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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

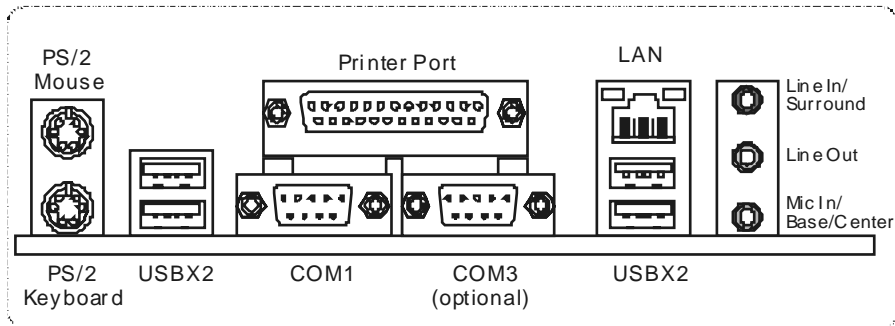
- ✦ FDD Cable X 1
- ✦ HDD Cable X 1
- ✦ User's Manual X 1
- ✦ Fully Setup Driver CD X 1
- ✦ Rear I/O Panel for ATX Case X 1
- ✦ Serial ATA Cable X 1 (optional)
- ✦ USB 2.0 Cable X1 (optional)
- ✦ S/PDIF Cable X 1 (optional)
- ✦ Serial ATA Power Switch Cable X 1 (optional)

1.3 MOTHERBOARD FEATURES

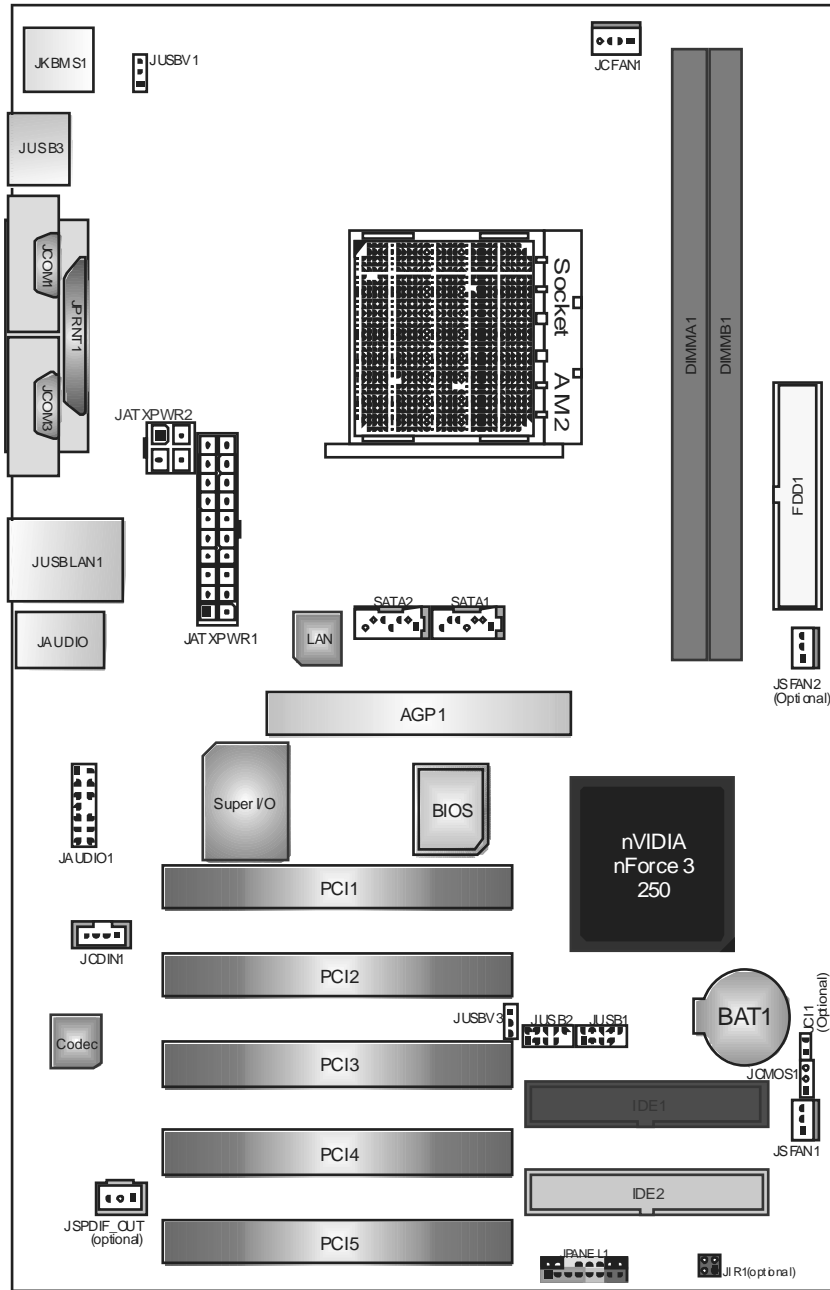
SPEC			
CPU	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron processors		AMD 64 Architecture enables 32 and 64 bit computing Supports Hyper Transport and Cool'nQuiet
FSB	Support HyperTransport		Supports up to 800MHz Bandwidth
Chipset	nVIDIA NF3 250		
Super I/O	ITE 8716F Provides the most commonly used legacy Super I/O functionality Low Pin Count Interface		Environment Control initiatives, H/W Monitor Fan Speed Controller ITE's "Smart Guardian" function
Main Memory	DIMM Slots x 2 Each DIMM supports 256/512MB & 1GB DDR2 Max Memory Capacity 2GB		Dual Channel Mode DDR2 memory module Supports DDR2 533 / 667 / 800 Registered DIMM and ECC DIMM is not supported
IDE	Integrated IDE Controller Ultra DMA 33 / 66 / 100 / 133 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.
LAN	Realtek 8201CL PHY		10 / 100 Mb/s Auto-Negotiation Half / Full duplex capability
Sound	ALC 655		6 channels audio output AC 97 Version 2.3
Slots	PCI slot	x5	Supports PCI cards
	AGP slot	x1	Supports AGP cards
On Board Connector	Floppy connector	x1	Each connector supports 2 Floppy drives
	IDE Connector	x2	Each connector supports 2 IDE device
	SATA Connector	x2	Each connector supports 1 SATA devices
	Front Panel Connector	x1	Supports front panel facilities
	Front Audio Connector	x1	Supports front panel audio function
	CD-in Connector	x1	Supports CD audio-in function

SPEC			
	S/PDIF out connector	x1	Supports digital audio out function
	CPU Fan header	x1	CPU Fan power supply (with Smart Fan function)
	System Fan header	x1	System Fan Power supply
	Chassis open header (optional)	x1	For chassis intruder detection function
	CMOS clear header	x1	Restore CMOS data to factory default
	USB connector	x2	Each connector supports 2 front panel USB ports
	Power Connector (20pin)	x1	Connects to Power supply
	Power Connector (4pin)	x1	Connects to Power supply
Back Panel I/O	PS/2 Keyboard	x1	Connects to PS/2 Keyboard
	PS/2 Mouse	x1	Connects to PS/2 Mouse
	Printer Port	x1	Provide Parallel connection
	Serial Port	x1	Provide RS-232 Serial connection
	LAN port	x1	Connects to RJ-45 ethernet cable
	USB Port	x4	Connects to USB devices
	Audio Jack	x3	Provide Audio-In/Out and microphone connection
Board Size	204 x 297 (mm)		ATX Form Factor
OS Support	Windows 2K /XP		Biostar Reserves the right to add or remove support for any OS With or without notice.

1.4 REAR PANEL CONNECTORS



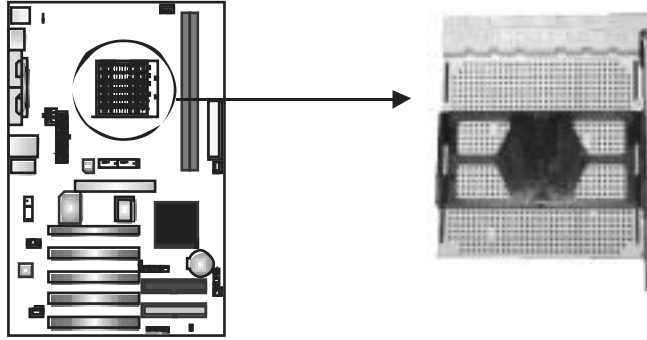
1.5 MOTHERBOARD LAYOUT



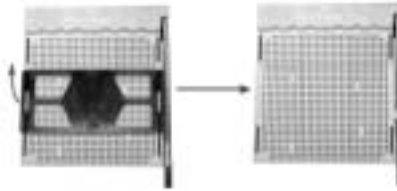
Note: ■ represents the 1st pin.

CHAPTER 2: HARDWARE INSTALLATION

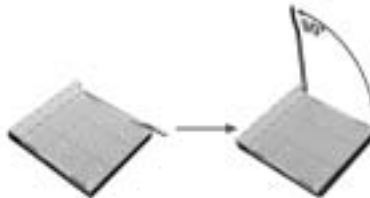
2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)



Step 1: Remove the socket protection cap.



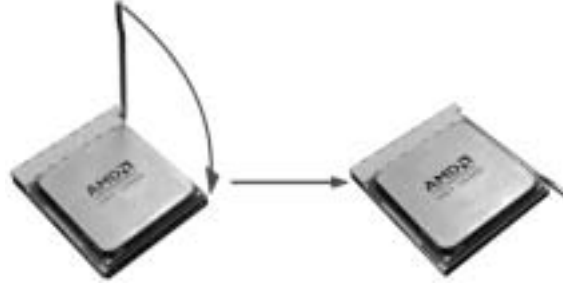
Step 2: Pull the lever toward direction A from the socket and then raise the lever up to a 90-degree angle.



Step 3: Look for the white triangle on socket, and the gold triangle on CPU should point towards this white triangle. The CPU will fit only in the correct orientation.



Step 4: Hold the CPU down firmly, and then close the lever toward direct B to complete the installation.



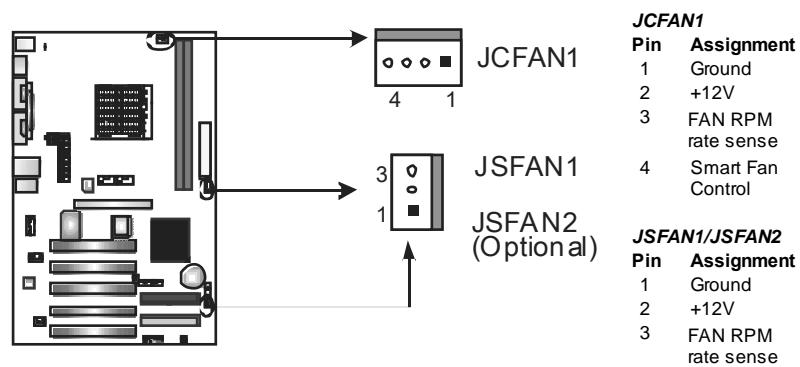
Step 5: Put the CPU Fan on the CPU and buckle it. Connect the CPU FAN power cable to the JCFAN1. This completes the installation.

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

JSFAN1/ JSFAN2(Optional): System Fan Header

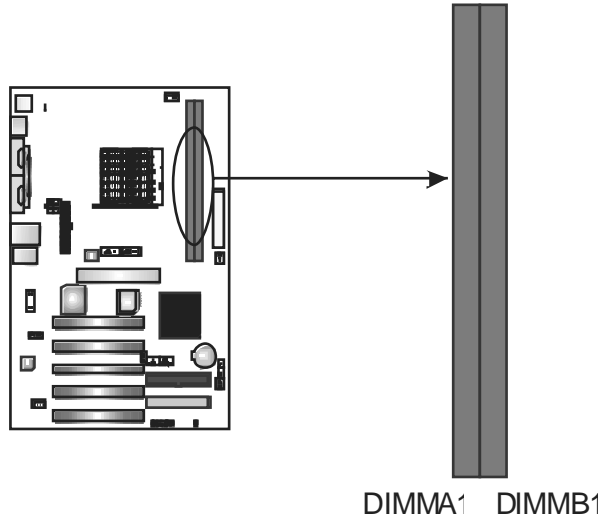


Note:

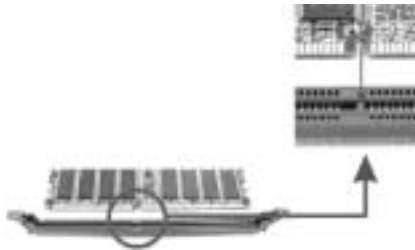
The JCFAN1、JSFAN1/JSFAN2 support 4-pin and 3-pin head connector. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.3 INSTALLING SYSTEM MEMORY

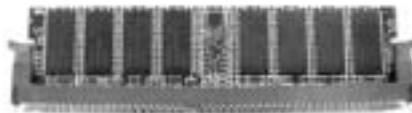
A. Memory Modules



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



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



B. Memory Capacity

DIMM Socket Location	DDR Module	Total Memory Size
DIMMA1	256MB/512MB/1024MB	Max is 2GB.
DIMMB1	256MB/512MB/1024MB	

E. Dual Channel Memory installation

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

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

Dual Channel Status	DIMMA1	DIMMB1
Disabled	O	X
Disabled	X	O
Enabled	O	O

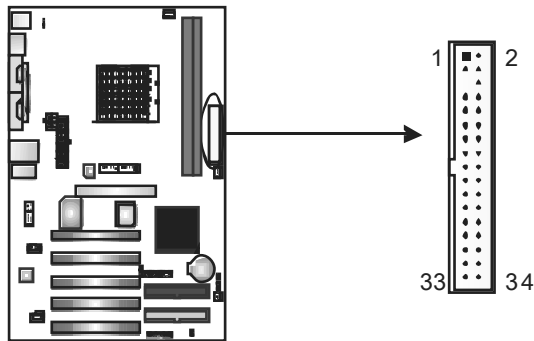
(O means memory installed, X means memory not installed.)

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

2.4 CONNECTORS AND SLOTS

FDD1: Floppy Disk Connector

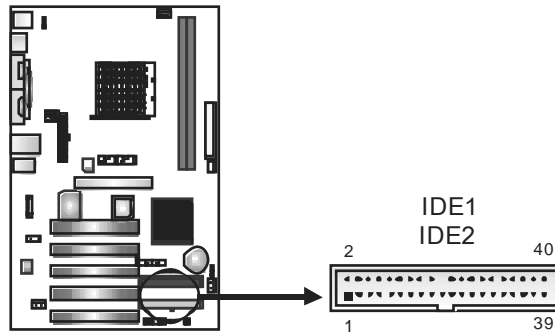
The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.



IDE1/IDE2: Hard Disk Connectors

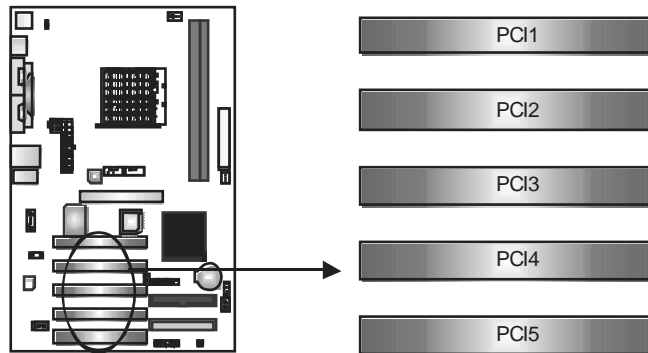
The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0-4, Bus Master, and Ultra DMA 33/66/100/133 functionality. It has two HDD connectors IDE1 (primary) and IDE2 (secondary).

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

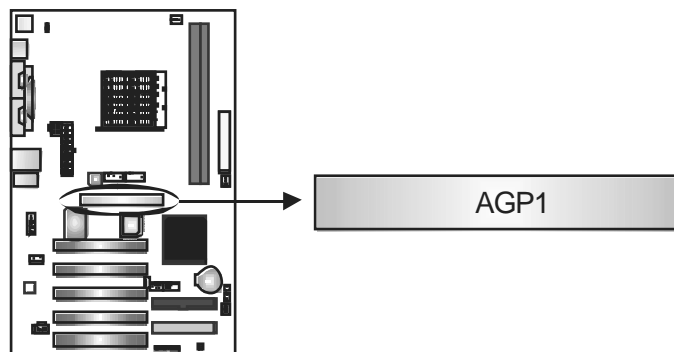


PCI1~PCI5: Peripheral Component Interconnect Slots

This motherboard is equipped with 5 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.

**AGP1: Accelerated Graphics Port Slot**

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



CHAPTER 3: HEADERS & JUMPERS SETUP

3.1 HOW TO SETUP JUMPERS

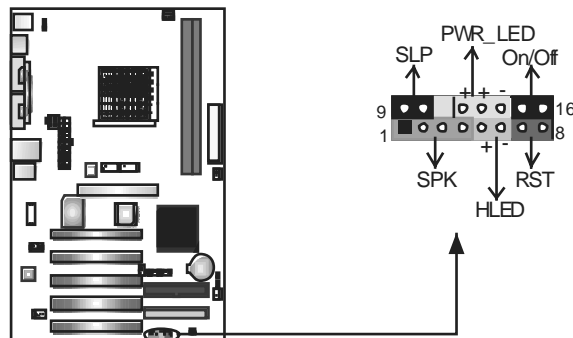
The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.



3.2 DETAIL SETTINGS

JPANEL1: Front Panel Header

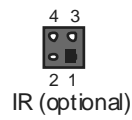
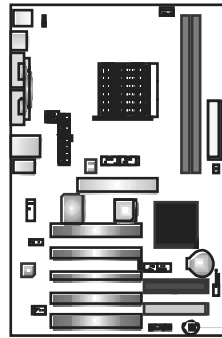
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, Sleep and speaker connection. It allows user to connect the PC case's front panel switch functions.



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

JIR1: IrDA Connector (Optional)

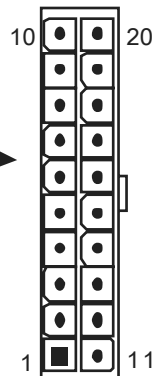
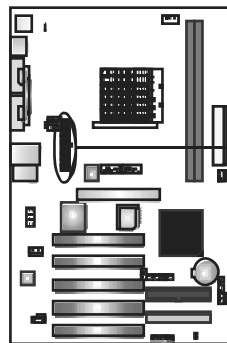
The motherboard has a Infrared header that supports infrared signal transmitting and receiving device.



Pin	Assignment
1	+5V
2	Ground
3	IRTX
4	IRRX

JATXPWR1: ATX Power Source Connector

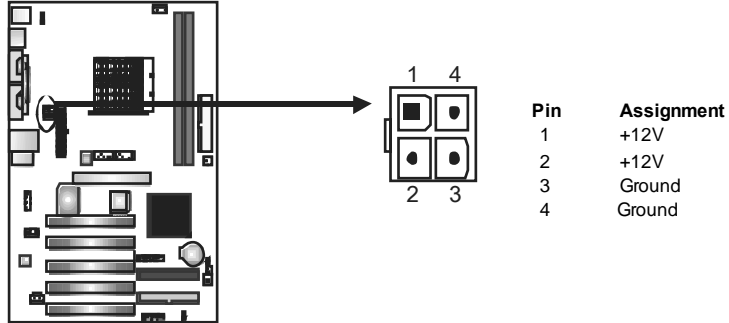
This connector allows user to connect 20-pin power connector on the ATX power supply.



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

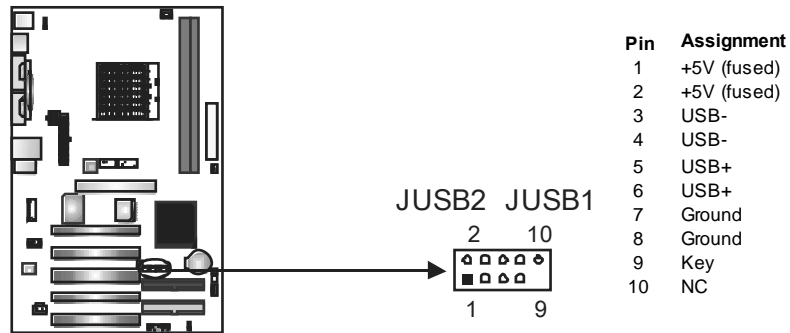
JATXPWR2: ATX Power Source Connector

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



JUSB1/JUSB2: Headers for USB 2.0 Ports at Front Panel

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



JUSBV1/JUSBV3: Power Source Headers for USB Ports

Pin 1-2 Close:

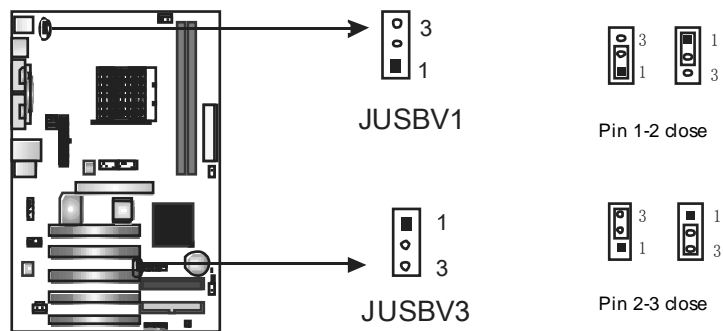
JUSBV1: +5V for USB ports at JUSBLAN1.

JUSBV3: +5V for USB ports at front panel (JUSB1/JUSB2).

Pin 2-3 Close:

JUSBV1: USB ports at JUSBLAN1 are powered by +5V standby voltage.

JUSBV3: USB ports at front panel (JUSB1/JUSB2) are powered by +5V standby voltage.

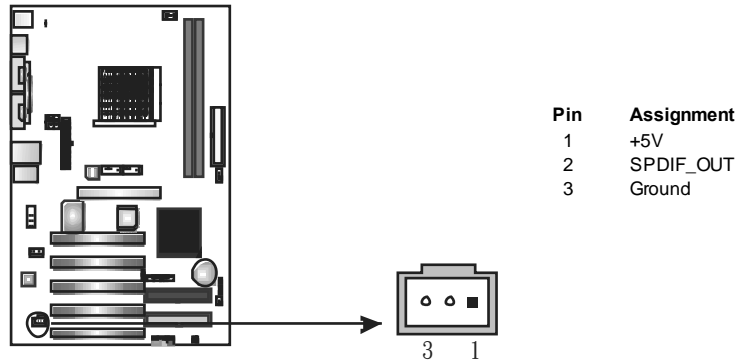


Note:

In order to support this function "Power-On system via a USB device," "JUSBV1/ JUSBV3" jumper cap should be placed on Pin 2-3 individually

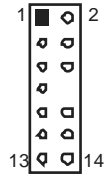
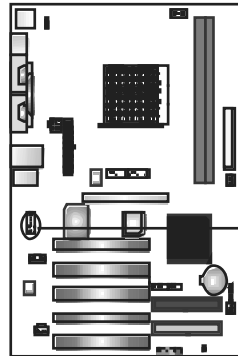
JSPDIF_OUT1: Digital Audio-out Connector (Optional)

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



JAUDIO1: Front Panel Audio Header

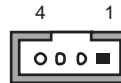
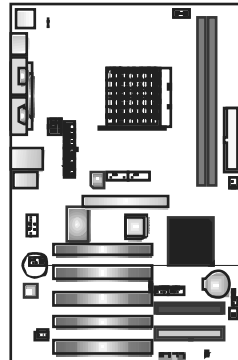
This header allows user to connect the front audio output cable with the PC front panel. It will disable the output on back panel audio connectors.



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

JCDIN1: CD-ROM Audio-in Connector

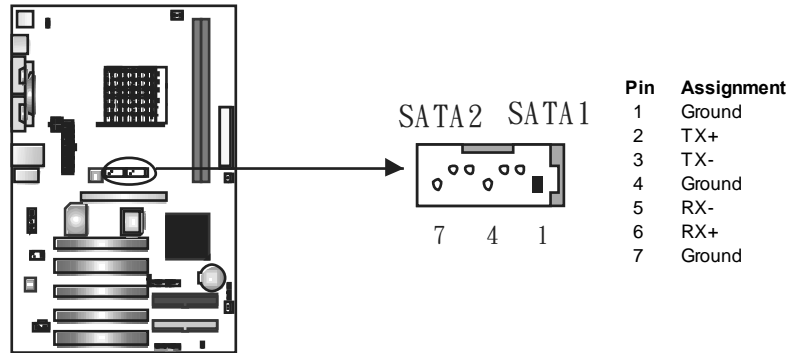
This connector allows user to connect the audio source from the variety devices, like CD-ROM, DVD-ROM, PCI sound card, PCI TV turner card etc..



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

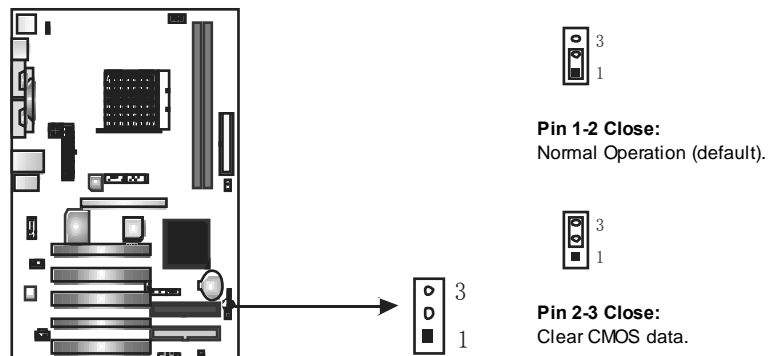
SATA1~SATA2: Serial ATA Connectors

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.



JCMOS1: Clear CMOS Header

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

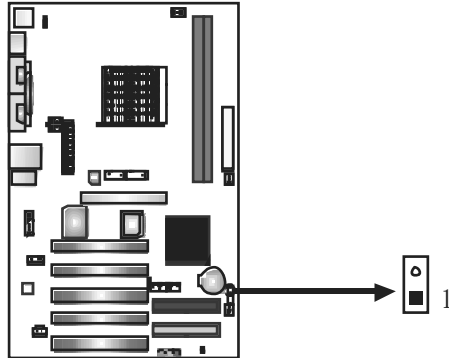


※ Clear CMOS Procedures:

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

JCI1: Chassis Open Header (Optional)

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.



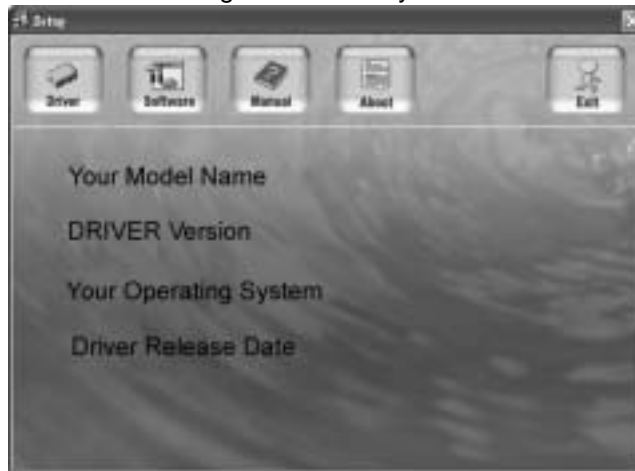
Pin	Assignment
1	Case open signal
2	Ground

CHAPTER 4: USEFUL HELP

4.1 DRIVER INSTALLATION NOTE

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

You will see the following window after you insert the CD



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

Note:

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

A. Driver Installation

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

B. Software Installation

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

C. Manual

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

Note:

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

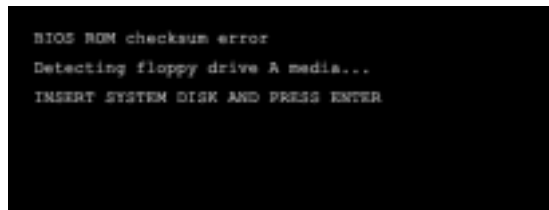
4.2 AWARD BIOS BEEP CODE

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

4.3 EXTRA INFORMATION

A. BIOS Update

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



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

1. Make a bootable floppy disk.
2. Download the Flash Utility "AWDFLASH.exe" from the Biostar website: www.biostar.com.tw
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
<ol style="list-style-type: none"> 1. No power to the system at all. Power light don't illuminate, fan inside power supply does not turn on. 2. Indicator light on key board does not turn on. 	<ol style="list-style-type: none"> 1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
<p>System inoperative. Keyboard lights are on, power indicator lights are lit, and hard drive is spinning.</p>	<p>Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.</p>
<p>System does not boot from hard disk drive, can be booted from optical drive.</p>	<ol style="list-style-type: none"> 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.
<p>System only boots from optical drive. Hard disk can be read and applications can be used but booting from hard disk is impossible.</p>	<ol style="list-style-type: none"> 1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
<p>Screen message says "Invalid Configuration" or "CMOS Failure."</p>	<p>Review system's equipment. Make sure correct information is in setup.</p>
<p>Cannot boot system after installing second hard drive.</p>	<ol style="list-style-type: none"> 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.



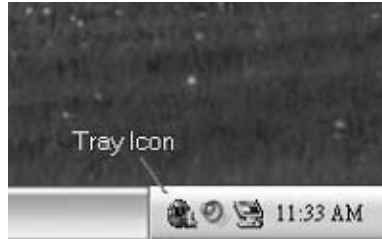
Usage:

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.

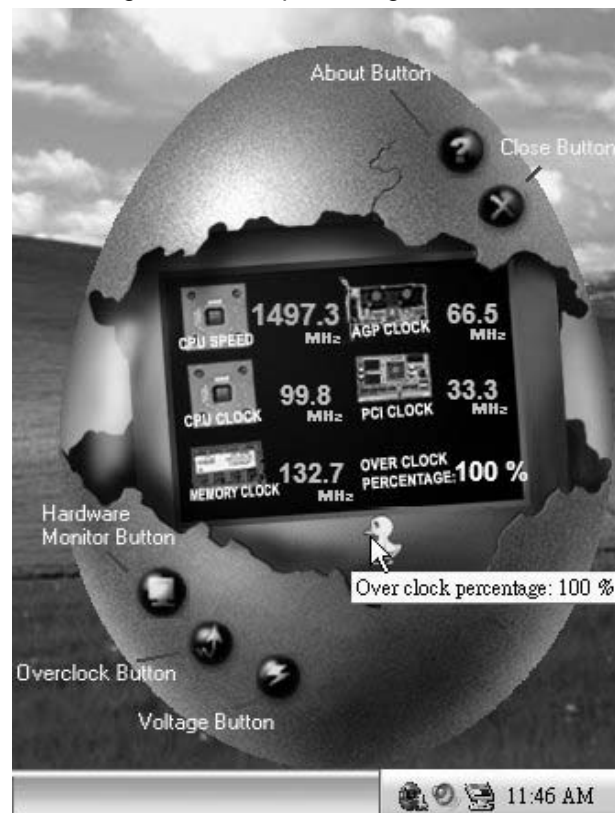
Main Panel contains features as follows:

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

Man walking → overclock percentage from 100% ~ 110 %

Panther running → overclock percentage from 110% ~ 120%

Car racing → overclock percentage from 120% ~ above



3. Voltage Panel

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

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



4. Overclock Panel

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



Overclock Panel contains the these features:

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

Warning:

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

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



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

Note:

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

5. Hardware Monitor Panel

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

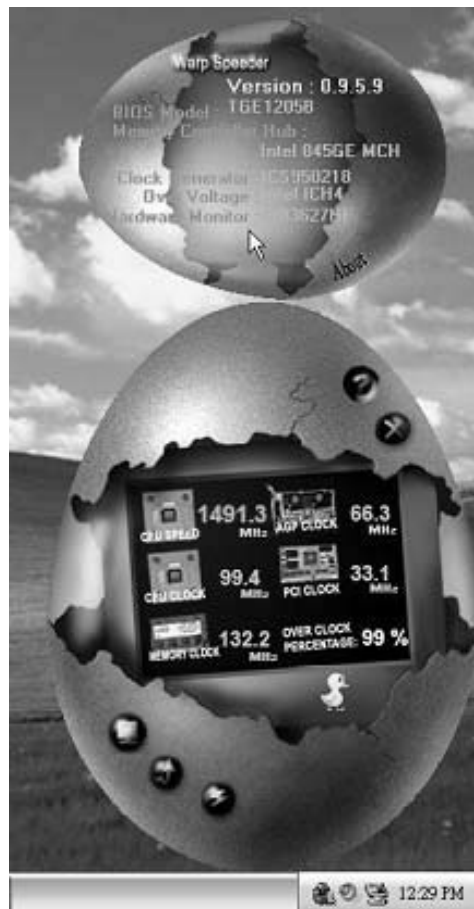
In this panel, you can get the real-time status information of your system. The information will be refreshed every 1 second.



6. About Panel

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

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



Note:

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

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APPENDENCIES: SPEC IN OTHER LANGUAGE**GERMAN**

Spezifikationen		
CPU	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64X2/ Sempron Prozessoren	Die AMD 64-Architektur unterstützt eine 32-Bit- und 64-Bit-Datenverarbeitung Unterstützt Hyper Transport und Cool'n'Quiet
FSB	Unterstützt HyperTransport mit einer Bandbreite von bis zu 800 MHz	
Chipsatz	nVIDIA NF3 250	
Super E/A	ITE 8716F Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle	Umgebungskontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller "Smart Guardian"-Funktion von ITE
Arbeitsspeicher	DDR2 DIMM-Steckplätze x 2 Jeder DIMM unterstützt 256/512MB & 1GB DDR2. Max. 2GB Arbeitsspeicher	Dual-Kanal DDR2 Speichermodul Unterstützt DDR2 533 / 667 / 800 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
IDE	Integrierter IDE-Controller	Ultra DMA 33 / 66 / 100 / 133 Bus Master-Modus Unterstützt PIO-Modus 0~4,
SATA	Integrierter Serial ATA-Controller Datentransfer rate bis zu 1.5 Gb/s	Konform mit der SATA-Spezifikation Version 1.0.
LAN	Realtek 8201CLPHY	10 / 100 Mb/s Auto-Negotiation Halb-/Voll duplex-Funktion
Audio-Codec	ALC 655	6-Kanal-Audioausgabe AC'97 Version 2.3
Steckplätze	PCI-Steckplatz x5 AGP Steckplatz x1	
Onboard-Anschluss	Diskettenlaufwerkanschluss x1 IDE-Anschluss x2 SATA-Anschluss x2 Fronttafelanschluss x1	Jeder Anschluss unterstützt 2 Diskettenlaufwerke Jeder Anschluss unterstützt 2 IDE-Laufwerke Jeder Anschluss unterstützt 1 SATA-Laufwerk Unterstützt die Fronttafelanforderungen

Spezifikationen			
	Front-Audioanschluss	x1	Unterstützt die Fronttafel-Audioanschlussfunktion
	CD-IN-Anschluss	x1	Unterstützt die CDAudio-In-Funktion
	S/PDIF-Ausgangsanschluss	x1	Unterstützt die digitale Audioausgabefunktion
	CPU-Lüfter-Sockel	x1	CPU-Lüfterstromversorgungsanschluss (mit Smart Fan-Funktion)
	System-Lüfter-Sockel	x1	System-Lüfter-Stromversorgungsanschluss
	"Gehäuse offen"-Sockel (optional)	x1	Zur Erkennung eines geöffneten Gehäuses
	"CMOS löschen"-Sockel	x1	
	USB-Anschluss	x2	Jeder Anschluss unterstützt 2 Fronttafel-USB-Anschlüsse
	Stromanschluss (20-polig)	x1	
	Stromanschluss (4-polig)	x1	
Rückseiten-E/A	PS/2-Tastatur	x1	
	PS/2-Maus	x1	
	Druckeranschluss	x1	
	Serieller Anschluss	x1	
	LAN-Anschluss	x1	
	USB-Anschluss	x4	
	Audioanschluss	x3	
Platinengröße	204 mm (B) X 297 mm (L)		
OS-Unterstützung	Windows 2K / XP		Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.

FRANCE

SPEC		
UC	Socket AM2 Processeurs AMD Athlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron	L'architecture AMD 64 permet le calcul 32 et 64 bits Prend en charge Hyper Transport et Cool'n'Quiet
Bus frontal	Prend en charge Hyper Transport jusqu'à une bande passante de 800 MHz	
Chipset	nVIDIA NF3 250	
Super E/S	ITE 8716F Fournit la fonctionnalité de Super E/S patrimoniales la plus utilisée. Interface à faible consommation de broches	Initiatives de contrôle environnementales, Moniteur de matériel Contrôleur de vitesse de ventilateur Fonction « Gardien intelligent » de l'ITE
Mémoire principale	Fentes DDR2 DIMM x 2 Chaque DIMM prend en charge des DDR2 de 256/512 Mo et 1 Go Capacité mémoire maximale de 2 Go	Module de mémoire DDR2 à mode à double voie Prend en charge la DDR2 533 / 667 / 800 Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas pris en charge
IDE	Contrôleur IDE intégré	Mode principale de Bus Ultra DMA 33 / 66 / 100 / 133 Prend en charge le mode PIO 0~4,
SATA	Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 1.5 Go/s.	Conforme à la spécification SATA Version 1.0
LAN	Realtek 8201CL PHY	10 / 100 Mb/s négociation automatique Half / Full duplex capability
Codec audio	ALC 655	Sortie audio à 6 voies AC'97 Version 2.3
Fentes	Fente PCI x5 Fente AGP x1	
Connecteur embarqué	Connecteur de disquette x1 Connecteur IDE x2 Connecteur SATA x2	Chaque connecteur prend en charge 2 lecteurs de disquettes Chaque connecteur prend en charge 2 périphériques IDE Chaque connecteur prend en charge 1 périphérique SATA

SPEC			
	Connecteur du panneau avant	x1	Prend en charge les équipements du panneau avant
	Connecteur Audio du panneau avant	x1	Prend en charge la fonction audio du panneau avant
	Connecteur d'entrée CD	x1	Prend en charge la fonction d'entrée audio de CD
	Connecteur de sortie S/PDIF	x1	Prend en charge la fonction de sortie audio numérique
	Embase de ventilateur UC	x1	Alimentation électrique du ventilateur UC (avec fonction de ventilateur intelligent)
	Embase de ventilateur système	x1	Alimentation électrique du ventilateur système
	Embase d'ouverture de châssis (optional)	x1	Pour la fonction de détection d'intrus dans le châssis
	Embase d'effacement CMOS	x1	
	Connecteur USB	x2	Chaque connecteur prend en charge 2 ports USB de panneau avant
	Connecteur d'alimentation (20 broches)	x1	
	Connecteur d'alimentation (4 broches)	x1	
E/S du panneau arrière	Clavier PS/2	x1	
	Souris PS/2	x1	
	Port d'imprimante	x1	
	Port série	x1	
	Port LAN	x1	
	Port USB	x4	
	Fiche audio	x3	
Dimensions de la carte	204 mm (l) X 297 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.

ITALIAN

SPECIFICA		
CPU	Socket AM2 Processori AMD Athlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron	L'architettura AMD 64 abilita la computazione 32 e 64 bit Supporto di Hyper Transport e Cool'n'Quiet
FSB	Supporto di Hyper Transport fino a 800 MHz di larghezza di banda	
Chipset	nVIDIA NF3 250	
Super I/O	ITE 8716F Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count)	Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller velocità ventolina Funzione "Smart Guardian" di ITE
Memoria principale	Alloggi DIMM DDR 2 x 2 Ciascun DIMM supporta DDR 2 256/512MB e 1GB Capacità massima della memoria 2GB	Modulo di memoria DDR2 a canale doppio Supporto di DDR2 533 / 667 / 800 DIMM registrati e DIMM ECC non sono supportati
IDE	Controller IDE integrato	Modalità Bus Master Ultra DMA 33 / 66 / 100 / 133 Supporto modalità PIO Mode 0-4
SATA	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 1.5 Gb/s.	Compatibile specifiche SATA Versione 1.0.
LAN	Realtek 8201CL	Negoziazione automatica 10 / 100 Mb/s Capacità Half / Full Duplex
Codec audio	ALC 655	Uscita audio 6 canali AC'97 Versione 2.3
Alloggi	Alloggio PCI x5 Alloggio AGP x1	
Connettori su scheda	Connettore floppy x1 Connettore IDE x2 Connettore SATA x2	Ciascun connettore supporta 2 unità Floppy Ciascun connettore supporta 2 unità IDE Ciascun connettore supporta 1 unità SATA

SPECIFICA			
	Connettore pannello frontale	x1	Supporta i servizi del pannello frontale
	Connettore audio frontale	x1	Supporta la funzione audio pannello frontale
	Connettore CD-in	x1	Supporta la funzione input audio CD
	Connettore output SPDIF	x1	Supporta la funzione d'output audio digitale
	Collettore ventolina CPU	x1	Alimentazione ventolina CPU (con funzione Smart Fan)
	Collettore ventolina sistema	x1	Alimentazione ventolina di sistema
	Collettore apertura telaio (optional)	x1	Per la funzione di rilevamento intrusione telaio
	Collettore cancellazione CMOS	x1	
	Connettore USB	x2	Ciascun connettore supporta 2 porte USB pannello frontale
	Connettore alimentazione (20 pin)	x1	
	Connettore alimentazione (4 pin)	x1	
I/O pannello posteriore	Tastiera PS/2	x1	
	Mouse PS/2	x1	
	Porta stampante	x1	
	Porta seriale	x1	
	Porta LAN	x1	
	Porta USB	x4	
	Connettore audio	x3	
Dimensioni scheda	204 mm (larghezza) x 297 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.

SPANISH

Especificación		
CPU	Conector AM2 Procesadores AMD Athlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron	La arquitectura AMD 64 permite el procesado de 32 y 64 bits Soporta las tecnologías Hyper Transport y Cool'nQuiet
FSB	Admite HyperTransport con un ancho de banda de hasta 800MHz	
Conjunto de chips	nVIDIA NF3 250	
Súper E/S	ITE 8716F Le ofrece las funcionalidades heredadas de uso más común Súper E/S. Interfaz de cuenta Low Pin	Iniciativas de control de entorno, Monitor hardware Controlador de velocidad de ventilador Función "Guarda inteligente" de ITE
Memoria principal	Ranuras DIMM DDR2 x 2 Cada DIMM admite DDR de 256/512MB y 1GB Capacidad máxima de memoria de 2GB	Módulo de memoria DDR2 de canal Doble Admite DDR2 de 533 / 667 / 800 No admite DIMM registrados o DIMM compatibles con ECC
IDE	Controlador IDE integrado	Modo bus maestro Ultra DMA 33 / 66 / 100 / 133 Soporta 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.
Red Local	Realtek 8201CL PHY	Negociación de 10 / 100 Mb/s Funciones Half / Full dúplex
Códex de sonido	ALC 655	Salida de sonido de 6 canales AC'97 Versión 2.3
Ranuras	Ranura PCI X5 Ranura AGP X1	
Conectores en placa	Conector disco flexible X1 Conector IDE X2 Conector SATA X2 Conector de panel frontal X1 Conector de sonido frontal X1	Cada conector soporta 2 unidades de disco flexible Cada conector soporta 2 dispositivos IDE Cada conector soporta 1 dispositivos SATA Soporta instalaciones en el panel frontal Soporta funciones de sonido en el panel frontal

Especificación			
	Conector de entrada de CD	X1	Soporta función de entrada de sonido de CD
	Conector de salida S/PDIF	X1	Soporta función de salida de sonido digital
	Cabecera de ventilador de CPU	X1	Fuente de alimentación de ventilador de CPU (con función Smart Fan)
	Cabecera de ventilador de sistema	X1	Fuente de alimentación de ventilador de sistema
	Cabecera de chasis abierto (opcional)	X1	Función de detección de intrusos en el chasis
	Cabecera de borrado de CMOS	X1	
	Conector USB	X2	Cada conector soporta 2 puertos USB frontales
	Conector de alimentación (20 patillas)	X1	
	Conector de alimentación (4 patillas)	X1	
Panel trasero de E/S	Teclado PS/2	X1	
	Ratón PS/2	X1	
	Puerto de impresora	X1	
	Puerto serie	X1	
	Puerto de red local	X1	
	Puerto USB	X4	
	Conector de sonido	X3	
Tamaño de la placa	204 mm. (A) X 297 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.

PORTUGUESE

ESPECIFICAÇÕES		
CPU	Socket AM2 Processadores AMD Athlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron	A arquitectura AMD 64 permite uma computação de 32 e 64 bits Suporta as tecnologias Hyper Transport e Cool'n'Quiet
FSB	Suporta a tecnologia HyperTransport com uma largura de banda até 800 MHz	
Chipset	nVIDIA NF3 250	
Especificação do Super I/O	ITE 8716F Proporciona as funcionalidades mais utilizadas em termos da especificação Super I/O. Interface LPC (Low Pin Count).	Iniciativas para controlo do ambiente Monitorização do hardware Controlador da velocidade da ventoinha Função "Smart Guardian" da ITE
Memória principal	Ranhuras DIMM DDR2 x 2 Cada módulo DIMM suporta uma memória DDR2 de 256/512 MB & 1 GB Capacidade máxima de memória: 2 GB	Módulo de memória DDR2 de canal duplo Suporta módulos DDR2 533 / 667 / 800 Os módulos DIMM registados e os DIMM ECC não são suportados
IDE	Controlador IDE integrado	Modo Bus master Ultra DMA 33 / 66 / 100 / 133 Suporta o modo PIO 0~4
SATA	Controlador Serial ATA integrado Velocidades de transmissão de dados até 1.5 Gb/s.	Compatibilidade com a especificação SATA versão 1.0.
LAN	Realtek 8201CL PHY	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
Ranhuras	Ranhura PCI x5 Ranhura AGP x1	
Conectores na placa	Conector da unidade de disquetes x1 Conector IDE x2 Conector SATA x2	Cada conector suporta 2 unidades de disquetes Cada conector suporta 2 dispositivos IDE Cada conector suporta 1 dispositivo SATA

ESPECIFICAÇÕES			
	Conector do painel frontal	x1	Para suporte de várias funções no painel frontal
	Conector de áudio frontal	x1	Suporta a função de áudio no painel frontal
	Conector para entrada de CDs	x1	Suporta a entrada de áudio a partir de CDs
	Conector de saída S/PDIF	x1	Suporta a saída de áudio digital
	Conector da ventoinha da CPU	x1	Alimentação da ventoinha da CPU (com a função Smart Fan)
	Conector da ventoinha do sistema	x1	Alimentação da ventoinha do sistema
	Conector para detecção da abertura do chassis	x1	Para detectar qualquer intrusão no chassis
	Conector para limpeza do CMOS	x1	
	Conector USB	x2	Cada conector suporta 2 portas USB no painel frontal
	Conector de alimentação (20 pinos)	x1	
	Conector de alimentação (4 pinos)	x1	
Entradas/Saídas no painel traseiro	Teclado PS/2	x1	
	Rato PS/2	x1	
	Porta para impressora	x1	
	Porta série	x1	
	Porta LAN	x1	
	Porta USB	x4	
	Tomada de áudio	x3	
Tamanho da placa	204 mm (L) X 297 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.

POLISH

SPEC		
Procesor	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Procesory Athlon 64X2 / Sempron	Architektura AMD 64 umożliwia przetwarzanie 32 i 64 bitowe Obsługa Hyper Transport oraz Cool'n'Quiet
FSB	Obsługa HyperTransport oszerokości pasma do 800 MHz	
Chipset	nVIDIA NF3 250	
Pamięć główna	Gniazda DDR2 DIMM x 2 Każde gniazdo DIMM obsługuje moduły 256/512MB oraz 1GB DDR2 Maks. Wielkość pamięci 2GB	Moduł pamięci DDR2 z trybem podwójnego kanału Obsługa DDR2 533 / 667 / 800 Brak obsługi Registered DIMM oraz ECC DIMM
Super I/O	ITE 8716F Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count	Funkcje kontroli warunków pracy, Monitor H/W Kontroler prędkości wentylatora Funkcja ITE "Smart Guardian"
IDE	Zintegrowany kontroler IDE Ultra DMA 33 / 66 / 100 / 133 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.
LAN	Realtek 8201CL PHY	10 / 100 Mb/s oraz automatyczną negocjacją szybkości Działanie w trybie półowicznego / pełnego duplexu
Kodek dźwiękowy	ALC 655	8 kanałowe wyjście audio AC'97 w wersji 2.3
Gniazda	Gniazdo PCI x5 Gniazdo AGP x1	
Złącza wbudowane	Złącze napędu dyskiety x1 Złącze IDE x2 Złącze SATA x2 Złącze panela przedniego x1	Każde złącze obsługuje 2 napędy dyskiety Każde złącze obsługuje 2 urządzenia IDE Każde złącze obsługuje 1 urządzenie SATA Obsługa elementów panela przedniego

SPEC			
	Przednie złącze audio	x1	Obsługa funkcj audio na panelu przednim
	Złącze wejścia CD	x1	Obsługa funkcj wejścia audio CD
	Złącze wyjścia S/PDIF	x1	Obsługa funkcj cyfrowego wyjścia audio
	Złącze gówkowe wentylatora procesora	x1	Zasilanie wentylatora procesora (z funkcją Smart Fan)
	Złącze gówkowe wentylatora systemowego	x1	Zasilanie wentylatora systemowego
	Złącze gówkowe otwarcia obudowy (opcja)	x1	Do funkcji wykrywania naruszenia obudowy
	Złącze gówkowe kasowania CMOS	x1	
	Złącze USB	x2	Każde złącze obsługuje 2 porty USB na panelu przednim
	Złącze zasilania (20 pinowe)	x1	
	Złącze zasilania (4 pinowe)	x1	
Back Panel I/O	Klawiatura PS/2	x1	
	Mysz PS/2	x1	
	Port drukarki	x1	
	Port szeregowy	x1	
	Port LAN	x1	
	Port USB	x4	
	Gniazdo audio	x3	
Wymiary płyty	204mm (S) X 297 mm (W)		
Obsługa systemu operacyjnego	Windows 2K / XP		Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.

RUSSIAN

СПЕЦ		
CPU (центральный процессор)	Гнездо AM2 Процессоры AMD Athlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron	Архитектура AMD 64 разрешать обработка данных на 32 и 64 бит Поддержка Hyper Transport и Cool'n'Quiet
FSB	Поддержка HyperTransport с пропускной способностью до 800 МГц	
Набор микросхем	nVIDIA NF3 250	
Основная память	Слоты DDR2 DIMM x 2 Каждый модуль DIMM поддерживает 256/512МБ & 1ГБ DDR2 Максимальная ёмкость памяти 2 Гб	Модуль памяти с двужанальным режимом DDR2 Поддержка DDR2 533 / 667 / 800 Не поддерживает зарегистрированные модули DIMM and ECC DIMM
Super I/O	ITE 8716F Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов	Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости Функция ITE "Smart Guardian" (Интеллектуальная защита)
IDE	Встроенное устройство управления встроенными интерфейсами устройств	Режим "хозяина" шины Ultra DMA 33 / 66 / 100 / 133 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
Локальная сеть	Realtek 8201CL PHY	Автоматическое согласование 10 / 100 Мб/с . Частичная / полная дуплексная способность
Звуковой кодек	ALC655	Шестиканальный звуковой выход AC'97 Версия 2.3
Слоты	Слот PCI x5 Слот AGP x1	
Встроенный разъём	Разъём HГМД x1 Разъём IDE x2 Разъём SATA x2 Разъём на лицевой панели x1	Каждый разъём поддерживает 2 накопителя на гибких магнитных дисках Каждый разъём поддерживает 2 встроенных интерфейса накопителей Каждый разъём поддерживает 1 устройство SATA Поддержка устройств на лицевой панели

СПЕЦ			
	Входной звуковой разъем	x1	Поддержка звуковых функций на лицевой панели
	Разъем ввода для CD	x1	Поддержка функции ввода для CD
	Разъем вывода для S/PDIF	x1	Поддержка вывода цифровой звуковой функции
	Контактирующее приспособление вентилятора центрального процессора	x1	Источник питания для вентилятора центрального процессора (с функцией интеллектуального вентилятора)
	Контактирующее приспособление вентилятора системы	x1	Источник питания для вентилятора системы
	Шасси открытого контактирующего приспособления (дополнительно)	x1	Для функции обнаружения злоумышленника шасси
	Открытое контактирующее приспособление CMOS	x1	
	USB-разъем	x2	Каждый разъем поддерживает 2 USB-порта на лицевой панели
	Разъем питания (20 вывод)	x1	
	Разъем питания (4 вывод)	x1	
Задняя панель средств ввода-вывода	Клавиатура PS/2	x1	
	Мышь PS/2	x1	
	Порт подключения принтера	x1	
	Последовательный порт	x1	
	Порт LAN	x1	
	USB-порт	x4	
	Гнездо для подключения наушников	x3	
Размер панели	204 мм (Ш) X 297 мм (В)		
Поддержка OS	Windows 2K / XP		Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.

ARABIC

المواصفات		
وحدة لمعالجة المركبة	AM2 مقبس AMD Athlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron	إجراء العمليات الحاسوبية بسرعة 32 و 64 بت AMD 64 تمكن تقنية Hyper Transport و Cod'nQuiet تدعم تقنية
النقل الأمامي لجلب مجموعة لشرايح	تردد 800 بتتردد يصل إلى HyperTransport تدعم تقنية nVIDIA NF3 2.50	
الذاكرة الرئيسية	فتحة DDR2 DIMM سعة DDR2 5 ذاكرة من نوع DIMM تدعم كل فتحة 256/512 ميجا بايت و 1 جيجا بايت سعة ذاكرة قصوى 2 جيجا بايت	مزدوجة فتحة DDR2 وحدة ذاكرة ميجا بايت 800 / 667 / 533 سعات DDR2 تدعم الذاكرة من نوع ECC و تلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة
Super I/O	ITE 8716F الأكثر استخداماً Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية	وسائل لتحكم في البيئة: مراقب لمعومة حلقة الأجهزة مراقب في سرعة المروحة من ITE "Smart Guardian" وظيفة
منفذ IDE	متكامل IDE متحكم Ultra DMA 33 / 66 / 100 / 133 نقل بتقنية وضع رئيسي	PIO Mode 0~4 دعم وضع
ASAT	متكامل Serial ATA متحكم نقل البيانات بسرعات تصل إلى 1.5 جيجا بايت/ثانية	1.0 الإصدار SATA مطابقة المواصفات
شبكة داخلية	Realtek 8201CL PHY	تقويض 10/100 ميجا بايت / ثنائي إمكانية النقل لمزيج الكامل/القصي
كوديك الصوت	ALC 655	قنوات لخرج الصوت 6 AC'97 من 2.3 الإصدار
الفتحات	فتحة PCI فتحة AGP	عدد 5 عدد 1
المنافذ على سطح اللوحة	مقعد محرك أقراص مرنة مقعد IDE مقعد SATA مقعد اللوحة الأممية مقعد الصوت الأممي	عدد 1 عدد 2 عدد 2 عدد 1 عدد 1
		يدعم محرك الأقراص المرنة يدعم كل منقذ اثنين من أجهزة SATA يدعم كل منقذ واحد من أجهزة يدعم تجهيزات اللوحة الأممية يدعم وظيفة الصوت باللوحة الأممية

المواصفات		
مقذ CD-IN	عدد 1	يدعم وظيفة نخل صوت الوصل لدمج
مقذ خرج S/PDIF	عدد 1	يدعم وظيفة خرج صوت رقمي
وصلة مروحة وحدة المعالجة المركزية	عدد 1	Smart Fan لتوصيل الطقة لمروحة وحدة المعالجة (مع وظيفة
وصلة مروحة للظلم	عدد 1	لتوصيل الطقة لمروحة الظلم
وصلة فتح الهيكل (اختياري)	عدد 1	للكنف عن اختراق البيكل
وصلة مسح CMOS	عدد 1	
مقذ USB	عدد 2	بالوحة الأمامية USB يدع عمل منفذ قحني
مقذ توصيل الطقة (20دوس)	عدد 1	
مقذ توصيل الطقة (4دبليس)	عدد 1	
لوحة مفاتيح PS/2	عدد 1	
مؤس PS/2	عدد 1	
مقذ طباعة	عدد 1	
مقذ تسلسلي	عدد 1	
مقذ شبكة لتصل محلية	عدد 1	
منافذ USB	عدد 4	
مقيس صوت	عدد 3	
حجم اللوحة	204 مم (عرض) X 297 مم (ارتفاع)	
دعم أنظمة تشغيل	Windows 2K / XP	بحيها في إنسفة أو إزالة لاع لبي نظام تشغيل باخلل أو دون اخلل Bistar تحتفظ

JAPANESE

仕様		
CPU	Socket AM2 AMDAthlon 64 / Athlon 64 FX / Athlon 64X2 / Sempron プロセッサ	AMD 64アーキテクチャでは、32ビットと64ビット計算が可能です ハイパートランスポートとクールアンドクワイアットをサポートします
FSB	800 MHz のバンド幅までハイパートランスポートをサポートします	
チップセット	nVIDIA NF3 250	
メインメモリ	DDR2 DIMMスロット x 2 各DIMMは 256/512MB & 1GB DDR2をサポート 最大メモリ容量2GB	デュアル チャンネルモードDDR2メモリモジュール DDR2 533 / 667 / 800をサポート 登録済みDIMMとECC DIMMはサポートされません
Super I/O	ITE 8716F もっとも一般に使用されるレガシーSuper I/O 機能を採用しています。 低ピンカウント インターフェイス	環境コントロールイニシアチブ、 H/Wモニター ファン速度コントローラ/ モニター ITEの「スマートガーディアン」機能
IDE	統合IDEコントローラ Ultra DMA 33 / 66 / 100 / 133バスマスタモード	PIO Mode 0~4のサポート、
SATA	統合シリアルATAコントローラ 最高 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。
LAN	Realtek 8201CL PHY	10 / 100 Mb/秒の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
スロット	PCIスロット x5 AGPスロット x1	
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	各コネクタは2つのフロッピードライブをサポートします 各コネクタは2つのIDEデバイスをサポートします 各コネクタは1つのSATAデバイスをサポートします

仕様			
	フロントパネルコネクタ	x1	フロントパネル機能をサポートします
	フロントオーディオコネクタ	x1	フロントパネルオーディオ機能をサポートします
	CDインコネクタ	x1	CDオーディオイン機能をサポートします
	S/PDIFアウトコネクタ	x1	デジタルオーディオアウト機能をサポートします
	CPUファンヘッダ	x1	CPUファン電源装置(スマートファン機能を搭載)
	システムファンヘッダ	x1	システムファン電源装置
	シャーシオープンヘッダ(オプション)	x1	シャーシ侵入検出機能
	CMOSクリアヘッダ	x1	
	USBコネクタ	x2	各コネクタは2つのフロントパネルUSBポートをサポートします
	電源コネクタ(20ピン)	x1	
	電源コネクタ(4ピン)	x1	
背面パネル I/O	PS/2キーボード	x1	
	PS/2マウス	x1	
	プリンタポート	x1	
	シリアルポート	x1	
	LANポート	x1	
	USBポート	x4	
	オーディオジャック	x3	
ボードサイズ	204 mm (幅) X 297 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。

2006/11/07

NF3 250 AM2 BIOS Setup

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NF3 250 AM2 BIOS Setup

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 Nvidia CK8 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.



NF3 250 AM2 BIOS Setup

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 Nvidia® 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

NF3 250 AM2 BIOS Setup

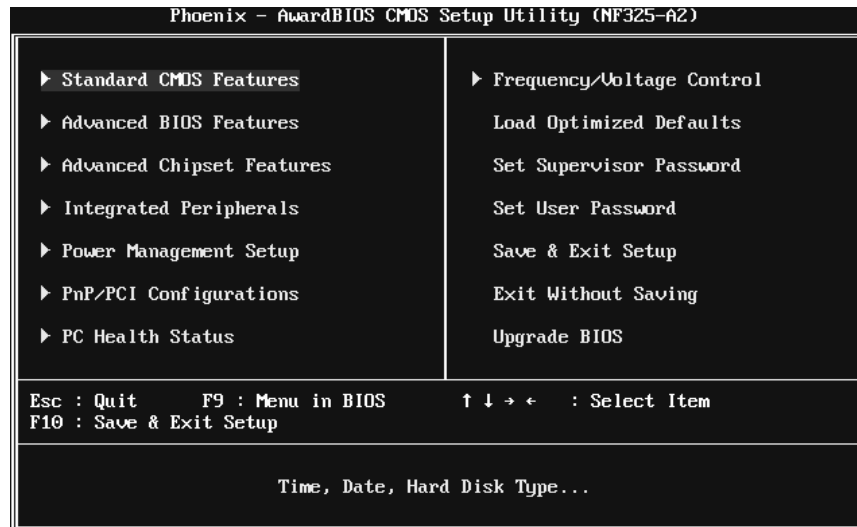
1 Main Menu

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

***WARNING**

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.

■ **Figure 1. Main Menu**



Standard CMOS Features

This submenu contains industry standard configurable options.

Advanced BIOS Features

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

Advanced Chipset Features

This submenu allows you to configure special chipset features.

NF3 250 AM2 BIOS Setup

Integrated Peripherals

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

Power Management Setup

This submenu allows you to configure the power management features.

PnP/PCI Configurations

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

PC Health Status

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

Frequency / Voltage 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!)**

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
```

Set Supervisor Password

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



```
Enter Password:
```

Set User Password

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



```
Enter Password:
```


NF3 250 AM2 BIOS Setup

Save & Exit Setup

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

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

Exit Without Saving

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

Quit Without Saving (Y/N)? N

Upgrade BIOS

This submenu allows you to upgrade bios.

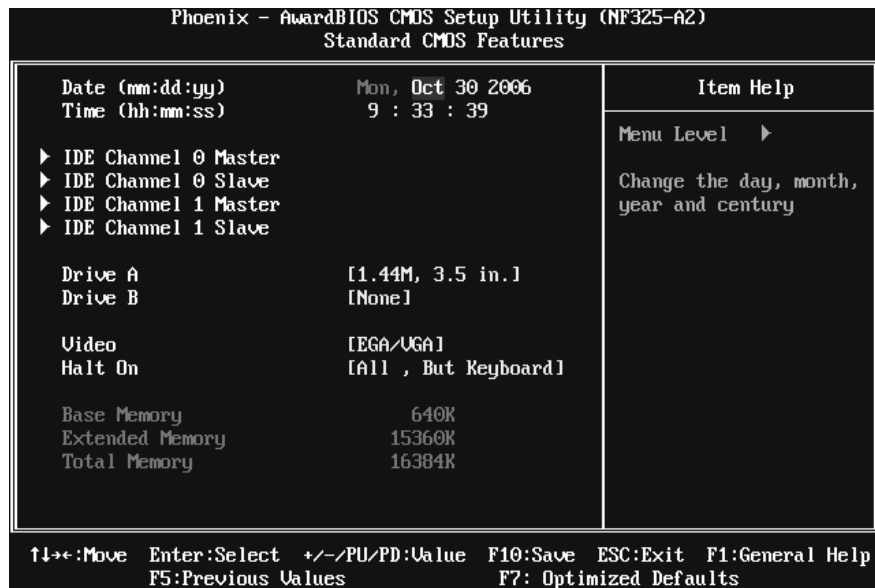
BIOS UPDATE UTILITY (Y/N)? N

NF3 250 AM2 BIOS Setup

2 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

■ Figure 2. Standard CMOS Setup



NF3 250 AM2 BIOS Setup

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 Channel 0 Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options
IDE Channel 0 Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Channel 1 Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Channel 1 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.

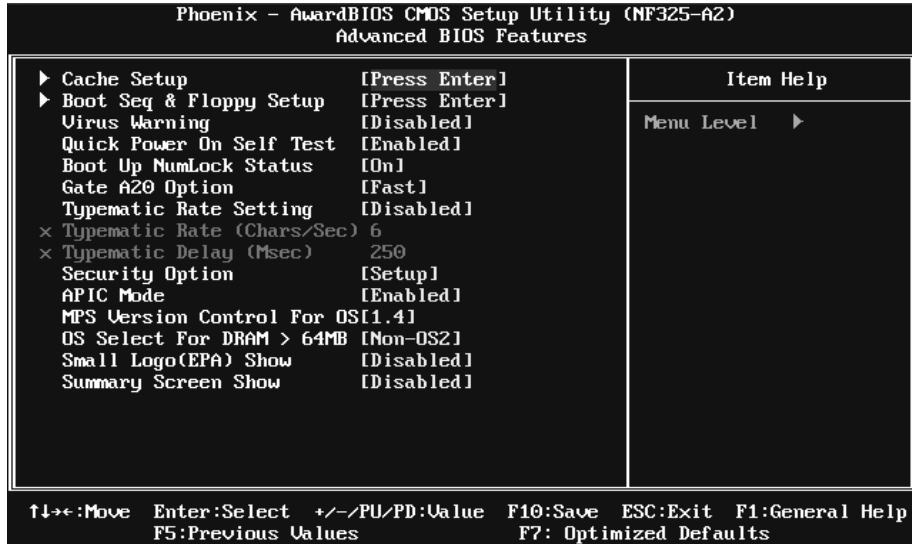
NF3 250 AM2 BIOS Setup

Item	Options	Description
Halt On	All Errors No Errors All, but Key board 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.

NF3 250 AM2 BIOS Setup

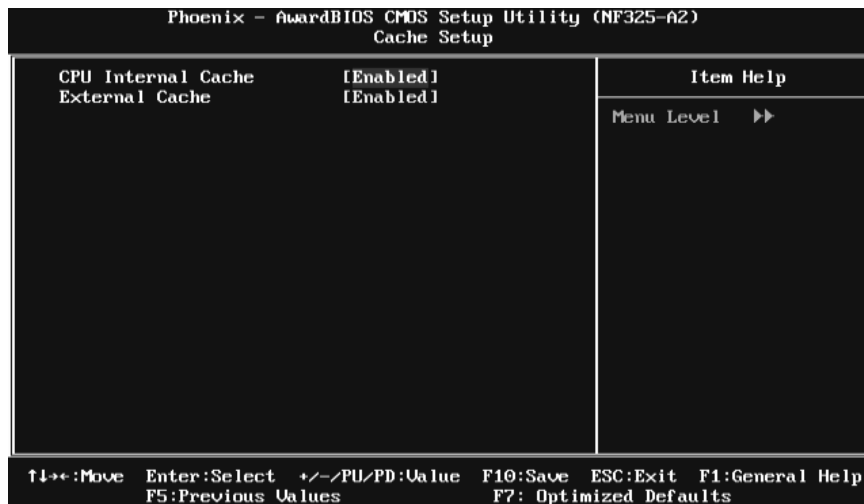
3 Advanced BIOS Features

■ Figure 3. Advanced BIOS Setup



Cache Setup

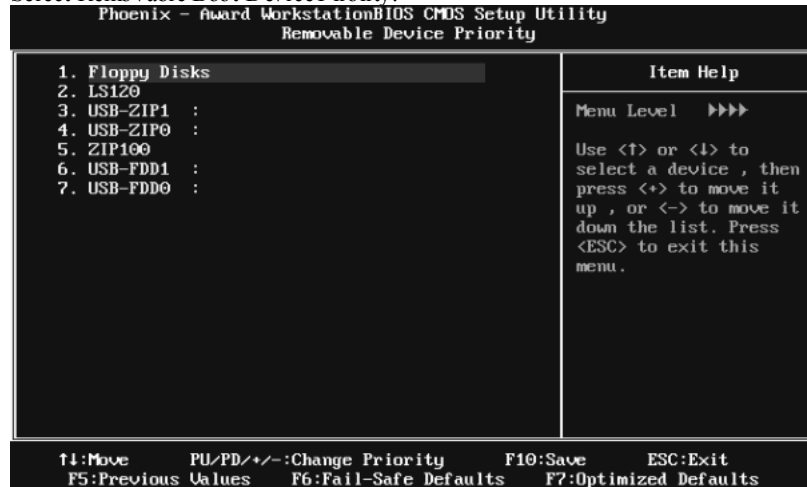
◆ Figure 3.1 Cache Setup



NF3 250 AM2 BIOS Setup

Removable Device Priority

Select Removable Boot Device Priority.



The Choices: Floppy Disks, Zip100, USB-FDD0, USB-FDD1, USB-ZIP0, USB-ZIP1, LS120.

Hard Disk Boot Priority

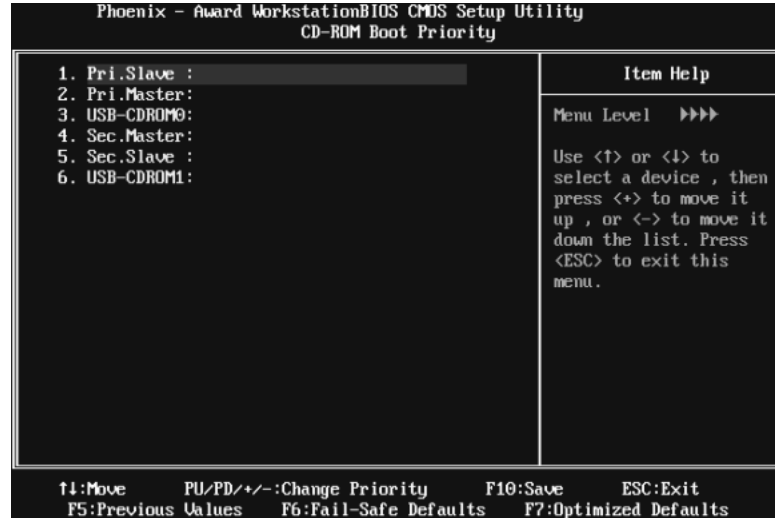
The BIOS will attempt to arrange the Hard Disk boot sequence automatically. You can change the Hard Disk booting sequence here.



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

NF3 250 AM2 BIOS Setup

CD-ROM Boot Priority



The Choices: Pri. Master, Pri. Slave, Sec. Master, Sec. Slave, USB-CDROM0, USB-CDROM1.

First/ Second/ Third Boot Device

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

The Choices: Removable, Hard Disk, CDROM, Legacy LAN, Disabled.

Boot Other Device

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

The Choices: Enabled (default), Disabled

Swap Floppy Drive

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

The Choices: Disabled (default), Enabled.

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: Enabled (Default), Disabled.

NF3 250 AM2 BIOS Setup

Virus Warning

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

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

Quick Power On Self Test

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

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

Boot Up NumLock Status

Selects the NumLock. State after power on.

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

Gate A20 Option

Select if chipset or keyboard controller should control Gate A20.

The Choices:

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

Typematic Rate Setting

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

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

Typematic Rate (Chars/Sec)

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

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

Typematic Delay (Msec)

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

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



NF3 250 AM2 BIOS Setup

Security Option

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

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

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

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

APIC MODE

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

The Choices: Enabled (default), Disabled.

MPS Version Control For OS

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

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

The Choices: 1.4 (default), 1.1.

OS Select For DRAM > 64MB

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

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

Small Logo (EPA) Show

This item allows you to enable/ disable display the small EPA logo.

The Choices: Disabled (default), Enabled.

Summary Screen Show

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

The Choices: Enabled, Disabled (default).



NF3 250 AM2 BIOS Setup

4 Advanced Chipset Features

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

■ Figure 4. Advanced Chipset Setup

Phoenix - AwardBIOS CMOS Setup Utility (NF325-A2)	
Advanced Chipset Features	
▶ DRAM Configuration	[Press Enter]
AGP Aperture Size (MB)	[128M]
AGP 3.0 Speed	[Auto]
× AGP 2.0 Speed	Auto
AGP Fast Write	[Auto]
AGP Sideband Address	[Auto]
Special I/O for PCI Card	[Disabled]
× Base I/O Address	0000
× I/O Length	1 Byte
System BIOS Cacheable	[Disabled]
	Item Help
	Menu Level ▶
	DRAM timing and control

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

NF3 250 AM2 BIOS Setup

DRAM Configuration

◆ Figure 4.1 DRAM Configuration

Phoenix - AwardBIOS CMDS Setup Utility (NF325-A2)		Item Help
DRAM Configuration		
Timing Mode	[Auto]	
× Memory Clock value or Limit	DDR 400	
DQS Training Control	[Skip DQS]	Menu Level ▶▶
CKE base power down mode	[Enabled]	
CKE based powerdown	[Per Channel]	Auto, no user limit
Memclock tri-stating	[Disabled]	MaxMemClk, limit by
Memory Hole Remapping	[Enabled]	Memory Clock value
Auto Optimize Bottom IO	[Enabled]	
× Bottom of [31:24] IO space FC		

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

Timing Mode
The Choices: Auto (default), MaxMemClk.

Memory Clock value or Limit
The Choices: DDR 400 (default), DDR 533, DDR 667, DDR 800.

DQS Training Control
The Choices: Skip DQS (default), Perform DQS.

CKE base power down mode
The Choices: Disabled, Enabled (default).

CKE base powerdown
The Choices: Per Channel (default), Per CS.

Memclock tri-stating
The Choices: Disabled (default), Enabled.

Memory Hole Remapping
The Choices: Enabled (default), Disabled.

NF3 250 AM2 BIOS Setup

Auto Optimize Bottom IO

The Choices: Enabled (default), Disabled.

Bottom of [31:24] IO space

The Choices: Min=0000 Max=00FF; Key in a HEX number.

AGP Aperture Size

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

The Choices: 64M, 256M, **128M (Default)**, 32M, 512M.

AGP 3.0 Speed

The Choices: Auto (default), 4x, 4x8x

AGP 2.0 Speed

The Choices: Auto (default), 1x, 1x2x, 1x2x4x.

AGP Fast Write

When Enabled, writes to the AGP (Accelerated Graphics Port) are executed with one wait states.

The Choices: Auto (default), Disabled.

AGP Sideband Address

The Choices: Auto (default), Disabled.

Special I/O for PCI Card

The Choices: Disabled (default), Enabled.

Base I/O Address

The Choices: 0000 (default), Min=0000; Max=FFFF, Key in a HEX number.

I/O Length

The Choices: 1 byte (default), 4 Bytes, 8 Bytes, 16 Bytes, 32 Bytes, 64 Bytes, 128 Bytes, 256 Bytes.



NF3 250 AM2 BIOS Setup

System BIOS Cacheable

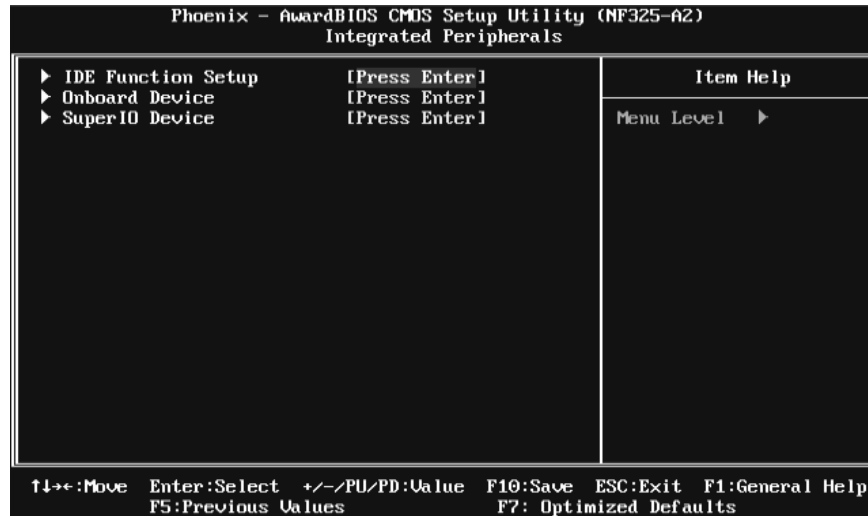
Selecting the “Enabled” option allows caching of the system BIOS ROM at F0000h-FFFFh which can improve system performance. However, any programs writing to this area of memory will cause conflicts and result in system errors.

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

NF3 250 AM2 BIOS Setup

5 Integrated Peripherals

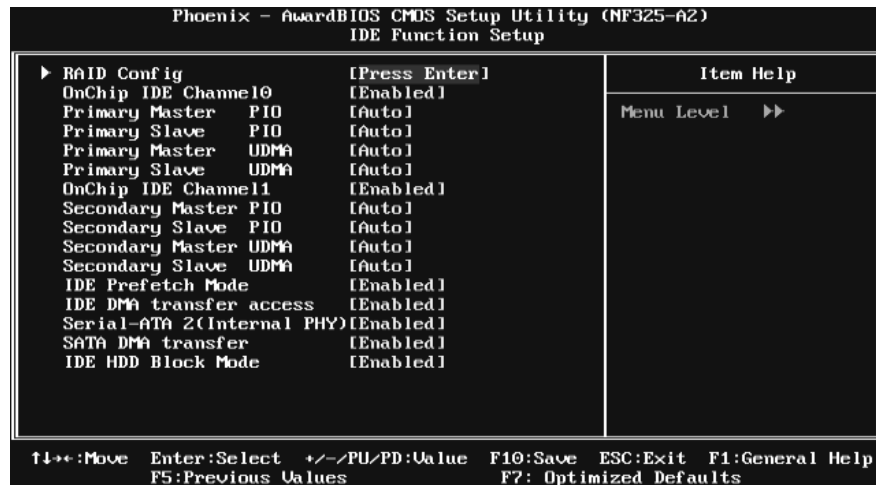
■ Figure 5. Integrated Peripherals



IDE Function Setup

If you highlight the literal “Press Enter” next to the “IDE Function Setup” label and then press the enter key, it will take you a submenu with the following options:

◆ Figure 5.1 IDE Function Setup



NF3 250 AM2 BIOS Setup

RAID Config

Phoenix - AwardBIOS CMOS Setup Utility (NF325-A2)			
RAID Config			
IDE RAID			Item Help
× IDE Channel0 Master RAID	Disabled		
× IDE Channel0 Slave RAID	Disabled		Menu Level >>>>
× IDE Channel1 Master RAID	Disabled		
× IDE Channel1 Slave RAID	Disabled		
× SATA Primary Master RAID	Disabled		
× SATA Secndry Master RAID	Disabled		

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

IDE RAID

This option allows you to enable or disable RAID function.

The Choices: Disabled (default), Enabled.

IDE Channel 0/1 Master/Slave RAID

The Choices: Disabled (default), Enabled.

SATA Primary/Secondary Master RAID

The Choices: Disabled (default), Enabled.

On-chip IDE Channel 0/1

The motherboard chipset contains a PCI IDE interface with support for two IDE channels. Select “Enabled” to activate the first and/or second IDE interface. Select “Disabled” to deactivate an interface if you are going to install a primary and/or secondary add-in IDE interface.

The Choices: Enabled (default), Disabled.

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.

NF3 250 AM2 BIOS Setup

Primary/Secondary Master/Slave UDMA

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

The Choices: Auto (default), Disabled.

IDE Prefetch Mode

The “onboard” IDE drive interfaces supports IDE prefetch function for faster drive access. If the interface on your drive does not support prefetching, or if you install a primary and/or secondary add-in IDE interface, set this option to “Disabled”.

The Choices: Enabled (default), Disabled.

IDE DMA Transfer Access

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

The Choices: Enabled (default), Disabled.

Serial-ATA 2(Internal PHY)

Enables support for Serial-ATA controller.

The Choices: Enabled (default), Disabled.

SATA DMA Transfer

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

The Choices: Enabled (default), Disabled.

IDE HDD Block Mode

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

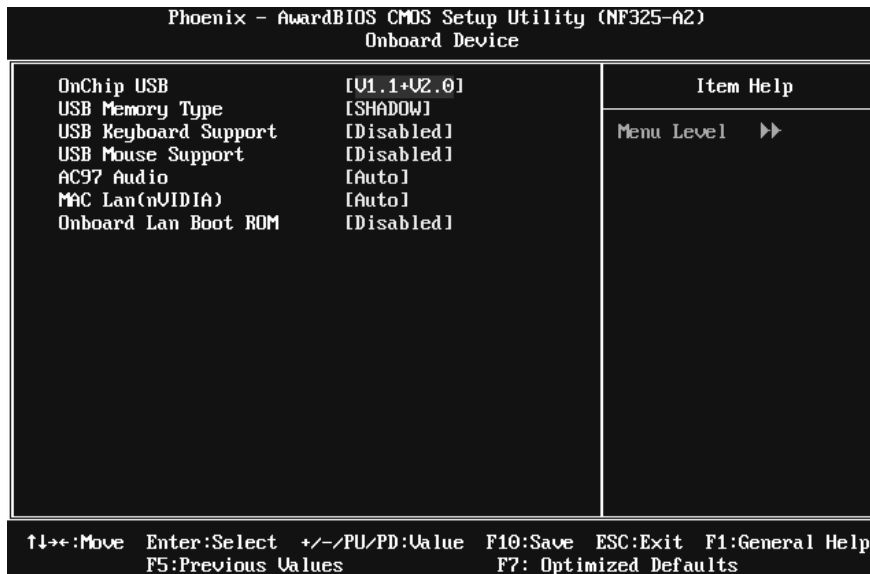
The Choices: Enabled (default), Disabled.

NF3 250 AM2 BIOS Setup

Onboard Device

If you highlight the literal “Press Enter” next to the “Onboard Device” label and then press the enter key, it will take you a submenu with the following options:

◆ **Figure 5. 2 Onboard Device**



OnChip USB

This option should be enabled if your system has a USB installed on the system board. You will need to disable this feature if you add a higher performance controller.

The Choices: V1.1+V2.0 (default), Disabled, V1.1

USB Memory Type

The item allows you select the type of USB Memory.

The Choices: SHADOW (default), Base Memory(640K).

USB Keyboard Support

Enables support for USB attached keyboard.

The Choices: Disabled (default), Enabled.

USB Mouse Support

Enables support for USB attached mouse.

The Choices: Disabled (default), Enabled.

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AC97 Audio

This option allows you to control the onboard AC97 audio.

The Choices: Auto (default), Disabled.

MAC LAN (nVIDIA)

This option allows you to change the state of the onboard MAC LAN.

The Choices: Auto (Default), Disabled.

Onboard LAN Boot ROM

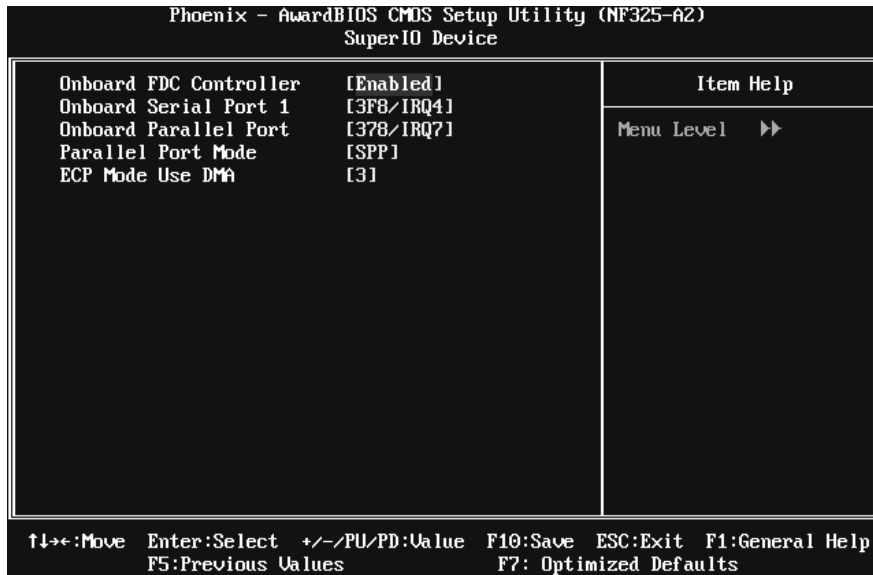
This item allows you to enable or disable Onboard LAN Boot ROM.

The Choices: Disabled (default), Enabled.

Super IO Device

Press Enter to configure the Super I/O Device.

◆ Figure 5.3 Super IO Device



Onboard FDC Controller

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

The Choices: Enabled (default), Disabled.

NF3 250 AM2 BIOS Setup

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.

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.

Parallel Port Mode

The default value is SPP.

The Choices:

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

ECP Mode Use DMA

Select ECP port type 1 or 3.

The Choices: 3 (default), 1.

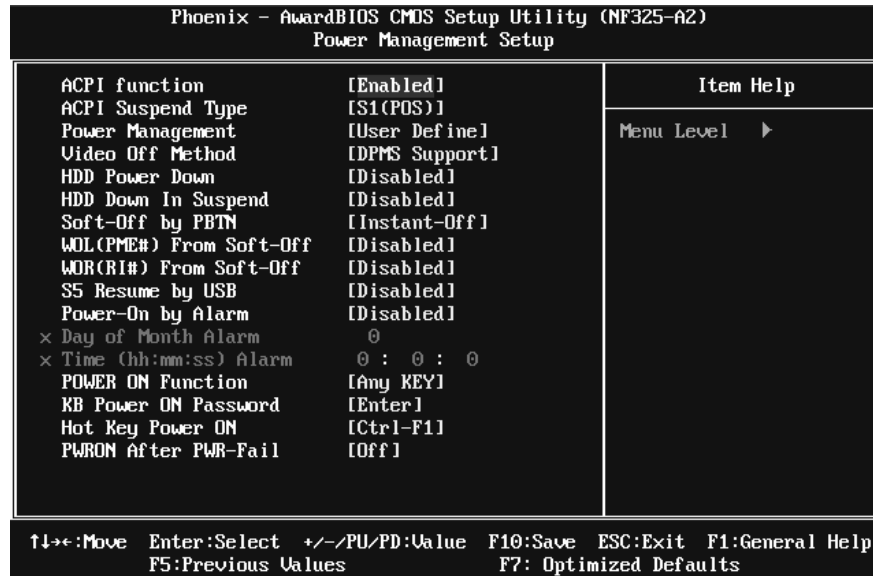


NF3 250 AM2 BIOS Setup

6 Power Management Setup

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

■ **Figure 6. Power Management Setup**



ACPI Function

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

The Choices: Enabled (default), Disabled.

ACPI Suspend Type

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

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

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.

NF3 250 AM2 BIOS Setup

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 PowerDown = 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 PowerDown = 1 min.

User Defined (default)

Allows you to set each mode individually.
When not disabled, each of the ranges are from 1 min. to 1 hr. except for
HDD PowerDown which ranges from 1 min. to 15 min. and disable.

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.

HDD Power Down

When enabled, the hard disk drive will power down and after a set time of system inactivity.
All other devices remain active.

The Choices: Disabled (default), 1Min, 2Min, 3Min, 4Min, 5Min, 6Min, 7Min, 8Min, 9Min, 10Min, 11Min, 12Min, 13Min, 14Min, 15Min.

HDD Down In Suspend

When enabled, the hard disk drive will power down while system suspend.

The Choices: Disabled (default), Enabled.



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Soft-Off by PBTN

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).

WOL (PME#) From Soft-Off

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

WOR (RI#) From Soft-Off

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

S5 Resume by USB

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

Power-On by Alarm

When you select Enabled, an alarm returns the system to Full ON state.

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

Date (ofMonth) Alarm

You can choose which month the system will boot up.

Time (hh:mm:ss) Alarm

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

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

POWER ON Function

This item allows you to choose the power on method.

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

KB Power ON Password

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

Hot Key Power ON

Choose the Hot Key combination to boot up the system.

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

POWER After PWR-Fail

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

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

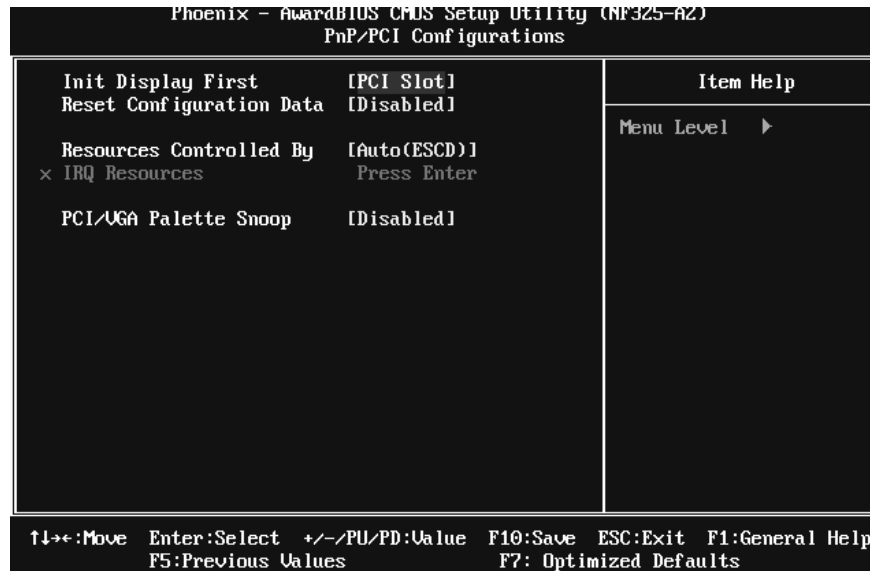


NF3 250 AM2 BIOS Setup

7 PnP/PCI Configurations

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

■ Figure 7. PnP/PCI Configurations



Init Display First

The option let you select the initial display slot.

The Choices: PCI Slot (default), AGP.

Reset Configuration Data

The system BIOS supports the PnP feature which 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 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

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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 signify that a resource is assigned to the PCI Bus or provides for ISA PnP add-on cards and peripherals.

The Choices: Disabled (default), Enabled.

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.

IRQ Resources

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

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



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PCI / VGA Palette Snoop

Choose Disabled or Enabled. Some graphic controllers which 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.

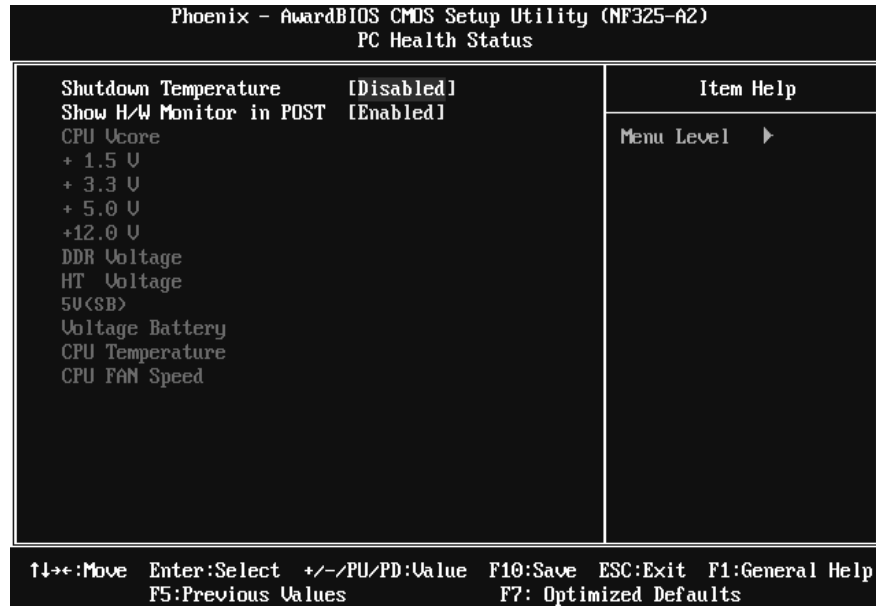
Disabled (default)	Disables the function.
Enabled	Enables the function.



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8 PC Health Status

■ Figure 8. PC Health Status



Shutdown Temperature

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

The Choices: Disabled (default), 70°C / 158°F, 75°C / 167°F, 80°C / 176°F.

Show H/W Monitor in POST

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

The Choices: Enabled (default), Disabled.

CPU Vcore / +1.5V / +3.3V / +5.0V / +12.0V / DDR Voltage / HT Voltage / 5V(SB) / Voltage Battery

Detect the system's voltage and battery status automatically.

NF3 250 AM2 BIOS Setup

CPU Temperature

Show you the current CPU temperature.

CPU FAN Speed

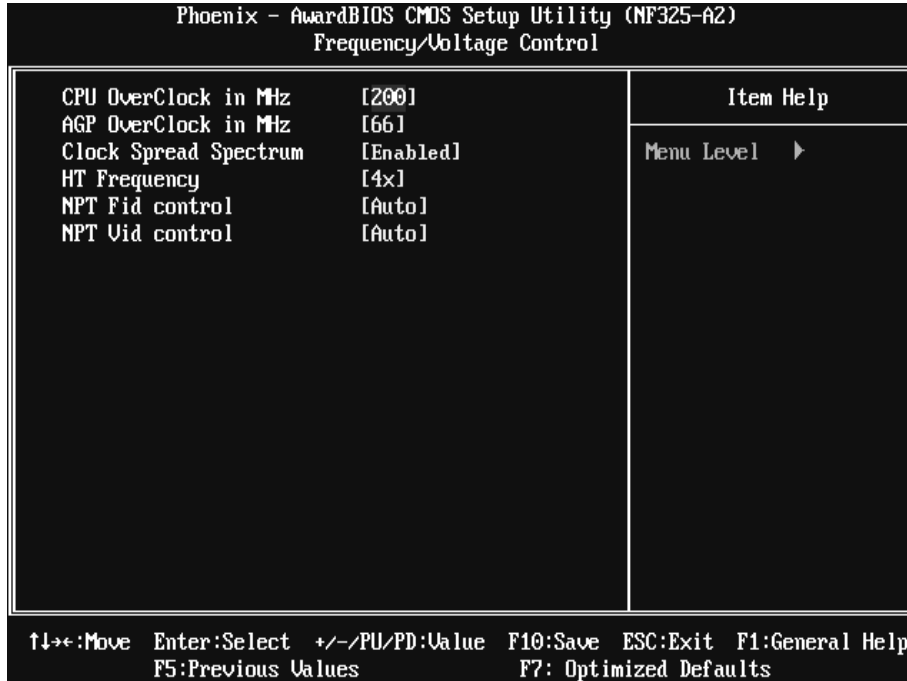
This field displays the current CPU FAN speed.



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9 Frequency/Voltage Control

■ Figure 9. Voltage Control



CPU Overclock in MHz

This item allows you to select CPU frequency.
The Choices: 200 (default), 201~250.

AGP Overclock in MHz

This item allows you to select AGP frequency.
The Choices: 66 (Default), 67~100.

Clock Spread Spectrum

This item allows you to select clock Spread Spectrum function.
The choices: Enabled (default), Disabled.

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HT Frequency

This item allows you to select HT frequency function.

The choices: 4x (default), 1x, 2x, 3x.

NPT Fid control

This function allows you to adjust the frequency ratio of CPU.

The Choices: Auto (default), x4: 800Mhz ~ x25: 5000Mhz
(differs from CPU)

NPT Vid control

This function allows you to adjust the CPU voltage.

The Choices: Auto (default), 0.3875V ~ 1.550V (differs from CPU)

