FCC Information and Copyright

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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

	Ver 1.0	Ver 7.0
CPU	Socket 478 Intel Northwood / Prescott processor up to 3.4 GHz Supports Hyper-Threading Technology	Socket 478 Intel Northwood / Prescott processor up to 3.4 GHz Supports Hyper-Threading Technology
FSB	400 / 533 / 800 MHz	400 / 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 Capicity 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 Capicity 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 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 x1 CPU Fan header x1

	Ver 1.0		Ver 7.0	
	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 (20pin)	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	225 (W) x 294 (L) mm		225 (W) x 294 (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
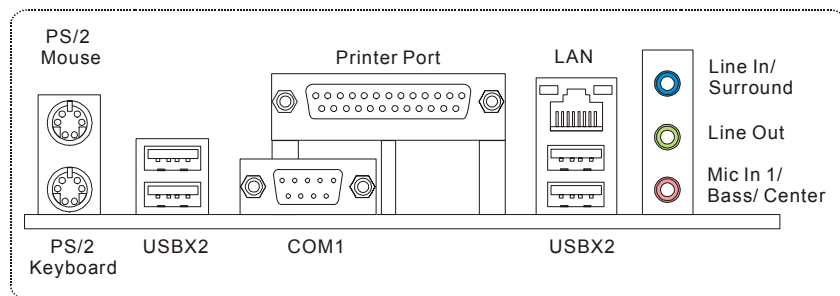
1.5 MOTHERBOARD LAYOUT (VER 1.0)
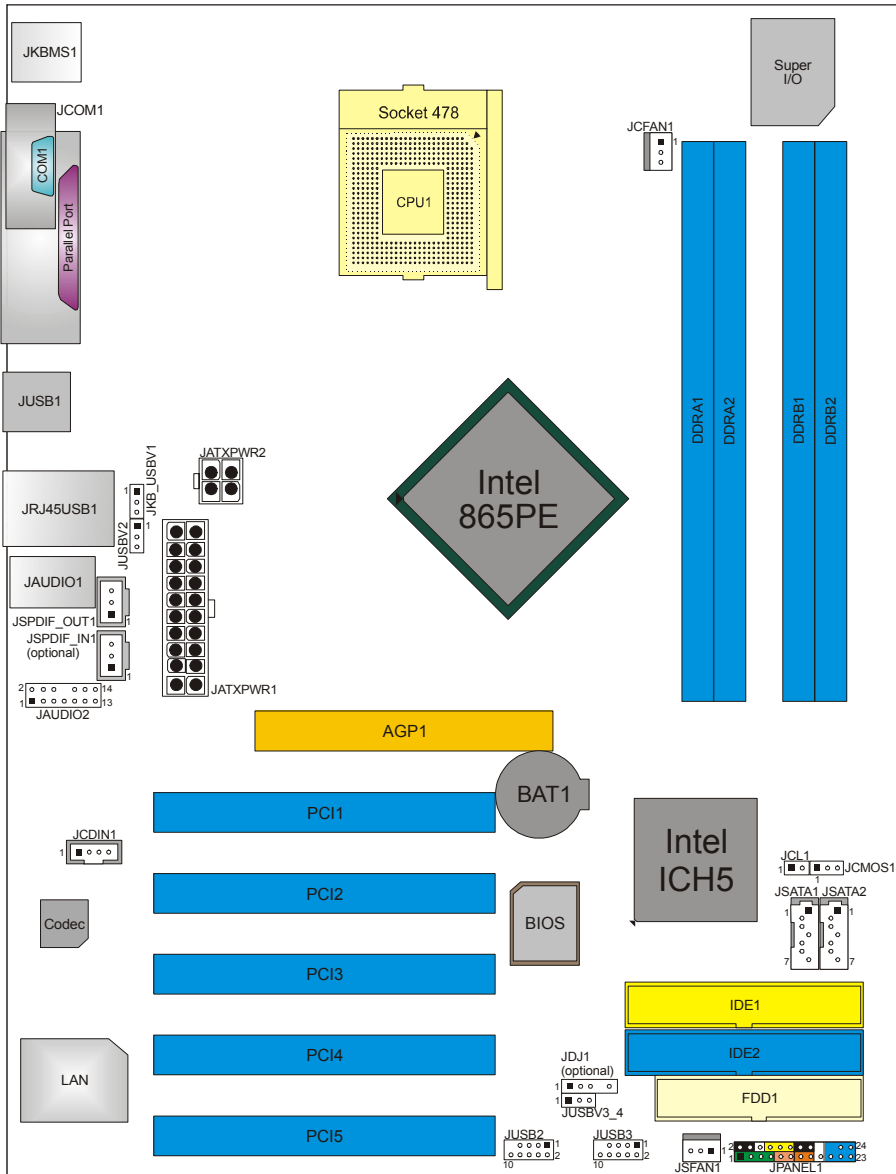
Note: ■ represents the 1st pin.

1.6 MOTHERBOARD LAYOUT (VER 7.0)

JKBMS1

JCOM1

COM1

Parallel Port

Socket 478

CPU1

JCFAN1

Super I/O

DDRA1 DDRA2

DDRB1 DDRB2

JUSB1

JATXPWR2

Intel 865PE

JRJ45USB1

JAUDIO1

JSPDIF_OUT1
JSPDIF_IN1
(optional)

JATXPWR1

JAUDIO2

AGP1

BAT1

PCI1

JCDIN1

Intel ICH5

JCL1 (optional)
JCMOS1

JSATA1 JSATA2

PCI2

Codec

BIOS

PCI3

IDE1

PCI4

JDJ1 (optional)

IDE2

FDD1

LAN

PCI5

IR(optional)

JUSB2   JUSB3

JSFAN1   JPANEL1
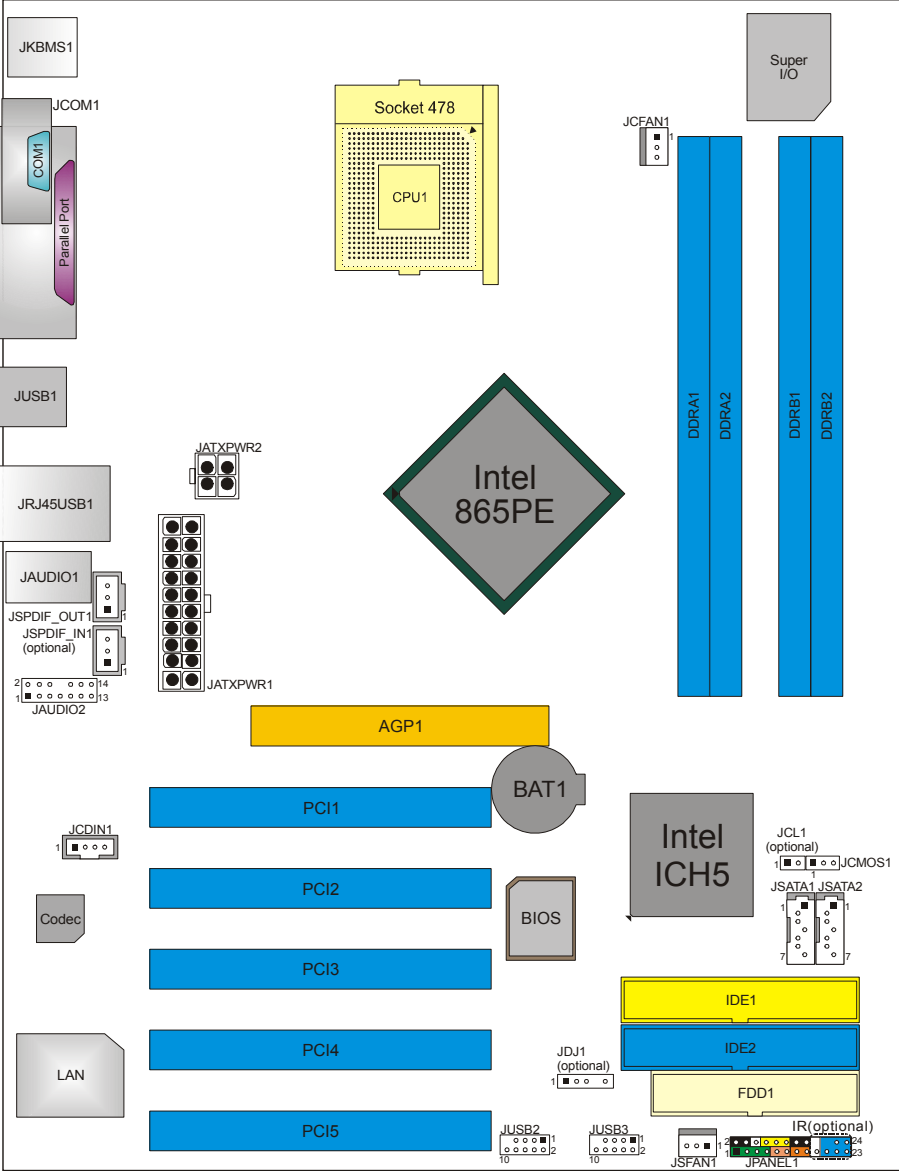
Note: ■ represents the 1st pin.

CHAPTER 2: HARDWARE INSTALLATION

2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)
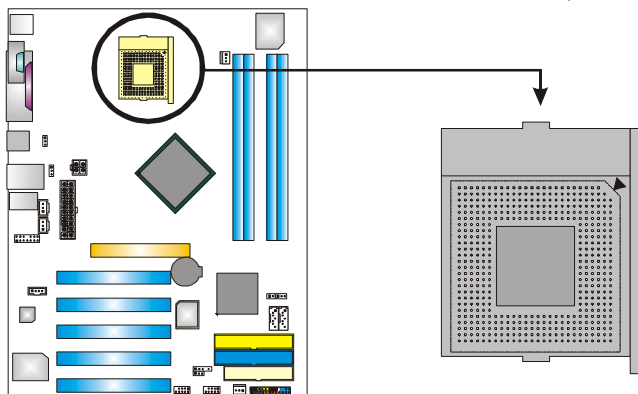
Step 1: Pull the lever sideways away from the socket and then raise the lever up to a 90-degree angle.

Step 2: Look for the white dot/cut edge. The white dot/cut edge should point wards the lever pivot. The CPU will fit only in the correct orientation.

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

Step 4: Put the CPU Fan on the CPU and buckle it. Connect the CPU FAN power cable to the JCFAN1. This completes the installation.
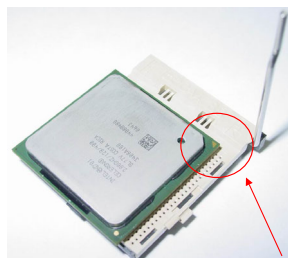
2.2 FAN HEADERS

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

JCFAN1: CPU Fan Header
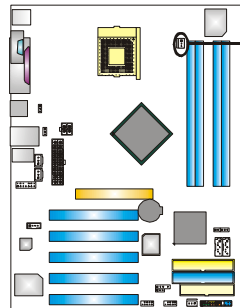
Pin	Assignment
1	Ground
2	Smart Fan Control
3	FAN RPM rate sense
4	Smart Fan Control

JSFAN1: System Fan Header
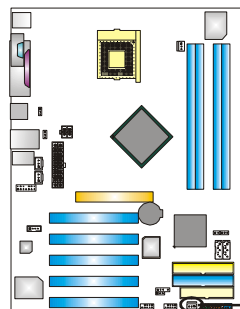
Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense

Note:

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

2.3 INSTALLING SYSTEM MEMORY
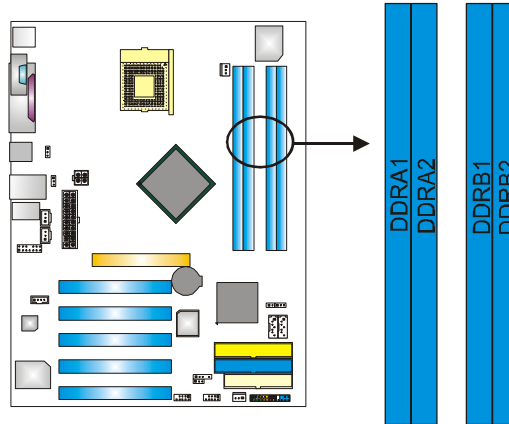
1. Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot such that the notch on the DIMM matches the break on the Slot.
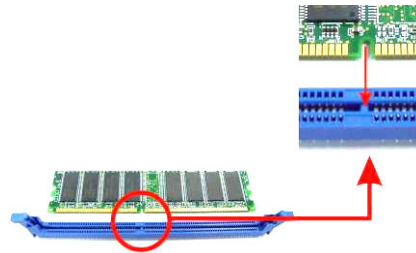
2. Insert the DIMM vertically and firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.

B. Memory Capacity

DIMM Socket Location	DDR Module	Total Memory Size
DDRA1	128MB/256MB/512MB/1GB *1	
DDRA2	128MB/256MB/512MB/1GB *1	Max is 4GB.
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.
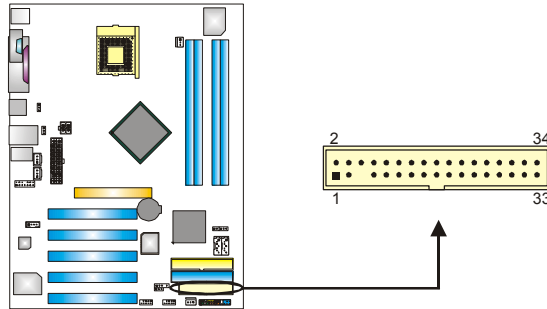
IDE1/IDE2: Hard Disk Connectors

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.
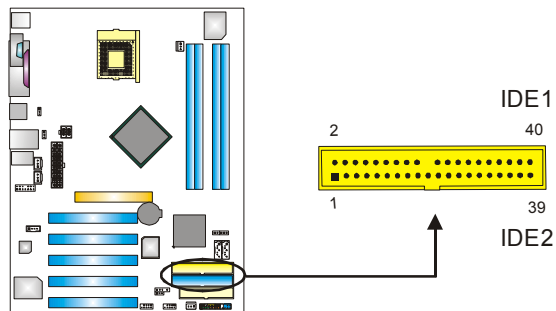
PCI1~PCI5: Peripheral Component Interconnect Slots

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.

PCI1
PCI2
PCI3
PCI4
PCI5
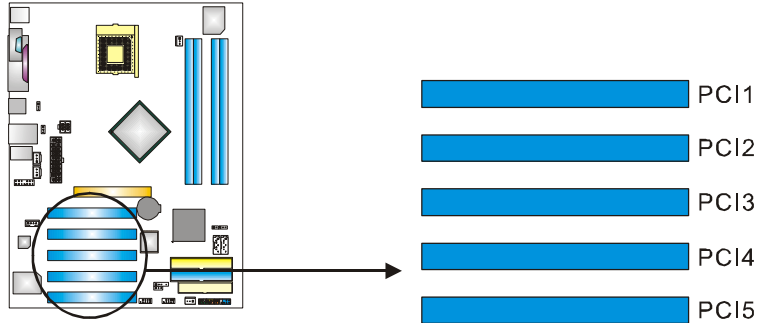
AGP1: Accelerated Graphics Port Slot

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.

AGP1
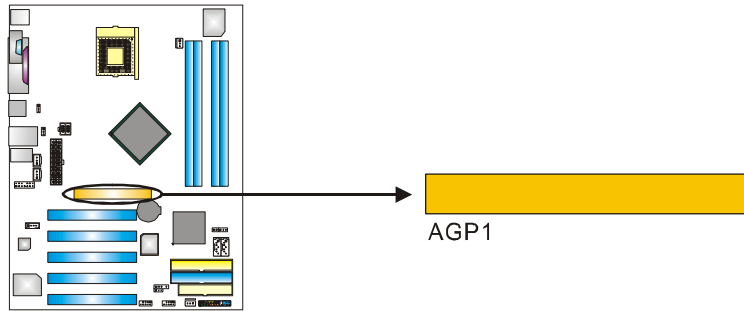
CHAPTER 3: HEADERS & JUMPERS SETUP

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".

Pin opened   Pin closed   Pin1-2 closed

3.2 DETAIL SETTINGS

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

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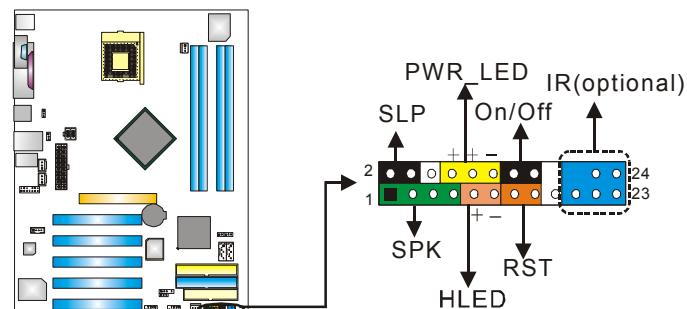
Pin	Assignment	Function	Pin	Assignment	Function
1	+5V		2	Sleep control	Sleep button
3	N/A	Speaker Connector	4	Ground	Sleep button
5	N/A	Speaker Connector	6	N/A	N/A
7	Speaker		8	Power LED (+)	Power LED
9	HDD LED (+)	Hard drive LED	10	Power LED (+)	Power LED
11	HDD LED (-)	Hard drive LED	12	Power LED (-)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

JPANEL1: Front Panel Header (for 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.
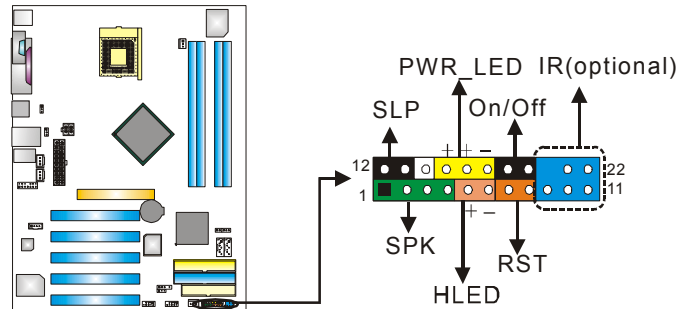
Pin	Assignment	Function	Pin	Assignment	Function
1	+5V		12	Sleep control	Sleep button
2	N/A	Speaker	13	Ground	Sleep button
3	N/A	Connector	14	N/A	N/A
4	Speaker		15	Power LED (+)	
5	HDD LED (+)	Hard drive	16	Power LED (+)	Power LED
6	HDD LED (-)	LED	17	Power LED (-)	
7	Ground	Reset button	18	Power button	Power-on button
8	Reset control	Reset button	19	Ground	Power-on button
9	N/A	IrDA	20	Key	
10	+5V	Connector	21	Ground	IrDA Connector
11	IRTX		22	IRRX	

JATXPWR1: ATX Power Source Connector

This connector allows user to connect 20-pin power connector on the ATX power supply.
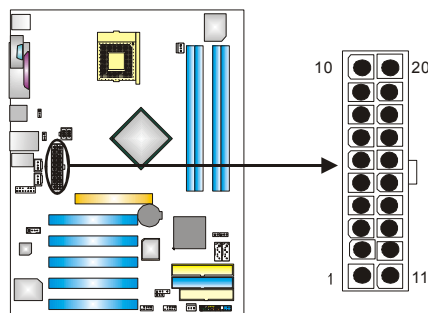
Pin	Assignment
1	+3.3V
2	+3.3V
3	Ground
4	+5V
5	Ground
6	+5V
7	Ground
8	PW_OK
9	Standby Voltage +5V
10	+12V
11	+3.3V
12	-12V
13	Ground
14	PS_ON
15	Ground
16	Ground
17	Ground
18	-5V
19	+5V
20	+5V

JATXPWR2: ATX Power Source Connector

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

Pin	Assignment
1	+12V
2	+12V
3	Ground
4	Ground
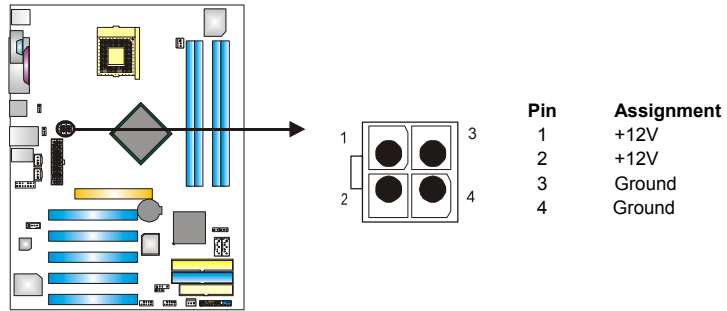
JUSB2/JUSB3: Headers for 2.0 Ports at Front USB Panel

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.

Pin	Assignment
1	+5V (fused)
2	+5V (fused)
3	USB-
4	USB-
5	USB+
6	USB+
7	Ground
8	Ground
9	Key
10	NC
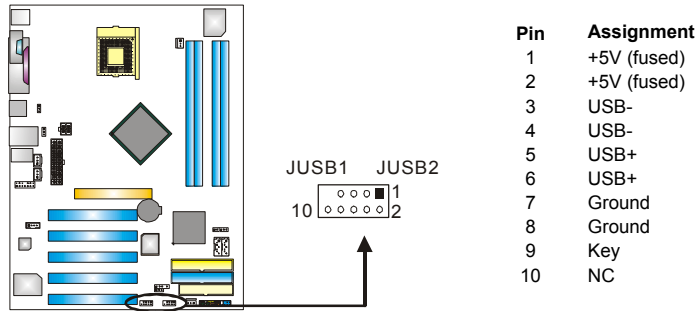
JKB_USBV1/JUSBV2/JUSBV3_4: Power Source Headers for PS/2 and USB Ports (Ver 1.x only)

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.

Pin 1-2 close

Pin 2-3 close
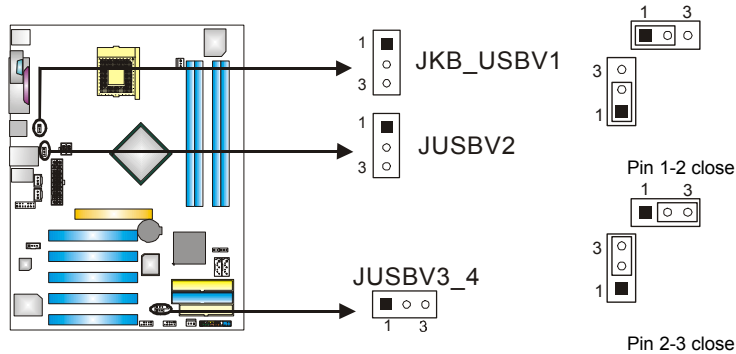
Note:

In order to support this function "Power-on system via keyboard and mouse", "JUSBV1/JUSBV2/JUSBV3_4" jumper cap should be placed on Pin 2-3.

JFAUDIO1: Front Panel Audio Header

This header allows user to connect the front audio output cable with the PC front panel. It will disable the output on back panel audio connectors.
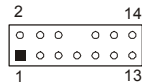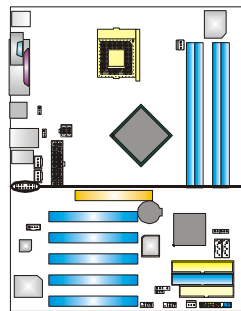
Pin	Assignment
1	Mic in/center
2	Ground
3	Mic power/Bass
4	Audio power
5	Right line out/ Speaker out Right
6	Right line out/ Speaker out Right
7	Reserved
8	Key
9	Left line out/ Speaker out Left
10	Left line out/ Speaker out Left
11	Right line in/ Rear speaker Right
12	Right line in/ Rear speaker Right
13	Left line in/ Rear speaker Left
14	Left line in/ Rear speaker Left

JCDIN1: CD-ROM Audio-in Connector

This connector allows user to connect the audio source from the variaty devices, like CD-ROM, DVD-ROM, PCI sound card, PCI TV turner card etc..
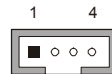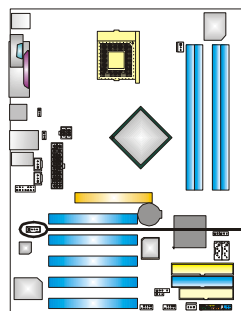
Pin	Assignment
1	Left Channel Input
2	Ground
3	Ground
4	Right Channel Input

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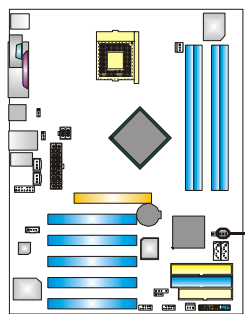
Pin 1-2 Close:
Normal Operation (default).

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.
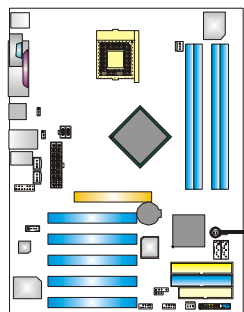
Pin	Assignment
1	Case open signal
2	Ground

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.

JSATA1   JSATA2

Pin	Assignment
1	Ground
2	TX+
3	TX-
4	Ground
5	RX-
6	RX+
7	Ground
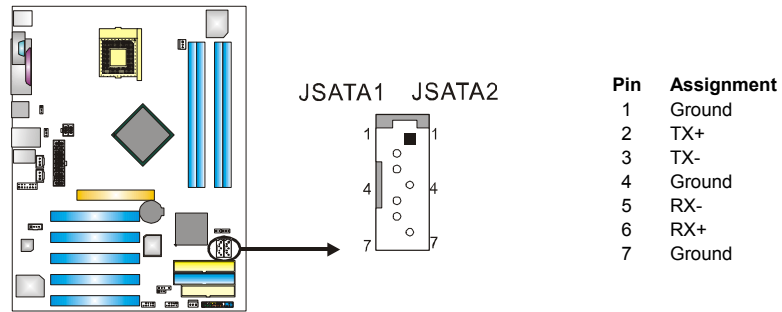
JSPDIF_OUT1 (optional)/ JSPDIF_IN1 (optional): Digital Audio-out Connector

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

JSPDIF_OUT1(optional)

Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

JSPDIF_IN1(Optional)
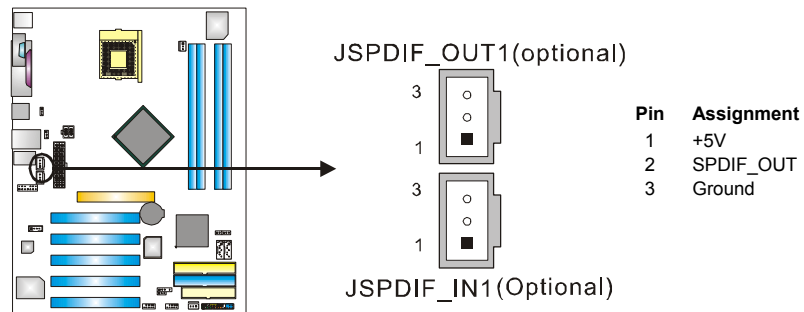
JDJ1 (optional): AUDIO DJ Header

Pin	Assignment
1	SMBDATA
2	SMBCLK
3	INT_B
4	Key
5	AXT_PWROK
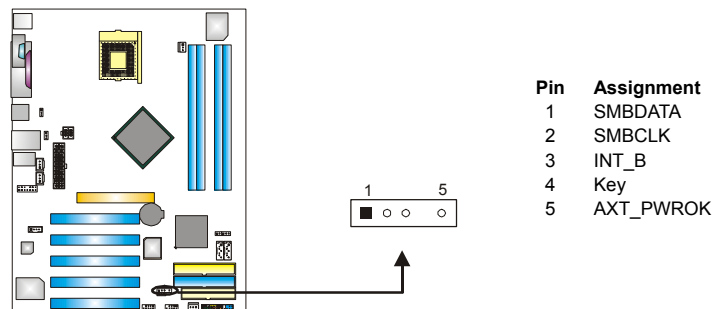
CHAPTER 4:   USEFUL HELP

4.1   DRIVER INSTALLATION NOTE

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

You will see the following window after you insert the CD
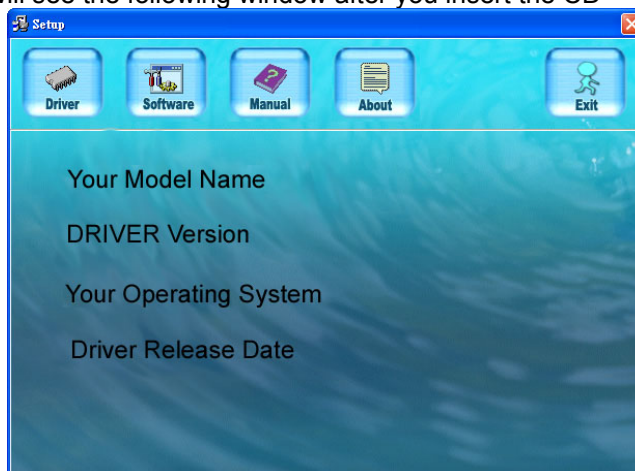
The setup guide will auto detect your motherboard and operating system.

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

A. Driver Installation

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

B. Software Installation

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

C. Manual

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

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

4.2 AWARD BIOS BEEP CODE

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

4.3 EXTRA INFORMATION

A. BIOS Update

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

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

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

1. Make a bootable floppy disk.
2. Download the Flash Utility "AWDFLASH.exe" from the Biostar website: 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 keyboard 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.
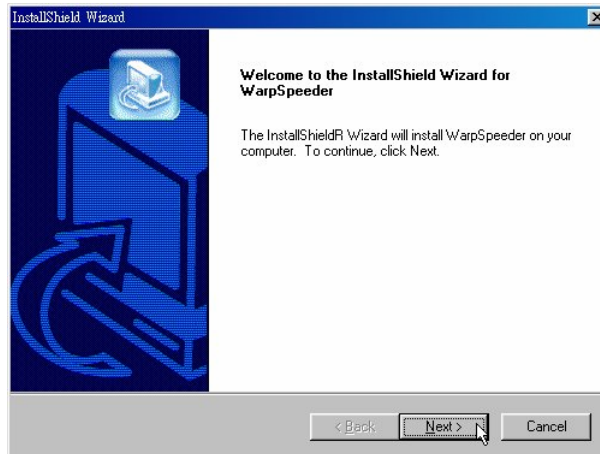
2. When you see the following dialog in setup procedure, it means setup is completed. If the "Launch the WarpSpeeder Tray Utility" checkbox is checked, the Tray Icon utility and [WarpSpeeder™] utility will be automatically and immediately launched after you click "Finish" button.
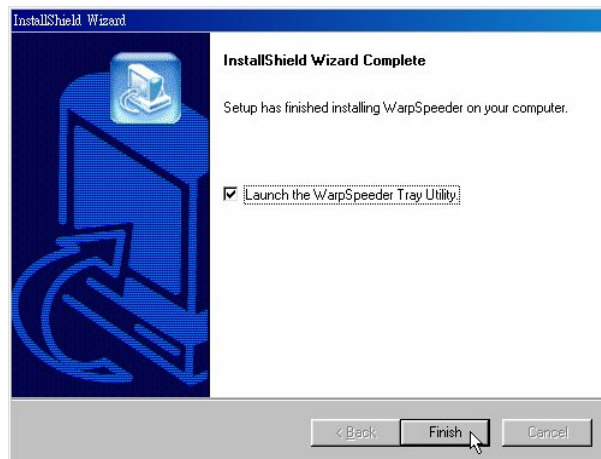
Usage:

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 WARPSPEEDER™

1. Tray Icon:

Whenever the Tray Icon utility is launched, it will display a little tray icon on the right side of Windows Taskbar.
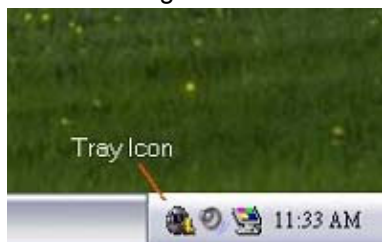
This utility is responsible for conveniently invoking [WarpSpeeder™] Utility. You can use the mouse by clicking the left button in order to invoke [WarpSpeeder™] directly from the little tray icon or you can right-click the little tray icon to pop up a popup menu as following figure. The "Launch Utility" 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:

a. Display the CPU Speed, CPU external clock, Memory clock, AGP clock, and PCI clock information.

b. Contains About, Voltage, Overclock, and Hardware Monitor Buttons for invoking respective panels.

c. With a user-friendly Status Animation, it can represent 3 overclock percentage stages:

Man walking→overclock percentage from 100% ~ 110 %

Panther running→overclock percentage from 110% ~ 120%

Car racing→overclock percentage from 120% ~ above
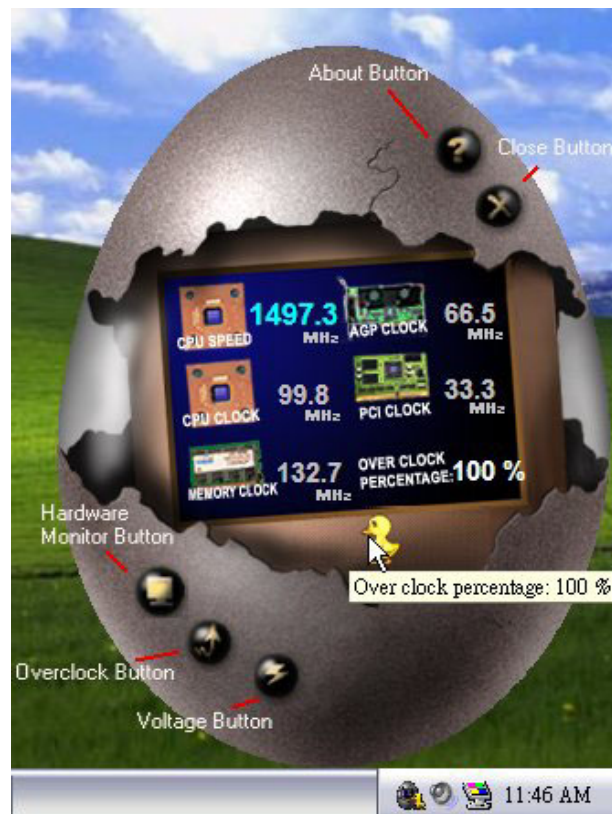
3. Voltage Panel

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

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

4. Overclock Panel

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

Overclock Panel contains the these features:

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

b. "Recovery Dialog button": Pop up the following dialog. Let user select a restoring way if system need to do a fail-safe reboot.
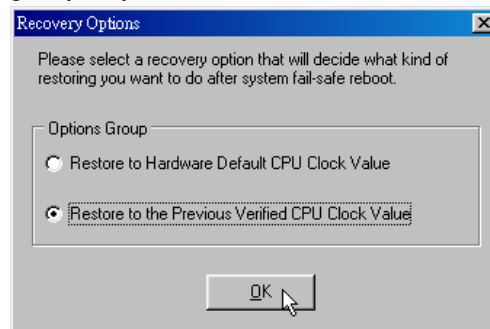
    c.   "Auto-overclock button": User can click this button and [WarpSpeeder™] will set the best and stable performance and frequency automatically. [WarpSpeeder™] utility will execute a series of testing until system fail. Then system will do fail-safe reboot by using Watchdog function. After reboot, the [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 your display card's color depth is High color (16 bit) or True color(24/32 bit) that is required for Direct3D rendering.

5. Hardware Monitor Panel

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

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

6. About Panel

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

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

Note:

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

APPENDENCIES: SPEC IN OTHER LANGUAGE

GERMAN

	Ver 1.0	Ver 7.0
CPU	Sockel 478 Intel Northwood / Prescott Prozessoren mit bis zu 3,4 GHz Unterstützt die Hyper-Threading-Technologie	Sockel 478 Intel Northwood / Prescott Prozessoren mit bis zu 3,4 GHz Unterstützt die Hyper-Threading-Technologie
FSB	400/ 533 / 800 MHz	400/ 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	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-/ Vollduplex-Funktion	Realtek 8100C 10 / 100 Mb/s Auto-Negotiation Halb-/ Vollduplex-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 PCI-Steckplatz x5	AGP 8X-Grafikkartensteckplatz x1 PCI-Steckplatz x5
Onboard-Anschluss	Diskettenlaufwerkanschluss x1 IDE-Anschluss x2 SATA-Anschluss x2 Fronttafelanschluss x1 Front-Audioanschluss x1	Diskettenlaufwerkanschluss x1 IDE-Anschluss x2 SATA-Anschluss x2 Fronttafelanschluss x1 Front-Audioanschluss x1

	Ver 1.0		Ver 7.0	
	CD-IN-Anschluss	x1	CD-IN-Anschluss	x1
	S/PDIF-Ausgangsanschluss(optional)	x1	S/PDIF-Ausgangsanschluss(optional)	x1
	S/PDIF Eingangsanschluss	x1	S/PDIF Eingangsanschluss 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 (20-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.	225 mm (B) X 294 mm (L)		225 mm (B) X 294 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	Socket 478 Processeurs Intel Northwood / Prescott jusqu'à 3,4 GHz Prend en charge la technologie Hyper-Threading	Socket 478 Processeurs Intel Northwood / Prescott jusqu'à 3,4 GHz Prend en charge la technologie Hyper-Threading
Bus frontal	400/ 533 / 800 MHz	400/ 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	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 avantx1 x1		Connecteur Audio du panneau avantx1 x1	
Connecteur d'entrée CD	x1	Connecteur d'entrée CD	x1
Connecteur d'entrée S/PDIF (en option)	x1	Connecteur d'entrée S/PDIF (en option)	x1
Connecteur de sortie S/PDIF	x1	Connecteur de sortie S/PDIF	x1
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 (optional)	x1	Embase d'ouverture de châssis (optional)	x1
Embase d'effacement CMOS	x1	Embase d'effacement CMOS	x1
Connecteur USB	x2	Connecteur USB	x2
Connecteur d'alimentation (20 broches)	x1	Connecteur d'alimentation (20 broches)	x1
Connecteur d'alimentation (4 broches)	x1	Connecteur d'alimentation (4 broches)	x1

	Ver 1.0 & Ver 7.0		Ver 7.1	
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
Dimensions de la carte	225mm (l) X 294 mm (H)		225mm (l) X 294 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	
CPU	Socket 478 Processore Intel Northwood / Prescott fino a 3.4 GHz Supporto tecnologia Hyper-Threading		Socket 478 Processore Intel Northwood / Prescott fino a 3.4 GHz Supporto tecnologia Hyper-Threading	
FSB	400/ 533 / 800 MHz		400/ 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	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 AGP 8X	x1	Alloggio grafica AGP 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	x1	Connettore output SPDIF	x1
	Collettore ventolina CPU	x1	Collettore ventolina CPU	x1
	Collettore ventolina sistema	x1	Collettore ventolina sistema	x1

	Ver 1.0		Ver 7.0	
	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 (20 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	225 mm (larghezza) x 294 mm (altezza)		225 mm (larghezza) x 294 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
CPU	Conector 478 Procesador Intel Northwood / Prescott hasta 3,4 GHz Soporta tecnología Hyper-Threading	Conector 478 Procesador Intel Northwood / Prescott hasta 3,4 GHz Soporta tecnología Hyper-Threading
FSB	400 / 533 / 800 MHz	400 / 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	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	
	Conector de salida S/PDIF	X1	Conector de salida S/PDIF	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 (20 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	225 mm. (A) X 294 Mm. (H)		225 mm. (A) X 294 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
CPU	Socket 478 Processador Intel Northwood / Prescott até 3,4 GHz Suporta a tecnologia Hyper-Threading	Socket 478 Processador Intel Northwood / Prescott até 3,4 GHz Suporta a tecnologia Hyper-Threading
FSB	400/ 533 / 800 MHz	400/ 533 / 800 MHz
Chipset	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
Especificaç ão 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	Ranhuras 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	Ranhuras 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	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
Ranhuras	Ranhura gráfica AGP 8X x1 Ranhura PCI x5	Ranhura gráfica AGP 8X x1 Ranhura PCI x5
Conectore s 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

Ver 1.0		Ver 7.0	
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 (20 pinos)	x1
Conector de alimentação (4 pinos)	x1	Conector de alimentação (4 pinos)	x1

	Ver 1.0		Ver 7.0	
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	225 mm (L) X 294 mm (A)		225 mm (L) X 294 mm (A)	
Sistemas operativos suportados	Windows 2K / XP A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.		Windows 2K / XP A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.	

POLISH

	Ver 1.0	Ver 7.0
Procesor	Socket 478 Procesor Intel Northwood / Prescott do 3,4 GHz Obsługa technologii Hyper-Threading	Socket 478 Procesor Intel Northwood / Prescott do 3,4 GHz Obsługa technologii Hyper-Threading
FSB	400/ 533 / 800 MHz	400/ 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	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 wbudowane	Złącze napędu dyskietek x1 Złącze IDE x2 Złącze SATA x2 Złącze panela przedniego x1	Złącze napędu dyskietek x1 Złącze IDE x2 Złącze SATA x2 Złącze panela przedniego x1

Ver 1.0			Ver 7.0		
	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	x1	Złącze wyjścia S/PDIF	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 (20 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	225 mm (S) X 294 mm (W)		225 mm (S) X 294 mm (W)		
Obsluga systemu operacyjnego	Windows 2K / XP Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.		Windows 2K / XP Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.		

RUSSIAN

	Ver 1.0	Ver 7.0
CPU (центральный процессор)	Гнездо 478 Процессор Intel Northwood / Prescott до 3.4 ГГц Поддержка технологии Hyper-Threading	Гнездо 478 Процессор Intel Northwood / Prescott до 3.4 ГГц Поддержка технологии Hyper-Threading
FSB	400/ 533 / 800 МГц	400/ 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	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		
Слоты	Графический слот AGP 8X	x1	Графический слот AGP 8X	x1	
	Слот PCI	x5	Слот PCI	x5	
Встроенный разъём	Разъём НГМД	x1	Разъём НГМД	x1	
	Разъём IDE	x2	Разъём IDE	x2	
	Разъём SATA	x2	Разъём SATA	x2	
	Разъём на лицевой панели	x1	Разъём на лицевой панели	x1	
	Входной звуковой разъём	x1	Входной звуковой разъём	x1	
	Разъём ввода для CD	x1	Разъём ввода для CD	x1	
	Разъём ввода для S/PDIF (дополнительно)	x1	Разъём ввода для S/PDIF (дополнительно)	x1	
	Разъём вывода для S/PDIF	x1	Разъём вывода для S/PDIF	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-разъём	x2	USB-разъём	x2	
	Разъем питания (20 вывод)	x1	Разъем питания (20 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	
	Гнездо для подключения наушников	x3	Гнездо для подключения наушников	x3	
Размер панели	225 мм (Ш) X 294 мм (В)		225 мм (Ш) X 294 мм (В)		
Поддержка OS	Windows 2K / XP Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.		Windows 2K / XP Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.		

ARABIC

	Ver 1.0	Ver 7.0
وحدة المعالجة المركزية	مقيس478 معالجاتIntel Northwood / Prescott بسرعة تصل إلى 3.4 جيجا هرتز تدعم تقنيةHyper-Threading	مقيس478 معالجاتIntel Northwood / Prescott بسرعة تصل إلى 3.4 جيجا هرتز تدعم تقنيةHyper-Threading
الناقل الأمامي الجانبي	تردد400 /533 / 800 ميجا هرتز	تردد400 /533 / 800 ميجا هرتز
مجموعة الشرائح	Intel 865PE Intel ICH5	Intel 865PE Intel ICH5
الذاكرة الرئيسية	عدد4 فتحةDDR DIMM تدعم كل فتحةDIMM ذاكرة من نوع DDR سعة 128/256/512 ميجا بايت و1 جيجا بايت سعة ذاكرة قصوى 4 جيجا بايت وحدة ذاكرةDDRأحادية/مزدوجة القناة تدعم الذاكرة من نوعDDR سعات 266 / 333 / 400 ميجا بايت	عدد4 فتحةDDR DIMM تدعم كل فتحةDIMM ذاكرة من نوع DDR سعة 128/256/512 ميجا بايت و1 جيجا بايت سعة ذاكرة قصوى 4 جيجا بايت وحدة ذاكرةDDRأحادية/مزدوجة القناة تدعم الذاكرة من نوعDDR سعات 266 / 333 / 400 ميجا بايت
Super I/O	ITE 8712F مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة وظيفة"Smart Guardian" منITE	ITE 8712F مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة وظيفة"Smart Guardian" منITE
منفذ IDE	متحكمIDEمتكامل ناقل بتقنيةUltra DMA 33 / 66 / 100 وضع رئيسي وضعPIO Mode 0~4دعم	متحكمIDEمتكامل ناقل بتقنيةUltra DMA 33 / 66 / 100 وضع رئيسي وضعPIO Mode 0~4دعم
SATA	متحكمSerial ATAمتكامل نقل البيانات بسرعات تصل إلى 1.5 جيجابت/ثانية. مطابقة لمواصفاتSATA الإصدار 1.0.	متحكمSerial ATAمتكامل نقل البيانات بسرعات تصل إلى 1.5 جيجابت/ثانية. مطابقة لمواصفاتSATA الإصدار 1.0.
شبكة داخلية 100/10	Realtek 8100C تفاوض تلقائي 100/10 ميجا بايت / ثانية إمكانية النقل المزدوج الكامل/النصفي	Realtek 8100C تفاوض تلقائي 100/10 ميجا بايت / ثانية إمكانية النقل المزدوج الكامل/النصفي
كوديك الصوت	ALC655 قنوات لخرج الصوت6 الإصدار2.3 منAC'97	(اختياري)ALC655 / 658 قنوات لخرج الصوت6 الإصدار2.3 منAC'97
الفتحات	فتحةAGP فئة 8X لبطاقة الرسومات عدد1 فتحةPCI عدد5	فتحةAGP فئة 8X لبطاقة الرسومات عدد1 فتحةPCI عدد5
المنافذ على سطح اللوحة	منفذ محرك أقراص مرنة عدد1 منفذ IDE عدد2 منفذ SATA عدد2 منفذ اللوحة الأمامية عدد1	منفذ محرك أقراص مرنة عدد1 منفذ IDE عدد2 منفذ SATA عدد2 منفذ اللوحة الأمامية عدد1

	Ver 1.0		Ver 7.0	
	منفذ الصوت الأمامي	عدد 1	منفذ الصوت الأمامي	عدد 1
	منفذ CD-IN	عدد 1	منفذ CD-IN	عدد 1
	منفذ دخل S/PDIF (اختياري)	عدد 1	منفذ دخل S/PDIF (اختياري)	عدد 1
	منفذ خرج S/PDIF	عدد 1	منفذ خرج S/PDIF	عدد 1
	وصلة مروحة وحدة المعالجة المركزية	عدد 1	وصلة مروحة وحدة المعالجة المركزية	عدد 1
	وصلة مروحة النظام	عدد 1	وصلة مروحة النظام	عدد 1
	وصلة فتح الهيكل (اختياري)	عدد 1	وصلة فتح الهيكل (اختياري)	عدد 1
	وصلة مسح CMOS	عدد 1	وصلة مسح CMOS	عدد 1
	منفذ USB	عدد 2	منفذ USB	عدد 2
	منفذ توصيل الطاقة (20دبوس)	عدد 1	منفذ توصيل الطاقة (20دبوس)	عدد 1
	منفذ توصيل الطاقة (4دبابيس)	عدد 1	منفذ توصيل الطاقة (4دبابيس)	عدد 1
منافذ دخل/خرج اللوحة الخلفية	لوحة مفاتيح PS/2	عدد 1	لوحة مفاتيح PS/2	عدد 1
	ماوس PS/2	عدد 1	ماوس PS/2	عدد 1
	منفذ تسلسلي	عدد 1	منفذ تسلسلي	عدد 1
	منفذ طابعة	عدد 1	منفذ طابعة	عدد 1
	منفذ شبكة اتصال محلية	عدد 1	منفذ شبكة اتصال محلية	عدد 1
	منافذ USB	عدد 4	منافذ USB	عدد 4
	مقبس صوت	عدد 3	مقبس صوت	عدد 3
حجم اللوحة	225 مم (عرض) X 294 مم (ارتفاع)		225 مم (عرض) X 294 مم (ارتفاع)	
دعم أنظمة التشغيل	Windows 2K / XP تحتفظ Biostar بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل باخطار أو بدون إخطار.		Windows 2K / XP تحتفظ Biostar بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل باخطار أو بدون إخطار.	

JAPANESE

	Ver 1.0	Ver 7.0
CPU	Socket 478 最大3.4 GHzのIntel Northwood / Prescottプロセッサ ハイパースレッドテクノロジをサポートします	Socket 478 最大3.4 GHzのIntel Northwood / Prescottプロセッサ ハイパースレッドテクノロジをサポートします
FSB	400/ 533 / 800 MHz	400/ 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	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

Ver 1.0			Ver 7.0		
	S/PDIFアウトコネクタ	x1	S/PDIFアウトコネクタ	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	
	シャーシオーブンヘッダ(オプション)	x1	シャーシオーブンヘッダ(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(20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	225 mm (幅) X 294 mm (高さ)		225 mm (幅) X 294 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.

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) are supported.

Supported CPUs

This AWARD BIOS supports the Intel Pentium ® 4 CPU.

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

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.

```
          Phoenix - AwardBIOS CMOS Setup Utility
┌─────────────────────────────────┬─────────────────────────────────┐
│ ▶ Standard CMOS Features         │ ▶ Frequency/Voltage Control      │
│                                  │                                  │
│ ▶ Advanced BIOS Features         │   Load Optimized Defaults        │
│                                  │                                  │
│ ▶ Advanced Chipset Features      │   Set Supervisor Password        │
│                                  │                                  │
│ ▶ Integrated Peripherals         │   Set User Password              │
│                                  │                                  │
│ ▶ Power Management Setup         │   Save & Exit Setup              │
│                                  │                                  │
│ ▶ PnP/PCI Configurations         │   Exit Without Saving            │
│                                  │                                  │
│ ▶ PC Health Status               │   Upgrade BIOS                   │
├─────────────────────────────────┴─────────────────────────────────┤
│ Esc : Quit       F9 : Menu in BIOS    ↑ ↓ → ←   : Select Item      │
│ F10 : Save & Exit Setup                                            │
├────────────────────────────────────────────────────────────────────┤
│                  Time, Date, Hard Disk Type...                     │
└────────────────────────────────────────────────────────────────────┘
```

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.

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:
```

1.11 *S*AVE & *E*XIT *S*ETUP

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 *E*XIT *W*ITHOUT *S*AVING

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

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

*U*PGRADE *BIOS*

This submenu allows you to upgrade bios.

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

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.

```
                  Phoenix - AwardBIOS CMOS Setup Utility
                         Standard CMOS Features
┌──────────────────────────────────────────────┬──────────────────────────┐
│   Date (mm:dd:yy)         Tue, Apr 15 2003     │      Item Help           │
│   Time (hh:mm:ss)           4 : 56 : 50        ├──────────────────────────┤
│                                                │  Menu Level    ▶         │
│ ▶ IDE Primary Master                           │                          │
│ ▶ IDE Primary Slave                            │  Change the day, month,  │
│ ▶ IDE Secondary Master                         │  year and century        │
│ ▶ IDE Secondary Slave                          │                          │
│                                                │                          │
│   Drive A                 [1.44M, 3.5 in.]     │                          │
│   Drive B                 [None]               │                          │
│                                                │                          │
│   Video                   [EGA/VGA]            │                          │
│   Halt On                 [All , But Keyboard] │                          │
│                                                │                          │
│   Base Memory                   640K           │                          │
│   Extended Memory             65472K           │                          │
│   Total Memory                 1024K           │                          │
│                                                │                          │
├────────────────────────────────────────────────────────────────────────┤
│ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│          F5:Previous Values              F7: Optimized Defaults          │
└──────────────────────────────────────────────────────────────────────────┘
```

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.

3   Advanced BIOS Features

```
            Phoenix - AwardBIOS CMOS Setup Utility
                     Advanced BIOS Features
┌─────────────────────────────────────────┬──────────────────┐
│ ▶ Boot Seq & Floppy Setup    [Press Enter]│     Item Help    │
│ ▶ Cache Setup                [Press Enter]│                  │
│   Virus Warning              [Disabled]   │ Menu Level    ▶  │
│   Hyper-Threading Technology[Enabled]     │                  │
│   Quick Power On Self Test   [Enabled]    │                  │
│   Boot Up NumLock Status     [On]         │                  │
│   Gate A20 Option            [Fast]       │                  │
│   Typematic Rate Setting     [Disabled]   │                  │
│ x Typematic Rate (Chars/Sec)  6           │                  │
│ x Typematic Delay (Msec)      250         │                  │
│   Security Option            [Setup]      │                  │
│   APIC Mode                  [Enabled]    │                  │
│   MPS Version Control For OS[1.4]         │                  │
│   OS Select For DRAM > 64MB [Non-OS2]     │                  │
│   Summary Screen Show        [Disabled]   │                  │
│                                           │                  │
├───────────────────────────────────────────┴──────────────────┤
│ ↑↓←→:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│       F5:Previous Values         F7: Optimized Defaults       │
└──────────────────────────────────────────────────────────────┘
```

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).

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.

Enabled (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.

Disabled (default)   Virus protection is disabled.

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.
Enabled (default)	Enable quick POST.

3.7 BOOT UP NUMLOCK STATUS

Selects the NumLock. State after power on.

On (default)	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.
Fast (default)	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.

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

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

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).

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.

```
                  Phoenix - AwardBIOS CMOS Setup Utility
                          Advanced Chipset Features

     DRAM Timing Selectable    [By SPD]                  Item Help
     CAS Latency Time          [2]
     Active to Precharge Delay [8]               Menu Level    ►
     DRAM RAS# to CAS# Delay   [4]
     DRAM RAS# Precharge       [4]
     Memory Frequency For      [Auto]
     System BIOS Cacheable     [Enabled]
     Video  BIOS Cacheable     [Enabled]
     Memory Hole At 15M-16M    [Disabled]
     Delay Prior to Thermal    [16 Min]
     AGP Aperture Size (MB)    [128]
     Init Display First        [AGP]




    ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
            F5:Previous Values            F7: Optimized Defaults
```

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

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 usually2 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.

4.11   AGP APERTURE SIZE (MB)

Select the size of the Accelerated Graphics Port (AGP) aperture. The apertures 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

```
              Phoenix - AwardBIOS CMOS Setup Utility
                      Integrated Peripherals
 ┌──────────────────────────────────────────┬─────────────────────┐
 │ ▶ OnChip IDE Device        [Press Enter]  │    Item Help        │
 │ ▶ Onboard Device           [Press Enter]  │                     │
 │ ▶ SuperIO Device           [Press Enter]  │ Menu Level    ▶     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 │                                           │                     │
 ├──────────────────────────────────────────┴─────────────────────┤
 │ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
 │            F5:Previous Values            F7: Optimized Defaults  │
 └──────────────────────────────────────────────────────────────────┘
```
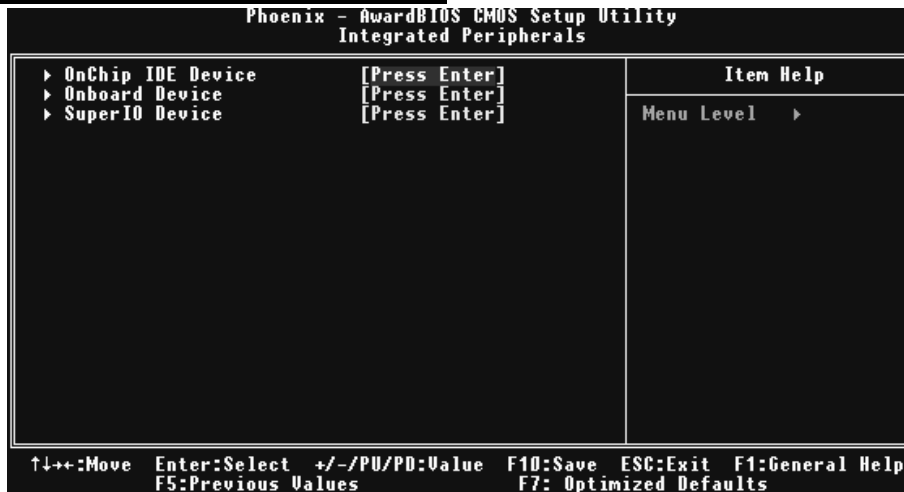
5.1   ONBOARD IDE DEVICE

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.

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.
Disabled (default)   Disable USB Keyboard/Mouse Support.

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.

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.

5.3.10   Parallel Port Mode

The default value is SPP.

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

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.

Off	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.

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.

```
                    Phoenix - AwardBIOS CMOS Setup Utility
                           Power Management Setup

     ACPI Function              [Enabled]                  ▲         Item Help
     ACPI Suspend Type          [S1(POS)]
   x Run VGABIOS if S3 Resume    Auto                        Menu Level    ►
     Power Management           [User Define]
     Video Off Method           [DPMS]
     Video Off In Suspend       [Yes]
     Suspend Type               [Stop Grant]
     MODEM Use IRQ              [3]
     Suspend Mode               [Disabled]
     HDD Power Down             [Disabled]
     Soft-Off by PWR-BTTN       [Instant-Off]
     Intruder# Detection        [Disabled]
     Wake-Up by PCI card        [Disabled]
     Power On by Ring           [Disabled]
   x USB KB Wake-Up From S3      Disabled
     Resume by Alarm            [Disabled]
   x  Date(of Month) Alarm       0
   x  Time(hh:mm:ss) Alarm       0 :  0 :  0           ▼

   ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
              F5:Previous Values              F7: Optimized Defaults
```

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:

S1 (POS) (default)	Power on Suspend
S3 (STR)	Suspend to RAM
S1 & S3	POS+STR

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.

6.3 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.

6.4   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.

6.5   VIDEO OFF IN SUSPEND

This determines the manner in which the monitor is blanked.

The Choices:

Yes (default), No.

6.6   SUSPEND TYPE

Select the Suspend Type.

The Choices:

Stop Grant (default, PwrOn Suspend).

6.7   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.

6.8   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.

6.9   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.

6.10   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).**

6.11   INTRUDER# DETECTION

This item allows you to enabled or disable intruder# detection

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

6.12   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).

6.13   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.

6.14   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 shat 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.

6.15 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]#

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.

```
                 Phoenix - AwardBIOS CMOS Setup Utility
                           PnP/PCI Configurations
┌──────────────────────────────────────────────┬────────────────────────┐
│ Reset Configuration Data   [Disabled]         │       Item Help        │
│                                                ├────────────────────────┤
│ Resources Controlled By    [Auto(ESCD)]        │ Menu Level    ▶        │
│ x IRQ Resources               Press Enter      │                        │
│                                                │ Default is Disabled.   │
│ PCI/VGA Palette Snoop      [Disabled]           │ Select Enabled to      │
│                                                │ reset Extended System  │
│                                                │ Configuration Data     │
│                                                │ ESCD) when you exit    │
│                                                │ Setup if you have      │
│                                                │ installed a new add-on │
│                                                │ and the system         │
│                                                │ reconfiguration has    │
│                                                │ caused such a serious  │
│                                                │ conflict that the OS   │
│                                                │ cannot boot            │
│                                                │                        │
├────────────────────────────────────────────────┴────────────────────────┤
│ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│            F5:Previous Values            F7: Optimized Defaults           │
└──────────────────────────────────────────────────────────────────────────┘
```

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.

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

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.

Disabled (default)   Disables the function.

Enabled   Enables the function.

8   PC Health Status

```
              Phoenix - AwardBIOS CMOS Setup Utility
                          PC Health Status
  ┌──────────────────────────────────────────┬──────────────────────┐
  │ Shutdown Temperature      [Disabled]      │      Item Help       │
  │ CPU Vcore                                 │                      │
  │ AGP Voltage                               │ Menu Level      ▶    │
  │ + 3.3 V                                   │                      │
  │ + 5.0 V                                   │                      │
  │ +12.0 V                                   │                      │
  │ -12.0 V                                   │                      │
  │ - 5.0 V                                   │                      │
  │ 5V(SB)                                    │                      │
  │ Voltage Battery                           │                      │
  │ Current CPU Temp                          │                      │
  │ Current SYS FAN Speed                     │                      │
  │ Current CPU FAN Speed                     │                      │
  │ Show H/W Monitor in POST  [Enabled]       │                      │
  │                                           │                      │
  │                                           │                      │
  │                                           │                      │
  │                                           │                      │
  ├──────────────────────────────────────────┴──────────────────────┤
  │ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help│
  │            F5:Previous Values             F7: Optimized Defaults  │
  └──────────────────────────────────────────────────────────────────┘
```

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℃/140℃, 65℃/149℉, **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.
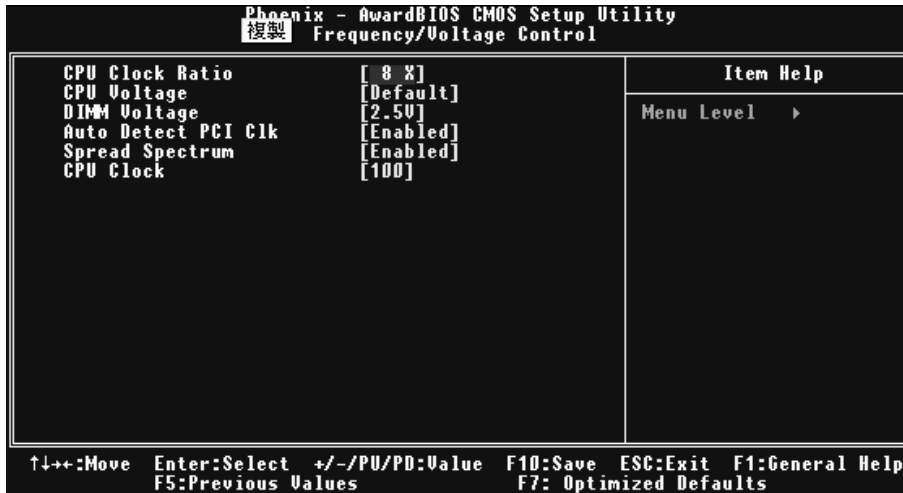
8.6   SHOW H/W MONITOR IN POST

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.

9   Frequency Control

```
         Phoenix - AwardBIOS CMOS Setup Utility
  複製   Frequency/Voltage Control
┌─────────────────────────────────────────┬──────────────────────┐
│ CPU Clock Ratio        [ 8 X]            │     Item Help        │
│ CPU Voltage            [Default]         │                      │
│ DIMM Voltage           [2.5V]            │ Menu Level    ▶      │
│ Auto Detect PCI Clk    [Enabled]         │                      │
│ Spread Spectrum        [Enabled]         │                      │
│ CPU Clock              [100]             │                      │
│                                          │                      │
│                                          │                      │
│                                          │                      │
│                                          │                      │
│                                          │                      │
│                                          │                      │
│                                          │                      │
└─────────────────────────────────────────┴──────────────────────┘
 ↑↓←→:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
            F5:Previous Values              F7: Optimized Defaults
```

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.

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.

10/07, 2004