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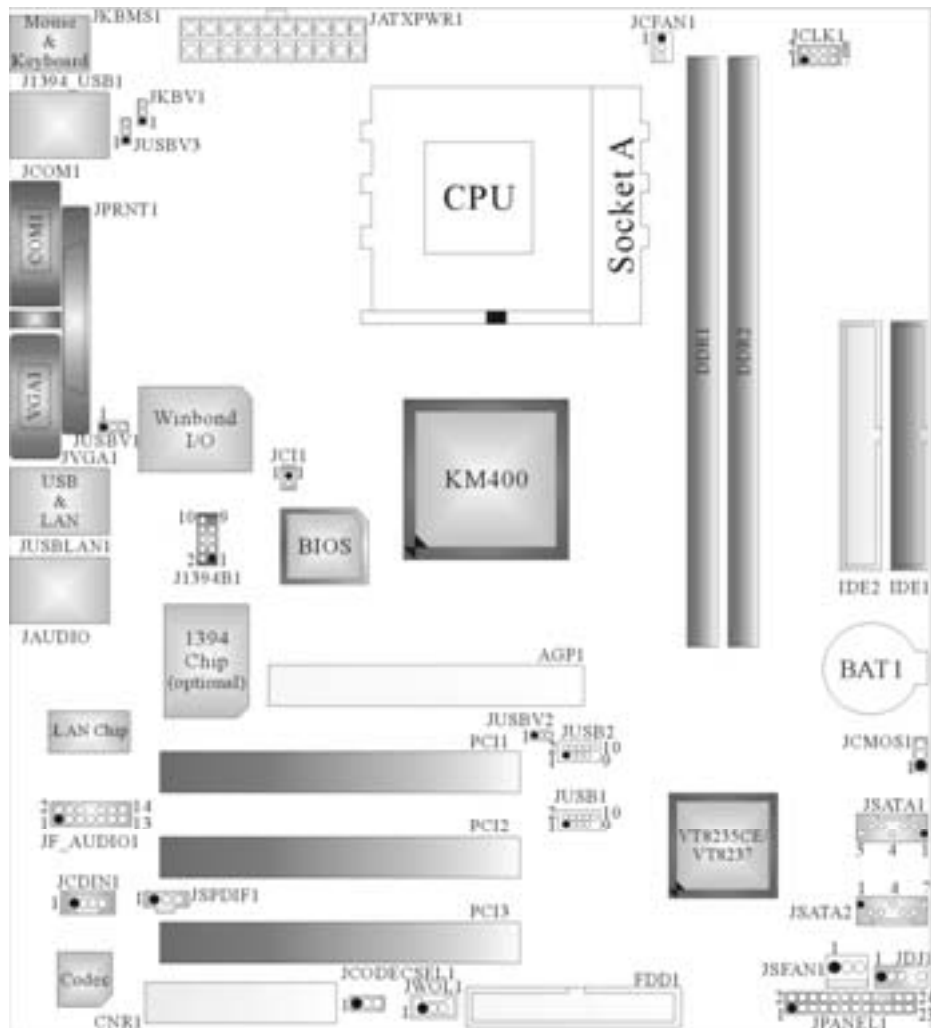
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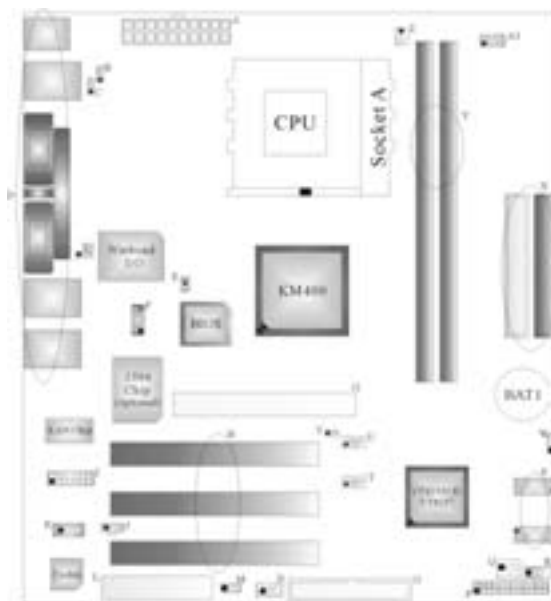
M7VIZ

Layout of M7VIZ (Version 1.3)



NOTE: ● represents the first pin.

Component Index (Version 1.3)



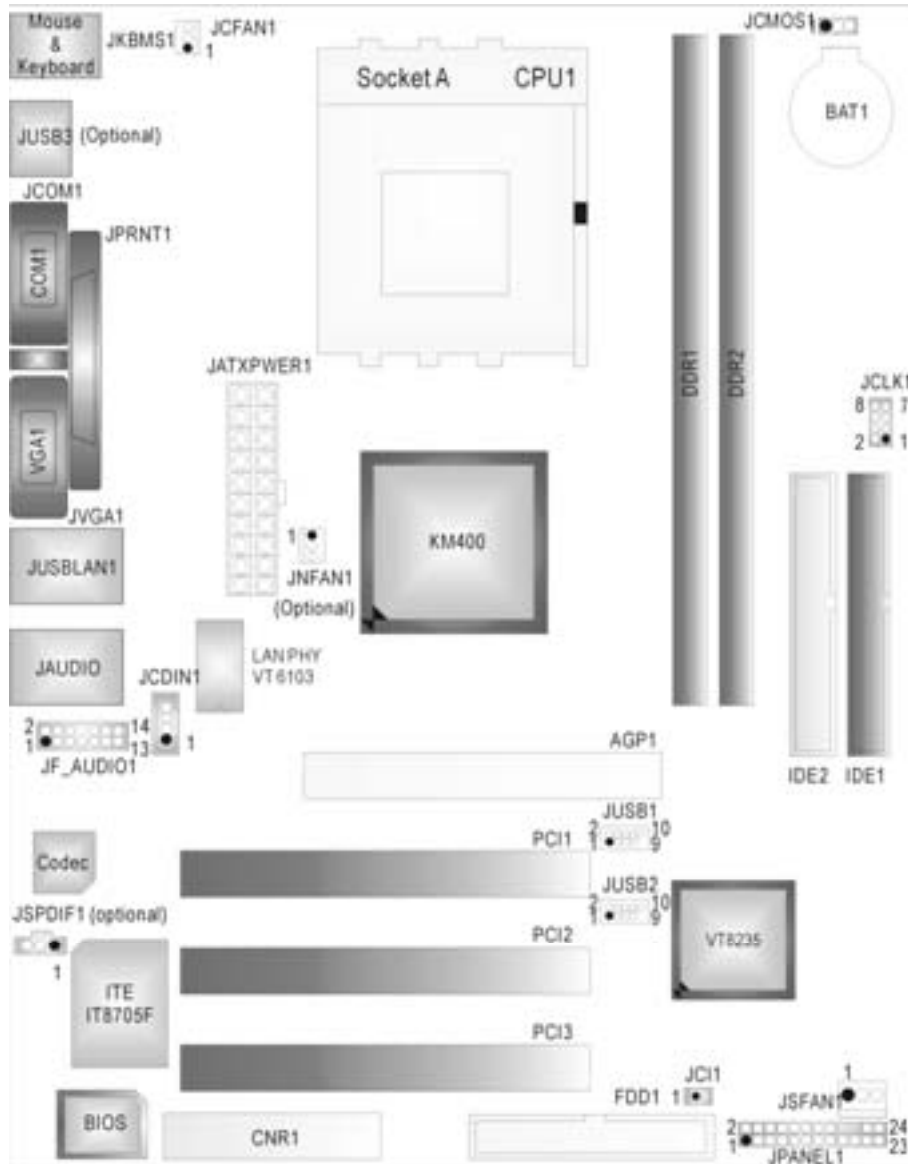
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|--|---|
| A. ATX Power Connector (JATXPWR1) | O. Floppy Disk Connector (FDD1) |
| B. Power Source Selection for Keyboard and Mouse (JKBV1) | P. Front Panel Connector (JPANEL1) |
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| L. Communication Network Riser Slot (CNR1) | Z. CPU Fan Connector (JCFAN1) |
| M. CNR Codec/ Onboard Selection (JCODECSEL1) | A1. Frequency Selection (JCLK1) |
| N. Wake On LAN Header (JWOL1) | B1. Power Source Selection for USB (JUSBV1) |

* optional

© only support with South Bridge VT8237

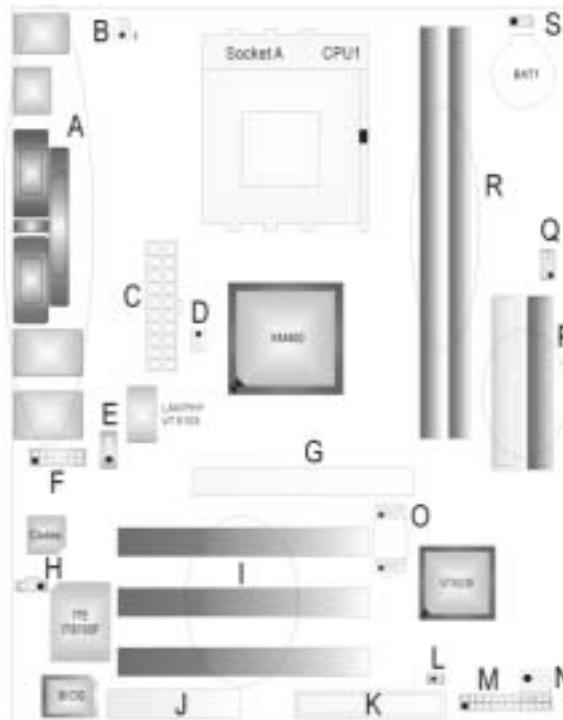
M7VIZ

Layout of M7VIZ (Version 8.0)



NOTE: ● represents the first pin.

Component Index (Version 8.0)



- | | |
|---|--------------------------------------|
| A. Back Panel Connectors | K. Floppy Disk Connector (FDD1) |
| B. CPU Fan Connector (JCFAN1) | L. Case Open Connector (JCI1)* |
| C. ATX Power Connector (JATXPWER1) | M. Front Panel Connector (JPANEL1) |
| D. North Bridge Fan Connector (JNFAN1)* | N. System FAN Header (JSFAN1) |
| E. CD-ROM Audio-In Header (JCDIN1) | O. Front USB Headers (JUSB1 & JUSB2) |
| F. Front Audio Header (JF_AUDIO1) | P. IDE Connectors (IDE1-2) |
| G. Accelerated Graphics Port Slot (AGP1) | Q. Frequency Selection (JCLK1) |
| H. Digital Audio Connector (JSPDIF1)* | R. DDR Modules (DDR1-2) |
| I. PCI BUS Slots (PCI 1-3) | S. Clear CMOS Function (JCMOS1) |
| J. Communication Network Riser Slot (CNR1)* | |

* optional

English

M7VIZ Features

A. Hardware

CPU

- Provides Socket A.
- Supports single AMD® Athlon/ Duron Family processor.
- Front Side Bus at 200/266/333 MHz.

Chipset

- North Bridge: VIA KM400.
- South Bridge: VIA VT8235CE/ VT8237.(optional)

Main Memory

- Supports up to 2 DDR devices.
- Supports SPD DDR 200/266/333/400 MHz (without ECC) DDR devices
- Maximum memory size is 2GB.

Super I/O

- Chip: Winbond W83697HF (Version 1.3).
ITE8705F (Version 8.0)

Slots

- Three 32-bit PCI bus masterslots.
- One CNR slot. (only Type B)
- One AGP 8X slot.

On Board IDE

- Supports four IDE disk drives.
- Supports PIO Mode 4, Master Mode and Ultra DMA 33/66/100/133 Bus Master Mode.

LAN PHY

- Chip: VIA VT6103.
- Supports 10 Mb/s and 100 Mb/s auto-negotiation
- Half/Full duplex capability.

IEEE 1394 Chip (Optional for Version 1.3. None for Version 8.0)

- Chip: VIA VT6307.
- Supports 2 IEEE 1394 ports.
- Detects connected device types and automatically configure data speed to 100, 200 or 400 Mbps.

On Board AC'97 Sound Codec

- Chip: CMI9761A.
- Compliant with AC'97 specification.
- Supports 6 channels.

On Board Peripherals

a. Rearside

- 1 serial port.
- 1 VGA port.
- 1 parallel port. (SPPEPP/ECP mode)
- Audio ports in vertical position.
- 1 RJ-45 LAN jack.
- PS/2 mouse and PS/2 keyboard.
- 2 USB2.0 ports. (4 USB2.0 ports only support with South Bridge VT8237)
- 1 1394A Firewire ports. (Optional for Version 1.3, none for Version 8.0)

b. FrontSide

- 1 floppy port supports 2 FDDs with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
- 4 USB2.0 ports.
- 1 front audio header.
- 1 S/PDIF out header.
- 1 1394A Firewire ports. (Optional for Version 1.3, none for version 8.0)

Dimensions

- ATX Form Factor: 22.1 X 24.5cm (W X L, for version 1.3)
19.4 X 24.4cm (W X L, for version 8.0)

B. BIOS & Software

BIOS

- Award legal BIOS.
- Supports APM1.2.
- Supports ACPI.
- Supports USB Function.

Software

- Supports Warpspeeder™, 9th Touch™, FLASHER™
- Offers the highest performance for Windows 98 SE, Windows 2000, Windows Me, Windows XP, SCO UNIX etc.

Package contents

- HDD Cable X 1
- FDD Cable X 1
- User's Manual X 1
- Fully Setup Driver CD X 1
- USB 2.0 Cable X 1 (optional)
- S/PDIF out Cable X 1 (optional)
- Rear I/O Panel for Micro ATX Case X 1 (optional)
- IEEE 1394 Cable X 1 (optional, none for Version 8.0)

How to set up Jumper

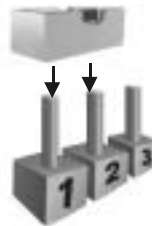
The illustration shows to how set up jumper. When the Jumper cap is placed on pins, the jumper is "close". If no jumper cap is placed on the pins, the jumper is "open". The illustration shows a 3-pin jumper whose pin1 and 2 are "close" when jumper cap is placed on these 2 pins.



Jumper open



Jumper close



Pin1-2 close

CPU Installation

Step1: Pull the lever sideways away from the socket and then raise the lever up to a 90-degree angle.

Step2: 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.

Step3: Hold the CPU down firmly, and then close the lever to complete the installation.

Step4: Put the CPU Fan on the CPU and buckle it. Connect the CPU fan power cable to the JCFAN1. This completes the installation.



Step1



Step2

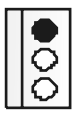


Step3




Step4

CPU Fan Header: JCFAN1

 1 JCFAN1	Pin	Assignment
	1	Ground
	2	+12V
	3	FAN RPM rate Sense

System Fan Header: JSFAN1

 1 JSFAN1	Pin	Assignment
	1	Ground
	2	+12V
	3	FAN RPM rate Sense

DDR DIMM Modules: DDR1, DDR2

DRAM Access Time: 2.5V Unbuffered/ Registered DDR 200 MHz (PC1600)/

DDR 266 MHz (PC2100)/ DDR 333 MHz (PC2700) Type required.

DRAM Type: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM Module (184 pin)

DIMM Socket Location	DDR Module	Total Memory Size (MB)
DDR 1	64MB/128MB/256MB/512MB/1GB *1	Max is 2GB
DDR 2	64MB/128MB/256MB/512MB/1GB *1	

Only for reference

Installing DDR Module

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.



Jumpers, Headers, Connectors & Slots

Floppy Disk Connector: FDD1

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.

Hard Disk Connectors: IDE1/ IDE2

The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0-5, 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.

Peripheral Component Interconnect Slots: PCI 1-3

This motherboard is equipped with 3 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.

Accelerated Graphics Port Slot: AGP1

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.

Communication Network Riser Slot: CNR1

The CNR specification is an open Industry Standard Architecture, and it defines a hardware scalable riser card interface, which supports modem only.

Serial ATA Connector: JSATA1/ JSATA2 (only support with South Bridge VT8237)

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

Note:

1. When plugging SATA HDD on JSATA1 connector, SATA BIOS will automatically detect as channel 1.
2. When plugging SATA HDD on JSATA2 connector, SATA BIOS will automatically detect as channel 0.

Front Panel Connector: JPANEL1



Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	2	Sleep Control	Sleep Button
3	NA		4	Ground	
5	NA		6	NA	NA
7	Speaker		8	Power LED (+)	POWER LED
9	HDD LED (+)	Hard Drive LED	10	Power LED (+)	
11	HDD LED (-)		12	Power LED (-)	
13	Ground	Reset Button	14	Power Button	Power-on Button
15	Reset Control		16	Ground	
17	NA		18	KEY	
19	NA	IrDA Connector	20	KEY	IrDA Connector
21	+5V		22	Ground	
23	IRTX		24	IRRX	

Power Connectors: JATXPWR1

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



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Power Source Selection for Keyboard/ Mouse: JKBV1 (No support for version 8.0)

JKBV1	Assignment	Description
 Pin 1-2 close	+5V	+5V for key board and mouse
 Pin 2-3 close	+5V Standby Voltage	PS/2 Mouse and PS/2 Key board are powered with +5V standby voltage



Note: In order to support the function "power-on the system via keyboard and mouse function, "JKBV1" jumper cap should be placed on pin 2-3.

Power Source Selection for USB: JUSBV1/ JUSBV2/ JUSBV3 (No support for version 8.0)

JUSBV1/JUSBV2/ JUSBV3	Assignment	Description
 Pin 1-2 close	+5V	JUSBV3: 5V for USB at the 1394_USB1 port connector JUSBV2: 5V for USB at the JUSB2 port connector JUSBV1: 5V for USB at the JUSBLAN1 port connector
 Pin 2-3 close	+5V Standby Voltage	JUSBV3: J1394_USB1 port is powered with standby voltage of 5V JUSBV2: JUSB2 port is powered with standby voltage of 5V JUSBV1: JUSBLAN1 port is powered with standby voltage of 5V

Note: In order to support the function "power-on the system via USB devices function, "JUSBV1/JUSBV2/ JUSBV3" jumper cap should be placed on pin 2-3 respectively.


Clear CMOS Jumper: JCMOS1

JCMOS1	Assignment
 Pin 1-2 Close	Normal Operation (default)
 Pin 2-3 Close	Clear CMOS Data

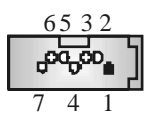
※ **Clear CMOS Procedures:**

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.


Case Open Connector: JCI1

 JCI1	Pin	Assignment
	1	Case Open Signal
	2	Ground

Serial ATA Connector: JSATA1/ JSATA2 (Only support with South Bridge VT8237)


 JSATA1/ JSATA2	Pin	Assignment	Pin	Assignment
	1	Ground	2	TX+
	3	TX-	4	Ground
	5	RX-	6	RX+
	7	Ground		

CD-ROM Audio-In Header: JCDIN1


 JCDIN1	Pin	Assignment
	1	Left Channel Input
	2	Ground
	3	Ground
	4	Right Channel Input

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Front Panel Audio Header: JF_AUDIO1

				JF_AUDIO1			
Pin	Assignment	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				

Digital Audio Connector: JSPDIF1 (Optional for version 8.0)


	Pin	Assignment
	1	+5V
	2	SPDIF_OUT
	3	Ground

Wake On LAN Header: JWOL1 (No support for version 8.0)

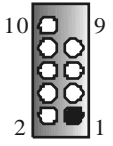
	Pin	Assignment
	1	+5V_SB
	2	Ground
	3	Wake up

Front USB Header: JUSB2, (JUSB1=>only support with South Bridge VT8237)



Note: Version 8.0 supports both JUSB 1 & JUSB2.

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

Front 1394 Header: J1394B1

 <p>J1394B1</p>	Pin	Assignment	Pin	Assignment
	1	A+	2	A-
	3	Ground	4	Ground
	5	B+	6	B-
	7	+12V	8	+12V
	9	KEY	10	Ground

CNR Codec/ Onboard Selection: JCODECSEL1

JCODECSEL1	Assignment
 <p>Pin 1-2 Close</p>	Onboard Codec is used (default)
 <p>Pin 2-3 Close</p>	CNR Codec is used


Frequency Selection: JCLK1 (Version 1.3)

Pin	100 MHz	133 MHz (Default)	166 MHz
1-2	Open	Open	Open
3-4	Close	Open	Open
5-6	Open	Open	Close
7-8	Open	Open	Open

Frequency Selection: JCLK1 (Version 8.0)

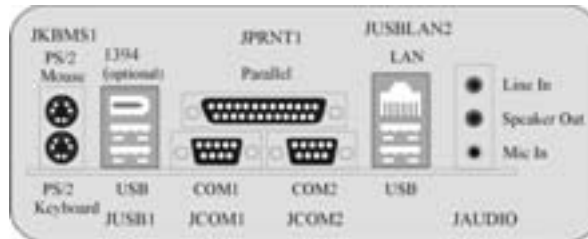
Pin	100 MHz	133 MHz (Default)	166 MHz
1-2	Close	Open	Open
3-4	Close	Close	Open
5-6	Open	Open	Open
7-8	Open	Open	Open

Audio DJ: JDJ1

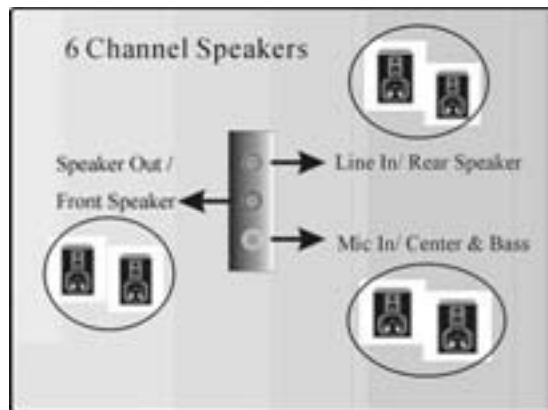
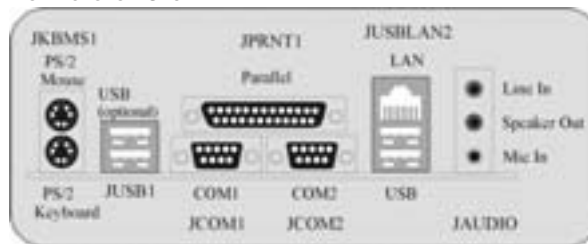
 <p>JDJ1</p>	Pin	Assignment	Pin	Assignment
	1	SMBDT	2	SMBCK
	3	-INTR_B	4	NA
	5	PWRGD		

Back Panel Connectors

For version 1.3



For version 8.0



Trouble Shooting

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

Français

Caractéristiques de la M7VIZ

A. Matériel

Processeur

- Fournit un support Socket A.
- Prend en charge un unique processeur AMD® de la famille Athlon/ Duron.
- Bus face avant à 200/266/333 MHz.

Chipset

- Pont nord : VIA KM400.
- Pont sud : VIA VT8235CE/ VT8237.(option)

Mémoire principale

- Prend en charge 2 barrettes DDR.
- Prise en charge des périphériques SFD DDR 200/266/333/400 MHz (sans ECC).
- Taille maximale de mémoire : 2 Go.

Super E/S

- Puce : Winbond W83697HF. (Version 1.3)
- ITE8705F. (Version 8.0)

Expansion

- Trois emplacements PCI 32 bits bus maître.
- Un emplacement CNR. (Type B uniquement)
- Un emplacement AGP 8X.

IDE intégré

- Prend en charge quatre lecteurs de disques IDE.
- Prend en charge les modes PIO 4, Maître et bus maître Ultra DMA 33/66/100/133.

Réseau

- Puce : VIA VT6103.
- Prend en charge la négociation automatique 10 Mb/s et 100 Mb/s
- Capacité semi duplex/duplex complet.

Puce IEEE 1394 (Option, Version 8.0 non prise en charge)

- Puce : VIA VT6307.
- Prend en charge 2 ports IEEE 1394.
- Détecte les périphériques connectés et configure automatiquement la vitesse de transfert des données à 100, 200 ou 400 Mb/s.

Codec son AC'97 intégré

- Puce : CM19761A.
- Conforme à la spécification AC'97.
- Prend en charge 6 canaux.

Périphériques intégrés**a. Face arrière**

- 1 port série.
- 1 port VGA
- 1 port parallèle. (mode SPP/EPP/ECP)
- Ports audio en position verticale.
- 1 prise réseau RJ-45.
- Souris et clavier PS2.
- 2 ports USB2.0. (4 ports USB2.0 uniquement avec le pont sud VT8237)
- 1 port 1394A Firewire. (option, Version 8.0 non prise en charge)

b. Face avant

- 1 port pour lecteur de disquettes prend en charge deux lecteurs de disquettes avec 360K, 720K, 1,2M, 1,44M et 2,88 Mo.
- 4 ports USB2.0.
- 1 connecteur audio avant.
- 1 connecteur S/PDIF.
- 1 port 1394A Firewire. (option, Version 8.0 non prise en charge.)

Dimensions

- Facteur de forme ATX: 22,1 X 24,5cm (I X L)
19.4 X 24.4cm (I X L, Version 8.0)

B. BIOS et logiciel**BIOS**

- BIOS Award.
- Prend en charge APM1.2.
- Prend en charge ACPI.
- Prend en charge la fonction USB.

Logiciel

- Prend en charge Warpspeeder™, 9th Touch™, FLASHER™
- Offre la meilleure performance sous Windows 98 SE, Windows 2000, Windows Me, Windows XP, SCO UNIX etc.

Contenu du carton

- Câble pour disque dur X1
- Câble pour lecteur de disquette X1
- Manuel de l'utilisateur X1
- CD complet d'installation des pilotes X 1
- Câble USB2.0 X1 (option)
- Câble S/PDIF X 1(option)
- Panneau d'E/S arrière pour châssis ATX X 1 (option)
- Câble IEEE 1394 X1 (option, Version 8.0 non prise en charge.)

Dépannage

PROBLÈME	SOLUTION
Pas d'alimentation au système. Les voyants lumineux ne s'allument pas, le ventilateur à l'intérieur du bloc d'alimentation ne se met pas en marche. Le voyant du clavier ne s'allume pas	<ul style="list-style-type: none"> * Assurez-vous que le câble d'alimentation est bien branché * Remplacez le câble * Contactez le service d'assistance technique.

PROBLÈME	SOLUTION
Le système ne fonctionne pas. Les voyants du clavier sont allumés, les voyants de l'alimentation aussi, le disque dur tourne.	<ul style="list-style-type: none"> * En exerçant une pression uniforme sur les deux extrémités du DIMM poussez le module vers le bas jusqu'à ce qu'il s'enclenche.

PROBLÈME	SOLUTION
Le système ne se réinitialise pas du disque dur, réinitialisation possible depuis le lecteur CD-ROM.	<ul style="list-style-type: none"> * Vérifiez le câble du disque à la carte du contrôleur de disque. Assurez-vous que les deux extrémités sont bien branchées ; vérifiez le type de lecteur dans la configuration standard de CMOS. * Il est très important d'effectuer des sauvegardes du disque dur. Les disques durs peuvent tomber en panne à n'importe quel moment.

PROBLÈME	SOLUTION
Le système ne se réinitialise que depuis le CD-ROM. Le disque dur peut être lu et les applications sont utilisables mais il est impossible d'effectuer de réinitialisation depuis le disque dur.	<ul style="list-style-type: none"> * Effectuez une sauvegarde des fichiers des données et d'application. Reformatez le disque dur. Ré-installez les applications et les données sauvegardées sur les disques de secours.

PROBLÈME	SOLUTION
Un message s'affiche indiquant que la configuration n'est pas valide ou qu'il y a une panne du CMOS.	<ul style="list-style-type: none"> * Vérifiez l'équipement du système. Assurez-vous que les informations de la configuration sont correctes.

PROBLÈME	SOLUTION
Impossible de réinitialiser le système après l'installation d'un deuxième disque dur.	<ul style="list-style-type: none"> * Réglez les cavaliers maître/esclave correctement. * Exécutez le programme SETUP et sélectionnez les types de lecteur. Contactez les fabricants pour toute question de compatibilité avec les autres disques.

WarpSpeeder



Introduction

[WarpSpeeder™], a new powerful control utility, features three userfriendly 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.

System Requirement

OS Support: Windows 98 SE, Windows Me, Windows 2000, Windows XP

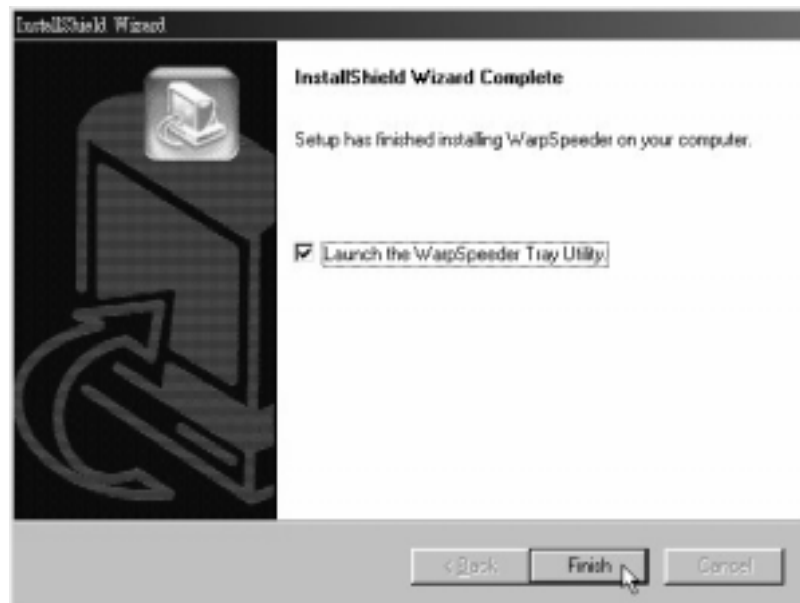
DirectX: DirectX 8.1 or above. (The Windows XP operating system includes DirectX 8.1. If you use Windows XP, you do not need to install DirectX 8.1.)

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.



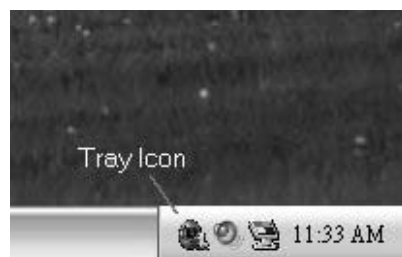
Usage

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

[WarpSpeeder™] includes 1 tray icon and 5 panels:

1. Tray Icon:

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



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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.

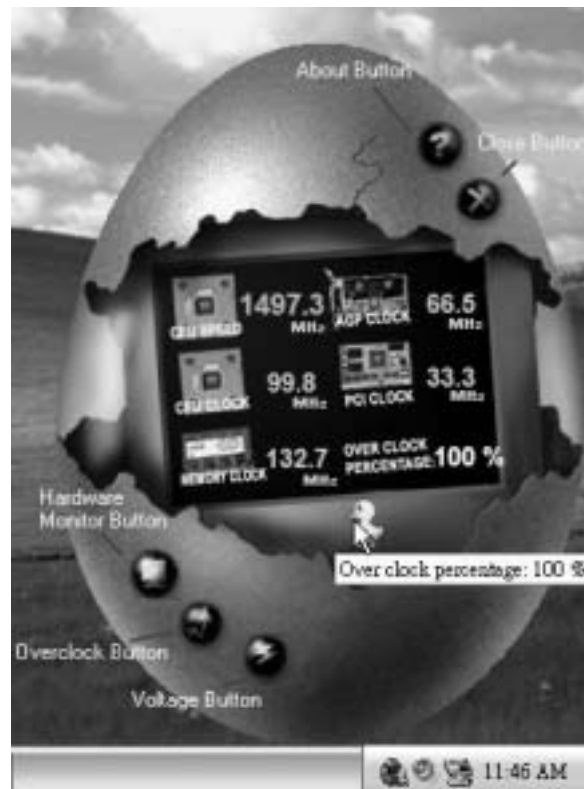
Main Panel contains features as follows:

- 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.

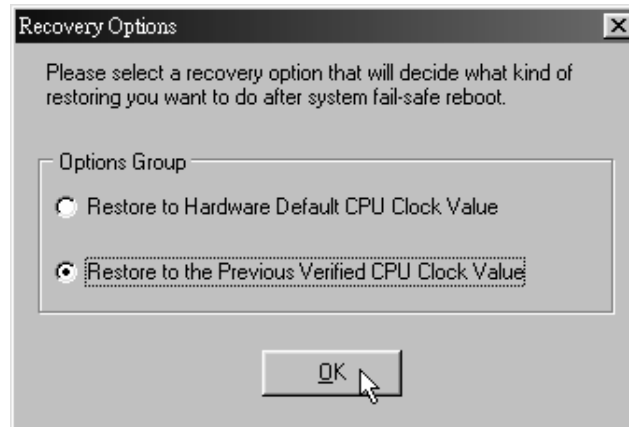


Overclock Panel contains the these features:

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

Warning: Manually overdock 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.



- d. "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.
- e. "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 chipsets, [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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05/28/2004

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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. Power to the hard disk drives and video monitors can be managed by this AWARD BIOS.

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.

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PCI Bus Support

This AWARD BIOS also supports Version 2.1 of the Intel PCI (Peripheral Component Interconnect) local bus specification.

DRAM Support

DDR SDRAM (Double Data Rate Synchronous DRAM) are supported.

Supported CPUs

This AWARD BIOS supports the AMD 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

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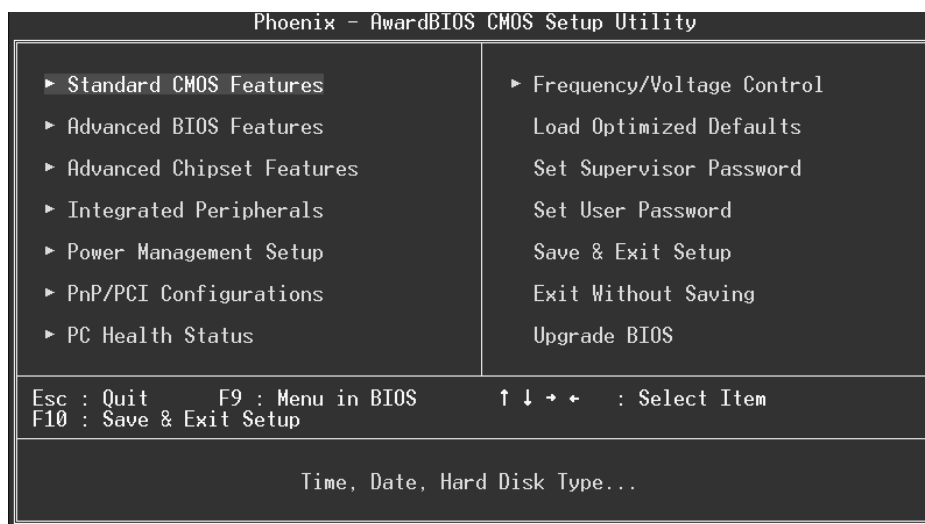
1 Main Menu

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.

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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 the 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:

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Set User Password

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

Enter Password:

Save & Exit Setup

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

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

Exit Without Saving

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

Quit Without Saving (Y/N)? N

Upgrade BIOS

This submenu allows you to upgrade bios.

BIOS UPDATE UTILITY (Y/N)? N

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2 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into 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

Phoenix - AwardBIOS CMOS Setup Utility		
Standard CMOS Features		
Date (mm:dd:yy)	Tue, Jun 10 2003	Item Help Menu Level ▶ Change the day, month, year and century
Time (hh:mm:ss)	17 : 41 : 52	
▶ IDE Primary Master		
▶ IDE Primary Slave		
▶ IDE Secondary Master		
▶ 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		

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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.

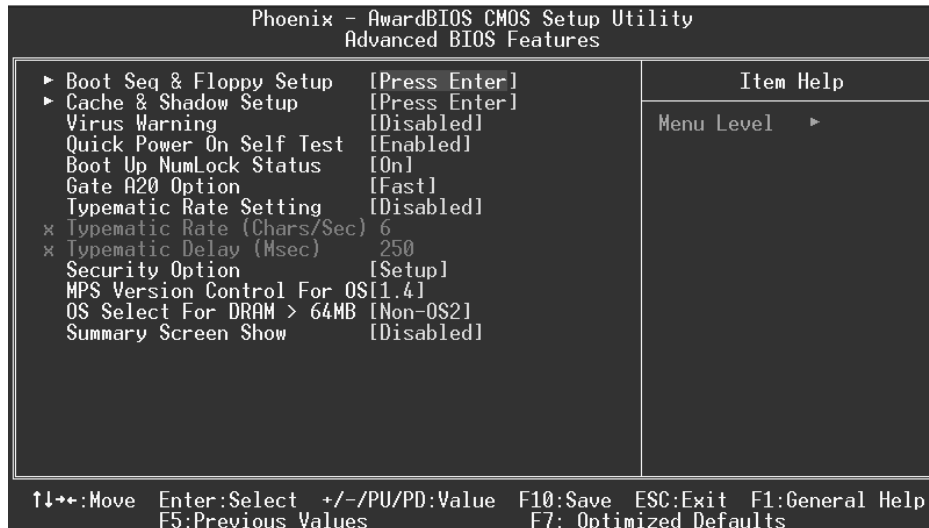
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Item	Options	Description
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/ Key	Select the situation in which you want the BIOS to stop the POST process and notify you.
Base Memory	N/A	Displays the amount of conventional memory detected during boot up.
Extended Memory	N/A	Displays the amount of extended memory detected during boot up.
Total Memory	N/A	Displays the total memory available in the system.

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3 Advanced BIOS Features

■ Figure 3. Advanced BIOS Setup



Boot Seq & Floppy Setup

This item allows you to setup boot seq & Floppy.

First/ Second/ Third/ Boot Other Device

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

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

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Cache & Shadow Setup

This item allows you to setup cache & shadow setup.

CPU Internal 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.

External Cache

This option enables or disables "Level 2" secondary cache on the CPU, which may improve performance.

Enabled (default)	Enable cache.
Disabled	Disable cache.

CPU L2 Cache ECC Checking

This item allows you to enable/disable CPU L2 Cache ECC Checking

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

Video BIOS Shadow

Determines whether video BIOS will be copied to RAM for faster execution.

Enabled (default)	Optional ROM is enabled.
Disabled	Optional ROM is disabled.

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.

Enabled (default)	Enable quick POST.
Disabled	Normal 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.

Normal	A pin in the keyboard controller
--------	----------------------------------

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Fast (default) controls Gate A20.
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.

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.

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.

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.

Summary Screen Show

This item allows you to enable/ disable display the Summary Screen Show.

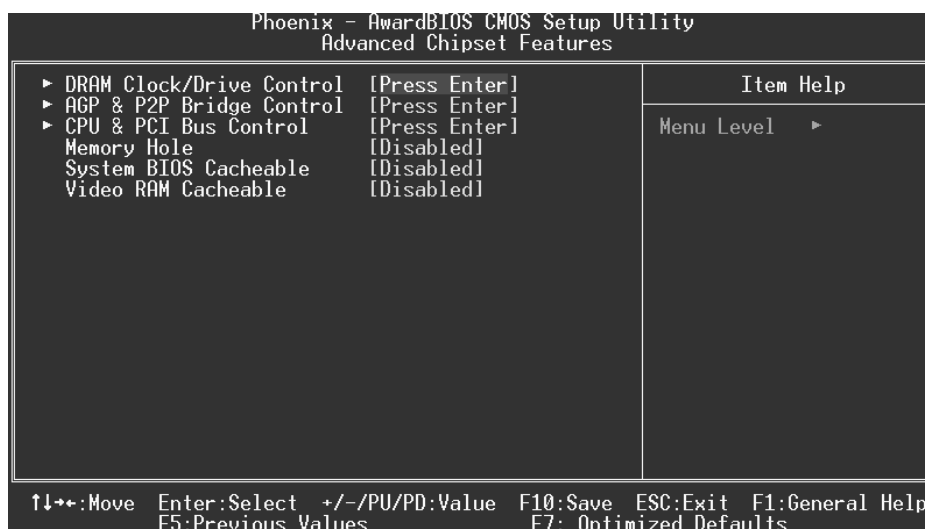
The Choices: Disabled (default), Enabled.

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4 Advanced Chipset Features

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

■ **Figure 4. Advanced Chipset Setup**



DRAM Clock/Drive Control

To control the Clock/Drive. If you highlight the literal "Press Enter" next to the "DRAM Clock/Drive Control" label and then press the enter key, it will take you a submenu with the following options:

DRAM Clock

This item determines DRAM clock following 100MHz, 133MHz, 166MHz or By SPD.

The Choices: 100MHz, 133MHz, **By SPD** (default), 166MHz.

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DRAM Timing

This item determines DRAM clock/ timing follow SPD or not.

The Choices: Auto By SPD (default), Manual, Turbo, Ultra.

DRAM CAS Latency

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

The Choices: 2.5 (default), 2.

Bank Interleave

This item allows you to enable or disable the bank interleave feature.

The Choices: Disabled (default), 2 bank, 4 bank.

Precharge to Active (Trp)

This item allows you to specify the delay from precharge command to activate command.

The Choices: 2T, 3T, 4T, 5T (default).

Tras Non DDR 400/ DDR 400

This item allows you to choose Non DDR 400/ DDR 400

The Choices: 6T/ 8T, 7T/10T (default), 5T/ 6T, 8T, 12T.

Active to Precharge (Tras)

This item allows you to specify the minimum bank active time.

The Choices: 7T, 6T (default).

Active to CMD (Trecd)

Use this item to specify the delay from the activation of a bank to the time that a read or write command is accepted.

The Choices: 2T, 3T, 4T, 5T (default).

DRAM Burst Length

The Choices: 4 (default), 8.

DRAM Queue Depth

This item permits to place the depths of the memory. The deeper the depth is, the better is this function.

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

DRAM Command Rate

This item controls clock cycle that must occur between the last valid write operation and the next command.

The Choices: 1T Command, 2T Command (default).

Write Recovery Time

This item allows you to select the recovery time.

The Choices: 2T, 3T (default).

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tWTR for DDR400 only

This item allows you to choose tWTR for DDR 400 only.

The Choices: 1T, 2T, **3T** (default).

AGP & P2P Bridge Control

If you highlight the literal “Press Enter” next to the “AGP & P2P Bridge Control” label and then press the enter key, it will take you a submenu with the following options:

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, 16M, 8M, 4M.

AGP Mode

This item allows you to select the AGP Mode.

The Choices: **4X** (default), 2X, 1X.

AGP Driving Control

By choosing “Auto” the system BIOS will the AGP output Buffer Drive strength P Ctrl by AGP Card. By choosing “Manual”, it allows user to set AGP output Buffer Drive strength P Ctrl by manual.

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

AGP Driving Value

While AGP driving control item set to “Manual”, it allows user to set AGP driving.

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

AGP Fast Write

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

AGP Master 1 WS Write

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

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

AGP Master 1 WS Write

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

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

AGP Master 1 WS Read

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

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

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CPU & PCI Bus Control

If you highlight the literal “Press Enter” next to the “CPU & PCI Bus Control” label and then press the enter key, it will take you a submenu with the following options:

PCI1 Master 0 WS Write

When enabled, writes to the PCI bus are executed with zero-wait states.

The Choices: Enabled (default), Disabled.

PCI2 Master 0 WS Write

When enabled, writes to the AGP bus are executed with zero-wait states.

The Choices: Enabled (default), Disabled.

PCI1 Post Write

When Enabled, CPU writes are allowed to post on the PCI bus.

The Choices: Enabled (default), Disabled.

PCI2 Post Write

When Enabled, CPU writes are allowed to post on the AGP bus.

The Choices: Enabled (default), Disabled.

VLink 8X Support

This item allows you to enable or disable VLink 8X support.

The Choices: Enabled (default), Disabled.

PCI Delay Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select Enabled to support compliance with PCI specification.

The Choices: Enabled (default), Disabled.

Memory Hole

When enabled, you can reserve an area of system memory for ISA adapter ROM. When this area is reserved, it cannot be cached. Refer to the user documentation of the peripheral you are installing for more information.

The Choices: Disabled (default), 15M – 16M.

System BIOS Cacheable

Selecting the “Enabled” option allows caching of the system BIOS ROM at F0000h-FFFFFh, 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).

Video RAM Cacheable

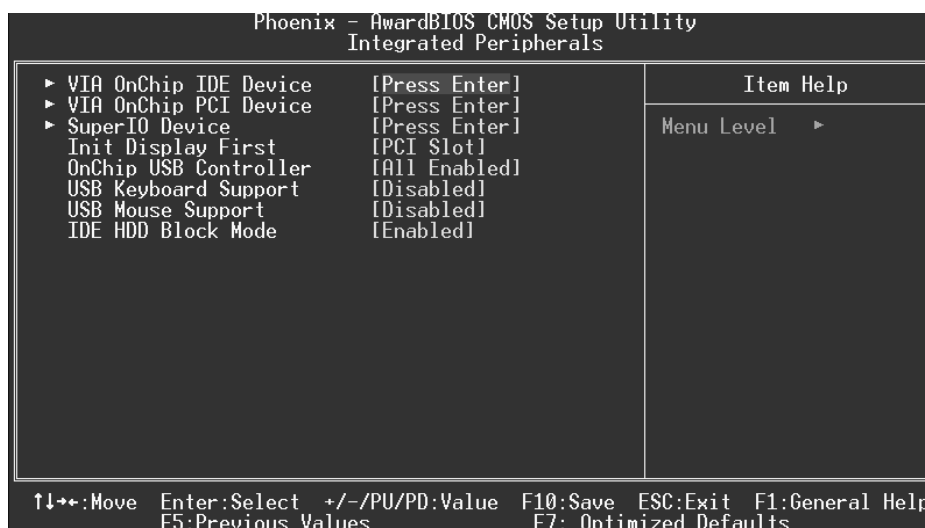
Enabling this option allows caching of the video RAM, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

The Choices: Enabled, Disabled (default).

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5 Integrated Peripherals

■ Figure 5. Integrated Peripherals



VIA OnChip IDE Device

The chipset contains a PCI IDE interface with support for two IDE channels.

Select "Enabled" to activate the first and / or second IDE interface. If you install a primary and / or secondary add-in IDE interface, select "Disabled" to deactivate an interface. If you highlight the literal "Press Enter" next to the "Onchip IDE Control" label and then press the enter key, it will take you a submenu with the following options:

OnChip 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.

IDE Prefetch Mode

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

The Choices: Enabled (default), Disabled.

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IDE Primary / Secondary Master / Slave PIO

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

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

IDE 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.

IDE HDD Block Mode

If your IDE hard drive supports block mode, select “Enabled” for automatic detection of the optimal number of block read/ writes per sector the drive can support.

The Choices: Enabled (default), Disabled.

VIA OnChip PCI Device

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

USB2.0 Support

This item allows you to enable or disable USB2.0.

The Choices: Enabled (default), Disabled.

VIA-3058 AC97 Audio

This option allows you to control the onboard AC97 audio.

The Choices: Auto (default), Disabled.

VIA-3068 MC97 Modem

This option allows you to control the onboard MC97 modem.

The Choices: Auto (default), Disabled.

VIA-3043 OnChip LAN

This option allows you to control the onboard LAN.

The Choices: Enabled (default), Disabled.

Onboard LAN Boot ROM

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

The Choices: Disabled (default), Enabled.

Onchip USB Controller

Select “Enabled” if your system contains a Universal Serial Bus (USB) controller

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and you have USB peripherals.

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

USB Keyboard/ Mouse Support

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

The Choices: Disabled (default), Enabled.

1394 Fire Wire

This item allows you to enable or disable 1394 Fire Wire.

The Choices: Enabled (default), Disabled.

Super IO Device

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

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.

Onboard Serial Port 1

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

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

Onboard Serial Port 2

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

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

UART Mode Select

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

The Choices: Normal (default), AS KIR, IrDA.

RxD, TxD Active

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

The Choices: Hi / Lo (default), Hi / Hi, Lo / Hi, Lo / Lo.

IR Transmission Delay

This item allows you to enable/disable IR transmission delay.

The Choices: Enabled (default), Disabled.

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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.

Use IR Pins

Consult your IR peripheral documentation to select the correct setting of the TxD and RxID signals.

The Choices: IR-Rx2Tx2 (default), RxID2, TxID2.

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.

EPP Mode Select

Select EPP port type 1.7 or 1.9.

The Choices: EPP 1.7(default), EPP 1.9.

ECP Mode Use DMA

Select a DMA Channel for the port.

The Choices: 3 (default), 1.

Game Port Address

Game Port I/O Address.

The Choices: 201 (default), 209, Disabled.

Midi Port Address

Midi Port Base I/O Address.

The Choices: 330 (default), 300, 290, Disabled.

Midi Port IRQ

This determines the IRQ in which the Midi Port can use.

The Choices: 5, 10 (default)

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Init Display First

With systems that have multiple video cards, this option determines whether the primary display uses a PCI Slot or an AGP Slot.

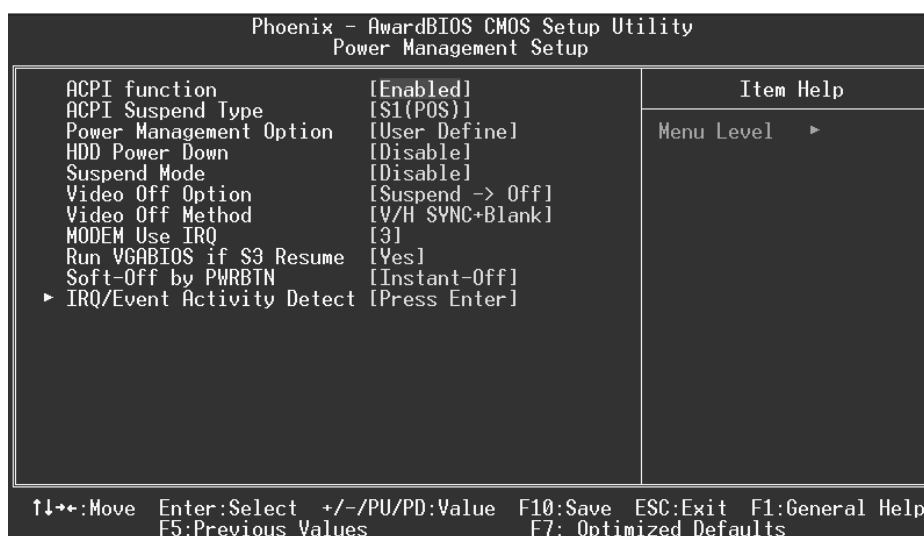
The Choices: **PCI Slot** (default), AGP.

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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.Suspend Mode.

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

M7VIZ BIOS Setup

Min. Power Saving

Minimum power management.
Suspend Mode = 1 hr.
HDD Power Down = 15 min

Max. Power Saving

Maximum power management only available for sl CPU's.
Suspend Mode = 1 min.
HDD Power Down = 1 min.

User Define (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 Power Down which ranges from 1 min. to 15 min. and disable.

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), 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, 15Min.

Suspend Mode

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

The Choices: Disabled (default), 1 Min, 2 Min, 4 Min, 6 Min, 8 Min, 10 Min, 20 Min, 30 Min, 40 Min, 1 Hour.

Video Off Option

This field determines when to activate the video off feature for monitor power management.

The Choices: Suspend→Off (default), Always on.

Video Off Method

This option determines the manner in which the monitor is goes blank.

V/H SYNC+Blank (default)

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.

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DPMS

Initial display power management signaling

The Choices: Stop Grant, PwrOn Suspend

Modem Use IRQ

This determines the IRQ, which can be applied in MODEM use.

The Choices: 3 (default), 4 / 5 / 7 / 9 / 10 / 11 / NA.

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, Yes (default), No.

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).

IRQ/Event Activity Detect

If you highlight the literal “Press Enter” next to the “IRQ/Event Activity Detect” label and then press the enter key, it will take you a submenu with the following options:

VGA

When set to **On**, any event occurring at a VGA Port will awaken a system which has been powered down.

The Choices: Off (default), On.

LPT & COM

When this option is set to **On**, any event occurring at a COM(serial)/LPT (printer) port will awaken a system which has been powered down.

The Choices: LPT/COM (default), COM, LPT, NONE.

HDD & FDD

When this option is set to **On**, any event occurring on a hard drive or a floppy drive will awaken a system which has been powered down.

The Choices: On (default), Off.

PCI Master

When set to **On**, you need a LAN add-on card which supports the power function. It should also support the wake-up on LAN jump.

The Choices: Off (default), On.

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PowerOn by PCI Card

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

The Choices: Disabled (default), Enabled.

Wake Up On LAN/Ring

To use this function, you need a LAN add-on card which support power on function. It should also support the wake-up on LAN jump.

Disabled (default) Wake up on LAN/Ring not supported.

Enabled Wake up on LAN/Ring supported.

RTC Alarm Resume

When "Enabled", you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode.

The Choices: Enabled, Disabled (default).

IRQs Activity Monitoring

Press Enter to access another sub menu used to configure the different wake up events (i.e. wake on LPT & COMM activity).

Primary INTR	On
IRQ3 (COM2)	Enabled
IRQ4 (COM1)	Enabled
IRQ5 (LPT2)	Enabled
IRQ6 (Floppy Disk)	Enabled
IRQ7 (LPT1)	Enabled
IRQ8 (RTC Alarm)	Disabled
IRQ9 (IRQ2 Redir)	Disabled
IRQ10 (Reserved)	Disabled
IRQ11 (Reserved)	Disabled
IRQ12 (PS/2 Mouse)	Enabled
IRQ13 (Coprocessor)	Enabled
IRQ14 (Hard Disk)	Enabled
IRQ15 (Reserved)	Disabled

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7 PnP/PCI Configurations

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

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

Phoenix - AwardBIOS CMOS Setup Utility		
PnP/PCI Configurations		
PNP OS Installed	[No]	Item Help
Reset Configuration Data	[Disabled]	Menu Level ▶
Resources Controlled By	[Auto(ESCD)]	Select Yes if you are using a Plug and Play capable operating system. Select No if you need the BIOS to configure non-boot devices.
x IRQ Resources	Press Enter	
PCI/VGA Palette Snoop	[Disabled]	
Assign IRQ For VGA	[Enabled]	
Assign IRQ For USB	[Enabled]	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F7: Optimized Defaults		

PNP OS Installed

When set to YES, BIOS will only initialize the PnP cards used for the boot sequence (VGA, IDE, SCSI). The rest of the cards will be initialized by the PnP operating system like Window™ 95. When set to NO, BIOS will initialize all the PnP cards. For non-PnP operating systems (DOS, Netware™), this option must set to NO.

The Choices: No (default), Yes.

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 (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

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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.

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

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.

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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.

Assign IRQ For VGA

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

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

Assign IRQ For USB

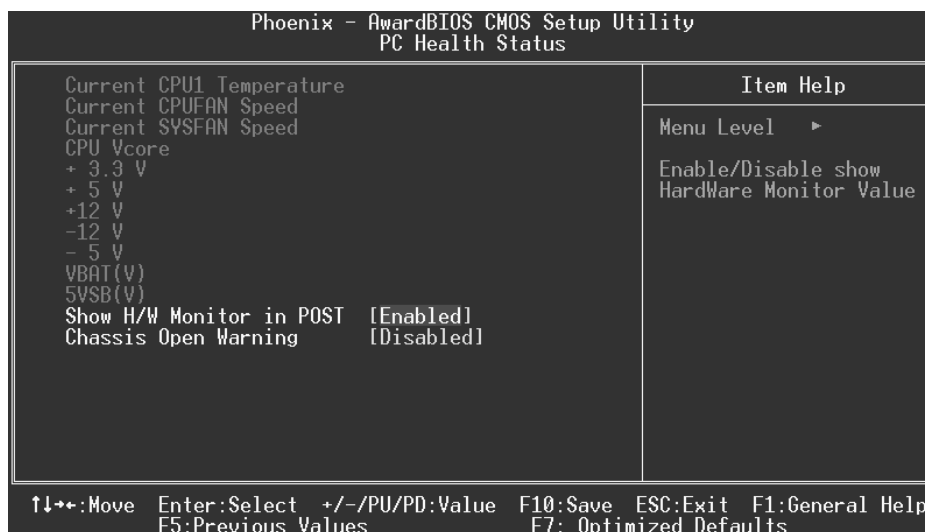
This item allows the users to choose which IRQ to assign for the USB.

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

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8 PC Health Status

■ Figure 8. PC Health Status



Current CPU1 Temperature

This field displays the current temperature of the CPU.

Current CPU FAN Speed

This field displays the current speed of CPU fan.

Current SYS FAN Speed

This field displays the current speed SYSTEM fan.

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), 60°C /140F, 65°C /149F, 70°C /158F, 75°C /167F.

CPU Vcore/3.3V/ +5V/ +12V/ -12V/ -5V/ 5VSB/ VBAT(V)

Detect the system's voltage status automatically.

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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 time for you to choose.

The Choices: Enabled (default), Disabled.

Chassis Open Warning

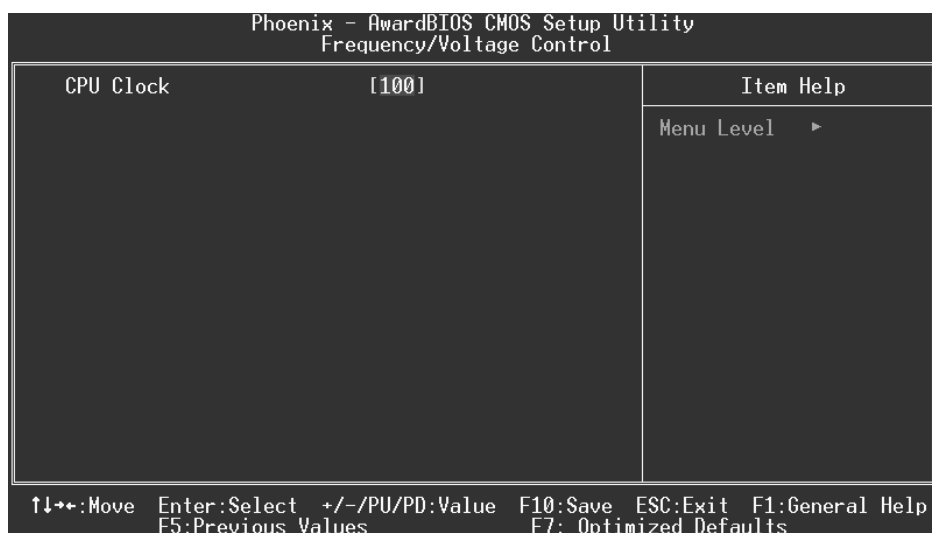
This item allows you to enable or disable Chassis Open Warning beep.

The Choices: Disabled (Default), Enabled.

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9 Frequency/ Voltage Control

■ Figure 9. Frequency/ Voltage Control



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.