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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY

The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.

"Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

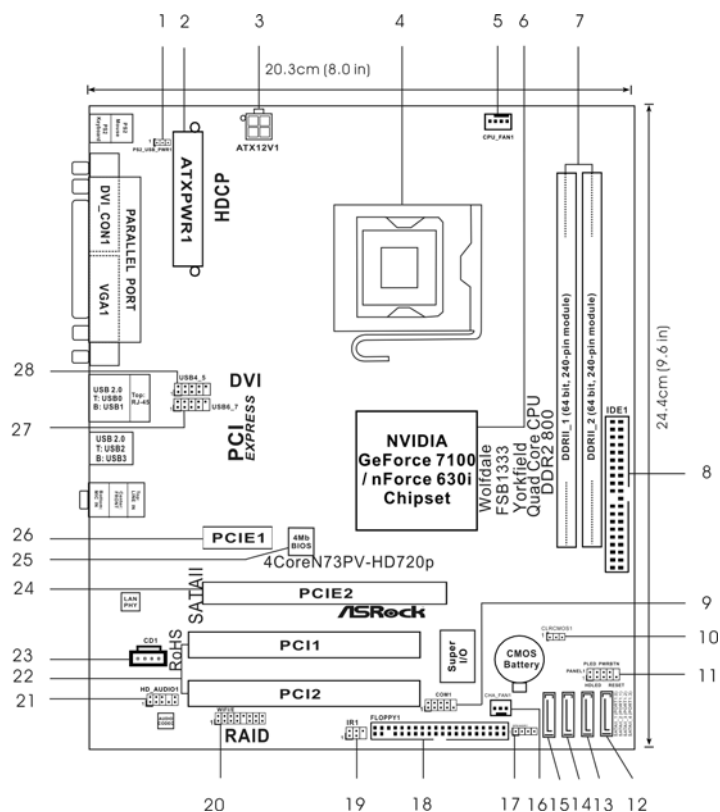
ASRock Website: <http://www.asrock.com>

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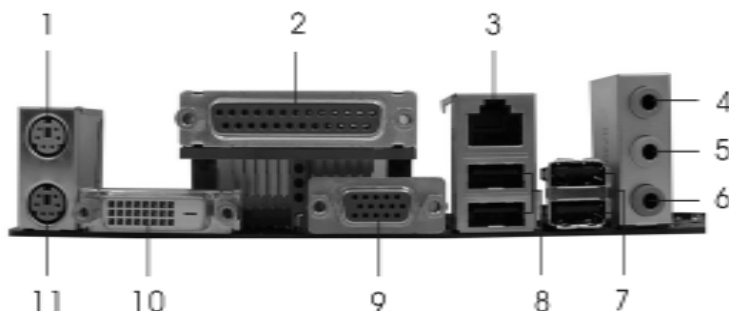
English

Motherboard Layout



- | | |
|---|--|
| 1 PS2_USB_PWR1 Jumper | 16 Chassis Fan Connector (CHA_FAN1) |
| 2 ATX Power Connector (ATXPWR1) | 17 Chassis Speaker Header (SPEAKER 1) |
| 3 ATX 12V Connector (ATX12V1) | 18 Floppy Connector (FLOPPY1) |
| 4 775-Pin CPU Socket | 19 DeskExpress Hot Plug Detection Header (IR1) |
| 5 CPU Fan Connector (CPU_FAN1) | 20 WiFi/E Header (WIFI/E) |
| 6 North Bridge Controller | 21 Front Panel Audio Header (HD_AUDIO1) |
| 7 2 x 240-pin DDR2 DIMM Slots (DDR11_1 and DDR11_2; Yellow) | 22 PCI Slots (PCI1 - 2) |
| 8 IDE1 Connector (IDE1, Blue) | 23 Internal Audio Connector: CD1 (Black) |
| 9 Serial Port Connector (COM1) | 24 PCI Express x16 Slot (PCIE2) |
| 10 Clear CMOS Jumper (CLRCMOS1) | 25 SPI Flash Memory (4Mb) |
| 11 System Panel Header (PANEL1) | 26 PCI Express x1 Slot (PCIE1) |
| 12 Fourth SATAII Connector (SATAII_4 (PORT1.3)) | 27 USB 2.0 Header (USB6_7, Blue) |
| 13 Third SATAII Connector (SATAII_3 (PORT1.2)) | 28 USB 2.0 Header (USB4_5, Blue) |
| 14 Secondary SATAII Connector (SATAII_2 (PORT1.1)) | |
| 15 Primary SATAII Connector (SATAII_1 (PORT1.0)) | |

ASRock 6CH_DVI I/O



- | | | | |
|-----|-------------------------|----|-----------------------------|
| 1 | PS/2 Mouse Port (Green) | 7 | USB 2.0 Ports (USB23) |
| 2 | Parallel Port | 8 | USB 2.0 Ports (USB01) |
| 3 | RJ-45 Port | 9 | VGA/D-Sub Port |
| 4 | Line In (Light Blue) | 10 | VGA/DVI-D Port |
| 5 | Front Speaker (Lime) | 11 | PS/2 Keyboard Port (Purple) |
| * 6 | Microphone (Pink) | | |

* To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. Please refer to below steps for the software setting of Multi-Streaming.

For Windows® XP:

After restarting your computer, you will find "Mixer" tool on your system. Please select "Mixer ToolBox" , click "Enable playback multi-streaming", and click "ok". Choose "2CH" or

"4CH" and then you are allowed to select "Realtek HDA Primary output" to use Rear Speaker and Front Speaker, or select "Realtek HDA Audio 2nd output" to use front panel audio. Then reboot your system.

For Windows® Vista™:

After restarting your computer, please double-click "Realtek HD Audio Manager" on the system tray. Set "Speaker Configuration" to "Quadraphonic" or "Stereo". Click "Device advanced settings", choose "Make front and rear output devices playbacks two different audio streams simultaneously", and click "ok". Then reboot your system.

1. Introduction

Thank you for purchasing ASRock **4CoreN73PV-HD720p** motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

This Quick Installation Guide contains introduction of the motherboard and step-by-step installation guide. More detailed information of the motherboard can be found in the user manual presented in the Support CD.



Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well. ASRock website <http://www.asrock.com>
If you require technical support related to this motherboard, please visit our website for specific information about the model you are using.
www.asrock.com/support/index.asp

1.1 Package Contents

ASRock **4CoreN73PV-HD720p** Motherboard

(Micro ATX Form Factor: 9.6-in x 8.0-in, 24.4 cm x 20.3 cm)

ASRock **4CoreN73PV-HD720p** Quick Installation Guide

ASRock **4CoreN73PV-HD720p** Support CD

One 80-conductor Ultra ATA 66/100/133 IDE Ribbon Cable

One Ribbon Cable for a 3.5-in Floppy Drive

One Serial ATA (SATA) Data Cable (Optional)

One Serial ATA (SATA) HDD Power Cable (Optional)

One ASRock 6CH DVI I/O Panel Shield

1.2 Specifications

Platform	- Micro ATX Form Factor: 9.6-in x 8.0-in, 24.4 cm x 20.3 cm
CPU	- LGA 775 for Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron®, supporting Quad Core Yorkfield and Dual Core Wolfdale processors - FSB1333/1066/800/533MHz - Supports Hyper-Threading Technology (see CAUTION 1) - Supports Untied Overclocking Technology (see CAUTION 2) - Supports EM64T CPU
Chipset	- NVIDIA® GeForce 7100 / nForce 630i
Memory	- 2 x DDR2 DIMM slots - Support DDR2 800/667/533 non-ECC, un-buffered memory - Max. capacity of system memory: 4GB (see CAUTION 3)
Hybrid Booster	- CPU Frequency Stepless Control (see CAUTION 4) - ASRock U-COP (see CAUTION 5) - Boot Failure Guard (B.F.G.)
Expansion Slot	- 1 x PCI Express x16 slot - 1 x PCI Express x1 slot - 2 x PCI slots
Graphics	- Integrated NVIDIA® GeForce 7100 - DX9.0 VGA, Pixel Shader 3.0 - Max. shared memory 256MB (see CAUTION 6) - Dual VGA Output: support DVI-D and D-Sub ports by independent display controllers - Supports HDCP function with DVI-D port - Supports 720p Blu-ray (BD) / HD-DVD playback (see CAUTION 7)
Audio	- 5.1 CH Windows® Vista™ Premium Level HD Audio (ALC662 Audio Codec)
LAN	- 4CoreN73PV-HD720p R1.0: Realtek Giga PHY RTL8211B, speed 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0: Realtek PHY RTL8201CL, speed 10/100 Ethernet - Supports Wake-On-LAN
Rear Panel I/O	ASRock 6CH_DVI I/O - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x VGA/D-Sub Port - 1 x VGA/DVI-D Port - 1 x Parallel Port (ECP/EPP Support)

	- 4 x Ready-to-Use USB 2.0 Ports - 1 x RJ-45 Port - HD Audio Jack: Line in/Front Speaker/Microphone
Connector	- 4 x Serial ATAII 3.0Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 0+1, JBOD and RAID 5), NCQ, AHCI and "Hot Plug" functions (see CAUTION 8) - 1 x ATA133 IDE connector (supports 2 x IDE devices) - 1 x Floppy connector - 1 x DeskExpress Hot Plug Detection header - 1 x COM port header - CPU/Chassis FAN connector - 24 pin ATX power connector - 4 pin 12V power connector - CD in header - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports) (see CAUTION 9) - 1 x WiFi/E header (see CAUTION 10)
BIOS Feature	- 4Mb AMI BIOS - AMI Legal BIOS - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - AMBIOS 2.3.1 Support
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version)
Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU Quiet Fan - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit compliant
Certifications	- FCC, CE, WHQL

* For detailed product information, please visit our website: <http://www.asrock.com>

WARNING

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

CAUTION!

1. About the setting of "Hyper Threading Technology", please check page 40 of "User Manual" in the support CD.
2. This motherboard supports Untied Overclocking Technology. Please read "Untied Overclocking Technology" on page 30 for details.
3. Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® XP and Windows® Vista™. For Windows® XP 64-bit and Windows® Vista™ 64-bit with 64-bit CPU, there is no such limitation.
4. Although this motherboard offers stepless control, it is not recommended to perform over-clocking. Frequencies other than the recommended CPU bus frequencies may cause the instability of the system or damage the CPU.
5. While CPU overheat is detected, the system will automatically shutdown. Before you resume the system, please check if the CPU fan on the motherboard functions properly and unplug the power cord, then plug it back again. To improve heat dissipation, remember to spray thermal grease between the CPU and the heatsink when you install the PC system.
6. The maximum shared memory size is defined by the chipset vendor and is subject to change. Please check NVIDIA® website for the latest information.
7. 720p Blu-ray (BD) / HD-DVD playback support on this motherboard requires the proper hardware configuration. Please refer to page 9 and 10 for the minimum hardware requirement and the passed 720p Blu-ray (BD) / HD-DVD films in our lab test.
8. Before installing SATAII hard disk to SATAII connector, please read the "SATAII Hard Disk Setup Guide" on page 24 to adjust your SATAII hard disk drive to SATAII mode. You can also connect SATA hard disk to SATAII connector directly.
9. Power Management for USB 2.0 works fine under Microsoft® Windows® Vista™ 64-bit / Vista™ / XP 64-bit / XP SP1 or SP2.
10. WiFi/E header supports WiFi+AP function with ASRock WiFi-802.11g or WiFi-802.11n module, an easy-to-use wireless local area network (WLAN) adapter. It allows you to create a wireless environment and enjoy the convenience of wireless network connectivity. Please visit our website for the availability of ASRock WiFi-802.11g or WiFi-802.11n module. ASRock website <http://www.asrock.com>

1.3 Minimum Hardware Requirement Table for Windows® Vista™ Premium 2007 and Basic Logo

For system integrators and users who purchase this motherboard and plan to submit Windows® Vista™ Premium 2007 and Basic logo, please follow below table for minimum hardware requirements.

CPU	Celeron D 326
Memory	1GB system memory (Premium)
	512MB Single Channel (Basic)
VGA	DX9.0 with WDDM Driver
	DVI with HDCP

* If you use onboard VGA with total system memory size 512MB and plan to submit Windows® Vista™ Basic logo, please adjust the shared memory size of onboard VGA to 64MB. If you use onboard VGA with total system memory size above 512MB and plan to submit Windows® Vista™ Premium or Basic logo, please adjust the shared memory size of onboard VGA to 128MB or above.

* If you plan to use external graphics card on this motherboard, please refer to Premium Discrete requirement at <http://www.asrock.com>

* If the onboard VGA supports DVI, it must also support HDCP function to qualify for Windows® Vista™ Premium 2007 logo.

* After June 1, 2007, all Windows® Vista™ systems are required to meet above minimum hardware requirements in order to qualify for Windows® Vista™ Premium 2007 logo.

1.4 Minimum Hardware Requirement for 720p Blu-ray (BD) / HD-DVD Playback Support

720p Blu-ray (BD) / HD-DVD playback support on this motherboard requires the proper hardware configuration. Please refer to below table for the minimum hardware requirement.

CPU	Wolfdale E8500
VGA	Onboard VGA with DVI-D port
Memory	DDR2 800, 1GB x 2
Suggested OS	Windows® Vista™ or Windows® Vista™ 64

* If you need to use CyberLink PowerDVD Ultra version 7.2 or 7.3, we suggest to disable Hardware Acceleration function for better playback performance and compatibility. After executing CyberLink PowerDVD Ultra program, please follow below steps to disable Hardware Acceleration function.

- A. Right-click the main page of CyberLink PowerDVD Ultra program.
- B. Click "Configuration".
- C. Select "Video".
- D. Click "Enable hardware acceleration (nVidia PureVideo)" to remove the "V" mark in this item.
- E. Click "OK" to save the change.

1.5 Passed 720p Blu-ray (BD) / HD-DVD Films in Our Lab Test

DVD	Film Name Type	Format	Producer
Blu-ray DVD	SWORDFISH	VC-1	WB
	UNDERWORLD EVOLUTION	MPEG-2	SONY
	CASINO ROYALE	MPEG-4-AVC	SONY
	THE LAST STAND	MPEG-4-AVC	FOX
	SPEED	MPEG-4-AVC	FOX
	THE LEAGUE OF EXTRAORDINARY GENTLEMEN	MPEG-4-AVC	FOX
HD- DVD	KING KONG	VC-1	UNIVERSAL
	THE INTERPRETER	MPEG-4-AVC	UNIVERSAL
	NEW ORLEANS CONCERT	MPEG-2	WEA
	ONE SIX RIGHT	MPEG-2	TERWILLIGER

* MPEG-4-AVC mentioned above refers to the same format of H.264.

* Above passed films are tested under below configuration.

Items	Configurations
CPU	Wolfdale E8500
VGA	Onboard VGA with DVI-D port
Memory	DDR2 800, 1GB x 2
OS	Windows® Vista™ or Windows® Vista™ 64
Playback Software	CyberLink PowerDVD Ultra
DVD Player	Pioneer BDR-101A / LG GBW-H10N (BD)
	HP HD100 (HD-DVD)

2. Installation

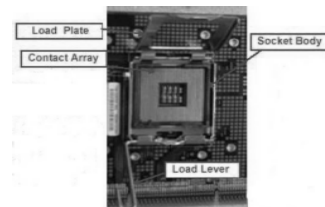
Pre-installation Precautions

Take note of the following precautions before you install motherboard components or change any motherboard settings.

1. Unplug the power cord from the wall socket before touching any component. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.
2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that comes with the component.
5. When placing screws into the screw holes to secure the motherboard to the chassis, please do not over-tighten the screws! Doing so may damage the motherboard.

2.1 CPU Installation

For the installation of Intel 775-LAND CPU, please follow the steps below.



775-Pin Socket Overview

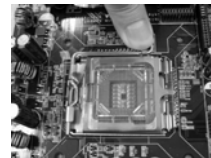


Before you insert the 775-LAND CPU into the socket, please check if the CPU surface is unclean or if there is any bent pin on the socket. Do not force to insert the CPU into the socket if above situation is found. Otherwise, the CPU will be seriously damaged.

English

Step 1. Open the socket:

Step 1-1. Disengaging the lever by depressing down and out on the hook to clear retention tab.



Step 1-2. Rotate the load lever to fully open position at approximately 135 degrees.

Step 1-3. Rotate the load plate to fully open position at approximately 100 degrees.

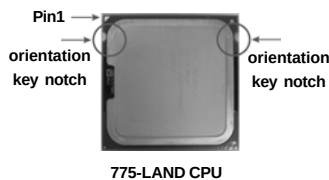


Step 2. Insert the 775-LAND CPU:

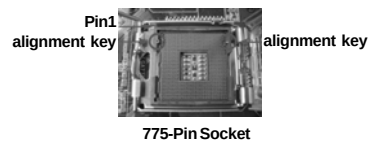
Step 2-1. Hold the CPU by the edges where are marked with black lines.



Step 2-2. Orient the CPU with IHS (Integrated Heat Sink) up. Locate Pin1 and the two orientation key notches.



775-LAND CPU



775-Pin Socket



For proper inserting, please ensure to match the two orientation key notches of the CPU with the two alignment keys of the socket.

Step 2-3. Carefully place the CPU into the socket by using a purely vertical motion.

Step 2-4. Verify that the CPU is within the socket and properly mated to the orient keys.



Step 3. Remove PnP Cap (Pick and Place Cap):

Use your left hand index finger and thumb to support the load plate edge, engage PnP cap with right hand thumb and peel the cap from the socket while pressing on center of PnP cap to assist in removal.





1. It is recommended to use the cap tab to handle and avoid kicking off the PnP cap.
2. This cap must be placed if returning the motherboard for after service.

Step 4. Close the socket:

- Step 4-1. Rotate the load plate onto the IHS.
- Step 4-2. While pressing down lightly on load plate, engage the load lever.
- Step 4-3. Secure load lever with load plate tab under retention tab of load lever.

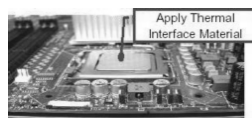


2.2 Installation of CPU Fan and Heatsink

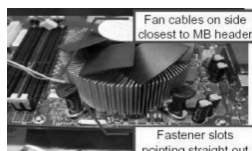
For proper installation, please kindly refer to the instruction manuals of your CPU fan and heatsink.

Below is an example to illustrate the installation of the heatsink for 775-LAND CPU.

- Step 1. Apply thermal interface material onto center of IHS on the socket surface.

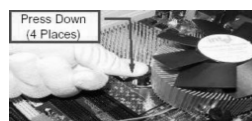


- Step 2. Place the heatsink onto the socket. Ensure fan cables are oriented on side closest to the CPU fan connector on the motherboard (CPU_FAN1, see page 2, No. 5).



- Step 3. Align fasteners with the motherboard throughholes.

- Step 4. Rotate the fastener clockwise, then press down on fastener caps with thumb to install and lock. Repeat with remaining fasteners.



If you press down the fasteners without rotating them clockwise, the heatsink cannot be secured on the motherboard.

- Step 5. Connect fan header with the CPU fan connector on the motherboard.
- Step 6. Secure excess cable with tie-wrap to ensure cable does not interfere with fan operation or contact other components.

English



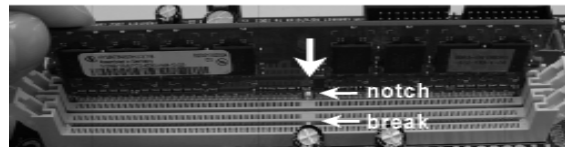
2.3 Installation of Memory Modules (DIMM)

This motherboard provides two 240-pin DDR2 (Double Data Rate 2) DIMM slots.



Please make sure to disconnect power supply before adding or removing DIMMs or the system components.

- Step 1. Unlock a DIMM slot by pressing the retaining clips outward.
- Step 2. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.



The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation.

- Step 3. Firmly insert the DIMM into the slot until the retaining clips at both ends fully snap back in place and the DIMM is properly seated.



2.4 Expansion Slots (PCI and PCI Express Slots)

There are 2 PCI slots and 2 PCI Express slots on this motherboard.

PCI slots: PCI slots are used to install expansion cards that have the 32-bit PCI interface.

PCIe slots: PCIe1 (PCIe x1 slot) is used for PCI Express cards with x1 lane width cards, such as Gigabit LAN card, SATA2 card, etc.

PCIe2 (PCIe x16 slot) is used for PCI Express cards with x16 lane width graphics cards.

Installing an expansion card

- Step 1. Before installing the expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.
- Step 2. Remove the bracket facing the slot that you intend to use. Keep the screws for later use.
- Step 3. Align the card connector with the slot and press firmly until the card is completely seated on the slot.
- Step 4. Fasten the card to the chassis with screws.



2.5 Dual Monitor and Surround Display Features

Dual Monitor Feature

This motherboard supports dual monitor feature. With the internal dual VGA output support (DVI-D and D-Sub), you can easily enjoy the benefits of dual monitor feature without installing any add-on VGA card to this motherboard. This motherboard also provides independent display controllers for DVI-D and D-Sub to support dual VGA output so that DVI-D and D-sub can drive same or different display contents. To enable dual monitor feature, please follow the below steps:

1. Connect the DVI-D monitor cable to the VGA/DVI-D port on the I/O panel of this motherboard. Connect the D-Sub monitor cable to the VGA/D-Sub port on the I/O panel of this motherboard.



VGA/DVI-D port

VGA/D-Sub port

2. If you have installed onboard VGA driver from our support CD to your system already, you can freely enjoy the benefits of dual monitor function provided by VGA/DVI-D and VGA/D-Sub ports with this motherboard after your system boots. If you haven't installed onboard VGA driver yet, please install onboard VGA driver from our support CD to your system and restart your computer. Then you can start to use dual monitor function provided by VGA/DVI-D and VGA/D-Sub ports with this motherboard.



When you playback HDCP-protected video from Blu-ray (BD) or HD-DVD disc, the content will be displayed only in one of the two monitors instead of both monitors.



Surround Display Feature

This motherboard supports surround display upgrade. With the internal dual VGA output support (DVI-D and D-Sub) and the external add-on PCI Express VGA card, you can easily enjoy the benefits of surround display feature. Please refer to the following steps to set up a surround display environment:

1. Install the NVIDIA® PCI Express VGA card to PCIE2 slot. Please refer to page 15 for proper expansion card installation procedures for details.
2. Connect the DVI-D monitor cable to the VGA/DVI-D port on the I/O panel of this motherboard. Connect the D-Sub monitor cable to the VGA/D-Sub port on the I/O panel of this motherboard.
3. Boot your system. Press <F2> to enter BIOS setup. Enter "Share Memory" option to adjust the memory capability to [32MB], [64MB], [128MB] or [256MB] to enable the function of VGA/D-sub. Please make sure that the value you select is less than the total capability of the system memory. If you do not adjust the BIOS setup, the default value of "Share Memory", [Auto], will disable VGA/D-Sub function when the add-on VGA card is inserted to this motherboard.
4. Install the onboard VGA driver and the add-on PCI Express VGA card driver to your system. If you have installed the onboard VGA driver and the add-on PCI Express VGA card driver already, there is no need to install them again.
5. Set up a multi-monitor display.

For Windows® XP / XP 64-bit OS:

Right click the desktop, choose "Properties", and select the "Settings" tab so that you can adjust the parameters of the multi-monitor according to the steps below.

- A. Click the "Identify" button to display a large number on each monitor.
- B. Right-click the display icon in the Display Properties dialog that you wish to be your primary monitor, and then select "Primary". When you use multiple monitors with your card, one monitor will always be Primary, and all additional monitors will be designated as Secondary.
- C. Select the display icon identified by the number 2.
- D. Click "Extend my Windows desktop onto this monitor".
- E. Right-click the display icon and select "Attached", if necessary.
- F. Set the "Screen Resolution" and "Color Quality" as appropriate for the second monitor. Click "Apply" or "OK" to apply these new values.
- G. Repeat steps C through E for the display icon identified by the number one, two, three and four.

For Windows® Vista™ / Vista™ 64-bit OS:

Right click the desktop, choose "Personalize", and select the "Display Settings" tab so that you can adjust the parameters of the multi-monitor according to the steps below.

- A. Click the number "2" icon.
 - B. Click the items "This is my main monitor" and "Extend the desktop onto this monitor".
 - C. Click "OK" to save your change.
 - D. Repeat steps A through C for the display icon identified by the number three and four.
6. Use Surround Display. Click and drag the display icons to positions representing the physical setup of your monitors that you would like to use. The placement of display icons determines how you move items from one monitor to another.



HDCP Function with DVI-D Port

HDCP function is supported with DVI-D port on this motherboard. To use HDCP function with this motherboard, you need to adopt the monitor that supports HDCP function as well. Therefore, you can enjoy the superior display quality with high-definition HDCP encryption contents. Please refer to below instruction for more details about HDCP function.

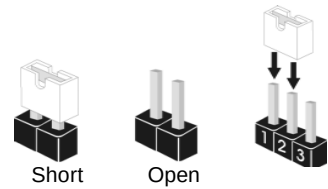
What is HDCP?

HDCP stands for High-Bandwidth Digital Content Protection, a specification developed by Intel® for protecting digital entertainment content that uses the DVI interface. HDCP is a copy protection scheme to eliminate the possibility of intercepting digital data midstream between the video source, or transmitter - such as a computer, DVD player or set-top box - and the digital display, or receiver - such as a monitor, television or projector. In other words, HDCP specification is designed to protect the integrity of content as it is being transmitted.

Products compatible with the HDCP scheme such as DVD players, satellite and cable HDTV set-top-boxes, as well as few entertainment PCs requires a secure connection to a compliant display. Due to the increase in manufacturers employing HDCP in their equipment, it is highly recommended that the HDTV or LCD monitor you purchase is compatible.

2.6 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is “Short”. If no jumper cap is placed on pins, the jumper is “Open”. The illustration shows a 3-pin jumper whose pin1 and pin2 are “Short” when jumper cap is placed on these 2 pins.



Jumper	Setting	Description
PS2_USB_PWR1 (see p.2 No. 1)	1_2 +5V 2_3 +5VSB	Short pin2, pin3 to enable +5VSB (standby) for PS/2 or USB wake up events.

Note: To select +5VSB, it requires 2 Amp and higher standby current provided by power supply.

Clear CMOS Jumper (CLRCMOS1) (see p.2 No. 10)	1_2 Default 2_3 Clear CMOS
---	--

Note: CLRCMOS1 allows you to clear the data in CMOS. The data in CMOS includes system setup information such as system password, date, time, and system setup parameters. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short pin2 and pin3 on CLRCMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action.

2.7 Onboard Headers and Connectors



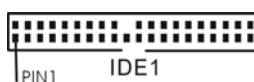
Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage of the motherboard!

FDD connector
(33-pin FLOPPY1)
(see p.2 No. 18)



Note: Make sure the red-striped side of the cable is plugged into Pin1 side of the connector.

Primary IDE connector (Blue)
(39-pin IDE1, see p.2 No. 8)



connect the blue end
to the motherboard



connect the black end
to the IDE devices

80-conductor ATA 66/100/133 cable

Note: Please refer to the instruction of your IDE device vendor for the details.

Serial ATAII Connectors

(SATAII_1 (PORT1.0):

see p.2, No. 15)

(SATAII_2 (PORT1.1):

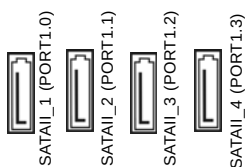
see p.2, No. 14)

(SATAII_3 (PORT1.2):

see p.2, No. 13)

(SATAII_4 (PORT1.3):

see p.2, No. 12)



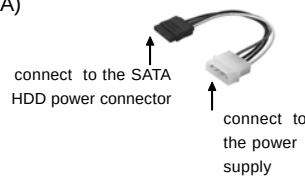
These four Serial ATAII (SATAII) connectors support SATA data cables for internal storage devices. The current SATAII interface allows up to 3.0 Gb/s data transfer rate.

Serial ATA (SATA)
Data Cable
(Optional)



Either end of the SATA data cable can be connected to the SATA / SATAII hard disk or the SATAII connector on this motherboard.

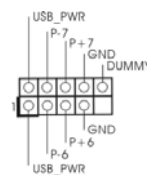
**Serial ATA (SATA)
Power Cable
(Optional)**



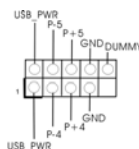
Please connect the black end of SATA power cable to the power connector on each drive. Then connect the white end of SATA power cable to the power connector of the power supply.

USB 2.0 Headers

(9-pin US6_7)
(see p.2 No. 27)



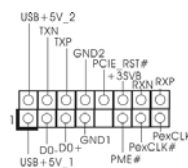
(9-pin USB4_5)
(see p.2 No. 28)



Besides four default USB 2.0 ports on the I/O panel, there are two USB 2.0 headers on this motherboard. Each USB 2.0 header can support two USB 2.0 ports.

WiFi/E Header

(15-pin WiFi/E)
(see p.2 No. 20)



This header supports WiFi+AP function with ASRock WiFi-802.11g or WiFi-802.11n module, an easy-to-use wireless local area network (WLAN) adapter. It allows you to create a wireless environment and enjoy the convenience of wireless network connectivity.

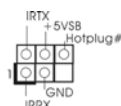


If you don't plan to use WiFi+AP function on this motherboard, this header can be used as a 4-Pin USB 2.0 header to support one USB 2.0 port. To connect the 4-Pin USB device cable to this header, please refer to this picture for proper installation.



DeskExpress Hot Plug Detection Header

(5-pin IR1)
(see p.2 No. 19)



This header supports the Hot Plug detection function for ASRock DeskExpress.

Internal Audio Connectors

(4-pin CD1)
(CD1: see p.2 No. 23)

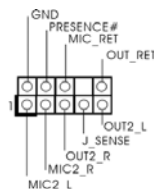


This connector allows you to receive stereo audio input from sound sources such as a CD-ROM, DVD-ROM, TV tuner card, or MPEG card.

Front Panel Audio Header

(9-pin HD_AUDIO1)

(see p.2 No. 21)



This is an interface for front panel audio cable that allows convenient connection and control of audio devices.



1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instruction in our manual and chassis manual to install your system.
2. If you use AC'97 audio panel, please install it to the front panel audio header as below:
 - A. Connect Mic_IN (MIC) to MIC2_L.
 - B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L.
 - C. Connect Ground (GND) to Ground (GND).
 - D. MIC_RET and OUT_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel.
 - E. Enter BIOS Setup Utility. Enter Advanced Settings, and then select Chipset Configuration. Set the Front Panel Control option from [Auto] to [Enabled].
 - F. Enter Windows system. Click the icon on the lower right hand taskbar to enter Realtek HD Audio Manager.

For Windows® XP / XP 64-bit OS:

Click "Audio I/O", select "Connector Settings" , choose "Disable front panel jack detection", and save the change by clicking "OK".

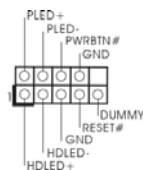
For Windows® Vista™ / Vista™ 64-bit OS:

Click the right-top "Folder" icon , choose "Disable front panel jack detection", and save the change by clicking "OK".

System Panel Header

(9-pin PANEL1)

(see p.2 No. 11)

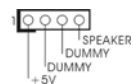


This header accommodates several system front panel functions.

Chassis Speaker Header

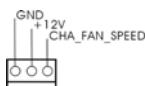
(4-pin SPEAKER 1)

(see p.2 No. 17)



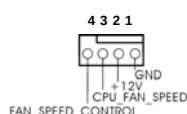
Please connect the chassis speaker to this header.

Chassis Fan Connector
(3-pin CHA_FAN1)
(see p.2 No. 16)



Please connect a chassis fan cable to this connector and match the black wire to the ground pin.

CPU Fan Connector
(4-pin CPU_FAN1)
(see p.2 No. 5)



Please connect a CPU fan cable to this connector and match the black wire to the ground pin.

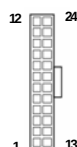


Though this motherboard provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin CPU fan to the CPU fan connector on this motherboard, please connect it to Pin 1-3.

Pin 1-3 Connected
3-Pin Fan Installation



ATX Power Connector
(24-pin ATXPWR1)
(see p.2 No. 2)

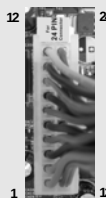


Please connect an ATX power supply to this connector.



Though this motherboard provides 24-pin ATX power connector, it can still work if you adopt a traditional 20-pin ATX power supply. To use the 20-pin ATX power supply, please plug your power supply along with Pin 1 and Pin 13.

20-Pin ATX Power Supply Installation

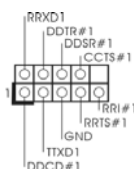


ATX 12V Connector
(4-pin ATX12V1)
(see p.2 No. 3)



Please connect an ATX 12V power supply to this connector.

Serial port Header
(9-pin COM1)
(see p.2 No. 9)



This COM1 header supports a serial port module.

English



2.8 SATAII Hard Disk Setup Guide

Before installing SATAII hard disk to your computer, please carefully read below SATAII hard disk setup guide. Some default setting of SATAII hard disks may not be at SATAII mode, which operate with the best performance. In order to enable SATAII function, please follow the below instruction with different vendors to correctly adjust your SATAII hard disk to SATAII mode in advance; otherwise, your SATAII hard disk may fail to run at SATAII mode.

Western Digital



If pin 5 and pin 6 are shorted, SATA 1.5Gb/s will be enabled.

On the other hand, if you want to enable SATAII 3.0Gb/s, please remove the jumpers from pin 5 and pin 6.

SAMSUNG



If pin 3 and pin 4 are shorted, SATA 1.5Gb/s will be enabled.

On the other hand, if you want to enable SATAII 3.0Gb/s, please remove the jumpers from pin 3 and pin 4.

HITACHI

Please use the Feature Tool, a DOS-bootable tool, for changing various ATA features. Please visit HITACHI's website for details:

<http://www.hitachigst.com/hdd/support/download.htm>



The above examples are just for your reference. For different SATAII hard disk products of different vendors, the jumper pin setting methods may not be the same. Please visit the vendors' website for the updates.



2.9 Serial ATA (SATA) / Serial ATAII (SATAII) Hard Disks Installation

This motherboard adopts NVIDIA® GeForce 7100 / nForce 630i chipset that supports Serial ATA (SATA) / Serial ATAII (SATAII) hard disks and RAID functions. You may install SATA / SATAII hard disks on this motherboard for internal storage devices. This section will guide you to install the SATA / SATAII hard disks.

- STEP 1: Install the SATA / SATAII hard disks into the drive bays of your chassis.
- STEP 2: Connect the SATA power cable to the SATA / SATAII hard disk.
- STEP 3: Connect one end of the SATA data cable to the motherboard's SATAII connector.
- STEP 4: Connect the other end of the SATA data cable to the SATA / SATAII hard disk.

2.10 Hot Plug and Hot Swap Functions for SATA / SATAII HDDs

This motherboard supports Hot Plug and Hot Swap functions for SATA / SATAII Devices in RAID / AHCI mode. NVIDIA® GeForce 7100 / nForce 630i chipset provides hardware support for Advanced Host controller Interface (AHCI), a new operation interface for SATA host controllers developed thru a joint industry effort. AHCI also provides usability enhancements such as Hot Plug.



NOTE

What is Hot Plug Function?

If the SATA / SATAII HDDs are NOT set for RAID configuration, it is called "Hot Plug" for the action to insert and remove the SATA / SATAII HDDs while the system is still power-on and in working condition. However, please note that it cannot perform Hot Plug if the OS has been installed into the SATA / SATAII HDD.

What is Hot Swap Function?

If SATA / SATAII HDDs are built as RAID 1 or RAID 5 then it is called "Hot Swap" for the action to insert and remove the SATA / SATAII HDDs while the system is still power-on and in working condition.

2.11 Driver Installation Guide

To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly.

2.12 Installing Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit Without RAID Functions

If you want to install Windows® XP, Windows® XP 64-bit, Windows® Vista™ or Windows® Vista™ 64-bit on your SATA / SATAII HDDs without RAID functions, please follow below procedures according to the OS you install.

2.12.1 Installing Windows® XP / XP 64-bit Without RAID Functions

If you want to install Windows® XP / Windows® XP 64-bit on your SATA / SATAII HDDs without RAID functions, please follow below steps.

Using SATA / SATAII HDDs with NCQ and Hot Plug functions

STEP 1: Set Up BIOS.

- A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.
- B. Set the "SATA Operation Mode" option to [AHCI].

STEP 2: Make a SATA / SATAII driver diskette.

- A. Insert the ASRock Support CD into your optical drive to boot your system. (There are two ASRock Support CD in the motherboard gift box pack, please choose the one for Windows® XP / XP 64-bit.)
- B. During POST at the beginning of system boot-up, press <F11> key, and then a window for boot devices selection appears. Please select CD-ROM as the boot device.
- C. When you see the message on the screen, "Generate Serial ATA driver diskette [Y/N]?", press <Y>.
- D. Then you will see these messages,

Please choose:

1. Generate AHCI Driver diskette for WindowsXP
2. Generate RAID Driver diskette for WindowsXP
3. Generate AHCI Driver diskette for WindowsXP64
4. Generate RAID Driver diskette for WindowsXP64
5. Exit

Reboot system now

Press any key to continue

Please insert a floppy diskette into the floppy drive. Select your required item on the list according to the mode you choose and the OS you install. Then press any key.

- E. The system will start to format the floppy diskette and copy SATA / SATAII drivers into the floppy diskette.

STEP 3: Install Windows® XP / XP 64-bit OS on your system.

After making a SATA / SATAII driver diskette, you can start to install Windows® XP / XP 64-bit on your system. At the beginning of Windows® setup, press F6 to install a third-party AHCI driver. When prompted, insert the SATA / SATAII driver diskette containing the NVIDIA® AHCI driver. After reading the floppy disk, the driver will be presented. Select the driver to install according to the OS you install. The drivers are as below:

A. NVIDIA nForce Storage Controller (required) Windows XP

B. NVIDIA nForce Storage Controller (required) Windows XP64

Please select A for Windows® XP in AHCI mode. Please select B for Windows® XP 64-bit in AHCI mode.

Using SATA / SATAII HDDs without NCQ and Hot Plug functions

STEP 1: Set Up BIOS.

- A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.
B. Set the "SATA Operation Mode" option to [non-RAID].

STEP 2: Install Windows® XP / XP 64-bit OS on your system.

2.12.2 Installing Windows® Vista™ / Vista™ 64-bit Without RAID Functions

If you want to install Windows® Vista™ / Windows® Vista™ 64-bit on your SATA / SATAII HDDs without RAID functions, please follow below steps.

Using SATA / SATAII HDDs with NCQ and Hot Plug functions

STEP 1: Set Up BIOS.

- A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.
B. Set the "SATA Operation Mode" option to [AHCI].

STEP 2: Install Windows® Vista™ / Vista™ 64-bit OS on your system.

Insert the Windows® Vista™ / Windows® Vista™ 64-bit optical disk into the optical drive to boot your system, and follow the instruction to install Windows® Vista™ / Windows® Vista™ 64-bit OS on your system. When you see "Where do you want to install Windows?" page, please insert the ASRock Support CD into your optical drive, and click the "Load Driver" button on the left on the bottom to load the NVIDIA® AHCI drivers. NVIDIA® AHCI drivers are in the following path in our Support CD:

(There are two ASRock Support CD in the motherboard gift box pack, please choose the one for Windows® Vista™ / Vista™ 64-bit.)

.. \ I386 \ AHCI_Vista (For Windows® Vista™ OS)

.. \ AMD64 \ AHCI_Vista64 (For Windows® Vista™ 64-bit OS)

After that, please insert Windows® Vista™ / Windows® Vista™ 64-bit optical disk into the optical drive again to continue the installation.

Using SATA / SATAII HDDs without NCQ and Hot Plug functions

STEP 1: Set Up BIOS.

- A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.
- B. Set the "SATA Operation Mode" option to [non-RAID].

STEP 2: Install Windows® Vista™ / Vista™ 64-bit OS on your system.

Insert the Windows® Vista™ / Windows® Vista™ 64-bit optical disk into the optical drive to boot your system, and follow the instruction to install Windows® Vista™ / Windows® Vista™ 64-bit OS on your system.

2.13 Installing Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit With RAID Functions

If you want to install Windows® XP, Windows® XP 64-bit, Windows® Vista™ or Windows® Vista™ 64-bit on your SATA / SATAII HDDs with RAID functions, please follow below procedures according to the OS you install.

2.13.1 Installing Windows® XP / XP 64-bit With RAID Functions

If you want to install Windows® XP / Windows® XP 64-bit on your SATA / SATAII HDDs with RAID functions, please follow below steps.

STEP 1: Set Up BIOS.

- A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.
- B. Set the "SATA Operation Mode" option to [RAID].

STEP 2: Make a SATA / SATAII driver diskette.

Please make a SATA / SATAII driver diskette by following section 2.12.1 step 2 on page 26.

STEP 3: Use "RAID Installation Guide" to set RAID configuration.

Before you start to configure RAID function, you need to check the RAID installation guide in the Support CD for proper configuration. Please refer to the BIOS RAID installation guide part of the document in the following path in the Support CD:

.. \ RAID Installation Guide

STEP 4: Install Windows® XP / XP 64-bit OS on your system.

After step1, 2, 3, you can start to install Windows® XP / Windows® XP 64-bit OS on your system. At the beginning of Windows® setup, press F6 to install a third-party RAID driver. When prompted, insert the SATA / SATAII driver diskette containing the NVIDIA® RAID driver. After reading the floppy disk, the drivers will be presented. Select the drivers to install. The drivers are as below:

A. NVIDIA RAID Driver (required)

B. NVIDIA nForce Storage Controller (required)

Please select A and B for Windows® XP / XP 64-bit in RAID mode. (There are two RAID drivers needed for RAID mode, you have to select them separately. Please specify the first RAID driver and then specify again for the second one.)

NOTE. If you install Windows® XP / Windows® XP 64-bit on IDE HDDs and want to manage (create, convert, delete, or rebuild) RAID functions on SATA / SATAII HDDs, you still need to set up "SATA Operation Mode" to [RAID] in BIOS first. Then, please set the RAID configuration by using the Windows RAID installation guide part of the document in the following path in the Support CD:

.. \ RAID Installation Guide

2.13.2 Installing Windows® Vista™ / Vista™ 64-bit With RAID Functions

If you want to install Windows® Vista™ / Windows® Vista™ 64-bit on your SATA / SATAII HDDs with RAID functions, please follow below steps.

STEP 1: Set Up BIOS.

- A. Enter BIOS SETUP UTILITY→ Advanced screen → IDE Configuration.
- B. Set the "SATA Operation Mode" option to [RAID].

STEP 2: Use "RAID Installation Guide" to set RAID configuration.

Before you start to configure RAID function, you need to check the RAID installation guide in the Support CD for proper configuration. Please refer to the BIOS RAID installation guide part of the document in the following path in the Support CD:

.. \ RAID Installation Guide

STEP 3: Install Windows® Vista™ / Vista™ 64-bit OS on your system.

Insert the Windows® Vista™ / Windows® Vista™ 64-bit optical disk into the optical drive to boot your system, and follow the instruction to install Windows® Vista™ / Windows® Vista™ 64-bit OS on your system. When you see "Where do you want to install Windows?" page, please insert the ASRock Support CD into your optical drive, and click the "Load Driver" button on the left on the bottom to load the NVIDIA® RAID drivers. NVIDIA® RAID drivers are in the following path in our Support CD:
(There are two ASRock Support CD in the motherboard gift box pack, please choose the one for Windows® Vista™ / Vista™ 64-bit.)

.. \ I386 \ RAID_Vista (For Windows® Vista™ OS)

.. \ AMD64 \ RAID_Vista64 (For Windows® Vista™ 64-bit OS)

After that, please insert Windows® Vista™ / Windows® Vista™ 64-bit optical disk into the optical drive again to continue the installation.

NOTE. If you install Windows® Vista™ / Windows® Vista™ 64-bit on IDE HDDs and want to manage (create, convert, delete, or rebuild) RAID functions on SATA / SATAII HDDs, you still need to set up "SATA Operation Mode" to [RAID] in BIOS first. Then, please set the RAID configuration by using the Windows RAID installation guide in the following path in the Support CD:
.. \ RAID Installation Guide

2.1.4 Untied Overclocking Technology

This motherboard supports Untied Overclocking Technology, which means during overclocking, FSB enjoys better margin due to fixed PCI / PCIE buses. Before you enable Untied Overclocking function, please enter "Overclock Mode" option of BIOS setup to set the selection from [Auto] to [CPU, PCIE, Async.]. Therefore, CPU FSB is untied during overclocking, but PCI / PCIE buses are in the fixed mode so that FSB can operate under a more stable overclocking environment.



Please refer to the warning on page 6 for the possible overclocking risk before you apply Untied Overclocking Technology.

3. BIOS Information

The Flash Memory on the motherboard stores BIOS Setup Utility. When you start up the computer, please press <F2> during the Power-On-Self-Test (POST) to enter BIOS Setup utility; otherwise, POST continues with its test routines. If you wish to enter BIOS Setup after POST, please restart the system by pressing <Ctl> + <Alt> + <Delete>, or pressing the reset button on the system chassis. The BIOS Setup program is designed to be user-friendly. It is a menu-driven program, which allows you to scroll through its various sub-menus and to select among the predetermined choices. For the detailed information about BIOS Setup, please refer to the User Manual (PDF file) contained in the Support CD.

4. Software Support CD information

This motherboard supports various Microsoft® Windows® operating systems: XP / XP 64-bit / Vista™ / Vista™ 64-bit. The Support CD that came with the motherboard contains necessary drivers and useful utilities that will enhance motherboard features. To begin using the Support CD, insert the CD into your CD-ROM drive. It will display the Main Menu automatically if "AUTORUN" is enabled in your computer. If the Main Menu does not appear automatically, locate and double-click on the file "ASSETUP.EXE" from the BIN folder in the Support CD to display the menus.

1. Einführung

Wir danken Ihnen für den Kauf des ASRock **4CoreN73PV-HD720p** Motherboard, ein zuverlässiges Produkt, welches unter den ständigen, strengen Qualitätskontrollen von ASRock gefertigt wurde. Es bietet Ihnen exzellente Leistung und robustes Design, gemäß der Verpflichtung von ASRock zu Qualität und Halbarkeit. Diese Schnellinstallationsanleitung führt in das Motherboard und die schrittweise Installation ein. Details über das Motherboard finden Sie in der Bedienungsanleitung auf der Support-CD.



Da sich Motherboard-Spezifikationen und BIOS-Software verändern können, kann der Inhalt dieses Handbuches ebenfalls jederzeit geändert werden. Für den Fall, dass sich Änderungen an diesem Handbuch ergeben, wird eine neue Version auf der ASRock-Website, ohne weitere Ankündigung, verfügbar sein. Die neuesten Grafikkarten und unterstützten CPUs sind auch auf der ASRock-Website aufgelistet.

ASRock-Website: <http://www.asrock.com>

Wenn Sie technische Unterstützung zu Ihrem Motherboard oder spezifische Informationen zu Ihrem Modell benötigen, besuchen Sie bitte unsere Webseite:

www.asrock.com/support/index.asp

1.1 Kartoninhalt

ASRock **4CoreN73PV-HD720p** Motherboard

(Micro ATX-Formfaktor: 24.4 cm x 20.3 cm; 9.6 Zoll x 8.0 Zoll)

ASRock **4CoreN73PV-HD720p** Schnellinstallationsanleitung

ASRock **4CoreN73PV-HD720p** Support-CD

Ein 80-adriges Ultra-ATA 66/100/133 IDE-Flachbandkabel

Ein Flachbandkabel für ein 3,5-Zoll-Diskettenlaufwerk

Ein Serial ATA (SATA) -Datenkabel (optional)

Ein Serial ATA (SATA) -Festplattenstromkabel (optional)

Ein ASRock 6CH DVI I/O Shield

1.2 Spezifikationen

Plattform	- Micro ATX-Formfaktor: 24.4 cm x 20.3 cm; 9.6 Zoll x 8.0 Zoll
CPU	- LGA 775 für Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® unterstützt Quad Core Yorkfield und Dual Core Wolfdale Prozessoren - FSB1333/1066/800/533MHz - Unterstützt Hyper-Threading-Technologie (siehe VORSICHT 1) - Unterstützt Untied-Übertaktungstechnologie (siehe VORSICHT 2) - Unterstützt EM64T-CPU
Chipsatz	- NVIDIA® GeForce 7100 / nForce 630i
Speicher	- 2 x Steckplätze für DDR2 - Unterstützt DDR2 800/667/533 non-ECC, ungepufferter Speicher - Max. Kapazität des Systemspeichers: 4GB (siehe VORSICHT 3)
Hybrid Booster	- Schrittloser CPU-Frequenz-Kontrolle (siehe VORSICHT 4) - ASRock U-COP (siehe VORSICHT 5) - Boot Failure Guard (B.F.G. – Systemstartfehlerschutz)
Erweiterungssteckplätze	- 1 x PCI Express x16-Steckplätze - 1 x PCI Express x1-Steckplätze - 2 x PCI -Steckplätze
Onboard-VGA	- Integrierte NVIDIA® GeForce7100 - DX9.0 VGA, Pixel Shader 3.0 - Maximal gemeinsam genutzter Speicher 256 MB (siehe VORSICHT 6) - Doppel-VGA Ausgabe: unterstützt DVI-D und D-Sub Ports durch unabhängige Bildschirmanzeige Kontrolleure - unterstützt HDCP Funktion mit DVI-D Port - unterstützt 720p Blu-ray (BD) / HD-DVD Playback (siehe VORSICHT 7)
Audio	- 5.1 CH Windows® Vista™ Premium Level HD Audio (ALC662 Audio Codec)
LAN	- 4CoreN73PV-HD720p R1.0 Realtek Giga PHY RTL8211B, speed 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0 Realtek PHY RTL8201CL, speed 10/100 Mb/s - Unterstützt Wake-On-LAN

E/A-Anschlüsse an der Rückseite	ASRock 6CH_DVI I/O - 1 x PS/2-Mausanschluss - 1 x PS/2-Tastaturanschluss - 1 x VGA/D-Sub port - 1 x VGA/DVI-D port - 1 x Paralleler port: Unterstützung für ECP / EPP - 4 x Standard-USB 2.0-Anschlüsse - 1 x RJ-45 port - HD Audiobuchse: Audioeingang / Lautsprecher vorne / Mikrofon
Anschlüsse	- 4 x SATAII-Anschlüsse, unterstützt bis 3.0 Gb/s Datenübertragungsrate, unterstützt RAID (RAID 0, RAID 1, RAID 0+1, JBOD und RAID 5), NCQ, AHCI und "Hot Plug" Funktionen (siehe VORSICHT 8) - 1 x ATA133 IDE-Anschlüsse (Unterstützt bis 2 IDE-Geräte) - 1 x FDD-Anschlüsse - 1 x DeskExpress heißer Stecker Detektionskopf - 1 x COM-Anschluss-Header - CPU/Gehäuse-Lüfteranschluss - 24-pin ATX-Netz-Header - 4-pin anschluss für 12V-ATX-Netzteil - Interne Audio-Anschlüsse - Anschluss für Audio auf der Gehäusenvorderseite - 2 x USB 2.0-Anschlüsse (unterstützt 4 USB 2,0-Ports) (siehe VORSICHT 9) - 1 x WiFi/E-Anschlüsse (siehe VORSICHT 10)
BIOS	- 4Mb AMI BIOS - AMI legal BIOS mit Unterstützung für "Plug and Play" - ACPI 1.1-Weckfunktionen - JumperFree-Modus - SMBIOS 2.3.1
Support-CD	- Treiber, Dienstprogramme, Antivirussoftware (Probeversion)
Hardware Monitor	- Überwachung der CPU-Temperatur - Motherboardtemperaturerkennung - Drehzahlmessung für CPU-Lüfter - Drehzahlmessung für Gehäuselüfter - CPU-Lüftergeräuschkämpfung - Spannungsüberwachung: +12V, +5V, +3.3V, Vcore
Betriebssysteme	- Unterstützt Microsoft® Windows® XP / XP 64-Bit / Vista™ / Vista™ 64-Bit
Zertifizierungen	- FCC, CE, WHQL

* Für die ausführliche Produktinformation, besuchen Sie bitte unsere Website:

<http://www.asrock.com>

WARNUNG

Beachten Sie bitte, dass Overclocking, einschließlich der Einstellung im BIOS, Anwenden der Untied Overclocking-Technologie oder Verwenden von Overclocking-Werkzeugen von Dritten, mit einem gewissen Risiko behaftet ist. Overclocking kann sich nachteilig auf die Stabilität Ihres Systems auswirken oder sogar Komponenten und Geräte Ihres Systems beschädigen. Es geschieht dann auf eigene Gefahr und auf Ihre Kosten. Wir übernehmen keine Verantwortung für mögliche Schäden, die aufgrund von Overclocking verursacht wurden.

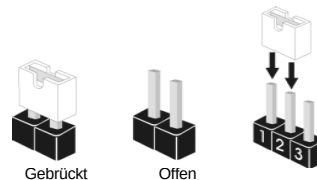
VORSICHT!

1. Die Einstellung der "Hyper-Threading Technology", finden Sie auf Seite 40 des auf der Support-CD enthaltenen Benutzerhandbuches beschrieben.
2. Dieses Motherboard unterstützt die Untied-Übertaktungstechnologie. Unter "Entkoppelte Übertaktungstechnologie" auf Seite 30 finden Sie detaillierte Informationen.
3. Durch Betriebssystem-Einschränkungen kann die tatsächliche Speichergröße weniger als 4 GB betragen, da unter Windows® XP und Windows® Vista™ etwas Speicher zur Nutzung durch das System reserviert wird. Unter Windows® XP 64-bit und Windows® Vista™ 64-bit mit 64-Bit-CPU besteht diese Einschränkung nicht.
4. Obwohl dieses Motherboard stufenlose Steuerung bietet, wird Overclocking nicht empfohlen. Frequenzen, die über den für den jeweiligen Prozessor vorgesehenen liegen, können das System instabil werden lassen oder die CPU beschädigen.
5. Wird eine Überhitzung der CPU registriert, führt das System einen automatischen Shutdown durch. Bevor Sie das System neu starten, prüfen Sie bitte, ob der CPU-Lüfter am Motherboard richtig funktioniert, und stecken Sie bitte den Stromkabelstecker aus und dann wieder ein. Um die Wärmeableitung zu verbessern, bitte nicht vergessen, etwas Wärmeleitpaste zwischen CPU und Kühlkörper zu sprühen.
6. Die Maximalspeichergröße ist von den Chipshändler definiert und umgetauscht. Bitte überprüfen Sie NVIDIA® website für die neuliche Information.
7. 720p Blu-ray (BD)/HD-DVD Playback Unterstützung auf dieser Hauptplatine fordert die passende Hardwarekonfiguration. Bitte verweisen Sie auf Seite 9 und 10 für minimal Hardware Anforderung und die überschritten 720p Blu-ray (BD)/HD-DVD Filme in unserem Laborversuch.
8. Bevor Sie eine SATA II Festplatte mit dem SATA II Anschluss verbinden, lesen Sie bitte die "Anleitung zur SATA II Festplatteneinrichtung" auf Seite 24, um Ihre SATA II Festplatte in den SATA II Modus umzuschalten. SATA-Festplatten können Sie auch direkt mit dem SATA II-Anschluss verbinden.
9. Das Power Management für USB 2.0 arbeitet unter Microsoft® Windows® Vista™ 64-Bit / Vista™ / XP 64-Bit / XP SP1 oder SP2 einwandfrei.

10. WiFi/E Sockel unterstützt WiFi+AP Funktion mit ASRock WiFi-802.11g oder WiFi-802.11n Modul, einem einfach zu bedienenden Wireless Local Area Network (WLAN) Adapter. Damit sind Sie in der Lage, ein drahtloses Netzwerk aufzubauen und die Vorzüge drahtloser Anschlussmöglichkeiten zu genießen. Für Verfügbarkeit des ASRock WiFi-802.11g oder WiFi-802.11n Moduls, siehe bitte unsere Webseite. ASRock Webseite <http://www.asrock.com>

1.3 Einstellung der Jumper

Die Abbildung verdeutlicht, wie Jumper gesetzt werden. Werden Pins durch Jumperkappen verdeckt, ist der Jumper "gebrückt". Werden keine Pins durch Jumperkappen verdeckt, ist der Jumper "offen". Die Abbildung zeigt einen 3-Pin Jumper dessen Pin1 und Pin2 "gebrückt" sind, bzw. es befindet sich eine Jumper-Kappe auf diesen beiden Pins.



Jumper	Einstellung	
PS2_USB_PW1 (siehe S.2, Punkt 1)		Überbrücken Sie Pin2, Pin3, um +5VSB (Standby) zu setzen und die PS/2 oder USB-Weckfunktionen zu aktivieren.

Hinweis: Um +5VSB nutzen zu können, muss das Netzteil auf dieser Leitung 2A oder mehr leisten können.

CMOS löschen (CLR CMOS1, 3-Pin jumper) (siehe S.2, Punkt 10)	
	Default-Einstellung CMOS löschen

Hinweis: CLRCMOS1 erlaubt Ihnen das Löschen der CMOS-Daten. Diese beinhalten das System-Passwort, Datum, Zeit und die verschiedenen BIOS-Parameter. Um die Systemparameter zu löschen und auf die Werkseinstellung zurückzusetzen, schalten Sie bitte den Computer ab und entfernen das Stromkabel. Benutzen Sie eine Jumperkappe, um die Pin 2 und Pin 3 an CLRCMOS1 für 5 Sekunden kurzzuschließen. Bitte vergessen Sie nicht, den Jumper wieder zu entfernen, nachdem das CMOS gelöscht wurde. Bitte vergessen Sie nicht, den Jumper wieder zu entfernen, nachdem das CMOS gelöscht wurde. Wenn Sie den CMOS-Inhalt gleich nach dem Aktualisieren des BIOS löschen müssen, müssen Sie zuerst das System starten und dann wieder ausschalten, bevor Sie den CMOS-Inhalt löschen.

1.4 Anschlüsse



Anschlussleisten sind KEINE Jumper. Setzen Sie KEINE Jumperkappen auf die Pins der Anschlussleisten. Wenn Sie die Jumperkappen auf die Anschlüsse setzen, wird das Motherboard permanent beschädigt!

Anschluss

Beschreibung

Anschluss für das
Floppy-Laufwerk

(33-Pin FLOPPY1)

(siehe S.2, Punkt 18)



FLOPPY1



die rotgestreifte Seite auf Stift 1

Hinweis: Achten Sie darauf, dass die rotgestreifte Seite des Kabel mit der Stift 1-Seite des Anschlusses verbunden wird.

Primärer IDE-Anschluss (blau)

(39-pin IDE1, siehe S.2, Punkt 8)



IDE1

Blauer Anschluss
zum Motherboard



Schwarzer Anschluss
zur Festplatte

80-adriges ATA 66/100/133 Kabel

Hinweis: Details entnehmen Sie bitte den Anweisungen Ihres IDE-Gerätehändlers.

Seriell-ATAII-Anschlüsse

(SATAI_1 (PORT1.0):

siehe S.2 - No. 15)

(SATAI_2 (PORT1.1):

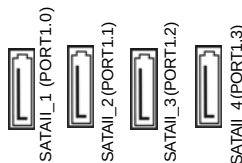
siehe S.2 - No. 14)

(SATAI_3 (PORT1.2):

siehe S.2 - No. 13)

(SATAI_4 (PORT1.3):

siehe S.2 - No. 12)



Diese vier Serial ATAII-
(SATAII-)Verbinder unterstützten
SATA-Datenkabel für interne
Massenspeichergeräte. Die
aktuelle SATAII-Schnittstelle
ermöglicht eine
Datenübertragungsrate bis
3,0 Gb/s.

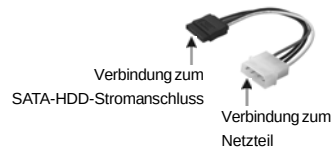
Serial ATA- (SATA-)
Datenkabel

(Option)



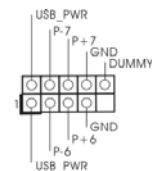
Jedes Ende des SATA
Datenkabels kann an die SATA
/ SATAII Festplatte oder das
SATAII Verbindungsstück auf
dieser Hauptplatine
angeschlossen werden.

Serial ATA- (SATA-) Stromversorgungskabel
(Option)

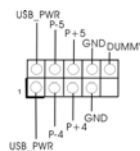


Verbinden Sie das schwarze Ende des SATA-Netzkabels mit dem Netzanschluss am Laufwerk. Verbinden Sie dann das weiße Ende des SATA-Stromversorgungskabels mit dem Stromanschluss des Netzteils.

USB 2.0-Header
(9-pol. USB6_7)
(siehe S.2 - Nr. 27)

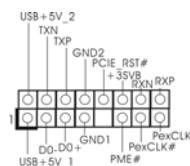


(9-pol. USB4_5)
(siehe S.2 - Nr. 28)



Zusätzlich zu den vier üblichen USB 2.0-Ports an den I/O-Anschlüssen befinden sich zwei USB 2.0-Anschlussleisten am Motherboard. Pro USB 2.0-Anschlussleiste werden zwei USB 2.0-Ports unterstützt.

WiFi/E Sockel
(15-pol. WiFi/E)
(siehe S.2 - No. 20)



Dieser Sockel unterstützt WiFi+AP Funktion mit ASRock WiFi-802.11g oder WiFi-802.11n Modul, einem einfach zu bedienenden Wireless Local Area Network (WLAN) Adapter. Damit sind Sie in der Lage, ein drahtloses Netzwerk aufzubauen und die Vorzüge drahtloser Anschlussmöglichkeiten zu genießen.



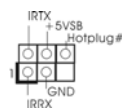
Möchten Sie die WiFi+AP-Funktion nicht auf diesem Motherboard verwenden, kann dieser Sockel als 4-pol. USB 2.0-Sockel zur Unterstützung eines USB 2.0-Anschlusses verwendet werden. Um das 4-pol. USB-Geräte Kabel richtig an diesen Sockel anzuschließen, beachten Sie diese Abbildung.



Deutsch

DeskExpress heißer Stecker Detektionskopf

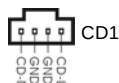
(5-pin IR1)
(siehe S.2 - No. 19)



Diese Kopf unterstützt die
heiße Stecker
Untersuchungsfunktion für
ASRock DeskExpress.

Interne Audio-Anschlüsse

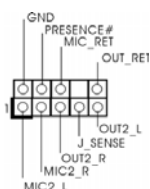
(4-Pin CD1)
(CD1: siehe S.2, Punkt 23)



Diese ermöglichen Ihnen Stereo-
Signalquellen, wie z. B. CD-ROM,
DVD-ROM, TV-Tuner oder
MPEG-Karten mit Ihrem System
zu verbinden.

Anschluss für Audio auf der Gehäusevorderseite

(9-Pin HD_AUDIO1)
(siehe S.2, Punkt 21)



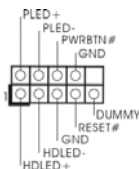
Dieses Interface zu einem
Audio-Panel auf der Vorderseite
Ihres Gehäuses, ermöglicht
Ihnen eine bequeme
Kontrolle über Audio-Geräte.



1. High Definition Audio unterstützt Jack Sensing (automatische Erkennung falsch angeschlossener Geräte), wobei jedoch die Bildschirmverdrahtung am Gehäuse HDA unterstützen muss, um richtig zu funktionieren. Beachten Sie bei der Installation im System die Anweisungen in unserem Handbuch und im Gehäusehandbuch.
2. Wenn Sie die AC'97-Audibleiste verwenden, installieren Sie diese wie nachstehend beschrieben an der Front-Audioanschlussleiste:
 - A. Schließen Sie Mic_IN (MIC) an MIC2_L an.
 - B. Schließen Sie Audio_R (RIN) an OUT2_R und Audio_L (LIN) an OUT2_L an.
 - C. Schließen Sie Ground (GND) an Ground (GND) an.
 - D. MIC_RET und OUT_RET sind nur für den HD-Audioanschluss gedacht. Diese Anschlüsse müssen nicht an die AC'97-Audibleiste angeschlossen werden.
 - E. Rufen Sie das BIOS-Setup-Dienstprogramm auf. Wechseln Sie zu Erweiterte Einstellungen und wählen Sie Chipset-Konfiguration. Setzen Sie die Option Frontleistenkontrolle von [Automatisch] auf [Aktiviert].
 - F. Rufen Sie das Windows-System auf. Klicken Sie auf das Symbol in der Taskleiste unten rechts, um den Realtek HD Audio-Manager aufzurufen. Für Windows® XP / XP 64-Bit Betriebssystem:
Klicken Sie auf "Audio-E/A", wählen Sie die "Anschlusseinstellungen"  wählen Sie "Erkennung der Frontleistebuchse deaktivieren" und speichern Sie die Änderung durch Klicken auf "OK". Für Windows® Vista™ / Vista™ 64-Bit Betriebssystem:
Die Rechterseite „Dateiordner“ Ikone anklicken , „Schalttafel Buchse Entdeckung sperren“ wählen und die Änderung speichern, indem Sie „OKAY“ klicken.

System Panel Anschluss

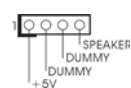
(9-Pin PANEL1)
(siehe S.2, Punkt 11)



Dieser Anschluss ist für die verschiedenen Funktionen der Gehäusefront.

Gehäuselautsprecher-Header

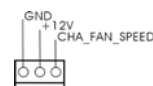
(4-pin SPEAKER1)
(siehe S.2, Punkt 17)



Schließen Sie den Gehäuselautsprecher an diesen Header an.

Gehäuse-Lüfteranschluss

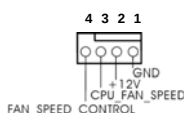
(3-pin CHA_FAN1)
(siehe S.2, Punkt 16)



Verbinden Sie das Gehäuselüfterkabel mit diesem Anschluss und passen Sie den schwarzen Draht dem Erdungsstift an.

CPU-Lüfteranschluss

(4-pin CPU_FAN1)
(siehe S.2, Punkt 5)



Verbinden Sie das CPU - Lüfterkabel mit diesem Anschluss und passen Sie den schwarzen Draht dem Erdungsstift an.



Obwohl dieses Motherboard einen vierpoligen CPU-Lüfteranschluss (Quiet Fan) bietet, können auch CPU-Lüfter mit dreipoligem Anschluss angeschlossen werden; auch ohne Geschwindigkeitsregulierung. Wenn Sie einen dreipoligen CPU-Lüfter an den CPU-Lüfteranschluss dieses Motherboards anschließen möchten, verbinden Sie ihn bitte mit den Pins 1 – 3.

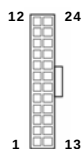
Pins 1–3 anschließen

Lüfter mit dreipoligem Anschluss installieren



ATX-Netz-Header

(24-pin ATXPWR1)
(siehe S.2, Punkt 2)



Verbinden Sie die ATX-Stromversorgung mit diesem Header.



Obwohl dieses Motherboard einen 24-pol. ATX-Stromanschluss bietet, kann es auch mit einem modifizierten traditionellen 20-pol. ATX-Netzteil verwendet werden. Um ein 20-pol. ATX-Netzteil zu verwenden, stecken Sie den Stecker mit Pin 1 und Pin 13 ein.

Installation eines 20-pol. ATX-Netzteils



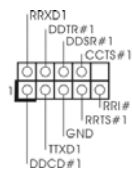
Deutsch

Anschluss für
12V-ATX-Netzteil
(4-pin ATX12V1)
(siehe S.2, Punkt 3)



Beachten Sie bitte, dass Sie eine Stromversorgung mit ATX 12-Volt-Stecker mit diesem Anschluss verbinden müssen, damit ausreichend Strom geliefert werden kann. Andernfalls reicht der Strom nicht aus, das System zu starten.

COM-Anschluss-Header
(9-pin COM1)
(siehe S.2 - No. 9)



Dieser COM-Anschluss-Header wird verwendet, um ein COM-Anschlussmodul zu unterstützen.

2. BIOS-Information

Das Flash Memory dieses Motherboards speichert das Setup-Utility. Drücken Sie <F2> während des POST (Power-On-Self-Test) um ins Setup zu gelangen, ansonsten werden die Testroutinen weiter abgearbeitet. Wenn Sie ins Setup gelangen wollen, nachdem der POST durchgeführt wurde, müssen Sie das System über die Tastenkombination <Ctrl> + <Alt> + <Delete> oder den Reset-Knopf auf der Gehäusevorderseite, neu starten. Natürlich können Sie einen Neustart auch durchführen, indem Sie das System kurz ab- und danach wieder anschalten. Das Setup-Programm ist für eine bequeme Bedienung entwickelt worden. Es ist ein menügesteuertes Programm, in dem Sie durch unterschiedliche Untermenüs scrollen und die vorab festgelegten Optionen auswählen können. Für detaillierte Informationen zum BIOS-Setup, siehe bitte das Benutzerhandbuch (PDF Datei) auf der Support CD.

3. Software Support CD Information

Dieses Motherboard unterstützt eine Reihe von Microsoft® Windows® Betriebssystemen: XP / XP 64-Bit / Vista™ / Vista™ 64-Bit. Die Ihrem Motherboard beigelegte Support-CD enthält hilfreiche Software, Treiber und Hilfsprogramme, mit denen Sie die Funktionen Ihres Motherboards verbessern können. Legen Sie die Support-CD zunächst in Ihr CD-ROM-Laufwerk ein. Der Willkommensbildschirm mit den Installationsmenüs der CD wird automatisch aufgerufen, wenn Sie die "Autorun"-Funktion Ihres Systems aktiviert haben. Erscheint der Willkommensbildschirm nicht, so "doppelklicken" Sie bitte auf das File ASSETUP.EXE im BIN-Verzeichnis der Support-CD, um die Menüs aufzurufen. Das Setup-Programm soll es Ihnen so leicht wie möglich machen. Es ist menügesteuert, d.h. Sie können in den verschiedenen Untermenüs Ihre Auswahl treffen und die Programme werden dann automatisch installiert.

1. Introduction

Merci pour votre achat d'une carte mère ASRock **4CoreN73PV-HD720p**, une carte mère très fiable produite selon les critères de qualité rigoureux de ASRock. Elle offre des performances excellentes et une conception robuste conformément à l'engagement d'ASRock sur la qualité et la fiabilité au long terme.

Ce Guide d'installation rapide présente la carte mère et constitue un guide d'installation pas à pas. Des informations plus détaillées concernant la carte mère pourront être trouvées dans le manuel l'utilisateur qui se trouve sur le CD d'assistance.



Les spécifications de la carte mère et le BIOS ayant pu être mis à jour, le contenu de ce manuel est sujet à des changements sans notification.

Au cas où n'importe qu'elle modification intervenait sur ce manuel, la version mise à jour serait disponible sur le site web ASRock sans nouvel avis. Vous trouverez les listes de prise en charge des cartes VGA et CPU également sur le site Web ASRock.

Site web ASRock, <http://www.asrock.com>

Si vous avez besoin de support technique en relation avec cette carte mère, veuillez consulter notre site Web pour de plus amples informations particulières au modèle que vous utilisez.

www.asrock.com/support/index.asp

1.1 Contenu du paquet

Carte mère ASRock **4CoreN73PV-HD720p**

(Facteur de forme Micro ATX: 9.6 pouces x 8.0 pouces, 24.4 cm x 20.3 cm)

Guide d'installation rapide ASRock **4CoreN73PV-HD720p**

CD de soutien ASRock **4CoreN73PV-HD720p**

Un câble ruban IDE Ultra ATA 66/100/133 80 conducteurs

Un câble ruban pour un lecteur de disquettes 3,5 pouces

Un câbles de données de série ATA (SATA) (en option)

Un câbles d'alimentation de série ATA (SATA) HDD (en option)

Un ASRock 6CH_DVI I/O Panel Shield

1.2 Spécifications

Format	- Facteur de forme Micro ATX: 9.6 pouces x 8.0 pouces, 24.4 cm x 20.3 cm
CPU	- LGA 775 pour Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® acceptant les processeurs Quad Core Yorkfield et Dual Core Wolfdale - FSB1333/1066/800/533MHz - Prise en charge de la technologie Hyper-Threading (voir ATTENTION 1) - Prend en charge la technologie Untied Overclocking (voir ATTENTION 2) - Prise en charge de la technologie EM64T par le CPU
Chipsets	- NVIDIA® GeForce 7100 / nForce 630i
Mémoire	- 2 x slots DIMM DDR2 - Supporte DDR2 800/667/533 non-ECC, sans amortissement mémoire - Capacité maxi de mémoire système: 4GB (voir ATTENTION 3)
L'accélérateur hybride	- Contrôle direct de la fréquence CPU (voir ATTENTION 4) - ASRock U-COP (voir ATTENTION 5) - Garde d'échec au démarrage (B.F.G.)
Slot d'extension	- 1 x slot PCI Express x16 - 1 x slot PCI Express x1 - 2 x slots PCI
VGA sur carte	- NVIDIA® Integre GeForce 7100 - VGA DX9.0, nuanceur de pixels 3.0 - mémoire partagée max 256MB (voir ATTENTION 6) - Output de VGA Dual: supporter DVI-D et D-Sub ports par les contrôleurs de display indépendants - Supporter la fonction de HDCP avec le port de DVI-D - Supporter 720p Blu-ray(BD)/ lecteur de HD-DVD (voir ATTENTION 7)
Audio	- 5.1 Son haute définition de première qualité CH Windows® Vista™ (codec audio ALC662)
LAN	- 4CoreN73PV-HD720p R1.0 Realtek Giga PHY RTL8211B, vitesse 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0 Realtek PHY RTL8201CL, vitesse 10/100 Mb/s - Support du Wake-On-LAN

Panneau arrière E/S	ASRock 6CH_DVI I/O - 1 x port souris PS/2 - 1 x port clavier PS/2 - 1 x port VGA/D-Sub - 1 x port VGA/DVI-D - 1 x port parallèle: Support ECP/EPP - 4 x ports USB 2.0 par défaut - 1 x port RJ-45 - Prise HD Audio: Entrée Ligne / Haut-parleur frontal / Microphone
Connecteurs	- 4 x connecteurs SATAII, prennent en charge un taux de transfert de données pouvant aller jusqu'à 3.0Go/s, supporte RAID (RAID 0, RAID 1, RAID 0+1, JBOD et RAID 5), NCQ, AHCI et "Hot-Plug" (Connexion à chaud) (voir ATTENTION 8) - 1 x ATA133 IDE connecteurs (prend en charge jusqu'à 2 périphériques IDE) - 1 x Port Disquette - 1 x DeskExpress Hot Plug Detection header - 1 x En-tête de port COM - Connecteur pour ventilateur de CPU/Châssis - br. 24 connecteur d'alimentation ATX - br. 4 connecteur d'alimentation 12V ATX - Connecteurs audio internes - Connecteur audio panneau avant - 2 x En-tête USB 2.0 (Prend en charge 4 ports USB 2.0) (voir ATTENTION 9) - 1 x Connecteur WiFi/E (voir ATTENTION 10)
BIOS	- 4Mb BIOS AMI - BIOS AMI - Support du "Plug and Play" - Compatible pour événements de réveil ACPI 1.1 - Gestion jumperless - Support SMBIOS 2.3.1
CD d'assistance	- Pilotes, utilitaires, logiciel anti-virus (Version d'essai)
Surveillance système	- Contrôle de la température CPU - Mesure de température de la carte mère - Tachéomètre ventilateur CPU - Tachéomètre ventilateur châssis - Ventilateur silencieux d'unité centrale - Monitoring de la tension: +12V, +5V, +3.3V, Vcore

OS	- Microsoft® Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit
Certifications	- FCC, CE, WHQL

* Pour de plus amples informations sur les produits, s'il vous plaît visitez notre site web:
<http://www.asrock.com>

ATTENTION

Il est important que vous réalisiez qu'il y a un certain risque à effectuer l'overclocking, y compris ajuster les réglages du BIOS, appliquer la technologie Untied Overclocking, ou utiliser des outils de tiers pour l'overclocking. L'overclocking peut affecter la stabilité de votre système, ou même causer des dommages aux composants et dispositifs de votre système. Si vous le faites, c'est à vos frais et vos propres risques. Nous ne sommes pas responsables des dommages possibles causés par l'overclocking.

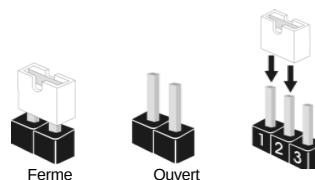
ATTENTION!

1. En ce qui concerne le paramétrage "Hyper-Threading Technology", veuillez consulter la page 40 du manuel de l'utilisateur sur le CD technique.
2. Cette carte mère prend en charge la technologie Untied Overclocking. Veuillez lire "La technologie de surcadencage à la volée" à la page 30 pour plus d'informations.
3. Du fait des limites du système d'exploitation, la taille mémoire réelle réservée au système pourra être inférieure à 4 Go sous Windows® XP et Windows® Vista™. Avec Windows® XP 64 bits et Windows® Vista™ 64 bits avec CPU 64 bits, il n'y a pas ce genre de limitation.
4. Même si cette carte mère offre un contrôle sans souci, il n'est pas recommandé d'y appliquer un over clocking. Des fréquences de bus CPU autres que celles recommandées risquent de rendre le système instable ou d'endommager le CPU et la carte mère.
5. Lorsqu'une surchauffe du CPU est détectée, le système s'arrête automatiquement. Avant de redémarrer le système, veuillez vérifier que le ventilateur d'UC sur la carte mère fonctionne correctement et débranchez le cordon d'alimentation, puis rebranchez-le. Pour améliorer la dissipation de la chaleur, n'oubliez pas de mettre de la pâte thermique entre le CPU le dissipateur lors de l'installation du PC.
6. La dimension maximum du memoire partage est definie par le vendeur de jeu de puces et est sujet de changer. Veuillez verifier la NVIDIA® website pour les informations recentes SVP.
7. Le support du lecteur HD-DVD/720p Blu-ray(BD) sur la carte mere demande la configuration propre du materiel. Veuillez consulter la page 9 et 10 pour la demande du materiel minimum et les films passes HD-DVD/720p Blu-ray (BD) dans notre lab de test.
8. Avant d'installer le disque dur SATAII sur le connecteur SATAII, veuillez lire le «Guide d'Installation du disque dur SATAII», page 24, pour mettre votre lecteur de disque SATAII en mode SATAII. Vous pouvez également brancher le disque dur SATA directement sur le connecteur SATAII.

9. La gestion de l'alimentation pour l'USB 2.0 fonctionne bien sous Microsoft® Windows® Vista™ 64-bit/ Vista™ / XP 64-bit / XP SP1; SP2.
10. L'en-tête WiFi/E accepte la fonction WiFi+AP avec le module ASRock WiFi-802.11g ou WiFi-802.11n ; c'est un adaptateur de réseau local sans-fil (WLAN) facile d'utilisation. Il vous permettra de créer un environnement sans fil et de bénéficier des avantages de la connectivité au réseau sans fil. Veuillez consultez notre site Internet pour vérifier la disponibilité du module ASRock WiFi-802.11g ou WiFi-802.11n. Site ASRock <http://www.asrock.com>

1.3 Réglage des cavaliers

L'illustration explique le réglage des cavaliers. Quand un capuchon est placé sur les broches, le cavalier est « FERME ». Si aucun capuchon ne relie les broches, le cavalier est « OUVERT ». L'illustration montre un cavalier à 3 broches dont les broches 1 et 2 sont « FERMEES » quand le capuchon est placé sur ces 2 broches.



Le cavalier	Description
PS2_USB_PW1 (voir p.2 fig. 1)	1_2 +5V 2_3 +5VSB Court-circuitez les broches 2 et 3 pour choisir +5VSB (standby) et permettre aux périphériques PS/2 ou USB de réveiller le système.

Note: Pour sélectionner +5VSB, il faut obligatoirement 2 Amp et un courant standby supérieur fourni par l'alimentation.

Effacer la CMOS (CLRCMOS1) (voir p.2 fig. 10)	1_2 Paramètres par défaut 2_3 Effacer la CMOS
---	---

Note: CLRCMOS1 vous permet d'effacer les données qui se trouvent dans la CMOS. Les données dans la CMOS comprennent les informations de configuration du système telles que le mot de passe système, la date, l'heure et les paramètres de configuration du système. Pour effacer et réinitialiser les paramètres du système pour retrouver la configuration par défaut, veuillez mettre l'ordinateur hors tension et débrancher le cordon d'alimentation de l'alimentation électrique. Attendez 15 secondes, puis utilisez un capuchon de cavalier pour court-circuiter la broche 2 et la broche 3 sur CLRCMOS1 pendant 5 secondes. Après avoir court-circuité le cavalier Effacer la CMOS, veuillez enlever le capuchon de cavalier.

Toutefois, veuillez ne pas effacer la CMOS tout de suite après avoir mis le



BIOS à jour. Si vous avez besoin d'effacer la CMOS lorsque vous avez fini de mettre le BIOS à jour, vous devez d'abord initialiser le système, puis le mettre hors tension avant de procéder à l'opération d'effacement de la CMOS.

1.4 Connecteurs

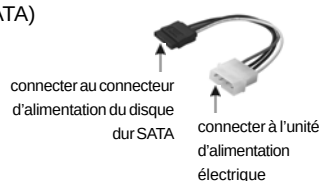


Les connecteurs NE SONT PAS des cavaliers. NE PLACEZ AUCUN capuchon sur ces connecteurs. Poser les bouchons pour cavaliers audessus des connecteurs provoquera des dommages irrémediables à la carte mere!

Les connecteurs	Description	
Connecteur du lecteur de disquette (FLOPPY1 br. 33) (voir p.2 fig. 18)		
Note: Assurez-vous que le côté avec fil rouge du câble est bien branché sur le côté Broche1 du connecteur.		
Connecteur IDE primaire (bleu) (IDE1 br. 39, voir p.2 fig. 8)		
connecteur bleu vers la carte mere		connecteur noir vers le disque dur
Câble ATA 66/100/133 80 conducteurs		
Note: Veuillez vous reporter aux instructions du fabricant de votre IDE peripherique pour les details.		
Connecteurs Série ATAIL (SATAI_1 (PORT1.0): voir p.2 fig. 15) (SATAI_2 (PORT1.1): voir p.2 fig. 14) (SATAI_3 (PORT1.2): voir p.2 fig. 13) (SATAI_4 (PORT1.3): voir p.2 fig. 12)		Ces quatre connecteurs Serial ATA (SATAI) prennent en charge les disques durs SATA ou SATAI pour les dispositifs de stockage interne. L'interface SATAI actuelle permet des taux transferts de données pouvant aller jusqu'à 3,0 Go/s.
Câble de données Série ATA (SATA) (en option)		Toute cote du cable de data SATA peut etre connecte au disque dur SATA / SATAI ou au connecteur SATAI sur la carte mere.

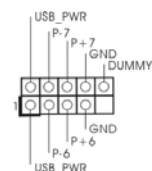


Cordon d'alimentation Série ATA (SATA) (en option)

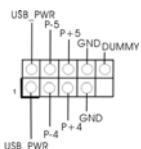


Veuillez connecter l'extrémité noire du cordon d'alimentation SATA sur le connecteur d'alimentation sur chaque unité. Connectez ensuite l'extrémité blanche du cordon d'alimentation SATA sur le connecteur d'alimentation de l'unité d'alimentation électrique.

En-tête USB 2.0 (USB6_7 br.9) (voir p.2 No. 27)

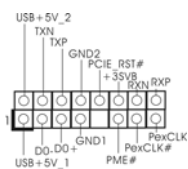


(USB4_5 br.9) (voir p.2 No. 28)



A côté des quatre ports USB 2.0 par défaut sur le panneau E/S, il y a deux embases USB 2.0 sur cette carte mère. Chaque embase USB 2.0 peut prendre en charge 2 ports USB 2.0.

En-tête WiFi/E Header (WiFi/E br.15) (voir p.2 No. 20)



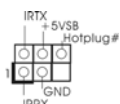
Cet en-tête supporte les fonctions WiFi+AP avec le module ASRock WiFi-802.11g ou WiFi-802.11n, c'est un adaptateur de réseau local sans fil (WLAN) facile d'utilisation. Il vous permettra de créer un environnement sans fil et de bénéficier des avantages de la connectivité au réseau sans fil.



Si vous ne comptez pas utiliser la fonction WiFi+AP de cette carte mère, cet en-tête peut être utilisé comme un en-tête USB 2.0 4 broches pour supporter un port USB 2.0. Pour connecter le câble de l'appareil USB 4 broches à cet en-tête et connaître son installation correcte, veuillez consulter cette image.



Header de Detection de DeskExpress Hot Plug (IR1 br.5) (voir p.2 No. 19)



Le header supporte la fonction de detection de HotPlug pour ASRock DeskExpress.

Connecteurs audio internes

(CD1 br. 4)

(CD1: voir p.2 fig. 23)

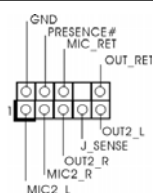


Ils vous permettent de gérer des entrées audio à partir de sources stéréo comme un CD-ROM, DVD-ROM, un tuner TV ou une carte MPEG.

Connecteur audio panneau avant

(HD_AUDIO1 br. 9)

(voir p.2 fig. 21)



C'est une interface pour un câble audio en façade qui permet le branchement et le contrôle commodes de périphériques audio.



1. L'audio à haute définition (HDA) prend en charge la détection de fiche, mais le fil de panneau sur le châssis doit prendre en charge le HDA pour fonctionner correctement. Veuillez suivre les instructions dans notre manuel et le manuel de châssis afin d'installer votre système.
2. Si vous utilisez le panneau audio AC'97, installez-le sur l'adaptateur audio du panneau avant conformément à la procédure ci-dessous :
 - A. Connectez Mic_IN (MIC) à MIC2_L.
 - B. Connectez Audio_R (RIN) à OUT2_R et Audio_L (LIN) à OUT2_L.
 - C. Connectez Ground (GND) à Ground (GND).
 - D. MIC_RET et OUT_RET sont réservés au panneau audio HD. Vous n'avez pas besoin de les connecter pour le panneau audio AC'97.
 - E. Entrer dans l'utilitaire de configuration du BIOS. Saisir les Paramètres avancés puis sélectionner Configuration du jeu de puces. Définir l'option panneau de commande de [Auto] à [Activé].
 - F. Entrer dans le système Windows. Cliquer sur l'icône sur la barre de tâches dans le coin inférieur droite pour entrer dans le Gestionnaire audio Realtek HD.

Pour Windows® XP / XP 64-bit OS:

Cliquer sur « E/S audio », sélectionner « Paramètres du connecteur »



, choisir « Désactiver la détection de la prise du panneau de commande » et sauvegarder les changements en cliquant sur « OK ».

Pour Windows® Vista™ / Vista™ 64-bit OS:

Cliquer droit "Fichier" icône , sélectionner "la détection

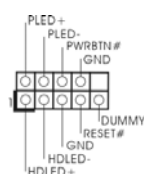


incapable de jack de panel d'avant " et sauvegarder le changement par cliquer "ok".

Connecteur pour panneau

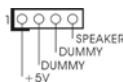
(PANEL1 br. 9)

(voir p.2 fig. 11)



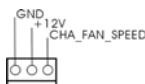
Ce connecteur offre plusieurs fonctions système en façade.

Connecteur du haut-parleur
du châssis
(SPEAKER1 br. 4)
(voir p.2 fig. 17)



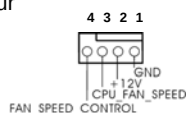
Veillez connecter le haut-
parleur de châssis sur ce
connecteur.

Connecteur pour ventilateur
de châssis
(CHA_FAN1 br. 3)
(voir p.2 fig. 16)



Veillez connecter le câble du
ventilateur du châssis sur ce
connecteur en branchant le fil
noir sur la broche de terre.

Connecteur pour ventilateur
CPU
(CPU_FAN1 br. 4)
(voir p.2 fig. 5)



Veillez connecter un câble de
ventilateur d'UC sur ce
connecteur et brancher le fil noir
sur la broche de terre.



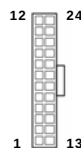
ien que cette carte mère offre un support de (Ventilateur silencieux)
ventilateur de CPU à 4 broches , le ventilateur de CPU à 3 broches peut bien
fonctionner même sans la fonction de commande de vitesse du ventilateur.
Si vous prévoyez de connecter le ventilateur de CPU à 3 broches au
connecteur du ventilateur de CPU sur cette carte mère, veuillez le connecter
aux broches 1-3.

Installation de ventilateur à 3 broches

Broches 1-3 connectées



Connecteur d'alimentation ATX
(ATXPWR1 br. 24)
(voir p.2 fig. 2)



Veillez connecter une unité
d'alimentation ATX sur ce
connecteur.



Bien que cette carte mère fournisse un connecteur de
courant ATX 24 broches, elle peut encore fonctionner si vous
adopter une alimentation traditionnelle ATX 20 broches. Pour
utiliser une alimentation ATX 20 broches, branchez à
l'alimentation électrique ainsi qu'aux broches 1 et 13.

20-Installation de l'alimentation électrique ATX



Connecteur d'alimentation
12V ATX
(ATX12V1 br. 4)
(voir p.2 fig. 3)

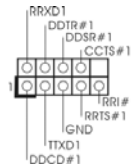


Veillez noter qu'il est nécessaire
de connecter une unité
d'alimentation électrique avec
prise ATX 12V sur ce
connecteur afin d'avoir une
alimentation suffisante. Faute de
quoi, il ne sera pas possible de
mettre sous tension.

En-tête de port COM

(COM1 br.9)

(voir p.2 No. 9)



Cette en-tête de port COM est utilisée pour prendre en charge un module de port COM.

2. Informations sur le BIOS

La puce Flash Memory sur la carte mère stocke le Setup du BIOS. Lorsque vous démarrez l'ordinateur, veuillez presser <F2> pendant le POST (Power-On-Self-Test) pour entrer dans le BIOS; sinon, le POST continue ses tests de routine. Si vous désirez entrer dans le BIOS après le POST, veuillez redémarrer le système en pressant <Ctl> + <Alt> + <Suppr>, ou en pressant le bouton de reset sur le boîtier du système. Vous pouvez également redémarrer en éteignant le système et en le rallumant. L'utilitaire d'installation du BIOS est conçu pour être convivial. C'est un programme piloté par menu, qui vous permet de faire défiler par ses divers sous-menus et de choisir parmi les choix prédéterminés. Pour des informations détaillées sur le BIOS, veuillez consulter le Guide de l'utilisateur (fichier PDF) dans le CD technique.

3. Informations sur le CD de support

Cette carte mère supporte divers systèmes d'exploitation Microsoft® Windows®: XP / XP 64 bits / Vista™ / Vista™ 64 bits. Le CD technique livré avec cette carte mère contient les pilotes et les utilitaires nécessaires pour améliorer les fonctions de la carte mère. Pour utiliser le CD technique, insérez-le dans le lecteur de CD-ROM. Le Menu principal s'affiche automatiquement si "AUTORUN" est activé dans votre ordinateur. Si le Menu principal n'apparaît pas automatiquement, localisez dans le CD technique le fichier "ASSETUP.EXE" dans le dossier BIN et double-cliquez dessus pour afficher les menus.

1. Introduzione

Grazie per aver scelto una scheda madre ASRock **4CoreN73PV-HD720p**, una scheda madre affidabile prodotta secondo i severi criteri di qualità ASRock. Le prestazioni eccellenti e il design robusto si conformano all'impegno di ASRock nella ricerca della qualità e della resistenza.

Questa Guida Rapida all'Installazione contiene l'introduzione alla motherboard e la guida passo-passo all'installazione. Informazioni più dettagliate sulla motherboard si possono trovare nel manuale per l'utente presente nel CD di supporto.



Le specifiche della scheda madre e il software del BIOS possono essere aggiornati, pertanto il contenuto di questo manuale può subire variazioni senza preavviso. Nel caso in cui questo manuale sia modificato, la versione aggiornata sarà disponibile sul sito di ASRock senza altro avviso. Sul sito ASRock si possono anche trovare le più recenti schede VGA e gli elenchi di CPU supportate.

ASRock website <http://www.asrock.com>

Se si necessita dell'assistenza tecnica per questa scheda madre, visitare il nostro sito per informazioni specifiche sul modello che si sta usando.

www.asrock.com/support/index.asp

1.1 Contenuto della confezione

Scheda madre ASRock **4CoreN73PV-HD720p**

(Micro ATX Form Factor: 9.6-in x 8.0-in, 24.4 cm x 20.3 cm)

Guida di installazione rapida ASRock **4CoreN73PV-HD720p**

CD di supporto ASRock **4CoreN73PV-HD720p**

Un cavo IDE 80-pin Ultra ATA 66/100/133

Un cavo per floppy drive a 1,44 Mb

Un cavi dati Serial ATA (SATA) (opzionali)

Un cavi di alimentazione HDD Serial ATA (SATA) (opzionali)

Un ASRock 6CH_DVI I/O Shield

1.2 Specifiche

Piattaforma	- Micro ATX Form Factor: 9.6-in x 8.0-in, 24.4 cm x 20.3 cm
Processore	- LGA 775 per Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® in grado di supportare processori Quad Core Yorkfield e Dual Core Wolfdale - FSB1333/1066/800/533MHz - Supporto tecnologia Hyper Threading (vedi ATTENZIONE 1) - Supporta la tecnologia overclocking "slegata" (vedi ATTENZIONE 2) - Supporto CPU EM64T
Chipset	- NVIDIA® GeForce 7100 / nForce 630i
Memoria	- 2 x slot DDR2 DIMM - Supporta DDR2 800/667/533 non-ECC, memoria senza buffer - Capacità massima della memoria di sistema: 4GB (vedi ATTENZIONE 3)
Booster ibrido	- Stepless control per frequenza del processore (vedi ATTENZIONE 4) - ASRock U-COP (vedi ATTENZIONE 5) - Boot Failure Guard (B.F.G.)
Slot di espansione	- 1 x slot PCI Express x16 - 1 x slot PCI Express x1 - 2 x slot PCI
VGA su scheda	- Scheda NVIDIA® GeForce 7100 - VGA DX9.0, Pixel Shader 3.0 - Memoria massima condivisa 256MB (vedi ATTENZIONE 6) - Uscita VGA Doppia: supporto porte DVI-D e D-Sub tramite verificatore display indipendente - Supporto per funzione HDCP con porta DVI-D port - Supporto 720p Blu-ray (BD) / HD-DVD riproduzione (vedi ATTENZIONE 7)
Audio	- 5.1 Audio HD CH Windows® Vista™ Premium Level (ALC662 Audio Codec)
LAN	- 4CoreN73PV-HD720p R1.0 Realtek Giga PHY RTL8211B, velocità 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0 Realtek PHY RTL8201CL, velocità 10/100 Mb/s - Supporta Wake-On-LAN
Pannello posteriore I/O	ASRock 6CH_DVI I/O - 1 x Porta PS/2 per mouse - 1 x Porta PS/2 per tastiera - 1 x Porta VGA/D-Sub

	- 1 x Porta VGA/DVI-D - 1 x Porta parallela: supporto ECP/EPP - 4 x Porte USB 2.0 già integrate - 1 x Porta RJ-45 - Connettore HD Audio: ingresso linea / cassa frontale / microfono
Connettori	- 4 x connettori SATAII 3.0Go/s, supporta RAID (RAID 0, RAID 1, RAID 0+1, JBOD e RAID 5), NCQ, AHCI e "Collegamento a caldo" (vedi ATTENZIONE 8) - 1 x connettori ATA133 IDE (supporta fino a 2 dispositivi IDE) - 1 x porta Floppy - 1 x Intestazione di rilevazione di DeskExpress Hot Plug - 1 x collettore porta COM - Connettore ventolina CPU/telaio - 24-pin collettore alimentazione ATX - 4-pin connettore ATX 12V - Connettori audio interni - Connettore audio sul pannello frontale - Header 2 x USB 2.0 (supporto porte 4 USB 2.0) (vedi ATTENZIONE 9) - 1 x connettore WiFi/E (vedi ATTENZIONE 10)
BIOS	- 4Mb AMI BIOS - Supporta AMI legal BIOS - Supporta "Plug and Play" - Compatibile con ACPI 1.1 wake up events - Supporta jumperfree - Supporta SMBIOS 2.3.1
CD di supporto	- Driver, utilità, software antivirus (Versione dimostrativa)
Monitor- aggio Hardware	- Sensore per la temperatura del processore - Sensore temperatura scheda madre - Indicatore di velocità per la ventola del processore - Indicatore di velocità per la ventola di raffreddamento - Ventola CPU silenziosa - Voltaggio: +12V, +5V, +3.3V, Vcore
Compatibilità SO	- Microsoft® Windows® XP / XP 64 bit / Vista™ / Vista™ 64 bit
Certificazioni	- FCC, CE, WHQL

* Per ulteriori informazioni, prego visitare il nostro sito internet: <http://www.asrock.com>

Italiano

AVVISO

Si prega di prendere atto che la procedura di overclocking implica dei rischi, come anche la regolazione delle impostazioni del BIOS, l'applicazione della tecnologia Untied Overclocking Technology, oppure l'uso di strumenti di overclocking forniti da terzi. L'overclocking può influenzare la stabilità del sistema, ed anche provocare danni ai componenti ed alle periferiche del sistema. La procedura è eseguita a proprio rischio ed a proprie spese. Noi non possiamo essere ritenuti responsabili per possibili danni provocati dall'overclocking.

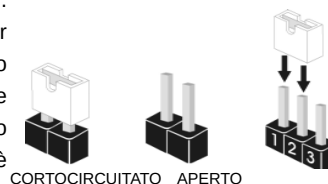
ATTENZIONE!

1. Per il settaggio della "Tecnologia Hyper-Threading", per favore controllare pagina 40 del Manuale dell'utente all'interno del CD di supporto.
2. Questa scheda madre supporta la tecnologia overclocking "slegata". Per i dettagli leggere "Tecnologia di Untied Overclocking" a pagina 30.
3. A causa delle limitazioni del sistema operativo, le dimensioni effettive della memoria possono essere inferiori a 4GB per l'accantonamento riservato all'uso del sistema sotto Windows® XP e Windows® Vista™. Per Windows® XP 64-bit e Windows® Vista™ 64-bit con CPU 64-bit, non c'è tale limitazione.
4. Anche se questa motherboard offre il controllo stepless, non si consiglia di effettuare l'overclocking. Frequenze del bus del processore diverse da quelle raccomandate possono causare instabilità al sistema o danni al processore e alla scheda madre.
5. Se il processore si surriscalda, il sistema si chiude automaticamente. Prima di riavviare il sistema, assicurarsi che la ventolina CPU della scheda madre funzioni correttamente; scollegare e ricollegare il cavo d'alimentazione. Per migliorare la dissipazione del calore, ricordare di applicare l'apposita pasta siliconica tra il processore e il dissipatore quando si installa il sistema.
6. La dimensione massima della memoria condivisa viene stabilita dal venditore del chipset ed è soggetta a modificazioni. Prego fare riferimento al sito internet NVIDIA® per le ultime informazioni.
7. Il supporto per riproduzione 720p Blu-ray (BD) / HD-DVD sulla scheda madre richiede una corretta configurazione hardware. Prego fare riferimento alla pagina 9 ed 10 per i requisiti minimi hardware e per il test 720p Blu-ray (BD) / HD-DVD del nostro laboratorio.
8. Prima di installare il disco rigido SATAII al connettore SATAII, leggere la "Guida di installazione del disco rigido SATAII" a pagina 24 per regolare l'unità disco SATAII in modalità SATAII. Si può anche connettere il disco rigido SATA al connettore SATAII direttamente.
9. La Gestione Risorse per USB 2.0 funziona perfettamente con Microsoft® Windows® Vista™ 64-bit / Vista™ / XP 64 bit / XP SP1; SP2.

10. WiFi/E header supporta la funzione WiFi+AP con il modulo WiFi-802.11g o WiFi-802.11n ASRock, un adattatore WLAN (rete locale wireless) semplice da usare. Consente di creare un ambiente wireless e godersi la comodità di una connettività di rete wireless. Visitate il nostro sito web per la disponibilità del modulo ASRock WiFi-802.11g o WiFi-802.11n. Sito web ASRock <http://www.asrock.com>

1.3 Setup dei Jumpers

L'illustrazione mostra come sono settati i jumper. Quando il ponticello è posizionato sui pin, il jumper è "CORTOCIRCUITATO". Se sui pin non ci sono ponticelli, il jumper è "APERTO". L'illustrazione mostra un jumper a 3 pin in cui il pin1 e il pin2 sono "CORTOCIRCUITATI" quando il ponticello è posizionato su questi pin.



Jumper	Settaggio del Jumper	
PS2_USB_PW1 (vedi p.2 item 1)	1_2 +5V 2_3 +5VSB	Cortocircuitare pin2, pin3 per settare a +5VSB (standby) e abilitare PS/2 o USB wake up events.

Nota: Per selezionare +5VSB, si richiedono almeno 2 Ampere e il consumo di corrente in standby sarà maggiore.

Resettare la CMOS (CLR_CMOS1) (vedi p.2 item 10)	1_2	2_3
	Impostazione predefinita	Azzeramento CMOS

Nota: CLR_CMOS1 permette di cancellare i dati presenti nel CMOS. I dati del CMOS comprendono le informazioni di configurazione quali la password di sistema, data, ora, e i parametri di configurazione del sistema. Per cancellare e ripristinare i parametri del sistema, spegnere il computer e togliere il cavo di alimentazione dalla presa di corrente. Dopo aver lasciato trascorrere 15 secondi, utilizzare un cappuccio jumper per cortocircuitare i pin 2 e 3 su CLR_CMOS1 per 5 secondi. Dopo aver cortocircuitato il jumper Clear CMOS jumper, togliere il terminatore jumper. Non cancellare la CMOS subito dopo aver aggiornato il BIOS. Se è necessario cancellare la CMOS una volta completato l'aggiornamento del BIOS, è necessario riavviare prima il sistema, e poi spegnerlo prima di procedere alla cancellazione della CMOS.

1.4 Connettori



I connettori NON sono jumpers. NON COLLOCARE i ponticelli sui connettori. Installando dei cappucci a ponticello sui connettori si causeranno danni permanenti alla scheda madre!

Connettori

Descrizione dei connettori

Connettore del

Floppy disk

(33-pin FLOPPY1)

(vedi p.2 item 18)

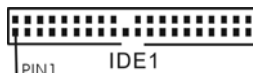


Lato del Pin1 con la striscia rossa

Nota: Assicurarsi che il lato del cavo con la striscia rossa sia inserito nel lato Pin1 del connettore.

Connettore IDE primario (blu)

(39-pin IDE1, vedi p.2 item 8)



Connettore blu

alla scheda madre



Connettore nero

all'hard disk drive

Cavo ATA 66/100/133 a 80 pin

Nota: Fate riferimento alle istruzioni del produttore del dispositivo IDE per maggiori dettagli.

Connettori Serial ATAII

(SATAII_1 (PORT1.0):
vedi p.2 Nr. 15)

(SATAII_2 (PORT1.1):
vedi p.2 Nr. 14)

(SATAII_3 (PORT1.2):
vedi p.2 Nr. 13)

(SATAII_4 (PORT1.3):
vedi p.2 Nr. 12)



Questi quattro connettori Serial ATA (SATAII) supportano le periferiche di archiviazione HD SATA o SATAII per le funzioni di archiviazione interna. ATAII (SATAII) supportano cavi SATAII per dispositivi di memoria interni. L'interfaccia SATAII attuale permette velocità di trasferimento dati fino a 3.0 Gb/s.

Cavi dati Serial ATA (SATA)

(Opzionale)



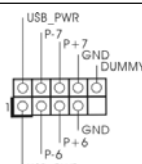
Una o altra estremità del cavo di dati SATA può essere collegata al disco rigido SATA / SATAII o al connettore di SATAII su questa cartolina base.

Cavo d'alimentazione Serial ATA (SATA) (Opzionale)



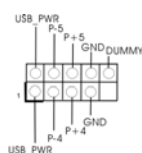
Collegare l'estremità nera del cavo di alimentazione SATA al connettore di alimentazione del drive. Poi connettete l'estremità bianca del cavo di alimentazione SATA al connettore power dell'alimentatore.

Collettore USB 2.0 (9-pin USB6_7) (vedi p.2 No. 27)

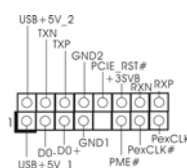


Oltre alle quattro porte USB 2.0 predefinite nel pannello I/O, la scheda madre dispone di due intestazioni USB 2.0. Ciascuna intestazione USB 2.0 supporta due porte USB 2.0.

(9-pin USB4_5) (vedi p.2 No. 28)



WiFi/E Header (15-pin WIFI/E) (vedi p.2 Nr. 20)



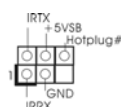
Questo header supporta la funzione WiFi+AP con il modulo WiFi-802.11g o WiFi-802.11n ASRock, un adattatore per WLAN (rete locale wireless). Consente di creare un ambiente wireless e godersi la comodità di una connettività di rete wireless.



Nel caso non si voglia usare la funzione WiFi+AP sulla scheda madre, il terminale può essere usato come terminale USB 2.0 a 4-Pin per supportare una porta USB 2.0. Per collegare il cavo a 4-Pin dispositivo USB al terminale, fare riferimento all'immagine.



Intestazione Di Rilevazione Di DeskExpress Hot Plug (5-pin IR1) (vedi p.2 Nr. 19)



Questa intestazione sostiene la funzione di rilevazione di Hot Plug per ASRock DeskExpress.

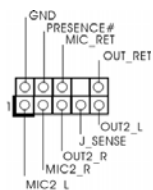
Connettori audio interni (4-pin CD1) (CD1: vedi p.2 item 23)



Permettono di ricevere input stereo audio da fonti di suono come CD-ROM, DVD-ROM, TV tuner, o schede MPEG.

Connettore audio sul pannello frontale

(9-pin HD_AUDIO1)
(vedi p.2 item 21)



È un'interfaccia per il cavo del pannello audio. Che consente connessione facile e controllo dei dispositivi audio.



1. La caratteristica HDA (High Definition Audio) supporta il rilevamento dei connettori, però il pannello dei cavi sul telaio deve supportare la funzione HDA (High Definition Audio) per far sì che questa operi in modo corretto. Attenersi alle istruzioni del nostro manuale e del manuale del telaio per installare il sistema.
2. Se si utilizza un pannello audio AC'97, installarlo nell'intestazione audio del pannello anteriore, come indicato di seguito:
 - A. Collegare Mic_IN (MIC) a MIC2_L.
 - B. Collegare Audio_R (RIN) a OUT2_R e Audio_L (LIN) ad OUT2_L.
 - C. Collegare Ground (GND) a Ground (GND).
 - D. MIC_RET e OUT_RET sono solo per il pannello audio HD. Non è necessario collegarli per il pannello audio AC'97.
 - E. Entrare nel programma di impostazione BIOS. Entrare su Impostazioni avanzate, quindi selezionare Configurazione chipset. Impostare l'opzione Comando pannello anteriore da [Auto] a [Attivato].
 - F. Entrare nel sistema di Windows. Fare clic sull'icona situata nell'angolo inferiore destro della barra delle applicazioni per entrare su Realtek HD Audio Manager.

Per Windows® XP / XP 64-bit OS:

Fare clic su "Audio I/O", selezionare "Impostazioni connettore"



scegliere "Disattiva rilevazione presa pannello anteriore" e salvare la modifica facendo clic su "OK".

Per Windows® Vista™ / Vista™ 64-bit OS:

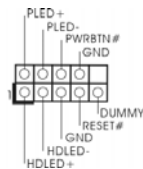
Cliccare sull'icona in alto a destra "Folder" ("Cartella")



selezionare "Disable front panel jack detection" "Disabilitare individuazione presa pannello frontale") e cliccare "OK" per memorizzare.

Connettore del pannello frontale

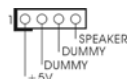
(9-pin PANEL1)
(vedi p.2 item 11)



Questo connettore accoglie diverse funzioni del pannello frontale.

Collettore casse telaio

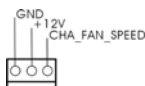
(4-pin SPEAKER1)
(vedi p.2 item 17)



Collegare le casse del telaio a questo collettore.

Connettore ventolina telaio

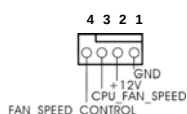
(3-pin CHA_FAN1)
(vedi p.2 item 16)



Collegare il cavo della ventolina telaio a questo connettore e far combaciare il filo nero al pin terra.

Connettore ventolina CPU

(4-pin CPU_FAN1)
(vedi p.2 item 5)



Collegare il cavo della ventolina CPU a questo connettore e far combaciare il filo nero al pin terra.



Sebbene la presente scheda madre disponga di un supporto per ventola CPU a 4 piedini (ventola silenziosa), la ventola CPU a 3 piedini è in grado di funzionare anche senza la funzione di controllo della velocità della ventola. Se si intende collegare la ventola CPU a 3 piedini al connettore della ventola CPU su questa scheda madre, collegarla ai piedini 1-3.

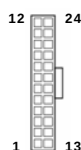
Piedini 1-3 collegati

Installazione della ventola a 3 piedini



Collettore alimentazione ATX

(24-pin ATXPWR1)
(vedi p.2/3 item 2)



Collegare la sorgente d'alimentazione ATX a questo collettore.



Con questa scheda madre, c'è in dotazione un connettore elettrico ATX a 24 pin, ma può funzionare lo stesso se si adotta un alimentatore ATX a 20 pin. Per usare l'alimentatore ATX a 20 pin, collegare l'alimentatore con il Pin 1 e il Pin 13.

Installazione dell'alimentatore ATX a 20 pin



Connettore ATX 12V

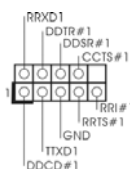
(4-pin ATX12V1)
(vedi p.2 item 3)



È necessario collegare una alimentazione con spinotto da 12V ATX a questo connettore in modo che possa fornire energia sufficiente. In caso contrario l'unità non si avvia.

Collettore porta COM

(9-pin COM1)
(voir p.2 Nr. 9)



Questo collettore porta COM è utilizzato per supportare il modulo porta COM.

2. Informazioni sul BIOS

La Flash Memory sulla scheda madre contiene le Setup Utility. Quando si avvia il computer, premi <F2> durante il Power-On-Self-Test (POST) della Setup utility del BIOS; altrimenti, POST continua con i suoi test di routine. Per entrare il BIOS Setup dopo il POST, riavvia il sistema premendo <Ctl> + <Alt> + <Delete>, o premi il tasto di reset sullo chassis del sistema. Per informazioni più dettagliate circa il Setup del BIOS, fare riferimento al Manuale dell'Utente (PDF file) contenuto nel cd di supporto.

3. Software di supporto e informazioni su CD

Questa scheda madre supporta vari sistemi operativi Microsoft® Windows®: XP / XP 64-bit / Vista™ / Vista™ 64-bit. Il CD di supporto a corredo della scheda madre contiene i driver e utilità necessari a potenziare le caratteristiche della scheda. Inserire il CD di supporto nel lettore CD-ROM. Se la funzione "AUTORUN" è attivata nel computer, apparirà automaticamente il Menù principale. Se il Menù principale non appare automaticamente, posizionarsi sul file "ASSETUP.EXE" nel CESTINO del CD di supporto e cliccare due volte per visualizzare i menù.

1. Introducción

Gracias por su compra de ASRock **4CoreN73PV-HD720p** placa madre, una placa de confianza producida bajo el control de calidad estricto y persistente. La placa madre provee realización excelente con un diseño robusto conforme al compromiso de calidad y resistencia de ASRock.

Esta Guía rápida de instalación contiene una introducción a la placa base y una guía de instalación paso a paso. Puede encontrar una información más detallada sobre la placa base en el manual de usuario incluido en el CD de soporte.



Porque las especificaciones de la placa madre y el software de BIOS podrían ser actualizados, el contenido de este manual puede ser cambiado sin aviso. En caso de cualquier modificación de este manual, la versión actualizada estará disponible en el website de ASRock sin previo aviso. También encontrará las listas de las últimas tarjetas VGA y CPU soportadas en la página web de ASRock.

Website de ASRock <http://www.asrock.com>

Si necesita asistencia técnica en relación con esta placa base, visite nuestra página web con el número de modelo específico de su placa.
www.asrock.com/support/index.asp

1.1 Contenido de la caja

Placa base ASRock **4CoreN73PV-HD720p**

(Factor forma Micro ATX: 24,4 cm x 20,3 cm, 9,6" x 8,0")

Guía de instalación rápida de ASRock **4CoreN73PV-HD720p**

CD de soporte de ASRock **4CoreN73PV-HD720p**

Una cinta de datos IDE de conducción 80 Ultra ATA 66/100/133

Una cinta de datos para una unidad de disco de 3,5"

Un Cable de Datos Serial ATA (SATA) (Opcional)

Un cable serie ATA (SATA) de alimentación de disco duro (Opcional)

Una protección ASRock 6CH DVI I/O

1.2 Especificación

Plataforma	- Factor forma Micro ATX: 24,4 cm x 20,3 cm, 9,6" x 8,0"
Procesador	- LGA 775 para Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron®, con soporte para los procesadores Quad Core Yorkfield y Dual Core Wolfdale - FSB1333/1066/800/533MHz - Admite tecnología Hyper Threading (ver ATENCIÓN 1) - Admite tecnología de aumento de velocidad liberada (vea ATENCIÓN 2) - Admite CPU EM64T
Chipset	- NVIDIA® GeForce 7100 / nForce 630i
Memoria	- 2 x DDR2 DIMM slots - Apoya DDR2 800/667/533 non-ECC, memoria de un-buffered - Máxima capacidad de la memoria del sistema: 4GB (vea ATENCIÓN 3)
Amplificador Híbrido	- Stepless control de frecuencia de CPU (vea ATENCIÓN 4) - ASRock U-COP (vea ATENCIÓN 5) - Protección de Falla de Inicio (B.F.G..)
Ranuras de Expansión	- 1 x ranuras PCI Express x16 - 1 x ranuras PCI Express x1 - 2 x ranuras PCI
VGA OnBoard	- Integrada de NVIDIA® GeForce 7100 - VGA DX9.0, Sombreador de Píxeles 3.0 - 256MB de Memoria máxima compartida (vea ATENCIÓN 6) - Salida de VGA dual: apoya los puertos de DVI-D y de D-Sub por los reguladores independientes de la exhibición - Apoya la función de HDCP con el puerto de DVI-D - Apoya la reproducción de Blu-ray de 720p (BD) / HD-DVD (vea ATENCIÓN 7)
Audio	- Sonido HD de Nivel Superior 5.1 Canales Windows® Vista™ (Códec de sonido ALC662)
LAN	- 4CoreN73PV-HD720p R1.0 Realtek Giga PHY RTL8211B, velocidad 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0 Realtek PHY RTL8201CL, velocidad 10/100 Mb/s - Soporta Wake-On-LAN
Entrada/Salida de Panel Trasero	ASRock 6CH_DVI I/O - 1 x puerto de ratón PS/2 - 1 x puerto de teclado PS/2 - 1 x puerto VGA/D-Sub

	- 1 x puerto VGA/DVI-D - 1 x puerto paralelo: soporta ECP/EPP - 4 x puertos USB 2.0 predeterminados - 1 x puerto RJ-45 - Conexión de HD audio: Entrada de línea / Altavoz frontal / Micrófono
Conectores	- 4 x conexiones SATAII, admiten una velocidad de transferencia de datos de hasta 3,0Gb/s, soporta RAID (RAID 0, RAID 1, RAID 0+1, JBOD y RAID 5), NCQ, AHCI y "Conexión en caliente" (vea ATENCIÓN 8) - 1 x ATA133 conexiones IDE (admite hasta 2 dispositivos IDE) - 1 x puerto Floppy - 1 x jefe de la Detección del Enchufe Caliente de DeskExpress - 1x En-tête de port COM - Conector del ventilador del CPU/chasis - 24-pin cabezal de alimentación ATX - 4-pin conector de ATX 12V power - Conector de Audio Interno - Conector de audio de panel frontal - 2 x Cabezal USB 2.0 (admite 4 puertos USB 2.0 adicionales) (vea ATENCIÓN 9) - 1 x Cabezal WiFi/E (vea ATENCIÓN 10)
BIOS	- 4Mb AMI BIOS - AMI legal BIOS - Soporta "Plug and Play" - ACPI 1.1 compliance wake up events - Soporta "jumper free setup" - Soporta SMBIOS 2.3.1
CD de soport	- Controladores, Utilerías, Software de Anti Virus (Versión de prueba)
Monitor Hardware	- Sensibilidad a la temperatura del procesador - Sensibilidad a la temperatura de la placa madre - Taquímetros de los ventiladores del procesador y del procesador - Taquímetros de los ventiladores del procesador y del chasis - Ventilador silencioso para procesador - Monitor de Voltaje: +12V, +5V, +3.3V, Vcore
OS	- En conformidad con Microsoft® Windows® XP / XP 64 bits / Vista™ / Vista™ 64 bits
Certificaciones	- FCC, CE, WHQL

* Para más información sobre los productos, por favor visite nuestro sitio web:

<http://www.asrock.com>

ADVERTENCIA

Tenga en cuenta que hay un cierto riesgo implícito en las operaciones de aumento de la velocidad del reloj, incluido el ajuste del BIOS, aplicando la tecnología de aumento de velocidad liberada o utilizando las herramientas de aumento de velocidad de otros fabricantes. El aumento de la velocidad puede afectar a la estabilidad del sistema e, incluso, dañar los componentes y dispositivos del sistema. Esta operación se debe realizar bajo su propia responsabilidad y Ud. debe asumir los costos. No asumimos ninguna responsabilidad por los posibles daños causados por el aumento de la velocidad del reloj.

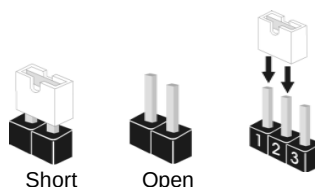
ATENCIÓN !

1. Por favor consulte página 40 del Manual del Usuario en el soporte CD sobre la configuración de Hyper-Threading Technology.
2. Esta placa base admite la tecnología de aumento de velocidad liberada. Por favor lea "Tecnología de Forzado de Reloj (Overclocking) no relacionado" en la página 30 para obtener detalles.
3. Debido a las limitaciones del sistema, el tamaño real de la memoria debe ser inferior a 4GB para que el sistema pueda funcionar bajo Windows® XP y Windows® Vista™. Para equipos con Windows® XP 64-bit y Windows® Vista™ 64-bit con CPU de 64-bit, no existe dicha limitación.
4. Aunque esta placa base ofrece un control completo, no es recomendable forzar la velocidad. Las frecuencias de bus de la CPU distintas a las recomendadas pueden causar inestabilidad en el sistema o dañar la CPU.
5. Cuando la temperatura de CPU está sobre-elevada, el sistema va a apagarse automáticamente. Antes de reanudar el sistema, compruebe si el ventilador de la CPU de la placa base funciona apropiadamente y desconecte el cable de alimentación, a continuación, vuelva a conectarlo. Para mejorar la disipación de calor, acuérdesse de aplicar thermal grease entre el procesador y el disipador de calor cuando usted instala el sistema de PC.
6. El tamaño de la memoria compartido máximo es definido por el vendedor del chipset y está conforme al cambio. Por favor compruebe el Web site de NVIDIA® para la información más última.
7. El apoyo de la reproducción de Blu-ray de 720p (BD) / HD-DVD en esta placa base requiere la configuración de hardware apropiada. Por favor refieren a la página 9 y 10 para el requisito mínimo de hardware y las películas de Blu-ray de 720p (BD) / HD-DVD pasado en nuestra prueba del laboratorio.
8. Antes de instalar el disco duro SATAII en el conector SATAII, por favor lea la "Guía de Configuración de Disco Duro SATAII" en la página 24 para ajustar su unidad de disco duro SATAII al modo SATAII. También puede conectar el disco duro SATA al conector SATAII directamente.
9. Power Management para USB 2.0 funciona bien bajo Microsoft® Windows® Vista™ 64 bits / Vista™ / XP 64 bits / XP SP1; SP2.

10. El conector WiFi/E es compatible con la función WiFi+AP con módulo ASRock WiFi-802.11g / WiFi-802.11n, un adaptador de área local (WLAN) fácil de usar. Le permite crear un entorno de red inalámbrico y disfrutar de la comodidad proporcionada por una conectividad inalámbrica a la red. Por favor, visite nuestro sitio web para conocer la disponibilidad del módulo ASRock WiFi-802.11g / WiFi-802.11n. Sitio web de ASRock <http://www.asrock.com>

1.3 Setup de Jumpers

La siguiente ilustración muestra el setup de Jumpers. Cuando el jumper cap está colocado sobre los pins, el jumper está "SHORT". Si ningún jumper cap está colocado sobre los pins, el jumper está "OPEN". La ilustración muestra un jumper de 3-pin cuyo pin1 y pin2 están "SHORT" cuando el jumper cap está colocado sobre estos 2 pins.



Jumper	Setting	Descripción
PS2_USB_PWR1 (vea p.2, N. 1)	1_2 +5V 2_3 +5VSB	Ponga en cortocircuito pin 2, pin 3 para habilitar +5VSB (standby) para PS/2 o USB wake up events.

Atención: Para elegir +5VSB, se necesita corriente mas que 2 Amp proveida por la fuente de electricidad.

Limpiar CMOS (CLRCMOS1, jumper de 3 pins) (vea p.2, N. 10)	1_2 Valor predeterminado 2_3 Restablecimiento de la CMOS
--	--

Atención: CLRCMOS1 permite que Usted limpie los datos en CMOS. Los datos en CMOS incluyen informaciones de la configuración del sistema, tales como la contraseña del sistema, fecha, tiempo, y parámetros de la configuración del sistema. Para limpiar y reconfigurar los parametros del sistema a la configuración de la fábrica, por favor apague el computador y desconecte el cable de la fuente de electricidad, utilice una cubierta de jumper para aislar las agujas pin2 y pin3 en CLRCMOS1 durante 5 segundos. Por favor acuérdate de quitar el jumper cap después de limpiar el COMS. Por favor acuérdate de quitar el jumper cap después de limpiar el COMS. Si necesita borrar la CMOS cuando acabe de finalizar la actualización de la BIOS, debe arrancar primero el sistema y, a continuación, apagarlo antes de realizar la acción de borrado de CMOS.



1.4 Cabezales y Conectores en Placas



Los conectores y cabezales en placa NO son puentes. NO coloque las cubiertas de los puentes sobre estos cabezales y conectores. El colocar cubiertas de puentes sobre los conectores y cabezales provocará un daño permanente en la placa base.

Conector de disquetera
(33-pin FLOPPY1)
(vea p.2, N. 18)



la banda roja debe quedar en el mismo lado que el contacto 1

Atención: Asegúrese que la banda roja del cable queda situado en el mismo lado que el contacto 1 de la conexión.

IDE conector primario (Azul)
(39-pin IDE1, vea p.2, N. 8)



Conector azul a placa madre



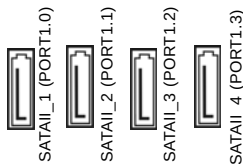
Conector negro a aparato IDE

Cable ATA 66/100/133 de conducción 80

Atención: Consulte las instrucciones del distribuidor del dispositivo IDE para conocer los detalles.

Conexiones de serie ATAII

(SATAI_1 (PORT1.0):
vea p.2, N. 15)
(SATAI_2 (PORT1.1):
vea p.2, N. 14)
(SATAI_3 (PORT1.2):
vea p.2, N. 13)
(SATAI_4 (PORT1.3):
vea p.2, N. 12)



Estos cuatro conectores de la Serie ATA (SATAII) soportan HDDs SATA o SATAII para dispositivos de almacenamiento interno. La interfaz SATAII actual permite una velocidad de transferencia de 3.0 Gb/s.

Español

Cable de datos de serie ATA (SATA)
(Opcional)



Ambos extremos del cable pueden conectarse al disco duro SATA / SATAII o la conexión de la placa base.

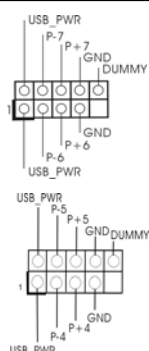


Cable de alimentación de serie ATA (SATA) (Opcional)



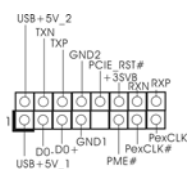
Conecte el extremo negro del cable de alimentación SATA en la conexión de alimentación de cada unidad. A continuación, conecte el extremo blanco del cable de alimentación SATA a la conexión de alimentación de la fuente de alimentación.

Cabezal USB 2.0 (9-pin USB6_7) (ver p.2, N. 27)



Además de cuatro puertos USB 2.0 predeterminados en el panel de E/S, hay dos bases de conexiones USB 2.0 en esta placa base. Cada una de estas bases de conexiones admite dos puertos USB 2.0.

Conector WiFi/E (15-pin WIFI/E) (vea p.2, N. 20)



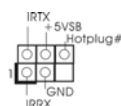
Este conector es compatible con la función WiFi+AP con el módulo ASRock WiFi-802.11g y WiFi-802.11n, un adaptador de área local (WLAN) fácil de usar. Le permite crear un entorno de red inalámbrico y disfrutar de la comodidad proporcionada por una conectividad inalámbrica a la red.



Si no tiene planeado usar la función WiFi+AP en esta placa base, este cabezal puede usarse como un cabezal USB 2.0 de 4 Pins para soportar un puerto USB 2.0. Para conectar el cable USB de 4 Pins del dispositivo a este cabezal, por favor, consulte esta imagen para realizar una instalación adecuada.



Jefe de la Detección del Enchufe Caliente de DeskExpress (5-pin IR1) (vea p.2, N. 19)

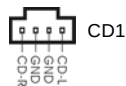


Este jefe apoya la función de la detección del Enchufe Caliente para ASRock DeskExpress.

Conector de audio interno

(4-pin CD1)

(CD1: vea p. 2, N. 23)

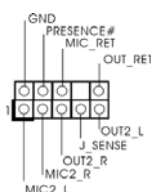


Permite recepción de input audio de fuente sónica como CD-ROM, DVD-ROM, TV tuner, o tarjeta MPEG.

Conector de audio de panel frontal

(9-pin HD_AUDIO1)

(vea p.2, N. 21)



Este es una interface para cable de audio de panel frontal que permite conexión y control conveniente de aparatos de Audio.



1. El Audio de Alta Definición soporta la detección de conector, pero el cable de panel en el chasis debe soportar HDA para operar correctamente. Por favor, siga las instrucciones en nuestro manual y en el manual de chasis para instalar su sistema.

2. Si utiliza el panel de sonido AC'97, instálelo en la cabecera de sonido del panel frontal de la siguiente manera:

- A. Conecte Mic_IN (MIC) a MIC2_L.
- B. Conecte Audio_R (RIN) a OUT2_R y Audio_L (LIN) en OUT2_L.
- C. Conecte Ground (GND) a Ground (GND).
- D. MIC_RET y OUT_RET son sólo para el panel de sonido HD. No necesitará conectarlos al panel de sonido AC'97.

E. Entre en la Utilidad de configuración del BIOS Entre en Configuración avanzada y, a continuación, seleccione Configuración del conjunto de chips. En el panel de control frontal cambie la opción [Automático] a [Habilitado].

F. Entre en el sistema Windows. Haga clic en el icono de la barra de tareas situada en la parte inferior derecha para entrar en el Administrador de audio HD Realtek.

Para Windows® XP / XP 64-bit OS:

Haga clic en "E/S de audio", seleccione "Configuración de conectores"



, elija "Deshabilitar la detección del conector del panel frontal" y guarde el cambio haciendo clic en "Aceptar".

Para Windows® Vista™ / Vista™ 64-bit OS:

Haga el clic el icono de la "Carpeta" de derecho-superior

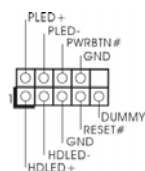


"Inhabilitar la detección del conector del panel delantero" y ahorre el cambio por chascando "OK".

Cabezal de panel de sistema

(9-pin PANEL1)

(vea p.2, N. 11)

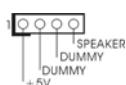


Este cabezar acomoda varias funciones de panel frontal de sistema.

Cabezal del altavoz del chasis

(4-pin SPEAKER1)

(vea p.2, N. 17)

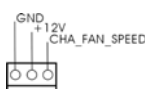


Conecte el altavoz del chasis a su cabezal.

Conector del ventilador del chasis

(3-pin CHA_FAN1)

(vea p.2, N. 16)

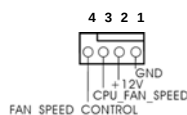


Conecte el cable del ventilador del chasis a este conector y haga coincidir el cable negro con el conector de tierra.

Conector del ventilador de la CPU

(4-pin CPU_FAN1)

(vea p.2, N. 5)



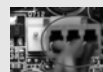
Conecte el cable del ventilador de la CPU a este conector y haga coincidir el cable negro con el conector de tierra.



Aunque esta placa base proporciona compatibilidad para un ventilador (silencioso) de procesador de 4 contactos, el ventilador de procesador de 3 contactos seguirá funcionando correctamente incluso sin la función de control de velocidad del ventilador. Si pretende enchufar el ventilador de procesador de 3 contactos en el conector del ventilador de procesador de esta placa base, conéctelo al contacto 1-3.

Contacto 1-3 conectado ←

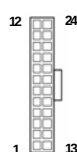
Instalación del ventilador de 3 contactos



Cabezal de alimentación ATX

(24-pin ATXPWR1)

(vea p.2, N. 2)



Conecte la fuente de alimentación ATX a su cabezal.



A pesar de que esta placa base incluye un conector de alimentación ATX de 24 pines, ésta puede funcionar incluso si utiliza una fuente de alimentación ATX de 20 pines tradicional. Para usar una fuente de alimentación ATX de 20 pines, por favor, conecte su fuente de alimentación usando los Pines 1 y 13.

Instalación de una Fuente de Alimentación ATX de 20 Pines



Español

Conector de ATX 12V power

(4-pin ATX12V1)

(ver p.2, No. 3)

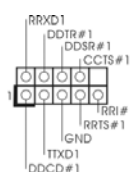


Tenga en cuenta que es necesario conectar este conector a una toma de corriente con el enchufe ATX 12V, de modo que proporcione suficiente electricidad. De lo contrario no se podrá encender.

Cabezal del puerto COM

(9-pin COM1)

(vea p.2, N. 9)



Este cabezal del puerto COM se utiliza para admitir un módulo de puerto COM.

2. BIOS Información

La utilidad de configuración de la BIOS se almacena en el chip BIOS FWH. Cuando se arranca el equipo, pulse <F2> durante la prueba automática de encendido (POST) para entrar en la Utilidad de la configuración de la BIOS, de lo contrario, POST continúa con sus rutinas de prueba. Si desea entrar en la Utilidad de configuración de la BIOS después de POST, reanude el sistema pulsando <Ctl>+<Alt>+<Supr> o pulsando el botón de restauración situado en el chasis del sistema. Para obtener información detalladas sobre la Utilidad de configuración de la BIOS, consulte el Manual del usuario (archivo PDF), que se encuentra en el CD de soporte.

3. Información de Software Support CD

Esta placa-base soporta diversos tipos de sistema operativo Windows®: XP / XP 64 bits / Vista™ / Vista™ 64 bits El CD de instalación que acompaña la placa-base trae todos los drivers y programas utilitarios para instalar y configurar la placa-base. Para iniciar la instalación, ponga el CD en el lector de CD y se desplegará el Menú Principal automáticamente si «AUTORUN» está habilitado en su computadora. Si el Menú Principal no aparece automáticamente, localice y doble-pulse en el archivo "ASSETUP.EXE" para iniciar la instalación.

1. Introdução

Gratos por comprar nossa placa-mãe **4CoreN73PV-HD720p**, um produto confiável feito com ASRock um estrito controle de qualidade consistente. Com um excelente desempenho, essa placa é dotada de um projeto robusto que atende a ASRock de compromisso com a qualidade e durabilidade.

Este Guia de Instalação Rápida apresenta a placa-mãe e o guia de instalação passo a passo. Mais informações detalhadas sobre a placa-mãe podem ser encontradas no manual do usuário do CD de suporte.



Porque as especificações da placa mãe e o software de BIOS poderiam ser atualizados, o conteúdo deste manual pode ser cambiado sem aviso. Em caso de qualquer modificação deste manual, a versão atualizada estará disponível no website de ASRock sem prévio aviso. Pode também encontrar as listas das mais recentes placas VGA e das CPUs suportadas no site da web da ASRock.
Website de ASRock <http://www.asrock.com>
Se precisar de apoio técnico em relação a este placa-mãe, por favor visite o nosso sítio da internet para informação específica acerca do modelo que está a utilizar.
www.asrock.com/support/index.asp

1.1 Este pacote contém

Placa-mãe ASRock **4CoreN73PV-HD720p**

(Formato Micro ATX: 9,6 pol. x 8,0 pol., 24,4 cm x 20,3 cm)

Guia de instalação rápida da ASRock **4CoreN73PV-HD720p**

CD de suporte da placa ASRock **4CoreN73PV-HD720p**

Um cabo-fita IDE Ultra ATA 66/100/133 de 80 condutores

Um cabo-fita para unidade de disquete de 3,5 pol.

Um cabo de dados ATA Serial (SATA) (Opcional)

Um cabo de alimentação da unidade de disco rígido ATA Serial (SATA) (Opcional)

Uma proteção ASRock 6CH_DVI I/O

1.2 Especificações

Plataforma	- Formato Micro ATX: 9,6 pol. x 8,0 pol., 24,4 cm x 20,3 cm
CPU	- Socket Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® de 775 pinos com suporte para o processador Quad Core Yorkfield e Dual Core Wolfdale - FSB1333/1066/800/533MHz - Suporta a tecnologia Hyper-Threading (veja o AVISO 1) - Suporta a tecnologia Untied Overclocking (veja o AVISO 2) - Suporta a CPU EM64T
Chipsets	- NVIDIA® GeForce 7100 / nForce 630i
Memória	- 2 x slots de DDR2 DIMM - Suporte para memória não intermédia DDR2 800/667/533, não ECC - Capacidade máxima de memória do sistema: 4GB (veja o AVISO 3)
Booster híbrido	- Frequência da CPU com controle contínuo (veja o AVISO 4) - ASRock U-COP (veja o AVISO 5) - B.F.G. (Boot Failure Guard)
Slots de Expansão	- 1 x slots de PCI Express x16 - 1 x slots de PCI Express x1 - 2 x slots de PCI
VGA integrado	- Integrado NVIDIA® GeForce7100 - VGA DX9.0, Pixel Shader 3.0 - Memória partilhada máxima 256MB (veja o AVISO 6) - Duplo VGA Saída: suportar DVI-D e D-Sub portas pelos controladores independentes de display - Suportar HDCP função com DVI-D porta - Suportar 720p Blu-ray (BD) / HD-DVD playback (veja o AVISO 7)
Áudio	- Áudio de alta definição de canal 5.1 através do Windows® Vista™ (Codec de áudio ALC662)
LAN	- 4CoreN73PV-HD720p R1.0: Realtek Giga PHY RTL8211B, Velocidade 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0: Realtek PHY RTL8201CL, Velocidade 10/100 Ethernet - Suporta Wake-On-LAN
Entrada/Saída pelo painel traseiro	ASRock 6CH_DVI I/O - 1 x porta para mouse PS/2 - 1 x porta para teclado PS/2

	- 1 x porta VGA/D-Sub - 1 x porta VGA/DVI-D - 1 x porta paralela (com suporte ECP/EPP) - 4 x portas USB 2.0 padrão - 1 x porta RJ-45 - HD Áudio Jack: Entrada de linha / Altifalante frontal / Microfone
Conectores	- 4 x conectores SATAII, suporte a taxa de transferência de dados de até 3,0 Gb/s, suporte RAID (RAID 0, RAID 1, RAID 0+1, JBOD e RAID 5), NCQ, AHCI e “conexão a quente” (veja o AVISO 8) - 1 x conectores ATA133 IDE (suporta até 2 dispositivos IDE) - 1 x porta para disquete - 1 x Suporte de Detecção Automática de Periféricos DeskExpress - 1 x conector da porta COM - Conector do ventilador da CPU/chassis - Conector de força do ATX de 24 pinos - Conector ATX 12 V de 4 pinos - Conectores internos de áudio - Conector Áudio do painel frontal - 2 x cabezal USB 2.0 (suportar 4 portas USB 2.0 adicionais) (veja o AVISO 9) - 1 x cabezal WiFi/E (veja o AVISO 10)
BIOS	- 4Mb BIOS AMI - BIOS AMI - Suporta dispositivos “Plug and Play” - ACPI 1.1 atendendo a eventos de “wake up” - Suporta dispositivos sem jumper - Suporte para SMBIOS 2.3.1
CD de suporte	- Controladores, utilitários, software antivírus (Experimentacao Versao)
Monitor do HW	- Sensores de temperature do procesador - Medição de temperatura da placa-mãe - Tacômetros de ventilador do Processador - Tacômetros de ventilador do chassis - Ventoinha silenciosa para a CPU - Monitoramento de voltagem : +12 V, +5 V, +3.3 V, Vcore
Sistema Operacional	- Microsoft® Windows® XP / XP de 64 bits / Vista™ / Vista™ de 64 bits
Certificações	- FCC, CE, WHQL

* Para informações mais detalhadas por favor visite o nosso sítio Web:

<http://www.asrock.com>

AVISO

Tenha em atenção que a operação de overclocking envolve alguns riscos, nomeadamente no que diz respeito ao ajuste das definições do BIOS, à aplicação da tecnologia Untied Overclocking ou à utilização de ferramentas de overclocking de terceiros. O overclocking pode afectar a estabilidade do seu sistema ou até mesmo causar danos ao nível dos componentes e dispositivos que integram o sistema. Esta operação é da total responsabilidade do utilizador. Não nos responsabilizamos pelos possíveis danos resultantes do overclocking.

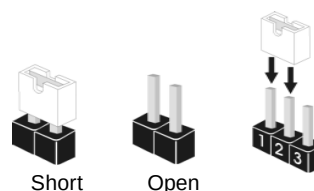
AVISO!

1. Sobre a configuração da "Tecnologia Hyper Threading", consulte a página 40 do Manual do Usuário no CD de suporte. (Somente inglês)
2. Esta placa principal suporta a tecnologia Untied Overclocking. Consulte a secção "Tecnologia Untied Overclocking" na página 30 para mais informações.
3. Devido às limitações do sistema operativo, o tamanho real da memória pode ser inferior a 4 GB uma vez que uma parte desta está reservada para utilização pelo sistema operativo no âmbito do Windows® XP e do Windows® Vista™. No caso da CPU de 64 bits do Windows® XP de 64 bits e do Windows® Vista™ de 64 bits, esta limitação não existe.
4. Apesar de esta placa-mãe oferecer controle continuamente variável, não se recomenda efetuar over-clock. Frequências de barramento diferentes das recomendadas para a CPU podem provocar instabilidade do sistema ou danos à CPU.
5. Assim que se detecta um superaquecimento na CPU, o sistema se desliga automaticamente e o botão de energia do chassis fica inativo. Cheque o ventilador da CPU na placa-mãe, para verificar se está funcionando corretamente antes de religar o sistema. Para melhorar a dissipação de calor, lembre-se de aplicar o material de interface térmica entre o processador e o dissipador de calor.
6. O máximo tamanho de memória compartilhada é definido por vendedor de chipset e é sujeito a mudar. Verifique o NVIDIA® website para a última informação.
7. 720p Blu-ray (BD) / HD-DVD playback suporta nesta tábua moderna requer a configuração apropriada de hardware. Refera à página 9 e 10 para o mínima necessidade de hardware e passar 720p Blu-ray (BD) / HD-DVD filmes no nosso teste de laboratório.
8. Antes de instalar o disco duro SATAII no conector SATAII, por favor leia o "Guia de Instalação do Disco duro SATAII" na página 24, para definir a sua unidade de disco duro SATAII com o modo SATAII. Também pode ligar directamente o disco duro SATA ao conector SATAII.
9. Power Management para USB 2.0 funciona bem embaixo de Microsoft® Windows® Vista™ de 64 bits / Vista™ / XP de 64 bits / XP SP1; SP2.

10. O cabeçalho WiFi/E suporta a função Wifi+AP com o módulo ASRock WiFi-802.11g ou WiFi-802.11n, um adaptador de rede de área local sem fios (WLAN) fácil de utilizar. Permite-lhe criar um ambiente sem fios e desfrutar da conveniência da conectividade de rede sem fios. Por favor visite o nosso sítio para conhecer a disponibilidade do módulo ASRock WiFi-802.11g / WiFi-802.11n.
Sítio da ASRock <http://www.asrock.com>

1.3 Configuração dos Jumpers

A ilustração mostra como os jumpers são configurados. Quando há uma capa de jumpers sobre os pinos, diz-se que o jumper está “curto”. Não havendo capa sobre os pinos, o jumper está “aberto”. A ilustração mostra um jumper de 3 pinos em que os pinos 1 e 2 estão “curtos” quando a capa de jumper estiver colocada sobre esses 2 pinos.



Jumper	Configuração	
PS2_USB_PW1 (veja a folha 2, No. 1)	 	Pin2, Pin3 curtos para habilitar +5VSB (stand by) para PS/2 ou eventos de wake up na USB.

Nota: Para escolher +5VSB, é preciso uma corrente de stand by de 2 A ou mais.

Restaurar CMOS (CLRCMOS1, jumper de 3 pinos) (veja a folha 2, No. 10)	 
	Configuração-padrão Limpar o CMOS

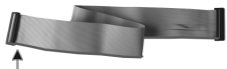
Nota: CLRCMOS1 permite você limpar os dados em CMOS. Os dados em CMOS incluem informações da configuração do sistema como: por exemplo a senha do sistema, data, tempo, e os parâmetros da configuração do sistema. Para limpar e reconfigurar os parâmetros do sistema a configuração inicial da fábrica, por favor desligue o cabo de força, ponha em curto-circuito os pin 2 e pin 3 de CLRCMOS1 por mais de 5 segundos para limpar o CMOS usando um jumper. Por favor lembre-se de remover o jumper depois de limpar o CMOS. Se precisar limpar o CMOS ao concluir a atualização do BIOS, deverá reiniciar o sistema primeiro e, em seguida, desligá-lo antes de executar a ação de limpeza o CMOS.



1.4 Conectores

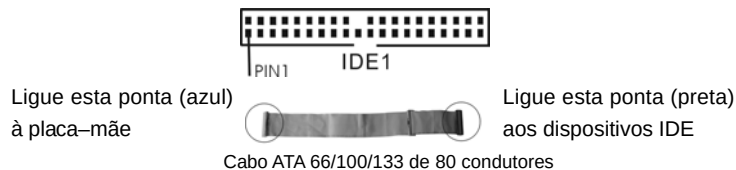


Os conectores NÃO SÃO jumpers. NÃO coloque capas de jumper sobre estes conectores. A colocação de pontos de jumper sobre os conectores causará danos irreversíveis à placa-mãe.

Conector	Figura	Descrição
Conector FDD (FLOPPY 1, 33 pinos) (veja a folha 2, No. 18)		 o lado com listras vermelhas para o Pino 1

Nota: Certifique-se de que o lado com listras vermelhas no cabo seja conectado ao lado Pino 1 do conector.

Conector primário (Azul)
(IDE1 de 39 pinos, veja a folha 2, No. 8)



Nota: Para detalhes, consulte as instruções do fornecedor do seu dispositivo IDE.

Conectores ATAII Serial

(SATAII_1 (PORT1.0):
veja a folha 2, No. 15)
(SATAII_2 (PORT1.1):
veja a folha 2, No. 14)
(SATAII_3 (PORT1.2):
veja a folha 2, No. 13)
(SATAII_4 (PORT1.3):
veja a folha 2, No. 12)



Estes quatro conectores Serial ATA (SATAII) suportam unidades de disco rígido SATA ou SATAII como dispositivos de armazenamento internos. A atual interface SATAII permite uma taxa de transferência de dados de até 3.0 Gb/s.

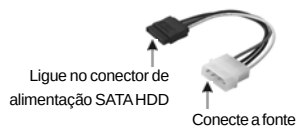
Cabo de dados
ATA (SATA)
(opcional)



Tanto a saída do cabo de Serial dados SATA pode ser conectado ao disco rígido SATA / SATAII quanto o conector SATAII na placa mãe.

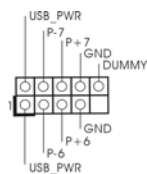


**Cabo de Alimentação
ATA (SATA)**
(opcional)



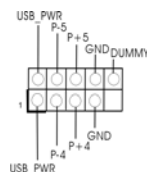
Conecte a saída de cor preta do cabo de alimentação SATA ao conector de alimentação em cada acionador. Em seguida, conecte a saída branca do cabo de alimentação SATA ao conector de alimentação da fonte.

Cabeçal USB 2.0
(USB6_7 de 9 pinos)
(veja a folha 2, No. 27)

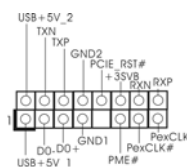


Além das quatro portas USB 2.0 por defeito no painel de entrada/saída, há duas ligações USB 2.0 nesta placa-mãe. Cada ligação USB 2.0 pode suportar duas portas USB 2.0.

(USB4_5 de 9 pinos)
(veja a folha 2, No. 28)



Cabeçalho WiFi/E
(WiFi/E, 15 pinos)
(veja a folha 2, No. 20)



Este cabeçalho suporta a função WiFi+AP com o módulo WiFi-802.11g ou WiFi-802.11n, um adaptador de rede de área local sem fios (WLAN) fácil de utilizar. Permite-lhe criar um ambiente sem fios e desfrutar da conveniência da conectividade de rede sem fios.

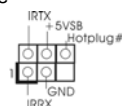


Se não tiver intenções de utilizar a função Wifi+AP nesta aplicação, este conector pode ser utilizado como conector USB 2.0 de 4 pinos para suportar uma porta USB 2.0. Para conectar o cabo do dispositivo USB de 4 pinos a este conector, por favor refira-se a esta imagem para uma instalação própria.



**Suporte de Detecção Automática de
Periféricos DeskExpress**

(IR1 de 5 pinos)
(veja a folha 2, No. 19)



Este suporte suporta a função de detecção automática de Periféricos para ASRock DeskExpress.

Conectores internos de áudio

(CD1 de 4 pinos)

(CD1: veja a folha 2, No. 23)

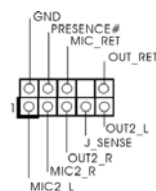


Estes conectores permitem que se receba entrada de áudio em estéreo de fontes de áudio como CD-ROM, DVD-ROM, placa sintonizadora de TV ou placa MPEG.

Conector Áudio do painel frontal

(HD_AUDIO1 de 9 pinos)

(veja a folha 2, No. 21)



Esta é uma interface para o cabo de áudio no painel frontal, que permite uma conexão e controle convenientes dos dispositivos de áudio.



1. Áudio de elevada definição que suporta a sensibilidade da tomada, mas o fio do painel existente no chassis tem de suportar HDA para funcionar correctamente. Siga s instruções que aparecem no manual e no manual do chassis para instalar o sistema.
2. Se utilizar o painel de áudio AC'97, instale-o no cabeçalho de áudio do painel frontal, como a figura abaixo mostra:
 - A. Ligue o Mic_IN (MIC) ao MIC2_L.
 - B. Ligue o Audio_R (RIN) ao OUT2_R e o Audio_L (LIN) ao OUT2_L.
 - C. Ligue o Ground (GND) ao Ground (GND).
 - D. MIC_RET e OUT_RET são apenas para o painel de áudio HD. Não necessita de os ligar para o painel de áudio AC'97.
 - E. Entre no utilitário de configuração do BIOS. Vá até à opção Definições avançadas e escolha Configuração do chipset. Defina a opção Controlo do painel frontal de [Automático] para [Activado].
 - F. Entre no sistema Windows. Clique no ícone existente na barra de tarefas no canto inferior direito para aceder ao Realtek HD Audio Manager.

Para Windows® XP / XP 64-bit OS:

Clique em "Entrada/Saída de áudio", seleccione "Definições do conector" , escolha a opção "Desactivar detecção da tomada do painel frontal" e guarde a alteração clicando em "OK".

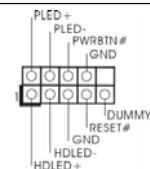
Para Windows® Vista™ / Vista™ 64-bit OS:

Clique o direito-cima "Folder" ícone , escolha "Detecção de valet de painel dianteiro" e guarda a mudança por clicar "OK".

Conector do sistema no painel

(PANEL1 de 9 pinos)

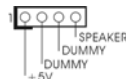
(veja a folha 2, No. 11)



Este conector acomoda diversas funções de sistema no painel frontal.

Conector do alto-falante do chassi

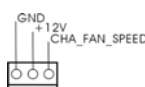
(SPEAKER1 de 4 pinos)
(veja a folha 2, No. 17)



Ligue o alto-falante do chassi neste conector.

Conector do ventilador do chassis

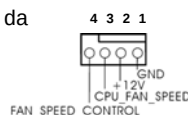
(CHA_FAN1 de 3 pinos)
(veja a folha 2, No. 16)



Ligue o cabo do ventilador neste conector, coincidindo o fio preto com o pino de aterramento.

Conector do ventilador da CPU

(CPU_FAN1 de 4 pinos)
(veja a folha 2, No. 5)



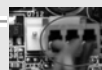
Ligue o cabo do ventilador da CPU, coincidindo o fio preto com o pino de aterramento.



Apesar de esta placa-mãe possuir 4 apoios para uma ventoinha de CPU (Ventoinha silenciosa), uma ventoinha de 3 pinos para CPU poderá funcionar mesmo sem a função de controlo de velocidade da ventoinha. Se pretender ligar uma ventoinha de 3 pinos para CPU ao conector de ventoinha da CPU nesta placa-mãe, por favor, ligue-a aos pinos 1-3.

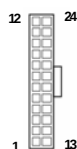
Pinos 1-3 ligados

Instalação de Ventoinha de 3 pinos



Conector de força do ATX

(ATXPWR1 de 24 pinos)
(veja a folha 2, No. 2)

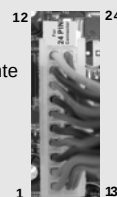


Ligue a fonte de alimentação ATX neste conector.



Embora esta placa-mãe providencie um conector de energia ATX de 24 pinos, pode apesar disso funcionar com a adaptação de uma fonte de energia tradicional de 20 pinos. Para usar a fonte de alimentação de 29 pinos, por favor ligue a sua fonte de alimentação com o Pino 1 e o Pino 13.

Instalação da Fonte de alimentação ATX de 20 Pinos



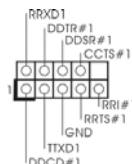
Conector ATX 12 V

(ATX12V1 de 4 pinos)
(veja a folha 2, No. 3)



Note que é necessário ligar uma fonte de alimentação com conector ATX 12V neste conector para fornecer alimentação suficiente. Do contrário, haverá falhas de funcionamento.

Conector da porta COM
(COM1 de 9 pinos)
(veja a folha 2, No. 9)



Este conector é usado para suportar um módulo de porta COM.

2. Informações da BIOS

O Utilitário de Configuração do BIOS está armazenado no chip FWH do BIOS. Ao iniciar o computador, pressione <F2> durante o Autoteste de iniciação (POST) para acessar o Utilitário de Configuração do BIOS; caso contrário, o POST continuará com as rotinas de teste. Se desejar acessar o Utilitário de Configuração do BIOS depois do POST, reinicie o sistema pressionando <Ctl> + <Alt> + , ou pressionando o botão de reinício no chassi do sistema. Para as informações detalhadas sobre o Utilitário de Configuração do BIOS, consulte o Manual do Usuário (arquivo PDF) no CD de suporte.

3. Informações do CD de Suporte

Esta placa Mãe suporta vários sistemas operacionais: Microsoft® Windows®: XP / XP de 64 bits / Vista™ / Vista™ de 64 bits. O CD de instalação que acompanha a placa Mãe contém: drivers e utilitários necessários para um melhor desempenho da placa Mãe. Para começar a usar o CD de instalação, introduza o CD na leitora de CD-ROM do computador. Automaticamente iniciará o menu principal, caso o AUTORUN esteja ativado. Se o menu principal não aparecer automaticamente, explore o CD e execute o "ASSETUP.EXE" localizado na pasta BIN.

1. 제품소개

ASRock의 4CoreN73PV-HD720p 메인 보드를 구매하여 주신것에 대하여 감사드립니다. 이 메인보드는 엄격한 품질관리 하에 생산되어진 신뢰성 있는 메인보드입니다. 이 제품은 고 품격 디자인과 함께 ASRock의 우수한 품질과 최고의 안정성을 자랑하고 있습니다. 이 빠른 설치 안내서에는 마더보드에 대한 설명과 단계별 설치 방법이 실려 있습니다. 마더보드에 대한 보다 자세한 내용은 지원 CD의 사용 설명서에서 확인할 수 있습니다.



메인보드의 사양이나 바이오스가 업데이트 되기 때문에 이 사용자 설명서의 내용은 예고 없이 변경되거나 바뀔 수가 있습니다. 만일을 생각해서 이 사용자 설명서의 어떤 변경이 있으면 ASRock의 웹사이트에서 언제든지 업데이트를 하실 수 있습니다. 웹사이트에서 최신 VGA 카드와 CPU 지원 목록을 확인할 수 있습니다. ASRock의 웹사이트 주소는 <http://www.asrock.com>입니다. 본 마더보드와 관련하여 기술 지원이 필요한 경우 당사 웹사이트를 방문하여 사용 중인 모델에 대한 특정 정보를 얻으십시오. www.asrock.com/support/index.asp

1.1 패키지 내용

ASRock 4CoreN73PV-HD720p 마더보드
(Micro ATX 폼 팩터: 9.6" X 8.0", 24.4 x 20.3 cm)
ASRock 4CoreN73PV-HD720p 쿼 설치 가이드
ASRock 4CoreN73PV-HD720p 지원 CD
80 도체 울트라 ATA 66/100/133 IDE 리본 케이블 1 개
3.5 인치 플로피 드라이브용 리본 케이블 1 개
시리얼 ATA (SATA) 데이터 케이블 1 개 (선택 사양)
시리얼 ATA (SATA) HDD 전원 케이블 1 개 (선택 사양)
"ASRock 6CH DVI I/O" I/O 차폐 1 개

1.2 설명서

플랫폼	- Micro ATX 폼 팩터: 9.6" X 8.0", 24.4 x 20.3 cm
CPU	- Intel® Core™ 2 Extreme 용 LGA 775 / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Quad Core Yorkfield 및 Dual Core Wolfdale 프로세서를 지원하는 Celeron® - FSB1333/1066/800/533MHz - 하이퍼-스레딩 기술 지원 (주의 1 참조) - 언타이드 오버클러킹(Untied Overclocking) 기술 지원 (주의 2 참조) - EM64T CPU 지원
칩셋	- NVIDIA® GeForce 7100 / nForce 630i
메모리	- DDR2 DIMM 슬롯 2 개 - DDR2 800/667/533 비-ECC, 언버퍼드 메모리를 지원 - 최대 4GB (주의 3 참조)
하이드브리 부스터	- CPU 주파수의 단계적인 조절 (주의 4 참조) - ASRock U-COP (주의 5 참조) - B.F.G..(Boot Failure Guard)
확장 슬롯	- 1 개의 PCI Express x16 슬롯 - 1 개의 PCI Express x1 슬롯 - 2 개의 PCI 슬롯
온보드 VGA	- 완벽한 NVIDIA® GeForce 7100 - DX9.0 VGA, Pixel Shader 3.0 - 최대 공유 메모리 256MB (주의 6 참조) - 더블 VGA 수출: DVI-D 와 D-Sub 포트 독립 디스플레이 컨트롤러를 지원 - DVI-D 포트의 HDCP 기능을 지원 - 720p Blu-ray (BD) / HD-DVD 재생을 지원 (주의 7 참조)
오디오	- 5.1CH Windows® Vista™ Premium 레벨 HD 오디오 (ALC662 오디오 코덱)
랜	- 4CoreN73PV-HD720p R1.0 Realtek PHY RTL8211B, 속도 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0 Realtek PHY RTL8201CL, 속도 10-100 이더넷 - 웨이크-온-랜 지원
후면판 I/O	ASRock 6CH_DVI I/O - 1 개 PS/2 마우스 포트 - 1 개 PS/2 키보드 포트 - 1 개의 VGA/D-Sub - 1 개의 VGA/DVI-D - 1 개의 병렬 포트:ECP/EPP 지원오 디오 잭 - 4 개더플트 USB 2.0 포트

	- 1 개 RJ-45 포트 - 오디오 잭: 라인 인 / 전방 스피커 / 마이크
온보드 헤더 및 커넥터	- 4 개의 Serial ATAII 3.0Gb/s 커넥터, RAID (RAID 0, RAID 1, RAID 0+1, JBOD 및 RAID 5) 기능 지원, NCQ, AHCI 및 “핫 플러그” 기능 지원 (주의 8 참조) - ATA133 IDE 커넥터 1 개 (최고 2 개의 IDE 장치 지원) - 플로피 포트 1 개 - DeskExpress 핫 플러그 탐지 헤더 1 개 - COM 포트 헤더 1 개 - CPU/새시 팬 커넥터 - 24 핀 ATX 전원 헤더 - 4 핀 ATX 12V 파워 콘넥터 - 내부 오디오 콘넥터 - 전면부 오디오 콘넥터 - USB 2.0 헤더 2 개 (4 개의 추가 USB 2.0 포트를 지원하는 헤더 2 개) (주의 9 참조) - WiFi/E 헤더 1 개 (주의 10 참조)
BIOS	- 4Mb AMI BIOS - AMI 에 따른 바이오스 - “플러그 앤 플레이” 지원 - ACPI 1.1 웨이크-업 이벤트와의 호환 - 점퍼 프리 지원 - 점퍼 프리 지원 ; SMBIOS 2.3.1 지원
지원 CD	- 드라이버, 유틸리티, 안티 바이러스 소프트웨어 (트라이얼 버전)
하드웨어 모니터	- CPU 온도 감지 - 마더보드 온도 감지 - CPU 과열시 CPU 수명 보호를 위한 시스템 정지기능 - CPU 팬 회전 속도계:샤시(케이스) 팬 회전 속도계 - CPU 소음팬 - 전압 감시 기능 : +12V,+5V,+3.3V,Vcore
OS	- 마이크로 소프트 Windows® XP / XP 64 비트 / Vista™ / Vista™64-bit 와 호환
인증서	- FCC, CE, WHQL

* 상세한 제품정보는 당사의 웹사이트를 방문할수있습니다. <http://www.asrock.com>

경고

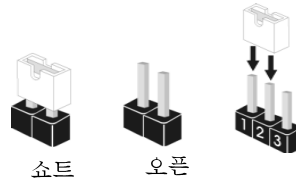
오버클로킹에는 BIOS 설정을 조정하거나 Untied Overclocking Technology를 적용하거나 타업체의 오버클로킹 도구를 사용하는 것을 포함하여 어느 정도의 위험이 따른다는 것을 유념하십시오. 오버클로킹은 시스템 안정성에 영향을 주거나 심지어 시스템의 구성 요소와 장치에 손상을 입힐지도 모릅니다. 오버클로킹은 사용자 스스로 위험과 비용을 감수하고 해야 합니다. 당사는 오버클로킹에 의해 발생할 수 있는 손상에 대해서 책임이 없습니다.

주의!

1. 하이퍼-스레딩 기술의 셋팅에 대하여는 지원 CD의 사용자 매뉴얼의 40 페이지를참고하세요.
2. 이 마더보드는 언타이드 오버클러킹 기술을 지원합니다. 자세한 내용은 30 페이지의 "언타이드 오버클러킹 기술"을 읽으십시오.
3. 운영 체제 한계 때문에 Windows® XP 및 Windows® Vista™에서 시스템 용도로 예약된 실제 메모리 크기는 4GB 이하일 수 있습니다. 64비트 CPU와 Windows® XP 64비트 및 Windows® Vista™ 64비트의 경우 그런 한계가 없습니다.
4. 본 마더보드는 직접 조절 기능을 제공하지만, 오버 클러킹을 하는 것은 권장되지 않습니다. 권장하는 CPU 주파수 외에 다른 주파수를 설정 시에는 시스템이 불안정해지거나, 메인보드와 CPU의 불량 발생 할 수 있으므로 가급적 사용 하지 마십시오.
5. 시스템을 다시 시작하기 전에 메인보드 위의 CPU 팬이 정상적으로 동작 또는 장착되어 있는지 확인하여 주십시오. 고온 방지를 위하여 PC 시스템을 설치할 때 CPU와 방열판 사이에 그리스를 발라 주셔야 합니다.
6. 칩세트의 제조원이 정하였거나 그변화를 한제하게되는 최대 공유 메모리의 크기에 대하여, NVIDIA® 의 웹사이트를 방문하여 최신 정보를 받으십시오.
7. 본 마더보드를 지원하는 720p Blu-ray (BD)/HD-DVD 재생은 적용되는 하드웨어의 구조를 요구합니다. 최소 하드웨어에 대한 요구와 당사 실험실에서 패스된 720p Blu-ray (BD)/HD-DVD 필립에 대하여, 9페이지와 10페이지를 참고하십시오.
8. SATA II 하드 디스크를 SATA II 커넥터에 연결하기 전에 24 페이지의 "SATA II 하드 디스크 설치 설명서"를 읽고 SATA II 하드 디스크를 SATA II 모드에 맞게 조정하십시오. 또한 SATA 하드 디스크를 SATA II 커넥터에 직접 연결할 수 있습니다.
9. 마이크로소프트 윈도우 Vista™ 64 비트/Vista™/XP 64 비트/XP SP1; SP2 상에서 USB 2.0의 구동을 위한 전원 관리 모드가 정상적으로.
10. WiFi/E 헤더는 ASRock WiFi-802.11g/WiFi-802.11n 모듈, 사용법이 용이한 WLAN(wireless local area network) 어댑터로 WiFi+AP 기능을 지원합니다. 이 헤더를 사용하여 무선 환경을 만들면 편리한 무선 네트워크 연결을 즐길 수 있습니다. ASRock WiFi-802.11g/WiFi-802.11n 모듈 구입하려면 당사의 웹사이트를 방문하십시오. ASRock 웹사이트 <http://www.asrock.com>

1.3 점퍼 셋팅

그림은 점퍼를 어떻게 셋업 하는지를 보여줍니다. 점퍼 캡이 핀 위에 있을 때, 점퍼는 “쇼트”입니다. 점퍼 캡이 핀 위에 없을 때 점퍼는 “오픈”입니다. 그림은 3개의 핀 중 1-2번 핀이 “쇼트”임을 보여주는 것이며, 점퍼 캡이 이 두 핀 위에 있음을 보여주는 것입니다.



점퍼	세팅	
PS2_USB_PWR1 (2페이지, 1번 항목 참조)	1_2 +5V	2_3 +5VSB
		PS/2 또는 USB를 깨어나게 하기 위해서는 2번과 3번 핀을 “쇼트” 하여야 합니다.
참고: +5VSB 선택할 경우 2암페어 정도 높은 전류 공급을 요구합니다.		

CMOS 초기화	1_2	2_3
(CLRCMOS1, 3핀 점퍼) (2페이지, 10번 항목 참조)	기본 설정	CMOS 삭제

참고: CLRCMOS1은 CMOS의 데이터를 삭제할 수 있게 합니다. CMOS의 데이터는 시스템 암호, 날짜, 시간 및 시스템 설정 매개 변수와 같은 시스템 설정 정보를 포함합니다. 시스템 매개 변수를 삭제하고 기본 설정으로 초기화하려면 컴퓨터를 끄고 전원 코드를 뽑은 후 점퍼 캡을 사용하여 CLRCMOS1의 2번과 3번 핀을 5초간 단락시키십시오. CMOS를 초기화한 뒤, 반드시 점퍼 캡을 제거하여야 합니다. 바이오스 업데이트를 마친 후 CMOS를 삭제해야 하는 경우 CMOS 삭제 동작 전에 시스템을 먼저 부팅했다가 종료해야 합니다.

1.4 온보드 헤더 및 커넥터



주의!

이 콘넥터는 접퍼가 아닙니다. 이 콘넥터 위에 접퍼 캡을 사용하지 마세요. 커넥터에 접퍼 캡을 설치하면 마더보드가 영구적으로 손상됩니다!

콘넥터

그림

설명

FDD 콘넥터
(33핀 FLOPPY1)

(2페이지, 18번 항목 참조)



빨간색 줄무늬 쪽을 1번 핀에

참고: 케이블의 빨간색 줄무늬가 있는 쪽을 커넥터의 1번 핀에 맞추어 연결하십시오.

IDE 콘넥터 1 (파란색)

(39핀 IDE1, 2페이지, 8번 항목 참조)



파란색은 메인보드에
연결합니다



검정색은 IDE 디바이스에
연결합니다

80 도체 ATA 66/100/133 케이블

참고: 자세한 사항은 IDE 장치 벤더가 제공하는 사용 설명서를 참조하십시오.

시리얼 ATAII 커넥터

(SATAI_1(PORT1.0):

2페이지, 15번 항목 참조)

(SATAI_2(PORT1.1):

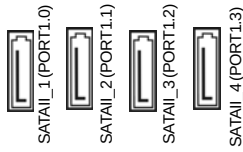
2페이지, 14번 항목 참조)

(SATAI_3(PORT1.2):

2페이지, 13번 항목 참조)

(SATAI_4(PORT1.3):

2페이지, 12번 항목 참조)



두 개의 시리얼 ATAII (SATA) 커넥터는 내부 저장 장치용 SATA 데이터 케이블을 지원합니다. 커넥터가 내부 기억 장치용 SATA 케이블을 지원합니다. 현재의 SATAII 인터페이스는 최고 3.0 Gb/s의 데이터 전송 속도를 지원합니다.

시리얼 ATA(SATA)

데이터 케이블

(선택 사양)



SATA 데이터 케이블의 임의적인 측을 마더보드의 SATA / SATAII 하드 디스크 혹은 SATAII 커넥터에 연결합니다.

시리얼 ATA(SATA)

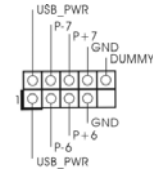
전원 케이블

(선택 사양)

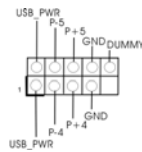


SATA 전원 케이블의 검은색 끝부분을 드라이브의 전원 커넥터에 연결하십시오. 그 다음에 SATA 전원 케이블의 흰색 끝을 전원 공급장치의 전원 커넥터에 연결합니다.

USB 2.0 헤더
(9핀 USB6_7)
(2페이지, 27번 항목 참조)

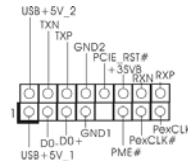


(9핀 USB4_5)
(2페이지, 28번 항목 참조)



본 머더보드에는 I/O 패널에 있는 4개의 기본 USB 2.0 포트 외에도 USB 2.0 헤더가 2개 있습니다. 각각의 USB 2.0 헤더는 2개의 USB 2.0 포트를 지원할 수 있습니다.

WiFi/E 헤더
(15핀 WIFI/E)
(2페이지, 20번 항목 참조)



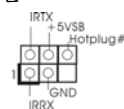
이 헤더는 ASRock WiFi-802.11g/WiFi-802.11n 모듈, 사용법이 용이한 WLAN (wireless local area network) 어댑터로 WiFi+AP 기능을 지원합니다. 이 헤더를 사용하여 무선 환경을 만들면 편리한 무선 네트워크 연결을 즐길 수 있습니다.



이 메인보드에서 WiFi+AP 기능을 사용하지 않을 경우, 이 헤더를 1개의 USB 2.0 포트를 지원하는 4핀 USB 2.0 헤더로 사용할 수 있습니다. 4핀 USB 장치 케이블을 이 헤더에 연결하려면, 이 그림을 참조하여 올바르게 설치하십시오.

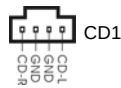


DeskExpress 핫 플러그 탐지 헤더를
연결해야 합니다
(5핀 IR1)
(2페이지, 19번 항목 참조)



본 헤더는 ASRock DeskExpress의 핫 플러그 탐지 기능을 지원합니다.

내부 오디오 콘넥터
(4핀 CD1)
(CD1: 2페이지, 23번 항목 참조)



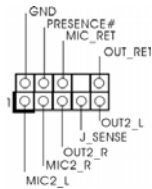
이 콘넥터는 CD-ROM, DVD-ROM, TV 튜너, 또는 MPEG 카드의 사운드 소스로부터 스테레오 입력을 받기 위한 것입니다.

하
단
화

전면부 오디오 콘넥터

(9핀HD_AUDIO1)

(2페이지, 21번 항목 참조)



이 콘넥터는 오디오 장치를 편리하게 조절하고 연결할 수 있는 전면 오디오 인터페이스입니다.

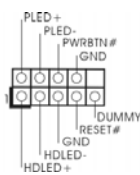


1. High Definition Audio(고음질 오디오)는 잭 센스 기능을 지원하나, 제대로 작동하려면 새시의 패널 와이어가 HAD를 지원해야 합니다. 이 설명서 및 새시 설명서의 지침을 따라 시스템을 설치하십시오.
2. AC' 97 오디오 패널을 사용하는 경우, 이를 아래와 같이 프런트 패널의 오디오 헤더에 설치하십시오.
 - A. Mic_IN (MIC)을 MIC2_L에 연결합니다.
 - B. Audio_R (RIN)을 OUT2_R에 연결하고, Audio_L (LIN)을 OUT2_L에 연결합니다.
 - C. Ground (GND)을 Ground (GND)에 연결합니다.
 - D. MIC_RET 및 OUT_RET는 HD 오디오 패널 전용입니다. 이들을 AC' 97 오디오 패널에 연결하지 않아도 됩니다.
 - E. BIOS 설정 유틸리티를 선택합니다. 고급 설정을 선택한 다음, 칩셋 구성을 선택합니다. 프론트 패널 제어를 [작동]에서 [사용]으로 설정합니다.
 - F. Windows® 시스템을 시작합니다. 우측 하단의 작업 표시줄에 있는 아이콘을 클릭하여 Realtek HD Audio Manager를 시작합니다.
Windows® XP / XP 64-bit 작업시스템에 대하여:
“오디오 입출력”을 클릭하고, “커넥터 설정”  을 선택하고, “프론트 패널 잭 감지 사용 안함”을 선택한 다음, “확인”을 클릭하여 변경 내용을 저장합니다.
Windows® Vista™ / Vista™ 64-bit 작업시스템에 대하여:
우상부의 “폴더”  아이콘을 클릭하여 “프론트 전면 삽입구 검출 기능을 잠금”을 선택한 후 “확인”을 클릭하여 변경을 저장합니다.

시스템 콘넥터

(9핀 PANEL1)

(2페이지, 11번 항목 참조)

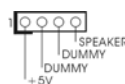


이 콘넥터는 시스템 전면 패널 기능을 지원하기 위한 것입니다.

새시 스피커 헤더

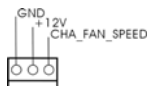
(4핀 SPEAKER 1)

(2페이지, 17번 항목 참조)



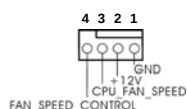
새시 스피커를 이 헤더에 연결하십시오.

새시 팬 커넥터
(3핀 CHA_FAN1)
(2페이지, 16번 항목 참조)



새시 팬 케이블을 이 커넥터에 연결하고 흑색 선을 접지 핀에 맞추십시오.

CPU 팬 커넥터
(4핀 CPU_FAN1)
(2페이지, 5번 항목 참조)



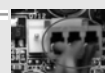
CPU 팬 케이블을 이 커넥터에 연결하고 흑색 선을 접지 핀에 맞추십시오.



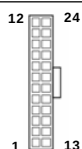
본 머더보드가 4핀 CPU 팬(저소음 팬) 지원을 제공하기는 하지만 팬 속도 제어 기능 없이도 3핀 CPU 팬을 성공적으로 작동할 수 있습니다. 본 머더보드의 CPU 팬 커넥터에 3핀 CPU 팬을 연결하려면 1-3번 핀에 연결하십시오.

1-3 번 핀에 연결됨

3핀 팬 설치



ATX 전원 헤더
(24핀 ATXPWR1)
(2페이지, 2번 항목 참조)



ATX 전원 공급기를 이 헤더에 연결하십시오.



이 머더보드는 24핀 ATX 전원 커넥터를 제공하지만, 종래의 20핀 ATX 전원공급장치를 사용해도 작동이 가능합니다. 20핀 ATX 전원 공급장치를 사용하려면, Pin 1과 Pin 13으로 전원공급장치를 연결하십시오.

20핀 ATX 전원 공급장치 설치

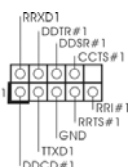


ATX 12V 파워 콘넥터
(4핀 ATX12V1)
(2페이지, 3번 항목 참조)



ATX 12V 플러그가 달린 전원공급장치를 이 커넥터에 연결해야 충분한 전력을 공급할 수 있습니다. 그렇지 않을 경우 전원을 켤 수 없습니다.

시리얼포트 컨넥터
(9핀 COM1)
(2페이지, 9번 항목 참조)



이 콘넥터는 시리얼 포트 모듈을 지원합니다.

중
하
하

2. 시스템 바이오스 정보

메인보드의 플래쉬 메모리에는 바이오스 셋업 유틸리티가 저장되어 있습니다. 컴퓨터를 사용하실 때, “자가진단 테스트”(POST)가 실시되는 동안 <F2>키를 눌러 바이오스 셋업으로 들어가세요; 만일 그렇게 하지 않으면 POST는 테스트 루틴을 계속하여 실행할 것입니다. 만일 POST 이후 바이오스 셋업을 하기 원하신다면, <Ctrl>+<Alt>+<Delete>키를 누르거나, 또는 시스템 본체의 리셋 버튼을 눌러 시스템을 재 시작하여 주시기 바랍니다. 바이오스 셋업 프로그램은 사용하기 편하도록 디자인되어 있습니다. 각 항목은 다양한 서브 메뉴 표가 올라오며 미리 정해진 값 중에서 선택할 수 있도록 되어 있습니다. 바이오스 셋업에 대한 보다 상세한 정보를 원하신다면 보조 CD 안의 포함된 사용자 매뉴얼(PDF 파일)을 따라 주시기 바랍니다.

3. 소프트웨어 지원 CD 정보

이 메인보드는 여러 가지 마이크로소프트 윈도우 운영 체계를 지원합니다: XP/XP 64 비트/Vista™/Vista™ 64 비트. 메인보드에 필요한 드라이버와 사용자 편의를 위해 제공되는 보조 CD는 메인보드의 기능을 향상시켜 줄 것입니다. 보조 CD를 사용하여 시작하시려면, CD-ROM 드라이브에 CD를 넣어주시기 바랍니다. 만일 고객님의 컴퓨터가 “AUTORUN”이 가능하다면 자동으로 메인 메뉴를 모니터에 디스플레이 시켜 줄 것입니다. 만일 자동으로 메인 메뉴가 나타나지 않는다면, 보조 CD의 디스플레이 메뉴 안에 있는 BIN 폴더 ASSETUP.EXE 파일을 더블 클릭하여 주시기 바랍니다.

(D: \BIN\ASSETUP.EXE, D:는 CD-ROM 드라이브)



1. 主板简介

谢谢你采用了华擎 *4CoreN73PV-HD720p* 主板, 本主板由华擎严格制造, 质量可靠, 稳定性好, 能够获得卓越的性能。本安装指南介绍了安装主板的步骤。更加详细的主板信息可参看驱动光盘的用户手册。



由于主板规格和 BIOS 软件将不断升级, 本手册之相关内容变更恕不另行通知。请留意华擎网站上公布的升级版本。你也可以在华擎网站找到最新的显卡和 CPU 支持表。

华擎网址: <http://www.asrock.com>

如果您需要与此主板有关的技术支持, 请参观我们的网站以了解您使用机种的规格信息。

www.asrock.com/support/index.asp

1.1 包装盒内物品

华擎 *4CoreN73PV-HD720p* 主板

(Micro ATX 规格: 9.6 英寸 X 8.0 英寸, 24.4 厘米 X 20.3 厘米)

华擎 *4CoreN73PV-HD720p* 快速安装指南

华擎 *4CoreN73PV-HD720p* 支持光盘

一条 80-conductor Ultra ATA 66/100/133 IDE 排线

一条 3.5 英寸软驱排线

一条 Serial ATA (SATA) 数据线 (选配)

一条 Serial ATA (SATA) 硬盘电源线 (选配)

一块 ASRock 6CH_DVI I/O 挡板



1.2 主板规格

架构	- Micro ATX 规格: - 9.6 英寸 X 8.0 英寸, 24.4 厘米 X 20.3 厘米
处理器	- LGA 775 支持 Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron®, 支持 Quad Core Yorkfield 和 Dual Core Wolfdale 处理器 - FSB1333/1066/800/533MHz - 支持 Hyper-Threading 超线程技术 (详见 警告1) - 支持异步超频技术 (详见 警告2) - 支持 EM64T CPU
芯片组	- NVIDIA® GeForce 7100 / nForce 630i
系统内存	- 配备 2 个 DDR2 DIMM 插槽 - 支持 DDR2 800/667/533 non-ECC、un-buffered 内存 - 最高支持 4GB 容量 (见警告 3)
Hybrid Booster (安心超频技术)	- 支持 CPU 无级频率调控 (见警告 4) - ASRock U-COP (见警告 5) - Boot Failure Guard (B.F.G., 启动失败恢复技术)
扩展插槽	- 1 x PCI Express x16 插槽 - 1 x PCI Express x1 插槽 - 2 x PCI 插槽
板载显卡	- 集成 NVIDIA® GeForce 7100 显示核心 - DX9.0 显卡, Pixel Shader 3.0 技术 - 最大共享内存 256MB (见警告 6) - 双 VGA 输出: 通过独立显示控制器提供 DVI-D 和 D-Sub 接口 - 通过 DVI-D 接口支持 HDCP 功能 - 可播放 720 线蓝光光盘 (BD) / HD-DVD 光盘 (见警告 7)
音效	- 5.1 声道 Windows® Vista™ Premium 级别高保真音频 (ALC662 音频编解码器)
板载 LAN 功能	- 4CoreN73PV-HD720p R1.0 - Realtek Giga PHY RTL8211B, 10/100/1000 Mb/s - 4CoreN73PV-HD720p R3.0 - Realtek PHY RTL8201CL, 高速 10/100 局域网 - 支持网路唤醒 (Wake-On-LAN)
Rear Panel I/O (后面板输入/输出接口)	ASRock 6CH_DVI I/O 界面 - 1 个 PS/2 鼠标接口 - 1 个 PS/2 键盘接口 - 1 个 VGA/D-Sub 接口 - 1 个 VGA/DVI-D 接口

	- 1 个并行接口 (支持 ECP/EPP) - 4 个可直接使用的 USB 2.0 接口 - 1 个 RJ-45 局域网接口 - 高保真音频插孔: 音频输入 / 前置喇叭 / 麦克风
连接头	- 4 x SATAII 3.0Gb/s 连接头, 支持 RAID (RAID 0, RAID 1, RAID 0+1, JBOD 和 RAID 5), NCQ, AHCI 和 “热插拔” 功能 (详见 警告 8) - 1 x ATA133 IDE 插座 (最高支持 2 个 IDE 驱动器) - 1 x 软驱接口 - 1 x DeskExpress 热插拔探测接头 - 1 X 串行接口连接器 - CPU/ 机箱风扇接头 - 24 针 ATX 电源接头 - 4 针 12V 电源接头 - 内置音频接头 - 前置音频面板接头 - 2 x USB 2.0 接口 (可支持 4 个额外的 USB 2.0 接口) (详见 警告 9) - 1 x WiFi/E 接口 (详见 警告 10)
BIOS	- 4Mb AMI BIOS - 采用 AMI BIOS - 支持即插即用 (Plug and Play, PnP) - ACPI 1.1 电源管理 - 支持唤醒功能 - 支持 jumperfree 免跳线模式
支持光盘	- 驱动程序, 工具软件, 杀毒软件 (测试版本)
硬件监控器	- CPU 温度侦测 - 主板温度侦测 - CPU 风扇转速计 - 系统风扇转速计 - CPU 静音风扇 - 电压范围: +12V, +5V, +3.3V, 核心电压
操作系统	- Microsoft® Windows® XP/XP 64 位元/Vista™/Vista™ 64 位元适用于此主板
认证	- FCC, CE, WHQL

* 请参阅华擎网站了解详细的产品信息: <http://www.asrock.com>

警告

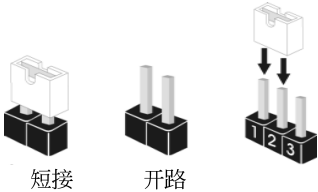
请了解超频具有不可避免的风险, 这些超频包括调节 BIOS 设置、运用异步超频技术或使用第三方超频工具。超频可能会影响您的系统稳定性, 甚至会导致系统组件和设备的损坏。这种风险和代价须由您自己承担, 我们对超频可能导致的损坏不承担责任。

警告!

- 1、关于“Hyper-Threading Technology”(超线程技术)的设置,请参考CD光盘中的“User Manual”(用户手册,英文版)第40页,或是“BIOS设置程序”第4页(中文版)。
- 2、这款主板支持异步超频技术。请阅读第30页的“Untied Overclocking Technology”(自由超频技术)了解详情。
- 3、由于操作系统的限制,在Windows® XP和Windows® Vista™下,供系统使用的实际内存容量可能小于4GB。对于Windows® XP 64位元和Windows® Vista™ 64位元搭配64位元CPU来说,不会存在这样的限制。
- 4、尽管本主板提供无级频率调控,但不推荐用户超频使用。不同于标准CPU总线频率的非标准频率可能会使系统不稳定,甚至会损害CPU和主板。
- 5、当检测到CPU过热问题时,系统会自动关机。在您重新启动系统之前,请检查主板上的CPU风扇是否正常运转并拔出电源线,然后再将它插回。为了提高散热性,在安装PC系统时请在CPU和散热器之间涂一层导热胶。
- 6、最大共享内存大小由芯片组厂商定义并且可以更改。请查阅NVIDIA®网站了解最新资讯。
- 7、在这款主板上播放720线蓝光光盘(BD)/HD-DVD光盘需要适当的硬件配置。请查阅第9页和第10页了解最低硬件要求和通过我们实验室测试的720线蓝光光盘(BD)/HD-DVD光盘电影。
- 8、在将SATAII硬盘连接到SATAII接口之前,请阅读第24页的“SATAII Hard Disk Setup Guide”(SATAII硬盘安装指南)调整您的SATAII硬盘驱动器为SATAII模式。您也可以直接将SATA硬盘连接到SATAII接口。
- 9、USB2.0电源管理在Windows® Vista™ 64位元/Vista™/XP 64位元/XP SP1或SP2系统下可正常工作。
- 10、WiFi/E接头搭配华擎WiFi-820.11g或820.11n模块支持WiFi+AP功能,这个模块是易于使用的无线局域网(WLAN)适配器,方便您组建无线网络环境,享受无线网络的便利。请访问我们的网站了解华擎WiFi-820.11g或820.11n模块的相关更新。
华擎网站 <http://www.asrock.com>

1.3 跳线设置

插图所示的就是设置跳线的方法。当跳线帽放置在针脚上时，这个跳线就是“短接”。如果针脚上没有放置跳线帽，这个跳线就是“开路”。插图显示了一个 3 针脚的跳线，当跳线帽放置在针脚 1 和针脚 2 之间时就是“短接”。



接 脚	设 定	说 明
PS2_USB_PWR1 (见第 2 页第 1 项)	1 2 +5V 2 3 +5VSB	短接 pin2 和 pin3，就可以设置 +5VSB(待机)，使 PS/2 或 USB 能唤醒系统。
注意：选择 +5VSB，电源必须能提供 +2 AMP 或更高的待机电流。		

清除 CMOS (CLRCMOS1, 3 针脚跳线) (见第 2 页第 10 项)	1 2 默认设置 2 3 清除 CMOS
---	--

注意：CLRCMOS1 允许您清除 CMOS 里的资料。在 CMOS 里的资料包括系统设置资讯，例如系统密码，日期，时间及系统设置参数。为了清除并重置系统参数到默认设置，请关闭电脑并拔掉电源线，然后用跳线帽短接 CLRCMOS1 上的 pin2 和 pin3 五秒钟。如果您需要再完成 BIOS 刷新时清除 CMOS，您必须首先启动系统，然后在您进行 CMOS 清除操作之前关闭系统。

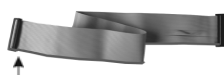
1.4 板载接头和接口



板载接头和接口不是跳线。切勿将跳线帽放置在这些接头和接口上。
将跳线帽放置在接头和接口上将会导致主板的永久性损坏！

软驱接头

(33 针 FLOPPY1)
(见第 2 页第 18 项)



将标示红色斑纹的一边插入第 1 针脚 (Pin1)

注意：请确保数据线标红色斑纹的一边插入连接器第 1 针脚 (Pin1) 的位置。

主 IDE 接头 (蓝色)

(39 针 IDE1, 见第 2 页第 8 项)



蓝色端接到主板上 黑色端接到硬盘驱动器上

80 针的 ATA 66/100/133 排线

注意：请查阅您的 IDE 驱动器供应商提供的说明书了解详细资料。

Serial ATAII 接口

(SATAII_1 (PORT1.0):

见第 2 页第 15 项)

(SATAII_2 (PORT1.1):

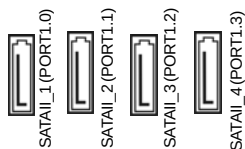
见第 2 页第 14 项)

(SATAII_3 (PORT1.2):

见第 2 页第 13 项)

(SATAII_4 (PORT1.3):

见第 2 页第 12 项)



这里有四组 Serial ATAII (SATAII) 接口支持 Serial (SATA) 数据线作为内部储存设置。目前 SATAII 界面理论上可提供高达 3.0Gb/s 的数据传输速率。

Serial ATA (SATA)

数据线

(选配)



SATA 数据线的任意一端均可连接 SATA/SATAII 硬盘或者主板上的 SATAII 接口。

Serial ATA (SATA)

电源线

(选配)



请将 SATA 电源线黑色的一端连接到 SATA 驱动器的电源接口。然后将 SATA 电源线白色的一端连接到电源适配器的电源接口。

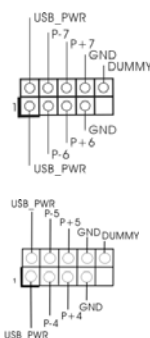
USB 2.0 扩展接头

(9 针 USB6_7)

(见第 2 页第 27 项)

(9 针 USB4_5)

(见第 2 页第 28 项)

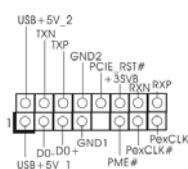


除了位于 I/O 面板的四个默认 USB 2.0 接口之外，这款主板有两组 USB 2.0 接针。这组 USB 2.0 接针可以支持两个 USB 2.0 接口。

WiFi/E 接头

(15 针 WIFI/E)

(见第 2 页第 20 项)



这个接头搭配华擎 WiFi-820.11g 或 820.11n 模块支持 WiFi+AP 功能，这个模块是易于使用的无线局域网 (WLAN) 适配器，方便您组建无线网络环境，享受无线网络的便利。



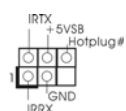
如果您不打算在这款主板上使用 WiFi+AP 功能，那么这组接针可以作为 4-Pin USB 2.0 接针使用。要将 4-Pin USB 连线连接到这组接针，请参考这张图片了解正确的安装方法。



DeskExpress 热插拔探测接头

(5 针 IR1)

(见第 2 页第 19 项)

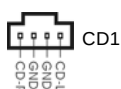


这个接头支持华擎 DeskExpress 的热插拔探测功能。

内置的音频接头

(4 针 CD1)

(CD1 见第 2 页第 23 项)

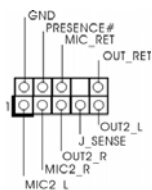


可以通过 CD-ROM，DVD-ROM，TV 调谐器或 MPEG 卡接收音频输入。

前置音频面板接头

(9 针 HD_AUDIO1)

(见第 2 页第 21 项)



可以方便连接音频设备。



1. 高保真音频(High Definition Audio, HDA)支持智能音频接口检测功能(Jack Sensing),但是机箱面板的连线必须支持 HDA 才能正常使用。请按我们提供的手册和机箱手册上的使用说明安装您的系统。
2. 如果您使用 AC' 97 音频面板,请按照下面的步骤将它安装到前面板音频接口:
 - A. 将 Mic_IN(MIC) 连接到 MIC2_L。
 - B. 将 Audio_R(RIN) 连接到 OUT2_R,将 Audio_L(LIN) 连接到 OUT2_L。
 - C. 将 Ground(GND) 连接到 Ground(GND)。
 - D. MIC_RET 和 OUT_RET 仅用于 HD 音频面板。您不必将它们连接到 AC' 97 音频面板。
 - E. 进入 BIOS 设置程序。进入 Advanced Settings(高级设置)并选择 Chipset Configuration(芯片组配置)。将 Front Panel Control(前面板控制)选项由 Auto(自动) 设置为 Enabled(启用)。
 - F. 进入 Windows 系统。点击右下角任务栏上的图标进入 Realtek HD Audio Manager(Realtek 高保真音频管理器)。

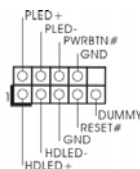
支持 Windows® XP/XP 64 位元操作系统:

点击"Audio I/O"(音频输入/输出接口),点选"Connector Settings"(连接设置),选择"Disable front panel jack detection"(关闭前面板插孔检测)并点击"OK"保存更改。

支持 Windows® Vista™/Vista™ 64 位元操作系统:

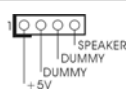
点击右上角的"Folder"(文件)图标,选择"Disable front panel jack detection"(关闭前面板插孔检测)并点击"OK"保存更改。

系统面板接头
(9 针 PANEL1)
(见第 2 页第 11 项)



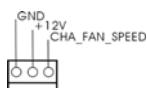
这个接头提供数个系统前面板功能。

机箱喇叭接头
(4 针 SPEAKER1)
(见第 2 页第 17 项)



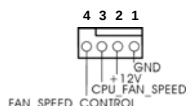
请将机箱喇叭连接到这个接头。

机箱风扇接头
(3 针 CHA_FAN1)
(见第 2 页第 16 项)



请将机箱风扇连接线接到这个接头,并让黑线与接地的针脚相接。

CPU 风扇接头
(4 针 CPU_FAN1)
(见第 2 页第 5 项)



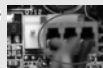
请将 CPU 风扇连接线接到这个接头,并让黑线与接地的针脚相接。



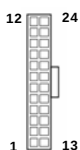
虽然此主板支持 4-Pin CPU 风扇 (Quiet Fan, 静音风扇), 但是没有调速功能的 3-Pin CPU 风扇仍然可以在此主板上正常运行。如果您打算将 3-Pin CPU 风扇连接到此主板的 CPU 风扇接口, 请将它连接到 Pin 1-3。

Pin 1-3 连接

3-Pin 风扇的安装



ATX 电源接头
(24 针 ATXPWR1)
(见第 2 页第 2 项)



请将 ATX 电源供应器连接到这个接头。



虽然此主板提供 24-pin ATX 电源接口, 但是您仍然可以使用传统的 20-pin ATX 电源。为了使用 20-pin ATX 电源, 请顺著 Pin 1 和 Pin 3 插上电源接头。

20-Pin ATX 电源安装说明

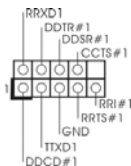


ATX 12V 接头
(4 针 ATX12V1)
(见第 2 页第 3 项)



请将一个 ATX 12V 电源供应器接到这个接头。

串行接口连接器
(9 针 COM1)
(见第 2 页第 9 项)



这个 COM1 端口支持一个串行接口的外设。

2. BIOS 信息

主板上的Flash Memory 存储了BIOS 设置程序。请再启动电脑进行开机自检(POST)时按下<F2>键进入BIOS 设置程序；此外，你也可以让开机自检(POST)进行常规检验。如果你需要在开机自检(POST)之后进入BIOS 设置程序，请按下<Ctrl>+<Alt>+<Delete>键重新启动电脑，或者按下系统面板上的重启按钮。有关BIOS 设置的详细信息，请查阅随机支持光盘里的用户手册(PDF 文件)。

3. 支持光盘信息

本主板支持各种微软视窗操作系统：Microsoft® Windows® XP/XP 64 位元/Vista™/Vista™ 64 位元。主板随机支持光盘包含各种有助于提高主板效能的必要驱动和实用程序。请将随机支持光盘放入光驱里，如果电脑的“自动运行”功能已启用，屏幕将会自动显示主菜单。如果主菜单不能自动显示，请查找支持光盘内BIN 文件夹下的“ASSETUP.EXE”，并双击它，即可调出主菜单。

电子信息产品污染控制标示

依据中国发布的「电子信息产品污染控制管理办法」及SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人体、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为10年。



图一

有毒有害物质或元素的名称及含量说明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

部件名称	有害物质或元素					
	铅(Pb)	镉(Cd)	汞(Hg)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
印刷电路板及其电子组件	X	O	O	O	O	O
外部信号连接头及线材	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。
X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求，然该部件仍符合欧盟指令 2002/95/EC 的规范。
备注： 此产品所标示之环保使用年限，系指在一般正常使用状况下。

NOTE.

If you install the VGA driver (version 163.91) on your system, but the window is not in full screen mode, please follow below steps to adjust the window.

1. Right-click the desktop and select **NVIDIA Control Panel**.
2. Click **Display** and click **Change Flat Panel Scaling**.
3. In the option **When using a resolution lower than my display's native resolution**, please select **Use my display's built-in scaling**.

