ThinkPad. ®
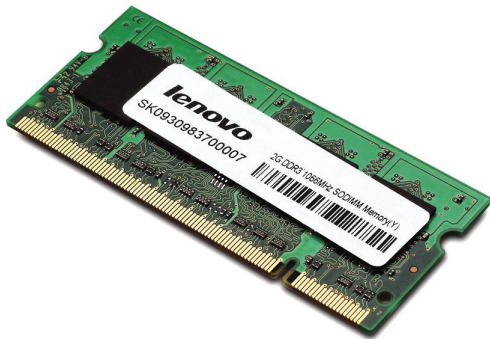
Personal Systems Reference
Lenovo® ThinkPad® TopSeller™ Notebooks

January 2011 - Version 391

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PC3-8500 DDR3 Low-Halogen SODIMM
1GB 55Y3706
2GB 55Y3707

ThinkPad Mini Dock Plus Series 3
433810U

USB 2.0 Portable Secure Hard Disk
160GB 43R2018
320GB 43R2019

ThinkPad Bluetooth Laser Mouse
41U5008

Lenovo® Power Hub
57Y4600

90W Ultraslim AC/DC Combo Adapter
41R4493

Lenovo® ThinkPad L412

Lenovo ThinkPad L412 with
ThinkPad Battery 55++ (9-cell)
57Y4186

Lenovo ThinkPad L412

Lenovo ThinkPad L412

Lenovo ThinkPad L412

Lenovo ThinkPad L412

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Preload	Avail date
4403-33U	i3-350M	2.26		2GB	14.0" HD	2.0M	160G	7200	Intel 6200[28]	WWAN upg	None		Blue	Pro 64	May 10
4403-34U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G	7200	Intel 6200	WWAN upg	None	Finger	Blue	Pro 64	May 10
4403-69U	i3-370M	2.40		2GB	14.0" HD	2.0M	160G	7200	Intel 6200	WWAN upg	None		Blue	Pro 64	Jul 10
☞ 4403-75U	i5-480M	2.66	2.93	2GB	14.0" HD	2.0M	320G	7200	11b/g/n	WWAN upg	None			Pro 64	Jan 11

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream business performance; two spindles*
Processor	**Intel® Core™ i3 processor i3-350M** or **i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-480M** or **i5-520M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **160GB**[8] (7200 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display Camera	**14.0"** (355mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None
Dimensions[3] Weight[2] Case color Case material Battery - type Battery - life[10]	*14.0W''' (WxDxH):* 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm *4-cell:* from 4.92 lb (2.23kg); *6-cell:* from 5.11 lb (2.32kg); *9-cell:* from 5.45 lb (2.47kg) black Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **6-cell** *4-cell:* up to 2.8 hr; *6-cell:* up to 5.0 hr; *9-cell:* up to 8.1 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel HM55 Express Chipset** One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None *Some:* Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced January 11, 2011; previous models on May 11 or July 6, 2010

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Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
4404-32U	i3-350M	2.26		2GB	14.0" HD	2.0M	160G	7200	11b/g/n	WWAN upg		Blue	6	Pro 64	May 10
4404-33U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	160G	7200	Intel 6200[28]	WWAN upg		Blue	6	Pro 64	May 10
4404-34U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G	7200	Intel 6200	WWAN upg		Blue	6	Pro 64	May 10
4404-35U	i5-540M	2.53	3.06	2GB	14.0" HD	2.0M	320G	7200	Intel 6200	WWAN upg	Finger	Blue	6	Pro 64	May 10
☞ 4404-4LU	i3-370M	2.40		2GB	14.0" HD	2.0M	160G	7200	Intel 6200	WWAN upg		Blue	6	Pro 64	Jul 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream business performance; two spindles*
Processor	**Intel® Core™ i3 processor i3-350M** or **i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-520M** or **i5-540M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / **8GB** max[7] / PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in
SATA disk	**160GB**[8] (7200 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	**14.0"** (355mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass
Touch pad	UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch
ThinkLight™	None
Dimensions[3]	*14.0W" (WxDxH):* 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm
Weight[2]	*4-cell:* from 4.92 lb (2.23kg); *6-cell:* from 5.11 lb (2.32kg); *9-cell:* from 5.45 lb (2.47kg)
Case color	black
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type	Lithium Ion **6-cell**
Battery - life[10]	*4-cell:* up to 2.8 hr; *6-cell:* up to 5.0 hr; *9-cell:* up to 8.1 hr
Chipset	**Mobile Intel HM55 Express Chipset**
ExpressCard/34	One slot (ExpressCard/34)
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
11b/g/n	*Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card
Intel 6200[28]	*Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2
WWAN upg	Wireless WAN upgradable
Modem	None
Bluetooth™	Bluetooth 2.1 wireless, LED indicator
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Intel AMT	None
Audio support	High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	Trusted Platform Module, TCG 1.2-compliant
Fingerprint reader	*Some:* UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Adobe® Reader®
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD
  45K6021
ThinkPlus 4-year LOR 9x5 NBD
  45K6022
ThinkPlus 5-year LOR 9x5 NBD
  45K6024
ThinkPlus 4-year P&L P/U Depot
  45K6023
ThinkPlus 5-year P&L P/U Depot
  45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced July 6, 2010; previous models on May 11, 2010

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Preload	Avail date
4403-58U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	160G	7200	Intel 6200[28]	WWAN upg	None	None	Blue	Pro 64	Jun 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *This system is Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream business performance; two spindles*
Processor	**Intel® Core™ i5 processor i5-520M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / **8GB** max[7] / PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in
SATA disk	**160GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	**14.0"** (355mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**ATI™ Mobility Radeon™ HD 5145 graphics**, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass
Touch pad	UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch
ThinkLight™	None
Dimensions[3]	*14.0W"* *(WxDxH):* 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm
Weight[2]	*4-cell:* from 5.09 lb (2.31kg); *6-cell:* from 5.28 lb (2.40kg); *9-cell:* from 5.62 lb (2.55kg)
Case color	black
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type	Lithium Ion **9-cell**
Battery - life[10]	*4-cell:* up to 2.5 hr; *6-cell:* up to 4.5 hr; *9-cell:* up to 7.4 hr
Chipset	**Mobile Intel HM55 Express Chipset**
ExpressCard/34	One slot (ExpressCard/34)
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
Intel 6200[28]	11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2
WWAN upg	Wireless WAN upgradable
Modem	None
Bluetooth™	Bluetooth 2.1 wireless, LED indicator
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Intel AMT	None
Audio support	High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	Trusted Platform Module, TCG 1.2-compliant
Fingerprint reader	None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

ThinkPad® L412 4404 (Discrete) - TopSeller (Windows 7)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
4404-3GU	i3-370M	2.40		2GB	14.0" HD	2.0M	160G	7200	Intel 6200[28]	WWAN upg		Finger	Blue	**9**	Pro 64	Jun 10
4404-3HU	i3-370M	2.40		2GB	14.0" HD	2.0M	320G	7200	Intel 6200	Gobi 2000	AT&T[23]		Blue	**9**	Pro 64	Jun 10
4404-3JU	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G	7200	Intel 6200	WWAN upg		Finger	Blue	**9**	Pro 64	Jun 10
4404-3KU	i3-350M	2.26		2GB	14.0" HD	2.0M	160G	7200	Intel 6200	WWAN upg			Blue	**9**	Pro 64	Jun 10
4404-3LU	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G	7200	Intel 6200	WWAN upg			Blue	**9**	Pro 64	Jun 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream business performance; two spindles*
Processor	**Intel® Core™ i3 processor i3-350M** or **i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-520M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / **8GB** max[7] / PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in
SATA disk	**160GB**[8] (7200 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	**14.0"** (355mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**ATI™ Mobility Radeon™ HD 5145 graphics**, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass
Touch pad	UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch
ThinkLight™	None
Dimensions[3]	*14.0W" (WxDxH):* 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm
Weight[2]	*4-cell:* from 5.09 lb (2.31kg); *6-cell:* from 5.28 lb (2.40kg); *9-cell:* from 5.62 lb (2.55kg)
Case color	black
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type	Lithium Ion **9-cell**
Battery - life[10]	*4-cell:* up to 2.5 hr; *6-cell:* up to 4.5 hr; *9-cell:* up to 7.4 hr
Chipset	**Mobile Intel HM55 Express Chipset**
ExpressCard/34	One slot (ExpressCard/34)
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
Intel 6200[28]	11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2
WWAN upg	*Some:* Wireless WAN upgradable
Gobi™ 2000	*Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider
Carrier	*Some:* AT&T®, contract required with service provider
Modem	None
Bluetooth™	Bluetooth 2.1 wireless, LED indicator
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Intel AMT	None
Audio support	High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	Trusted Platform Module, TCG 1.2-compliant
Fingerprint reader	*Some:* UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Windows Live™ Toolbar
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
EPEAT® Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced June 22, 2010

ThinkPad® L412 Accessories

Memory
1GB PC3-10600 DDR3 L-H SODIMM	55Y3709	ann	03/02/10
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4415	ann	03/02/10
2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann	03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann	03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann	03/02/10

Storage and removable storage
SL410/510 500GB Disk SATA 3G/s (5400 rpm)	43N3422	ann	10/22/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

Wireless WAN (Mini PCI Express)
Only WWAN upgradable models:
ThinkPad Gobi™ 2000 Broadband Option	78Y1399	ann	01/07/10
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	ann	01/07/10

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Port Replicator Series 3	433610W	ann	06/23/09
ThinkPad Mini Dock Series 3[61]	433710U	ann	06/23/09

[61] When docked, ThinkPad Mini Dock Series 3 (433710U) Audio ports are inactive, ThinkPad Audio ports are active.

ThinkPad Mini Dock Plus Series 3[61]	433810U	ann	06/23/09

[61] When docked, ThinkPad Mini Dock Plus Series 3 (433810U) eSATA & Audio ports are inactive, ThinkPad eSATA & Audio ports are active.

ThinkPad Mini Dock Plus Series 3 - Mobile WS	433820U	ann	01/07/10

Keyboard
TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	ann	09/15/09

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

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

Mouse
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

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

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

Batteries
ThinkPad Battery 55+ (6-cell)	57Y4185	ann	03/30/10
ThinkPad Battery 55++ (9-cell)	57Y4186	ann	03/30/10
ThinkPad External Battery Charger[44]	40Y7625	ann	09/20/05

[44] Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45]	40Y7696	ann	01/05/06

[45] Only compatible with the integrated graphics models.

ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
Lenovo Power Hub	57Y4600	ann	09/07/10
90W Ultraslim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at **www.lenovopowertips.com**

Carrying Cases
Up to 14" widescreen models:
ThinkPad 14W Case Sleeve	57Y4294	ann	03/16/10

Up to 15.4" widescreen models:
ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor	5453HB1	ann	06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann	06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

ThinkPad.

Lenovo® ThinkPad L512

Lenovo ThinkPad L512 with
ThinkPad Battery 55++ (9-cell)
57Y4186

Lenovo ThinkPad L512

Lenovo ThinkPad L512

Lenovo ThinkPad L512

Lenovo ThinkPad L512

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
4444-32U	i3-350M	2.26		2GB	15.6" HD	2.0M	160G	7200	11b/g/n	WWAN upg		Blue	6	Pro 32	May 10
4444-33U	i3-350M	2.26		2GB	15.6" HD	2.0M	160G	7200	Intel 6200[28]	WWAN upg		Blue	6	Pro 64	May 10
4444-34U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G	7200	Intel 6200	WWAN upg	Finger	Blue	6	Pro 64	May 10
4444-4EU	i3-370M	2.40		2GB	15.6" HD	2.0M	160G	7200	11b/g/n	WWAN upg		Blue	6	Pro 64	Jul 10
4444-4FU	i3-370M	2.40		2GB	15.6" HD	2.0M	160G	7200	Intel 6200	WWAN upg		Blue	6	Pro 64	Jul 10
☞ 4444-4VU	i5-560M	2.66	3.20	2GB	15.6" HD	2.0M	320G	7200	Intel 6200	WWAN upg	Finger	Blue	6	Pro 64	Sep 10

- **These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)**

Positioning	*Mainstream business performance; two spindles*
Processor	**Intel® Core™ i3 processor i3-350M or i3-370M with dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-520M or i5-560M with dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **160GB**[8] (7200 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display Camera	**15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None
Dimensions[3] Weight[2] Case color Case material Battery - type Battery - life[10]	*15.6W" (WxDxH):* 15" x 9.7" x 1.26–1.42"; 380mm x 247mm x 32–36mm *4-cell:* from 5.48 lb (2.49kg); *6-cell:* from 5.67 lb (2.57kg); *9-cell:* from 6.01 lb (2.73kg) black Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **6-cell** *4-cell:* up to 2.8 hr; *6-cell:* up to 4.9 hr; *9-cell:* up to 8.0 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel HM55 Express Chipset** One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD
　45K5968
ThinkPlus 2-year LOR 9x5 NBD
　45K5969
ThinkPlus 3-year LOR 9x5 NBD
　45K5970
ThinkPlus 4-year LOR 9x5 NBD
　45K5973
ThinkPlus 5-year LOR 9x5 NBD
　45K5975
ThinkPlus 2-year P&L P/U Depot
　45K5971
ThinkPlus 3-year P&L P/U Depot
　45K5972
ThinkPlus 4-year P&L P/U Depot
　45K5974
ThinkPlus 5-year P&L P/U Depot
　45K5976
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced September 28, 2010; previous models on May 11 or July 6, 2010

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(RUB3-5) October 2010

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
4447-32U	i3-350M	2.26		2GB	15.6" HD	2.0M	160G 7200	11b/g/n	WWAN upg		Blue	6	Pro 32	May 10
4447-33U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	160G 7200	Intel 6200[28]	WWAN upg	Finger	Blue	6	Pro 64	May 10
☞ 4447-3EU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	160G 7200	Intel 6200	WWAN upg		Blue	6	Pro 32	Jul 10
☞ 4447-3HU	i3-370M	2.40		2GB	15.6" HD	2.0M	160G 7200	11b/g/n	WWAN upg		Blue	6	Pro 64	Jul 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream business performance; two spindles*
Processor	**Intel® Core™ i3 processor i3-350M or i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-520M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **160GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display Camera	**15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None
Dimensions[3] Weight[2] Case color Case material Battery - type Battery - life[10]	*15.6W" (WxDxH):* 15" x 9.7" x 1.26–1.42"; 380mm x 247mm x 32–36mm *4-cell:* from 5.48 lb (2.49kg); *6-cell:* from 5.67 lb (2.57kg); *9-cell:* from 6.01 lb (2.73kg) black Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **6-cell** *4-cell:* up to 2.8 hr; *6-cell:* up to 4.9 hr; *9-cell:* up to 8.0 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel HM55 Express Chipset** One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD
45K6021
ThinkPlus 4-year LOR 9x5 NBD
45K6022
ThinkPlus 5-year LOR 9x5 NBD
45K6024
ThinkPlus 4-year P&L P/U Depot
45K6023
ThinkPlus 5-year P&L P/U Depot
45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
☞ US models announced July 6, 2010; previous models on May 11, 2010

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(RUB3-6) July 2010

Memory
1GB PC3-10600 DDR3 L-H SODIMM   55Y3709 *ann 03/02/10*
1GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y4415 *ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM   55Y3710 *ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y4416 *ann 03/02/10*
4GB PC3-10600 DDR3 L-H SODIMM   55Y3711 *ann 03/02/10*

Storage and removable storage
SL410/510 500GB Disk SATA 3G/s (5400 rpm) 43N3422 *ann 10/22/09*

USB 2.0 Portable 500GB Hard Disk   45K1690 *ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk   43R2018 *ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk   43R2019 *ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive   57Y4400 *ann 01/07/10*
USB 2.0 Portable DVD Burner   43N3264 *ann 01/05/10*

Wireless WAN (Mini PCI Express)
Only WWAN upgradable models:
ThinkPad Gobi™ 2000 Broadband Option   78Y1399 *ann 01/07/10*
ThinkPad AT&T® Gobi 2000 Broadband Option 78Y1398 *ann 01/07/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand   45J9292 *ann 05/12/09*
USB Port Replicator with Digital Video   45K1610 *ann 07/28/09*
ThinkPad Port Replicator Series 3   433610W *ann 06/23/09*
ThinkPad Mini Dock Series 3[61]   433710U *ann 06/23/09*
  [61] When docked, ThinkPad Mini Dock Series 3 (433710U) Audio ports
  are inactive, ThinkPad Audio ports are active.

ThinkPad Mini Dock Plus Series 3[61]   433810U 06/23/09
  [61] When docked, ThinkPad Mini Dock Plus Series 3 (433810U) eSATA
  & Audio ports are inactive, ThinkPad eSATA & Audio ports are active.

ThinkPad Mini Dock Plus Series 3 - Mobile WS 433820U *ann 01/07/10*

Keyboard
TrackPoint Cap Collection   73P2698 *ann 12/16/03*
USB Numeric Keypad   33L3225 *ann 05/01/00*
Preferred Pro USB Keyboard   73P5220 *ann 06/21/05*
Enhanced Performance USB Keyboard   73P2620 *ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]   57Y4700 *ann 09/15/09*
  [52] Wireless via 2.4GHz technology using a micro-size USB receiver.
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*

Mouse
Lenovo Optical Mouse (USB)   06P4069 *ann 05/21/03*
Lenovo Laser Mouse (USB)   41U3074 *ann 01/23/07*
ThinkPad USB Laser Mouse   57Y4635 *ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)   31P7405 *ann 08/27/02*
ThinkPad Travel Mouse (USB, Optical)   31P7410 *ann 06/04/02*
ThinkPad Bluetooth Laser Mouse   41U5008 *ann 01/22/08*

Multimedia
ThinkPad In-Ear Headphones   57Y4488 *ann 01/07/10*

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

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

Batteries
ThinkPad Battery 55+ (6-cell)   57Y4185 *ann 03/30/10*
ThinkPad Battery 55++ (9-cell)   57Y4186 *ann 03/30/10*
ThinkPad External Battery Charger[44]   40Y7625 *ann 09/20/05*
  [44] Requires the *ThinkPad 90W AC Adapter*
    40Y7659 or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45]   40Y7696 *ann 01/05/06*
  [45] Only compatible with the integrated graphics models.
ThinkPad 90W AC Adapter   40Y7659 *ann 09/20/05*
Lenovo Power Hub   57Y4600 *ann 09/07/10*
90W Ultraslim AC/DC Combo Adapter   41R4493 *ann 09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)   41R4481 *ann 12/18/07*
•Generic Micro USB charge tip (L18)   41R4490 *ann 01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
Up to 15.4" widescreen models:
ThinkPad 15W Case Sleeve   51J0477 *ann 08/18/09*
Lenovo Business Messenger Case   51J0475 *ann 08/18/09*
Lenovo Messenger Max   41U5253 *ann 05/01/07*
ThinkPad Business Topload Case   43R2476 *ann 05/13/08*
ThinkPad Business Backpack   43R2482 *ann 05/13/08*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor   5453HB1 *ann 06/10/10*
ThinkVision® L1711p 17" Monitor   5047HB2 *ann 10/20/09*
ThinkVision L1900p 19" Monitor   4431HE1 *ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor   2448HB6 *ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor   2572HB6 *ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor   2572HD6 *ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor   2578HB6 *ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor   4014HB6 *ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor   4420HB2 *ann 09/17/08*

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter   45K5296 *ann 05/12/09*
ThinkVision USB Soundbar   40Y7616 *ann 08/23/05*
ThinkVision Soundbar   45K1263 *ann 09/16/08*
Kensington MicroSaver Cable Lock   73P2582 *ann 12/29/03*
Kensington Twin Head Cable Lock   45K1620 *ann 09/30/08*
Lenovo Security Cable Lock   57Y4303 *ann 08/24/10*
Lenovo Easy Reach Monitor Stand   55Y9258 *ann 09/22/09*
  [46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad T410

Lenovo ThinkPad T410

Lenovo ThinkPad T410

Lenovo ThinkPad T410

ThinkPad triple external monitor configuration
using NVIDIA's Optimus technology

ThinkPad Mini Dock Series 3
433710U

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Cam-era	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
2516-ADU	i5-520M	2.40	2.93	2GBx1 1066	14.1" WXGA	2.0M	250G	5400	11b/g/n		None	None	6	No	Pro 32	Jan 10
2516-DCU	i5-560M	2.66	3.20	2GBx1 1066	14.1" WXGA	2.0M	320G	7200	11b/g/n		None	None	6	No	Pro 64	Sep 10
☞ 2516-F9U	i5-480M	2.66	2.93	4GBx1 1333	14.1" WXGA	2.0M	320G	7200	Intel 1000	WWAN upg	None	None	6	No	Pro 64	Jan 11

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	Premiere performance; two spindles
Processor	**Intel® Core™ i5 processor i5-480M, i5-520M, or i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz or PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable. One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**14.1"** (358mm) **WXGA (1280x800) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio. Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys. TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch. Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case color Case material	*14.1W'" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm. *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg). Black. *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom. *6-cell:* up to 6.6 hr; *9-cell:* up to 11 hr; *9-cell plus Slice battery:* up to 22 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset**. One slot (ExpressCard/34). None. 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC). Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card 11b/g/n Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots. *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card. *Some:* 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2. *Some:* Wireless WAN upgradable. 56K V.92[6] modem. None. Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1. Intel Active Management Technology (iAMT). High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole. Trusted Platform Module, TCG 1.2-compliant. None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976

Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced January 11, 2011; previous models on January 7 or September 28, 2010

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(NZ1-1) January 2011

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
2518-C2U	i5-520M	2.40	2.93	2GB	14.1" WXGA	2.0M	250G 5400	Intel 6200[28]	Gobi 2000	AT&T[23]	Finger	Blue	6	vPro	Pro 32	Jan 10
2518-F3U	i5-520M	2.40	2.93	2GB	14.1" WXGA	2.0M	250G 5400	11b/g/n	WWAN upg			Blue	6		Pro 32	Jan 10
2518-F6U	i5-520M	2.40	2.93	*4GB*	14.1" WXGA+	2.0M	80G SSD	Intel 6200	WWAN upg		Finger	Blue	*9*	vPro	Pro 32	Jan 10
2518-4HU	i5-520M	2.40	2.93	2GB	14.1" WXGA	2.0M	320G 7200	Intel 6200	WWAN upg		Finger	Blue	6	vPro	Pro 32	Mar 10
2518-QBU	i5-540M	2.53	3.06	*4GB*	14.1" WXGA	2.0M	160G SSD	Intel 6200	WWAN upg		Finger		6	vPro	Pro 64	Jul 10
☞ 2518-AHU	i5-560M	2.66	3.20	2GB	14.1" WXGA	2.0M	320G 7200	Intel 6200	WWAN upg			Blue	6	vPro	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning Processor	Premiere performance; two spindles **Intel® Core™ i5 processor i5-520M, i5-540M, or i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access *Some:* **80GB**[8] or **160GB** Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high *Some:* **250GB** (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	*Some:* **14.1"** (358mm) **WXGA (1280x800) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio *Some:* **14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case color Case material	*14.1W" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type Battery - life[10]	Lithium Ion **6-cell** or **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery *6-cell:* up to 6.6 hr; *9-cell:* up to 11 hr; *9-cell plus Slice battery:* up to 22 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card 11b/g/n Intel 6200[28] WWAN upg Gobi™ 2000 Carrier	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 *Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* AT&T®, contract required with service provider
Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	56K V.92[6] modem *Some:* Bluetooth 2.1 wireless, LED indicator *Non-vPro model:* Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 *vPro model:* Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD
45K6021
ThinkPlus 4-year LOR 9x5 NBD
45K6022
ThinkPlus 5-year LOR 9x5 NBD
45K6024
ThinkPlus 4-year P&L P/U Depot
45K6023
ThinkPlus 5-year P&L P/U Depot
45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced September 28, 2010; previous models on January 7, March 2, or July 6, 2010

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(NZ1-3) October 2010

ThinkPad® T410 2518 (TopSeller) - Windows 7 (January 2011)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Bat-tery cells	Power Adapter (watt)	Intel vPro	Preload	Avail date
2518-BGU	i7-620M	2.66	3.33	4GBx1 1333	14.1" WXGA+	500G 7200	Intel 1000	WWAN upg		*9*	90W		Pro 64	Jan 11
2518-BJU	i5-560M	2.66	3.20	2GBx1 1066	14.1" WXGA+	320G 7200	WiMAX	Gobi 2000	selectable	6	65W	vPro	Pro 64	Jan 11

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a depot repair service 3-year limited warranty**
- **These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)**

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-560M** with **dual-core**, or **Intel Core i7 processor i7-620M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; *i5-560M:* 3MB cache; *i7-620M:* 4MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz or PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **320GB**[8] (7200 rpm) or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case color Case material	*14.1W'" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type Battery - life[10]	Lithium Ion **6-cell** or **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery *6-cell:* up to 6.6 hr; *9-cell:* up to 11 hr; *9-cell plus Slice battery:* up to 22 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 1000 WiMAX	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX
WWAN upg Gobi™ 2000 Carrier	*Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* User selectable at first boot, AT&T®, Verizon®, or Sprint®, contract required with service provider
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator *Non-vPro model:* Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 *vPro model:* Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt or 90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Intel vPro	Preload	Avail date
2518-AJU	i5-560M	2.66	3.20	2GB	14.1" WXGA+	2.0M	320G	7200	Intel 6200[28]	WWAN upg	None	Blue	vPro	Pro 64	Sep 10

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- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Premiere performance; two spindles*
Processor	**Intel® Core™ i5 processor i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Optimus graphics[37]	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, **Intel HD Graphics** in processor, and **NVIDIA Quadro® NVS3100M**, PCI Express® x16, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] **Weight**[2] **Case color Case material**	*14.1W'" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type Battery - life[10]	Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 6.5 hr; *9-cell:* up to 10.9 hr; *9-cell plus Slice battery:* up to 21.9 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 6200[28] **WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support**	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US model announced September 28, 2010

ThinkPad® T410 2516 (Discrete) - TopSeller (Windows 7)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
2516-AEU	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	2.0M	320G	7200	11b/g/n	None	None	Blue	**9**	No	Pro 32	Jan 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *This system is Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning **Processor**	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-520M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	**Preloaded operating system**[20] - Genuine Windows® 7 Professional 32
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available	**Preloaded applications**[14] (only some listed)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	• Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate
Widescreen display **Camera**	**14.1"** (358mm) **WXGA (1280x800) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	• Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW)
Discrete **graphics**	**NVIDIA® Quadro® NVS3100M**, PCI Express® x16, **256MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	• Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Keyboard **TrackPoint®** Touchpad **ThinkLight™**	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Supports ThinkVantage® technologies
Dimensions[3] Weight[2] Case color Case material	*14.1W" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service[17] 24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378
Battery - type Battery - life[10]	Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 5.0 hr; *9-cell:* up to 8.3 hr; *9-cell plus Slice battery:* up to 16.6 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus™· [22] 1-year LOR[24] 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None	Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available	

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Intel vPro	Preload	Avail date
2518-C4U	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	320G	7200	11b/g/n	Gobi 2000	Verizon[16]	Fing	Blue		Pro 32	Jan 10
2518-F5U	i5-540M	2.53	3.06	*4GB*	14.1" WXGA+	2.0M	500G	7200	WiMAX	WWAN upg		Fing	Blue	vPro	Pro 32	Jan 10
2518-4KU	i5-520M	2.40	2.93	*4GB*	14.1" WXGA+	2.0M	320G	7200	Intel 6200[28]	Gobi 2000	Verizon	Fing	Blue	vPro	Pro 64	Mar 10
2518-4LU	i5-540M	2.53	3.06	*4GB*	14.1" WXGA+	2.0M	320G	7200	WiMAX	WWAN upg		Fing	Blue	vPro	Pro 64	Mar 10
☞ 2518-QCU	i5-540M	2.53	3.06	*4GB*	14.1" WXGA+	2.0M	160G	SSD	Intel 6200	WWAN upg			Blue	vPro	Pro 64	Jul 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-520M** or **i5-540M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access *Some:* **160GB**[8] Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high *Some:* **320GB** (7200 rpm) or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro® NVS3100M**, PCI Express® x16, **256MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case color Case material	*14.1W'" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type Battery - life[10]	Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 5.0 hr; *9-cell:* up to 8.3 hr; *9-cell plus Slice battery:* up to 16.6 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)

PCIe Mini Card 11b/g/n Intel 6200[28] WiMAX
 	
 WWAN upg Gobi™ 2000
 	
 Carrier
	Two PCI Express Mini Card slots
	 Some: 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card
	 Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2
	 Some: 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card,
	      Intel Centrino® Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX
	 Some: Wireless WAN upgradable
	 Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A,
	      GPRS/WCDMA/HSPA, GPS, contract required with service provider
	 Some: Verizon®, contract required with service provider

Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator *Non-vPro model:* Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 *vPro model:* Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information

☞ US model announced July 6, 2010; previous models on January 7 or March 2, 2010

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
✂ 2516-AQU	i3-330M	2.13	2GB	14.1" WXGA	2.0M	250G	5400	Intel 1000			None	None	6	No	Pro 32	Feb 10
2516-72U	i3-370M	2.40	2GB	14.1" WXGA	2.0M	250G	5400	Intel 1000			None	None	6	No	Pro 64	Jul 10
2516-73U	i3-370M	2.40	2GB	14.1" WXGA	2.0M	320G	7200	Intel 1000			None	None	6	No	Pro 64	Jul 10
2516-74U	i3-370M	2.40	2GB	14.1" WXGA	2.0M	320G	7200	Intel 1000	Gobi 2000	selectable	None	None	6	No	Pro 64	Jul 10
☞ 2516-FBU	i3-390M	2.66	2GB	14.1" WXGA	2.0M	320G	7200	Intel 1000	WWAN upg		None	None	6	No	Pro 64	Jan 11

- ***These small and medium business (SMB) models are part of the US TopSeller™ Program***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning	*Premiere performance; two spindles*
Processor	**Intel® Core™ i3 processor i3-330M**, **i3-370M**, or **i3-390M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**14.1"** (358mm) **WXGA (1280x800) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select", Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case color Case material	*14.1"W" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 6.6 hr; *9-cell:* up to 11 hr; *9-cell plus Slice battery:* up to 22 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 1000 WWAN upg Gobi™ 2000 Carrier	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS *Some:* User selectable at first boot, AT&T®, Verizon®, or Sprint®, contract required with service provider
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92[6] modem None Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced January 11, 2011; previous models on February 2 or July 6, 2010
✂ US model withdrawn effective July 31, 2010

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ThinkPad® T410i 2518 (TopSeller) - Windows 7

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
2518-JWU	i3-370M	2.40	2GB	14.1" WXGA	2.0M	320G	7200	Intel 1000	Gobi 2000	selectable		Blue	9	No	Pro 64	Jul 10
2518-JXU	i3-370M	2.40	2GB	14.1" WXGA	2.0M	250G	5400	Intel 1000	WWAN upg		Finger		9	No	Pro 64	Jul 10
2518-MHU	i3-370M	2.40	2GB	14.1" WXGA	2.0M	250G	5400	Intel 1000			Finger		9	No	Pro 64	Jul 10

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a depot repair service 3-year limited warranty**
- **These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)**

Positioning	*Premiere performance; two spindles*
Processor	**Intel® Core™ i3 processor i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB** std / **8GB** max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**14.1"** (358mm) **WXGA (1280x800) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case color Case material	*14.1W'" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type Battery - life[10]	Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery *6-cell:* up to 6.6 hr; *9-cell:* up to 11 hr; *9-cell plus Slice battery:* up to 22 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 1000 WWAN upg Gobi™ 2000 Carrier	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS *Some:* User selectable at first boot, AT&T®, Verizon®, or Sprint®, contract required with service provider
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92[6] modem *Some:* Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD
45K6021
ThinkPlus 4-year LOR 9x5 NBD
45K6022
ThinkPlus 5-year LOR 9x5 NBD
45K6024
ThinkPlus 4-year P&L P/U Depot
45K6023
ThinkPlus 5-year P&L P/U Depot
45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced July 6, 2010

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(NZ1i-3) July 2010

ThinkPad® T410i 2518 (Discrete) - TopSeller (Windows 7)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Blue/ Fing	Intel vPro	Preload	Avail date
2518-JYU	i3-370M	2.40	2GB	14.1" WXGA+	LED	2.0M	320G 7200	Intel 6200[28]	WWAN upg	None	Yes	No	Pro 64	Jul 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *This model has a depot repair service 3-year limited warranty*
- *This system is Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning **Processor**	*Premiere performance; two spindles* **Intel® Core™ i3 processor i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB** std / **8GB** max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim **SATA disk**	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display **Camera**	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro®** **NVS3100M**, PCI Express® x16, **256MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard **TrackPoint®** **Touchpad** **ThinkLight™**	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] **Weight**[2] **Case color** **Case material**	*14.1W'" (WxDxH):* 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm *6-cell:* starting at 5.0 lb (2.27kg); *9-cell:* starting at 5.35 lb (2.43kg) Black *Top:* High Elasticity PolyCarbonate (HEPC); *Bottom:* Carbon-Fiber Reinforced Plastic
Battery - type **Battery - life**[10]	Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 5.0 hr; *9-cell:* up to 8.3 hr; *9-cell plus Slice battery:* up to 16.6 hr
Chipset **ExpressCard/34** **Smart Card read** **Multicard reader** **Ports**	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card **Intel 6200**[28] **WWAN upg** **Modem** **Bluetooth™** **Ethernet** **Intel AMT** **Audio support**	Two PCI Express Mini Card slots 11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security **Security chip** **Fingerprint reader**	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Right column

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US model announced July 6, 2010

ThinkPad® T410 Accessories

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3706 *ann 06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4385 *ann 06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3707 *ann 06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4386 *ann 06/23/09*
4GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3708 *ann 06/23/09*

Ultrabay Slim 9.5mm
Serial ATA Hard Drive Bay Adapter III   43N3412 *ann 06/23/09*
DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s 43N3292 *ann 08/03/10*
DVD Burner Ultrabay Slim Drive II SATA 1.5G/s 43N3229 *ann 06/23/09*
Ultrabay Slim Blu-ray Burner II (SATA)   43N3230 *ann 06/23/09*

Storage and removable storage
160GB Disk SATA 3.0Gb/s (7200 rpm)[41]   41N5737 *ann 10/16/07*
250GB Disk SATA 3.0Gb/s (5400 rpm)[41]   43R8152 *ann 01/15/08*
250GB Disk FDE SATA 3.0Gb/s (7200 rpm)[41] 43N3410 *ann 01/20/09*
320GB Disk SATA 3.0Gb/s (5400 rpm)[41]   43N3403 *ann 08/05/08*
320GB Disk SATA 3.0Gb/s (7200 rpm)[41]   43N3411 *ann 01/20/09*
500GB Disk SATA 3.0Gb/s (7200 rpm)[41]   43N3423 *ann 01/07/10*
  [41] Can be used as the main HDD or
    with *Serial ATA Hard Drive Bay Adapter III 43N3412* in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)   43N3406 *ann 08/26/08*
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) 43N3417 *ann 06/23/09*
ThinkPad 160GB Intel X25-M SSD[41]   43N3435 *ann 06/22/10*

USB 2.0 Portable 320GB Hard Disk   45K1689 *ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk   45K1690 *ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk 43R2018 *ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk 43R2019 *ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive   57Y4400 *ann 01/07/10*
USB 2.0 Portable DVD Burner   43N3264 *ann 01/05/09*

Wireless WAN (Mini PCI Express)
Only WWAN upgradable models:
ThinkPad Gobi™ 2000 Broadband Option   78Y1399 *ann 01/07/10*
ThinkPad AT&T® Gobi 2000 Broadband Option 78Y1398 *ann 01/07/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand   45J9292 *ann 05/12/09*
USB Port Replicator with Digital Video   45K1610 *ann 07/28/09*
ThinkPad Port Replicator Series 3   433610W *ann 06/23/09*
ThinkPad Mini Dock Series 3   433710U *ann 06/23/09*
ThinkPad Mini Dock Plus Series 3   433810U *ann 06/23/09*
ThinkPad Mini Dock Plus Series 3 - Mobile WS 433820U *ann 01/07/10*

Keyboard
TrackPoint Cap Collection   73P2698 *ann 12/16/03*
USB Numeric Keypad   33L3225 *ann 05/01/00*
Preferred Pro USB Keyboard   73P5220 *ann 06/21/05*
Enhanced Performance USB Keyboard   73P2620 *ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52] 57Y4700 *ann 09/15/09*
  [52] Wireless via 2.4GHz technology using a micro-size USB receiver.
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*

Mouse
Lenovo Optical Mouse (USB)   06P4069 *ann 05/21/03*
Lenovo Laser Mouse (USB)   41U3074 *ann 01/23/07*
ThinkPad USB Laser Mouse   57Y4635 *ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical) 31P7405 *ann 08/27/02*
ThinkPad Travel Mouse (USB, Optical)   31P7410 *ann 06/04/02*
ThinkPad Bluetooth Laser Mouse   41U5008 *ann 01/22/08*

Multimedia
ThinkPad In-Ear Headphones   57Y4488 *ann 01/07/10*

Security
Kensington® MicroSaver® Cable Lock   73P2582 *ann 12/29/03*
Kensington Twin Head Cable Lock   45K1620 *ann 09/30/08*
Lenovo Security Cable Lock   57Y4303 *ann 08/24/10*
USB Gemplus GemPC Smart Card Reader   41N3040 *ann 02/21/06*
ThinkPad T400/T410/R400 Privacy Filter 43R2472 *ann 08/05/08*
  Note: ThinkPad T400/T410/R400 Privacy Filter (43R2472)
      is not supported on T400s or T410s.

Batteries
ThinkPad Battery 55+ (6-cell)   57Y4185 *ann 03/30/10*
ThinkPad Battery 55++ (9-cell)   57Y4186 *ann 03/30/10*
ThinkPad Battery 27++ (9-cell, slice)[43] 57Y4545 *ann 01/07/10*
  [43] To be used along with system battery for all-day computing;
  attaches under ThinkPad using docking connector
  (not supported when using Series 3 Port Replicator or Docks).
ThinkPad External Battery Charger   40Y7625 *ann 09/20/05*

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45]   40Y7696 *ann 01/05/06*
  [45] Only compatible with the integrated graphics models.
ThinkPad 90W AC Adapter   40Y7659 *ann 09/20/05*
Lenovo Power Hub   57Y4600 *ann 09/07/10*
90W Ultraslim AC/DC Combo Adapter   41R4493 *ann 09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)   41R4481 *ann 12/18/07*
•Generic Micro USB charge tip (L18)   41R4490 *ann 01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
Up to 14" widescreen models:
ThinkPad 14W Case Sleeve   57Y4294 *ann 03/16/10*

Up to 15.4" widescreen models:
ThinkPad 15W Case Sleeve   51J0477 *ann 08/18/09*
Lenovo Business Messenger Case   51J0475 *ann 08/18/09*
Lenovo Messenger Max   41U5253 *ann 05/01/07*
Lenovo Performance BackPack   41U5254 *ann 05/01/07*
ThinkPad Business Topload Case   43R2476 *ann 05/13/08*
ThinkPad Business Backpack   43R2482 *ann 05/13/08*
ThinkPad Deluxe Expander Case   43R2478 *ann 05/13/08*
ThinkPad Executive Leather Case   43R2480 *ann 05/13/08*

Up to 15.6" widescreen models:
Wenger Backpack for Lenovo   57Y4271 *ann 01/07/10*
Wenger Slim Case for Lenovo   57Y4272 *ann 01/07/10*
Wenger Deluxe Slim Case for Lenovo   57Y4273 *ann 01/07/10*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor   5453HB1 *ann 06/10/10*
ThinkVision® L1711p 17" Monitor   5047HB2 *ann 10/20/09*
ThinkVision L1900p 19" Monitor   4431HE1 *ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor   2448HB6 *ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor   2572HB6 *ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor   2572HD6 *ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor   2578HB6 *ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor   4014HB6 *ann 06/10/10*

www.lenovo.com/support/thinkpad/optimus-monitors

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter   45K5296 *ann 05/12/09*
DisplayPort to Single-link DVI-D Cable 45J7915 *ann 08/05/08*
ThinkVision USB Soundbar   40Y7616 *ann 08/23/05*
ThinkVision Soundbar   45K1263 *ann 09/16/08*
Kensington MicroSaver Cable Lock   73P2582 *ann 12/29/03*
Kensington Twin Head Cable Lock   45K1620 *ann 09/30/08*
Lenovo Security Cable Lock   57Y4303 *ann 08/24/10*
Lenovo Easy Reach Monitor Stand   55Y9258 *ann 09/22/09*
  [46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad T410s

Lenovo ThinkPad T410s

ThinkPad Battery 42 (3-cell, bay)
57Y4536

ThinkPad Battery 59+ (6-cell)
51J0497

ThinkPad triple external monitor configuration
using NVIDIA's Optimus technology

Lenovo ThinkPad T410s

ThinkPad® T410s 2901 (TopSeller) - Windows 7

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2901-ATU	i5-560M	2.66	3.20	2GB	14.1" WXGA+	2.0M	250G 5400	11b/g/n	WWAN upg	None	Blue	Express	No	Pro 64	Sep 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

Positioning	*Premiere performance and ultraportability; two spindles*
Processor	**Intel® Core™ i5 processor i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **250GB**[8] (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material	*14.1W" (WxDxH):* 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm *6-cell:* starting at 3.94 lb (1.79kg) *Display cover:* Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); *Base:* Magnesium alloy
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports unique 2nd battery in Ultrabay Slim *6-cell:* up to 4.8 hr; *6-cell plus Ultrabay battery:* up to 7.9 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel QS57 Express Chipset** One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Client Security Solution™
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Presentation Director
- ThinkVantage Productivity Center
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD
45K5968
ThinkPlus 2-year LOR 9x5 NBD
45K5969
ThinkPlus 3-year LOR 9x5 NBD
45K5970
ThinkPlus 4-year LOR 9x5 NBD
45K5973
ThinkPlus 5-year LOR 9x5 NBD
45K5975
ThinkPlus 2-year P&L P/U Depot
45K5971
ThinkPlus 3-year P&L P/U Depot
45K5972
ThinkPlus 4-year P&L P/U Depot
45K5974
ThinkPlus 5-year P&L P/U Depot
45K5976
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US model announced September 28, 2010

ThinkPad® T410s 2904 (TopSeller) - Windows 7

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Card slot	Intel vPro	Preload	Avail date
2904-FZU	i5-520M	2.40	2.93	*4GB*	14.1" WXGA+	2.0M	128G SSD	Intel 6200[28]	WWAN upg	Finger	Express	vPro	Pro 64	Mar 10
2904-GGU	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	250G 5400	Intel 6200	WWAN upg		Express	vPro	Pro 64	May 10
☞ 2904-HCU	i5-560M	2.66	3.20	*4GB*	14.1" WXGA+	2.0M	128G SSD	Intel 6200	WWAN upg		Express	vPro	Pro 64	Sep 10

- ***These small and medium business (SMB) models are part of the US TopSeller™ Program***
- ***These models have a depot repair service 3-year limited warranty***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning	*Premiere performance and ultraportability; two spindles*
Processor	**Intel® Core™ i5 processor i5-520M** or **i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access *Some:* **128GB**[8] Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high *Some:* **250GB** (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material	*14.1W" (WxDxH):* 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm *6-cell:* starting at 3.94 lb (1.79kg) *Display cover:* Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); *Base:* Magnesium alloy
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports unique 2nd battery in Ultrabay Slim *6-cell:* up to 4.8 hr; *6-cell plus Ultrabay battery:* up to 7.9 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel QS57 Express Chipset** One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)

PCIe Mini Card
   Intel 6200[28]
   WWAN upg
 Modem
 Bluetooth™
 Ethernet
 Intel AMT
 Audio support
	Two PCI Express Mini Card slots
	 11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2
	 Wireless WAN upgradable
	 None
	 Bluetooth 2.1 wireless, LED indicator
	 Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1
	 Intel Active Management Technology (iAMT)
	 High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack

Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD
    45K6021
ThinkPlus 4-year LOR 9x5 NBD
    45K6022
ThinkPlus 5-year LOR 9x5 NBD
    45K6024
ThinkPlus 4-year P&L P/U Depot
    45K6023
ThinkPlus 5-year P&L P/U Depot
    45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information

☞ US model announced September 28, 2010; previous models on March 2 or May 4, 2010

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(SN2-7) October 2010

ThinkPad® T410s 2904 (Switchable) - TopSeller (Windows 7)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2904-G2U	i5-520M	2.40	2.93	*4GB*	14.1" WXGA+	2.0M	128G SSD	Intel 6200[28]	WWAN upg	Finger	Blue	3-in-1	vPro	Pro 64	Mar 10
☞ 2904-GEU	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	250G 5400	Intel 6200	WWAN upg		Blue	3-in-1	vPro	Pro 64	May 10
☞ 2904-GFU	i5-540M	2.53	3.06	2GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200	WWAN upg		Blue	3-in-1	vPro	Pro 64	May 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Premiere performance and ultraportability; two spindles*
Processor	**Intel® Core™ i5 processor i5-520M** or **i5-540M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access *Some:* **128GB**[8] Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high *Some:* **250GB** (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Switchable graphics	Dynamic switching between discrete and integrated graphics (user selectable), **Intel HD Graphics** in processor, and **NVIDIA® Quadro® NVS3100M**, PCI Express® x16, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2048x1536 (VGA)@75Hz(integrated) or 85Hz(discrete); 1920x1200@60Hz (single-link DVI-D via cable 45J7915); 2560x1600 (DP)@60Hz
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material	*14.1W" (WxDxH):* 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm *6-cell:* starting at 3.94 lb (1.79kg) *Display cover:* Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); *Base:* Magnesium alloy
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports unique 2nd battery in Ultrabay Slim *6-cell:* up to 4.8 hr; *6-cell plus Ultrabay battery:* up to 7.9 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel QS57 Express Chipset** None 3-in-1 reader (MMC, SD, SDHC) Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots 11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information

☞ US models announced May 4, 2010; previous model on March 30, 2010

ThinkPad® T410s 2904 (Optimus) - TopSeller (Windows 7)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2904-HDU	i5-560M	2.66	3.20	*4GB*	14.1" WXGA+	2.0M	128G SSD	Intel 6200[28]	WWAN upg	Finger	Blue	3-in-1	vPro	Pro 64	Sep 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *This model has a depot repair service 3-year limited warranty*
- *This system is Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Premiere performance and ultraportability; two spindles*
Processor	**Intel® Core™ i5 processor i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**4GB** std / **8GB** max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access **128GB**[8] Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Optimus graphics[37]	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, **Intel HD Graphics** in processor, and **NVIDIA Quadro® NVS3100M**, PCI Express® x16, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915); 2560x1600 (DP)@60Hz
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material	*14.1W" (WxDxH):* 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm *6-cell:* starting at 3.94 lb (1.79kg) *Display cover:* Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); *Base:* Magnesium alloy
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports unique 2nd battery in Ultrabay Slim *6-cell:* up to 4.7 hr; *6-cell plus Ultrabay battery:* up to 7.8 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel QS57 Express Chipset** None 3-in-1 reader (MMC, SD, SDHC) Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
US model announced September 28, 2010

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(SN2-12) December 2010

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2901-ARU	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	250G 5400	11b/g/n	WWAN upg	Finger	Blue	Express	No	Pro 64	Aug 10
2901-ASU	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200[28]	WWAN upg	Finger	Blue	Express	No	Pro 64	Aug 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These system are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Premiere performance and ultraportability; two spindles*
Processor	**Intel® Core™ i3 processor i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access *Some:* **128GB**[8] Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high *Some:* **250GB** (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material	*14.1W" (WxDxH):* 13.3" x 9.5" x 0.83"–1.02"; 337 x 241.5mm x 21.1–25.9mm *6-cell:* starting at 3.94 lb (1.79kg) *Display cover:* Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); *Base:* Magnesium alloy
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports unique 2nd battery in Ultrabay Slim *6-cell:* up to 4.8 hr; *6-cell plus Ultrabay battery:* up to 7.9 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel QS57 Express Chipset** One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Client Security Solution™
- Fingerprint Software
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Presentation Director
- ThinkVantage Productivity Center
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
US models announced August 3, 2010

ThinkPad® T410si 2904 (TopSeller) - Windows 7 (August 2010)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2904-H6U	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	250G	5400	11b/g/n	WWAN upg		Blue	Express	No	Pro 64	Aug 10
2904-H7U	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	160G	SSD	Intel 1000	WWAN upg	Finger	Blue	Express	No	Pro 64	Aug 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Premiere performance and ultraportability; two spindles*
Processor	**Intel® Core™ i3 processor i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access *Some:* **160GB**[8] Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high *Some:* **250GB** (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	**14.1"** (358mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material	*14.1W" (WxDxH):* 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm *6-cell:* starting at 3.94 lb (1.79kg) *Display cover:* Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); *Base:* Magnesium alloy
Battery - type Battery - life[10]	Lithium Ion **6-cell**, supports unique 2nd battery in Ultrabay Slim *6-cell:* up to 4.8 hr; *6-cell plus Ultrabay battery:* up to 7.9 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel QS57 Express Chipset** One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced August 3, 2010

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	*ann 06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	*ann 06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	*ann 06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	*ann 06/23/09*
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	*ann 06/23/09*

Ultrabay Slim 9.5mm
Serial ATA Hard Drive Bay Adapter III	43N3412	*ann 06/23/09*
DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s	43N3292	*ann 08/03/10*
DVD Burner Ultrabay Slim Drive II SATA 1.5G/s	43N3229	*ann 06/23/09*
Ultrabay Slim Blu-ray Burner II (SATA)	43N3230	*ann 06/23/09*

Storage and removable storage
1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm)	43N3418	*ann 06/23/09*
500GB Disk SATA 3.0Gb/s (7200 rpm)[51]	43N3423	*ann 01/07/10*

[51] Can be used with *Serial ATA Hard Drive Bay Adapter III 43N3412* in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8"(2.5" cover)[49]	43N3406	*ann 08/26/08*
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)[49]	43N3417	*ann 06/23/09*

[49] Can be used as the main HDD or
with *Serial ATA Hard Drive Bay Adapter III 43N3412* in Ultrabay
via the removable adaptive cover provided with the drive

USB 2.0 Portable 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

Wireless WAN (Mini PCI Express)
ThinkPad Gobi™ 2000 Broadband Option	78Y1399	*ann 01/07/10*
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	*ann 01/07/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	*ann 05/12/09*
USB Port Replicator with Digital Video	45K1610	*ann 07/28/09*
ThinkPad Port Replicator Series 3	433610W	*ann 06/23/09*
ThinkPad Mini Dock Series 3	433710U	*ann 06/23/09*
ThinkPad Mini Dock Plus Series 3	433810U	*ann 06/23/09*
ThinkPad Mini Dock Plus Series 3 - Mobile WS	433820U	*ann 01/07/10*

Keyboard
TrackPoint Cap Collection	73P2698	*ann 12/16/03*
USB Numeric Keypad	33L3225	*ann 05/01/00*
Preferred Pro USB Keyboard	73P5220	*ann 06/21/05*
Enhanced Performance USB Keyboard	73P2620	*ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*

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

Mouse
Lenovo Optical Mouse (USB)	06P4069	*ann 05/21/03*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
ThinkPad USB Laser Mouse	57Y4635	*ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	*ann 08/27/02*
ThinkPad Travel Mouse (USB, Optical)	31P7410	*ann 06/04/02*
ThinkPad Bluetooth Laser Mouse	41U5008	*ann 01/22/08*

Multimedia
ThinkPad In-Ear Headphones	57Y4488	*ann 01/07/10*

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

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

Batteries
ThinkPad Battery 59+ (6-cell)	51J0497	*ann 06/23/09*
ThinkPad Battery 42 (3-cell, bay)[43]	57Y4536	*ann 08/25/09*

[43] Used in Ultrabay Slim bay.
ThinkPad External Battery Charger	40Y7625	*ann 09/20/05*

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45]	40Y7696	*ann 01/05/06*

[45] Only compatible with the integrated graphics models.
ThinkPad 90W AC Adapter	40Y7659	*ann 09/20/05*
Lenovo Power Hub	57Y4600	*ann 09/07/10*
90W Ultraslim AC/DC Combo Adapter	41R4493	*ann 09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	*ann 12/18/07*
•Generic Micro USB charge tip (L18)	41R4490	*ann 01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
Up to 14" widescreen models:
ThinkPad 14W Case Sleeve	57Y4294	*ann 03/16/10*

Up to 15.4" widescreen models:
ThinkPad 15W Case Sleeve	51J0477	*ann 08/18/09*
Lenovo Business Messenger Case	51J0475	*ann 08/18/09*
Lenovo Messenger Max	41U5253	*ann 05/01/07*
Lenovo Performance BackPack	41U5254	*ann 05/01/07*
ThinkPad Business Topload Case	43R2476	*ann 05/13/08*
ThinkPad Business Backpack	43R2482	*ann 05/13/08*
ThinkPad Deluxe Expander Case	43R2478	*ann 05/13/08*
ThinkPad Executive Leather Case	43R2480	*ann 05/13/08*

Up to 15.6" widescreen models:
Wenger Backpack for Lenovo	57Y4271	*ann 01/07/10*
Wenger Slim Case for Lenovo	57Y4272	*ann 01/07/10*
Wenger Deluxe Slim Case for Lenovo	57Y4273	*ann 01/07/10*

More information at **www.lenovo.com/support/cases**

Monitors
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*

www.lenovo.com/support/thinkpad/optimus-monitors

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
DisplayPort to Single-link DVI-D Cable	45J7915	*ann 08/05/08*
ThinkVision USB Soundbar	40Y7616	*ann 08/23/05*
ThinkVision Soundbar	45K1263	*ann 09/16/08*
Kensington MicroSaver Cable Lock	73P2582	*ann 12/29/03*
Kensington Twin Head Cable Lock	45K1620	*ann 09/30/08*
Lenovo Security Cable Lock	57Y4303	*ann 08/24/10*
Lenovo Easy Reach Monitor Stand	55Y9258	*ann 09/22/09*

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad T510

Lenovo ThinkPad T510

ThinkPad Mini Dock Plus Series 3
433810U

ThinkPad Battery 27++ (9-cell, slice)
57Y4545

ThinkPad triple external monitor configuration
using NVIDIA's Optimus technology

Lenovo ThinkPad T510

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
4313-28U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G	5400	DVD±RW	11b/g/n	None	None	None	6	No	Pro 32	Jan 10
☞ 4313-CTU	i5-560M	2.66	3.20	2GB	15.6" HD	2.0M	320G	7200	DVD±RW	11b/g/n	None	None	None	6	No	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-520M** or **i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**15.6"** (396mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*15.6W" (WxDxH):* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **6-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 6.2 hr; *9-cell:* up to 10.4 hr; *9-cell plus Slice battery:* up to 20.8 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92[6] modem None Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD
　45K5968
ThinkPlus 2-year LOR 9x5 NBD
　45K5969
ThinkPlus 3-year LOR 9x5 NBD
　45K5970
ThinkPlus 4-year LOR 9x5 NBD
　45K5973
ThinkPlus 5-year LOR 9x5 NBD
　45K5975
ThinkPlus 2-year P&L P/U Depot
　45K5971
ThinkPlus 3-year P&L P/U Depot
　45K5972
ThinkPlus 4-year P&L P/U Depot
　45K5974
ThinkPlus 5-year P&L P/U Depot
　45K5976
Post-warranty annual maintenance agreements at
　lenovo.com/thinkplus/warranty

See footnotes for important warranty information

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ThinkPad® T510 4313 (TopSeller) - Windows 7 (January 2011)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Camera	Disk SATA GB[8] rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat-tery cells	Intel vPro	Preload	Avail date
4313-J6U	i5-480M	2.66	2.93	2GBx1 1066	15.6" HD	2.0M	320G 7200	DVD±RW	Intel 1000	WWAN upg	6	No	Pro 64	Jan 11
4313-J8U	i5-480M	2.66	2.93	4GBx1 1333	15.6" HD+	2.0M	320G 7200	DVD±RW	Intel 1000	WWAN upg	6	No	Home P 64	Jan 11

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-480M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz or PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display	*Some:* **15.6"** (396mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (396mm) **HD+ (1600x900) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*15.6W" (WxDxH):* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **6-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 6.2 hr; *9-cell:* up to 10.4 hr; *9-cell plus Slice battery:* up to 20.8 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable 56K V.92[6] modem None Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
4314-36U	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	320G	7200	WiMAX	WWAN upg	Finger	Blue	6	vPro	Pro 32	Jan 10
4314-2JU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	250G	5400	11b/g/n	WWAN upg		Blue	6		Pro 32	Jan 10
4314-9BU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	160G	7200	Intel 6200[28]	WWAN upg		Blue	9	vPro	Pro 64	May 10
4314-C5U	i5-540M	2.53	3.06	2GBx1 1066	15.6" HD	160G	SSD	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Jul 10
4314-DDU	i5-560M	2.66	3.20	2GBx1 1066	15.6" HD	320G	7200	Intel 6200	WWAN upg		Blue	6	vPro	Pro 64	Sep 10
☞ 4314-DPU	i7-620M	2.66	3.33	4GBx1 1333	15.6" HD+	500G	7200	Intel 1000	WWAN upg		Blue	6		Pro 64	Jan 11

- ***These small and medium business (SMB) models are part of the US TopSeller™ Program***
- ***These models have a depot repair service 3-year limited warranty***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-520M, i5-540M, or i5-560M** with **dual-core**, or **Intel Core i7 processor i7-620M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; *i5-520M/i5-540M/i5-560M:* 3MB cache; *i7-620M:* 4MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz or PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access *Some:* **160GB**[8] Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high *Some:* **160GB** (7200 rpm), **250GB** (5400 rpm), **320GB** (7200 rpm), or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display Camera	*Some:* **15.6"** (396mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (396mm) **HD+ (1600x900) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*15.6W"* *(WxDxH):* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **6-cell** or **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery *6-cell:* up to 6.2 hr; *9-cell:* up to 10.4 hr; *9-cell plus Slice battery:* up to 20.8 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card 11b/g/n Intel 1000 Intel 6200[28] WiMAX WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 *Some:* 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX Wireless WAN upgradable 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator *Non-vPro model:* Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 *vPro model:* Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr - battery depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD
45K6021
ThinkPlus 4-year LOR 9x5 NBD
45K6022
ThinkPlus 5-year LOR 9x5 NBD
45K6024
ThinkPlus 4-year P&L P/U Depot
45K6023
ThinkPlus 5-year P&L P/U Depot
45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced January 11, 2011; previous models on January 7, May 4, July 6, or September 28, 2010

ThinkPad® T510 4314 (Optimus) - TopSeller (Windows 7)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
4314-DEU	i5-560M	2.66	3.20	2GB	15.6" HD+	2.0M	320G	7200	Intel 6200[28]	WWAN upg	None	Blue	*9*	vPro	Pro 64	Sep 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *This model has a depot repair service 3-year limited warranty*
- *This system is Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Premiere performance; two spindles*
Processor	**Intel® Core™ i5 processor i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**15.6"** (396mm) **HD+ (1600x900) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Optimus graphics[37]	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, **Intel HD Graphics** in processor, and **NVIDIA Quadro® NVS3100M**, PCI Express® x16, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*15.6W" (WxDxH):* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 6.1 hr; *9-cell:* up to 10.3 hr; *9-cell plus Slice battery:* up to 20.7 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**3-years**/1-yr - battery depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US model announced September 28, 2010

ThinkPad® T510 4313 (Discrete) - TopSeller (Windows 7)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
4313-29U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G	7200	DVD±RW	11b/g/n	None	None	Blue	*9*	No	Pro 32	Feb 10

- ***This small and medium business (SMB) model is part of the US TopSeller™ Program***
- ***This system is Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-520M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**15.6"** (396mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro® NVS3100M**, PCI Express® x16, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*15.6W" (WxDxH):* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 4.7 hr; *9-cell:* up to 7.8 hr; *9-cell plus Slice battery:* up to 15.6 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 32

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD
    45K5968
ThinkPlus 2-year LOR 9x5 NBD
    45K5969
ThinkPlus 3-year LOR 9x5 NBD
    45K5970
ThinkPlus 4-year LOR 9x5 NBD
    45K5973
ThinkPlus 5-year LOR 9x5 NBD
    45K5975
ThinkPlus 2-year P&L P/U Depot
    45K5971
ThinkPlus 3-year P&L P/U Depot
    45K5972
ThinkPlus 4-year P&L P/U Depot
    45K5974
ThinkPlus 5-year P&L P/U Depot
    45K5976
Post-warranty annual maintenance agreements at
    lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US model announced January 7, 2010

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(KN1-4) January 2010

ThinkPad® T510 4314 (Discrete) - TopSeller (Windows 7)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
4314-2MU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G 5400	Intel 1000	WWAN upg			9		Pro 32	Feb 10
4314-2PU	i5-540M	2.53	3.06	*4GB*	15.6" HD+	2.0M	500G 7200	Intel 6200[28]	WWAN upg	Finger	Blue	9	vPro	Pro 32	Feb 10
4314-7QU	i5-520M	2.40	2.93	*4GB*	15.6" HD+	2.0M	320G 7200	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Mar 10
4314-7RU	i5-540M	2.53	3.06	*4GB*	15.6" HD+	2.0M	128G SSD	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Mar 10
4314-9CU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	160G 7200	Intel 6200	WWAN upg		Blue	9	vPro	Pro 64	May 10
4314-9DU	i5-540M	2.53	3.06	2GB	15.6" HD+	2.0M	160G 7200	Intel 6200	WWAN upg		Blue	9	vPro	Pro 64	May 10
☞ 4314-C4U	i5-540M	2.53	3.06	2GB	15.6" HD	2.0M	160G SSD	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Jul 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a depot repair service 3-year limited warranty*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i5 processor i5-520M** or **i5-540M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access *Some:* **128GB**[8] or **160GB** Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high *Some:* **160GB** (7200 rpm), **250GB** (5400 rpm), **320GB** (7200 rpm), or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive
Widescreen display	*Some:* **15.6"** (396mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (396mm) **HD+ (1600x900) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro® NVS3100M**, PCI Express® x16, **512MB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*15.6W"* *(WxDxH):* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 4.7 hr; *9-cell:* up to 7.8 hr; *9-cell plus Slice battery:* up to 15.6 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 1000 Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92[6] modem *Some:* Bluetooth 2.1 wireless, LED indicator *Non-vPro model:* Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 *vPro model:* Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant *Some:* UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr - battery depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

90-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced July 6, 2010; previous models on January 7, March 2, or May 4, 2010

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload	Avail date
4313-C2U	i3-370M	2.40	2GB	15.6" HD	2.0M	250G	5400	DVD±RW	Intel 1000	None	Finger	Blue	6	No	Pro 64	Jul 10
4313-C3U	i3-370M	2.40	2GB	15.6" HD	2.0M	320G	7200	DVD±RW	Intel 1000	None	Finger	Blue	6	No	Pro 64	Jul 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning Processor	*Premiere performance; two spindles* **Intel® Core™ i3 processor i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**15.6"** (396mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*15.6W" (WxDxH):* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **6-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 6.2 hr; *9-cell:* up to 10.4 hr; *9-cell plus Slice battery:* up to 20.8 hr
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD
45K5968
ThinkPlus 2-year LOR 9x5 NBD
45K5969
ThinkPlus 3-year LOR 9x5 NBD
45K5970
ThinkPlus 4-year LOR 9x5 NBD
45K5973
ThinkPlus 5-year LOR 9x5 NBD
45K5975
ThinkPlus 2-year P&L P/U Depot
45K5971
ThinkPlus 3-year P&L P/U Depot
45K5972
ThinkPlus 4-year P&L P/U Depot
45K5974
ThinkPlus 5-year P&L P/U Depot
45K5976
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced July 6, 2010

Lenovo® ThinkPad W510

Lenovo ThinkPad W510

ThinkPad Mini Dock Plus Series 3 - Mobile WorkStation
433820U

ThinkPad 135W AC Adapter
55Y9317

Lenovo ThinkPad W510

Lenovo ThinkPad W510

ThinkPad® W510 4319 (TopSeller) - Windows 7

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Multi-Touch Screen	Disk SATA GB[8]	rpm	RAID	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Color calib	Intel vPro	Preload	Avail date
4319-2NU	i7-720QM	1.60	2.80	2GBx1 1066	15.6" HD+		320G	7200	None	Intel 6300[28]	WWAN upg			vPro	Pro 32	Jan 10
4319-2PU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" FHD		320G	7200	None	Intel 6300	WWAN upg			vPro	Pro 64	Jan 10
✂ 4319-2QU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" FHD		320G	7200	None	Intel 6300	Gobi 2000			vPro	Pro 64	Jan 10
4319-2RU	i7-820QM	1.73	3.06	2GBx2 1066	15.6" FHD	*Multi*	320G	7200	None	Intel 6300	WWAN upg		X-Rite	vPro	Pro 64	Jan 10
4319-4BU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" FHD		320G	7200	None	Intel 6300	Gobi 2000	AT&T[23]		vPro	Pro 64	Feb 10
4319-4MU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" HD+		320G	7200	None	Intel 6300	Gobi 2000	AT&T		vPro	Pro 64	Mar 10
☞ 4319-64U	i7-720QM	1.60	2.80	2GBx1 1066	15.6" HD+		320G	7200	None	Intel 6300	WWAN upg			vPro	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *Power-packed engineering with Open GL graphics and ISV certifications*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mobile workstation; two spindles*
Processor	**Intel® Core™ i7 processor i7-720QM** or **i7-820QM** with **quad-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; *i7-720QM:* 6MB cache; *i7-820QM:* 8MB cache
Memory	**2GB** or **4GB** std / 16GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, four 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™
Widescreen display	*Some:* **15.6"** (396mm) **HD+ (1600x900) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut *Some:* **15.6"** (396mm) **FHD (1920x1080) color**, anti-glare, **LED backlight**, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut *Some:* **15.6"** (396mm) **FHD (1920x1080) color**, anti-glare, **LED backlight**, 242 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut, **MultiTouch** (touchscreen supports two-finger touch)
Color calibration Camera	*Some:* huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro® FX880M**, PCI Express® x16, **1GB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions (WxDxH)[3]	*HD+:* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *FHD:* 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm *FHD MultiTouch:* 14.68" x 9.65" x 1.35-1.57"; 372.8mm x 245.1mm x 34.3-39.8mm
Weight[2] Case material Battery - type Battery - life[10]	*6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg) *Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic Lithium Ion **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery at bottom *6-cell:* up to 3.0 hr; *9-cell:* up to 5.1 hr; *9-cell plus slice battery:* up to 10.5 hr
Chipset ExpressCard/34 Smart Card Read Multicard Reader Ports	**Mobile Intel QM57 Express Chipset** One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 6300[28] WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots 11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 *Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	*Some:* AT&T®, contract required with service provider 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)
- huey™PRO Monitor Color Correction by Pantone®/X-Rite® (color calibration models)

Supports ThinkVantage® technologies

135-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR[24] 9x5 NBD 41C9176
ThinkPlus 4-year LOR 9x5 NBD 41C9177
ThinkPlus 5-year LOR 9x5 NBD 41C9179
ThinkPlus 4-year P&L P/U Depot 41C9178
ThinkPlus 5-year P&L P/U Depot 41C9180
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced September 28, 2010; previous models on January 7, February 2, or March 2, 2010
✂ US model withdrawn effective February 2010

ThinkPad® W510 4319 (TopSeller) - Windows 7 (July 2010)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Disk SATA GB[8] rpm	RAID	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Color calib	Bat-tery cells	Intel vPro	Preload	Avail date
4319-5RU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD+	320G 7200	None	Intel 6300[28]	WWAN upg	None	**9**		Pro 64	Jul 10
4319-5SU	i7-620M	2.66	3.33	2GBx2 1066	15.6" FHD	320G 7200	None	Intel 6300	WWAN upg	None	**9**		Pro 64	Jul 10
☞ 4319-5XU	i5-560M	2.66	3.20	4GBx1 1333	15.6" HD+	320G 7200	None	Intel 6200[28]	WWAN upg	None	6	vPro	Pro 64	Sep 10
☞ 4319-65U	i5-560M	2.66	3.20	2GBx1 1066	15.6" HD+	320G 7200	None	Intel 6300	WWAN upg	None	**9**	vPro	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *Power-packed engineering with Open GL graphics and ISV certifications*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mobile workstation; two spindles*
Processor	**Intel® Core™ i5 processor i5-520M** or **i5-560M** with **dual-core**, or **Intel Core i7 processor i7-620M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; *i5-520M/i5-560M:* 3MB cache; *i7-620M:* 4MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz or PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™
Widescreen display	*Some:* **15.6"** (396mm) **HD+ (1600x900) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut *Some:* **15.6"** (396mm) **FHD (1920x1080) color**, anti-glare, **LED backlight**, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut
Color calibration	None
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro® FX880M**, PCI Express® x16, **1GB** memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass
Touchpad	UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions
Dimensions (WxDxH)[3]	*HD+:* 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm *FHD:* 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm
Weight[2]	*6-cell:* starting at 5.66 lb (2.57kg); *9-cell:* starting at 6.01 lb (2.72kg)
Case material	*Display cover:* Glass-fiber reinforced plastic; *Base:* Carbon-fiber reinforced plastic
Battery - type	Lithium Ion **6-cell** or **9-cell**, supports optional Slice battery (57Y4545) as 2nd battery
Battery - life[10]	*6-cell:* up to 3.0 hr; *9-cell:* up to 5.1 hr; *9-cell plus slice battery:* up to 10.5 hr
Chipset	**Mobile Intel QM57 Express Chipset**
ExpressCard/34	One slot (ExpressCard/34)
Smart Card Read	None
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)
Ports	Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 6200[28] Intel 6300[28] WWAN upg	Two PCI Express Mini Card slots *Some:* 11a/b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 Wireless WAN upgradable
Modem	56K V.92[6] modem
Bluetooth™	Bluetooth 2.1 wireless, LED indicator
Ethernet	*Non-vPro model:* Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 *vPro model:* Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1
Intel AMT	Intel Active Management Technology (iAMT)
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	Trusted Platform Module, TCG 1.2-compliant
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

135-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD 41C9176
ThinkPlus 4-year LOR 9x5 NBD 41C9177
ThinkPlus 5-year LOR 9x5 NBD 41C9179
ThinkPlus 4-year P&L P/U Depot 41C9178
ThinkPlus 5-year P&L P/U Depot 41C9180
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US models announced September 28, 2010; previous models on July 13, 2010

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM   55Y3706 *ann 06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25Pack)   57Y4385 *ann 06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM   55Y3707 *ann 06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25Pack)   57Y4386 *ann 06/23/09*
4GB PC3-8500 DDR3 Low-Halogen SODIMM   55Y3708 *ann 06/23/09*
1GB PC3-10600 DDR3 L-H SODIMM   55Y3709 *ann 03/02/10*
1GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y4415 *ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM   55Y3710 *ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y4416 *ann 03/02/10*
4GB PC3-10600 DDR3 L-H SODIMM   55Y3711 *ann 03/02/10*

Ultrabay Slim 9.5mm
Serial ATA Hard Drive Bay Adapter III[48]   43N3412 *ann 06/23/09*

Ultrabay Enhanced 12.7mm
DVD Burner Ultrabay Enhanced II SATA   43N3294 *ann 01/07/10*
Blu-ray Reader / DVD Burner Ultrabay Enh   43N3295 *ann 01/07/10*

Storage and removable storage
160GB Disk SATA 3.0Gb/s (7200 rpm)[41]   41N5737 *ann 10/16/07*
250GB Disk SATA 3.0Gb/s (5400 rpm)[41]   43R8152 *ann 01/15/08*
250GB Disk FDE SATA 3.0Gb/s (7200 rpm)[41]   43N3410 *ann 01/20/10*
320GB Disk SATA 3.0Gb/s (5400 rpm)[41]   43N3403 *ann 08/05/08*
320GB Disk SATA 3.0Gb/s (7200 rpm)[41]   43N3411 *ann 01/20/10*
500GB Disk SATA 3.0Gb/s (7200 rpm)[41]   43N3423 *ann 01/07/10*
   [41] Can be used as the main HDD or
   with *Serial ATA Hard Drive Bay Adapter III 43N3412* in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)   43N3406 *ann 08/26/08*
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)   43N3417 *ann 06/23/09*
ThinkPad 160GB Intel X25-M SSD[41]   43N3435 *ann 06/22/10*

USB 2.0 Portable 320GB Hard Disk   45K1689 *ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk   45K1690 *ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk   43R2018 *ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk   43R2019 *ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive   57Y4400 *ann 01/07/10*
USB 2.0 Portable DVD Burner   43N3264 *ann 01/05/10*

Wireless WAN (Mini PCI Express)
Only WWAN upgradable models:
ThinkPad Gobi™ 2000 Broadband Option   78Y1399 *ann 01/07/10*
ThinkPad AT&T® Gobi 2000 Broadband Option 78Y1398 *ann 01/07/10*

ThinkPad Expansion
T510:
ThinkPad Port Replicator Series 3   433610W *ann 06/23/09*
ThinkPad Mini Dock Series 3   433710U *ann 06/23/09*
ThinkPad Mini Dock Plus Series 3   433810U *ann 06/23/09*

All:
Lenovo® Essential Notebook Stand   45J9292 *ann 05/12/09*
USB Port Replicator with Digital Video   45K1610 *ann 07/28/09*
ThinkPad Mini Dock Plus Series 3 - Mobile WS 433820U *ann 01/07/10*

Keyboard
TrackPoint Cap Collection   73P2698 *ann 12/16/03*
USB Numeric Keypad   33L3225 *ann 05/01/00*
Preferred Pro USB Keyboard   73P5220 *ann 06/21/05*
Enhanced Performance USB Keyboard   73P2620 *ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]   57Y4700 *ann 09/15/09*
   [52] Wireless via 2.4GHz technology using a micro-size USB receiver.
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*

Mouse
Lenovo Optical Mouse (USB)   06P4069 *ann 05/21/03*
Lenovo Laser Mouse (USB)   41U3074 *ann 01/23/07*
ThinkPad USB Laser Mouse   57Y4635 *ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)   31P7405 *ann 08/27/02*
ThinkPad Travel Mouse (USB, Optical)   31P7410 *ann 06/04/02*
ThinkPad Bluetooth Laser Mouse   41U5008 *ann 01/22/08*

Multimedia
ThinkPad In-Ear Headphones   57Y4488 *ann 01/07/10*

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

Batteries
ThinkPad Battery 55+ (6-cell)   57Y4185 *ann 03/30/10*
ThinkPad Battery 55++ (9-cell)   57Y4186 *ann 03/30/10*
ThinkPad Battery 27++ (9-cell, slice)[43]   57Y4545 *ann 01/07/10*
   [43] To be used along with system battery for all-day computing;
   attaches under ThinkPad using docking connector
   (not supported when using Series 3 Port Replicator or Docks).
ThinkPad External Battery Charger   40Y7625 *ann 09/20/05*

More information at **www.lenovo.com/alldaycomputing**

T510:
ThinkPad 65W AC Adapter[45]   40Y7696 *ann 01/05/06*
   [45] Only compatible with the integrated graphics models.
ThinkPad 90W AC Adapter   40Y7659 *ann 09/20/05*
Lenovo Power Hub   57Y4600 *ann 09/07/10*
90W Ultraslim AC/DC Combo Adapter   41R4493 *ann 09/22/09*

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)   41R4481 *ann 12/18/07*
•Generic Micro USB charge tip (L18)   41R4490 *ann 01/06/09*

More information at **www.lenovopowertips.com**

W510:
ThinkPad 135W AC Adapter   55Y9317 *ann 01/07/10*

More info at **www.lenovo.com/support/poweradapters**

Carrying Cases
Up to 15.6" widescreen models:
ThinkPad 15W Case Sleeve   51J0477 *ann 08/18/09*
Lenovo Business Messenger Case   51J0475 *ann 08/18/09*
Lenovo Messenger Max   41U5253 *ann 05/01/07*
Lenovo Performance BackPack   41U5254 *ann 05/01/07*
ThinkPad Business Backpack   43R2482 *ann 05/13/08*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor   5453HB1 *ann 06/10/10*
ThinkVision® L1711p 17" Monitor   5047HB2 *ann 10/20/09*
ThinkVision L1900p 19" Monitor   4431HE1 *ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor   2448HB6 *ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor   2572HB6 *ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor   2572HD6 *ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor   2578HB6 *ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor   4014HB6 *ann 06/10/10*

www.lenovo.com/support/thinkpad/optimus-monitors

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter   45K5296 *ann 05/12/09*
Lenovo DisplayPort to VGA Monitor Cable   57Y4393 *ann 08/04/09*
DisplayPort to Single-link DVI-D Cable   45J7915 *ann 08/05/08*
ThinkVision USB Soundbar   40Y7616 *ann 08/23/05*
ThinkVision Soundbar   45K1263 *ann 09/16/08*
Kensington MicroSaver Cable Lock   73P2582 *ann 12/29/03*
Kensington Twin Head Cable Lock   45K1620 *ann 09/30/08*
Lenovo Security Cable Lock   57Y4303 *ann 08/24/10*
Lenovo Easy Reach Monitor Stand   55Y9258 *ann 09/22/09*
   [46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad W701

Lenovo ThinkPad W701 with
ThinkPad W700 Mini Dock 2.0
57Y4345

ThinkPad W700 Mini Dock 2.0
57Y4345

ThinkPad Battery 37++ (9-cell)
45J7914

Lenovo ThinkPad W701

Lenovo ThinkPad W701

ThinkPad® W701 2500 (TopSeller) - Windows 7

Type-model	Processor	Memory (MHz)	Widescreen display	Discrete graphics	Disk(s) SATA GB[8] rpm		RAID	SATA optical	PCIe Mini Card 802.11	Card slot	Color calib/ Digitizer	Power Adapter (watt)	Intel vPro	Preload	Avail date
2500-3AU	i7-720QM	2GBx1 1066	17" WXGA+	FX2800M	1x320G	7200	No	DVD±RW	Intel 6300[28]	Exp 54		230W	vPro	Pro 64	Mar 10
2500-3BU	i7-820QM	2GBx2 1066	17" WUXGA	FX2800M	1x320G	7200	No	DVD±RW	Intel 6300	Smart	Yes	230W	vPro	Pro 64	Mar 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mobile workstation; three spindles*
Processor	**Intel® Core™ i7 processor i7-720QM** or **i7-820QM** with **quad-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; *i7-720QM:* 1.60GHz, 6MB cache; *i7-820QM:* 1.73GHz, 8MB cache
Memory	**2GB** or **4GB** std / 16GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, four 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Enhancd SATA disk(s)	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high One disk, **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display	*Some:* **17.0"** (433.0mm) **WXGA+ (1440x900) color**, anti-glare, **LED backlight**, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, 45% color gamut *Some:* **17.0"** (433.0mm) **WUXGA (1920x1200) color**, anti-glare, **RGB LED backlight**, 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut
Color calibration	*Some:* huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro® FX2800M**, PCI Express® x16, **1GB** memory supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort or dual-link DVI-D)@60Hz; 2048x1536 (VGA)@85Hz
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard *Some:* Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*9-cell 17W" (WxDxH):* 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm *9-cell:* starting at 8.97 lb (4.07kg) *Top:* magnesium alloy; *Bottom:* Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion **9-cell** *9-cell:* up to 2.0 hr
Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	**Mobile Intel QM57 Express Chipset** One ExpressCard/34 *Some:* [/54] One ExpressCard/34 or ExpressCard/54 None *Some:* Smart Card Reader 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 6300[28] Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- Fingerprint Software
- ThinkVantage Toolbox
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® WinDVD® (DVD±RW)

ISV software certifications

Supports ThinkVantage® technologies

ThinkPad W700 Mini Dock 2.0

Provides desktop expansion and cable mgmt for W700 and W701 Series

Features:
- Security key lock
- Security cable lock slot
- External monitor ports
  − Analog VGA DB-15
  − Dual-link DVI-D
  − DisplayPort
- Four USB 2.0 ports
- eSATA port
- Gigabit ethernet port
- Microphone in and headphone out
- S/PDIF (RCA coaxial digital out)
- Requires 170 or 230 watt AC adptr

230-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 3-year LOR[24] 9x5 NBD
41C9176
ThinkPlus 4-year LOR 9x5 NBD
41C9177
ThinkPlus 5-year LOR 9x5 NBD
41C9179
ThinkPlus 4-year P&L P/U Depot
41C9178
ThinkPlus 5-year P&L P/U Depot
41C9180
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced February 23, 2010

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(NIC3-1) February 2010

ThinkPad®

Lenovo® ThinkPad W701ds

Lenovo ThinkPad W701ds

Lenovo ThinkPad W701ds

ThinkPad 17W Business Topload Case
43R9117

ThinkPad 230W AC Adapter
55Y9333

Type-model	Processor	Memory (MHz)	Primary display	Secondary display	Camera	Discrete graphics	Disk(s) SATA GB[8] rpm	RAID	Color calib/ Digitizer	Power Adapter (watt)	Intel vPro	Preload	Avail date
2500-2XU	i7-820QM	4GBx2 1333	17" WUXGA	10.6" WXGA		FX3800M	128G SSD + 320G 5400	None	Yes	230W	vPro	Pro 64	Mar 10
2500-3CU	i7-820QM	2GBx2 1066	17" WUXGA	10.6" WXGA	2.0M	FX3800M	500G 7200	None	Yes	230W	vPro	Pro 64	Mar 10

- *ds = dual screen*
- *17" widescreen ThinkPad workstation with two RAID-capable disks*
- *Select models include integrated color calibration and digitizer on palm rest*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mobile workstation; three spindles*
Processor	**Intel® Core™ i7 processor i7-820QM** with **quad-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; 1.73GHz, 8MB cache
Memory	**4GB** or **8GB** std / **16GB** max[7] / PC3-8500 1066MHz or PC3-10600 1333MHz **DDR3**, non-parity, dual-channel capable, four 204-pin SO-DIMM sockets
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high *Some:* One disk, **500GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ (APS) *Some:* Two disks, **128GB** Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high and **320GB** (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS *All:* removable, upgradable, supports three disks max, Shock Mounted Hard Drive
Displays	*Primary:* **17.0"** (433.0mm) **WUXGA (1920x1200) color**, anti-glare, **RGB LED backlight**, 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut; *Secondary:* **10.6"** (268.7mm) **WXGA (768x1280) color**, portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size
Color calibration	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest
Camera	*Some:* camera on top of screen, 2.0-megapixel, fixed focus
Discrete graphics	**NVIDIA® Quadro® FX3800M**, PCI Express® x16, **1GB** memory, supports dual independent display; *Maximum external resolution:* 2560x1600 (DisplayPort or dual-link DVI-D)@60Hz; 2048x1536 (VGA)@85Hz
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case material Battery - type Battery - life[10]	*9-cell 17W" (WxDxH):* 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm *9-cell:* starting at 11.43 lb (5.23kg) *Top:* magnesium alloy; *Bottom:* Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion **9-cell** *9-cell:* up to 2.0 hr
Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card read Multicard reader Ports	**Mobile Intel QM57 Express Chipset** One ExpressCard/34 None [CF] One Type I slot None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor[11] (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)
PCIe Mini Card Intel 6300[28] Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software
- ThinkVantage Toolbox
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)

ISV software certifications

Supports ThinkVantage® technologies

ThinkPad W700 Mini Dock 2.0

Provides desktop expansion and cable mgmt for W700 and W701 Series

Features:
- Security key lock
- Security cable lock slot
- External monitor ports
  – Analog VGA DB-15
  – Dual-link DVI-D
  – DisplayPort
- Four USB 2.0 ports
- eSATA port
- Gigabit ethernet port
- Microphone in and headphone out
- S/PDIF (RCA coaxial digital out)
- Requires 170 or 230 watt AC adptr

230-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 3-year LOR 9x5 NBD
41C9176
ThinkPlus 4-year LOR 9x5 NBD
41C9177
ThinkPlus 5-year LOR 9x5 NBD
41C9179
ThinkPlus 4-year P&L P/U Depot
41C9178
ThinkPlus 5-year P&L P/U Depot
41C9180
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	*ann 06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25Pack)	57Y4385	*ann 06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	*ann 06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25Pack)	57Y4386	*ann 06/23/09*
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	*ann 06/23/09*
1GB PC3-10600 DDR3 L-H SODIMM	55Y3709	*ann 03/02/10*
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4415	*ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	*ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	*ann 03/02/10*
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	*ann 03/02/10*

Ultrabay Slim 9.5mm
Serial ATA Hard Drive Bay Adapter III[48]	43N3412	*ann 06/23/09*

  [48] Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm
Blu-ray Reader / DVD Burner Ultrabay Enh	43N3295	*ann 01/07/10*

Storage and removable storage
160GB Disk SATA 3.0Gb/s (7200 rpm)[41]	41N5737	*ann 10/16/07*
250GB Disk SATA 3.0Gb/s (5400 rpm)[41]	43R8152	*ann 01/15/08*
250GB Disk FDE SATA 3.0Gb/s (7200 rpm)[41]	43N3410	*ann 01/20/09*
320GB Disk SATA 3.0Gb/s (5400 rpm)[41]	43N3403	*ann 08/05/08*
320GB Disk SATA 3.0Gb/s (7200 rpm)[41]	43N3411	*ann 01/20/09*
500GB Disk SATA 3.0Gb/s (7200 rpm)[41]	43N3423	*ann 01/07/10*

  [41] Can be used as the main HDD or
    with *Serial ATA Hard Drive Bay Adapter III 43N3412* in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	*ann 08/26/08*
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	*ann 06/23/09*
ThinkPad 160GB Intel X25-M SSD[41]	43N3435	*ann 06/22/10*
USB 2.0 Portable 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	*ann 05/12/09*
USB Port Replicator with Digital Video	45K1610	*ann 07/28/09*
ThinkPad W700 Mini Dock 2.0	57Y4345	*ann 09/29/09*

More information at **www.lenovo.com/support/W700minidock**

Keyboard
TrackPoint Cap Collection	73P2698	*ann 12/16/03*
USB Numeric Keypad	33L3225	*ann 05/01/00*
Preferred Pro USB Keyboard	73P5220	*ann 06/21/05*
Enhanced Performance USB Keyboard	73P2620	*ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*

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

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*

Mouse
Lenovo Optical Mouse (USB)	06P4069	*ann 05/21/03*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
ThinkPad USB Laser Mouse	57Y4635	*ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	*ann 08/27/02*
ThinkPad Travel Mouse (USB, Optical)	31P7410	*ann 06/04/02*
ThinkPad Bluetooth Laser Mouse	41U5008	*ann 01/22/08*

Security
Kensington® MicroSaver® Cable Lock	73P2582	*ann 12/29/03*
Kensington Twin Head Cable Lock	45K1620	*ann 09/30/08*
Lenovo Security Cable Lock	57Y4303	*ann 08/24/10*
USB Gemplus GemPC Smart Card Reader	41N3040	*ann 02/21/06*
ExpressCard Gemplus Smart Card Reader[57]	41N3043	*ann 06/27/06*

  [57] Only compatible with the models having 54mm Express card slot.

Multimedia
ThinkPad In-Ear Headphones	57Y4488	*ann 01/07/10*

Batteries
ThinkPad Battery 37++ (9-cell)	45J7914	*ann 08/12/08*
ThinkPad 230W AC Adapter	55Y9333	*ann 02/23/10*

More information at **www.lenovo.com/alldaycomputing**

Carrying Cases
Up to 17.0" widescreen models:
ThinkPad 17W Business Topload Case	43R9117	*ann 08/12/08*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann 06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann 09/17/08*

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	*ann 08/04/09*
DisplayPort to Single-link DVI-D Cable	45J7915	*ann 08/05/08*
ThinkVision USB Soundbar	40Y7616	*ann 08/23/05*
ThinkVision Soundbar	45K1263	*ann 09/16/08*
Kensington MicroSaver Cable Lock	73P2582	*ann 12/29/03*
Kensington Twin Head Cable Lock	45K1620	*ann 09/30/08*
Lenovo Security Cable Lock	57Y4303	*ann 08/24/10*
Lenovo Easy Reach Monitor Stand	55Y9258	*ann 09/22/09*

  [46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad X100e

Lenovo ThinkPad X100e

Lenovo ThinkPad X100e

Lenovo ThinkPad X100e with 3-cell battery

Lenovo ThinkPad X100e

Lenovo ThinkPad X100e family

ThinkPad® X100e (3508) - TopSeller (Windows 7)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	CCFL or LED	Camera	Integrated graphics	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Blue-tooth	Preload	Avail date
3508-28U	MV-40	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	WWAN upg		black		Home P 32	Jan 10
3508-29U	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black		Pro 32	Jan 10
3508-2AU	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	Gobi 2000	AT&T[23]	black		Pro 32	Jan 10
3508-9BU	L335	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	WWAN upg		black		Home P 32	Mar 10
3508-9CU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black		Pro 32	Mar 10
3508-9DU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		red		Pro 32	Mar 10
3508-9EU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	Gobi 2000		black	Blue	Pro 32	Mar 10
3508-9TU	L335	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	Gobi 2000	AT&T	black		Home P 32	Apr 10
3508-A9U	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black	Blue	Home P 32	Jul 10
3508-AAU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	Gobi 2000	selectable	black		Pro 32	Jul 10
3508-AHU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11a/b/g/n	WWAN upg		black	Blue	Home P 32	Jul 10
☞ 3508-AKU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black		Home P 32	Sep 10
☞ 3508-ALT	MV-40	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	Gobi 2000	selectable	black	Blue	Home P 32	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Entry ultraportable for excellent usability and reliability; one spindle*
Processor	**AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40** with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache or **AMD Athlon Neo X2 Processor for Ultrathin Notebooks L335** with **dual-core**, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache
Memory	**1GB** or **2GB** std / 4GB max[7] / PC2-5300 667MHz **DDR2**, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW	None (use optional USB-based optical drive)
SATA disk	**160GB**[8] (5400 rpm) or **250GB** (5400 rpm) / SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable
Widescreen display	**11.6"** (295mm) **HD (1366x768) TFT color**, anti-glare, **LED backlight**, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio
Camera	Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive
Integrated graphics	**ATI™ Radeon™ HD 3200 graphics**, in M780G, external analog monitor support via VGA DB-15 connector; *Maximum external resolution:* 2048x1536 @ 60Hz
Keyboard	Full-size, 6-row, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass
Touch pad	Two-button touch pad, suppots multi-touch function
ThinkLight™	None
Dimensions[3]	*6-cell:* 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm
Weight[2]	*6-cell:* from 3.3 lb (1.5kg)
Case	*Color:* black or red; *Material:* PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic
Battery - type	Lithium Ion **6-cell**
Battery - life[10]	*6-cell:* up to 5 hr
Chipset	**AMD M780G Chipset**, SB710 south bridge
Multicard reader	4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital)
ExpressCard/54	None
Ports	Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
11b/g/n	*Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2
11a/b/g/n	*Some:* 11a/b/g/n wireless, ThinkPad 11a/b/g/n, PCIe Half Mini Card, Broadcom® chipset, 2x2
WWAN upg	*Some:* Wireless WAN upgradable
Gobi™ 2000	*Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS
Carrier	*Some:* AT&T®, contract required with service provider *Some:* User selectable at first boot, AT&T, Verizon®, or Sprint®, contract required with service provider
Modem	None
Bluetooth™	*Some:* Bluetooth 2.1 wireless
Ethernet	Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1
Intel AMT	None
Audio support	High Definition (HD) Audio, Conexant CX20582-11Z codec / stereo speakers, 1.5 watt x 2 / combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	None
Fingerprint reader	None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 32
- *Some:* Genuine Windows 7 Professional 32

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Windows Live™ Toolbar
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC Adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US models announced September 21, 2010; previous models on January 5, March 30, April 6, July 6, or July 27, 2010

ThinkPad® X100e Accessories

Memory
1GB PC2-5300 DDR2 SODIMM	40Y7734	ann	01/05/06
1GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0502	ann	03/17/09
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann	11/28/06
2GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0548	ann	03/17/09

Storage and removable storage
USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive[53]	57Y4400	ann	01/07/10
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

[53] USB-only attach.

Wireless WAN (Mini PCI Express)
Only WWAN upgradable models:
ThinkPad AT&T® Gobi 2000 Broadband Opt	78Y1398	ann	01/07/10
ThinkPad Gobi 2000 Broadband Option	78Y1399	ann	01/07/10

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09

[56] *USB Port Replicator with Digital Video 45K1610* is not supported by ThinkPad X100e due to the system's CPU capabilities.

Keyboard
TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	ann	09/15/09

[52] Wireless via 2.4GHz technology using a micro-size USB receiver.
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Preferred Pro USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08
Lenovo Wireless Laser Mouse - Black[52]	45K1696	ann	11/25/08
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	ann	11/25/08

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

Multimedia
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

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

Batteries
ThinkPad Battery 17+ (6-cell)	57Y4559	ann	01/05/10
ThinkPad External Battery Charger[44]	40Y7625	ann	09/20/05

[44] Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter	40Y7696		
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
Lenovo Power Hub	57Y4600	ann	09/07/10
90W Ultraslim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at **www.lenovopowertips.com**

Carrying Cases
ThinkPad 11W Case Sleeve	57Y4286	ann	01/05/10
ThinkPad 11W Sling Case	57Y4287	ann	01/05/10

More information at **www.lenovo.com/support/cases**

Monitors
ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann	06/10/10

Monitor Accessories[46]
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad X201
(TrackPoint model)

Lenovo ThinkPad X201 with
ThinkPad Battery 47++ (9-cell)
43R9255

Lenovo ThinkPad X201
(UltraNav model)

Lenovo ThinkPad X201
(UltraNav model)

ThinkPad X200 UltraBase
43R8781

ThinkPad 65W AC Adapter
40Y7696

ThinkPad® X201 (3249) - TopSeller (Windows 7)

Type-model	Proc-essor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8]	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Intel vPro	Preload	Avail date
3249-2EU	i5-540M	2.53	3.06	2GB	12.1" WXGA		250G	5400			Intel 6200[28]	WWAN upg		vPro	Pro 32	Mar 10
3249-2FU	i5-540M	2.53	3.06	2GB	12.1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro	Pro 32	Mar 10
3249-2GU	i5-540M	2.53	3.06	*4GB*	12.1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	Intel 6200	Gobi 2000	Verizon[16]	vPro	Pro 32	Mar 10
3249-2HU	i5-520M	2.40	2.93	*4GB*	12.1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro	Pro 32	Mar 10
3249-2TU	i5-540M	2.53	3.06	*4GB*	12.1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	WiMAX	WWAN upg		vPro	Pro 64	Mar 10
3249-2UU	i5-540M	2.53	3.06	*4GB*	12.1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	Intel 6200	Gobi 2000	AT&T[23]	vPro	Pro 64	Mar 10
3249-2VU	i5-540M	2.53	3.06	*4GB*	12.1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro	Pro 64	Mar 10
3249-C2U	i5-520M	2.40	2.93	2GB	12.1" WXGA	2.0M	160G	7200			Intel 6200	WWAN upg		vPro	Pro 64	Apr 10
3249-C3U	i5-520M	2.40	2.93	2GB	12.1" WXGA	2.0M	320G	7200			Intel 6200	WWAN upg		vPro	Pro 64	Apr 10
☞ 3249-EPU	i5-560M	2.66	3.20	2GB	12.1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro	Pro 64	Sep 10
☞ 3249-ERU	i5-560M	2.66	3.20	2GB	12.1" WXGA		160G	7200			Intel 6200	WWAN upg		vPro	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*An ultraportable for the executive on the move; one spindle*
Processor	**Intel® Core™ i5 processor i5-520M, i5-540M,** or **i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in 1 socket; 1 socket available
SATA DVD±RW Ultrabay Slim SATA disk	*Some:* DVD burner, SATA 1.5Gb/s, removable from *X200 UltraBase* Supports Ultrabay Slim devices in optional or standard *X200 UltraBase* (43R8781) **160GB**[8] (7200 rpm), **250GB** (5400 rpm), or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std *X200 UltraBase*
Widescreen display Camera	**12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio *Some:* camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; *Maximum external resolution:* 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case Battery - type Battery - life[10]	*without UltraBase; 4/6-cell:* 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm *without UltraBase; 9-cell:* 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm *4-cell:* from 2.89 lb (1.31kg); *6-cell:* from 3.18 lb (1.44kg); *9-cell:* from 3.52 lb (1.60kg) *Color:* black; *Material:* magnesium alloy Lithium Ion **6-cell** *4-cell:* up to 3.4 hr; *6-cell:* up to 6.7 hr; *9-cell:* up to 11.3 hr
Chipset	**Mobile Intel QM57 Express Chipset**
Media slice Multicard reader ExpressCard/54 Ports	*Some:* **ThinkPad X200 UltraBase media slice** (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)
PCIe Mini Card Intel 6200[28] WiMAX WWAN upg Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots *Some:* 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 *Some:* 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX *Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* AT&T® or Verizon®, contract required with service provider 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- Microsoft Office 2010 preloaded; purchase product key to activate

Supports ThinkVantage® technologies

ThinkPad X200 UltraBase™
- Provides desktop expansion and cable management for X200 and X201 Series
- Easily connects to the bottom of the X200 or X201 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
  - DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s   43N3292
  - Serial ATA Hard Drive Bay Adapter III   43N3412
Disks supported (some):
    - 250GB FDE 7200 rpm 43N3410
    - 320GB Disk 7200 rpm 43N3411

Other features:
- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter
- 1.6 lb; 730g

65-watt AC Adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

See footnotes for important warranty information
☞ US models announced September 28, 2010; previous models on February 23, March 2, or April 20, 2010

Type-model	Proc-essor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Intel vPro	Preload	Avail date
3249-1FU	i5-480M	2.66	2.93	2GB	12.1" WXGA	2.0M	160G 7200	Optional	Optional	Intel 1000	WWAN upg	No	Pro 64	Jan 11

- ***This small and medium business (SMB) model is part of the US TopSeller™ Program***
- ***This system is Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning	*An ultraportable for the executive on the move; one spindle*
Processor	**Intel® Core™ i5 processor i5-480M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in 1 socket; 1 socket available
SATA DVD±RW Ultrabay Slim SATA disk	Option for *ThinkPad X200 UltraBase* Supports Ultrabay Slim devices in optional or standard *X200 UltraBase* (43R8781) **160GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std *X200 UltraBase*
Widescreen display Camera	**12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; *Maximum external resolution:* 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] **Weight**[2] **Case Battery - type Battery - life**[10]	*without UltraBase; 4/6-cell:* 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm *without UltraBase; 9-cell:* 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm *4-cell:* from 2.89 lb (1.31kg); *6-cell:* from 3.18 lb (1.44kg); *9-cell:* from 3.52 lb (1.60kg) *Color:* black; *Material:* magnesium alloy Lithium Ion **6-cell** *4-cell:* up to 3.4 hr; *6-cell:* up to 6.7 hr; *9-cell:* up to 11.3 hr
Chipset	**Mobile Intel QM57 Express Chipset**
Media slice Multicard reader ExpressCard/54 Ports	*Option:* **ThinkPad X200 UltraBase media slice** (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable 56K V.92[6] modem None Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update

Supports ThinkVantage® technologies

ThinkPad X200 UltraBase™
- Provides desktop expansion and cable management for X200 and X201 Series
- Easily connects to the bottom of the X200 or X201 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
  – DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s   43N3292
  – Serial ATA Hard Drive Bay Adapter III   43N3412
    Disks supported (some):
    • 250GB FDE 7200 rpm 43N3410
    • 320GB Disk 7200 rpm 43N3411

Other features:
- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter
- 1.6 lb; 730g

65-watt AC Adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

See footnotes for important warranty information
US model announced January 11, 2011

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(MOC3-7) January 2011

ThinkPad® X201i (3249) - TopSeller (Windows 7)

en*Personal Systems Reference (PSREF)*

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB[8] rpm		Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Intel vPro	Preload	Avail date
✂ 3249-J2U	i3-330M	2.13	2GB	12.1" WXGA	None	250G	5400	Optional	Optional	Intel 1000	WWAN upg	No	Pro 32	Mar 10
✂ 3249-MCU	i3-330M	2.13	2GB	12.1" WXGA	None	160G	7200	Optional	Optional	Intel 1000	WWAN upg	No	Pro 64	Apr 10
3249-MDU	i3-370M	2.40	2GB	12.1" WXGA	None	160G	7200	Optional	Optional	Intel 1000	WWAN upg	No	Pro 64	Jul 10
☞ 3249-1HU	i3-390M	2.66	2GB	12.1" WXGA	None	160G	7200	Optional	Optional	Intel 1000	WWAN upg	No	Pro 64	Jan 11

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*An ultraportable for the executive on the move; one spindle*
Processor	**Intel® Core™ i3 processor i3-330M, i3-370M,** or **i3-390M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in 1 socket; 1 socket available
SATA DVD±RW Ultrabay Slim SATA disk	Option for *ThinkPad X200 UltraBase* Supports Ultrabay Slim devices in optional or standard *X200 UltraBase* (43R8781) **160GB**[8] (7200 rpm) or **250GB** (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std *X200 UltraBase*
Widescreen display Camera	**12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio None
Integrated graphics	**Intel HD Graphics** in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; *Maximum external resolution:* 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions
Dimensions[3] Weight[2] Case Battery - type Battery - life[10]	*without UltraBase; 4/6-cell:* 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm *without UltraBase; 9-cell:* 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm *4-cell:* from 2.89 lb (1.31kg); *6-cell:* from 3.18 lb (1.44kg); *9-cell:* from 3.52 lb (1.60kg) *Color:* black; *Material:* magnesium alloy Lithium Ion **6-cell** *4-cell:* up to 3.4 hr; *6-cell:* up to 6.7 hr; *9-cell:* up to 11.3 hr
Chipset	**Mobile Intel QM57 Express Chipset**
Media slice Multicard reader ExpressCard/54 Ports	*Option:* **ThinkPad X200 UltraBase media slice** (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable 56K V.92[6] modem None Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager

Supports ThinkVantage® technologies

ThinkPad X200 UltraBase™
- Provides desktop expansion and cable management for X200 and X201 Series
- Easily connects to the bottom of the X200 or X201 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
  − DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s   43N3292
  − Serial ATA Hard Drive Bay Adapter III   43N3412
  Disks supported (some):
  • 250GB FDE 7200 rpm 43N3410
  • 320GB Disk 7200 rpm 43N3411

Other features:
- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter
- 1.6 lb; 730g

65-watt AC Adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

See footnotes for important warranty information
☞ US model announced January 11, 2011; previous models on February 23, April 20, or July 6, 2010
✂ US models withdrawn effective July 31, 2010

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Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann	06/23/09

Ultrabay Slim 9.5mm
Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase
Serial ATA Hard Drive Bay Adapter III	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s	43N3292	ann	08/03/10
DVD Burner Ultrabay Slim Drive II SATA 1.5G/s	43N3229	ann	06/23/09
Ultrabay Slim Blu-ray Burner II (SATA)	43N3230	ann	06/23/09

Storage and removable storage
160GB Disk SATA 3.0Gb/s (7200 rpm)[41]	41N5737	ann	10/16/07
250GB Disk SATA 3.0Gb/s (5400 rpm)[41]	43R8152	ann	01/15/08
250GB Disk FDE SATA 3.0Gb/s (7200 rpm)[41]	43N3410	ann	01/20/09
320GB Disk SATA 3.0Gb/s (5400 rpm)[41]	43N3403	ann	08/05/08
320GB Disk SATA 3.0Gb/s (7200 rpm)[41]	43N3411	ann	01/20/09
500GB Disk SATA 3.0Gb/s (7200 rpm)[41]	43N3423	ann	01/07/10

[41] Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann	06/23/09
ThinkPad 160GB Intel X25-M SSD[41]	43N3435	ann	06/22/10

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive[53]	57Y4400	ann	01/07/10

[53] USB-only attach.

Wireless WAN (Mini PCI Express)
Only X201 WWAN upgradable models:
ThinkPad Gobi™ 2000 Broadband Option	78Y1399	ann	01/07/10
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	ann	01/07/10

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad X200 UltraBase	43R8781	ann	08/05/08

Keyboard
TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	ann	09/15/09

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

Mouse
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Security
Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
X200s (WXGA+), X201s 12W Privacy Filter	43R2470	ann	08/05/08
X200/X200s (WXGA), X201 12W Privacy Filter	55Y9264	ann	04/07/09
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Multimedia
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

Batteries
ThinkPad Battery 47 (4-cell)	43R9253	ann	08/05/08
ThinkPad Battery 47+ (6-cell)	43R9254	ann	08/05/08
ThinkPad Battery 47++ (9-cell)	43R9255	ann	08/05/08
ThinkPad External Battery Charger	40Y7625	ann	09/20/05

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter	40Y7696	ann	01/05/06
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
Lenovo Power Hub	57Y4600	ann	09/07/10
90W Ultraslim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at **www.lenovopowertips.com**

Carrying Cases
Up to 12" widescreen models:
ThinkPad 12W Case Sleeve	51J0476	ann	08/18/09

Up to 13.3" widescreen models:
ThinkPad Ultraportable Case	41U5062	ann	05/13/08

Up to 15.4" widescreen models:
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance BackPack	41U5254	ann	05/01/07
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

More information at **www.lenovo.com/support/cases**
Lenovo luxury cases at **www.lenovoluxurycases.com**

Monitors
Lenovo L2230x Wide 21.5" Monitor	5453HB1	ann	06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann	06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo DisplayPort to VGA Monitor Cable[50]	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable[50]	45J7915	ann	08/05/08

[50] Can only be used via ThinkPad X200 UltraBase (43R8781)

ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad X201 Tablet

Lenovo ThinkPad X201 Tablet

Lenovo ThinkPad X201 Tablet

Lenovo ThinkPad X201 Tablet

Lenovo ThinkPad X201 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115

Lenovo ThinkPad X201 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115

ThinkPad® X201 Tablet (2985) - TopSeller (Windows 7)

Type-model	Proc-essor	Base (GHz)	Max turbo (GHz)	Memory	Widescreen display	Camera (Mega-pixel)	Disk SATA GB[8]	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Bat-tery cells	Intel vPro	Preload	Avail date
2985-C2U	i7-640LM	2.13	2.93	2GB	12.1" WXGA *Entry*		250G	5400			Intel 6200[28]	upg		4	vPro	Pro 32	Mar 10
2985-C3U	i7-640LM	2.13	2.93	2GB	12.1" WXGA *Entry*	2.0	320G	7200	DVD±RW	UltraB	Intel 6200	upg		8	vPro	Pro 32	Mar 10
2985-C4U	i7-640LM	2.13	2.93	*4GB*	12.1" WXGA *Entry*	2.0	320G	7200	DVD±RW	UltraB	Intel 6200	Gobi	Verizon[16]	8	vPro	Pro 32	Mar 10
✂ 2985-C5U	i7-640LM	2.13	2.93	*4GB*	12.1" WXGA *Outdoor*	2.0	320G	7200			Intel 6200	upg		8	vPro	Pro 32	Mar 10
2985-C6U	i7-640LM	2.13	2.93	2GB	12.1" WXGA *Multi*	2.0	250G	5400			Intel 6200	upg		8	vPro	Pro 32	Mar 10
2985-C7U	i7-640LM	2.13	2.93	*4GB*	12.1" WXGA *Multi*	2.0	320G	7200	DVD±RW	UltraB	Intel 6200	upg		8	vPro	Pro 32	Mar 10
☞ 2985-EWU	i7-640LM	2.13	2.93	*4GB*	12.1" WXGA *Entry*	2.0	320G	7200	DVD±RW	UltraB	Intel 6200	Gobi	Verizon	8	vPro	Pro 64	Mar 10
☞ 2985-EXU	i7-640LM	2.13	2.93	*4GB*	12.1" WXGA *Entry*	2.0	320G	7200	DVD±RW	UltraB	Intel 6200	Gobi	AT&T[23]	8	vPro	Pro 64	Mar 10
☞ 2985-EYU	i7-640LM	2.13	2.93	*4GB*	12.1" WXGA *Multi*	2.0	320G	7200	DVD±RW	UltraB	Intel 6200			8	vPro	Pro 64	Mar 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Convertible tablet ultraportable; one spindle*
Processor	**Intel® Core™ i7 processor i7-640LM** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in 1 socket; 1 socket available
SATA DVD±RW Ultrabay Slim SATA disk	*Some:* DVD burner, SATA 1.5Gb/s, removable from *X200 UltraBase* Supports Ultrabay Slim devices in optional or standard *X200 UltraBase* (43R8781) **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std *X200 UltraBase*
Widescreen display	*Entry:* **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless *Outdoor:* **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS *MultiTouch:* **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced **MultiTouch** (touchscreen support pen & two-finger touch) *All:* **WideView** (170° viewing), anti-reflective and anti-glare protective coatings, **write on screen with standard digitizer pen**, pen holder in side base (right), **rotatable dual swivel hinge** for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)
Camera	*Some:* camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; *Maximum external resolution:* 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None
Dimensions[3]	*without UltraBase; 4-cell:* 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm *without UltraBase; 8-cell:* 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm
Weight[2] Case Battery - type Battery - life[10]	*4-cell:* from 3.57 lb (1.62kg); *8-cell:* from 3.96 lb (1.8kg) *Color:* black; *Material:* magnesium alloy Lithium Ion **4-cell** or **8-cell** *4-cell:* up to 3.5 hr; *8-cell:* up to 7.9 hr
Chipset	**Mobile Intel QM57 Express Chipset**
Media slice Multicard Reader ExpressCard/54 Ports	*Some:* **ThinkPad X200 UltraBase media slice** (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)
PCIe Mini Card Intel 6200[28] WWAN upg Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 *Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* AT&T® or Verizon®, contract required with service provider 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery & digitizer pen - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software
- ThinkVantage Toolbox
- Lenovo SimpleTap (Multi-Touch models)
- Adobe® Reader®
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® WinDVD® (DVD±RW)
- Corel Burn.Now™ Lenovo Edition (DVD±RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD±RW)

Supports ThinkVantage® technologies

ThinkPad X200 UltraBase™
- Provides desktop expansion and cable management for X200 and X201 Series
- Easily connects to the bottom of the X200 or X201 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
  - DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s — 43N3292
  - Serial ATA Hard Drive Bay Adapter III — 43N3412 Disks supported (some):
    - 250GB FDE 7200 rpm 43N3410
    - 320GB Disk 7200 rpm 43N3411

Other features:
- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter
- 1.6 lb; 730g

65-watt AC Adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

See footnotes for important warranty information
☞ US models announced March 2, 2010; previous models on February 23, 2010
✂ US model withdrawn effective January 2011

ThinkPad® X201 Tablet (2985) - TopSeller (Windows 7) - April 2010

Type-model	Proc-essor	Base (GHz)	Max turbo (GHz)	Memory	Widescreen display	Camera (Mega-pixel)	Disk SATA GB[8]	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Bat-tery cells	Intel vPro	Preload	Avail date
2985-F2U	i7-620LM	2.00	2.80	2GB	12.1" WXGA *Entry*	2.0	160G	7200	DVD±RW	UltraB	Intel 6200[28]	Gobi	Verizon[16]	8	vPro	Pro 64	Apr 10
✂ 2985-F3U	i7-620LM	2.00	2.80	2GB	12.1" WXGA *Outdoor*	2.0	160G	7200			Intel 6200	upg		8	vPro	Pro 64	Apr 10
2985-F4U	i7-620LM	2.00	2.80	2GB	12.1" WXGA *Multi*	2.0	320G	7200	DVD±RW	UltraB	Intel 6200	upg		8	vPro	Pro 64	Apr 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	Convertible tablet ultraportable; one spindle	**Preloaded operating system**[20]
Processor	**Intel® Core™ i7 processor i7-620LM** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache	- Genuine Windows® 7 Professional 64
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in 1 socket; 1 socket available	**Preloaded applications**[14] (only some listed)

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Windows Live™ Toolbar
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

SATA DVD±RW Ultrabay Slim SATA disk	*Some:* DVD burner, SATA 1.5Gb/s, removable from *X200 UltraBase* Supports Ultrabay Slim devices in optional or standard *X200 UltraBase* (43R8781) **160GB**[8] (7200 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std *X200 UltraBase*
Widescreen display	*Entry:* **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless
	Outdoor: **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS
	MultiTouch: **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced **MultiTouch** (touchscreen support pen & two-finger touch)
	All: **WideView** (170° viewing), anti-reflective and anti-glare protective coatings, **write on screen with standard digitizer pen**, pen holder in side base (right), **rotatable dual swivel hinge** for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)
Camera	Camera on top of screen, 2.0-megapixel, fixed focus

Supports ThinkVantage® technologies

Integrated graphics	**Intel HD Graphics** in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; *Maximum external resolution:* 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None
Dimensions[3]	*without UltraBase; 4-cell:* 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm *without UltraBase; 8-cell:* 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm
Weight[2] Case Battery - type Battery - life[10]	*4-cell:* from 3.57 lb (1.62kg); *8-cell:* from 3.96 lb (1.8kg) *Color:* black; *Material:* magnesium alloy Lithium Ion **8-cell** *4-cell:* up to 3.5 hr; 8-*cell:* up to 7.9 hr
Chipset	**Mobile Intel QM57 Express Chipset**
Media slice Multicard Reader ExpressCard/54 Ports	*Some:* **ThinkPad X200 UltraBase media slice** (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)

ThinkPad X200 UltraBase™
- Provides desktop expansion and cable management for X200 and X201 Series
- Easily connects to the bottom of the X200 or X201 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
  - DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s   43N3292
  - Serial ATA Hard Drive Bay Adapter III   43N3412
    Disks supported (some):
    - 250GB FDE 7200 rpm 43N3410
    - 320GB Disk 7200 rpm 43N3411

Other features:
- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter
- 1.6 lb; 730g

PCIe Mini Card Intel 6200[28] WWAN upg Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 *Some:* Wireless WAN upgradable *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* Verizon®, contract required with service provider 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery & digitizer pen - depot repair service / service upgrades[22] available

65-watt AC Adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

See footnotes for important warranty information
US models announced April 20, 2010

✂ US model withdrawn effective January 2011

ThinkPad® X201 Tablet (2985) - TopSeller (Windows 7) - June 2010

Type-model	Proc-essor	Base (GHz)	Max turbo (GHz)	Memory	Widescreen display	Camera (Mega-pixel)	Disk SATA GB[8]	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat-tery cells	Intel vPro	Preload	Avail date
2985-F7U	i5-520UM	1.06	1.86	*4GB*	12.1" WXGA *Multi*	2.0M	320G	7200	DVD±RW	UltraB	Intel 6200[28]	WWAN upg	8	vPro	Pro 32	Jun 10
2985-FAU	i5-520UM	1.06	1.86	2GB	12.1" WXGA *Entry*		250G	5400			Intel 6200	WWAN upg	4	vPro	Pro 64	Jun 10
✂ 2985-FBU	i5-520UM	1.06	1.86	2GB	12.1" WXGA *Outdoor*	2.0M	320G	7200			Intel 6200	WWAN upg	8	vPro	Pro 64	Jun 10
2985-FCU	i5-520UM	1.06	1.86	2GB	12.1" WXGA *Multi*	2.0M	250G	5400			Intel 6200	WWAN upg	8	vPro	Pro 64	Jun 10
☞ 2985-FSU	i5-560M	2.66	3.20	2GB	12.1" WXGA *Entry*		160G	7200			Intel 6200	WWAN upg	4	vPro	Pro 64	Sep 10
✂ 2985-FYU	i5-560M	2.66	3.20	2GB	12.1" WXGA *Outdoor*	2.0M	160G	7200			Intel 6200	WWAN upg	8	vPro	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	Convertible tablet ultraportable; one spindle
Processor	**Intel® Core™ i5 processor i5-520UM** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 800MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-560M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in 1 socket; 1 socket available
SATA DVD±RW Ultrabay Slim SATA disk	*Some:* DVD burner, SATA 1.5Gb/s, removable from *X200 UltraBase* Supports Ultrabay Slim devices in optional or standard *X200 UltraBase* (43R8781) **160GB**[8] (7200 rpm), **250GB** (5400 rpm), or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std *X200 UltraBase*
Widescreen display	*Entry:* **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless *Outdoor:* **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS *MultiTouch:* **12.1"** (308mm) **WXGA (1280x800) TFT color**, anti-glare, **LED backlight**, 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced **MultiTouch** (touchscreen support pen & two-finger touch) *All:* **WideView** (170° viewing), anti-reflective and anti-glare protective coatings, **write on screen with standard digitizer pen**, pen holder in side base (right), **rotatable dual swivel hinge** for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)
Camera	*Some:* camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; *Maximum external resolution:* 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar[13], magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None
Dimensions[3]	*without UltraBase; 4-cell:* 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm *without UltraBase; 8-cell:* 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm
Weight[2] Case Battery - type Battery - life[10]	*4-cell:* from 3.57 lb (1.62kg); *8-cell:* from 3.96 lb (1.8kg) *Color:* black; *Material:* magnesium alloy Lithium Ion **4-cell** or **8-cell** *4-cell:* up to 3.5 hr; *8-cell:* up to 7.9 hr
Chipset	**Mobile Intel QM57 Express Chipset**
Media slice Multicard Reader ExpressCard/54 Ports	*Some:* **ThinkPad X200 UltraBase media slice** (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)
PCIe Mini Card Intel 6200[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92[6] modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip
Limited warranty[12]	**3-years**/1-yr battery & digitizer pen - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Lenovo SimpleTap (Multi-Touch models)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

ThinkPad X200 UltraBase™
- Provides desktop expansion and cable management for X200 and X201 Series
- Easily connects to the bottom of the X200 or X201 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
  – DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s   43N3292
  – Serial ATA Hard Drive Bay Adapter III   43N3412
  Disks supported (some):
  - 250GB FDE 7200 rpm 43N3410
  - 320GB Disk 7200 rpm 43N3411

Other features:
- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter
- 1.6 lb; 730g

65-watt AC Adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

See footnotes for important warranty information
☞ US models announced September 28, 2010; previous models on May 25, 2010
✂ US models withdrawn effective January 2011

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ThinkPad® X201 Tablet Accessories

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	*ann*	*06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	*ann*	*06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	*ann*	*06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	*ann*	*06/23/09*
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	*ann*	*06/23/09*

Ultrabay Slim 9.5mm
Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase
Serial ATA Hard Drive Bay Adapter III	43N3412	*ann*	*06/23/09*
DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s	43N3292	*ann*	*08/03/10*
DVD Burner Ultrabay Slim Drive II SATA 1.5G/s	43N3229	*ann*	*06/23/09*
Ultrabay Slim Blu-ray Burner II (SATA)	43N3230	*ann*	*06/23/09*

Storage and removable storage
160GB Disk SATA 3.0Gb/s (7200 rpm)[41]	41N5737	*ann*	*10/16/07*
250GB Disk SATA 3.0Gb/s (5400 rpm)[41]	43R8152	*ann*	*01/15/08*
250GB Disk FDE SATA 3.0Gb/s (7200 rpm)[41]	43N3410	*ann*	*01/20/09*
320GB Disk SATA 3.0Gb/s (5400 rpm)[41]	43N3403	*ann*	*08/05/08*
320GB Disk SATA 3.0Gb/s (7200 rpm)[41]	43N3411	*ann*	*01/20/09*
500GB Disk SATA 3.0Gb/s (7200 rpm)[41]	43N3423	*ann*	*01/07/10*

[41] Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	*ann*	*08/26/08*
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	*ann*	*06/23/09*
ThinkPad 160GB Intel X25-M SSD[41]	43N3435	*ann*	*06/22/10*

USB 2.0 Portable 320GB Hard Disk	45K1689	*ann*	*03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann*	*05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann*	*11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann*	*11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive[53]	57Y4400	*ann*	*01/07/10*

[53] USB-only attach.

Wireless WAN (Mini PCI Express)
Only WWAN upgradable models:
ThinkPad Gobi™ 2000 Broadband Option	78Y1399	*ann*	*01/07/10*
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	*ann*	*01/07/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	*ann*	*05/12/09*
USB Port Replicator with Digital Video	45K1610	*ann*	*07/28/09*
ThinkPad X200 UltraBase	43R8781	*ann*	*08/05/08*

Keyboard
TrackPoint Cap Collection	73P2698	*ann*	*12/16/03*
USB Numeric Keypad	33L3225	*ann*	*05/01/00*
Preferred Pro USB Keyboard	73P5220	*ann*	*06/21/05*
Enhanced Performance USB Keyboard	73P2620	*ann*	*03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann*	*09/15/09*

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

Mouse
Lenovo Optical Mouse (USB)	06P4069	*ann*	*05/21/03*
Lenovo Laser Mouse (USB)	41U3074	*ann*	*01/23/07*
ThinkPad USB Laser Mouse	57Y4635	*ann*	*12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	*ann*	*08/27/02*
ThinkPad Travel Mouse (USB, Optical)	31P7410	*ann*	*06/04/02*
ThinkPad Bluetooth Laser Mouse	41U5008	*ann*	*01/22/08*

Security
Kensington® MicroSaver® Cable Lock	73P2582	*ann*	*12/29/03*
Kensington Twin Head Cable Lock	45K1620	*ann*	*09/30/08*
Lenovo Security Cable Lock	57Y4303	*ann*	*08/24/10*
USB Gemplus GemPC Smart Card Reader	41N3040	*ann*	*02/21/06*
ExpressCard Gemplus Smart Card Reader	41N3043	*ann*	*06/27/06*

Multimedia
ThinkPad In-Ear Headphones	57Y4488	*ann*	*01/07/10*

Tablet
ThinkPad Digitizer Pen	41U3143	*ann*	*11/14/06*
ThinkPad Tablet Tether (3-pack)	41U4820	*ann*	*11/14/06*

Batteries
ThinkPad Battery 12 (4-cell)	43R9256	*ann*	*09/23/08*
ThinkPad Battery 12++ (8-cell)	43R9257	*ann*	*09/23/08*
ThinkPad External Battery Charger[47]	40Y7625	*ann*	*09/20/05*

[47] Only supports *ThinkPad Battery 12 (4-cell) 43R9256*

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter	40Y7696	*ann*	*01/05/06*
ThinkPad 90W AC Adapter	40Y7659	*ann*	*09/20/05*
Lenovo Power Hub	57Y4600	*ann*	*09/07/10*
90W Ultraslim AC/DC Combo Adapter	41R4493	*ann*	*09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	*ann*	*12/18/07*
•Generic Micro USB charge tip (L18)	41R4490	*ann*	*01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
X200 Tablet:
ThinkPad X200 Tablet Sleeve	43R9115	*ann*	*09/23/08*

Up to 13.3" widescreen models:
ThinkPad Ultraportable Case	41U5062	*ann*	*05/13/08*

Up to 15.4" widescreen models:
Lenovo Business Messenger Case	51J0475	*ann*	*08/18/09*
Lenovo Messenger Max	41U5253	*ann*	*05/01/07*
Lenovo Performance BackPack	41U5254	*ann*	*05/01/07*
ThinkPad Business Topload Case	43R2476	*ann*	*05/13/08*
ThinkPad Business Backpack	43R2482	*ann*	*05/13/08*
ThinkPad Deluxe Expander Case	43R2478	*ann*	*05/13/08*
ThinkPad Executive Leather Case	43R2480	*ann*	*05/13/08*

More information at **www.lenovo.com/support/cases**
Lenovo luxury cases at **www.lenovoluxurycases.com**

Monitors
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann*	*06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann*	*10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann*	*11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann*	*10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann*	*10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann*	*10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann*	*10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann*	*06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann*	*09/17/08*

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann*	*05/12/09*
Lenovo DisplayPort to VGA Monitor Cable[50]	57Y4393	*ann*	*08/04/09*
DisplayPort to Single-link DVI-D Cable[50]	45J7915	*ann*	*08/05/08*

[50] Can only be used via ThinkPad X200 UltraBase (43R8781)

ThinkVision USB Soundbar	40Y7616	*ann*	*08/23/05*
ThinkVision Soundbar	45K1263	*ann*	*09/16/08*
Kensington MicroSaver Cable Lock	73P2582	*ann*	*12/29/03*
Kensington Twin Head Cable Lock	45K1620	*ann*	*09/30/08*
Lenovo Security Cable Lock	57Y4303	*ann*	*08/24/10*
Lenovo Easy Reach Monitor Stand	55Y9258	*ann*	*09/22/09*

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Partial list of Lenovo® ThinkPlus Services[22] for ThinkPad notebooks

For more information see: http://www.lenovo.com/services_warranty/us/en/index.html

ThinkPlus service upgrade options for ThinkPad W/X series

ThinkPad X100e notebook with 1-year Mail-In warranty

2-year Mail-In repair service	78Y1519
3-year Mail-In repair service	78Y1520
1-year LOR[24] 9x5 Next Business Day	78Y1517
2-year LOR 9x5 Next Business Day	78Y1521
3-year LOR 9x5 Next Business Day	78Y1522

ThinkPad X100e notebook with 1-year Depot warranty

2-year parts and labor depot repair service	41C9169
3-year parts and labor depot repair service	41C9170
1-year LOR 9x5 Next Business Day	41C9166
2-year LOR 9x5 Next Business Day	41C9167
3-year LOR 9x5 Next Business Day	41C9168

ThinkPad X series notebook with 1-year Depot warranty

2-year parts and labor depot repair service	41C9169
3-year parts and labor depot repair service	41C9170
4-year parts and labor depot repair service	41C9172
5-year parts and labor depot repair service	41C9174
1-year LOR 9x5 Next Business Day	41C9166
2-year LOR 9x5 Next Business Day	41C9167
3-year LOR 9x5 Next Business Day	41C9168
4-year LOR 9x5 Next Business Day	41C9171
5-year LOR 9x5 Next Business Day	41C9173

ThinkPad W/X series notebook with 3-year Depot warranty

4-year parts and labor depot repair service	41C9178
5-year parts and labor depot repair service	41C9180
3-year LOR 9x5 Next Business Day	41C9176
4-year LOR 9x5 Next Business Day	41C9177
5-year LOR 9x5 Next Business Day	41C9179

ThinkPad W/X series notebook with 3-year Onsite warranty

4-year LOR 9x5 Next Business Day	12X5630
5-year LOR 9x5 Next Business Day	43R2162

ThinkPlus service upgrade options for ThinkPad T/R series

ThinkPad T/R series notebook with 1-year Depot warranty

2-year parts and labor depot repair service	45K5971
3-year parts and labor depot repair service	45K5972
4-year parts and labor depot repair service	45K5974
5-year parts and labor depot repair service	45K5976
1-year LOR 9x5 Next Business Day	45K5968
2-year LOR 9x5 Next Business Day	45K5969
3-year LOR 9x5 Next Business Day	45K5970
4-year LOR 9x5 Next Business Day	45K5973
5-year LOR 9x5 Next Business Day	45K5975

ThinkPad T/R series notebook with 3-year Depot warranty

4-year parts and labor depot repair service	45K6023
5-year parts and labor depot repair service	45K6025
3-year LOR 9x5 Next Business Day	45K6021
4-year LOR 9x5 Next Business Day	45K6022
5-year LOR 9x5 Next Business Day	45K6024

ThinkPad T/R series notebook with 3-year Onsite warranty

4-year LOR 9x5 Next Business Day	45K6038
5-year LOR 9x5 Next Business Day	43R2162

ThinkPlus Secure Business

Lenovo Online Data Backup

- Secure offsite data storage
- 256-bit Advanced Encryption System
- Data recovery or access in case of an unforeseen event
- Automatic, remote management
- Choose which business critical data to back up

1-year Lenovo Online Data Backup - *10GB*	51J0787
1-year Lenovo Online Data Backup - *25GB*	51J0795

ThinkPlus Priority Support for enterprise customers

- 9x5 next-business-day response Lenovo Onsite Repair
- 24x7 support with priority routing and advanced level technicians

ThinkPad notebook with 1-year Depot warranty

3-year Priority Support	45J9094

ThinkPad notebook with 3-year Depot warranty

3-year Priority Support	45J9095
4-year Priority Support	45J9096
5-year Priority Support	45J9097
3-year Priority Support 4-hour response	45J9101
4-year Priority Support 4-hour response	45J9102
5-year Priority Support 4-hour response	45J9103

ThinkPad notebook with 3-year Onsite (GMP) warranty

3-year Priority Support	45J9098
4-year Priority Support	45J9099
5-year Priority Support	45J9100
3-year Priority Support 4-hour response	45J9104
4-year Priority Support 4-hour response	45J9105
5-year Priority Support 4-hour response	45J9106

ThinkPad Workstation notebook with 1-year Depot warranty

3-year Priority Support	45J9107

ThinkPad Workstation notebook with 3-year Depot warranty

3-year Priority Support	45J9108
4-year Priority Support	45J9109
5-year Priority Support	45J9110
3-year Priority Support 4-hour response	45J9114
4-year Priority Support 4-hour response	45J9115
5-year Priority Support 4-hour response	45J9116

ThinkPad Workstation notebook with 3-year Onsite (GMP) warranty

3-year Priority Support	45J9111
4-year Priority Support	45J9112
5-year Priority Support	45J9113
3-year Priority Support 4-hour response	45J9117
4-year Priority Support 4-hour response	45K1520
5-year Priority Support 4-hour response	45K1521

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, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

1. Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.

2. **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.

3. **Thinness** may vary at certain points on the system.

4. **Wireless capability:** Requires compatible wireless-enabled options sold separately.

5. **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.

6. **Public network download modem 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.

7. **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.

8. **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

9. **CD/DVD drive speeds** list maximum rates; rates are variable and are often less than the maximum.

10. **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. For the ThinkPad X300, battery life is based on Business Winstone Battery Mark 2002. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

11. **External monitor:** This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.

12. **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

13. **Internet access not included.**

14. **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

16. **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.

17. **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.

18. **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.

19. **EasyServ depot repair service:** In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.

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.

21. **For combination drives**, maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

[22] **ThinkPlus 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. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.

[23] **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

[24] **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. In the United States call 1-800-426-7378. 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.

[26] **Full-size keyboard:** As defined by ISO/IEC 15412.

[27] **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

[28] **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.

[30] **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

[32] **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

[36] **Wireless upgradable** allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.

[37] **Optimus graphics** Optimus only switches in Windows 7 environment. It performs as discrete graphics in Windows Vista or Windows XP Professional environment.

ThinkPad®

Visit **www.lenovo.com/safecomputing** periodically for the latest information on safe and effective computing.

Visit **www.lenovo.com/psref** for the latest version of Personal Systems Reference.

ThinkPad.

Personal Systems Reference
Lenovo® ThinkPad® Edge Series
and SL Series TopSeller™ Notebooks

January 2011 - Version 391

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

Lenovo® ThinkPad Edge 13"

Lenovo ThinkPad Edge 13"
(Glossy black model)

Lenovo ThinkPad Edge 13"
(Glossy red model)

ThinkPad Battery 73+ (6-cell)   57Y4565
ThinkPad Battery 73 (4-cell)   57Y4564

USB 2.0 Portable DVD Burner
43N3264

Lenovo ThinkPad Edge 13"

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Integrated graphics	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Top color	Blue-tooth	Battery cells	Preload	Avail date
0196-24U	SU7300	1.30	*3GB*	13.3" HD	0.3M	GMA	320G	7200	Intel 1000	None	Matte black	Blue	6	Pro 32	Jan 10
0196-4YU	SU7300	1.30	*3GB*	13.3" HD	0.3M	GMA	320G	7200	Intel 1000	None	Glossy black	Blue	6	Pro 32	Jan 10
☞ 0196-5DU	SU7300	1.30	2GB	13.3" HD	0.3M	GMA	250G	5400	Intel 1000	None	Glossy red		6	Pro 32	Apr 10
☞ 0196-5EU	SU7300	1.30	*3GB*	13.3" HD	0.3M	GMA	250G	5400	WiMAX	None	Matte black	Blue	6	Pro 32	Apr 10
☞ 0196-5FU	SU7300	1.30	2GB	13.3" HD	0.3M	GMA	250G	5400	Intel 1000	None	Matte black		6	Home P 64	Apr 10

- ***These small and medium business (SMB) models are part of the US TopSeller™ Program***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning	Sophisticated design with quality, durability and reliability for SMB customers; one spindle
Processor	**Intel® Core™ 2 Duo processor SU7300** with ultra low voltage, **dual-core**, 800MHz system bus, and 3MB L2 cache
Memory	**2GB** or **3GB** std / 4GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
Optical drive	None (use optional USB Portable DVD Burner 43N3264)
SATA disk	**250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 1.5Gb/s or 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	**13.3"** (338mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio
Camera	Camera on top of screen, 0.3-megapixel, low light sensitive
Integrated graphics	**Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD)**, in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536@75Hz
Keyboard	6-row, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13]
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch
ThinkLight™	None
Dimensions[3]	*13.3"" (WxDxH):* 12.7" x 9.0" x 1.0"; 322 x 228mm x 25.4mm (excluding battery bump)
Weight[2]	*4-cell:* starting at 3.59 lb (1.63kg); *6-cell:* starting at 3.81 lb (1.73kg)
Case color	Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type[37]	Lithium Ion **6-cell**
Battery - life[10]	*4-cell:* up to 5.3 hr; *6-cell:* up to 8.0 hr
Chipset	**Mobile Intel GS45 Express Chipset** (Graphics Memory Controller Hub); **ICH9M** I/O Controller Hub
ExpressCard	None
Smart Card Read	None
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, XD)
Ports	Three USB 2.0 (one powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
Intel 1000	*Some:* 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2
WiMAX	*Some:* 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX
WWAN upg	None
Modem	None
Bluetooth™	*Some:* Bluetooth 2.1 wireless
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Intel AMT	None
Audio support	High Definition (HD) Audio, Conexant® CX20582 codec / stereo speakers, 1 watt x 2/ mono microphone, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	None
Fingerprint reader	None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 32

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Norton™ Internet Security 2009 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD
45K5968
ThinkPlus 2-year LOR 9x5 NBD
45K5969
ThinkPlus 3-year LOR 9x5 NBD
45K5970
ThinkPlus 4-year LOR 9x5 NBD
45K5973
ThinkPlus 2-year P&L P/U Depot
45K5971
ThinkPlus 3-year P&L P/U Depot
45K5972
ThinkPlus 4-year P&L P/U Depot
45K5974
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information

☞ US models announced April 6, 2010; previous models on January 5, 2010

Type-model	Proc-essor	GHz	Memory	Wide-screen display	Cam-era	Integrated graphics	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Top color	Blue-tooth	Battery cells	Preload	Avail date
0197-26U	L325	1.50	2GB	13.3" HD	0.3M	HD 3200	250G	5400	11b/g/n	None	Matte black	None	4	Home P 64	Jan 10
0197-27U	L325	1.50	*3GB*	13.3" HD	0.3M	HD 3200	250G	5400	11b/g/n	None	Matte black	None	6	Pro 32	Jan 10
0197-6XU	L325	1.50	*3GB*	13.3" HD	0.3M	HD 3200	250G	5400	11b/g/n	None	Glossy black	None	6	Pro 32	Jan 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Sophisticated design with quality, durability and reliability for SMB customers; one spindle*
Processor	**AMD® Athlon™ Neo X2 Dual-Core processor L325** with **dual-core**, virtualization technology, integrated DDR2 memory controller, and 1MB L2 cache
Memory	**2GB** or **3GB** std / 4GB max[7] / PC2-5300 667MHz **DDR2**, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
Optical drive	None (use optional USB Portable DVD Burner 43N3264)
SATA disk	**250GB**[8] (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	**13.3"** (338mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio
Camera	Camera on top of screen, 0.3-megapixel, low light sensitive
Integrated graphics	**ATI™ Radeon™ HD 3200 graphics**, in M780G, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2456x1536@60Hz
Keyboard	6-row, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13]
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch
ThinkLight™	None
Dimensions[3]	*13.3W‴ (WxDxH):* 12.7" x 9.0" x 1.0"; 322 x 228mm x 25.4mm (excluding battery bump)
Weight[2]	*4-cell:* starting at 3.61 lb (1.64kg); *6-cell:* starting at 3.83 lb (1.74kg)
Case color	Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type[37]	Lithium Ion **4-cell** or **6-cell**
Battery - life[10]	*L325 models with 4-cell:* up to 3.3 hr; *6-cell:* up to 5.0 hr
Chipset	**AMD M780G Chipset**, SB710 south bridge
ExpressCard	None
Smart Card Read	None
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, XD)
Ports	Three USB 2.0 (one powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
11b/g/n	11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® RTL8191SE
WWAN upg	None
Modem	None
Bluetooth™	None
Ethernet	Realtek RTL8111DL Gigabit Network Connection
Audio support	High Definition (HD) Audio, Conexant® CX20582 codec / stereo speakers, 1 watt x 2/ mono microphone, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	None
Fingerprint reader	None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 32

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD   45K5968
ThinkPlus 2-year LOR 9x5 NBD   45K5969
ThinkPlus 3-year LOR 9x5 NBD   45K5970
ThinkPlus 4-year LOR 9x5 NBD   45K5973
ThinkPlus 2-year P&L P/U Depot   45K5971
ThinkPlus 3-year P&L P/U Depot   45K5972
ThinkPlus 4-year P&L P/U Depot   45K5974
Post-warranty annual maintenance agreements at
    lenovo.com/thinkplus/warranty

Memory
0196 with Intel processors:
1GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3706 *ann 06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4385 *ann 06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3707 *ann 06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4386 *ann 06/23/09*
1GB PC3-10600 DDR3 L-H SODIMM   55Y3709 *ann 03/02/10*
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)55Y4415 *ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM   55Y3710 *ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)55Y4416 *ann 03/02/10*

0197 with AMD processors:
1GB PC2-5300 DDR2 SODIMM   40Y7734 *ann 01/05/06*
1GB PC2-5300 DDR2 SODIMM (25-Pack) 51J0502 *ann 03/17/09*
2GB PC2-5300 DDR2 SODIMM   40Y7735 *ann 11/28/06*
2GB PC2-5300 DDR2 SODIMM (25-Pack) 51J0548 *ann 03/17/09*

Storage and removable storage
USB 2.0 Portable 320GB Hard Disk   45K1689 *ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk   45K1690 *ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk 43R2018 *ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk 43R2019 *ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive[53] 57Y4400 *ann 01/07/10*
USB 2.0 Portable DVD Burner   43N3264 *ann 01/05/10*
  [53] USB-only attach.

ThinkPad Expansion
Lenovo® Essential Notebook Stand   45J9292 *ann 05/12/09*
USB Port Replicator with Digital Video 45K1610 *ann 07/28/09*

Keyboard
TrackPoint Cap Collection   73P2698 *ann 12/16/03*
USB Numeric Keypad   33L3225 *ann 05/01/00*
Preferred Pro USB Keyboard   73P5220 *ann 06/21/05*
Enhanced Performance USB Keyboard   73P2620 *ann 03/23/04*
Lenovo Mini Wireless Keyboard N5901[52] (blk) 57Y6336
Ultraslim Wireless Keyboard and Mouse[52] 57Y4700 *ann 09/15/09*
  [52] Wireless via 2.4GHz technology using a micro-size USB receiver.
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*

Mouse
Lenovo Optical Mouse (USB)   06P4069 *ann 05/21/03*
Lenovo Laser Mouse (USB)   41U3074 *ann 01/23/07*
ThinkPad USB Laser Mouse   57Y4635 *ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical) 31P7405 *ann 08/27/02*
ThinkPad Travel Mouse (USB, Optical)   31P7410 *ann 06/04/02*
ThinkPad Bluetooth Laser Mouse   41U5008 *ann 01/22/08*
Lenovo Wireless Laser Mouse - Black[52] 45K1696 *ann 11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52] 51J0198 *ann 11/25/08*
Lenovo Optical Mouse A6010 (black)   57Y6255
Lenovo Mini Optical Mouse M20B   55Y2091
Lenovo Wireless Mouse N30B (black)   55Y9360

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

Multimedia
ThinkPad In-Ear Headphones   57Y4488 *ann 01/07/10*
Lenovo Mini Speaker M220   55Y2033
Lenovo Headphone P550   55Y2065

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

Batteries[37]
ThinkPad Battery 73 (4-cell)   57Y4564 *ann 01/05/10*
ThinkPad Battery 73+ (6-cell)   57Y4565 *ann 01/05/10*
ThinkPad External Battery Charger[44] 40Y7625 *ann 09/20/05*
  [44] Requires the *ThinkPad 90W AC Adapter
   40Y7659* or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter [45]   40Y7696 *ann 01/05/06*
  [45] Only compatible with the integrated graphics models.
ThinkPad 90W AC Adapter   40Y7659 *ann 09/20/05*
Lenovo Power Hub   57Y4600 *ann 09/07/10*
90W Ultraslim AC/DC Combo Adapter   41R4493 *ann 09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)   41R4481 *ann 12/18/07*
•Generic Micro USB charge tip (L18) 41R4490 *ann 01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
ThinkPad 15W Case Sleeve   51J0477 *ann 08/18/09*
Lenovo Business Messenger Case   51J0475 *ann 08/18/09*
Lenovo Messenger Max   41U5253 *ann 05/01/07*
Lenovo Performance BackPack   41U5254 *ann 05/01/07*
ThinkPad Business Topload Case   43R2476 *ann 05/13/08*
ThinkPad Business Backpack   43R2482 *ann 05/13/08*
ThinkPad Deluxe Expander Case   43R2478 *ann 05/13/08*
ThinkPad Executive Leather Case   43R2480 *ann 05/13/08*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor   5453HB1 *ann 06/10/10*
ThinkVision® L1711p 17" Monitor   5047HB2 *ann 10/20/09*
ThinkVision L1900p 19" Monitor   4431HE1 *ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor 2448HB6 *ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor 2572HB6 *ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor 2572HD6 *ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor 2578HB6 *ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor 4014HB6 *ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor 4420HB2 *ann 09/17/08*

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter   45K5296 *ann 05/12/09*
ThinkVision USB Soundbar   40Y7616 *ann 08/23/05*
ThinkVision Soundbar   45K1263 *ann 09/16/08*
Kensington MicroSaver Cable Lock   73P2582 *ann 12/29/03*
Kensington Twin Head Cable Lock   45K1620 *ann 09/30/08*
Lenovo Security Cable Lock   57Y4303 *ann 08/24/10*
Lenovo Easy Reach Monitor Stand   55Y9258 *ann 09/22/09*
  [46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad Edge 14"

Lenovo ThinkPad Edge 14"
(Glossy black model)

Lenovo ThinkPad Edge 14"

USB Port Replicator with Digital Video
45K1610

Lenovo ThinkPad Edge 14"

Type-model	Processor	GHz	Memory	Wide-screen display	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0578-23U	i3-350M	2.26	2+1GB	14.0" HD	320G	7200	Intel 6200[28]			Matte black			6	Pro 64	Mar 10
✂ 0578-25U	i3-330M	2.13	2GBx2	14.0" HD	250G	5400	11b/g/n			Matte black			4	Home P 64	Mar 10
✂ 0578-27U	i3-330M	2.13	2GBx1	14.0" HD	250G	5400	Intel 1000			Glossy black			6	Pro 32	Mar 10
✂ 0578-29U	i3-330M	2.13	2GBx1	14.0" HD	250G	5400	Intel 1000			Glossy black			6	Home P 64	Mar 10
✂ 0578-2AU	i3-330M	2.13	2GBx2	14.0" HD	250G	5400	Intel 1000	Gobi 2000	AT&T[23]	Glossy black		Blue	6	Pro 64	Mar 10
✂ 0578-2BU	i3-330M	2.13	2GBx2	14.0" HD	320G	7200	Intel 1000	Gobi 2000	Verizon[16]	Glossy black		Blue	6	Pro 64	Mar 10
✂ 0578-65U	i3-330M	2.13	2GBx2	14.0" HD	320G	7200	Intel 1000			Glossy black	Finger	Blue	6	Pro 64	Mar 10
✂ 0578-66U	i3-330M	2.13	2+1GB	14.0" HD	320G	7200	Intel 1000			Glossy red		Blue	6	Home P 64	Mar 10
0578-28U	Cel P4500	1.86	2GBx1	14.0" HD	250G	5400	Intel 1000			Glossy black			6	Home P 64	Apr 10
0578-64U	Cel P4500	1.86	2GBx1	14.0" HD	250G	5400	Intel 1000			Glossy black			6	Pro 32	Apr 10
0578-7ZU	Cel P4500	1.86	2GBx1	14.0" HD	250G	5400	Intel 1000			Matte black			6	Home P 64	Apr 10
✂ 0578-82U	i3-330M	2.13	2GBx1	14.0" HD	250G	5400	Intel 1000			Matte black			6	Pro 32	Apr 10
✂ 0578-83U	i3-330M	2.13	2+1GB	14.0" HD	250G	5400	Intel 1000			Glossy red		Blue	6	Pro 32	Apr 10
✂ 0578-84U	i3-330M	2.13	2+1GB	14.0" HD	250G	5400	Intel 1000	Gobi 2000	AT&T	Glossy black		Blue	6	Pro 32	Apr 10
✂ 0578-85U	i3-330M	2.13	2GBx1	14.0" HD	250G	5400	Intel 1000			Matte black			6	Home P 64	Apr 10
✂ 0578-86U	i3-330M	2.13	2GBx2	14.0" HD	320G	7200	Intel 1000			Matte black		Blue	6	Pro 64	Apr 10
☞ 0578-C5U	i3-350M	2.26	2GBx1	14.0" HD	320G	7200	Intel 1000			Matte black		Blue	6	Pro 64	Apr 10
☞ 0578-C6U	i3-350M	2.26	2GBx2	14.0" HD	500G	7200	Intel 1000			Glossy black		Blue	6	Pro 64	Apr 10

- **These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)**

Positioning	Sophisticated design with quality, durability and reliability for SMB customers; two spindles
Processor	**Intel® Celeron® Processor P4500** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), and 2MB cache **Intel Core™ i3 processor i3-330M** or **i3-350M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB**, **3GB**, or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm), **320GB** (7200 rpm), or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display Camera	**14.0"** (355mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536@75Hz; 1920x1080 (HDMI port)
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13] UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None
Dimensions[3] Weight[2] Case color Case material Battery - type[37] Battery - life[10]	*14.0W" (WxDxH):* 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm *4-cell:* from 4.72 lb (2.14kg); *6-cell:* from 4.9 lb (2.22kg); *9-cell:* from 5.29 lb (2.40kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **4-cell** or **6-cell** *4-cell:* up to 2.9 hr; *6-cell:* up to 4.5 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel HM55 Express Chipset** One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 1000 Intel 6200[28] Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* AT&T® or Verizon®, contract required with service provider None *Some:* Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None *Some:* UPEK Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating (except Celeron models)
ENERGY STAR® 5.0-compliant (except Celeron models)
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US models announced April 13, 2010; previous models on March 23 or April 6 2010
✂ US models withdrawn effective August 2010

ThinkPad® Edge 14" 0578 (Intel) - TopSeller (Windows 7) - May 2010

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0578-9KU	i3-350M	2.26		*4GB*	14.0" HD	500G 5400	Intel 1000			Matte black			6	Home P 64	May 10
0578-DGU	i3-350M	2.26		2GB	14.0" HD	320G 7200	Intel 1000			Glossy red			6	Pro 64	May 10
0578-DHU	i3-350M	2.26		*4GB*	14.0" HD	500G 5400	Intel 1000			Glossy red			6	Pro 64	May 10
☞ 0578-F5U	i3-370M	2.40		2GB	14.0" HD	250G 5400	Intel 1000			Matte black			6	Pro 64	Jul 10
☞ 0578-F6U	i3-370M	2.40		*4GB*	14.0" HD	320G 7200	Intel 1000			Matte black			6	Pro 64	Jul 10
☞ 0578-F7U	i3-370M	2.40		*4GB*	14.0" HD	320G 7200	Intel 1000			Matte black	Fing	Blue	6	Pro 64	Jul 10
☞ 0578-F8U	i3-370M	2.40		*4GB*	14.0" HD	320G 7200	Intel 1000	Gobi 2000	AT&T[23]	Matte black	Fing	Blue	6	Pro 64	Jul 10
☞ 0578-F9U	i3-370M	2.40		*4GB*	14.0" HD	320G 7200	Intel 1000			Glossy red	Fing	Blue	6	Pro 64	Jul 10
☞ 0578-HTU	i3-350M	2.26		*4GB*	14.0" HD	250G 5400	Intel 1000			Matte black			4	Home P 64	Jul 10
☞ 0578-HUU	i3-370M	2.40		*4GB*	14.0" HD	250G 5400	Intel 1000			Matte black			4	Home P 64	Jul 10
☞ 0578-HVU	i3-350M	2.26		*4GB*	14.0" HD	320G 5400	Intel 1000			Glossy black			4	Home P 64	Jul 10
☞ 0578-HWU	i3-370M	2.40		*4GB*	14.0" HD	320G 5400	Intel 1000			Glossy black			4	Home P 64	Jul 10
☞ 0578-HXU	i5-450M	2.40	2.66	*4GB*	14.0" HD	500G 5400	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul 10
✂ 0578-HZU	i3-350M	2.26		*4GB*	14.0" HD	500G 5400	Intel 1000			Glossy black			6	Pro 64	Jul 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning Processor	*Sophisticated design with quality, durability and reliability for SMB customers; two spindles* **Intel® Core™ i3 processor i3-350M or i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-450M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm), **320GB** (5400 or 7200 rpm), or **500GB** (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display Camera	**14.0"** (355mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536@75Hz; 1920x1080 (HDMI port)
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13] UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None
Dimensions[3] Weight[2] Case color Case material Battery - type[37] Battery - life[10]	*14.0W" (WxDxH):* 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm *4-cell:* from 4.72 lb (2.14kg); *6-cell:* from 4.9 lb (2.22kg); *9-cell:* from 5.29 lb (2.40kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **4-cell** or **6-cell** *4-cell:* up to 2.9 hr; *6-cell:* up to 4.5 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel HM55 Express Chipset** One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card Intel 1000 Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* AT&T®, contract required with service provider None *Some:* Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None *Some:* UPEK Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US models announced July 6, 2010; previous models on May 4, 2010
✂ US model withdrawn effective October 2010

ThinkPad® Edge 14" 0578 (Intel) - TopSeller (Windows 7) - January 2011

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Screen type	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Preload	Avail date
0578-N6U	i3-390M	2.66		*4GB*	14.0" HD	Glossy	320G	7200	Intel 1000			Matte black	Fing	Blue	Pro 64	Jan 11
0578-N8U	i3-390M	2.66		2GB	14.0" HD	Glossy	250G	5400	Intel 1000			Matte black			Pro 64	Jan 11
0578-NJU	i5-480M	2.66	2.93	*4GB*	14.0" HD	Glossy	320G	7200	Intel 1000			Matte black	Fing	Blue	Pro 64	Jan 11
0578-P4U	i3-390M	2.66		*4GB*	14.0" HD	Glossy	320G	7200	Intel 1000	Gobi 2000	AT&T[23]	Glossy black	Fing	Blue	Pro 64	Jan 11
0578-Q2U	i3-380M	2.53		2GB	14.0" HD		250G	5400	11b/g/n			Matte black			Pro 64	Jan 11
0578-QLU	i3-380M	2.53		2GB	14.0" HD		250G	5400	11b/g/n			Matte black			Pro 64	Jan 11

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	Sophisticated design with quality, durability and reliability for SMB customers; two spindles
Processor	**Intel® Core™ i3 processor i3-380M** or **i3-390M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-480M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets); *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	*Some:* **14.0"** (355mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **14.0"** (355mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536@75Hz; 1920x1080 (HDMI port)
Keyboard	6-row, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13]
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch
ThinkLight™	None
Dimensions[3]	*14.0W" (WxDxH):* 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm
Weight[2]	*4-cell:* from 4.72 lb (2.14kg); *6-cell:* from 4.9 lb (2.22kg); *9-cell:* from 5.29 lb (2.40kg)
Case color	Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type[37]	Lithium Ion **6-cell**
Battery - life[10]	*4-cell:* up to 2.9 hr; *6-cell:* up to 4.5 hr
Chipset	**Mobile Intel HM55 Express Chipset**
ExpressCard/34	One ExpressCard/34
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
11b/g/n	*Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card
Intel 1000	*Some:* 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2
Gobi™ 2000	*Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider
Carrier	*Some:* AT&T®, contract required with service provider
Modem	None
Bluetooth™	*Some:* Bluetooth 2.1 wireless
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Intel AMT	None
Audio support	High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	None
Fingerprint reader	*Some:* UPEK Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
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International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD
45K5968
ThinkPlus 2-year LOR 9x5 NBD
45K5969
ThinkPlus 3-year LOR 9x5 NBD
45K5970
ThinkPlus 4-year LOR 9x5 NBD
45K5973
ThinkPlus 2-year P&L P/U Depot
45K5971
ThinkPlus 3-year P&L P/U Depot
45K5972
ThinkPlus 4-year P&L P/U Depot
45K5974
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0199-4GU	P340	2.20	2GB	14.0" HD	0.3M	320G	7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
0199-4HU	P340	2.20	2GB	14.0" HD	0.3M	320G	7200	11b/g/n	Glossy red	None	None	6	Pro 64	Sep 10
0199-4JU	P540	2.40	2GB	14.0" HD	0.3M	320G	7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Sophisticated design with quality, durability and reliability for SMB customers; two spindles*
Processor	**AMD® Athlon™ II Dual-Core Mobile Processor P340** with **dual-core,** virtualization technology, integrated DDR3 memory controller, and 1MB L2 cache or **AMD Turion™ II Dual-Core Mobile Processor P540** with **dual-core,** virtualization technology, integrated DDR3 memory controller, and 2MB L2 cache
Memory	**2GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **320GB**[8] (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display Camera	**14.0"** (355mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus
Integrated graphics	**ATI™ Radeon™ HD 4250 graphics**, in RS880M, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2456x1536@60Hz
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13] UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None
Dimensions[3] Weight[2] Case color Case material Battery - type[37] Battery - life[10]	*14.0W" (WxDxH):* 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm *4-cell:* from 4.78 lb (2.17kg); *6-cell:* from 4.96 lb (2.25kg); *9-cell:* from 5.36 lb (2.43kg) Matte black (top) or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **6-cell** *4-cell:* up to 2.6 hr; *6-cell:* up to 4 hr; *9-cell:* up to 6 hr
Chipset ExpressCard/34 Multicard Reader Ports	**AMD RS880M Chipset**, SB820M south bridge One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Modem Bluetooth™ Ethernet Audio support Security Security chip Fingerprint reader	One PCI Express Half Mini Card slot 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card None None Realtek® RTL8111DL Gigabit Network Connection High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
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- Adobe Flash® Player
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- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
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ThinkPlus 4-year LOR 9x5 NBD
45K5973
ThinkPlus 2-year P&L P/U Depot
45K5971
ThinkPlus 3-year P&L P/U Depot
45K5972
ThinkPlus 4-year P&L P/U Depot
45K5974
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced September 28, 2010

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(BER1-5) October 2010

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	*ann*	*06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	*ann*	*06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	*ann*	*06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	*ann*	*06/23/09*
1GB PC3-10600 DDR3 L-H SODIMM	55Y3709	*ann*	*03/02/10*
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)	55Y4415	*ann*	*03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	*ann*	*03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	55Y4416	*ann*	*03/02/10*

Storage and removable storage
USB 2.0 Portable 320GB Hard Disk	45K1689	*ann*	*03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann*	*05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann*	*11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann*	*11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	*ann*	*01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann*	*01/05/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	*ann*	*05/12/09*
USB Port Replicator with Digital Video	45K1610	*ann*	*07/28/09*

Keyboard
TrackPoint Cap Collection	73P2698	*ann*	*12/16/03*
USB Numeric Keypad	33L3225	*ann*	*05/01/00*
Preferred Pro USB Keyboard	73P5220	*ann*	*06/21/05*
Enhanced Performance USB Keyboard	73P2620	*ann*	*03/23/04*
Lenovo Mini Wireless Keyboard N5901[52] (blk)	57Y6336		
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann*	*09/15/09*

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

Mouse
Lenovo Optical Mouse (USB)	06P4069	*ann*	*05/21/03*
Lenovo Laser Mouse (USB)	41U3074	*ann*	*01/23/07*
ThinkPad USB Laser Mouse	57Y4635	*ann*	*12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	*ann*	*08/27/02*
ThinkPad Travel Mouse (USB, Optical)	31P7410	*ann*	*06/04/02*
ThinkPad Bluetooth Laser Mouse	41U5008	*ann*	*01/22/08*
Lenovo Wireless Laser Mouse - Black[52]	45K1696	*ann*	*11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	*ann*	*11/25/08*
Lenovo Optical Mouse A6010 (black)	57Y6255		
Lenovo Mini Optical Mouse M20B	55Y2091		
Lenovo Wireless Mouse N30B (black)	55Y9360		

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

Multimedia
ThinkPad In-Ear Headphones	57Y4488	*ann*	*01/07/10*
Lenovo Mini Speaker M220	55Y2033		
Lenovo Headphone P550	55Y2065		

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

Batteries[37]
ThinkPad Battery 25 (4-cell)	51J0498	*ann*	*10/22/09*
ThinkPad Battery 25+ (6-cell)	51J0499	*ann*	*10/22/09*
ThinkPad Battery 25++ (9-cell)	51J0500	*ann*	*10/22/09*
ThinkPad External Battery Charger[44]	40Y7625	*ann*	*09/20/05*

[44] Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45]	40Y7696	*ann*	*01/05/06*

[45] Only compatible with the integrated graphics models.
ThinkPad 90W AC Adapter	40Y7659	*ann*	*09/20/05*
Lenovo Power Hub	57Y4600	*ann*	*09/07/10*
90W Ultraslim AC/DC Combo Adapter	41R4493	*ann*	*09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	*ann*	*12/18/07*
•Generic Micro USB charge tip (L18)	41R4490	*ann*	*01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
ThinkPad 14W Case Sleeve	57Y4294	*ann*	*03/16/10*
Lenovo Business Messenger Case	51J0475	*ann*	*08/18/09*
Lenovo Messenger Max	41U5253	*ann*	*05/01/07*
Lenovo Performance BackPack	41U5254	*ann*	*05/01/07*
ThinkPad Business Topload Case	43R2476	*ann*	*05/13/08*
ThinkPad Business Backpack	43R2482	*ann*	*05/13/08*
ThinkPad Deluxe Expander Case	43R2478	*ann*	*05/13/08*
ThinkPad Executive Leather Case	43R2480	*ann*	*05/13/08*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann*	*06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann*	*10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann*	*11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann*	*10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann*	*10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann*	*10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann*	*10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann*	*06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann*	*09/17/08*

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann*	*05/12/09*
ThinkVision USB Soundbar	40Y7616	*ann*	*08/23/05*
ThinkVision Soundbar	45K1263	*ann*	*09/16/08*
Kensington MicroSaver Cable Lock	73P2582	*ann*	*12/29/03*
Kensington Twin Head Cable Lock	45K1620	*ann*	*09/30/08*
Lenovo Security Cable Lock	57Y4303	*ann*	*08/24/10*
Lenovo Easy Reach Monitor Stand	55Y9258	*ann*	*09/22/09*

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad Edge 15"

Lenovo ThinkPad Edge 15"
(Glossy black model)

Lenovo ThinkPad Edge 15"

Lenovo ThinkPad Edge 15"
(Glossy red model)

Lenovo ThinkPad Edge 15"

ThinkPad® Edge 15" 0301 (Intel) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	Screen type	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0301-23U	i3-350M	2.26	*4GB*	15.6" HD	Glossy	320G 7200	Intel 6200[28]			Matte black			6	Pro 64	Mar 10
✂ 0301-25U	i3-330M	2.13	*4GB*	15.6" HD	Glossy	250G 5400	11b/g/n			Matte black			4	Home P	Mar 10
✂ 0301-26U	i3-330M	2.13	2GB	15.6" HD		250G 5400	Intel 1000			Glossy black			6	Pro 32	Mar 10
✂ 0301-27U	i3-330M	2.13	2GB	15.6" HD		320G 7200	Intel 1000	Gobi 2000	AT&T[23]	Glossy black		Blue	6	Pro 32	Mar 10
✂ 0301-29U	i3-330M	2.13	2GB	15.6" HD	Glossy	250G 5400	Intel 1000			Glossy black			6	Home P	Mar 10
✂ 0301-2AU	i3-330M	2.13	*4GB*	15.6" HD		250G 5400	Intel 1000	Gobi 2000	AT&T	Glossy black		Blue	6	Pro 64	Mar 10
✂ 0301-2BU	i3-330M	2.13	*4GB*	15.6" HD		250G 5400	Intel 1000	Gobi 2000	Verizon[16]	Glossy black		Blue	6	Pro 64	Mar 10
✂ 0301-5PU	i3-330M	2.13	2GB	15.6" HD		320G 7200	Intel 1000	Gobi 2000	Verizon	Glossy black	Finger	Blue	6	Pro 32	Mar 10
✂ 0301-5QU	i3-330M	2.13	2GB	15.6" HD		250G 5400	Intel 1000			Glossy red		Blue	6	Pro 32	Mar 10
✂ 0301-5RU	i3-330M	2.13	*3GB*	15.6" HD		320G 7200	Intel 1000			Glossy red		Blue	6	Home P	Mar 10
✂ 0301-5SU	i3-330M	2.13	*4GB*	15.6" HD		320G 7200	Intel 1000			Glossy black	Finger	Blue	6	Pro 64	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles **Intel® Core™ i3 processor i3-330M** or **i3-350M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache
Memory	**2GB**, **3GB**, or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm) or **320GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	*Some:* **15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (395mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536@75Hz; 1920x1080 (HDMI port)
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13] UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch
ThinkLight™	None
Dimensions[3] Weight[2] Case color	*15.6W'" (WxDxH):* 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm *4-cell:* from 5.32 lb (2.42kg); *6-cell:* from 5.50 lb (2.50kg); *9-cell:* from 5.89 lb (2.67kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom
Case material Battery - type[37] Battery - life[10]	Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **4-cell** or **6-cell** *4-cell:* up to 2.9 hr; *6-cell:* up to 4.5 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel HM55 Express Chipset** One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 1000 Intel 6200[28] Gobi™ 2000 Carrier	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider *Some:* AT&T® or Verizon®, contract required with service provider
Modem	None
Bluetooth™	*Some:* Bluetooth 2.1 wireless
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Intel AMT	None
Audio support	High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole None
Fingerprint reader	*Some:* UPEK Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe® Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
US models announced March 23, 2010
✂ US models withdrawn effective August 2010

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(LDN1-1) March 2010

ThinkPad® Edge 15" 0301 (Intel) - TopSeller (Windows 7) - April 2010

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Screen type	Disk SATA GB[8] rpm		PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0301-28U	Cel P4500	1.86		2GBx1	15.6" HD	Glossy	250G	5400	Intel 1000			Glossy black			6	Home P 64	Apr 10
0301-5NU	Cel P4500	1.86		2GBx1	15.6" HD	Glossy	250G	5400	Intel 1000			Matte black			6	Home P 64	Apr 10
✂ 0301-8GU	i3-330M	2.13		2GBx1	15.6" HD		250G	5400	Intel 1000			Matte black			6	Pro 32	Apr 10
✂ 0301-8HU	i3-330M	2.13		2GBx2	15.6" HD		320G	7200	WiMAX			Matte black	Fing	Blue	6	Pro 64	Apr 10
✂ 0301-8JU	i3-330M	2.13		2GBx1	15.6" HD	Glossy	250G	5400	Intel 1000			Matte black			6	Home P 64	Apr 10
✂ 0301-8KU	i3-330M	2.13		2GBx2	15.6" HD		320G	7200	Intel 1000			Matte black		Blue	6	Pro 64	Apr 10
✂ 0301-9AU	i3-330M	2.13		2GBx1	15.6" HD		250G	5400	Intel 1000	Gobi	AT&T[23]	Glossy black			6	Pro 32	Apr 10
0301-9CU	i3-350M	2.26		2GBx1	15.6" HD		320G	7200	Intel 1000			Matte black		Blue	6	Pro 64	Apr 10
0301-9DU	i3-350M	2.26		2GBx2	15.6" HD		500G	7200	Intel 1000			Glossy black		Blue	6	Pro 64	Apr 10
✂ 0301-89U	i5-430M	2.26	2.53	2GBx2	15.6" HD		500G	7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	May 10
☞ 0301-8AU	i3-350M	2.26		2GBx1	15.6" HD	Glossy	250G	5400	Intel 1000			Matte black			4	Home P 64	May 10
☞ 0301-8BU	i3-350M	2.26		2GBx2	15.6" HD		500G	7200	Intel 1000			Glossy black	Fing		6	Pro 64	May 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Sophisticated design with quality, durability and reliability for SMB customers; two spindles*
Processor	**Intel® Celeron® Processor P4500** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), and 2MB cache or **Intel Core™ i3 processor i3-330M** or **i3-350M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-430M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology, and 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm), **320GB** (7200 rpm), or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	*Some:* **15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (395mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536 @75Hz; 1920x1080 (HDMI port)
Keyboard	6-row, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13]
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch
ThinkLight™	None
Dimensions[3]	*15.6W" (WxDxH):* 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm
Weight[2]	*4-cell:* from 5.32 lb (2.42kg); *6-cell:* from 5.50 lb (2.50kg); *9-cell:* from 5.89 lb (2.67kg)
Case color	Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type[37]	Lithium Ion **4-cell** or **6-cell**
Battery - life[10]	*4-cell:* up to 2.9 hr; *6-cell:* up to 4.5 hr
Chipset	**Mobile Intel HM55 Express Chipset**
ExpressCard/34	One ExpressCard/34
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card	Two PCI Express Mini Card slots
Intel 1000	*Some:* 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2
WiMAX	*Some:* 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX
Gobi™ 2000	*Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider
Carrier	*Some:* AT&T®, contract required with service provider
Modem	None
Bluetooth™	*Some:* Bluetooth 2.1 wireless
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Intel AMT	None
Audio support	High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	None
Fingerprint reader	*Some:* UPEK Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating (except Celeron models)
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ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US models announced May 4, 2010; previous models on April 6 or April 13, 2010
✂ US models withdrawn effective August 2010

ThinkPad® Edge 15" 0301 (Intel) - TopSeller (Windows 7) - July 2010

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Screen type	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0301-DBU	i3-370M	2.40		2GB	15.6" HD		250G 5400	Intel 1000			Matte black			6	Pro 64	Jul 10
0301-DCU	i3-370M	2.40		*4GB*	15.6" HD		320G 7200	Intel 1000			Matte black	Fing	Blue	6	Pro 64	Jul 10
0301-DDU	i3-370M	2.40		*4GB*	15.6" HD		320G 7200	Intel 1000	Gobi 2000	AT&T[23]	Matte black	Fing	Blue	6	Pro 64	Jul 10
✂ 0301-DEU	i3-370M	2.40		*4GB*	15.6" HD		320G 7200	Intel 1000			Glossy red	Fing	Blue	6	Pro 64	Jul 10
0301-ECU	i3-370M	2.40		*4GB*	15.6" HD	Glossy	250G 5400	Intel 1000			Matte black			4	Home P	Jul 10
0301-EDU	i3-370M	2.40		*4GB*	15.6" HD		500G 7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul 10
0301-EEU	i3-350M	2.26		*4GB*	15.6" HD		500G 7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul 10
0301-EFU	i3-370M	2.40		2GB	15.6" HD		250G 5400	Intel 1000			Glossy black			6	Home P	Jul 10
0301-EGU	i3-370M	2.40		*3GB*	15.6" HD		320G 7200	Intel 1000			Glossy red		Blue	6	Home P	Jul 10
0301-EHU	i5-450M	2.40	2.66	*4GB*	15.6" HD		500G 7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul 10
0301-EJU	i5-450M	2.40	2.66	*4GB*	15.6" HD		500G 7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul 10
0301-EMU	i3-350M	2.26		2GB	15.6" HD		250G 5400	Intel 1000	Gobi 2000	AT&T	Glossy black			6	Pro 32	Jul 10

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- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	Sophisticated design with quality, durability and reliability for SMB customers; two spindles	**Preloaded operating system**[20]
Processor	**Intel® Core™ i3 processor i3-350M** or **i3-370M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-450M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	- *Some:* Genuine Windows® 7 Home Premium 64 - *Some:* Genuine Windows 7 Professional 32 - *Some:* Genuine Windows 7 Professional 64
Memory	**2GB**, **3GB**, or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available	**Preloaded applications**[14] (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm), **320GB** (7200 rpm), or **500GB** (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	• ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions)
Widescreen display	*Some:* **15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (395mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	• Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Microsoft Research AutoCollage Touch
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536@75Hz; 1920x1080 (HDMI port)	
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13] UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch	
ThinkLight™	None	Supports ThinkVantage® technologies
Dimensions[3]	*15.6W" (WxDxH):* 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm	65-watt AC adapter
Weight[2]	*4-cell:* from 5.32 lb (2.42kg); *6-cell:* from 5.50 lb (2.50kg); *9-cell:* from 5.89 lb (2.67kg)	EPEAT™ Gold rating
Case color	Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom	ENERGY STAR® 5.0-compliant RoHS-compliant
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	International Warranty Service[17]
Battery - type[37]	Lithium Ion **4-cell** or **6-cell**	24 hour x 7 day[18] toll-free support
Battery - life[10]	*4-cell:* up to 2.9 hr; *6-cell:* up to 4.5 hr	during the warranty period[12] via 800-426-7378
Chipset	**Mobile Intel HM55 Express Chipset**	
ExpressCard/34	One ExpressCard/34	ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)	ThinkPlus 2-year LOR 9x5 NBD 45K5969
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	ThinkPlus 3-year LOR 9x5 NBD 45K5970
PCIe Mini Card Intel 1000 Gobi™ 2000	Two PCI Express Mini Card slots 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 *Some:* Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	ThinkPlus 4-year LOR 9x5 NBD 45K5973
Carrier	*Some:* AT&T®, contract required with service provider	ThinkPlus 2-year P&L P/U Depot 45K5971
Modem	None	ThinkPlus 3-year P&L P/U Depot 45K5972
Bluetooth™	*Some:* Bluetooth 2.1 wireless	ThinkPlus 4-year P&L P/U Depot 45K5974
Ethernet	Realtek® RTL8111DL Gigabit Network Connection	Post-warranty annual maintenance agreements at
Intel AMT	None	**lenovo.com**/thinkplus/warranty
Audio support	High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	None	
Fingerprint reader	*Some:* UPEK Fingerprint reader on palm rest, swipe sensor	
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available	

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide-screen display	Disk SATA GB[8] rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0301-JDU	i5-480M	2.66	2.93	*4GB*	15.6" HD	320G 7200	Intel 1000	None	None	Matte black	Fing	Blue	6	Pro 64	Jan 11
0301-JAU	i3-390M	2.66		*4GB*	15.6" HD	320G 7200	Intel 1000	None	None	Matte black	Fing	Blue	6	Pro 64	Jan 11
0301-J9U	i3-390M	2.66		2GB	15.6" HD	250G 5400	Intel 1000	None	None	Matte black			6	Pro 64	Jan 11
0301-K3U	i3-390M	2.66		4GB	15.6" HD	500G 5400	Intel 1000	None	None	Matte black			6	Home P	Jan 11
0301-Q2U	i3-380M	2.53		2GB	15.6" HD	250G 5400	11b/g/n	None	None	Matte black			6	Pro 64	Jan 11

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Positioning	Sophisticated design with quality, durability and reliability for SMB customers; two spindles
Processor	**Intel® Core™ i3 processor i3-380M** or **i3-390M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or **Intel Core i5 processor i5-480M** with **dual-core**, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm), **320GB** (7200 rpm), or **500GB** (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display Camera	**15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus
Integrated graphics	**Intel HD Graphics** in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2048x1536@75Hz; 1920x1080 (HDMI port)
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13] UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None
Dimensions[3] Weight[2] Case color Case material Battery - type[37] Battery - life[10]	*15.6W" (WxDxH):* 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm *4-cell:* from 5.32 lb (2.42kg); *6-cell:* from 5.50 lb (2.50kg); *9-cell:* from 5.89 lb (2.67kg) Matte black (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion **6-cell** *4-cell:* up to 2.9 hr; *6-cell:* up to 4.5 hr
Chipset ExpressCard/34 Multicard Reader Ports	**Mobile Intel HM55 Express Chipset** One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card 11b/g/n Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two PCI Express Mini Card slots *Some:* 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card *Some:* 11b/g/n wireless[4], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None None *Some:* Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None *Some:* UPEK Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

Type-model	Proc-essor	GHz	Memory	Wide-screen display	Screen type	Camera	Disk SATA GB[8]	rpm	PCIe Mini Card 802.11	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0302-44U	P340	2.20	2GB	15.6" HD		2.0M	320G	7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
0302-45U	P540	2.40	2GB	15.6" HD		2.0M	320G	7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
☞ 0302-4LU	P840	1.90	4GB	15.6" HD	Glossy	0.3M	500G	5400	11b/g/n	Glossy black	None	None	6	Home P	Jan 11

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Sophisticated design with quality, durability and reliability for SMB customers; two spindles*
Processor	**AMD® Athlon™ II Dual-Core Mobile Processor P340** with **dual-core,** virtualization technology, integrated DDR3 memory controller, and 1MB L2 cache or **AMD Turion™ II Dual-Core Mobile Processor P540** with **dual-core,** virtualization technology, integrated DDR3 memory controller, and 2MB L2 cache or **AMD Phenom™ II Triple-Core Mobile Processor P840** with **triple-core,** virtualization technology, integrated DDR3 memory controller, and 1.5MB L2 cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz **DDR3**, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **320GB**[8] (7200 rpm) or **500GB** (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™
Widescreen display	*Some:* **15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (395mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	Camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus
Integrated graphics	**ATI™ Radeon™ HD 4250 graphics**, in RS880M, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; *Max external resolution:* 2456x1536 @ 60Hz
Keyboard	6-row, spill-resistant, multimedia Fn keys
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar[13]
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch
ThinkLight™	None
Dimensions[3]	*15.6W" (WxDxH):* 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm
Weight[2]	*4-cell:* from 5.40 lb (2.45kg); *6-cell:* from 5.58 lb (2.53kg); *9-cell:* from 5.95 lb (2.70kg)
Case color	Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic
Battery - type[37]	Lithium Ion **6-cell**
Battery - life[10]	*4-cell:* up to 2.6 hr; *6-cell:* up to 4 hr; *9-cell:* up to 6 hr
Chipset	**AMD RS880M Chipset**, SB820M south bridge
ExpressCard/34	One ExpressCard/34
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
PCIe Mini Card 11b/g/n	One PCI Express Half Mini Card slot 11b/g/n wireless[4], ThinkPad 11b/g/n, PCIe Half Mini Card
Modem	None
Bluetooth™	None
Ethernet	Realtek® RTL8111DL Gigabit Network Connection
Audio support	High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	None
Fingerprint reader	None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch

Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD
　　　　　　45K5968
ThinkPlus 2-year LOR 9x5 NBD
　　　　　　45K5969
ThinkPlus 3-year LOR 9x5 NBD
　　　　　　45K5970
ThinkPlus 4-year LOR 9x5 NBD
　　　　　　45K5973
ThinkPlus 2-year P&L P/U Depot
　　　　　　45K5971
ThinkPlus 3-year P&L P/U Depot
　　　　　　45K5972
ThinkPlus 4-year P&L P/U Depot
　　　　　　45K5974
Post-warranty annual maintenance agreements at
　　lenovo.com/thinkplus/warranty

See footnotes for important warranty information
☞ US model announced January 11, 2011; previous models on September 28, 2010

ThinkPad® Edge 15" Accessories

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09
1GB PC3-10600 DDR3 L-H SODIMM	55Y3709	ann	03/02/10
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)	55Y4415	ann	03/02/10
2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann	03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	55Y4416	ann	03/02/10

Storage and removable storage
USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09

Keyboard
TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Lenovo Mini Wireless Keyboard N5901[52] (blk)	57Y6336		
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	ann	09/15/09

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

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

Mouse
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08
Lenovo Wireless Laser Mouse - Black[52]	45K1696	ann	11/25/08
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	ann	11/25/08
Lenovo Optical Mouse A6010 (black)	57Y6255		
Lenovo Mini Optical Mouse M20B	55Y2091		
Lenovo Wireless Mouse N30B (black)	55Y9360		

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

Multimedia
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10
Lenovo Mini Speaker M220	55Y2033		
Lenovo Headphone P550	55Y2065		

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

Batteries[37]
ThinkPad Battery 25 (4-cell)	51J0498	ann	10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann	10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann	10/22/09
ThinkPad External Battery Charger[44]	40Y7625	ann	09/20/05

[44] Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45]	40Y7696	ann	01/05/06

[45] Only compatible with the integrated graphics models.

ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
Lenovo Power Hub	57Y4600	ann	09/07/10
90W Ultraslim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at **www.lenovopowertips.com**

Carrying Cases
ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance BackPack	41U5254	ann	05/01/07
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor	5453HB1	ann	06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann	06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad SL410

Lenovo ThinkPad SL410

Lenovo ThinkPad SL410

Lenovo ThinkPad SL410

Lenovo ThinkPad SL410 buttons

Lenovo ThinkPad SL410 lights

ThinkPad® SL410 2842 (GMA) - TopSeller (Windows 7)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	CCFL or LED	Screen type	Cam-era	Integrated graphics	Disk SATA GB[8] rpm		SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue-tooth	Finger print reader	Bat-tery cells	Preload	Avail date
2842-F7U	T6570	2.10	2GB	14.0" HD	LED	Glossy	2.0M	GMA	250G	5400	DVD±RW	✳ Intel 1000	None			6	Pro 32	Jan 10
2842-F8U	T6570	2.10	*3GB*	14.0" HD	LED	Glossy	2.0M	GMA	320G	7200	DVD±RW	✳ Intel 1000	None			6	Pro 32	Jan 10
2842-F9U	T6670	2.20	*4GB*	14.0" HD	LED	Glossy	2.0M	GMA	320G	7200	DVD±RW	✳ Intel 1000	None	Blue	Fing	6	Pro 64	Jan 10
2842-K3U	T6670	2.20	2GB	14.0" HD	LED	Glossy	0.3M	GMA	250G	5400	DVD±RW	✳ Intel 1000	None			6	Pro 64	Sep 10
2842-K4U	T6670	2.20	*3GB*	14.0" HD	LED	Glossy	0.3M	GMA	500G	7200	DVD±RW	✳ Intel 1000	None			6	Pro 64	Sep 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Processor	**Intel® Core™ 2 Duo processor T6570** or **T6670** with **dual-core**, 800MHz system bus, and 2MB L2 cache
Memory	**2GB**, **3GB**, or **4GB** std / 8GB max[7] / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm), **320GB** (7200 rpm), or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**14.0"** (355mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus
Integrated graphics	**Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD)**, in GM45, HDMI port supporting HDCP to output protected content; *Max external resolution:* 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)
Keyboard TrackPoint® Touch pad Lighting FX	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminated power button
Dimensions[3] Weight[2] Case color Case material Battery - type[37] Battery - life[10]	*4/6-cell 14.0W" (WxDxH):* 13.54" x 9.17" x 1.26–1.42"; 344mm x 233mm x 32–36mm *4-cell:* starting at 4.59 lb (2.08kg); *6-cell:* starting at 5.1 lb (2.3kg) ThinkPad Matte Black Scratch-resistant ABS plastic Lithium Ion **6-cell** *6-cell:* up to 4.0 hr; *9-cell:* up to 6 hr
Chipset	**Mobile Intel GM45 Express Chipset** (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752)
ExpressCard Multicard Reader PC Card Smart Card Read Ports	One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
Mini PCI Express Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	One Mini PCI Express slot 11b/g/n wireless[4], Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None None *Some:* Bluetooth 2.1 wireless, LED indicator Realtek RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole None *Some:* Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Microsoft Office 2010 preloaded; purchase product key to activate
- Adobe® Reader®
- Adobe Flash® Player
- Roxio® Creator® Business Edition (DVD±RW)

Supports ThinkVantage® technologies

65-watt (GMA graphics) AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™, [22] 1-year LOR[24] 9x5 NBD
45K5968
ThinkPlus 2-year LOR 9x5 NBD
45K5969
ThinkPlus 3-year LOR 9x5 NBD
45K5970
ThinkPlus 4-year LOR 9x5 NBD
45K5973
ThinkPlus 5-year LOR 9x5 NBD
45K5975
ThinkPlus 2-year P&L P/U Depot
45K5971
ThinkPlus 3-year P&L P/U Depot
45K5972
ThinkPlus 4-year P&L P/U Depot
45K5974
ThinkPlus 5-year P&L P/U Depot
45K5976
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

See footnotes for important warranty information   ✳ Intel Centrino® processor technology
☞ US models announced September 28, 2010; previous models on December 15, 2009
✂ US models withdrawn effective December 2010 or January 2011

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3706 *ann 06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4385 *ann 06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3707 *ann 06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4386 *ann 06/23/09*
4GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3708 *ann 06/23/09*

Storage and removable storage
SL410/510 500GB Disk SATA 3G/s (5400 rpm) 43N3422 *ann 10/22/09*

USB 2.0 Portable 320GB Hard Disk 45K1689 *ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk 45K1690 *ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk 43R2018 *ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk 43R2019 *ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive 57Y4400 *ann 01/07/10*
USB 2.0 Portable DVD Burner 43N3264 *ann 01/05/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand 45J9292 *ann 05/12/09*
USB Port Replicator with Digital Video 45K1610 *ann 07/28/09*

Keyboard
TrackPoint Cap Collection 73P2698 *ann 12/16/03*
USB Numeric Keypad 33L3225 *ann 05/01/00*
Preferred Pro USB Keyboard 73P5220 *ann 06/21/05*
Enhanced Performance USB Keyboard 73P2620 *ann 03/23/04*
Lenovo Mini Wireless Keyboard N5901[52] (blk) 57Y6336
Ultraslim Wireless Keyboard and Mouse[52] 57Y4700 *ann 09/15/09*
  [52] Wireless via 2.4GHz technology using a micro-size USB receiver.
ThinkPad USB Keyboard with TrackPoint 55Y9003 *ann 08/18/09*
Preferred Pro USB Fingerprint Keyboard 73P4730 *ann 02/22/05*
Lenovo USB Smartcard Keyboard 51J0155 *ann 03/24/09*

Mouse
Lenovo Optical Mouse (USB) 06P4069 *ann 05/21/03*
Lenovo Laser Mouse (USB) 41U3074 *ann 01/23/07*
ThinkPad USB Laser Mouse 57Y4635 *ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical) 31P7405 *ann 08/27/02*
ThinkPad Travel Mouse (USB, Optical) 31P7410 *ann 06/04/02*
ThinkPad Bluetooth Laser Mouse 41U5008 *ann 01/22/08*
Lenovo Optical Mouse A6010 (black) 57Y6255
Lenovo Mini Optical Mouse M20B 55Y2091
Lenovo Wireless Mouse N30B (black) 55Y9360

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

Multimedia
ThinkPad In-Ear Headphones 57Y4488 *ann 01/07/10*
Lenovo Mini Speaker M220 55Y2033
Lenovo Headphone P550 55Y2065

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

Batteries[37]
ThinkPad Battery 25 (4-cell) 51J0498 *ann 10/22/09*
ThinkPad Battery 25+ (6-cell) 51J0499 *ann 10/22/09*
ThinkPad Battery 25++ (9-cell) 51J0500 *ann 10/22/09*
ThinkPad External Battery Charger[44] 40Y7625 *ann 09/20/05*
  [44] Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45] 40Y7696
  [45] Only compatible with the integrated graphics models.
ThinkPad 90W AC Adapter 40Y7659 *ann 09/20/05*
Lenovo Power Hub 57Y4600 *ann 09/07/10*
90W Ultraslim AC/DC Combo Adapter 41R4493 *ann 09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a) 41R4481 *ann 12/18/07*
•Generic Micro USB charge tip (L18) 41R4490 *ann 01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
Up to 14" widescreen models:
ThinkPad 14W Case Sleeve 57Y4294 *ann 03/16/10*

Up to 15.4" widescreen models:
ThinkPad 15W Case Sleeve 51J0477 *ann 08/18/09*
Lenovo Business Messenger Case 51J0475 *ann 08/18/09*
Lenovo Messenger Max 41U5253 *ann 05/01/07*
Lenovo Performance BackPack 41U5254 *ann 05/01/07*
ThinkPad Business Topload Case 43R2476 *ann 05/13/08*
ThinkPad Business Backpack 43R2482 *ann 05/13/08*
ThinkPad Deluxe Expander Case 43R2478 *ann 05/13/08*
ThinkPad Executive Leather Case 43R2480 *ann 05/13/08*

Up to 15.6" widescreen models:
Wenger Backpack for Lenovo 57Y4271 *ann 01/07/10*
Wenger Slim Case for Lenovo 57Y4272 *ann 01/07/10*
Wenger Deluxe Slim Case for Lenovo 57Y4273 *ann 01/07/10*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor 5453HB1 *ann 06/10/10*
ThinkVision® L1711p 17" Monitor 5047HB2 *ann 10/20/09*
ThinkVision L1900p 19" Monitor 4431HE1 *ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor 2448HB6 *ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor 2572HB6 *ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor 2572HD6 *ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor 2578HB6 *ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor 4014HB6 *ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor 4420HB2 *ann 09/17/08*

Monitor Accessories[46]
ThinkVision USB Soundbar 40Y7616 *ann 08/23/05*
ThinkVision Soundbar 45K1263 *ann 09/16/08*
Kensington MicroSaver Cable Lock 73P2582 *ann 12/29/03*
Kensington Twin Head Cable Lock 45K1620 *ann 09/30/08*
Lenovo Security Cable Lock 57Y4303 *ann 08/24/10*
Lenovo Easy Reach Monitor Stand 55Y9258 *ann 09/22/09*
  [46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad SL accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo® ThinkPad SL510

Lenovo ThinkPad SL510

Lenovo ThinkPad SL510

Lenovo ThinkPad SL510

Lenovo Essential Notebook Stand
45J9292

ThinkPad SL510 Touchpad

Type-model	proc-essor	GHz	Memory	Wide-screen display	CCFL or LED	Screen type	Cam-era	Inte-grated graphics	Disk SATA GB[8] rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue-tooth	Finger print reader	Bat-tery cells	Preload	Avail date
2847-2KU	T5870	2.00	2GB	15.6" HD	LED			GMA	160G 5400	DVD±RW ✶	Intel 5100[28]				6	Pro 32	Oct 09
2847-2LU	T5870	2.00	*4GB*	15.6" HD	LED		2.0M	GMA	250G 5400	DVD±RW ✶	Intel 5100		Blue		6	Home P	Oct 09
2847-2QU	P8700	2.53	*4GB*	15.6" HD	LED		2.0M	GMA	320G 5400	DVD±RW ✣	Intel 5100		Blue	Fing	6	Pro 64	Oct 09
2847-6GU	T6670	2.20	2GB	15.6" HD	LED		2.0M	GMA	250G 5400	DVD±RW ✶	WiMAX				6	Pro 32	Nov 09
2847-6HU	T6670	2.20	*3GB*	15.6" HD	LED		2.0M	GMA	250G 5400	DVD±RW ✶	Intel 5100	Verizon[16]			6	Pro 32	Nov 09
2847-9VU	T6570	2.10	*4GB*	15.6" HD	LED	Glossy	2.0M	GMA	320G 7200	DVD±RW ✶	Intel 1000[28]		Blue		6	Home P	Jan 10
2847-9YU	T6670	2.20	*4GB*	15.6" HD	LED		2.0M	GMA	320G 7200	DVD±RW ✶	Intel 1000		Blue	Fing	6	Pro 64	Jan 10
2847-9UU	T6570	2.10	2GB	15.6" HD	LED		2.0M	GMA	250G 5400	DVD±RW ✶	Intel 1000				6	Pro 32	Jan 10
2847-9XU	T6570	2.10	*3GB*	15.6" HD	LED		2.0M	GMA	320G 7200	DVD±RW ✶	Intel 1000				6	Pro 32	Jan 10
2847-9ZU	T6670	2.20	*3GB*	15.6" HD	LED		2.0M	GMA	320G 7200	DVD±RW ✶	Intel 1000	AT&T[23]			6	Pro 32	Jan 10
2847-AZU	T6570	2.10	2GB	15.6" HD	LED	Glossy	2.0M	GMA	250G 5400	DVD±RW ✶	Intel 1000				6	Home P	Apr 10
2847-CZU	T6670	2.20	2GB	15.6" HD	LED		0.3M	GMA	250G 5400	DVD±RW ✶	Intel 1000				6	Pro 64	Sep 10
2847-D2U	T6670	2.20	*3GB*	15.6" HD	LED		0.3M	GMA	500G 7200	DVD±RW ✶	Intel 1000				6	Pro 64	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Processor	**Intel® Core™ 2 Duo processor T5870, T6570, or T6670** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core 2 Duo processor P8700** with **dual-core**, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache
Memory	**2GB**, **3GB**, or **4GB** std / 8GB max[7] / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **160GB**[8] (5400 rpm), **250GB** (5400 rpm), **320GB** (5400 or 7200 rpm), or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display	*Some:* **15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio *Some:* **15.6"** (395mm) **HD (1366x768) color**, **VibrantView** (glossy), **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio
Camera	*Some:* camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus
Integrated graphics	**Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD)**, in GM45, HDMI port supporting HDCP to output protected content *Max external resolution:* 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)
Keyboard TrackPoint® Touch pad	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch
Lighting FX	Illuminated power button
Dimensions[3] Weight[2] Case Battery - type[37] Battery - life[10]	*4/6-cell 15.6W" (WxDxH):* 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm *4-cell:* starting at 5.17 lb (2.35kg); *6-cell:* starting at 5.64 lb (2.56kg) *Color:* ThinkPad Matte Black; *Material:* Scratch-resistant ABS plastic Lithium Ion **6-cell** *6-cell:* up to 4.0 hr; *9-cell:* up to 6 hr
Chipset	**Mobile Intel GM45 Express Chipset** (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752)
ExpressCard Multicard reader PC Card Smart Card read Ports	One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
Mini PCI Express Intel 1000[28] Intel 5100[28] WiMAX Verizon[16] AT&T[23]	One or two Mini PCI Express slots *Some:* 11b/g/n wireless[4], Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 *Some:* 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) *Some:* 11a/b/g/n and WiMAX wireless, Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) *Some:* Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon® *Some:* Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®
Modem Bluetooth™ Ethernet Intel AMT Audio support	None *Some:* Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None *Some:* Fingerprint reader on palm rest, swipe sensor
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 64
- *Some:* Genuine Windows 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint models)
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt (GMA graphics) AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
☞ US models announced September 28, 2010; previous models on October 22, November 17, or December 15, 2009, or April 6, 2010
✶ Intel Centrino® processor technology
✣ Intel Centrino 2 processor technology

✂ US models withdrawn effective February or December 2010 or January 2011

Type-model	proc-essor	GHz	Memory	Wide-screen display	CCFL or LED	Cam-era	Inte-grated graphics	Disk SATA GB[8] rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue-tooth	Finger print reader	Bat-tery cells	Preload	Avail date
2847-DJU	T6670	2.20	*4GB*	15.6" HD	LED	0.3M	GMA	500G 7200	DVD±RW	✶11n[28]	None	None	None	6	Home P	Jan 11
2847-DKU	T6670	2.20	2GB	15.6" HD	LED	0.3M	GMA	250G 5400	DVD±RW	✶Intel 1000[28]	None	None	None	6	Home P	Jan 11

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)**

Processor	**Intel® Core™ 2 Duo processor T6670** with **dual-core**, 800MHz system bus, and 2MB L2 cache
Memory	**2GB** or **4GB** std / 8GB max[7] / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-italics:* standard memory in one socket; one socket available
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in **250GB**[8] (5400 rpm) or **500GB** (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™
Widescreen display Camera	**15.6"** (395mm) **HD (1366x768) color**, anti-glare, **LED backlight**, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus
Integrated graphics	**Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD)**, in GM45, HDMI port supporting HDCP to output protected content *Max external resolution:* 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)
Keyboard TrackPoint® Touch pad Lighting FX	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, Internet Scroll Bar[13], magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminated power button
Dimensions[3] Weight[2] Case Battery - type[37] Battery - life[10]	*4/6-cell 15.6W" (WxDxH):* 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm *4-cell:* starting at 5.17 lb (2.35kg); *6-cell:* starting at 5.64 lb (2.56kg) *Color:* ThinkPad Matte Black; *Material:* Scratch-resistant ABS plastic Lithium Ion **6-cell** *6-cell:* up to 4.0 hr; *9-cell:* up to 6 hr
Chipset ExpressCard Multicard reader PC Card Smart Card read Ports	**Mobile Intel GM45 Express Chipset** (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)
Mini PCI Express 11n[28] Intel 1000[28] WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	One Mini PCI Express slot *Some:* 11b/g/n wireless[4], Mini-PCIe Adapter II *Some:* 11b/g/n wireless, Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None None None Realtek® RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole None None
Limited warranty[12]	**1-year** - depot repair service / service upgrades[22] available

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[14] (only some listed)
- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- ThinkVantage Toolbox
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt (GMA graphics) AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service[17]
24 hour x 7 day[18] toll-free support during the warranty period[12] via 800-426-7378

ThinkPlus™,[22] 1-year LOR[24] 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 5-year LOR 9x5 NBD 45K5975
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
ThinkPlus 5-year P&L P/U Depot 45K5976
Post-warranty annual maintenance agreements at **lenovo.com**/thinkplus/warranty

See footnotes for important warranty information
US models announced January 11, 2011

✶ Intel Centrino® processor technology
✣ Intel Centrino 2 processor technology

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(TOP1-4) January 2011

ThinkPad® SL510 Accessories

Memory
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	*ann*	*06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	*ann*	*06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	*ann*	*06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	*ann*	*06/23/09*
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	*ann*	*06/23/09*

Storage and removable storage
SL410/510 500GB Disk SATA 3G/s (5400 rpm)	43N3422	*ann*	*10/22/09*
USB 2.0 Portable 320GB Hard Disk	45K1689	*ann*	*03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann*	*05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann*	*11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann*	*11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	*ann*	*01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann*	*01/05/10*

ThinkPad Expansion
Lenovo® Essential Notebook Stand	45J9292	*ann*	*05/12/09*
USB Port Replicator with Digital Video	45K1610	*ann*	*07/28/09*

Keyboard
TrackPoint Cap Collection	73P2698	*ann*	*12/16/03*
USB Numeric Keypad	33L3225	*ann*	*05/01/00*
Preferred Pro USB Keyboard	73P5220	*ann*	*06/21/05*
Enhanced Performance USB Keyboard	73P2620	*ann*	*03/23/04*
Lenovo Mini Wireless Keyboard N5901[52] (blk)	57Y6336		
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann*	*09/15/09*

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

ThinkPad USB Keyboard with TrackPoint	55Y9003	*ann*	*08/18/09*
Preferred Pro USB Fingerprint Keyboard	73P4730	*ann*	*02/22/05*
Lenovo USB Smartcard Keyboard	51J0155	*ann*	*03/24/09*

Mouse
Lenovo Optical Mouse (USB)	06P4069	*ann*	*05/21/03*
Lenovo Laser Mouse (USB)	41U3074	*ann*	*01/23/07*
ThinkPad USB Laser Mouse	57Y4635	*ann*	*12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	*ann*	*08/27/02*
ThinkPad Travel Mouse (USB, Optical)	31P7410	*ann*	*06/04/02*
ThinkPad Bluetooth Laser Mouse	41U5008	*ann*	*01/22/08*
Lenovo Optical Mouse A6010 (black)	57Y6255		
Lenovo Mini Optical Mouse M20B	55Y2091		
Lenovo Wireless Mouse N30B (black)	55Y9360		

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

Multimedia
ThinkPad In-Ear Headphones	57Y4488	*ann*	*01/07/10*
Lenovo Mini Speaker M220	55Y2033		
Lenovo Headphone P550	55Y2065		

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

Batteries[37]
ThinkPad Battery 25 (4-cell)	51J0498	*ann*	*10/22/09*
ThinkPad Battery 25+ (6-cell)	51J0499	*ann*	*10/22/09*
ThinkPad Battery 25++ (9-cell)	51J0500	*ann*	*10/22/09*
ThinkPad External Battery Charger[44]	40Y7625	*ann*	*09/20/05*

[44] Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at **www.lenovo.com/alldaycomputing**

ThinkPad 65W AC Adapter[45]	40Y7696

[45] Only compatible with the integrated graphics models.

ThinkPad 90W AC Adapter	40Y7659	*ann*	*09/20/05*
Lenovo Power Hub	57Y4600	*ann*	*09/07/10*
90W Ultraslim AC/DC Combo Adapter	41R4493	*ann*	*09/22/09*

More info at **www.lenovo.com/support/poweradapters**

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493
•iPod and iPhone Charge Tip (L10a)	41R4481	*ann*	*12/18/07*
•Generic Micro USB charge tip (L18)	41R4490	*ann*	*01/06/09*

More information at **www.lenovopowertips.com**

Carrying Cases
Up to 15.6" widescreen models:
ThinkPad 15W Case Sleeve	51J0477	*ann*	*08/18/09*
Lenovo Business Messenger Case	51J0475	*ann*	*08/18/09*
Lenovo Messenger Max	41U5253	*ann*	*05/01/07*
Lenovo Performance BackPack	41U5254	*ann*	*05/01/07*
ThinkPad Business Backpack	43R2482	*ann*	*05/13/08*

More information at **www.lenovo.com/support/cases**

Monitors
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann*	*06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann*	*10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann*	*11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann*	*10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann*	*10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann*	*10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann*	*10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann*	*06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann*	*09/17/08*

Monitor Accessories[46]
ThinkVision USB Soundbar	40Y7616	*ann*	*08/23/05*
ThinkVision Soundbar	45K1263	*ann*	*09/16/08*
Kensington MicroSaver Cable Lock	73P2582	*ann*	*12/29/03*
Kensington Twin Head Cable Lock	45K1620	*ann*	*09/30/08*
Lenovo Security Cable Lock	57Y4303	*ann*	*08/24/10*
Lenovo Easy Reach Monitor Stand	55Y9258	*ann*	*09/22/09*

[46] Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad SL accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**
Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

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, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

[1] Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.

[2] **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.

[3] **Thinness** may vary at certain points on the system.

[4] **Wireless capability:** Requires compatible wireless-enabled options sold separately.

[6] **Public network download modem 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.

[7] **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.

[8] **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

[10] **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

[12] **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

[13] **Internet access not included.**

[14] **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

[16] **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.

[17] **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.

[18] **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.

[19] **EasyServ depot repair service:** In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.

[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.

[22] **ThinkPlus 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. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.

[23] **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

[24] **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. In the United States call 1-800-426-7378. 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.

[27] **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

[28] **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.

[30] **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

[32] **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

[35] **Operating system:** Level of support varies by operating system. Operating systems not preloaded on the system may not provise full feature functionality. Refer to **lenovo.com**/think/support and enter your machine type and model number for more information.

[37] **Battery:** The ThinkPad Edge and ThinkPad SL series do not support batteries that are not genuine Lenovo-made or authorized. These systems will continue to boot, but may not charge unauthorized batteries.
Warning: Lenovo has no responsibility for the performance or safety of unauthorized batteries, and provides no warranties for failures or damage arising out of their use.

ThinkPad®

Visit **www.lenovo.com/safecomputing** periodically for the latest information on safe and effective computing.

Visit **www.lenovo.com/psref** for the latest version of Personal Systems Reference.

Lenovo
1009 Think Place
Morrisville, NC 27560
U.S.A.

January 2011
slbook.pdf

ThinkCentre.

Personal Systems Reference
Lenovo® ThinkCentre TopSeller™ Desktops

January 2011 - Version 391

Lenovo ThinkCentre M90/M90p
(Eco Ultra Small, Small, Tower Form Factors)

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

Kensington® MicroSaver® Cable Lock
73P2582
Kensington Twin Head Cable Lock
45K1620

1GB PC3-8500 DDR3 UDIMM 45J5434
2GB PC3-8500 DDR3 UDIMM 45J5435
1GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3706
2GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3707
(UDIMM for SFF, Tower only; SODIMM for Eco USFF only)

NVIDIA® GeForce® 310 DMS59 (2-DVI, 2-VGA)
57Y4167

Lenovo® USB-to-DVI Monitor Adapter
45K5296

Ultraslim Wireless Keyboard and Mouse
57Y4700

Lenovo Laser Mouse (USB)
41U3074

Lenovo ThinkCentre M58 and M58p Eco Ultra Small, Small, Tower

ThinkCentre®

Lenovo ThinkCentre M58 Eco Ultra Small

Lenovo ThinkCentre M58 Eco Ultra Small
with dual Lenovo ThinkVision monitors

Lenovo ThinkCentre M58 Small

Lenovo ThinkCentre M58 Small
with Lenovo ThinkVision monitor

Lenovo ThinkCentre M58 Tower

Lenovo ThinkCentre M58 Tower
with dual Lenovo ThinkVision monitors

ThinkCentre® M58 Eco Ultra Small (8820) - TopSeller (Windows 7)

Name	Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor conn	DisplayPort dongle	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
M58	8820-AQU	1x2	Core 2 Duo E7500	2.93	2	2GB	250GB[2]	DVD±RW	GMA	VGA, DP	None	ES50	None	Pro 32	None	Jan 10

- ***This small and medium business (SMB) model is part of the US TopSeller™ Program***
- ***This model has a 3-year limited warranty[1]***
- ***This system is Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning	*Mainstream enterprise stability and manageability*
Processor	**Intel® Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB std**, 8GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 204-pin SODIMM sockets (notebook); *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator 4500 (GMA 4500)**, integrated graphics in Q45, uses main memory (up to 765MB*)*, one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display
SATA disk	**250GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors and one eSATA connector on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q45 Express Chipset** (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort)
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Analog Devices AD1882 codec
Speaker	One internal speaker for business audio
Ethernet	Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0
Intel AMT	None
Modem	None
Security chip	Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	External AC/DC adapter, 130 watts, autosensing, 87% PSU

Eco Ultra Small

optical	disk

Bay ① 5.25", 1.6" high, access, std optical
Bay ② 3.5", 1" high, no access, std disk

Slot 1: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 10.8" W X 9.4" D X 3.1" H
- 275mm W X 238mm D X 80mm H
- 9.2 lb (4.2 kg) in maximum configuration
- Hinged toolless cover for easy serviceability
- Toolless disk and optical drive removal
- Toolless systemboard retention
- System floor stand for vertical orientation

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
  - security slot and cover release button are combined into one latch for improved chassis security
- Power-on password
- Administrator password
- Hard disk password (user and master)
- Boot sequence control
- Boot without diskette, keyboard
- Individual USB port disablement

Supports ThinkVantage® technologies

EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]

- Genuine Windows® 7 Professional 32

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)

Accessories

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
Lenovo Vertical PC and Monitor Stand II	41R4474
ThinkCentre Ultra Small Under Desk Mount	40Y8625

More accessories on O-M58 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]

- ➭ **3-year parts and labor**
- ➭ **International Warranty Service[9]**
- ➭ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➭ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➭ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➭ **Post warranty maintenance services available**
- ➭ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Name	Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor conn	DisplayPort dongle	Intel vPro	Win7 preload	Global Educ	Avail date
M58	8910-AQU	2x3	Pentium E5400	2.70	2	2GB	250GB[2]	DVD±RW	GMA	VGA, DP	None	None	Pro 32	None	Jan 10
☞ M58	8910-B4U	2x3	Pentium E5700	3.00	2	2GB	250GB	DVD±RW	GMA	VGA, DP	None	None	Pro 32	None	Oct 10
M58	8910-ARU	2x3	Core 2 Duo E7500	2.93	2	2GB	250GB	DVD±RW	GMA	VGA, DP	None	None	Pro 32	None	Jan 10
M58	8910-AUU	2x3	Core 2 Quad Q9500	2.83	4	*4GB*	320GB	DVD±RW	GMA	VGA, DP	None	None	Pro 32	None	Mar 10
M58	8910-ASU	2x3	Core 2 Duo E7500	2.93	2	*4GB*	320GB	DVD±RW	GMA	VGA, DP	None	None	Pro 64	None	Mar 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream enterprise stability and manageability*
Processor	**Intel® Pentium® Processor E5400** or **E5700** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache or **Intel Core 2 Quad Processor Q9500** with **quad-core**, 1333MHz system bus, and 6MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB** or **4GB std**, 16GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available; *Non-italics:* standard memory in one socket; 3 sockets available
Graphics	**Intel Graphics Media Accelerator 4500 (GMA 4500)**, integrated graphics in Q45, uses main memory (up to 765MB *[2GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display

Small

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, open (reader)
Slot 1: Low Profile, PCI Express 2.0 x16
Slot 2: Low Profile, 32-bit PCI 2.3
- Business black color; metal case
- 12.5" W X 14.0" D X 3.9" H
- 317mm W X 355mm D X 99mm H
- 16.5 lb (7.5 kg) in maximum configuration
- Toolless cover flips up and tilts backward on rear hinges
- Toolless disk, optical drive removal
- Toolless adapter retention
- Toolless systemboard retention
- System floor stand for vertical orientation

SATA disk	**250GB** or **320GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors on planar
eSATA port	One external SATA (eSATA) port
Diskette drive	None
Media reader	None
Chipset	**Intel Q45 Express Chipset** (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort), eSATA
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Analog Devices AD1882 codec
Speaker	One internal speaker for business audio
Ethernet	Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0
Intel AMT	None
Modem	None
Security chip	Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	280 watts with variable speed fan, autosensing, two diagnostic LEDs

Security
- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
  - optional cable also locks the cover by deactivating the cover release buttons
- Power-on password
- Administrator password
- Hard disk password (user and master)
- Boot sequence control
- Boot without diskette, keyboard
- Serial port I/O control
- Individual USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA® Quadro® 256MB NVS 290	43R1765

More accessories on O-M58 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]
- ➥ **3-year parts and labor**
- ➥ **International Warranty Service**[9]
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):**[7]
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➥ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day**[14] **toll-free support during the warranty period**[1] **via 800-426-7378**

See footnotes for important warranty information
☞ US model announced September 28, 2010; previous models on January 12 or February 23, 2010

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(MLAN4-24) October 2010

Name	Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor connectors	DisplayPort dongle	Intel vPro	Win7 preload	Global Educ	Avail date
M58	9960-ALU	4x4	Core 2 Duo E7500	2.93	2	2GB	250GB[2]	DVD±RW	GMA	VGA, DP	None	None	Pro 32	None	Jan 10
☞ M58	9960-APU	4x4	Core 2 Quad Q9500	2.83	4	*4GB*	320GB	DVD±RW	GMA	VGA, DP	None	None	Pro 32	None	Mar 10
☞ M58	9960-AMU	4x4	Core 2 Duo E7500	2.93	2	*4GB*	320GB	DVD±RW	GMA	VGA, DP	None	None	Pro 64	None	Mar 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream enterprise stability and manageability*
Processor	**Intel® Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache or **Intel Core 2 Quad Processor Q9500** with **quad-core**, 1333MHz system bus, and 6MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB** or **4GB std**, 16GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available; *Non-italics:* standard memory in one socket; 3 sockets available
Graphics	**Intel Graphics Media Accelerator 4500 (GMA 4500)**, integrated graphics in Q45, uses main memory (up to 765MB *[2GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display
SATA disk	**250GB** or **320GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), three SATA connectors and one eSATA connector on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q45 Express Chipset** (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort)
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Analog Devices AD1882 codec
Speaker	One internal speaker for business audio
Ethernet	Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0
Intel AMT	None
Modem	None
Security chip	Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	280 watts with variable speed fan, manual switch, two diagnostic LEDs

Tower
- Business black color; metal case
- 6.9" W X 17.3" D X 15.8" H
- 175mm W X 440mm D X 402mm H
- 24.2 lb (11.0 kg) in max configuration
- Handle on top front
- Toolless cover removal
- Toolless disk, diskette drive, optical drive removal
- Toolless adapter retention

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, open (reader/diskette)
Bay ④ 3.5", 1" high, no access, std disk
Slot 1: half-length, full-height, PCIe 2.0 x16 (75w max)
Slot 2: half-length, full-height, PCIe 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)
- Power-on password
- Administrator password
- Hard disk password (user and master)
- Boot sequence control
- Boot without diskette, keyboard
- Serial port I/O control
- Individual USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Limited Warranty[1]
- ↪ **3-year parts and labor**
- ↪ **International Warranty Service[9]**
- ↪ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ↪ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ↪ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ↪ **Post warranty maintenance services available**
- ↪ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA® Quadro® 256MB NVS 290	43R1765
NVIDIA Quadro 256MB NVS 295	45K1669

More accessories on O-M58 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

See footnotes for important warranty information
☞ US models announced February 23, 2010; previous model on January 12, 2010

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(MLAN4-25) March 2010

Name	Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor conn	DisplayPort dongle	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
M58p	9961-ALU	1x2	Core 2 Duo E8400	3.00	2	2GB	250GB[2]	DVD±RW	GMA	VGA, DP	None	ES50	vPro	Pro 32	No	Jan 10

- *Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)*
- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *This model has a 3-year limited warranty[1]*
- *This system is Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream enterprise stability and manageability*
Processor	**Intel® Core™ 2 Duo Processor E8400** with **dual-core**, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB std**, 8GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 204-pin SODIMM sockets (notebook); *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator 4500 (GMA 4500)**, integrated graphics in Q45, uses main memory (up to 765MB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display
SATA disk	**250GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors and one eSATA connector on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q45 Express Chipset** (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort)
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Analog Devices AD1882 codec
Speaker	One internal speaker for business audio
Ethernet	Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0
Intel AMT	Intel Active Management Technology (iAMT)
Modem	None
Security chip	Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	External AC/DC adapter, 130 watts, autosensing, 87% PSU

Eco Ultra Small

optical	disk

☐ ∘∘ ☐

Bay ① 5.25", 1.6" high, access, std optical
Bay ② 3.5", 1" high, no access, std disk

Slot 1: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 10.8" W X 9.4" D X 3.1" H
- 275mm W X 238mm D X 80mm H
- 9.2 lb (4.2 kg) in maximum configuration
- Hinged toolless cover for easy serviceability
- Toolless disk and optical drive removal
- Toolless systemboard retention
- System floor stand for vertical orientation

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
  - security slot and cover release button are combined into one latch for improved chassis security
- Power-on password
- Administrator password
- Hard disk password (user and master)
- Boot sequence control
- Boot without diskette, keyboard
- Individual USB port disablement

Supports ThinkVantage® technologies

EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]

- Genuine Windows® 7 Professional 32

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)

Accessories

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
Lenovo Vertical PC and Monitor Stand II	41R4474
ThinkCentre Ultra Small Under Desk Mount	40Y8625

More accessories on O-M58 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]

- ➭ **3-year parts and labor**
- ➭ **International Warranty Service[9]**
- ➭ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➭ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➭ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➭ **Post warranty maintenance services available**
- ➭ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Name	Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor connectors	DisplayPort dongle	Intel vPro	Win7 preload	Global Educ	Avail date
M58p	9964-ABU	2x3	Core 2 Duo E8400	3.00	2	2GB	250GB[2]	DVD±RW	GMA	VGA, DP	None	vPro	Pro 32	None	Jan 10
✂ **M58p**	9964-ACU	2x3	Core 2 Quad Q9400	2.66	4	*4GB*	320GB	DVD±RW	GMA	VGA, DP	None	vPro	Pro 32	None	Jan 10
☞ **M58p**	9964-ADU	2x3	Core 2 Duo E8400	3.00	2	*4GB*	320GB	DVD±RW	GMA	VGA, DP	None	vPro	Pro 64	None	Mar 10

- *Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)*
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream enterprise stability and manageability*
Processor	**Intel® Core™ 2 Duo Processor E8400** with **dual-core**, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache or **Intel Core 2 Quad Processor Q9400** with **quad-core**, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB** or **4GB std**, 16GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available; *Non-italics:* standard memory in one socket; 3 sockets available
Graphics	**Intel Graphics Media Accelerator 4500 (GMA 4500)**, integrated graphics in Q45, uses main memory (up to 765MB *[2GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display

Small

```
  ┌──────────────┬────────┐
  │  optical     │  disk  │
  │              │(in rear)│
  ├──────────────┴────────┤
  │   ▭ ○ ○ ▭            │
  └────────────────────────┘
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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, open (reader)
Slot 1: Low Profile, PCI Express 2.0 x16
Slot 2: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 12.5" W X 14.0" D X 3.9" H
- 317mm W X 355mm D X 99mm H
- 16.5 lb (7.5 kg) in maximum configuration
- Toolless cover flips up and tilts backward on rear hinges
- Toolless disk, optical drive removal
- Toolless adapter retention
- Toolless systemboard retention
- System floor stand for vertical orientation

SATA disk	**250GB** or **320GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors on planar
eSATA port	One external SATA (eSATA) port
Diskette drive	None
Media reader	None
Chipset	**Intel Q45 Express Chipset** (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort), eSATA
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Analog Devices AD1882 codec
Speaker	One internal speaker for business audio
Ethernet	Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0
Intel AMT	Intel Active Management Technology (iAMT)
Modem	None
Security chip	Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	280 watts with variable speed fan, autosensing, two diagnostic LEDs

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
  - optional cable also locks the cover by deactivating the cover release buttons
- Power-on password
- Administrator password
- Hard disk password (user and master)
- Boot sequence control
- Boot without diskette, keyboard
- Serial port I/O control
- Individual USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA® Quadro® 256MB NVS 290	43R1765

More accessories on O-M58 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]

- ➾ **3-year parts and labor**
- ➾ **International Warranty Service[9]**
- ➾ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➾ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➾ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➾ **Post warranty maintenance services available**
- ➾ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

See footnotes for important warranty information
☞ US model announced February 23, 2010; previous models on January 12, 2010
✂ US model withdrawn effective April 2010

ThinkCentre® M58p Tower (9965) - TopSeller (Windows 7)

Name	Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor connectors	DisplayPort dongle	Intel vPro	Win7 preload	Global Educ	Avail date
M58p	9965-A9U	4x4	Core 2 Duo E8400	3.00	2	2GB	250GB[2]	DVD±RW	GMA	VGA, DP	None	vPro	Pro 32	None	Jan 10
✄ M58p	9965-ABU	4x4	*Core 2 Quad Q9400*	2.66	4	*4GB*	*320GB*	*DVD±RW*	*GMA*	*VGA, DP*	*None*	*vPro*	*Pro 32*	*None*	*Jan 10*
☞ **M58p**	9965-ACU	4x4	Core 2 Duo E8400	3.00	2	*4GB*	320GB	DVD±RW	GMA	VGA, DP	None	vPro	Pro 64	None	Mar 10

- *Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)*
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Mainstream enterprise stability and manageability*
Processor	**Intel® Core™ 2 Duo Processor E8400** with **dual-core**, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache or **Intel Core 2 Quad Processor Q9400** with **quad-core**, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB** or **4GB std**, 16GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available; *Non-italics:* standard memory in one socket; 3 sockets available
Graphics	**Intel Graphics Media Accelerator 4500 (GMA 4500)**, integrated graphics in Q45, uses main memory (up to 765MB *[2GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display
SATA disk	**250GB** or **320GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), three SATA connectors and one eSATA connector on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q45 Express Chipset** (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort)
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Analog Devices AD1882 codec
Speaker	One internal speaker for business audio
Ethernet	Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0
Intel AMT	Intel Active Management Technology (iAMT)
Modem	None
Security chip	Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	280 watts with variable speed fan, manual switch, two diagnostic LEDs

Tower

- Business black color; metal case
- 6.9" W X 17.3" D X 15.8" H
- 175mm W X 440mm D X 402mm H
- 24.2 lb (11.0 kg) in max configuration
- Handle on top front
- Toolless cover removal
- Toolless disk, diskette drive, optical drive removal
- Toolless adapter retention

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,   open (reader/diskette)
Bay ④ 3.5",   1" high,   no access, std disk
Slot 1: half-length,full-height, PCIe 2.0 x16 (75w max)
Slot 2: half-length,full-height, PCIe 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)
- Power-on password
- Administrator password
- Hard disk password (user and master)
- Boot sequence control
- Boot without diskette, keyboard
- Serial port I/O control
- Individual USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Microsoft Office 2010 preloaded; purchase product key to activate
- Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA® Quadro® 256MB NVS 290	43R1765
NVIDIA Quadro 256MB NVS 295	45K1669

More accessories on O-M58 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]

- ➥ **3-year parts and labor**
- ➥ **International Warranty Service[9]**
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➥ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

See footnotes for important warranty information
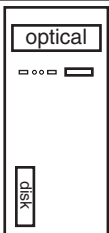☞ US model announced February 23, 2010; previous models on January 12, 2010
✄ US model withdrawn effective April 2010

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Partial list of accessories supported on ThinkCentre M58 and M58p

Memory
Eco Ultra Small 8820/7359/7637/9961/7479/6136 use notebook memory:

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	*ann 06/23/09*
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	*ann 06/23/09*
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	*ann 06/23/09*
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	*ann 06/23/09*

Small 8910/7360/6258/7638/9964/7483/7220/6137/6234, and Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/ 7639 use desktop memory:

1GB PC3-8500 DDR3 UDIMM	45J5434	*ann 11/18/08*
1GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4421	*ann 11/10/09*
2GB PC3-8500 DDR3 UDIMM	45J5435	*ann 11/18/08*
2GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4422	*ann 11/10/09*

More information at **www.lenovo.com/support/desktopmemorycompatibility**

Optical
All:

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max[4]	41N5618	*ann 09/26/06*
Super Multi-Burner DL DVD±RW SATA Drive	41N5620	*ann 09/26/06*

Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/ 7639 support:

Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675	*ann 03/31/09*

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	*ann 01/24/06*
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 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

Graphics
Small 8910/7360/6258/7638/9964/7483/7220/6137/6234 support Low Profile:

ADD2 DVI-D Monitor Connection (HDCP)	43R1985	*ann 11/06/07*
NVIDIA® Quadro® 256MB NVS 290 (2-DVI or 2-VGA via DMS59 dongles)	43R1765	*ann 12/18/07*
NVIDIA GeForce® 310 512MB DMS59 (2-DVI or 2-VGA via DMS59 dongles)	57Y4167	*ann 03/02/10*

Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/ 7639 support 75 watts max:

ADD2 DVI-D Monitor Connection (HDCP)	43R1985	*ann 11/06/07*
NVIDIA Quadro 256MB NVS 290	43R1765	*ann 12/18/07*
NVIDIA Quadro 256MB NVS 295 (2-DP)	45K1669	*ann 04/21/09*
NVIDIA GeForce 310 512MB DMS59	57Y4167	*ann 03/02/10*

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

Keyboard

Preferred Pro USB Keyboard	73P5220	*ann 06/21/05*
Preferred Pro Full Size PS/2 Keyboard	31P7415	*ann 06/04/02*
Enhanced Performance USB Keyboard	73P2620	*ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*
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*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
Lenovo Wireless Laser Mouse - Black[52]	45K1696	*ann 11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	*ann 11/25/08*

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

Multimedia

ThinkPad® In-Ear Headphones[60]	57Y4488	*ann 01/07/10*

[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	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.

Mounting Device
Eco Ultra Small 8820/7359/7637/9961/7479/6136 support under desk mounting device:

ThinkCentre Ultra Small Under Desk Mount	40Y8625	*ann 09/06/05*

Monitors

Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann 06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann 09/17/08*

More information at **www.lenovo.com/thinkvision**

Monitor Accessories[46]
Eco Ultra Small 8820/7359/7637/9961/7479/6136 support:

Lenovo Vertical PC and Monitor Stand II	41R4474	*ann 01/27/09*

All:

Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
DisplayPort™ to Single-link DVI-D Cable	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable	57Y4393	*ann 08/04/09*
ThinkVision USB Soundbar	40Y7616	*ann 08/23/05*
ThinkVision Soundbar	45K1263	*ann 09/16/08*
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	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 desktop accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**

Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

ThinkCentre®

Lenovo ThinkCentre M70e Small and
Lenovo ThinkCentre M70e Tower

Lenovo ThinkCentre M70e Tower
with Lenovo ThinkVision monitor

Lenovo ThinkCentre M70e Small
with optional PS/2 keyboard and mouse ports

Lenovo ThinkCentre M70e Small
with Lenovo ThinkVision monitor

Lenovo ThinkCentre M70e Tower
with optional PS/2 keyboard and mouse ports

Lenovo ThinkCentre M70e Tower

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Win7 preload	Global Educ	Avail date
0809-C5U	4x3	Pentium E5500	2.80	2MB	2	2GB	320GB[2]	DVD±RW	GMA	Pro 32	None	Aug 10
0809-B3U	4x3	Core 2 Duo E7500	2.93	3MB	2	*3GB*	320GB	DVD±RW	GMA	Pro 32	None	Aug 10
0809-C6U	4x3	Core 2 Duo E8400	3.00	6MB	2	*4GB*	500GB	DVD±RW	GMA	Pro 64	None	Aug 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Essential business features, exceptional value*
Processor	**Intel® Pentium® Processor E5500** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache or **Intel Core 2 Duo Processor E8400** with **dual-core**, 1333MHz system bus, and 6MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB, 3GB, or 4GB std**, 4GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 240-pin DIMM sockets; *Italics:* standard memory in both sockets; no sockets avail; *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator X4500 (GMA X4500)**, integrated graphics in G41, uses main memory (up to 765MB *[2GB models]*, 1277MB *[3GB models]*, or 1759MB *[4GB models]*), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter

Small

disk   optical

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 1: Low Profile, PCI Express x16 (40w max)
Slot 2: Low Profile, PCI Express x1
Slot 3: Low Profile, 32-bit PCI 2.3
Slot 4: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 13.2" W X 15.0" D X 3.9" H
- 335mm W X 382mm D X 99mm H
- 14.5 lb (6.6 kg) in maximum configuration
- Highlighted optical drive button for easy access
- System floor stand for vertical orientation

SATA disk	**320GB** or **500GB,** SATA 3.0Gb/s 7200 rpm, vibration dampening
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), three SATA connectors on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel G41 Express Chipset** (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus)
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	One internal speaker for business audio
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN®
Intel AMT	None
Modem	None
Security chip	None
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	240 watts, autosensing, active Power Factor Correction

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, mouse
- Serial port I/O control
- USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort™ to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
ADD2 DVI-D Monitor Connection (HDCP)	43R1985
NVIDIA® GeForce® 310 512MB (DP, VGA)	57Y4397
NVIDIA Quadro® 512MB FX 380 LP (DP,DVI)	57Y4396

More accessories on O-M70E sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]
- ➭ **3-year parts and labor**
- ➭ **International Warranty Service[9]**
- ➭ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➭ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➭ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➭ **Post warranty maintenance services available**
- ➭ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory[8]	SATA disk	2nd Disk Bay	SATA optical	Graphics	Win7 preload	Global Educ	Avail date
0806-C1U	4x3	Pentium E5500	2.80	2MB	2	2GB	320GB[2]	None	DVD±RW	GMA	Pro 32	None	Aug 10
0806-B3U	4x3	Core 2 Duo E7500	2.93	3MB	2	*3GB*	320GB	None	DVD±RW	GMA	Pro 32	None	Aug 10
0806-C5U	4x3	Core 2 Duo E8400	3.00	6MB	2	*4GB*	500GB	None	DVD±RW	GMA	Pro 64	None	Aug 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Essential business features, exceptional value*
Processor	**Intel® Pentium® Processor E5500** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache or **Intel Core 2 Duo Processor E8400** with **dual-core**, 1333MHz system bus, and 6MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB**, **3GB**, or **4GB std**, 4GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 240-pin DIMM sockets; *Italics:* standard memory in both sockets; no sockets avail; *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator X4500 (GMA X4500)**, integrated graphics in G41, uses main memory (up to 765MB *[2GB models]*, 1277MB *[3GB models]*, or 1759MB *[4GB models]*), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), three SATA connectors on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel G41 Express Chipset** (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus)
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	One internal speaker for business audio
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN®
Intel AMT	None
Modem	None
Security chip	None
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	280 watts with variable speed fan, manual switch

Tower
- Business black color; metal case
- 6.3" W X 16.6" D X 15.3" H
- 160mm W X 422mm D X 388mm H
- 20.7 lb (9.4 kg) in max configuration
- Handle on top front
- 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

Slot 1: half-length,full-height, PCI Express x16 (60w max)
Slot 2: half-length,full-height, PCI Express x1
Slot 3: half-length,full-height, 32-bit PCI 2.3
Slot 4: half-length,full-height, 32-bit PCI 2.3

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, mouse
- Serial port I/O control
- USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Limited Warranty[1]
- ➥ **3-year parts and labor**
- ➥ **International Warranty Service[9]**
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➥ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort™ to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
ADD2 DVI-D Monitor Connection (HDCP)	43R1985
NVIDIA® GeForce® 310 512MB (DP, VGA)	57Y4397

More accessories on O-M70E sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Partial list of accessories supported on ThinkCentre M70e

Memory
1GB PC3-8500 DDR3 UDIMM	45J5434	*ann 11/18/08*
1GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4421	*ann 11/10/09*
2GB PC3-8500 DDR3 UDIMM	45J5435	*ann 11/18/08*
2GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4422	*ann 11/10/09*

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*
Super Multi-Burner DL DVD±RW SATA Drive	41N5620	*ann 09/26/06*

Storage and removable storage
250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	*ann 01/24/06*
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	*ann 11/06/07*
USB 2.0 Portable 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive [53]	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

[53] USB-only attach.

Graphics
Small 0809/0822/0830/0833/0843 support Low Profile:
DisplayPort™ to Single-link DVI-D Cable[50]	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable[50]	57Y4393	*ann 08/04/09*
ADD2 DVI-D Monitor Connection (HDCP)	43R1985	*ann 11/06/07*
NVIDIA® Quadro® 512MB FX 380 LP (DP, DVI with a DVI to VGA converter)	57Y4396	*ann 02/02/10*
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59 (2-DVI or 2-VGA via DMS59 dongles)	57Y4167	*ann 03/02/10*

Tower 0806/0829/0832/0842 support:
DisplayPort to Single-link DVI-D Cable[50]	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable[50]	57Y4393	*ann 08/04/09*
ADD2 DVI-D Monitor Connection (HDCP)	43R1985	*ann 11/06/07*
NVIDIA GeForce 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59	57Y4167	*ann 03/02/10*

[50] Attaches to theThinkCentre compatible DisplayPort graphics card.

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

Keyboard
Preferred Pro USB Keyboard	73P5220	*ann 06/21/05*
Preferred Pro Full Size PS/2 Keyboard	31P7415	*ann 06/04/02*
Enhanced Performance USB Keyboard	73P2620	*ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*
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*

[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*
ThinkPad® USB Laser Mouse	57Y4635	*ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	*ann 08/27/02*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
Lenovo Wireless Laser Mouse - Black[52]	45K1696	*ann 11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	*ann 11/25/08*

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

Multimedia
ThinkPad In-Ear Headphones[60]	57Y4488	*ann 01/07/10*

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

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

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	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
Lenovo D186 Wide 18.5" Monitor	2580AB1	*ann 01/12/10*
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann 06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann 09/17/08*

More information at **www.lenovo.com/thinkvision**

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
ThinkVision USB Soundbar	40Y7616	*ann 08/23/05*
ThinkVision Soundbar	45K1263	*ann 09/16/08*
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	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 desktop accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**

Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

ThinkCentre®

Lenovo ThinkCentre M75e Small and
Lenovo ThinkCentre M75e Tower

Lenovo ThinkCentre M75e Tower
with Lenovo ThinkVision monitor

Lenovo ThinkCentre M75e Small

Lenovo ThinkCentre M75e Small
with Lenovo ThinkVision monitor

Lenovo ThinkCentre M75e Tower

Lenovo ThinkCentre M75e Tower

Type-model	Slot x bay	Processor	GHz	Memory[8]	SATA disk	SATA optical	Media reader	Integrated graphics	Monitor connectors	Win7 preload	Global Educ	Avail date
4163-B2U	4x3	Sempron 145	2.80	1GB	250GB[2]	DVD	None	3000	VGA, DVI-D	Prem 32	None	Oct 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *This model has a 1-year limited warranty[1]*
- *This system is Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Essential business features, exceptional value*	**Small**
Processor	**AMD® Sempron™ Processor 145** with single-core, integrated 1066MHz DDR3 memory controller, and 1MB L2 cache	
Implementation	Processor in Socket AM3	

Positioning: *Essential business features, exceptional value*

Processor: **AMD® Sempron™ Processor 145** with single-core, integrated 1066MHz DDR3 memory controller, and 1MB L2 cache

Implementation: Processor in Socket AM3

Memory: **1GB std**, 16GB max[8], **UDIMM, PC3-10600 1333MHz DDR3***, four 240-pin DIMM sockets; *Non-italics:* standard memory in one socket; three sockets avail * System automatically clocks down for processors with 1066MHz DDR3 memory controller

Graphics: **ATI™ Radeon™ 3000**, integrated in chipset, uses main memory (up to 256MB), one analog VGA DB-15 connector, one DVI-D connector, DirectX® 10, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with optional dual-head ATI Radeon discrete graphics adapter

SATA disk: **250GB,** SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller: Serial ATA, SATA 3.0Gb/s, integrated in SB710
SATA DVD: DVD-ROM DL SATA 1.5Gb/s 16-48X Max[4] Drive
SATA cables: Two SATA cables (each 1-drop to device), four SATA connectors
eSATA port: None
Diskette drive: None
Media reader: None

Chipset: **AMD 760G Chipset** with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O

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), monitor (VGA DB-15, DVI-D)
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 media reader or 2 rear USB ports)
Audio: High Definition (HD) Audio, Realtek® ALC662 codec
Speaker: One internal speaker for business audio
IEEE 1394: None
Ethernet: Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN®
Modem: None
Security chip: Winbond® WPCT210 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant

Keyboard: Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse: Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply: 240 watts, autosensing, active Power Factor Correction

Small

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 1: Low Profile, PCIe 2.0 x16 (40w max)
Slot 2: Low Profile, PCIe 2.0 x1
Slot 3: Low Profile, PCIe 2.0 x1
Slot 4: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 13.2" W X 15.0" D X 3.9" H
- 335mm W X 382mm D X 99mm H
- 14.9 lb (6.8 kg) in maximum configuration
- Highlighted optical drive button for easy access
- System floor stand for vertical orientation

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, mouse
- Serial port I/O control
- USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 32

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate

Accessories

1GB PC3-10600 DDR3 UDIMM	57Y4389
2GB PC3-10600 DDR3 UDIMM	57Y4390
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort™ to Single-link DVI-D Cable	45J7915
NVIDIA® Quadro® 512MB FX 380 LP	57Y4396
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397
NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA)	57Y4167

More accessories on O-M75E sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]

- ➥ **1-year parts and labor**
- ➥ **International Warranty Service[9]**
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):[7]**
  - **1-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9189)
  - **2-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9187)
  - **2-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9190)
  - **3-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9188)
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9191)
- ➥ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Type-model	Slot x bay	Processor	GHz	Memory[8]	SATA disk	SATA optical	Media reader	Integrated graphics	Monitor connectors	Win7 preload	Global Educ	Avail date
5042-A5U	4x3	Athlon II X2 B22	2.80	2GB	320GB[2]	DVD±RW	None	3000	VGA, DVI-D	Pro 32	None	Oct 10
5042-A6U	4x3	Phenom II X2 B53	2.80	*3GB*	320GB	DVD±RW	None	3000	VGA, DVI-D	Pro 32	None	Oct 10
5042-A7U	4x3	Athlon II X4 640	3.00	*4GB*	500GB	DVD±RW	None	3000	VGA, DVI-D	Pro 64	None	Oct 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Essential business features, exceptional value*
Processor	**AMD® Athlon™ II X2 Processor B22** with **dual-core**, integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) or **AMD Phenom™ II X2 Processor B53** with **dual-core**, integrated 1066MHz DDR3 memory controller, and 1MB L2 cache (512KB per core), and 6MB shared L3 cache or **AMD Athlon II X4 Processor 640** with **quad-core**, integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512KB per core)
Implementation	Processor in Socket AM3
Memory	**2GB, 3GB, or 4GB std**, 16GB max[8], **UDIMM, PC3-10600 1333MHz DDR3***, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets avail; *Non-italics:* standard memory in one socket; three sockets avail * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**ATI™ Radeon™ 3000**, integrated in chipset, uses main memory (up to 256MB), one analog VGA DB-15 connector, one DVI-D connector, DirectX® 10, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with optional dual-head ATI Radeon discrete graphics adapter
SATA disk	**320GB or 500GB,** SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in SB710
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**AMD 760G Chipset** with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O
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), monitor (VGA DB-15, DVI-D)
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 media reader or 2 rear USB ports)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	One internal speaker for business audio
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN®
Modem	None
Security chip	Winbond® WPCT210 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	240 watts, autosensing, active Power Factor Correction

Small

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 1: Low Profile, PCIe 2.0 x16 (40w max)
Slot 2: Low Profile, PCIe 2.0 x1
Slot 3: Low Profile, PCIe 2.0 x1
Slot 4: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 13.2" W X 15.0" D X 3.9" H
- 335mm W X 382mm D X 99mm H
- 14.9 lb (6.8 kg) in maximum configuration
- Highlighted optical drive button for easy access
- System floor stand for vertical orientation

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  - Security slot (in rear for optional Kensington® Microsaver® cable)
- Power-on password
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  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➥ **ThinkPlus services at lenovo.com/thinkplus/warranty**
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Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
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2GB PC3-10600 DDR3 UDIMM	57Y4390
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort™ to Single-link DVI-D Cable	45J7915
NVIDIA® Quadro® 512MB FX 380 LP	57Y4396
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397
NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA)	57Y4167

More accessories on O-M75E sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Type-model	Slot x bay	Processor	GHz	Memory[8]	SATA disk	2nd Disk Bay	SATA optical	Media reader	Integrated graphics	Monitor connectors	Win7 preload	Global Educ	Avail date
4162-A3U	4x3	Sempron 145	2.80	1GB	250GB[2]	None	DVD	None	3000	VGA, DVI-D	Prem 32	None	Oct 10

- ***This small and medium business (SMB) model is part of the US TopSeller™ Program***
- ***This model has a 1-year limited warranty[1]***
- ***This system is Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning	*Essential business features, exceptional value*
Processor	**AMD® Sempron™ Processor 145** with single-core, integrated 1066 MHz DDR3 memory controller, and 1MB L2 cache
Implementation	Processor in Socket AM3
Memory	**1GB std**, 16GB max[8], **UDIMM**, **PC3-10600 1333MHz DDR3***, four 240-pin DIMM sockets; *Non-italics:* standard memory in one socket; three sockets avail * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**ATI™ Radeon™ 3000**, integrated in chipset, uses main memory (up to 256MB), one analog VGA DB-15 connector, one DVI-D connector, DirectX® 10, ATI Avivo™**,** SurroundView™, supports dual independent display; supports up to 4 monitors with optional dual-head ATI Radeon discrete graphics adapter
SATA disk	**250GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in SB710
SATA DVD	DVD-ROM DL SATA 1.5Gb/s 16-48X Max[4] Drive
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**AMD 760G Chipset** with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O
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), monitor (VGA DB-15, DVI-D)
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 media reader or 2 rear USB ports)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	One internal speaker for business audio
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN®
Modem	None
Security chip	Winbond® WPCT210 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	280 watts with variable speed fan, manual switch

Tower
- Business black color; metal case
- 6.3" W X 16.6" D X 15.3" H
- 160mm W X 422mm D X 388mm H
- 21.2 lb (9.6 kg) in max configuration
- Handle on top front
- Highlighted optical drive button for easy access

optical

disk

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 1: half-length,full-height, PCIe 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
Slot 4: half-length,full-height, 32-bit PCI 2.3

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, mouse
- Serial port I/O control
- USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 32

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate

Accessories

1GB PC3-10600 DDR3 UDIMM	57Y4389
2GB PC3-10600 DDR3 UDIMM	57Y4390
DVD-ROM DL SATA 1.5Gb/s 16-48X Max	41N5618
DisplayPort™ to Single-link DVI-D Cable	45J7915
NVIDIA® GeForce® 310 512MB (DP, VGA)	57Y4397
NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA)	57Y4167

More accessories on O-M75E sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]
- ➥ **1-year parts and labor**
- ➥ **International Warranty Service**[9]
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):**[7]
  - **1-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9189)
  - **2-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9187)
  - **2-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9190)
  - **3-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9188)
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9191)
- ➥ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day**[14] **toll-free support during the warranty period**[1] **via 800-426-7378**

Type-model	Slot x bay	Processor	GHz	Memory[8]	SATA disk	2nd Disk Bay	SATA optical	Media reader	Integrated graphics	Monitor connectors	Win7 preload	Global Educ	Avail date
5041-A1U	4x3	Athlon II X2 B22	2.80	2GB	320GB[2]	None	DVD±RW	None	3000	VGA, DVI-D	Pro 32	None	Oct 10
5041-A2U	4x3	Phenom II X2 B53	2.80	*3GB*	320GB	None	DVD±RW	None	3000	VGA, DVI-D	Pro 32	None	Oct 10
5041-A3U	4x3	Athlon II X4 640	3.00	*4GB*	500GB	None	DVD±RW	None	3000	VGA, DVI-D	Pro 64	None	Oct 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Essential business features, exceptional value*
Processor	**AMD® Athlon™ II X2 Processor B22** with **dual-core**, integrated 1066 MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) or **AMD Phenom™ II X2 Processor B53** with **dual-core**, integrated 1066 MHz DDR3 memory controller, and 1MB L2 cache (512KB per core), and 6MB shared L3 cache or **AMD Athlon II X4 Processor 640** with **quad-core**, integrated 1333 MHz DDR3 memory controller, and 2MB L2 cache (512KB per core)
Implementation	Processor in Socket AM3
Memory	**2GB, 3GB, or 4GB std**, 16GB max[8], **UDIMM, PC3-10600 1333MHz DDR3***, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets avail; *Non-italics:* standard memory in one socket; three sockets avail * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**ATI™ Radeon™ 3000**, integrated in chipset, uses main memory (up to 256MB), one analog VGA DB-15 connector, one DVI-D connector, DirectX® 10, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with optional dual-head ATI Radeon discrete graphics adapter
SATA disk	**320GB or 500GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in SB710
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**AMD 760G Chipset** with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O
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), monitor (VGA DB-15, DVI-D)
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 media reader or 2 rear USB ports)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	One internal speaker for business audio
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN®
Modem	None
Security chip	Winbond® WPCT210 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	280 watts with variable speed fan, manual switch

Tower

- Business black color; metal case
- 6.3" W X 16.6" D X 15.3" H
- 160mm W X 422mm D X 388mm H
- 21.2 lb (9.6 kg) in max configuration
- Handle on top front
- 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

Slot 1: half-length, full-height, PCIe 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
Slot 4: half-length, full-height, 32-bit PCI 2.3

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, mouse
- Serial port I/O control
- USB port disablement

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant

Limited Warranty[1]
➱ **3-year parts and labor**
➱ **International Warranty Service[9]**
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➱ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
➱ **ThinkPlus services at lenovo.com/thinkplus/warranty**
➱ **Post warranty maintenance services available**
➱ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-10600 DDR3 UDIMM	57Y4389
2GB PC3-10600 DDR3 UDIMM	57Y4390
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort™ to Single-link DVI-D Cable	45J7915
NVIDIA® GeForce® 310 512MB (DP, VGA)	57Y4397
NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA)	57Y4167

More accessories on O-M75E sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Partial list of accessories supported on ThinkCentre M75e

Memory

1GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4389	*ann 01/12/10*
1GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4419	*ann 01/12/10*
2GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4390	*ann 01/12/10*
2GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4420	*ann 01/12/10*

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*
Super Multi-Burner DL DVD±RW SATA Drive	41N5620	*ann 09/26/06*

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	*ann 01/24/06*
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	*ann 11/06/07*
USB 2.0 Portable 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive [53]	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

[53] USB-only attach.

Graphics

Small 4163/5042/5046/5054/5062/5058/5064 support Low Profile:

DisplayPort™ to Single-link DVI-D Cable[50]	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable[50]	57Y4393	*ann 08/04/09*
NVIDIA® Quadro® 512MB FX 380 LP (DP, DVI with a DVI to VGA converter)	57Y4396	*ann 02/02/10*
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59 (2-DVI or 2-VGA via DMS59 dongles)	57Y4167	*ann 03/02/10*

Tower 4162/5041/5044/5053/5061/5057/5063 support:

DisplayPort to Single-link DVI-D Cable[50]	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable[50]	57Y4393	*ann 08/04/09*
NVIDIA GeForce 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59	57Y4167	*ann 03/02/10*

[50] Attaches to theThinkCentre compatible DisplayPort graphics card.

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

Keyboard

Preferred Pro USB Keyboard	73P5220	*ann 06/21/05*
Preferred Pro Full Size PS/2 Keyboard	31P7415	*ann 06/04/02*
Enhanced Performance USB Keyboard	73P2620	*ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*
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*

[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*
ThinkPad® USB Laser Mouse	57Y4635	*ann 12/15/09*
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	*ann 08/27/02*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
Lenovo Wireless Laser Mouse - Black[52]	45K1696	*ann 11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	*ann 11/25/08*
Lenovo Mini Optical Mouse - Black	55Y9308	*ann 05/19/09*
Lenovo Mini Optical Mouse - White	55Y9309	*ann 05/19/09*

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

Multimedia

ThinkPad In-Ear Headphones[60]	57Y4488	*ann 01/07/10*

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

Modem

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

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	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

Lenovo D186 Wide 18.5" Monitor	2580AB1	*ann 01/12/10*
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann 06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann 09/17/08*

More information at **www.lenovo.com/thinkvision**

Monitor Accessories[46]

Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
ThinkVision USB Soundbar	40Y7616	*ann 08/23/05*
ThinkVision Soundbar	45K1263	*ann 09/16/08*
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	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 desktop accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**

Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo ThinkCentre M90/M90p Eco USFF

Lenovo ThinkCentre M90/M90p Eco USFF

Lenovo ThinkCentre M90/M90p SFF

Lenovo ThinkCentre M90/M90p SFF
with ThinkVision L2251x (2578-HB6)

Lenovo ThinkCentre M90/M90p Tower

Lenovo ThinkCentre M90/M90p Tower

Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Integrated graphics	Monitor conn	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
3244-A8U	1x2	Core i3-530	2.93	2	2GB	250GB[2]	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 32	None	Mar 10
☞ 3244-B4U	1x2	Core i3-550	3.20	2	2GB	320GB	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 64	None	Jan 11

- *The most powerful, stable, and manageable desktop with next generation Intel platform*
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Ultimate security, stability, and manageability for the enterprise*
Processor	**Intel® Core™ i3 Processor i3-530** or **i3-550** with **dual-core**, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache
Implementation	Processor in LGA1156 socket
Memory	**2GB std**, 8GB max, **PC3-10600 1333MHz DDR3**, two 204-pin SODIMM sockets (notebook); *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 765MB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display
DP dongle	None
SATA disk	**250GB** or **320GB**, SATA 3.0Gb/s 7200 rpm
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA Controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1, two SATA connectors for disk and optical
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q57 Express Chipset**, Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1 support, PCI, ethernet, and USB), SMSC® SCH5147 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, ethernet (RJ-45), monitor (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
Speaker	Internal speaker for business audio
Ethernet	One gigabit ethernet port, Intel 82578DM, Wake on LAN®
Intel AMT	None
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	External AC/DC adapter, 130 watts, autosensing, 87% PSU

Eco Ultra Small

Bay ① 5.25", 1.6" high, access, std optical
Bay ② 3.5", 1" high, no access, std disk

Slot 1: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 11.0" W X 9.4" D X 3.1" H
- 279mm W X 238mm D X 79mm H
- 9.2 lb (4.2 kg) in maximum configuration
- Hinged toolless cover for easy serviceability
- Toolless disk and optical drive removal
- System floor stand for vertical orientation

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement

Environmental Features

- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant

Supports ThinkVantage® technologies

Preloaded operating system[20]

- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
Lenovo Vertical PC and Monitor Stand II	41R4474
ThinkCentre Ultra Small Under Desk Mount	40Y8625

More accessories on O-M90 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]

- ➥ **3-year parts and labor**
- ➥ **International Warranty Service[9]**
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➥ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

See footnotes for important warranty information
☞ US model announced December 28, 2010; previous model on March 2, 2010
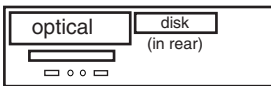
© Lenovo
(MELB1-24) January 2011

Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor conn	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
3245-A9U	2x3	Core i3-530	2.93	2	2GB	250GB[2]	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 32	None	Mar 10
3245-B3U	2x3	Core i3-530	2.93	2	*4GB*	320GB	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 64	None	Mar 10
☞ 3245-B7U	2x3	Core i3-550	3.20	2	2GB	320GB	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 64	None	Dec 10
3245-B1U	2x3	Core i5-750	2.66	4	*3GB*	500GB	DVD±RW	*310*	VGA, DP	ES50	None	Pro 32	None	Mar 10

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- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Ultimate security, stability, and manageability for the enterprise*
Processor	**Intel® Core™ i3 Processor i3-530** or **i3-550** with **dual-core**, Intel 64, Intel Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or **Intel Core i5 Processor i5-750** with **quad-core**, Intel 64, Virtualization Technology, Turbo Boost Technology (up to 3.20 GHz at max turbo mode), integrated 1333MHz dual-channel DDR3 memory controller, and 8MB cache
Implementation	Processor in LGA1156 socket
Memory	**2GB, 3GB,** or **4GB std**, 16GB max, **UDIMM, PC3-10600 1333MHz DDR3**, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available; *Non-italics:* standard memory in one socket; three sockets available
Graphics	*Some:* **Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 765MB *[2GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display
	Some: **NVIDIA® GeForce® 310**, PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts
DP dongle	None
SATA disk	**250GB, 320GB,** or **500GB**, SATA 3.0Gb/s 7200 rpm
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA Controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1, two SATA connectors for disk and optical
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q57 Express Chipset**, Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1 support, PCI, ethernet, and USB), SMSC® SCH5147 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (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)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Ethernet	One gigabit ethernet port, Intel 82578DM, Wake on LAN®
Intel AMT	None
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	240 watts with 85% efficiency, auto-sensing, active Power Factor Correction

Small

optical | disk (in rear)

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, open (reader)
Slot 1: Low Profile, PCI Express 2.0 x16 (75w max)
Slot 2: Low Profile, 32-bit PCI 2.3
- Business black color; metal case
- 12.5" W X 14.0" D X 3.9" H
- 317mm W X 355mm D X 99mm H
- 16.5 lb (7.5 kg) in maximum configuration
- Toolless cover flips up and tilts backward on rear hinges
- Toolless disk, optical drive removal
- Toolless adapter retention
- Toolless system board retention
- System floor stand for vertical orientation

Security
- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Serial port I/O control
- Individual USB port disablement

Environmental Features
- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant

Supports ThinkVantage® technologies

Limited Warranty[1]
- ➥ **3-year parts and labor**
- ➥ **International Warranty Service[9]**
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➥ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories
1GB PC3-10600 DDR3 UDIMM	57Y4389
2GB PC3-10600 DDR3 UDIMM	57Y4390
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA GeForce 512MB 310 (DP, VGA)	57Y4397
NVIDIA Quadro® 512MB FX380 LP (DP, DVI)	57Y4396

More accessories on O-M90 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

See footnotes for important warranty information
☞ US model announced November 30, 2010; previous models on March 2, 2010

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(MELB1-25) December 2010

ThinkCentre® M90 Tower (3246) - TopSeller (Windows 7)

Type-model	Slot x bay	Processor	GHz	Cores	Memory[8]	SATA disk	2nd Disk Bay	SATA optical	Graphics	Monitor conn	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
3246-B1U	4x4	Core i3-530	2.93	2	2GB	250GB[2]	None	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 32	None	Mar 10
3246-B2U	4x4	Core i5-750	2.66	4	*3GB*	500GB	None	DVD±RW	*310*	VGA, DP	ES50	None	Pro 32	None	Mar 10
3246-B4U	4x4	Core i3-530	2.93	2	*4GB*	320GB	None	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 64	None	Mar 10
☞ 3246-B9U	4x4	Core i3-550	3.20	2	2GB	320GB	None	DVD±RW	Intel HD	VGA, DP	ES50	None	Pro 64	None	Dec 10

- *The most powerful, stable, and manageable desktop with next generation Intel platform*
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Ultimate security, stability, and manageability for the enterprise*
Processor	**Intel® Core™ i3 Processor i3-530** or **i3-550** with **dual-core**, Intel 64, Intel Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or **Intel Core i5 Processor i5-750** with **quad-core**, Intel 64, Virtualization Technology, Turbo Boost Technology (up to 3.20 GHz at max turbo mode), integrated 1333MHz dual-channel DDR3 memory controller, and 8MB cache
Implementation	Processor in LGA1156 socket
Memory	**2GB, 3GB, or 4GB std**, 16GB max, **UDIMM, PC3-10600 1333MHz DDR3**, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available; *Non-italics:* standard memory in one socket; three sockets available
Graphics	*Some:* **Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 765MB *[2GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ conn, supports dual independent display
	Some: **NVIDIA® GeForce® 310**, PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts
DP dongle	None
SATA disk	**250GB, 320GB, or 500GB**, SATA 3.0Gb/s 7200 rpm
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA Controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1/10, three SATA connectors for disk and optical
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q57 Express Chipset,** Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1/10 support, PCI, ethernet, and USB), SMSC® SCH5147 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (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)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Ethernet	One gigabit ethernet port, Intel 82578DM, Wake on LAN®
Intel AMT	None
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	280 watts with variable speed fan, autosensing, 85% PSU

Tower

- 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 max configuration
- Handle on top front
- Power button on top handle
- Toolless cover removal
- Tilted front I/O for easy access
- Toolless disk, optical drive removal
- Toolless adapter retention

```
   ┌──────────┐
   │ optical  │
   ├──────────┤
   │    ②     │
   ├──────────┤
   │    ③     │
   │   disk   │
   │  ○ □·○   │
   └──────────┘
```

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, open (reader/diskette)
Bay ④ 3.5", 1" high, no access, std disk

Slot 1: half-length, full-height, PCIe 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)
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Serial port I/O control
- Individual USB port disablement

Environmental Features

- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant

Supports ThinkVantage® technologies

Limited Warranty[1]

- ➭ **3-year parts and labor**
- ➭ **International Warranty Service[9]**
- ➭ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➭ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➭ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ➭ **Post warranty maintenance services available**
- ➭ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]

- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)

- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-10600 DDR3 UDIMM	57Y4389
2GB PC3-10600 DDR3 UDIMM	57Y4390
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA GeForce 512MB 310 (DP, VGA)	57Y4397

More accessories on O-M90 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

See footnotes for important warranty information
☞ US model announced November 30, 2010; previous models on March 2, 2010

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Type-model	Slot x bay	Processor	Base GHz	Max Turbo GHz	Cores	Memory[8]	SATA disk	SATA optical	Integrated graphics	Monitor conn	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
3257-A5U	1x2	Core i5-650	3.20	3.46	2	*3GB*	500GB[2]	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 32	None	Mar 10
☞ 3257-A9U	1x2	Core i5-650	3.20	3.46	2	*3GB*	500GB	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 64	None	Dec 10

- *Next generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology*
- *Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0**
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

* For more information on Lenovo Secure Managed Client, see **lenovo.com/acc**

Positioning	*Ultimate security, stability, and manageability for the enterprise*
Processor	**Intel® Core™ i5 Processor i5-650** with **dual-core**, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache
Implementation	Processor in LGA1156 socket
Memory	**3GB std**, 8GB max, **PC3-10600 1333MHz DDR3**, two 204-pin SODIMM sockets (notebook); *Italics: standard memory in both sockets; no sockets available*
Graphics	**Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 1277MB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display
DP dongle	None
SATA disk	**500GB**, SATA 3.0Gb/s 7200 rpm
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA Controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1, two SATA connectors for disk and optical
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q57 Express Chipset**, Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1 support, PCI, ethernet, and USB), SMSC® SCH5147 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, ethernet (RJ-45), monitor (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
Speaker	Internal speaker for business audio
Ethernet	One gigabit ethernet port, Intel 82578DM, Wake on LAN®
Intel AMT	Intel Active Management Technology 6.0 (Intel AMT 6.0)
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	External AC/DC adapter, 130 watts, autosensing, 87% PSU

Eco Ultra Small

Bay ① 5.25", 1.6" high, access, std optical
Bay ② 3.5", 1" high, no access, std disk

Slot 1: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 11.0" W X 9.4" D X 3.1" H
- 279mm W X 238mm D X 79mm H
- 9.2 lb (4.2 kg) in maximum configuration
- Hinged toolless cover for easy serviceability
- Toolless disk and optical drive removal
- System floor stand for vertical orientation

Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement

Environmental Features

- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant

Supports ThinkVantage® technologies

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
Lenovo Vertical PC and Monitor Stand II	41R4474
ThinkCentre Ultra Small Under Desk Mount	40Y8625

More accessories on O-M90 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]
- ➫ **3-year parts and labor**
- ➫ **International Warranty Service[9]**
- ➫ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➫ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➫ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ➫ **Post warranty maintenance services available**
- ➫ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

See footnotes for important warranty information
☞ US model announced November 30, 2010; previous model on March 2, 2010

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Type-model	Slot x bay	Processor	Base GHz	Max Turbo GHz	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Monitor conn	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
3269-A6U	2x3	Core i5-650	3.20	3.46	2	*3GB*	500GB[2]	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 32	None	Mar 10
☞ 3269-B5U	2x3	Core i5-650	3.20	3.46	2	*3GB*	500GB	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 64	None	Dec 10
3269-A8U	2x3	Core i5-650	3.20	3.46	2	*4GB*	320GB	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 64	None	Mar 10
3269-B1U	2x3	Core i7-870	2.93	3.60	4	*4GB*	500GB	DVD±RW	*310*	VGA, DP	ES50	vPro	Pro 64	None	Oct 10

- *Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology*
- *Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0**
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

* For more information on Lenovo Secure Managed Client, see **lenovo.com/acc**

Positioning	*Ultimate security, stability, and manageability for the enterprise*
Processor	**Intel® Core™ i5 Processor i5-650** with **dual-core**, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or **Intel Core i7 Processor i7-870** with **quad-core**, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 8MB cache
Implementation	Processor in LGA1156 socket
Memory	**3GB** or **4GB std**, 16GB max, **UDIMM**, **PC3-10600 1333MHz DDR3**, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available
Graphics	*Some:* **Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 1277MB*[3GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display *Some:* **NVIDIA® GeForce® 310**, PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts
DP dongle	None
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s 7200 rpm
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA Controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1, two SATA connectors for disk and optical
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q57 Express Chipset**, Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1 support, PCI, ethernet, and USB), SMSC® SCH5147 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (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)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Ethernet	One gigabit ethernet port, Intel 82578DM, Wake on LAN®
Intel AMT	Intel Active Management Technology 6.0 (Intel AMT 6.0)
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	240 watts with 85% efficiency, auto-sensing, active Power Factor Correction

Small

optical | disk (in rear)

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, open (reader)
Slot 1: Low Profile, PCI Express 2.0 x16 (75w max)
Slot 2: Low Profile, 32-bit PCI 2.3
- Business black color; metal case
- 12.5" W X 14.0" D X 3.9" H
- 317mm W X 355mm D X 99mm H
- 16.5 lb (7.5 kg) in maximum configuration
- Toolless cover flips up and tilts backward on rear hinges
- Toolless disk, optical drive removal
- Toolless adapter retention
- Toolless system board retention
- System floor stand for vertical orientation

Security
- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Serial port I/O control
- Individual USB port disablement

Environmental Features
- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant

Supports ThinkVantage® technologies

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30-day)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-10600 DDR3 UDIMM	57Y4389
2GB PC3-10600 DDR3 UDIMM	57Y4390
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA® GeForce® 512MB 310 (DP, VGA)	57Y4397
NVIDIA Quadro® 512MB FX380 LP (DP, DVI)	57Y4396

More accessories on O-M90 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Type-model	Slot x bay	Processor	Base GHz	Max Turbo GHz	Cores	Memory[8]	SATA disk	2nd Disk Bay	SATA optical	Integrated graphics	Monitor conn	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
3282-A8U	4x4	Core i5-650	3.20	3.46	2	*3GB*	500GB[2]	None	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 32	None	Mar 10
☞ 3282-B6U	4x4	Core i5-650	3.20	3.46	2	*3GB*	500GB	None	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 64	None	Dec 10
3282-B1U	4x4	Core i5-650	3.20	3.46	2	*4GB*	320GB	None	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 64	None	Mar 10
3282-B3U	4x4	Core i7-870	2.93	3.60	4	*4GB*	500GB	None	DVD±RW	*310*	VGA, DP	ES50	vPro	Pro 64	None	Oct 10

- *Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology*
- *Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0**
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

* For more information on Lenovo Secure Managed Client, see **lenovo.com/acc**

Positioning	*Ultimate security, stability, and manageability for the enterprise*
Processor	**Intel® Core™ i5 Processor i5-650** with **dual-core**, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or **Intel Core i7 Processor i7-870** with **quad-core**, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 8MB cache
Implementation	Processor in LGA1156 socket
Memory	**3GB** or **4GB std**, 16GB max, **UDIMM**, **PC3-10600 1333MHz DDR3**, four 240-pin DIMM sockets; *Italics:* standard memory in two sockets; two sockets available
Graphics	*Some:* **Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 1277MB*[3GB models]* or 1759MB *[4GB models]*), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display *Some:* **NVIDIA® GeForce® 310**, PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts
DP dongle	None
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s 7200 rpm
SATA DVD±RW	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA Controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1/10, three SATA connectors for disk and optical
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q57 Express Chipset,** Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1/10 support, PCI, ethernet, and USB), SMSC® SCH5147 Super I/O
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (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)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Ethernet	One gigabit ethernet port, Intel 82578DM, Wake on LAN®
Intel AMT	Intel Active Management Technology 6.0 (Intel AMT 6.0)
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), black, Lenovo logo
Power supply	280 watts with variable speed fan, autosensing, 85% PSU

Tower

- 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 max configuration
- Handle on top front
- Power button on top handle
- Toolless cover removal
- Tilted front I/O for easy access
- Toolless disk, optical drive removal
- Toolless adapter retention

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,	open (reader/diskette)
Bay ④	3.5",	1" high,	no access,	std disk

Slot 1: half-length, full-height, PCIe 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)
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Serial port I/O control
- Individual USB port disablement

Environmental Features

- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant

Supports ThinkVantage® technologies

Limited Warranty[1]

- ↪ **3-year parts and labor**
- ↪ **International Warranty Service[9]**
- ↪ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ↪ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ↪ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ↪ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30-day)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-10600 DDR3 UDIMM	57Y4389
2GB PC3-10600 DDR3 UDIMM	57Y4390
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
NVIDIA® GeForce® 512MB 310 (DP, VGA)	57Y4397

More accessories on O-M90 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

See footnotes for important warranty information

☞ US model announced November 30, 2010; previous models on March 2 or September 28, 2010

Partial list of accessories supported on ThinkCentre M90 and M90p

Memory
Eco Ultra Small 3244/3692/3257/3853/5296 use notebook memory:
1GB PC3-10600 DDR3 L-H SODIMM	55Y3709	*ann 03/02/10*
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4415	*ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	*ann 03/02/10*
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	*ann 03/02/10*
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	*ann 03/02/10*

Small 3245/5485/3269/5536/5864, and
Tower 3246/5474/3282/5498/5852 use desktop memory:
1GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4389	*ann 01/12/10*
1GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4419	*ann 01/12/10*
2GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4390	*ann 01/12/10*
2GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4420	*ann 01/12/10*

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*
Super Multi-Burner DL DVD±RW SATA Drive	41N5620	*ann 09/26/06*
Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675	*ann 03/31/09*

Storage and removable storage
250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	*ann 01/24/06*
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 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive[53]	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

[53] USB-only attach.

Graphics
Small 3245/5485/3269/5536/5864 support Low Profile:
NVIDIA® Quadro® 256MB NVS 290 (2-DVI or 2-VGA via DMS59 dongles)	43R1765	*ann 12/18/07*
NVIDIA Quadro 256MB NVS 295 (2-DP)	45K1669	*ann 04/21/09*
NVIDIA Quadro 512MB FX 380 LP (DP, DVI with a DVI to VGA converter)	57Y4396	*ann 02/02/10*
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59 (2-DVI or 2-VGA via DMS59 dongles)	57Y4167	*ann 03/02/10*

Tower 3246/5474/3282/5498/5852 support 75 watts max:
NVIDIA Quadro 256MB NVS 290	43R1765	*ann 12/18/07*
NVIDIA Quadro 256MB NVS 295 (2-DP)	45K1669	*ann 04/21/09*
NVIDIA Quadro 512MB NVS450 (4-DP/4-DVI)	57Y4398	*ann 01/19/10*
NVIDIA GeForce 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59	57Y4167	*ann 03/02/10*

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 Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*
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*

[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*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
Lenovo Wireless Laser Mouse - Black[52]	45K1696	*ann 11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	*ann 11/25/08*

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

Multimedia
ThinkPad In-Ear Headphones[60]	57Y4488	*ann 01/07/10*

[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	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.

Mounting Device
Eco Ultra Small 3244/3692/3257/3853/5296 support under desk mounting device:
ThinkCentre Ultra Small Under Desk Mount	40Y8625	*ann 09/06/05*

Monitors
Lenovo D186 Wide 18.5" Monitor	2580AB1	*ann 01/12/10*
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann 06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann 09/17/08*

More information at **www.lenovo.com/thinkvision**

Monitor Accessories[46]
Eco Ultra Small 3244/3692/3257/3853/5296 support:
Lenovo Vertical PC and Monitor Stand II	41R4474	*ann 01/27/09*

All:
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
DisplayPort™ to Single-link DVI-D Cable	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable	57Y4393	*ann 08/04/09*
ThinkVision USB Soundbar	40Y7616	*ann 08/23/05*
ThinkVision Soundbar	45K1263	*ann 09/16/08*
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	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 desktop accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**

Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo ThinkCentre M90z

ThinkCentre®

Lenovo ThinkCentre M90z with Frame Stand

Lenovo ThinkCentre M90z with Height Adjustable Stand Option 57Y4351
(57Y4351 is not compatible to Multi-touch models)

Tool-Less Back Cover Removal

Handle

Dual Independent Display with Optional Lenovo ThinkVision Monitor
and Lenovo Ultraslim Wireless Keyboard/Mouse Kit (57Y4700)

Type-model	Proc-essor	GHz	Memory	Widescreen display	Camera (mega-pixel)	Integrated graphics	SATA disk	SATA optical	PCIe Mini Card 802.11	Stand type	Intel vPro	Win7 preload	Global Educ	Avail date
3429-A1U	G6950	2.80	2GBx1	23.0" Full HD		Intel HD	320GB[2]	DVD±RW	Intel 1000	Frame		Pro 32	None	Jun 10
3429-A2U	i3-530	2.93	2+1GB	23.0" Full HD	2.0M	Intel HD	500GB	DVD±RW	Intel 1000	Frame		Pro 32	None	Jun 10
3429-D6U	G6960	2.93	2GBx1	23.0" Full HD	2.0M	Intel HD	320GB	DVD±RW	Intel 1000	Frame		Pro 64	None	Jan 11
3429-D3U	i3-550	3.20	2+1GB	23.0" Full HD	2.0M	Intel HD	320GB	DVD±RW	Intel 1000	Frame		Pro 64	None	Dec 10
3429-A3U	i5-650	3.20	2GBx2	23.0" Full HD	2.0M	Intel HD	500GB	DVD±RW	Intel 1000	Frame	vPro	Pro 64	None	Jun 10

☞

- *Best space saving solution & excellent cable management*
- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*All-In-One PC for the enterprise*
Processor	**Intel® Pentium® Processor G6950** or **G6960** with **dual-core**, Intel 64, Virtualization Technology, integrated 1066MHz dual-channel DDR3 memory controller, and 3MB cache or **Intel Core™ i3 Processor i3-530** or **i3-550** with **dual-core**, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or **Intel Core i5 Processor i5-650** with **dual-core**, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache
Implementation	Processor in LGA1156 socket
Memory	**2GB, 3GB,** or **4GB** std, 8GB max[8], **PC3-10600 1333MHz DDR3***, dual-channel capable, two 204-pin SODIMM sockets (notebook) * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 765MB *[2GB models]*, 1277MB *[3GB models]*, or 1759MB *[4GB models]*), one DisplayPort™ connector, supports dual independent display
DP dongle	None
Widescreen	**23.0"** (584.2mm) **Full HD 1080p (1920x1080) TFT color**, anti-glare, CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio, work as standalone monitor via VGA-in connector
Multi-touch	None
Camera	*Some:* Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical on/off switch
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s, 3.5" wide, 7200 rpm
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel Q57 Express Chipset** Platform Controller Hub (PCH) for SATA, ethernet, and USB
Ports	*Rear:* four USB 2.0, ethernet (RJ-45), DisplayPort, VGA-in connector *Side:* two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
PCIe Mini Card	One PCI Express Mini Card slot
Intel 1000	11b/g/n wireless[13], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2
Bluetooth™	None
Ethernet	One gigabit ethernet port, Intel 82578DM
Audio	High Definition (HD) Audio, Realtek® ALC269 codec
Speaker	Two internal speakers (2watt x 2)
IEEE 1394	None
Intel AMT	*vPro model(s):* Intel Active Management Technology 6.0 (Intel AMT 6.0)
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	150 watts, autosensing, 85% PSU, 80 PLUS® Bronze qualified

All-In-One

All:
- Business black color
- Handle in rear
- Support VESA mount (100mm)
- Tool-less back cover, disk, optical drive, memory removal

Model(s) with Frame stand:
- 22" W X 4.29" D X 17.4" H
- 560mm W X 109mm D X 443mm H
- 23.6 lb (10.7 kg) in maximum configuration

Bay ① 3.5", 1" high, no access, std disk (desktop)
Bay ② slim, .5" high, access, std optical (notebook)

Security

- Security chip (see information left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)
- Boot sequence control
- Boot without keyboard, mouse
- Individual USB port disablement

Supports ThinkVantage® technologies

- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- TCO Certified Edge
- GREENGUARD® certified
- RoHS-compliant

Limited Warranty[1]

↝ **3-year parts and labor**
↝ **International Warranty Service[9]**
↝ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
↝ **Onsite service upgrade options (in eligible locations):[7]**
- **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
- **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
- **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
- **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
- **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
↝ **ThinkPlus services at lenovo.com/thinkplus/warranty**
↝ **Post warranty maintenance services available**
↝ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton Internet Security 2011 (30-day)
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

2GB PC3-10600 DDR3 SODIMM	55Y3710
ThinkCentre M90z Height Adjustable Stand	57Y4351

More accessories on O-M90Z sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

See footnotes for important warranty information
☞ US model announced January 4, 2011; previous models on May 11 or November 30, 2010

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(MABS1-4) January 2011

ThinkCentre™ M90z (0870) - Multi-touch (TopSeller) - Windows 7

Type-model	Proc-essor	GHz	Memory	Widescreen display	Camera (mega-pixel)	Integrated graphics	SATA disk	SATA optical	PCIe Mini Card 802.11	Media reader	Intel vPro	Win7 preload	Global Educ	Avail date
0870-A3U	i3-530	2.93	2GBx1	23.0" Full HD	2.0M	Intel HD	320GB[2]	DVD±RW	Intel 1000			Pro 32	None	Jun 10
0870-A4U	i5-650	3.20	2GBx2	23.0" Full HD	2.0M	Intel HD	500GB	DVD±RW	Intel 1000	Media	vPro	Pro 32	None	Jun 10
☞ 0870-A6U	i5-650	3.20	2GBx2	23.0" Full HD	2.0M	Intel HD	500GB	DVD±RW	Intel 1000		vPro	Pro 64	None	Dec 10

- ***Best space saving solution & excellent cable management***
- ***These small and medium business (SMB) models are part of the US TopSeller™ Program***
- ***These models have a 3-year limited warranty[1]***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Positioning	*All-In-One PC for the enterprise*
Processor	**Intel® Core™ i3 Processor i3-530** with **dual-core**, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or
	Intel Core i5 Processor i5-650 with **dual-core**, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache
Implementation	Processor in LGA1156 socket
Memory	**2GB** or **4GB** std, 8GB max[8], **PC3-10600 1333MHz DDR3**, dual-channel capable, two 204-pin SODIMM sockets (notebook)
Graphics	**Intel HD Graphics** in processor, HDCP, DirectX® 10, uses main memory (up to 765MB *[2GB models]* or 1759MB *[4GB models]*), one DisplayPort™ connector, supports dual independent display
DP dongle	None
Widescreen	**23.0"** (584.2mm) **Full HD 1080p (1920x1080) TFT color**, anti-glare, CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio, work as standalone monitor via VGA-in connector
Multi-touch	Supports Multi-touch function
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s, 3.5" wide, 7200 rpm
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high
eSATA port	None
Diskette drive	None
Media reader	*Some:* Single Slot SD Media Card Reader
Chipset	**Intel Q57 Express Chipset** Platform Controller Hub (PCH) for SATA, ethernet, and USB
Ports	*Rear:* four USB 2.0, ethernet (RJ-45), DisplayPort, VGA-in connector *Side:* two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
PCIe Mini Card	One PCI Express Mini Card slot
Intel 1000	11b/g/n wireless[13], PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2
Bluetooth™	None
Ethernet	One gigabit ethernet port, Intel 82578DM
Audio	High Definition (HD) Audio, Realtek® ALC269 codec
Speaker	Two internal speakers (2watt x 2)
IEEE 1394	None
Intel AMT	*vPro model(s):* Intel Active Management Technology 6.0 (Intel AMT 6.0) *Non-vPro model(s):* None
Modem	None
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	150 watts, autosensing, 85% PSU, 80 PLUS® Bronze qualified

All-In-One

- Business black color
- 22" W X 4.57" D X 17.4" H
- 560mm W X 116mm D X 443mm H
- 25.3 lb (11.5 kg) in maximum configuration
- Handle in rear
- Support VESA mount (100mm)
- Tool-less back cover, disk, optical drive, memory removal
- Frame stand

Bay ① 3.5", 1" high, no access, std disk (desktop)
Bay ② slim, .5" high, access, std optical (notebook)

Security

- Security chip (see information left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)
- Boot sequence control
- Boot without keyboard, mouse
- Individual USB port disablement

Supports ThinkVantage® technologies

- EPEAT™ Gold rating
- ENERGY STAR® 5.0-compliant
- TCO Certified Edge
- GREENGUARD® certified
- RoHS-compliant

Limited Warranty[1]

- ➫ **3-year parts and labor**
- ➫ **International Warranty Service[9]**
- ➫ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➫ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 41C9192)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9193)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 41C9194)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 41C9195)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 41C9196)
- ➫ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ➫ **Post warranty maintenance services available**
- ➫ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]

- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (only some listed)

- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Message Center Plus
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

2GB PC3-10600 DDR3 SODIMM   55Y3710
More accessories on O-M90Z sheet

Acc Guide in pdf **lenovo.com/accessoriesguide**
Other accessories at **lenovo.com/accessories**

See footnotes for important warranty information
☞ US model announced November 30, 2010; previous models on May 11, 2010

Partial list of accessories supported on ThinkCentre M90z AIO

Memory

1GB PC3-10600 DDR3 SODIMM	55Y3709	*ann 03/02/10*
1GB PC3-10600 DDR3 SODIMM (25Pack)	57Y4415	*ann 03/02/10*
2GB PC3-10600 DDR3 SODIMM	55Y3710	*ann 03/02/10*
2GB PC3-10600 DDR3 SODIMM (25Pack)	57Y4416	*ann 03/02/10*
4GB PC3-10600 DDR3 SODIMM	55Y3711	*ann 03/02/10*

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

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	*ann 01/24/06*
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 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive[53]	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

[53] USB-only attach.

Keyboard

Preferred Pro USB Keyboard	73P5220	*ann 06/21/05*
Enhanced Performance USB Keyboard	73P2620	*ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*
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*

[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*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*

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

Multimedia

ThinkPad® In-Ear Headphones	57Y4488	*ann 01/07/10*

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	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.

Stand

ThinkCentre M90z Height Adjustable Stand[59]	57Y4351	*ann 05/04/10*
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.

Monitors

Lenovo D186 Wide 18.5" Monitor	2580AB1	*ann 01/12/10*
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann 06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann 09/17/08*

More information at **www.lenovo.com/thinkvision**

Monitor Accessories[46]

Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
DisplayPort™ to Single-link DVI-D Cable	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable	57Y4393	*ann 08/04/09*
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	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 desktop accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**

Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

ThinkCentre®

Lenovo ThinkCentre A70 Small and
Lenovo ThinkCentre A70 Tower

Lenovo ThinkCentre A70 Tower
with Lenovo ThinkVision monitor

Lenovo ThinkCentre A70 Small

Lenovo ThinkCentre A70 Small
with Lenovo ThinkVision monitor

Lenovo ThinkCentre A70 Tower

Lenovo ThinkCentre A70 Small

Name	Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory[8]	SATA disk	SATA optical	Graphics	Win7 preload	Global Educ	Avail date
A70	7844-D4U	4x2	Celeron E3300	2.50	1MB	2	1GB	320GB[2]	DVD	GMA	Pro 32	None	Aug 10
A70	7844-C1U	4x2	Pentium E5500	2.80	2MB	2	2GB	320GB	DVD±RW	GMA	Pro 32	None	Aug 10
A70	7844-B4U	4x2	Core 2 Duo E7500	2.93	3MB	2	2GB	320GB	DVD±RW	GMA	Pro 32	None	Aug 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 1-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Quality, reliability, and security for small/medium businesses*
Processor	**Intel® Celeron® Processor E3300** with **dual-core**, 800MHz system bus, and 1MB L2 cache or **Intel Pentium® Processor E5500** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**1GB** or **2GB std**, 4GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 240-pin DIMM sockets; *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator X4500 (GMA X4500)**, integrated graphics in G41, uses main memory (up to 253MB *[1GB models]*, 765MB *[2GB models]*), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter

Small

Bay ① 5.25", 1.6" high, access, std optical
Bay ② 3.5", 1" high, no access, std disk

Slot 1: Low Profile, PCI Express x16 (45w max)
Slot 2: Low Profile, PCI Express x1
Slot 3: Low Profile, PCI Express x1
Slot 4: Low Profile, 32-bit PCI 2.3

- Business black color; metal case
- 13.1" W X 14.5" D X 3.8" H
- 333mm W X 368mm D X 97mm H
- 18.7 lb (8.5 kg) in maximum configuration
- Highlighted optical drive button for easy access
- System floor stand for vertical orientation

SATA disk	**320GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7
SATA DVD	*Some:* DVD-ROM DL SATA 1.5Gb/s 16-48X Max[4] Drive
SATA DVD±RW	*Some:* Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), three SATA connectors on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel G41 Express Chipset** (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus)
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	None
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Realtek® RTL8111DL
Intel AMT	None
Modem	None
Security chip	None
Keyboard	Lenovo Slim USB Keyboard (USB connector), black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	180 watts, universal, manual switch

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
- Boot sequence control
- Serial port I/O control
- USB port disablement

Supports ThinkVantage® technologies

RoHS-compliant

Preloaded operating system[20]

- Genuine Windows® 7 Professional 32

Preloaded applications[5] (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
DVD-ROM DL SATA 1.5Gb/s 16-48X Max	41N5618
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort™ to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
ADD2 DVI-D Monitor Connection (HDCP)	43R1985
NVIDIA® GeForce® 310 512MB (DP, VGA)	57Y4397
NVIDIA Quadro® 512MB FX 380 LP (DP,DVI)	57Y4396

More accessories on O-A70 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

Limited Warranty[1]

- ➭ **1-year parts and labor**
- ➭ **International Warranty Service[9]**
- ➭ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➭ **Onsite service upgrade options (in eligible locations):[7]**
  - **1-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 45K5951)
  - **2-year LOR 9x5, Next Business Day** (ThinkPlus part number 45K5949)
  - **2-year LOR 9x5, 4 hour response** (ThinkPlus part number 45K5952)
  - **3-year LOR 9x5, Next Business Day** (ThinkPlus part number 45K5950)
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 45K5953)
- ➭ **ThinkPlus services at lenovo.com**/thinkplus/warranty
- ➭ **Post warranty maintenance services available**
- ➭ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Name	Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory[8]	SATA disk	2nd Disk Bay	SATA optical	Graphics	Win7 preload	Global Educ	Avail date
A70	7099-C2U	4x2	Celeron E3300	2.50	1MB	2	1GB	320GB[2]	None	DVD	GMA	Pro 32	None	Aug 10
A70	7099-B8U	4x2	Pentium E5500	2.80	2MB	2	2GB	320GB	None	DVD±RW	GMA	Pro 32	None	Aug 10
A70	7099-E6U	4x2	Pentium E5500	2.80	2MB	2	*3GB*	320GB	None	DVD±RW	GMA	Prem 32	None	Aug 10
A70	7099-E5U	4x2	Pentium E5500	2.80	2MB	2	*4GB*	500GB	None	DVD±RW	GMA	Pro 64	None	Aug 10
A70	7099-A5U	4x2	Core 2 Duo E7500	2.93	3MB	2	2GB	320GB	None	DVD±RW	GMA	Pro 32	None	Aug 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *These models have a 1-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*Quality, reliability, and security for small/medium businesses*
Processor	**Intel® Celeron® Processor E3300** with **dual-core**, 800MHz system bus, and 1MB L2 cache or **Intel Pentium® Processor E5500** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**1GB**, **2GB**, **3GB**, or **4GB std**, 4GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 240-pin DIMM sockets; *Italics:* standard memory in both sockets; no sockets avail; *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator X4500 (GMA X4500)**, integrated graphics in G41, uses main memory (up to 253MB *[1GB models]*, 765MB *[2GB models]*, 1277MB *[3GB models]*, or 1759MB *[4GB models]*), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s 7200 rpm, vibration dampening
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7
SATA DVD	*Some:* DVD-ROM DL SATA 1.5Gb/s 16-48X Max[4] Drive
SATA DVD±RW	*Some:* Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), three SATA connectors on planar
eSATA port	None
Diskette drive	None
Media reader	None
Chipset	**Intel G41 Express Chipset** (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus)
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	None
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Realtek® RTL8111DL
Intel AMT	None
Modem	None
Security chip	None
Keyboard	Lenovo Slim USB Keyboard (USB connector), black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	180 watts, universal, manual switch

Tower
- Business black color; metal case
- 6.3" W X 14.0" D X 15.4" H
- 160mm W X 355mm D X 392mm H
- 23.1 lb (10.5 kg) in max configuration
- Non-slip designed handle on top front
- Power button on top handle
- Highlighted optical drive button for easy access

Bay ① 5.25", 1.6" high, access, std optical
Bay ② 3.5", 1" high, no access, std disk

Slot 1: half-length, full-height, PCI Express x16 (45w max)
Slot 2: half-length, full-height, PCI Express x1
Slot 3: half-length, full-height, PCI Express x1
Slot 4: half-length, full-height, 32-bit PCI 2.3

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
- Boot sequence control
- Serial port I/O control
- USB port disablement

Supports ThinkVantage® technologies

RoHS-compliant

Limited Warranty[1]
- ➥ **1-year parts and labor**
- ➥ **International Warranty Service[9]**
- ➥ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ➥ **Onsite service upgrade options (in eligible locations):[7]**
  - **1-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 45K5951)
  - **2-year LOR 9x5, Next Business Day** (ThinkPlus part number 45K5949)
  - **2-year LOR 9x5, 4 hour response** (ThinkPlus part number 45K5952)
  - **3-year LOR 9x5, Next Business Day** (ThinkPlus part number 45K5950)
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 45K5953)
- ➥ **ThinkPlus services at** lenovo.com/thinkplus/warranty
- ➥ **Post warranty maintenance services available**
- ➥ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 32
- *Some:* Genuine Windows 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
DVD-ROM DL SATA 1.5Gb/s 16-48X Max	41N5618
Super Multi-Burner DL DVD±RW SATA Drive	41N5620
DisplayPort™ to Single-link DVI-D Cable	45J7915
DisplayPort to VGA Monitor Cable	57Y4393
ADD2 DVI-D Monitor Connection (HDCP)	43R1985
NVIDIA® GeForce® 310 512MB (DP, VGA)	57Y4397

More accessories on O-A70 sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

ThinkCentre® A70 Accessories

Partial list of accessories supported on ThinkCentre A70

Memory
1GB PC3-8500 DDR3 UDIMM	45J5434	*ann 11/18/08*
1GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4421	*ann 11/10/09*
2GB PC3-8500 DDR3 UDIMM	45J5435	*ann 11/18/08*
2GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4422	*ann 11/10/09*

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*
Super Multi-Burner DL DVD±RW SATA Drive	41N5620	*ann 09/26/06*

Storage and removable storage
250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	*ann 01/24/06*
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	*ann 11/06/07*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive [53]	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

[53] USB-only attach.

Graphics
Small 7844 support Low Profile:
DisplayPort™ to Single-link DVI-D Cable[50]	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable[50]	57Y4393	*ann 08/04/09*
ADD2 DVI-D Monitor Connection (HDCP)	43R1985	*ann 11/06/07*
NVIDIA® Quadro® 512MB FX 380 LP		
(DP, DVI with a DVI to VGA converter)	57Y4396	*ann 02/02/10*
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59		
(2-DVI or 2-VGA via DMS59 dongles)	57Y4167	*ann 03/02/10*

Tower 7099 support 75 watts max:
DisplayPort to Single-link DVI-D Cable[50]	45J7915	*ann 08/05/08*
DisplayPort to VGA Monitor Cable[50]	57Y4393	*ann 08/04/09*
ADD2 DVI-D Monitor Connection (HDCP)	43R1985	*ann 11/06/07*
NVIDIA GeForce 310 512MB (DP, VGA)	57Y4397	*ann 02/02/10*
NVIDIA GeForce 310 512MB DMS59	57Y4167	*ann 03/02/10*

[50] Attaches to theThinkCentre compatible DisplayPort graphics card.

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 Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*
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*

[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*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
Lenovo Wireless Laser Mouse - Black[52]	45K1696	*ann 11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	*ann 11/25/08*

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

Multimedia
ThinkPad In-Ear Headphones[60]	57Y4488	*ann 01/07/10*

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

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

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	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
Lenovo D186 Wide 18.5" Monitor	2580AB1	*ann 01/12/10*
Lenovo L2230x Wide 21.5" Monitor	5453HB1	*ann 06/10/10*
ThinkVision® L1711p 17" Monitor	5047HB2	*ann 10/20/09*
ThinkVision L1900p 19" Monitor	4431HE1	*ann 11/11/08*
ThinkVision L1951p Wide 19" Monitor	2448HB6	*ann 10/20/09*
ThinkVision L2250p Wide 22" Monitor	2572HB6	*ann 10/20/09*
ThinkVision L2251p Wide 22" Monitor	2572HD6	*ann 10/20/09*
ThinkVision L2251x Wide 22" Monitor	2578HB6	*ann 10/20/09*
ThinkVision L2321x Wide 23" Monitor	4014HB6	*ann 06/10/10*
ThinkVision L2440p Wide 24" Monitor	4420HB2	*ann 09/17/08*

More information at **www.lenovo.com/thinkvision**

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
ThinkVision USB Soundbar	40Y7616	*ann 08/23/05*
ThinkVision Soundbar	45K1263	*ann 09/16/08*
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	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 desktop accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**

Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Lenovo ThinkCentre A70z All-In-One

Lenovo ThinkCentre A70z All-In-One
(Wireless keyboard & mouse
on selected models only)

Lenovo ThinkCentre A70z All-In-One

Lenovo ThinkCentre A70z All-In-One

Lenovo ThinkCentre A70z All-In-One

ThinkCentre A70z Performance Stand
57Y4277

ThinkCentre Extend Arm
57Y4352

Type-model	Proc-essor	GHz	Memory	Widescreen display	Camera (mega-pixel)	Integrated graphics	SATA disk	SATA optical	Mini PCIe 802.11 wireless	Keyboard /Mouse	ENERGY STAR 5.0	Win7 preload	Global Educ	Avail date
0401-A2U	E3300	2.50	1GB	19.0" WXGA+		GMA X4500	320GB[2]	DVD±RW		USB	ES50	Prem 32	None	Jun 10
0401-A3U	E5500	2.80	2GB	19.0" WXGA+	1.3M	GMA X4500	320GB	DVD±RW		USB	ES50	Pro 32	None	Jun 10
0401-D3U	E5500	2.80	*3GB*	19.0" WXGA+	1.3M	GMA X4500	320GB	DVD±RW	11b/g/n[12]	USB	ES50	Prem 32	None	Jun 10
0401-B6U	E5500	2.80	*4GB*	19.0" WXGA+	1.3M	GMA X4500	500GB	DVD±RW	11b/g/n	USB	ES50	Pro 32	None	Jun 10
☞ 0401-R6U	E5700	3.00	2GB	19.0" WXGA+	1.3M	GMA X4500	320GB	DVD±RW	11b/g/n	USB	ES50	Pro 64	None	Dec 10
0401-B7U	E7500	2.93	2GB	19.0" WXGA+	1.3M	GMA X4500	320GB	DVD±RW	11b/g/n	USB	ES50	Pro 32	None	Jun 10
☞ 0401-R7U	E7500	2.93	2GB	19.0" WXGA+	1.3M	GMA X4500	320GB	DVD±RW	11b/g/n	USB	ES50	Pro 64	None	Dec 10
0401-A5U	E7500	2.93	*4GB*	19.0" WXGA+	1.3M	GMA X4500	320GB	DVD±RW	11b/g/n	Wireless	ES50	Pro 64	None	Jun 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *Best space saving solution & excellent cable management*
- *These models have a 1-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*All-In-One PC for business customers*
Processor	**Intel® Celeron® Processor E3300** with **dual-core**, 800MHz system bus, and 1MB L2 cache or **Intel Pentium® Processor E5500** or **E5700** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**1GB, 2GB, 3GB, or 4GB** std, 4GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 240-pin DIMM sockets; *Italics:* standard memory in both sockets; no sockets available *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator X4500 (GMA X4500)**, integrated graphics in G41, uses main memory, DirectX® 10
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s, 3.5" wide, 7200 rpm
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable
eSATA port	None
Diskette drive	None
Media reader	None
Widescreen display	**19.0"** (482.6mm) **WXGA+ (1440x900)** **TFT color**, anti-glare, CCFL backlight, 300 nits, 16:10 aspect ratio, 1000:1 contrast ratio
Camera	*Some:* Camera on top of screen, 1.3-megapixel, fixed focus, integrated microphone (mono), LED indicator
Chipset	**Intel G41 Express Chipset**; I/O Controller Hub 7 (ICH7)
Ports	*Rear:* Three USB 2.0, serial (9-pin), ethernet (RJ-45) *Side:* Three USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Mini PCI Express 11b/g/n[12]	One Mini PCI Express slot *Some:* 11b/g/n wireless[13], Mini PCIe adapter, Broadcom® BCM43225
Audio	High Definition (HD) Audio, CONEXANT™ CX20582 codec
Speaker	Two internal speakers (2 watt x 2)
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Realtek® RTL8111DL
Intel AMT	None
Modem	None
Security chip	None
Keyboard	*Some:* Ultraslim Wireless Keyboard (2.4GHz via USB receiver), black *Some:* Preferred Pro USB Keyboard (USB), 104-key, black, Lenovo® logo
Mouse	*Some:* Ultraslim Wireless Mouse (2.4GHz via USB receiver), 1000 dpi, black *Some:* Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	130 watts, autosensing, 85% PSU

All-In-One
- Business black color
- 18.58" W X 2.87" D X 14.0" H
- 472mm W X 73mm D X 356mm H
- 17.6 lb (8 kg) in maximum configuration
- Handle in rear
- Support VESA mount (100mm)
- Picture frame style metallic stand (Tilt 10°-35°)

Bay ① 3.5",   1" high,   no access, std disk (desktop)
Bay ② slim,   .5" high,   access,   std optical (notebook)

Security
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)
- Boot sequence control
- Boot without keyboard, mouse
- USB port disablement

Supports ThinkVantage® technologies

ENERGY STAR® 5.0-compliant
RoHS-compliant

Limited Warranty[1]
- ↪ **1-year parts and labor**
- ↪ **International Warranty Service[9]**
- ↪ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ↪ **Onsite service upgrade options (in eligible locations):[7]**
  - **1-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 45K5951)
  - **2-year LOR 9x5, Next Business Day** (ThinkPlus part number 45K5949)
  - **2-year LOR 9x5, 4 hour response** (ThinkPlus part number 45K5952)
  - **3-year LOR 9x5, Next Business Day** (ThinkPlus part number 45K5950)
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus part number 45K5953)
- ↪ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ↪ **Post warranty maintenance services available**
- ↪ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 32
- *Some:* Genuine Windows 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30-day)
- Adobe® Reader®
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
ThinkCentre A70z Performance Stand	57Y4277

More accessories on O-A70Z sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

See footnotes for important warranty information
☞ US models announced November 30, 2010; previous models on May 25 or June 1, 2010

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ThinkCentre™ A70z (2565) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Camera (mega- pixel)	Integrated graphics	SATA disk	SATA optical	Mini PCIe 802.11 wireless	Keyboard /Mouse	ENERGY STAR 5.0	Win7 preload	Global Educ	Avail date
2565-A6U	E5500	2.80	2GB	19.0" WXGA+	1.3M	GMA X4500	320GB[2]	DVD±RW	11b/g/n[12]	USB	ES50	Pro 32	None	Jun 10
2565-A7U	E7500	2.93	*4GB*	19.0" WXGA+	1.3M	GMA X4500	320GB	DVD±RW	11b/g/n	USB	ES50	Pro 64	None	Jun 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*
- *Best space saving solution & excellent cable management*
- *These models have a 3-year limited warranty[1]*
- *These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)*

Positioning	*All-In-One PC for business customers*
Processor	**Intel® Pentium® Processor E5500** with **dual-core**, 800MHz system bus, and 2MB L2 cache or **Intel Core™ 2 Duo Processor E7500** with **dual-core**, 1066MHz system bus, and 3MB L2 cache
Implementation	Processor in LGA775 socket
Memory	**2GB** or **4GB** std, 4GB max[8], **PC3-8500 1066MHz DDR3**, non-parity, dual-channel capable, two 240-pin DIMM sockets; *Italics:* standard memory in both sockets; no sockets available *Non-italics:* standard memory in one socket; one socket available
Graphics	**Intel Graphics Media Accelerator X4500 (GMA X4500)**, integrated graphics in G41, uses main memory, DirectX® 10
SATA disk	**320GB**, SATA 3.0Gb/s, 3.5" wide, 7200 rpm
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable
eSATA port	None
Diskette drive	None
Media reader	None
Widescreen display	**19.0"** (482.6mm) **WXGA+ (1440x900)** **TFT color**, anti-glare, CCFL backlight, 300 nits**,** 16:10 aspect ratio, 1000:1 contrast ratio
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, integrated microphone (mono), LED indicator
Chipset	**Intel G41 Express Chipset**; I/O Controller Hub 7 (ICH7)
Ports	*Rear:* Three USB 2.0, serial (9-pin), ethernet (RJ-45) *Side:* Three USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Mini PCI Express 11b/g/n[12]	One Mini PCI Express slot 11b/g/n wireless[13], Mini PCIe adapter, Broadcom® BCM43225
Audio	High Definition (HD) Audio, CONEXANT™ CX20582 codec
Speaker	Two internal speakers (2 watt x 2)
IEEE 1394	None
Ethernet	Gigabit ethernet on planar, Realtek® RTL8111DL
Intel AMT	None
Modem	None
Security chip	None
Keyboard	Preferred Pro USB Keyboard (USB), 104-key, black, Lenovo® logo
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo
Power supply	130 watts, autosensing, 85% PSU

All-In-One
- Business black color
- 18.58" W X 2.87" D X 14.0" H
- 472mm W X 73mm D X 356mm H
- 17.6 lb (8 kg) in maximum configuration
- Handle in rear
- Support VESA mount (100mm)
- Picture frame style metallic stand (Tilt 10°-35°)

Bay ① 3.5", 1" high, no access, std disk (desktop)
Bay ② slim, .5" high, access,   std optical (notebook)

Security
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)
- Boot sequence control
- Boot without keyboard, mouse
- USB port disablement

Supports ThinkVantage® technologies

ENERGY STAR® 5.0-compliant
RoHS-compliant

Limited Warranty[1]
- ↪ **3-year parts and labor**
- ↪ **International Warranty Service[9]**
- ↪ **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- ↪ **Onsite service upgrade options (in eligible locations):[7]**
  - **3-year LOR 9x5, 4 hour response** (ThinkPlus™ part number 45K5955)
  - **3-year LOR 24x7, 4 hour response** (ThinkPlus part number 45K5956)
  - **4-year LOR 9x5, Next Business Day** (ThinkPlus part number 45K5957)
  - **4-year LOR 9x5, 4 hour response** (ThinkPlus part number 45K5958)
  - **4-year LOR 24x7, 4 hour response** (ThinkPlus part number 45K5959)
- ↪ **ThinkPlus services at lenovo.com/thinkplus/warranty**
- ↪ **Post warranty maintenance services available**
- ↪ **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Professional 32
- *Some:* Genuine Windows 7 Professional 64

Preloaded applications[5] (all OSes; only some listed)
- Rescue and Recovery™
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

Accessories

1GB PC3-8500 DDR3 UDIMM	45J5434
2GB PC3-8500 DDR3 UDIMM	45J5435
ThinkCentre A70z Performance Stand	57Y4277

More accessories on O-A70Z sheet

Acc Guide in pdf **lenovo.com**/accessoriesguide
Other accessories at **lenovo.com**/accessories

See footnotes for important warranty information
US models announced June 1, 2010

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(TYMA2-2) June 2010

Partial list of accessories supported on ThinkCentre A70z AIO

Memory
AIO 1165 use desktop memory:
1GB PC2-6400 DDR2 UDIMM	41U2977	*ann 09/26/06*
1GB PC2-6400 DDR2 UDIMM (25-Pack)	51J0549	*ann 03/17/09*
2GB PC2-6400 DDR2 UDIMM	41U2978	*ann 01/08/08*
2GB PC2-6400 DDR2 UDIMM (25-Pack)	51J0550	*ann 03/17/09*

AIO 0401/2565 use desktop memory:
1GB PC3-8500 DDR3 UDIMM	45J5434	*ann 11/18/08*
1GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4421	*ann 11/10/09*
2GB PC3-8500 DDR3 UDIMM	45J5435	*ann 11/18/08*
2GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4422	*ann 11/10/09*

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

Storage and removable storage
250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	*ann 01/24/06*
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	*ann 11/06/07*
USB 2.0 Portable 320GB Hard Disk	45K1689	*ann 03/17/09*
USB 2.0 Portable 500GB Hard Disk	45K1690	*ann 05/26/09*
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	*ann 11/18/08*
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	*ann 11/18/08*
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	*ann 01/07/10*
USB 2.0 Portable DVD Burner	43N3264	*ann 01/05/10*

Keyboard
Preferred Pro USB Keyboard	73P5220	*ann 06/21/05*
Enhanced Performance USB Keyboard	73P2620	*ann 03/23/04*
Ultraslim Wireless Keyboard and Mouse[52]	57Y4700	*ann 09/15/09*
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*

[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*
Lenovo Laser Mouse (USB)	41U3074	*ann 01/23/07*
Lenovo Wireless Laser Mouse - Black[52]	45K1696	*ann 11/25/08*
Lenovo Wireless Laser Mouse - Red/Black[52]	51J0198	*ann 11/25/08*

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

Multimedia
ThinkPad® In-Ear Headphones	57Y4488	*ann 01/07/10*

Security
Kensington® MicroSaver® Cable Lock[56]	73P2582	*ann 12/29/03*
Lenovo Security Cable Lock	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.

Stand
ThinkCentre A70z Performance Stand	57Y4277	*ann 11/17/09*
ThinkCentre Extend Arm	57Y4352	*ann 07/06/10*

Monitor Accessories[46]
Lenovo USB-to-DVI Monitor Adapter	45K5296	*ann 05/12/09*
Kensington MicroSaver Cable Lock[56]	73P2582	*ann 12/29/03*
Lenovo Security Cable Lock	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 desktop accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at **www.lenovo.com/accessories**

Accessories Guide pdf at **www.lenovo.com/accessoriesguide**

Partial list of Lenovo® ThinkPlus Services[7]
for ThinkCentre desktops

For more information see:
http://www.lenovo.com/services_warranty/us/en/index.html

ThinkPlus service upgrade options for ThinkCentre M series

ThinkCentre desktop with 1-year Onsite warranty

LOR = Lenovo Onsite Repair

1-year LOR 9x5 4-hour response	41C9189
2-year LOR 9x5 Next Business Day	41C9187
2-year LOR 9x5 4-hour response	41C9190
3-year LOR 9x5 Next Business Day	41C9188
3-year LOR 9x5 4-hour response	41C9191

ThinkCentre desktop with 3-year Onsite warranty

LOR = Lenovo Onsite Repair

3-year LOR 9x5 4-hour response	41C9192
3-year LOR 24x7 4-hour response	41C9193
4-year LOR 9x5 Next Business Day	41C9194
4-year LOR 9x5 4-hour response	41C9195
4-year LOR 24x7 4-hour response	41C9196

ThinkPlus service upgrade options for ThinkCentre A series

ThinkCentre desktop with 1-year Onsite warranty

LOR = Lenovo Onsite Repair

1-year LOR 9x5 4-hour response	45K5951
2-year LOR 9x5 Next Business Day	45K5949
2-year LOR 9x5 4-hour response	45K5952
3-year LOR 9x5 Next Business Day	45K5950
3-year LOR 9x5 4-hour response	45K5953

ThinkCentre desktop with 3-year Onsite warranty

LOR = Lenovo Onsite Repair

3-year LOR 9x5 4-hour response	45K5955
3-year LOR 24x7 4-hour response	45K5956
4-year LOR 9x5 Next Business Day	45K5957
4-year LOR 9x5 4-hour response	45K5958
4-year LOR 24x7 4-hour response	45K5959
5-year LOR 9x5 Next Business Day	45K5963

ThinkPlus Secure Business

Lenovo Online Data Backup

- Secure offsite data storage
- 256-bit Advanced Encryption System
- Data recovery or access in case of an unforeseen event
- Automatic, remote management
- Choose which business critical data to back up

1-year Lenovo Online Data Backup - *10GB*	51J0787
1-year Lenovo Online Data Backup - *25GB*	51J0795

ThinkPlus Priority Support for enterprise customers

- 9x5 next-business-day response Lenovo Onsite Repair
- 24x7 support with priority routing and advanced level technicians

ThinkCentre desktop with 1-year Onsite warranty

3-year Priority Support	45J9087

ThinkCentre desktop with 3-year Onsite warranty

3-year Priority Support	45J9088
4-year Priority Support	45J9089
5-year Priority Support	45J9090
3-year Priority Support 4-hour response	45J9091
4-year Priority Support 4-hour response	45J9092
5-year Priority Support 4-hour response	45J9093

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, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. 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. In the United States call 1-800-426-7378. 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.

[6] **Multi-Burner Plus** (part number 73P3305 or 73P3370) is a DVD±RW device that reads and writes to DVD-RAM, DVD-R, DVD-RW, DVD+R, and DVD+RW. It also reads and writes to CD-R and CD-RW media. 73P3370 also writes to DVD+R double layer media.

[7] **ThinkPlus 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 ThinkPlus 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.

ThinkCentre