioning	Mainstream All-In-One PC for the enterprise		Preloaded operating system ²⁰ Some: Windows 7 Professional 64 Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Nitro Pro
Memory	16GB max, 1600MHz DDR3L, two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; Maximum resolution: 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio		
Multi-touch	None		
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off		
Controls	Side buttons for brightness up, brightness down, and power on/off		
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high		
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-V		
Audio	High Definition (HD) Audio, Realtek ALC269VC		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), Lenovo® logo Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Mouse	Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Power supply	150 watts, autosensing, 85% PSU		
Mechanical	● Business black color ● Carry handle in rear ● Support VESA mount (100mm) With Frame stand: 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) With Monitor stand: 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Type-model	Processor	Memory ^a		Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/ Mouse	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10BB000EUS	i5-4570S	4GBx1	1600MHz	720p	500G 7200	HD 4600	N2230	Media	Switch	None	Monitor	USB	G P	Win7 Pro64	DG 09/24/13
10BB001DUS	i5-4570S	4GBx1	1600MHz	720p	500G 7200	HD 4600	N2230	Media	Switch	None	Frame	USB	G P	Win7 Pro64	09/24/13
10BB002VUS	i3-4130	4GBx1	1600MHz	720p	500G 7200	HD 4400	N2230	Media	Switch	None	Monitor	USB	G P	Win7 Pro64	DG 09/24/13

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system²⁰ <i>Some:</i> Windows 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Nitro Pro
Implementation	Processor in LGA1150 socket		
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio		
Multi-touch	None		
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off		
Controls	Side buttons for brightness up, brightness down, and power on/off		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high		
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-V		
Audio	High Definition (HD) Audio, Realtek ALC269VC		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Mechanical	● Business black color ● Carry handle in rear ● Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US model(s) announced September 24, 2012

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 (MDST1-6) September 2013

ThinkCentre® M73z (10BB) - GMP (Win8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/ Mouse	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10BB001CUS	i5-4570S	4GBx1	1600MHz	720p	500G 7200	HD 4600	N2230	Media Switch	None	Frame	USB	G P	Win8 Pro64	09/24/13

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Mainstream All-In-One PC for the enterprise Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 8 Pro 64-bit
Implementation	Processor in LGA1150 socket		Web install applications (only some listed) • Password Manager
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook)		Preloaded applications (only some listed) • ThinkVantage System Update • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Norton Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Intel AppUp • Nitro Pro • AccuWeather • Norton™ Studio
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant EuP 2013 Certified
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio		
Multi-touch	None		
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off		
Controls	Side buttons for brightness up, brightness down, and power on/off		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high		
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-V		
Audio	High Definition (HD) Audio, Realtek ALC269VC		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Modem	None		
IEEE 1394	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Mechanical	• Business black color • Carry handle in rear • Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced September 24, 2012

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(MDST1-7) September 2013



Lenovo ThinkCentre M78
Small and Tower



Lenovo ThinkCentre M78 Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M78 Small



Lenovo ThinkCentre M78 Small
with Lenovo ThinkVision Monitor



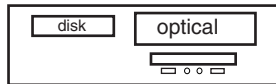
Lenovo ThinkCentre M78 Tower



Lenovo ThinkCentre M78 Tower

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
5100-A1U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A3U	4x3	A4-5300	4GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A4U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Pro 64 08/28/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2
Processor	
Implementation	
Memory	
Graphics	
DP dongle	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz None
Disk	SATA 6.0Gb/s 7200 rpm
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar
eSATA port	None
Media reader	None
Chipset	AMD A75 Chipset
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
IEEE 1394	None
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®
Modem	None
Security chip	Trusted Platform Module (TPM 1.2-compliant)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo
Floor Stand	System floor stand for vertical orientation
Power supply	240 watts, autosensing, active Power Factor Correction
Machine	• Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3
	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available
Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Google Chrome • Google Toolbar • Skype™ for Windows • Evernote® • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)	
RoHS-compliant	
Supports ThinkVantage Technologies	
For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet	

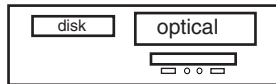
Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
5100-B1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Win8 Pro64	10/23/12
5100-B2U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Win8 Pro64	10/23/12
5100-C1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Win7 Pro64	10/30/12
5100-C2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Win7 Pro64	10/30/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability	
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2	
Implementation	Processor in Socket FM2	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz None	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1	
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar	
eSATA port	None	
Media reader	None	
Chipset	AMD A75 Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Modem	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, active Power Factor Correction	
Machine	• Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader	
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3	
disk optical		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	
Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Google Chrome • Google Toolbar • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage® System Update • View Management Utility • Lenovo Solution Center • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Evernote® • Skype™		
Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)		
RoHS-compliant		
Supports ThinkVantage Technologies		
For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
4865-A7U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	Pro 32	08/28/12
4865-C1U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	None	Pro 64	08/28/12
4865-C2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	Pro 64	08/28/12
4865-C3U	4x3	A4-5300	4GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	Pro 64	08/28/12

●3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation	Processor in Socket FM2			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz None			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	AMD A75 Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, active Power Factor Correction			
Machine	● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet	

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
4865-E1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Win8 Pro64	10/23/12

●3-year limited warranty

Positioning	Processor		Mainstream enterprise stability and manageability		Preloaded operating system Windows® 8 Pro 64-bit Preloaded applications (only some listed) ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)
Implementation	Processor		in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets				
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>				
DP dongle	None				
Disk	SATA 6.0Gb/s 7200 rpm				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive				
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1				
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar				
eSATA port	None				
Media reader	None				
Chipset	AMD A75 Chipset				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)				
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)				
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)				
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec				
Speaker	Internal speaker for business audio				
IEEE 1394	None				
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®				
Modem	None				
Security chip	Trusted Platform Module (TPM 1.2-compliant)				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo				
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo				
Floor Stand	System floor stand for vertical orientation				
Power supply	240 watts, autosensing, active Power Factor Correction				
Machine	● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention				
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader				
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3				
disk optical					
Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)					
RoHS-compliant					
Supports ThinkVantage Technologies					
For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet					
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available				

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2113-A1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	ES52	None	Pro 32 08/28/12

●3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)		Preloaded operating system Genuine Windows® 7 Professional 32 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
disk optical			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

ThinkCentre® M78 Small (2113) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
2113-D1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-D2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-D3U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-D4U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7450	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-E1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	ES52	None	Win7 Pro64 10/30/12

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models ● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● Lenovo® Message Center Plus ● Lenovo SimpleTap ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) - Windows 8 models ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Norton™ Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) - All models ● ThinkVantage® System Update ● View Management Utility ● Lenovo Solution Center ● Norton Internet Security (30 days of virus definitions) ● Microsoft® Office preloaded; purchase a product key to activate ● Evernote® ● Skype™
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)		
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Some: AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; Maximum resolution: 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz Some: AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced October 23 or 30, 2012

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ThinkCentre® M78 Small (2114) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
2114-A1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	G P	Pro 64	08/28/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)		
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution</i> : 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
disk optical			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Cable lock Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s)			
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
US model(s) announced August 28, 2012

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
2114-B1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	G P	Win8 Pro64	10/23/12
2114-C1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	G P	Win7 Pro64	10/30/12

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

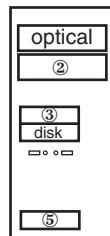
Positioning Processor	Mainstream enterprise stability and manageability AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2	Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Google Chrome • Google Toolbar • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage® System Update • View Management Utility • Lenovo Solution Center • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Evernote® • Skype™ Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet
Implementation	Processor in Socket FM2	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i> None	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1	
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar	
eSATA port	None	
Media reader	None	
Chipset	AMD A75 Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Modem	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, 85% PSU	
Machine	• Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader	
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

ThinkCentre® M78 Tower (2111) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Win7 Global preload	Ann date (mm/dd/yy)
2111-A1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	None	Pro 64 08/28/12
2111-A2U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	None	Pro 64 08/28/12
2111-A3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	None	None	Pro 64 08/28/12
2111-A4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	GeForce 605	None	None	None	None	Pro 64 08/28/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box		
Implementation	Processor in Socket FM2										Preloaded applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)		
Graphics	<i>Some:</i> AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz <i>Some:</i> NVIDIA® GeForce® 605 , PCI Express® 2.0 x16 adapter, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	AMD A75 Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)		
RoHS-compliant													
Supports ThinkVantage Technologies													
For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet													
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced August 28, 2012

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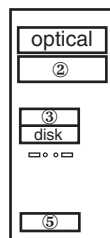
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
2111-B2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	None	Win8 Pro64	10/23/12
2111-B3U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	None	Win8 Pro64	10/23/12
2111-C2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	None	Win7 Pro64	10/30/12
2111-C3U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	None	Win7 Pro64	10/30/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Google Chrome • Google Toolbar • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage® System Update • View Management Utility • Lenovo Solution Center • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Evernote® • Skype™
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz None		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, manual switch		
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)			
RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

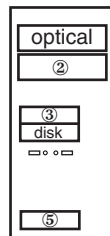
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
1766-A7U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Pro 32	08/28/12
1766-B1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Pro 64	08/28/12
1766-B2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Prem 32	08/28/12
1766-B3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	None	Pro 64	08/28/12
1766-B4U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Pro 64	08/28/12

●3-year limited warranty

Positioning Processor	<i>Mainstream enterprise stability and manageability</i> AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 <i>Some:</i> Genuine Windows 7 Home Premium 32	
Implementation	Processor in Socket FM2		Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Google Chrome • Google Toolbar • Skype™ for Windows • Evernote® • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz None			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	AMD A75 Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts with variable speed fan, manual switch			
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)	
			RoHS-compliant	
			Supports ThinkVantage Technologies	
			For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet	

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Win7 Global preload	Ann date (mm/dd/yy)
1562-A1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Pro 32 08/28/12
1562-C1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Prem 32 08/28/12
1562-C2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Pro 64 08/28/12
1562-C3U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	None	Pro 64 08/28/12
1562-C4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	ES52	None	Pro 64 08/28/12
1562-C5U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	GeForce 605	None	None	ES52	None	Pro 64 08/28/12

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Some: Genuine Windows 7 Home Premium 32		
Implementation	Processor in Socket FM2										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets										● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box		
Graphics	Some: AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; Maximum resolution: 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz Some: NVIDIA® GeForce® 605, PCI Express® 2.0 x16 adapter, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz										Preloaded applications (only some listed)		
DP dongle	None										● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)		
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None										Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)		
Chipset	AMD A75 Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										EPEAT™ Gold rating		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										ENERGY STAR 5.2-compliant		
Speaker	Internal speaker for business audio										ULE Gold		
IEEE 1394	None										RoHS-compliant		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										Supports ThinkVantage Technologies		
Modem	None										For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										Limited Warranty 3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts, autosensing, 85% PSU												
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
1562-E1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Win8 Pro64	10/23/12
1562-E2U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	None	Win8 Pro64	10/23/12
1562-E3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	ES52	None	Win8 Pro64	10/23/12
1562-E4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7450	None	None	ES52	None	Win8 Pro64	10/23/12
1562-F1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Win7 Pro64	10/30/12

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2		
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Some: AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz</i> Some: AMD Radeon HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i> ; works along with Intel HD Graphics to support up to four independent monitors		Preloaded applications (only some listed) - Windows 7 models - ThinkVantage® Product Recovery - ThinkVantage Communication Utility - ThinkVantage Power Manager - Lenovo® Message Center Plus - Lenovo SimpleTap - Adobe® Reader® - Google Chrome - Google Toolbar - RapidBoot HDD Accelerator - Symantec™ VIP - Windows Live™ Essentials - Corel® Burn.Now™ (DVD±RW) - Corel DVD MovieFactory® (DVD±RW) - Windows 8 models - Lenovo Support - Lenovo Companion - Lenovo Cloud Storage - Lenovo QuickLaunch - Norton™ Studio - Intel AppUp® - AccuWeather - PC Device Stage - Cyberlink Power2Go (DVD±RW) - Cyberlink PowerProducer (DVD±RW) - All models - ThinkVantage® System Update - View Management Utility - Lenovo Solution Center - Norton Internet Security (30 days of virus definitions) - Microsoft® Office preloaded; purchase a product key to activate - Evernote® - Skype™
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts, autosensing, 85% PSU		
Machine	- Business black color; metal case 6.9" W X 17.4" D X 16.3" H 175mm W X 442mm D X 414mm H 27.5 lb (12.5 kg) in maximum configuration - Toolless cover removal, toolless adapter retention - Toolless disk, optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Preloaded operating system

Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Some: Windows 8 Pro 64-bit

Preloaded applications (only some listed) - Windows 7 models

- ThinkVantage® Product Recovery
- ThinkVantage Communication Utility
- ThinkVantage Power Manager
- Lenovo® Message Center Plus
- Lenovo SimpleTap
- Adobe® Reader®
- Google Chrome
- Google Toolbar
- RapidBoot HDD Accelerator
- Symantec™ VIP
- Windows Live™ Essentials
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

- Windows 8 models

- Lenovo Support
- Lenovo Companion
- Lenovo Cloud Storage
- Lenovo QuickLaunch
- Norton™ Studio
- Intel AppUp®
- AccuWeather
- PC Device Stage
- Cyberlink Power2Go (DVD±RW)
- Cyberlink PowerProducer (DVD±RW)

- All models

- ThinkVantage® System Update
- View Management Utility
- Lenovo Solution Center
- Norton Internet Security (30 days of virus definitions)
- Microsoft® Office preloaded; purchase a product key to activate
- Evernote®
- Skype™

Security

- Security chip (see information on left)
- One lock to secure both cover and entire system to fixed object:
 - Padlock loop (in rear for opt padlock)
 - Security slot (in rear for optional Kensington® MicroSaver® cable)
- Cable lock
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Chassis intrusion switch on selected model(s)

EPEAT™ Gold rating
 ENERGY STAR 5.2-compliant
 ULE Gold
 RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to O-M78 sheet;
 For ThinkPlus™ service upgrade options, please go to S-TC sheet

ThinkCentre® M78 Tower (1565) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
1565-A1U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	G P	Pro 64	08/28/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

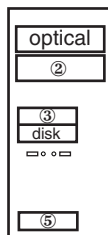
Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)		
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution</i> : 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
optical ② ③ disk □ □ □ ⑤			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US model(s) announced August 28, 2012

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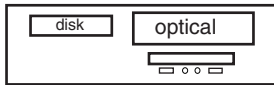
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global (G) GMP (P)	Ann date (mm/dd/yy)
1565-B1U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	G P	Win8 Pro64 10/23/12
1565-C1U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	G P	Win7 Pro64 10/30/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit		
Implementation	Processor in Socket FM2										Some: Windows 8 Pro 64-bit		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed)		
Graphics	AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz										- Windows 7 models		
DP dongle	None										• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Google Chrome • Google Toolbar • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)		
Disk	SATA 6.0Gb/s 7200 rpm										- Windows 8 models		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										• Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										- All models		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										• ThinkVantage® System Update • View Management Utility • Lenovo Solution Center • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Evernote® • Skype™		
eSATA port	None										Security		
Media reader	None										• Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)		
Chipset	AMD A75 Chipset										EPEAT™ Gold rating		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										ENERGY STAR 5.2-compliant		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										ULE Gold		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										RoHS-compliant		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										Supports ThinkVantage Technologies		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										For compatible accessories, please go to O-M78 sheet;		
Speaker	Internal speaker for business audio										For ThinkPlus™ service upgrade options, please go to S-TC sheet		
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts, autosensing, 85% PSU												
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												
													
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	DP to DP Cable	Global	Preload	Ann date (mm/dd/yy)
10BU0000US	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	None	HD 7480D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0001US	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0002US	4x3	A4-6300B	4GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0003US	4x3	A6-6400B	4GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0004US	4x3	A8-6500B	4GBx1	500G 7200	DVD±RW	None	None	HD 8570D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0005US	4x3	A8-6500B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13
10BU0006US	4x3	A6-6400B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13
10BU0007US	4x3	A4-6300B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13
10BU0008US	4x3	A4-6300B	2GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/22/13
10BU0009US	4x3	A6-6400B	2GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	None	None	None	Win7 Pro64 (DG)	12/10/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD APU A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A4-6300B (dual-core, 3.7GHz, 1MB L2 cache), Turbo Core (up to 3.9GHz), AMD Radeon HD 8370D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A6-6400B (dual-core, 3.9GHz, 1MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8470D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-6500B (quad-core, 3.5GHz, 4MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8570D Graphics, DDR3 memory controller (up to 1866MHz) Processor in Socket FM2		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro	
Implementation	Processor in Socket FM2			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz <i>Some:</i> DisplayPort to DisplayPort monitor cable			
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	AMD A75 Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
PCIe WLAN	None			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	Optional System floor stand for vertical orientation			
Power supply	240 watts, autosensing			
Machine	• Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

ThinkCentre® M78 Small (10BT) - 1-year onsite

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	2nd Serial	Floor stand	DP to Cable	Preload	Ann date (mm/dd/yy)
10BT0004US	4x3	A8-5500B	8GBx1	1TB 7200	DVD±RW	None	Media	HD 8570	None	None	Serial	Stand	Cable	Win7 Pro64 (DG)	10/01/13
10BT0005US	4x3	A4-5300	4GBx1	500G 7200	DVD±RW	None	None	HD 7480D	None	None	Serial	Stand	None	Win7 Pro64 (DG)	10/01/13
10BT0006US	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	N105	Media	HD 7540D	None	None	Serial	Stand	None	Win7 Pro64 (DG)	10/01/13

● 1-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro
Processor	AMD APU A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core (up to 3.7GHz), AMD Radeon HD 7560D Graphics, DDR3 memory controller (up to 1866MHz)		
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz		
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, Intel Centrino® Wireless-N 105, 1x1		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing		
Machine	• Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
disk optical			
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Preloaded operating system

Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit

Ready to install applications (only some listed)

- Rescue and Recovery™
- Password Manager

Preloaded applications (only some listed)

- ThinkVantage® Product Recovery
- ThinkVantage System Update
- ThinkVantage Communication Utility
- ThinkVantage Power Manager
- View Management Utility
- PC Device Stage
- Lenovo Cloud Storage by SugarSync
- Lenovo Solution Center
- Lenovo Message Center Plus
- Norton™ Internet Security (30 days of virus definitions)
- Adobe® Reader®
- Skype™
- Evernote®
- Microsoft® Office preloaded; purchase a product key to activate
- Cyberlink Power2Go (DVD±RW)
- Cyberlink PowerProducer (DVD±RW)
- Nitro Pro

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Cable lock
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Chassis intrusion switch on selected model(s)

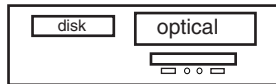
RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	DP to DP Cable	Global	Preload	Ann date (mm/dd/yy)
10BT0000US	4x3	A4-5300B	4GBx1	500G 7200	DVD±RW	None	None	HD 7480D	Switch	None	Stand	None	None	Win7 Pro64	10/01/13
10BT0008US	4x3	A4-6300B	4GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BT0009US	4x3	A6-6400B	4GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BT000AUS	4x3	A8-6500B	4GBx1	500G 7200	DVD±RW	None	None	HD 8570D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BT000BUS	4x3	A6-6400B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13
10BT000CUS	4x3	A8-6500B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13

●3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD APU A4-5300B (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A4-6300B (dual-core, 3.7GHz, 1MB L2 cache), Turbo Core (up to 3.9GHz), AMD Radeon HD 8370D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-6400B (dual-core, 3.9GHz, 1MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8470D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-6500B (quad-core, 3.5GHz, 4MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8570D Graphics, DDR3 memory controller (up to 1866MHz)		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	
Implementation	Processor in Socket FM2		Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro	
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz			
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	AMD A75 Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
PCIe WLAN	None			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing			
Machine	• Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)	
			RoHS-compliant	
			Supports ThinkVantage Technologies	
			For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	2nd Serial / Parallel	Floor stand	DP to DP Cable	Preload	Ann date (mm/dd/yy)
10BS0002US	4x3	A8-6500B	4GBx1	1TB 7200	DVD±RW	N2230	None	HD 8570	Switch	None	S P	Stand	Cable	Win8 Pro64	10/01/13

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Windows® 8 Pro 64-bit Ready to install applications (only some listed) ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Desktop Power Manager ● PC Device Stage ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Nitro Pro ● AccuWeather ● Norton Studio Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Processor	AMD APU A8-6500B (quad-core, 3.5GHz, 4MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon™ HD 8570D Graphics, DDR3 memory controller (up to 1866MHz)		
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz		
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
disk optical			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced October 1, 2013

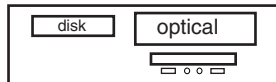
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ThinkCentre® M78 Small (10BS) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	Floor stand	DP to DP Cable	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10BS0005US	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	N105	None	HD 8470	Switch	None	Stand	None	G P	Win7 Pro64 (DG)	10/01/13
10BS0006US	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	Switch	None	Stand	None	G P	Win7 Pro64 (DG)	10/01/13
10BS0007US	4x3	A4-5300B	2GBx1	500G 7200	DVD	None	None	HD 7480D	Switch	None	Stand	None	G P	Win7 Pro64	10/01/13

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD APU A4-5300B (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core (up to 3.7GHz), AMD Radeon HD 7560D Graphics, DDR3 memory controller (up to 1866MHz) Processor in Socket FM2		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	
Implementation	Processor in Socket FM2		Ready to install applications (only some listed)	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		• Rescue and Recovery™ • Password Manager	
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz <i>Some:</i> AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz		Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro	
DP cable	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	AMD A75 Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, Intel Centrino® Wireless-N 105, 1x1			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	• Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant	
			Supports ThinkVantage Technologies	
			For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US model(s) announced October 1, 2013

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	DP to DP Cable	Global	Preload	Ann date (mm/dd/yy)
10BR0000US	4x5	A4-5300	2GBx1	250G 7200	DVD±RW	None	None	HD 7480D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BR0001US	4x5	A6-5400B	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BR0002US	4x5	A4-6300B	2GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BR0004US	4x5	A6-6400B	4GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BR0005US	4x5	A8-6500B	4GBx1	500G 7200	DVD±RW	None	None	HD 8570D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BR0006US	4x5	A8-6500B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 Pro64 (DG)	10/01/13
10BR0007US	4x5	A6-6400B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 Pro64 (DG)	10/01/13
10BR0008US	4x5	A4-6300B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 Pro64 (DG)	10/01/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD APU A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A4-6300B (dual-core, 3.7GHz, 1MB L2 cache), Turbo Core (up to 3.9GHz), AMD Radeon HD 8370D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A6-6400B (dual-core, 3.9GHz, 1MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8470D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-6500B (quad-core, 3.5GHz, 4MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8570D Graphics, DDR3 memory controller (up to 1866MHz)										Preloaded operating system			
Implementation	Processor in Socket FM2										Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Ready to install applications (only some listed)			
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz <i>Some:</i> DisplayPort to DisplayPort monitor cable										● Rescue and Recovery™ ● Password Manager			
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable										Preloaded applications (only some listed)			
Disk	SATA 6.0Gb/s 7200 rpm										● ThinkVantage® Product Recovery			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										● ThinkVantage System Update			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										● ThinkVantage Communication Utility			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										● ThinkVantage Power Manager			
eSATA port	None										● View Management Utility			
Media reader	None										● PC Device Stage			
Chipset	AMD A75 Chipset										● Lenovo Cloud Storage by SugarSync			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										● Lenovo Solution Center			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										● Lenovo Message Center Plus			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										● Norton™ Internet Security (30 days of virus definitions)			
PCIe WLAN	None										● Adobe® Reader®			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										● Skype™			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										● Evernote®			
Speaker	Internal speaker for business audio										● Microsoft® Office preloaded; purchase a product key to activate			
IEEE 1394	None										● Cyberlink Power2Go (DVD±RW)			
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										● Cyberlink PowerProducer (DVD±RW)			
Modem	None										● Nitro Pro			
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo										Security			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										● Security chip (see information on left)			
Power supply	280 watts, manual switch										● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable)			
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal										● Cable lock			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader* Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk* *bay only available on models with HDD/SSD/reader installed										● Power-on password			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										● Administrator password			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										● Hard disk password			
											● Boot sequence control			
											● Boot without keyboard and mouse			
											● Individual USB port disablement			
											● Chassis intrusion switch on selected model(s)			
											RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

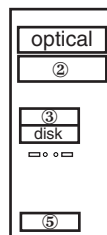
See footnotes for important warranty information
 US model(s) announced October 1, 2013

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	DP to DP Cable	Global	Preload	Ann date (mm/dd/yy)
10BQ0000US	4x5	A4-5300B	4Gx1+2Gx3	500G Hybrid	DVD±RW	None	None	HD 7480D	Switch	None	None	None	Win7 Pro64	10/01/13
10BQ0004US	4x5	A4-5300	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BQ0005US	4x5	A6-5400B	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BQ0006US	4x5	A8-5500B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BQ0008US	4x5	A4-6300B	4GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BQ0009US	4x5	A6-6400B	4GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	None	None	Win7 Pro64 (DG)	10/01/13

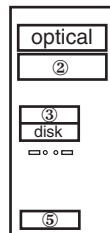
•3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability AMD APU A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A4-5300B (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A4-6300B (dual-core, 3.7GHz, 1MB L2 cache), Turbo Core (up to 3.9GHz), AMD Radeon HD 8370D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A6-6400B (dual-core, 3.9GHz, 1MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8470D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core (up to 3.7GHz), AMD Radeon HD 7560D Graphics, DDR3 memory controller (up to 1866MHz)										Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro				
Implementation	Processor in Socket FM2														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz														
DP cable	None														
Disk	<i>Some:</i> SATA 6.0Gb/s 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1														
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	AMD A75 Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
PCIe WLAN	None														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®														
Modem	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, manual switch														
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader* Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk* *bay only available on models with HDD/SSD/reader installed														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	DP to DP Cable	Global	Preload	Ann date (mm/dd/yy)
10BQ000AUS	4x5	A8-6500B	4GBx1	500G 7200	DVD±RW	None	None	HD 8570D	None	None	None	None	Win7 Pro64 (DG)	10/01/13
10BQ000BUS	4x5	A8-6500B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 Pro64 (DG)	10/01/13
10BQ000CUS	4x5	A4-6300B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 Pro64 (DG)	10/01/13
10BQ000DUS	4x5	A6-6400B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 Pro64 (DG)	10/01/13

• 3-year limited warranty

Positioning Processor	<i>Mainstream enterprise stability and manageability</i> AMD APU A4-6300B (dual-core, 3.7GHz, 1MB L2 cache), Turbo Core (up to 3.9GHz), AMD Radeon™ HD 8370D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-6400B (dual-core, 3.9GHz, 1MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8470D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-6500B (quad-core, 3.5GHz, 4MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8570D Graphics, DDR3 memory controller (up to 1866MHz) Processor in Socket FM2		Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz <i>Some:</i> DisplayPort to DisplayPort monitor cable			
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable			
Disk	<i>Some:</i> SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	AMD A75 Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
PCIe WLAN	None			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, manual switch			
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader* Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk* *bay only available on models with HDD/SSD/reader installed			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

Type-model	Slot x bay	Processor	Memory*	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	2nd Serial / Parallel	DP to DP Cable	DP to DVI Dongle	Preload	Ann date (mm/dd/yy)
10BN0001US	4x5	A8-5500B	4Gx1+2Gx3	1TB 7200	DVD±RW	N2230	None	HD 8470	Switch	None	S P	Cable	Dongle	Win8 Pro64	10/01/13

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system				
Processor	AMD APU A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core (up to 3.7GHz), AMD Radeon™ HD 7560D Graphics, DDR3 memory controller (up to 1866MHz) Processor in Socket FM2										Windows® 8 Pro 64-bit				
Implementation											Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets										● Password Manager				
Graphics	AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz Some: AMD Radeon™ HD 8470, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz										Preloaded applications (only some listed)				
DP cable	Some: DisplayPort to DisplayPort monitor cable										● ThinkVantage® System Update				
DP dongle	Some: DisplayPort to DVI-D cable										● View Management Utility				
Disk	Some: SATA 6.0Gb/s 7200 rpm										● Lenovo® Support				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										● Lenovo Companion				
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										● Lenovo Cloud Storage by SugarSync				
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										● Lenovo Solution Center				
eSATA port	None										● Desktop Power Manager				
Media reader	None										● PC Device Stage				
Chipset	AMD A75 Chipset										● Microsoft® Office preloaded; purchase a product key to activate				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										● Norton™ Internet Security (30 days of virus definitions)				
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										● PC Device Stage				
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										● Evernote®				
PCIe WLAN	Some: 11b/g/n wireless, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2										● Skype™				
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										● Cyberlink PowerDVD (DVD±RW, DVD)				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										● Cyberlink Power2Go (DVD±RW)				
Speaker	Internal speaker for business audio										● Cyberlink PowerProducer (DVD±RW)				
IEEE 1394	None										● Nitro Pro				
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										● AccuWeather				
Modem	None										● Norton Studio				
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader* Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk* *bay only available on models with HDD/SSD/reader installed														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security				
											● Security chip (see information on left)				
											● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable)				
											● Cable lock				
											● Power-on password				
											● Administrator password				
											● Hard disk password				
											● Boot sequence control				
											● Boot without keyboard and mouse				
											● Individual USB port disablement				
											● Chassis intrusion switch on selected model(s)				
											EPEAT™ Gold rating				
											ENERGY STAR 5.2-compliant				
											ULE Gold				
											RoHS-compliant				
											Supports ThinkVantage Technologies				
											For compatible accessories, please go to TC-AQP sheet;				
											For Lenovo service upgrade options, please go to S-TC sheet				

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	DP to DP Cable	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10BN0005US	4x5	A4-5300B	2GBx1	500G 7200	DVD	None	None	HD 7480D	Switch	None	None	G P	Win7 Pro64	10/01/13
10BN0006US	4x5	A8-5500B	4GBx1	1TB 7200	DVD±RW	N105	None	HD 8470	Switch	None	None	G P	Win7 Pro64 (DG)	10/01/13
10BN0007US	4x5	A6-5400B	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	Switch	None	None	G P	Win7 Pro64 (DG)	10/01/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) - Rescue and Recovery™ - Password Manager Preloaded applications (only some listed) - ThinkVantage® Product Recovery - ThinkVantage System Update - ThinkVantage Communication Utility - ThinkVantage Power Manager - View Management Utility - PC Device Stage - Lenovo Cloud Storage by SugarSync - Lenovo Solution Center - Lenovo Message Center Plus - Norton™ Internet Security (30 days of virus definitions) - Adobe® Reader® - Skype™ - Evernote® - Microsoft® Office preloaded; purchase a product key to activate - Cyberlink Power2Go (DVD±RW) - Cyberlink PowerProducer (DVD±RW) - Nitro Pro			
Processor	AMD APU A4-5300B (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core (up to 3.7GHz), AMD Radeon HD 7560D Graphics, DDR3 memory controller (up to 1866MHz) Processor in Socket FM2													
Implementation	Processor in Socket FM2													
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets													
Graphics	AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; Maximum resolution: 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz Some: AMD Radeon™ HD 8470, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz													
DP cable	None													
Disk	Some: SATA 6.0Gb/s 7200 rpm													
Optical	Some: DVD-ROM DL SATA 1.5Gb/s Drive Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	AMD A75 Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
PCIe WLAN	Some: 11b/g/n wireless, Intel Centrino® Wireless-N 105, 1x1													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	- Business black color; metal case 6.9" W X 17.4" D X 16.3" H 175mm W X 442mm D X 414mm H 27.5 lb (12.5 kg) in maximum configuration - Toolless cover removal, toolless adapter retention - Toolless disk, optical drive removal													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader* Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk* *bay only available on models with HDD/SSD/reader installed													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

Memory

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11
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Storage and removable storage

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 5100/4865/2113/2114 support Low Profile:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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Tower 2111/1766/1562/1565 support 75 watts max:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultralim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁶²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre M82
Small and Tower



Lenovo ThinkCentre M82 Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M82 Small



Lenovo ThinkCentre M82 Small
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M82 Tower



Lenovo ThinkCentre M82 Tower

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3306-A1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 06/19/12
3306-A2U	4x3	i5-3470	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 06/19/12
3306-A3U	4x3	i5-3470	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 06/19/12
3306-A4U	4x3	i5-3470	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	None	None	Pro 64 06/19/12
3306-A5U	4x3	i5-3470	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7350	None	None	Stand	None	None	Pro 64 06/19/12
3306-A6U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	None	None	Pro 64 06/19/12
3306-D1U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	<i>Some:</i> Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors <i>Some:</i> AMD Radeon HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors		
DP dongle	None		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q75 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3306-B2U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	07/10/12
3306-B3U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	07/10/12
3306-F1U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q75 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
disk optical			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
GREENGUARD® certified RoHS-compliant
Supports ThinkVantage Technologies
For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet

Preloaded operating system

Genuine Windows® 7 Professional 64

Ready to install applications (only some listed)

- Rescue and Recovery™
- Password Manager

Preloaded applications (only some listed)

- ThinkVantage® Product Recovery
- ThinkVantage System Update
- ThinkVantage Communication Utility
- ThinkVantage Power Manager
- View Management Utility
- Lenovo AppShop
- Lenovo Solution Center
- Lenovo Message Center Plus
- Lenovo SimpleTap
- Norton™ Internet Security (30 days of virus definitions)
- Adobe® Reader®
- Skype™ for Windows
- Windows Live™ Essentials
- Microsoft® Office preloaded; purchase a product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Cable lock
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Chassis intrusion switch on selected model(s)

 GREENGUARD® certified
RoHS-compliant

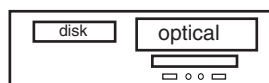
Supports ThinkVantage Technologies

 For compatible accessories, please go to O-M82 sheet;
For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M82 Small (3306) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3306-C1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-F2U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-F3U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-F4U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-G1U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win7 Pro64 10/23/12
3306-G2U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win7 Pro64 10/23/12
3306-G3U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win7 Pro64 10/23/12
3306-H1U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	Win7 Pro64 03/05/13
3306-J1U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	None	None	Win7 Pro64 03/12/13
3306-J2U	4x3	i5-3475S	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	Win7 Pro64 03/12/13
3306-J3U	4x3	i5-3475S	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	None	None	Win7 Pro64 03/12/13
Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit		
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										- Windows 7 models		
Graphics	Some: Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors										- ThinkVantage® Product Recovery - ThinkVantage Communication Utility - ThinkVantage Power Manager - Lenovo® AppShop - Lenovo Message Center Plus - Lenovo SimpleTap - Adobe® Reader® - Windows Live™ Essentials - Corel® Burn.Now™ (DVD±RW) - Corel DVD MovieFactory® (DVD±RW)		
DP dongle	None										- Windows 8 models		
Disk	SATA 6.0Gb/s 7200 rpm										- Lenovo Support - Lenovo Companion - Lenovo Cloud Storage - Norton™ Studio - AccuWeather - Evernote® - Cyberlink Power2Go (DVD±RW) - Cyberlink PowerProducer (DVD±RW)		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										- All models		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										- ThinkVantage System Update - Lenovo Solution Center - View Management Utility - Norton Internet Security (30 days of virus definitions) - Microsoft® Office preloaded; purchase a product key to activate - Skype™		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										Security		
eSATA port	None										- Security chip (see information on left) - Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - Cable lock - Power-on password - Administrator password - Hard disk password - Boot sequence control - Boot without keyboard and mouse - Individual USB port disablement - Chassis intrusion switch on selected model(s)		
Media reader	None										GREENGUARD® certified		
Chipset	Intel Q75 Express Chipset										RoHS-compliant		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										Supports ThinkVantage Technologies		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										For compatible accessories, please go to O-M82 sheet;		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										For Lenovo service upgrade options, please go to S-TC sheet		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Manageability	Intel Standard Manageability												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, active Power Factor Correction												
Machine	- Business black color; metal case 13.3" W X 15.2" D X 3.9" H 338mm W X 385mm D X 100mm H 16.5 lb (7.5 kg) in maximum configuration - Toolless cover flips up and tilts backward on rear hinges - Toolless disk and optical drive removal - Toolless adapter retention												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3395-A2U	4x3	i3-2130	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2000	None	None	Stand	None	Pro 64	06/19/12
✗ 3395-C6U	4x3	i3-2120	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	None	Pro 64	06/19/12
✗ 3395-C7U	4x3	G850	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	None	Stand	None	Pro 32	06/19/12

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Pentium® G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz None		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q75 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Cable lock
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Chassis intrusion switch on selected model(s)

GREENGUARD® certified
RoHS-compliant

Supports ThinkVantage Technologies

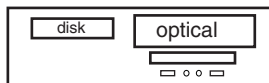
For compatible accessories, please go to O-M82 sheet;
For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3395-C4U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 64	06/19/12
3395-C5U	4x3	i5-3550	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 64	06/19/12
3395-D5U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 32	06/19/12
3395-D6U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 32	06/19/12
3395-G1U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 64	07/10/12

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability			Preloaded operating system
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket			
Implementation	Processor in LGA1155 socket			Ready to install applications (only some listed)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz			Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q75 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, active Power Factor Correction			
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
disk optical				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
✕ 3395-H7U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64	10/23/12
3395-N1U	4x3	i3-2130	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	None	Win7 Pro64	10/23/12
✕ 3395-N2U	4x3	i3-2120	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	None	Win7 Pro64	10/23/12
3395-N3U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Win7 Pro64	10/23/12
3395-AAU	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Win8 Pro64	11/27/12
3395-R1U	4x3	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	None	Intel HD	None	None	Stand	None	Win7 Pro64	12/04/12
3395-R2U	4x3	G2020	4GBx1 1600MHz	500G 7200	DVD±RW	None	Intel HD	None	None	Stand	None	Win7 Pro64	01/22/13
3395-CAU	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Win7 Pro64	03/05/13
3395-DAU	4x3	i5-3475S	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	None	Win7 Pro64	03/12/13
Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	Intel® Pentium® G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz) Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz) Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz) Intel Core i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit		
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets												
Graphics	Intel HD Graphics / 2000 / 2500 / 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Manageability	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	Some: System floor stand for vertical orientation												
Power supply	240 watts, autosensing, active Power Factor Correction												
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												



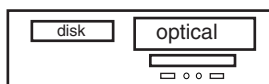
ThinkCentre® M82 Small (2756) - ENERGY STAR® 5.2 - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2756-B1U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	06/05/12
2756-B3U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	06/05/12
2756-D1U	4x3	i5-3550	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	06/05/12
2756-D2U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	None	06/05/12
2756-D7U	4x3	i5-3550	4GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	06/05/12
2756-F1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	06/05/12
2756-F2U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	06/05/12
2756-F3U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	None	06/05/12
2756-F4U	4x3	i5-3470	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	06/05/12

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64		
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed)		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)		
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Manageability	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, 85% PSU												
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet		



See footnotes for important warranty information

US models announced June 5, 2012

✗ US model withdrawn effective November 2012

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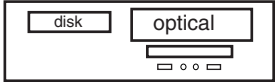
(MDTN1-2) November 2012

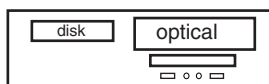
ThinkCentre® M82 Small (2756) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
2756-J2U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64	10/23/12
2756-L4U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64	10/23/12
2756-L5U	4x3	i3-3240	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64	10/23/12
2756-L6U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64	10/23/12
2756-L7U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	None	Win8 Pro64	10/23/12

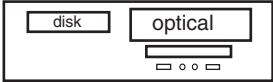
●3-year limited warranty

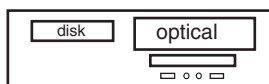
Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Windows® 8 Pro 64-bit Preloaded applications (only some listed) ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)	
Implementation	Processor in LGA1155 socket			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	<i>Some:</i> Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q75 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet	



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
2756-N3U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win7 Pro64	10/23/12
2756-N4U	4x3	i3-2130	4GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	ES52	None	Win7 Pro64	10/23/12
2756-N5U	4x3	i3-2130	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	ES52	None	Win7 Pro64	10/23/12
✕ 2756-N6U	4x3	G870	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	None	Stand	ES52	None	Win7 Pro64	10/23/12
2756-N7U	4x3	G640	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	None	Stand	ES52	None	Win7 Pro64	10/23/12
2756-N8U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	None	Win7 Pro64	10/23/12
2756-N9U	4x3	i5-3470	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win7 Pro64	10/23/12

•3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo® AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Implementation	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	Intel HD Graphics / 2000 / 2500 / 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q75 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
2929-A1U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Pro 64	06/05/12
2929-B1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Pro 64	06/19/12
2929-D1U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Pro 64	08/14/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q75 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
disk optical			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
2929-C1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Win8 Pro64	10/23/12
2929-E1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Win7 Pro64	10/23/12

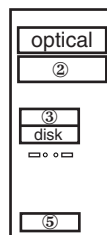
●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i5-3470 Processor (4 cores / 4 threads , 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit						
Implementation																	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets																
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz																
DP dongle	None																
Disk	SATA 6.0Gb/s 7200 rpm																
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset																
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector																
eSATA port	None																
Media reader	None																
Chipset	Intel Q75 Express Chipset																
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort																
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)																
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector																
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																
Speaker	Internal speaker for business audio																
IEEE 1394	None																
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																
Manageability	Intel Standard Manageability																
Modem	None																
Security chip	Trusted Platform Module (TPM 1.2-compliant)																
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																
Floor Stand	System floor stand for vertical orientation																
Power supply	240 watts, autosensing, 85% PSU																
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention																
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader																
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3																
disk optical														Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)			
														EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant			
														Supports ThinkVantage Technologies			
														For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3302-A1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 64	06/19/12
3302-A2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 32	06/19/12
3302-A3U	4x5	i5-3470	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 64	06/19/12
3302-A4U	4x5	i5-3470	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7350	None	None	None	None	Pro 64	06/19/12
3302-A5U	4x5	i5-3470	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	None	None	Pro 64	06/19/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64
Implementation			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Graphics	<i>Some:</i> Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors <i>Some:</i> AMD Radeon HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors		
DP dongle	None		Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q75 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, manual switch		
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

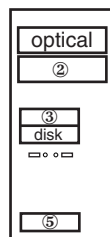


ThinkCentre® M82 Tower (3302) - TopSeller - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3302-B2U	4x5	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 64	07/10/12
3302-B3U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Pro 64	07/10/12
3302-E1U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)		
Implementation					
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets				
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>				
DP dongle	None				
Disk	SATA 6.0Gb/s 7200 rpm				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive				
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset				
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector				
eSATA port	None				
Media reader	None				
Chipset	Intel Q75 Express Chipset				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)				
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort				
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)				
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec				
Speaker	Internal speaker for business audio				
IEEE 1394	None				
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®				
Manageability	Intel Standard Manageability				
Modem	None				
Security chip	Trusted Platform Module (TPM 1.2-compliant)				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo				
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo				
Power supply	280 watts with variable speed fan, manual switch				
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal				
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk				
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3				
					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available				

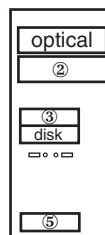
See footnotes for important warranty information
 US models announced July 10 or September 4, 2012

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 (MDTN1-15) September 2012

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3302-C1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64 10/23/12
3302-E2U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64 10/23/12
3302-E3U	4x5	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64 10/23/12
3302-F1U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64 10/23/12
3302-F2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64 10/23/12
3302-F3U	4x5	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64 10/23/12
3302-H1U	4x5	i5-3475S	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Win7 Pro64 03/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit		
Implementation											Preloaded applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										- Windows 7 models		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)		
DP dongle	None										- Windows 8 models		
Disk	SATA 6.0Gb/s 7200 rpm										• Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										- All models		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security • (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										Security		
eSATA port	None										• Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)		
Media reader	None										GREENGUARD® certified		
Chipset	Intel Q75 Express Chipset										RoHS-compliant		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										Supports ThinkVantage Technologies		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										For compatible accessories, please go to O-M82 sheet;		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										For Lenovo service upgrade options, please go to S-TC sheet		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Manageability	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3392-B6U	4x5	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Pro 64	06/19/12
3392-C1U	4x5	i3-2120	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Pro 64	06/19/12
3392-C3U	4x5	i3-2120	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Pro 64	06/19/12
3392-C7U	4x5	G630	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Pro 64	06/19/12
3392-C8U	4x5	G850	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Pro 64	06/19/12
3392-F3U	4x5	G630	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Pro 64	07/10/12

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system			
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) - Rescue and Recovery™ - Password Manager Preloaded applications (only some listed) - ThinkVantage® Product Recovery - ThinkVantage System Update - ThinkVantage Communication Utility - ThinkVantage Power Manager - View Management Utility - Lenovo AppShop - Lenovo Solution Center - Lenovo Message Center Plus - Lenovo SimpleTap - Norton™ Internet Security (30 days of virus definitions) - Adobe® Reader® - Skype™ for Windows - Windows Live™ Essentials - Microsoft® Office preloaded; purchase a product key to activate - Corel® Burn.Now™ (DVD±RW) - Corel DVD MovieFactory® (DVD±RW)			
Implementation														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets													
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector													
eSATA port	None													
Media reader	None													
Chipset	Intel Q75 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Manageability	Intel Standard Manageability													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts with variable speed fan, manual switch													
Machine	- Business black color; metal case 6.9" W X 17.4" D X 16.3" H 175mm W X 442mm D X 414mm H 24.2 lb (11.0 kg) in maximum configuration - Toolless cover removal, toolless adapter retention - Toolless disk, optical drive removal													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

optical

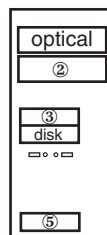
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disk

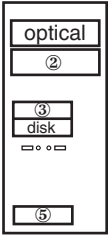
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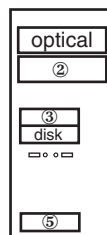
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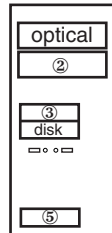
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3392-D2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 32	06/19/12
3392-C2U	4x5	i5-3550	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 64	06/19/12
3392-C4U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Pro 64	06/19/12
3392-C5U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 64	06/19/12
3392-D7U	4x5	i5-3570	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 32	06/19/12
3392-D8U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Pro 32	06/19/12
3392-D9U	4x5	i5-3470	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Pro 64	06/19/12

●3-year limited warranty

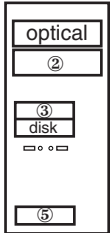
Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation	Processor in LGA1155 socket			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q75 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts with variable speed fan, manual switch			
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet	

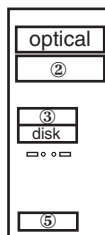


Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB	2nd Disk rpm	Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3392-G3U	4x5	i5-3470	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64	10/23/12
3392-K8U	4x5	i7-3770	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Win7 Pro64	10/23/12
3392-K9U	4x5	i5-3570	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64	10/23/12
3392-L1U	4x5	i5-3470	2GBx1 1600MHz	250G	7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64	10/23/12
3392-R1U	4x5	i5-3475S	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Win7 Pro64	03/12/13

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										- Windows 7 models				
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz										• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
DP dongle	None										- Windows 8 models				
Disk	SATA 6.0Gb/s 7200 rpm										• Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										- All models				
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton™ Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										Security				
eSATA port	None										• Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)				
Media reader	None										GREENGUARD® certified				
Chipset	Intel Q75 Express Chipset										RoHS-compliant				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										Supports ThinkVantage Technologies				
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										For compatible accessories, please go to O-M82 sheet;				
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										For Lenovo service upgrade options, please go to S-TC sheet				
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Manageability	Intel Standard Manageability														
Modem	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts with variable speed fan, manual switch														
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
															
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3392-K3U	4x5	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Win7 Pro64	10/23/12
3392-K4U	4x5	G870	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	10/23/12
3392-K5U	4x5	G640	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	10/23/12
3392-K6U	4x5	i3-2130	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Win7 Pro64	10/23/12
3392-K7U	4x5	i3-2120	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Win7 Pro64	10/23/12
3392-N1U	4x5	G2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	12/04/12
3392-N2U	4x5	G2020	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	01/22/13

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system			
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz) Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz) Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz)										Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) - Rescue and Recovery™ - Password Manager Preloaded applications (only some listed) - ThinkVantage® Product Recovery - ThinkVantage System Update - ThinkVantage Communication Utility - ThinkVantage Power Manager - View Management Utility - Lenovo® AppShop - Lenovo Solution Center - Lenovo Message Center Plus - Lenovo Simple Tap - Norton™ Internet Security (30 days of virus definitions) - Adobe® Reader® - Skype™ for Windows - Windows Live™ Essentials - Microsoft® Office preloaded; purchase a product key to activate - Corel® Burn.Now™ (DVD±RW) - Corel DVD MovieFactory® (DVD±RW)			
Implementation	Processor in LGA1155 socket													
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>													
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector													
eSATA port	None													
Media reader	None													
Chipset	Intel Q75 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Manageability	Intel Standard Manageability													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts with variable speed fan, manual switch													
Machine	- Business black color; metal case 6.9" W X 17.4" D X 16.3" H 175mm W X 442mm D X 414mm H 24.2 lb (11.0 kg) in maximum configuration - Toolless cover removal, toolless adapter retention - Toolless disk, optical drive removal													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
											Security - Security chip (see information on left) - One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) - Cable lock - Power-on password - Hard disk password - Boot sequence control - Boot without keyboard and mouse - Serial port I/O control - Individual USB port disablement - Chassis intrusion switch on selected model(s)			
											GREENGUARD® certified			
											RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty 3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



See footnotes for important warranty information

US models announced October 23, 2012, December 4, 2012, or January 22, 2013

✗ US model(s) withdrawn effective November 2013

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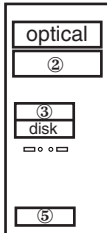
(MDTN1-25) February 2013

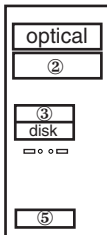
ThinkCentre® M82 Tower (2697) - ENERGY STAR® 5.2

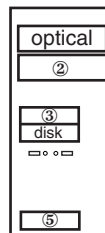
Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2697-E5U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Pro 32 06/05/12
2697-M1U	4x5	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	Media	HD 4000	None	Switch	ES52	None	Pro 64 11/06/12

●3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Implementation	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Memory				
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector			
eSATA port	None			
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0			
Chipset	Intel Q75 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, autosensing, 85% PSU			
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet	

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)				
2697-H1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win8 Pro64	10/23/12				
2697-J3U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win8 Pro64	10/23/12				
2697-J4U	4x5	i3-3240	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win8 Pro64	10/23/12				
2697-J5U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	None	Win8 Pro64	10/23/12				
2697-J6U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	None	Win8 Pro64	10/23/12				
2697-L2U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win7 Pro64	10/23/12				
2697-L3U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win7 Pro64	10/23/12				
2697-L4U	4x5	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win7 Pro64	10/23/12				
2697-L6U	4x5	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	ES52	None	Win7 Pro64	10/23/12				
Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz) Intel Core i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™							
Implementation	Processor in LGA1155 socket										Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet							
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets																	
Graphics	Some: Intel HD Graphics 2000 / 2500 / 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz Some: AMD Radeon™ HD 7450, DirectX 11, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors																	
DP dongle	None																	
Disk	SATA 6.0Gb/s 7200 rpm																	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset																	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector																	
eSATA port	None																	
Media reader	None																	
Chipset	Intel Q75 Express Chipset																	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort																	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)																	
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector																	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																	
Speaker	Internal speaker for business audio																	
IEEE 1394	None																	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																	
Manageability	Intel Standard Manageability																	
Modem	None																	
Security chip	Trusted Platform Module (TPM 1.2-compliant)																	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																	
Power supply	280 watts, autosensing, 85% PSU																	
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal																	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk																	
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3																	
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																	



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
2742-A1U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Pro 64	06/05/12
2742-B1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Pro 64	06/19/12
2742-D1U	4x5	i5-3570	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Pro 64	08/14/12

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket			Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)		
Implementation						
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets					
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>					
DP dongle	None					
Disk	SATA 6.0Gb/s 7200 rpm					
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive					
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset					
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector					
eSATA port	None					
Media reader	None					
Chipset	Intel Q75 Express Chipset					
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)					
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort					
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)					
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector					
Audio	High Definition (HD) Audio, Realtek® ALC662 codec					
Speaker	Internal speaker for business audio					
IEEE 1394	None					
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®					
Manageability	Intel Standard Manageability					
Modem	None					
Security chip	Trusted Platform Module (TPM 1.2-compliant)					
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo					
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo					
Power supply	280 watts, autosensing, 85% PSU					
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal					
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk					
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available					

optical

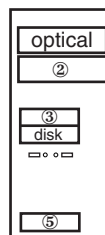
②

③

disk

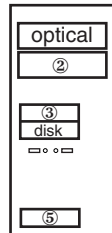
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⑤



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
2742-C1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Win8 Pro64	10/23/12
2742-E1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Win7 Pro64	10/23/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in WWindows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		
Implementation	Processor in LGA1155 socket		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz</i>		
DP dongle	None		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q75 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts, autosensing, 85% PSU		
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Memory

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility**Optical**

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann	09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11

Storage and removable storage

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
180GB Solid State Drive	0B47308	ann	01/29/13
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics*Small 2756/2929 support Low Profile:*NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷ 0B47077 ann 01/29/13*Tower 2697/2742 support 75 watts max:*NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷ 0B47077 ann 01/29/13⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.More information at www.lenovo.com/support/graphiccards**Keyboard**

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.More information at www.lenovo.com/support/keyboards**Mouse**

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice**Modem**

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.**Security**

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.**Monitors**

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12

⁶⁹ DisplayPort cable is not included; use optional

DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors**Monitor Accessories⁴⁶**

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann	08/14/12
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre M83 Mini Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M83 Mini Tower
with optional WLAN and graphic card



Lenovo ThinkCentre M83 Small Pro
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M83 Small Pro
with optional dual graphic cards
* Cable lock only available on some special bid
models



Lenovo ThinkCentre M83 Small Pro
(inside view)



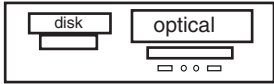
Optional 2.5" bay on
Lenovo ThinkCentre M83 Small Pro
* Come with optional 2.5" 2nd HDD

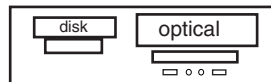
ThinkCentre® M83 SFF Pro (10AM) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Pro-cessor	Memory ^a	SATA disk GB rpm	2nd disk	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Floor stand	ENERGY STAR 5.2	Preload	Ann date (mm/dd/yy)
10AM0002US	3x4	i5-4670	4GBx1	1TB 7200		None		HD 4600	USB	None	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AM0003US	3x4	i5-4570	4GBx1	500G 7200		None		HD 4600	None	None	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AM0004US	3x4	i7-4770	8GBx1	1TB 7200		Intel 105		GT 620	USB	Serial	Parallel	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM0005US	3x4	i5-4570	8GBx1	1TB 7200		Intel 105		GT 620	USB	Serial	Parallel	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM0006US	3x4	i7-4770	4GBx1	500G 7200		None		HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM0007US	3x4	i5-4570	4GBx1	500G 7200		None		HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM000AUS	3x4	i7-4770	4GBx1	1TB 7200		None		HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13
10AM000BUS	3x4	i5-4570	4GBx1	128G SSD	1TB	None	Media	HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13
10AM0009US	3x4	i3-4130	4GBx1	500G 7200		None		HD 4400	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13
10AM000CUS	3x4	i3-4130	4GBx1	500G Hybrid		None		HD 4400	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro	
Implementation	Processor in LGA1150 socket			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	Intel HD Graphics 4400 or 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors</i>			
DP dongle	None			
Disk	<i>Some:</i>	SATA 6.0Gb/s, 7200 rpm, 3.5" wide		
	<i>Some:</i>	500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
	<i>Some:</i>	Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide		
2nd disk	<i>Some:</i>	SATA 6.0Gb/s, 7200 rpm, 3.5" wide		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)			
eSATA port	None			
Media reader	<i>Some:</i>	29-in-1 media reader, internal USB 2.0		
Chipset	Intel Q85 Express Chipset			
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
PCIe WLAN	<i>Some:</i>	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio (1 watt)			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	Optional system floor stand for vertical orientation			
Power supply	240 watts, autosensing			
Machine	• SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader			
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	



See footnotes for important warranty information

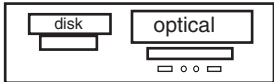
US model(s) announced July 30, 2013 or August 20, 2013

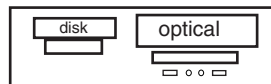
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(MSK1S-3) September 2013

Type-model	Slot x bay	Pro-processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Floor stand	ENERGY STAR 5.2	Preload	Ann date (mm/dd/yy)
10AN0006US	3x4	i5-4570	4GBx1	500G 7200 DVD±RW	None	Reader	HD 8470	None	None	None	None	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AN000GUS	3x4	i5-4570	4GBx1	500G 7200 DVD±RW	None	None	HD 4600	USB	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/27/13
10AN000HUS	3x4	i7-4770	4GBx1	500G 7200 DVD±RW	None	None	HD 4600	USB	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/27/13
10AN000JUS	3x4	i7-4770	8GBx1	1TB 7200 DVD±RW	None	None	HD 4600	USB	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/27/13
10AN000KUS	3x4	i5-4570	8GBx1	1TB 7200 DVD±RW	None	None	HD 8570	USB	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/27/13
10AN000XUS	3x4	i3-4130	4GBx1	500G 7200 DVD±RW	None	None	HD 4400	USB	None	None	None	None	Stand	None	Win7 Pro64 (DG)	10/22/13
10AN000YUS	3x4	i3-4130	8GBx1	1TB Hybrid DVD±RW	None	None	HD 8570	USB	None	None	None	None	Stand	None	Win7 Pro64 (DG)	10/22/13

• 3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro
Implementation	Processor in LGA1150 socket		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors <i>Some:</i> AMD Radeon HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors		
DP dongle	None		
Disk	<i>Some:</i> SATA 6.0Gb/s 7200 rpm, 3.5" wide <i>Some:</i> 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)		
eSATA port	None		
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0		
Chipset	Intel Q85 Express Chipset		
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	240 watts, autosensing		
Machine	• SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader		
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet



See footnotes for important warranty information

US model(s) announced July 30, 2013, August 27, 2013, or October 22, 2013

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(MSK1S-4) October 2013

ThinkCentre® M83 SFF Pro (10AH) - ES 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Pro-processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Floor stand	ENERGY STAR 5.2	Preload	Ann date (mm/dd/yy)
10AH000JUS	3x4	i5-4570	4GBx1	1TB 7200	DVD	Intel 105	None	HD 8470	USB	None	Switch	Stand	ES52	Win7 Pro64	07/30/13

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> <i>Some: AMD Radeon™ HD 8470, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors</i>		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide		
Optical	DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)		
eSATA port	None		
Media reader	None		
Chipset	Intel Q85 Express Chipset		
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</i>		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● SFF Pro (12.9L), business black color; metal case ● (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm ● 17.20 lb (7.8 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk and optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader		
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)		
disk optical			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced July 30, 2013

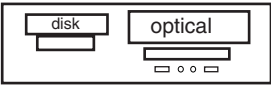
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ThinkCentre® M83 SFF Pro (10AH) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Pro-processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AH0015US	3x4	i5-4570	2GBx1	500G 7200	DVD	None	HD 4600	None	None	Switch	None	ES52	G P	Win7 Pro64	07/30/13
10AH0016US	3x4	i5-4570	4GBx1	500G 7200	DVD	None	HD 4600	USB	None	Switch	Stand	ES52	G P	Win7 Pro64 (DG)	07/30/13
10AH0017US	3x4	i5-4570	4GBx1	1TB 7200	DVD	Intel 105	HD 8470	USB	None	Switch	Stand	ES52	G P	Win7 Pro64 (DG)	07/30/13
10AH001HUS	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	HD 4600	USB	None	Switch	Stand	ES52	G P	Win7 Pro64 (DG)	08/20/13
10AH001JUS	3x4	i5-4570	4GBx1	1TB 7200	DVD±RW	Intel 105	HD 8470	USB	None	Switch	Stand	ES52	G P	Win7 Pro64 (DG)	08/20/13

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide		
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)		
eSATA port	None		
Media reader	None		
Chipset	Intel Q85 Express Chipset		
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Manageability	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● SFF Pro (12.9L), business black color; metal case ● (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm ● 17.20 lb (7.8 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk and optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader		
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US model(s) announced July 30, 2013 or August 20, 2013

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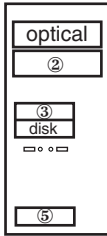
(MSK1S-2) August 2013

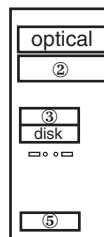
ThinkCentre® M83 Mini Tower (10AL) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	ENERGY STAR 5.2	Preload	Ann date (mm/dd/yy)
10AL0008US	3x5	i5-4670	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	USB	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AL0009US	3x5	i5-4570	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AL000AUS	3x5	i7-4770	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	USB	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AL000BUS	3x5	i5-4670	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	USB	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AL000CUS	3x5	i5-4670	4GBx2	1TB 7200	DVD±RW	None	None	HD 4600	USB	Serial	Parallel	None	None	Win7 Pro64 (DG)	07/30/13
10AL000DUS	3x5	i5-4670	4GBx1	500GB 7200	DVD±RW	None	None	HD 8470	USB	Serial	Parallel	None	None	Win7 Pro64 (DG)	07/30/13
10AL000EUS	3x5	i7-4770	4GBx2	1TB 7200	DVD±RW	None	None	GT 620	USB	Serial	Parallel	None	None	Win7 Pro64 (DG)	07/30/13
10AL000FUS	3x5	i7-4770	4GBx2	500GB 7200	DVD±RW	None	None	HD 8570	USB	Serial	Parallel	None	None	Win7 Pro64 (DG)	07/30/13
10AL000GUS	3x5	i7-4770	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 Pro64 (DG)	08/20/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> <i>Some: AMD Radeon™ HD 8470, DirectX 11, 3D Hardware Acceleration,</i> <i>512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts,</i> <i>Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz,</i> <i>works along with Intel HD Graphics to support up to five independent monitors</i> <i>Some: AMD Radeon HD 8570, DirectX 11, 3D Hardware Acceleration,</i> <i>2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts;</i> <i>Max resolution: 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz,</i> <i>works along with Intel HD Graphics to support up to five independent monitors</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration,</i> <i>1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts;</i> <i>Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz,</i> <i>works along with Intel HD Graphics to support up to five independent monitors</i>			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)			
eSATA port	None			
Media reader	None			
Chipset	Intel Q85 Express Chipset			
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
PCIe WLAN	None			
Bluetooth	None			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio (1.5 watt)			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Manageability	Intel Standard Manageability			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, autosensing			
Machine	• Mini Tower (25L), business black color, metal case • (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm • 24.69 lb (11.20 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			



See footnotes for important warranty information
 US model(s) announced July 30, 2013 or August 20, 2013

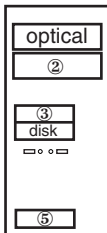
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 (MSK1T-4) August 2013

ThinkCentre® M83 Mini Tower (10AK)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AK0004US	3x5	i5-4570	8GBx1	500GB 7200 DVD±RW	None	None	None	GT 620	USB	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AK0005US	3x5	i5-4570	4GBx1	500GB 7200 DVD±RW	None	None	None	HD 4600	None	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AK0006US	3x5	i7-4770	8GBx1	500GB 7200 DVD±RW	None	None	None	GT 620	USB	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AK0007US	3x5	i7-4770	8GBx1	500GB 7200 DVD±RW	None	None	None	HD 4600	None	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AK000LUS	3x5	i3-4130	4GBx1	500GB 7200 DVD±RW	None	None	None	HD 4400	USB	None	None	None	None	Win7 Pro64 (DG)	10/22/13
10AK000MUS	3x5	i3-4130	8GBx1	1TB Hybrid DVD±RW	None	None	None	HD 8570	USB	None	None	None	None	Win7 Pro64 (DG)	10/22/13

●3-year limited warranty

Positioning	Mainstream enterprise stability and manageability											Preloaded operating system			
Processor	Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller, Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller, Processor in LGA1150 socket											Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											● Rescue and Recovery™ ● Password Manager			
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors Some: AMD Radeon HD 8570, DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; Max resolution: 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors											Preloaded applications (only some listed)			
DP dongle	None											● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro			
Disk	Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide Some: 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)														
eSATA port	None														
Media reader	None														
Chipset	Intel Q85 Express Chipset														
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio (1.5 watt)														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Manageability	Intel Standard Manageability														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing														
Machine	● Mini Tower (25L), business black color, metal case ● (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm ● 24.69 lb (11.20 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk, optical drive removal														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)														
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)			
EPEAT™ Gold rating															
ULE Gold															
Cisco EnergyWise compatible															
GREENGUARD® certified															
RoHS-compliant															
Supports ThinkVantage Technologies															
For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet															

See footnotes for important warranty information

US model(s) announced July 30, 2013 and October 22, 2013

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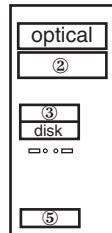
(MSK1T-3) October 2013

ThinkCentre® M83 Mini Tower (10AG) - ES 5.2 (Windows 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCle WLAN	Media reader	Additional Graphics	2nd Front serial port	Chassis intrusion switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
10AG000CUS	3x5	i5-4570	4GBx1	1TB 7200	DVD	Intel 105	None	HD 8470	USB	None	Switch	ES52	None	Win8 Pro64 07/30/13

●3-year limited warranty

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket										Preloaded operating system Windows® 8 Pro 64-bit			
Implementation											Ready to install applications (only some listed) ● Password Manager			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed) ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage by SugarSync ● Desktop Power Manager ● Norton™ Studio ● AccuWeather ● Evernote® ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● ThinkVantage System Update ● Lenovo Solution Center ● Norton Internet Security (30 days of virus definitions) ● Skype™ ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz</i> <i>Some: AMD Radeon™ HD 8470</i> , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i> , works along with Intel HD Graphics to support up to five independent monitors													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide													
Optical	DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive													
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)													
eSATA port	None													
Media reader	None													
Chipset	Intel Q85 Express Chipset													
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphne (stereo, 3.5mm)													
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</i>													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio (1.5 watt)													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®													
Manageability	Intel Standard Manageability													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	● Mini Tower (25L), business black color, metal case ● (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm ● 24.69 lb (11.20 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk, optical drive removal													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
US model(s) announced July 30, 2013

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(MSK1T-1) August 2013

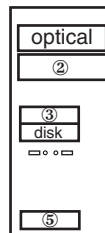
ThinkCentre® M83 Mini Tower (10AG) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Additional Front Graphics	2nd serial port	Chassis intrusion switch	Key-board	ENERGY STAR 5.2	Global (G) GMP (P)	Ann date (mm/dd/yy)
10AG000PUS	3x5	i5-4570	4GBx1	1TB 7200	DVD	Intel 105	HD 8470	USB	None	Switch	USB	ES52 G P	Win7 Pro64 (DG) 07/30/13
10AG000QUS	3x5	i5-4570	2GBx1	500GB 7200	DVD	None	HD 4600	None	None	Switch	USB	ES52 G P	Win7 Pro64 07/30/13
10AG000RUS	3x5	i5-4570	4GBx1	500GB 7200	DVD	None	HD 4600	USB	None	Switch	USB	ES52 G P	Win7 Pro64 (DG) 07/30/13
10AG000SUS	3x5	i5-4570	4GBx1	500GB 7200	DVD±RW	None	HD 4600	USB	None	Switch	Finger	ES52 G P	Win7 Pro64 (DG) 08/20/13
10AG000TUS	3x5	i5-4570	4GBx1	1TB 7200	DVD±RW	Intel 105	HD 8470	USB	None	Switch	USB	ES52 G P	Win7 Pro64 (DG) 08/20/13
10AG000UUS	3x5	i5-4570	4GBx1	500GB 7200	DVD±RW	None	HD 4600	USB	None	Switch	USB	ES52 G P	Win7 Pro64 (DG) 09/10/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability										Preloaded operating system		
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										<i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit		
Implementation	Processor in LGA1150 socket										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										● Rescue and Recovery™ ● Password Manager		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA)@60Hz <i>Some:</i> AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz, works along with Intel HD Graphics to support up to five independent monitors										Preloaded applications (only some listed)		
DP dongle	None										● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink Power2Go (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro		
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide										Security		
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset										EPEAT™ Gold rating		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)										ENERGY STAR® 5.2-compliant		
eSATA port	None										ULE Gold		
Media reader	None										Cisco EnergyWise compatible		
Chipset	Intel Q85 Express Chipset										GREENGUARD® certified		
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										RoHS-compliant		
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models										Supports ThinkVantage Technologies		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										For compatible accessories, please go to TC-AQP sheet;		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1										For Lenovo service upgrade options, please go to S-TC sheet		
Bluetooth	None												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio (1.5 watt)												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®												
Manageability	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM1.2-compliant)												
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo <i>Some:</i> Lenovo USB Fingerprint Keyboard (USB connector)												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts, autosensing, 85% PSU												
Machine	● Mini Tower (25L), business black color, metal case ● (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm ● 24.69 lb (11.20 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk, optical drive removal												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)												
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												



See footnotes for important warranty information

US model(s) announced July 30, 2013, August 20, 2013, or September 10, 2013

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(MSK1T-2) September 2013

Lenovo ThinkCentre M92/M92p Tiny, Small, Tower

ThinkCentre®



Lenovo ThinkCentre M92/M92p Tiny
with Optional Serial Port or DisplayPort



Lenovo ThinkCentre M92/M92p Tiny
with Floor Stand



Lenovo ThinkCentre M92/M92p Small



Lenovo ThinkCentre M92/M92p Tiny
with VESA Mount



Lenovo ThinkCentre M92/M92p Tower



Lenovo ThinkCentre M92/M92p Tiny
with External Optical Box

ThinkCentre® M92 Tiny (3229) - GMP (Thin Client)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB	External optical rpm	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
≈ 3229-A1U	G460	2GBx1	8G SSD	None	Intel HD	None	Serial	None	None	None	ES52	None	G P	Emb 32	07/10/12
≈ 3229-A2U	G465	2GBx1	8G SSD	None	Intel HD	None	Serial	None	None	None	ES52	None	G P	Emb 32	01/08/13
3229-A3U	G470	2GBx1	8G SSD	None	Intel HD	None	Serial	None	None	None	ES52	None	G P	Emb 32	07/09/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

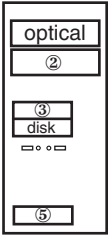
Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G465 Processor (1 core / 2 threads, 1.9GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G470 Processor (1 core / 2 threads, 2.0GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket	Preloaded operating system Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>	
DP dongle	None	
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide	
External optical	None	
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset	
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar	
eSATA port	None	
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	None	
Bluetooth	None	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	None	
Mouse	None	
Floor Stand	None	
VESA mount	None	
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU	
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet

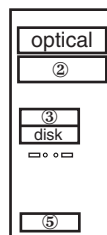
See footnotes for important warranty information
US models announced July 10, 2012, January 8, 2013, or July 9, 2013
≈ US model(s) withdrawn effective November 2013

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	PCIe Mini Card WLAN / BT	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)
3208-A8U	4x5	i3-2130	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	ES52	None	Pro 64	06/05/12
3208-A9U	4x5	i3-2120	2GBx1	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	ES52	None	Pro 32	06/05/12
3208-C5U	4x5	i3-3240	4GBx2	1TB 7200	Bay	DVD±RW	Media	HD 7450	Intel 2230 + BT	Switch	ES52	None	Pro 64	11/06/12

●3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Processor in LGA1155 socket			Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64		
Implementation	Processor in LGA1155 socket			Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)		
Graphics	<i>Some:</i> Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors					
DP dongle	None					
Disk	SATA 6.0Gb/s 7200 rpm					
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive					
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support					
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector					
eSATA port	None					
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0					
Chipset	Intel Q77 Express Chipset					
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)					
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort					
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)					
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector					
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2					
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter					
Audio	High Definition (HD) Audio, Realtek® ALC662 codec					
Speaker	Internal speaker for business audio					
IEEE 1394	None					
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®					
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)					
Modem	None					
Security chip	Trusted Platform Module (TPM1.2-compliant)					
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo					
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo					
Power supply	280 watts, autosensing, 85% PSU					
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal					
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk					
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant		
				Supports ThinkVantage Technologies		
				For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet		



ThinkCentre® M92p Tiny (2121) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
2121-A1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	DP	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
2121-A2U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	DP	None	Stand	Mount	ES52	vPro	None	Pro 64	07/10/12
2121-A3U	i5-3470T	4GBx1	320G 7200	None	HD 2500	None	DP	None	Stand	Mount	ES52	vPro	None	Pro 64	07/10/12
2121-A4U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Serial	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
2121-A5U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
2121-A6U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
2121-A7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	Mount	ES52	vPro	None	Pro 64	07/10/12
⚡ 2121-B1U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	DP	None	Stand	Mount	ES52	vPro	None	Pro 64	07/10/12
⚡ 2121-C8U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	DP	None	None	Mount	ES52	vPro	None	Pro 64	08/14/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system				
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64				
Implementation											Ready to install applications (only some listed)				
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)										• Rescue and Recovery™ • Password Manager				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz										Preloaded applications (only some listed)				
DP dongle	None										• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Disk	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm														
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in														
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset														
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										Security				
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										• Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)				
Floor Stand	Some: System floor stand for vertical orientation										• Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)				
VESA mount	Supports VESA 75mm and 100mm mount standard										EPEAT™ Gold rating				
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU										ENERGY STAR® 5.2-compliant				
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)										ULE Gold				
											Cisco EnergyWise compatible				
											GREENGUARD® certified				
											RoHS-compliant				
											Supports ThinkVantage Technologies				
											For compatible accessories, please go to O-M92 sheet;				
											For Lenovo service upgrade options, please go to S-TC sheet				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced July 10 or August 14, 2012

⚡ US models withdrawn effective September or November 2012

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(MHTN1-19) August 2012

ThinkCentre® M92p Tiny (2121) - TopSeller (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
2121-B2U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	None	None	Stand	Mount	ES52	vPro	None	Emb 32	07/10/12
2121-B3U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 2230 + BT	None	None	Stand	Mount	ES52	vPro	None	Emb 32	07/10/12
2121-F3U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Emb 32	03/05/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide		
External optical	None		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel Q77 Express Chipset		
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US models announced July 10, 2012 or March 5, 2013
✗ US model withdrawn effective October 2012

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(MHTN1-20) March 2013

ThinkCentre® M92p Tiny (2121) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
2121-A9U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C4U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	None	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C5U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C9U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
2121-D3U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D4U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D5U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 105	DP	None	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D8U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	DP	None	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-E1U	i5-3470T	4GBx1	180G SSD	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E2U	i5-3470T	4GBx1	180G SSD	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E3U	i5-3470T	4GBx1	500G 5400	None	HD 2500	Intel 105	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E4U	i5-3470T	4GBx1	500G 5400	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E5U	i5-3470T	4GBx1	500G 5400	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E9U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	12/11/12
2121-F1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	None	Win7 Pro64	12/11/12
2121-F2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 105	Serial	None	None	Mount	ES52	vPro	None	Win7 Pro64	12/25/12
Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit				
Implementation											Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo® Support • Lenovo Companion • Norton™ Studio • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz														
DP dongle	None														
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide														
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in														
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset														
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	<i>Some:</i> System floor stand for vertical orientation														
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

US models announced October 23, November 20, December 11, or December 25, 2012

⌘ US models withdrawn effective November 2012

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(MHTN1-24) February 2013

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional Chassis port intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)
3243-A3U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	Stand	None	ES52	vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 1-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system		
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64		
Implementation											Ready to install applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)										● Rescue and Recovery™ ● Password Manager		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz										Preloaded applications (only some listed)		
DP dongle	None										● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate		
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm												
External optical	None												
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset												
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar												
eSATA port	None												
Chipset	Intel Q77 Express Chipset												
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)												
PCIe Mini Card	One PCI Express® Mini Card slot												
PCIe WLAN	None												
Bluetooth	None												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)												
Modem	None												
Security chip	Trusted Platform Module (TPM1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
VESA mount	None												
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU												
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)										Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)		
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant													
Supports ThinkVantage Technologies													
For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet													
Limited Warranty	1-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3238-A1U	i5-3470T	4GBx1	500G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	None	Pro 64	06/05/12
3238-B5U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	None	None	ES52	vPro	None	Pro 64	06/05/12
3238-B6U	i5-3470T	4GBx1	320G 5400	None	HD 2500	None	None	None	Stand	None	ES52	vPro	None	Pro 64	06/05/12
3238-B7U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	None	ES52	vPro	None	Pro 32	06/05/12
3238-B8U	i5-3470T	2GBx1	320G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	vPro	None	Pro 32	06/05/12
3238-D9U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	USB	None	Stand	Mount	ES52	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system				
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Genuine Windows® 7 Professional 32				
Implementation	Processor in LGA1155 socket										Some: Genuine Windows 7 Professional 64				
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)										Ready to install applications (only some listed)				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz										● Rescue and Recovery™ ● Password Manager				
DP dongle	None										Preloaded applications (only some listed)				
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm										● ThinkVantage® Product Recovery				
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in										● ThinkVantage System Update				
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset										● ThinkVantage Communication Utility				
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar										● ThinkVantage Power Manager				
eSATA port	None										● View Management Utility				
Chipset	Intel Q77 Express Chipset										● Lenovo AppShop				
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										● Lenovo Solution Center				
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)										● Lenovo Message Center Plus				
PCIe Mini Card	One PCI Express® Mini Card slot										● Lenovo SimpleTap				
PCIe WLAN	None										● Norton™ Internet Security (30 days of virus definitions)				
Bluetooth	None										● Adobe® Reader®				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										● Skype™ for Windows				
Speaker	Internal speaker for business audio										● Windows Live™ Essentials				
IEEE 1394	None										● Microsoft® Office preloaded; purchase a product key to activate				
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										● Corel® Burn.Now™ (DVD±RW)				
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)										● Corel DVD MovieFactory® (DVD±RW)				
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	Some: System floor stand for vertical orientation														
VESA mount	Some: Supports VESA 75mm and 100mm mount standard														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)										Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)				
											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
											Supports ThinkVantage Technologies				
											For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	PCle Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Security Cable	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3238-F5U	i5-3470T	4GBx1	500G 7200	None	Intel 2230 + BT	None	None	None	None	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F6U	i5-3470T	4GBx1	500G 7200	None	Intel 105	None	None	None	None	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F7U	i5-3470T	4GBx1	500G 7200	None	Intel 105	None	None	None	Stand	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F8U	i5-3470T	4GBx1	500G 7200	DVD±RW	Intel 2230 + BT	None	None	None	None	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F9U	i5-3470T	4GBx1	500G 7200	None	Intel 2230 + BT	None	None	None	Stand	Mount	ES52	vPro	None	Pro 64	06/19/12
⌘ 3238-K3U	i5-3470T	4GBx1	500G 7200	None	None	DP	None	None	Stand	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-E5U	i5-3470T	4GBx1	500G 7200	None	None	None	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
3238-E8U	i5-3470T	4GBx1	320G 7200	DVD±RW	None	None	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
3238-E9U	i5-3470T	4GBx1	320G 7200	None	None	None	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
3238-F1U	i5-3470T	4GBx1	320G 7200	None	None	None	None	None	Stand	None	ES52	vPro	None	Pro 64	07/10/12
3238-F2U	i5-3470T	2GBx1	320G 7200	None	None	None	None	None	Stand	None	ES52	vPro	None	Pro 64	07/10/12
⌘ 3238-P6U	i5-3470T	4GBx2	180G SSD	DVD±RW	Intel 2230 + BT	None	Switch	Cable	None	Mount	ES52	vPro	None	Pro 64	11/06/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz		
DP dongle	None		
Disk	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide		
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel Q77 Express Chipset		
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)		
PCle Mini Card	One PCI Express® Mini Card slot		
PCle WLAN	Some: 11b/g/n wireless, PCle Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCle Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Some: System floor stand for vertical orientation		
VESA mount	Some: Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information

US models announced June 19, July 10, or November 6, 2012

⌘ US models withdrawn effective October 2012 or February 2013

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(MHTN1-17) November 2012

ThinkCentre® M92p Tiny (3238) - Thin Client

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3238-K4U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	None	None	Stand	Mount	ES52	vPro	None	Emb 32	07/10/12
3238-R6U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Emb 32	03/05/13
3238-R7U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Emb 32	03/05/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise															Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket															Genuine Windows® 7 Embedded 32			
Implementation	Processor in LGA1155 socket															Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)															● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz																		
DP dongle	None																		
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide																		
External optical	None																		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset																		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar																		
eSATA port	None																		
Chipset	Intel Q77 Express Chipset																		
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																		
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)																		
PCIe Mini Card	One PCI Express® Mini Card slot																		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2																		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter																		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																		
Speaker	Internal speaker for business audio																		
IEEE 1394	None																		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)																		
Modem	None																		
Security chip	Trusted Platform Module (TPM1.2-compliant)																		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																		
Floor Stand	System floor stand for vertical orientation																		
VESA mount	Some: Supports VESA 75mm and 100mm mount standard																		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU																		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)															Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)			
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant																			
Supports ThinkVantage Technologies																			
For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet																			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																		

See footnotes for important warranty information
US models announced July 10, 2012 or March 5, 2013

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(MHTN1-21) March 2013

ThinkCentre® M92p Tiny (3238) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Key- board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3238-K1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	USB	vPro	None	Win8 Pro64	10/23/12
3238-K2U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	USB	vPro	None	Win8 Pro64	10/23/12
3238-L1U	i5-3470T	4GBx1	320G 7200	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	USB	vPro	None	Win8 Pro64	10/23/12
3238-L2U	i5-3470T	4GBx1	320G 7200	None	HD 2500	None	DP	None	None	Mount	USB	vPro	None	Win8 Pro64	10/23/12
3238-L4U	i5-3470T	4GBx1	320G 5400	None	HD 2500	None	None	None	None	Mount	USB	vPro	None	Win7 Pro64	10/23/12
3238-L5U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	Stand	Mount	USB	vPro	None	Win7 Pro64	10/23/12
3238-L6U	i5-3470T	2GBx1	500G 5400	None	HD 2500	None	None	None	Stand	None	USB	vPro	None	Win7 Pro64	10/23/12
3238-L7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	None	Mount	USB	vPro	None	Win7 Pro64	10/23/12
3238-M3U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	USB	vPro	None	Win7 Pro64	10/23/12
3238-M4U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 105	None	None	Stand	None	USB	vPro	None	Win7 Pro64	10/23/12
3238-M5U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 105	None	None	None	None	USB	vPro	None	Win7 Pro64	10/23/12
3238-M6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	Stand	Mount	USB	vPro	None	Win7 Pro64	10/23/12
3238-M7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	None	None	USB	vPro	None	Win7 Pro64	10/23/12
3238-M8U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	None	USB	vPro	None	Win7 Pro64	10/23/12
3238-M9U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	None	USB	vPro	None	Win7 Pro64	10/23/12
3238-Q2U	i5-3470T	4GBx1	180G SSD	None	HD 2500	Intel 105	DP	None	None	Mount	USB	vPro	None	Win7 Pro64	11/20/12
3238-Q3U	i5-3470T	4GBx1	180G SSD	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	USB	vPro	None	Win7 Pro64	11/20/12
3238-S9U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 105	None	None	None	Mount	2.4-G	vPro	None	Win8 Pro64	05/28/13

Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit
Implementation	Processor in LGA1155 socket	Preloaded applications (only some listed) - Windows 7 models
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None	- Windows 8 models
DP dongle	None	• Lenovo® Support • Lenovo Companion • Lenovo Cloud Storage • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide	- All models
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in	• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton™ Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Onboard SATA	Serial ATA, SATA 6.0Gb/s support, integrated in chipset	
eSATA port	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar	
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Floor Stand	<i>Some:</i> System floor stand for vertical orientation	
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard	
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU	
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)
		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
		Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US models announced October 23, 2012, November 20, 2012, or May 28, 2013

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(MHTN1-25) June 2013

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR	Intel 5.2 vPro	Global (G) GMP (P)	Win7 preload(mm/dd/yy)	Ann date
3237-A1U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm		
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel Q77 Express Chipset		
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	None		
VESA mount	Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)		
Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)			
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

ThinkCentre® M92p Tiny (3237) - GMP (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR	Intel vPro	Global (G) GMP (P)	Win7 preload(mm/dd/yy)	Ann date
3237-A3U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	Serial	None	None	None	ES52	vPro	G P	Emb 32	07/10/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads , 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide		
External optical	None		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel Q77 Express Chipset		
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	None		
Mouse	None		
Floor Stand	None		
VESA mount	None		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
			EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant
			Supports ThinkVantage Technologies
			For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model announced July 10, 2012

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ThinkCentre® M92p Tiny (3237) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3237-A4U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	G P	Win8 Pro64	10/23/12
3237-A5U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm		
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel Q77 Express Chipset		
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	None		
VESA mount	Supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU		
Machine	• Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)
			EPEAT™ Gold rating
			ENERGY STAR® 5.2-compliant
			ULE Gold
			Cisco EnergyWise compatible
			GREENGUARD® certified
RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
US models announced October 23, 2012

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(MHTN1-26) October 2012

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
2988-A1U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
2988-A3U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
2988-A6U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
2988-A9U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Pro 64	07/10/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

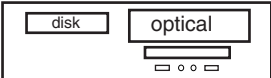
Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache) , Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation	Processor in LGA1155 socket		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q77 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
disk optical				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

ThinkCentre® M92p Small (2988) - TopSeller - II

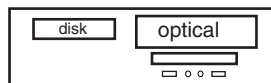
Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
2988-A4U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
2988-A5U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
2988-A7U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
2988-A8U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation	Processor in LGA1155 socket			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	<i>Some:</i> AMD Radeon™ HD 7350 , DirectX® 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors <i>Some:</i> AMD Radeon HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q77 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	

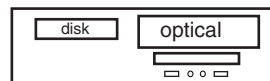
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	PCle Mini Card WLAN / BT	Chassis intr switchstand	Floor	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
2988-B2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-C6U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-B4U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-C8U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-D9U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
2988-E1U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
2988-E2U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
2988-F2U	4x3	i7-3770	4GBx2	1TB 7200	DVD±RW	None	HD 7450	Intel 6205	None	Stand	ES52	vPro	None	Win7 Pro64	03/12/13
2988-F3U	4x3	i5-3475S	4GBx2	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	03/12/13
Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Implementation															
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
PCle WLAN	<i>Some:</i> 11a/b/g/n, PCle Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader														
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCle 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3209-A2U	4x3	i5-3550	4GBx1	1600MHz 500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
3209-A4U	4x3	i5-3550	4GBx1	1600MHz 500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
3209-C5U	4x3	i7-3770	4GBx1	1600MHz 500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Pro 32	06/05/12
3209-C8U	4x3	i5-3550	4GBx1	1600MHz 250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
3209-E4U	4x3	i5-3470	4GBx1	1600MHz 500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 32	06/05/12
3209-E5U	4x3	i5-3550	4GBx1	1600MHz 500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 32	06/05/12
3209-E6U	4x3	i5-3470	2GBx1	1600MHz 250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 32	06/05/12
3209-E7U	4x3	i5-3470	2GBx1	1600MHz 500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
3209-D7U	4x3	i5-3470	4GBx1	1600MHz 500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	07/10/12
3209-D9U	4x3	i5-3570	4GBx1	1600MHz 500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	07/10/12
3209-F8U	4x3	i5-3570	4GBx1	1600MHz 1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Pro 64	07/10/12
3209-F9U	4x3	i7-3770	4GBx1	1600MHz 1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Pro 64	07/10/12

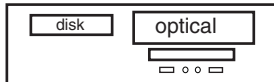
• Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
• 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system									
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Ready to install applications (only some listed) - Rescue and Recovery™ - Password Manager Preloaded applications (only some listed) - ThinkVantage® Product Recovery - ThinkVantage System Update - ThinkVantage Communication Utility - ThinkVantage Power Manager - View Management Utility - Lenovo AppShop - Lenovo Solution Center - Lenovo Message Center Plus - Lenovo Simple Tap - Norton™ Internet Security (30 days of virus definitions) - Adobe® Reader® - Skype™ for Windows - Windows Live™ Essentials - Microsoft® Office preloaded; purchase a product key to activate - Corel® Burn.Now™ (DVD±RW) - Corel DVD MovieFactory® (DVD±RW)									
Implementation	Processor in LGA1155 socket										Security - Security chip (see information on left) - Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - Cable lock - Power-on password - Administrator password - Hard disk password - Boot sequence control - Boot without keyboard and mouse - Individual USB port disablement - Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet									
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets																			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None																			
DP dongle	None																			
Disk	SATA 6.0Gb/s 7200 rpm																			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support																			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector																			
eSATA port	None																			
Media reader	None																			
Chipset	Intel Q77 Express Chipset																			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort																			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)																			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector																			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																			
Speaker	Internal speaker for business audio																			
IEEE 1394	None																			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)																			
Modem	None																			
Security chip	Trusted Platform Module (TPM1.2-compliant)																			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																			
Floor Stand	System floor stand for vertical orientation																			
Power supply	240 watts, autosensing, 85% PSU																			
Machine	- Business black color; metal case 13.3" W X 15.2" D X 3.9" H 338mm W X 385mm D X 100mm H 16.5 lb (7.5 kg) in maximum configuration - Toolless cover flips up and tilts backward on rear hinges - Toolless disk and optical drive removal - Toolless adapter retention																			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader																			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3																			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																			



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3209-D4U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12
3209-D5U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

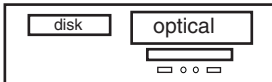
Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> Works along with Intel HD Graphics to support up to four independent monitors			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q77 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	

ThinkCentre® M92p Small (3209) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3209-K2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
3209-K9U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
3209-L1U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
3209-L2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12

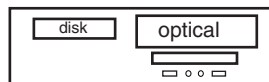
- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Windows® 8 Pro 64-bit Preloaded applications (only some listed) ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)		
Implementation					
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets				
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors				
DP dongle	None				
Disk	SATA 6.0Gb/s 7200 rpm				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive				
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support				
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector				
eSATA port	None				
Media reader	None				
Chipset	Intel Q77 Express Chipset				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)				
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort				
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)				
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec				
Speaker	Internal speaker for business audio				
IEEE 1394	None				
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®				
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)				
Modem	None				
Security chip	Trusted Platform Module (TPM1.2-compliant)				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo				
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo				
Floor Stand	System floor stand for vertical orientation				
Power supply	240 watts, autosensing, 85% PSU				
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention				
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader				
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available				

See footnotes for important warranty information
US models announced October 23, 2012

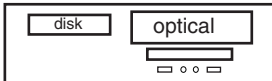
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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3209-L3U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L4U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L5U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L7U	4x3	i5-3470	2GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L8U	4x3	i5-3570	4GBx1	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M1U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M3U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M4U	4x3	i5-3570	4GBx1	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M5U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo® AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)			
Implementation	Processor in LGA1155 socket														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	<i>Some:</i> Intel HD Graphics 2500 / 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors <i>Some:</i> AMD Radeon HD 7450 , DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader														
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3209-R5U	4x3	i5-3475S	4GBx2	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	03/12/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	
Implementation			Ready to install applications (only some listed)	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		• Rescue and Recovery™ • Password Manager	
Graphics	AMD Radeon™ HD 7450 , DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz</i> ; works along with Intel HD Graphics to support up to four independent monitors		Preloaded applications (only some listed)	
DP dongle	None		• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo® AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q77 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader			
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3			
				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	

ThinkCentre® M92p Small (3227) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^s	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)	
3227-A1U	4x3	i7-3770	4GBx1	1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	G P	Pro 64	06/05/12
3227-A2U	4x3	i5-3470	4GBx1	1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	G P	Pro 64	06/19/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise															Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket															Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager			
Implementation	Processor in LGA1155 socket															Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets															Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz None																		
DP dongle	None																		
Disk	SATA 6.0Gb/s 7200 rpm																		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support																		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector																		
eSATA port	None																		
Media reader	None																		
Chipset	Intel Q77 Express Chipset																		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort																		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)																		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector																		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																		
Speaker	Internal speaker for business audio																		
IEEE 1394	None																		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)																		
Modem	None																		
Security chip	Trusted Platform Module (TPM1.2-compliant)																		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																		
Floor Stand	System floor stand for vertical orientation																		
Power supply	240 watts, autosensing, 85% PSU																		
Machine	● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention																		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader																		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3																		
disk optical																			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																		

ThinkCentre® M92p Small (3227) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR	Intel vPro 5.2	Global (G) P	Win	Pro	Ann date (mm/dd/yy)
3227-A3U	4x3	i5-3470	4GBx1	1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	G	P	Win8 Pro64 10/23/12
3227-A4U	4x3	i5-3470	4GBx1	1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	G	P	Win7 Pro64 10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		
Implementation	Processor in LGA1155 socket		Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		Some: Windows 8 Pro 64-bit
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @ 60Hz		Preloaded applications (only some listed)
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		- Windows 7 models
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support		• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader™ • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector		
eSATA port	None		- Windows 8 models
Media reader	None		
Chipset	Intel Q77 Express Chipset		• Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		- All models
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
disk optical			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

ThinkCentre® M92p Tower (2992) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^s	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
2992-A2U	4x5	i5-3550	4GBx1	1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-A3U	4x5	i7-3770	4GBx2	1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-A4U	4x5	i7-3770	4GBx2	1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-A5U	4x5	i7-3770	4GBx1	1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-A6U	4x5	i5-3550	4GBx1	1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	
Graphics	Some: Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz Some: AMD Radeon™ HD 7350, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors Some: AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support	
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector	
eSATA port	None	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts, autosensing, 85% PSU	
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk	
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

optical

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disk

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ThinkCentre® M92p Tower (2992) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^s		SATA disk GB	2nd Disk rpm Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
2992-A7U	4x5	i5-3470	4GBx1	1600MHz	500G	7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-A8U	4x5	i5-3470	4GBx1	1600MHz	500G	7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-A9U	4x5	i7-3770	4GBx2	1600MHz	1TB	7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-B1U	4x5	i7-3770	4GBx2	1600MHz	1TB	7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Pro 64 06/05/12
2992-B2U	4x5	i7-3770	4GBx1	1600MHz	1TB	7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64 07/10/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Some: Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz; Some: AMD Radeon™ HD 7350, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors Some: AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q77 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts, autosensing, 85% PSU		
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

optical

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disk

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Security

● Security chip (see information on left)

● One lock to secure both cover and entire system to fixed object:

-Padlock loop (in rear for opt padlock)

-Security slot (in rear for optional Kensington® MicroSaver® cable)

● Cable lock

● Power-on password

● Hard disk password

● Boot sequence control

● Boot without keyboard and mouse

● Serial port I/O control

● Individual USB port disablement

● Chassis intrusion switch on selected model(s)

EPEAT™ Gold rating

ENERGY STAR® 5.2-compliant

ULE Gold

Cisco EnergyWise compatible

GREENGUARD® certified

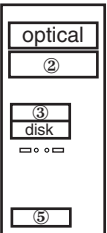
RoHS-compliant

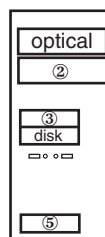
Supports ThinkVantage Technologies

For compatible accessories, please go to O-M92 sheet;

For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Slot x bay	Processor	Memory*	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
2992-B5U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-C9U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-D1U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-D2U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-E3U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2992-E4U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2992-E5U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2992-F7U	4x5	i5-3475S	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	03/12/13
2992-F8U	4x5	i5-3475S	4GBx2	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	03/12/13

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™									
Implementation	Processor in LGA1155 socket																			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets																			
Graphics	Some: Intel HD Graphics 2500 / 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors																			
DP dongle	None																			
Disk	SATA 6.0Gb/s 7200 rpm																			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support																			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector																			
eSATA port	None																			
Media reader	None																			
Chipset	Intel Q77 Express Chipset																			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort																			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)																			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector																			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																			
Speaker	Internal speaker for business audio																			
IEEE 1394	None																			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)																			
Modem	None																			
Security chip	Trusted Platform Module (TPM1.2-compliant)																			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																			
Power supply	280 watts, autosensing, 85% PSU																			
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal																			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk																			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies									
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet									



Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3212-A3U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-A9U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 32	06/05/12
3212-C1U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system				
Processor	Intel® Core™ i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64				
Implementation											Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										• Rescue and Recovery™ • Password Manager				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz										Preloaded applications (only some listed)				
DP dongle	None										• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
optical ② ③ disk ⋮ ⑤										Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)					
										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant					
										Supports ThinkVantage Technologies					
										For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet					
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

ThinkCentre® M92p Tower (3212) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a		SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3212-C6U	4x5	i7-3770	4GBx1	1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-C7U	4x5	i5-3550	4GBx1	1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-C9U	4x5	i7-3770	4GBx1	1600MHz	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-D1U	4x5	i7-3770	4GBx1	1600MHz	250G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-E4U	4x5	i5-3470	4GBx1	1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 32	06/05/12
3212-E5U	4x5	i7-3770	4GBx1	1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 32	06/05/12
3212-E6U	4x5	i5-3470	2GBx1	1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 32	06/05/12
3212-E7U	4x5	i5-3470	2GBx1	1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-K1U	4x5	i7-3770	4GBx1	1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	06/19/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	
Graphics	Some: Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz Some: AMD Radeon™ HD 7350, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support	
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector	
eSATA port	None	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts, autosensing, 85% PSU	
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal optical ② ③ disk ⑤	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk	
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3	
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

Security

● Security chip (see information on left)

● One lock to secure both cover and entire system to fixed object:

-Padlock loop (in rear for opt padlock)

-Security slot (in rear for optional Kensington® MicroSaver® cable)

● Cable lock

● Power-on password

● Hard disk password

● Boot sequence control

● Boot without keyboard and mouse

● Serial port I/O control

● Individual USB port disablement

● Chassis intrusion switch on selected model(s)

EPEAT™ Gold rating

ENERGY STAR® 5.2-compliant

ULE Gold

GREENGUARD® certified

RoHS-compliant

Supports ThinkVantage Technologies

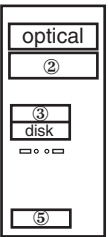
For compatible accessories, please go to O-M92 sheet;

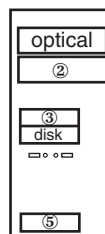
For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M92p Tower (3212) - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	PCIe Mini Card WLAN / BT	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3212-D8U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-D9U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-E2U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-F7U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-F8U	4x5	i5-3570	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-M2U	4x5	i7-3770	4GBx2	1TB 7200	Bay	DVD±RW	Media	HD 4000	Intel 2230 + BT	Switch	ES52	vPro	None	Pro 64	11/06/12

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)	
Implementation	Processor in LGA1155 socket			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector			
eSATA port	None			
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0			
Chipset	Intel Q77 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, autosensing, 85% PSU			
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	



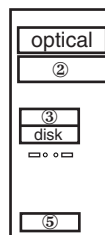
ThinkCentre® M92p Tower (3212) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3212-H1U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
3212-K3U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
3212-K4U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
3212-K5U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win8 Pro64	10/23/12

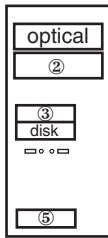
- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system	
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Windows® 8 Pro 64-bit Preloaded applications (only some listed) • ThinkVantage® System Update • View Management Utility • Lenovo® Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Lenovo Solution Center • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Norton Studio • Intel AppUp® • AccuWeather • PC Device Stage • Evernote® • Skype™ • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)	
Implementation	Processor in LGA1155 socket		Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @ 60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @ 60Hz; works along with Intel HD Graphics to support up to four independent monitors			
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector			
eSATA port	None			
Media reader	None			
Chipset	Intel Q77 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, autosensing, 85% PSU			
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			



See footnotes for important warranty information
US models announced October 23, 2012

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(MHTN1-31) October 2012

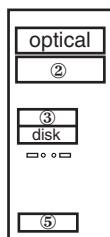
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3212-K7U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-K8U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-K9U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L1U	4x5	i5-3570	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L2U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L3U	4x5	i5-3570	4GBx1	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L4U	4x5	i5-3470	2GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L5U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L6U	4x5	i7-3770	4GBx1	250G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L7U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L8U	4x5	i5-3470	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L9U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo® AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Implementation	Processor in LGA1155 socket														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	<i>Some:</i> Intel HD Graphics 2500 / 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors <i>Some:</i> AMD Radeon HD 7450 , DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

ThinkCentre® M92p Tower (3212) - Windows 8 - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3212-N4U	4x5	i5-3475S	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	03/12/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit									
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)									
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										• Rescue and Recovery™ • Password Manager									
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										Preloaded applications (only some listed)									
DP dongle	None										• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo® AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)									
Disk	SATA 6.0Gb/s 7200 rpm										Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)									
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support																			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector																			
eSATA port	None																			
Media reader	None																			
Chipset	Intel Q77 Express Chipset																			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort																			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)																			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector																			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																			
Speaker	Internal speaker for business audio																			
IEEE 1394	None																			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)																			
Modem	None																			
Security chip	Trusted Platform Module (TPM1.2-compliant)																			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																			
Power supply	280 watts, autosensing, 85% PSU																			
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal																			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk																			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3																			
										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant										
										Supports ThinkVantage Technologies										
										For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																			

See footnotes for important warranty information
US model announced March 12, 2013

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(MHTN1-36) March 2013

ThinkCentre® M92p Tower (3228) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3228-A1U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	G P	Pro 64	06/05/12
3228-A2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	G P	Pro 64	06/19/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)									
Implementation																				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets																			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None																			
DP dongle	None																			
Disk	SATA 6.0Gb/s 7200 rpm																			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support																			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector																			
eSATA port	None																			
Media reader	None																			
Chipset	Intel Q77 Express Chipset																			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort																			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)																			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector																			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																			
Speaker	Internal speaker for business audio																			
IEEE 1394	None																			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®																			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)																			
Modem	None																			
Security chip	Trusted Platform Module (TPM1.2-compliant)																			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																			
Power supply	280 watts, autosensing, 85% PSU																			
Machine	● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal ● Toolless disk, optical drive removal ● Toolless adapter retention																			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk																			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3																			
optical ② ③ disk == ◦ == ⑤																				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet									

See footnotes for important warranty information
US models announced June 5 or June 19, 2012

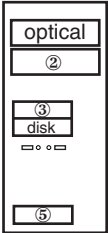
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(MHTN1-16) June 2012

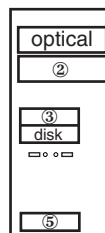
ThinkCentre® M92p Tower (3228) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3228-A3U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	G P	Win8 Pro64	10/23/12
3228-A4U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket										Some: Windows 8 Pro 64-bit				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed)				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz										- Windows 7 models				
DP dongle	None										• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Disk	SATA 6.0Gb/s 7200 rpm										- Windows 8 models				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										• Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)				
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support										- All models				
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector										• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
eSATA port	None										Security				
Media reader	None										• Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)				
Chipset	Intel Q77 Express Chipset										EPEAT™ Gold rating				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										ENERGY STAR® 5.2-compliant				
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										ULE Gold				
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										GREENGUARD® certified				
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector										RoHS-compliant				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										Supports ThinkVantage Technologies				
Speaker	Internal speaker for business audio										For compatible accessories, please go to O-M92 sheet;				
IEEE 1394	None										For Lenovo service upgrade options, please go to S-TC sheet				
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal • Toolless disk, optical drive removal • Toolless adapter retention														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



Memory

Tiny 3234/3243/3238/3237 use notebook memory:

2GB PC3-12800 DDR3 SODIMM	0A65722	ann	06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann	06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann	06/05/12

Small 3207/2988/3209/3227, and

Tower 3208/2992/3212/3228 use desktop memory:

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

Small and Tower support:

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann	09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11

Storage and removable storage

Small and Tower support:

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
180GB Solid State Drive	0B47308	ann	01/29/13

All:

USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 3207/2988/3209/3227 support Low Profile:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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Tower 3208/2992/3212/3228 support:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Under Desk Mount

Tiny support:

ThinkCentre Tiny Under Desk Mount Bracket	0B47097	ann	08/07/12
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Monitors

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann	08/14/12
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to Dual-DisplayPort Monitor Cable	0B47092	ann	06/05/12
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre M93/M93p Tiny
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M93/M93p Tiny
with optional WLAN



Lenovo ThinkCentre M93/M93p Tiny
with optional external I/O box



Lenovo ThinkCentre M93/M93p Tiny
with optional external optical box



Lenovo ThinkCentre M93/M93p Tiny
(inside view)



Lenovo ThinkCentre M93/M93p Tiny

ThinkCentre® M93p Tiny (10AB) - TopSeller I

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AB000DUS	i5-4570T	4GBx1	500G Hybrid	None	HD 4600	Intel 105	2nd DP	None	None	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000EUS	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 105	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000FUS	i7-4765T	8GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000GUS	i7-4765T	4GBx2	180G SSD	DVD±RW	HD 4600	Intel 6235	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000HUS	i7-4765T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000JUS	i5-4570T	4GBx2	180G SSD	DVD±RW	HD 4600	Intel 6235	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000KUS	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000QUS	i7-4765T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 2230	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000RUS	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 2230	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache) , Turbo Boost 2.0 (3.0GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology			Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro		
Implementation	Processor in LGA1150 socket					
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)					
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz; 1920x1200 (HDMI) @60Hz</i>					
DP dongle	None					
Disk	<i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide					
External optical	<i>Some:</i> external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0					
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset					
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar					
eSATA port	None					
Chipset	Intel Q87 Express Chipset					
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)					
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)					
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port					
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)					
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2					
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter			Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • <i>Chassis intrusion switch on selected model(s)</i>		
Audio	High Definition (HD) Audio, Realtek® ALC283 codec					
Speaker	Internal speaker for business audio (1.5 watt)					
IEEE 1394	None					
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®					
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)					
Modem	None					
Security chip	Trusted Platform Module (TPM1.2-compliant)					
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo					
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo					
Floor Stand	Optional system floor stand for vertical orientation					
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard					
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU					
Machine	• Tiny (1L), business black color; metal case • <i>M93/p Tiny only:</i> 7.0" W X 7.2" D X 1.4" H • <i>M93/p Tiny only:</i> 179mm W X 182mm D X 34.5mm H • <i>M93/p Tiny only:</i> 2.9 lb (1.3 kg), weight may vary by configuration • <i>With VESA mount & optical box:</i> 7.2" W X 7.2" D X 2.55" H • <i>With VESA mount & optical box:</i> 184mm W X 182mm D X 65mm H • <i>With VESA mount & optical box:</i> 5.1 lb (2.3 kg), weight may vary by configuration			EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
US model(s) announced July 2, 2013

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ThinkCentre® M93p Tiny (10AB) - TopSeller II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AB000SUS	i7-4765T	4GBx1	500G Hybrid	I/O box	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000TUS	i5-4570T	4GBx1	500G Hybrid	I/O box	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000UUS	i5-4570T	4GBx1	500G Hybrid	I/O box	HD 4600	None	None	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0010US	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 105	2nd DP	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0011US	i7-4765T	8GBx1	128G SSD	DVD±RW	HD 4600	Intel 6235	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0012US	i7-4765T	4GBx1	128G SSD	DVD±RW	HD 4600	Intel 2230	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0013US	i5-4570T	4GBx1	500G 7200	DVD±RW	HD 4600	Intel 105	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0014US	i5-4570T	4GBx1	500G 7200	I/O box	HD 4600	Intel 105	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0015US	i5-4570T	4GBx1	500G 7200	DVD±RW	HD 4600	Intel 2230	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0016US	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 105	Serial	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB002AUS	i5-4570T	4GBx1	128G SSD	None	HD 4600	Intel 2230	2nd DP	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	12/10/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system
Processor	Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz; 1920x1200 (HDMI) @60Hz		
DP dongle	None		
Disk	Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0		
External optical	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
SATA controller	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
Onboard SATA	None		
eSATA port	None		
Chipset	Intel Q87 Express Chipset		
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port		
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC283 codec		
Speaker	Internal speaker for business audio (1.5 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU		
Machine	● Tiny (1L), business black color; metal case ● M93/p Tiny only: 7.0" W X 7.2" D X 1.4" H ● M93/p Tiny only: 179mm W X 182mm D X 34.5mm H ● M93/p Tiny only: 2.9 lb (1.3 kg), weight may vary by configuration ● With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H ● With VESA mount & optical box: 184mm W X 182mm D X 65mm H ● With VESA mount & optical box: 5.1 lb (2.3 kg), weight may vary by configuration		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US model(s) announced July 2, 2013 or December 10, 2013

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Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AA0023US	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 105	HDMI	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AA0024US	i7-4765T	4GBx1	500G 7200	None	HD 4600	Intel 105	HDMI	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AA0025US	i7-4765T	4GBx1	500G 7200	None	HD 4600	Intel 6235	HDMI	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	07/02/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- A depot repair service 1-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system
Processor	Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz; 1920x1200 (HDMI) @60Hz		Ready to install applications (only some listed)
DP dongle	None		
Disk	Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm		● Rescue and Recovery™ ● Password Manager
External optical	None		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		Preloaded applications (only some listed)
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro
Chipset	Intel Q87 Express Chipset		
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2		Supports ThinkVantage Technologies
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC283 codec		For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Speaker	Internal speaker for business audio (1.5 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU		
Machine	● Tiny (1L), business black color; metal case ● M93/p Tiny only: 7.0" W X 7.2" D X 1.4" H ● M93/p Tiny only: 179mm W X 182mm D X 34.5mm H ● M93/p Tiny only: 2.9 lb (1.3 kg), weight may vary by configuration ● With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H ● With VESA mount & optical box: 184mm W X 182mm D X 65mm H ● With VESA mount & optical box: 5.1 lb (2.3 kg), weight may vary by configuration		
Limited Warranty	1-years - depot repair service / service upgrades available		

See footnotes for important warranty information
US model(s) announced July 2, 2013

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Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AA0027US	i7-4765T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 6235	2nd DP	None	None	Mount	vPro	None	Win7 Pro64 (DG)	09/10/13
10AA0028US	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 6235	2nd DP	None	None	Mount	vPro	None	Win7 Pro64 (DG)	09/10/13
10AA002BUS	i7-4765T	4GBx1	500G 7200	None	HD 4600	Intel 2230	2nd DP	None	Stand	None	vPro	None	Win7 Pro64 (DG)	09/10/13
10AA002AUS	i7-4765T	4GBx1	500G Hybrid	I/O box	HD 4600	Intel 2230	HDMI	None	None	Mount	vPro	None	Win7 Pro64 (DG)	09/10/13
10AA0029US	i5-4570T	4GBx1	500G Hybrid	I/O box	HD 4600	Intel 2230	HDMI	None	None	Mount	vPro	None	Win7 Pro64 (DG)	09/10/13
10AA002CUS	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 2230	2nd DP	None	Stand	None	vPro	None	Win7 Pro64 (DG)	09/10/13
10AA003PUS	i7-4765T	4GBx1	256G SSD	None	HD 4600	Intel 6235	2nd DP	None	Stand	None	vPro	None	Win7 Pro64 (DG)	11/12/13
10AA003QUS	i5-4570T	4GBx1	256G SSD	None	HD 4600	Intel 6235	2nd DP	None	Stand	None	vPro	None	Win7 Pro64 (DG)	11/12/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system
Processor	Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz; 1920x1200 (HDMI) @60Hz		Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro
DP dongle	None		
Disk	Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide		Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)
External optical	Some: external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel Q87 Express Chipset		
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port		
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC283 codec		
Speaker	Internal speaker for business audio (1.5 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU		
Machine	• Tiny (1L), business black color; metal case • M93/p Tiny only: 7.0" W X 7.2" D X 1.4" H • M93/p Tiny only: 179mm W X 182mm D X 34.5mm H • M93/p Tiny only: 2.9 lb (1.3 kg), weight may vary by configuration • With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H • With VESA mount & optical box: 184mm W X 182mm D X 65mm H • With VESA mount & optical box: 5.1 lb (2.3 kg), weight may vary by configuration		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US model(s) announced September 10, 2013 or November 12, 2013

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(MSS1N-7) November 2013

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AA001YUS	i5-4570T	2GBx1	320G 5400	None	HD 4600	Intel 105	None	Switch	Stand	None	vPro	G P	Win7 Pro64	07/02/13
10AA0020US	i5-4570T	4GBx1	500G 5400	DVD	HD 4600	Intel 2230	Serial	Switch	None	Mount	vPro	G P	Win7 Pro64 (DG)	07/02/13
10AA0021US	i7-4765T	4GBx1	128G SSD	DVD	HD 4600	Intel 2230	2nd DP	Switch	None	Mount	vPro	G P	Win7 Pro64 (DG)	07/02/13
10AA0022US	i5-4570T	4GBx1	500G 5400	None	HD 4600	Intel 2230	HDMI	Switch	Stand	None	vPro	G P	Win7 Pro64 (DG)	07/02/13
10AA002RUS	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 2230	HDMI	Switch	Stand	None	vPro	G P	Win7 Pro64 (DG)	10/08/13
10AA002SUS	i5-4570T	4GBx1	500G 7200	DVD±RW	HD 4600	Intel 2230	Serial	Switch	None	Mount	vPro	G P	Win7 Pro64 (DG)	10/08/13
10AA002UUS	i5-4570T	4GBx1	500G Hybrid	None	HD 4600	Intel 2230	HDMI	None	Stand	None	vPro	G P	Win7 Pro64 (DG)	11/12/13
10AA002VUS	i7-4765T	4GBx1	500G Hybrid	None	HD 4600	Intel 2230	2nd DP	None	Stand	None	vPro	G P	Win7 Pro64 (DG)	11/12/13
10AA002WUS	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 105	2nd DP	None	Stand	None	vPro	G P	Win7 Pro64 (DG)	11/12/13

•Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	Ultimate security, stability, and manageability for the enterprise		Preloaded operating system Some: Windows® 7 Professional 64 Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Processor	Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz; 1920x1200 (HDMI) @60Hz		
DP dongle	None		
Disk	Some: SATA 3.0Gb/s, 2.5" Wide, 5400 rpm Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide		
External optical	Some: external optical box with slim DVD-ROM, 12.7mm high, tray-in, via USB 3.0 Some: external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar		
eSATA port	None		
Chipset	Intel Q87 Express Chipset		
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port		
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Audio	High Definition (HD) Audio, Realtek® ALC283 codec		
Speaker	Internal speaker for business audio (1.5 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard		
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU		
Machine	● Tiny (1L), business black color; metal case ● M93/p Tiny only: 7.0" W X 7.2" D X 1.4" H ● M93/p Tiny only: 179mm W X 182mm D X 34.5mm H ● M93/p Tiny only: 2.9 lb (1.3 kg), weight may vary by configuration ● With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H ● With VESA mount & optical box: 184mm W X 182mm D X 65mm H ● With VESA mount & optical box: 5.1 lb (2.3 kg), weight may vary by configuration		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

US model(s) announced July 2, 2013, October 8, 2013, or November 12, 2013

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(MSS1N-5) November 2013



Lenovo ThinkCentre M93/M93p Mini Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M93/M93p Mini Tower
with optional WLAN and graphic card



Lenovo ThinkCentre M93/M93p Small Pro
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M93/M93p Small Pro
with optional dual graphic cards
* Cable lock only available on some special bid
models



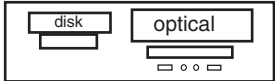
Lenovo ThinkCentre M93/M93p Small Pro
(inside view)

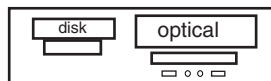


Optional 2.5" bay on
Lenovo ThinkCentre M93/M93p Small Pro
* Come with optional 2.5" 2nd HDD

Type-model	Slot x bay	Pro-processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Floor stand	Intel vPro	Preload	Ann date (mm/dd/yy)
10A9000HUS	4x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	HD 4600	None	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000JUS	4x4	i5-4670	4GBx1	500G Hybrid	DVD±RW	None	HD 4600	USB	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000KUS	4x4	i7-4770	4GBx1	1TB 7200	DVD±RW	None	GT 620	USB	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000LUS	4x4	i7-4770	8GBx1	500G Hybrid	DVD±RW	None	GT 620	None	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000MUS	4x4	i7-4770	4GBx2	500G Hybrid	DVD±RW	None	GT 620	USB	Serial	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A90014US	4x4	i7-4770	8GBx1	1TB 7200	DVD±RW	105	GT 620	USB	Serial	Parallel	None	Stand	vPro	Win7 Pro64 (DG)	08/13/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro	
Implementation	Processor in LGA1150 socket			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration,</i> 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz,</i> works along with Intel HD Graphics to support up to five independent monitors			
DP dongle	None			
Disk	<i>Some:</i> SATA 6.0Gb/s 7200 rpm, 3.5" wide <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)			
eSATA port	None			
Media reader	None			
Chipset	Intel Q87 Express Chipset			
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1			
Bluetooth	None			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio (1 watt)			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	<i>Some:</i> System floor stand for vertical orientation			
Power supply	240 watts, autosensing, 85% PSU			
Machine	● SFF Pro (12.9L), business black color; metal case ● (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm ● 17.20 lb (7.8 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk and optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 2: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader			
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max) Slot 4: Low Profile, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	



See footnotes for important warranty information

US model(s) announced June 18, 2013 or August 13, 2013

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(MSS1S-3) August 2013

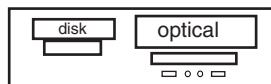
ThinkCentre® M93p SFF Pro (10A9) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Pro-processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Floor stand	Intel vPro	Preload	Ann date (mm/dd/yy)
10A9000NUS	4x4	i7-4770	4GBx1	1TB 7200	DVD±RW	None	None	HD 8470	USB	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000PUS	4x4	i7-4770	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000QUS	4x4	i5-4670	4GBx2	500G Hybrid	DVD±RW	None	None	GT 620	USB	Serial	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000RUS	4x4	i5-4670	4GBx1	1TB 7200	DVD±RW	None	None	HD 8470	USB	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000SUS	4x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A90016US	4x4	i7-4770	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	10/08/13
10A90017US	4x4	i5-4570	4GBx1	128G SSD	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	10/08/13
10A9002CUS	4x4	i5-4670	4GBx1	500G Hybrid	DVD±RW	None	None	GT 620	None	None	None	Stand	vPro	Win7 Pro64 (DG)	12/10/13

•Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro
Implementation			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> <i>Some: AMD Radeon™ HD 8470, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz,</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz,</i>		
DP dongle	None		
Disk	<i>Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)		
eSATA port	None		
Media reader	None		
Chipset	Intel Q87 Express Chipset		
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	● SFF Pro (12.9L), business black color; metal case ● (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm ● 17.20 lb (7.8 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk and optical drive removal disk optical		
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 2: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader		
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max) Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		



See footnotes for important warranty information

US model(s) announced June 18, 2013, October 8, 2013, or December 10, 2013

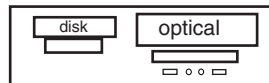
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(MSS1S-4) December 2013

Type-model	Slot x bay	Pro-processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Floor stand	Intel vPro	Preload	Ann date (mm/dd/yy)
10A8000TUS	4x4	i7-4770	4GBx2	1TB 7200	DVD±RW	Intel 105	Media	GT 620	None	Serial	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A8000UUS	4x4	i7-4770	4GBx2	1TB 7200	DVD±RW	None	None	GT 620	USB	Serial	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A8000VUS	4x4	i7-4770	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	USB	Serial	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A8000WUS	4x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	USB	Serial	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A8000XUS	4x4	i5-4570	8GBx1	1TB 7200	DVD±RW	Intel 105	None	HD 4600	USB	Serial	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A8000YUS	4x4	i5-4570	4GBx1	250G 7200	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro
Implementation			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz, works along with Intel HD Graphics to support up to five independent monitors</i>		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)		
eSATA port	None		
Media reader	<i>Some:</i> 29-in-1 media reader, slim, internal USB 2.0		
Chipset	Intel Q87 Express Chipset		
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	• SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 2: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader		
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max) Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		



Product Specifications Reference (PSREF)

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

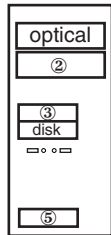
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(MSS1S-2) November 2013

ThinkCentre® M93p Mini Tower (10A7) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x	Pro- cessor	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10A7000BUS	4x5	i5-4570	4Gx1	500G 7200	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64	(DG) 06/18/13
10A7000CUS	4x5	i5-4670	4Gx1	500G Hybrid	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64	(DG) 06/18/13
10A7000DUS	4x5	i7-4770	4Gx1	1TB 7200	DVD±RW	None	HD 8570	None	None	None	None	vPro	None	Win7 Pro64	(DG) 06/18/13
10A7000EUS	4x5	i7-4770	4Gx2	500G Hybrid	DVD±RW	Media	HD 8570	None	Serial	Parallel	None	vPro	None	Win7 Pro64	(DG) 06/18/13
10A7000FUS	4x5	i7-4770	4Gx1	500G 7200	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64	(DG) 06/18/13
10A7000GUS	4x5	i5-4670	4Gx2	500G Hybrid	DVD±RW	None	GT 620	USB	Serial	None	None	vPro	None	Win7 Pro64	(DG) 06/18/13
10A7000QUS	4x5	i7-4770	8Gx1	1TB 7200	DVD±RW	None	GT 620	None	None	None	None	vPro	None	Win7 Pro64	(DG) 07/09/13
10A7000SUS	4x5	i7-4770	4Gx1	1TB 7200	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64	(DG) 10/08/13
10A7000TUS	4x5	i5-4570	4Gx1	128G SSD	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64	(DG) 10/08/13
10A7000UUS	4x5	i7-4770	8Gx1	180G SSD	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64	(DG) 10/08/13

● *Small and medium business (SMB) model(s), part of the US TopSeller™ Program*

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro
Implementation	Processor in LGA1150 socket		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz</i> <i>Some: AMD Radeon HD 8570, DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; Max resolution: 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz,</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz,</i>		
DP dongle	None		
Disk	<i>Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)		
eSATA port	None		
Media reader	<i>Some: 29-in-1 media reader, internal USB 2.0</i>		
Chipset	Intel Q87 Express Chipset		
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio (1.5 watt)		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Modem	None		
Security chip	Trusted Platform Module (TPM1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts, autosensing, 85% PSU		
Machine	● Mini Tower (25L), business black color, metal case ● (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm ● 24.69 lb (11.20 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk, optical drive removal		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max) Slot 4: half-length, full-height, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information

US model(s) announced June 18, 2013, July 9, 2013, or October 8, 2013

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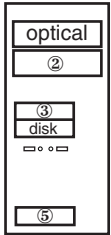
(MSS1T-3) October 2013

ThinkCentre® M93p Mini Tower (10A6)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10A6000UUS	4x5	i7-4770	4GBx2	1TB 7200	DVD±RW	None	Media	GT 620	None	Serial	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A6000VUS	4x5	i7-4770	4GBx2	500G 7200	DVD±RW	None	Media	HD 8570	None	Serial	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A6000WUS	4x5	i7-4770	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	USB	None	None	vPro	None	Win7 Pro64 (DG)	06/18/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	
Implementation	Processor in LGA1150 socket		Ready to install applications (only some listed)	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		● Rescue and Recovery™ ● Password Manager	
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz</i> <i>Some: AMD Radeon HD 8570, DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; Max resolution: 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz, works along with Intel HD Graphics to support up to five independent monitors</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz, works along with Intel HD Graphics to support up to five independent monitors</i>		Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro	
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)			
eSATA port	None			
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0			
Chipset	Intel Q87 Express Chipset			
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
PCIe WLAN	None			
Bluetooth	None			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio (1.5 watt)			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, autosensing, 85% PSU			
Machine	● Mini Tower (25L), business black color, metal case ● (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm ● 24.69 lb (11.20 kg) in maximum configuration ● Toolless cover removal, adapter retention ● Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max) Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

See footnotes for important warranty information
US model(s) announced June 18, 2013

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(MSS1T-1) June 2013

ThinkCentre® M93p Mini Tower (10A6) - GMP

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10A60017US	4x5	i5-4570	2GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	Switch	vPro	G P	Win7 Pro64	06/18/13
10A60018US	4x5	i7-4770	4GBx1	1TB 7200	DVD±RW	Intel 105	None	HD 8470	USB	None	Switch	vPro	G P	Win7 Pro64 (DG)	06/18/13
10A60019US	4x5	i5-4570	4GBx1	500G 7200	DVD±RW	Intel 105	None	HD 4600	USB	None	Switch	vPro	G P	Win7 Pro64 (DG)	06/18/13
10A6001DUS	4x5	i5-4570	4GBx1	500G 7200	DVD	Intel 105	None	HD 4600	USB	None	Switch	vPro	G P	Win7 Pro64 (DG)	08/20/13
10A6001EUS	4x5	i7-4770	4GBx1	1TB 7200	DVD	Intel 105	None	HD 8470	USB	None	Switch	vPro	G P	Win7 Pro64 (DG)	08/20/13
10A6001FUS	4x5	i5-4570	2GBx1	500G 7200	DVD	None	None	HD 4600	None	None	Switch	vPro	G P	Win7 Pro64	08/20/13
10A6001SUS	4x5	i7-4770	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	USB	Serial	None	vPro	G P	Win7 Pro64 (DG)	11/12/13
10A6001TUS	4x5	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	vPro	G P	Win7 Pro64 (DG)	11/12/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	
Implementation			Ready to install applications (only some listed)	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		• Rescue and Recovery™ • Password Manager	
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz, works along with Intel HD Graphics to support up to five independent monitors		Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro	
DP dongle	None			
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide			
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max⁴ Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)			
eSATA port	None			
Media reader	None			
Chipset	Intel Q87 Express Chipset			
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1			
Bluetooth	None			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio (1.5 watt)			
IEEE 1394	None			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Modem	None			
Security chip	Trusted Platform Module (TPM1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	280 watts, autosensing, 85% PSU			
Machine	• Mini Tower (25L), business black color, metal case • (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm • 24.69 lb (11.20 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk, optical drive removal			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk			
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max) Slot 4: half-length, full-height, 32-bit PCI 2.3			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

See footnotes for important warranty information

US model(s) announced June 18, 2013, August 20, 2013, or November 12, 2013

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Lenovo ThinkCentre M92z with Frame Stand



Lenovo ThinkCentre M92z with Monitor Stand



Toolless Back Cover Removal



Toolless Stand Removal



Dual Independent Display with Optional Lenovo ThinkVision Monitor

ThinkCentre® M92z (3280) - 20" (TopSeller) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega- pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key- board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3280-A1U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3280-A2U	i5-3470S	4GBx2	2.0M	1TB 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3280-A5U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win7 Pro64	11/20/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models ● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● RapidBoot HDD Accelerator ● Lenovo® SimpleTap ● Adobe® Reader® ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) - Windows 8 models ● Lenovo Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Norton™ Studio ● AccuWeather ● Evernote® ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) - All models ● ThinkVantage System Update ● ThinkVantage Automatic Lock Utility ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Microsoft® Office preloaded; purchase a product key to activate ● Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>All:</i> ● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Model(s) with 20" Non multi-touch, Frame stand:</i> ● 19.8" W X 3.6" D X 16.1" H, ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration <i>Model(s) with 20" Non multi-touch, Monitor stand:</i> ● 19.8" W X 5.6" D X 17.6" H, ● 503mm W X 143mm D X 448mm H (including stand) ● 23.0 lb (10.5 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable: Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

ThinkCentre® M92z (3291) - 20" (TopSeller) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3291-A4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3291-A6U	i7-3770S	4GBx1	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3291-A7U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3291-A9U	i5-3470T	4GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3291-B1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3291-B2U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3291-B6U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 / 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> ● Business black color ● 19.8" W X 3.6" D X 16.1" H ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

ThinkCentre® M92z (3291) - 20" (TopSeller) - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3291-B7U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3291-B8U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3291-C7U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64 09/04/12
3291-C9U	i3-3220	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64 09/04/12
3291-D1U	i3-3240	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64 09/04/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500 integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Processor			
Implementation			
Memory		16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics		Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle		None	
Display		20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor		None	
Multi-touch		None	
Camera		Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar		
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader		
Chipset	Intel Q77 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with 20" Non multi-touch, Monitor stand:</i> ● Business black color ● 19.8" W X 5.6" D X 17.6" H ● 503mm W X 143mm D X 448mm H (including stand) ● 23.0 lb (10.5 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

ThinkCentre® M92z (3291) - 20" (TopSeller) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3291-C5U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3291-C8U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3291-D2U	i3-3220	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3291-D3U	i3-3240	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3291-D6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	10/23/12
3291-D7U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	10/23/12
3291-E1U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win7 Pro64	12/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • RapidBoot HDD Accelerator • Lenovo® SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	EPEAT™ Gold rating
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	ENERGY STAR® 5.2-compliant
Power supply	150 watts, autosensing, 85% PSU	TCO Certified Edge
Machine	<i>All:</i> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) <i>Model(s) with 20" Non multi-touch, Frame stand:</i> • 19.8" W X 3.6" D X 16.1" H, • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration <i>Model(s) with 20" Non multi-touch, Monitor stand:</i> • 19.8" W X 5.6" D X 17.6" H, • 503mm W X 143mm D X 448mm H (including stand) • 23.0 lb (10.5 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°	TUV Green Mark
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	ULE Gold
		EuP 2013
		Cisco EnergyWise compatible
		GREENGUARD® certified
		RoHS-compliant
		Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M92Z sheet;
		For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3296-B1U	i3-2130	4GBx1	2.0M	500G 7200	HD 2000	11b/g/n	None	None	S P	None	Frame	USB	None	None	Pro 64 06/05/12
✂ 3296-B6U	G630	4GBx1	None	250G 7200	Intel HD	None	None	None	S P	None	Frame	USB	None	None	Pro 64 06/05/12
✂ 3296-B7U	G630	4GBx1	2.0M	250G 7200	Intel HD	11b/g/n	None	None	S P	None	Frame	USB	None	None	Pro 64 06/05/12

●3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Memory	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
Graphics	None	
DP dongle	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Display	None	
Light sensor	None	
Multi-touch	None	
Camera	<i>Some:</i> Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> ● Business black color ● 19.8" W X 3.6" D X 16.1" H ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

See footnotes for important warranty information

US models announced June 5, 2012

✂ US models withdrawn effective May 2013

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(MTRL1-4) February 2013

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3296-B2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3296-B3U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3296-B5U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3296-E5U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	06/05/12
3296-E6U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Frame	USB	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Memory		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • <i>Chassis intrusion switch on selected model(s)</i>
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	EPEAT™ Gold rating
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	ENERGY STAR® 5.2-compliant
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	TCO Certified Edge
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	TUV Green Mark
Security chip	Trusted Platform Module (TPM 1.2-compliant)	ULE Gold
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	EuP 2013
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	Cisco EnergyWise compatible
Power supply	150 watts, autosensing, 85% PSU	GREENGUARD® certified
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> • Business black color • 19.8" W X 3.6" D X 16.1" H • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)	RoHS-compliant
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M92Z sheet;
		For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3296-E4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3296-E7U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These models have a 3-year limited warranty

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)					
Implementation																
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>															
DP dongle	None															
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector															
Light sensor	None															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off															
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons															
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Intel AMT	Trusted Platform Module (TPM 1.2-compliant)															
Security chip																
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	Model(s) with 20" Non multi-touch, Monitor stand: • Business black color • 19.8" W X 5.6" D X 17.6" H • 503mm W X 143mm D X 448mm H (including stand) • 23.0 lb (10.5 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)										Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)					
											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant					
											Supports ThinkVantage Technologies					
											For compatible accessories, please go to O-M92Z sheet;					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For Lenovo service upgrade options, please go to S-TC sheet					

ThinkCentre® M92z (3296) - 20" (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3296-F6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3296-G6U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win8 Pro64	10/23/12
3296-G7U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win8 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system²⁰ Windows® 8 Pro 64-bit Preloaded applications (only some listed) ● ThinkVantage® System Update ● ThinkVantage Automatic Lock Utility ● View Management Utility ● Lenovo® Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)	
Implementation				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>			
DP dongle	None			
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector			
Light sensor	None			
Multi-touch	None			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off			
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons			
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar			
Media reader	None			
Chipset	Intel Q77 Express Chipset			
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)			
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
ExpressCard	None			
mSATA	One mSATA slot			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter			
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®			
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Security chip	Trusted Platform Module (TPM 1.2-compliant)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● <i>Chassis intrusion switch on selected model(s)</i>	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	150 watts, autosensing, 85% PSU			
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> ● Business black color ● 19.8" W X 3.6" D X 16.1" H ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
			Supports ThinkVantage Technologies	
			For compatible accessories, please go to O-M92Z sheet;	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US models announced October 23, 2012

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Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3296-F4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-F5U	i5-3470S	4GBx2	2.0M	1TB 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-G8U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3296-G9U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3296-H1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-H2U	i5-3570S	4GBx1	2.0M	1TB 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-H3U	i5-3570S	4GBx2	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-H7U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	10/23/12
3296-J8U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	11/20/12

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • RapidBoot HDD Accelerator • Lenovo® SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 Models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Optical	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Onboard SATA	<i>Some:</i> 11-in-1 Single Slot SD media reader	
Media reader		
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	EPEAT™ Gold rating
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	ENERGY STAR® 5.2-compliant
Power supply	150 watts, autosensing, 85% PSU	TCO Certified Edge
Machine	<i>Model(s) with 20" Non multi-touch, Monitor stand:</i> • Business black color • 19.8" W X 5.6" D X 17.6" H • 503mm W X 143mm D X 448mm H (including stand) • 23.0 lb (10.5 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)	TUV Green Mark
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	ULE Gold
		EuP 2013
		Cisco EnergyWise compatible
		GREENGUARD® certified
		RoHS-compliant
		Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M92Z sheet;
		For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M92z (3298) - 20" (GMP)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCle Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global (G) GMP (P)	Win7 preload (mm/dd/yy)	Ann date
3298-A2U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>		
DP dongle	None		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector		
Light sensor	Ambient Light Sensor		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off		
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar		
Media reader	11-in-1 Single Slot SD media reader		
Chipset	Intel Q77 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCle Mini Card	One PCI Express® Mini Card slot		
PCle WLAN	11b/g/n wireless, PCle Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> ● Business black color ● 19.8" W X 3.6" D X 16.1" H, ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

ThinkCentre® M92z (3298) - 20" (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCle Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3298-A4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Win8 Pro64	10/23/12
3298-A6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	None	Frame	USB	vPro	G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰				
Implementation	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											Some: Windows 8 Pro 64-bit				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>											Preloaded applications (only some listed)				
DP dongle	None											- Windows 7 models				
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector											• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • RapidBoot HDD Accelerator • Lenovo® SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Light sensor	Ambient Light Sensor											- Windows 8 models				
Multi-touch	None											• Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)				
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off											- All models				
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons											• ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											Security				
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											• Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)				
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar											EPEAT™ Gold rating				
Media reader	11-in-1 Single Slot SD media reader											ENERGY STAR® 5.2-compliant				
Chipset	Intel Q77 Express Chipset											TCO Certified Edge				
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											TUV Green Mark				
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											ULE Gold				
ExpressCard	None											EuP 2013				
mSATA	One mSATA slot											Cisco EnergyWise compatible				
PCIe Mini Card	One PCI Express® Mini Card slot											GREENGUARD® certified				
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											RoHS-compliant				
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											Supports ThinkVantage Technologies				
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®											For compatible accessories, please go to O-M92Z sheet;				
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											For Lenovo service upgrade options, please go to S-TC sheet				
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> • Business black color • 19.8" W X 3.6" D X 16.1" H, • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)															
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available															

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M92z (3315) - 23" (TopSeller) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)
3315-A3U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system ²⁰ Windows® 8 Pro 64-bit Preloaded applications (only some listed) ● ThinkVantage® System Update ● ThinkVantage Automatic Lock Utility ● View Management Utility ● Lenovo® Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	 For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

ThinkCentre® M92z (3318) - 23" (TopSeller) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCle Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3318-A4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3318-A5U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3318-A6U	i7-3770S	4GBx2	2.0M	500G 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3318-B7U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)						
Implementation																	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)																
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i> None																
DP dongle	None																
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector																
Light sensor	None																
Multi-touch	None																
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off																
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons																
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm																
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable																
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar																
Media reader	None																
Chipset	Intel Q77 Express Chipset																
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)																
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																
ExpressCard	None																
mSATA	One mSATA slot																
PCle Mini Card	One PCI Express® Mini Card slot																
PCle WLAN	11b/g/n wireless, PCle Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2																
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter																
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®																
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified																
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)																
Security chip	Trusted Platform Module (TPM 1.2-compliant)																
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo																
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																
Power supply	150 watts, autosensing, 85% PSU																
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.7" D X 17.6" H ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet						
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																

See footnotes for important warranty information
US models announced June 5, 2012

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(MTRL1-9) February 2013

ThinkCentre® M92z (3318) - 23" (TopSeller) - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3318-B6U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3318-B8U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3318-B9U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	None	None	None	None	Monitor	2.4G	vPro	None	Pro 64	06/05/12
3318-C1U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	None	None	Monitor	2.4G	vPro	None	Pro 64	06/05/12
3318-E3U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64	09/04/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

See footnotes for important warranty information
 US models announced June 5 or September 4, 2012

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 (MTRL1-10) February 2013

ThinkCentre® M92z (3318) - 23" (TopSeller) - Win 8

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3318-E5U	i5-3470T	4GBx1	2.0M	1TB 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3318-E6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3318-E7U	i5-3570S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3318-H5U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64	11/20/12
3318-H7U	i3-3220	4GBx1	2.0M	180G SSD	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	11/20/12
3318-J1U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	12/04/12
3318-J5U	G870	4GBx1	2.0M	500G 7200	Intel HD	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	01/22/13
3318-J8U	i5-3330S	4GBx1	2.0M	1TB 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	03/12/13
Positioning Processor	Premium All-In-One PC for the enterprise Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3330S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • RapidBoot HDD Accelerator • Lenovo® SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Implementation																
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz															
DP dongle	None															
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector															
Light sensor	None															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off															
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons															
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> • Business black color • 22.4" W X 3.7" D X 17.6" H • 568mm W X 93mm D X 447mm H (including stand) • 21.5 lb (9.8 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 20, 2012, Dec 4, 2012, Jan 22, 2013, or Mar 12, 2013

✗ US model(s) withdrawn effective November 2013

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(MTRL1-25) March 2013

ThinkCentre® M92z (3318) - 23" (TopSeller) - Win 8 - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3318-E2U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F5U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F6U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F3U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F4U	G870	4GBx1	2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F9U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	10/23/12
3318-J3U	G2120	4GBx1	2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	12/04/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	EPEAT™ Gold rating
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	ENERGY STAR® 5.2-compliant
Power supply	150 watts, autosensing, 85% PSU	TCO Certified Edge
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> • Business black color • 22.4" W X 9.7" D X 17.8" H • 568mm W X 247mm D X 452mm H (including stand) • 25.7 lb (11.7 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)	TUV Green Mark
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	ULE Gold
		EuP 2013
		Cisco EnergyWise compatible
		GREENGUARD® certified
		RoHS-compliant
		Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M92Z sheet;
		For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US models announced October 23 or December 4, 2012
 < US model(s) withdrawn effective November 2013

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 (MTRL1-26) February 2013

ThinkCentre® M92z (3318) - 23" (TopSeller) - Win 8 - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCle Mini Card WLAN	Media reader	Light sensor	Ser & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Intel Mouse vPro	Global	Preload	Ann date (mm/dd/yy)	
3318-D2U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3318-E1U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3318-E8U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3318-E9U	i5-3570S	4GBx1	2.0M	1TB 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3318-F1U	i5-3570S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3318-F2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3318-G1U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	10/23/12
3318-J4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 6205	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	01/22/13
3318-J6U	i7-3770S	4GBx1	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	None	None	None	None	Monitor	2.4G	vPro	None	Win7 Pro64	03/05/13
Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Preloaded operating system ²⁰ Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Implementation	Processor in LGA1155 socket											Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz															
DP dongle	None															
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector															
Light sensor	None															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off															
Controls	Front: Microphone mute, speaker mute, monitor mode, OSD menu, and power button Side: Volume up and down buttons															
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	Some: 11-in-1 Single Slot SD media reader															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCle Mini Card	One PCI Express® Mini Card slot															
PCle WLAN	Some: 11a/b/g/n, PCle Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Some: 11b/g/n wireless, PCle Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo Some: Ultrasm Plus Wireless Keyboard (2.4GHz via USB receiver), black															
Mouse	Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultrasm Plus Wireless Mouse (2.4GHz via USB receiver), black															
Power supply	150 watts, autosensing, 85% PSU															
Machine	Model(s) with 23" Non multi-touch, Monitor stand: • Business black color • 22.4" W X 9.7" D X 17.8" H • 568mm W X 247mm D X 452mm H (including stand) • 25.7 lb (11.7 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)															
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available															

See footnotes for important warranty information

US models announced October 23, 2012, January 22, 2013 or March 5, 2013

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(MTRL1-27) March 2013

ThinkCentre® M92z (3325) - 23"

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)
3325-A1U	i3-2130	4GBx1	2.0M	500G 7200	HD 2000	11b/g/n	None	None	S P	None	Frame	USB	None	None	Pro 64 06/05/12

●3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD 2000 Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.7" D X 17.6" H ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal , ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model announced June 5, 2012

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(MTRL1-11) February 2013

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)	
3325-B3U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3325-B4U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3325-E2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads , 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads , 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCle Mini Card	One PCI Express® Mini Card slot	
PCle WLAN	11b/g/n wireless, PCle Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.7" D X 17.6" H ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal , ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M92z (3325) - 23" - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Intel Mouse vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3325-E1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB vPro	None	Pro 64	06/05/12
3325-D9U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	None	None	None	None	Monitor	USB vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	EPEAT™ Gold rating
Mouse	Enhanced Optical USB Mouse, 1000dpi, black, Lenovo logo	ENERGY STAR® 6.0-compliant
Power supply	150 watts, autosensing, 85% PSU	TCO Certified Edge
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	TUV Green Mark
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	ULE Gold
		EuP 2013
		Cisco EnergyWise compatible
		GREENGUARD® certified
		RoHS-compliant
		Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M92Z sheet;
		For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US models announced June 5, 2012

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(MTRL1-13) February 2013

ThinkCentre® M92z (3325) - 23" (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3325-F6U i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3325-G7U i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	None	Frame	USB	None	None	Win8 Pro64	10/23/12
3325-G8U i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	None	Frame	USB	None	None	Win8 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system²⁰ Windows® 8 Pro 64-bit Preloaded applications (only some listed) ● ThinkVantage® System Update ● ThinkVantage Automatic Lock Utility ● View Management Utility ● Lenovo® Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office preloaded; purchase a product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)	
Implementation				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>			
DP dongle	None			
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector			
Light sensor	None			
Multi-touch	None			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off			
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons			
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar			
Media reader	None			
Chipset	Intel Q77 Express Chipset			
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)			
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
ExpressCard	None			
mSATA	One mSATA slot			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter			
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®			
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)			
Security chip	Trusted Platform Module (TPM 1.2-compliant)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● <i>Chassis intrusion switch on selected model(s)</i>	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	150 watts, autosensing, 85% PSU			
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.7" D X 17.6" H ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal , ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
			Supports ThinkVantage Technologies	
			For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

See footnotes for important warranty information
US models announced October 23, 2012

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Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Intel Mouse vPro	Global	Preload	Ann date (mm/dd/yy)	
3325-G9U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3325-H1U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3325-H2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB vPro	None	None	Win8 Pro64	10/23/12
3325-H3U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB vPro	None	None	Win8 Pro64	10/23/12
3325-H4U	i5-3570S	4GBx1	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB vPro	None	None	Win8 Pro64	10/23/12
3325-H5U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB vPro	None	None	Win8 Pro64	10/23/12
3325-H8U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB vPro	None	None	Win7 Pro64	10/23/12
3325-K4U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	11b/g/n	None	None	None	None	Monitor	USB vPro	None	None	Win7 Pro64	11/20/12
3325-L2U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	06/25/13
Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Implementation	Processor in LGA1155 socket											Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz															
DP dongle	None															
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector															
Light sensor	None															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off															
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons															
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, 1000dpi, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> • Business black color • 22.4" W X 9.7" D X 17.8" H • 568mm W X 247mm D X 452mm H (including stand) • 25.7 lb (11.7 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

US models announced October 23 or November 20, 2012 or June 25, 2013

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(MTRL1-29) July 2013

ThinkCentre® M92z (3327) - 23" (GMP)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega- pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key- board/ Mouse	Intel vPro	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3327-A4U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	Ambient Light Sensor	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.7" D X 17.6" H, ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M92z (3327) - 23" (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel Global (G) vPro	GMP (P)	Preload	Ann date (mm/dd/yy)
3327-A8U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Win8 Pro64	10/23/12
3327-B2U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	None	Frame	USB	vPro	G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰				
Implementation	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											Some: Windows 8 Pro 64-bit				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>											Preloaded applications (only some listed)				
DP dongle	None											- Windows 7 models				
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector											• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Light sensor	Ambient Light Sensor											- Windows 8 models				
Multi-touch	None											• Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)				
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off											- All models				
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons											• ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Skype™				
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											Security				
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											• Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)				
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar											• Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)				
Media reader	11-in-1 Single Slot SD media reader											EPEAT™ Gold rating				
Chipset	Intel Q77 Express Chipset											ENERGY STAR® 5.2-compliant				
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											TCO Certified Edge				
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											TUV Green Mark				
ExpressCard	None											ULE Gold				
mSATA	One mSATA slot											EuP 2013				
PCIe Mini Card	One PCI Express® Mini Card slot											Cisco EnergyWise compatible				
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											GREENGUARD® certified				
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											RoHS-compliant				
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®											Supports ThinkVantage Technologies				
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											For compatible accessories, please go to O-M92Z sheet;				
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)											For Lenovo service upgrade options, please go to S-TC sheet				
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> • Business black color • 22.4" W X 3.7" D X 17.6" H, • 568mm W X 93mm D X 447mm H (including stand) • 21.5 lb (9.8 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)															
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available															

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M92z (3311) - 23" (Multi-touch) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3311-A4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3311-C2U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	11/20/12
3311-C3U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Pro 64	12/11/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Microsoft Touch Pack ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	Multi-touch, 2-point support	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	<i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.9" D X 17.6" H, ● 568mm W X 100mm D X 447mm H (including stand) ● 23.9 lb (10.9 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

See footnotes for important warranty information

US models announced June 5, November 20, or December 11, 2012

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ThinkCentre® M92z (3311) - 23" (Multi-touch) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN / BT	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3311-B1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3311-B2U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3311-B3U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	Media	None	None	None	Monitor	2.4G	vPro	None	Pro 64 06/05/12
3311-B9U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	None	None	Pro 64 09/04/12
3311-C1U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 11/20/12
3311-C4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 6205	None	None	None	None	Monitor	USB	vPro	None	Pro 64 01/22/13

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Microsoft Touch Pack • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Implementation															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @ 60Hz</i>														
DP dongle	None														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	Multi-touch, 2-point support														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Optical															
Onboard SATA															
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultrasm Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultrasm Plus Wireless Mouse (2.4GHz via USB receiver), black														
Mouse															
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" multi-touch, Monitor stand:</i> • Business black color • 22.4" W X 10.0" D X 17.8" H • 568mm W X 254mm D X 452mm H (including stand) • 28.2 lb (12.8 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)														
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available														

See footnotes for important warranty information

US models announced June 5, 2012, Sep 4, 2012, Nov 20, 2012, or Jan 22, 2013

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ThinkCentre® M92z (3314) - 23" (Multi-touch)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3314-D8U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3314-D9U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3314-E7U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 08/14/12
3314-E6U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	None	None	Pro 64 09/04/12
3314-F1U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 11/20/12
3314-F2U	i7-3770S	8GBx1	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 12/11/12
3314-F3U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 6205	None	None	None	None	Monitor	USB	vPro	None	Pro 64 01/22/13

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Microsoft® Touch Pack • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Implementation	Processor in LGA1155 socket														
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i> None														
DP dongle	None														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector None														
Light sensor	None														
Multi-touch	Multi-touch, 2-point support														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" multi-touch, Monitor stand:</i> • Business black color • 22.4" W X 10.0" D X 17.8" H • 568mm W X 254mm D X 452mm H (including stand) • 28.2 lb (12.8 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm)										Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available														

See footnotes for important warranty information

US models announced Jun 5, Aug 14, Sep 4, No 20, Dec 11, 2012, or Jan 22, 2013

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ThinkCentre® M92z (3329) - 23" (Multi-touch) - GMP

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global (G) GMP (P)	Win7 preload (mm/dd/yy)	Ann date
3329-A4U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Microsoft Touch Pack ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	Ambient Light Sensor	
Multi-touch	Multi-touch, 2-point support	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.9" D X 17.6" H, ● 568mm W X 100mm D X 447mm H (including stand) ● 23.9 lb (10.9 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

Memory

2GB PC3-12800 DDR3 SODIMM	0A65722	ann 06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann 06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann 06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann 02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann 02/08/11
Lenovo Headset P550	55Y2065	
Lenovo Headset P950 (black)	57Y6605	ann 02/08/11

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann 05/01/12

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann 08/14/12
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



ThinkCentre M93z (Multi-touch) with Frame Stand and optional wireless keyboard and mouse



ThinkCentre M93z (Non-touch) with Monitor Stand and optional wireless keyboard and mouse



ThinkCentre M93z with Monitor Stand with optional PS/2 and Serial ports



ThinkCentre M93z with Frame Stand with optional PS/2 and Serial ports



Frame Stand
(Adjustable between 10° and 45°)



Monitor Stand
(Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait)

ThinkCentre® M93z (10AF) - TopSeller (1-year onsite)

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AF000JUS	G3220	4GBx1	2.0M	500G 7200	Intel HD	N105	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	08/20/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3* , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller		Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>		
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro
Light sensor	Optional ambient light sensor		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Non-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm ● 21.3 lb (9.68 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Non-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 25.5 lb (11.58 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
			EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
			Supports ThinkVantage Technologies
			For compatible accessories, please go to TC-AQP sheet;
			For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	1-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced August 20, 2013

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(MPHS1-16) September 2013

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AF0003US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AF0004US	i5-4430S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	07/09/13
10AF0005US	i7-4770S	4GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AF0006US	i5-4670S	4GBx1	2.0M	500G Hybrid	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AF0007US	i5-4570S	4GBx1	2.0M	180G SSD	HD 4600	N2230	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AF0008US	i7-4770S	8GBx1	2.0M	500G Hybrid	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AF000KUS	i5-4570S	4GBx1	2.0M	128G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	09/10/13
10AF000LUS	i7-4770S	8GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	09/10/13
Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager				
Implementation	Processor in LGA1150 socket											Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Lenovo Solutions for Small Business • Nitro Pro				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort) @60Hz</i>															
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector															
Light sensor	Optional ambient light sensor															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off															
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button															
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar															
Media reader	Optional 11-in-1 media card reader															
Chipset	Intel Q87 Express Chipset															
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	• Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) <i>Non-touch model(s) with frame stand:</i> • (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm • 21.3 lb (9.68 kg) in maximum configuration • Adjustable stand (between 10° and 45°) <i>Non-touch model(s) with monitor stand:</i> • (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm • 25.5 lb (11.58 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet				

ThinkCentre® M93z (10AF) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AF000FUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG	08/20/13
10AF000GUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	08/20/13
10AF000HUS	i3-4130	4GBx1	2.0M	500G Hybrid	HD 4400	N2230	Media	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG	08/20/13
10AF000VUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	None	USB	vPro	None	Win7 Pro64 DG	11/12/13
10AF000WUS	i7-4770S	8GBx1	2.0M	256G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	11/12/13

● Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro						
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)																
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; Maximum resolution: 3840x2160 (DisplayPort)@60Hz																
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector																
Light sensor	Optional ambient light sensor																
Multi-touch	None																
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off																
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button																
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide																
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable																
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar																
Media reader	Optional 11-in-1 media card reader																
Chipset	Intel Q87 Express Chipset																
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)																
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)																
ExpressCard	None																
mSATA	One mSATA slot																
PCIe Mini Card	One PCI Express® Mini Card slot																
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2																
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter																
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®																
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified																
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)																
Security chip	Trusted Platform Module (TPM 1.2-compliant)																
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo																
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																
Power supply	150 watts, autosensing, 85% PSU																
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) Non-touch model(s) with frame stand: ● (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm ● 21.3 lb (9.68 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) Non-touch model(s) with monitor stand: ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 25.5 lb (11.58 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet						
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																

See footnotes for important warranty information

US model(s) announced August 20, 2013 or November 12, 2013

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(MPHS1-15) November 2013

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AE000FUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AE000GUS	i7-4770S	4GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AE000HUS	i5-4430S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	07/09/13
10AE000YUS	i5-4570S	4GBx1	2.0M	500G Hybrid	HD 4600	N2230	Media	None	None	None	Frame	USB	vPro	None	Win7 Pro64 DG	07/09/13

●3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro	
Implementation	Processor in LGA1150 socket		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 3840x2160 (DisplayPort)@60Hz			
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector			
Light sensor	Optional ambient light sensor			
Multi-touch	None			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off			
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button			
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar			
Media reader	Optional 11-in-1 media card reader			
Chipset	Intel Q87 Express Chipset			
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)			
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)			
ExpressCard	None			
mSATA	One mSATA slot			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified			
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	150 watts, autosensing, 85% PSU			
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Non-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm ● 21.3 lb (9.68 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Non-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 25.5 lb (11.58 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			

ThinkCentre® M93z (10AE) - II

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AE001GUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	DG 08/20/13
10AE001HUS	G3220	4GBx1	2.0M	500G 7200	Intel HD	N105	None	None	None	None	Frame	USB	None	None	Win7 Pro64	DG 08/20/13
10AE001JUS	i3-4130	4GBx1	2.0M	500G Hybrid	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	DG 08/20/13

●3-year limited warranty

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3* , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or HD Graphics 4400 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Max resolution:</i> 3840x2160 (DP)@60Hz [HD 4x00]; 2560x1600 (DP)@60Hz [Intel HD]		
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		
Light sensor	Optional ambient light sensor		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Non-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm ● 21.3 lb (9.68 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Non-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 25.5 lb (11.58 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

EPEAT™ Gold rating
ENERGY STAR® 5.2-compliant
TCO Certified Edge
TUV Green Mark
ULE Gold
EuP 2013
Cisco EnergyWise compatible
GREENGUARD® certified
RoHS-compliant
Supports ThinkVantage Technologies
For compatible accessories, please go to TC-AQP sheet;
For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced August 20, 2013

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Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AE001FUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	Sensor	None	Switch	Monitor	USB	vPro	G P	Win7 Pro64	07/09/13
10AE001DUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N6235	Media	Sensor	None	Switch	Monitor	USB	vPro	G P	Win7 Pro64 DG	07/09/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

●3-year limited warranty

Positioning	Premium All-In-One PC for the enterprise		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 3840x2160 (DisplayPort)@60Hz		
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		
Light sensor	Optional ambient light sensor		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Non-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm ● 21.3 lb (9.68 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Non-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 25.5 lb (11.58 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced July 9, 2013

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(MPHS1-8) July 2013

ThinkCentre® M93z (10AE) - GMP (Windows 8)

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AE001EUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	Sensor	None	Switch	Monitor	USB	vPro	G P	Win8 Pro64	07/09/13

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- 3-year limited warranty

Positioning	Premium All-In-One PC for the enterprise		Preloaded operating system Windows® 8 Pro 64-bit Web install applications (only some listed) ● Password Manager Preloaded applications (only some listed) ● ThinkVantage System Update ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Support ● Lenovo Companion ● Norton Internet Security (30 days of virus definitions) ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote® ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro ● AccuWeather ● Norton™ Studio
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort) @60Hz</i>		
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		
Light sensor	Optional ambient light sensor		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Non-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm ● 21.3 lb (9.68 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Non-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 25.5 lb (11.58 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced July 9, 2013

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ThinkCentre® M93z (10AD) - Multi-touch (TopSeller) - 1-year onsite

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AD001HUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64	DG 08/13/13
10AD001MUS	G3220	4GBx1	2.0M	500G 7200	Intel HD	N105	None	None	None	None	Frame	USB	None	None	Win7 Pro64	DG 08/20/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller	Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro
Implementation	Processor in LGA1150 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3* , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller	
Graphics	Intel HD Graphics or HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Max resolution:</i> 3840x2160 (DP)@60Hz [HD 4x00]; 2560x1600 (DP)@60Hz [Intel HD]	
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector	
Light sensor	Optional ambient light sensor	
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off	
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button	
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar	
Media reader	Optional 11-in-1 media card reader	
Chipset	Intel Q87 Express Chipset	
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) Multi-touch model(s) with frame stand: ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait	
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

See footnotes for important warranty information

US model(s) announced August 13, 2013 or August 20, 2013

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(MPHS1-13) September 2013

ThinkCentre® M93z (10AD) - Multi-touch (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Pro- cessor	Memory ^a	Camera (mega- pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key- board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AD0001US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD0003US	i5-4430S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	07/09/13
10AD0004US	i7-4770S	4GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD0005US	i5-4570S	4GBx1	2.0M	500G Hybrid	HD 4600	N2230	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD0008US	i7-4770S	8GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	2.4G	vPro	None	Win7 Pro64 DG	07/09/13
10AD0009US	i5-4570S	4GBx1	2.0M	180G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD001GUS	i5-4570S	4GBx1	2.0M	128G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	08/13/13

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro	
Implementation	Processor in LGA1150 socket			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i> 23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector			
Display	Optional ambient light sensor Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off			
Light sensor	Optional ambient light sensor			
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off			
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button			
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar Optional 11-in-1 media card reader			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar			
Media reader	Optional 11-in-1 media card reader			
Chipset	Intel Q87 Express Chipset			
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)			
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)			
ExpressCard	None			
mSATA	One mSATA slot			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Security chip	Trusted Platform Module (TPM 1.2-compliant)		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)	
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black			
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black			
Power supply	150 watts, autosensing, 85% PSU			
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US model(s) announced July 9, 2013 or August 13, 2013

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ThinkCentre® M93z (10AD) - Multi-touch (TopSeller) - II

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AD001JUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG	08/20/13
10AD001KUS	i3-4130	4GBx1	2.0M	500G Hybrid	HD 4400	N2230	Media	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG	08/20/13
10AD001LUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	08/20/13
10AD0020US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N6235	Media	None	None	None	None	USB	vPro	None	Win7 Pro64 DG	11/12/13
10AD0021US	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	None	USB	None	None	Win7 Pro64 DG	11/12/13
10AD0022US	i5-4570S	4GBx1	2.0M	256G SSD	HD 4600	N2230	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	11/12/13

● Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	
Implementation	Processor in LGA1150 socket		Ready to install applications (only some listed)	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		● Rescue and Recovery™ ● Password Manager	
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 3840x2160 (DisplayPort)@60Hz		Preloaded applications (only some listed)	
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro	
Light sensor	Optional ambient light sensor			
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off			
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button			
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar			
Media reader	Optional 11-in-1 media card reader			
Chipset	Intel Q87 Express Chipset			
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)			
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)			
ExpressCard	None			
mSATA	One mSATA slot			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified			
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	150 watts, autosensing, 85% PSU			
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US model(s) announced August 20, 2013 or November 12, 2013

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(MPHS1-12) November 2013

ThinkCentre® M93z (10AD) - Multi-touch (TopSeller) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AD0002US	i5-4670S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	None	None	None	Monitor	2.4G	vPro	None	Win8 Pro64	07/09/13
10AD0006US	i7-4770S	8GBx1	2.0M	500G Hybrid	HD 4600	N2230	Media	None	None	None	Frame	2.4G	vPro	None	Win8 Pro64	07/09/13
10AD0007US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N6235	Media	None	None	None	Monitor	2.4G	vPro	None	Win8 Pro64	07/09/13
10AD001DUS	i5-4670S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	Sensor	None	None	Monitor	USB	vPro	None	Win8 Pro64	07/23/13
10AD001EUS	i5-4670S	4GBx1	2.0M	1TB 7200	HD 4600	N2230	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	07/23/13
10AD001FUS	i7-4770S	8GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	Sensor	None	None	Monitor	USB	vPro	None	Win8 Pro64	07/23/13
10AD001NUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	Media	None	None	None	Monitor	USB	None	None	Win8 Pro64	08/20/13
Positioning Processor	Premium All-In-One PC for the enterprise Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Preloaded operating system Windows® 8 Pro 64-bit Web install applications (only some listed) ● Password Manager Preloaded applications (only some listed) ● ThinkVantage System Update ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Support ● Lenovo Companion ● Norton Internet Security (30 days of virus definitions) ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote® ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro ● AccuWeather ● Norton™ Studio				
Implementation	Processor in LGA1150 socket											Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)				
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics 4400 or 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; Maximum resolution: 3840x2160 (DisplayPort)@60Hz															
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color, IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector															
Light sensor	Optional ambient light sensor															
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off															
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button															
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar															
Media reader	Optional 11-in-1 media card reader															
Chipset	Intel Q87 Express Chipset															
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), Lenovo® logo Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black															
Mouse	Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black															
Power supply	150 watts, autosensing, 85% PSU															
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) Multi-touch model(s) with frame stand: ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet				

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AC000GUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Monitor	USB vPro	None	Win7 Pro64	DG	07/09/13
10AC000HUS	i7-4770S	4GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB vPro	None	Win7 Pro64	DG	07/09/13
10AC000JUS	i5-4430S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	None	Win7 Pro64	DG	07/09/13
10AC0011US	i7-4770S	8GBx1	2.0M	500G Hybrid	HD 4600	N2230	Media	None	None	None	Monitor	2.4G vPro	None	Win7 Pro64	DG	07/09/13

●3-year limited warranty

Positioning	Premium All-In-One PC for the enterprise		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro
Processor	Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>		
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		
Light sensor	Optional ambient light sensor		
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black		
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AC001JUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	DG 08/20/13
10AC001KUS	i3-4130	4GBx1	2.0M	500G Hybrid	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	DG 08/20/13
10AC001LUS	G3220	4GBx1	2.0M	500G 7200	Intel HD	N105	None	None	None	None	Frame	USB	None	None	Win7 Pro64	DG 08/20/13

●3-year limited warranty

Positioning Processor	Premium All-In-One PC for the enterprise Intel® Pentium® G3220 Processor (2 cores / 2 threads , 3.0GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-4130 Processor (2 cores / 4 threads , 3.4GHz, 3MB cache), integrated Intel HD Graphics 4400, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3* , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or HD Graphics 4400 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Max resolution:</i> 3840x2160 (DP) @60Hz [HD 4x00]; 2560x1600 (DP) @60Hz [Intel HD] 23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		
Display			
Light sensor	Optional ambient light sensor		
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)			
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US model(s) announced July 9, 2013 or August 20, 2013

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 (MPHS1-11) September 2013

ThinkCentre® M93z (10AC) - Multi-touch (Windows 8)

Personal Systems Reference (PSREF)

Type-model	Pro- cessor	Memory ^a	Camera (mega- pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key- board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
10AC0010US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N6235	Media	None	None	None	Monitor	2.4G	vPro	None	Win8 Pro64	07/09/13
10AC001HUS	i7-4770S	8GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	Sensor	None	None	Monitor	USB	vPro	None	Win8 Pro64	08/13/13

●3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		Preloaded operating system Windows® 8 Pro 64-bit Web install applications (only some listed) ● Password Manager Preloaded applications (only some listed) ● ThinkVantage System Update ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Support ● Lenovo Companion ● Norton Internet Security (30 days of virus definitions) ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote® ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro ● AccuWeather ● Norton™ Studio	
Implementation	Processor in LGA1150 socket			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 3840x2160 (DisplayPort)@60Hz			
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector			
Light sensor	Optional ambient light sensor			
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off			
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button			
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar			
Media reader	Optional 11-in-1 media card reader			
Chipset	Intel Q87 Express Chipset			
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)			
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)			
ExpressCard	None			
mSATA	One mSATA slot			
PCIe Mini Card	One PCI Express® Mini Card slot			
PCIe WLAN	<i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®			
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified			
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)			
Security chip	Trusted Platform Module (TPM 1.2-compliant)			
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black			
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black			
Power supply	150 watts, autosensing, 85% PSU			
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
			Supports ThinkVantage Technologies	
			For compatible accessories, please go to TC-AQP sheet;	
			For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US model(s) announced July 9, 2013 or August 13, 2013

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(MPHS1-2) August 2013

ThinkCentre® M93z (10AC) - Multi-touch (GMP)

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AC001GUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	Sensor	None	Switch	Monitor	USB	vPro	G P	Win7 Pro64	07/09/13
10AC001EUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N6235	Media	Sensor	None	Switch	Monitor	USB	vPro	G P	Win7 Pro64 DG	07/09/13

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- 3-year limited warranty

Positioning	Premium All-In-One PC for the enterprise		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		
Implementation	Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 3840x2160 (DisplayPort)@60Hz		
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		
Light sensor	Optional ambient light sensor		
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced July 9, 2013

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ThinkCentre® M93z (10AC) - Multi-touch (GMP) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10AC001FUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	Sensor	None	Switch	Monitor	USB	vPro	G P	Win8 Pro64	07/09/13

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- 3-year limited warranty

Positioning	Premium All-In-One PC for the enterprise		Preloaded operating system Windows® 8 Pro 64-bit Web install applications (only some listed) ● Password Manager Preloaded applications (only some listed) ● ThinkVantage System Update ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Support ● Lenovo Companion ● Norton Internet Security (30 days of virus definitions) ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote® ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro ● AccuWeather ● Norton™ Studio
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket		
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>		
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector		
Light sensor	Optional ambient light sensor		
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button		
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel Q87 Express Chipset		
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)		
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)		
ExpressCard	None		
mSATA	One mSATA slot		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU		
Machine	● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> ● (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm ● 24.7 lb (11.22 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 28.9 lb (13.12 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°; Pivot: Landscape / Portrait		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced July 9, 2013

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Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand



Handle



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand

ThinkCentre® Edge 62z (2117) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Stand type	Global	Preload	Ann date (mm/dd/yy)
2117-BBU	i3-3220	4GBx1 1600MHz	720p	500G 7200	DVD±RW	HD 2500	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-EKU	G2020	2GBx1 1600MHz	720p	500G 7200	DVD±RW	Intel HD	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-ELU	G2020	2GBx1 1600MHz	720p	500G 7200	None	Intel HD	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-EWU	i3-3240	2GBx1 1600MHz	720p	320G 5400	DVD±RW	HD 2500	Intel 105	Frame	None	Win7 Pro64	05/14/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Essential All-In-One PC for small/medium businesses		Preloaded operating system²⁰ Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Lenovo® Message Center Plus Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Lenovo Cloud Storage by SugarSync ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Intel AppUp® ● Nitro PDF Pro ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Pentium® G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	8GB max, PC3-12800 1600MHz DDR3 , one 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>		
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses system memory		
Display	18.5" (470mm) HD (1366x768) TFT color , CCFL backlight, 200 nits, 16:9 aspect ratio, 600:1 dynamic contrast ratio		
Multi-touch	None		
Camera	HD720p Camera on top of screen, 1.0-megapixel, fixed focus		
Controls	Front facing button for power on/off, side buttons for brightness up and brightness down		
Disk	Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide		
Optical	<i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), serial (9-pin)		
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	One PCI Express® Mini Card slot		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1		
Bluetooth	None		
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VC		
Audio	High Definition (HD) Audio, Realtek ALC269Q		
Speaker	Two internal stereo speakers (2watt x 2)		
Intel AMT	None		
Security chip	None		
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	120 watts, autosensing, 87% PSU		
Machine	<i>Model(s) with Frame stand:</i> ● Business black color ● 18.5" W X 2.3" D X 14.5" H ● 469.7mm W X 59.5mm D X 368.4mm H (including stand) ● 11 lb (5 kg) in maximum configuration ● Tilt: 10°-20° back; no lift; no swivel; adjustable stand ● Supports VESA mount (100mm)		
Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement			
ENERGY STAR® 5.2-compliant			
EuP 2013			
RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-Edge62Z sheet;			
For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		



Lenovo ThinkCentre Edge 72 Small and
Lenovo ThinkCentre Edge 72 Tower



Lenovo ThinkCentre Edge 72 Small
with Dual Lenovo ThinkVision Monitors



Lenovo ThinkCentre Edge 72 Small



Lenovo ThinkCentre Edge 72 Small



Lenovo ThinkCentre Edge 72 Tower



Lenovo ThinkCentre Edge 72 Tower

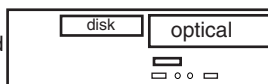
ThinkCentre® Edge 72 Small (3493) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Floor stand	Global	Win7 preload	Ann date (mm/dd/yy)
3493-A7U	3x2	G630	2GBx1 1600MHz	250G 7200	DVD±RW	HD 7350	None	None	None	Parallel	Serial	Stand	None	Pro 64	06/19/12
3493-A8U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	HD 7350	None	None	None	Parallel	Serial	Stand	None	Pro 64	06/19/12
3493-EKU	3x2	G640	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	None	Serial	Stand	None	Pro 64	07/10/12
3493-F8U	3x2	G640	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	None	Serial	Stand	None	Pro 64	07/17/12
3493-BNU	3x2	G640	2GBx1 1600MHz	250G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None	Pro 64	08/14/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	Stylish design, reliability, and productivity for small/medium businesses Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation	Processor in LGA1155 socket		Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets			
Graphics	<i>Some:</i> Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors			
DP dongle	None			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)			
PCIe WLAN	None			
Bluetooth	None			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Floor Stand	System floor stand for vertical orientation			
Power supply	180 watts, universal, manual switch			
Machine	● Glossy black bezel; metal case ● 13.2" W X 15.0" D X 3.9" H ● 336mm W X 382mm D X 101mm H ● 13.2 lb (6.0 kg) in maximum configuration ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, opt reader* *bay only available on models with media reader installed			
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1			
Limited Warranty ¹	1-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available			



See footnotes for important warranty information
 US model(s) announced June 19, July 10, July 17, or August 14, 2012
 ✖ US models withdrawn effective August 2012

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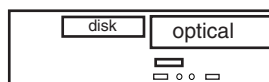
ThinkCentre® Edge 72 Small (3493) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Floor stand	Global	Win7 preload	Ann date (mm/dd/yy)
3493-A6U	3x2	i5-3550S	4GBx1 1600MHz	1TB 7200	DVD±RW	HD 7350	None	None	None	Parallel	Serial	Stand	None	Pro 64	06/19/12
3493-B7U	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	None	None	Stand	None	Pro 64	06/19/12
3493-EJU	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	None	Serial	Stand	None	Pro 64	07/10/12
3493-BKU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	Parallel	None	Stand	None	Pro 64	09/04/12
3493-BPU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	Parallel	Serial	Stand	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish design, reliability, and productivity for small/medium businesses										Preloaded operating system				
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Implementation	Processor in LGA1155 socket														
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets														
Graphics	Some: Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i> Some: AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 3.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	Intel H61 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®														
Intel AMT	None														
Modem	None														
Security chip	None														
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	180 watts, universal, manual switch														
Machine	• Glossy black bezel; metal case • 13.2" W X 15.0" D X 3.9" H • 336mm W X 382mm D X 101mm H • 13.2 lb (6.0 kg) in maximum configuration • Highlighted optical drive button for easy access														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, opt reader* *bay only available on models with media reader installed														
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1														
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



See footnotes for important warranty information
 US model(s) announced June 19, July 10, or September 4, 2012
 ✕ US models withdrawn effective August 2012

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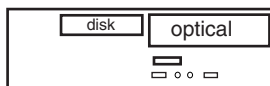
ThinkCentre® Edge 72 Small (3493) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Floor stand	Global	Preload	Ann date (mm/dd/yy)
3493-DFU	3x2	G640	4GBx1 1600MHz	500G 7200	DVD	Intel HD	None	None	None	None	Serial	Stand	None	Win7 Pro64	10/23/12
3493-DGU	3x2	G640	4GBx1 1600MHz	500G 7200	DVD	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	10/23/12
3493-GPU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	11/20/12
3493-GRU	3x2	G645	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	11/20/12
3493-H5U	3x2	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	12/25/12
3493-HAU	3x2	G2020	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	02/19/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish design, reliability, and productivity for small/medium businesses										Preloaded operating system				
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Processor in LGA1155 socket										Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo® Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets System automatically clocks down for processors with 1066MHz DDR3 memory controller														
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz														
DP dongle	None														
Disk	SATA 3.0Gb/s 7200 rpm														
Optical	Some: DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	Intel H61 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®														
Intel AMT	None														
Modem	None														
Security chip	None														
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	180 watts, universal, manual switch														
Machine	• Glossy black bezel; metal case • 13.2" W X 15.0" D X 3.9" H • 336mm W X 382mm D X 101mm H • 13.2 lb (6.0 kg) in maximum configuration • Highlighted optical drive button for easy access														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, opt reader* *bay only available on models with media reader installed														
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1														
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet				



See footnotes for important warranty information

US model(s) announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Feb 19, 2013

✗ US models withdrawn effective November 2012 or January 2013

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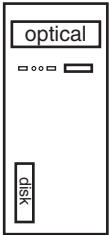
(TAPI1-5) February 2013

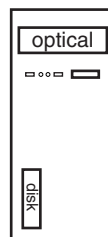
ThinkCentre® Edge 72 Tower (3484) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Global	Win7 preload	Ann date (mm/dd/yy)
3484-A7U	3x2	i3-2130	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
3484-A8U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
3484-A9U	3x2	G630	2GBx1 1600MHz	250G 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
3484-FDU	3x2	G640	4GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	None	Serial	None	Pro 64	07/10/12
3484-GAU	3x2	G640	2GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	None	Serial	None	Pro 64	07/17/12
3484-BFU	3x2	G640	2GBx1 1600MHz	250G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Pro 64	08/14/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	Stylish design, reliability, and productivity for small/medium businesses Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)	
Implementation				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets			
Graphics	<i>Some:</i> Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors			
DP dongle	None			
Disk	SATA 3.0Gb/s 7200 rpm			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar			
eSATA port	None			
Media reader	None			
Chipset	Intel H61 Express Chipset			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)			
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)			
PCIe WLAN	None			
Bluetooth	None			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
IEEE 1394	None			
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®			
Intel AMT	None			
Modem	None			
Security chip	None			
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo			
Power supply	180 watts, universal, manual switch			
Machine	● Glossy black bezel; metal case ● 6.3" W X 15.7" D X 15.6" H (with handle) ● 160mm W X 399mm D X 397mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Ergonomic rubberized handle ● Highlighted optical drive button for easy access			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, std disk *bay only available on models with media reader installed			
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1			
Limited Warranty¹	1-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security ● One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement	
			RoHS-compliant	
			Supports ThinkVantage Technologies	
			For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet	



See footnotes for important warranty information

US model(s) announced June 19, July 10, July 17, or August 14, 2012

✗ US models withdrawn effective August 2012

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(TAPI1-3) August 2012

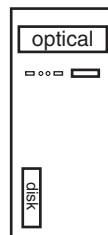
ThinkCentre® Edge 72 Tower (3484) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Global	Win7 preload	Ann date (mm/dd/yy)
✖ 3484-A6U	3x2	i5-3550S	4GBx1 1600MHz	1TB 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
✖ 3484-C1U	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	None	None	None	Pro 64	06/19/12
3484-FCU	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	None	Serial	None	Pro 64	07/10/12
3484-BGU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	Parallel	Serial	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish design, reliability, and productivity for small/medium businesses		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	<i>Some:</i> Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors		
DP dongle	None		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	180 watts, universal, manual switch		
Machine	● Glossy black bezel; metal case ● 6.3" W X 15.7" D X 15.6" H (with handle) ● 160mm W X 399mm D X 397mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Ergonomic rubberized handle ● Highlighted optical drive button for easy access Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, std disk *bay only available on models with media reader installed optical □□□□▬ disk		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, std disk *bay only available on models with media reader installed		
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1		
Limited Warranty¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		



See footnotes for important warranty information
 US model(s) announced June 19, July 10, or September 4, 2012
 ✖ US models withdrawn effective August 2012

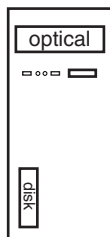
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 (TAPI1-4) September 2012

ThinkCentre® Edge 72 Tower (3484) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory*	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Global	Preload	Ann date (mm/dd/yy)
3484-DEU	3x2	G640	4GBx1 1600MHz	500G 7200	None	DVD	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	10/23/12
3484-DFU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	None	DVD	HD 2500	None	None	None	Parallel	Serial	None	Win7 Pro64	10/23/12
3484-HNU	3x2	G645	2GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	11/20/12
3484-HPU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	Parallel	Serial	None	Win7 Pro64	11/20/12
3484-JJU	3x2	G2120	4GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	12/25/12
3484-JMU	3x2	G2020	2GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	02/19/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish design, reliability, and productivity for small/medium businesses										Preloaded operating system																			
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller																				Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo® Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)									
Implementation	Processor in LGA1155 socket																													
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>																													
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>																													
DP dongle	None																													
Disk	SATA 3.0Gb/s 7200 rpm																													
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive																													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset																													
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar																													
eSATA port	None																													
Media reader	None																													
Chipset	Intel H61 Express Chipset																													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																													
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D																													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)																													
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)																													
PCIe WLAN	None																													
Bluetooth	None																													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec																													
Speaker	Internal speaker for business audio																													
IEEE 1394	None																													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®																													
Intel AMT	None																													
Modem	None																													
Security chip	None																													
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo																													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																													
Power supply	180 watts, universal, manual switch																													
Machine	• Glossy black bezel; metal case • 6.3" W X 15.7" D X 15.6" H (with handle) • 160mm W X 399mm D X 397mm H • 16.5 lb (7.5 kg) in maximum configuration • Ergonomic rubberized handle • Highlighted optical drive button for easy access																				Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement									
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, std disk *bay only available on models with media reader installed																													
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1																													
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available																													

See footnotes for important warranty information

US model(s) announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Feb 19, 2013

✗ US models withdrawn effective January 2013

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(TAPI1-6) February 2013

Memory

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann	09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11
Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675	ann	03/31/09

Storage and removable storage

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 3493 support Low Profile:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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Tower 3484 support:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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⁶⁷ Simultaneously use the graphic card monitor ports along with the system's integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
Lenovo Mini Wireless Keyboard N5901 ⁵²	57Y6336	ann	12/08/09
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09
Lenovo Cherry Smartcard Keyboard	0A36328	ann	05/10/11

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁶⁰	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
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⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB Soundbar	0A36190	ann	05/01/12
Lenovo DVI to DVI Monitor Cable	0B47071		
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



ThinkCentre E73 SFF and Tower



ThinkCentre E73 Tower
with Dual Lenovo ThinkVision Monitors



ThinkCentre E73 SFF



ThinkCentre E73 SFF



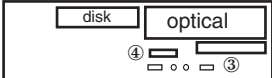
ThinkCentre E73 Tower



ThinkCentre E73 SFF
with HDD and optional SSD

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Parallel port	Serial port	Floor stand	Keyboard / mouse	Global	Preload	Ann date (mm/dd/yy)
10AU002MUS	3x4	i5-4430S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	Serial	None	USB	None	Win7 Pro64 (DG)	10/22/13
10AU002PUS	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	Parallel	Serial	Stand	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AU002QUS	3x4	G3220	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	Parallel	Serial	Stand	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AU002RUS	3x4	i5-4570S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	Parallel	Serial	Stand	USB(slim)	None	Win7 Pro64 (DG)	10/22/13

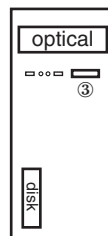
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish design, reliability, and productivity for small/medium businesses											Preloaded operating system		
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager		
Implementation	Processor in LGA1150 socket											Preloaded applications (only some listed)		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3* , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller											• ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • ThinkVantage Device Experience • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz</i>													
DP dongle	None													
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar													
eSATA port	None													
Media reader	Optional 9-in-1 media reader, internal USB 2.0													
Chipset	Intel H81 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Two USB 3.0, two USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
PCIe WLAN	None													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN													
Manageability	Intel Standard Manageability													
Modem	None													
Security chip	None													
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo Some: Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	Optional system floor stand for vertical orientation													
Power supply	180 watts, universal, autosensing													
Machine	• Glossy black bezel; metal case • 13.2" W X 15.0" D X 3.98" H • 336mm W X 382mm D X 101mm H • 13.2 lb (6.0 kg) in maximum configuration • Highlighted optical drive button for easy access													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, optnl reader* *bay only available on models with SSD/reader installed													
Slot	Slot 1: Low Profile, PCI Express® 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1													
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet		

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Parallel port	Serial port	Keyboard / mouse	Global	Preload	Ann date (mm/dd/yy)
10AS002JUS	3x3	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	Parallel	Serial	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AS002KUS	3x3	i5-4570S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	Parallel	Serial	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AS005LUS	3x3	G3220	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	USB	None	Win7 Pro64 (DG)	12/10/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Stylish design, reliability, and productivity for small/medium businesses</i>										Preloaded operating system			
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager			
Implementation											Preloaded applications (only some listed)			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3* , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller													
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz</i>													
DP dongle	None													
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar													
eSATA port	None													
Media reader	Optional 9-in-1 media reader, internal USB 2.0													
Chipset	Intel H81 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Two USB 3.0, two USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
PCIe WLAN	None													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN													
Manageability	Intel Standard Manageability													
Modem	None													
Security chip	None													
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo <i>Some:</i> Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	180 watts, universal, autosensing													
Machine	• Glossy black bezel; metal case • 6.3" W X 15.7" D X 15.6" H (with handle) • 160mm W X 400mm D X 397mm H • 16.5 lb (7.5 kg) in maximum configuration • Ergonomic rubberized handle • Highlighted optical drive button for easy access													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, optnl reader* *bay only available on models with media reader installed													
Slot	Slot 1: half-length, full-height, PCI Express® 3.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1													
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													



See footnotes for important warranty information

US model(s) announced October 22, 2013 or December 10, 2013

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(TLS1T-1) December 2013



Lenovo ThinkCentre Edge 92z with Frame Stand



Lenovo ThinkCentre Edge 92z with Frame Stand



Lenovo ThinkCentre Edge 92z with Frame Stand



Handle



Lenovo ThinkCentre Edge 92z with Frame Stand



Lenovo ThinkCentre Edge 92z with Frame Stand

ThinkCentre® Edge 92z (3396) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3396-A3U	i5-3470S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 2500	Intel 105	None	2.4G	None	Pro 64	07/03/12
3396-B2U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3396-B3U	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3396-B4U	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3396-B5U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3396-B6U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	2.4G	None	Prem 64	07/03/12
3396-BUU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Pro 64	09/04/12
✕ 3396-C3U	G870	4GBx1	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 2230 + BT	None	USB	None	Pro 64	09/11/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	<i>Stylish All-In-One PC for small/medium businesses</i> Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 64 <i>Some:</i> Genuine Windows 7 Home Premium 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Intel Small Business Advantage ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics, Intel HD Graphics 2500, or Intel HD Graphics 4000 in processor, use main memory, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution:</i> 1920x1200 (HDMI)@60Hz 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector		
Widescreen display			
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator		
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
mSATA™ SSD	None		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader		
Chipset	Intel B75 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	Two PCI Express® Mini Card slots		
PCIe WLAN [†]	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
PCIe mSATA	One Mini PCIe mSATA slot		
Ethernet	One gigabit ethernet port, Intel 82579LM		
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified		
Intel AMT	None		
Security chip	None		
Keyboard	<i>Some:</i> Lenovo® Slim New F5 USB Keyboard (USB connector), black <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Mouse			
Power supply	150 watts, autosensing, 85% PSU		
Machine	<i>Model(s) with Frame stand:</i> ● Business black color ● 21.5" W X 3.2" D X 16.3" H ● 545mm W X 81mm D X 414mm H (with feet) ● 18.5 lb (8.4 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)		Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ENERGY STAR® 5.2-compliant RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet
Limited Warranty [†]	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US model(s) announced July 3, September 4, or September 11, 2012
 ✕ US model(s) withdrawn effective November 2013

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 (TROY1-1) November 2012

ThinkCentre® Edge 92z (3396) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3396-BPU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12
3396-BQU	i7-3770S	4GBx2	2.0M	500G 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12
3396-BRU	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	Media	2.4G	None	Win8 Pro64	10/23/12
3396-BVU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Win8 Pro64	10/23/12
3396-BTU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	2.4G	None	Win8 Pro64	10/23/12
3396-C6U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	None	USB	None	Win7 Pro64	10/23/12
3396-C7U	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	None	USB	None	Win7 Pro64	10/23/12
3396-CMU	G2120	4GBx1	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 105	Media	USB	None	Win7 Pro64	12/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										Preloaded operating system		
Processor	Intel® Pentium® G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit		
Implementation											Preloaded applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										- Windows 7 models		
Graphics	Intel HD Graphics / 2500 / 4000 in processor, use main memory, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution:</i> 1920x1200 (HDMI)@60Hz										• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Symantec™ VIP • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)		
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector										- Windows 8 models		
Multi-touch	None										• Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator										- All models		
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in										• ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Evernote® • Skype™		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm										Security		
mSATA™ SSD	None										• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable										ENERGY STAR® 5.2-compliant		
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader										RoHS-compliant		
Chipset	Intel B75 Express Chipset										Supports ThinkVantage Technologies		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in										For compatible accessories, please go to O-Edge92Z sheet;		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										For ThinkPlus™ service upgrade options, please go to S-TC sheet		
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	<i>Some:</i> Lenovo® Slim New F5 USB Keyboard (USB connector), black												
Mouse	<i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black												
Power supply	150 watts, autosensing, 85% PSU												
Machine	<i>Model(s) with Frame stand:</i> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm)												
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced October 23 or December 4, 2012

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ThinkCentre® Edge 92z (3399) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3399-GJU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Stylish All-In-One PC for small/medium businesses		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Intel Small Business Advantage ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics 2500 in processor, use main memory, external digital monitor support via HDMI, supports dual independent display; Maximum resolution: 1920x1200 (HDMI)@60Hz		
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color, infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator		
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
mSATA™ SSD	None		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	7-in-1 Single Slot SD media reader		
Chipset	Intel B75 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	Two PCI Express® Mini Card slots		
PCIe WLAN ⁴	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
PCIe mSATA	One Mini PCIe mSATA slot		
Ethernet	One gigabit ethernet port, Intel 82579LM		
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified		
Intel AMT	None		
Security chip	None		
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black		
Mouse	Enhanced Optical USB Mouse, black		
Power supply	150 watts, autosensing, 85% PSU		
Machine	Model(s) with Frame stand: ● Business black color ● 21.5" W X 3.2" D X 16.3" H ● 545mm W X 81mm D X 414mm H (with feet) ● 18.5 lb (8.4 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)		
Limited Warranty ¹	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced November 20, 2012

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Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3418-A8U	i7-3770S	4GBx2	2.0M	500G 7200	64GB	DVD±RW	HD 7650A	Intel 105	Media	2.4G	None	Pro 64	07/03/12
3418-A9U	i5-3550S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3418-B1U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3418-C8U	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3418-C7U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish All-In-One PC for small/medium businesses										Preloaded operating system		
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Intel Small Business Advantage ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)		
Implementation													
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)												
Graphics	AMD Radeon™ HD 7650A, 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; Maximum resolution: 1920x1200(HDMI)@60Hz												
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color, infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector												
Multi-touch	None												
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator												
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in												
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm												
mSATA™ SSD	Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot												
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Media reader	Some: 7-in-1 Single Slot SD media reader												
Chipset	Intel B75 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN ⁴	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	Some: Lenovo® Slim New F5 USB Keyboard (USB connector), black Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black												
Mouse	Some: Enhanced Optical USB Mouse, black Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black												
Power supply	180 watts, autosensing, 92% PSU												
Machine	Model(s) with Frame stand: ● Business black color ● 21.5" W X 3.2" D X 16.3" H ● 545mm W X 81mm D X 414mm H (with feet) ● 18.5 lb (8.4 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)												
Limited Warranty ¹	1-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												
Security ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ENERGY STAR® 5.2-compliant RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet													

ThinkCentre® Edge 92z (3418) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3418-CAU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish All-In-One PC for small/medium businesses										Preloaded operating system		
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Windows® 8 Pro 64-bit		
Implementation											Preloaded applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)										• ThinkVantage® System Update • ThinkVantage Automatic lock Utility • View Management Utility • Lenovo® Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Lenovo Solution Center • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Norton Studio • Intel AppUp® • AccuWeather • PC Device Stage • Evernote® • Skype™ • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
Graphics	AMD Radeon™ HD 7650A, 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; Maximum resolution: 1920x1200(HDMI)@60Hz												
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color, infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector												
Multi-touch	None												
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator												
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in												
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm												
mSATA™ SSD	None												
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Media reader	None												
Chipset	Intel B75 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN ⁴	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black												
Mouse	Enhanced Optical USB Mouse, black												
Power supply	180 watts, autosensing, 92% PSU												
Machine	Model(s) with Frame stand: • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm)										Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement		
ENERGY STAR® 5.2-compliant													
RoHS-compliant													
Supports ThinkVantage Technologies													
For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet													
Limited Warranty ¹	1-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced October 23, 2012

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(TROY1-6) November 2012

ThinkCentre® Edge 92z (3426) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3426-HEU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12
3426-HFU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Stylish All-In-One PC for small/medium businesses		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Intel Small Business Advantage ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)		
Graphics	AMD Radeon™ HD 7650A, 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; Maximum resolution: 1920x1200(HDMI)@60Hz		
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color, infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator		
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
mSATA™ SSD	None		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	7-in-1 Single Slot SD media reader		
Chipset	Intel B75 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	Two PCI Express® Mini Card slots		
PCIe WLAN¹	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
PCIe mSATA	One Mini PCIe mSATA slot		
Ethernet	One gigabit ethernet port, Intel 82579LM		
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified		
Intel AMT	None		
Security chip	None		
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black		
Mouse	Enhanced Optical USB Mouse, black		
Power supply	180 watts, autosensing, 92% PSU		
Machine	Model(s) with Frame stand: ● Business black color ● 21.5" W X 3.2" D X 16.3" H ● 545mm W X 81mm D X 414mm H (with feet) ● 18.5 lb (8.4 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)		
Limited Warranty¹	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced November 20, 2012

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ThinkCentre® Edge 92z (3414) - Multi-touch (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3414-A7U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3414-A8U	i5-3570S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3414-A9U	i7-3770S	4GBx2	2.0M	1TB 7200	64GB	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
✕ 3414-B3U	i3-2120	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	USB	None	Pro 64	07/03/12
3414-B4U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	USB	None	Pro 64	07/03/12
3414-B5U	i7-3770S	4GBx2	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3414-C7U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3414-C8U	i7-3770S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3414-C9U	i7-3770S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3414-CAU	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3414-CPU	i5-3470S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish All-In-One PC for small/medium businesses		Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Microsoft Touch Pack ● Lenovo Solution Center ● Lenovo Message Center Plus ● Intel Small Business Advantage ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office preloaded; purchase a product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD 2000 Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation			
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)		
Graphics	AMD Radeon™ HD 7650A, 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; Maximum resolution: 1920x1200(HDMI)@60Hz 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color, infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector		
Widescreen display	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch		
Multi-touch	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator		
Camera	Front facing buttons for brightness up, brightness down, power on/off, and Video in		
Controls			
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
mSATA™ SSD	Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Media reader	Some: 7-in-1 Single Slot SD media reader		
Chipset	Intel B75 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
PCIe Mini Card	Two PCI Express® Mini Card slots		
PCIe WLAN ⁴	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter		
PCIe mSATA	One Mini PCIe mSATA slot		
Ethernet	One gigabit ethernet port, Intel 82579LM		
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified		
Intel AMT	None		
Security chip	None		
Keyboard	Some: Lenovo® Slim New F5 USB Keyboard (USB connector), black Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black		
Mouse	Some: Enhanced Optical USB Mouse, black Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Power supply	180 watts, autosensing, 92% PSU		
Machine	Model(s) with Frame stand: ● Business black color ● 21.5" W X 3.2" D X 16.3" H ● 545mm W X 81mm D X 414mm H (with feet) ● 18.5 lb (8.4 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)		
Limited Warranty ¹	1-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US model(s) announced July 3 or July 10, 2012
 ✕ US model(s) withdrawn effective November 2013

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ThinkCentre® Edge 92z (3414) - Multi-touch (TS) - Win 8

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3414-CVU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12
3414-D3U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	10/23/12
3414-D4U	i7-3770S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	10/23/12
3414-DJU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	10/23/12
3414-DKU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	10/23/12
✂ 3414-DLU	G870	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	10/23/12
3414-DNU	i7-3770S	8GBx2	2.0M	1TB 7200	None	BD player	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Win7 Pro64	11/13/12
3414-ELU	G2120	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	12/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										Preloaded operating system		
Processor	Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										Preloaded applications (only some listed)		
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch										- Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Microsoft Touch Pack • Lenovo® Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Symantec™ VIP • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) • Corel WinDVD® (BD player) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Evernote® • Skype™		
Widescreen display	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator Front facing buttons for brightness up, brightness down, power on/off, and Video in										Security		
Multi-touch	Front facing buttons for brightness up, brightness down, power on/off, and Video in										• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement		
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator Front facing buttons for brightness up, brightness down, power on/off, and Video in										ENERGY STAR® 5.2-compliant		
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in										RoHS-compliant		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm										Supports ThinkVantage Technologies		
mSATA™ SSD	None										For compatible accessories, please go to O-Edge92Z sheet;		
Optical	Some: Blu-ray™ disc reader (no Blu-ray media burning), DVD recordable, not removable, 12.7mm high, tray-in Some: DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable Some: 7-in-1 Single Slot SD media reader										For ThinkPlus™ service upgrade options, please go to S-TC sheet		
Media reader	Some: 7-in-1 Single Slot SD media reader												
Chipset	Intel B75 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN ⁴	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	Some: Lenovo® Slim New F5 USB Keyboard (USB connector), black Some: Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, black Some: Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black 180 watts, autosensing, 92% PSU												
Mouse													
Power supply													
Machine	<i>Model(s) with Frame stand:</i> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm)												
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
 US model(s) announced October 23, November 13, or December 4, 2012
 ✂ US model(s) withdrawn effective November 2013

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 (TROY1-7) December 2012

ThinkCentre® Edge 92z (3417) - Multi-touch (TS) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3417-K1U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12
3417-K2U	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	Media	USB	None	Win7 Pro64	11/20/12
3417-K3U	i7-3770S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12
3417-K4U	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	11/20/12
3417-K5U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	11/20/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	Stylish All-In-One PC for small/medium businesses Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit	
Implementation			Preloaded applications (only some listed) - Windows 7 models	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		• ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Microsoft Touch Pack • Lenovo® Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Symantec™ VIP • Windows Live™ Essentials • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Microsoft® Office preloaded; purchase a product key to activate • Evernote® • Skype™	
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution:</i> 1920x1200(HDMI)@60Hz 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector			
Widescreen display	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator			
Multi-touch	Front facing buttons for brightness up, brightness down, power on/off, and Video in			
Camera	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm			
Controls	None			
Disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable			
mSATA™ SSD	7-in-1 Single Slot SD media reader			
Optical	Intel B75 Express Chipset			
Media reader	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in			
Chipset	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)			
	Two PCI Express® Mini Card slots			
	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2			
	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter			
	One Mini PCIe mSATA slot			
	One gigabit ethernet port, Intel 82579LM			
	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified			
	None			
	None			
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black			
Mouse	Enhanced Optical USB Mouse, black			
Power supply	180 watts, autosensing, 92% PSU			
Machine	<i>Model(s) with Frame stand:</i> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm)			
Limited Warranty ¹	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement ENERGY STAR® 5.2-compliant RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
 US model(s) announced November 20, 2012

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 (TROY1-10) November 2012

Memory

2GB PC3-12800 DDR3 SODIMM	0A65722	ann 06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann 06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann 06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage

USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12

Keyboard

Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11

More information at www.lenovo.com/support/mice

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
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Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
3M ThinkCentre Edge91z/92z Privacy Filter	4Z10A23290	ann 09/30/08

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Stand

ThinkCentre Edge 91z/92z Stand ⁵⁹	0A33969	ann 07/26/11
ThinkCentre Extend Arm ⁵⁷	57Y4352	ann 07/06/10

⁵⁷ Compatible when ThinkCentre Extend Arm is desk (clamp) mounted only, wall mount is not supported.
⁵⁹ Not compatible to Multi-touch models.

Monitor Accessories⁴⁶

Lenovo HDMI to VGA Monitor Cable	0B47069	ann 06/26/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



ThinkCentre E93z with Frame Stand



ThinkCentre E93z with Monitor Stand



ThinkCentre E93z with Frame Stand



ThinkCentre E93z with Monitor Stand



ThinkCentre E93z with Frame Stand



ThinkCentre E93z with Monitor Stand



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z with UltraFlex Stand
with optional wireless mouse / keyboard
and Lenovo ThinkVision Monitor



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z (handle)

ThinkCentre® E93z (10B8) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Pro-cessor	Memory ^a	Wide-screen display	Multi-Touch	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Stand type	Key-board/Mouse	Preload	Ann date (mm/dd/yy)
10B80007US	i5-4430S	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	HD 4600	N2230	Media	Frame	USB	Win7 Pro64 DG	08/27/13
10B80058US	i3-4130	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	HD 4400	N2230	Media	Frame	USB(slim)	Win7 Pro64 DG	10/22/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Premium All-In-One PC for the enterprise												
Processor	Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller												
Implementation	Processor in LGA1150 socket												
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)												
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11.1, external digital monitor support via HDMI, supports dual independent display; <i>Max resolution:</i> 1920x1080 (panel) @60Hz; 1920x1200 (HDMI) @60Hz 21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color , wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector												
Display													
Light sensor	None												
Multi-touch	None												
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off												
Controls	Monitor mode / computer mode button, volume up/down buttons, and power button												
Disk	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm												
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar												
Media reader	Optional 11-in-1 media card reader												
Chipset	Intel B85 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader												
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter												
Ethernet	One gigabit ethernet port, Intel I217-V, Wake on LAN®												
Audio support	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified												
Intel AMT	None												
Security chip	None												
Keyboard	<i>Some:</i> Lenovo® Slim New F5 USB Keyboard (USB connector), black <i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	150 watts, autosensing, 85% PSU												
Color	Business black color												
VESA mount	Support VESA mount (100mm)												
Dimensions and weight (without stand)	<i>Non-touch models (WxDxH):</i> 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm 14.55 lb (6.6 kg) in maximum configuration <i>Touch models (WxDxH):</i> 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm 16.31 lb (7.4 kg) in maximum configuration												
Stand	<i>Optional Frame Stand:</i> Adjustable between 10° and 65° (Tilt) <i>Optional Monitor Stand:</i> Adjustable between -5° and 45° (Tilt) <i>Optional UltraFlex Stand:</i> Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management												
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

Preloaded operating system

Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit

Ready to install applications (only some listed)

- Rescue and Recovery™
- Password Manager
- Preloaded applications (only some listed)**
- ThinkVantage® Product Recovery
- ThinkVantage System Update
- ThinkVantage Communication Utility
- ThinkVantage Device Experience
- ThinkVantage AutoLock
- Desktop Power Manager
- View Management Utility
- Lenovo Cloud Storage by SugarSync
- Lenovo Solution Center
- Norton™ Internet Security (30 days of virus definitions)
- Adobe® Reader®
- Skype™
- Microsoft Office preloaded; purchase a product key to activate
- Cyberlink PowerDVD (DVD±RW, DVD)
- Cyberlink Power2Go (DVD±RW)
- Cyberlink PowerProducer (DVD±RW)
- Evernote
- Lenovo Solutions for Small Business
- Nitro Pro

Security

- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement

ENERGY STAR® 5.2-compliant

EuP 2013

GREENGUARD® certified
RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to TC-AQP sheet;

For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced August 27, 2013 or October 22, 2013

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(TRPL1-1) October 2013

ThinkCentre® E93z (10B9) - NVIDIA (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Pro-cessor	Memory ⁸	Wide-screen display	Multi-Touch	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card Media reader	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
10B9000SUS	i5-4430S	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB None Win7 Pro64	DG 08/27/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Premium All-In-One PC for the enterprise		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Processor	Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller		
Implementation	Processor in LGA1150 socket		Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Lenovo Solutions for Small Business ● Nitro Pro
Memory	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)		
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4400/4600 in processor, and NVIDIA GeForce® GT 720A, PCI Express® x16, 1GB memory, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; Max resolution: 1920x1080 (panel) @60Hz; 1920x1200 (HDMI) @60Hz		
Display	21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color, wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector		
Light sensor	None		
Multi-touch	None		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Monitor mode / computer mode button, volume up/down buttons, and power button		
Disk	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel B85 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in		
Side ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader		
PCIe Mini Card	Two PCI Express® Mini Card slots		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-V, Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	180 watts, autosensing, 92% PSU		
Color	Business black color		
VESA mount	Support VESA mount (100mm)		
Dimensions and weight (without stand)	Non-touch models (WxDxH): 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm		
	Touch models (WxDxH): 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm		
Stand	14.55 lb (6.6 kg) in maximum configuration		
	21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm		
	16.31 lb (7.4 kg) in maximum configuration		
	Optional Frame Stand: Adjustable between 10° and 65° (Tilt)		
Limited Warranty	Optional Monitor Stand: Adjustable between -5° and 45° (Tilt)		
	Optional UltraFlex Stand: Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management		
	1-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
US model(s) announced August 27, 2013

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ThinkCentre® E93z (10BA) - Multi-touch (NVIDIA) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Wide-screen display	Multi-Touch	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card	Media reader	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
10BA000EUS	i7-4770S	4GBx1	21.5" FHD	Touch	2.0M	500G Hybrid	DVD±RW	GT 720A	N2230	Media	Frame	2.4G	None	Win7 Pro64 DG 08/27/13
10BA000FUS	i7-4770S	4GBx1	21.5" FHD	Touch	2.0M	500G Hybrid	DVD±RW	GT 720A	N2230	Media	UltraFlex	2.4G	None	Win7 Pro64 DG 08/27/13
10BA000GUS	i5-4430S	4GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB	None	Win7 Pro64 DG 08/27/13
10BA000HUS	i5-4430S	8GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB	None	Win7 Pro64 DG 08/27/13
10BA001LUS	i7-4770S	8GBx1	21.5" FHD	Touch	2.0M	500G Hybrid	DVD±RW	GT 720A	N2230	Media	UltraFlex	USB	None	Win7 Pro64 DG 08/27/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	Premium All-In-One PC for the enterprise		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Lenovo Solutions for Small Business ● Nitro Pro
Implementation	Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4400/4600 in processor, and NVIDIA GeForce® GT 720A , PCI Express® x16, 1GB memory, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Max resolution:</i> 1920x1080 (panel) @60Hz; 1920x1200 (HDMI) @60Hz		
Display	21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color , wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector		
Light sensor	None		
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Controls	Monitor mode / computer mode button, volume up/down buttons, and power button		
Disk	<i>Some:</i> SATA 3.0Gb/s, 2.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide		
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar		
Media reader	Optional 11-in-1 media card reader		
Chipset	Intel B85 Express Chipset		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in		
Side ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader		
PCIe Mini Card	Two PCI Express® Mini Card slots		
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Ethernet	One gigabit ethernet port, Intel I217-V, Wake on LAN®		
Audio support	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Intel AMT	None		
Security chip	None		
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black		
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black		
Power supply	180 watts, autosensing, 92% PSU		
Color	Business black color		
VESA mount	Support VESA mount (100mm)		
Dimensions and weight (without stand)	<i>Non-touch models (WxDxH):</i> 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm 14.55 lb (6.6 kg) in maximum configuration <i>Touch models (WxDxH):</i> 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm 16.31 lb (7.4 kg) in maximum configuration		
Stand	<i>Optional Frame Stand:</i> Adjustable between 10° and 65° (Tilt) <i>Optional Monitor Stand:</i> Adjustable between -5° and 45° (Tilt) <i>Optional UltraFlex Stand:</i> Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management		
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US model(s) announced August 27, 2013

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ThinkCentre® E93z (10BA) - Multi-touch (NVIDIA) - TopSeller (Win8)

Personal Systems Reference (PSREF)

Type-model	Pro- cessor	Memory ⁸	Wide- screen display	Multi- Touch	Camera (mega- pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card	Media reader	Stand type	Key- board/ Mouse	Global	Preload	Ann date (mm/dd/yy)
10BA000MUS	i5-4670S	4GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB	None	Win8 Pro64	08/27/13
10BA001MUS	i5-4570S	4GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	UltraFlex	USB	None	Win8 Pro64	08/27/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Preloaded operating system Windows® 8 Pro 64-bit Web install applications (only some listed) • Password Manager Preloaded applications (only some listed) • ThinkVantage System Update • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Norton Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Lenovo Solutions for Small Business • Nitro Pro • AccuWeather • Norton™ Studio
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Memory	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4400/4600 in processor, and NVIDIA GeForce® GT 720A , PCI Express® x16, 1GB memory, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Max resolution:</i> 1920x1080 (panel)@60Hz; 1920x1200 (HDMI)@60Hz		
Graphics	21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color , wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector		
Display	None		
Light sensor	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch		
Multi-touch	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off		
Camera	Monitor mode / computer mode button, volume up/down buttons, and power button		
Controls	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm		
Disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable		
Optical	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar		
Onboard SATA	Optional 11-in-1 media card reader		
Media reader	Intel B85 Express Chipset		
Chipset	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in		
Rear ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader		
Side ports	Two PCI Express® Mini Card slots		
PCIe Mini Card	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2		
PCIe WLAN	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter		
Bluetooth	One gigabit ethernet port, Intel I217-V, Wake on LAN®		
Ethernet	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified		
Audio support	None		
Intel AMT	None		
Security chip	Preferred Pro USB Keyboard (USB connector), Lenovo® logo		
Keyboard	Enhanced Optical USB Mouse, black, Lenovo logo		
Mouse	180 watts, autosensing, 92% PSU		
Power supply	Business black color		
Color	Support VESA mount (100mm)		
VESA mount	<i>Non-touch models (WxDxH):</i> 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm		
Dimensions and weight (without stand)	14.55 lb (6.6 kg) in maximum configuration		
	<i>Touch models (WxDxH):</i> 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm		
Stand	16.31 lb (7.4 kg) in maximum configuration		
	<i>Optional Frame Stand:</i> Adjustable between 10° and 65° (Tilt)		
	<i>Optional Monitor Stand:</i> Adjustable between -5° and 45° (Tilt)		
Limited Warranty	<i>Optional UltraFlex Stand:</i> Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management		
	1-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US model(s) announced August 27, 2013

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**Partial list of Lenovo Services⁷
for ThinkCentre desktops**

For more information see:

http://www.lenovo.com/services_warranty/us/en/index.html

<u>Lenovo service upgrade options for ThinkCentre M series</u> <i>ThinkCentre desktop with 1-year Onsite warranty</i> LOR = Lenovo Onsite Repair 2-year LOR 9x5 Next Business Day 41C9187 3-year LOR 9x5 Next Business Day 41C9188 <i>ThinkCentre desktop with 3-year Onsite warranty</i> LOR = Lenovo Onsite Repair 4-year LOR 9x5 Next Business Day 41C9194	<u>Lenovo service upgrade options for ThinkCentre A series and Edge series</u> <i>ThinkCentre desktop with 1-year Onsite warranty</i> LOR = Lenovo Onsite Repair 2-year LOR 9x5 Next Business Day 45K5949 3-year LOR 9x5 Next Business Day 45K5950 <i>ThinkCentre desktop with 3-year Onsite warranty</i> LOR = Lenovo Onsite Repair 4-year LOR 9x5 Next Business Day 45K5957 5-year LOR 9x5 Next Business Day 45K5963
<u>Lenovo Priority Support for enterprise customers</u> • 24x7 support with priority routing and advanced level technicians <i>ThinkCentre desktop with 1-year Onsite warranty</i> Add to 3-year warranty coverage - 3-year Priority Support* 45J9087 <i>ThinkCentre desktop with 3-year Onsite warranty</i> Add to 3-year warranty coverage - 3-year Priority Support* 45J9088 Add to 4-year warranty coverage - 4-year Priority Support* 45J9089 Add to 5-year warranty coverage - 5-year Priority Support* 45J9090 * Covered machine must have concurrent warranty coverage.	

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, go to http://support.lenovo.com/en_US/product-service/warranty-status/WarrantyPolicies.page. Lenovo makes no representation or warranty regarding third party products or services.

¹ **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

² **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

³ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.

⁴ **CD and DVD list** maximum rates; rates are variable and are often less than the maximum.

⁵ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply.

⁷ **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. P&L means parts and labor. P/U means pick-up. See lenovo terms and conditions for complete details and restrictions.

⁸ **Memory:** For PCs without a separate graphics card, memory supports both system and video. Accessible system memory may be up to 384MB less than the amount stated, depending on video mode.

⁹ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

¹⁰ **Modem speeds:** Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

¹¹ **For combination drives,** maximum speeds only are given in the following order: CD read, CD write, CD re-write, DVD read.

¹² **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

¹³ **Wireless capability:** Requires compatible wireless-enabled options sold separately.

¹⁴ **Response times may vary.** May exclude some holidays. Telephone support may be subject to additional charges.

¹⁵ **Update Connector** is available at no charge to registered customers during the limited warranty period. Line charges may apply.

¹⁶ **Embedded Security Subsystem** works with optional VPN software.

- ¹⁸ **Embedded Security Subsystem** may require download of client security software from the Web.
- ¹⁹ **Asset ID** allows system-specific information to be stored in a chip inside the system; it does not have any radio frequency support.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

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Visit www.lenovo.com/psref for the latest version of Product Specifications Reference.

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