

# **CHAINTECH**

## **V915P**

**Intel 915P & ICH6  
ATX Motherboard**

**Reference Manual**



## ***Declaration of Conformity***

**According to 47 CFR, Parts 2 and 15 of the FCC Rules**

**The following designated product:**

**EQUIPMENT: MAINBOARD**

**MODEL NO.: V915P**

**is a Class B digital device that complies with 47 CFR Parts 2 and 15 of the FCC Rules. Operation is subject to the following two conditions:**


- 1. This device may not cause harmful interference.**
- 2. This device must accept any interference received, including interference that may cause undesired operation.**

**This declaration is given to the manufacturer:**

**CHAINTECH-EXCEL COMPUTER INC.  
4427 Enterprise St. Fremont, CA 94538, U.S.A.**

**<http://www.chaintechusa.com>**

**Chaintech President: Simon Ho**

**Signature: **

## **Federal Communications Commission Statement**

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- \* This device may not cause harmful interference.
- \* This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for 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. If this equipment is not installed and used in accordance with the manufacturer's instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- \* Reorient or relocate the receiving antenna.
- \* Increase the separation between the equipment and receiver.
- \* Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- \* Consult the dealer or an experienced radio/TV technician for help.

The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## **Canadian Department of Communications Statement**

This digital apparatus does not exceed the Class B limits for audio noise emissions from digital apparatuses set out in the Radio Interference Regulations of the Canadian Department of Communications.

## **Manufacturer's Disclaimer Statement**

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# Specifications

## **CPU:**

Supports Socket 775 Pentium® 4 Prescott processor  
Supports Hyper-Threading Technology  
533/ 800 MHz FSB (Front Side Bus) frequencies

## **Chipset:**

Northbridge Chipset – Intel® 915P  
Southbridge Chipset – Intel® ICH6  
I/O Controller – Winbond W83627THF  
HD Audio Codec – Realtek ALC880  
Gb LAN Controller – Marvell® MV8001

## **DRAM Memory:**

Uses either DDR400 (PC3200) or DDR333 (PC2700) SDRAM  
SDRAM modules must be unbuffered and non-ECC  
Supported memory module increments are 256 MB /512 MB /1 GB  
Total memory capacity is 4 GB (see Memory Installation section for more details)  
Supports Dual-Channel data bus

## **PCI-Express BUS Slots:**

Provides 1 x 16 PCI Express slot with 4 GB/s bandwidth (each direction)  
Provides 2 x 1 PCI Express slots with 250 MB/s bandwidth (each direction)  
All PCI Express slots are fully PCI Express 1.0a compliant

## **PCI BUS Slots:**

Provides 3 PCI slots  
Contains 33MHz, 32bit PCI interface, PCI 2.3 is compliant

## **Universal Serial Bus:**

Supports up to 8 USB ports for USB compliant interface devices

Supports USB 2.0 Enhanced Host Controller Interface (EHCI) and USB 1.1 Universal Host Controller Interface (UHCI)

## **Onboard IDE Controller:**

Supports Ultra ATA 66/ 100, DMA and PIO modes

Supports IDE interface with CD-ROM

Supports high capacity hard disk drives

IDE slot can support 2 IDE drives

## **Onboard SATA Bus:**

4 SATA IDE slots

SATA 1.0 compatible

Supports 150 MB/s transfer rates

## **Hardware Monitor Function:**

Monitors CPUFAN/ CHASFAN/ AUXFAN Speeds

Monitors system Voltage

## **HD Audio Sound Codec Onboard:**

HD Audio (High Definition Audio) protocol compliance

Compliant with Azalia specifications

8-channel playback capability

Supports Sony/ Philips Digital Interfaces (S/PDIF)

## **LAN Controller:**

Marvell MV8001 supports Ethernet 10/100/1000 Mbit/s connectivity.

## **I/O Controller:**

One multi-mode Parallel Port capable of supporting the following specifications:



1. Standard & Bi-direction Parallel Port
2. Enhanced Parallel Port (EPP)
3. Extended Capabilities Port (ECP)

Contains one serial port, 16550 UART

Supports PS/2 mice and PS/2 keyboards

Supports 360 KB/720 KB/1.2 MB/1.44 MB/2.88 MB floppy disk drives

## **BIOS:**

Phoenix-Award™ BIOS

Supports APM1.2

Supports ACPI2.0 power management

# Introduction

## Pick The Best

Thank you for choosing Chaintech V915P motherboard. Before building your own perfect PC and installing and configuring its components, you need to have a clear idea of what you truly get by buying the Chaintech V915P mobo to pick the best components and enhance the performance for your flesh and blood.

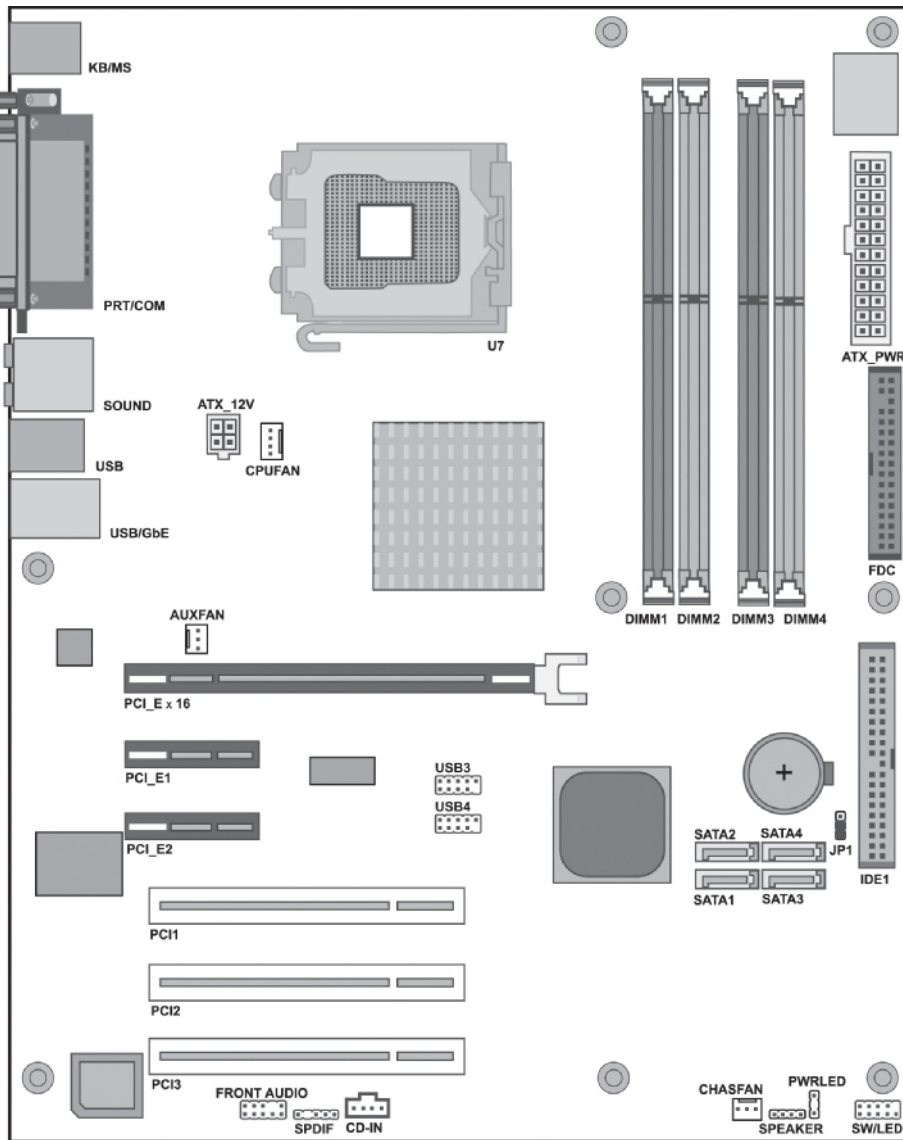
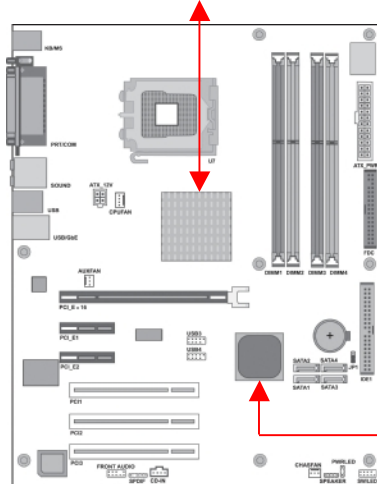


Figure 1 Chaintech V915P Layout

## Intel 915P

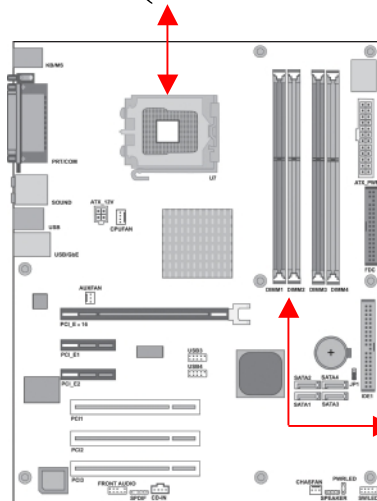


This Northbridge is also known as the **Memory Controller Hub**. This part of the chipset provides the system bus interface, memory controller, PCI-Express interface and hub interface for I/O.

## Intel ICH6

This Southbridge is also known as the Input/Output Controller Hub, and controls the system's access to the outside world, such as the PCI bus, USB ports, IDE sockets, Serial ATA ports and so on.

## LGA (Land-Grid Array) 775 Socket



A quality CPU deserves a quality home. Here is where your valuable CPU comfortably sits. The LGA775 socket, which has 775 sensitive contacts, is only compatible with the Intel processors in the land-775 LGA package.

## Memory DIMM (Dual In-Line Memory Module) Slots 1/2/3/4

These places enable you to install 4 up to 4GB DDR333/400 SDRAMs. Improved communications between your memory and the processor should also improve performance.

## PCI-Express X16

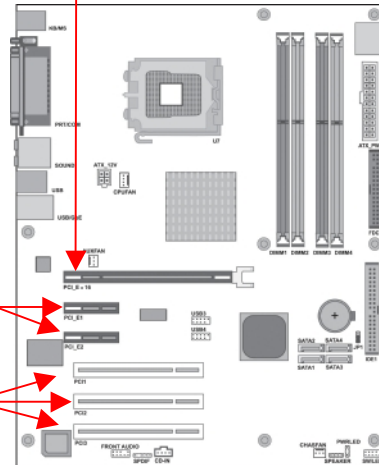
Your PCI-E x16-based graphics card goes here.

## PCI-Express X1

Your PCI-Express x1-based expansion cards go here.

## PCI Slots

Your expansion cards go here, but bear in mind that more is not necessarily better.

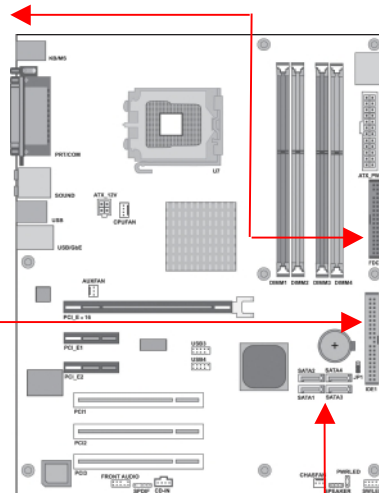


## FDC (Floppy Disk Connector)

As its name suggests, this connector connects to your floppy disk drive via the FDC cable.

## IDE Channel

This motherboard provides one IDE channel supporting PIO Mode 0~4, Bus Master, Ultra ATA 66/100. That gives you support for up to two parallel ATA drives.

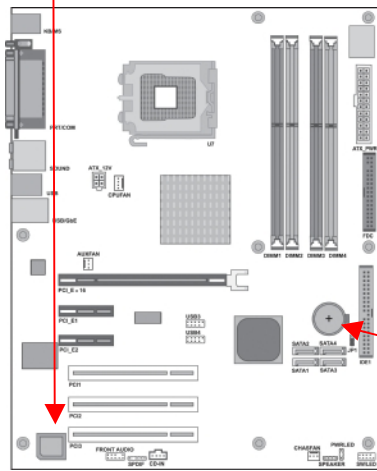


## SATA (Serial ATA) 1/2/3/4

Your SATA devices go here.



## BIOS

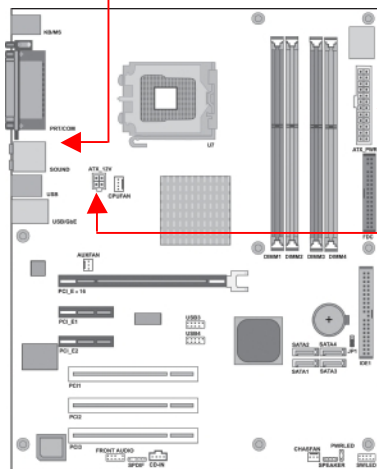


The Basic Input/Out System (BIOS) contains the code to burn up your PC, test it and start loading an Operating System.

## Battery

The BIOS set-up data is held in CMOS RAM, thanks to the power taken from this battery.

## Rear I/O panel



Most of the I/O ports will be found here, but not all.

## ATX Power Connectors

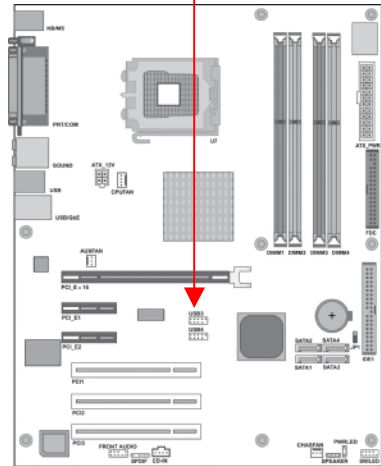
These connectors handle most of your PC's and CPU's power needs.

## Fan Connectors

Your CPU/Chipset/Case fan will be powered from these sockets, respectively.

## USB Connectors 3/4

This motherboard has two extra ports that you won't find on the rear I/O panel. To access them, you will need to run a cable from a socket on the motherboard to a slot connector, which screws into a vacant PCI backplate. Alternatively, connect to the front of your PC if your case has front-mounted ports.



# Hardware Setup

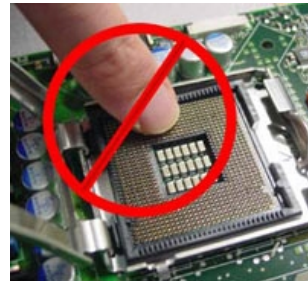
Having figured out in general what you get, the next job is to bite the bullet and build your PC

## Precautions

When integrating a Pentium 4 processor-based system, be sure to take the proper electrostatic discharge (ESD) precautions. Consider using ground straps, gloves, ESD mats, or other protective measures to avoid damaging the processor and other electrical components in the system.

## Warning

Do not touch socket sensitive contacts. Chaintech assumes no responsibility for the potential damages caused by this action and therefore the warranty we provide may be invalid.



## Installing CPU

**#1** Disengage Load Lever by depressing down and out on the hook to clear retention tab. Rotate Load Lever to fully open position at approximately 135°

**#2** Rotate Load Plate to fully open position at approximately 100°. Remove Socket Protective Cover. With left hand index finger and thumb to support the load plate edge, engage protective cover finger tab with right hand thumb and peel the cover from LGA775 Socket while pressing on center of protective cover to assist in removal.

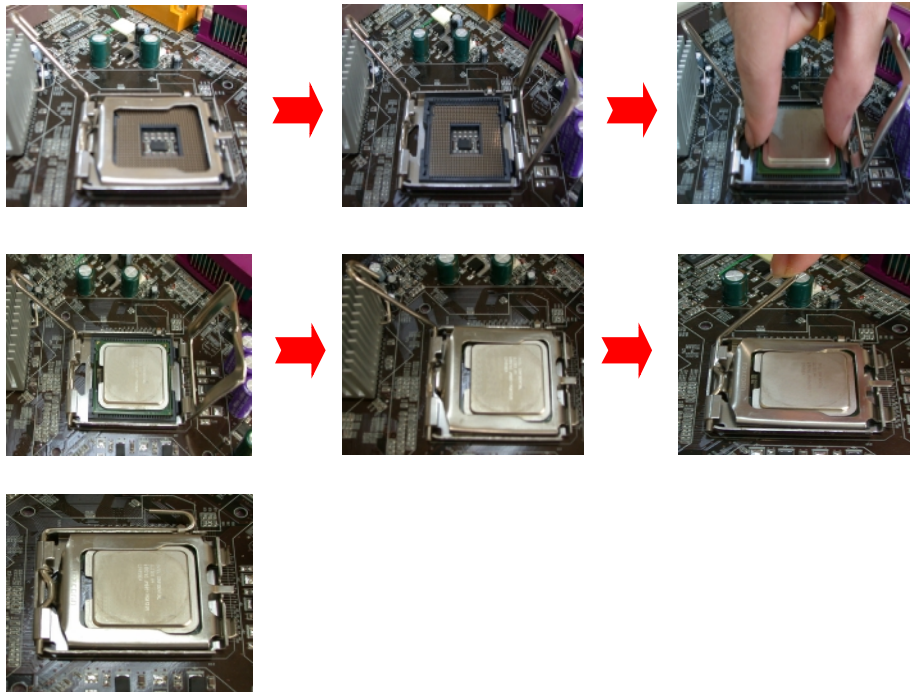
**#3** Locate the two orientation key notches.

**#4** Grasp the processor with thumb and index finger. (Grasp the edges without the orientation notches.) The socket has cutouts for your fingers to fit into. Carefully place the package into the socket body using a purely vertical motion. (Tilting the processor into place or shifting it into place on the socket can damage the sensitive socket contacts.)

**#5** Verify that package is within the socket body and properly mated to the orientation keys

## #6 Close the socket by

1. Close the Load Plate
2. While pressing down lightly on Load Plate, engage the Load Lever.
3. Secure Load Lever with Load Plate tab under retention tab of Load Lever



## Installing Cooling Fan

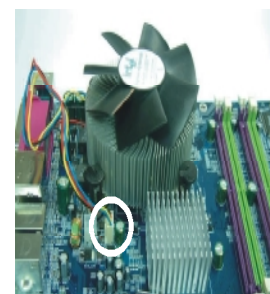
### .Warning

For a safety landing, avoid leaving prongs on hard surface.

### Instructions

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 cable to the CPUFAN adapter. For more details on this, go to <http://www.intel.com>

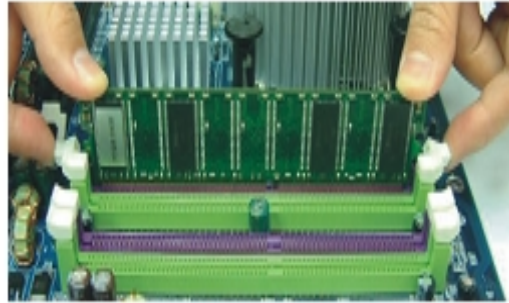
Avoid damage, avoid placing prongs on hard surface





## Installing Memory

Take great care when handling and implementing the memory, because it is not cheap anymore. Memory DIMMs will only go in one way, so don't try and force it. Line up the DIMM and push down gently. Then, when it's in place, lock it in with white connectors, as shown on the right image.



### Warning

This mainboard contains 4 memory slots which use 184-pin DDR SDRAM with a total memory capacity of up to 4 GB. You must install unbuffered/non-ECC DDR-SDRAM DIMMs with either 256 MB, 512 MB, or 1 GB of memory. These modules must be either DDR400 (PC3200) or DDR333 (PC2700) SDRAM.

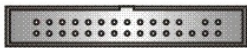
### Tips

This mainboard provides Dual-Channel functionality for its DIMM slots. Enabling Dual-Channel can significantly increase your data access rates. DIMM1 and DIMM2 share one channel, while DIMM3 and DIMM4 share the second channel. Enabling Dual-Channel simply means to make sure that the total memory for the two channels is balanced. For example: If you install one 256 MB module in DIMM1 and one in DIMM2 (256MB x 2 = 512MB), you must install a total of 512 MB between DIMM3 and DIMM4. In balancing the memory on the two channels, you have, in effect, enabled Dual-Channel.

# Storage Configuration

So far so good, now it is time to install the storage devices for your mainboard.

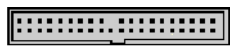
## Floppy Disk Connector: FDC



**FDC**

This mainboard provides a standard floppy disk connector (FDC) that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy diskette drives. This connector supports the floppy drive ribbon cables provided in the packaging.

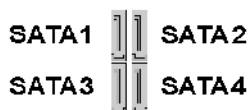
## IDE1 (Primary IDE Connector)



**IDE1**

You can connect 2 IDE devices to the IDE1 connector using a single ribbon cable with 3 connectors (2 for the drives and one to connect to the board). If you are connecting 1 drive, you should configure it as the Master device. If you are connecting a second drive, you must configure it as the Slave device (see your hard drive manual for master/slave configuration specifics). If you have an IDE CD-ROM drive, you just can attach it to this connector.

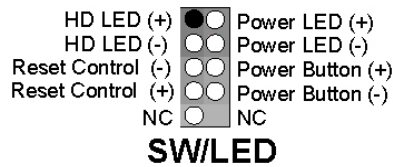
## SATA1-4 (Serial ATA connector)



These SATA connectors (SATA1 – SATA4) support Serial ATA 150. Each SATA connector can only support one serial ATA device. **Note:** With most storage devices, there is a power cable that you need attach to a power source (power supply).

# Front Panel Configuration

## SW/LED



### HD LED (Hard Drive LED Connector)

This connector can be attached to an LED on the front panel of a computer case. The LED will flicker during any disk activity.

### RST SW (Reset Connector)

This connector can be attached to a momentary SPST switch. This switch is normally left open. When closed it will cause the mainboard to reset and run the POST (Power On Self Test).

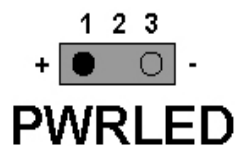
### PWR-LED (2-pin Power LED)

The mainboard provides a two-pin power LED connector. If there is a 2-pin power LED cable on the front panel of your computer case, you can attach it to the 2-pin power LED connector. The LED will illuminate showing that the computer is powered on.

### PWR ON (Power Button)

This connector can be attached to a front panel power switch. The switch must pull the Power Button pin to ground for at least 50 ms to signal the power supply to switch on or off (the time required is due to internal debounce circuitry on the system board). At least two seconds must pass before the power supply will recognize another on/off signal.

### PWR-LED (3-Pin Power LED)



This mainboard provides a 3-pin power LED connector. If there is a 3-pin power LED cable on the front panel of a computer case, you can attach it to the 3-pin power LED connector. The LED will illuminate showing that the computer is powered on.

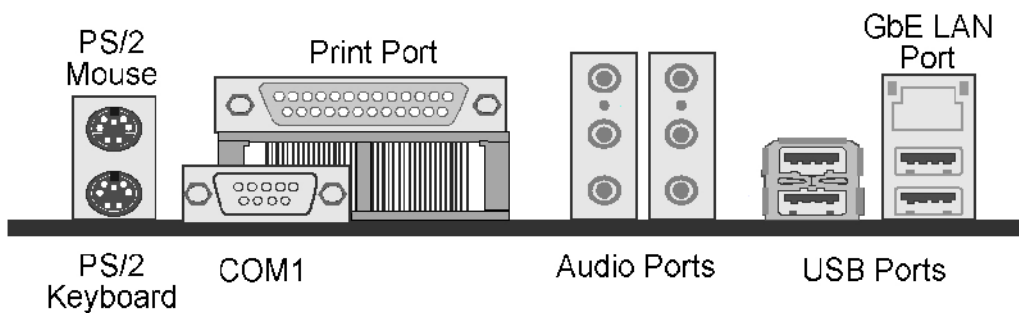
## SPEAKER (Speaker)



### SPEAKER

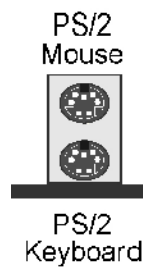
A front panel speaker can be attached to this connector. This speaker is used for audible beeps during the boot up process (Power On Self-Test). A single “short beep” is normal, while “irregular beeps” signal problems.

## Rear Panel Configuration



## PS/2 Mouse & PS/2 Keyboard Connectors: KB/MS

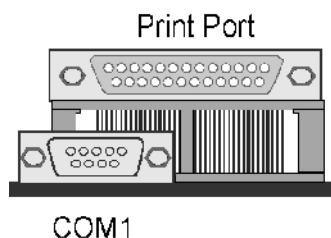
This mainboard provides a standard PS/2 mouse connector and PS/2 keyboard connector. The pin assignments are described below:



Pin	Assignment	Pin	Assignment
1	Data	4	+5 V (fused)
2	No connect	5	Clock
3	Ground	6	No connect

## Serial and Parallel Interface Ports

This mainboard come equipped with one serial port and one parallel port.



## Parallel Interface Port: PRT

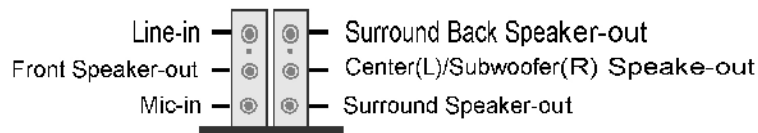
The parallel port on your system has a 25-pin, DB25 connector that is used to interface with parallel printers and other devices using a parallel interface.

## The Serial Interface: COM1

The serial interface port is sometimes referred to as an RS-232 port or an asynchronous communication port. Mice, modems and other peripheral serial devices can be connected to this port.

## Audio Port Connectors: Sound

This mainboard comes equipped with 6 Audio Ports. The Mic-in, Line-in and Front Speaker-out are standard audio ports that provide basic audio functionality. When you install the 8 Channel Audio Effects driver (4/6/8 channel audio), the other 3 audio ports will be enabled (see appendix 1).



**Line In** Connects to an external audio device such as a CD player, tape player or other audio devices that provide audio.

**Front Speaker-Out** Connects to standard audio speakers for audio output. This port becomes the surround sound front speakers when the 8 Channel Audio Effects (4/6/8 speakers) driver is installed and enabled. Also note that this port provides the most amperage of all the ports making it suitable for headphones and speakers without their own power cables.

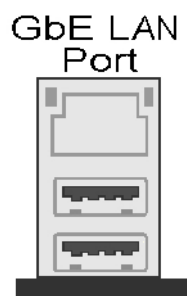
**Mic In** Connects to a microphone.

**Surround Back Speaker-out** This port represents the surround sound back speakers and is only functional when the 4/ 6/ 8 Channel Audio Effects driver is installed and enabled.

**Center/Subwoofer** This port represents the Center/Subwoofer speakers and is only functional when the 6/ 8 Channel Audio Effects driver is installed and enabled. **Surround Speaker-out** This port represents an auxiliary port and is only functional when 8 Channel Audio Effects driver is installed and enabled.

## USB & (Gb) LAN Connectors: USB/ Gb LAN

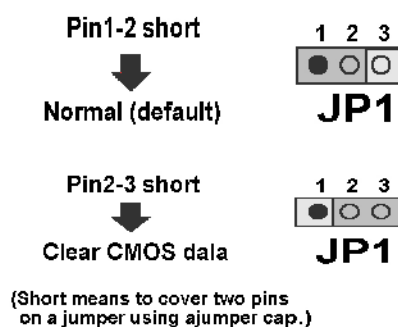
This mainboard comes with 4 USB ports and a Gb/s LAN port. The USB connectors are used to attach to keyboards, mice and other USB devices. You can plug the USB devices directly into this connector. The LAN connectors can be attached directly to a network.



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

## Clear CMOS Jumper: JP1

The “Clear CMOS” jumper allows you to reset your CMOS configurations. This is particularly useful when you have forgotten your system password and cannot boot to the operating system.

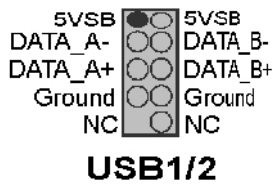


## Tips

The following steps explain how to reset your CMOS configurations when you have forgotten your system password.

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

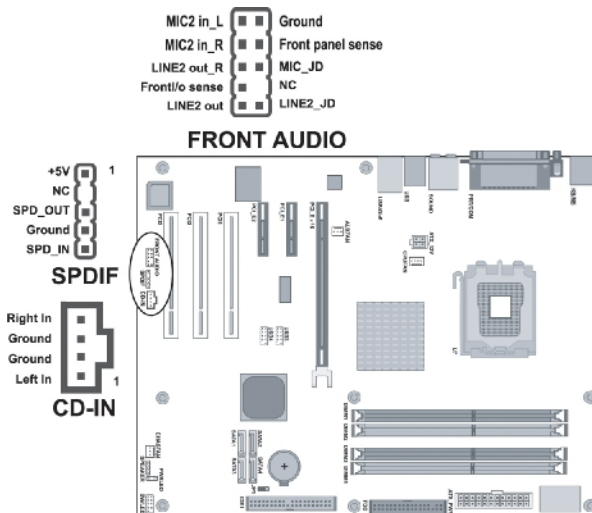
## Front USB Headers: USB3/ USB4



This mainboard provides 2 USB headers on the board allowing for 4 additional USB ports. To make use of these headers, you must attach a USB bracket/cable with USB ports (some models will come packaged with a USB 4-port bracket-cable). The optionally packaged bracket will have two connectors that you can connect to the headers (USB1, USB2). The other end (bracket containing the USB ports) is attached to the computer casing.

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.

## Audio Connectors



### CD-ROM Audio-In Header: CD-IN

This header is used to connect to the CD-ROM/DVD audio cable

### Front Panel Audio Header: FRONT AUDIO

You can use the Front Panel Audio header (FRONT AUDIO) to connect to a separate audio bracket or to connect to case embedded audio equipment. The Front AUDIO header provides MIC-in and Line-out functionality and cannot be used simultaneously with the back panel mic

and speakers. An SPDIF/Audio bracket is optionally packaged with some models.

## **S/PDIF Header: SPDIF**

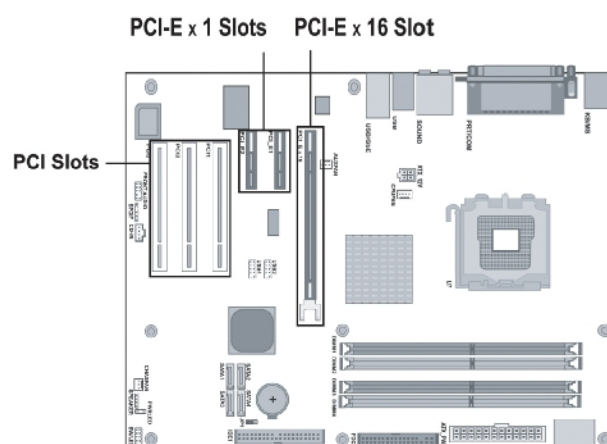
S/PDIF (Sony/Philips Digital Interface) is an audio transfer file format which provides high quality audio using optical fiber and digital signals. This mainboard is equipped with an SPDIF header and must be used with a bracket-cable containing S/PDIF ports. An SPDIF/Audio bracket is optionally packaged with some models. The bracket has RCA connectors similar to that used with most consumer audio products and TOS-Link connectors and you can use these connectors to output/input audio to and from an S/PDIF device. The devices you connect to must be S/PDIF compliant for optimal effect.

## **SPDIF & FRONT AUDIO bracket**

You can connect this bracket to the SPDIF and FRONT AUDIO Headers.

## **Slots**

There is one PCI-Express x16 slot, 2 PCI-Express x1 slots and 3 PCI slots. These slots are designed for expansion cards to complement and enhance the functionality of the mainboard.



## **PCI-Express slots: PCI-E X16 & PCI-E1/ PCI-E2**

PCI-E x16 slots are for installing PCI-Express graphics cards. The PCI-E x1 slot is for expansion cards which fit the PCI-E x1 slot.



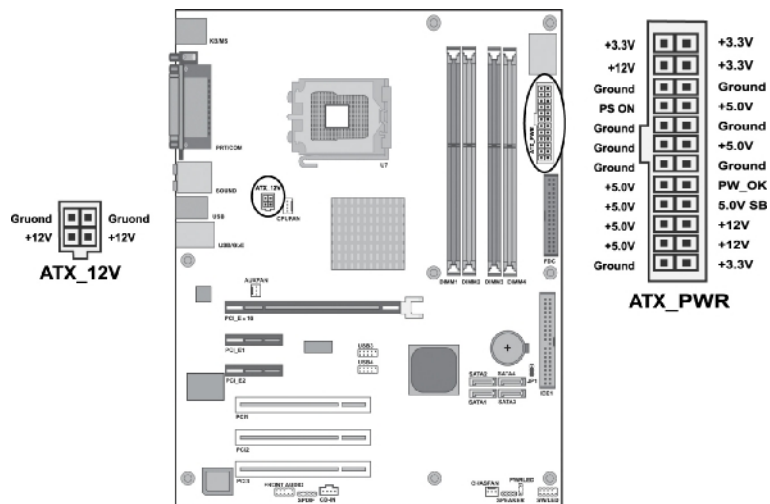
## PCI Slots: PCI1/ PCI2/ PCI3

This mainboard is equipped with 3 standard PCI slots. PCI stands for Peripheral Component Interconnect and is a bus standard for expansion cards, which has, for the most part, supplanted the older ISA bus standard. This PCI slot is designated as 32 bit.

## Power Supply Attachments

### ATX Power Connector: ATX\_PWR 、 ATX\_12V

This mainboard requires two ATX power connections. The first is a 24-pin connector and the second is a 4-pin connector. Attach the 4-pin connector first and then attach the 24-pin connector. Make sure the connectors are secure before applying power. (ATX\_PWR can be attached to a 20-pin connector but be extra careful with the connector orientation when connecting the cables)



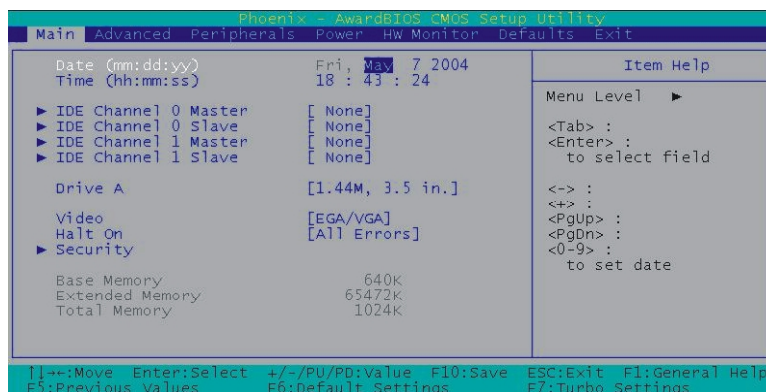
# BIOS Settings

## Zeros and ones

Phoenix-Award BIOS has a built-in setup program that allows users to modify the basic system configuration. This information is stored in CMOS RAM whose power is supplied by a battery so that it can retain the setup information even when the power is turned off. Press Delete when you Power on or Reboot the computer system. (i.e. After the logo appears at the center of the screen, please press Delete to enter the BIOS setup program). In the BIOS, make sure that everything is working fine before you try to optimize it for maximum performance.

## Main

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



## Date (mm/date/year) and Time (hh/mm/ss)

Allow you to change the date and time of the system clock. No matter how good the quality of the motherboard, remember that losing (or gaining) several seconds per month is not a surprising thing.

## **IDE Channel 0 Master/Slave**

You can press **Enter** to see the submenus they contain.

### **Drive A**

Allows you to select the type of floppy drive installed for drive A. Available options are **None, 365K, 5.25in, 1.2M, 5.25in, 702K, 3.5in, 1.44M, 3.5in** and **2.88M, 3.5in**.

### **Video**

Allows you to select the type of displaying standard you are using. Available options are **EGA/VGA, CGA 40, CGA 80** and **MONO**.

### **Halt On**

Select the situation in which you want the BIOS to stop the POST process and notify you. Available options are **All Errors, No Errors, All, but keyboard, All, but diskette,** and **All, but disk/key**.

### **Security**

This feature consists of two options -- **Set Password** as well as **Security Option**. If you set a password for security, the Security Option will enable you to determine whether the code needs to be entered during the boot process or when you enter the BIOS settings.

### **Base Memory**

Displays the amount of conventional memory detected during boot up.

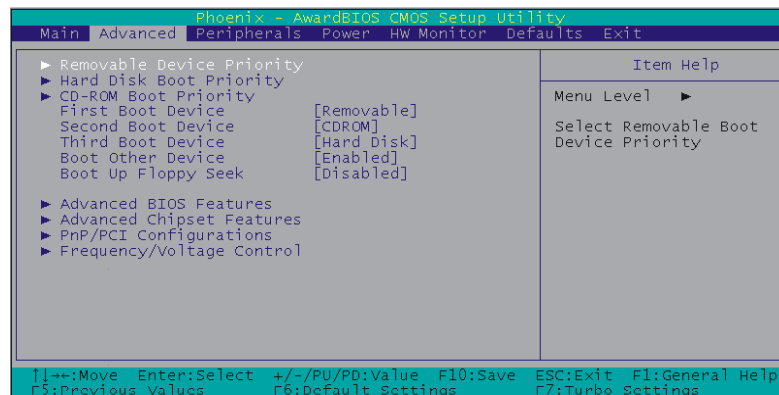
### **Extended Memory**

Displays the amount of extended memory detected during boot up.

### **Total Memory**

Displays the total memory available in the system.

# Advanced



## Removable Device Priority

Select removable device priority, such as Floppy Disks, LS120, ZIP-100, USB-FDD and USB-ZIP.

## Hard Disk Boot Priority

Select hard disk boot priority.

## First/Second/Third Boot Device

Allow you to select the First, Second and Third Boot Device. If your computer is newly constructed, the next thing you want to do is load the Operating System from scratch, directly off its CD. Before that, you need to set the First Boot Device to the CDROM. This instructs the BIOS to boot from the CD drive before trying to boot from the hard drive, which is still blank.

## Boot Other Device

The setting instructs the computer to boot from other devices if it fails to boot from the First/Second/Third Device.

## Boot up Floppy Seek

This BIOS feature determines whether your computer checks for a floppy drive during boot-up or not. If **enabled**, the computer will attempt to detect and initialize the floppy drive. If it can not detect one, it will flash

an error message. However, the system will be allowed to continue the boot process. If this feature is **disabled**, your computer will skip the floppy drive check, which speeds up the booting process by several seconds. Since the floppy check is really pointless, it is recommended that you **disable** this feature for a faster booting process.

## **Advanced BIOS Features**

### **CPU Feature**

#### **Delay Prior to Thermal**

This BIOS feature controls the activation of the Thermal Monitor's automatic mode. It allows you to determine when the Pentium 4's Thermal Monitor should be activated in automatic mode after the system boots. In general, the Thermal Monitor should not be activated immediately on booting since the processor will be under a heavy load during the booting process, which results in the sharp rise in die temperature from its cold state, which leads to the unstable system. Therefore, to ensure optimal booting performance, the activation of the Thermal Monitor must be delayed for a set period of time. But how do you possibly know the optimal delay time? It is recommended that you set this to its lowest value that exceeds the time it takes to fully boot up your computer.

#### **Thermal Management**

This item will monitor the CPU thermal to prevent the CPU damage from high temperature.

#### **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**

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 this area. BIOS will show a warning message on screen and alarm beep.

## CPU L1 & L2 Cache

Cache memory is much faster than conventional DRAM system memory. These fields allow you to **enable** or **disable** the CPUs Level 1 built-in cache and Level 2 external cache. Both settings are left as Enabled to significantly enhance the performance of your computer.

## Hyper-Threading Technology

When you install a CPU featuring Hyper-Threading Technology, this item will allow you to **enable** or **disable** the Hyper-Threading technology.

Options: Disabled · Enabled (default).

## Quick Power On Self Test

**Enable** this function to reduce the amount of time required to run the POST (Power On Self Test). BIOS will save time by skipping certain tests during POST. It is recommended that you **disable** this setting. Finding a problem during boot up is better than losing data during your work.

## Boot Up NumLock Status

This function defines the keyboard's numberpad as number keys or arrow keys. If it is set at **On** the number keys will be activated, if it is set at **Off** the arrow keys will be activated.

## Typematic Rate Setting

When **enabled**, you can set the following two-typematic control items. When **disabled**, the keyboard controller determines keystrokes arbitrarily in your system.

### Typematic Rate (Chars/Sec)

The typematic rate sets the rate at which characters on the screen repeat when a key is pressed and held down.

### Typematic Delay (Msec)

The typematic delay sets how long after you press a key that a character begins repeating.

## APIC Mode

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

## 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**

IBM's relic. If your system's DRAM is larger than 64MB and you are running OS/2, select OS/2 as the item value. Otherwise, set the item value to Non-OS/2 for all other operating systems.

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

Self **M**onitoring, **A**nalysis and **R**eporting **T**echnology is a technology that enables a PC to attempt to predict the possible failure of hard drives shown on the booting screen.

### **Intel OSB Logo Show**

This item allows you to show or hide the small LOGO EPA.

Options: Disabled · Enabled (default)

## **Advanced Chipset Features**

### **DRAM Timing Selectable**

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

Options: Manual · By SPD (default)

### **CAS Latency Time**

CAS is short for column address strobe, which is a kind of signals. When the CPU needs data from SDRAM, CAS signals will be sent via the CAS line to specify the column where the data is needed. This controls the time delay (in clock cycles - CLKs) that passes before the SDRAM starts to carry out a read command after receiving it. This also determines the number of CLKs for the completion of the first part of a burst transfer. In other words, the lower the latency, the faster the transaction.

Note that some SDRAM modules may not be able to handle the lower latency and will become unstable and lose data. Therefore, set the DRAM CAS Latency Time to **2** for optimal performance if possible but increase it to **2.5** if your system becomes unstable.

Interestingly, increasing the CAS latency time does have an advantage in that it will enable the SDRAM to run at a higher clockspeed, thereby

giving you an edge in overclocking your system. So, if you hit a snag while overclocking, try increasing the CAS latency time.

### **DRAM RAS# to CAS# Delay**

This item allows you to select a delay time between the CAS and RAS strobe signals. It only applies when DRAM is written to, read from, or refreshed. This field is adjustable only when “DRAM Timing Selectable” is set to “manual”. This field is locked when “DRAM Timing Selectable” is set to “By SPD” and is automatically determined by the system.

Options: 4 、 3 、 2

### **DRAM RAS# Precharge**

This item allows you to select the DRAM RAS# precharge time. The ROW address strobe must precharge again before DRAM is refreshed. An inadequate configuration may result in incomplete data. This field is adjustable only when “DRAM Timing Selectable” is set to “**manual**”. This field is locked when “DRAM Timing Selectable” is set to “**By SPD**” and is automatically determined by the system.

Options: 4 、 3 、 2

### **Precharge Delay**

This item allows you to select DRAM Active to Precharge Delay. This field is locked when “DRAM Timing Selectable” is set to “By SPD” and is automatically determined by the system.

Options: 8 、 7 、 6 、 5

### **System BIOS Cacheable**

Enabling this function allows caching of the system BIOS ROM at F0000h-FFFFFh, which results in better system performance. However, if any program writes to this memory area, a system error may result. It is advisable to leave it in default setting. Caching the system BIOS results in better performance than shadowing the system BIOS.

### **Video BIOS Cacheable**

Select “**Enabled**” to allow caching of the video BIOS which may improve performance. If any other program writes to this memory area, a system error may result.

Options: Enabled, Disabled (default)



## **Memory Hole at 15M-16M**

**Enabling** this function will reserve the memory address space between 15MB and 16MB for ISA expansion cards. However, it will also result in not allowing the system to have access to memory above 16MB. Please note that some expansion cards require this setting to be enabled. The default setting is **Disabled**. If Auto Configuration is enabled, you must set the DRAM timing function to 60ns or 70ns, depending on the type of DRAM you install.

## **PCI Express Root Port Func**

### **PCI Express Port1/2**

This item allows you to **enabled** or **disabled** PCI Express x 1 port 1/ 2.

Options: Auto (default) 、 Disabled

### **PCI-E Compliancy Mode**

This item allows you to select the PCI-E Compliancy Mode.

Options: V1.0a (default) 、 V1.0

### **PEG Force X1**

This item allows you to force the PCI-Express x 16 slot to install the PCI-Express x 1 interface expansion card.

Options: Disabled (default) 、 Enabled

## **PnP/PCI Configurations**

### **Reset Configuration Data**

If you just install a new hardware or modify your computer' s hardware configuration, the BIOS will automatically detect the changes and reconfigure the ESCD(Extended System Configuration Data). Therefore, there is usually no need to manually force the BIOS to reconfigure the ESCD. However, the occasion may arise where the BIOS may not be able to detect the hardware changes. A serious resource conflict may occur and the operating system may not even boot as a result. This is where the **Reset Configuration Data** BIOS feature comes in. This BIOS feature allows you to manually force the BIOS to clear the previously saved ESCD data and reconfigure the settings. All you need to do is **enable** this BIOS feature and then reboot your computer. The new ESCD should

resolve the conflict and allow the operating system to load normally. Please note that the BIOS will automatically reset it to the default setting of **Disabled** after reconfiguring the new ESCD. So, there is no need for you to manually **disable** this feature after rebooting.

### **Resources Controlled By**

This BIOS feature determines if the BIOS should automatically configure IRQ and DMA resources. The BIOS is generally capable of automatically configuring IRQ and DMA resources for the devices in your computer. Therefore, it is advisable that you set this feature to **Auto**. However, if the BIOS has problems assigning the resources properly, you can select the **Manual** option to reveal the IRQ and DMA assignment fields. You can then assign each IRQ or DMA channel to either **Legacy ISA** or **PCI/ISA PnP** devices. **Legacy ISA** devices are compliant with the original PC AT bus specification and require a specific interrupt and/or DMA channel to function properly. **PCI/ISA PnP** devices, on the other hand, adhere to the Plug and Play standard and can use any interrupt or DMA channel.

### **IRQ Resources**

When resources are controlled manually, you can assign each system interrupt a type, depending on the type of device using the interrupt. This is only configurable when “**Resources Controlled By**” is set to “**Manual**”.

Options: IRQ-3/ 4/ 5/ 7/ 9/ 10/ 11/ 12/ 14/ 15 assigned to PCI device

### **PCI / VGA Palette Snoop**

This option is only useful if you use an MPEG card or an add-on card that makes use of the graphics card's Feature Connector. It corrects incorrect color reproduction by "snooping" into the graphics card's framebuffer memory and modifying (synchronizing) the information delivered from the graphics card's Feature Connector to the MPEG or add-on card. It will also solve the problem of display inversion to a black screen after using the MPEG card.

### **PCI Latency Timer (CLK)**

This BIOS feature controls how long a PCI device can hold the PCI bus before another takes over. The longer the latency, the longer the PCI device can retain control of the bus before handing it over to another PCI device.

Normally, the PCI Latency Timer is set to **32 cycles**. This means the

active PCI device has to complete its transactions within 32 clock cycles or hand it over to the next PCI device. For better PCI performance, a longer latency should be used. Try increasing it to **64 cycles** or even **128 cycles**. The optimal value for every system is different. You should benchmark your PCI cards' performance after each change to determine the optimal PCI latency time for your system. Please note that a longer PCI latency isn't necessarily better. A long latency can also reduce performance as the other PCI devices queuing up may be stalled for too long. This is especially true with systems with many PCI devices or PCI devices that continuously write short bursts of data to the PCI bus. Such systems would work better with shorter PCI latencies as they allow rapid access to the PCI bus. In addition, some time-critical PCI devices may not agree with a long latency. Such devices require priority access to the PCI bus which may not be possible if the PCI bus is held up by another device for a long period. In such cases, it is recommended that you keep to the default PCI latency of **32 cycles**.

### **PCI SLOT1-3**

This item allows you to select an IRQ address for PCI slot 1-3.

Options: Auto (default) 、 3 、 4 、 5 、 7 、 9 、 10 、 11 、 12 、 14 、 15

## **PCI Express relative items**

### **Maximum Payload Size**

This item allows you to set the PCI Express Maximum payload size per time.

Options: 4096 (default) 、 128 、 256 、 512 、 1024 、 2048

## **Frequency/Voltage Control**

### **Spread Spectrum**

The spikes generated by your motherboards clock generator create EMI (Electromagnetic Interference). This function reduces the EMI by modulating the pulses so that the spikes of the pulses are reduced and hence gives reduced EMI. But this reduction can mean that some of your time-critical devices such as SCSI devices can be affected and their stability reduced. **Leave the setting disabled** especially if you are overclocking your system. If you find you have to try this use the smallest % setting possible.

Some BIOS's have a Smart Clock setting which can turn off AGP, PCI & SDRAM clock signals when not in use which reduces EMI without giving system stability problems. This also gives a slight reduction in power consumption.

### **PCI Speed Setting**

This feature allows you to set the PCI frequency. Auto is recommended.

### **PCI-E Speed Setting**

Ditto.

### **System Memory Frequency**

If you want to activate this feature, set DRAM Timing Selectable to Manual. Available options are Auto, 333MHz, and 400MHz.

### **CPU Speed Detected**

Shows the current CPU speed.

### **CPU Speed Setting**

This item displays the CPU speed you set. If you don't change the "CPU Host Frequency" or the "CPU Clock Ratio" and the item will display the current CPU speed.

### **CPU Host Frequency (MHz)**

This item displays the CPU Host frequency. You can set it from XXX to 333. The default depends on your CPU frequency. The default for this field depends on the CPU installed.

### **CPU Clock Ratio**

This field 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 adjust the "CPU Clock Ratio". The default depends on your CPU.

### **DDR Voltage (Volt)**

This item allows you to adjust the RAM voltage.

Options: Default (default) 、 + 0.3V 、 + 0.2V 、 + 0.1V

### **NB Voltage (Volt)**

This item allows you to adjust the North Bridge voltage.

Options: Default (default) 、 +0.3V 、 + 0.2V 、 + 0.1V

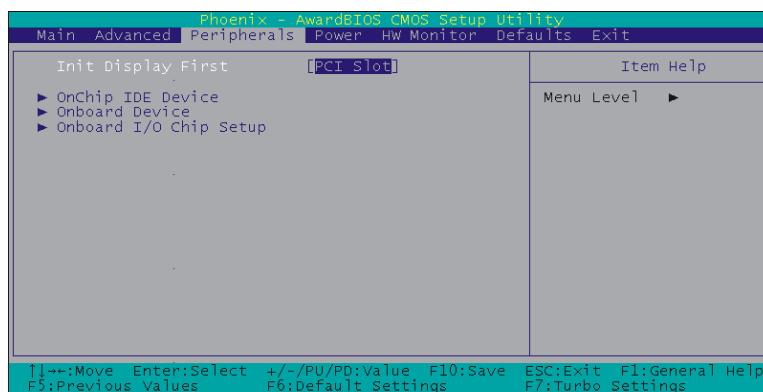
## Default CPU Voltage (Volt)

This item displays the CPU default Voltage.

## CPU Voltage (Volt)

This item allows you to adjust your CPU core voltage. Options: 0.85~1.9.  
The default depends on your CPU.

# Peripherals



## Init Display First

Set to **PCIEx** if your primary display is your PCI-E adapter or to **PCI** if the primary display is a PCI video card.

## OnChip IDE Device

### IDE HDD Block Mode

Enabled is recommended for the best hard drive performance. Windows NT 4.0 users should set this to Disabled unless they can confirm they have been updated with a Service Pack that will work with it.

### On-Chip channel0/channel1 PCI IDE

The mainboard chipset contains a PCI IDE interface with support for two IDE channels. These two IDE channels are for IDE1 and SATA1/2/3/4 connectors use. Select "**Enabled**" to activate the first and/or second IDE interface. Select "**Disabled**" to deactivate the interface if you are going to install a primary and/or secondary add-in IDE interface.

Options: Enabled (default) \ Disabled

### **IDE channel0/channel1 Master/Slave PIO**

Set all of these to **Auto** and let the BIOS determine if each drive is capable of Ultra DMA support, and its respective PIO mode.

### **IDE channel0/channel1 Master/Slave UDMA**

Same as above.

## **OnChip Serial ATA Setting**

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

This field allows you to select the on-chip Serial ATA operating mode which will determine how you will use your Serial ATA drives with the other standard IDE drives. This system can physically attach 2 IDE drives and 4 SATA drives but will have certain limitations as described below.

Options :

**Disabled:** Disable on-chip serial ATA. No Serial ATA devices installed.

**Auto**(default): BIOS will auto-detect the presence of any SATA devices.

2 (or 1) IDE drivers + 4 (or 3) SATA drivers → Enhanced Mode

2 (or 1) IDE drivers + 2 (or 1) SATA drivers (Must connect with SATA1 +3 or with SATA2+4) → Combined Mode

4 ( or 3 or 2 or 1)SATA drivers → SATA only

2 (or 1) IDE drivers → Disabled

**Combined Mode:** Windows<sup>®</sup> 98/ME can recognize IDE devices but cannot directly recognize an SATA device and therefore you must use this mode to allow the SATA device to simulate an IDE device by assuming the role of one IDE channel in the system. This means that you will have one available IDE channel for 2 SATA drives to use (each IDE channel can support 2 IDE drives). If you were to install all both IDE drives and 4 SATA drives, you will only see 2 of the SATA drives along with the 2 IDE drives.

**Enhanced Mode:** In this mode, you can use all 6 hard disk drives (including 2 IDE drives and 4 SATA drives). Note: You cannot use “Enhanced” mode with Windows<sup>®</sup> 98/ME. It only support to install Windows<sup>®</sup> 2000/XP if you want to boot from SATA device. (It’s restriction from Microsoft.)

**SATA Only:** Select this option when you install SATA drives only.

### **PATA IDE Mode**

This item allows you to select an IDE channel for PATA IDE devices.

When you install the SATA device(s) to the SATA1 or 3 or 1+3, this item should be set to channel 1. When you install the device(s) to the SATA2 or 4 or 2+4, this item should be set to channel 0.

Options: Channel 0 (default) 、 channel 1

### **SATA Port**

This item will display which IDE channel will be used to the SATA device.

Options: SATA2, 4 is channel 1

## **Onboard Device**

### **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 option should be **enabled** if your system has a USB 2.0 device installed on the system board. You will need to **disable** this feature if you install a USB 1.1 device.

Options: Enabled (default) 、 Disabled

### **USB Keyboard Support**

**Enables** support for USB attached keyboards.

Options: Disabled (default) 、 Enabled

### **Audio Device**

This item allows you to control the onboard audio.

Options: Auto (default) 、 Disabled

### **Gigabit LAN Device**

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

Options: Enabled (default) 、 Disabled

### **IDE RAID Device**

This item allows you to **enable** or **disable** the IDE RAID Device.

Options: Enabled (default) 、 Disabled

## **Onboard I/O Chip Setup**

### **Power On Function**

This option allows you to select a way to power on your computer.

Options: Password、Hot KEY、Mouse Left、Mouse Right、Any KEY、BUTTON ONLY (default), and Keyboard 98

### **KB Power On Password**

This is the password that your system will use as part of the power-on sequence. This field is only configurable when “Power On Function” is set to “Password”.

### **Hot Key Power ON**

This option allows you to use the Ctrl key along with a hot key (function key) to power on your system. This field is only configurable when “Power On Function” is set to “Hot Key”.

Options: Ctrl-F1、Ctrl-F2... .. Ctrl-F12

### **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 for port1)、2F8/IRQ3、3E8/IRQ4、2E8/IRQ3、Auto

### **UART Mode Select**

This item allows you to select the Infra Red (IR) standard to be used.

Options: Disabled (default)、ASKIR、IrDA

### **RxD, TxD Active**

This item determines the RxD and TxD frequencies. This field only configurable if “UART Mode Select” is set to “ASKIR” or “IrDA”.

Options: Hi / Lo (default)、Hi / Hi、Lo / Hi、Lo / Lo



### **IR Transmission Delay**

This item allows you to **enable/disable** IR transmission delay. This field is only configurable if “UART Mode Select” is set to “ASKIR” or “IrDA”.

Options: Enabled (default) 、 Disabled

### **UR2 Duplex Mode**

Select the transmission mode used by the IR interface. Full-duplex mode permits simultaneous bi-directional transmission. Half-duplex mode permits transmission in only one direction at a time. This field only configurable if “UART Mode Select” is set to “ASKIR” or “IrDA”.

Options: Half (default) 、 Full

### **Use IR Pins**

Consult your IR peripheral documentation to select the correct setting of the TxD and RxD signals. This field is only configurable if “UART Mode Select” is set to “ASKIR” or “IrDA”.

Options: RxD2 、 DxD2 (default)

### **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:

ECP (default)      Extended Capabilities Port.

EPP                      Enhanced Parallel Port.

SPP                      Standard Printer Port.

ECP+EPP              ECP & EPP mode.

Normal

### **EPP Mode Select**

Select EPP port type 1.7 or 1.9. This field is only configurable if “Parallel Port Mode” is set to “EPP” or “ECP+EPP”.

Options: EPP 1.9(default) 、 EPP 1.7

### **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”.

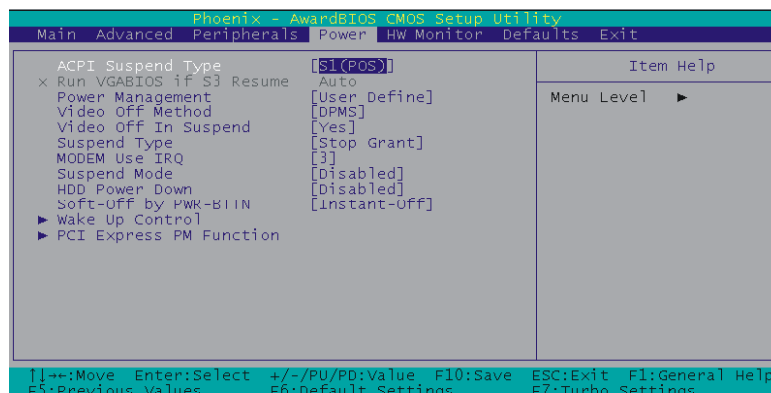
Options: 3 (default) 、 1

### **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

# Power



## ACPI Suspend Mode

This item specifies the power saving modes for ACPI function. Available options are:

### 1. S1 (POS)

The S1 state is low power state. In this state, no system context (CPU or Chipset) is lost and the hardware maintains all system contexts.

### 2. S3 (STR)

The S3 state is a lower power state, where the information of system configuration and opened applications / files are saved to main memory. The remaining power of other hardware components are turn off to save energy.

The information stored in memory will be used to restore the system when a **wake up** event occurs.

### 3. S1 & S3

If S3 state is supported by the system, by default [S3] is automatically selected. Otherwise [S1] is selected.

## Run VGABIOS if S3 Resume

Select whether you want to run VGABIOS 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

## Power Management

The level of power management can be set. Disable if you don't want any of it. You can use min or max settings that are pre-determined, or set to "User Define" to specify.

## Video Off Method

**Blank Screen:** The system BIOS will only blank off the screen when disabling video.

**V/H SYNC + Blank:** In addition to Blank screen, BIOS will also turn off the V-SYNC & H-SYNC signals from VGA cards to monitor.

**DPMS:** Select this option if your monitor supports the Display Power Management Signaling (DPMS) standard of the Video Electronics Standards Association (VESA). Use the software supplied for your video subsystem to select video power management values.

*Note: Green monitors detect the V/H SYNC signals to turn off it's electron gun.*

## Video Off In Suspend

This determines whether power to the monitor is switched off when the computer is in suspend mode.

Options: Yes ∙ No (default)

## Suspend Type

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

Options: Stop Grant (default) ∙ PwrOn Suspend

## Modem Use IRQ

This determines the modem's IRQ.

Options: 3 (default) ∙ 4 ∙ 5 ∙ 7 ∙ 9 ∙ 10 ∙ 11 ∙ NA.

## Suspend Mode

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

Options: Disabled(default) 、 1Min 、 2Min 、 4Min 、 8Min 、 12Min 、 20Min 、 30Min 、 40Min 、 1Hour

## **HDD Power Down**

It shuts down any IDE hard disk drives in the system after an idle period. This feature does not affect SCSI hard drives. **Disabled** is recommended.

## **Soft-Off by PWRBTN**

When set to **Delay 4 Sec.**, this function allows the power button to put the system in Suspend, a power saving mode. When set to **Instant-Off**, the Soft-Off by PWR-BTN function is disabled and the computer turns completely off when the power button is pressed.

## **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:

### **PCI PME Wake Up**

When **enabled**, the LAN, which is on Board, will be able to receive a signal and wake up the system from soft off and suspend mode. You should connect the LAN to the RJ45 port and turn on the resume event in suspend mode.

### **Ring Wake Up**

When **enabled**, a Modem/LAN will be able to receive a signal and activate the system from soft off and green mode. You should connect the modem to the COM port and signal your PC to power on.

### **USB KB Wake-up from S3**

Allows the activity of USB device to wake up the system from S3 power saving modes. Settings are **Enabled** and **Disabled**.

### **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**

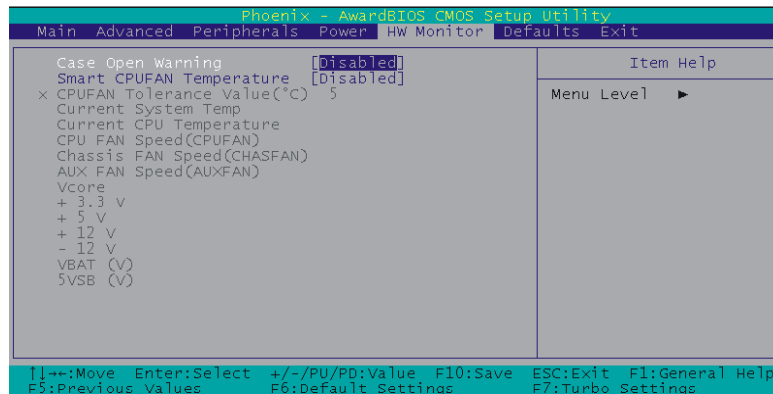
You can choose the hour, minute and second the system will boot up. This field is only configurable when “RTC Wake Up” is set to “**Enabled**”.

#### **Reload Global Timer Events**

When a system goes into suspend mode, certain devices must be inactive for a period of time. Conversely, if any of those devices have any activity, the system will awaken. You can select the devices that will participate in suspend/power-on activity by configuring these fields. Devices include: Primary IDE 0/ Primary IDE 1/ Secondary IDE 0/ Secondary IDE 1/ FDD, COM, LPT Port/ PCI PIRQ [A-D] #.

Options: Disabled (default), Enabled

# HW Monitor



## Case Open Warning

If this function is set to **“Enabled”** and the case had been previously opened, the system will automatically display alert messages on the screen when you power on your computer. If this function is set to **“Disabled”**, the system will not show alert messages when you power on your computer even if the case had been previously opened.

Options: Disabled (default) 、 Enabled

## Smart CPUFAN Temperature

This function allows you to select the CPU temperature. If the CPU temperature is higher than the value you’ve selected, the CPUFAN will accelerate till the temperature cools down to the defaulted value you set.

Options: Disabled (default) 、 30°C / 86°F 、 35°C / 95°F 、 40°C / 104°F 、 45°C / 113°F 、 50°C / 122°F 、 55°C / 131°F 、 60°C / 140°F 、 65°C / 149°F 、 70°C / 158°F 、 75°C / 167°F 、 80°C / 176°F 、 85°C / 185°F

# Defaults



## Load System Default Settings

To avoid errors, this option allows you to recover the original defaults of BIOS. In fact, this is the first skill you should know as you try to set other defaults of BIOS.

## Load System Turbo Settings

This option has the similar function to the previous one. The difference between them is that this is more efficient in settings, and this has the disadvantage of potentially making the system unstable. So, the decision is up to you.

## Load CMOS From BIOS

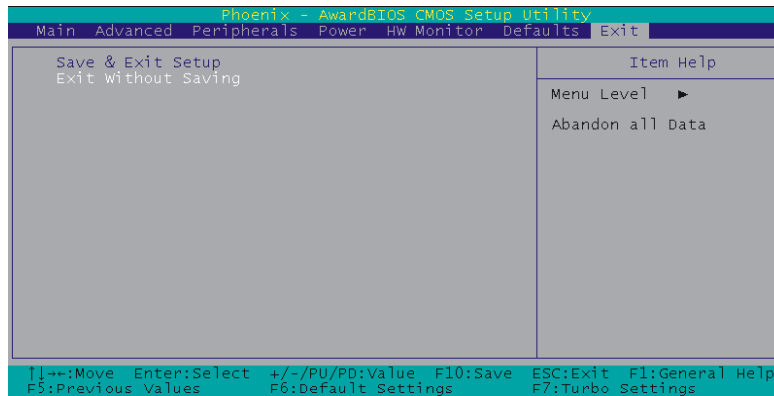
Load defaults from flash ROM for systems without batteries.

## Save CMOS To BIOS

Save defaults to flash ROM for systems without batteries.



# Exit



## Save & Exit Setup

If you select this and type **Y** followed by **Enter**, the values entered in the setup utilities will be recorded in the CMOS memory of the BIOS chip.

## Exit Without Saving

Same as above, but without saving.

# 主機板 BIOS 系統設定

## 簡介

本章節爲您介紹建立在主機板 Flash ROM BIOS 系統裡的 PHOENIX-AWARD™ 設定程式。此程式可讓使用者能夠修改主機板的系統基本設定值，並將其儲存在主機板的快閃記憶體晶片上，即使系統關機，BIOS 的設定資料亦不會消失。

在您電腦系統 Flash ROM (Read Only Memory) 裡面的 PHOENIX-AWARD™ BIOS 設定程式是一種標準版本的 BIOS 設定程式。可支援 Intel® Pentium 4 (Prescott) 處理器的 BIOS 系統。BIOS 程式提供硬體的參數設定，使電腦能正常運作，並達到最佳效能。

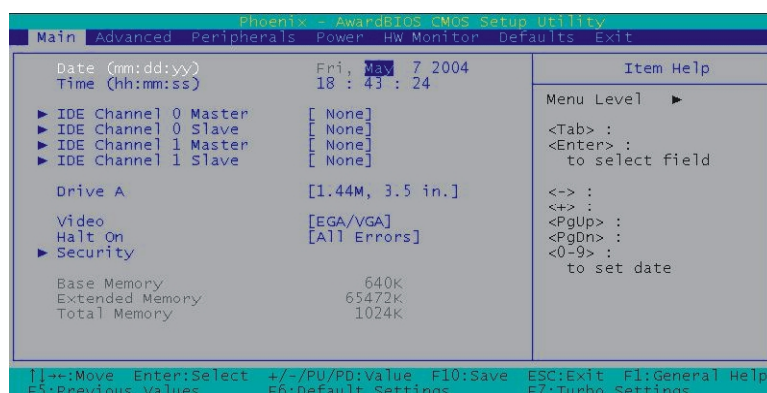
以下簡略地介紹 BIOS 系統各項功能的內容及設定程序，請以您手上的主機板所附的 BIOS 內容爲標準。

## 按鍵功能

您可以使用上、下、左、右箭頭鍵來反白您所選取的項目，按 <Enter> 鍵以選擇進入您想修改的項目，按 <PgUp> 和 <PgDn> 鍵來變換選項內容，按 <F1> 鍵進入 help 畫面，最後按 <Esc> 鍵以離開 BIOS 的設定功能畫面。

## 主選單(Main Menu)

進入 PHOENIX-AWARD™ BIOS CMOS 設定功能時，首先呈現在您眼前的就是主選單。主選單使您可以選擇您想要更改設定的功能選項。利用上、下、左、右的箭頭鍵選擇您所要修改的項目，並按下 <Enter> 鍵以進入此選項的子選單。



## 進階功能設定(Advanced)

在此選單中您可設定開機磁碟的優先順序，另外還有幾個子選單包括有 BIOS 進階功能設定、晶片組的進階功能設定、PnP/PCI 組態設定及頻率/電壓的設定，讓您可以設定 BIOS 所提供的特殊進階功能。

## 整合週邊系統設定(Integrated Peripherals)

在此選單中您可設定所有週邊設備的相關設值，如：模式設定、致能設定、位址設定等。

## 電源管理設定(Power Management)

當您用自己一貫的方式來使用電腦時，電源管理模式設定可讓您的系統達到最省電的模式。

## 電腦硬體監控功能(Hardware Monitoring)

在 BIOS 設定中提供了系統硬體監控的功能，包括了機殼打開警示功能、系統自動偵測溫度/電壓/風扇轉速功能。

## 載入預設值(Load Defaults)

您可在此選單中載入 BIOS 設定的安全預設值，使電腦獲得穩定的運作效能。

## 退出選單(Exit Menu)

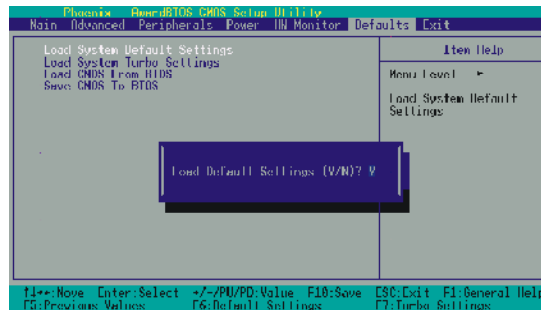
在此選單中您可選擇儲存所有 CMOS 設定並離開(Save & Exit Setup)或是選擇離開但不儲存任何設定之更改(Exit Without Saving)。

當您進入 BIOS 設定畫面中時，請依照下列步驟載入基本 BIOS 的 CMOS 設定。

### 載入預設值

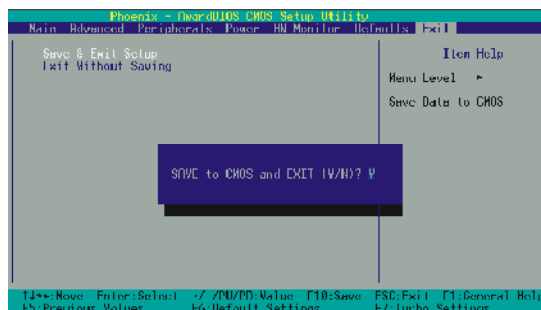
進入載入預設值(Default)選單中，選擇【Load System Default Settings】

並按下 **Enter** 鍵後，請按 **【Y】** 及 **【Enter】** 鍵，即可載入基本 BIOS 的 CMOS 設定。



### 儲存 CMOS 設定並離開

進入退出選單(Exit)中，選擇 **【Save & Exit Setup】** 並按下 **Enter** 鍵後，請按 **【Y】** 及 **【Enter】** 鍵，即可儲存 CMOS 設定並離開 BIOS 設定畫面。



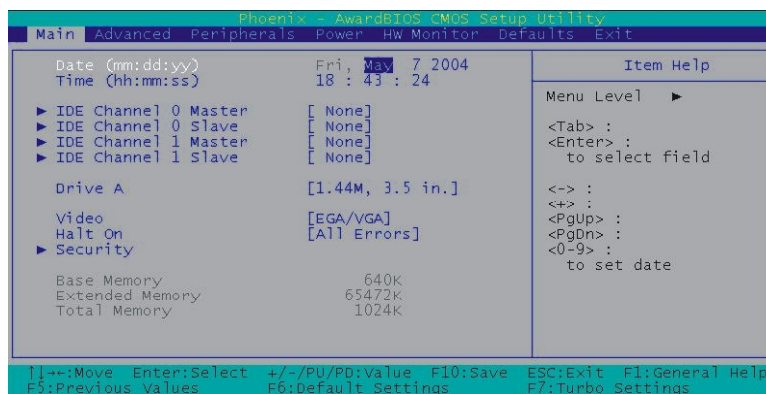
# BIOS 설정

Phoenix-Award BIOS 는 설정 프로그램을 내장하여 사용자가 기본 시스템 환경을 설정, 수정할 수 있도록 합니다. 독립 배터리로 전기가 공급되어 시스템이 꺼져 있을 때도 설정값이 유지됩니다.

사용자가 시스템의 전원을 켜거나 재시작할 때 [Delete] 키를 눌러 BIOS 의 설정 프로그램으로 들어갈 수 있습니다. BIOS 를 최적화하기 전에 모든 기능이 정상적으로 작동하고 있는지 먼저 살펴보시기 바랍니다.

## 메인화면

PHOENIX-AWARD™CMOS 설정 유틸리티의 메인화면입니다. 화면 상단의 메뉴바에서 좌우 화살표키를 이용하여 설정하고자 하는 곳으로 커서를 둔 후 각각의 설정부분을 자신의 시스템에 맞게 설정할 수 있습니다.



## 날짜 (mm/date/year) 및 시간 (hh/mm/ss)

시스템의 날짜와 시간을 설정할 수 있습니다.

## IDE Channel 0 Master/Slave

서브메뉴를 보기위해서 엔터키를 누릅니다.

## Drive A

플로피 장치 모델을 선택합니다. 가능한 옵션은 **None, 365K, 5.25in, 1.2M, 5.25in, 702K, 3.5in, 1.44M, 3.5in, 2.88M, 3.5in** 입니다.

## Video

시스템에 있는 비디오 어댑터의 유형을 선택합니다. 가능한 옵션은 **EGA/VGA, CGA 40, CGA 80, MONO** 입니다.

## Halt On

시스템에 전원이 들어오면 바이오스는 POST 라는 자가진단 테스트를 실행합니다. 이 기능은 바이오스가 하드웨어 에러를 감지하면 컴퓨터 실행을 중단시키는 기능이며, 가능한 옵션은 **All Errors, No Errors, All but keyboard, All but diskette, All but disk/key** 입니다. 예를 들어 All but Keyboard 를 선택하신다면 부팅중 키보드 에러를 제외한 에러가 생길 시 시스템이 부팅을 멈추고 정지하게 됩니다.

## **Security**

바이오스 설정으로 들어갈 경우 비밀번호를 설정할 수 있습니다. 이 기능을 설정하면 바이오스 설정을 하기 위하여 비밀번호를 물어보게 됩니다.

## **Base Memory**

부팅 중 감지되는 기본 메모리의 용량을 나타냅니다.

## **Extended Memory**

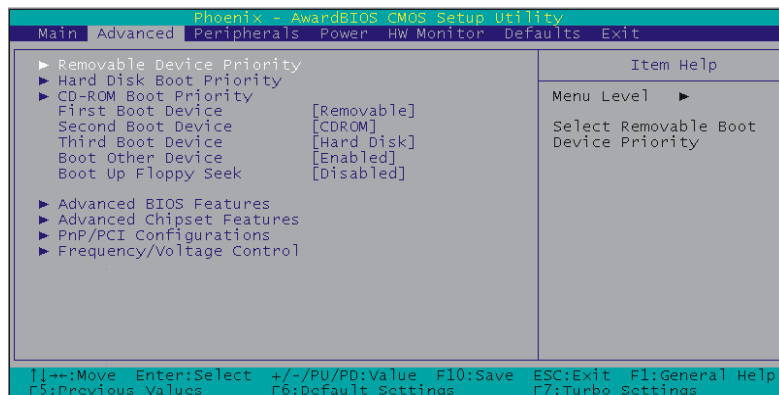
부팅 중 감지되는 확장 메모리의 용량을 나타냅니다.

## **Total Memory**

시스템의 총 메모리 용량을 나타냅니다.



# Advanced



## Removable Device Priority

이동 가능한 장치의 우선순위를 정합니다. 예를 들어 Floppy Disks, LS120, ZIP-100, USB-FDD, USB-ZIP 등이 있습니다.

## Hard Disk Boot Priority

하드디스크의 부팅 우선순위를 정합니다.

## First/Second/Third Boot Device

첫번째, 두번째, 세번째 부팅 장치를 선택할 수 있습니다. 만약 CD-ROM 에서 부팅하기를 원할 경우 이곳에서 부팅 우선순위를 정할 수 있습니다.

## Boot Other Device

만약 첫번째, 두번째, 세번째 부팅 장치에서 부팅을 할 수 없을 경우 부팅할 수 있는 장치를 설정 합니다.

## **Boot up Floppy Seek**

이 옵션이 활성화되어 있을 경우 컴퓨터는 부팅시 플로피 디스크를 검색하여 검색이 안되면 에러메시지를 보여줍니다. 그 후 정상적인 부팅이 이루어 집니다. 비활성화 되면 플로피디스크 검색을 건너뛰게 되므로 부팅 속도를 향상시킬 수 있습니다. 이 부분은 비활성화 [disable]로 하시길 권장합니다.

## **Advanced BIOS Features**

### **CPU Feature**

#### **Delay Prior to Thermal**

이 기능은 온도 모니터링 기능의 자동 모드를 조절합니다. 시스템이 부팅된 후 언제 이 모니터링 기능이 작동할 것인지에 대해서 설정하는 기능입니다. 이 기능은 부팅 후 일정한 시간 후에 이루어져야 합니다. 만약 처음부터 모니터링 기능을 설정하면 CPU 의 온도가 급속히 올라가게 되어 시스템의 안정성에 문제가 있을 수 있습니다. 이 항목을 가장 낮은 값으로 설정하여 여러분의 컴퓨터가 완전히 부팅이 끝난 후에 이 기능이 동작하도록 합니다.

#### **Thermal Management**

이 항목은 고열로 인한 CPU 손상을 방지하기 위하여 CPU 의 온도를 모니터링 합니다.

### **Limit CPUID MaxVal**

Limit CPUID MaxVal 가 3 으로 설정되어 있을 경우 , 이 항목은 WinodwsXP 에서 반드시 “Disabled”로 설정되어야 합니다. 가능한 옵션은 Enable, Disable (기본값) 입니다.

### **Virus Warning**

이 옵션을 활성화 하면, 프로그램이 디스크 드라이브의 부트부분에 쓰기를 시도했을 때 경고메시지와 비프음을 나타냅니다.

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

캐시 메모리는 기존의 DRAM 시스템 메모리보다 훨씬 빠릅니다. 사용자는 CPU 의 L1 내장캐시와 L2 외부 캐시를 Enable/Disable 할 수 있습니다. 두 설정이 다 활성화된 상태로 컴퓨터의 성능을 향상시킬 수 있습니다.

### **Hyper-Threading Technology**

하이퍼스리딩 기능이 지원되는 CPU 를 장착했을 경우 사용자는 하이퍼스리딩 기능을 활성화할지 비활성화할지 결정할 수 있습니다. 가능한 옵션은 Disabled, Enabled(기본값) 입니다.

### **Quick Power On Self Test**

POST(Power On Self Test)를 실행하는데 드는 시간을 줄이기 위하여 기능을 활성화 합니다. 바이오스에서 POST 중 일부 항목을 건너뛰으로써 부팅시간을 단축 할 수 있습니다. 그러나 저희는 이 기능을 비활성화 하기를 권장합니다. POST 를 건너뛰므로 해서 생길 수 있는 오류를

방지하기 위해서 입니다.

### **Boot Up NumLock Status**

키보드 숫자패드를 숫자키로 사용하거나 화살표키로 사용하도록 설정할 수 있습니다. 이 옵션을 On 하면 숫자키로 사용할 수 있고, Off 하면 화살표키로 사용 가능합니다.

### **Typematic Rate Setting**

이 기능이 활성화되면 사용자는 다음의 두가지에 대해서 설정이 가능합니다. 비활성화되면 컴퓨터가 자체적으로 키타이핑 값을 설정합니다.

### **Typematic Rate (Chars/Sec)**

키를 누르고 있을 때 초당 타이핑 되는 비율을 설정합니다.

### **Typematic Delay (Msec)**

키를 누르고 있을 때 키가 눌린 후 얼마간의 시간 뒤에 다시 타이핑이 시작될지를 설정합니다.

### **APIC Mode**

이 부분을 활성화함으로써 “**MPS version control for OS**” 를 설정할 수 있습니다. 그러나 시스템의 안정성을 위하여 비활성화 할 것을 권장합니다.

### **MPS Version Control for OS**

1.1 버전은 윈도우 NT 환경에서 8 개 이상의 IRQ 를 지원하는 구버전입니다. 윈도우 2000, 윈도우 XP 에서는 새로운 1.4 버전을 선택하십시오. 설정 가능한 옵션은 [1.4] (기본값) , [1.1] 입니다.

## **OS Select For DRAM > 64MB**

시스템의 DRAM 이 64M 보다 크고 사용자가 OS/2 를 실행한다면 OS/2 를 설정합니다. 또한 다른 OS 를 위한 Non-OS/2 로 설정합니다.

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

이 항목은 하드디스크 장치의 예상 가능한 에러를 자체적으로 진단하여 부팅 스크린에 나타내는 기능을 합니다..

## **Intel OSB Logo Show**

이 항목은 작은 로고를 보이거나 안보이게 할 수 있습니다. 가능한 옵션은 Disabled, Enabled(기본값) 입니다.

# **Advanced Chipset Features**

## **DRAM Timing Selectable**

이 항목은 DRAM 의 클럭/타이밍을 SPD 혹은 수동 구성을 사용하여 설정할 수 있습니다. 만약 여러분께서 “By SPD” 옵션을 선택하시려면, 여러분의 메모리 모듈이 SPD 를 가지고 있는지 확인하십시오. 가능한 옵션은 [Manual], [By SPD] 입니다.

## **CAS Latency Time**

CAS(Column Address Strobe)는 신호의 종류입니다. CPU 가 SDRAM 으로부터 데이터가 필요할 때, CAS 는 데이터가 필요한 특정한 컬럼에 CAS 라인을 통해 신호를 보냅니다. 이 기능은 신호를 받은 후 명령을 읽고 실행하는 SDRAM 의 시작 신호 전송 시간 지연을 조절합니다. 몇몇 SDRAM 은 낮은

레이턴시를 다루지 못할 수도 있으며, 시스템이 불안정해 질 수도 있습니다.

### **DRAM RAS# to CAS# Delay**

이 항목은 CAS 와 RAS 신호간에 지연시간을 설정할 수 있도록 합니다. 이 항목은 DRAM 이 쓰기 (Written to), 읽기 (Read from) 또는 리플레시 (Refreshed) 로 되어 있어야만 가능합니다. 이 항목은 오직 “DRAM Timing Selectable” 이 “manual”로 설정이 되어 있을 때만 조절 가능합니다. “DRAM Timing Selectable” 이 “By SPD” 로 설정되어 있으면 조절은 불가능하며, 이 경우 시스템이 자동적으로 설정하게 됩니다. 가능한 옵션은 4, 3, 2 입니다.

### **DRAM RAS# Precharge**

이 항목은 DRAM RAS# 프리차지(Precharge) 시간을 설정합니다. ROW 주소는 DRAM 이 리플레시 되기 전에 반드시 선충전(Precharge) 되어야 합니다. 구성이 부적절하면 부정확한 데이터가 나올 수 있습니다. “DRAM Timing Selectable”이 “manual”로 되어있을때만 조절이 가능합니다. “DRAM Timing Selectable”이 “By SPD”로 되어있으면 조절은 불가능하며, 이 경우 시스템이 자동적으로 설정하게 됩니다. 가능한 옵션은 4, 3, 2 입니다.

### **Precharge Delay**

이 항목은 DRAM Active 를 Precharge Delay 로 설정 할 수 있게 합니다. “DRAM Timing Selectable” 이 “By SPD”로 되어있으면 조절은 불가능하며, 이 경우 시스템이 자동적으로 설정하게 됩니다. 가능한 옵션은 8, 7, 6, 5

입니다.

### **System BIOS Cacheable**

이 항목을 활성화 하면 시스템 바이오스 롬의 더 낮은 퍼포먼스의 결과를 가져오는 F000h-FFFFh 부분의 캐싱을 가능하게 합니다. 그러나 만약 이 부분에 다른 프로그램이 쓰기를 시도하게 되면, 에러를 발생시킬 수도 있습니다. 이 부분을 기본 설정값으로 남겨두시기를 권장합니다.

### **Video BIOS Cacheable**

“Enabled”를 선택하면 퍼포먼스를 향상시킬 수 있는 비디오 바이오스의 캐싱을 가능하게 합니다. 만약 이 부분에 다른 프로그램이 쓰기를 시도하게 되면, 에러를 발생시킬 수도 있습니다. 가능한 옵션은 Enabled, Disabled(기본값) 입니다.

### **Memory Hole at 15M-16M**

이 항목을 활성화하면 15MB ~ 16MB 사이의 메모리 주소공간을 ISA 확장카드를 위해 남겨놓습니다. 그러나 이 항목의 활성화로 인하여 16MB 이상의 메모리 접근이 안될 수도 있습니다. 몇몇 확장 카드는 이 부분을 활성화 해야만 작동됩니다. 기본 설정값은 비활성화(Disabled) 입니다. 만약 자동 구성으로 활성화 되어 있다면, DRAM 타이밍 기능을 여러분이 장착한 메모리에 따라 60ns 혹은 70ns 으로 설정해 주어야 합니다.

## **PCI Express Root Port Func**

### **PCI Express Port1/2**

이 항목은 여러분이 PCI Express x 1 포트 1/2 항목을 활성화 혹은 비활성화 하게 합니다. 가능한 옵션으로는 Auto(기본값), Disabled 가 있습니다.

### **PCI-E Compliancy Mode**

이 항목은 여러분이 PCI-E 승락(Compliancy) 모드를 설정 가능하게 합니다. 가능한 옵션으로는 V1.0a(기본값), V1.0 이 있습니다.

### **PEG Force X1**

이 항목은 PCI-E x 1 인터페이스 카드를 강제적으로 PCI 익스프레스 x 16 슬롯에 설치할 수 있도록 합니다. 가능한 옵션은 Disabled(기본값), Enabled 입니다.

## **PnP/PCI Configurations**

### **Reset Configuration Data**

만약 새로운 하드웨어를 설치하였거나, 컴퓨터 하드웨어 구성을 수정한 경우에는 바이오스가 자동적으로 변경된 구성을 알아차려 ESCD(Extended System Configuration Data)에 저장하게 됩니다. 그러므로 정상적인 상태에서는 사용자가 수동으로 설정을 바꿀 필요는 없습니다. 그러나 가끔 바이오스가 자동으로 변경된 구성을 알아차리지 못하는 경우가 생길 수 있으며, 이런 경우에 부팅이 되지 않는 등의 문제가 발생할 수 있습니다. 이러한 경우 이 항목을 활성화 하여 재부팅 하면 바이오스가 다시 컴퓨터의 변경된



구성을 ESCD 에 기록하게 됩니다. 한번 활성화한 이후에는 자동적으로 비활성화로 바뀌게 되니 이 항목으로 다시 들어와서 비활성화로 바꾸실 필요는 없습니다.

### **Resources Controlled By**

이 항목은 바이오스가 자동적으로 IRQ 와 DMA 같은 것을 설정할 수 있는지를 설정합니다. 대체적으로 바이오스는 여러분의 컴퓨터의 장치의 IRQ 와 DMA 를 자동으로 구성합니다. 그러므로 이 설정을 Auto 로 놓아두시기를 권장합니다. 그러나 만약 바이오스가 리소스에 적절하게 접근하는 것에 문제가 있을 경우 수동으로 IRQ 와 DMA 영역을 설정해 줄 수 있습니다. 그 후 ISA 또는 PCI/ISA PnP 장비에 각각 IRQ 또는 DMA 값을 줄 수 있습니다. 레거시 ISA 장비는 적절한 동작을 위하여 특정한 인터럽트와 DMA 채널을 요구하기도 합니다. 반면 플러그 앤 플레이는 아무 인터럽트 혹은 DMA 채널을 사용할 수 있습니다.

### **IRQ Resources**

리소스가 수동으로 조절되게 되면, 여러분은 인터럽트를 사용하는 각각의 장치에 따라 시스템 인터럽트 타입을 설정할 수 있습니다. 이 설정은 “Resources Controlled By” 항목이 “Manual”로 지정되어 있을 때만 사용 가능합니다. 가능한 옵션은 IRQ-3/4/5/7/9/10/11/12/14/15 assigned to PCI device 입니다.

## **PCI / VGA Palette Snoop**

이 옵션은 여러분이 MPEG 카드 또는 그래픽 카드 기능 연결단자의 에드온 카드를 사용할 때만 유용하게 사용할 수 있습니다. 이것은 잘못된 색상을 “Snooping”을 통하여 재생산되어 정확한 색상을 나타내게 됩니다.

이 기능은 또한 MPEG 카드를 쓴 후 스크린이 까맣게 변하는 문제도 해결하여 줍니다.

## **PCI Latency Timer (CLK)**

이 바이오스의 기능은 PCI 장치가 얼마나 오랫동안 PCI 버스를 점유할 수 있는지를 조절합니다. 레이턴시를 길게 하면 다른 PCI 장비로 PCI 버스의 사용권을 넘겨주는 시간이 길어집니다. 보통 PCI 레이턴시 시간은 32 사이클로 설정되어 있습니다. 이것을 64 사이클이나, 128 사이클로 늘려줄 수 있습니다. 최적의 설정값은 시스템마다 다를 수 있습니다. 단 긴 레이턴시가 꼭 좋은 것 만은 아니며 설정을 길게 할 경우 다른 PCI 장비의 성능을 감소시키기도 합니다. 따라서 기본값인 32 사이클로 설정하시기를 권장합니다.

## **PCI SLOT1-3**

이 항목은 PCI 슬롯 1-3 의 IRQ 주소를 선택할 수 있도록 합니다. 가능한 옵션은 Auto(기본값), 3, 4, 5, 7, 9, 10, 11, 12, 14, 15 입니다.

## **PCI Express relative items**

### **Maximum Payload Size**

이 항목은 PCI 익스프레스의 시간당 최대 하중의 크기를 설정할 수 있습니다. 가능한 옵션은 4096(기본값), 128, 256, 512, 1024, 2048 입니다.

## **Frequency/Voltage Control**

### **Spread Spectrum**

이 기능은 EMI 를 감소시켜줍니다. 그러나 이 항목을 활성화 함으로써 SCSI 장비 등의 안정성이 감소할 수도 있습니다. 따라서 설정을 비활성화 상태로 놓아 두십시오. (특히 오버클럭킹 시) 몇몇 스마트 바이오스는 AGP, PCI, SDRAM 클럭 신호를 EMI 감소를 위해 스스로 끌 수도 있습니다. 이것은 약간의 절전 효과도 가져올 수 있습니다.

### **PCI Speed Setting**

이 기능은 PCI 주파수를 설정할 수 있습니다. Auto 를 권장합니다.

### **PCI-E Speed Setting**

복제 [Ditto]

### **System Memory Frequency**

이 기능을 활성화 시키려면 DRAM Timing Selectable 를 Manual 로 설정하십시오. 가능한 옵션은 Auto, 333MHz, 400MHz 입니다.

### **CPU Speed Detected**

현재 CPU 속도를 보여줍니다.

## **CPU Speed Setting**

이 항목은 여러분이 설정한 CPU 속도를 보여줍니다. 만약 여러분이 “CPU Host Frequency” 또는 “CPU Clock Ratio”를 바꾸지 않았다면 이 항목은 현재 CPU 속도를 나타낼 것 입니다.

### **CPU Host Frequency (MHz)**

이 항목은 CPU 의 호스트 주파수를 나타냅니다. 여러분은 XXX 부터 333 까지 설정할 수 있습니다. 기본값은 여러분의 CPU 스펙에 맞추어 작동합니다.

### **CPU Clock Ratio**

이 항목은 CPU 제조사가 CPU 를 잠금으로 설정해 놓지 않았을 때 나타냅니다. CPU 가 잠겨있으면 여러분은 “CPU Clock Ratio”를 조절할 수 없습니다. 이 기능의 설정여부는 여러분의 CPU 에 달려 있습니다.

### **DDR Voltage (Volt)**

이 항목은 RAM 전압을 조절할 수 있게 합니다. 가능한 옵션은 Default(기본값), +0.3V, +0.2V, +0.1V 입니다.

### **NB Voltage (Volt)**

이 항목은 메인보드 노스브릿지의 전압을 조절할 수 있게 합니다. 가능한 옵션은 Default(기본값), +0.3V, +0.2V, +0.1V 입니다.

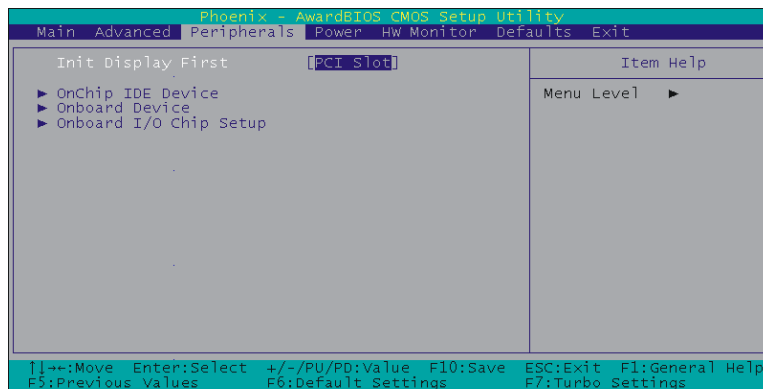
### **Default CPU Voltage (Volt)**

이 항목은 CPU 의 기본 전압을 나타냅니다.

## CPU Voltage (Volt)

이 항목은 CPU 코어 전압을 조절할 수 있게 합니다. 가능한 옵션은 0.85~1.9 입니다. 기본값은 여러분의 CPU 기본값으로 고정됩니다.

## Peripherals



### Init Display First

여러분의 주 디스플레이 장치가 PCI 익스프레스 일 때, PCI 디스플레이 장비를 설정합니다.

### OnChip IDE Device

#### IDE HDD Block Mode

최대의 퍼포먼스를 위하여 이 기능을 활성화 하기를 권장합니다. 윈도우 NT 4.0 사용자는 서비스 팩을 설치 하지 않았을 경우 이 기능을 비활성화 하시기 바랍니다.

#### On-Chip channel0/channel1 PCI IDE

메인보드의 칩셋은 두개의 IDE 채널을 지원하는 PCI IDE 인터페이스를

가지고 있습니다. 이 두개의 IDE 채널은 IDE1, SATA1/2/3/4 커넥터 사용을 위한 것입니다. Enabled 를 선택하면 첫번째 혹은 두번째 IDE 인터페이스가 지원됩니다. 만일 여러분이 프라이머리/세컨더리 IDE 인터페이스를 설치하려고 한다면 Disabled 를 선택하십시오. 가능한 옵션은 Enabled(기본값), Disabled 입니다.

### **IDE channel0/channel1 Master/Slave PIO**

만일 모든 장치가 울트라 DMA 와 각각의 PIO 모드를 지원이 가능하면 이 설정을 Auto 로 설정하여 바이오스가 스스로 이 항목을 설정하도록 하십시오.

### **IDE channel0/channel1 Master/Slave UDMA**

위와 동일합니다.

## **OnChip Serial ATA Setting**

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

이 항목은 여러분이 어떻게 다른 표준 IDE 장치와 시리얼 ATA 를 사용할 것인지를 정하는 온칩 시리얼 ATA 운영 모드를 선택하는 것입니다. 물리적으로 2 개의 IDE 장치와 4 개의 시리얼 ATA 장치를 붙일 수 있으나 아래에 기술된 것처럼 특정한 한계가 있을 수 있습니다.

옵션 :

**Disabled:** 온 칩 시리얼 ATA 를 비활성화 시킵니다. 아무런 시리얼 ATA 장비도 설치되지 않습니다.

**Auto(기본값):** 바이오스는 자동적으로 현재의 시리얼 ATA 장비를 감지할 것입니다.

2 (또는 1) IDE 드라이버 + 4 (또는 3) SATA 드라이버 à 증대모드

2 (또는 1) IDE 드라이버 + 2 (또는 1) SATA 드라이버 (반드시 SATA1+3  
혹은 SATA2+4 와 함께 연결되어야 합니다. à 조합 모드

4 (또는 3 또는 2 또는 1)SATA 드라이버 à SATA 만

2 (또는 1) IDE 드라이버 à 비활성화

**Combined Mode:** Windows® 98/ME 는 IDE 장비를 감지할 수 있으나 SATA 장비는 직접 감지하지 못합니다. 그러므로 여러분은 반드시 시스템의 IDE 채널의 역할을 SATA 장비가 사용할 수 있도록 해야 합니다. 다시 말해서 하나의 IDE 채널은 2 개의 SATA 장비를 사용 가능 하도록 합니다. 만일 여러분이 모든 2 개의 IDE 드라이브를 장착하고 4 개의 SATA 드라이브를 장착한다면 여러분은 2 개의 IDE 드라이브와 2 개의 SATA 장비만을 보게 됩니다.

**Enhanced Mode:** 이 모드에서는 여러분은 총 6 개의 하드디스크를 사용할 수 있습니다. (IDE 드라이브 2 개, SATA 드라이브 4 개) Windows® 98/ME 에서는 “Enhanced Mode”는 지원되지 않습니다. 이 모드는 Windows® 2000/XP 에서만 지원됩니다.

**SATA Only:** SATA 드라이버만 설치할 경우 이 옵션을 선택합니다.

## **PATA IDE Mode**

이 항목은 PATA IDE 장비를 위한 IDE 채널을 선택할 수 있게 합니다. SATA 장치를 SATA1 또는 3 또는 1 + 3 으로 설치하면 이 항목은 반드시 채널 1 로 설정되어야 합니다. SATA 장치를 SATA2 또는 4 또는 2 + 4 로 설치하면 이 항목은 반드시 채널 0 으로 설정되어야 합니다. 가능한 옵션은 Channel 0(기본값), channel 1 입니다.

## **SATA Port**

이 항목은 어떠한 IDE 채널이 SATA 장치에 의해 사용되는지를 표시해 줍니다. 가능한 옵션은 SATA2, 4 is channel 1 입니다.

## **Onboard Device**

### **USB Controller**

만약 보드에 USB 포트가 설치되어 있으면 이 옵션은 반드시 활성화 되어야 합니다. 만약 여러분이 더 높은 퍼포먼스의 컨트롤러를 사용하려면 이 기능을 비활성화 시켜야 합니다. 사용 가능한 옵션은 Enabled(기본값), Disabled 입니다.

### **USB 2.0 Controller**

만약 보드에 USB2.0 장치가 설치되어 있으면 이 옵션은 반드시 활성화 되어야 합니다. 만약 USB 1.1 장치를 설치한다면 이 옵션을 비활성화 시켜야 합니다. 사용 가능한 옵션은 Enabled(기본값), Disabled 입니다.



## **USB Keyboard Support**

활성화 될 경우 USB 용 키보드를 지원합니다. 사용 가능한 옵션은 Disabled(기본값), Enabled 입니다.

## **Audio Device**

이 항목은 온보드용 오디오 장치의 설정을 조절합니다. 사용 가능한 옵션은 있는 Auto(기본값), Disabled 입니다.

## **Gigabit LAN Device**

이 항목은 기가비트랜 장치를 활성화 또는 비활성화 시킬 수 있게 합니다. 사용 가능한 옵션은 Enabled(기본값), Disabled 입니다.

## **IDE RAID Device**

이 항목은 IDE RAID 장치를 활성화 또는 비활성화 시킬 수 있게 합니다. 사용 가능한 옵션은 Enabled(기본값), Disabled 입니다.

# **Onboard I/O Chip Setup**

## **Power On Function**

이 항목은 여러분이 컴퓨터의 전원을 켜는 방법을 설정하게 합니다. 사용 가능한 옵션은 Password·Hot KEY·Mouse Left·Mouse Right·Any KEY·BUTTON ONLY (기본값), Keyboard 98 입니다.

## **KB Power On Password**

이 항목은 필드의 구성이 “Power On Function” 이 “Password”로 설정 되어 있을 경우만 사용 가능합니다.

## **Hot Key Power ON**

이 항목은 “Power On Function” 이 “Hot Key”로 설정되어 있는 경우만 사용 가능합니다. 이 옵션은 핫 키와 컨트롤 키를 이용하여 컴퓨터의 전원을 켤 수 있습니다. 사용 가능한 옵션은 Ctrl-F1, Ctrl-F2, ... .. Ctrl-F12 입니다.

## **Onboard FDC Controller**

보드에 플로피 디스크 컨트롤러가 설치되어 있고, 여러분이 사용하시길 원하시면 “Enabled”를 선택하십시오. 시스템에 플로피 드라이브가 없다면, “Disabled”를 선택하십시오. 가능한 옵션은 Enabled(기본값), Disabled 가 있습니다.

## **Onboard Serial Port 1**

첫째/둘째 시리얼 포트의 어드레스와 통신 인터럽트를 선택합니다. 사용 가능한 옵션은 Disabled, 3F8/IRQ4(포트 1 의 기본값), 2F8/IRQ3, 3F8/IRQ4, 2E8/IRQ3, Auto 가 있습니다.

## **UART Mode Select**

이 항목은 여러분이 IR(Infra Red) 스텐더드를 사용할 수 있도록 합니다. 사용 가능한 옵션은 Disabled(기본값), ASKIR, IrDA 입니다.

## **RxD, TxD Active**

이 항목은 RxD, TxD 주파수를 설정합니다. 이 항목은 “UART Mode Select” 가 “ASKIR” 또는 “IrDA”로 설정되어 있을 때만 구성이 가능합니다. 사용 가능한 옵션은 Hi/Lo(기본값), Hi/Hi, Lo/Hi, Lo/Lo 입니다.

## **IR Transmission Delay**

이 항목은 IR 전송 지연을 설정합니다. “UART Mode Select”가 “ASKIR” 또는 “IrDA”로 설정되어 있을 때만 구성이 가능합니다. 사용 가능한 옵션은 Enabled(기본값), Disabled 입니다.

## **UR2 Duplex Mode**

IR 인터페이스에 의해서 전송 모드를 선택합니다. “UART Mode Select”가 “ASKIR” 또는 “IrDA”로 설정되어 있을 때 풀 듀플렉스 모드는 동시 양방향 전송을 가능하게 합니다. 하프 듀플렉스 모드는 한번에 한 방향 전송을 가능하게 합니다. 사용 가능한 옵션은 Half(기본값), Full 입니다.

## **Use IR Pins**

정확한 TxD, RxD 신호 설정을 위하여 여러분의 IR 문서를 참고 하십시오. “UART Mode Select”가 “ASKIR” 또는 “IrDA” 로 설정되어 있을때만 선택 가능합니다. 가능한 옵션은 RxD2, DxD2(기본값)입니다.

## **Onboard Parallel Port**

온보드 병렬 포트를 위한 주소와 원격 인터럽트를 선택합니다. 가능한 옵션은 378/IRQ7(기본값), 278/IRQ5, 3BC/IRQ7, Disabled 가 있습니다.

## **Parallel Port Mode**

온보드 병렬 포트를 위한 병렬 포트 모드를 선택할 수 있습니다.

옵션:

ECP (기본값)      Extended Capabilities Port.

EPP	Enhanced Parallel Port.
SPP	Standard Printer Port.
ECP+EPP	ECP & EPP mode.

Normal 입니다.

### **EPP Mode Select**

EPP 포트의 종류를 1.7 또는 1.9 로 선택하십시오. 이 항목은 “Parallel Port Mode” 가 “EPP” 또는 “ECP+EPP 로 되어 있을 때만 설정이 가능합니다.

가능한 옵션은 EPP1.9(기본값), EPP1.7 입니다.

### **ECP Mode Use DMA**

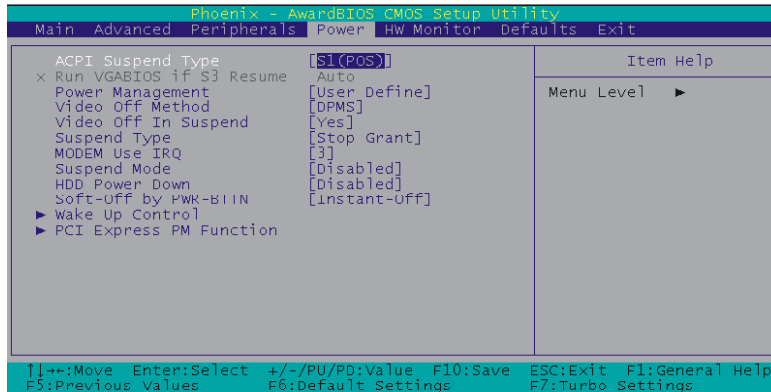
ECP 모드를 사용할 때, 병렬 포트 사용을 위해 DMA 채널을 선택하십시오.

이 항목은 “Parallel Port Mode”가 “ECP”로 되어 있을 때만 설정이 가능합니다. 가능한 옵션은 3(기본값), 1 입니다.

### **PWRON After PWR-Fail**

이 항목은 전원이 나간 후 다시 전원이 들어오는 과정에서 부팅을 할 것인지를 정합니다. 만약 “On” 을 선택하면 이전에 시스템이 켜져있었는지 꺼져있었는지 상관없이 부팅을 합니다. 만약 “Former-Sts”를 선택하면 전원이 나가기전의 상태로 되돌립니다. 가능한 옵션은 Off(기본값), On, Former-Sts 가 있습니다.

# Power



## ACPI Suspend Mode

이 항목은 ACPI 기능을 위한 절전에 관한 사항입니다. 가능한 옵션은 다음과 같습니다.

### 1. S1 (POS)

S1 상태는 저 전력 상태입니다. 이 상태에서는 어떠한 시스템 구성요소 (CPU나 각종 칩셋)에도 변화가 없으며 하드웨어의 모든 시스템 구성요소를 유지합니다.

### 2. S3 (STR)

S3 상태는 더 낮은 전력 상태입니다. 이 상태에서는 시스템의 설정 정보와 활성화된 어플리케이션의 정보 파일들이 메인 메모리에 저장됩니다. 다른 하드웨어들은 절전을 위해 전력이 차단됩니다. 메모리안에 저장된 정보는 “Wake up” 이 활성화 되었을 때 시스템에 다시 돌려주게 됩니다.

### 3. S1 & S3

만약 S3 상태가 시스템에서 지원된다면, 기본값인 S3 가 자동적으로

선택됩니다. 그렇지 않으면 S1 이 선택됩니다.

## Run VGABIOS if S3 Resume

S3 대기 기능으로부터 시스템에 재 동작할 때 VGABIOS 의 실행을 할 것인지를 설정할 수 있습니다. 이 기능은 “ACPI Suspend Type” 이 “S1(POS)”로 되어 있을 경우에는 구성할 수 없습니다. 가능한 옵션은 Auto(기본값), Yes, No 입니다.

## Power Management

전원 관리의 단계는 손수 설정이 가능합니다. 만약 아무것도 변화시키지 않으려면 “Disable”을 선택합니다. 또한 최대값 및 최소값 등을 미리 설정하거나 “User Define” (사용자 지정값)을 설정할 수 있습니다.

## Video Off Method

**Blank Screen:** 비디오 신호 수신에 되지 않을 경우 바이오스는 스크린에 검은 화면만을 나타냅니다.

**V/H SYNC + Blank:** 검은 화면과 더불어, 바이오스는 VGA 카드에서 모니터로 전송되는 V-SYNC & H-SYNC 신호를 차단합니다.

**DPMS:** 여러분의 모니터가 VESA(Video Electronics Standards Association)의 DPMS (Display Power Management Signaling)을 지원하면 이 옵션을 선택할 수

있습니다.

## **Video Off In Suspend**

컴퓨터가 일시 정지 모드로 들어갈 때 모니터의 전원을 차단시킬지를 결정합니다. 가능한 옵션은 Yes, No(기본값)입니다.

## **Suspend Type**

이 항목은 ACPI 운영체제 시스템 하에서 일시정지 종류를 설정하도록 합니다. 가능한 옵션은 Stop Grant(기본값), PwrOn Suspend 입니다.

## **Modem Use IRQ**

이 항목은 모뎀의 IRQ 를 설정합니다. 가능한 옵션은 3(기본값), 4, 5, 7, 9, 10, 11, NA 입니다.

## **Suspend Mode**

이 항목은 ACPI 운영체제 시스템 하에서 일시 정지 시간을 설정할 수 있게 해 줍니다. 가능한 옵션은 Disabled(기본값), 1Min, 2Min, 4Min, 8Min, 12Min, 20Min, 30Min, 40Min, 1Hour 입니다.

## **HDD Power Down**

이 항목은 일정한 시간이 지난 후에 모든 IDE 하드디스크 장치를 끌 수 있게 설정이 가능합니다. SCSI 하드디스크는 이 기능이 되지 않습니다. 이

항목은 비활성화 (Disabled)로 해 놓으시길 권장합니다.

## **Soft-Off by PWRBTN**

이 항목을 **Delay 4 Sec** 로 설정했을 경우, 파워버튼을 누름으로써 시스템이 꺼지는 대신 대기모드로 들어갈 수 있도록 합니다. Instant-Off 로 설정했을 경우에 파워버튼을 누르게 되면 컴퓨터는 바로 종료되게 됩니다.

## **Wake Up Control**

“**Wake Up Control**” 항목을 하이라이트 한 후 엔터키를 누르면 다음과 같은 하위 메뉴가 나타납니다.

## **PCI PME Wake Up**

온보드형 랜이 활성화 되어있을 때 신호를 받을 수 있으며, 대기모드 혹은 소프트 오프 모드에서 신호를 받게 될 경우 시스템을 재동작 하게 합니다.

LAN 은 반드시 RJ45 포트에 연결되어 있어야 하며 대기모드에서 재시작 항목을 켜 놓아야 합니다.

## **Ring Wake Up**

활성화 되어 있을경우, 모뎀/랜은 신호를 받을 수 있는 상태이며, 소프트 오프 모드 또는 그린 모드에서 시스템을 재동작 하게 합니다. 모뎀은 반드시 COM 포트에 연결되어 있어야 하며 컴퓨터에 전원켜짐 신호를 주어야 합니다.

## **USB KB Wake-up from S3**

S3 절전 모드에서 USB 장비를 이용하여 시스템을 재동작 하게 합니다.



가능한 옵션은 Enabled 와 Disabled 가 있습니다.

## **RTC Wake Up**

이 항목이 활성화되면 RTC(Real-Time Clock) 알람의 시간과 날짜를 설정하여 시스템을 대기모드에서 재동작 하게 할 수 있습니다. 가능한 옵션은 Enabled, Disabled(기본값) 입니다.

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

여러분은 특정한 날짜에 컴퓨터가 켜지도록 설정할 수 있습니다. 이 기능은 “RTC Wake Up”이 “Enabled”로 설정되어 있을 때만 가능합니다.

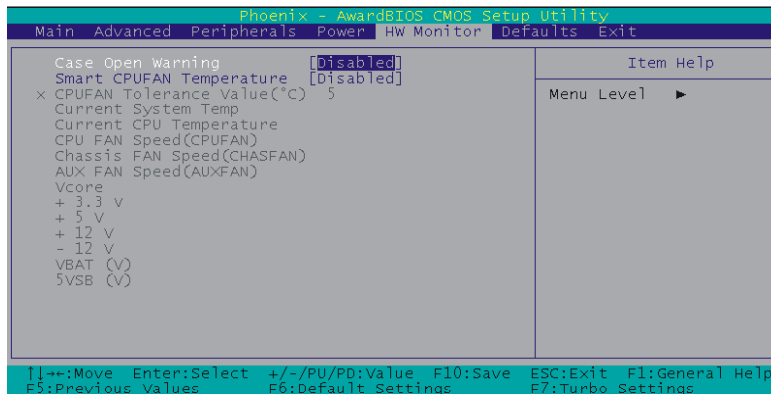
## **Time (hh:mm:ss) Alarm**

여러분은 특정한 시간, 분에 컴퓨터가 켜지도록 설정할 수 있습니다. 이 기능은 “RTC Wake Up”이 “Enabled”로 설정되어 있을 때만 가능합니다.

## **Reload Global Timer Events**

시스템이 대기 모드로 들어가게 되려면 몇몇 장치들은 반드시 일정시간동안 작동하지 않아야 합니다. 반대로 말해 만약 어떠한 장치라도 작동이 되게 되면 시스템은 자동으로 재동작 됩니다. 여러분은 이러한 기능에 참여하는 장비를 선택할 수 있습니다. 다음의 장비들이 포함됩니다. Primary IDE 0/ Primary IDE 1/ Secondary IDE 0/ Secondary IDE 1/ FDD, COM, LPT 포트/ PCI PIRQ [A-D] # 입니다. 가능한 옵션은 Disabled(기본값) , Enabled 입니다.

# HW Monitor



## Case Open Warning

이 기능이 활성화 되어 있고, 케이스가 열려있게 되면, 시스템은 자동으로 컴퓨터의 전원이 들어올 때 스크린에 경고 메시지를 띄우게 됩니다. 가능한 옵션은 Disabled(기본값), Enabled 입니다.

## Smart CPUFAN Temperature

이 기능은 여러분이 CPU 의 온도를 설정할 수 있게 합니다. 만약 CPU 의 온도가 여러분이 설정한 값보다 높을 경우 CPU 쿨러가 온도를 낮추기 위해 더욱 빨리 돌아 설정한 온도와 가깝도록 조절됩니다. 가능한 옵션은 Disabled(기본값), 30C/86F, 35C/95F, 40C/104F, 45C/113F, 50C/122F, 55C/131F, 60C/140F, 65C/149F, 70C/158F, 75C/167F, 80C/176, 85C/185F 입니다.

# Defaults



## Load System Default Settings

이 항목은 바이오스의 조절이 잘못되었을 때 기본값으로 돌릴 수 있도록 합니다. 문제가 생겼을 경우 가장 먼저 해야 할 작업이 바이오스의 기본값을 불러오는 것입니다.

## Load System Turbo Settings

이 항목은 시스템의 성능을 더욱 효율적으로 해줍니다. 다만 시스템의 성능이 안정적이지 않을 수도 있습니다. 따라서 이 항목을 설정하는 것은 여러분의 선택에 달려 있습니다.

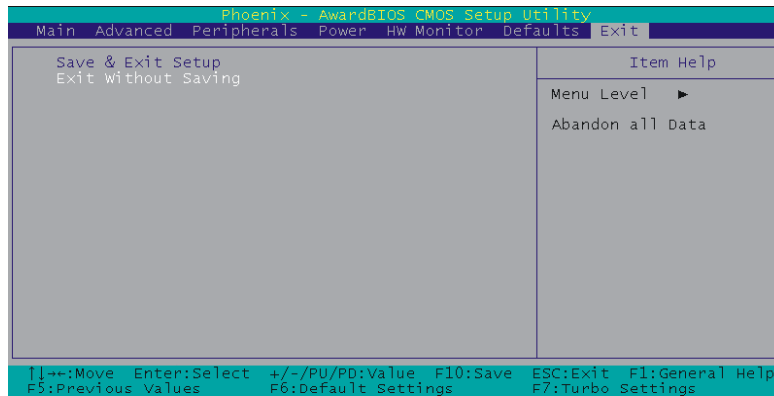
## Load CMOS From BIOS

플래시 롬의 기본값을 불러옵니다.

## Save CMOS To BIOS

플래시 롬으로 설정값을 저장합니다.

# Exit



## Save & Exit Setup

이 항목을 선택하고 “Y”를 치게 되면, 바이오스의 CMOS 메모리로 변경된 값들이 저장됩니다.

## Exit Without Saving

변경된 항목이 저장되지 않습니다.

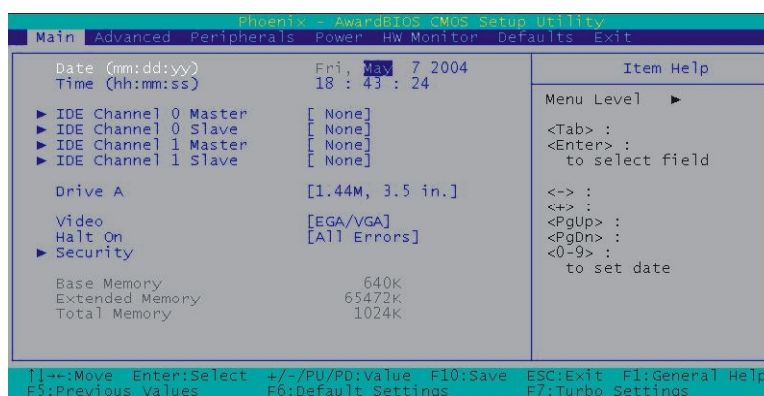
# BIOS Settings

## Des Zéros et des uns

La ROM du BIOS Phoenix Award possède un programme d'installation intégré permettant aux utilisateurs de modifier la configuration de base du système. Cette information est stockée dans la RAM CMOS de sorte qu'elle peut conserver les informations de paramétrage, même quand l'alimentation est coupée. Pour entrer dans le programme d'installation du **BIOS Phoenix Award** appuyez sur [Suppr] quand vous **Allumez** ou **redémarrez** le système de l'ordinateur (c.a.d. Après l'affichage du logo dans le centre de l'écran, appuyez sur [Suppr] pour entrer dans le menu de paramétrage du Bios). Une fois dans le BIOS, assurez vous que tout fonctionne avant de tenter toute optimisation pour un maximum de performance.

## Menu Principal

Lorsque que vous entrez dans le menu de paramétrage PHOENIX-AWARD™ CMOS, le **Menu Principal** apparaît à l'écran. Ce menu vous permettra de choisir plusieurs options de configuration. Utilisez les flèches gauche/droite pour choisir un élément du menu, puis les touches haut/bas afin de sélectionner la configuration qui vous convient.



## Date (jr/m/an) et Heure (hh/mm/ss)

Paramètre la date et l'heure du système. Peu importe la qualité d'une carte mère, souvenez vous que gagner ou perdre quelques secondes ne sont pas des choses surprenantes.

## **IDE Channel 0 Maître/Esclave**

Vous pouvez appuyer sur **Entrée** pour voir les sous menus rattachés à cet élément.

## **Lecteur A**

Cette option vous permet de choisir le type de lecteur de disquette installé pour le lecteur A. Les options disponibles sont **Aucun (None)**, **365K**, **5.25in**, **1.2M**, **5.25in**, **702K**, **3.5in**, **1.44M**, **3.5in** et **2.88M**, **3.5in**.

## **Vidéo**

Cette option vous permet de choisir le type d'affichage standard que vous souhaitez utiliser. Les options disponibles sont **EGA/VGA**, **CGA 40**, **CGA 80** et **MONO**.

## **Halt On**

Choisissez la situation dans laquelle vous voulez que le BIOS arrête le processus de POST et vous en informe. Les options disponibles sont **All Errors**, **No Errors**, **All, but keyboard**, **All, but diskette**, et **All, but disk/key**.

## **Sécurité**

Cette caractéristique se compose de 2 options – **Définir un Mot de passe** aussi qu'une **option de Sécurité**. Si vous définissez un mot de passe pour sécurité, l'option de sécurité vous permettra de déterminer si le mot de passe doit être saisi durant le boot ou lors d'une entrée dans les paramètres du Bios.

## **Mémoire de Base**

Montre la quantité de mémoire conventionnelle détectée durant le Boot.

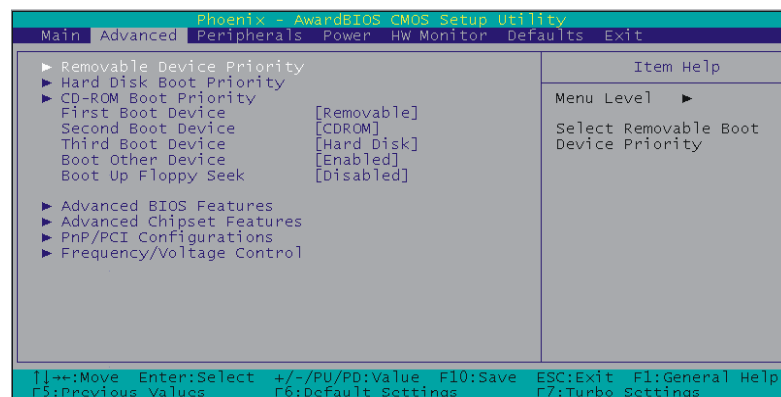
## **Mémoire Prolongée**

Montre la quantité de mémoire prolongée détectée durant le Boot.

## Mémoire Totale

Montre la quantité de mémoire totale disponible dans le système.

## Avancé



### Removable device priority

Choisissez la priorité des disques amovibles, comme un lecteur de disquette, LS120, ZIP-100, USB-FDD et USB-ZIP.

### Hard Disk Boot Priority

Choisissez la priorité de démarrage des disques durs.

### First/Second/Third Boot Device

Permet de choisir le Premier, Deuxième, et Troisième périphérique de démarrage. Si votre ordinateur vient juste d'être construit, la première chose que vous souhaitez faire sera de charger le Système d'exploitation directement à partir du CD. Avant cela, vous devrez définir le premier Boot sur le CDROM. Ceci informera le Bios de démarrer en premier à partir du CDROM avant de démarrer à partir d'un disque dur qui risque d'être vierge.

### Boot Other Device

Cette fonction demande à l'ordinateur de démarrer à partir d'un autre périphérique, s'il échoue tout démarrage à partir du premier, du deuxième ou du troisième périphérique prioritaire.

## **Boot up Floppy Seek**

Cette fonction du BIOS détermine si votre ordinateur doit vérifier la présence ou non, d'un lecteur de disquette durant le démarrage. Si activée (**enabled**), l'ordinateur recherchera et initialisera le lecteur de disquette. S'il ne peut pas en détecter, un message d'erreur apparaîtra. Toutefois le système sera autorisé à continuer la séquence de démarrage (Boot). Si cette fonction est désactivée (**disabled**), votre ordinateur sautera cette étape de détection d'un lecteur de disquette, ce qui augmente la vitesse de démarrage de quelques secondes. Puisque les lecteurs de disquette sont de moins en moins utilisés nous vous recommandons de désactiver cette option pour un démarrage plus rapide du système.

## **Advanced BIOS Features (Fonctions BIOS Avancées)**

### **Caractéristiques CPU**

#### **Delay Prior to Thermal**

Ce dispositif BIOS commande l'activation automatique du contrôle de température. Il vous permet de déterminer quand le moniteur thermique du Pentium 4 devrait être activé en mode automatique, après le boot du système. En général, le moniteur thermique ne devrait pas être activé immédiatement après le démarrage du système puisque le CPU sera utilisé de façon importante durant la séquence de démarrage ce qui a comme conséquence une élévation importante de la température, conduisant à une instabilité du système. Ainsi, pour assurer un maximum de performance durant le Boot, l'activation du moniteur thermique doit être retardé. Comment définir au mieux ce laps de temps nécessaire ? Il est recommandé de choisir la valeur la plus basse qui permet un démarrage complet du système.

#### **Thermal Management (Gestion Thermique)**

Cette fonction gèrera la température du CPU pour éviter tout dégât dû à une chauffe excessive.

#### **Limit CPUID MaxVal**

Quand la limite CPUID MaxVal est définie à 3, la fonction devrait être paramétrée sur "**Disabled**" (désactiver) pour Windows XP.

Options : Enabled (Activé) \ Disabled (défaut).



## **Virus Warning**

Permet d'activer la fonction VIRUS warning (alerte Virus) pour la protection des secteurs de boot des disques durs IDE. Si cette fonction est activée (enabled) et si quelque chose tente d'écrire des données dans cette zone. Le BIOS affichera un message d'alerte accompagné d'un bip sonore.

## **CPU L1 & L2 Cache**

La mémoire Cache est beaucoup plus rapide que la mémoire système DRAM conventionnelle. Ces champs vous permettent d'activer ou de désactiver (**enable** ou **disable**) le cache interne de niveau 1 et le cache externe de niveau 2 du CPU. Les 2 paramètres sont laissés sur activé (Enabled) pour améliorer significativement la performance de votre ordinateur.

## **Technologie Hyper-Threading**

Lorsque que vous installez un CPU équipé de la technologie Hyper-Threading, cette fonction vous permettra de l'activer ou pas (**enable** ou **disable**). Options : Disabled · Enabled (défaut).

## **Quick Power On Self Test**

Activez cette fonction pour diminuer le temps nécessaire à l'exécution du POST (Power On Self Test). Le BIOS gagnera du temps en sautant certains éléments pendant le POST. Il est recommandé de désactiver ce paramètre. Découvrir un problème pendant le démarrage est préférable à la perte de vos données pendant un travail.

## **Boot Up NumLock Status**

Cette fonction définit le pavé numérique du clavier comme touches de chiffres ou touches fléchées. Si elle est paramétrée sur "on", les touches de chiffres seront activées, si elle est paramétrée sur "off" les touches fléchées seront activées.

## **Typematic Rate Setting**

Quand elle est activée, vous pouvez paramétrer les deux éléments de contrôle de répétition automatique. Quand elle est désactivée, le contrôleur du clavier détermine arbitrairement les frappes dans votre système.

## **Typematic Rate (Chars/Sec)**

La vitesse de répétition paramètre la vitesse à laquelle les caractères se répètent à l'écran quand vous appuyez sur une touche et que vous la maintenez, enfoncée.

### **Typematic Delay (Msec)**

Le délai de répétition définit la durée, après avoir appuyé sur une touche, après laquelle un caractère commence à se répéter.

### **APIC Mode**

En activant cette option, “MPS version control for OS” peut être paramétré. La position **Désactivé (Disabled)** est recommandée.

### **MPS Version Control for OS**

La version 1.1 est la version la plus ancienne qui supporte plus de 8 IRQ dans un environnement Windows NT. Choisissez la nouvelle version 1.4 pour Windows 2000 et Windows XP.

Options : 1.4 (défaut) \ 1.1

### **OS Select For DRAM > 64MB**

Si votre DRAM est supérieure à 64Mo et que vous travaillez sous OS/2, sélectionnez OS/2 comme valeur de l'élément. Sinon, paramétrez la valeur de l'élément sur Non-OS/2 pour tous les autres systèmes d'exploitation.

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

Ce champs vous permet d'Activer ou de Désactiver la fonction S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) système qui utilise la technologie d'analyse interne des disques durs. Ce paramètre est normalement désactivé car les ressources nécessaires à la fonction SMART peuvent diminuer les performances du système.

### **Intel OSB Logo Show**

Ce paramétrage permet d'afficher ou de masquer le Logo EPA.

Options: Disabled \ Enabled (default)

## **Advanced Chipset Features** (Fonctionnalités Avancées du Chipset)

### **DRAM Timing Selectable**

Cette fonction détermine la vitesse de la mémoire en utilisant les configuration SPD ou manuelle. Soyez certain que votre mémoire possède un SPD (Serial Presence Data), si vous choisissez l'option "By SPD". Options: Manual \ By SPD (default)

### **CAS Latency Time**

CAS est un diminutif de « Column Address Strobe », qui est une sorte de signal. Lorsque que le CPU a besoin de données contenu dans la SDRAM, des signaux CAS seront envoyés au travers de la ligne CAS pour spécifier la colonne ou les donnée sont nécessaires. Cela contrôle les délais (dans les cycles d'horloge - CLK) qui passent avant que la SDRAM commence à exécuter une commande de lecture après en avoir reçu la demande. Ceci détermine également le nombre de CLK nécessaire à l'accomplissement de la première partie d'un transfert en mode continu. En d'autres termes, plus la latence est basse, plus la transaction est rapide. Notez que certains modules SDRAM peuvent ne pas supporter une latence trop basse et deviendront instables et perdront des données. Par conséquent définissez une latence de CAS DRAM à 2 pour une exécution optimale si possible mais augmentez-la à 2.5 si votre système devient instable.

Toutefois, augmenter le temps de latence CAS a un avantage qui permettra à la SDRAM de fonctionner à une vitesse plus élevée, ce qui donne une certaine marge dans l'overclocking de votre système. Donc, si vous rencontrez des problème durant un overclocking, essayez en augmentant le temps de latence CAS.

### **DRAM RAS# to CAS# Delay**

Cette fonction vous permet de choisir les délais entre des signaux CAS et RAS. Elle s'applique seulement quand la DRAM est écrite, lue, ou rafraîchie. Ce champ est réglable seulement quand "DRAM Timing Selectable" est placée sur "Manual". Ce champ est verrouillé quand "DRAM Timing Selectable" est placée sur "By SPD" et sera automatiquement déterminée par le système. Options: 4 \ 3 \ 2

## **DRAM RAS# Precharge**

Cette fonction vous permet de choisir le temps de précharge DRAM RAS#. L'adresse ROW doit être préchargé avant la rafraîchissement de la DRAM. Une mauvaise configuration peut entraîner des données incomplètes. Ce champ est réglable seulement quand "DRAM Timing Selectable" est placée sur "manuel". Ce champ est verrouillé quand "DRAM Timing Selectable" est placée sur "By SPD" et sera automatiquement déterminée par le système. Options: 4 \ 3 \ 2

## **Precharge Delay**

Cette fonction permet de choisir le délai de précharge de la DRAM Active. Ce champ est verrouillé quand "DRAM Timing Selectable" est placée sur "By SPD" et sera automatiquement déterminée par le système.

Options: 8 \ 7 \ 6 \ 5

## **System BIOS Cacheable**

Le fait d'activer cette fonction permet la mise en cache de la ROM BIOS système à F0000h-FFFFFh, ce qui donne de meilleures performances système. Cependant, si un programme écrit dans cette zone mémoire, il peut en résulter une erreur système. Il est conseillé de laisser ce paramètre sur son réglage par défaut (disable). La mise en cache du BIOS système peut donner de meilleures performances que l'ombrage du BIOS système.

## **Video BIOS Cacheable**

Choisissez "Enabled" pour activer l'option Video BIOS Cacheable qui peut améliorer la performance. Si un autre programme écrit dans cette zone de mémoire, une erreur système peut se produire. Options : Enabled (activer), Disabled (défaut)

## **Memory Hole at 15M-16M**

Le fait d'activer cette fonction réservera un espace d'adresse mémoire entre 15Mo et 16Mo pour les cartes d'extension ISA. Cependant, cela aura aussi pour effet de ne pas permettre au système d'avoir accès à la mémoire supérieur à 16Mo. Remarques que certaines cartes d'extension requièrent que ce paramètre soit activé. Le paramètre par défaut est Disabled. Si Auto Configuration est activée, vous devez paramétrer la fonction de synchronisation DRAM sur 60ns ou 70ns, en fonction du type de DRAM installé.

## PCI Express Root Port Func

### PCI Express Port1/2

Cette fonction vous permet d'activer (**enabled**) ou non (**disabled**) les ports 1/2 PCI Express x 1.

Options: Auto (default) \ Disabled

### PCI-E Compliancy Mode

Cet article vous permet de choisir le mode de compatibilité PCI-E.

Options: V1.0a (default) \ V1.0

### PEG Force X1

Cette fonction vous permet de forcer le slot PCI-Express 16x à installer une carte d'extension d'interface PCI-Express 1x.

Options : Disabled (défaut) \ Enabled

## PnP/PCI Configurations

### Reset Configuration Data

Si vous installez un nouveau matériel ou si vous modifiez la configuration matérielle de votre ordinateur, le BIOS détectera automatiquement les changements et reconfigurera l'ESCD (Extended System Configuration Data). Par conséquent, il n'y a habituellement aucun besoin de forcer manuellement le BIOS à modifier l'ESCD. Cependant, l'occasion peut se présenter où le BIOS peut ne pas pouvoir détecter les changements de matériel. Un conflit sérieux de ressource peut se produire et le logiciel d'exploitation peut même ne pas redémarrer. C'est ici qu'intervient la fonction BIOS **Reset Configuration Data**. Cette option vous permet de forcer manuellement le BIOS pour effacer les données ESCD précédemment sauvegardées et ainsi de reconfigurer les paramètres. Tout ce que vous avez à faire est d'activer (**enable**) cette option du BIOS et ensuite de redémarrer votre ordinateur. Le nouvel ESCD devrait résoudre les conflits et permettre au système d'exploitation de redémarrer normalement. Notez que la fonction sera automatiquement désactivée (**Disabled**) par le BIOS après la nouvelle reconfiguration de ESCD. Vous n'aurez pas besoin de désactiver manuellement l'option après le redémarrage.

### Resources Controlled By

Ce dispositif BIOS détermine si le BIOS doit configurer automatiquement les ressources d'IRQ et de DMA. Le BIOS est généralement capable de

configurer automatiquement des ressources d'IRQ et de DMA pour les périphériques dans votre ordinateur. Par conséquent, il est recommandé que vous placiez cette option sur **Auto**. Cependant, si le BIOS a des problèmes pour assigner les ressources correctement, vous pouvez choisir l'option Manuelle (**Manual**) pour indiquer les champs IRQ et DMA. Vous pouvez ensuite assigner chaque canal IRQ ou DMA aux périphériques ISA ou PCI/ISA PnP. Les périphériques ISA sont compatibles avec les spécifications originales des bus AT PC et nécessitent une interruption spécifique et/ou un canal DMA pour fonctionner correctement. Les périphériques PCI/ISA PnP, d'un autre côté, adhèrent au standard Plug and Play et peuvent utiliser tout canal d'interruption ou DMA.

### **IRQ Resources**

Quand les ressources sont contrôlées manuellement, vous pouvez assigner à chaque système d'interruption un type, en fonction du type de périphérique utilisant cette interruption. Cette fonction n'est paramétrable que lorsque "**Resources Controlled By**" est positionné sur "**Manual**".

Options : IRQ -3/ 4/ 5/ 7/ 9/ 10/ 11/ 12/ 14/ 15 assigné au périphérique PCI

### **PCI / VGA Palette Snoop**

Cette option n'est utile que si vous vous servez d'une carte MPEG ou d'un carter add-on qui utilise le connecteur des cartes graphique. Elle corrige la reproduction incorrecte de couleur par le "snooping" dans la mémoire framebuffer de la carte graphique et modifie (synchronise) l'information délivrée par le connecteur des cartes graphiques à la carte MPEG ou à carte add-on. Elle résoudra également le problème de l'inversion d'affichage vers un écran noir après avoir employé la carte de MPEG. .

### **PCI Latency Timer (CLK)**

Cette fonction BIOS contrôle le temps durant lequel un périphérique PCI peut monopoliser le bus PCI avant qu'un autre périphérique n'en ait besoin. Plus la latence est longue, plus longtemps un périphérique pourra conserver le contrôle du bus PCI avant de le passer à un autre périphérique.

Normalement, l'horloge de latence PCI est définie à **32 cycles**. Cela veut dire que le périphérique PCI doit accomplir sa transaction dans l'intervalle des 32 cycles d'horloge ou bien laisser son tour à un autre périphérique. Pour une meilleure performance PCI, utilisez une latence plus élevée. Essayez d'augmenter le nombre de cycles à **64** ou **128**. La valeur optimale pour chaque système est différente. Vous devriez tester votre performance PCI

après chaque changement pour déterminer le temps de Latence optimal pour votre système. Merci de noter qu'une Latence PCI plus longue n'est pas forcément meilleure. Une Latence trop longue peut aussi diminuer la performance, les périphériques PCI pouvant être bloqués trop longtemps. Ceci est particulièrement vrai avec une machine ayant beaucoup de périphérique PCI ou des périphériques PCI envoyant régulièrement des données au bus PCI. Ce type de système fonctionnera mieux avec une faible latence PCI qui permet des accès rapide au bus PCI. En outre, certains périphériques PCI sensibles à la latence peuvent ne pas fonctionner avec une latence trop élevée. De tels périphériques nécessitent un accès prioritaire au bus PCI qui ne peut pas être donné si le bus est attribué trop longtemps. Dans cette situation, il est recommandé de conserver le temps de latence PCI par défaut de **32 cycles**.

### **PCI SLOT1-3**

Cette fonction vous permet de choisir une adresse IRQ pour les slots PCI 1-3.

Options : Auto (défaut) 、 3 、 4 、 5 、 7 、 9 、 10 、 11 、 12 、 14 、 15

### **PCI Express relative items (Eléments relatifs au PCI Express)**

#### **Maximum Payload Size**

Cette fonction vous permet de choisir la taille maximum de la charge PCI express.

Options : 4096 (défaut) 、 128 、 256 、 512 、 1024 、 2048

### **Frequency/Voltage Control (contrôle Fréquence/Voltage)**

#### **Spread Spectrum (Spectre de propagation)**

Les pointes de tensions produites par le générateur à horloge de votre carte mère créent des IEM (interférence électromagnétique). Cette fonction réduit les IEM en modulant les impulsions des pointes de tension afin de réduire les IEM. Mais cette réduction peut aussi signifier que certains périphériques sensibles comme les périphériques SCSI peuvent être affectés et leur stabilité réduite. Laissez ce paramètre sur désactivé spécialement si vous avez overclocké votre système. Si vous devez néanmoins vous servir de cette option, utilisez-la avec la valeur la plus petite possible.

Certains BIOS possèdent des réglages particuliers permettant d'arrêter tout signal d'horloge AGP, PCI & SDRAM lorsqu'ils ne sont pas en

fonctionnement ce qui réduit les IEM sans donner de problème de stabilité à votre système. Ceci permet également une légère réduction de la consommation d'énergie.

### **PCI Speed Setting**

Cette fonction vous permet de définir la fréquence PCI. **Auto** est conseillé.

### **PCI-E Speed Setting**

Idem. **System Memory Frequency**

Si vous voulez activer cette fonction, définissez **DRAM Timing Selectable** sur "**Manual**" (**Manuel**). Les options disponibles sont Auto, 333MHz, et 400MHz.

### **CPU Speed Detected**

Montre la vitesse actuelle du Processeur.

### **CPU Speed Setting**

Cette fonction montre la fréquence processeur que vous avez défini. Si vous ne changez pas la fonction "CPU Host Frequency" ou "CPU Clock Ratio" l'élément affichera la vitesse actuelle du processeur.

### **CPU Host Frequency (MHz)**

Cette fonction montre la fréquence du processeur. Vous pouvez la définir de XXX à 333. Le paramètre par défaut dépend de la fréquence de votre processeur. Le statut par défaut dépend du processeur installé.

### **CPU Clock Ratio**

Ce champ ne s'affichera que si votre processeur n'est pas dans un état verrouiller par le constructeur du processeur. Si votre processeur est verrouillé, vous ne serez pas en mesure de régler le "CPU Clock Ratio". Le statut par défaut dépend de votre processeur.

### **DDR Voltage (Volt)**

Cette fonction vous permettra d'ajuster le voltage RAM.

Options : Défaut (défaut) 、 + 0.3V 、 + 0.2V 、 + 0.1V

### **NB Voltage (Volt)**

Cette fonction vous permettra d'ajuster le voltage du pont Nord (North Bridge).

Options: Défaut (défaut) 、 +0.3V 、 + 0.2V 、 + 0.1V



## Default CPU Voltage (Volt)

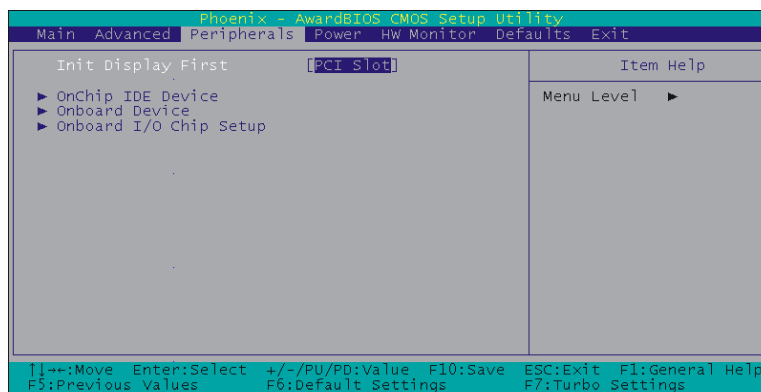
Cette fonction affiche le voltage par défaut du processeur.

## CPU Voltage (Volt)

Cette fonction vous permet d'ajuster le voltage du core de votre processeur.

Options: 0.85~1.9. Le statut par défaut dépend de votre processeur.

# Peripherals (Périphériques)



## Init Display First

A définir sur **PCI-Ex** si votre périphérique d'affichage primaire est sur slot PCI-E ou sur **PCI** si votre périphérique d'affichage primaire est une carte vidéo PCI.

## OnChip IDE Device

### IDE HDD Block Mode

Le statut **Activé** est recommandé pour une meilleure performance disque dur. Les utilisateurs de Windows NT 4.0 doivent paramétrer cette fonction sur désactivé (**Disabled**) jusqu'à ce qu'ils vérifient la mise à jour de leur système avec un Service Pack qui fonctionnera avec ce paramètre.

## On-Chip channel0/channel1 PCI IDE

Le chipset de la carte mère contient une interface PCI IDE qui supporte 2 canaux IDE. Ces 2 canaux IDE sont pour l'utilisation des connecteurs IDE1 et SATA1/2/3/4. Choisissez "**Enabled**" pour activer la première et/ou la deuxième interface IDE. Choisissez "**Disabled**" pour désactiver l'interface si vous êtes sur le point d'installer une interface IDE primaire ou

secondaire additionnelle.

Options: Enabled (default) · Disabled

### **IDE channel0/channel1 Master/Slave PIO**

Définissez les tous sur **Auto** et laisser le BIOS déterminer si chaque lecteur est compatible Ultra DMA, ainsi que son mode PIO respectif.

### **IDE channel0/channel1 Master/Slave UDMA**

Comme ci-dessus.

## **OnChip Serial ATA Setting**

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

Ce champs vous permet de choisir le mode opératoire Serial ATA intégré qui déterminera comment vous utiliserez vos lecteurs Serial ATA avec les autres lecteurs de type IDE. Ce système peut physiquement attacher 2 lecteurs IDE et 4 lecteurs SATA mais avec les limitations suivantes.

Options :

**Disabled:** Désactive la puce serial ATA. Aucun périphérique SATA ne sera installé.

**Auto(default):** Le BIOS détectera automatiquement la présence de tous périphériques SATA.

2 (ou 1) lecteurs IDE + 4 (ou 3) lecteurs SATA à Enhanced Mode

2 (ou 1) lecteurs IDE + 2 (ou 1) lecteurs SATA (Doit être connecté avec le SATA1 +3 ou avec le SATA2+4) à Combined Mode

4 ( ou 3 ou 2 ou 1)lecteurs SATA à SATA only

2 (ou 1) lecteur IDE à Disabled

**Combined Mode:** Windows® 98/ME peut reconnaître des périphériques IDE mais ne peut pas directement reconnaître un périphérique SATA c'est pourquoi vous devez utiliser ce mode pour émuler un périphérique IDE qui assumera le rôle d'un canal IDE dans le système. Ceci signifie que vous aurez un canal IDE disponible pour l'utilisation de 2 lecteurs SATA (chaque canal IDE peut supporter 2 lecteurs IDE). Si vous deviez installer les 2 lecteurs IDE et les 4 lecteur SATA, vous ne verriez que 2 des lecteurs SATA et 2 lecteurs IDE.

**Enhanced Mode:** Dans ce mode , vous pouvez utiliser jusqu'à 6 disques durs (incluant 2 lecteurs IDE et 4 lecteurs SATA). Note: Vous ne pouvez utiliser le mode "Enhanced" avec Windows® 98/ME. Seul l'installation de Windows® 2000/XP permet le boot depuis un périphérique SATA. (C'est

une restriction de Microsoft.)

**SATA Only:** Choisissez cette option lorsque vous n'installez que des lecteurs SATA.

### **PATA IDE Mode**

Cette fonction vous permet de choisir un canal IDE pour des périphériques PATA IDE. Lorsque que vous installez le(s) périphérique(s) SATA sur le SATA1 ou 3 ou 1+3, cette fonction doit être définie sur le canal 1. Lorsque que vous installez le(s) périphérique(s) sur le SATA2 ou 4 ou 2+4, cette fonction doit être définie sur le canal 0.

Options : Channel 0 (défaut) \ channel 1

### **SATA Port**

Cette fonction vous montrera quel canal IDE sera utilisé pour le(s) périphérique(s) SATA.

Options : SATA2, 4 est le canal 1

## **Onboard Device**

### **USB Controller**

Cette option doit être Activée (**enabled**) si votre système à un équipement USB d'installé sur le panneau système. Vous devrez désactiver cette option si vous ajouter un contrôleur plus performant.

Options : Enabled (défaut) \ Disabled

### **USB 2.0 Controller**

Cette option doit être Activée (**enabled**) si votre système à un équipement USB 2.0 d'installé sur le panneau système. Vous devrez désactiver (**disable**) cette fonction si vous installez un périphérique USB 1.1.

Options : Enabled (défaut) \ Disabled

### **USB Keyboard Support**

**Active** le support de clavier USB.

Options : Disabled (défaut) \ Enabled

### **Audio Device**

Cette fonction vous permettra de contrôler la carte audio intégrée.

Options : Auto (défaut) \ Disabled

## **Gigabit LAN Device**

Cette fonction activera (**enable**) ou désactivera (**disable**) le périphérique Gigabit LAN.

Options : Enabled (défaut) 、 Disabled

## **IDE RAID Device**

Cette fonction vous permet d'activer (**enable**) ou de désactiver (**disable**) le périphérique IDE RAID.

Options : Enabled (défaut) 、 Disabled

## **Onboard I/O Chip Setup**

### **Power On Function**

Cette option vous permet de choisir le mode d'allumage de votre ordinateur.

Options : Password 、 Hot KEY 、 Mouse Left 、 Mouse Right 、 Any KEY 、 BUTTON ONLY (défaut), et Keyboard 98

### **KB Power On Password**

Ceci est le mot de passe que votre système utilisera comme élément de la séquence de démarrage. Ce champs n'est qu'uniquement paramétrable que lorsque "Power On Function" est défini sur "Password".

### **Hot Key Power ON**

Cette option vous permet d'utiliser la touche Ctrl avec une touche directe (fonction clef) pour allumer votre système. Ce champ n'est paramétrable que si "Power On Function" est défini sur "Hot Key".

Options: Ctrl-F1 、 Ctrl-F2... .. Ctrl-F12

### **Onboard FDC Controller**

Sélectionnez "Enabled" si votre système possède un de lecteur de disquette (FDC) installé sur la carte système et si vous voulez l'utiliser. Si vous installez une FDC supplémentaire ou si le système ne possède pas de lecteur de disquette, choisissez "Disabled" dans ce champ.

Options : Enabled (défaut) 、 Disabled

## **Onboard Serial Port 1**

Choisissez une adresse correspondante à l'interruption pour le premier et le second port série.

Options : Disabled 、 3F8/IRQ4 (défaut pour le port1) 、 2F8/IRQ3 、 3E8/IRQ4 、 2E8/IRQ3 、 Auto

## **UART Mode Select**

Cette fonction détermine le standard Infra Rouge (IR) utilisé.

Options : Disabled (défaut) 、 ASKIR 、 IrDA

## **RxD, TxD Active**

Cette fonction détermine la fréquence RxD et TxD. Ce champ n'est paramétrable que si "UART Mode Select" est défini sur "ASKIR" ou "IrDA".

Options : Hi / Lo (défaut) 、 Hi / Hi 、 Lo / Hi 、 Lo / Lo

## **IR Transmission Delay**

Cette fonction vous permet d'activer ou de désactiver (**enable/disable**) le délai de transmission IR. Ce champ n'est paramétrable que si "UART Mode Select" est défini sur "ASKIR" ou "IrDA".

Options : Enabled (défaut) 、 Disabled

## **UR2 Duplex Mode**

Choisissez le mode de transmission utilisé par l'interface IR. Le mode Full-duplex permet une transmission bidirectionnelle simultanée. Le mode Half-duplex ne permet qu'une transmission alternée dans un sens. Ce champ n'est paramétrable que si "UART Mode Select" est défini sur "ASKIR" ou "IrDA".

Options : Half (défaut) 、 Full

## **Use IR Pins**

Consultez la documentation de votre périphérique IR pour choisir le bon paramétrage des signaux TxD et RxD. Ce champ n'est paramétrable que si "UART Mode Select" est défini sur "ASKIR" ou "IrDA".

Options : RxD2 、 DxD2 (défaut)

## **Onboard Parallel Port**

Choisissez une adresse et une interruption correspondante pour le port parallèle intégré.

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

## **Parallel Port Mode**

Cette option vous permet de choisir le mode du port parallèle intégré.

Options :

ECP (défaut)      Extended Capabilities Port.

EPP                      Enhanced Parallel Port.

SPP                      Standard Printer Port.

ECP+EPP              ECP & EPP mode.

Normal

## **EPP Mode Select**

Choisissez le type de port EPP 1.7 ou 1.9. Ce champ n'est paramétrable que si "Parallel Port Mode" est défini sur "EPP" ou "ECP+EPP".

Options : EPP 1.9 (défaut) 、 EPP 1.7

## **ECP Mode Use DMA**

Choisissez un canal DMA pour le port parallèle lorsque que vous utilisez le mode ECP. Ce champ n'est paramétrable que si "Parallel Port Mode" est défini sur "ECP".

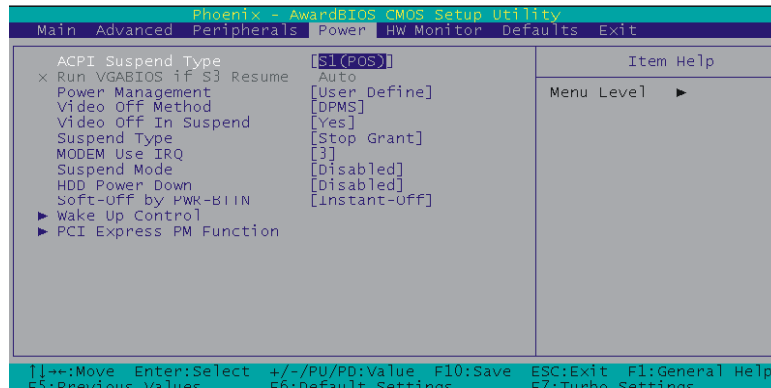
Options : 3 (défaut) 、 1

## **PWRON After PWR-Fail**

Ce champ détermine si votre système se relancera après une coupure de courant. Si vous choisissez "On", le système démarrera dès sa mise sous tension qu'il ait eu ou non une coupure de courant. Si vous choisissez "Former-Sts", le système sera restauré au statut antérieur à la panne de courant.

Options : Off (défaut) 、 On 、 Former-Sts

# Power



## ACPI Suspend Mode

Cet élément spécifie les modes d'économie d'énergie pour la fonction ACPI. Les options disponibles sont :

### 1. S1 (POS)

L'état S1 est l'état de faible alimentation. Dans cet état, aucun contexte système (CPU ou Chipset) n'est perdu et le matériel maintient tous les contextes système.

### 2. S3 (STR)

L'état S3 est l'état de faible alimentation, où les informations de configuration système et les applications / fichiers ouverts sont enregistrés dans la mémoire principale. Les alimentations restantes des autres composants matériels sont coupées pour économiser de l'énergie.

Les informations stockées en mémoire seront utilisées pour rétablir le système quand un événement [wake up] se produit.

### 3. S1 & S3

Si l'état S3 est supporté par le système, l'option par défaut [S3] sera automatiquement choisit. Autrement se sera [S1].

## Run VGABIOS if S3 Resume

Choisissez de lancer le VGABIOS lorsque que le système se réveille de la fonction suspendue S3. Ce champ n'est paramétrable que si "ACPI Suspend Type" est défini sur "S1 (POS)".

Options : Auto (défaut) 、 Yes 、 No

## Power Management

Le niveau de gestion d'énergie peut être défini. **Disable** si vous n'en voulez aucune. Vous pouvez utiliser les paramètres **min** ou **max** qui sont prédéterminés, ou utiliser "**User Define**" pour les spécifier.

## Video Off Method

**Blank Screen** : le système BIOS éteindra le moniteur en désactivant la vidéo.

**V/H SYNC + Blank** : En addition à l'extinction du moniteur, le BIOS éteindra également les signaux V-SYNC & H-SYNC de la carte VGA au moniteur.

**DPMS**: Choisissez cette option si votre moniteur supporte le standard DPMS (Display Power Management Signaling) standard de la VESA (Video Electronics Standards Association). Utilisez le logiciel fourni pour votre sous système vidéo pour choisir les valeurs d'alimentation.

*Note : Les moniteurs Verts détectent les signaux SYNC V/H pour arrêter leurs canon à électron.*

## Video Off In Suspend

Cela détermine si le courant du moniteur est coupé lorsque l'ordinateur est en mode suspendu.

Options: Yes ∙ No (défaut)

## Suspend Type

Cette fonction vous permet de choisir le type de suspension sous un système d'exploitation ACPI.

Options : Stop Grant (défaut) ∙ PwrOn Suspend

## Modem Use IRQ

Cela détermine l'IRQ du modem.

Options : 3 (défaut) ∙ 4 ∙ 5 ∙ 7 ∙ 9 ∙ 10 ∙ 11 ∙ NA.

## Suspend Mode

Cela vous permet de choisir la durée de suspension sous un système d'exploitation ACPI.



Options : Disabled (défaut) 、 1Min 、 2Min 、 4Min 、 8Min 、 12Min 、 20Min 、 30Min 、 40Min 、 1Heure

## **HDD Power Down**

Cela éteint tout disque dur IDE dans le système après une période d'inactivité. Cette option n'affecte pas les disques durs SCSI. **Disabled** est recommandé.

## **Soft-Off by PWRBTN**

Quand elle est paramétrée sur “Delay 4 Sec”, cette fonction permet au bouton d'alimentation de mettre le système en Suspension, un mode d'économie d'énergie. Quand elle est paramétrée sur “Instant-Off” la fonction “Soft-Off by PWR-BTN” est désactivée et l'ordinateur s'éteint complètement quand vous appuyez sur le bouton d'alimentation.

## **Wake Up Control**

Si vous sélectionnez l'option “**Wake Up Control**” et pressez la touche entrée, cela affichera un sous menu avec les options suivantes :

### **PCI PME Wake Up**

Une fois activée (**enabled**), le LAN, qui est intégré à la carte, sera capable de recevoir un signal et de réveiller le système des modes soft off et suspend mode. Vous devrez connecter le LAN au port RJ45 et activer le résumer d'événement en mode suspendu.

### **Ring Wake Up**

Une fois activée (**enabled**), un Modem/LAN sera capable de recevoir un signal et d'activer le système depuis les modes soft off et green (vert). Vous devrez connecter votre modem au port COM et signaler à votre PC de s'allumer.

### **USB KB Wake-up from S3**

Permet de réveiller le système du mode d'économie d'énergie S3 par l'activité d'un périphérique USB. Les paramètres sont **Enabled** et **Disabled**.

## RTC Wake Up

Une fois Activé (“**Enabled**”), vous pouvez régler la date et l'heure à laquelle l'alarme RTC (real-time clock) réveillera votre système du mode suspendu.

Options : Enabled \ Disabled (défaut).

## Date (of Month) Alarm

Vous pouvez choisir une date dans le mois à laquelle le système démarrera. Ce champ n'est paramétrable uniquement que si “RTC Wake Up” est défini sur “**Enabled**”.

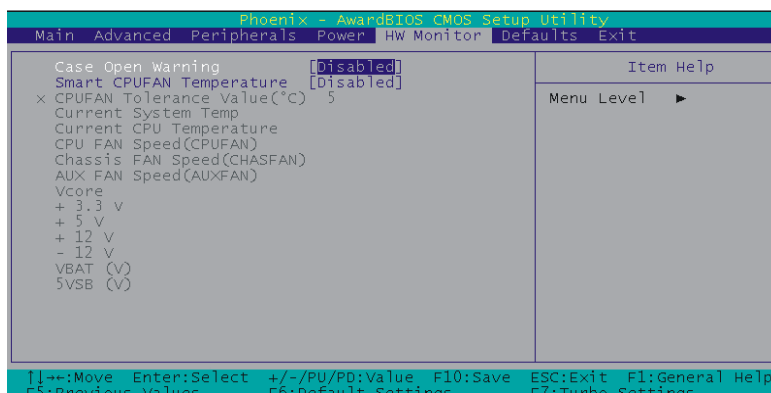
## Time (hh:mm:ss) Alarm

Vous pouvez choisir l'heure, la minute et la seconde à laquelle le système démarrera. Ce champ n'est paramétrable uniquement que si “RTC Wake Up” est défini sur “**Enabled**”.

## Reload Global Timer Events

Lorsque que le système entre en mode suspendu, certains périphériques doivent être inactifs pendant une période donnée. Réciproquement, si un seul de ces périphériques a une activité, le système se réveillera. Vous pouvez choisir les périphériques qui participeront à la suspension /au réveil d'activité en configurant ces champs. Les périphériques incluent : Primary IDE 0/ Primary IDE 1/ Secondary IDE 0/ Secondary IDE 1/ FDD, COM, LPT Port/ PCI PIRQ [A-D] #. Options: Disabled (défaut), Enabled

# HW Monitor



## Case Open Warning

Si cette fonction est définie sur “**Enabled**” et que la tour a été ouverte précédemment, le système affichera immédiatement un message d'alerte à l'écran lorsque que vous rallumerez votre ordinateur. Si cette fonction est définie sur “**Disabled**”, le système n'affichera pas de messages d'alertes lorsque que vous rallumerez votre ordinateur même si la tour a été précédemment ouverte.

Options : Disabled (défaut) 、 Enabled

## Smart CPUFAN Temperature

Cette fonction vous permet de choisir la température du processeur. Si la température du processeur est supérieure à la valeur que vous avez choisie, la vitesse du ventilateur du processeur augmentera jusqu'à ce que la température soit au niveau de vos paramètres.

Options : Disabled (défaut) 、 30°C / 86°F 、 35°C / 95°F 、 40°C / 104°F 、 45°C / 113°F 、 50°C / 122°F 、 55°C / 131°F 、 60°C / 140°F 、 65°C / 149°F 、 70°C / 158°F 、 75°C / 167°F 、 80°C / 176°F 、 85°C / 185°F

# Defaults



## Load System Default Settings

Pour éviter les erreurs, cette option vous permettra de retrouver les paramètres par défaut du BIOS. En fait, ceci est la première chose que vous devriez connaître lorsque que vous décidez de modifier les paramètres standard du BIOS.

## Load System Turbo Settings

Cette option est similaire à la précédente. La différence entre les deux étant un paramétrage plus efficace, qui a le désavantage de rendre potentiellement instable votre système. La décision vous appartient.

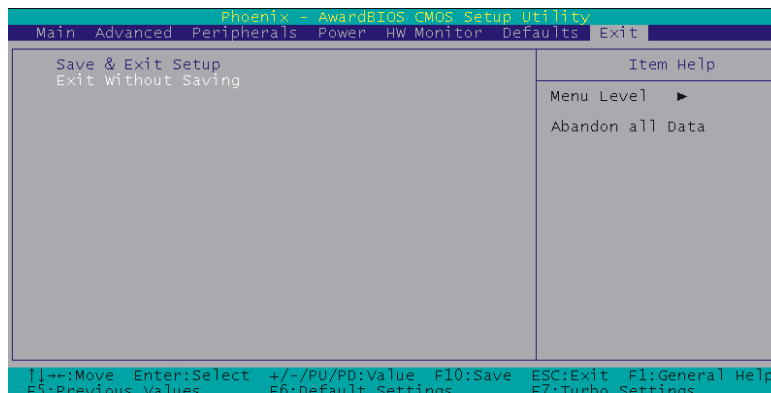
## Load CMOS From BIOS

Chargement des paramètres ROM flash par défaut pour les systèmes sans pile.

## Save CMOS To BIOS

Sauvegarde des paramètres par défaut dans la ROM flash pour les systèmes sans pile.

# Exit



## Save & Exit Setup

Si vous vous choisissez cette option et tapez **Y** suivi de la touche **Entrée**, les valeurs saisies dans l'utilitaire de paramètres seront enregistrées dans la mémoire CMOS de la puce BIOS.

## Exit Without Saving

Idem, en tapant sur la touche **N** suivi de la touche **Entré**, mais sans enregistrement des modifications.

# Software

We have dealt with your hardware and BIOS, so now it is time to learn the new tricks with the drivers.

## Driver Driving

Insert your driver CD provided by the motherboard manufacturer into the CD-ROM drive so that the following screen will automatically show up.



Or, you can launch the Driver CD Installation Utility manually by executing the Intel.exe program located on the Driver CD. (For more details, please refer to the Readme.txt files that in each folder of the Driver.)

## Intel Chipset Driver

This feature provides all the functions your North/South Bridge contain. To install this, just click **Intel Chipset Driver** then follow with care what will pop up.

## DirectX 9.0b Install

This feature provides the driver of DirectX 9.0b. To install this, just click **DirectX 9.0b Install** then follow with care what will pop up.

## Realtek Codec Audio Driver

This feature provides the driver of Realtek Codec Audio. To install this, just

click **Realtek Codec Audio Driver** then follow with care what will pop up.

You can only install this driver if you are using Windows® XP with Service Packet1 (or more advanced). You will see a screen as shown right after finishing the driver installation and rebooting the system, click “Continue Anyway” to complete the installation.



## Marvell Network Driver

This feature provides the driver of Marvell (GbE) Network. To install this, just click **Marvell Network Driver** then follow with care what will pop up.

# NOTE

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