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CHAPTER 1: INTRODUCTION

1.1 BEFORE YOU START

Thank you for choosing our product. Before you start installing the motherboard, please make sure you follow the instructions below:

- Prepare a dry and stable working environment with sufficient lighting.
- Always disconnect the computer from power outlet before operation.
- Before you take the motherboard out from anti-static bag, ground yourself properly by touching any safely grounded appliance, or use grounded wrist strap to remove the static charge.
- Avoid touching the components on motherboard or the rear side of the board unless necessary. Hold the board on the edge, do not try to bend or flex the board.
- Do not leave any unfastened small parts inside the case after installation. Loose parts will cause short circuits which may damage the equipment.
- Keep the computer from dangerous area, such as heat source, humid air and water.

1.2 PACKAGE CHECKLIST

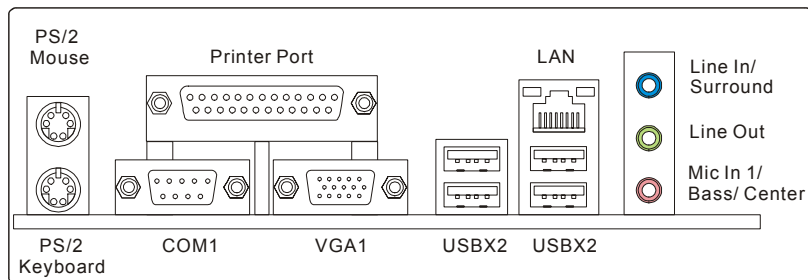
- FDD Cable X 1
- HDD Cable X 1
- User's Manual X 1
- Serial ATA Cable X 1
- Fully Setup Driver CD X 1
- Rear I/O Panel for ATX Case X 1
- USB 2.0 Cable X1 (optional)
- S/PDIF Cable X 1 (optional)
- Serial ATA Power Switch Cable X 1 (optional)

1.3 MOTHERBOARD FEATURES

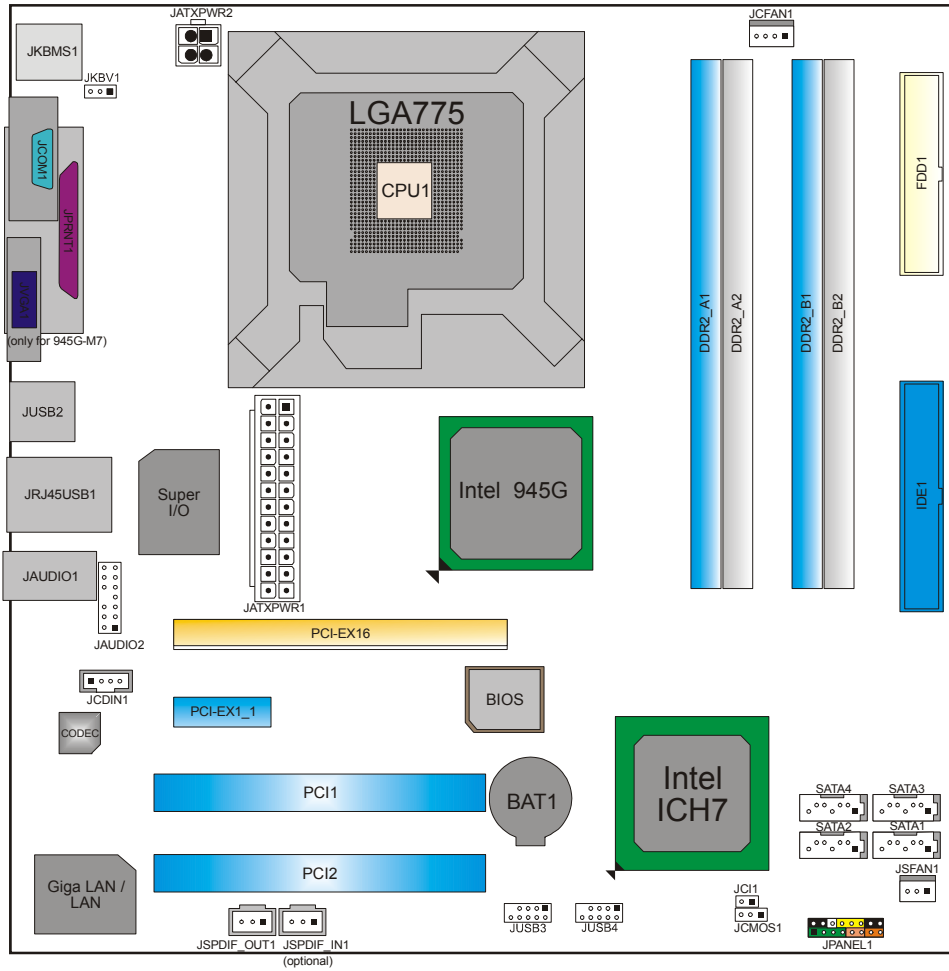
| SPEC | | |
|--------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| CPU | LGA 775 Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D processor up to 3.8 GHz | Supports Hyper Treading/ Execute Disable Bit/ Enhanced Intel SpeedStep®/ Intel Extended Memory 64 technology |
| FSB | 533 / 800 /1066 MHz | |
| Chipset | Intel 945G | Intel ICH7 |
| Super I/O | ITE IT8712F Provides the most commonly used legacy Super I/O functionality. Low Pin Count Interface | Environment Control initiatives, H/W Monitor Fan Speed Controller ITE's "Smart Guardian" function |
| Main Memory | DIMM Slots x 4 Each DIMM supports 256/512MB & 1GB DDR2 Max Memory Capacity 4GB | Dual Channel Mode DDR2 memory module Supports DDR2 533 / 667 Registered DIMM and Non-ECC DIMM is not supported |
| IDE | Integrated IDE Controller | Ultra DMA 33~100 Bus Master Mode supports PIO Mode 0~4, |
| SATA 2 | Integrated Serial ATA Controller | Data transfer rates up to 3.0 Gb/s. SATA Version 2.0 specification compliant. |
| LAN | Realtek RTL 8110SC / 8100C (optional) | 10 / 100 Mb/s / 1Gb/s auto negotiation (Gigabit bandwidth is for RTL 8110SC only) Half / Full duplex capability |
| Sound Codec | ALC655 | 6 channels audio out AC'97 Version 2.3 |
| Slots | PCI Express x 16 slot | x1 Supports PCI express x16 expansion cards |
| | PCI Express x 1 slot | x1 Supports PCI express x1 expansion cards |
| | PCI slot | x2 Supports PCI expansion cards |
| On Board Connector | Floppy connector | x1 Each connector supports 2 Floppy drives |
| | IDE Connector | x1 Each connector supports 2 IDE device |
| | SATA Connector | x4 Each connector supports 1 SATA devices |
| | Front Panel Connector | x1 Supports front panel facilities |
| | Front Audio Connector | x1 Supports front panel audio function |

| SPEC | | | |
|----------------|--------------------------------|----|-----------------------------------------------------------------------------------|
| | CD-in Connector | x1 | Supports CD audio-in function |
| | S/PDIF out connector | x1 | Supports digital audio out function |
| | S/PDIF in connector (optional) | x1 | Supports digital audio in function |
| | CPU Fan header | x1 | CPU Fan power supply (with Smart Fan function) |
| | System Fan header | x1 | System Fan Power supply |
| | Chassis open header (optional) | x1 | For chassis intruder detection function |
| | Clear CMOS header | x1 | Restore CMOS data to factory default |
| | USB connector | x2 | Each connector supports 2 front panel USB ports |
| | Power Connector (24pin) | x1 | Connects to Power supply |
| | Power Connector (4pin) | x1 | Connects to Power supply |
| Back Panel I/O | PS/2 Keyboard | x1 | Connects to PS/2 Keyboard |
| | PS/2 Mouse | x1 | Connects to PS/2 Mouse |
| | Serial Port | x1 | Provide RS-232 Serial connection |
| | Printer Port | x1 | Provide printer port connection |
| | LAN port | x1 | Connects to RJ-45 ethernet cable |
| | USB Port | x4 | Connects to USB devices |
| | Audio Jack | x3 | Provide Audio-In/Out and microphone connection |
| Board Size | 244 (W) x 244 (L) mm | | Micro ATX form Factor |
| OS Support | Windows 2000 / XP | | We Reserves the right to add or remove support for any OS with or without notice. |

1.4 REAR PANEL CONNECTORS



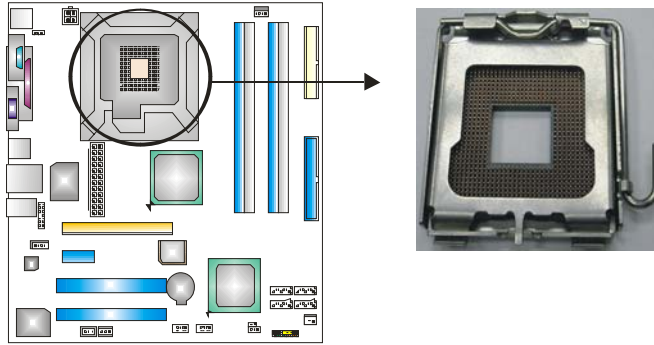
1.5 MOTHERBOARD LAYOUT



Note: ■ represents the 1st pin.

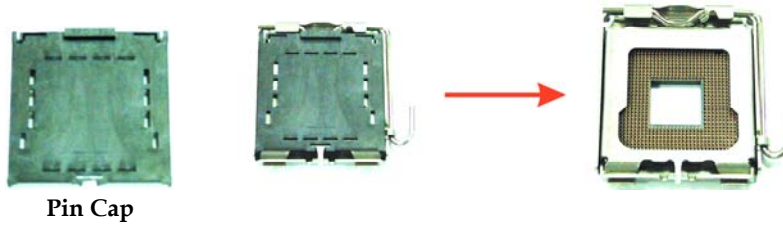
CHAPTER 2: HARDWARE INSTALLATION

2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)

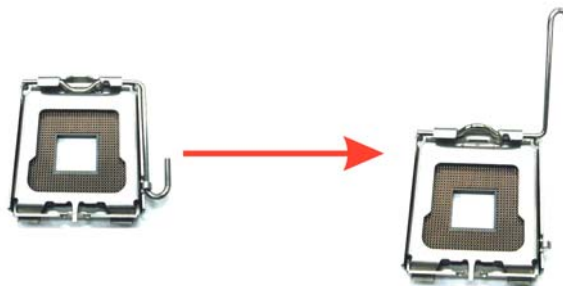


Special Notice:

Remove Pin Cap before installation, and make good preservation for future use. When the CPU is removed, cover the Pin Cap on the empty socket to ensure pin legs won't be damaged.



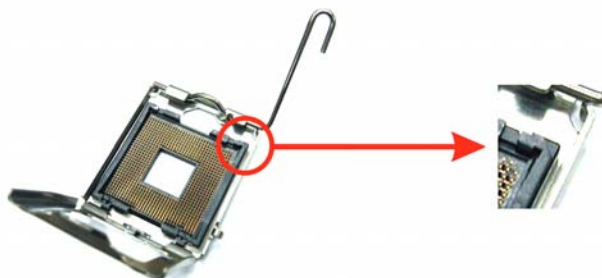
Step 1: Pull the socket locking lever out from the socket and then raise the lever up to a 90-degree angle.



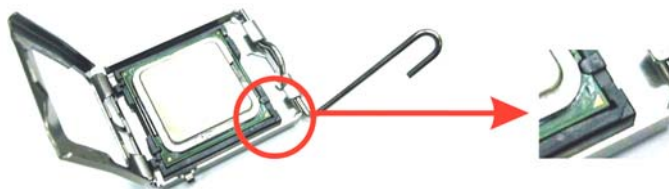
Motherboard Manual

Step 2: Look for the triangular cut edge on socket, and the golden dot on CPU should point forwards this triangular cut edge. The CPU will fit only in the correct orientation.

Step 2-1:



Step 2-2:



Step 3: Hold the CPU down firmly, and then lower the lever to locked position to complete the installation.

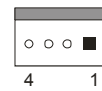
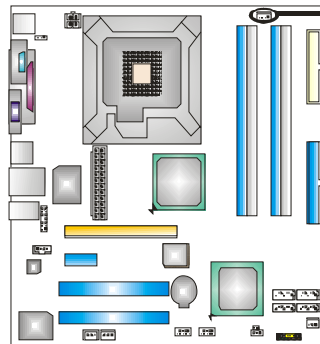


Step 4: Put the CPU Fan and heatsink assembly on the CPU and buckle it on the retention frame. Connect the CPU FAN power cable into the JCFAN1. This completes the installation.

2.2 FAN HEADERS

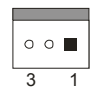
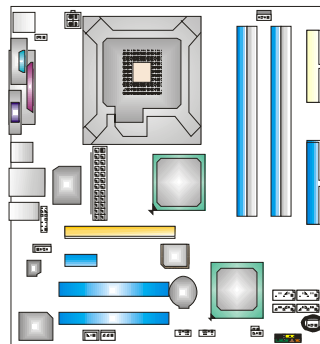
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

JCFAN1: CPU Fan Header



| Pin | Assignment |
|-----|----------------------------|
| 1 | Ground |
| 2 | +12V |
| 3 | FAN RPM rate sense |
| 4 | Smart Fan Control (By Fan) |

JSFAN1: System Fan Header



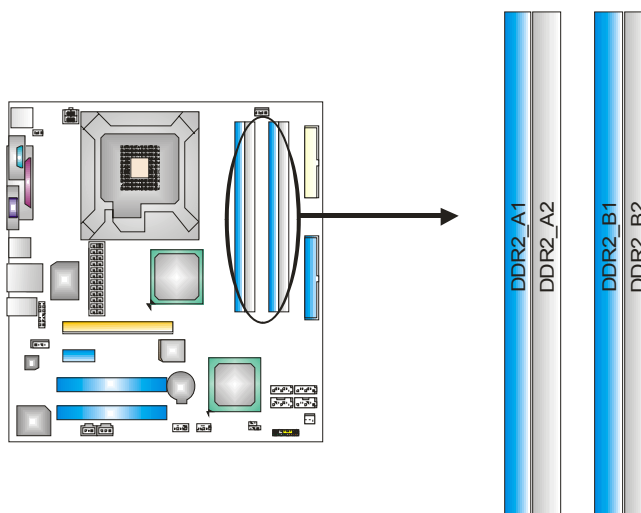
| Pin | Assignment |
|-----|--------------------|
| 1 | Ground |
| 2 | +12V |
| 3 | FAN RPM rate sense |

Note:

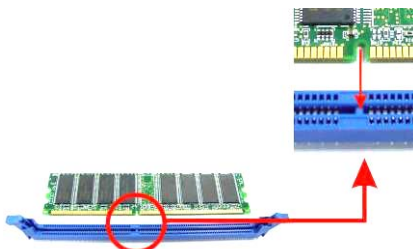
The JCFAN1 and JSFAN1 support 4-pin and 3-pin head connector. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.3 INSTALLING SYSTEM MEMORY

A. Memory Modules



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



2. Insert the DIMM vertically and firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.



B. Memory Capacity

| DIMM Socket Location | DDR Module | Total Memory Size |
|----------------------|--------------------|-------------------|
| DDR2_A1 | 256MB/512MB/1GB *1 | Max is 4GB. |
| DDR2_A2 | 256MB/512MB/1GB *1 | |
| DDR2_B1 | 256MB/512MB/1GB *1 | |
| DDR2_B2 | 256MB/512MB/1GB *1 | |

C. Dual Channel Memory installation

To trigger the Dual Channel function of the motherboard, the memory module must meet the following requirements:

Install memory module of the same density in pairs, shown in the following table.

| Dual Channel Status | DDR2_A1 | DDR2_A2 | DDR2_B1 | DDR2_B2 |
|---------------------|---------|---------|---------|---------|
| Enabled | O | X | O | X |
| Enabled | X | O | X | O |
| Enabled | O | O | O | O |

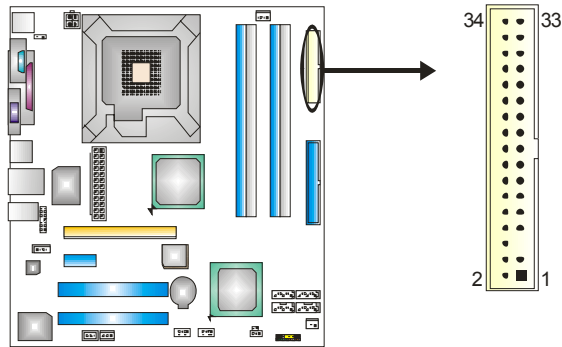
(O means memory installed, X means memory not installed.)

The DRAM bus width of the memory module must be the same (x8 or x16)

2.4 CONNECTORS AND SLOTS

FDD1: Floppy Disk Connector

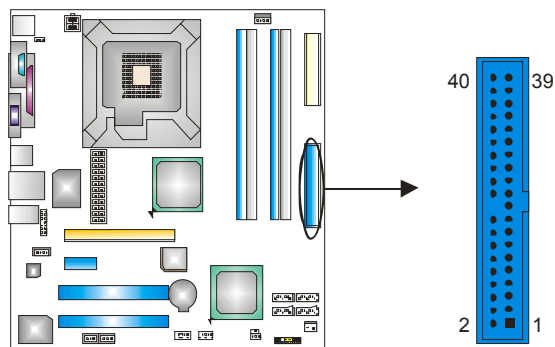
The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.



IDE1: Hard Disk Connectors

The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0~4, Bus Master, and Ultra DMA 33/66/100 functionality.

The IDE connectors can connect a master and a slave drive, so you can connect up to four hard disk drives. The first hard drive should always be connected to IDE1.

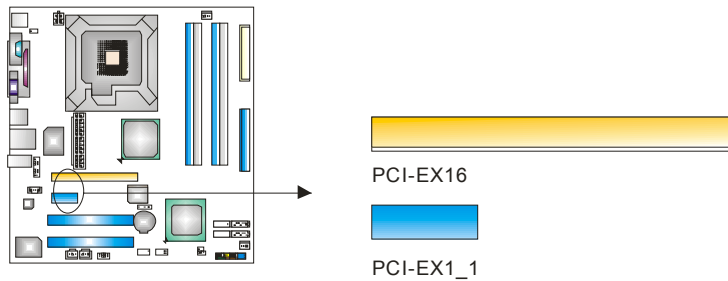


PCI-Ex16: PCI-Express x16 Slot

- PCI-Express 1.0a compliant.
- Maximum theoretical realized bandwidth of 4GB/s simultaneously per direction, for an aggregate of 8GB/s totally.

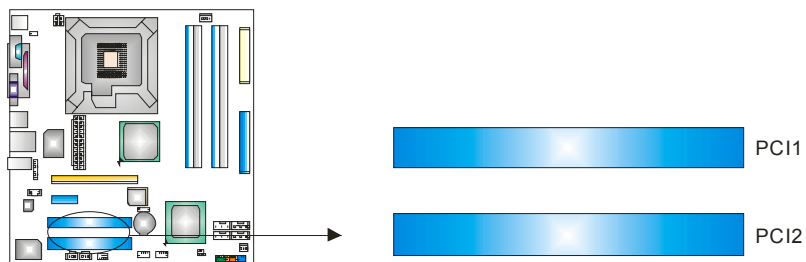
PCI-Ex1_1: PCI-Express x1 slots

- PCI-Express 1.0a compliant.
- Data transfer bandwidth up to 250MB/s per direction; 500MB/s in total.
- PCI-Express supports a raw bit-rate of 2.5Gb/s on the data pins.
- 2X bandwidth over the traditional PCI architecture.



PCI1~PCI2: Peripheral Component Interconnect Slots

This motherboard is equipped with 2 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.



CHAPTER 3: HEADERS & JUMPERS SETUP

3.1 HOW TO SETUP JUMPERS

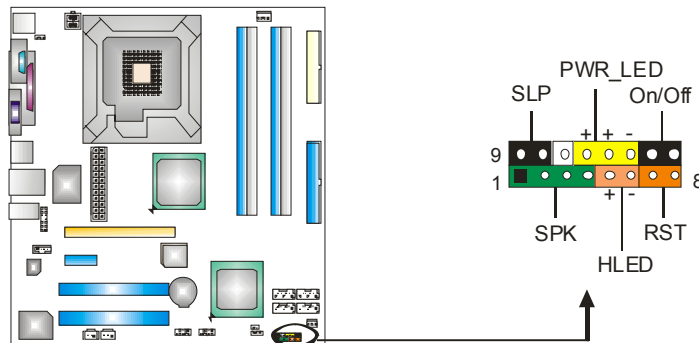
The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.



3.2 DETAIL SETTINGS

JPANEL1: Front Panel Header

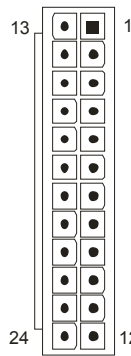
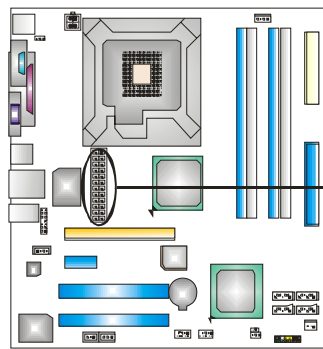
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, Sleep button and speaker Connection. It allows user to connect the PC case’s front panel switch functions.



| Pin | Assignment | Function | Pin | Assignment | Function |
|-----|---------------|-------------------|---------------|---------------|-----------------|
| 1 | +5V | | 9 | Sleep control | Sleep button |
| 2 | N/A | Speaker Connector | 10 | Ground | |
| 3 | N/A | | 11 | N/A | N/A |
| 4 | Speaker | | 12 | Power LED (+) | Power LED |
| 5 | HDD LED (+) | 13 | Power LED (+) | | |
| 6 | HDD LED (-) | 14 | Power LED (-) | | |
| 7 | Ground | Reset button | 15 | Power button | Power-on button |
| 8 | Reset control | | 16 | Ground | |

JATXPWR1: ATX Power Source Connector

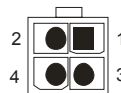
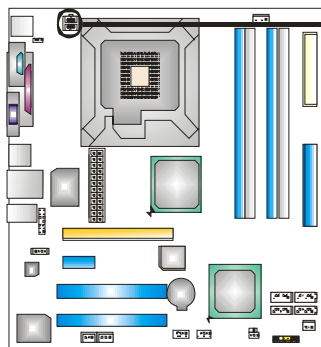
This connector allows user to connect 24-pin power connector on the ATX power supply.



| Pin | Assignment |
|-----|---------------------|
| 1 | +3.3V |
| 2 | +3.3V |
| 3 | Ground |
| 4 | +5V |
| 5 | Ground |
| 6 | +5V |
| 7 | Ground |
| 8 | PW_OK |
| 9 | Standby Voltage +5V |
| 10 | +12V |
| 11 | +12V |
| 12 | 2 x 12 Detect |
| 13 | +3.3V |
| 14 | -12V |
| 15 | Ground |
| 16 | PS_ON |
| 17 | Ground |
| 18 | Ground |
| 19 | Ground |
| 20 | -5V |
| 21 | +5V |
| 22 | +5V |
| 23 | +5V |
| 24 | Ground |

JATXPWR2: ATX Power Source Connector

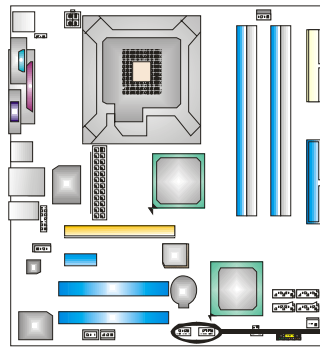
By connecting this connector, it will provide +12V to CPU power circuit.



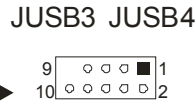
| Pin | Assignment |
|-----|------------|
| 1 | +12V |
| 2 | +12V |
| 3 | Ground |
| 4 | Ground |

JUSB3/JUSB4: Headers for USB 2.0 Ports at Front Panel

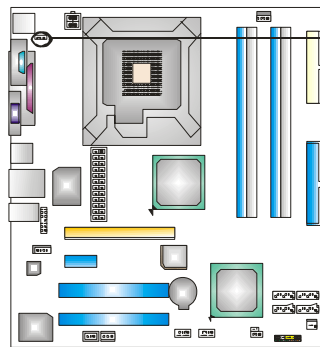
This header allows user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



| Pin | Assignment |
|-----|-------------|
| 1 | +5V (fused) |
| 2 | +5V (fused) |
| 3 | USB- |
| 4 | USB- |
| 5 | USB+ |
| 6 | USB+ |
| 7 | Ground |
| 8 | Ground |
| 9 | Key |
| 10 | NC |



JKBV1: Power Source Header for PS/2 Keyboard and Mouse



Pin 1-2 Close (Default)

+5V for PS/2 keyboard and mouse.



Pin 2-3 close

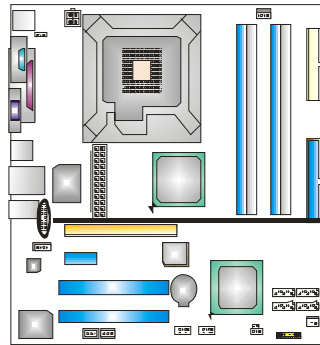
PS/2 keyboard and mouse are powered by +5V standby voltage.

Note:

In order to support this function "Power-on system via keyboard and mouse", "JKBV1" jumper cap should be placed on Pin 2-3.

JAUDIO2: Front Panel Audio Header

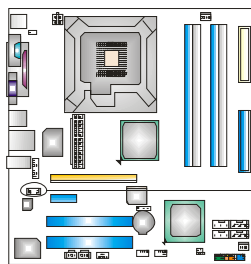
This header allows user to connect the front audio output cable with the PC front panel. It will disable the output on back panel audio connectors.



| Pin | Assignment |
|-----|-----------------------------------------|
| 1 | Mic in/center |
| 2 | Ground |
| 3 | Mic power/Bass |
| 4 | Audio power |
| 5 | Right line out/ Speaker out Right |
| 6 | Right line out/ Speaker out Right |
| 7 | Reserved |
| 8 | Key |
| 9 | Left line out/ Speaker out Left |
| 10 | Left line out/ Speaker out Left |
| 11 | Right line in/ Rear speaker Right |
| 12 | Right line in/ Rear speaker Right |
| 13 | Left line in/ Rear speaker Left |
| 14 | Left line in/ Rear speaker Left |

JCDIN1: CD-ROM Audio-in Connector

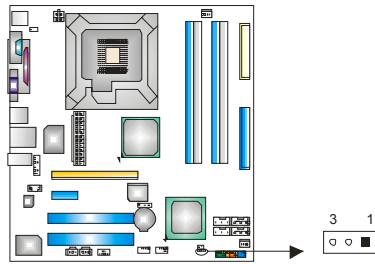
This connector allows user to connect the audio source from the variety devices, like CD-ROM, DVD-ROM, PCI sound card, PCI TV turner card etc..



| Pin | Assignment |
|-----|---------------------|
| 1 | Left Channel Input |
| 2 | Ground |
| 3 | Ground |
| 4 | Right Channel Input |

JCMOS1: Clear CMOS Header

By placing the jumper on pin2-3, it allows user to restore the BIOS safe setting and the CMOS data, please carefully follow the procedures to avoid damaging the motherboard.



Pin 1-2 Close:
Normal Operation (default).



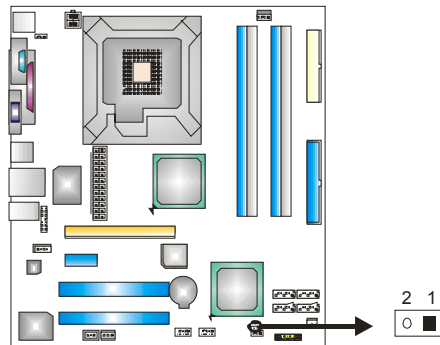
Pin 2-3 Close:
Clear CMOS data.

※ Clear CMOS Procedures:

1. Remove AC power line.
2. Set the jumper to "Pin 2-3 close".
3. Wait for five seconds.
4. Set the jumper to "Pin 1-2 close".
5. Power on the AC.
6. Reset your desired password or clear the CMOS data.

JCI1: Chassis Open Header

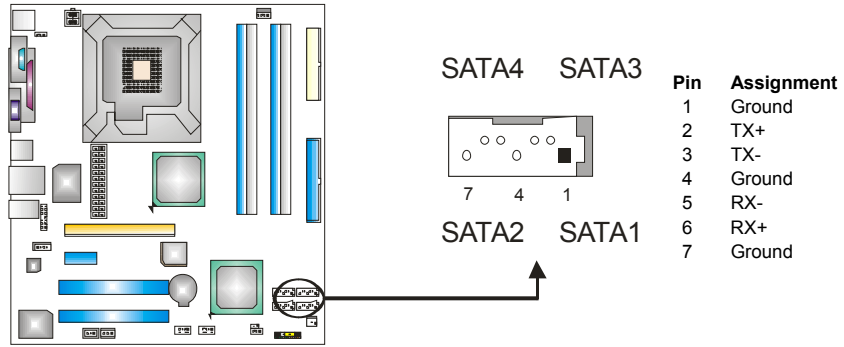
This connector allows system to monitor PC case open status. If the signal has been triggered, it will record to the CMOS and show the message on next boot-up.



| Pin | Assignment |
|-----|------------------|
| 1 | Case open signal |
| 2 | Ground |

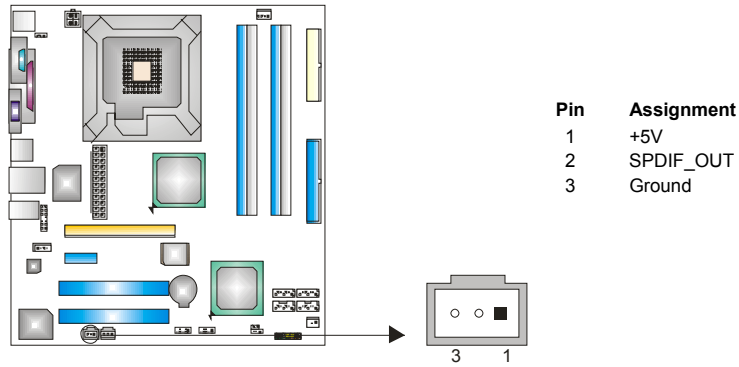
JSATA1~JSATA4: Serial ATA Connectors

The motherboard has a PCI to SATA Controller with 4 channels SATA interface, it satisfies the SATA 2.0 spec and with transfer rate of 3GB/s.



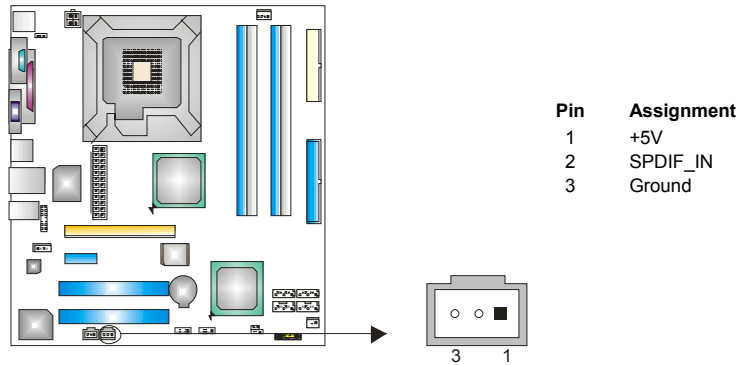
JSPDIF_OUT1: Digital Audio-out Connector

This connector allows user to connect the PCI bracket SPDIF output header.



JSPDIF_IN1 (optional): Digital Audio-in Connector

This connector allows user to connect the PCI bracket SPDIF input header.

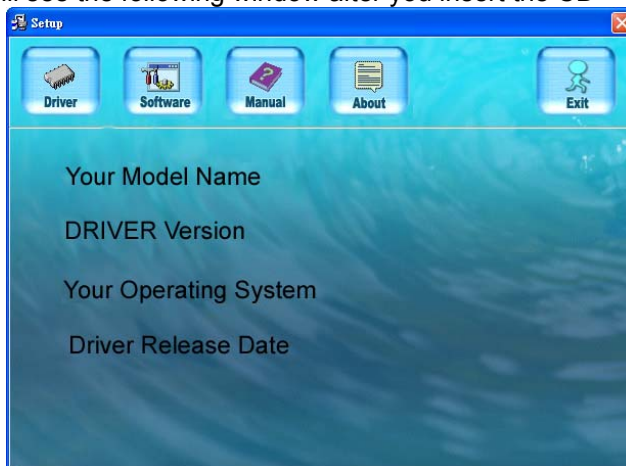


CHAPTER 4:USEFUL HELP

4.1 DRIVER INSTALLATION NOTE

After you installed your operating system, please insert the Fully Setup Driver CD into your optical drive and install the driver for better system performance.

You will see the following window after you insert the CD



The setup guide will auto detect your motherboard and operating system.

Note:

If this window didn't show up after you insert the Driver CD, please use file browser to locate and execute the file **SETUP.EXE** under your optical drive.

A. Driver Installation

To install the driver, please click on the Driver icon. The setup guide will list the compatible driver for your motherboard and operating system. Click on each device driver to launch the installation program.

B. Software Installation

To install the software, please click on the Software icon. The setup guide will list the software available for your system, click on each software title to launch the installation program.

C. Manual

Aside from the paperback manual, we also provide manual in the Driver CD. Click on the Manual icon to browse for available manual.

Note:

You will need Acrobat Reader to open the manual file. Please download the latest version of Acrobat Reader software from <http://www.adobe.com/products/acrobat/readstep2.html>

4.2 AWARD BIOS BEEP CODE

| Beep Sound | Meaning |
|-------------------------------------------|-------------------------------------------------------|
| One long beep followed by two short beeps | Video card not found or video card memory bad |
| High-low siren sound | CPU overheated System will shut down automatically |
| One Short beep when system boot-up | No error found during POST |
| Long beeps every other second | No DRAM detected or install |

4.3 EXTRA INFORMATION

A. BIOS Update

After you fail to update BIOS or BIOS is invaded by virus, the Boot-Block function will help to restore BIOS. If the following message is shown after boot-up the system, it means the BIOS contents are corrupted.

```
BIOS ROM checksum error
Detecting floppy drive A media..
INSERT SYSTEM DISK AND PRESS ENTER
```

In this Case, please follow the procedure below to restore the BIOS:

1. Make a bootable floppy disk.
2. Download the Flash Utility "AWDFLASH.exe" from the website.
3. Confirm motherboard model and download the respectively BIOS from the website.
4. Copy "AWDFLASH.exe" and respectively BIOS into floppy disk.
5. Insert the bootable disk into floppy drive and press Enter.
6. System will boot-up to DOS prompt.
7. Type "Awdflash xxxx.bf/sn/py/r" in DOS prompt.
(xxxx means BIOS name.)
8. System will update BIOS automatically and restart.
9. The BIOS has been recovered and will work properly.

B. CPU Overheated

If the system shutdown automatically after power on system for seconds, that means the CPU protection function has been activated.

When the CPU is over heated, the motherboard will shutdown automatically to avoid a damage of the CPU, and the system may not power on again.

In this case, please double check:

1. The CPU cooler surface is placed evenly with the CPU surface.
2. CPU fan is rotated normally.
3. CPU fan speed is fulfilling with the CPU speed.

After confirmed, please follow steps below to relief the CPU protection function.

1. Remove the power cord from power supply for seconds.
2. Wait for seconds.
3. Plug in the power cord and boot up the system.

Or you can:

1. Clear the CMOS data.
(See "Close CMOS Header: JCMOS1" section)
2. Wait for seconds.
3. Power on the system again.

4.4 TROUBLESHOOTING

| Probable | Solution |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> No power to the system at all. Power light don't illuminate, fan inside power supply does not turn on. Indicator light on keyboard does not turn on. | <ol style="list-style-type: none"> Make sure power cable is securely plugged in. Replace cable. Contact technical support. |
| System inoperative. Keyboard lights are on, power indicator lights are lit, and hard drive is spinning. | Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place. |
| System does not boot from hard disk drive, can be booted from optical drive. | <ol style="list-style-type: none"> Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time. |
| System only boots from optical drive. Hard disk can be read and applications can be used but booting from hard disk is impossible. | <ol style="list-style-type: none"> Back up data and applications files. Reformat the hard drive. Re-install applications and data using backup disks. |
| Screen message says "Invalid Configuration" or "CMOS Failure." | Review system's equipment. Make sure correct information is in setup. |
| Cannot boot system after installing second hard drive. | <ol style="list-style-type: none"> Set master/slave jumpers correctly. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives. |

CHAPTER 5: WARPSPEEDER™



5.1 INTRODUCTION

[WarpSpeeder™], a new powerful control utility, features three user-friendly functions including Overclock Manager, Overvoltage Manager, and Hardware Monitor.

With the Overclock Manager, users can easily adjust the frequency they prefer or they can get the best CPU performance with just one click. The Overvoltage Manager, on the other hand, helps to power up CPU core voltage and Memory voltage. The cool Hardware Monitor smartly indicates the temperatures, voltage and CPU fan speed as well as the chipset information. Also, in the About panel, you can get detail descriptions about BIOS model and chipsets. In addition, the frequency status of CPU, memory, AGP and PCI along with the CPU speed are synchronically shown on our main panel.

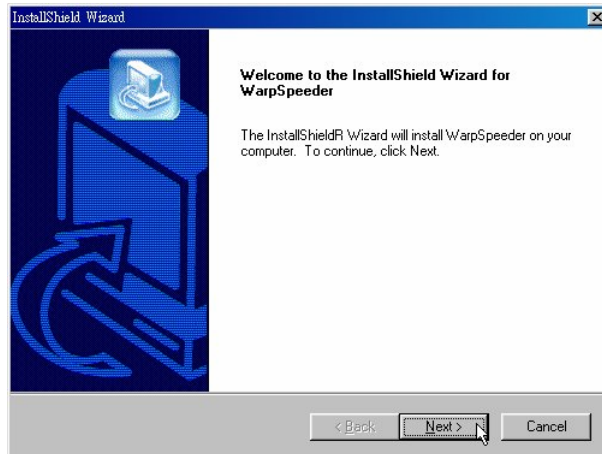
Moreover, to protect users' computer systems if the setting is not appropriate when testing and results in system fail or hang, [WarpSpeeder™] technology assures the system stability by automatically rebooting the computer and then restart to a speed that is either the original system speed or a suitable one.

5.2 SYSTEM REQUIREMENT

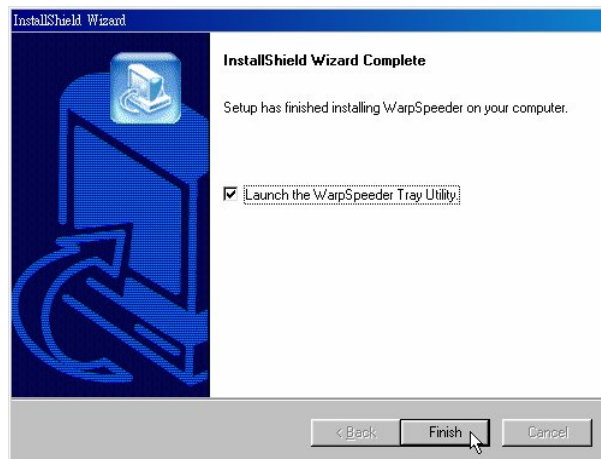
OS Support: Windows 98 SE, Windows Me, Windows 2000, Windows XP
DirectX: DirectX 8.1 or above. (The Windows XP operating system includes DirectX 8.1. If you use Windows XP, you do not need to install DirectX 8.1.)

5.3 INSTALLATION

1. Execute the setup execution file, and then the following dialog will pop up. Please click “Next” button and follow the default procedure to install.



2. When you see the following dialog in setup procedure, it means setup is completed. If the “Launch the WarpSpeeder Tray Utility” checkbox is checked, the Tray Icon utility and [WarpSpeeder™] utility will be automatically and immediately launched after you click “Finish” button.



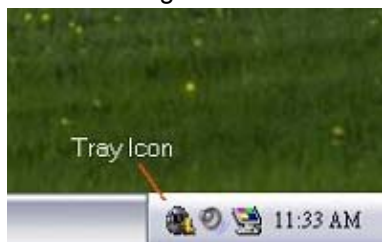
Usage:

The following figures are just only for reference, the screen printed in this user manual will change according to your motherboard on hand.

5.4 WARPSPEDER™

1. Tray Icon:

Whenever the Tray Icon utility is launched, it will display a little tray icon on the right side of Windows Taskbar.



This utility is responsible for conveniently invoking [WarpSpeeder™] Utility. You can use the mouse by clicking the left button in order to invoke [WarpSpeeder™] directly from the little tray icon or you can right-click the little tray icon to pop up a popup menu as following figure. The "Launch Utility" item in the popup menu has the same function as mouse left-click on tray icon and "Exit" item will close Tray Icon utility if selected.

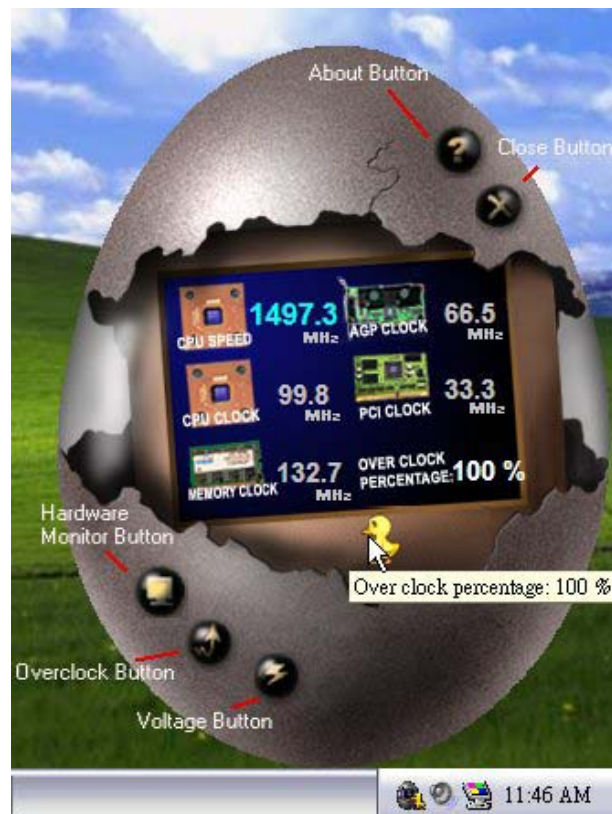


2. Main Panel

If you click the tray icon, [WarpSpeeder™] utility will be invoked. Please refer to the following figure; the utility's first window you will see is Main Panel.

Main Panel contains features as follows:

- Display the CPU Speed, CPU external clock, Memory clock, AGP clock, and PCI clock information.
- Contains About, Voltage, Overclock, and Hardware Monitor Buttons for invoking respective panels.
- With a user-friendly Status Animation, it can represent 3 overclock percentage stages:
 - Man walking→overclock percentage from 100% ~ 110 %
 - Panther running→overclock percentage from 110% ~ 120%
 - Car racing→overclock percentage from 120% ~ above



3. Voltage Panel

Click the Voltage button in Main Panel, the button will be highlighted and the Voltage Panel will slide out to up as the following figure.

In this panel, you can decide to increase CPU core voltage and Memory voltage or not. The default setting is “No”. If you want to get the best performance of overclocking, we recommend you click the option “Yes”.



4. Overclock Panel

Click the Overclock button in Main Panel, the button will be highlighted and the Overclock Panel will slide out to left as the following figure.



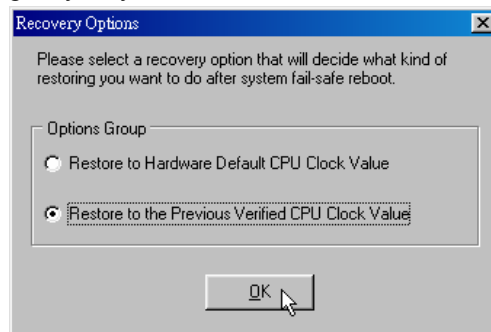
Overclock Panel contains the these features:

- “-3MHz button”, “-1MHz button”, “+1MHz button”, and “+3MHz button”:
provide user the ability to do real-time overclock adjustment.

Warning:

Manually overclock is potentially dangerous, especially when the overclocking percentage is over 110 %. We strongly recommend you verify every speed you overclock by click the Verify button. Or, you can just click Auto overclock button and let [WarpSpeeder™] automatically gets the best result for you.

- “Recovery Dialog button”:
Pop up the following dialog. Let user select a restoring way if system need to do a fail-safe reboot.



Motherboard Manual

- c. “Auto-overclock button”: User can click this button and [WarpSpeeder™] will set the best and stable performance and frequency automatically. [WarpSpeeder™] utility will execute a series of testing until system fail. Then system will do fail-safe reboot by using Watchdog function. After reboot, the [WarpSpeeder™] utility will restore to the hardware default setting or load the verified best and stable frequency according to the Recovery Dialog’s setting.
- d. “Verify button”: User can click this button and [WarpSpeeder™] will proceed a testing for current frequency. If the testing is ok, then the current frequency will be saved into system registry. If the testing fail, system will do a fail-safe rebooting. After reboot, the [WarpSpeeder™] utility will restore to the hardware default setting or load the verified best and stable frequency according to the Recovery Dialog’s setting.

Note:

Because the testing programs, invoked in Auto-overclock and Verify, include DirectDraw, Direct3D and DirectShow tests, the DirectX 8.1 or newer runtime library is required. And please make sure your display card’s color depth is High color (16 bit) or True color(24/32 bit) that is required for Direct3D rendering.

5. Hardware Monitor Panel

Click the Hardware Monitor button in Main Panel, the button will be highlighted and the Hardware Monitor panel will slide out to left as the following figure.

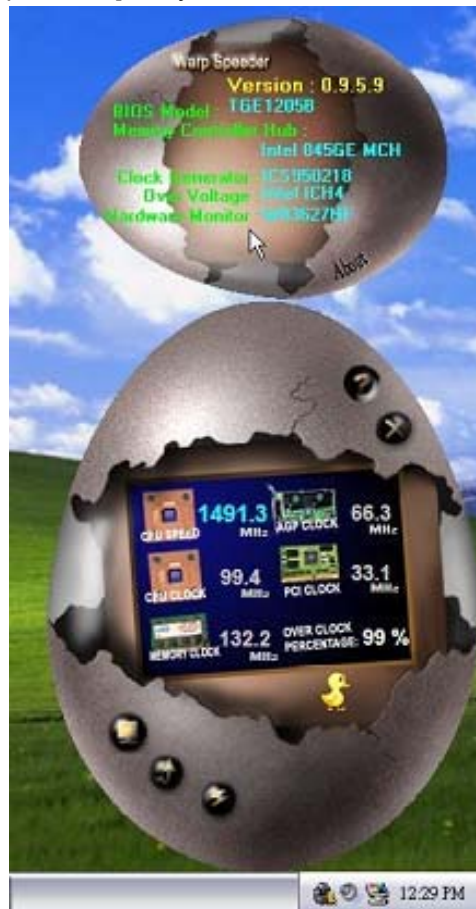
In this panel, you can get the real-time status information of your system. The information will be refreshed every 1 second.



6. About Panel

Click the “about” button in Main Panel, the button will be highlighted and the About Panel will slide out to up as the following figure.

In this panel, you can get model name and detail information in hints of all the chipset that are related to overclocking. You can also get the mainboard’s BIOS model and the Version number of [WarpSpeeder™] utility.



Note:

Because the overclock, overvoltage, and hardware monitor features are controlled by several separate chipset, [WarpSpeeder™] divide these features to separate panels. If one chipset is not on board, the correlative button in Main panel will be disabled, but will not interfere other panels’ functions. This property can make [WarpSpeeder™] utility more robust.

APPENDENCIES: SPEC IN OTHER LANGUAGE

GERMAN

| Spezifikationen | | |
|-------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| CPU | LGA 775 Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D Prozessoren mit bis zu 3,8 GHz | Unterstützt Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Extended Memory 64 Technology |
| FSB | 533 / 800 /1066 MHz | |
| Chipsatz | Intel 945G | Intel ICH7 |
| Super E/A | ITE 8712F Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle | Umgebungskontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller "Smart Guardian"-Funktion von ITE |
| Arbeitsspeicher | DDR2 DIMM-Steckplätze x 4 Jeder DIMM unterstützt 256/512MB & 1GB DDR2. Max. 4GB Arbeitsspeicher | Dual-Kanal DDR2 Speichermodul Unterstützt DDR2 533 / 667 registrierte DIMMs. Nicht-ECC DIMMs werden nicht unterstützt. |
| IDE | Integrierter IDE-Controller Ultra DMA 33 / 66 / 100 Bus Master-Modus | Unterstützt PIO-Modus 0~4, |
| SATA II | Integrierter Serial ATA-Controller Datentransferrate bis zu 3Gb/s | Konform mit der SATA-Spezifikation Version 2.0. |
| LAN | Realtek RTL 8110SC / RTL 8100C (optional) | 10 / 100 / 1000 Mb/s Auto-Negotiation (Gigabit-Bandbreite nur beim RTL 8110SC) Halb-/ Vollduplex-Funktion |
| Audio-Codec | ALC 655 | 6-Kanal-Audioausgabe AC'97 Version 2.3 |
| Steckplätze | PCI-Steckplatz x2 PCI Express x16 Steckplatz x1 PCI Express x 1-Steckplatz x1 | |
| Onboard-Anschluss | Diskettenlaufwerkanschluss x1 IDE-Anschluss x1 | Jeder Anschluss unterstützt 2 Diskettenlaufwerke Jeder Anschluss unterstützt 2 IDE-Laufwerke |

| Spezifikationen | | | |
|------------------|----------------------------------------|----|----------------------------------------------------------------------------------------------------------------------|
| | SATA-Anschluss | x4 | Jeder Anschluss unterstützt 1 SATA-Laufwerk |
| | Fronttafelanschluss | x1 | Unterstützt die Fronttafel-funktionen |
| | Front-Audioanschluss | x1 | Unterstützt die Fronttafel-Audioanschlussfunktion |
| | CD-IN-Anschluss | x1 | Unterstützt die CD Audio-In-Funktion |
| | S/PDIF-Ausgangsanschluss | x1 | Unterstützt die digitale Audioausgabefunktion |
| | S/PDIF Eingangsanschluss (optional) x1 | | Unterstützt die digitale Audioeingabefunktion |
| | CPU-Lüfter-Sockel | x1 | CPU-Lüfterstromversorgungsanschluss (mit Smart Fan-Funktion) |
| | System-Lüfter-Sockel | x1 | System-Lüfter-Stromversorgungsanschluss |
| | "Gehäuse offen"-Sockel | x1 | Zur Erkennung eines geöffneten Gehäuses |
| | "CMOS löschen"-Sockel | x1 | |
| | USB-Anschluss | x2 | Jeder Anschluss unterstützt 2 Fronttafel-USB-Anschlüsse |
| | Stromanschluss (24-polig) | x1 | |
| | Stromanschluss (4-polig) | x1 | |
| Rückseiten-E/A | PS/2-Tastatur | x1 | |
| | PS/2-Maus | x1 | |
| | Serieller Anschluss | x1 | |
| | Druckeranschluss | x1 | |
| | LAN-Anschluss | x1 | |
| | USB-Anschluss | x4 | |
| | Audioanschluss | x3 | |
| Platinengröße. | 244 mm (B) X 244 mm (L) | | |
| OS-Unterstützung | Windows 2K / XP | | behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen. |

FRANCE

| SPEC | | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UC | LGA 775 Processeurs Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D jusqu'à 3,8 GHz | Prend en charge les technologies Hyper-Threading / d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ de mémoire étendue 64 |
| Bus frontal | 533 / 800 /1066 MHz | |
| Chipset | Intel 945G | Intel ICH7 |
| Super E/S | ITE 8712F Fournit la fonctionnalité de Super E/S patrimoniales la plus utilisée. Interface à faible compte de broches | Initiatives de contrôle environnementales, Moniteur de matériel Contrôleur de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE |
| Mémoire principale | Fentes DDR2 DIMM x 4 Chaque DIMM prend en charge des DDR2 de 256/512 Mo et 1Go Capacité mémoire maximale de 4 Go | Module de mémoire DDR2 à mode à double voie Prend en charge la DDR2 533 / 667 Les DIMM à registres et DIMM sans code correcteurs d'erreurs ne sont pas prises en charge |
| IDE | Contrôleur IDE intégré Mode principale de Bus Ultra DMA 33 / 66 / 100 | Prend en charge le mode PIO 0~4, |
| SATA SATA II | Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 3 Go/s. | Conforme à la spécification SATA Version 2.0 |
| LAN | Realtek RTL 8110SC / RTL 8100C (optional) | 10 / 100 / 1000 Mb/s négociation automatique (La bande passante Gigabit est pour le RTL 8110SC uniquement) Half / Full duplex capability |
| Codec audio | ALC 655 | Sortie audio à 6 voies AC'97 Version 2.3 |
| Fentes | Fente PCI x2 Slot PCI Express x16 x1 Slot PCI Express x 1 x1 | |
| Connecteur embarqué | Connecteur de disquette x1 Connecteur IDE x1 | Chaque connector prend en charge 2 lecteurs de disquettes Chaque connecteur prend en charge 2 périphériques IDE |

| SPEC | | | |
|-------------------------|----------------------------------------|----|--------------------------------------------------------------------------------------|
| | Connecteur SATA | x4 | Chaque connecteur prend en charge 1 périphérique SATA |
| | Connecteur du panneau avant | x1 | Prend en charge les équipements du panneau avant |
| | Connecteur Audio du panneau avant | x1 | Prend en charge la fonction audio du panneau avant |
| | Connecteur d'entrée CD | x1 | Prend en charge la fonction d'entrée audio de CD |
| | Connecteur de sortie S/PDIF | x1 | Prend en charge la fonction de sortie audio numérique |
| | Connecteur d'entrée S/PDIF (en option) | x1 | Prend en charge la fonction d'entrée audio numérique |
| | Embase de ventilateur UC | x1 | Alimentation électrique du ventilateur UC (avec fonction de ventilateur intelligent) |
| | Embase de ventilateur système | x1 | Alimentation électrique du ventilateur système |
| | Embase d'ouverture de châssis | x1 | Pour la fonction de détection d'intrus dans le châssis |
| | Embase d'effacement CMOS | x1 | |
| | Connecteur USB | x2 | Chaque connecteur prend en charge 2 ports USB de panneau avant |
| | Connecteur d'alimentation (24 broches) | x1 | |
| | Connecteur d'alimentation (4 broches) | x1 | |
| E/S du panneau arrière | Clavier PS/2 | x1 | |
| | Souris PS/2 | x1 | |
| | Port série | x1 | |
| | Port d'imprimante | x1 | |
| | Port LAN | x1 | |
| | Port USB | x4 | |
| | Fiche audio | x3 | |
| Dimension s de la carte | 244 mm (l) X 244 mm (H) | | |
| Support SE | Windows 2K / XP | | se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis. |

ITALIAN

| SPECIFICA | | |
|--------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| CPU | LGA 775 Processore Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D fino a 3.8 GHz | Supporto di Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Tecnologia Extended Memory 64 |
| FSB | 533 / 800 / 1066 MHz | |
| Chipset | Intel 945G | Intel ICH7 |
| Super I/O | ITE 8712F Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) | Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller velocità ventolina Funzione "Smart Guardian" di ITE |
| Memoria principale | Alloggi DIMM DDR2 x 4 Ciascun DIMM supporta DDR2 256/512MB e 1GB Capacità massima della memoria 4GB | Modulo di memoria DDR2 a canale doppio Supporto di DDR2 533 / 667 DIMM registrati e DIMM Non-ECC non sono supportati |
| IDE | Controller IDE integrato Modalità Bus Master Ultra DMA 33 / 66 / 100 | Supporto modalità PIO Mode 0-4 |
| SATA II | Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3 Gb/s. | Compatibile specifiche SATA Versione 2.0. |
| LAN | Realtek RTL 8110SC / RTL 8100C(optional) | Negoziatura automatica 10 / 100 / 1000 Mb/s (la larghezza di banda Gigabit è solo per RTL 8110SC) Capacità Half / Full Duplex |
| Codec audio | ALC 655 | Uscita audio 6 canali AC'97 Versione 2.3 |
| Alloggi | Alloggio PCI x2 Alloggio PCI Express x16 x1 Alloggio PCI Express x1 x1 | |
| Connettori | Connettore floppy x1 | Ciascun connettore supporta 2 unità Floppy |

| SPECIFICA | | | |
|------------------------------|---------------------------------------|----|-------------------------------------------------------------------------------------------------------------|
| su scheda | Connettore IDE | x1 | Ciascun connettore supporta 2 unità IDE |
| | Connettore SATA | x4 | Ciascun connettore supporta 1 unità SATA |
| | Connettore pannello frontale | x1 | Supporta i servizi del pannello frontale |
| | Connettore audio frontale | x1 | Supporta la funzione audio pannello frontale |
| | Connettore CD-in | x1 | Supporta la funzione input audio CD |
| | Connettore output SPDIF | x1 | Supporta la funzione d'output audio digitale |
| | Connettore input S/PDIF (optional) | x1 | Supporta la funzione d'input audio digitale |
| | Collettore ventolina CPU | x1 | Alimentazione ventolina CPU (con funzione Smart Fan) |
| | Collettore ventolina sistema | x1 | Alimentazione ventolina di sistema |
| | Collettore apertura telaio | x1 | Per la funzione di rilevamento intrusione telaio |
| | Collettore cancellazione CMOS | x1 | |
| | Connettore USB | x2 | Ciascun connettore supporta 2 porte USB pannello frontale |
| | Connettore alimentazione (24 pin) | x1 | |
| | Connettore alimentazione (4 pin) | x1 | |
| I/O pannello posteriore | Tastiera PS/2 | x1 | |
| | Mouse PS/2 | x1 | |
| | Porta seriale | x1 | |
| | Porta stampante | x1 | |
| | Porta LAN | x1 | |
| | Porta USB | x4 | |
| | Connettore audio | x3 | |
| Dimensioni scheda | 244 mm (larghezza) x 244 mm (altezza) | | |
| Sistemi operativi supportati | Windows 2K / XP | | si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso. |

SPANISH

| Especificación | | |
|-------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| CPU | LGA 775 Procesador Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D hasta 3,8 GHz | Admite Hyper-Threading / Bit de deshabilitación de ejecución / Intel SpeedStep® Mejorado / Tecnología Extended Memory 64 |
| FSB | 533 / 800 /1066 MHz | |
| Conjunto de chips | Intel 945G | Intel ICH7 |
| Súper E/S | ITE 8712F Le ofrece las funcionalidades heredadas de uso más común Súper E/S. Interfaz de cuenta Low Pin | Iniciativas de control de entorno, Monitor hardware Controlador de velocidad de ventilador Función "Guardia inteligente" de ITE |
| Memoria principal | Ranuras DIMM DDR2 x 4 Cada DIMM admite DDR de 256/512MB y 1GB Capacidad máxima de memoria de 4GB | Módulo de memoria DDR2 de canal Doble Admite DDR2 de 533 / 667 No admite DIMM registrados o DIMM no compatibles con ECC |
| IDE | Controlador IDE integrado Modo bus maestro Ultra DMA 33 / 66 / 100 | Soporte los Modos PIO 0~4, |
| SATA II | Controlador ATA Serie Integrado Tasas de transferencia de hasta 3 Gb/s. | Compatible con la versión SATA 2.0. |
| Red Local | Realtek RTL 8110SC / RTL 8100C (opcional) | Negociación de 10 / 100 / 1000 Mb/s (el ancho de banda Gigabit es únicamente para 8110SC) Funciones Half / Full dúplex |
| Códecs de sonido | ALC 655 | Salida de sonido de 6 canales AC'97 Versión 2.3 |
| Ranuras | Ranura PCI X2 Ranura PCI Express x16 X1 Ranura PCI express x 1 X1 | |

| Especificación | | | |
|---------------------------------------|----------------------------------------|----|----------------------------------------------------------------------------------------------|
| Conectores en placa | Conector disco flexible | X1 | Cada conector soporta 2 unidades de disco flexible |
| | Conector IDE | X1 | Cada conector soporta 2 dispositivos IDE |
| | Conector SATA | X4 | Cada conector soporta 1 dispositivos SATA |
| | Conector de panel frontal | X1 | Soporta instalaciones en el panel frontal |
| | Conector de sonido frontal | X1 | Soporta funciones de sonido en el panel frontal |
| | Conector de entrada de CD | X1 | Soporta función de entrada de sonido de CD |
| | Conector de salida S/PDIF | X1 | Soporta función de salida de sonido digital |
| | Conector de entrada S/PDIF (opcional) | x1 | Soporta función de entrada de sonido digital |
| | Cabecera de ventilador de CPU | X1 | Fuente de alimentación de ventilador de CPU (con función Smart Fan) |
| | Cabecera de ventilador de sistema | X1 | Fuente de alimentación de ventilador de sistema |
| | Cabecera de chasis abierto | X1 | Función de detección de intrusos en el chasis |
| | Cabecera de borrado de CMOS | X1 | |
| | Conector USB | X2 | Cada conector soporta 2 puertos USB frontales |
| | Conector de alimentación (24 patillas) | X1 | |
| Conector de alimentación (4 patillas) | X1 | | |
| Panel trasero de E/S | Teclado PS/2 | X1 | |
| | Ratón PS/2 | X1 | |
| | Puerto serie | X1 | |
| | Puerto de impresora | X1 | |
| | Puerto de red local | X1 | |
| | Puerto USB | X4 | |
| | Conector de sonido | X3 | |
| Tamaño de la placa | 244mm. (A) X 244 Mm. (H) | | |
| Soporte de sistema operativo | Windows 2K / XP | | se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo. |

PORTUGUESE

| ESPECIFICAÇÕES | | |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU | LGA 775 Processador Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D até 3,8 GHz / Extended Memory 64 | Suporta as tecnologias Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® |
| FSB | 533 / 800 /1066 MHz | |
| Chipset | Intel 945G | Intel ICH7 |
| Especificação Super I/O | ITE 8712F Proporciona as funcionalidades mais utilizadas em termos da especificação Super I/O. Interface LPC (Low Pin Count). | Iniciativas para controlo do ambiente Monitorização do hardware Controlador da velocidade da ventoinha Função "Smart Guardian" da ITE |
| Memória principal | Ranuras DIMM DDR2 x 4 Cada módulo DIMM suporta uma memória DDR2 de 256/512 MB & 1 GB Capacidade máxima de memória: 4 GB | Módulo de memória DDR2 de canal duplo Suporta módulos DDR2 533 / 667 Os módulos DIMM registados e os DIMM Non-ECC não são suportados |
| IDE | Controlador IDE integrado Modo Bus master Ultra DMA 33 / 66 / 100 | Suporta o modo PIO 0~4, |
| SATA II | Controlador Serial ATA integrado Velocidades de transmissão de dados até 3 Gb/s. | Compatibilidade com a especificação SATA versão 2.0. |
| LAN | Realtek RTL 8110SC / RTL 8100C(opcional) | Auto negociação de 10 / 100 / 1000 Mb/s (a largura de banda Gigabit refere-se apenas à especificação RTL 8110SC) Capacidade semi/full-duplex |
| Codec de som | ALC 655 | Saída de áudio de 6 canais AC'97 Versão 2.3 |
| Ranuras | Ranhura PCI x2 Ranhura PCI Express x16 x1 Ranhura PCI Express x 1 x1 | |
| Conectores na placa | Conector da unidade de disquetes x1 Conector IDE x1 | Cada conector suporta 2 unidades de disquetes Cada conector suporta 2 dispositivos IDE |

| ESPECIFICAÇÕES | | | |
|----------------------------------------------|-----------------------------------------------|----|-----------------------------------------------------------------------------------------------------------------|
| | Conector SATA | x4 | Cada conector suporta 1 dispositivo SATA |
| | Conector do painel frontal | x1 | Para suporte de várias funções no painel frontal |
| | Conector de áudio frontal | x1 | Suporta a função de áudio no painel frontal |
| | Conector para entrada de CDs | x1 | Suporta a entrada de áudio a partir de CDs |
| | Conector de saída S/PDIF | x1 | Suporta a saída de áudio digital |
| | Conector de entrada S/PDIF (opcional) | x1 | Suporta a entrada de áudio digital |
| | Conector da ventoinha da CPU | x1 | Alimentação da ventoinha da CPU (com a função Smart Fan) |
| | Conector da ventoinha do sistema | x1 | Alimentação da ventoinha do sistema |
| | Conector para detecção da abertura do chassis | x1 | Para detectar qualquer intrusão no chassis |
| | Conector para limpeza do CMOS | x1 | |
| | Conector USB | x2 | Cada conector suporta 2 portas USB no painel frontal |
| | Conector de alimentação (24 pinos) | x1 | |
| | Conector de alimentação (4 pinos) | x1 | |
| Entradas/ Saídas no painel traseiro | Teclado PS/2 | x1 | |
| | Rato PS/2 | x1 | |
| | Porta série | x1 | |
| | Porta para impressora | x1 | |
| | Porta LAN | x1 | |
| | Porta USB | x4 | |
| | Tomada de áudio | x3 | |
| Tamanho da placa | 244 mm (L) X 244 mm (A) | | |
| Sistemas operativos suportados | Windows 2K / XP | | A reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio. |

POLISH

| <i>SPEC</i> | | |
|--------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Procesor | LGA 775 Procesor Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D do 3,8 GHz | Obsługa Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Extended Memory 64 Technology |
| FSB | 533 / 800 /1066 MHz | |
| Chipset | Intel 945G | Intel ICH7 |
| Pamięć główna | Gniazda DDR2 DIMM x 4 Każde gniazdo DIMM obsługuje moduły 256/512MB oraz 1GB DDR2 Maks. wielkość pamięci 4GB | Moduł pamięci DDR2 z trybem podwójnego kanału Obsługa DDR2 533 / 667 Brak obsługi Registered DIMM oraz Non-ECC DIMM |
| Super I/O | ITE 8712F Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count | Funkcje kontroli warunków pracy, Monitor H/W Kontroler prędkości wentylatora Funkcja ITE "Smart Guardian" |
| IDE | Zintegrowany kontroler IDE Ultra DMA 33 / 66 / 100 Tryb Bus Master | obsługa PIO tryb 0~4, |
| SATA II | Zintegrowany kontroler Serial ATA Transfer danych do 3 Gb/s. | Zgodność ze specyfikacją SATA w wersji 2.0. |
| LAN | Realtek RTL 8110SC / RTL 8100C (opcja) | 10 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości (Pasma gigabitowe wyłącznie dla RTL 8110SC) Działanie w trybie połowicznego / pełnego dupleksu |
| Kodek dźwiękowy | ALC 655 | 6 kanałowe wyjście audio AC'97 w wersji 2.3 |
| Gniazda | Gniazdo PCI x2 Gniazdo PCI Express x16 x1 Gniazdo PCI Express x 1 x1 | |
| Złącza wbudowan | Złącze napędu dyskietek x1 Złącze IDE x1 | Każde złącze obsługuje 2 napędy dyskietek Każde złącze obsługuje 2 urządzenia IDE |

| SPEC | | | |
|------------------------------|-----------------------------------------|----|-----------------------------------------------------------------------------------------------------------|
| e | Złącze SATA | x4 | Każde złącze obsługuje 1 urządzenie SATA |
| | Złącze panela przedniego | x1 | Obsługa elementów panela przedniego |
| | Przednie złącze audio | x1 | Obsługa funkcji audio na panelu przednim |
| | Złącze wejścia CD | x1 | Obsługa funkcji wejścia audio CD |
| | Złącze wyjścia S/PDIF | x1 | Obsługa funkcji cyfrowego wyjścia audio |
| | Złącze wejścia S/PDIF (opcja) | x1 | Obsługa funkcji cyfrowego wejścia audio |
| | Złącze główkowe wentylatora procesora | x1 | Zasilanie wentylatora procesora (z funkcją Smart Fan) |
| | Złącze główkowe wentylatora systemowego | x1 | Zasilanie wentylatora systemowego |
| | Złącze główkowe otwarcia obudowy | x1 | Do funkcji wykrywania naruszenia obudowy |
| | Złącze główkowe kasowania CMOS | x1 | |
| | Złącze USB | x2 | Każde złącze obsługuje 2 porty USB na panelu przednim |
| | Złącze zasilania (24 pinowe) | x1 | |
| Złącze zasilania (4 pinowe) | x1 | | |
| Back Panel I/O | Klawiatura PS/2 | x1 | |
| | Mysz PS/2 | x1 | |
| | Port szeregowy | x1 | |
| | Port drukarki | x1 | |
| | Port LAN | x1 | |
| | Port USB | x4 | |
| | Gniazdo audio | x3 | |
| Wymiary płyty | 244 mm (S) X 244 mm (W) | | |
| Obsługa systemu operacyjnego | Windows 2K / XP | | zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia. |

RUSSIAN

| СПЕЦ | | |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU (центральный процессор) | LGA 775 Процессор Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D до 3.8 ГГц | Поддержка технологий Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Extended Memory 64 Technology |
| FSB | 533 / 800 / 1066 МГц | |
| Набор микросхем | Intel 945G | Intel ICH7 |
| Основная память | Слоты DDR2 DIMM x 4 Каждый модуль DIMM поддерживает 256/512МБ & 1ГБ DDR2 Максимальная ёмкость памяти 4 ГБ | Модуль памяти с двухканальным режимом DDR2 Поддержка DDR2 533 / 667 Не поддерживает зарегистрированные модули DIMM and Non-ECC DIMM |
| Super I/O | ITE 8712F Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов | Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости Функция ITE "Smart Guardian" (Интеллектуальная защита) |
| IDE | Встроенное устройство управления встроенными интерфейсами устройств | Режим "хозяина" шины Ultra DMA 33 / 66 / 100 Поддержка режима PIO 0~4, |
| SATA II | Встроенное последовательное устройство управления ATA | скорость передачи данных до 3 гигабит/с. Соответствие спецификации SATA версия 2.0. |
| Локальная сеть | Realtek RTL 8110SC / RTL 8100C (дополнительно) | Автоматическое согласование 10 / 100 / 1000 Мб/с (гигабитная пропускная способность только для гигабитного физического уровня) Частичная / полная дуплексная способность |
| Звуковой кодек | ALC 655 | Шестиканальный звуковой выход AC'97 Версия 2.3 |
| Слоты | Слот PCI x2 Слот PCI Express x16 x1 Слот PCI Express x 1 x1 | |
| Встроенный разъём | Разъём НГМД x1 Разъём IDE x1 | Каждый разъём поддерживает 2 накопителя на гибких магнитных дисках Каждый разъём поддерживает 2 встроенных интерфейса накопителей |

| СПЕЦ | | | |
|------------------------------------|-------------------------------------------------------------------|----|--------------------------------------------------------------------------------------------------------------------|
| | Разъём SATA | x4 | Каждый разъём поддерживает 1 устройство SATA |
| | Разъём на лицевой панели | x1 | Поддержка устройств на лицевой панели |
| | Входной звуковой разъём | x1 | Поддержка звуковых функций на лицевой панели |
| | Разъём ввода для CD | x1 | Поддержка функции ввода для CD |
| | Разъём вывода для S/PDIF | x1 | Поддержка вывода цифровой звуковой функции |
| | Разъём ввода для S/PDIF (дополнительно) | x1 | Поддержка ввода цифровой звуковой функции |
| | Контактирующее приспособление вентилятора центрального процессора | x1 | Источник питания для вентилятора центрального процессора (с функцией интеллектуального вентилятора) |
| | Контактирующее приспособление вентилятора системы | x1 | Источник питания для вентилятора системы |
| | Шасси открытого контактирующего приспособления | x1 | Для функции обнаружения злоумышленника шасси |
| | Открытое контактирующее приспособление CMOS | x1 | |
| | USB-разъём | x2 | Каждый разъём поддерживает 2 USB-порта на лицевой панели |
| | Разъем питания (24 вывод) | x1 | |
| | Разъем питания (4 вывод) | x1 | |
| Задняя панель средств ввода-вывода | Клавиатура PS/2 | x1 | |
| | Мышь PS/2 | x1 | |
| | Последовательный порт | x1 | |
| | Порт подключения принтера | x1 | |
| | Порт LAN | x1 | |
| | USB-порт | x4 | |
| | Гнездо для подключения наушников | x3 | |
| Размер панели | 244 мм (Ш) X 244 мм (В) | | |
| Поддержка ОС | Windows 2K / XP | | сохраняет за собой право добавлять или удалять средства обеспечения для ОС с или без предварительного уведомления. |

ARABIC

| المواصفات | | |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| وحدة المعالجة المركزية | LGA 775 Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D يتردد يصل إلى 8.3 جيجا هرتز | Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Extended Memory 64 Technology |
| الناقل الأمامي الجانبي | ميغا هرتز 533 / 800 / 1066 تردد | |
| مجموعة الشرائح | Intel 945G | Intel ICH7 |
| الذاكرة الرئيسية | قناة DDR2 DIMM عدد 4 تدعم ذاكرة من نوع DIMM تدعم كل قطة ميغا بايت و 1 جيجا 256/512 سعة DDR2 بايت سعة ذاكرة قصوى 4 جيجا بايت | مزدوجة القناة DDR2 وحدة ذاكرة ميغا بايت 533 / 667 سعات DDR2 تدعم الذاكرة من نوع ECC المسجلة وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة |
| Super I/O | ITE 8712F الأكثر استخداماً. Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية | وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة |
| منفذ IDE | متكامل IDE متحكم Ultra DMA 33 / 66 / 100 ناقل بتقنية وضع رئيسي | PIO Mode 0~4 دعم وضع |
| SATA II | متكامل Serial ATA متحكم نقل البيانات بسرعات تصل إلى 3 جيجابت/ثانية. | 2.0 الإصدار SATA مطابقة لمواصفات |
| شبكة داخلية | Realtek RTL 8110SC / RTL 8100C (اختياري) | تفاوض تلقائي 10/100 ميغا بايت / ثانية و 1 جيجا بايت/ثانية (RTL 8110SC) (النطاق الترددي للجيجابت مقصور فقط على إمكانية النقل المزدوج الكامل/النصفي |
| كوديك الصوت | ALC655 | قنوات لخرج الصوت 6 AC'97 من 2.3 الإصدار |
| الفتحات | قطة PCI عدد 2 قطة PCI Express x 16 عدد 1 قطة PCI Express x 1 عدد 1 | |

Motherboard Manual

| المواصفات | | |
|---------------------------------------------------------------------------|-------|--------------------------------------|
| يدعم محركين للأقراص المرنة | عدد 1 | منفذ محرك أقراص مرنة |
| IDE يدعم كل منفذ اثنين من أجهزة | عدد 1 | منفذ IDE |
| SATA يدعم كل منفذ واحد من أجهزة | عدد 4 | منفذ SATA |
| يدعم تجهيزات اللوحة الأمامية | عدد 1 | منفذ اللوحة الأمامية |
| يدعم وظيفة الصوت باللوحة الأمامية | عدد 1 | منفذ الصوت الأمامي |
| يدعم وظيفة دخل صوت القرص المدمج | عدد 1 | منفذ CD-IN |
| يدعم وظيفة خرج الصوت الرقمي | عدد 1 | منفذ خرج S/PDIF |
| يدعم وظيفة دخل الصوت الرقمي | عدد 1 | منفذ دخل S/PDIF (اختياري) |
| Smart Fan(لتوصيل الطاقة لمروحة وحدة المعالجة (مع وظيفة | عدد 1 | وصلة مروحة وحدة المعالجة المركزية |
| لتوصيل الطاقة لمروحة النظام | عدد 1 | وصلة مروحة النظام |
| للكشف عن اختراق الهيكل | عدد 1 | وصلة فتح الهيكل |
| | عدد 1 | وصلة مسح CMOS |
| باللوحة الأمامية USB يدعم كل منفذ فتحتي | عدد 2 | منفذ USB |
| | عدد 1 | منفذ توصيل الطاقة (24 دبوس) |
| | عدد 1 | منفذ توصيل الطاقة (4 دبوس) |
| | عدد 1 | لوحة مفاتيح PS/2 |
| | عدد 1 | موس PS/2 |
| | عدد 1 | منفذ تسلسلي |
| | عدد 1 | منفذ طباعة |
| | عدد 1 | منفذ شبكة اتصال محلية |
| | عدد 4 | منافذ USB |
| | عدد 3 | مقيس صوت |
| | | حجم اللوحة |
| | | 244 مم (عرض) X 244 مم (ارتفاع) |
| تحتفظ بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو بدون إخطار . | | دعم أنظمة التشغيل Windows 2K / XP |

JAPANESE

| 仕様 | | |
|-----------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| CPU | LGA 775 Intel Core2Duo/ Pentium 4 / Pentium D / Celeron D processor up to 3.8 GHz | Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Extended Memory 64 Technology をサポートします |
| FSB | 533 / 800 / 1066 MHz | |
| チップセット | Intel 945G | Intel ICH7 |
| メインメモリ | DDR2 DIMMスロット x 4 各DIMMは 256/512MB & 1GB DDR2をサポート 最大メモリ容量4GB | デュアル チャンネルモードDDR2メモリモジュール DDR2 533 / 667をサポート 登録済みDIMMと非ECC DIMMはサポートされません |
| Super I/O | ITE 8712F もっとも一般に使用されるレガシー Super I/O機能を採用しています。 低ピンカウントインターフェイス | 環境コントロールインシチブ、 H/Wモニター ファン速度コントローラ/ モニター ITEの「スマートガーディアン」機能 |
| IDE | 統合IDEコントローラ Ultra DMA 33 / 66 / 100バスマスタモード | PIO Mode 0~4のサポート、 |
| SATA II | 統合シリアルATAコントローラ 最高3 Gb/秒のデータ転送速度 | SATAバージョン2.0仕様に準拠。 |
| LAN | Realtek RTL 8110SC / RTL 8100C(オプション) | 10 / 100 / 1000 Mb/秒のオートネゴシエーション (Gigabitバンド幅はRTL 8110SC専用です) 半/全二重機能 |
| サウンドCodec | ALC 655 | 6チャンネルオーディオアウト AC'97バージョン2.3 |
| スロット | PCIスロット x2 PCI Express x16スロット x1 PCI Express x 1スロット x1 | |
| オンボードコネクタ | フロッピーコネクタ x1 | 各コネクタは2つのフロッピードライブをサポートします |

| 仕様 | | | |
|--------------|--------------------------|----|--------------------------------------|
| | IDEコネクタ | x1 | 各コネクタは2つのIDEデバイスをサポートします |
| | SATAコネクタ | x4 | 各コネクタは1つのSATAデバイスをサポートします |
| | フロントパネルコネクタ | x1 | フロントパネル機能をサポートします |
| | フロントオーディオコネクタ | x1 | フロントパネルオーディオ機能をサポートします |
| | CDインコネクタ | x1 | CDオーディオイン機能をサポートします |
| | S/PDIFアウトコネクタ | x1 | デジタルオーディオアウト機能をサポートします |
| | S/PDIFインコネクタ (オプション) | x1 | デジタルオーディオイン機能をサポートします |
| | CPUファンヘッダ | x1 | CPUファン電源装置(スマートファン機能を搭載) |
| | システムファンヘッダ | x1 | システムファン電源装置 |
| | シャーシオープンヘッダ | x1 | シャーシ侵入検出機能 |
| | CMOSクリアヘッダ | x1 | |
| | USBコネクタ | x2 | 各コネクタは2つのフロントパネルUSBポートをサポートします |
| | 電源コネクタ(24ピン) | x1 | |
| | 電源コネクタ(4ピン) | x1 | |
| 背面パネル I/O | PS/2キーボード | x1 | |
| | PS/2マウス | x1 | |
| | シリアルポート | x1 | |
| | プリンタポート | x1 | |
| | LANポート | x1 | |
| | USBポート | x4 | |
| | オーディオジャック | x3 | |
| ボードサイズ | 244 mm (幅) X 244 mm (高さ) | | |
| OSサポート | Windows 2K / XP | | は事前のサポートなしにOSサポートを追加または削除する権利を留保します。 |

2006/09/27