P4M800 Pro

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FCC Compliance Statement

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. However, there is no guarantee that interference will not occur in a particular installation.

CE Mark

The device is in accordance with 89/336 ECC-ENC Directive.

P4M800 Pro

VIA® P4M800 Pro & VT8237R+
Support Socket 775 Intel® Pentium® 4/ Celeron D Processor

User Manual

To enable the Hyper-Threading (HT) Technology, your computer system is required to have the following components:

- **CPU:** An Intel® Pentium® 4 Processor with HT Technology
- **Chipset:** An Intel® Chipset that supports HT Technology
- **BIOS:** A BIOS that supports HT Technology must be enabled
- **OS:** An operating system that supports HT Technology

For more information on Hyper-Threading Technology, go to:
http://www.intel.com/info/hyperthreading

Dimensions (ATX form-factor):

- 244mm x 205mm (W x L)

Operating System:

- Windows® 98/ ME/ 2000/ XP

Ver: EG101

Things You Should Know

- The images and pictures in this manual are for reference only and may vary depending on hardware models, third party components and software versions.
- Power off your system when configuring switches and pins.
- This mainboard contains very delicate IC chips. Always use a grounded wrist strap when working with the system.
- Do not touch any IC chip, lead, connector or other components.
- Unplug the AC power when you install or remove any device on the mainboard.

Packing List

- P4M800 Pro mainboard
- FDD Cable
- HDD Cable
- P4M800 Pro Uer Manual CD
- P4M800 Pro Setup Driver CD
- I/O Bracket (for ATX case)
- USB 2.0 Cable (Optional)
- SATA Cable (Optional)
- SPDIF Out Cable (Optional)

Symbols

The following list explains the convention for symbols that will be used throughout this manual:

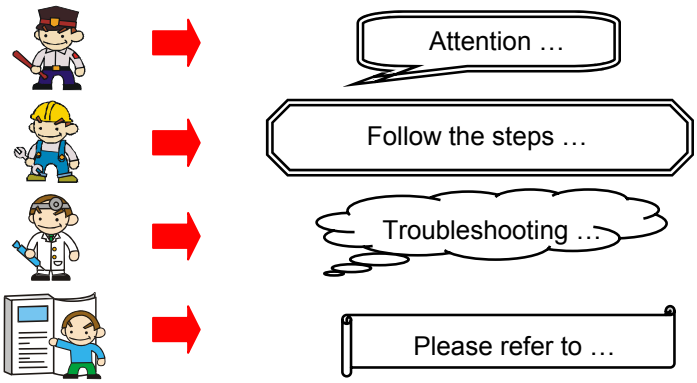


Table of Contents

Chapter 1. Getting Started

Introduction

Congratulations on the choosing P4M800 Pro Mainboard. It is based on the VIA® P4M800 Pro Northbridge chipset and the VT8237R+ Southbridge chipset; the mainboard comprises integrated the VIA® UniChrome™ Pro 2D/3D graphics optimized. It also supports the Intel® Pentium® 4/ Celeron D Processor with 800/ 533 MHz of FSB (Front Side Bus) frequencies.

The P4M800 Pro provides two 240-pin DIMM (Dual In-Line Memory Modules) sockets which support to insert DDR II 400 (PC2-3200)/ DDR II 533 (PC2-4300) SDRAM, and support a total memory capacity of 2 GB.

The mainboard provides one 8x AGP slot and three PCI slots. In addition, one 360Kb/ 720Kb/ 1.2Mb/ 1.44Mb/ 2.88Mb floppy disk drive connector and two IDE connectors that support Ultra ATA 66/100/133 for hard disk drives are provided on this mainboard. The onboard Serial ATA function, two SATA connectors are able to support the transfer rate up to 1.5 Gbps.

There is a maximum of eight USB2.0/ 1.1 ports that can be set up on this mainboard.

The onboard AC' 97 Audio codec supports high quality performance 6-channel audio play (Super 5.1 Channel Audio Effect) **(See Appendix I)**. The mainboard also supports the Sony/Philips Digital Interfaces (SPDIF) function (optional).

The P4M800 Pro comes with an onboard 10/100 Mbps Ethernet LAN chip. There is a LAN port on the back panel that you can directly plug an internet cable into.

In addition, this mainboard supports the ABS (Albatron BIOS Security) card (Optional), which is a small circuit board inserted onto the mainboard providing full backup BIOS functionality in case of BIOS failure or damage during the BIOS flash **(See Appendix II)**.

All the information (including hardware installation and software installation) in this manual are for reference only. The contents in this manual may be updated without notice. The company will not assume any mistake that user caused.

Specification

CPU:

- Support Socket 775 Intel® Pentium® 4/ Celeron D Processor
- Support Hyper-Threading Technology
- Support 800/ 533 MHz FSB (Front Side Bus) frequencies

Chipset:

- Northbridge Chipset – VIA® P4M800 Pro
- Southbridge Chipset – VIA® VT8237R+
- I/O Controller – ITE® IT8712F-S
- AC' 97 Aduio Codec – VIA® VT1616
- LAN PHY – VIA® VT6103

Memory:

- Provide two 240-pin DIMM sockets
- Support DDR II 400 (PC2-3200)/ DDR II 533 (PC2-4300) SDRAM
- Support 256 MB /512 MB/1 GB, and a total memory capacity of 2 GB

Slots:

- Provide one 8x AGP slot
- Provide three PCI slot

Onboard IDE:

- Provide two IDE slots
- Support a maximum of four IDE devices can be set up
- Support Ultra ATA 66/100/133 function

Onboard Serial ATA :

- Provide two SATA connectors with SATA 1.0 specification
- Supports the transfer rate up to 1.5Gb/ s
- One SATA connector can only support one SATA HDD

Onboard AC' 97 Audio Codec:

- High performance Codec with high S/N ratio (>90 db)
- Support 6-channel playback capability (Super 5.1 Channel Audio Effect)
- Support Sony/ Philips Digital Interfaces (S/PDIF) function (Optional)

Onboard LAN PHY:

- 10/100 Mbps Ethernet LAN supported

I/O facilities:

- Support one VGA port for D-SUB
- Support PS/2 mouse and PS/2 keyboard
- Support 360 KB/720 KB/1.2 MB/1.44 MB/2.88 MB floppy disk drive
- Four onboard USB 2.0/ 1.1 ports
- Supports one PRT header and one COM header compatible with external devices connected by cable
- Two USB headers come with this mainboard for a maximum of four additional USB ports to be set

BIOS:

- Phoenix-Award™ BIOS
- Support APM 1.2
- Support ACPI 2.0 power management

Green Functionality:

- Support Phoenix-Award™ BIOS power management functionality
- Supports system-wake-from-power-saving-mode by keyboard or mouse touching

Shadow RAM:

- Integrated memory controller provides shadow RAM functionality and supports ROM BIOS

Flash Memory:

- Supports flash memory functionality
- Supports ESCD functionality

Hardware Monitor Function:

- Monitor CPU Fan Speed
- Monitor CPU and system temperature
- Monitor system voltages

Watch Dog Timer:

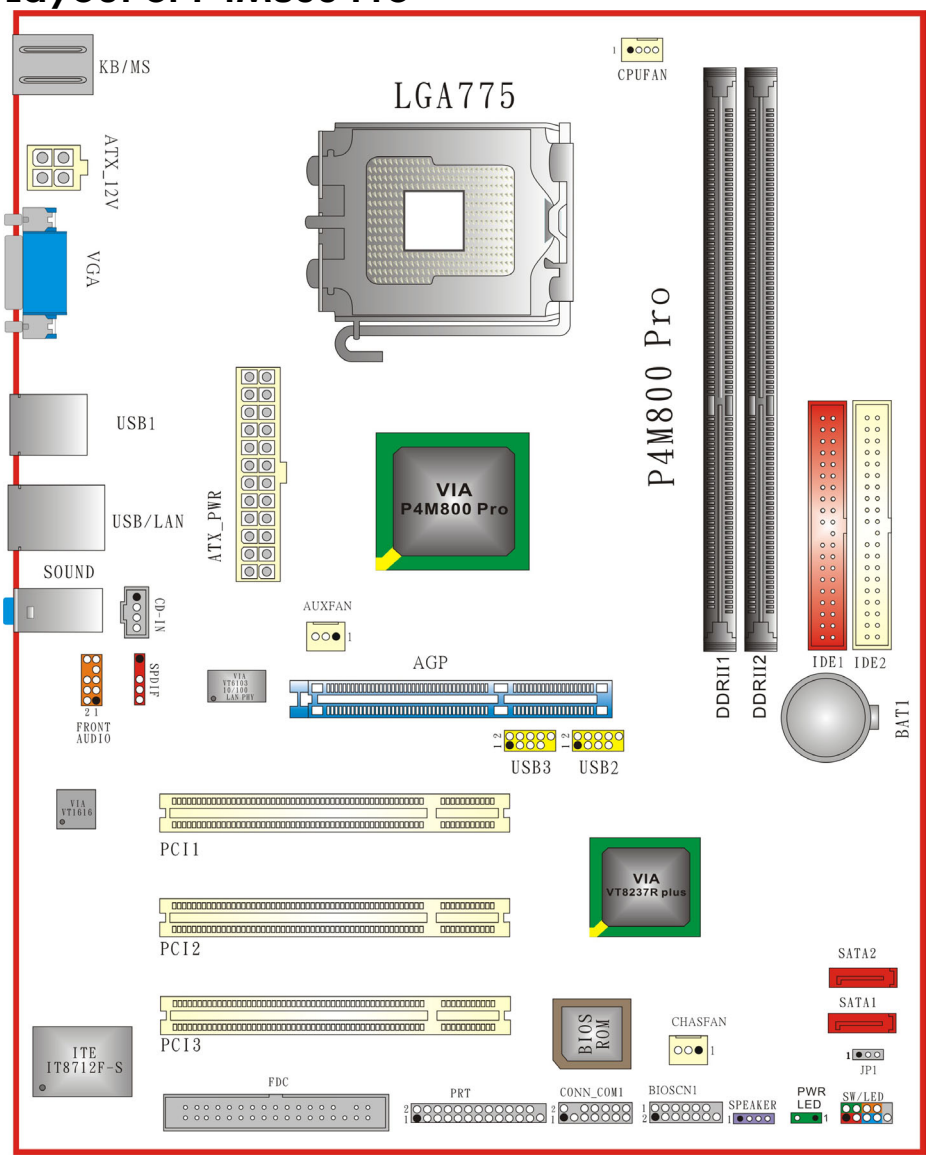
- This function is for detecting the system when it is unable to handle over-clocking configurations during the POST stage. Once the problem is detected, the system will reset the configurations and reboot the system within five seconds.

ABS (Albatron BIOS Security):

- Supports ABS card (optional)
- Supports BIOS backup

Configuration

Layout of P4M800 Pro



Hardware Installation

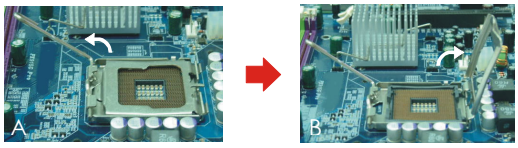
This section will assist you in quickly installing your system hardware. Wear a wrist ground strap before handling components. Electrostatic discharge may damage the system's components.

CPU Processor Installation

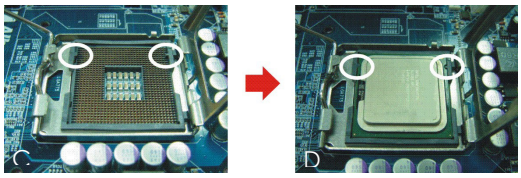
This mainboard supports Intel® Pentium® 4/ Celeron® D processor using a Socket 775. Before building your system, we suggest you to visit the Intel website and review the processor installation procedures. http://www.intel.com

CPU Socket 775 Configuration Steps:

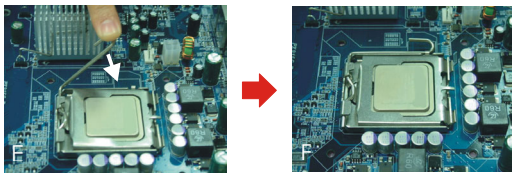
1. Locate the CPU socket 775 on your mainboard and nudge the lever away from the socket as shown. Then lift the lever to a 140-degree angle (A). Next, lift up the iron cover (B).



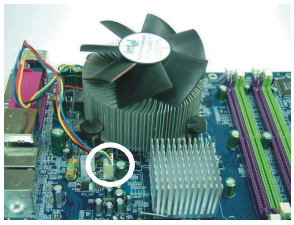
2. There are two distinctive marks located near the corners of the socket on the same side as the lever as shown (C). Match these marks with the marks on the CPU and carefully lower the CPU down onto the socket (D).



3. Replace the iron cover and then lower the lever until it snaps back into position (E). This will lock down the CPU (F).



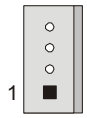
4. Smear thermal grease on the top of the CPU. Lower the CPU fan onto the CPU/CPU socket and secure it using the attachments or screws provided on the fan. Finally, attach the fan power cord to the **CPUFAN** header.



Attention: DO NOT touch the CPU pins due to they are sensitive and easily to be damaged. Also, make sure that you have completed all installation steps before power-on the system. Finally, double-check that the heatsink is properly installed and make sure that the CPU fan power cord is securely attached (cooling problems may cause overheating and lead to damage the CPU and other sensitive components).

FAN Headers: CPUFAN, AUXFAN, CHASFAN

Three power headers for cooling fans are available on the P4M800 Pro. The cooling fans play a very important role in maintaining CPU and ambient temperatures in your system. Please attach the fan power cords to these three headers.



CPUFAN

Pin	Assignment
1	Ground
2	Power (+12V)
3	FAN RPM rate sense
4	Smart Fan Control

AUXFAN/ CHASFAN

Pin	Assignment
1	Ground
2	Power (+12V)
3	FAN RPM rate sense

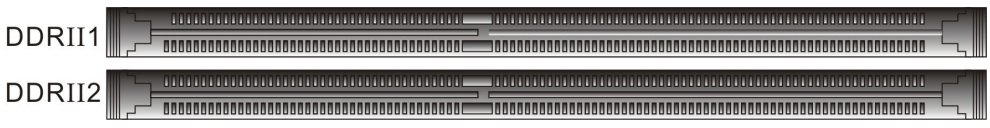
Attention

It is strongly recommended that you can attach a cooling fan on the top of your CPU, and also attach the fan power cord onto the mainboard CPUFAN header, to avoid your CPU damaged due to high temperatures.

In general, the fan power cord is designed and should be attached with a specific direction. The black wire of the fan power cord is Ground. You should attach it onto the header pin-1.

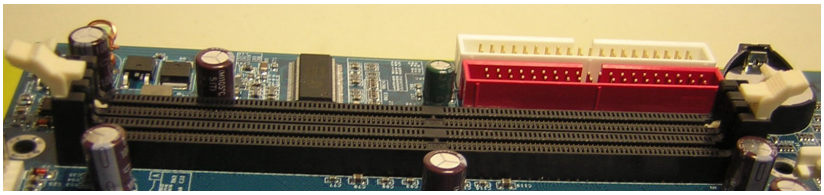
Memory Installation: DDRII1/2

The P4M800 Pro provides two 240-pin DIMM (Dual In-Line Memory Module) sockets which support to insert DDR II 400 (PC2-3200)/ DDR II 533 (PC2-4300) SDRAM and support a total memory capacity of 2 GB.

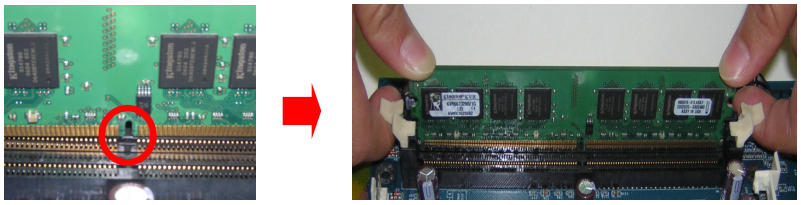


Memory Setup Steps:

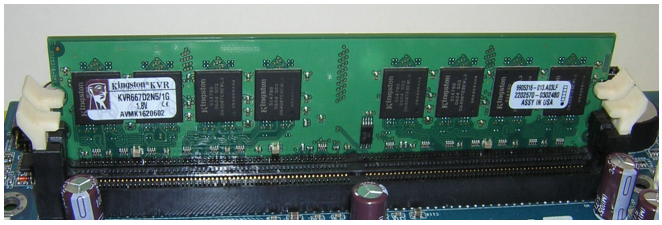
1. Pull the white plastic tabs at both ends of the socket away.



2. Align a memory on the socket such that the notch on the memory matches the break on the socket.



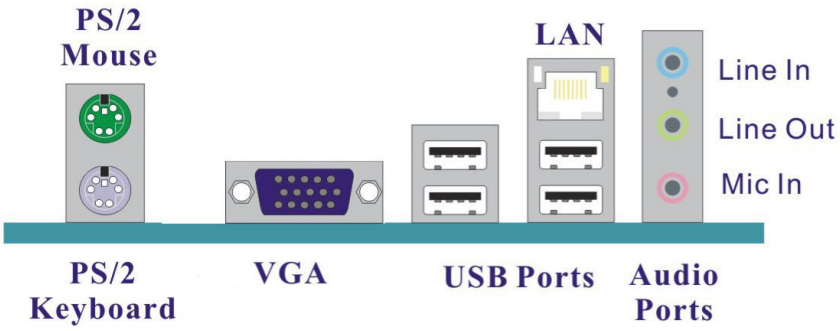
3. Lower the memory vertically into the socket and press firmly by using both thumbs until the memory snaps into place.



4. Repeat steps 1, 2 & 3 for the remaining memory and DIMM sockets setup.

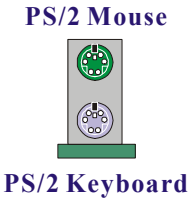
* The pictures shown above are for reference only. The actual installation may vary depending on models.

Back Panel Configuration



PS/2 Mouse & PS/2 Keyboard Ports: KB/MS

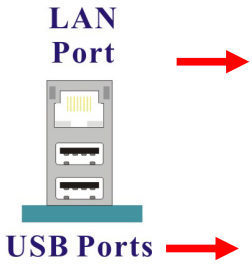
This mainboard provides a standard PS/2 mouse port and a PS/2 keyboard port. The pin assignments are described below.



Pin	Assignment	Pin	Assignment
1	Data	4	+5 V (fused)
2	N/A	5	Clock
3	Ground	6	N/A

USB Ports/ LAN Port: USB/LAN, USB1

There are four USB 2.0/ 1.1 ports on the back panel. These USB ports are used to attach with USB devices, such as keyboard, mouse and other USB supported devices. There is also a 10/100 Mbps Ethernet LAN port available for you to attach an Internet cable.

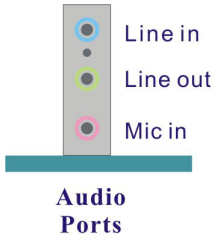


Pin	Assignment	Pin	Assignment
1	TX+ (TX+)	5	N/A (TRD2-)
2	TX- (TX-)	6	RX- (RX-)
3	RX+ (RX+)	7	N/A (TRD3+)
4	N/A (TRD2+)	8	N/A (TRD3-)

Pin	Assignment	Pin	Assignment
1/5	+5 V (fused)	3/7	USBP0+/P1+
2/6	USBP0-/P1-	4/8	Ground

Audio Ports: Sound

This mainboard provides three Audio Ports. The Mic-in, Line-in and Line-out are standard audio ports that provide basic audio function.



Audio Ports

Line-In (Blue) This port is used to attach an external audio device such as a CD player, tape player or other audio device that has an audio input connector. When the Super 5.1 Channel Audio Effect is enabled, your rear speakers will be enabled with this port.

Line-Out (Green) It is a standard audio port and used to attach speaker or headset. When the Super 5.1 Channel Audio Effect is enabled, your front speakers will be enabled with this port. In addition, if you have enabled the Super 5.1 Channel Audio Effect but still are using the Standard 2-channel audio play, we strongly recommend you to use this port.

Mic-In (Pink) This port is used to attach a microphone to input your voice. When the Super 5.1 Channel Audio Effect is enabled, your subwoofer/center equipments will be enabled.

.

This mainboard supports Super 5.1 Channel Audio Effect which you can transfer the audio system from 2-channel to 6-channel. See **Appendix I** for more information.

Connectors

Floppy Disk Drive Connector: FDC

The mainboard provides a standard floppy disk drive connector (FDC) that supports to be attached maximal two 360Kb/ 720Kb/ 1.2Mb/ 1.44Mb/ 2.88Mb floppy disk drives by FDD ribbon cables.

Hard disk drive Connectors: IDE1/2, SATA1/2

The mainboard provides two IDE connectors with Ultra ATA 66/100/133 specification. You can maximal attach four IDE devices, such as hard disk drive (HDD), CD-ROM, DVD-ROM, and so on by IDE ribbon cables. The onboard Serial ATA, two SATA connectors support the transfer rate up to 1.5 Gbps.

Primary IDE Connector: IDE1

There are two maximal IDE devices can attach to one IDE connector. If you attach two IDE HDDs, you must use a ribbon cable which with two cable connectors. You also must configure one drive as the master and the other one as the slave.

Secondary IDE Connector: IDE2

The IDE2 connector can also be attached with two HDDs by IDE ribbon cable; however, you also must configure one as the Master and the other one as the Slave.

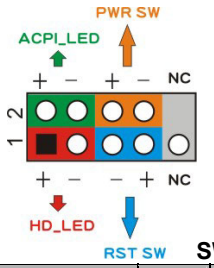
SATA Connector: SATA1/2

The two SATA connectors support a transfer rate of 1.5 Gbps. One SATA connector only can attach one SATA HDD of each time.

SATA1/ 2

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

Front Panel Headers: SW/LED, PWRLED, SPEAKER



SW/LED

Pin	Assignment	Function	Pin	Assignment	Function
1	HDD LED (+)	Hard Drive LED (HD_LED)	2	Power LED (+)	Power LED (ACPI_LED)
3	HDD LED (-)		4	Power LED (-)	
5	Reset Control (-)	Reset Switch (RST_SW)	6	Power Switch (+)	Power-on Switch (PWR_SW)
7	Reset Control (+)		8	Power Switch (-)	
9	N/A		10	N/A	

Hard Drive LED Header (Red): HD_LED

If your case front panel has a hard drive LED cable, attach it to this header. The LED will flicker when there is hard disk drive activity.

Reset Switch Header (Blue): RST_SW

This header can be attached to a momentary SPST switch (reset button) cable on your case front panel. The switch is normally left open. When the switch closed, it will cause the mainboard to reset and run the POST (Power-On Self Test).

Power Switch Header (Orange): PWR_SW

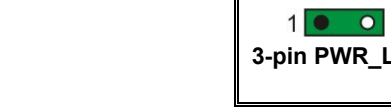
This header can be attached to a power switch cable on your case front panel. You can turn your system on or off by pressing the button attached to this power switch cable.

2-pin Power LED Header (Green): ACPI_LED

The mainboard provides a 2-pin power LED header. If there is a 2-pin power LED cord on your case front panel, you can attach it to the 2-pin power LED header. Then the power LED will illuminate while the system is powered on.

3-pin Power LED Header (Green): PWRLED

The mainboard also provides a 3-pin power LED header. If there is a 3-pin power LED cord on your case front panel, you can attach it to this 3-pin header instead of attach to the 2-pin one on the SW/LED header.

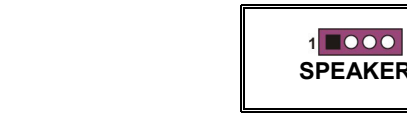


3-pin PWR_LED

Pin	Assignment	Pin	Assignment
1	PWR_LED (+)	2	N/A
3	PWR_LED (-)		

Speaker Header (Purple): SPEAKER

A speaker cable on your case front panel can be attached to this header. When you reboot the computer, this speaker will issue a short audible (beep). If there are problems during the Power On Self-Test, the system will issue an irregular pattern of audible beeps through this speaker.



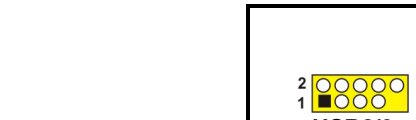
SPEAKER

Pin	Assignment	Pin	Assignment
1	PC_BEEP	2	N/A
3	Ground	4	+5V

Headers & Jumpers

Front USB Headers: USB2/3

This mainboard provides four onboard USB 1.1/2.0 ports (back panel) that attach to USB devices. There are two additional USB headers that can be connected by cables to four USB ports on the front panel of your PC case giving the possibility of 8 USB ports.



USB2/3

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

Attention

If you are using a USB 2.0 device with Windows 2000/XP, you will need to install the USB 2.0 driver from the Microsoft® website. If you are using Service pack 1 (or later) for Windows® XP, and using Service pack4 (or later) for Windows® 2000,you will not have to install the driver.

USB Power Header: USBPWR1

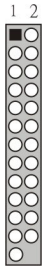
USB devices attached to USB two ports on the back panel can awaken the system from sleep mode. In order to enable this functionality, you must adjust the jumper caps on USBPWR1 header for +5V or +5V Standby mode.

USBPWR1	Assignment	Description
 **Pin 1-2 Closed**	+5V	S1 sleep mode (CPU stopped, DRAM refreshed, system running in low power mode)
 **Pin 2-3 Closed**	+5V Standby	S3/S4/S5 sleep modes (no power to CPU, DRAM in slow refresh, power supply in reduced power mode)

Note: Close stands for putting a jumper cap onto two header pins.

Printer Interface Header: PRT

This mainboard provides a PRT header for you connecting an additional printer connector on your case back panel. Attach the cable of printer connector (Optional) onto this header, then you can use the printer connector connecting with a printer.

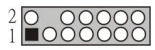


PRT

Pin	Assignment	Pin	Assignment
1	RSTB-	2	RPDR0
3	RPDR1	4	RPDR2
5	RPDR3	6	RPDR4
7	RPDR5	8	RPDR6
9	RPDR7	10	ACK-
11	BUSY	12	PE
13	SLCT	14	RAFD-
15	ERR-	16	RINIT_P-
17	RSLIN-	18	Ground
19	Ground	20	Ground
21	Ground	22	Ground
23	Ground	24	Ground
25	Ground	26	N/A

Serial Interface Header: CONN_COM1

This mainboard provides a CONN_COM1 header for you connecting an additional serial connector on your case back panel. Attach the cable of serial connector (Optional) onto this header, then you can use the serial connector connecting with a mic, modem or other peripheral device.



CONN_COM1

Pin	Assignment	Pin	Assignment
1	+12V	2	+5V
3	-12V	4	N/A
5	DCD0-	6	SIN0
7	SOUT0	8	DTR0-
9	Ground	10	DSR0-
11	RTS0-	12	CTS0-
13	RI0-	14	RI-

Clear CMOS Jumper: JP1

The “Clear CMOS” function is used when you cannot boot your system due to some CMOS problems, such as forgetting a password. Configuring the jumper caps on this header will allow you to reset the CMOS configurations.

JP1	Assignment
1  **Pin 1-2 Close**	Normal (Default)
1  **Pin 2-3 Close**	Clear CMOS Data

Note: Close stands for putting a jumper cap onto two header pins.

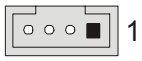
The following steps explain how to reset your CMOS configurations when you forgot a system password.

1. Turn off your system and disconnect the AC power cable.
2. Set JP1 header to OFF (2-3 Closed).
3. Wait several seconds.
4. Set JP1 header to ON (1-2 closed).
5. Connect the AC power cable and turn on your system.
6. Reset your new password.

Audio Configuration

CD-ROM Audio-In Connector: CD-IN

The CD-IN connector is used to attach an audio cable to audio devices such as CD-ROMs, DVD-ROMs etc.



CD-IN

Pin	Assignment
1	Left channel input
2	Ground
3	Ground
4	Right channel input

SPDIF Header: SPDIF

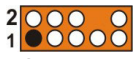
S/PDIF is a recent audio transfer file format, which provides high quality audio using optical fiber and digital signals. This mainboard is capable to deliver audio output through the SPDIF header. One way you would use this header is by using an SPDIF bracket (optional) and attaching its cord onto this SPDIF header. The RCA or TOS-Link connectors will be provided on the bracket and which are convenient you to outputt audio format files between your system and the SPDIF styled devices.

SPDIF

Pin	Assignment	Pin	Assignment
1	+5V	2	N/A
3	SPDIF out	4	Ground

Front Audio Header: FRONT AUDIO

If your case front panel has audio ports, you can connect them to the Front Audio Header of this mainboard. First, you must remove the jumper caps on this header and then attach the cables from the front panel to the pins on this header. You can use both the front audio panel and back panel audio simultaneously. If you are not using front panel audio ports, leave the jumper caps on the header pins (Note: pins 5&6, 9&10, 11&12, and 13&14) to avoid problems with the back panel audio ports.



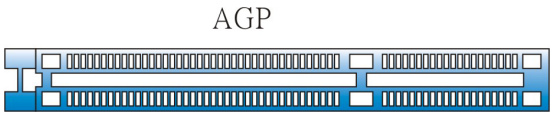
FRONT AUDIO

Pin	Assignment	Pin	Assignment
1	Mic in/center	2	Ground
3	Mic_VREF	4	Audio power +5V
5	Front out_R	6	Rear out_R
7	N/A	8	N/A
9	Front out_L	10	Rear out_L

Slots

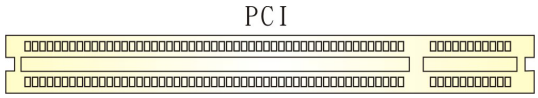
AGP Slot: AGP

The mainboard supports to install an extra graphics card with AGP interface in order to improve your display efficiency and performance. The AGP slot comes with AGP 3.0 specification and supports 8x graphics card installation but 1.5 V only.



PCI Slots: PCI1/2/3

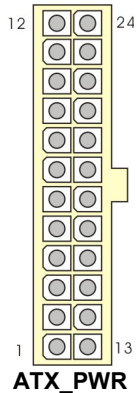
This mainboard provides three standard 32-bit PCI slots. PCI stands for Peripheral Component Interconnect and is a bus standard for installing expansion cards, such as network card and SCSI card, to these PCI slots.



Power Supply Attachments

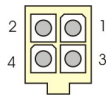
ATX Power Connector: ATX_PWR, ATX_12V

This mainboard provides two ATX power connectors, a 24-pin ATX_PWR connector and a 4-pin ATX_12V connector. You must use a power supply that has both of these connectors, and both connectors must be attached before the system is powered on. These power connectors support several power management functions, such as the instant power-on function. The connector pins are described below.



ATX_PWR

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



ATX_12V

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

Attention

In general, power cords are designed and should be attached with a specific direction. The black wire of the power cord is Ground and should be attached onto the header location of Ground.

Chapter 2. BIOS Setup

Introduction

This section describes PHOENIX-AWARD™ BIOS Setup program which resides in the BIOS firmware. The Setup program allows users to modify the basic system configuration. The configuration information is then saved to CMOS RAM where the data is sustained by battery after power-down.

The BIOS provides critical low-level support for standard devices such as disk drives, serial ports and parallel ports. As well, the BIOS control the first stage of the boot process, loading and executing the operating system.

The PHOENIX-AWARD™ BIOS installed in your computer system's ROM is a custom version of an industry standard BIOS. This means that it supports the BIOS of Intel® based processors.

This version of the PHOENIX-AWARD™ BIOS includes additional features such as virus and password protection as well as special configurations for fine-tuning the system chipset. The defaults for the BIOS values contained in this document may vary slightly with the version installed in your system.

Plug and Play Support

This PHOENIX-AWARD™ BIOS supports the Plug and Play Version 1.0A specification as well as ESCD (Extended System Configuration Data) write.

EPA Green PC Support

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

APM Support

This PHOENIX-AWARD™ BIOS supports Version 1.1 & 1.2 of the Advanced Power Management (APM) specification. These features include system sleep and suspend modes in addition to hard disk and monitor sleep modes. Power management features are implemented using the System Management Interrupt (SMI).

DRAM Support

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

Supported CPUs

This PHOENIX-AWARD™ BIOS supports the Intel® Pentium® 4/ Celeron D CPUs.

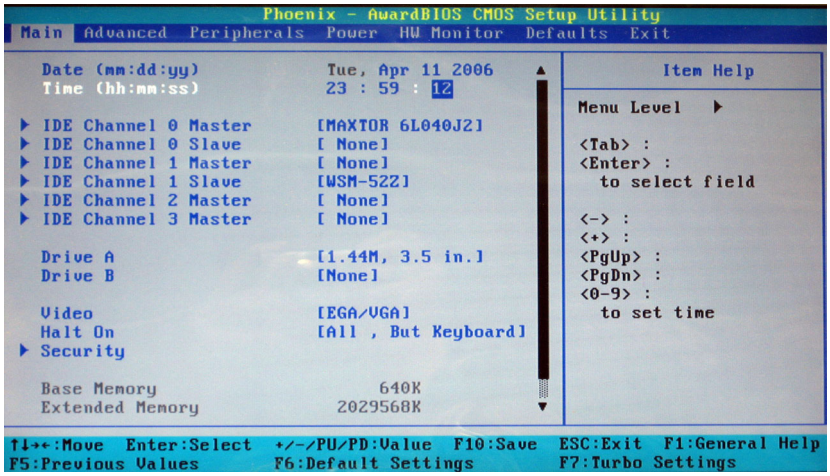
Key Function

In general, you can 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 within the BIOS Setup program.

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)
Esc	Main Menu: Quit without saving changes Submenus: Exit Current page to the next higher level menu
Move Enter	Move to the item you desire
PgUp key	Increase the numeric value or enter changes
PgDn key	Decrease the numeric value or enter changes
+ Key	Increase the numeric value or enter changes
- Key	Decrease the numeric value or enter changes
Esc key	Main Menu – Quit and do 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
F6 key	Load the defaults from BIOS default table
F7 key	Load the turbo defaults
F10 key	Save all the CMOS changes and exit

Main Menu

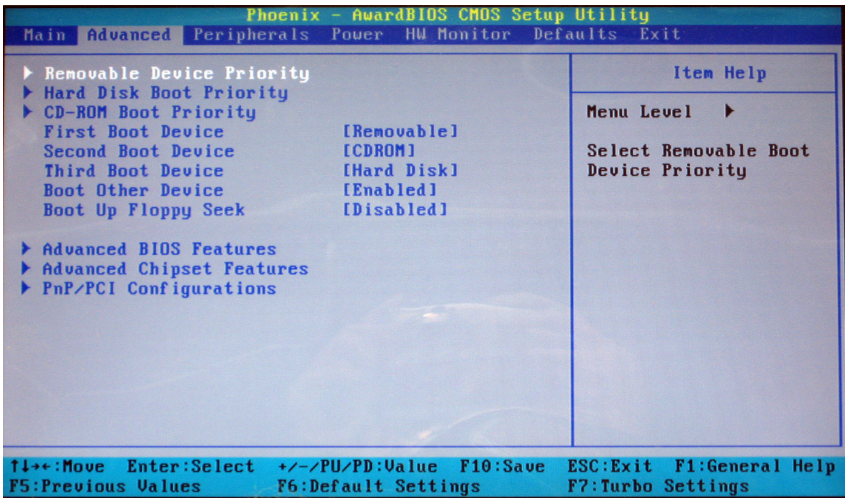
When you enter the PHOENIX-AWARD™ BIOS Utility, the Main Menu will appear on the screen. The Main menu allows you to select from several configuration options. Use the left/right arrow keys to select a particular configuration screen from the top menu bar or use the down arrow key to access and configure the information below.



Main Menu Setup Configuration Options

Item	Options	Description
Date	mm dd yyyy	Set the system date. Note that the 'Day' automatically changes when you set the date.
Time	hh: mm: ss	Set the current time of the system.
IDE Channel 0/1/2/3 Master	Options contained in sub menu.	Press <Enter> to enter the sub menu.
IDE Channel 0/1 Slave	Options contained in sub menu.	Press <Enter> to enter the sub menu.
Driver A	None 360k, 5.25 in 1.2M, 5.25 in 720K, 3.5 in 1.44M, 3.5 in 2.88M, 3.5 in	Select the type of floppy disk drive installed in your system.
Driver B	None 360k, 5.25 in 1.2M, 5.25 in 720K, 3.5 in 1.44M, 3.5 in 2.88M, 3.5 in	Select the type of floppy disk drive installed in your system.
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video device.
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/ Key	Select the situation in which you want the BIOS to stop the POST process and notify you.
Security	Options contained in sub menu.	Press <Enter> to enter the sub menu.
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.

Advanced



Removable Device Priority

Select removable device boot priority.

Hard Disk Boot Priority

Select hard disk boot priority.

CD-ROM Boot Priority

Select CD-ROM boot priority.

First /Second/Third Boot Device

Select the order in which devices will be searched in order to find a boot device. Options: Removable (default for first boot device)、Hard Disk (default for third boot device)、CDROM (default for second boot device)、Disabled

Boot Other Device

The setting allows the system to try to boot from other devices if the system fails to boot from the 1st/ 2nd/ 3rd boot devices. Options: Enabled (default)、Disabled

Boot Up Floppy Seek

When Enabled, the BIOS tests (seeks) floppy drivers to determine whether they have 40 or 80 tracks. Only 360 KB floppy drivers have 40 tracks. Drives with 720 KB, 1.2 MB and 1.44 MB capacity have 80

tracks. Because very few modern PCs have 40-tracks floppy drivers, we recommend that you set this field to “Disabled”. Options: Enbaled、Disabled (default)

Advanced BIOS Features

CPU Feature

Delay Prior To Thermal

Select the delay time before thermal activation from high temperatures. Options: 4 Min、8 Min、16 Min (default)、32 Min

Limit CPUID MaxVal

When the limit CPUID MaxVal is set to 3, the item should be set to “Disabled” for Windows XP. Options: Enabled、Disabled (default)

Virus Warning

This item allows you to choose the Virus Warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempts to write data into thia area, BIOS will display a warning message on the screen and sound an audio alarm (beep). Options: Disabled (default)、Enabled

CPU L1 & L2 Cache

This item makes CPU internal cache active or inactive. System performance may degrade if you disable this item. Options: Enabled (default)、Disable.

Hyper-Threading Technology

When you install a CPU include Hyper-Threading Technolong. And this item will allow you to enable or disabled the Hyper-Threading technology. Choosing the item “Enabled” is for Windows XP and Linux 2.4.x, while the item “Disable” is for other Operating System. Options: Disabled、Enabled (default)

CPU L2 Cache ECC Checking

It makes CPU cache ECC function active or inactive. Options: Enabled (default)、Disabled.

Quick Power On Self Test

It allows the system to skip certain tests while booting. This will speed up the boot process.

Options: Enabled (default)、Disabled.

Swap Floppy Drive

If the system has two floppy drives, you can choose “Enable” to assign physical drive B to logical drive A, and vice versa. Options: Enabled、Disabled (default)

Boot Up NumLock Status

You can select the power on state for NumLock.

Options:

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

Typematic Rate Setting

When “Enabled”, the “typematic rate” and “typematic delay” can be configured. Typematic Rate determines the keystroke repeat rate used by the keyboard controller.

Options: Disabled (default)、Enabled

Typematic Rate (Chars/Sec)

The rate at which character repeats when you hold down a key.

Options: 6 (default)、8、10、12、15、20、24、30

Typematic Delay (Msec)

The delay before keystrokes begins to repeat. Options: 250 (default)、500、750、1000

APIC Mode

By enabling this option, “MPS version control for OS” can be configured.

Options: Disabled、Enabled (default)

MPS Version Control For OS

The 1.1 version is the older version that supports 8 more IRQs in the Windows NT environment. Choose the new 1.4 version for Windows 2000 and Windows XP. Options: 1.4 (default)、1.1

OS Select For DRAM > 64MB

Select “OS2” only if you are running the OS/2 operating system with greater than 64MB of RAM.

Options: Non-OS2 (default)、OS2

HDD S.M.A.R.T. Capability

Self Monitoring Analysis and Reporting Technology is a technology that enables a PC to attempt to predict the possible failure of storage drives. Options: Disabled (default)、Enabled

Small Logo (EPA) Show

This item allows you to show or hide the small LOGO EPA. Options: Disabled、Enabled (default)

Advanced Chipset Features

DRAM Clock/ Drive Control

Press <Enter> to enter next page for DRAM Clock/ Drive Control settings.

DRAM Clock

This item determines DRAM clock using SPD or other configurations. Make sure your memory module has SPD (Serial Presence Data), if you want to select the “By SPD” option.

Options: By SPD (default)、200MHz、266MHz

DRAM Timing

This item determines DRAM timing using auto or manual configuration. Options: Manual、Auto (default)

CAS Latency

This item determines CAS Latency. When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. Do not reset this field from the default value specified by the system engineer. This field is adjustable only when “DRAM Timing” is set to “Manual”. This field is locked when “DRAM Timing” is set to “Auto” and is automatically determined by the system.

Options: 2、3、4 (default)、5

Precharge to Active (Trp)

You can set the time to precharge. Options: 2T、3T、4T、5T (default)

Active to Precharge (Tras)

This item allows you to select DRAM Active to Precharge Delay.
Options: 5T、6T、7T、8T、9T、10T、11T、12T、13T (default)、14T、15T、16T、17T、18T、19T、20T

Active to CMD (Trcd)

Select the DRAM delay time when being read. Options: 2T、3T、4T、5T (default)

DRAM Command Rate

This item determines DRAM Command Rate. Options: 1T Command、2T Command (default)

AGP & P2P Bridge Control

Press <Enter> to enter next page for AGP & P2P Bridge Control

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.

Options: 32M、64M、128M (default)、256M、512M、1G

AGP 3.0 Mode

This item allows you to select the AGP Mode. Options: 8x (default)、4x

AGP Driving Control

By choosing “Auto” the system BIOS will automatically set the AGP output buffer drive strength. By choosing “Manual”, it allows user to set the AGP output buffer driver strength.

Options: Auto (default)、Manual

AGP Driving Value

While the AGP Driving Control option is set to “Manual”, it allows the user to set AGP Driving Value. Options: DA (default)、00~FF

AGP Fast Write

The AGP Fast Write technology allows the CPU to write directly to the graphics card bypassing the system AGP 4X speed. Choose “Enable” only when you used with AGP card support.

Options: Disabled (default)、Enabled

AGP Master 1 WS Write

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

Options: Disabled、Enabled (default)

AGP Master 1 WS Read

When enabled, reads from AGP (Accelerated Graphics Port) are executed with one wait state.

Options: Disabled、Enabled (default)

AGP 3.0 Calibration Cycle

This item will appear when you install the 8X VGA card. Options: Enabled、Disabled (default)

VGA Share Memory Size

This item determines VGA share memory size. Options: Disabled、16M、32M、64M (default)

Direct Frame Buffer

This item allows charging extra VGA share memory from Memory for great performance on the go.

Options: Enabled、Disabled (default)

CPU & PCI Bus Control

Press <Enter> to enter the next page for CPU & PCI Bus Control

PCI Master 0 WS Write

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

Options: Enabled (default)、Disabled

PCI Delay Transaction

The chipset has an embedded 32-bit post write buffer to support delay transactions cycles. Select Enabled to comply with PCI specifications. Options: Enabled (default)、Disabled

CPU Clock Ratio

This item will only display if the CPU has not been set to a locked state by the CPU manufactory. If your CPU is locked, you will not be able to see the “CPU Clock Ratio” item. The default depends on your CPU.

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. Options: Disabled (default)、15M-16M

System BIOS Cacheable

When enabled, accesses to system BIOS ROM addressed at F0000H-FFFFFH are cached, provided that the cache controller is enabled. Options: Enabled (default)、Disabled

PnP/PCI Configurations

PCI / VGA Palette Snoop

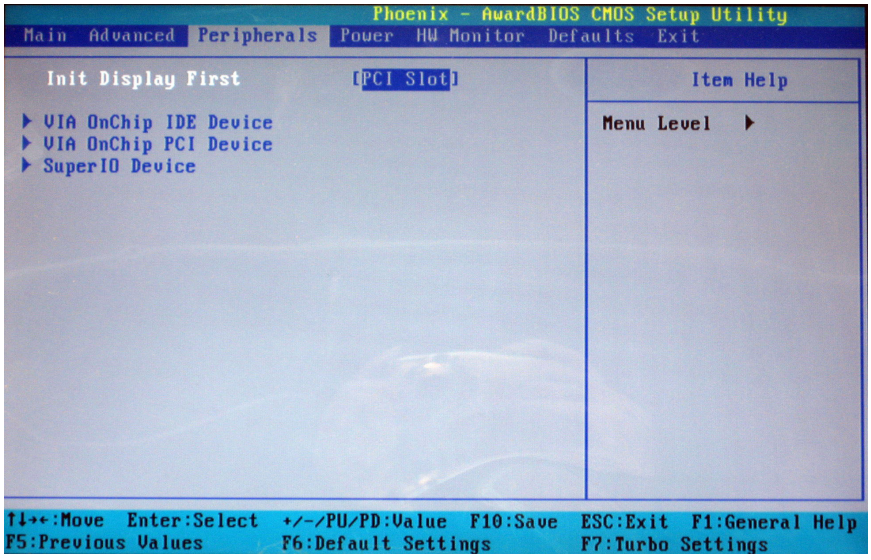
Some graphic controllers that are not VGA compatible take the output from a VGA controller and map it to their display as a way to provide boot information and VGA compatibility.

Options: Disabled (default)、Enabled

PCI Latency Timer (CLK)

This item allows you to set up the PCI Latency Time (0-255). If you select the “32” it will optimize PCI speeds. Options: 0~255、32 (default)

Integrated Peripherals



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. Options: AGP、PCI Slot (default)

VIA OnChip IDE Device

OnChip IDE Channel 0/1

The mainboard 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. Options: 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 incrementally. In Auto mode, the system automatically determines the best mode for each device.

Options: Auto (default)、Mode0、Mode1、Mode2、Mode3、Mode4.

Primary/ Secondary/ Master/ Slave UDMA

Ultra DMA/133 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/133, select “Auto” to enable BIOS support. Options: Auto (default)、Disabled

IDE HDD Block Mode

Block mode is otherwise known as block transfer, multiple commands, or multiple sector read/write. Select the “Enabled” option if your IDE hard drive supports block mode (most new drives do). The system will automatically determine the optimal number of blocks to read and write per sector.

Options: Enabled (default)、Disabled

IDE Prefetch Mode

The “onboard” IDE drive interfaces supports IDE prefetching for faster drive access. If you install a primary and/or secondary add-in IDE interface, set this option to “Disabled” if the interface does not support prefetching. Options: Enabled (default)、Disabled

OnChip SATA

This item allows you to enabled or disabled on-chip SATA function.

Options: Enabled (default)、Disabled

VIA OnChip PCI Device

Onboard Audio Device

This item allows you to control the onboard audio. Options: Enabled (default)、Disabled

Onboard LAN Device

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

Options: Enabled (default)、Disabled

Onboard Lan Boot ROM

This item decides whether to invoke the boot ROM of the onboard LAN chip.

Options: Enabled、Disabled (default)

USB Controller

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

Options: Enabled (default)、Disabled

USB 2.0 Controller

This item is for disable or enable EHCI controller only. This BIOS itself may/ may not have high speed USB support will be automatically turn on when high speed device were attached.

Options: Enabled (default)、Disabled

USB Emulation

The item allows you to select functions of USB devices on DOS.

Options:

OFF	Not support any USB device on DOS
KB/ MS	Support USB legacy Keyboard and Mouse, but not support USB Storage
ON (default)	Support USB legacy Keyboard, Mouse and Storage

USB Keyboard Support

Enables support for USB attached keyboard. Options: Disabled (default)、Enabled

USB Mouse Support

Enables support for USB attached mouse. Options: Disabled (default)、Enabled

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 you install an add-in FDC or the system has no floppy drive, select “Disabled”.

Options: Enabled (default)、Disabled

Onboard Serial Port 1

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

Options: Disabled、3F8/IRQ4 (default)、2F8/IRQ3、3E8/IRQ4、2E8/IRQ3、Auto

Onboard Parallel Port

Select an address and corresponding interrupt for the onboard parallel port.

Options: 378/IRQ7 (default)、278/IRQ5、3BC/IRQ7、Disabled

Parallel Port Mode

This option allows you to select a parallel port mode for the onboard parallel port.

Options:

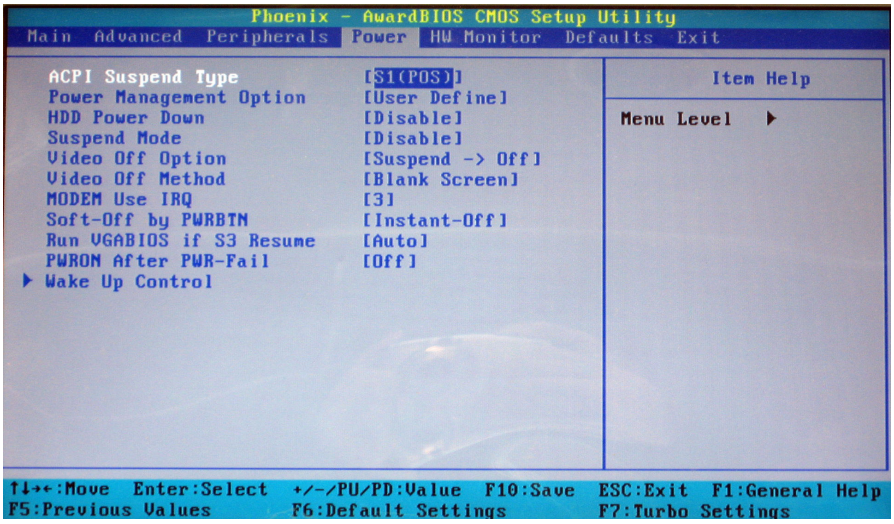
SPP (default)	Standard Printer Port

EPP	Enhanced Parallel Port
ECP	Extended Capabilities Port
ECP+EPP	ECP & EPP mode

ECP Mode Use DMA

Select a DMA Channel for the parallel port when using the ECP mode. This field is only configurable if “Parallel Port Mode” is set to “ECP”. Options: 3 (default)、1

Power Management



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

ACPI Suspend Type

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

Options:

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

Power Management Option

There are three options of Power Management:

1. Min. Saving

Minimum power management

Suspend Mode = 1hour

HDD Power Down = 15 minutes

2. Max. Saving

Maximum power management (only available for sl CPUs)

Suspend Mode = 1 minute

HDD Power Down = 1 minute

3. User Defined (default)

Allow to set each mode individually

When this option is enabled, each of the ranges are from 1 minute to 1 hour except for HDD Power Down, which ranges from 1 minute to 15 minute and includes a “disable” option.

Note: If you select Min. or Max. Power Saving modes, the “HDD Power Down” value and the “Suspend Mode” value are both fixed.

HDD Power Down

When enabled, the hard disk drive will power down after a certain configurable period of system inactivity. All other devices remain active.

Options: 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

This item allows you to select the suspend time under the ACPI operating system.

Options: Disabled(default)、1Min、2Min、4Min、6Min、8Min、10Min、20Min、30Min、40Min、1Hour

Video Off Option

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

Options: Always On、Suspend → Off (default)

Video Off Method

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

Options:

Blank Screen (default)	This option only writes blanks to the video buffer.
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.
DPMS Support	Initial display power management signaling.

Modem Use IRQ

This determines the modem’s IRQ. Options: NA、3 (default)、4、5、7、9、10、11

Soft-off by PWRBTN

In situations where the system enters a “hung” state, you can configure the BIOS so that you are required to pre the power button for more than 4 seconds before the system enters the Soft-Off state.

Options: Delay 4 Sec、Instant-Off (default).

Run VGA Bios if S3 Resume

Select whether you want to run VGA BIOS when the system wakes up from the S3 suspend function. This field is not configurable if “ACPI Suspend Type” is set to “S1 (POS)”.

Options: Auto (default)、Yes、No

PWRON After PWR-Fail

This field will determine whether your system will boot after restoring power after a power failure. If you select “On”, the system will boot whether or not the system was on before power failure. If you select “Former-Sts”, the system will be restored to the status before the power failure.

Options: Off (default)、On、Former-Sts

Wake Up Control

If you highlight the “Wake Up Control” label and then press the enter key, it will display a submenu with the following options:

PS2 KB Wakeup Select

Use this option to configure the PS2 keyboard Wake Up feature.

“Password” Use this selection to force the user to enter a password after the system awakens from PS2 keyboard activity.

“Hot Key” Use PS2KB key to awake the system. See “PS2KB Wake Up from S3-S5” to configure the hotkey.

PS2 KB Wakeup From S3/ S4/ S5

This option is used when “PS2KB Wake Up Select” is configured as “HOT KEY”.

Options: Disabled (default) 、Ctrl+F1 (to F12)、Power、Wake、Any Key

USB Wake Up

This item allows you to select USB devices to awaken the system from suspend mode.

Options: Enabled、Disabled (default)

VGA

When set to “On”, any event occurring at a VGA Port will awaken a system which had been previously powered down. Options: 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 suspended. Options: LPT/COM (default)、COM、LPT、NONE

HDD & FDD

When set to “On”, any event occurring on a hard drive activity or a floppy drive activity will awaken the system which had been previously suspended. Options: ON (default)、OFF

PCI Master

When set to “On”, you need a LAN add-on card which supports the power on function. It should also support the wake-up on LAN jumper. Options: OFF (default)、ON

PCI PME Wake Up

When you select “Enabled”, a PME signal from any PCI card will awaken the system from suspend mode. Options: Disabled (default)、Enabled

Ring Wake Up

This option allows you to awaken the system upon receiving an incoming call to modem device.

Options: Disabled (default)、Enabled.

RTC Wake Up

When “Enabled”, you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode. Options: Enabled、Disabled (default).

Date (of Month) Alarm

You can choose which date of the month the system will boot up. This field is only configurable when “RTC Wake Up” is set to “Enabled”.

Time (hh: mm: ss) Alarm

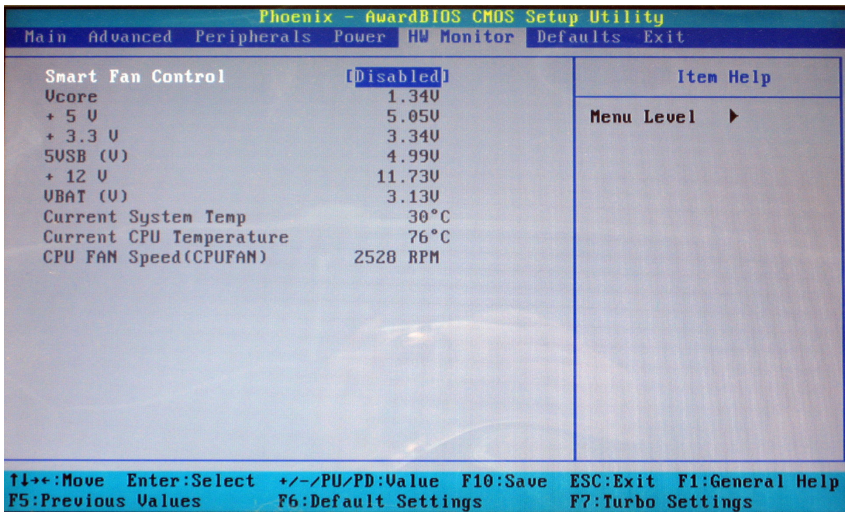
You can choose the hour, minute and second the system will boot up. This field is only configurable when “RTC Wake Up” is set to “Enabled”.

IRQs Activity Monitoring

Press Enter to access a 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 (RQ2 Redir)	Disabled
IRQ10 (Reserved)	Disabled
IRQ11 (Reserved)	Disabled
IRQ12 (PS/2 Mouse)	Enabled
IRQ13 (Coprocessor)	Enabled
IRQ14 (Hard Disk)	Enabled
IRQ15 (Reserved)	Disabled

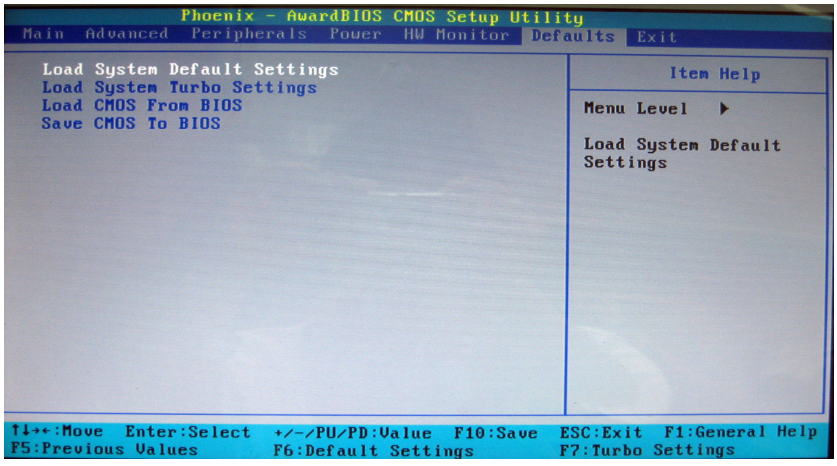
Hardware Monitor



Smart FAN Control

This item allows you to select the “Smart Fan Control” that monitors the CPU temperature and intelligently adjusts the CPUFAN speed to maintain safe temperature for your CPU. In addition, the Smart Fan Control can reduce noise levels by lowering fan speeds during low activity to provide you a most comfortable and quiet environment. Options: Disabled (default)、Enabled

Load Defaults



Load System Defaults Settings

Load System Default Settings.

Load System Turbo Settings

Load System Turbo Settings.

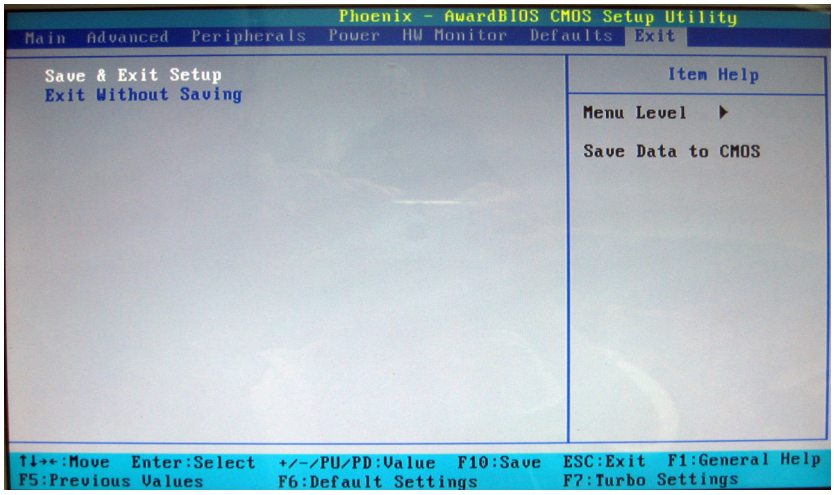
Load CMOS From BIOS

Load defaults from flash ROM for systems without batteries.

Save CMOS To BIOS

Save defaults to flash ROM for systems without batteries.

Exit Menu



Save & Exit Setup

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

Exit Without Saving

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

Chapter 3. Software Setup

Software List

Category	Platform
VIA 4 IN 1 Driver	Windows 98/ ME/ 2000/ XP
VIA LAN Driver	Windows 98/ ME/ 2000/ XP
VIA Audio Driver	Windows 98/ ME/ 2000/ XP
VIA VGA Driver	Windows 98/ ME/ 2000/ XP
Trend PC-Cillin® 2005	Windows 98/ ME/ 2000/ XP
Microsoft® DirectX 9.0c	Windows 98/ ME/ 2000/ XP
Adobe® Acrobat Reader 5	Windows 98/ ME/ 2000/ XP
Dr. Speed	Windows 2000/ XP
VIA USB 2.0 Driver	Windows 98/ ME

Attention: If your operating system is Windows 98/ ME, you must install the driver of USB 2.0 to make your USB devices effective.

Software Installation

Place the Driver CD into the CD-ROM drive and the Installation Utility will auto-run. You can also launch the Driver CD Installation Utility manually by executing the via.exe program located on the Driver CD. (For more details, please refer to the Readme.txt files that in each folder of the Driver CD.)

◎ The screen and images are only for general reference. The version of the screens you received with your software may vary slightly.

1. When you insert the driver CD into the CD-ROM, you'll see the screen as the picture below. There are several driver buttons displayed in the main screen, and you can click on the drivers to install.

- VIA 4 IN 1 Driver – provides the functions of all the drivers built in the Northbridge/ Southbridge
- VIA Audio Driver – provides the driver of VIA Audio Codec
- VIA VGA Driver – provides the driver of VIA integrated UniChrome™ Pro Graphics Engine
- VIA LAN Driver – provides the driver of VIA LAN PHY

2. Click on the "Utilities Menu" button, you can choose the software to install.

- Trend PC-Cillin 2005 – provides the software of Trend PC-Cillin 2005 (Anti-virus program)
- Microsoft DirectX 9.0c – provides software of Microsoft DirectX
- Acrobat Reader 5 – install Adobe Acrobat Reader program that you can browse pdf files
- Dr. Speed – install this software, you can enhance the mainboard with higher efficiency of overclocking executed and more stable of voltages supplied.

3. If you click the "Browse CD" button, you can browse all the files in the Driver CD.
4. Click "Exit" button to exit the program.

Chapter 4: Troubleshooting

Problem 1:

No power to the system. Power light does not illuminate. Fan inside power supply does not turn on. Indicator lights on keyboard are not lit.

Causes:

1. Power cable is unplugged.
2. Defective power cable.
3. Power supply failure.
4. Faulty wall outlet; circuit breaker or fuse blown.

Solutions:

1. Make sure power cable is securely plugged in.
2. Replace cable.
3.Contact technical support.
4.Use different socket, repair outlet, reset circuit breaker or replace fuse.

Problem 2:

System inoperative. Keyboard lights are on, power indicator lights are lit, hard drive is active but system seems “hung”

Causes: Memory DIMM is partially dislodged from the slot on the mainboard.

Solutions:

1. Power Down
2. Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.

Problem 3:

System does not boot from the hard disk drive but can be booted from the CD-ROM drive.

Causes:

1. Connector between hard drive and system board unplugged.
2. Damaged hard disk or disk controller.
3. Hard disk directory or FAT is corrupted.

Solutions:

1. Check the cable running from the disk to the disk controller board. Make sure both ends are securely attached. Check the drive type in the standard CMOS setup.
2. Contact technical support.
3. Backing up the hard drive is extremely important. Make sure your periodically perform backups to avoid untimely disk crashes.

Problem 4:

System only boots from the CD-ROM. The hard disk can be read and applications can be used but booting from the hard disk is impossible.

Causes: Hard Disk boot sector has been corrupted.

Solutions: Back up data and applications files. Reformat the hard drive. Re-install applications and data using backup disks.

Problem 5:

Error message reading “SECTOR NOT FOUND” displays and the system does not allow certain data to be accessed.

Causes: There are many reasons for this such as virus intrusion or disk failure.

Solutions: Back up any salvageable data. Then performs low level format, partition, and then a high level format the hard drive. Re-install all saved data when completed.

Problem 6:

Screen message says “Invalid Configuration” or “CMOS Failure.”

Causes: Incorrect information entered into the BIOS setup program.

Solutions: Review system’s equipment. Reconfigure the system.

Problem 7:

The Screen is blank.

Causes: No power to monitor.

Solutions: Check the power connectors to the monitor and to the system.

Problem 8:

Blank screen.

Causes:

1. Memory problem.
2. Computer virus.

Solutions:

1. Reboot computer. Reinstall memory. Make sure that all memory modules are securely installed.
2. Use anti-virus programs to detect and clean viruses.

Problem 9:

Screen goes blank periodically.

Causes: Screen saver is enabled.

Solutions: Disable screen saver.

Problem 10:

Keyboard failure.

Causes: Keyboard is disconnected.

Solutions: Reconnect keyboard. Replace keyboard if you continue to experience problems.

Problem 11:

No color on screen.

Causes:

1. Faulty Monitor.
2. CMOS incorrectly set up.

Solutions:

1. If possible, connect monitor to another system. If no color appears, replace monitor.
2. Call technical support.

Problem 12:

The screen displays “C: drive failure.”

Causes: Hard drive cable not connected properly.

Solutions: Check hard drive cable.

Problem 13:

Cannot boot the system after installing a second hard drive.

Causes:

1. Master/slave jumpers not set correctly.
2. Hard drives are not compatible / different manufacturers.

Solutions:

1. Set master/slave jumpers correctly.

2.Run SETUP program and select the correct drive types. Call drive manufacturers for possible compatibility problems with other drives.

Problem 14:

Missing operating system on hard drive.

Causes: CMOS setup has been changed.

Solutions: Run setup and select the correct drive type.

Problem 15:

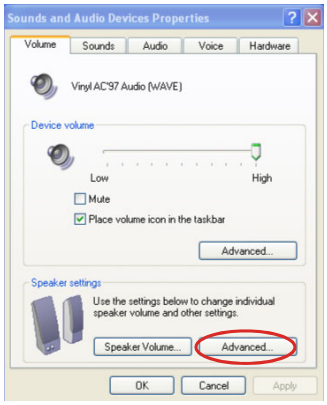
Certain keys do not function.

Causes: Keys jammed or defective.

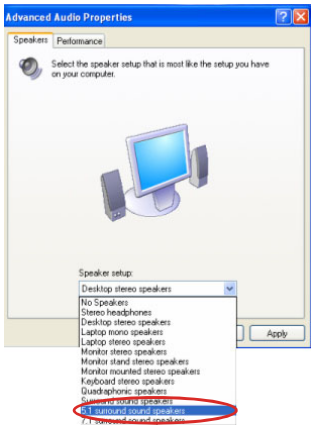
Solutions: Replace keyboard.

Appendix I: Super 5.1 Channel Setup

1. Beginning with the "Start" button, select **Setting → Control Panel → Sounds, Speech, and Audio Devices → Sounds and Audio Devices**. The screen below will display. First check the "Place volume icon in the taskbar" in the Device volume block. Then press the "Advanced…" button to configure the speaker settings.

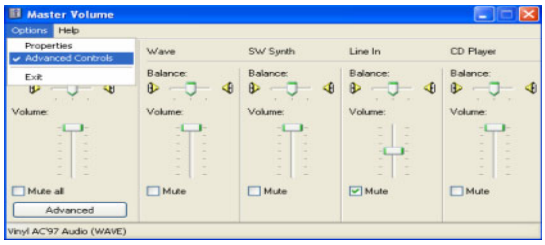


2. At the "Advanced Audio Properties" screen use the drop-down box to select the "5.1 surround sound speakers". Click "Apply" to enable the 5.1 channel audio effect.

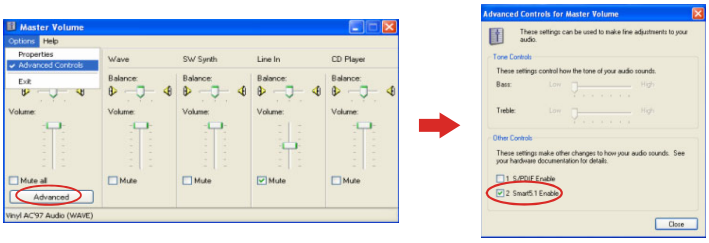


3. On your desktop, double click the volume icon that is on the desk bar.

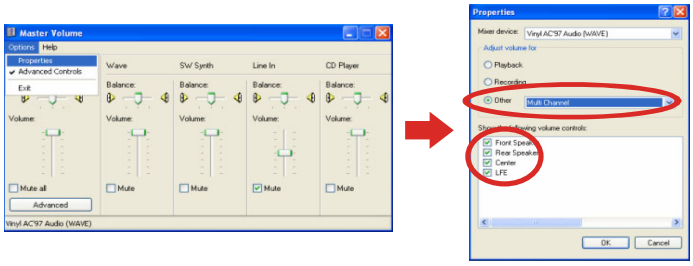
4. On the “Master Volume” screen, select “Options → Advanced Controls”.



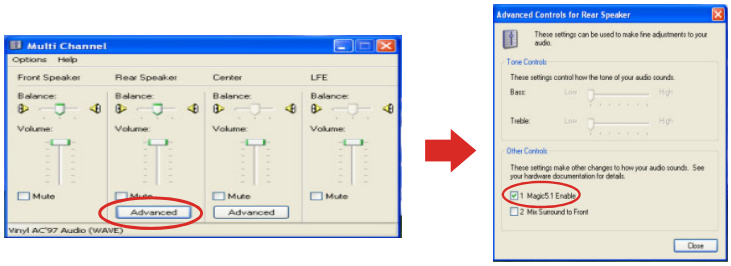
5. Next, click the “Advanced” button of the Master Volume, then check the “Smart5.1 Enable”.



6. Also On the “Master Volume” screen, select “Options → Properties”, then check “Other” item, select all the four items shown as below and click OK.



7. Finally, click the “Advanced” button of the Rear Speaker on the “Multi Channel” screen, then check the “Magic5.1 Enable”. This is the final step in configuring “Super 5.1 Channel Audio Effect”. (If you broadcast a DVD with a DVD-ROM, please skip this step.)



Appendix II: ABS (Albatron BIOS Security) Card Setup

Introduction

The ABS (Albatron BIOS Security) system provides your system with a recovery BIOS backup when your onboard BIOS has been damaged beyond system boot capability.

Preparation and Setup

You should prepare a boot floppy disk and have it ready in case of such BIOS failures. Otherwise you will have to find another computer to make the boot floppy disk from. When you make the disk, you should visit our website and download the latest version of the BIOS file for your mainboard along with the AWDFLASH.exe executable, placing both onto the floppy disk.

Onboard BIOS Recovery Procedures

1. Make sure your system is turned off.

2. Set the jumper cap on the ABS_JP1 header located on the ABS Card to the "*Rescue BIOS*" position **(See Figure 1)**.

3. Remove the jumper caps (on pins 1-2, pins 3-4) from the mainboard BIOSCN1 header **(See Figure 2)**.

4. Insert the ABS Card onto the BIOSCN1 header on the mainboard. The ABS Card will fit over the entire the header and can only be inserted in one direction.

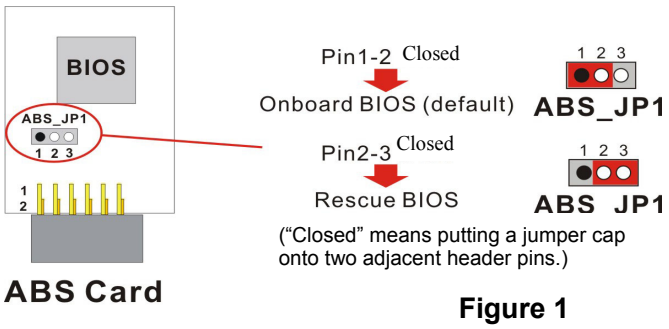


Figure 1

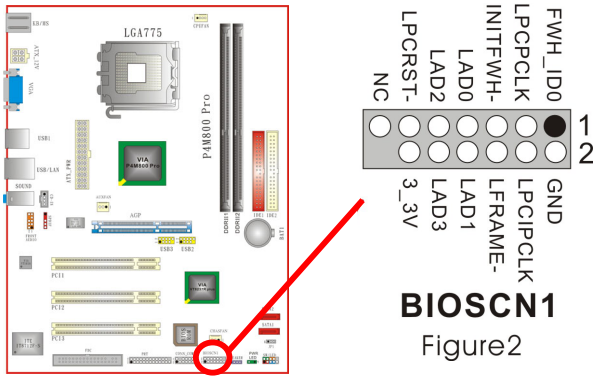
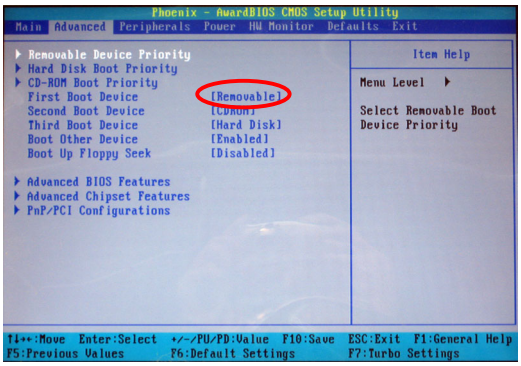


Figure2

Place the boot floppy disk (from the “Preparation and Setup” section) into the floppy drive and turn on your system.

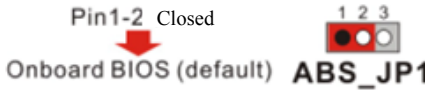
Note: If your system is not setup to use the floppy drive as the first boot drive, you must enter the BIOS setup utility and make the appropriate adjustments. During the initial boot up sequence the screen will display a message that will give you an opportunity to enter the BIOS setup utility (typically, “Press Delete Key to enter BIOS utility”) .

Once in the BIOS Utility, follow this path: Advanced -> Hard Disk Boot Priority -> First Boot Device and set the “First Boot Device” to “Removable”.



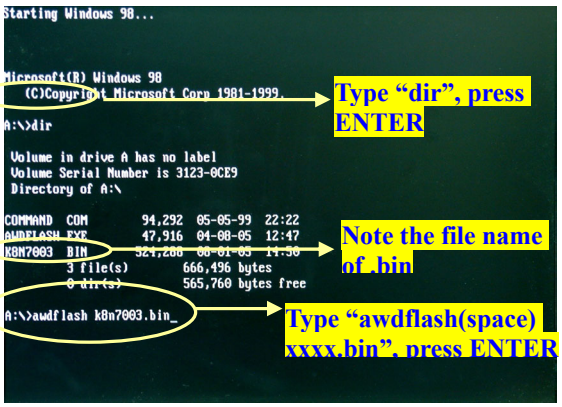
After the system boots from the floppy, the system will enter into the DOS mode (Note that the system has booted using the ABS card’s BIOS).

6. With the system still running, you must carefully move the jumper cap on the ABS Card (ABS_JP1 header) back to its “*Onboard BIOS*” position. This disables the ABS BIOS which will now allow you to flash the corrupted mainboard BIOS from the floppy disk.

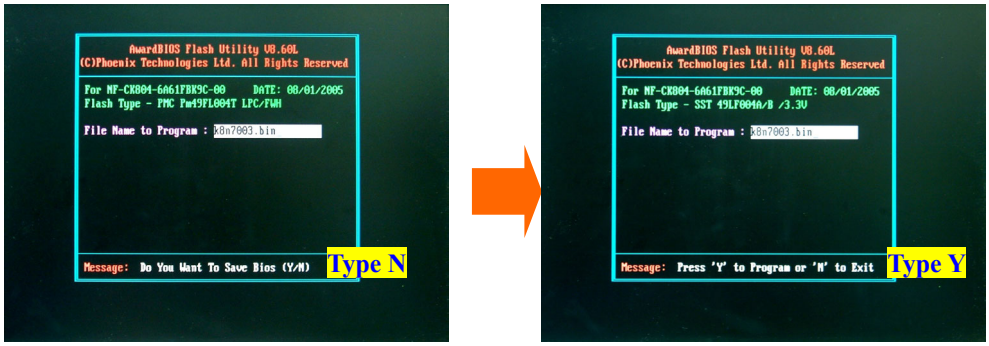


(“Closed” means putting a jumper cap onto two adjacent header pins.)

7. At the DOS prompt, type “DIR” and take notice of the name of the BIOS file name which ends with the extension “.bin” (e.g. K8N7003.bin”). There should also be an AWDFLASH.exe file present. Then type: **awdflash(space)(the file name of .bin).bin** (For example: awdflash(space) k8n7003.bin)

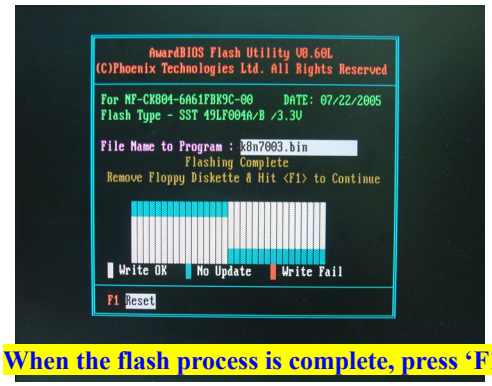


8. The initial AWARD BIOS FLASH screen (shown below-left) will appear and prompt you with the message, “Do you want to save BIOS?” Type “**N**” (**Note:** Typing “Y” is only used when saving the BIOS from the onboard BIOS to the floppy disk).



The next screen (shown above-right) will display a message “Press ’Y’ to Program or ‘N’ to Exit”. Then type ‘**Y**’ to begin the onboard BIOS flash procedure.

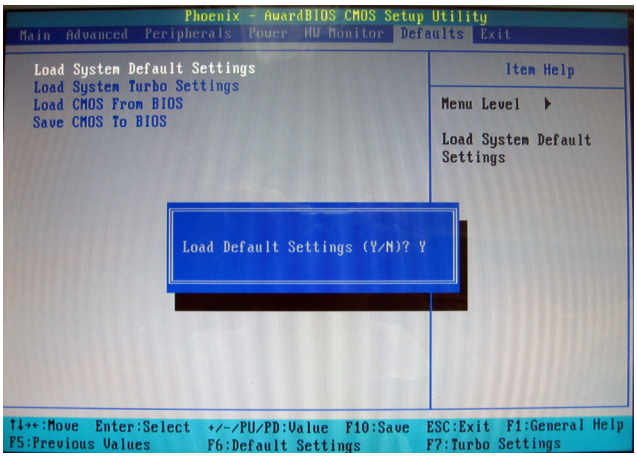
9. The flashing procedure will take several minutes and will show its progress on the screen. After the flash BIOS procedures have completed, press ‘**F1**’ to reboot the system.



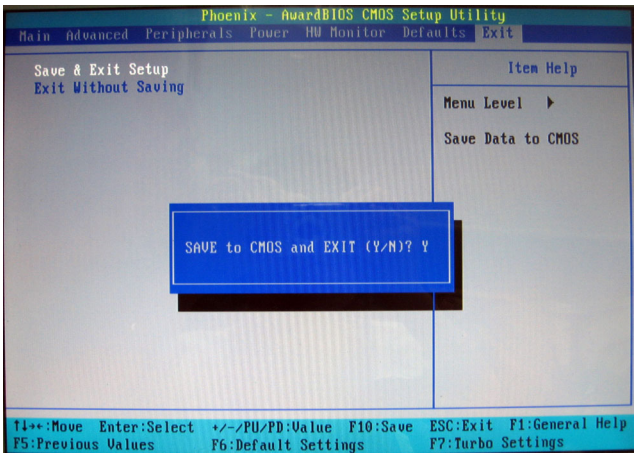
When the flash process is complete, press ‘F1’

Attention
While processing the flash BIOS procedures, DO NOT power off or restart your system. Otherwise, it may damage the onboard BIOS.

10. During the next boot sequence, enter the BIOS utility program (**Note:** During the boot sequence you will be given a chance to enter the BIOS utility by pressing the “DEL” key on most systems). Load the system with the default settings, and save the changes before exit the BIOS utility program. Then the onboard BIOS recovery procedures are completed at this time.



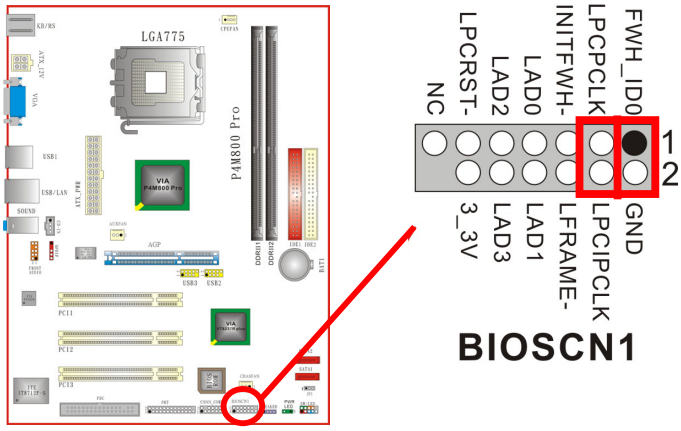
Follow the path: **Defaults** -> **Load System Default Settings** -> **Y .**



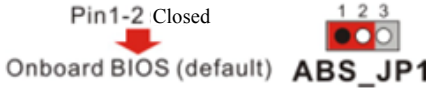
Next, follow the path: **Exit** -> **Save & Exit Setup** -> **Y**

11. After you have recovered your onboard BIOS, you can choose to remove or not remove the ABS Card from the mainboard.

If you do choose to remove the ABS Card from the mainboard, make sure that the system is powered off before you remove the card. After you remove the ABS card you must replace the two jumper caps on the BIOSCN1 header back to the default positions (pins 1-2 and pins 3-4 are both closed as shown).



If you choose not remove the ABS Card from the mainboard, make sure that the jumper caps on the ABS_JP1 header located on the ABS Card to the "*Onboard BIOS*" as below, in order to reduce the damage opportunity of the rescue BIOS in ABS Card and on the other hand to extend the usage life of the ABS Card.



("Closed" means putting a jumper cap onto two adjacent header pins.)

Attention
If both your onboard BIOS and rescue BIOS are damaged unfortunately, the ABS Card will fail the feature of providing BIOS backup. Therefore, it is recommended that recover the onboard BIOS in advance, and take the ABS Card as emergency happen.