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## **CHAPTER 1: INTRODUCTION**

### **1.1 BEFORE YOU START**

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

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

### **1.2 PACKAGE CHECKLIST**

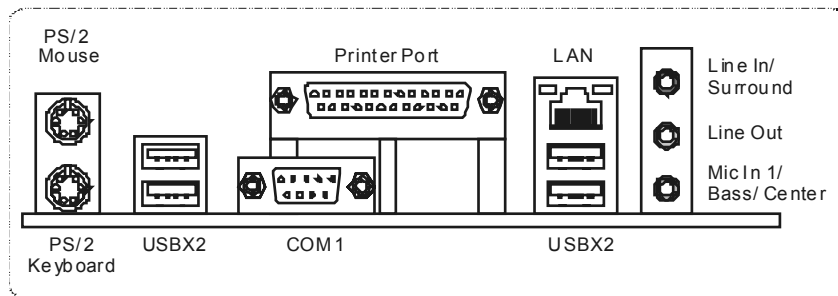
- ✦ FDD Cable X 1
- ✦ HDD Cable X 1
- ✦ User's Manual X 1
- ✦ Fully Setup Driver CD X 1
- ✦ Rear I/O Panel for ATX Case X 1
- ✦ Serial ATA Cable X 1 (optional)
- ✦ USB 2.0 Cable X1 (optional)
- ✦ S/PDIF Cable X 1 (optional)
- ✦ Serial ATA Power Switch Cable X 1 (optional)

### 1.3 MOTHERBOARD FEATURES

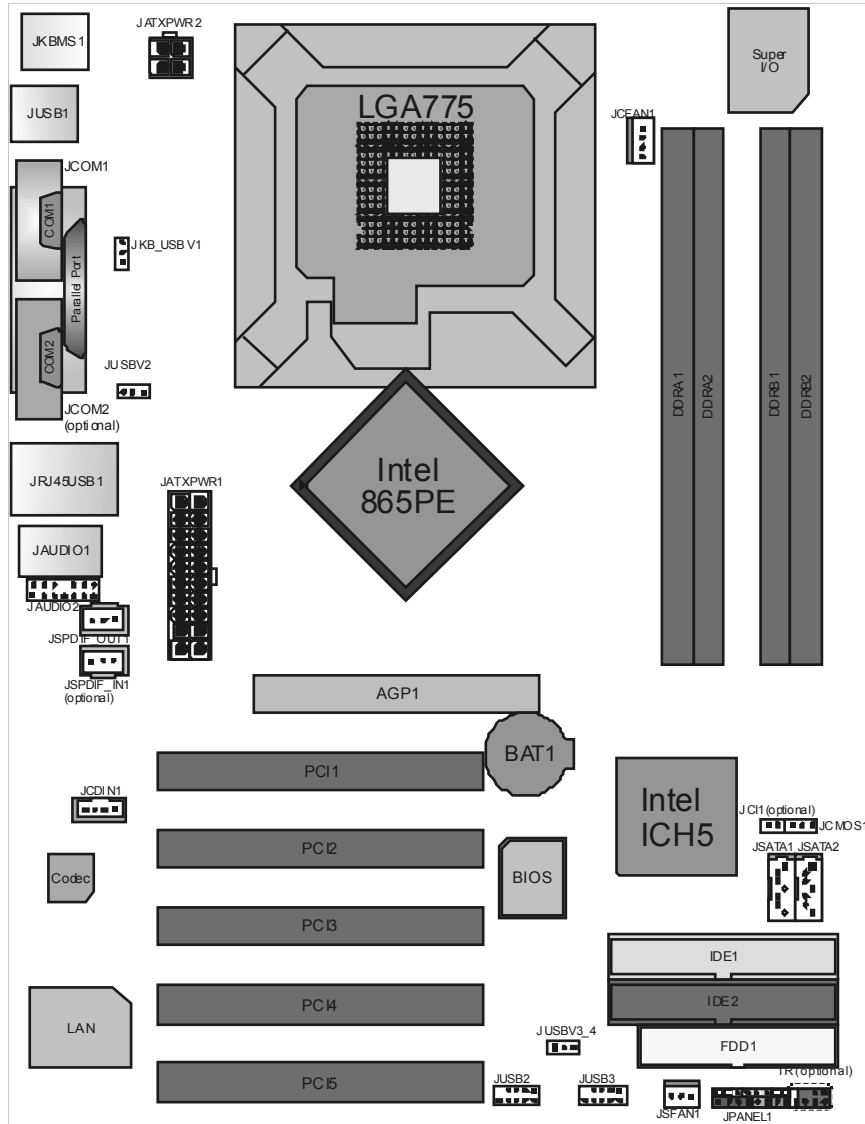
	<i>Ver 1.0 &amp; Ver 7.0</i>	<i>Ver 7.1</i>
CPU	LGA 775 Intel Pentium 4 / Pentium D / Celeron D processor up to 3.8 GHz (does not support Cedar Mill & Presler CPU)	LGA 775 Intel Pentium 4 / Pentium D / Celeron D processor up to 3.8 GHz
FSB	533 / 800 MHz	533 / 800 MHz
Chipset	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
Super I/O	ITE IT8712F H/W Monitor Fan Speed Controller ITE's "Smart Guardian" function	ITE IT8712F H/W Monitor Fan Speed Controller ITE's "Smart Guardian" function
Main Memory	DIMM Slots x 4 Each DIMM supports 128/256/512MB & 1GB DDR Max Memory Capacity 4GB Dual Channel Mode DDR memory module Supports DDR 266 / 333 / 400	DIMM Slots x 4 Each DIMM supports 128/256/512MB & 1GB DDR Max Memory Capacity 4GB Dual Channel Mode DDR memory module Supports DDR 266 / 333 / 400
IDE	Integrated IDE Controller Ultra DMA 33~100 Bus Master Mode supports PIO Mode 0~4,	Integrated IDE Controller Ultra DMA 33~100 Bus Master Mode supports PIO Mode 0~4,
SATA	Integrated Serial ATA Controller Data transfer rates up to 1.5 Gb/s. SATA Version 1.0 specification compliant.	Integrated Serial ATA Controller Data transfer rates up to 1.5 Gb/s. SATA Version 1.0 specification compliant.
10/100 LAN	Realtek RTL 8100C 10 / 100 Mb/s auto negotiation Half / Full duplex capability	Realtek RTL 8100C 10 / 100 Mb/s auto negotiation Half / Full duplex capability
Sound Codec	ALC655 6 channels audio out AC'97 Version 2.3	ALC655 / 658 (optional) 6 channels audio out AC'97 Version 2.3
Slots	AGP 8X graphics slot x1 PCI slot x5	AGP 8X graphics slot x1 PCI slot x5
On Board Connector	Floppy connector x1 IDE Connector x2 SATA Connector x2 Front Panel Connector x1 Front Audio Connector x1 CD-in Connector x1 S/PDIF in connector (optional) x1 S/PDIF out connector (optional) x1 CPU Fan header x1	Floppy connector x1 IDE Connector x2 SATA Connector x2 Front Panel Connector x1 Front Audio Connector x1 CD-in Connector x1 S/PDIF in connector (optional) x1 S/PDIF out connector (optional) x1 CPU Fan header x1

	<i>Ver 1.0 &amp; Ver 7.0</i>	<i>Ver 7.1</i>
	System Fan header x1	System Fan header x1
	Chassis open header (optional) x1	Chassis open header (optional) x1
	Clear CMOS header x1	Clear CMOS header x1
	USB connector x2	USB connector x2
	Power Connector (20pin) x1	Power Connector (24pin) x1
	Power Connector (4pin) x1	Power Connector (4pin) x1
Back Panel I/O	PS/2 Keyboard x1	PS/2 Keyboard x1
	PS/2 Mouse x1	PS/2 Mouse x1
	Serial Port x1	Serial Port x1
	Printer Port x1	Printer Port x1
	LAN port x1	LAN port x1
	USB Port x4	USB Port x4
	Audio Jack x3	Audio Jack x3
Board Size	226 (W) x 295 (L) mm	226 (W) x 295 (L) mm
OS Support	Windows 2K / XP Biostar Reserves the right to add or remove support for any OS with or without notice.	Windows 2K / XP Biostar Reserves the right to add or remove support for any OS with or without notice.

### 1.4 REAR PANEL CONNECTORS

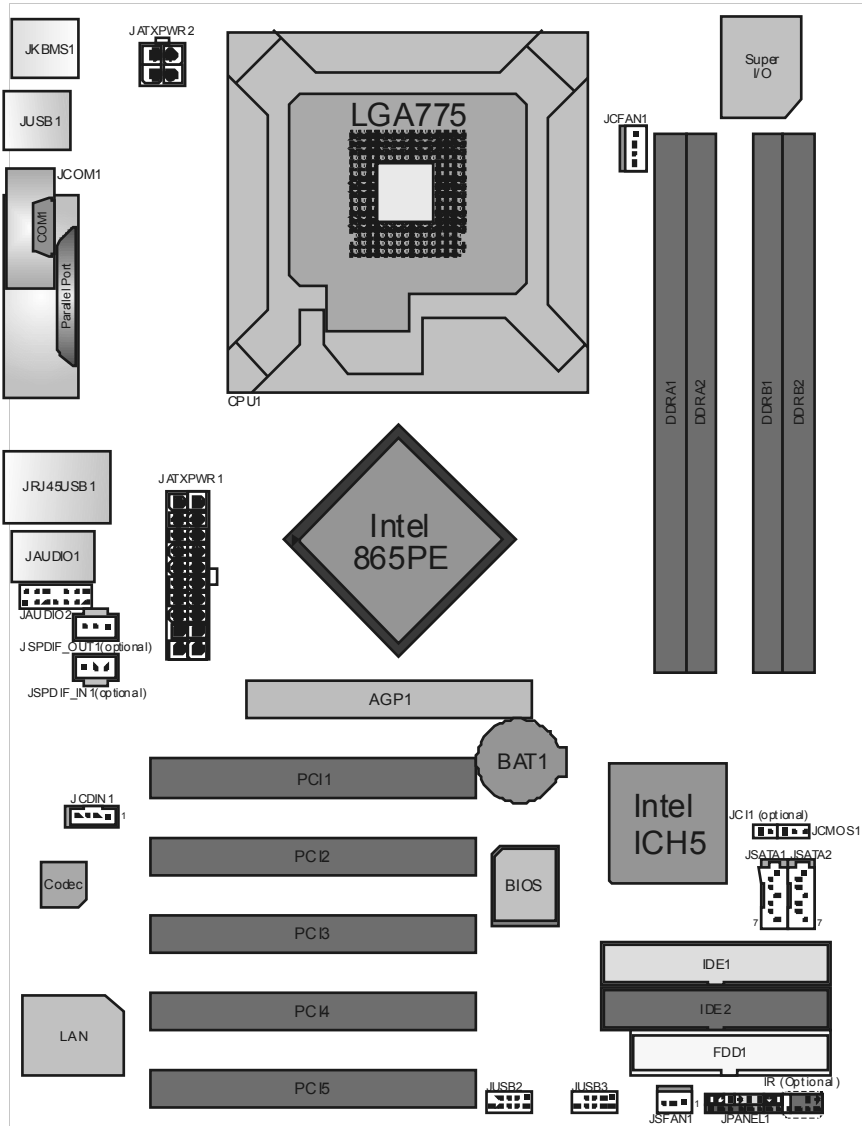


## 1.5 MOTHERBOARD LAYOUT (VER1.0)



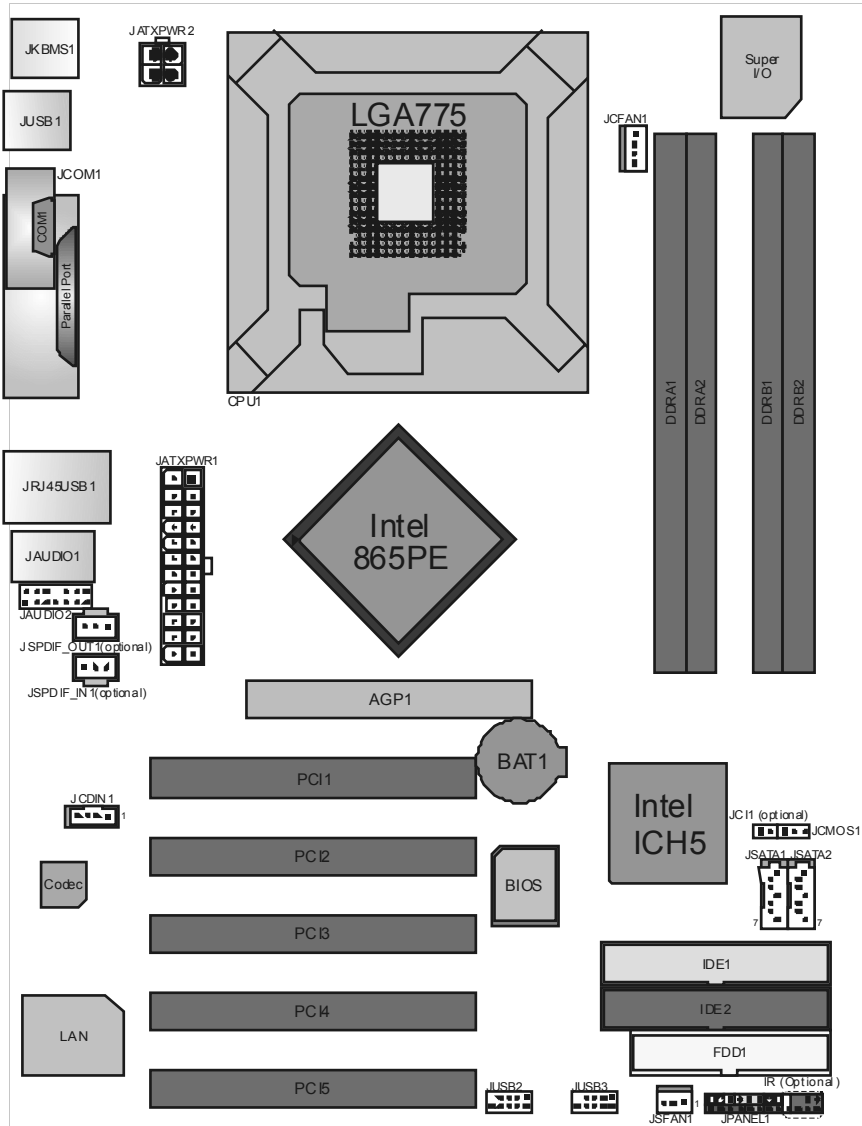
**Note:** ■ represents the 1<sup>st</sup> pin.

## 1.6 MOTHERBOARD LAYOUT (VER 7.0)



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

## 1.7 MOTHERBOARD LAYOUT (VER 7.1)

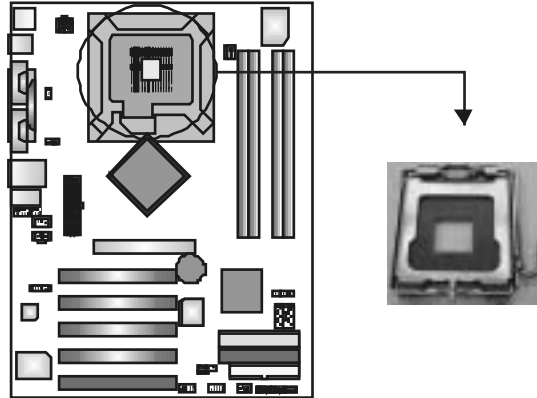


**Note:** ■ represents the 1<sup>st</sup> pin.



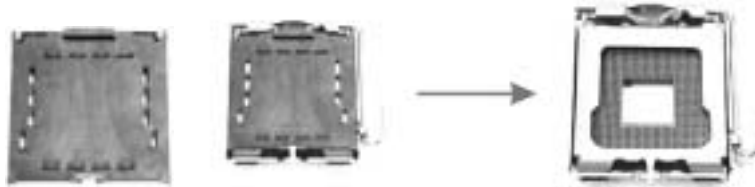
## CHAPTER 2: HARDWARE INSTALLATION

### 2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)



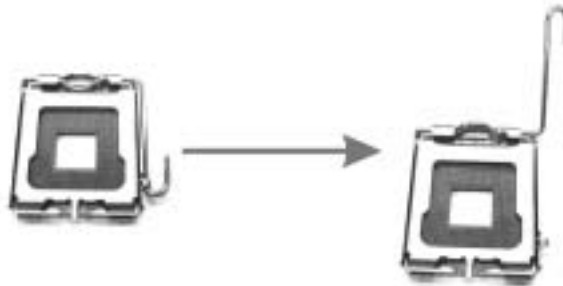
#### *Special Notice*

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.



#### **Pin Cap**

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

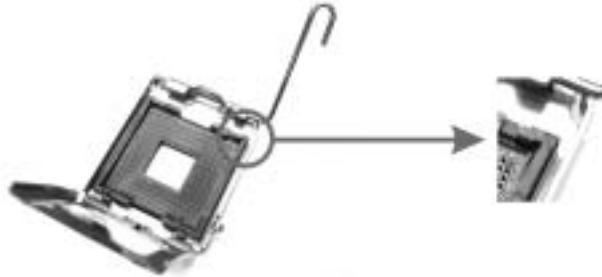


## Motherboard Manual

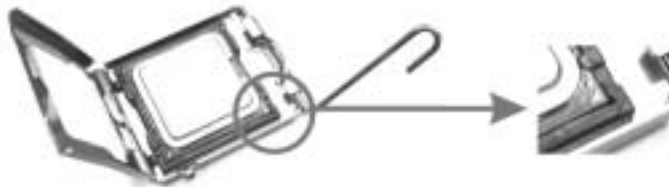
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**Step 2:** Look for the triangular cut edge on socket, and the golden dot on CPU should point forwards this triangular cut edge. The CPU will fit only in the correct orientation.

*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.

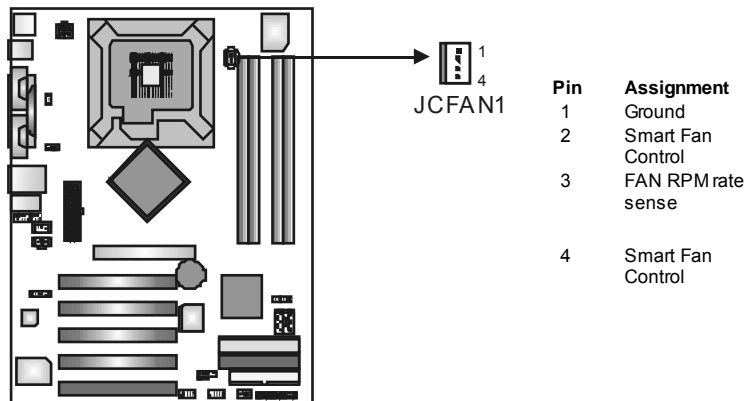


**Step 4:** Put the CPU Fan and heatsink assembly on the CPU and buckle it on the retention frame. Connect the CPU FAN power cable into the JCFAN1. This completes the installation.

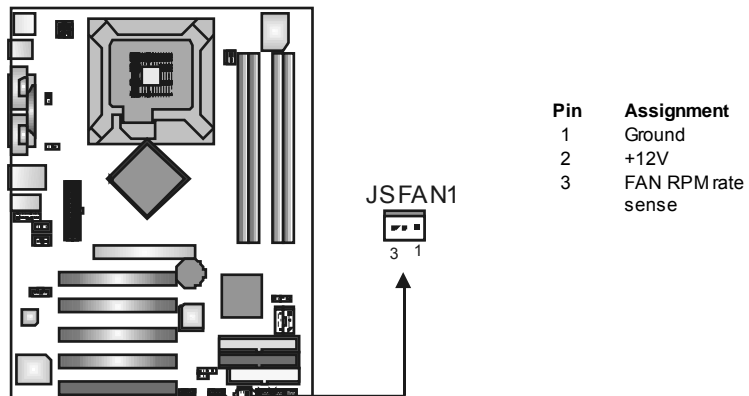
## 2.2 FAN HEADERS

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



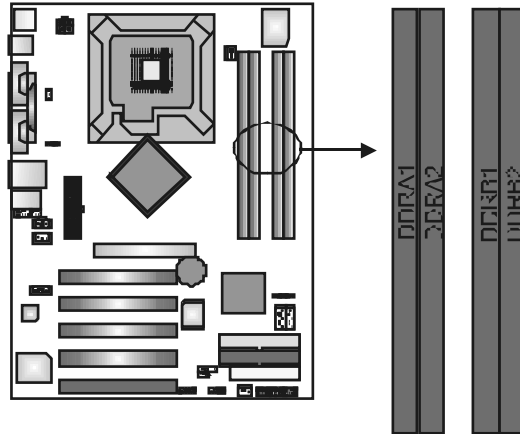
### JSFAN1: System Fan Header



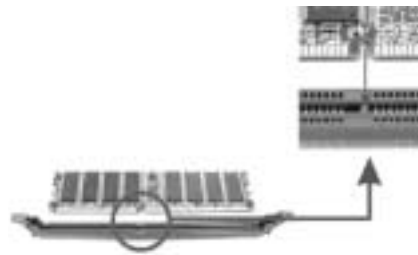
**Note:**

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

## 2.3 INSTALLING SYSTEM MEMORY



1. Unlock a DIMM slot by pressing the retaining dips 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.



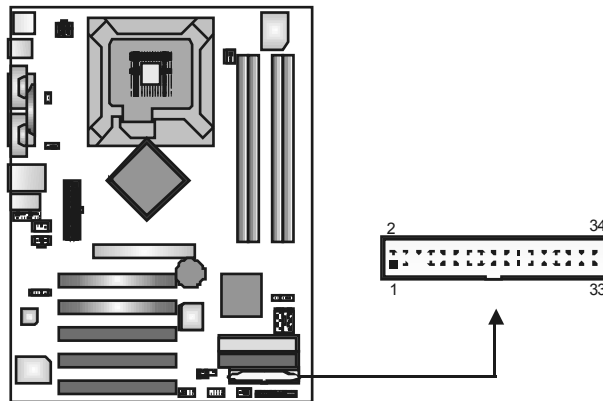
### B. Memory Capacity

DIMM Socket Location	DDR Module	Total Memory Size
DDRA1	128MB/256MB/512MB/1GB *1	Max is 4GB.
DDRA2	128MB/256MB/512MB/1GB *1	
DDRB1	128MB/256MB/512MB/1GB *1	
DDRB2	128MB/256MB/512MB/1GB *1	

## 2.4 CONNECTORS AND SLOTS

### FDD1: Floppy Disk Connector

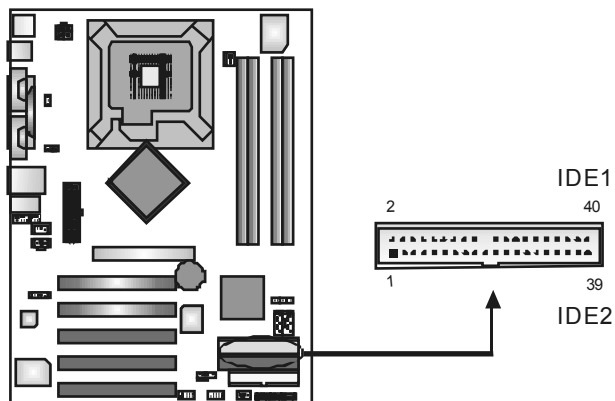
The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.



### IDE1/IDE2: Hard Disk Connectors

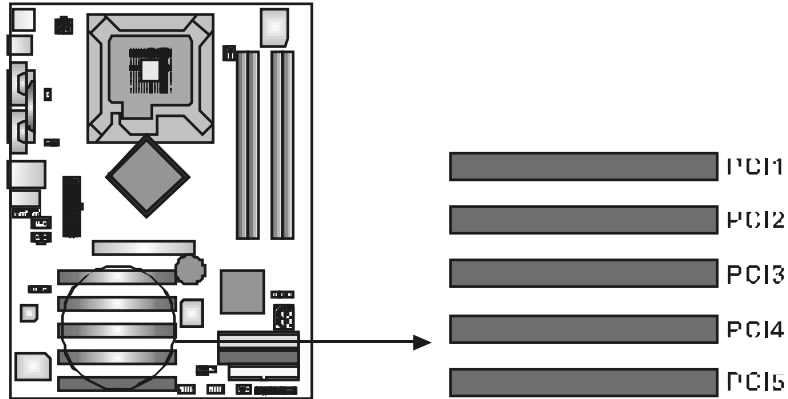
The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0~4, Bus Master, and Ultra DMA 33/66/100 functionality. It has two HDD connectors IDE1 (primary) and IDE2 (secondary).

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



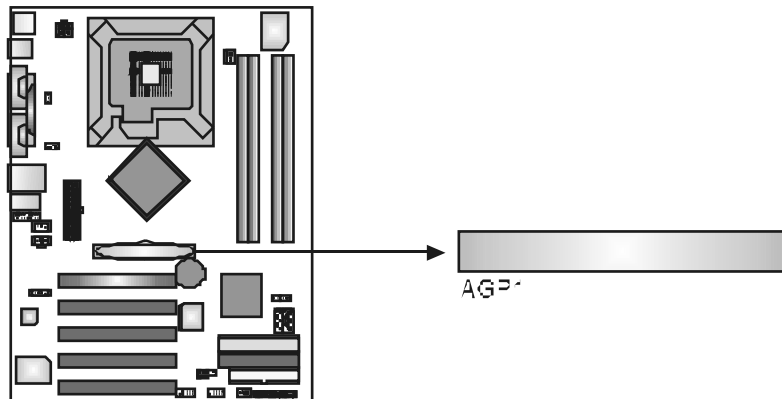
### PCI1~PCI5: Peripheral Component Interconnect Slots

This motherboard is equipped with 5 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.



### AGP1: Accelerated Graphics Port Slot

Your monitor will attach directly to that video card. This motherboard supports video cards for PCI slots, but it is also equipped with an Accelerated Graphics Port (AGP). An AGP card will take advantage of AGP technology for improved video efficiency and performance, especially with 3D graphics.



## CHAPTER 3: HEADERS & JUMPERS SETUP

### 3.1 HOW TO SETUP JUMPERS

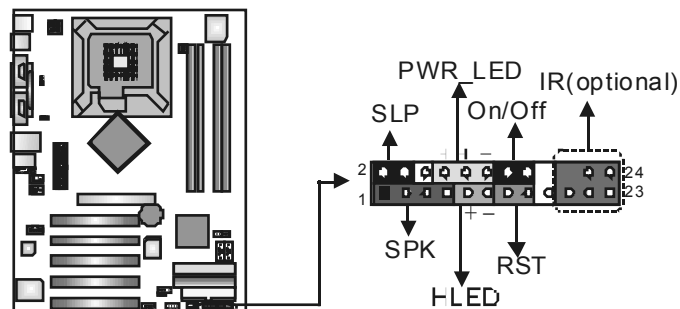
The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.



### 3.2 DETAIL SETTINGS

#### JPANEL1: Front Panel Header (for Ver 1.x and Ver 7.0)

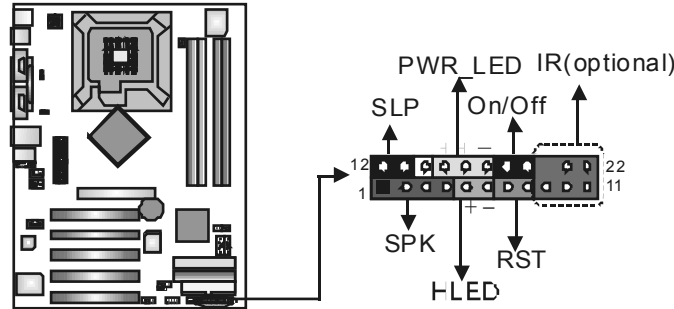
This 24-pin connector includes Power-on, Reset, HDD LED, Power LED, Sleep button, speaker and IrDA Connection. It allows user to connect the PC case's front panel switch functions.



Pin	Assignment	Function	Pin	Assignment	Function
1	+5V		2	Sleep control	Sleep button
3	N/A	Speaker Connector	4	Ground	
5	N/A		6	N/A	N/A
7	Speaker		8	Power LED (+)	Power LED
9	HDD LED (+)	Hard drive LED	10	Power LED (+)	
11	HDD LED (-)		12	Power LED (-)	
13	Ground	Reset button	14	Power button	Power-on button
15	Reset control		16	Ground	
17	N/A		18	Key	
19	N/A	IrDA Connector	20	Key	
21	+5V		22	Ground	
23	IRTX		24	IRRX	

**JANEL1: Front Panel Header (for Ver 7.1)**

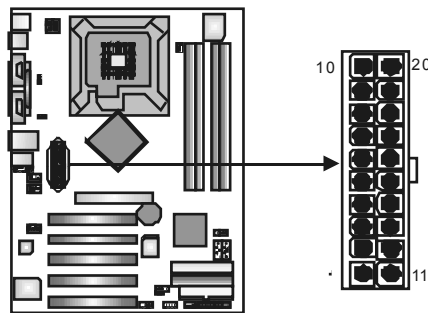
This 24-pin connector includes Power-on, Reset, HDD LED, Power LED, Sleep button, speaker and IrDA Connection. It allows user to connect the PC case's front panel switch functions.



Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	12	Sleep control	Sleep button
2	N/A		13	Ground	
3	N/A		14	N/A	N/A
4	Speaker		15	Power LED (+)	Power LED
5	HDD LED (+)	16	Power LED (+)		
6	HDD LED (-)	Hard drive LED	17	Power LED (-)	Power-on button
7	Ground		18	Power button	
8	Reset control	Reset button	19	Ground	IrDA Connector
9	N/A		20	Key	
10	+5V	IrDA Connector	21	Ground	
11	IRTX		22	IRRX	

**JATXPWR1: ATX Power Source Connector**

This connector allows user to connect 20-pin power connector on the ATX power supply.

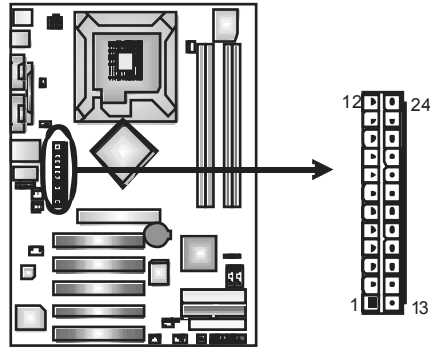


Pin	Assignment
1	+3.3V
2	+3.3V
3	Ground
4	+5V
5	Ground
6	+5V
7	Ground
8	PW_OK
9	StandbyVoltage +5V
10	+12V
11	+3.3V
12	-12V
13	Ground
14	PS_ON
15	Ground
16	Ground
17	Ground
18	-5V
19	+5V
20	+5V



### ATX Power Source Connector: JATXPWR1 (Ver 7.1 only)

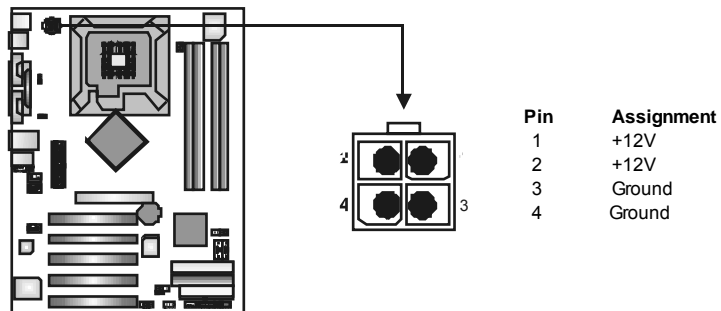
JATXPWR1 allows user to connect 24-pin power connector on the ATX power supply.



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

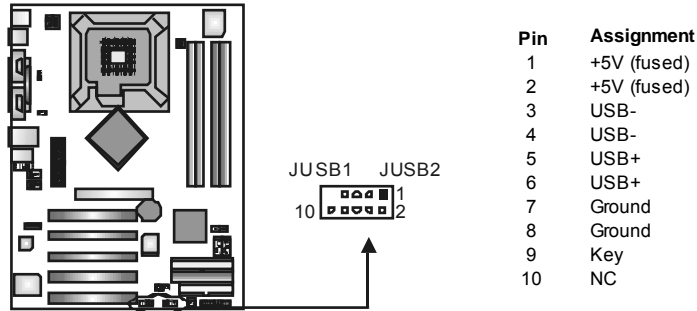
### JATXPWR2: ATX Power Source Connector

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



### JUSB2/JUSB3: Headers for 2.0 Ports at Front USB Panel

This motherboard provides 2 USB 2.0 headers, which 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.



### JKB\_USBV1/JUSBV2/JUSBV3\_4: Power Source Headers for PS/2 and USB Ports (Ver 1.x only)

**Pin 1-2 Close:**

JKB\_USBV1: +5V for JKBMS1 and JUSB1.

JUSBV2: +5V for JUSBLAN1.

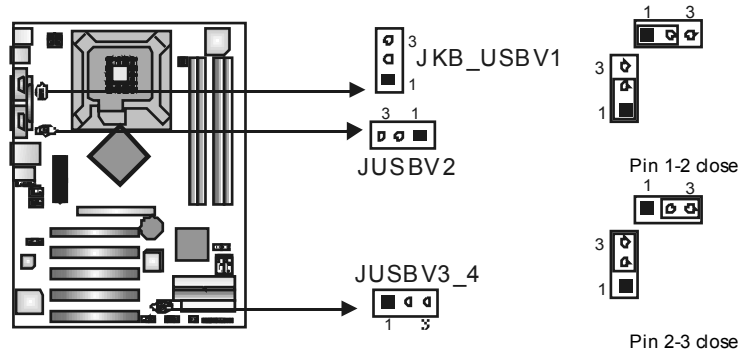
JUSBV3\_4: +5V for JUSB2/3.

**Pin 2-3 Close:**

JKB\_USBV1: JKBMS1 and JUSB1 are powered with +5V standby voltage.

JUSBV2: JUSBLAN1 is powered by +5V standby voltage.

JUSBV3\_4: JUSB2/3 are powered by +5V standby voltage.

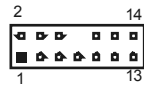
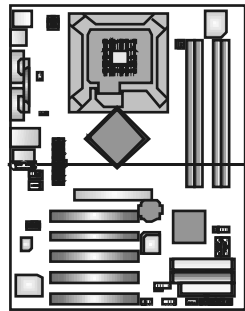


**Note:**

In order to support this function "Power-on system via keyboard and mouse", "JUSBV1/JUSBV2/JUSBV3\_4" jumper caps should be placed on Pin 2-3.

**JFAUDIO1: Front Panel Audio Header**

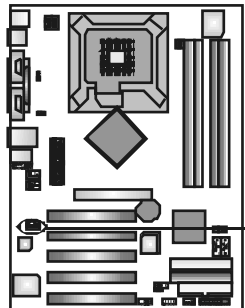
This header allows user to connect the front panel audio output cable with the PC front panel. It will disable the output on back panel audio connectors.



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

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

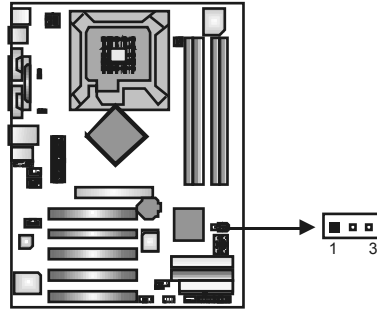
This connector allows user to connect the audio source from the variety devices, like CD-ROM, DVD-ROM, PCI sound card, PCI TV turner card etc..



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

### JCMOS1: Clear CMOS Header

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



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



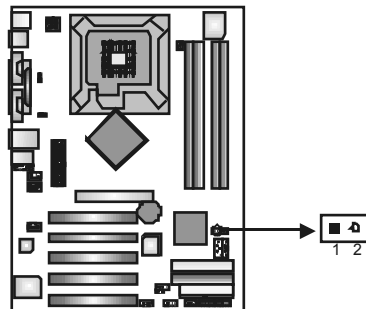
**Pin 2-3 Close:**  
Clear CMOS data.

#### ※ Clear CMOS Procedures:

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

### JCI1: Chassis Open Header

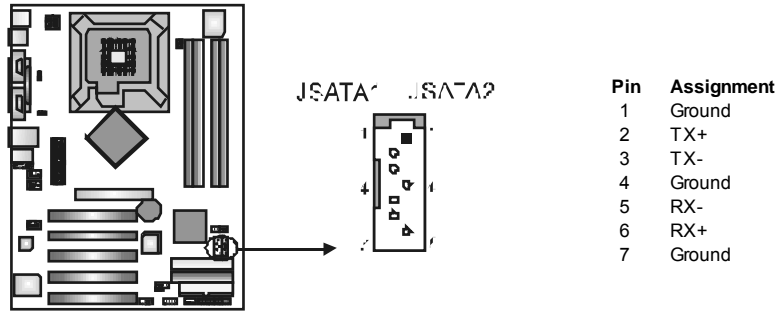
This connector allows system to monitor PC case open status. If the signal has been triggered, it will record to the CMOS and show the message on next boot-up.



Pin	Assignment
1	Case open signal
2	Ground

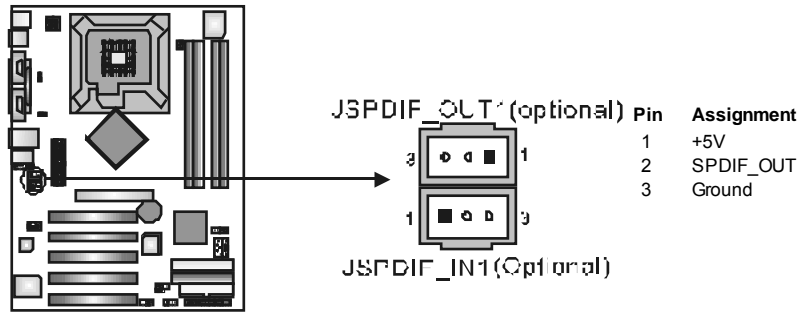
**JSATA1~JSATA2: Serial ATA Connectors**

The motherboard has a PCI to SATA Controller with 2 channels SATA interface, it satisfies the SATA 1.0 spec and with transfer rate of 1.5Gb/s.

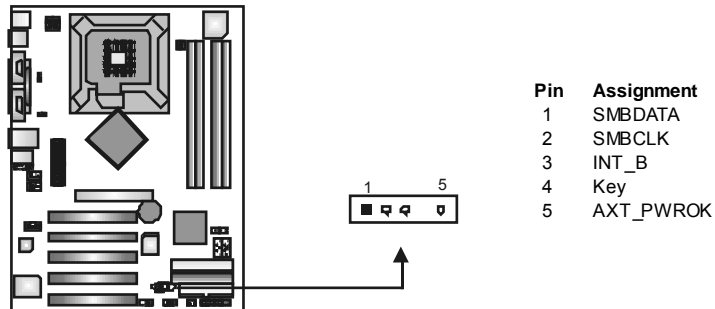


**JSPDIF\_OUT1 (optional)/ JSPDIF\_IN1 (optional): Digital Audio-out Connector**

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



**JDJ1 (optional): AUDIO DJ Header**

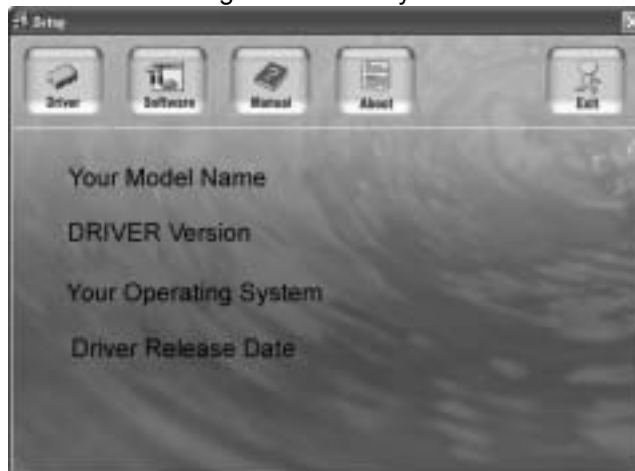


## **CHAPTER 4: USEFUL HELP**

### **4.1 DRIVER INSTALLATION NOTE**

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

You will see the following window after you insert the CD



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

**Note:**

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

#### **A. Driver Installation**

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

#### **B. Software Installation**

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

#### **C. Manual**

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

**Note:**

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

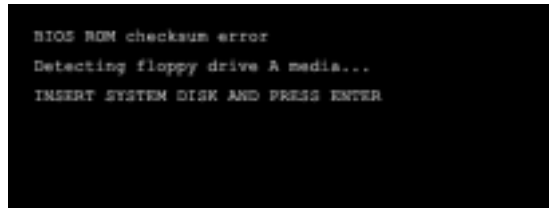
## 4.2 AWARD BIOS BEEP CODE

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

## 4.3 EXTRA INFORMATION

### A. BIOS Update

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



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

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

**B. CPU Overheated**

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

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

In this case, please double check:

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

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

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

Or you can:

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



## 4.4 TROUBLESHOOTING

Probable	Solution
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™**



### **5.1 INTRODUCTION**

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

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

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

### **5.2 SYSTEM REQUIREMENT**

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

## 5.3 INSTALLATION

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



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



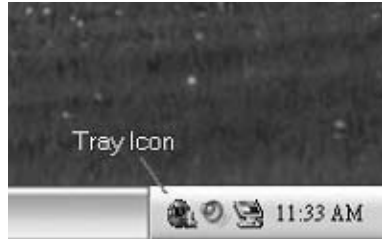
### Usage:

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

## 5.4 WARPSPEDER™

### 1. **Tray Icon:**

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



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



## 2. Main Panel

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

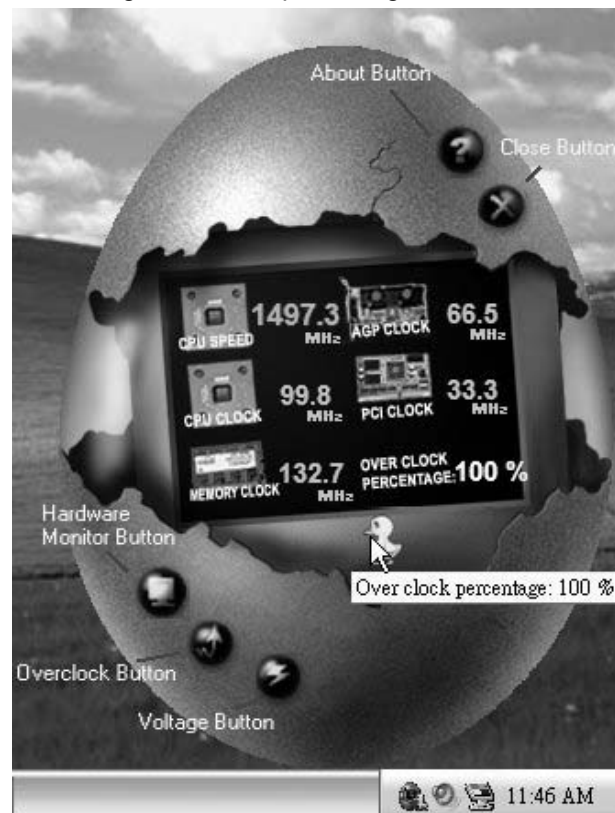
### Main Panel contains features as follows:

- Display the CPU Speed, CPU external dock, Memory dock, AGP dock, and PCI dock information.
- Contains About, Voltage, Overclock, and Hardware Monitor Buttons for invoking respective panels.
- With a user-friendly Status Animation, it can represent 3 overclock percentage stages:

Man walking → overclock percentage from 100% ~ 110 %

Panther running → overclock percentage from 110% ~ 120%

Car racing → overclock percentage from 120% ~ above



### 3. Voltage Panel

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

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



#### 4. Overclock Panel

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



**Overclock Panel contains the these features:**

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

**Warning:**

Manually overclock is potentially dangerous, especially when the 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 overclock button and let [WarpSpeeder™] automatically gets the best result for you.

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



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

**Note:**

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

**5. Hardware Monitor Panel**

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

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

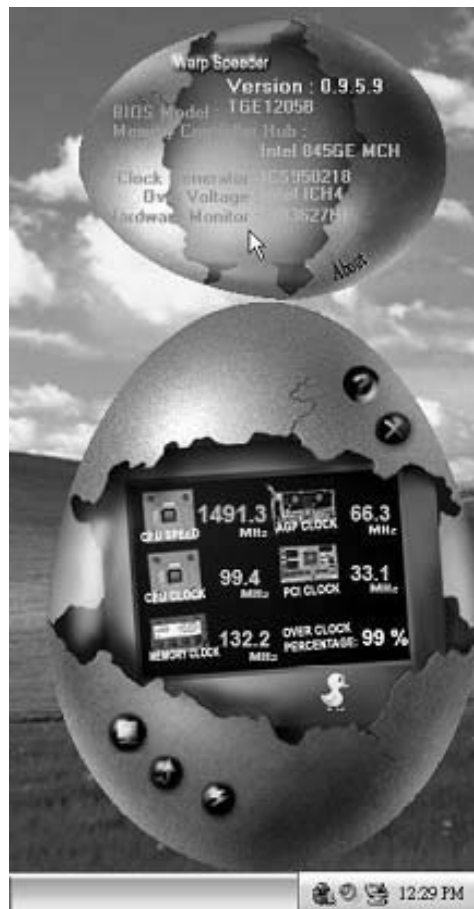




## 6. About Panel

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

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



### Note:

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

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

	Ver 1.0 & Ver 7.0		Ver 7.1	
CPU	LGA 775 Intel Pentium 4 / Pentium D / Celeron D Prozessoren mit bis zu 3,8 GHz (Unterstützt keine Cedar Mill & Presler CPUs)		LGA 775 Intel Pentium 4 / Pentium D / Celeron D Prozessoren mit bis zu 3,8 GHz	
FSB	533 / 800 MHz		533 / 800 MHz	
Chipsatz	Intel 865PE Intel ICH5		Intel 865PE Intel ICH5	
Super E/A	ITE 8712F Hardware-Überwachung Lüfterdrehzahl-Controller "Smart Guardian"-Funktion von ITE		ITE 8712F Hardware-Überwachung Lüfterdrehzahl-Controller "Smart Guardian"-Funktion von ITE	
Arbeitsspeicher	DDR DIMM-Steckplätze x 4 Jeder DIMM unterstützt 128/256/512MB & 1GB DDR Max. 4GB Arbeitsspeicher Dual-Kanal DDR Speichermodul Unterstützt DDR 266 / 333 / 400		DDR DIMM-Steckplätze x 4 Jeder DIMM unterstützt 128/256/512MB & 1GB DDR Max. 4GB Arbeitsspeicher Dual-Kanal DDR Speichermodul Unterstützt DDR 266 / 333 / 400	
IDE	Integrierter IDE-Controller Ultra DMA 33 / 66 / 100 Bus Master-Modus Unterstützt PIO-Modus 0~4		Integrierter IDE-Controller Ultra DMA 33 / 66 / 100 Bus Master-Modus Unterstützt PIO-Modus 0~4	
SATA II	Integrierter Serial ATA-Controller Datentransferrate bis zu 1.5Gb/s Konform mit der SATA-Spezifikation Version 1.0		Integrierter Serial ATA-Controller Datentransferrate bis zu 1.5Gb/s Konform mit der SATA-Spezifikation Version 1.0	
LAN	Realtek 8100C 10 / 100 Mb/s Auto-Negotiation Halb-/ Voll duplex-Funktion		Realtek 8100C 10 / 100 Mb/s Auto-Negotiation Halb-/ Voll duplex-Funktion	
Audio-Codec	ALC 655 6-Kanal-Audioausgabe AC'97 Version 2.3		ALC 655 / 658 (optional) 6-Kanal-Audioausgabe AC'97 Version 2.3	
Steckplätze	AGP 8X-Grafikkartensteckplatz	x1	AGP 8X-Grafikkartensteckplatz	x1
	PCI-Steckplatz	x5	PCI-Steckplatz	x5
Onboard-Anschluss	Diskettenlaufwerkanschluss	x1	Diskettenlaufwerkanschluss	x1
	IDE-Anschluss	x2	IDE-Anschluss	x2
	SATA-Anschluss	x2	SATA-Anschluss	x2
	Fronttafelanschluss	x1	Fronttafelanschluss	x1
	Front-Audioanschluss	x1	Front-Audioanschluss	x1

**I86PE-A7**

Ver 1.0 & Ver 7.0		Ver 7.1
	CD-IN-Anschluss x1	CD-IN-Anschluss x1
	S/PDIF-Ausgangsanschluss(optional) x1	S/PDIF-Ausgangsanschluss(optional) x1
	S/PDIF Eingangsanschluss (optional) x1	S/PDIF Eingangsanschluss (optional) x1
	CPU-Lüfter-Sockel x1	CPU-Lüfter-Sockel x1
	System-Lüfter-Sockel x1	System-Lüfter-Sockel x1
	"Gehäuse offen"-Sockel (optional) x1	"Gehäuse offen"-Sockel (optional) x1
	"CMOS löschen"-Sockel x1	"CMOS löschen"-Sockel x1
	USB-Anschluss x2	USB-Anschluss x2
	Stromanschluss (20-polig) x1	Stromanschluss (24-polig) x1
	Stromanschluss (4-polig) x1	Stromanschluss (4-polig) x1
Rückseiten- E/A	PS/2-Tastatur x1	PS/2-Tastatur x1
	PS/2-Maus x1	PS/2-Maus x1
	Serieller Anschluss x1	Serieller Anschluss x1
	Druckeranschluss x1	Druckeranschluss x1
	LAN-Anschluss x1	LAN-Anschluss x1
	USB-Anschluss x4	USB-Anschluss x4
	Audioanschluss x3	Audioanschluss x3
Platinengröße.	226 mm (B) X 295 mm (L)	226 mm (B) X 295 mm (L)
OS-Unterstützung	Windows 2K / XP Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.	Windows 2K / XP Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.

## FRANCE

	Ver 1.0 & Ver 7.0	Ver 7.1
UC	LGA 775 Processeurs Intel Pentium 4 / Pentium D / Celeron D jusqu'à 3,8 GHz (pas de prise en charge des UC Cedar Mill & Presler)	LGA 775 Processeurs Intel Pentium 4 / Pentium D / Celeron D jusqu'à 3,8 GHz
Bus frontal	533 / 800 MHz	533 / 800 MHz
Chipset	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
Super E/S	ITE 8712Fs, Moniteur de matériel Contrôleur de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE	ITE 8712Fs, Moniteur de matériel Contrôleur de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE
Mémoire principale	Fentes DDR DIMM x 4 Chaque DIMM prend en charge des DDR de 128/256/512 Mo et 1Go Capacité mémoire maximale de 4 Go Module de mémoire DDR à mode à double voie Prend en charge la DDR2 266 / 333 / 400	Fentes DDR DIMM x 4 Chaque DIMM prend en charge des DDR de 128/256/512 Mo et 1Go Capacité mémoire maximale de 4 Go Module de mémoire DDR à mode à double voie Prend en charge la DDR2 266 / 333 / 400
IDE	Contrôleur IDE intégré Mode principale de Bus Ultra DMA 33 / 66 / 100 Prend en charge le mode PIO 0~4,	Contrôleur IDE intégré Mode principale de Bus Ultra DMA 33 / 66 / 100 Prend en charge le mode PIO 0~4,
SATA SATA II	Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 1.5 Go/s. Conforme à la spécification SATA Version 1.0	Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 1.5 Go/s. Conforme à la spécification SATA Version 1.0
LAN	Realtek 8100C 10 / 100 Mb/s négociation automatique Half / Full duplex capability	Realtek 8100C 10 / 100 Mb/s négociation automatique Half / Full duplex capability
Codec audio	ALC 655 Sortie audio à 6 voies AC'97 Version 2.3	ALC 655 / 658 (optional) Sortie audio à 6 voies AC'97 Version 2.3
Fentes	Fente graphique AGP 8X x1 Fente PCI x5	Fente graphique AGP 8X x1 Fente PCI x5
Connecteur embarqué	Connecteur de disquette x1 Connecteur IDE x2 Connecteur SATA x2 Connecteur du panneau avant x1	Connecteur de disquette x1 Connecteur IDE x2 Connecteur SATA x2 Connecteur du panneau avant x1

	Ver 1.0 & Ver 7.0	Ver 7.1
	Connecteur Audio du panneau avant x1 x1	Connecteur Audio du panneau avant x1 x1
	Connecteur d'entrée CD x1	Connecteur d'entrée CD x1
	Connecteur d'entrée S/PDIF x1 (en option)	Connecteur d'entrée S/PDIF x1 (en option)
	Connecteur de sortie S/PDIF x1 (en option)	Connecteur de sortie S/PDIF x1 (en option)
	Embase de ventilateur UC x1	Embase de ventilateur UC x1
	Embase de ventilateur système x1	Embase de ventilateur système x1
	Embase d'ouverture de châssis x1 (optional)	Embase d'ouverture de châssis x1 (optional)
	Embase d'effacement CMOS x1	Embase d'effacement CMOS x1
	Connecteur USB x2	Connecteur USB x2
	Connecteur d'alimentation x1 (20 broches)	Connecteur d'alimentation x1 (24 broches)
	Connecteur d'alimentation x1 (4 broches)	Connecteur d'alimentation x1 (4 broches)
E/S du panneau arrière	Clavier PS/2 x1	Clavier PS/2 x1
	Souris PS/2 x1	Souris PS/2 x1
	Port série x1	Port série x1
	Port d'imprimante x1	Port d'imprimante x1
	Port LAN x1	Port LAN x1
	Port USB x4	Port USB x4
	Fiche audio x3	Fiche audio x3
Dimension s de la carte	226mm (L) X 295 mm (H)	226mm (L) X 295 mm (H)
Support SE	Windows 2K / XP Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.	Windows 2K / XP Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.

**ITALIAN**

	Ver 1.0 & Ver 7.0		Ver 7.1	
CPU	LGA 775 Processore Intel Pentium 4 / Pentium D / Celeron D fino a 3.8 GHz (Non supporta CPU Cedar Mill & Presler)		LGA 775 Processore Intel Pentium 4 / Pentium D / Celeron D fino a 3.8 GHz	
FSB	533 / 800 MHz		533 / 800 MHz	
Chipset	Intel 865PE Intel ICH5		Intel 865PE Intel ICH5	
Super I/O	ITE 8712F Monitoraggio hardware Controller velocità ventolina Funzione "Smart Guardian" di ITE		ITE 8712F Monitoraggio hardware Controller velocità ventolina Funzione "Smart Guardian" di ITE	
Memoria principale	Alloggi DIMM DDR x 4 Ciascun DIMM supporta DDR 128/256/512MB e 1GB Capacità massima della memoria 4GB Modulo di memoria DDR a canale doppio Supporto di DDR 266 / 333 / 400		Alloggi DIMM DDR x 4 Ciascun DIMM supporta DDR 128/256/512MB e 1GB Capacità massima della memoria 4GB Modulo di memoria DDR a canale doppio Supporto di DDR 266 / 333 / 400	
IDE	Controller IDE integrato Modalità Bus Master Ultra DMA 33 / 66 / 100 Supporto modalità PIO Mode 0-4		Controller IDE integrato Modalità Bus Master Ultra DMA 33 / 66 / 100 Supporto modalità PIO Mode 0-4	
SATA II	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 1.5 Gb/s. Compatibile specifiche SATA Versione 1.0.		Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 1.5 Gb/s. Compatibile specifiche SATA Versione 1.0.	
LAN	Realtek 8100C Negoziazione automatica 10 / 100 Mb/s Capacità Half / Full Duplex		Realtek 8100C Negoziazione automatica 10 / 100 Mb/s Capacità Half / Full Duplex	
Codec audio	ALC 655 Uscita audio 6 canali AC'97 Versione 2.3		ALC 655 / 658 (optional) Uscita audio 6 canali AC'97 Versione 2.3	
Alloggi	Alloggio grafica A GP 8X	x1	Alloggio grafica A GP 8X	x1
	Alloggio PCI	x5	Alloggio PCI	x5
Connettori su scheda	Connettore floppy	x1	Connettore floppy	x1
	Connettore IDE	x2	Connettore IDE	x2
	Connettore SATA	x2	Connettore SATA	x2
	Connettore pannello frontale	x1	Connettore pannello frontale	x1
	Connettore audio frontale	x1	Connettore audio frontale	x1
	Connettore CD-in	x1	Connettore CD-in	x1
	Connettore input S/PDIF (optional)	x1	Connettore input S/PDIF (optional)	x1
	Connettore output SPDIF (optional)	x1	Connettore output SPDIF (optional)	x1
	Collettore ventolina CPU	x1	Collettore ventolina CPU	x1
	Collettore ventolina sistema	x1	Collettore ventolina sistema	x1

**I86PE-A7**

Ver 1.0 & Ver 7.0		Ver 7.1
	Collettore apertura telaio (optional) x1	Collettore apertura telaio (optional) x1
	Collettore cancellazione CMOS x1	Collettore cancellazione CMOS x1
	Connettore USB x2	Connettore USB x2
	Connettore alimentazione (20 pin) x1	Connettore alimentazione (24 pin) x1
	Connettore alimentazione (4 pin) x1	Connettore alimentazione (4 pin) x1
I/O pannello posteriore	Tastiera PS/2 x1	Tastiera PS/2 x1
	Mouse PS/2 x1	Mouse PS/2 x1
	Porta seriale x1	Porta seriale x1
	Porta stampante x1	Porta stampante x1
	Porta LAN x1	Porta LAN x1
	Porta USB x4	Porta USB x4
	Connettore audio x3	Connettore audio x3
Dimensioni scheda	226 mm (larghezza) x 295 mm (altezza)	226 mm (larghezza) x 295 mm (altezza)
Sistemi operativi supportati	Windows 2K / XP Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.	Windows 2K / XP Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.

**SPANISH**

	Ver 1.0 & Ver 7.0	Ver 7.1
CPU	LGA 775 Procesador Intel Pentium 4 / Pentium D / Celeron D hasta 3,8 GHz (no soporta CPU Cedar Mill & Presler)	LGA 775 Procesador Intel Pentium 4 / Pentium D / Celeron D hasta 3,8 GHz
FSB	533 / 800 MHz	533 / 800 MHz
Conjunto de chips	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
Súper E/S	ITE 8712F Monitor hardware Controlador de velocidad de ventilador Función "Guardia inteligente" de ITE	ITE 8712F Monitor hardware Controlador de velocidad de ventilador Función "Guardia inteligente" de ITE
Memoria principal	Ranuras DIMM DDR x 4 Cada DIMM admite DDR de 128/256/512MB y 1GB Capacidad máxima de memoria de 4GB Módulo de memoria DDR de canal Doble Admite DDR de 266 / 333 / 400	Ranuras DIMM DDR x 4 Cada DIMM admite DDR de 128/256/512MB y 1GB Capacidad máxima de memoria de 4GB Módulo de memoria DDR de canal Doble Admite DDR de 266 / 333 / 400
IDE	Controlador IDE integrado Modo bus maestro Ultra DMA 33 / 66 / 100 Soporte los Modos PIO 0~4.	Controlador IDE integrado Modo bus maestro Ultra DMA 33 / 66 / 100 Soporte los Modos PIO 0~4.
SATA II	Controlador ATA Serie Integrado Tasas de transferencia de hasta 1.5 Gb/s. Compatible con la versión SATA 1.0.	Controlador ATA Serie Integrado Tasas de transferencia de hasta 1.5 Gb/s. Compatible con la versión SATA 1.0.
Red Local	Realtek 8100C Negociación de 10 / 100 Mb/s Funciones Half / Full dúplex	Realtek 8100C Negociación de 10 / 100 Mb/s Funciones Half / Full dúplex
Códecs de sonido	ALC 655 Salida de sonido de 6 canales AC'97 Versión 2.3	ALC 655 / 658 (opcional) Salida de sonido de 6 canales AC'97 Versión 2.3
Ranuras	Ranura de gráficos AGP x8                   x1 Ranura PCI                                       X5	Ranura de gráficos AGP x8                   x1 Ranura PCI                                       X5
Conectores en placa	Conector disco flexible                   X1 Conector IDE                                   X2 Conector SATA                                X2 Conector de panel frontal                X1 Conector de sonido frontal                X1 Conector de entrada de CD                X1 Conector de entrada S/PDIF            x1 (opcional)	Conector disco flexible                   X1 Conector IDE                                   X2 Conector SATA                                X2 Conector de panel frontal                X1 Conector de sonido frontal                X1 Conector de entrada de CD                X1 Conector de entrada S/PDIF            x1 (opcional)



Ver 1.0 & Ver 7.0		Ver 7.1
	Conector de salida S/PDIF (opcional) X1	Conector de salida S/PDIF (opcional) X1
	Cabecera de ventilador de CPU X1	Cabecera de ventilador de CPU X1
	Cabecera de ventilador de sistema X1	Cabecera de ventilador de sistema X1
	Cabecera de chasis abierto(opcional) X1	Cabecera de chasis abierto(opcional) X1
	Cabecera de borrado de CMOS X1	Cabecera de borrado de CMOS X1
	Conector USB X2	Conector USB X2
	Conector de alimentación (20 patillas) X1	Conector de alimentación (24 patillas) X1
	Conector de alimentación (4 patillas) X1	Conector de alimentación (4 patillas) X1
Panel trasero de E/S	Teclado PS/2 X1	Teclado PS/2 X1
	Ratón PS/2 X1	Ratón PS/2 X1
	Puerto serie X1	Puerto serie X1
	Puerto de impresora X1	Puerto de impresora X1
	Puerto de red local X1	Puerto de red local X1
	Puerto USB X4	Puerto USB X4
	Conector de sonido X3	Conector de sonido X3
Tamaño de la placa	226 mm. (A) X 295 Mm. (H)	226 mm. (A) X 295 Mm. (H)
Soporte de sistema operativo	Windows 2K / XP BioStar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.	Windows 2K / XP BioStar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.

## PORTUGUESE

	Ver 1.0 & Ver 7.0	Ver 7.1
CPU	LGA 775 Processador Intel Pentium 4 / Pentium D / Celeron D até 3,8 GHz (não suporta a CPU Cedar Mill & Presler)	LGA 775 Processador Intel Pentium 4 / Pentium D / Celeron D até 3,8 GHz
FSB	533 / 800 MHz	533 / 800 MHz
Chipset	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
Especificação Super I/O	ITE 8712F Monitorização do hardware Controlador da velocidade da ventoinha Função "Smart Guardian" da ITE	ITE 8712F Monitorização do hardware Controlador da velocidade da ventoinha Função "Smart Guardian" da ITE
Memória principal	Ranuras DIMM DDR x4 Cada módulo DIMM suporta uma memória DDR de 128/256/512 MB & 1 GB Capacidade máxima de memória: 4 GB Módulo de memória DDR de canal duplo Suporta módulos DDR 266 / 333 / 400	Ranuras DIMM DDR x4 Cada módulo DIMM suporta uma memória DDR de 128/256/512 MB & 1 GB Capacidade máxima de memória: 4 GB Módulo de memória DDR de canal duplo Suporta módulos DDR 266 / 333 / 400
IDE	Controlador IDE integrado Modo Bus master Ultra DMA 33 / 66 / 100 Suporta o modo PIO 0~4.	Controlador IDE integrado Modo Bus master Ultra DMA 33 / 66 / 100 Suporta o modo PIO 0~4.
SATA II	Controlador Serial ATA integrado Velocidades de transmissão de dados até 1.5 Gb/s. Compatibilidade com a especificação SATA versão 1.0.	Controlador Serial ATA integrado Velocidades de transmissão de dados até 1.5 Gb/s. Compatibilidade com a especificação SATA versão 1.0.
LAN	Realtek 8100C Auto negociação de 10 / 100 Mb/s Capacidade semi/full-duplex	Realtek 8100C Auto negociação de 10 / 100 Mb/s Capacidade semi/full-duplex
Codec de som	ALC 655 Saída de áudio de 6 canais AC'97 Versão 2.3	ALC 655 / 658 (opcional) Saída de áudio de 6 canais AC'97 Versão 2.3
Ranuras	Ranhura gráfica AGP 8X x1 Ranhura PCI x5	Ranhura gráfica AGP 8X x1 Ranhura PCI x5
Conectores na placa	Conector da unidade de disquetes x1 Conector IDE x2 Conector SATA x2 Conector do painel frontal x1 Conector de áudio frontal x1 Conector para entrada de CDs x1	Conector da unidade de disquetes x1 Conector IDE x2 Conector SATA x2 Conector do painel frontal x1 Conector de áudio frontal x1 Conector para entrada de CDs x1

**I86PE-A7**

Ver 1.0 & Ver 7.0		Ver 7.1	
	Conector de entrada S/PDIF (opcional) x1	Conector de entrada S/PDIF (opcional) x1	
	Conector de saída S/PDIF x1	Conector de saída S/PDIF x1	
	Conector da ventoinha da CPU x1	Conector da ventoinha da CPU x1	
	Conector da ventoinha do sistema x1	Conector da ventoinha do sistema x1	
	Conector para detecção da abertura do chassis (opcional) x1	Conector para detecção da abertura do chassis (opcional) x1	
	Conector para limpeza do CMOS x1	Conector para limpeza do CMOS x1	
	Conector USB x2	Conector USB x2	
	Conector de alimentação (20 pinos) x1	Conector de alimentação (24 pinos) x1	
	Conector de alimentação (4 pinos) x1	Conector de alimentação (4 pinos) x1	
Entradas/ Saídas no painel traseiro	Teclado PS/2 x1	Teclado PS/2 x1	
	Rato PS/2 x1	Rato PS/2 x1	
	Porta série x1	Porta série x1	
	Porta para impressora x1	Porta para impressora x1	
	Porta LAN x1	Porta LAN x1	
	Porta USB x4	Porta USB x4	
	Tomada de áudio x3	Tomada de áudio x3	
Tamanho da placa	226 mm (L) X 295 mm (A)	226 mm (L) X 295 mm (A)	
Sistemas operativos suportados	Windows 2K / XP A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistemas operativo com ou sem aviso prévio.	Windows 2K / XP A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistemas operativo com ou sem aviso prévio.	

**POLISH**

	Ver 1.0 & Ver 7.0	Ver 7.1
Procesor	LGA 775 Procesor Intel Pentium 4 / Pentium D / Celeron D do 3,8 GHz (brak obsługi procesorów Cedar Mill & Presler)	LGA 775 Procesor Intel Pentium 4 / Pentium D / Celeron D do 3,8 GHz
FSB	533 / 800 MHz	533 / 800 MHz
Chipset	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
Pamięć główna	Gniazda DDR DIMM x 4 Każde gniazdo DIMM obsługuje moduły 128/256/512MB oraz 1GB DDR Maks. wielkość pamięci 4GB Moduł pamięci DDR z trybem podwójnego kanału Obsługa DDR 266 / 333 / 400	Gniazda DDR DIMM x 4 Każde gniazdo DIMM obsługuje moduły 128/256/512MB oraz 1GB DDR Maks. wielkość pamięci 4GB Moduł pamięci DDR z trybem podwójnego kanału Obsługa DDR 266 / 333 / 400
Super I/O	ITE 8712F Monitor H/W Kontroler prędkości wentylatora Funkcja ITE "Smart Guardian"	ITE 8712F Monitor H/W Kontroler prędkości wentylatora Funkcja ITE "Smart Guardian"
IDE	Zintegrowany kontroler IDE Ultra DMA 33 / 66 / 100 Tryb Bus Master obsługa PIO tryb 0~4	Zintegrowany kontroler IDE Ultra DMA 33 / 66 / 100 Tryb Bus Master obsługa PIO tryb 0~4
SATA II	Zintegrowany kontroler Serial ATA Transfer danych do 1.5 Gb/s. Zgodność ze specyfikacją SATA w wersji 1.0.	Zintegrowany kontroler Serial ATA Transfer danych do 1.5 Gb/s. Zgodność ze specyfikacją SATA w wersji 1.0.
LAN	Realtek 8100C 10 / 100 Mb/s z automatyczną negocjacją szybkości Działanie w trybie połowicznego / pełnego dupleksu	Realtek 8100C 10 / 100 Mb/s z automatyczną negocjacją szybkości Działanie w trybie połowicznego / pełnego dupleksu
Kodek dźwiękowy	ALC 655 6 kanałowe wyjście audio AC'97 w wersji 2.3	ALC 655 / 658 (opcja) 6 kanałowe wyjście audio AC'97 w wersji 2.3
Gniazda	Gniazdo grafiki AGP 8X                   x1 Gniazdo PCI                                   x5	Gniazdo grafiki AGP 8X                   x1 Gniazdo PCI                                   x5
Złącza wbudowa ne	Złącze napędu dyskietek                   x1 Złącze IDE                                    x2 Złącze SATA                                  x2	Złącze napędu dyskietek                   x1 Złącze IDE                                    x2 Złącze SATA                                  x2

**I86PE-A7**

Ver 1.0 & Ver 7.0		Ver 7.1		
	Złącze panela przedniego	x1	Złącze panela przedniego	x1
	Przednie złącze audio	x1	Przednie złącze audio	x1
	Złącze wejścia CD	x1	Złącze wejścia CD	x1
	Złącze wejścia S/PDIF (opcja)	x1	Złącze wejścia S/PDIF (opcja)	x1
	Złącze wyjścia S/PDIF (opcja)	x1	Złącze wyjścia S/PDIF (opcja)	x1
	Złącze główkowe wentylatora procesora	x1	Złącze główkowe wentylatora procesora	x1
	Złącze główkowe wentylatora systemowego	x1	Złącze główkowe wentylatora systemowego	x1
	Złącze główkowe otwarcia obudowy (opcja)	x1	Złącze główkowe otwarcia obudowy (opcja)	x1
	Złącze główkowe kasowania CMOS	x1	Złącze główkowe kasowania CMOS	x1
	Złącze USB	x2	Złącze USB	x2
	Złącze zasilania (20 pinowe)	x1	Złącze zasilania (24 pinowe)	x1
	Złącze zasilania (4 pinowe)	x1	Złącze zasilania (4 pinowe)	x1
Back Panel I/O	Klawiatura PS/2	x1	Klawiatura PS/2	x1
	Mysz PS/2	x1	Mysz PS/2	x1
	Port szeregowy	x1	Port szeregowy	x1
	Port drukarki	x1	Port drukarki	x1
	Port LAN	x1	Port LAN	x1
	Port USB	x4	Port USB	x4
	Gniazdo audio	x3	Gniazdo audio	x3
Wymiary płyty	226 mm (S) X 295 mm (W)		226 mm (S) X 295 mm (W)	
Obsługa systemu operacyjnego	Windows 2K / XP Biostar zastrzega sobie prawo do dawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.		Windows 2K / XP Biostar zastrzega sobie prawo do dawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.	

## RUSSIAN

	Ver 1.0 & Ver 7.0	Ver 7.1
CPU (центральный процессор)	LGA 775 Процессор Intel Pentium 4 / Pentium D / Celeron D до 3.8 ГГц ( не поддерживает центральные процессоры Cedar Mill & Presler)	LGA 775 Процессор Intel Pentium 4 / Pentium D / Celeron D до 3.8 ГГц
FSB	533 / 800 МГц	533 / 800 МГц
Набор микросхем	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
Основная память	Слоты DDR DIMM x 4 Каждый модуль DIMM поддерживает 128/256/512МБ & 1ГБ DDR Максимальная ёмкость памяти 4 ГБ Модуль памяти с двухканальным режимом DDR Поддержка DDR 266 / 333 / 400	Слоты DDR DIMM x 4 Каждый модуль DIMM поддерживает 128/256/512МБ & 1ГБ DDR Максимальная ёмкость памяти 4 ГБ Модуль памяти с двухканальным режимом DDR Поддержка DDR 266 / 333 / 400
Super I/O	ITE 8712F Аппаратный монитор Регулятор скорости Функция ITE "Smart Guardian" (Интеллектуальная защита)	ITE 8712F Аппаратный монитор Регулятор скорости Функция ITE "Smart Guardian" (Интеллектуальная защита)
IDE	Встроенное устройство управления встроенными интерфейсами устройств Режим "хозяина" шины Ultra DMA 33 / 66 / 100 Поддержка режима PIO 0~4,	Встроенное устройство управления встроенными интерфейсами устройств Режим "хозяина" шины Ultra DMA 33 / 66 / 100 Поддержка режима PIO 0~4,
SATA II	Встроенное последовательное устройство управления ATA скорость передачи данных до 1.5 гигабит/с. Соответствие спецификации SATA версия 1.0.	Встроенное последовательное устройство управления ATA скорость передачи данных до 1.5 гигабит/с. Соответствие спецификации SATA версия 1.0.
Локальная сеть	Realtek 8100C Автоматическое согласование 10 / 100 Мб/с Частичная / полная дуплексная способность	Realtek 8100C Автоматическое согласование 10 / 100 Мб/с Частичная / полная дуплексная способность
Звуковой кодек	ALC 655 Шестиканальный звуковой выход AC'97 Версия 2.3	ALC 655 / 658 (дополнительно) Шестиканальный звуковой выход AC'97 Версия 2.3

		Ver 1.0 & Ver 7.0		Ver 7.1	
Слоты	Графический слот AGP 8X	x1	Графический слот AGP 8X	x1	
	Слот PCI	x5	Слот PCI	x5	
Встроенный разъем	Разъем НГМД	x1	Разъем НГМД	x1	
	Разъем IDE	x2	Разъем IDE	x2	
	Разъем SATA	x2	Разъем SATA	x2	
	Разъем на лицевой панели	x1	Разъем на лицевой панели	x1	
	Входной звуковой разъем	x1	Входной звуковой разъем	x1	
	Разъем ввода для CD	x1	Разъем ввода для CD	x1	
	Разъем ввода для S/PDIF (дополнительно)	x1	Разъем ввода для S/PDIF (дополнительно)	x1	
	Разъем вывода для S/PDIF (дополнительно)	x1	Разъем вывода для S/PDIF (дополнительно)	x1	
	Контактирующее приспособление вентилятора центрального процессора	x1	Контактирующее приспособление вентилятора центрального процессора	x1	
	Контактирующее приспособление вентилятора системы	x1	Контактирующее приспособление вентилятора системы	x1	
	Шасси открытого контактирующего приспособления (дополнительно)	x1	Шасси открытого контактирующего приспособления (дополнительно)	x1	
	Открытое контактирующее приспособление CMOS	x1	Открытое контактирующее приспособление CMOS	x1	
	USB-разъем	x2	USB-разъем	x2	
	Разъем питания (20 вывод)	x1	Разъем питания (24 вывод)	x1	
	Разъем питания (4 вывод)	x1	Разъем питания (4 вывод)	x1	
	Задняя панель средств ввода-вывода	Клавиатура PS/2	x1	Клавиатура PS/2	x1
Мышь PS/2		x1	Мышь PS/2	x1	
Последовательный порт		x1	Последовательный порт	x1	
Порт подключения принтера		x1	Порт подключения принтера	x1	
Порт LAN		x1	Порт LAN	x1	
USB-порт		x4	USB-порт	x4	
Размер панели	Гнездо для подключения наушников	x3	Гнездо для подключения наушников	x3	
	226 мм (Ш) X 295 мм (В)		226 мм (Ш) X 295 мм (В)		
Поддержка OS	Windows 2K / XP		Windows 2K / XP		
	Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.		Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.		

## ARABIC

Ver 7.1	Ver 1.0 & Ver 7.0	
LGA 775 LGA 775 Intel Pentium 4 / Pentium D / Celer on معالجات Intel Pentium 4 / Pentium D / Celer on معالجات بنترند يصل إلى 308 جيجا هرتز D	LGA 775 Intel Pentium 4 / Pentium D / Celer on معالجات Cedar Mill & Presler (لا تدعم وحدة المعالجة المركزية بنترند يصل إلى 308 جيجا هرتز D	وحدة المعالجة المركزية
ميغا هرتز 533 / 800 ترند	ميغا هرتز 533 / 800 ترند	الناقل الأمامي الجانبي
Intel 865PE Intel ICH5	Intel 865PE Intel ICH5	مجموعة الشرائح
فتحة DDR DIMM عدد 4 سعة DDR تدعم ذاكرة من نوع DIMM تدعم كل فتحة ميغا بايت و 1 جيجا بايت 128/256/512 سعة ذاكرة قصوى 4 جيجا بايت أحادية/مزودة القناة DDR وحدة ذاكرة 266 / 333 / 400 سعات DDR تدعم الذاكرة من نوع ميغا بايت	فتحة DDR DIMM عدد 4 سعة DDR تدعم ذاكرة من نوع DIMM تدعم كل فتحة ميغا بايت و 1 جيجا بايت 128/256/512 سعة ذاكرة قصوى 4 جيجا بايت أحادية/مزودة القناة DDR وحدة ذاكرة 266 / 333 / 400 سعات DDR تدعم الذاكرة من نوع ميغا بايت	الذاكرة الرئيسية
ITE 8712F مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة من "Smart Guardian" وظيفة	ITE 8712F مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة من "Smart Guardian" وظيفة	Super I/O
متكامل IDE متحكم Ultra DMA 33 / 66 / 100 ناقل تقنية وضع رئيسي PIO Mode 0~4 دعم وضع	متكامل IDE متحكم Ultra DMA 33 / 66 / 100 ناقل تقنية وضع رئيسي PIO Mode 0~4 دعم وضع	منفذ IDE
متكامل Serial ATA متحكم نقل البيانات بسرعات تصل إلى 1.5 جيجابت/ثانية. 1.0 الإصدار SATA مطابقة لمواصفات	متكامل Serial ATA متحكم نقل البيانات بسرعات تصل إلى 1.5 جيجابت/ثانية. 1.0 الإصدار SATA مطابقة لمواصفات	SATA II
Realtek 8100C تفاوض تلقائي 100/10 ميغا بايت / ثلثية إمكانية النقل المزدوج الكامل/النصفي	Realtek 8100C تفاوض تلقائي 100/10 ميغا بايت / ثلثية إمكانية النقل المزدوج الكامل/النصفي	شبكة داخلية 100/10
ALC655 / 658 (اختياري) قنوات لخرج الصوت 6 AC'97 من 2.3 لإصدار	ALC655 قنوات لخرج الصوت 6 AC'97 من 2.3 لإصدار	كوديك الصوت
عدد 1 فتحة AGP فئة 8X لبطاقة الرسومات	عدد 1 فتحة AGP فئة 8X لبطاقة الرسومات	الفتحات
عدد 5 فتحة PCI	عدد 5 فتحة PCI	
عدد 1 مقعد محرك أقراص مرنة	عدد 1 مقعد محرك أقراص مرنة	المنافذ على سطح اللوحة
عدد 2 مقعد IDE	عدد 2 مقعد IDE	
عدد 2 مقعد SATA	عدد 2 مقعد SATA	



## I86PE-A7

Ver 7.1	Ver 1.0 & Ver 7.0	
1 عدد مقذا للوحة الأملمية	1 عدد مقذا للوحة الأملمية	
1 عدد مقذا الصوت الأملي	1 عدد مقذا الصوت الأملي	
1 عدد مقذا-IN CD	1 عدد مقذا-IN CD	
1 عدد مقذا دخل S/PDIF (اختياري)	1 عدد مقذا دخل S/PDIF (اختياري)	
1 عدد مقذا خرج S/PDIF (اختياري)	1 عدد مقذا خرج S/PDIF (اختياري)	
1 عدد وصلة مروحة وحدة المعالجة المركزية	1 عدد وصلة مروحة وحدة المعالجة المركزية	
1 عدد وصلة مروحة النظم	1 عدد وصلة مروحة النظم	
1 عدد وصلة فتح الهيكل (اختياري)	1 عدد وصلة فتح الهيكل (اختياري)	
1 عدد وصلة مسح CMOS	1 عدد وصلة مسح CMOS	
2 عدد مقذا USB	2 عدد مقذا USB	
1 عدد مقذا توصيل الطاقة (24دوس)	1 عدد مقذا توصيل الطاقة (20دوس)	
1 عدد مقذا توصيل الطاقة (4بيليس)	1 عدد مقذا توصيل الطاقة (4بيليس)	
1 عدد لوحة مفاتيح PS2	1 عدد لوحة مفاتيح PS2	
1 عدد مؤس PS/2	1 عدد مؤس PS/2	
1 عدد مقذا تسلسلي	1 عدد مقذا تسلسلي	منافذ دخل/خرج للوحه الخلفية
1 عدد مقذا طابعة	1 عدد مقذا طابعة	
1 عدد مقذا شبكة لتصل محلية	1 عدد مقذا شبكة لتصل محلية	
4 عدد منافذ USB	4 عدد منافذ USB	
3 عدد مقيس صوت	3 عدد مقيس صوت	
226 مم (عرض) X 295 مم (ارتفاع)	226 مم (عرض) X 295 مم (ارتفاع)	حجم اللوحة
Windows 2K / XP بحقها في إضافة أو إزالة الدعم لأي نظام Biostar تحتفظ تشغل باخطار أو بدون اخطار .	Windows 2K / XP بحقها في إضافة أو إزالة الدعم لأي نظام Biostar تحتفظ تشغل باخطار أو بدون اخطار .	دم أنظمة التشغيل

## JAPANESE

	Ver 1.0 & Ver 7.0	Ver 7.1
CPU	LGA 775 Intel Pentium 4 / Pentium D / Celeron D processor up to 3.8 GHz (Cedar Mill & Presler CPUはサポートしません)	LGA 775 Intel Pentium 4 / Pentium D / Celeron D processor up to 3.8 GHz
FSB	533 / 800 MHz	533 / 800 MHz
チップセット	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
メインメモリ	DDR DIMMスロット x 4 各DIMMは128/256/512MB & 1GB DDRをサ ポート 最大メモリ容量4GB デュアル チャンネルモードDDRメモリモジュ ール DDR 266 / 333 / 400 をサポート	DDR DIMMスロット x 4 各DIMMは128/256/512MB & 1GB DDRをサ ポート 最大メモリ容量4GB デュアル チャンネルモードDDRメモリモジュ ール DDR 266 / 333 / 400 をサポート
Super I/O	ITE 8712F 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 8712F H/Wモニター ファン速度コントローラ/ モニター ITEの「スマートガーディアン」機能
IDE	統合IDEコントローラ Ultra DMA 33 / 66 / 100バスマスタモード PIO Mode 0~4のサポート	統合IDEコントローラ Ultra DMA 33 / 66 / 100 バスマスタモード PIO Mode 0~4のサポート
SATA II	統合シリアルATAコントローラ 最高1.5 Gb/秒のデータ転送速度 SATAバージョン1.0仕様に準拠。	統合シリアルATAコントローラ 最高1.5 Gb/秒のデータ転送速度 SATAバージョン1.0仕様に準拠。
10/100 LAN	Realtek 8100C 10 / 100 Mb/sオートネゴシエーション 半/全二重機能	Realtek 8100C 10 / 100 Mb/sオートネゴシエーション 半/全二重機能
サウンド Codec	ALC 655 6チャンネルオーディオアウト AC'97バージョン2.3	ALC 655 / 658 (オプション) 6チャンネルオーディオアウト AC'97バージョン2.3
スロット	AGP 8X グラフィックススロット x1 PCIスロット x5	AGP 8X グラフィックススロット x1 PCIスロット x5
オンボードコネクタ	フロッピーコネクタ x1 IDEコネクタ x2 SATAコネクタ x2 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インコネクタ (オプション) x1	フロッピーコネクタ x1 IDEコネクタ x2 SATAコネクタ x2 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インコネクタ (オプション) x1

**I86PE-A7**

Ver 1.0 & Ver 7.0		Ver 7.1		
	S/PDIFアウトコネクタ(オプション)	x1	S/PDIFアウトコネクタ(オプション)	x1
	CPUファンヘッダ	x1	CPUファンヘッダ	x1
	システムファンヘッダ	x1	システムファンヘッダ	x1
	シャーシオープンヘッダ(オプション)	x1	シャーシオープンヘッダ(オプション)	x1
	CMOSクリアヘッダ	x1	CMOSクリアヘッダ	x1
	USBコネクタ	x2	USBコネクタ	x2
	電源コネクタ(20ピン)	x1	電源コネクタ(24ピン)	x1
	電源コネクタ(4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キーボード	x1
	PS/2マウス	x1	PS/2マウス	x1
	シリアルポート	x1	シリアルポート	x1
	プリンタポート	x1	プリンタポート	x1
	LANポート	x1	LANポート	x1
	USBポート	x4	USBポート	x4
	オーディオジャック	x3	オーディオジャック	x3
ボードサイズ	226 mm (幅) X 295 mm (高さ)		226 mm (幅) X 295 mm (高さ)	
OSサポート	Windows 2K / XP Biostar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 2K / XP Biostar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。	

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## **BIOS SETUP**

### ***Introduction***

This manual discussed Award™ Setup program built into the ROM BIOS. The Setup program allows users to modify the basic system configuration. This special information is then stored in battery-backed RAM so that it retains the Setup information when the power is turned off.

The Award BIOS™ installed in your computer system's ROM (Read Only Memory) is a custom version of an industry standard BIOS. This means that it supports Intel Pentium® 4 processor input/output system. The BIOS provides critical low-level support for standard devices such as disk drives and serial and parallel ports.

Adding important has customized the Award BIOS™, but nonstandard, features such as virus and password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

The rest of this manual is intended to guide you through the process of configuring your system using Setup.

### ***Plug and Play Support***

These AWARD BIOS supports the Plug and Play Version 1.0A specification. ESCD (Extended System Configuration Data) write is supported.

### ***EPA Green PC Support***

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

### ***APM Support***

These 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. This AWARD BIOS can manage power to the hard disk drives and video monitors.

## ***I86PE-A7 BIOS Setup***

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### ***ACPI Support***

Award ACPI BIOS support Version 1.0 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 AWARD BIOS also supports Version 2.1 of the Intel PCI (Peripheral Component Interconnect) local bus specification.

### ***DRAM Support***

DDR DRAM (Double Data Rate Synchronous DRAM) is supported.

### ***Supported CPUs***

This AWARD BIOS supports the Intel Pentium® 4 CPU.

---

## ***I86PE-A7 BIOS Setup***

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### ***Using Setup***

In general, you use the arrow keys to highlight items, 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.

Keystroke	Function
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

## I86PE-A7 BIOS Setup

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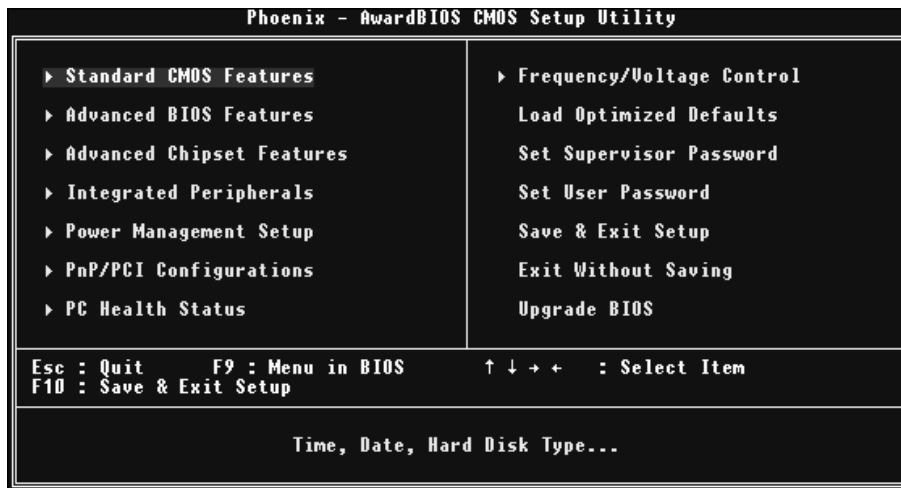
### 1 Main Menu

Once you enter Award BIOS™ CMOS Setup Utility, the Main Menu will appear on the screen.

#### ⚠ **WARNING**

The information about BIOS defaults on manual (**Figure 1,2,3,4,5,6,7,8,9**) is just for reference; please refer to the BIOS installed on board, for update information.

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.



#### ***1.1 STANDARD CMOS FEATURES***

This submenu contains industry standard configurable options.

#### ***1.2 ADVANCED BIOS FEATURES***

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

#### ***1.3 ADVANCED CHIPSET FEATURES***

This submenu allows you to configure special chipset features.

#### ***1.4 INTEGRATED PERIPHERALS***

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

#### ***1.5 POWER MANAGEMENT SETUP***

This submenu allows you to configure the power management features.



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## ***I86PE-A7 BIOS Setup***

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### ***1.6 PNP/PCI CONFIGURATIONS***

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

### ***1.7 PC HEALTH STATUS***

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

### ***1.8 FREQUENCY CONTROL***

This submenu allows you to change CPU Vcore Voltage and CPU/PCI clock.

*(However, this function is strongly recommended not to use. Not properly change the voltage and clock may cause CPU or M/B damage!)*

### ***1.8 LOAD OPTIMIZED DEFAULTS***

This selection allows you to reload the BIOS when the system is having problems particularly with the boot 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

### ***1.9 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:

### ***1.10 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:

## ***I86PE-A7 BIOS Setup***

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### ***1.11 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
```

### ***1.12 EXITS 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
```

### ***1.13 UPGRADE BIOS***

This submenu allows you to upgrade bios.

```
BIOS UPDATE UTILITY (Y/N)? N
```

## I86PE-A7 BIOS Setup

### 2 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into 10 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.



## ***I86PE-A7 BIOS Setup***

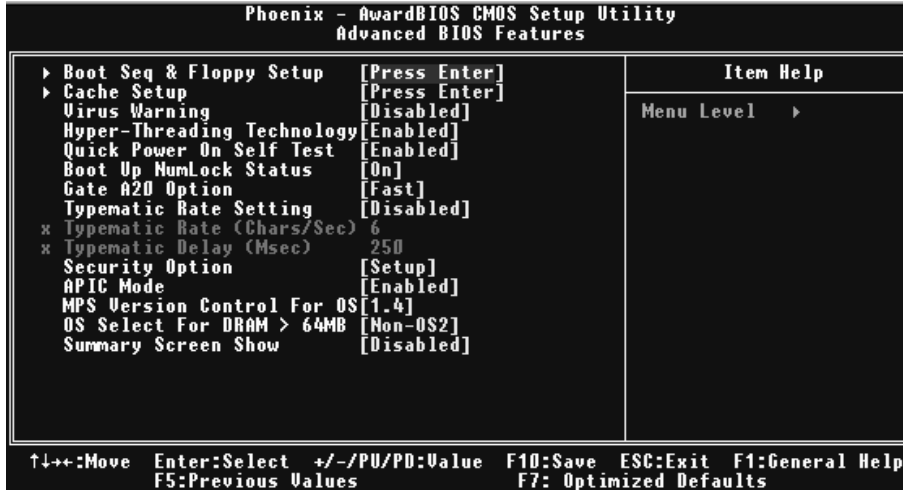
### **2.1 MAIN MENU SELECTIONS**

This table shows the selections that you can make 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.
IDE Primary Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options
IDE Primary Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Secondary Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Secondary Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
Drive A Drive B	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.
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video device.
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.

## I86PE-A7 BIOS Setup

### 3 Advanced BIOS Features



#### 3.1 BOOT SEQ & FLOPPY SETUP

##### 3.1.1 First/ Second/ Third/ Boot Other Device

These BIOS attempt to load the operating system from the device in the sequence selected in these items.

The Choices: Floppy, LS120, HDD-0, SCSI, CDROM, HDD-1, HDD-2, HDD-3, ZIP100, LAN, HPT370, Disabled, Enabled.

##### 3.1.2 Swap Floppy Drive

For systems with two floppy drives, this option allows you to swap logical drive assignments.

The Choices: Disabled (default), Enabled.

##### 3.1.3 Boot Up Floppy Seek

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

The Choices: Disabled, Enabled (default).

##### 3.1.4 Report NO FDD for Win95

The Choices: NO (default).

---

## ***I86PE-A7 BIOS Setup***

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### ***3.2 CACHE SETUP***

#### ***CPU L1&L2 Cache***

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

<b>Enabled</b> (default)	Enable cache.
Disabled	Disable cache.

### ***3.3 CPU FEATURE***

#### ***3.3.1 Thermal Management***

This item allows you to choose the monitor's thermal management.

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

#### ***3.3.2 TM2 Bus Ratio***

Represents the frequency bus ratio of the throttled performance state that will be initiated when the on-die sensor goes from not hot to hot.

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

#### ***3.3.3 TM2 Bus VID***

Represents the voltage of the throttled performance state that will be initiated when the on-die sensor goes from not hot to hot.

**The Choices: 0.8375 (default).**

#### ***3.3.4 Limit CPUID***

This item allows you to set the limit of the CPU ID with a maximum value to 3. It should be disabled for WinXP.

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

### ***3.4 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.

Enabled	Virus protection is activated.
<b>Disabled</b> (default)	Virus protection is disabled.

---

## ***I86PE-A7 BIOS Setup***

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### ***3.5 HYPER-THREADING TECHNOLOGY***

This option allows you to enable or disabled Hyper-Threading Technology. "Enabled" for Windows XP and Linux 2.4.x (OS optimized for Hyper-Threading Technology). "Disable" for other OS (OS not optimized for Hyper-Threading Technology).

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

### ***3.6 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.
<b>Enabled (default)</b>	Enable quick POST.

### ***3.7 BOOT UP NUMLOCK STATUS***

Selects the NumLock. State after power on.

<b>On (default)</b>	Numpad is number keys.
Off	Numpad is arrow keys.

### ***3.8 GATE A20 OPTION***

Select if chipset or keyboard controller should control Gate A20.

Normal	A pin in the keyboard controller controls Gate A20.
<b>Fast (default)</b>	Lets chipset control Gate A20.

### ***3.9 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.**

### ***3.10 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.**

### ***3.11 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.**

---

## ***I86PE-A7 BIOS Setup***

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### ***3.12 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.
<b>Setup (default)</b>	A password is required to access the Setup Utility only.

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

### ***3.13 APIC MODE***

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

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

### ***3.14 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.**

### ***3.15 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.**

### ***3.16 SUMMARY SCREEN SHOW***

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

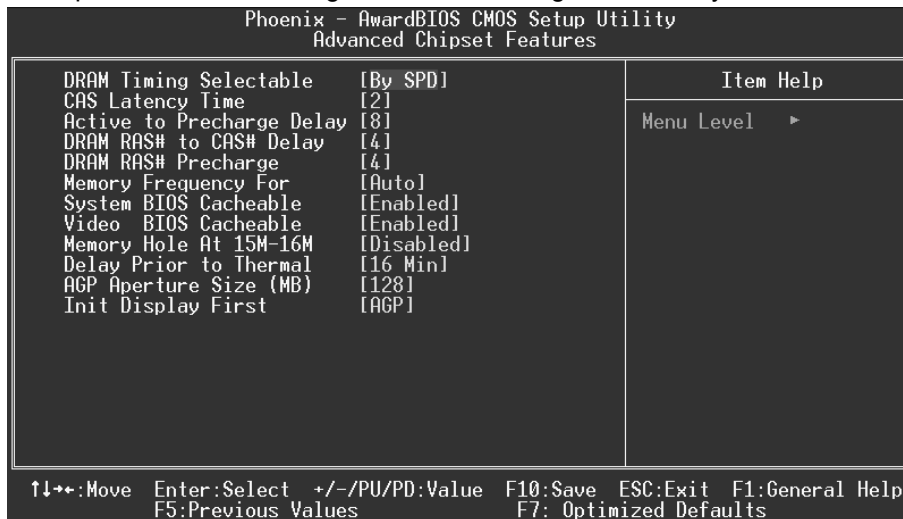
**The choices: Enabled, Disabled (default).**



## I86PE-A7 BIOS Setup

### 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.



#### 4.1 DRAM TIMING SELECTABLE

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

**The Choices:** By SPD (default), Manual.

#### 4.2 CAS LATENCY TIME

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

**The Choices:** 1.5, 2 (default), 2.5, 3.

#### 4.3 ACTIVE TO PRECHARGE DELAY

This item controls the number of DRAM clocks to activate the precharge delay.

**The Choices:** 8 (default), 7, 6, 5

---

## ***I86PE-A7 BIOS Setup***

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### ***4.4 DRAM RAS# TO CAS# DELAY***

This field let you insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. Fast gives faster performance; and slow gives more stable performance. This field applies only when synchronous DRAM is installed in the system.

**The Choices: 4 (default), 3, 2.**

### ***4.5 DRAM RAS# PRECHARGE***

If an insufficient number of cycle is allowed for RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete, and the DRAM may fail to retain data. Fast gives faster performance; and Slow gives more stable performance. This field applies only when synchronous DRAM is installed in the system.

**The Choices: 4 (default), 3, 2.**

### ***4.6 MEMORY FREQUENCY FOR***

This item allows you to select the Memory Frequency.

**The Choices: Auto (default), DDR266, DDR300, DDR400.**

### ***4.7 SYSTEM BIOS CACHEABLE***

Selecting Enabled allows you caching of the system BIOS ROM at F0000h~FFFFFh, resulting a better system performance. However, if any program writes to this memory area, a system error may result.

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

### ***4.8 VIDEO BIOS CACHEABLE***

Select Enabled allows caching of the video BIOS, resulting a better system performance. However, if any program writes to this memory area, a system error may result.

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

### ***4.9 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. The user information of peripherals that need to use this area of system memory usually<sup>2</sup> discussed their memory requirements.

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

### ***4.10 DELAY PRIOR TO THERMAL***

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

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

## ***I86PE-A7 BIOS Setup***

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### ***4.11 AGP APERTURE SIZE (MB)***

Select the size of the Accelerated Graphics Port (AGP) aperture. The aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation.

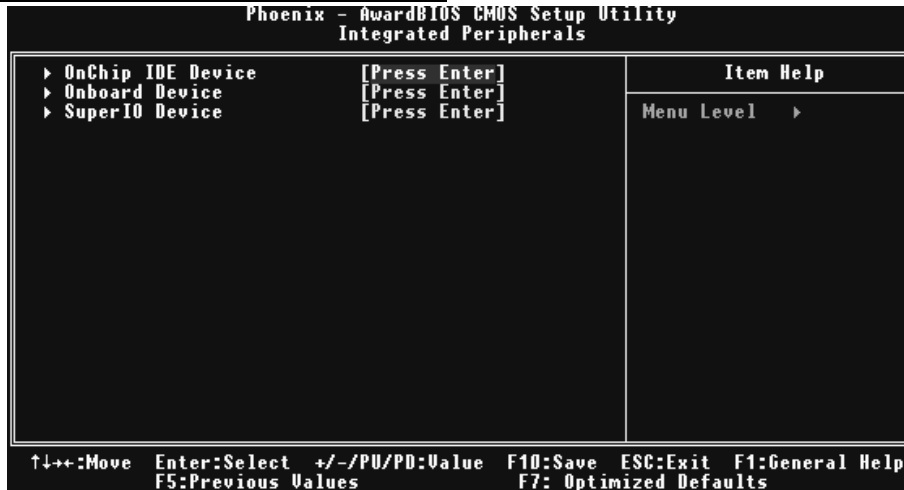
**The Choices:** 64, 4, 8, 16, 32, **128 (default)**, 256.

### ***4.12 INIT DISPLAY FIRST***

This item allows you to decide to active whether PCI Slot or on-chip VGA first.

**The Choices:** AGP (**default**), PCI Slot.

## 5 Integrated Peripherals



### 5.1 ONBOARD IDE DEVICE

#### 5.1.1 IDE HDD Block Mode

Block mode is also called block transfer, multiple commands, or multiple sector 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.

#### 5.1.2 IDE DMA Transfer Access

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

The Choices: Enabled (default), Disabled.

#### 5.1.3 On-Chip Primary/ Secondary PCI IDE

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

The Choices: Enabled (Default), Disabled.

---

## ***I86PE-A7 BIOS Setup***

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### **5.1.4 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.

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

Ultra DMA/100 functionality 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 OSR2 or a third party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/100, select Auto to enable BIOS support.

The Choices: Auto (default), Disabled.

### **5.1.6 On-Chip Serial ATA**

This item allows you to enable or disable the On-Chip Serial ATA.

The Choices: Disabled (default).

### **5.1.7 Serial ATA Port0/1 Mode**

The Choices: Primary Master (default).

## **5.2 ONBOARD DEVICE**

### **5.2.1 USB Controller**

Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have USB peripherals.

The Choices: Enabled (default), Disabled

### **5.2.2 USB 2.0 Controller**

The Choices: Enabled (default), disabled.

### **5.2.3 USB Keyboard/Mouse Support**

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

Enabled	Enable USB Keyboard/Mouse Support.
<b>Disabled</b> (default)	Disable USB Keyboard/Mouse Support.

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## ***I86PE-A7 BIOS Setup***

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### **5.2.4 AC'97 Audio/ Modem**

This item allows you to decide to enable/ disable to support AC'97 Audio/Modem.

The Choices: Auto (default), Disabled.

### **5.2.5 VIA 1394 Controller**

This item allows you to enable or disable the Onboard 1394 Controller.

The Choices: Enabled (default), Disabled.

### **5.2.6 VIA RAID Controller**

This item allows you to enable or disable the Onboard Raid Controller.

The Choices: Enabled (default), Disabled.

### **5.2.7 Onboard PCI LAN**

This item allows you to enable or disable the onboard PCI LAN.

The Choices: Enabled (default), disabled.

### **5.2.8 Onboard LAN Boot ROM**

Decide whether to invoke the boot ROM of the onboard LAN chip.

The Choices: Disabled, Enable (default).

## **5.3 SUPER IO DEVICE**

### **5.3.1 Power On Function**

This item allows you to choose the power on function.

The Choices: Button Only (default), Password, Hot Key, Mouse Left, Mouse Right, Any Key, and Keyboard 98.

### **5.3.2 KB Power on Password**

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

### **5.3.3 HOT Key power ON**

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

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, Ctrl-F12.

---

## ***I86PE-A7 BIOS Setup***

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### **5.3.4 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 install and FDC or the system has no floppy drive, select Disabled in this field.

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

### **5.3.5 Onboard Serial Port 1**

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

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

### **5.3.6 Onboard Serial Port 2**

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

**The Choices: 2F8/IRQ3 (default for Version 1.0~6.0), Disabled, Auto, 3F8/IRQ4, 3E8/IRQ4, 2E8/IRQ3.**

### **5.3.7 UART Mode Select**

This item allows you to determine which Infrared (IR) function of onboard I/O chip.

**The Choices: Normal (default), ASKIR, IrDA, SCR.**

### **5.3.8 UR2 Duplex Mode**

Select the value required by the IR device connected to the IR port. Full-duplex mode permits simultaneous two-direction transmission. Half-duplex mode permits transmission in one direction only at a time.

**The Choices: Half (default), Full.**

### **5.3.9 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.**

## ***I86PE-A7 BIOS Setup***

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### **5.3.10 Parallel Port Mode**

The default value is SPP.

<b>SPP</b> (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.

### **5.3.11 ECP Mode Use DMA**

Select a DMA Channel for the port.

**The Choices: 3 (default), 1.**

### **5.3.12 Power after Power Fail**

This setting specifies whether your system will reboot after a power fail or interrupts occurs.

<b>Off</b>	Leaves the computer in the power off state.
On	Reboots the computer.
Former-Sts	Restores the system to the status before power failure or interrupt occurs.

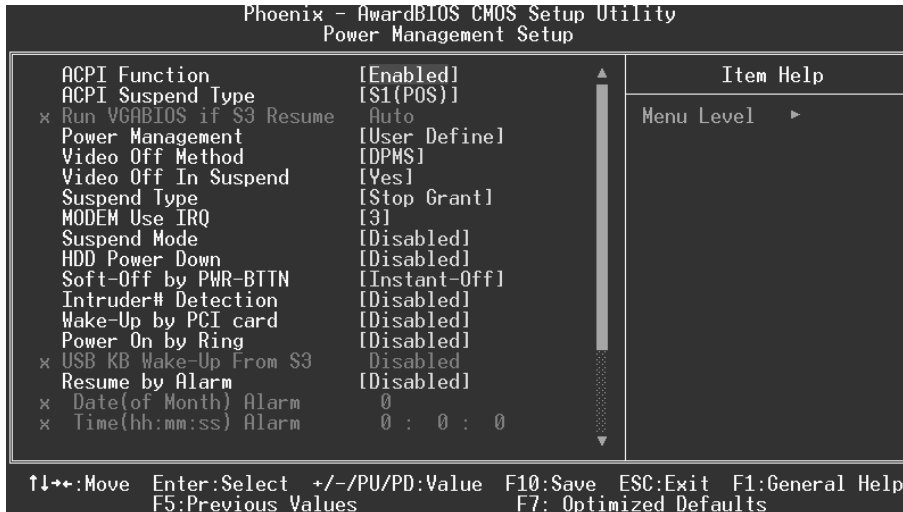
**The Choices: Off (default), on, Former-Sts.**



## I86PE-A7 BIOS Setup

### 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.



#### 6.1 ACPI FUNCTION

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

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

#### 6.2 ACPI SUSPEND TYPE

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

**The Choices:**

<b>S1 (POS)</b> (default)	Power on Suspend
<b>S3 (STR)</b>	Suspend to RAM
<b>S1 &amp; S3</b>	POS+STR

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## ***I86PE-A7 BIOS Setup***

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### **6.3 *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 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.**

### **6.4 *POWER MANAGEMENT***

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

1. HDD Power Down.
2. Doze Mode.
3. Suspend Mode.

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

#### **Min. Saving**

Minimum power management.

Doze Mode = 1 hr.

Standby Mode = 1 hr

Suspend Mode = 1 hr.

HDD Power Down = 15 min

#### **Max Saving**

Maximum power management only available for sl CPU's.

Doze Mode = 1 min

Standby Mode = 1 min.

Suspend Mode = 1 min.

HDD Power Down = 1 min.

#### **User Defined (default)**

Allow you to set each mode individually.

When not disabled, each of the ranges is from 1 min. to 1 hr. except for HDD Power Down which ranges from 1 min. to 15 min. and disable.

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## ***I86PE-A7 BIOS Setup***

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### ***6.5 VIDEO OFF METHOD***

This option determines the manner in which the monitor is 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.

### ***6.6 VIDEO OFF IN SUSPEND***

This determines the manner in which the monitor is blanked.

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

### ***6.7 SUSPEND TYPE***

Select the Suspend Type.

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

### ***6.8 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.**

### ***6.9 SUSPEND MODE***

When enabled and after the set time of system inactivity, all devices except the CPU will be shut off.

**The Choices: Disabled (default), 1Min, 2Min, 4Min, 8Min, 12Min, 20Min, 30Min, 40Min, 1Hour.**

### ***6.10 HDD POWER DOWN***

When enabled and after the set time of system inactivity , the hard disk drive will be powered down while all other devices remain active.

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

### ***6.11 SOFT-OFF BY PWR-BTTN***

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has "hung."

**The Choices: Delay 4 Sec, Instant-Off (default).**

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### ***6.12 INTRUDER# DETECTION***

This item allows you to enable or disable intruder# detection

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

### ***6.13 WAKE-UP BY PCI CARD***

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

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

### ***6.14 USB KB/MS WAKE-UP FROM S3***

This item allows you to enable or disabled wake up from S3 from USB keyboard.

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

### ***6.15 RESUME BY ALARM***

This function is for setting date and time for your computer to boot up. During Disabled, you cannot use this function. During Enabled, Choose the Date and Time.

Alarm:

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

You can choose which month the system will boot up.

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

You can choose what hour, minute and second the system will boot up.

**Note:** If you have change the setting, you must let the system boot up until it goes to the operating system, before this function will work.

### ***6.16 RELOAD GLOBAL TIMER EVENT***

Reload Global Timer Events are I/O events whose occurrence can prevent the system from entering a power saving mode or can awaken the system from such a mode. In effect, the system remains alert for anything, which occurs to a device, which is configured as *Enabled*, even when the system is in a power down mode.

**Primary IDE 0/1**

**Secondary IDE 0/1**

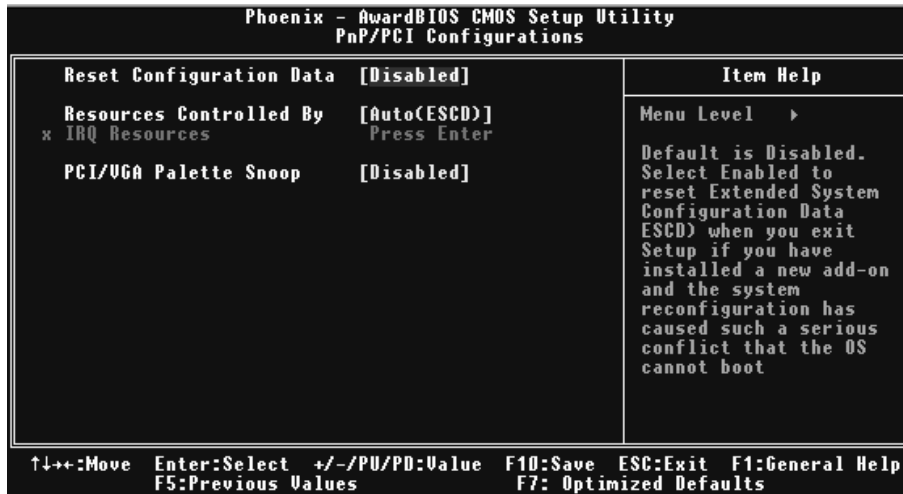
**FDD, COM, LPT Port**

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

## I86PE-A7 BIOS Setup

### 7 PnP/PCI Configurations

This section describes configuring the PCI bus system. PCI, or Personal Computer Interconnect, is a system that 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.



#### 7.1 RESET CONFIGURATION DATA

The system BIOS supports the PnP feature that requires the system to record which resources are assigned and protects resources from conflict. Every peripheral device has a node, which is called ESCD. This node records which resources are assigned to it. The system needs to record and update ESCD to the memory locations. These locations (4K) are reserved in the system BIOS. If the Disabled (default) option is chosen, the system's ESCD will update only when the new configuration varies from the last one. If the Enabled option is chosen, the system is forced to update ESCDs and then is automatically set to the "Disabled" mode.

The above settings will be shown on the screen only if "Manual" is chosen for the resources controlled by function.

Legacy is the term, which signifies that a resource is assigned to the ISA Bus and provides non-PnP ISA add-on cards. PCI / ISA PnP signifies that a resource is assigned to the PCI Bus or provides for ISA PnP add-on cards and peripherals.

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

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### ***7.2 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.

### ***7.3 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

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### ***7.4 PCI/VGA PALETTE SNOOP***

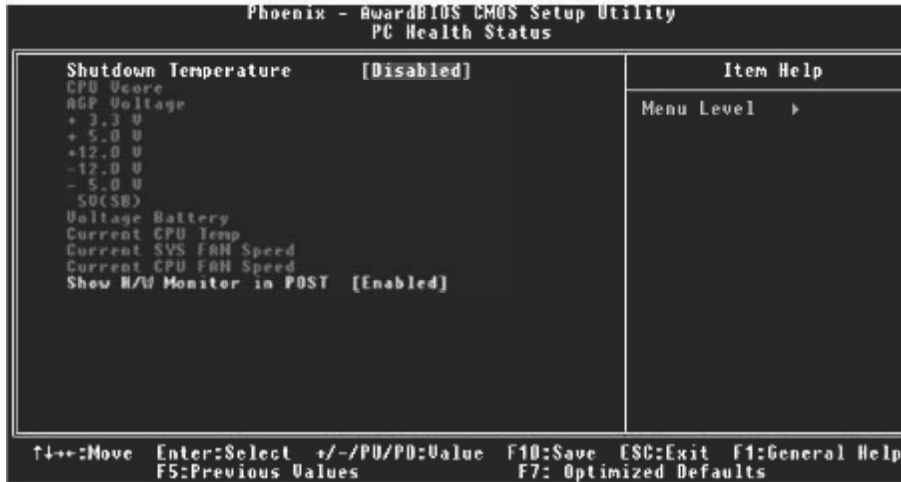
Choose Disabled or Enabled. Some graphic controllers that are not VGA compatible take the output from a VGA controller and map it to their display as a way to provide boot information and VGA compatibility.

However, the color information coming from the VGA controller is drawn from the palette table inside the VGA controller to generate the proper colors, and the graphic controller needs to know what is in the palette of the VGA controller. To do this, the non-VGA graphic controller watches for the Write access to the VGA palette and registers the snoop data. In PCI based systems, where the VGA controller is on the PCI bus and a non-VGA graphic controller is on an ISA bus, the Write Access to the palette will not show up on the ISA bus if the PCI VGA controller responds to the Write.

In this case, the PCI VGA controller should not respond to the Write, it should only snoop the data and permit the access to be forwarded to the ISA bus. The non-VGA ISA graphic controller can then snoop the data on the ISA bus. Unless you have the above situation, you should disable this option.

<b>Disabled</b> (default)	Disables the function.
Enabled	Enables the function.

## **8 PC Health Status**



### **8.1 SHUTDOWN TEMPERATURE**

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

The Choices: 60°C/140°C, 65°C/149°F, Disabled (default).

### **8.2 CPU VCORE/ AGP VOLTAGE/ +3.3V/ +5.0V/ +12V/ -12V/ -5V/ 5VSB(V)/ VOLTAGE BATTERY**

Detect the system's voltage status automatically.

### **8.3 CURRENT CPU TEMP**

Show you the current CPU temperature.

### **8.4 CURRENT CPU FAN SPEED**

This field displays the current CPUFAN speed.

### **8.5 CURRENT SYS FAN SPEED**

This field displays the current speed SYSTEM fan.

### **8.6 SHOW H/W MONITOR IN POST**

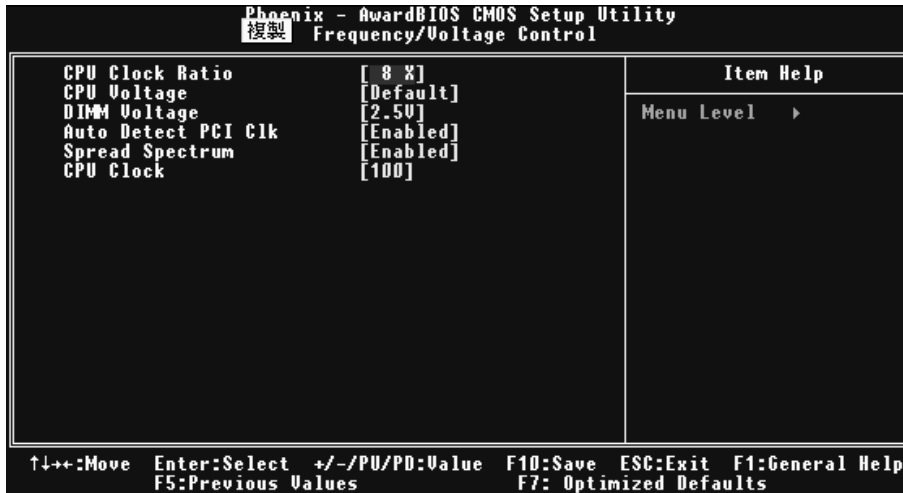
If you computer contain a monitoring system, it will show PC health status during POST stage. The item offers several delay time to select you want.

The Choices: Enabled (default), Disabled.



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### 9 Frequency Control



#### 9.1 CPU CLOCK RATIO

The Choices: **8X** (default), 9X, 10X, 11X, 12X, 13X, 14 X, 15X, 16X, 17X, 18X, 19X, 20 X, 21 X, 22 X, 23 X.

#### 9.2 CPU VOLTAGE

This item allows you to select CPU Voltage Regulator.

The Choices: Default (default), +2.5%, +5.5%, +8.1%.

#### 9.3 DIMM VOLTAGE

This item allows you to select DDR Voltage Regulator.

The Choices: 2.5V (Default), 2.6V, 2.7V, 2.8V.

#### 9.4 AUTO DETECT PCI CLK

This item allows you to enable / disable auto Detect PCI Clock.

The Choices: Enabled (default), Disabled.

#### 9.5 SPREAD SPECTRUM

This item allows you to enable/disable the Spread Spectrum function.

The Choices: Enabled (default), Disabled.

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### **9.6 CPU CLOCK**

This item allows you to select CPU Clock, and CPU over clocking. If unfortunately, 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. 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.**