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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**

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

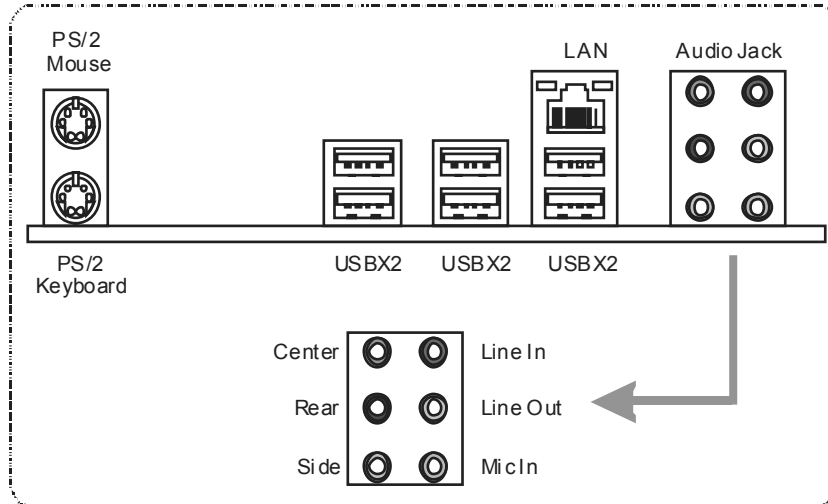
*Note:* The package contents may differ by area or your motherboard version.

### 1.3 MOTHERBOARD FEATURES

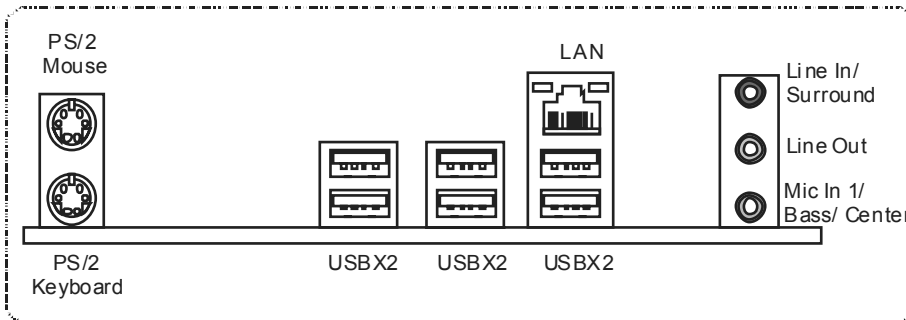
	Ver 5.x	Ver 6.x
CPU	LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium D / Pentium 4 / Celeron D processor Supports Hyper-Threading/ Execute Disable Bit/ Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium D / Pentium 4 / Celeron D processor Supports Hyper-Threading/ Execute Disable Bit/ Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
FSB	Support 533 / 800 / 1066 / 1333 MHz	Support 533 / 800 / 1066 / 1333 MHz
Chipset	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Super I/O	ITE 8718F Provides the most commonly used legacy Super I/O functionality Low Pin Count Interface Environment Control initiatives, Hardware Monitor Controller Fan Speed Controller ITE's "Smart Guardian" function	ITE 8718F Provides the most commonly used legacy Super I/O functionality Low Pin Count Interface Environment Control initiatives, Hardware Monitor Controller Fan Speed Controller ITE's "Smart Guardian" function
Main Memory	DIMM Slots x 4 Each DIMM supports 256MB / 512MB / 1GB / 2GB DDR2 Max Memory Capacity 8GB Dual Channel Mode DDR2 memory module Supports DDR2 800/667 (with FSB 800/1066/1333 CPU) Supports DDR2 533 (with FSB 533/1066 CPU) Supports DDR2 1066 (with FSB 1333 CPU) Registered DIMM and ECC DIMM is not supported	DIMM Slots x 4 Each DIMM supports 256MB / 512MB / 1GB / 2GB DDR2 Max Memory Capacity 8GB Dual Channel Mode DDR2 memory module Supports DDR2 800/667 (with FSB 800/1066/1333 CPU) Supports DDR2 533 (with FSB 533/1066 CPU) Supports DDR2 1066 (with FSB 1333 CPU) Registered DIMM and ECC DIMM is not supported
IDE	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133 Bus Master Mode supports PIO Mode 0~4	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133 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	Integrated Serial ATA Controller Data transfer rates up to 3.0 Gb/s. SATA Version 2.0 specification compliant

	<i>Ver 5.x</i>	<i>Ver 6.x</i>
LAN	Realtek RTL 8111B / 8101E (optional) 10 / 100 Mb/s / 1Gb/s auto negotiation (Ggabit bandwidth is for RTL 8111B only) Half / Full duplex capability	Realtek RTL 8111B / 8101E (optional) 10 / 100 Mb/s / 1Gb/s auto negotiation (Ggabit bandwidth is for RTL 8111B only) Half / Full duplex capability
Sound Codec	ALC888 7.1 channels audio out High Definition Audio	ALC662 5.1 channels audio out High Definition Audio
Slots	PCI slot x3 PCI Express x 16 slot x1 PCI Express x 4 slot x1 PCI Express x 1 slot x1	PCI slot x3 PCI Express x 16 slot x1 PCI Express x 4 slot x1 PCI Express x 1 slot x1
On Board Connector	Floppy connector x1 Printer Port Connector x1 Serial port Connector x1 IDE Connector x1 SATA Connector x4 Front Panel Connector x1 Front Audio Connector x1 CD-in Connector x1 S/PDIF out connector (optional) x1 CPU Fan header x1 System Fan header x1 Clear CMOS header x1 USB connector x3 Power Connector (24pin) x1 Power Connector (4pin) x1	Floppy connector x1 Printer Port Connector x1 Serial port Connector x1 IDE Connector x1 SATA Connector x4 Front Panel Connector x1 Front Audio Connector x1 CD-in Connector x1 S/PDIF out connector (optional) x1 CPU Fan header x1 System Fan header x1 Clear CMOS header x1 USB connector x3 Power Connector (24pin) x1 Power Connector (4pin) x1
Back Panel I/O	PS/2 Keyboard x1 PS/2 Mouse x1 LAN port x1 USB Port x6 Audio Jack x6	PS/2 Keyboard x1 PS/2 Mouse x1 LAN port x1 USB Port x6 Audio Jack x3
Board Size	205 (W) x 305 (L) mm	205 (W) x 305 (L) mm
OS Support	Windows 2000 / XP / VISTA Biostar Reserves the right to add or remove support for any OS with or without notice	Windows 2000 / XP / VISTA Biostar Reserves the right to add or remove support for any OS with or without notice

### 1.4 REAR PANEL CONNECTORS (FOR VER 5.X)

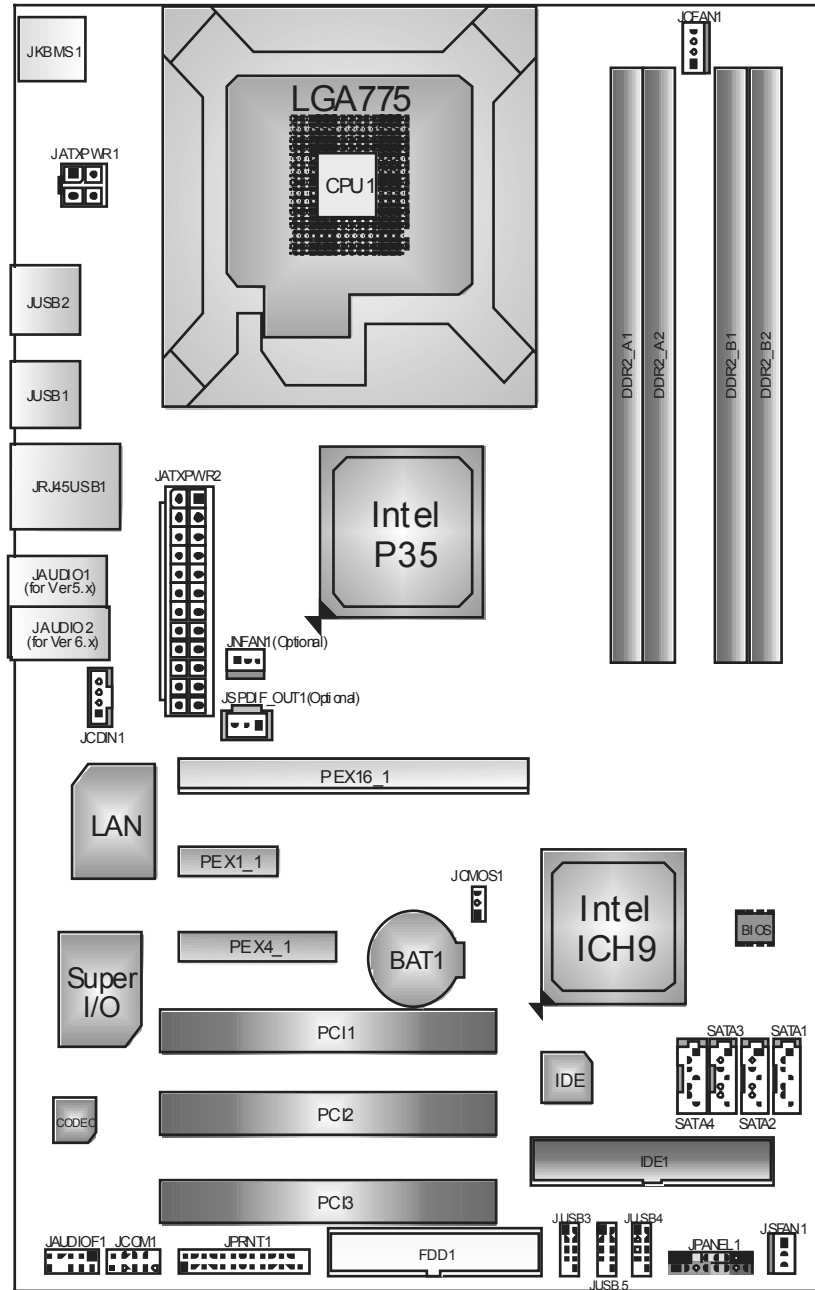


### 1.5 REAR PANEL CONNECTORS (FOR VER 6.X)



Since the audio chip supports High Definition Audio Specification, the function of each audio jack can be defined by software. The input/output function of each audio jack listed above represents the default setting. However, when connecting external microphone to the audio port, please use the Line In (blue) and Mic In (Pink) audio jack.

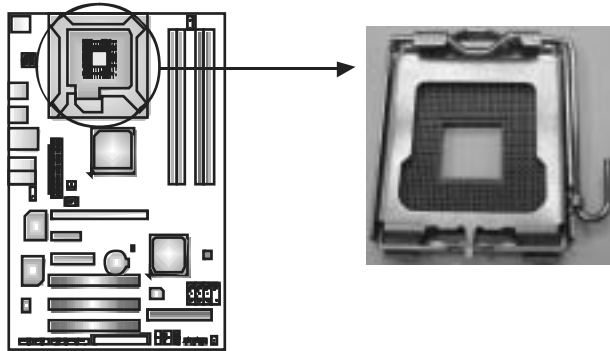
## 1.6 MOTHERBOARD LAYOUT



**Note:** ■ represents the 1<sup>st</sup> pin.

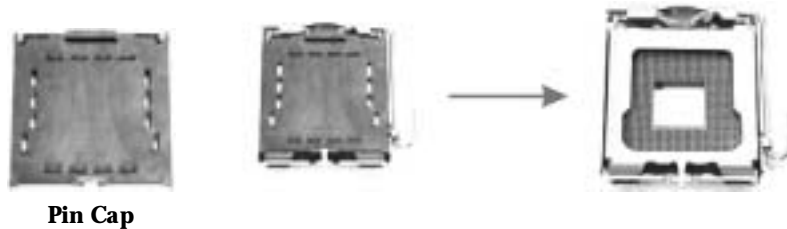
## CHAPTER 2: HARDWARE INSTALLATION

### 2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)

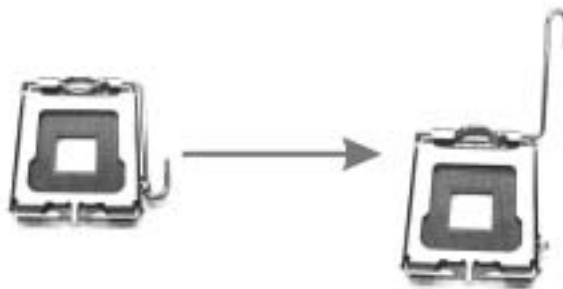


***Special Notice***

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.



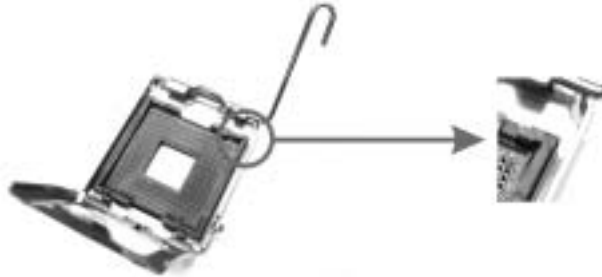
**Step 1:** Pull the socket locking lever out from the socket and then raise the lever up to a 90-degree angle.



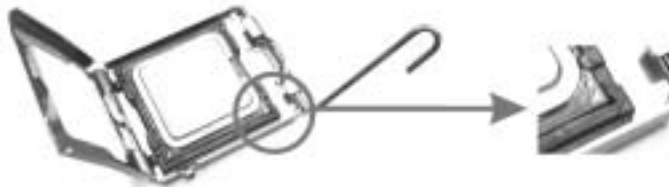


**Step 2:** Look for the triangular cut edge on socket, and the golden dot on CPU should point forwards this triangular cut edge. The CPU will fit only in the correct orientation.

*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.

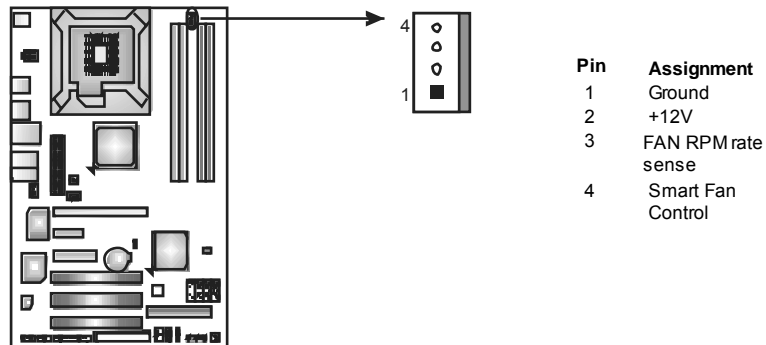


**Step 4:** Put the CPU Fan and heatsink assembly on the CPU and buckle it on the retention frame. Connect the CPU FAN power cable into the JCFAN1. This completes the installation.

## 2.2 FAN HEADERS

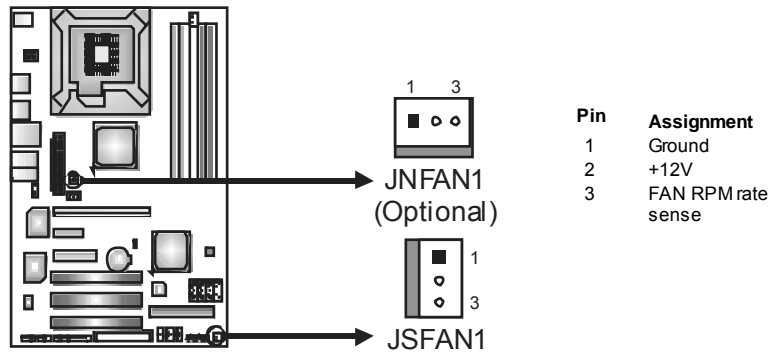
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

### JCFAN1: CPU Fan Header



### JSFAN1: System Fan Header

### JNFAN1: Northbridge Fan Header (Optional)

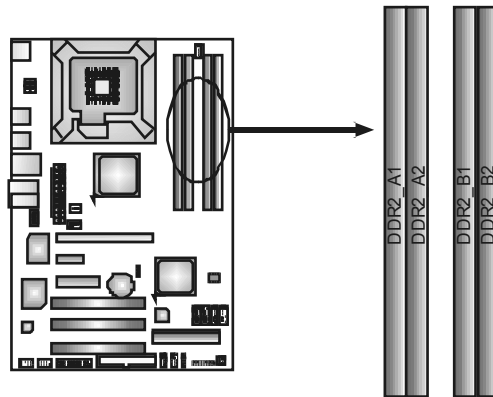


**Note:**

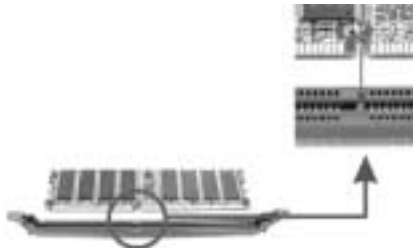
The JNFAN1 and JSFAN1 support 3-pin head connector. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

## 2.3 INSTALLING SYSTEM MEMORY

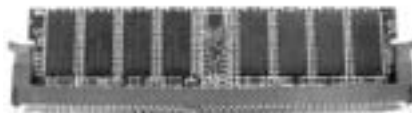
### A. Memory Modules



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/2GB	Max is 8GB.
DDR2_A2	256MB/512MB/1GB/2GB	
DDR2_B1	256MB/512MB/1GB/2GB	
DDR2_B2	256MB/512MB/1GB/2GB	

**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)

**D. FSB Supporting Table**

According to the FSB frequency of the installed CPU, the motherboard could support DDR2 533/667/800/1066 modules. Please refer to the table below to find out the proper RAM module that fits the FSB of the installed CPU.

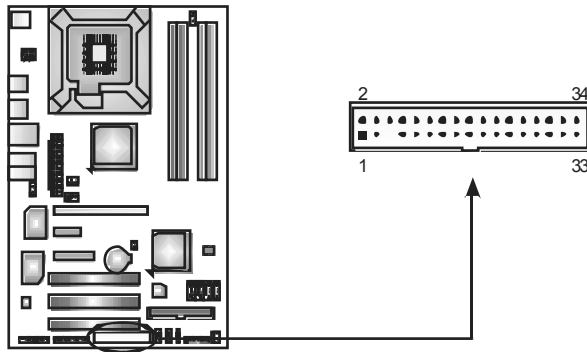
FSB of CPU \ DDR2 Module	FSB 533	FSB 800	FSB 1066	FSB1333
DDR2 533	O	X	O	X
DDR2 667	X	O	O	O
DDR2 800	X	O	O	O
DDR2 1066	X	X	X	O

(O means supported, X means not supported.)

## 2.4 CONNECTORS AND SLOTS

### FDD1: Floppy Disk Connector

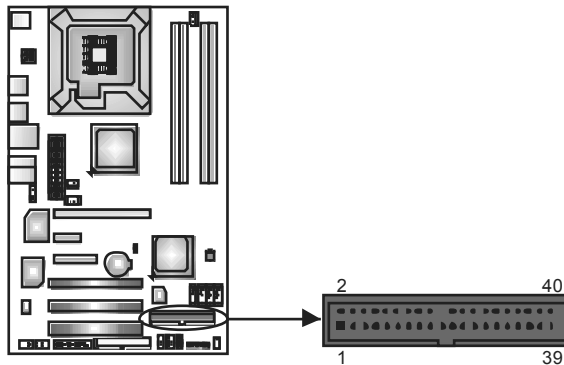
The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.



### IDE1: Hard Disk Connector

The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0~4, Bus Master, and Ultra DMA 33/66/100/133 functionality.

The IDE connector can connect a master and a slave drive, so you can connect up to two hard disk drives.



**PEX16\_1: PCI-Express x16 Slot**

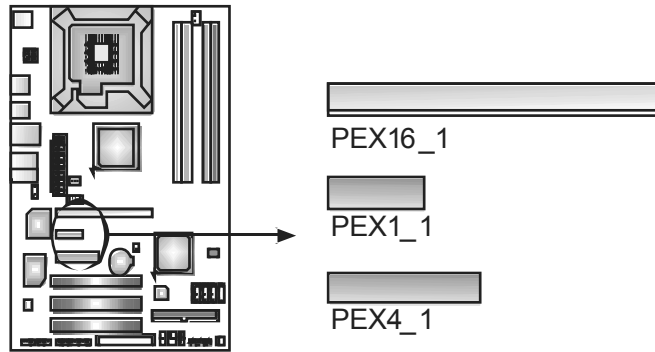
- PCI-Express 1.0a compliant.
- Maximum theoretical realized bandwidth of 4GB/s simultaneously per direction, for an aggregate of 8GB/s totally.

**PEX4\_1: PCI-Express x4 Slot**

- PCI-Express 1.0a compliant.
- Maximum theoretical realized bandwidth of 1GB/s simultaneously per direction, for an aggregate of 2GB/s totally.

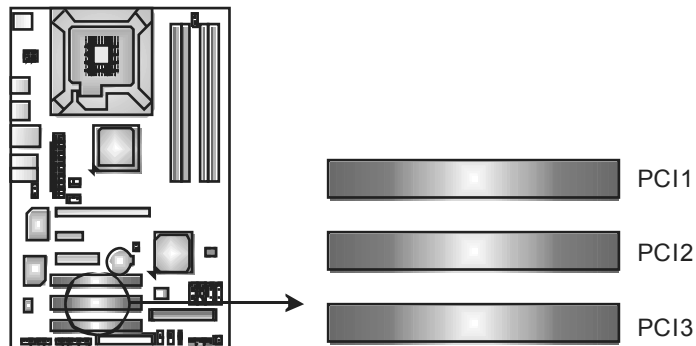
**PEX1\_1: PCI-Express x1 Slot**

- PCI-Express 1.0a compliant.
- Maximum theoretical realized bandwidth of 250MB/s simultaneously per direction, for an aggregate of 500MB/s totally.



**PCI1~PCI3: Peripheral Component Interconnect Slots**

This motherboard is equipped with 3 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

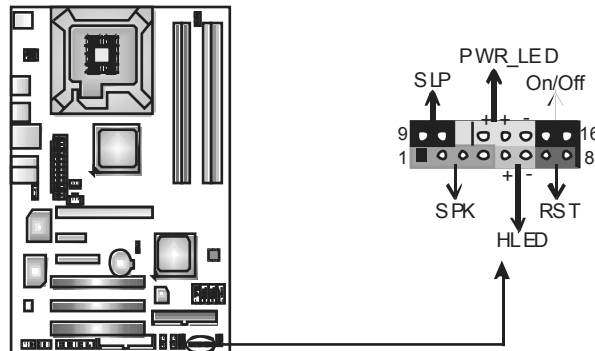
The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.



### 3.2 DETAIL SETTINGS

#### JPANEL1: Front Panel Header

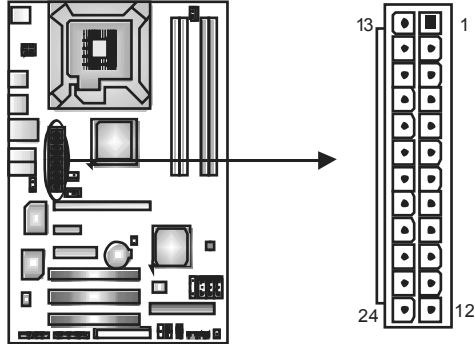
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, Sleep button and speaker connection. It allows user to connect the PC case's front panel switch functions.



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

### JATXPWR2: ATX Power Source Connector

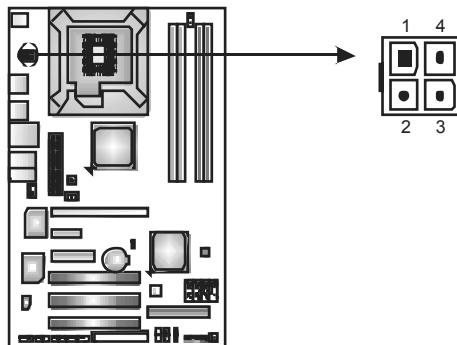
JATXPWR2 allows user to connect 24-pin power connector on the ATX power supply.



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

### JATXPWR1: ATX Power Source Connector

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

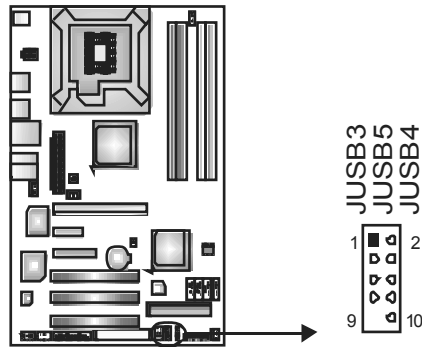


Pin	Assignment
1	+12V
2	+12V
3	Ground
4	Ground



**JUSB3/JUSB4/JUSB5: Headers for USB 2.0 Ports at Front Panel**

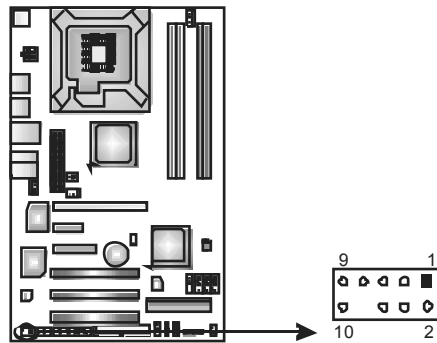
This header allows user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



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

**JAUDIOF1: Front Panel Audio Header**

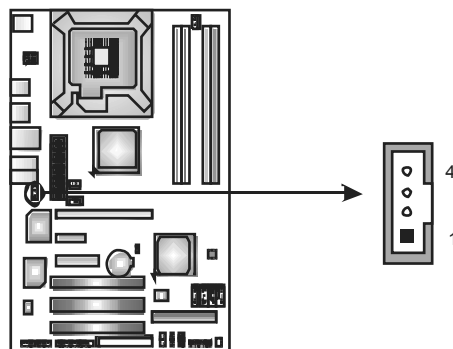
This header allows user to connect the front audio output cable with the PC front panel. It will disable the output on back panel audio connectors.



Pin	Assignment
1	Mic Left in
2	Ground
3	Mic Right in
4	GPIO
5	Right line in
6	Jack Sense
7	Front Sense
8	Key
9	Left line in
10	Jack Sense

**JCDIN1: CD-ROM Audio-in Connector**

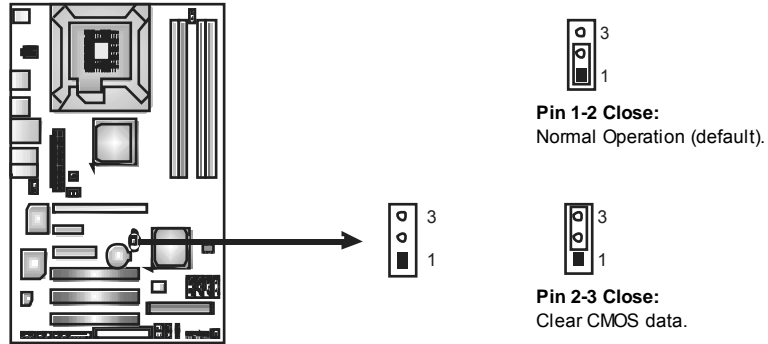
This connector allows user to connect the audio source from the variety devices, like CD-ROM, DVD-ROM, PCI sound card, PCI TV turner card etc..



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.

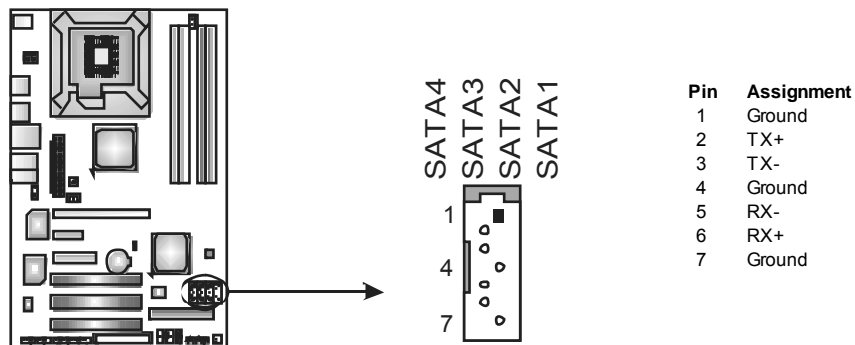


#### ※ Clear CMOS Procedures:

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.

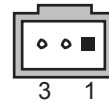
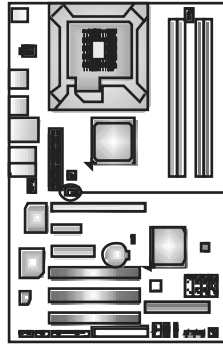
### SATA1~SATA4: Serial ATA Connectors

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 3.0Gb/s.



### JSPDIF\_OUT1: Digital Audio-out Connector (Optional)

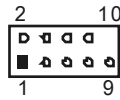
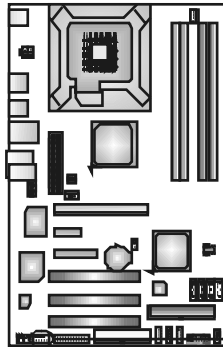
This connector allows user to connect the PCI bracket SPDIF output header.



Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

### JCOM1: Serial Port Connector

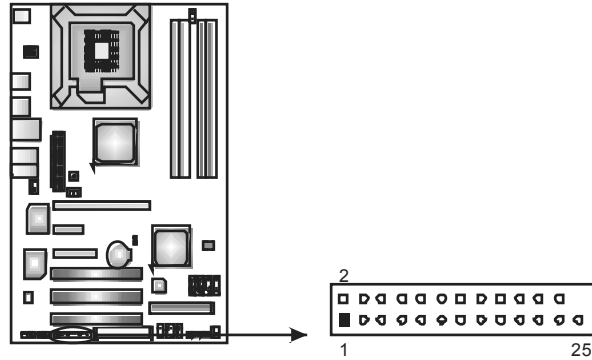
The motherboard has a Serial Port Connector for connecting RS-232 Port.



Pin	Assignment
1	Carrier detect
2	Received data
3	Transmitted data
4	Data terminal ready
5	Signal ground
6	Data set ready
7	Request to send
8	Clear to send
9	Ring indicabr
10	Key

**JPRNT1: Printer Port Connector**

This header allows you to connector printer on the PC.



Pin	Assignment	Pin	Assignment
1	-Strobe	14	Ground
2	-ALF	15	Data 6
3	Data 0	16	Ground
4	-Error	17	Data 7
5	Data 1	18	Ground
6	-Init	19	-ACK
7	Data 2	20	Ground
8	-Scltin	21	Bus y
9	Data 3	22	Ground
10	Ground	23	PE
11	Data 4	24	Ground
12	Ground	25	SCLT
13	Data 5	26	Key

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## 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 **SETUPEXE** 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

### ***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
1. No power to the system at all Power light don't illuminate, fan inside power supply does not turn on. 2. Indicator light on key board does not turn on.	1. Make sure power cable is securely plugged in. 2. Replace cable. 3. 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.	1. 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. 2. 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.	1. Back up data and applications files. 2. 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.	1. Set master/slave jumpers correctly. 2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives.

## **CHAPTER 5: WARPSPEEDER™ III**



### **5.1 INTRODUCTION**

[WarpSpeeder™ III], 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, VGA 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™ III] 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.

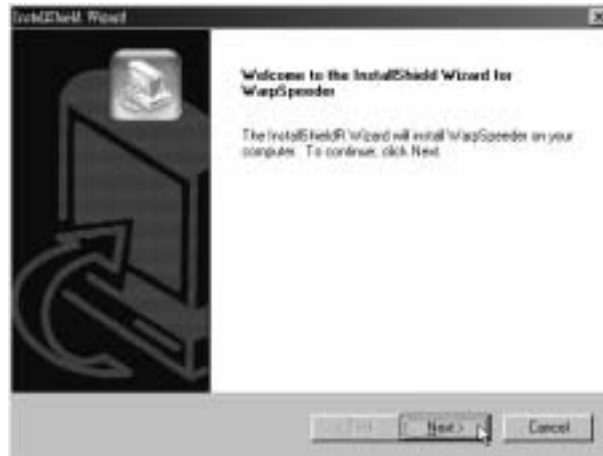
### **5.2 SYSTEM REQUIREMENT**

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. Click “Finish” button.



### Usage:

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

## 5.4 WARPSPEEDER™ III

### 1. Desktop Icon

After the [WarpSpeeder™ III] has been installed, a [WarpSpeeder™ III] icon will appear on the desktop, just like the icon shown below.



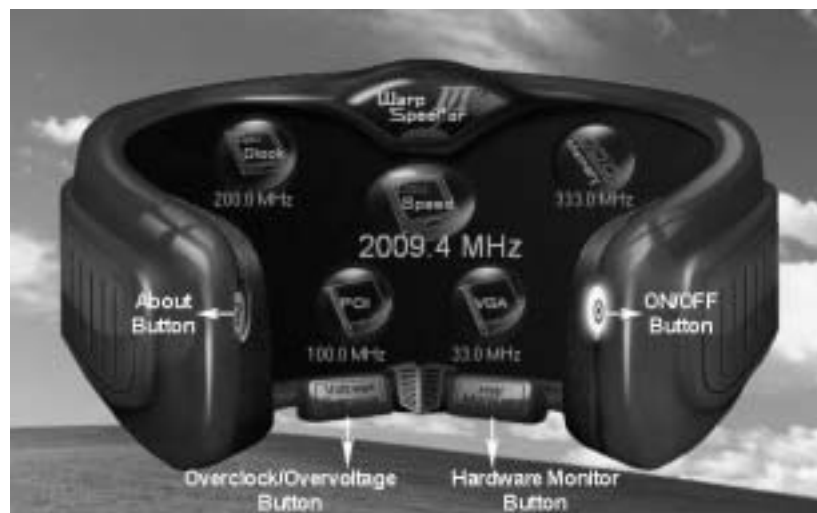
Now you can launch the [WarpSpeeder™ III] utility simply by double-clicking the desktop icon.

### 2. Main Panel

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

**Main Panel contains features as follows:**

- a. Display the CPU Speed, CPU external clock, Memory dock, VGA clock, and PCI dock information.
- b. Contains About, Voltage/Overdock, and Hardware Monitor Buttons for invoking respective panels. The On/Off button is for closing the program.



### 3. **Overclock/Overvoltage Panel**

Click the Overdock/Overvoltage button in the Main Panel, the button will be highlighted and the Overclock/Overvoltage Panel will show up as the following figure. As you can see, the Overclock Panel is on the right side, and the Overvoltage Panel is on the left side.



**Overclock Panel contains these features:**

- a. “Auto-Overdock”:  
User can click this button and [WarpSpeeder™ III] will set the best and stable performance and frequency automatically. A warning dialog as below will show up to notify you that the system may become unstable, click on “OK” to proceed.



Then [WarpSpeeder™ III] utility will execute a series of testing until system fail. Then system will do fail-safe reboot by using Watchdog function. After reboot, launch the [WarpSpeeder™ III] utility again and the utility will load the previously verified best and stable frequency.

- b. “Verify”:  
If you use the “Manual Adjust” bar to adjust the CPU frequency, then you can click this button and [WarpSpeeder™ III] 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 fails, system will do a fail-safe rebooting. After reboot, the [WarpSpeeder™ III] utility will restore to the hardware default setting.

**Warning:**

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

- c. “V3 Engine”/“V6 Engine”/“V9 Engine”:  
Provide user the ability to do real-time overdock adjustment.
- d. “Recovery”:  
Click this button and the [WarpSpeeder™ III] utility will restore all values to the hardware default setting.

**Overvoltage Panel contains these features:**

- a. "CPU Voltage":  
This function allows user to adjust CPU voltage. Click on "+" to increase or "-" to decrease the CPU voltage.
- b. "Memory Voltage":  
This function allows user to adjust Memory voltage. Click on "+" to increase or "-" to decrease the Memory voltage.

**4. Hardware Monitor Panel**

Click the Hardware Monitor button in Main Panel, the button will be highlighted and the Hardware Monitor panel will show up 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.



## 5. About Panel

Click the “about” button in Main Panel, the button will be highlighted and the About Panel will show 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 the version number of [WarpSpeeder™ III] utility.



### Note:

Because the overclock, overvoltage, and hardware monitor features are controlled by several separate chipset, [WarpSpeeder™ III] 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™ III] utility more robust.

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**APPENDENCIES: SPEC IN OTHER LANGUAGE****GERMAN**

	<i>Ver 5.x</i>	<i>Ver 6.x</i>
CPU	LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D Prozessoren Unterstützt Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D Prozessoren Unterstützt Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
FSB	533 / 800 / 1066 / 1333 MHz	533 / 800 / 1066 / 1333 MHz
Chipsatz	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Super E/A	ITE 8718F Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Court-Schnittstelle Umgebungs-kontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller/-Überwachung "Smart Guardian"-Funktion von ITE	ITE 8718F Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Court-Schnittstelle Umgebungs-kontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller/-Überwachung "Smart Guardian"-Funktion von ITE
Arbeitsspeicher	DDR2 DIMM-Steckplätze x 4 Jeder DIMM unterstützt 256MB / 512MB / 1GB / 2GB DDR2. Max. 8GB Arbeitsspeicher Dual-Kanal DDR2 Speichermodul Unterstützt DDR2 800/667 (w. FSB 800/1066/1333 CPU) Unterstützt DDR2 533 (w. FSB 533/1066 CPU) Unterstützt DDR2 1066 (w. FSB 1333 CPU) registrierte DIMMs. ECC DIMMs werden nicht unterstützt.	DDR2 DIMM-Steckplätze x 4 Jeder DIMM unterstützt 256MB / 512MB / 1GB / 2GB DDR2. Max. 8GB Arbeitsspeicher Dual-Kanal DDR2 Speichermodul Unterstützt DDR2 800/667 (w. FSB 800/1066/1333 CPU) Unterstützt DDR2 533 (w. FSB 533/1066 CPU) Unterstützt DDR2 1066 (w. FSB 1333 CPU) registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
IDE	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133 Bus Master-Modus Unterstützt PIO-Modus 0~4,	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133 Bus Master-Modus Unterstützt PIO-Modus 0~4,
SATA	Integrierter Serial ATA-Controller Datentransfertrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0.	Integrierter Serial ATA-Controller Datentransfertrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0.



	Ver 5.x	Ver 6.x
LAN	Realtek RTL 8111B / RTL 8101E(optional) 10 / 100 / 1000 Mb/s Auto-Negotiation (Gigabit-Bandbreite nur beim RTL 8111B) Halb-/Voll duplex-Funktion	Realtek RTL 8111B / RTL 8101E(optional) 10 / 100 / 1000 Mb/s Auto-Negotiation (Gigabit-Bandbreite nur beim RTL 8111B) Halb-/Voll duplex-Funktion
HD Audio-Unterstützung	ALC888 Unterstützt High-Definition Audio 7.1-Kanal-Audioausgabe	ALC662 Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe
Steckplätze	PCI-Steckplatz x3 PCI Express x16 Steckplatz x1 PCI Express x4 Steckplatz x1 PCI Express x 1-Steckplatz x1	PCI-Steckplatz x3 PCI Express x16 Steckplatz x1 PCI Express x4 Steckplatz x1 PCI Express x 1-Steckplatz x1
Onboard-Anschluss	Diskettenlaufwerkanschluss x1 Druckeranschluss Anschluss x1 Serieller Anschluss x1 IDE-Anschluss x1 SATA-Anschluss x4 Fronttafelanschluss x1 Front-Audioanschluss x1 CD-IN-Anschluss x1 S/PDIF- Ausgangsanschluss (optional) x1 CPU-Lüfter-Sockel x1 System-Lüfter-Sockel x1 "CMOS löschen"-Sockel x1 USB-Anschluss x3 Stromanschluss (24-polig) x1 Stromanschluss (4-polig) x1	Diskettenlaufwerkanschluss x1 Druckeranschluss Anschluss x1 Serieller Anschluss x1 IDE-Anschluss x1 SATA-Anschluss x4 Fronttafelanschluss x1 Front-Audioanschluss x1 CD-IN-Anschluss x1 S/PDIF- Ausgangsanschluss (optional) x1 CPU-Lüfter-Sockel x1 System-Lüfter-Sockel x1 "CMOS löschen"-Sockel x1 USB-Anschluss x3 Stromanschluss (24-polig) x1 Stromanschluss (4-polig) x1
Rückseiten-E/A	PS/2-Tastatur x1 PS/2-Maus x1 LAN-Anschluss x1 USB-Anschluss x6 Audioanschluss x6	PS/2-Tastatur x1 PS/2-Maus x1 LAN-Anschluss x1 USB-Anschluss x6 Audioanschluss x3
Platinengröße	205 mm (B) X 305 mm (L)	205 mm (B) X 305 mm (L)
OS-Unterstützung	Windows 2000 / XP / VISTA Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.	Windows 2000 / XP / VISTA Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.

## FRANCE

	Ver 5.x	Ver 6.x
UC	LGA 775 Processeurs Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Prend en charge les technologies Hyper-Threading / d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ d'architecture Intel 64 / de mémoire étendue 64 / de virtualisation	LGA 775 Processeurs Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Prend en charge les technologies Hyper-Threading / d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ d'architecture Intel 64 / de mémoire étendue 64 / de virtualisation
Bus frontal	533 / 800 / 1066 / 1333 MHz	533 / 800 / 1066 / 1333 MHz
Chipset	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Super E/S	ITE 8718F 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 /moniteur de vitesse de ventilateur Fonction "Garden intelligent" de l'ITE	ITE 8718F 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 /moniteur de vitesse de ventilateur Fonction "Garden intelligent" de l'ITE
Mémoire principale	Fentes DDR2 DIMM x 4 Chaque DIMM prend en charge des DDR2 de 256Mo / 512Mo / 1Go / 2Go Capacité mémoire maximale de 8Go Module de mémoire DDR2 à mode à double voie Prend en charge la DDR2 800/667 (w. FSB 800/1066/1333 CPU) Prend en charge la DDR2 533 (w. FSB 533/1066 CPU) Prend en charge la DDR2 1066 (w. FSB 1333 CPU) Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge	Fentes DDR2 DIMM x 4 Chaque DIMM prend en charge des DDR2 de 256Mo / 512Mo / 1Go / 2Go Capacité mémoire maximale de 8Go Module de mémoire DDR2 à mode à double voie Prend en charge la DDR2 800/667 (w. FSB 800/1066/1333 CPU) Prend en charge la DDR2 533 (w. FSB 533/1066 CPU) Prend en charge la DDR2 1066 (w. FSB 1333 CPU) Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge
IDE	JMicro JMB368 Mode principale de Bus Ultra DMA 33 / 66 / 100 / 133 Prend en charge le mode PIO 0~4,	JMicro JMB368 Mode principale de Bus Ultra DMA 33 / 66 / 100 / 133 Prend en charge le mode PIO 0~4,
SATA	Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0	Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0

	Ver 5.x	Ver 6.x
LAN	Realtek RTL 8111B / RTL 8101E(optional) 10 / 100 / 1000 Mb/s négociation automatique (La bande passante Gigabit est pour le RTL 8111B uniquement) Half / Full duplex capability	Realtek RTL 8111B / RTL 8101E(optional) 10 / 100 / 1000 Mb/s négociation automatique (La bande passante Gigabit est pour le RTL 8111B uniquement) Half / Full duplex capability
Prise en charge audio HD	ALC888 Prise en charge de l'audio haute définition Sortie audio à 7.1 voies	ALC662 Prise en charge de l'audio haute définition Sortie audio à 5.1 voies
Fentes	Fente PCI x3 Fente PCI Express x16 x1 Fente PCI Express x4 x1 Fente PCI Express x1 x1	Fente PCI x3 Fente PCI Express x16 x1 Fente PCI Express x4 x1 Fente PCI Express x1 x1
Connecteur embarqué	Connecteur de disquette x1 Connecteur de Port d'imprimante x1 Connecteur de Port série x1 Connecteur IDE x1 Connecteur SATA x4 Connecteur du panneau avant x1 Connecteur Audio du panneau avant x1 Connecteur d'entrée CD x1 Connecteur de sortie S/PDIF (optional) x1 Embase de ventilateur UC x1 Embase de ventilateur système x1 Embase d'effacement CMOS x1 Connecteur USB x3 Connecteur d'alimentation x1 (24 broches) Connecteur d'alimentation x1 (4 broches)	Connecteur de disquette x1 Connecteur de Port d'imprimante x1 Connecteur de Port série x1 Connecteur IDE x1 Connecteur SATA x4 Connecteur du panneau avant x1 Connecteur Audio du panneau avant x1 Connecteur d'entrée CD x1 Connecteur de sortie S/PDIF (optional) x1 Embase de ventilateur UC x1 Embase de ventilateur système x1 Embase d'effacement CMOS x1 Connecteur USB x3 Connecteur d'alimentation x1 (24 broches) Connecteur d'alimentation x1 (4 broches)
E/S du panneau arrière	Clavier PS/2 x1 Souris PS/2 x1 Port LAN x1 Port USB x6 Fiche audio x6	Clavier PS/2 x1 Souris PS/2 x1 Port LAN x1 Port USB x6 Fiche audio x3
Dimensions de la carte	205 mm (l) X 305 mm (H)	205 mm (l) X 305 mm (H)
Support SE	Windows 2000 / XP / VISTA Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.	Windows 2000 / XP / VISTA Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.

**ITALIAN**

	<i>Ver 5.x</i>	<i>Ver 6.x</i>
CPU	LGA 775 Processore Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D Supporto di Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization	LGA 775 Processore Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D Supporto di Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization
FSB	533 / 800 / 1066 / 1333 MHz	533 / 800 / 1066 / 1333 MHz
Chipset	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Super I/O	ITE 8718F Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller / Monitoraggio velocità ventolina Funzione "Smart Guardian" di ITE	ITE 8718F Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller / Monitoraggio velocità ventolina Funzione "Smart Guardian" di ITE
Memoria principale	Alloggi DIMM DDR 2 x 4 Ciascun DIMM supporta DDR2 256MB / 512MB / 1GB / 2GB Capacità massima della memoria a 8GB Modulo di memoria DDR2 a canale doppio Supporto di DDR2 800/667 (w. FSB 800/ 1066/1333 CPU) Supporto di DDR2 533 (w. FSB 533/1066 CPU) Supporto di DDR2 1066 (w. FSB 1333 CPU) DIMM registrati e DIMM ECC non sono supportati	Alloggi DIMM DDR 2 x 4 Ciascun DIMM supporta DDR2 256MB / 512MB / 1GB / 2GB Capacità massima della memoria a 8GB Modulo di memoria DDR2 a canale doppio Supporto di DDR2 800/667 (w. FSB 800/ 1066/1333 CPU) Supporto di DDR2 533 (w. FSB 533/1066 CPU) Supporto di DDR2 1066 (w. FSB 1333 CPU) DIMM registrati e DIMM ECC non sono supportati
IDE	JMicro JMB368 Modalità Bus Master Ultra DMA 33 / 66 / 100 / 133 Supporto modalità PIO Mode 0-4	JMicro JMB368 Modalità Bus Master Ultra DMA 33 / 66 / 100 / 133 Supporto modalità PIO Mode 0-4
SATA	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0.	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0.

	Ver 5.x	Ver 6.x
LAN	Realtek RTL 8111B / RTL 8101E(optional) Negoziazione automatica 10 / 100 / 1000 Mb/s (la larghezza di banda Gigabit è solo per RTL 8111B) Capacità Half / Full Duplex	Realtek RTL 8111B / RTL 8101E(optional) Negoziazione automatica 10 / 100 / 1000 Mb/s (la larghezza di banda Gigabit è solo per RTL 8111B) Capacità Half / Full Duplex
Supporto audio HD	ALC888 Supporto audio High-Definition (HD) Uscita audio 7.1 canali	ALC662 Supporto audio High-Definition (HD) Uscita audio 5.1 canali
Alloggi	Alloggio PCI x3 Alloggio PCI Express x16 x1 Alloggio PCI Express x4 x1 Alloggio PCI Express x1 x1	Alloggio PCI x3 Alloggio PCI Express x16 x1 Alloggio PCI Express x4 x1 Alloggio PCI Express x1 x1
Connettori su scheda	Connettore floppy x1 Connettore Porta stampante x1 Connettore Porta seriale x1 Connettore IDE x1 Connettore SATA x4 Connettore pannello frontale x1 Connettore audio frontale x1 Connettore CD-in x1 Connettore output SPDIF (optional) x1 Collettore ventolina CPU x1 Collettore ventolina sistema x1 Collettore cancellazione CMOS x1 Connettore USB x3 Connettore alimentazione x1 (24 pin) Connettore alimentazione x1 (4 pin)	Connettore floppy x1 Connettore Porta stampante x1 Connettore Porta seriale x1 Connettore IDE x1 Connettore SATA x4 Connettore pannello frontale x1 Connettore audio frontale x1 Connettore CD-in x1 Connettore output SPDIF (optional) x1 Collettore ventolina CPU x1 Collettore ventolina sistema x1 Collettore cancellazione CMOS x1 Connettore USB x3 Connettore alimentazione x1 (24 pin) Connettore alimentazione x1 (4 pin)
I/O pannello posteriore	Tastiera PS/2 x1 Mouse PS/2 x1 Porta LAN x1 Porta USB x6 Connettore audio x6	Tastiera PS/2 x1 Mouse PS/2 x1 Porta LAN x1 Porta USB x6 Connettore audio x3
Dimensioni i scheda	205 mm (larghezza) x 305 mm (altezza)	205 mm (larghezza) x 305 mm (altezza)
Sistemi operativi supportati	Windows 2000 / XP / VISTA Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.	Windows 2000 / XP / VISTA Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.

## SPANISH

	Ver 5.x	Ver 6.x
CPU	LGA 775 Procesador Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Admite Hyper-Threading / Bit de deshabilitación de ejecución/ Intel SpeedStep® Mejorado/ Intel Architecture-64 / Tecnología Extended Memory 64 / Tecnología de virtualización	LGA 775 Procesador Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Admite Hyper-Threading / Bit de deshabilitación de ejecución/ Intel SpeedStep® Mejorado/ Intel Architecture-64 / Tecnología Extended Memory 64 / Tecnología de virtualización
FSB	533 / 800 / 1066 / 1333 MHz	533 / 800 / 1066 / 1333 MHz
Conjunto de chips	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Súper E/S	ITE 8718F 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/monitor de velocidad de ventilador Función "Guarda inteligente" de ITE	ITE 8718F 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/monitor de velocidad de ventilador Función "Guarda inteligente" de ITE
Memoria principal	Ranuras DIMM DDR2 x 4 Cada DIMM admite DDR de 256MB / 512MB / 1GB / 2GB Capacidad máxima de memoria de 8GB Módulo de memoria DDR2 de canal Doble Admite DDR2 de 800/667 (w. FSB 800/1066/ 1333 CPU) Admite DDR2 de 533 (w. FSB 533/1066 CPU) Admite DDR2 de 1066 (w. FSB 1333 CPU) No admite DIMM registrados o DIMM compatibles con ECC	Ranuras DIMM DDR2 x 4 Cada DIMM admite DDR de 256MB / 512MB / 1GB / 2GB Capacidad máxima de memoria de 8GB Módulo de memoria DDR2 de canal Doble Admite DDR2 de 800/667 (w. FSB 800/1066/ 1333 CPU) Admite DDR2 de 533 (w. FSB 533/1066 CPU) Admite DDR2 de 1066 (w. FSB 1333 CPU) No admite DIMM registrados o DIMM compatibles con ECC
IDE	JMicro JMB368 Modo bus maestro Ultra DMA 33 / 66 / 100 / 133 Soporte los Modos PIO 0~4,	JMicro JMB368 Modo bus maestro Ultra DMA 33 / 66 / 100 / 133 Soporte los Modos PIO 0~4,
SATA	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0.	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0.

	Ver 5.x	Ver 6.x
Red Local	Realtek RTL 8111B / RTL 8101E (opcional) Negociación de 10 / 100 / 1000 Mb/s (el ancho de banda Gigabit es únicamente para 8111B) Funciones Half/ Full dúplex	Realtek RTL 8111B / RTL 8101E (opcional) Negociación de 10 / 100 / 1000 Mb/s (el ancho de banda Gigabit es únicamente para 8111B) Funciones Half/ Full dúplex
Soporte de sonido HD	ALC888 Soporte de sonido de Alta Definición Salida de sonido de 7.1 canales	ALC662 Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales
Ranuras	Ranura PCI X3 Ranura PCI Express x16 X1 Ranura PCI Express x4 X1 Ranura PCI express x 1 X1	Ranura PCI X3 Ranura PCI Express x16 X1 Ranura PCI Express x4 X1 Ranura PCI express x 1 X1
Conectores en placa	Conector disco flexible X1 Conector Puerto de impresora X1 Conector Puerto serie X1 Conector IDE X1 Conector SATA X4 Conector de panel frontal X1 Conector de sonido frontal X1 Conector de entrada de CD X1 Conector de salida S/PDIF (opcional) X1 Cabecera de ventilador de CPU X1 Cabecera de ventilador de sistema X1 Cabecera de borrado de CMOS X1 Conector USB X3 Conector de alimentación X1 (24 patillas) Conector de alimentación X1 (4 patillas)	Conector disco flexible X1 Conector Puerto de impresora X1 Conector Puerto serie X1 Conector IDE X1 Conector SATA X4 Conector de panel frontal X1 Conector de sonido frontal X1 Conector de entrada de CD X1 Conector de salida S/PDIF (opcional) X1 Cabecera de ventilador de CPU X1 Cabecera de ventilador de sistema X1 Cabecera de borrado de CMOS X1 Conector USB X3 Conector de alimentación X1 (24 patillas) Conector de alimentación X1 (4 patillas)
Panel trasero de E/S	Teclado PS/2 X1 Ratón PS/2 X1 Puerto de red local X1 Puerto USB X6 Conector de sonido X6	Teclado PS/2 X1 Ratón PS/2 X1 Puerto de red local X1 Puerto USB X6 Conector de sonido X3
Tamaño de la placa	205 mm. (A) X 305 Mm. (H)	205 mm. (A) X 305 Mm. (H)
Soporte de sistema operativo	Windows 2000 / XP / VISTA Bios* se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.	Windows 2000 / XP / VISTA Bios* se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.

## PORTUGUESE

	<i>Ver 5.x</i>	<i>Ver 6.x</i>
CPU	LGA 775 Processador Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Suporta as tecnologias Hyper-Threading / Execute Disable Bit / EnhancedIntel SpeedStep® / Intel Architecture -64/ Extended Memory 64 / Virtualization	LGA 775 Processador Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Suporta as tecnologias Hyper-Threading / Execute Disable Bit / EnhancedIntel SpeedStep® / Intel Architecture -64/ Extended Memory 64 / Virtualization
FSB	533 / 800 / 1066 / 1333 MHz	533 / 800 / 1066 / 1333 MHz
Chipset	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Especificação do Super I/O	ITE 8718F 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/Monitor da velocidade da ventoinha Função "Smart Guardian" da ITE	ITE 8718F 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/Monitor 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 MB / 512 MB / 1GB / 2GB Capacidade máxima de memória: 8 GB Módulo de memória DDR2 de canal duplo Suporta módulos DDR2 800/667 (w. FSB 800/1066/1333 CPU) Suporta módulos DDR2 533 (w. FSB 533/1066 CPU) Suporta módulos DDR2 1066 (w. FSB 1333 CPU) Os módulos DIMM registados e os DIMM ECC não são suportados	Ranuras DIMM DDR2 x 4 Cada módulo DIMM suporta uma memória DDR2 de 256 MB / 512 MB / 1GB / 2GB Capacidade máxima de memória: 8 GB Módulo de memória DDR2 de canal duplo Suporta módulos DDR2 800/667 (w. FSB 800/1066/1333 CPU) Suporta módulos DDR2 533 (w. FSB 533/1066 CPU) Suporta módulos DDR2 1066 (w. FSB 1333 CPU) Os módulos DIMM registados e os DIMM ECC não são suportados
IDE	JMicro JMB368 Modo Bus master Ultra DMA 33 / 66 / 100 / 133 Suporta o modo PIO 0~4,	JMicro JMB368 Modo Bus master Ultra DMA 33 / 66 / 100 / 133 Suporta o modo PIO 0~4,
SATA	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0.	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0.



	Ver 5.x	Ver 6.x
LAN	Realtek RTL 8111B / RTL 8101E(opcional) Auto negociação de 10 / 100 / 1000Mb/s (a largura de banda Ggabit refere-se apenas à especificação RTL 8111B) Capacidade semi/full-duplex	Realtek RTL 8111B / RTL 8101E(opcional) Auto negociação de 10 / 100 / 1000Mb/s (a largura de banda Ggabit refere-se apenas à especificação RTL 8111B) Capacidade semi/full-duplex
Suporte para áudio de alta definição	ALC888 Suporta a especificação High-Definition Audio Saída de áudio de 7.1 canais	ALC662 Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais
Ranhuras	Ranhura PCI x3 Ranhura PCI Express x16 x1 Ranhura PCI Express x4 x1 Ranhura PCI Express x 1 x1	Ranhura PCI x3 Ranhura PCI Express x16 x1 Ranhura PCI Express x4 x1 Ranhura PCI Express x 1 x1
Conectores na placa	Conector da unidade de disquetes x1 Conector da para impressora x1 Conector da Porta série x1 Conector IDE x1 Conector SATA x4 Conector do painel frontal x1 Conector de áudio frontal x1 Conector para entrada de CDs x1 Conector de saída S/PDIF (opcional) x1 Conector da vertedinha da CPU x1 Conector da vertedinha do sistema x1 Conector para limpeza do CMOS x1 Conector USB x3 Conector de alimentação (24 pinos) x1 Conector de alimentação (4 pinos) x1	Conector da unidade de disquetes x1 Conector da para impressora x1 Conector da Porta série x1 Conector IDE x1 Conector SATA x4 Conector do painel frontal x1 Conector de áudio frontal x1 Conector para entrada de CDs x1 Conector de saída S/PDIF (opcional) x1 Conector da vertedinha da CPU x1 Conector da vertedinha do sistema x1 Conector para limpeza do CMOS x1 Conector USB x3 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 LAN x1 Porta USB x6 Tomada de áudio x6	Teclado PS/2 x1 Rato PS/2 x1 Porta LAN x1 Porta USB x6 Tomada de áudio x3
Tamanho da placa	205 mm (L) X 305 mm (A)	205 mm (L) X 305 mm (A)
Sistemas operativos suportados	Windows 2000 / XP / VISTA A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.	Windows 2000 / XP / VISTA A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.

**POLISH**

	<i>Ver 5.x</i>	<i>Ver 6.x</i>
Procesor	LGA 775 Procesor Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Obsługa Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	LGA 775 Procesor Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4/ Pentium D/ Celeron D Obsługa Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
FSB	533 / 800 / 1066 / 1333 MHz	533 / 800 / 1066 / 1333 MHz
Chipset	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Pamięć główna	Gniazda DDR2 DIMM x 4 Każde gniazdo DIMM obsługuje moduły 256MB / 512MB / 1GB / 2GB Maks. wielkość pamięci 8GB Moduł pamięci DDR2 z trybem podwójnego kanału Obsługa DDR2 800/667 (w. FSB 800/1066/1333 CPU) Obsługa DDR2 533 (w. FSB 533/1066 CPU) Obsługa DDR2 1066 (w. FSB 1333 CPU) Brak obsługi Registered DIMM oraz ECC DIMM	Gniazda DDR2 DIMM x 4 Każde gniazdo DIMM obsługuje moduły 256MB / 512MB / 1GB / 2GB Maks. wielkość pamięci 8GB Moduł pamięci DDR2 z trybem podwójnego kanału Obsługa DDR2 800/667 (w. FSB 800/1066/1333 CPU) Obsługa DDR2 533 (w. FSB 533/1066 CPU) Obsługa DDR2 1066 (w. FSB 1333 CPU) Brak obsługi Registered DIMM oraz ECC DIMM
Super I/O	ITE 8718F Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Court Funkcje kontroli warunków pracy, Monitor H/W Kontroler/Monitor prędkości wentylatora Funkcja ITE "Smart Guardian"	ITE 8718F Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Court Funkcje kontroli warunków pracy, Monitor H/W Kontroler/Monitor prędkości wentylatora Funkcja ITE "Smart Guardian"
IDE	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133 Tryb Bus Master obsługa PIO tryb 0~4,	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133 Tryb Bus Master obsługa PIO tryb 0~4,
SATA	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.
LAN	Realtek RTL 8111B / RTL 8101E (opcja) 10 / 100 / 1000 Mb/s z automatyczną negocjacją	Realtek RTL 8111B / RTL 8101E (opcja) 10 / 100 / 1000 Mb/s z automatyczną negocjacją

	Ver 5.x	Ver 6.x
	szybkości (Pasmo gigabitowe wyłącznie dla RTL 8111B) Działanie w trybie półowicznego / pełnego duplexu	szybkości (Pasmo gigabitowe wyłącznie dla RTL 8111B) Działanie w trybie półowicznego / pełnego duplexu
Obsługa audio HD	ALC888 Obsługa High-Definition Audio 7.1 kanałowe wyjście audio	ALC662 Obsługa High-Definition Audio 5.1 kanałowe wyjście audio
Gniazda	Gniazdo PCI x3 Gniazdo PCI Express x16 x1 Gniazdo PCI Express x 4 x1 Gniazdo PCI Express x 1 x1	Gniazdo PCI x3 Gniazdo PCI Express x16 x1 Gniazdo PCI Express x 4 x1 Gniazdo PCI Express x 1 x1
Złącza wbudowane	Złącze napędu dyskietek x1 Złącze Port drukarki x1 Złącze Port szeregowy x1 Złącze IDE x1 Złącze SATA x4 Złącze pętla przedniego x1 Przednie złącze audio x1 Złącze wejścia CD x1 Złącze wyjścia S/PDIF (opcja) x1 Złącze głośnikowe wentylatora procesora x1 Złącze głośnikowe wentylatora systemowego x1 Złącze głośnikowe kasowania CMOS x1 Złącze USB x3 Złącze zasilania (24 pinowe) x1 Złącze zasilania (4 pinowe) x1	Złącze napędu dyskietek x1 Złącze Port drukarki x1 Złącze Port szeregowy x1 Złącze IDE x1 Złącze SATA x4 Złącze pętla przedniego x1 Przednie złącze audio x1 Złącze wejścia CD x1 Złącze wyjścia S/PDIF (opcja) x1 Złącze głośnikowe wentylatora procesora x1 Złącze głośnikowe wentylatora systemowego x1 Złącze głośnikowe kasowania CMOS x1 Złącze USB x3 Złącze zasilania (24 pinowe) x1 Złącze zasilania (4 pinowe) x1
Back Panel I/O	Klawiatura PS/2 x1 Mysz PS/2 x1 Port LAN x1 Port USB x6 Gniazdo audio x6	Klawiatura PS/2 x1 Mysz PS/2 x1 Port LAN x1 Port USB x6 Gniazdo audio x3
Wymiary płyty	205 mm (S) X 305 mm (W)	205 mm (S) X 305 mm (W)
Obsługa systemu operacyjnego	Windows 2000 / XP / VISTA Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.	Windows 2000 / XP / VISTA Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.

**RUSSIAN**

	<i>Ver 5.x</i>	<i>Ver 6.x</i>
CPU (центральный процессор)	LGA 775 Процессор Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D Поддержка технологий Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация	LGA 775 Процессор Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D Поддержка технологий Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация
FSB	533 / 800 / 1066 / 1333 МГц	533 / 800 / 1066 / 1333 МГц
Набор микросхем	Intel P35 Intel ICH9	Intel P35 Intel ICH9
Основная память	Слоты DDR2 DIMM x 4 Каждый модуль DIMM поддерживает 256 МБ / 512 МБ / 1 ГБ / 2 ГБ DDR2 Максимальная ёмкость памяти 8 ГБ Модуль памяти с двужанальным режимом DDR2 Поддержка DDR2 800/667 (w. FSB 800/1066/1333 CPU) Поддержка DDR2 533 (w. FSB 533/1066 CPU) Поддержка DDR2 1066 (w. FSB 1333 CPU) Не поддерживает зарегистрированные модули DIMM and ECC DIMM	Слоты DDR2 DIMM x 4 Каждый модуль DIMM поддерживает 256 МБ / 512 МБ / 1 ГБ / 2 ГБ DDR2 Максимальная ёмкость памяти 8 ГБ Модуль памяти с двужанальным режимом DDR2 Поддержка DDR2 800/667 (w. FSB 800/1066/1333 CPU) Поддержка DDR2 533 (w. FSB 533/1066 CPU) Поддержка DDR2 1066 (w. FSB 1333 CPU) Не поддерживает зарегистрированные модули DIMM and ECC DIMM
Super I/O	ITE 8718F Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости вентилятора/ монитор Функция ITE "Smart Guardian" (Интеллектуальная защита)	ITE 8718F Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости вентилятора/ монитор Функция ITE "Smart Guardian" (Интеллектуальная защита)
IDE	JMicro JMB368 Режим "хвояина" шины Ultra DMA 33 / 66 / 100 / 133 Поддержка режима PIO 0~4,	JMicro JMB368 Режим "хвояина" шины Ultra DMA 33 / 66 / 100 / 133 Поддержка режима PIO 0~4,
SATA	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0.	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0.

	Ver 5.x	Ver 6.x
Локальная сеть	Realtek RTL 8111B / RTL 8101E (дополнительно) Автоматическое согласование 10 / 100 / 1000 Мб/с (гигабитная пропускная способность только для гигабитного физического уровня) Частичная / полная дуплексная способность	Realtek RTL 8111B / RTL 8101E (дополнительно) Автоматическое согласование 10 / 100 / 1000 Мб/с (гигабитная пропускная способность только для гигабитного физического уровня) Частичная / полная дуплексная способность
Звуковая поддержка жесткого диска	ALC888 Звуковая поддержка High-Definition 7.1-канальный звуковой выход	ALC662 Звуковая поддержка High-Definition 5.1-канальный звуковой выход
Слоты	Слот PCI x3 Слот PCI Express x16 x1 Слот PCI Express x 4 x1 Слот PCI Express x 1 x1	Слот PCI x3 Слот PCI Express x16 x1 Слот PCI Express x 4 x1 Слот PCI Express x 1 x1
Встроенный разъем	Разъем НГМД x1 Разъем Порт подключения принтера x1 Разъем Последовательный порт x1 Разъем IDE x1 Разъем SATA x4 Разъем на лицевой панели x1 Входной звуковой разъем x1 Разъем ввода для CD x1 Разъем вывода для S/PDIF(дополнительно)x1 Контактирующее приспособление вентилятора центрального процессора x1 Контактирующее приспособление вентилятора системы x1 Открытое контактирующее приспособление CMOS x1 USB-разъем x3 Разъем питания (24 вывод) x1 Разъем питания (4 вывод) x1	Разъем НГМД x1 Разъем Порт подключения принтера x1 Разъем Последовательный порт x1 Разъем IDE x1 Разъем SATA x4 Разъем на лицевой панели x1 Входной звуковой разъем x1 Разъем ввода для CD x1 Разъем вывода для S/PDIF(дополнительно)x1 Контактирующее приспособление вентилятора центрального процессора x1 Контактирующее приспособление вентилятора системы x1 Открытое контактирующее приспособление CMOS x1 USB-разъем x3 Разъем питания (24 вывод) x1 Разъем питания (4 вывод) x1
Задняя панель средств ввода-вывода	Клавиатура PS/2 x1 Мышь PS/2 x1 Порт LAN x1 USB-порт x6 Гнездо для подключения наушников x6	Клавиатура PS/2 x1 Мышь PS/2 x1 Порт LAN x1 USB-порт x6 Гнездо для подключения наушников x3
Размер панели	205 мм (Ш) X 305мм (В)	205 мм (Ш) X 305мм (В)
Поддержка OS	Windows 2000 / XP / VISTA Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.	Windows 2000 / XP / VISTA Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.

## ARABIC

Ver 6.x	Ver 5.x	
LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx معالجات / Pentium 4 / Pentium D / Celeron D بتردد يصل إلى Hyper-Threading / Execute Disable Bit / تدعم تقنيات Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx معالجات / Pentium 4 / Pentium D / Celeron D بتردد يصل إلى Hyper-Threading / Execute Disable Bit / تدعم تقنيات Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	وحدة المعالجة لمركزية
ميجا هرتز 533 / 800 / 1066 / 1333 تردد	ميجا هرتز 533 / 800 / 1066 / 1333 تردد	النقل الأممي الجانبي
Intel P35 Intel ICH9	Intel P35 Intel ICH9	مجموعة الشرائح
عدد 4 فتحة DDR2 DIMM ميجا 256/512 سعة DDR2 تدعم ذاكرة من نوع DIMM تدعم كل قحة بليت 2 و بليت 1 جيجا بايت سعة ذاكرة قصوى 8 جيجا بايت مزوجة لفتحة DDR2 وحدة ذاكرة (w. FSB) 800/1066/1333 CPU تدعم الذاكرة من نوع 533/1066 CPU (w. FSB) 533/1066 CPU تدعم الذاكرة من نوع 1066/1333 CPU (w. FSB) 1066/1333 CPU تدعم الذاكرة من نوع ECC و تلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	عدد 4 فتحة DDR2 DIMM ميجا 256/512 سعة DDR2 تدعم ذاكرة من نوع DIMM تدعم كل قحة بليت 2 و بليت 1 جيجا بايت سعة ذاكرة قصوى 8 جيجا بايت مزوجة لفتحة DDR2 وحدة ذاكرة (w. FSB) 800/1066/1333 CPU تدعم الذاكرة من نوع 533/1066/1333 CPU (w. FSB) 533/1066 CPU تدعم الذاكرة من نوع 1066/1333 CPU (w. FSB) 1066/1333 CPU تدعم الذاكرة من نوع ECC و تلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	الذاكرة الرئيسية
ITE 8718F الأكثر استخداماً Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية وسائل لتحكم في البيئة مراقب لمعوية حلقة الأجهزة مراقب في سرعة لمروحة ITE من "Smart Guardian" وظيفة	ITE 8718F الأكثر استخداماً Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية وسائل لتحكم في البيئة مراقب لمعوية حلقة الأجهزة مراقب في سرعة لمروحة ITE من "Smart Guardian" وظيفة	Super I/O
JMicro JMB368 متحكم IDE وضع رئيسي 33 / 66 / 100 / 133 نقل ببقية PIO Mode 0~4 - دعم وضع	JMicro JMB368 متحكم IDE وضع رئيسي 33 / 66 / 100 / 133 نقل ببقية PIO Mode 0~4 - دعم وضع	منفذ IDE
متكامل Serial ATA متحكم جيجابت/ثانية 3.0 قل لينكات بساعات تصل إلى 2.0 الإصدار SATA مطابقة لمواصفات	متكامل Serial ATA متحكم جيجابت/ثانية 3.0 قل لينكات بساعات تصل إلى 2.0 الإصدار SATA مطابقة لمواصفات	SATA

Ver 6.x	Ver 5.x	
Realtek RTL 8111B/ RTL 8101E(اختياري) تقوض قهلي 100/10 ميجا بايت /ثلية و1ججابت/ثانية RTL 8111Bالطلق الترندي ليججابت مقصور ققط على إمكانية القفل لمزوج الكامل/القصي	Realtek RTL 8111B/ RTL 8101E(اختياري) تقوض قهلي 100/10 ميجا بايت /ثلية و1ججابت/ثانية RTL 8111Bالطلق الترندي ليججابت مقصور ققط على إمكانية القفل لمزوج الكامل/القصي	شبكة داخلية
ALC662 Intel دعم قهية لصوت علي تعريف من 5.1 قنوات لخرج الصوت	ALC888 دعم قهية لصوت علي تعريف من 7.1 قنوات لخرج الصوت	دعم الصوت علي التعريف
عدد 3 فتحة PCI عدد 1 فتحة PCI Expressx16 عدد 1 فتحة PCI Expressx4 عدد 1 فتحة PCI Express x 1	عدد 3 فتحة PCI عدد 1 فتحة PCI Expressx16 عدد 1 فتحة PCI Expressx4 عدد 1 فتحة PCI Express x 1	الفتحات
عدد 1 مقذ محرك أقراص مرنة عدد 1 مقذ طابعة عدد 1 مقذ تسلسلي عدد 1 مقذ IDE عدد 4 مقذ SATA عدد 1 مقذ اللوحة الأملية عدد 1 مقذ الصوت الأملي عدد 1 مقذ CD-IN عدد 1 مقذ خرج S/PDIF(اختياري) عدد 1 وصلة مروحة وحدة المعالجة المركزية عدد 1 وصلة مروحة للنظم عدد 1 وصلة مسح CMOS عدد 3 مقذ USB عدد 1 مقذ توصيل لطقه (24يوس) عدد 1 مقذ توصيل لطقه (4ديليس)	عدد 1 مقذ محرك أقراص مرنة عدد 1 مقذ طابعة عدد 1 مقذ تسلسلي عدد 1 مقذ IDE عدد 4 مقذ SATA عدد 1 مقذ اللوحة الأملية عدد 1 مقذ الصوت الأملي عدد 1 مقذ CD-IN عدد 1 مقذ خرج S/PDIF(اختياري) عدد 1 وصلة مروحة وحدة المعالجة المركزية عدد 1 وصلة مروحة للنظم عدد 1 وصلة مسح CMOS عدد 3 مقذ USB عدد 1 مقذ توصيل لطقه (24يوس) عدد 1 مقذ توصيل لطقه (4ديليس)	المنافذ على سطح اللوحة
عدد 1 لوحة مفاتيح PS/2 عدد 1 مؤس PS/2 عدد 1 مقذ شبكة لتصل محلية عدد 6 منافذ USB عدد 3 مقيس صوت	عدد 1 لوحة مفاتيح PS/2 عدد 1 مؤس PS/2 عدد 1 مقذ شبكة لتصل محلية عدد 6 منافذ USB عدد 6 مقيس صوت	منافذ دخل/خرج اللوحة الخلفية
205مم (عرض) X 305مم (ارتفاع)	205مم (عرض) X 305مم (ارتفاع)	حجم اللوحة
Windows 2000 / XP / VISTA بخطها في إضافة أو إزالة لدعم لأي نظام تشغيل بإخطل Biostar تحتفظ أو بيون إخطل.	Windows 2000 / XP / VISTA بخطها في إضافة أو إزالة لدعم لأي نظام تشغيل بإخطل Biostar تحتفظ أو بيون إخطل.	دعم أنظمة التشغيل

## JAPANESE

	Ver 5.x	Ver 6.x
CPU	LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D processor Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technologyをサポート します	LGA 775 Intel Core2Duo / Core2Quad / Celeron 4xx / Pentium 4 / Pentium D / Celeron D processor Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technologyをサポート します
FSB	533 / 800 / 1066 / 1333 MHz	533 / 800 / 1066 / 1333 MHz
チップセット	Intel P35 Intel ICH9	Intel P35 Intel ICH9
メインメモリ	DDR2 DIMMスロット x 4 各DIMMは 256MB / 512MB / 1GB / 2GB DDR2を サポート 最大メモリ容量8GB デュアル チャンネルモードDDR2メモリモジュール DDR2 800/667をサポート (w. FSB 800/1066/ 1333 CPU) DDR2 533をサポート (w. FSB 533/1066 CPU) DDR2 1066をサポート (w. FSB 1333 CPU) 登録済みDIMMとECC DIMMはサポートされません	DDR2 DIMMスロット x 4 各DIMMは 256MB / 512MB / 1GB / 2GB DDR2を サポート 最大メモリ容量8GB デュアル チャンネルモードDDR2メモリモジュール DDR2 800/667をサポート (w. FSB 800/1066/ 1333 CPU) DDR2 533をサポート (w. FSB 533/1066 CPU) DDR2 1066をサポート (w. FSB 1333 CPU) 登録済みDIMMとECC DIMMはサポートされません
Super I/O	ITE 8718F 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ニシアチブ、 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	ITE 8718F 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ニシアチブ、 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	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133バスマスタモード PIO Mode 0~4のサポート、	JMicro JMB368 Ultra DMA 33 / 66 / 100 / 133バスマスタモード PIO Mode 0~4のサポート、
SATA	統合シリアルATAコントローラ 最高3.0 Gb/秒のデータ転送速度 SATAバージョン2.0仕様に準拠。	統合シリアルATAコントローラ 最高3.0 Gb/秒のデータ転送速度 SATAバージョン2.0仕様に準拠。



	Ver 5.x	Ver 6.x
LAN	Realtek RTL 8111B / RTL 8101E(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 8111B専用です) 半/全二重機能	Realtek RTL 8111B / RTL 8101E(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 8111B専用です) 半/全二重機能
HDオーディオのサポート	ALC888 ハイデフィニションオーディオのサポート 7.1チャンネルオーディオアウト	ALC662 ハイデフィニションオーディオのサポート 5.1チャンネルオーディオアウト
スロット	PCIスロット x3 PCI Express x16スロット x1 PCI Express x4スロット x1 PCI Express x1スロット x1	PCIスロット x3 PCI Express x16スロット x1 PCI Express x4スロット x1 PCI Express x1スロット x1
オンボードコネクタ	フロッピーコネクタ x1 プリンタポートコネクタ x1 シリアルポートコネクタ x1 IDEコネクタ x1 SATAコネクタ x4 フロントパネルコネクタ x1 フロントオーディオコネクタ x1 CDインコネクタ x1 S/PDIFアウトコネクタ(オプション) x1 CPUファンヘッダ x1 システムファンヘッダ x1 CMOS クリアヘッダ x1 USBコネクタ x3 電源コネクタ(24ピン) x1 電源コネクタ(4ピン) x1	フロッピーコネクタ x1 プリンタポートコネクタ x1 シリアルポートコネクタ x1 IDEコネクタ x1 SATAコネクタ x4 フロントパネルコネクタ x1 フロントオーディオコネクタ x1 CDインコネクタ x1 S/PDIFアウトコネクタ(オプション) x1 CPUファンヘッダ x1 システムファンヘッダ x1 CMOS クリアヘッダ x1 USBコネクタ x3 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 LANポート x1 USBポート x6 オーディオジャック x6	PS/2キーボード x1 PS/2マウス x1 LANポート x1 USBポート x6 オーディオジャック x3
ボードサイズ	205 mm (幅) X 305 mm (高さ)	205 mm (幅) X 305 mm (高さ)
OSサポート	Windows 2000 / XP / VISTA Bicstar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。	Windows 2000 / XP / VISTA Bicstar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。

2007/07/05

# ***P35D2-A7 BIOS Setup***

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<b>BIOS Setup .....</b>	<b>1</b>
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<b>2 Standard CMOS Features.....</b>	<b>7</b>
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<b>5 Integrated Peripherals.....</b>	<b>18</b>
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## **BIOS Setup**

### **Introduction**

The purpose of this manual is to describe the settings in the Phoenix-Award™ BIOS Setup program on this motherboard. The Setup program allows users to modify the basic system configuration and save these settings to CMOS RAM. The power of CMOS RAM is supplied by a battery so that it retains the Setup information when the power is turned off.

Basic Input-Output System (BIOS) determines what a computer can do without accessing programs from a disk. This system controls most of the input and output devices such as keyboard, mouse, serial ports and disk drives. BIOS activates at the first stage of the booting process, loading and executing the operating system. Some additional features, such as virus and password protection or chipset fine-tuning options are also included in BIOS.

The rest of this manual will to guide you through the options and settings in BIOS Setup.

### **Plug and Play Support**

This PHOENIX-AWARD BIOS supports the Plug and Play Version 1.0A specification.

### **EPA Green PC Support**

This PHOENIX-AWARD BIOS supports Version 1.03 of the EPA Green PC specification.

### **APM Support**

This PHOENIX-AWARD BIOS supports Version 1.1&1.2 of the Advanced Power Management (APM) specification. Power management features are implemented via the System Management Interrupt (SMI). Sleep and Suspend power management modes are supported. Power to the hard disk drives and video monitors can also be managed by this PHOENIX-AWARD BIOS.

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## **ACPI Support**

Phoenix-Award ACPI BIOS support Version 1.0b of Advanced Configuration and Power interface specification (ACPI). It provides ASL code for power management and device configuration capabilities as defined in the ACPI specification, developed by Microsoft, Intel and Toshiba.

## **PCI Bus Support**

This PHOENIX-AWARD BIOS also supports Version 2.3 of the Intel PCI (Peripheral Component Interconnect) local bus specification.

## **DRAM Support**

DDR2 SDRAM (Double Data Rate Synchronous DRAM) is supported.

## **Supported CPUs**

This PHOENIX-AWARD BIOS supports the Intel CPU.

## **Using Setup**

Use the arrow keys to highlight items in most of the place, press <Enter> to select, use the <PgUp> and <PgDn> keys to change entries, press <F1> for help and press <Esc> to quit. The following table provides more detail about how to navigate in the Setup program by using the keyboard.

<b>Keystroke</b>	<b>Function</b>
Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item on the left (menu bar)
Right arrow	Move to the item on the right (menu bar)
Move Enter	Move to the item you desired
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
+ Key	Increase the numeric value or make changes
- Key	Decrease the numeric value or make changes
Esc key	Main Menu – Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu – Exit Current page and return to Main Menu
F1 key	General help on Setup navigation keys
F5 key	Load previous values from CMOS
F7 key	Load the optimized defaults
F10 key	Save all the CMOS changes and exit

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# P35D2-A7

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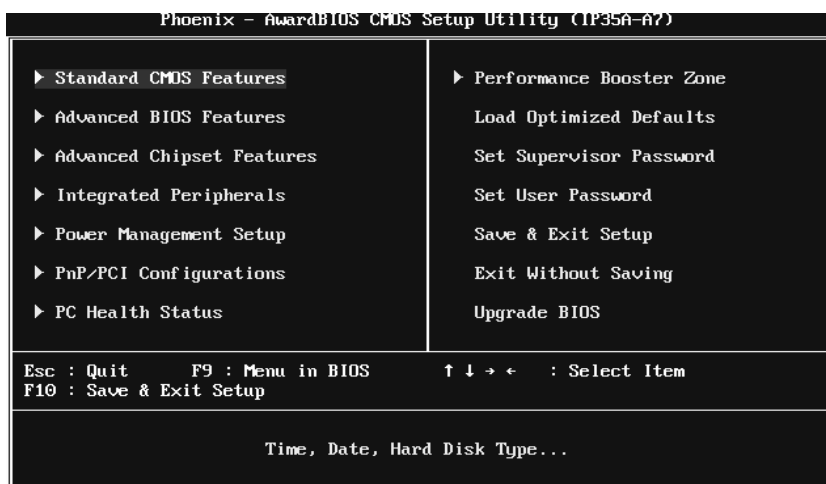
## 1 Main Menu

Once you enter Phoenix-Award BIOS™ CMOS Setup Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup functions. Use the arrow keys to select among the items and press <Enter> to accept and enter the sub-menu.

**!! WARNING !!**

For better system performance, the BIOS firmware is being continuously updated. The BIOS information described in this manual (Figure 1, 2, 3, 4, 5, 6, 7, 8, 9,10) is for your reference only. The actual BIOS information and settings on board may be slightly different from this manual.

■ Figure 1: Main Menu



### Standard CMOS Features

This submenu contains industry standard configurable options.

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## **Advanced BIOS Features**

This submenu allows you to configure advanced features of the BIOS.

## **Advanced Chipset Features**

This submenu allows you to configure special chipset features.

## **Integrated Peripherals**

This submenu allows you to configure certain IDE hard drive options and Programmed Input/ Output features.

## **Power Management Setup**

This submenu allows you to configure the power management features.

## **PnP/PCI Configurations**

This submenu allows you to configure certain “Plug and Play” and PCI options.

## **PC Health Status**

This submenu allows you to monitor the hardware of your system.

## **Performance Booster Zone**

This submenu allows you to change CPU Vcore Voltage and CPU/PCI clock. (However, we suggest you to use the default setting. Changing the voltage and clock improperly may damage the CPU or M/B!)

## **Load Optimized Defaults**

This selection allows you to reload the BIOS when problem occurs during system booting sequence. These configurations are factory settings optimized for this system. A confirmation message will be displayed before defaults are set.



Load Optimized Defaults (Y/N)? N

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## **Set Supervisor Password**

Setting the supervisor password will prohibit everyone except the supervisor from making changes using the CMOS Setup Utility. You will be prompted with to enter a password.



```
Enter Password:
```

## **Set User Password**

If the Supervisor Password is not set, then the User Password will function in the same way as the Supervisor Password. If the Supervisor Password is set and the User Password is set, the “User” will only be able to view configurations but will not be able to change them.



```
Enter Password:
```

## **Save & Exit Setup**

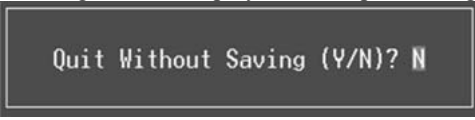
Save all configuration changes to CMOS (memory) and exit setup. Confirmation message will be displayed before proceeding.



```
SAVE to CMOS and EXIT (Y/N)? Y
```

## **Exit Without Saving**

Abandon all changes made during the current session and exit setup. Confirmation message will be displayed before proceeding.



```
Quit Without Saving (Y/N)? N
```

## ***P35D2-A7***

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### **Upgrade BIOS**

This submenu allows you to upgrade bios.

BIOS UPDATE UTILITY (Y/N)? N

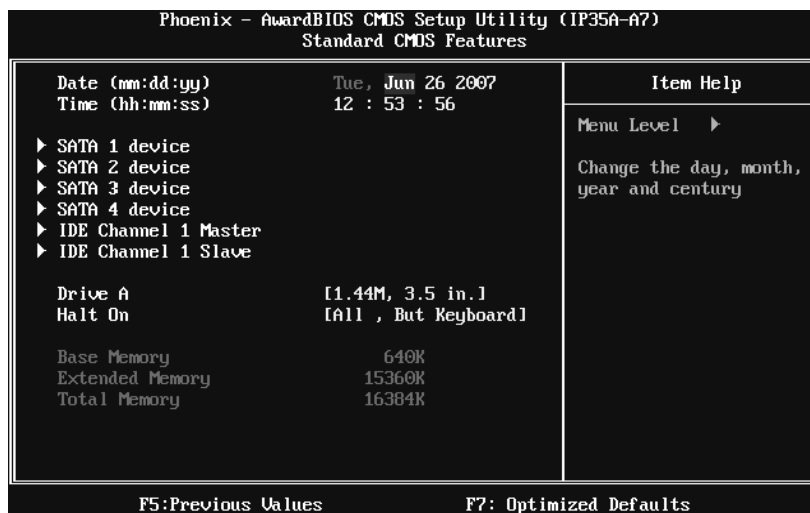


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## 2 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into several categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

■ Figure 2: Standard CMOS Setup



### Main Menu Selections

This table shows the items and the available options on the Main Menu.

Item	Options	Description
Date	mm : dd : yy	Set the system date. Note that the 'Day' automatically changes when you set the date.
Time	hh : mm : ss	Set the system internal clock.
SATA 1 / 2 / 3 / 4 Device	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options

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<b>Item</b>	<b>Options</b>	<b>Description</b>
IDE Channel 1 Master / Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
Drive A	360K, 5.25 in 1.2M, 5.25 in 720K, 3.5 in 1.44M, 3.5 in 2.88M, 3.5 in None	Select the type of floppy disk drive installed in your system.
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/ Key	Select the situation in which you want the BIOS to stop the POST process and notify you.
Base Memory	N/A	Displays the amount of conventional memory detected during boot up.
Extended Memory	N/A	Displays the amount of extended memory detected during boot up.
Total Memory	N/A	Displays the total memory available in the system.

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## 3 Advanced BIOS Features

■ Figure 3: Advanced BIOS Setup

Phoenix - AwardBIOS CMOS Setup Utility (IP35A-A7)		Item Help
Advanced BIOS Features		Menu Level ▶
▶ CPU Feature	[Press Enter]	
▶ Cache Setup	[Press Enter]	
▶ Boot Seq & Floppy Setup	[Press Enter]	
Virus Warning	[Disabled]	
Hyper-Threading Technology	[Enabled]	
Quick Power On Self Test	[Enabled]	
Boot Up NumLock Status	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
× Typematic Rate (Chars/Sec)	6	
× Typematic Delay (Msec)	250	
Security Option	[Setup]	
APIC Mode	[Enabled]	
MPS Version Control For OS	[1.4]	
OS Select For DRAM > 64MB	[Non-OS2]	
Full Screen LOGO Show	[Enabled]	
Small Logo(EPA) Show	[Disabled]	
Summary Screen Show	[Disabled]	

F5: Previous Values      F7: Optimized Defaults

### CPU Feature

Phoenix - AwardBIOS CMOS Setup Utility (IP35A-A7)		Item Help
CPU Feature		Menu Level ▶
Delay Prior to Thermal	[16 Min]	
Thermal Management	[Thermal Monitor 1]	
TM2 Bus Ratio	[ 0 X]	
TM2 Bus VID	[0.8375V]	
PPM Mode	[Native Mode]	
Limit CPUID MaxVal	[Disabled]	
C1E Function	[Auto]	
Execute Disable Bit	[Enabled]	
Virtualization Technology	[Enabled]	
Core Multi-Processing	[Enabled]	

F5: Previous Values      F7: Optimized Defaults

## **P35D2-A7**

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### **Delay Prior to Thermal**

Set this item to enable the CPU Thermal function to engage after the specified time.

**The Choices:** 4 Min, 8 Min, **16Min** (default), 32 Min.

### **Thermal Management**

This option allows you to select the way to control the “Thermal Management.”

**The Choices:** **Thermal Monitor 1** (default), Thermal Monitor 2.

### **TM2 Bus Ratio**

This option represents the frequency (bus ratio) of the throttled performance state that will be initiated when the on-die sensor detects temperature increase.

Min= 0 Max= 255 Key in a DEC number.

**The Choices:** **0 X** (default).

### **TM2 Bus VID**

This option represents the voltage of the throttled performance state that will be initiated when the on-die sensor detects temperature increase.

**The Choices:** **0.8375V** (default), 0.8375-1.6000.

### **PPM Mode**

**The Choices:** **Native Mode** (default), SMM Mode.

### **Limit CUID MaxVal**

Set Limit CUID MaxVal to 3, it should be “Disabled” for Windows XP.

**The Choices:** **Disabled** (default), Enabled.

### **C1E Function**

This item allows you to configure the Enhanced Halt State (C1E) function, which may reduce the power consumption of your system when the system is idle.

**The Choices:** **Auto** (default), Disabled.

### **Execute Disable Bit**

This item allows you to configure the Execute Disabled Bit function, which protects your system from buffer overflow attacks.

**The Choices:** **Enabled** (default), Disabled.

### **Virtualization Technology**

Virtualization Technology can virtually separate your system resource into several parts, thus enhance the performance when running virtual machines or multi interface systems.

**The Choices:** **Enabled** (default), Disabled.

### **Core Multi-Processing**

**The Choices:** **Enabled** (default), Disabled.

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## Cache Setup



### CPU L3 Cache

Depending on the CPU/chipset in use, you may be able to increase memory access time with this option.

**Enabled** (default) Enable cache.

**Disabled** Disable cache.

## Boot Seq & Floppy Setup

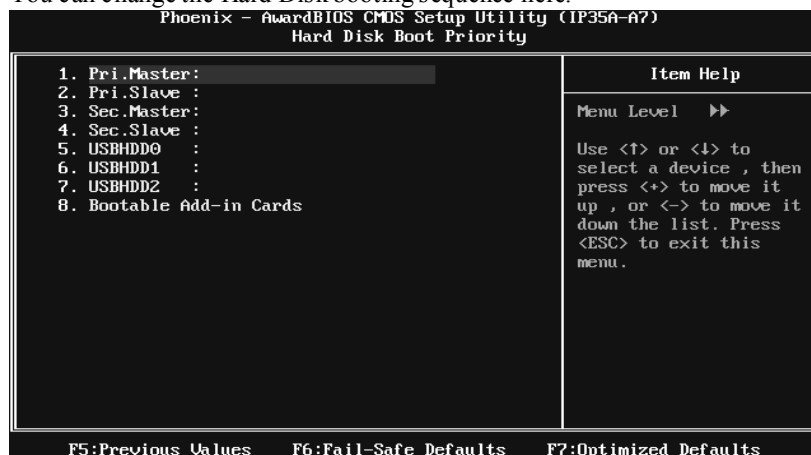
This item allows you to setup boot sequence & Floppy.



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### Hard Disk Boot Priority

The BIOS will attempt to arrange the Hard Disk boot sequence automatically. You can change the Hard Disk booting sequence here.



**The Choices:** Pri. Master, Pri. Slave, Sec. Master, Sec. Slave, USB HDD0, USB HDD1, USB HDD2, and Bootable Add-in Cards.

#### First/Second/Third Boot Device

The BIOS will attempt to load the operating system in this order.

**The Choices:** Floppy, LS120, Hard Disk, CDROM, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, Legacy LAN, Disabled.

#### Boot Other Device

When enabled, BIOS will try to load the operating system from other device when it failed to load from the three devices above.

**The Choices:** Enabled (default), Disabled.

#### Boot Up Floppy Seek

When enabled, System will test the floppy drives to determine if they have 40 or 80 tracks during boot up. Disabling this option reduces the time it takes to boot-up.

**The Choices:** Enabled (default), Disabled.

## **P35D2-A7**

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### **Virus Warning**

This option allows you to choose the VIRUS Warning feature that is used to protect the IDE Hard Disk boot sector. If this function is enabled and an attempt is made to write to the boot sector, BIOS will display a warning message on the screen and sound an alarm beep.

**Disabled** (default) Virus protection is disabled.  
Enabled Virus protection is activated.

### **Hyper-Threading Technology**

This option allows you to enable or disabled Hyper-Threading Technology. "Enabled" for Windows XP and Linux2.4.x (OS optimized for Hyper-Threading Technology). "Disable" for other OS (OS not optimized for Hyper-Threading Technology).

**The Choices:** Enabled (default), Disabled.

### **Quick Power On Self Test**

Enabling this option will cause an abridged version of the Power On Self-Test (POST) to execute after you power up the computer.

Disabled Normal POST.  
**Enabled** (default) Enable quick POST.

### **Boot Up NumLock Status**

Selects the NumLock State after the system switched on.

The Choices:

**On** (default) Numpad is number keys.  
Off Numpad is arrow keys.

### **Gate A20 Option**

Select if chipset or keyboard controller should control Gate A20.

Normal A pin in the keyboard controller controls GateA20.  
**Fast** (default) Lets chipset control Gate A20.

### **Typematic Rate Setting**

When a key is held down, the keystroke will repeat at a rate determined by the keyboard controller. When enabled, the typematic rate and typematic delay can be configured.

**The Choices:** Disabled (default), Enabled.

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### **Typematic Rate (Chars/Sec)**

Sets the rate at which a keystroke is repeated when you hold the key down.

**The Choices:** 6 (default), 8, 10, 12, 15, 20, 24, 30.

### **Typematic Delay (Msec)**

Sets the delay time after the key is held down before it begins to repeat the keystroke.

**The Choices:** 250 (default), 500, 750, 1000.

### **Security Option**

This option will enable only individuals with passwords to bring the system online and/or to use the CMOS Setup Utility.

**System:** A password is required for the system to boot and is also required to access the Setup Utility.

**Setup (default):** A password is required to access the Setup Utility only.

This will only apply if passwords are set from the Setup main menu.

### **APIC MODE**

Selecting Enabled enables APIC device mode reporting from the BIOS to the operating system.

**The Choices:** Enabled (default), Disabled.

### **MPS Version Control For OS**

The BIOS supports version 1.1 and 1.4 of the Intel multiprocessor specification.

Select version supported by the operation system running on this computer.

**The Choices:** 1.4 (default), 1.1.

### **OS Select For DRAM > 64MB**

A choice other than Non-OS2 is only used for OS2 systems with memory exceeding 64MB.

**The Choices:** Non-OS2 (default), OS2.

### **Full Screen LOGO Show**

This item allows you to enable/disable Full Screen LOGO Show.

**The Choices:** Enabled (default), Disabled.



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### **Small Logo(EPA) Show**

This item allows you to select whether the “Small Logo” shows.

**The Choices: Disabled** (default), Enabled.

### **Summary Screen Show**

This item allows you to enable/disable the summary screen. Summary screen means system configuration and PCI device listing.

**The Choices: Disabled** (default), Enabled.

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## P35D2-A7

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### 4 Advanced Chipset Features

This submenu allows you to configure the specific features of the chipset installed on your system. This chipset manage bus speeds and access to system memory resources, such as DRAM. It also coordinates communications with the PCI bus. The default settings that came with your system have been optimized and therefore should not be changed unless you are suspicious that the settings have been changed incorrectly.

■ **Figure 4: Advanced Chipset Setup**



#### System BIOS Cacheable

Selecting the “Enabled” option allows caching of the system BIOS ROM at F0000h-FFFFFh, which is able to improve the system performance. However, any programs that attempts to write to this memory block will cause conflicts and result in system errors.

**The Choices:** Enabled (default), Disabled.

## ***P35D2-A7***

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### **Memory Hole At 15M-16M**

You can reserve this area of system memory for ISA adapter ROM. When this area is reserved it cannot be cached. Check the user information of peripherals that need to use this area of system memory for the memory requirements.

**The Choices:** **Disabled** (default), Enabled.

### **PEG Force X1**

When using on-chip VGA, this item has to be set as X1.

**Disabled** (default) PCI Express X16

Enabled PCI Express X1

# P35D2-A7

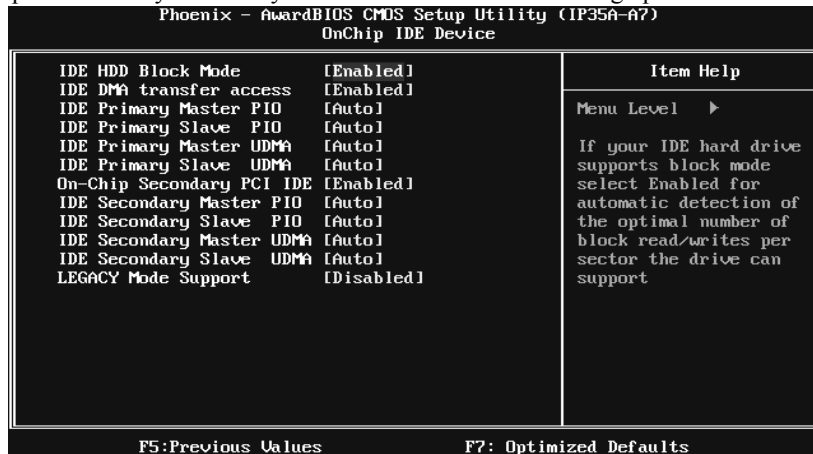
## 5 Integrated Peripherals

■ Figure 5. Integrated Peripherals



### OnChip IDE Device

Highlight the “Press Enter” label next to the “OnChip IDE Device” label and press enter key will take you a submenu with the following options:



## **P35D2-A7**

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### **IDE HDD Block Mode**

Block mode is also called block transfer, multiple commands, or multiple sectors read / write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read / write per sector where the drive can support.

**The Choices:** Enabled (default), Disabled.

### **IDE DMA Transfer Access**

This item allows you to enable or disable the IDE DMA transfer access.

**The Choices:** Enabled (default), Disabled.

### **IDE Primary/Secondary Master/Slave PIO**

The IDE PIO (Programmed Input / Output) fields let you set a PIO mode (0-4) for each of the IDE devices that the onboard IDE interface supports. Modes 0 to 4 will increase performance progressively. In Auto mode, the system automatically determines the best mode for each device.

**The Choices:** Auto (default), Mode0, Mode1, Mode2, Mode3, Mode4.

### **On-chip Secondary PCI IDE**

This item allows you to enable or disable the primary / secondary IDE Channel.

**The Choices:** Enabled (default), Disabled.

### **IDE Primary/Secondary Master/Slave UDMA**

Ultra DMA function can be implemented if it is supported by the IDE hard drives in your system. As well, your operating environment requires a DMA driver (Windows 95 or OSR2 may need a third party IDE bus master driver). If your hard drive and your system software both support Ultra DMA, select Auto to enable BIOS support.

**The Choices:** Auto (default), Disabled.

### **LEGACY Mode Support**

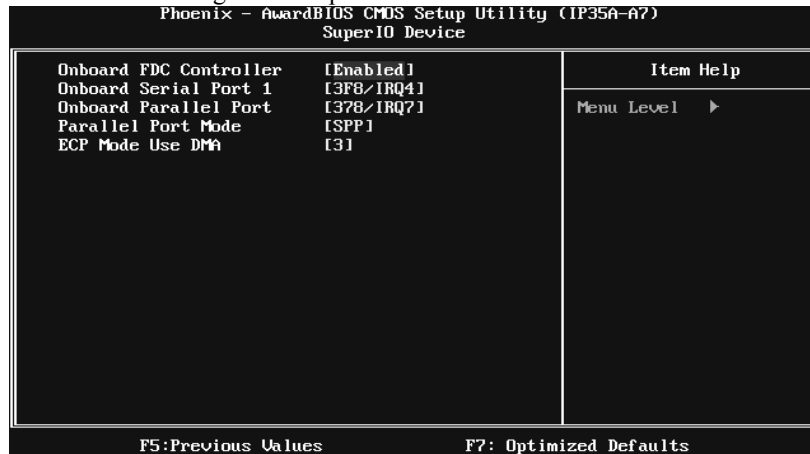
This item allows you to enable or disable legacy mode support.

**The Choices:** Disabled (default), Enabled.

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## Super IO Device

Press Enter to configure the Super I/O Device.



### **Onboard FDC Controller**

Select enabled if your system has a floppy disk controller (FDC) installed on the system board and you wish to use it. If you installed another FDC or the system uses no floppy drive, select disabled in this field.

**The Choices:** Enabled (default), Disabled.

### **Onboard Serial Port 1**

Select an address and corresponding interrupt for the first and second serial ports.

**The Choices:** 3F8/IRQ4 (default), Disabled, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Auto.

### **Onboard Parallel Port**

This item allows you to determine access onboard parallel port controller with which I/O Address.

**The Choices:** 378/IRQ7 (default), 278/IRQ5, 3BC/IRQ7, Disabled.

# P35D2-A7

## Parallel Port Mode

This item allows you to determine how the parallel port should function. The default value is SPP.

The Choices:

- SPP (default) Using Parallel port as Standard Printer Port.
- EPP Using Parallel Port as Enhanced Parallel Port.
- ECP Using Parallel port as Extended Capabilities Port.
- ECP+EPP Using Parallel port as ECP & EPP mode.

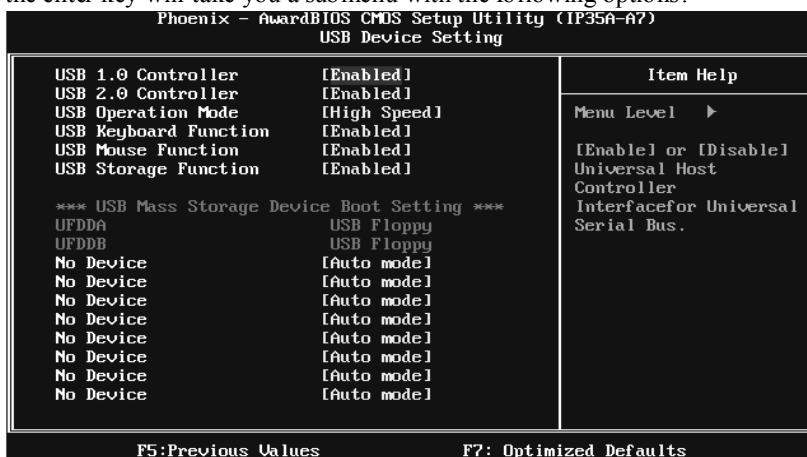
## ECP Mode Use DMA

Select a DMA Channel for the port.

The Choices: 3 (default), 1.

## USB Device Setting

Highlight the “Press Enter” label next to the “Onboard Device” label and press the enter key will take you a submenu with the following options:



## USB 1.0/2.0 Controller

If your system contains a Universal Serial Bus (USB) controller, This entry is to enable/disable Enhanced host controller .

The Choices: Enabled (default), Disabled.

## **P35D2-A7**

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### **USB Operation Mode**

Auto decide USB device operation mode.

**[High Speed]:** If USB device was high speed device, then it operated on high speed mode. If USB device was full/low speed, then it operated on full/low speed mode.

**[Full/Low Speed]:** All of USB device operated on full/low speed mode.

**The Choices:** High Speed (default), Full/Low Speed.

### **USB Keyboard/Mouse/Storage Function**

This item allows you to enable or disable the USB Keyboard/ Mouse/ USB Storage Legacy Support.

**Enabled**(default) Enable USB Keyboard/ Mouse/ USB Storage Support.

**Disabled** Disable USB Keyboard / Mouse/ USB Storage Support.

### **USB Mass Storage Device Boot Setting**

**[Auto Mode]:** According to contents of USB MSD decide boot up type.

**[FDD Mode]:** The USB MSD always boot up as floppy disk.

**[HDD Mode]:** The USB MSD always boot up as hard disk.

**The Choices:** Auto mode (default), FDD mode, HDD mode.

## **PCI-E to PATA IDE cntrlr**

This item allows you to control the onboard IDE controller.

**The Choices:** Auto (default), Disabled.

## **PCI-E Compliancy Mode**

This item allows you to select the PCI-E Compliancy Mode.

**The Choices:** v1.0a (default), v1.0.

## **Onboard HD Audio**

This item allows you to control the onboard HD codec.

**The Choices:** Auto (default), Disabled.

## **Onboard LAN**

This item allows you to enable or disable the Onboard LAN.

**The Choices:** Enabled (default), Disabled.

## **Onboard LAN Boot ROM**

This item allows you to enable or disable the Onboard LAN Boot ROM.

**The Choices:** Disabled (default), Enabled.



# P35D2-A7

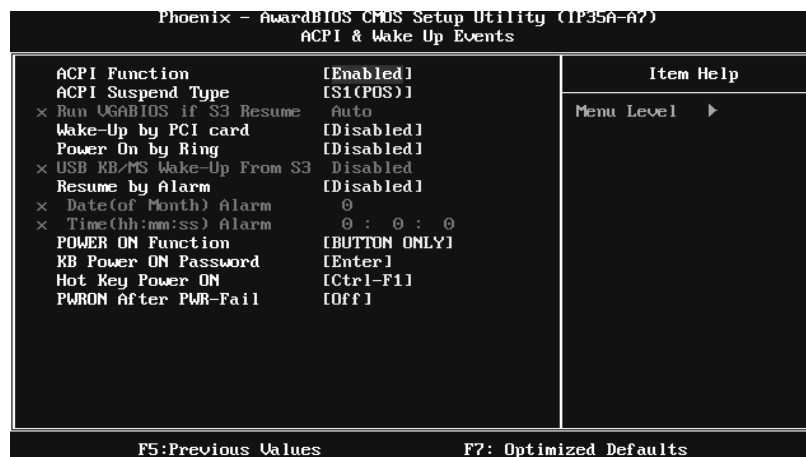
## 6 Power Management Setup

The Power Management Setup Menu allows you to configure your system to utilize energy conservation and power up/power down features.

■ Figure 6. Power Management Setup



### ACPI & Wake Up Events



## **P35D2-A7**

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### **ACPI Function**

This item displays the status of the Advanced Configuration and Power Management (ACPI).

**The Choices:** Enabled (default), Disabled.

### **ACPI Suspend Type**

The item allows you to select the suspend type under the ACPI operating system.

**The Choices:** S1 (POS) (default) Power on Suspend  
S3 (STR) Suspend to RAM  
S1 & S3 POS+STR

### **Run VGABIOS if S3 Resume**

Choosing Enabled will make BIOS run VGA BIOS to initialize the VGA card when system wakes up from S3 state. The system resume time is shortened if you disable the function, but system will need AGP driver to initialize the card. So, if the AGP driver of the VGA card does not support the initialization feature, the display may work abnormally or not function after S3.

**The Choices:** Auto (default), Yes, No.

### **Wake-Up by PCI card**

When you select "Enable", a PME signal from PCI card returns the system to Full On state.

**The Choices:** Disabled (default), Enabled.

### **Power On by Ring**

An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from a soft off state.

**The Choices:** Enabled, Disabled (default).

### **USB KB/MS Wake-Up From S3**

This item allows you to enable or disabled the USB keyboard/mouse wake up from S3 function.

**The Choices:** Disabled (default), Enabled.

### **Resume by Alarm**

This function is for setting date and time for your computer to boot up. When enabled, you can choose the date and time of system resume.

**The Choices:** Disabled (default), Enabled.

### **Date (of Month) Alarm**

You can choose which month the system will boot up.

### **Time (hh:mm:ss) Alarm**

You can choose the system boot up time, input hour, minute and second to specify.

**Note:** If you have change the setting, you must let the system boot into

## P35D2-A7

operating system, before this function will work.

### POWER ON Function

This item allows you to choose the power on method.

**The Choices:** **Button Only** (default), Password, Hot Key, Mouse Move/Click, Mouse Double Click, Any Key, Keyboard 98.

### KB Power ON Password

Input password and press Enter to set the Keyboard power on password.

### Hot Key Power ON

Choose the Hot Key combination to boot up the system.

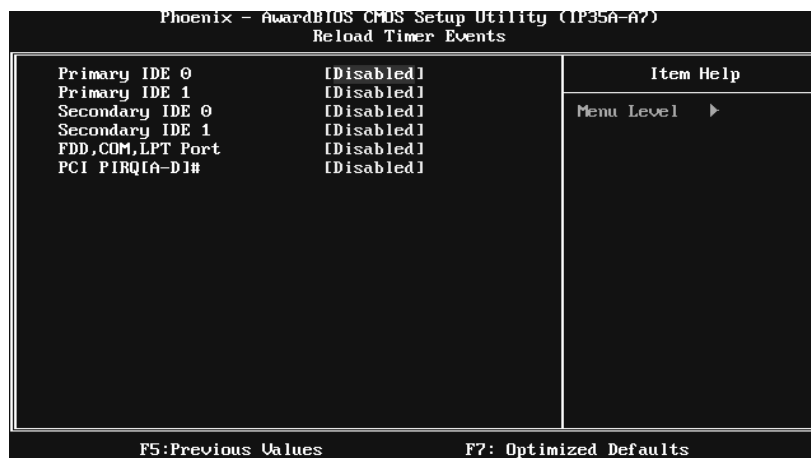
**The Choices:** **Ctrl-F1** (default), Ctrl-F2, Ctrl-F3, Ctrl-F4, Ctrl-F5, Ctrl-F6, Ctrl-F7, Ctrl-F8, Ctrl-F9, Ctrl-F10, Ctrl-F11, and Ctrl-F12.

### PWRON After PWR-Fail

This setting specifies how your system should behave after a power fail or interrupts occurs. By choosing off will leave the computer in the power off state. Choosing On will reboot the computer. Former-Sts will restore the system to the status before power failure or interrupt occurs.

**The Choices:** **Off** (default), On, Former-Sts.

## Reload Timer Events



### Primary/Secondary IDE 0/1

You can enable or disable Primary or Secondary RAID 0 or RAID 1 function under this item.

**The Choices:** **Disabled** (default), Enabled.

## **P35D2-A7**

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### **FDD, COM, LPT Port**

You can enable or disable FDD, COM, and LPT port under this item.

**The Choices:** Disabled (default), Enabled.

### **PCI PIRQ [A-D]#**

You can enable or disable PCI PIRQ [A-D]# under this item.

**The Choices:** Disabled (default), Enabled.

## **Power Management**

This category allows you to select the power saving method and is directly related to the following modes:

1. HDD Power Down.
2. Suspend Mode.

There are three options of Power Management, three of which have fixed mode settings

### **Min. Saving** (default)

Minimum power management.

Suspend Mode = 1 hr.

HDD Power Down = 15 min

### *Max. Saving*

Maximum power management only available for s1 CPU's.

Suspend Mode = 1 min.

HDD Power Down = 1 min.

### *User Define*

Allow you to set each option individually.

When you choose user define, you can adjust each of the item from 1 min. to 1 hr. except for HDD Power Down which ranges from 1 min. to 15 min.

## **Video Off Method**

This option determines the manner when the monitor goes blank.

### **V/H SYNC+Blank**

This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.

### **Blank Screen**

This option only writes blanks to the video buffer.

### **DPMS** (default)

Initial display power management signaling.

## **P35D2-A7**

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### **Video Off In Suspend**

This item determines the monitor status when the system is in Suspend mode.  
**The Choices:** Yes (default), No.

### **Suspend Type**

Select the Suspend Type.  
**The Choices:** Stop Grant (default), PwrOn Suspend.

### **Modem Use IRQ**

This determines the IRQ, which can be applied in MODEM use.  
**The Choices:** 3 (default), 4, 5, 7, 9, 10, 11, NA.

### **Suspend Mode**

The item allows you to adjust the system idle time before suspend.  
**The Choices:** Disabled, 1 Min, 2 Min, 4 Min, 6 Min, 8 Min, 10 Min, 20 Min, 30 Min, 40 Min, **1 Hour** (default).

### **HDD Power Down**

When enabled, the hard-disk drives will power down after a set time of system inactivity. All other devices remain active.  
**The Choices:** Disabled, 1 Min, 2 Min, 3 Min, 4 Min, 5 Min, 6 Min, 7 Min, 8 Min, 9 Min, 10 Min, 11 Min, 12 Min, 13 Min, 14 Min, **15 Min** (default).

### **Soft-Off by PWR-BTN**

This item determines the behavior of system power button. Instant off turn off the power immediately, and Delay 4 Sec. will require you to press and hold the power button for 4 seconds to cut off the system power.  
**The Choices:** Delay 4 Sec, **Instant-Off** (default).

### **HPET Support**

This item allows you to control the High Precision Event Timer.  
**The Choices:** **Enabled**(default), Disabled.

## ***P35D2-A7***

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### **HPET Mode**

This item allows you to select the way the High Precision Event Timer works.

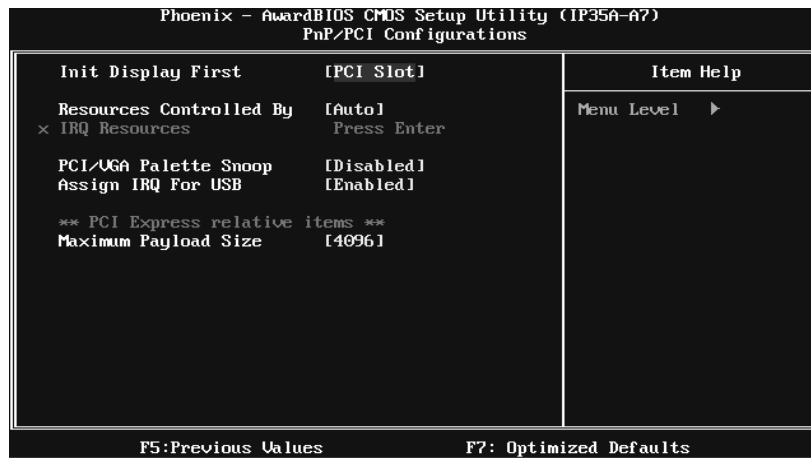
**The Choices:** 32-bit mode (default), 64-bit mode.

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## 7 PnP/PCI Configurations

This section describes configuring the PCI bus system. PCI, or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed of the CPU itself uses when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

■ **Figure 7: PnP/PCI Configurations**



### Init Display First

This item allows you to decide to active whether PCI Slot or on-chip VGA first.  
**The Choices:** PCI Slot (default), PCIEx.

### Resources Controlled By

By Choosing “**Auto(ESCD)**” (default), the system BIOS will detect the system resources and automatically assign the relative IRQ and DMA channel for each peripheral. By Choosing “Manual”, the user will need to assign IRQ & DMA for add-on cards. Be sure that there are no IRQ/DMA and I/O port conflicts.

**The Choices:** Auto (default), Manual.

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### **IRQ Resources**

This submenu will allow you to assign each system interrupt a type, depending on the type of device using the interrupt. When you press the “Press Enter” tag, you will be directed to a submenu that will allow you to configure the system interrupts. This is only configurable when “Resources Controlled By” is set to “Manual”.

IRQ-3	assigned to PCI Device
IRQ-4	assigned to PCI Device
IRQ-5	assigned to PCI Device
IRQ-7	assigned to PCI Device
IRQ-9	assigned to PCI Device
IRQ-10	assigned to PCI Device
IRQ-11	assigned to PCI Device
IRQ-12	assigned to PCI Device
IRQ-14	assigned to PCI Device
IRQ-15	assigned to PCI Device

### **PCI / VGA Palette Snoop**

Some old graphic controllers need to “snoop” on the VGA palette and then map it to their display as a way to provide boot information and VGA compatibility. This item allows such snooping to take place.

**The Choices:** Disabled (default), Enabled.

### **Assign IRQ For USB**

This item allows the users to choose which IRQ to assign for the USB.

**The Choices:** Enabled (default), Disabled.

### **Maximum Payload Size**

Set the maximum payload size for Transaction packets (TLP).

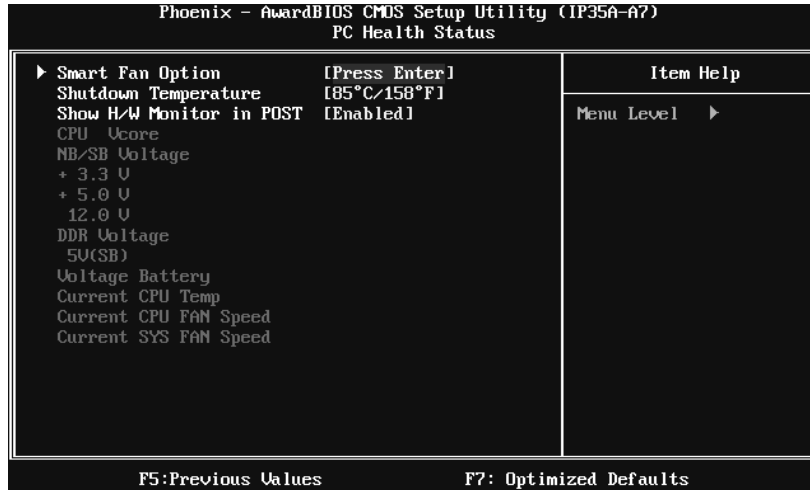
**The Choice:** 4096 (default.), 128, 256, 512, 1024, 2048.



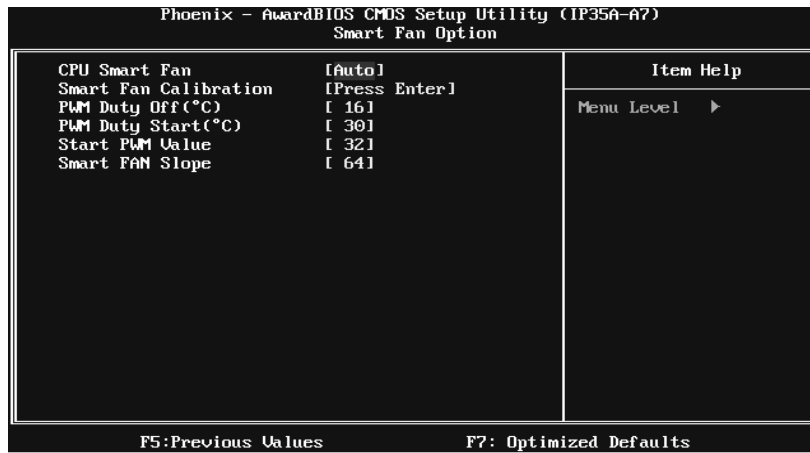
# P35D2-A7

## 8 PC Health Status

■ Figure 8: PC Health Status



### Smart Fan Option



## **P35D2-A7**

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### **CPU Smart Fan**

This item allows you to control the CPU/System Fan.

**The Choices:** Auto (default), Disabled, 4-pin, 3-pin..

### **Smart Fan Calibration**

Choose this item and then the BIOS will auto test and detect the CPU/System fan functions and show CPU/System fan speed.

### **PWM Duty Off<°C>**

If the CPU/System Temperature is lower than the set value, FAN will turn off.

**The Choices:** Min=0,.Max=127, Key in a DEC number.

### **PWM Duty Start<°C>**

CPU/System fan starts to work under smart fan function when arrive this set value.

**The Choices:** Min=0,.Max=127, Key in a DEC number.

### **Start PWM Value**

When CPU/System temperature arrives to the set value, the CPU/System fan will work under Smart Fan Function mode. The range is from 0~127, with an interval of 1.

**The Choices:** Min=0,.Max=127, Key in a DEC number.

### **Smart Fan Slope**

Increasing the value of slope PWM will raise the speed of CPU/System fan.

**The Choices:** Min=1,.Max=127, Key in a DEC number.

## **Shutdown Temperature**

This item allows you to set up the CPU shutdown Temperature. This item is only effective under Windows 98 ACPI mode.

**The Choices:** 60°C /140°F, 65°C /149°F, 70°C /158°F, 75°C /167°F, 80°C /176°F, 85°C /185°F (default), 90°C /194°F, 95°C /203°F, Disabled.

## **Show HW Monitor in POST**

If your computer contains a monitoring system, it will show PC health status during POST stage. The item offers several different delay times.

**The Choices:** Enabled (default), Disabled.

## **CPU Vcore, NB/SB/DDR Voltage, +3.3V, +5.0V, 12.0V, 5V (SB), Voltage Battery**

Detect the system's voltage status automatically.

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### **Current CPU Temp**

This field displays the current temperature of CPU.

### **Current CPU FAN Speed**

This field displays the current speed of CPU fan.

### **Current SYS FAN Speed**

This field displays the current speed of SYSTEM fan.

# P35D2-A7

## 9 Performance Booster Zone

■ Figure 9: Performance Booster Zone



### CPU Clock Ratio

This item allows you to select the CPU Ratio.  
Min= 6 Max= 50, Key in a DEC number.  
**The Choices:** 6X (default).

### CPU Clock

This item allows you to select CPU Clock, and CPU over clocking.  
Min= 100 Max= 333 Key in a DEC number.  
**The Choices:** 100Mhz (default).

Special Notice:

If the system's frequency that you are selected is not functioning, there are two methods of booting-up the system.

Method 1:

Clear the COMS data by setting the JCOMS1 ((2-3) closed)) as "ON" status. All the CMOS data will be loaded as defaults setting.

Method 2:

Press the <Insert> key and Power button simultaneously, after that keep-on pressing the <Insert> key until the power-on screen showed.

## P35D2-A7

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This action will boot-up the system according to FSB of the processor  
It's strongly recommended to set CPU Vcore and clock in default setting. If the CPU Vcore and clock are not in default setting, it may cause CPU or M/B damage.

### PCIE Clock Select

The Choices: Fixed 100 (default), Manual.

### PCIE Clock

The Choices: 100 (default), Min=100; Max=200; key in DEC number.

### System Memory Frequency

The Choices: Auto (default), 677Mhz, 800Mhz.

### DRAM Configuration



#### **DRAM Timing Selectable**

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. This item allows you to choose between auto and manual adjusting DRAM Timing.

The Choices: By SPD (default), Manual.

## **P35D2-A7**

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### **CAS Latency Time**

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing.

**The Choices:** Auto (default), 5, 6.

### **DRAM RAS# to CAS# Delay**

This field allows you to insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. Low value will provide a faster performance; and high value made the system more stable. This field applies only when synchronous DRAM is installed in the system.

**The Choices:** Auto (default), 5, 6.

### **DRAM RAS# Precharge**

If an insufficient number of cycles are allowed for RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete, and the DRAM may fail to retain data. Low value will provide faster performance; and high value made the system more stable. This field applies only when synchronous DRAM is installed in the system.

**The Choices:** Auto (default), 5, 6.

### **Precharge dealy (tRAS)**

This item allows you to specify the minimum row active time (tRAS).

**The Choices:** Auto (default), 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.

### **TWR**

**The Choices:** Auto (default), 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.

### **TWTR**

**The Choices:** Auto (default), 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.

### **TRRD**

**The Choices:** Auto (default), 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.

### **TRTP**

**The Choices:** Auto (default), 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.

## **CPU Voltage**

This item allows you to select CPU Voltage Control.

**The Choices:** StartUp (default), +0.012V ~ +0.787V.

## **FSB Termination Voltage**

This item allows you to select FSB termination Voltage.

**The Choices:** 1.25V (default), 1.35V, 1.45V, 1.55V.

## ***P35D2-A7***

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### **(G)MCH Voltage**

This item allows you to select (G)MCH Voltage Control

**The Choices:** 1.25V (default), 1.35V, 1.45V, 1.55V.

### **Memory Voltage**

This item allows you to select memory Voltage Control.

**The Choices:** 1.90V (default), 2.00V, 2.10V, 2.20V, 2.30V, 2.40V, 2.50V, 2.60V.