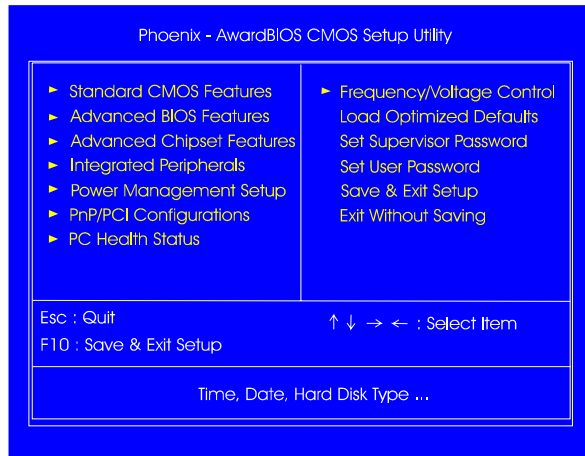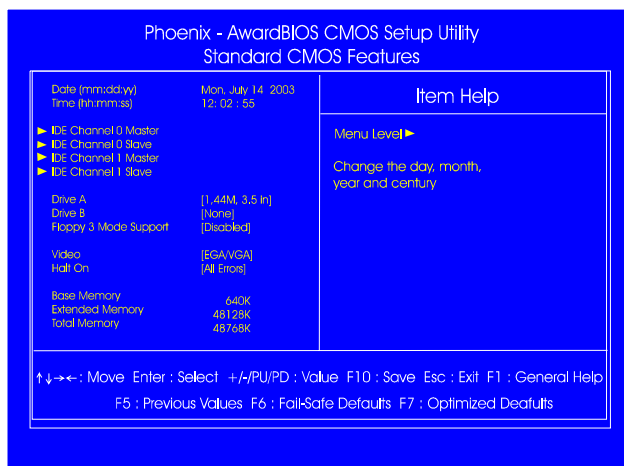# BIOS Setup

The mainboard comes with the chip that Award BIOS that contains the ROM Setup information of your system. (This chip serves as an interface between the processor and the rest of the mainboard components.) This section explains the information contained in the Setup program and tells you how to modify the settings according to your system configuration.

CMOS Setup Utility

The Setup utility program allows updates to the mainboard configuration settings. The BIOS setup values will be saved in the CMOS. It is executed when the user changes system configuration; user changes system backup battery; or the system detects a configuration error and asks the user to run the Setup program. Use the arrow keys to select and press **Enter** to run the selected program.

Standard CMOS Setup

```
              Phoenix - AwardBIOS CMOS Setup Utility
                     Standard CMOS Features

   Date (mm:dd:yy)         Mon, July 14  2003      Item Help
   Time (hh:mm:ss)         12: 02 : 55

 ► IDE Channel 0 Master                        Menu Level ►
 ► IDE Channel 0 Slave
 ► IDE Channel 1 Master                        Change the day, month,
 ► IDE Channel 1 Slave                         year and century

   Drive A                [1.44M, 3.5 in]
   Drive B                [None]
   Floppy 3 Mode Support  [Disabled]

   Video                  [EGA/VGA]
   Halt On                [All Errors]

   Base Memory                   640K
   Extended Memory             48128K
   Total Memory                48768K

 ↑↓→←: Move  Enter : Select  +/-/PU/PD : Value  F10 : Save  Esc : Exit  F1 : General Help
           F5 : Previous Values  F6 : Fail-Safe Defaults  F7 : Optimized Deafults
```

The Standard CMOS Setup screen is displayed above. Each item may have one or more option settings. The system BIOS automatically detects memory size, thus no changes are necessary. Use the arrow keys to highlight the item and then use **PgUp** or **PgDn** keys to select the value you want in each item.

Date

To set the date, highlight the *Date* field and then press **Page Up/Page Down** or **+/-** keys to set the current date. Follow the month, day and year format.

Time

To set the time, highlight the *Time* field and then press **Page Up/Page Down** or **+/-** keys to set the current time. Follow the hour, minute, and second format.

Hard Disks

This field records the specifications for all non-SCSI hard drives installed in the system. The onboard PCI IDE connectors provide Primary and Secondary channels for connecting up to four IDE hard disks or other IDE devices. Each channel can support up to two hard disks, the first of which is the *Master* and the second is the *Slave*.

Hard Disk Configurations

Capacity: The hard disk size. The unit is Bytes.

Cylinder: The cylinder number of the hard disk.

Head: The read/write head number of hard disk.

Precomp: The cylinder number at which the disk drive changes the write current.

Landing Zone: The cylinder number that the disk drive heads (read/write) are seated when the disk drive is parked.

Sector: The sector number of each track defined on the hard disk.

Drive A / Drive B

This field records the types of floppy drives installed in the system. To enter the configuration value for a particular drive, highlight its corresponding field and then select the drive type using the **left-** or **right-arrow** key.

Floppy 3 Mode Support

This is a Japanese standard floppy type drive. The standard stores 1.2MB in a 3.5 inch diskette.
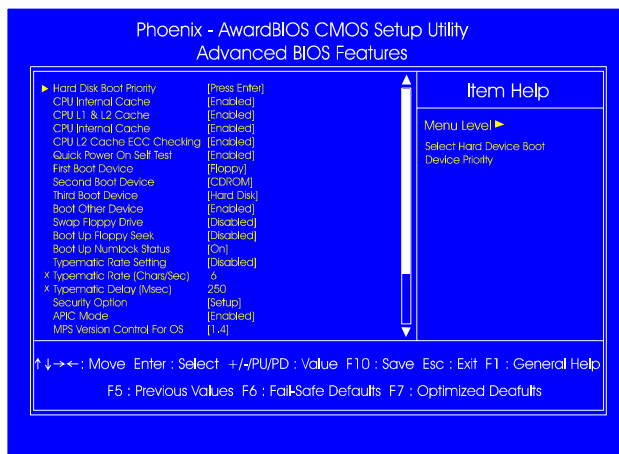
Video

Set this field to the type of video display card installed in the system.

Halt On

This field determines which types of errors will cause the system to halt.

**Chapter 3
BIOS Setup**

Advanced BIOS Features

Hard Disk Boot Priority

This feature will auto detect all hard disks of bootable device on the system. It also allows users to select hard disk device booting priority.

CPU Internal Cache

When enabled, improves the system performance. Disable this item when testing or trouble-shooting. The options are: Enabled, Disabled.

CPU L1 & L2 Cache

When enabled, improves the system performance. Disable this item when testing or trouble-shooting. The options are: Enabled, Disabled.

CPU L2 Cache ECC Checking

When enabled, it activates the CPU L2 cache check and error correction. The options are: Enabled, Disabled.

Quick Power On Self Test

When enabled, allows the BIOS to bypass the extensive memory test. The options are: Enabled, Disabled.

First/Second/Third Boot Device

This feature allows user to select the boot device priority. The options are: Floppy, LS120, Hard Disk, CDROM, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, USB-HDD, LAN, Disabled.

Boot Other Device

This feature allows user to select the boot device priority.
The options are: Enabled, Disabled.

Swap Floppy Drive

Allows you to switch the order in which the operating system accesses the floppy drives during boot up. Full Screen LOGO Show
It decides whether or not the full screen logo is shown during system booting up. The options are: Enabled, Disabled.

Boot Up Floppy Seek

When enabled, assigns the BIOS to perform floppy diskette drive tests by issuing the time-consuming seek commands.
The options are: Enabled, Disabled.

Boot Up Numlock Status

When set to On, allows the BIOS to automatically enable the Num Lock Function when the system boots up. The options are: On, Off.

Gate A20 Option

When set at Fast, allows a faster access response under Protected mode. The options are: Fast, Normal.

Typematic Rate Setting

The term typematic means that when a keyboard key is held down, the character is repeatedly entered until the key is released.
The options are: Disabled, Enabled.

Typematic Rate (Chars/Sec)

This feature is available only if the above item, Typematic Rate Setting, is set at Enabled. Sets the rate of a character repeat when the key is held down. The options are: 6, 8, 10, 12, 15, 20, 24, 30.

**Chapter 3
BIOS Setup**

Typematic Delay (Msec)

This feature is available only if the item, Typematic Rate Setting, is set at Enabled. Sets the delay time before a character is repeated.
The options are: 250, 500, 750, 1000 millisecond.

Security Option

Allows to set the security level of the system.The options: Setup, System.

APIC Mode

Allows you to decide if the system enters the APIC (Advanced Programmable Interrupt Controller) mode or not for more IRQs can be released.
The options are: Enabled, Disabled.

MPS Version Control For OS

When two CPUs onboard (not this board) this feature allows you to select MPS (Multi-Processor Spec.) version control for OS when logo test executes. The options are: 1.1, 1.4.

OS Select For DRAM > 64MB

If your operating system (OS) is OS/2, select the option OS2. Otherwise, stay with the default setting Non-OS2.The options are: Non-OS2, OS2.

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

S.M.A.R.T. stands for Self-Monitoring and Analysis Reporting Technology which allows your hard disk drive to report any read/write errors and issues a warning with LDCM installed. The options: Disabled, Enabled.

Video BIOS Shadow

Enabling this feature will copy the video BIOS to shadow RAM, it will improve the system performance.
The options are: Enabled, Disabled.

BIOS Guardian

It allows the system to prevent computer viruses. Users will need to disable it to update BIOS. The options are: Enabled, Disabled.

NOTE: Please disable this BIOS feature about BIOS Guardian before you start to reflash BIOS.

**Chapter 3
BIOS Setup**

BIOS Guardian and Reflash BIOS

BIOS Guardian by default is enabled, thus effectively acts as a fire-wall against viruses that can attack the BIOS while the system is running. It must be disabled before reflash BIOS.

The steps below show you how to off and on BIOS Guardian when reflash BIOS:
1. Press **Del** key while booting. Go to *CMOS Setup Utility* menu.
2. Go to *Advanced BIOS Features* submenu.
3. Set the feature *BIOS Guardian* at Disabled.
4. Save the setting and exit. The system restarts.
5. POST screen holds. A message about BIOS Guardian shows.
6. Press Space bar.
7. Reflash BIOS. Restart the system after complete it.
8. POST screen holds. A message about BIOS Guardian shows.
9. Press **G** key. The feature BIOS Guardian will be enabled again.

Full Screen LOGO Show

It decides whether or not the full screen logo is shown during system booting up. The options are: Enabled, Disabled.

NOTE:
1. LogoGenie supports Award BIOS only.
2. If you create a Logo file (.bmp) by LogoGenie, the file size must be 640 x 464 x 256 colors.

To enable this utility, please proceed as follows:
1. Insert software CD. Select LogoGenie from the Menu and follow the installation instructions.
2. After LogoGenie has been installed, go to Windows Start Box. In Programs Menu, select LogoGenie, then select LogoGenie.
3. Press F1 to read Help file to understand how to use this software if it is new to you.

Advanced Chipset Features
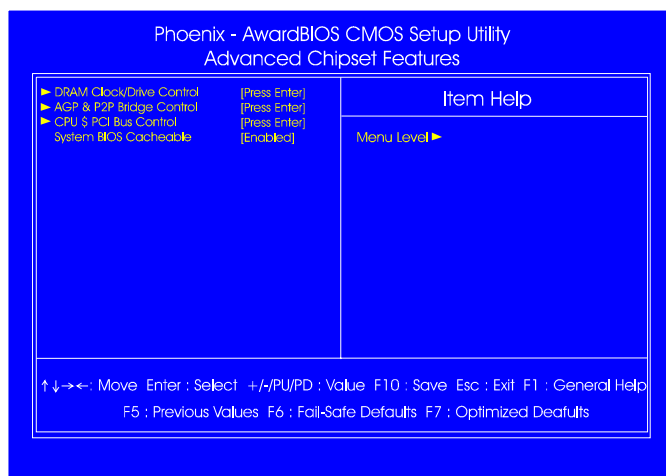
DRAM Clock/Drive Control

Current FSB Frequency, Current DRAM Frequency
This item allows you to get current FSB and DRAM frequencies.

DRAM Clock
The feature allows users to select the DRAM clock.
The options are: 133 MHz, 166 MHz, 200 MHz, By SPD.

DRAM Timing
This feature allows user to select the way to set DRAM timing.
The options are: By SPD, Manual.

DRAM CAS Latency

If the CAS latency of your installed memory medule is 2 Cycle, The selection 2 will enhance system performance. The options are: 1.5, 2, 2.5, 3.

Bank Interleave

This item allows users to select the bank interleave function of DRAM, when the feature DRAM Timing By SPD set at Disabled.
The options are: Disabled, 2 Bank, 4 Bank.

Precharge to Active (Trp)

This item allows users to set the clock time from Precharge to Active command. The options are: 2T, 3T, 4T, 5T.

Active to Precharge (Tras)

This item allows users to set the clock time from Active to Precharge command. The options are: 6T, 7T, 8T, 9T.

Active to CMD (Trcd)

This item allows users to set the clock time from Active to Read/Write Delay command. The options are: 2T, 3T, 4T, 5T.

DRAM Burst Length

This item allows users to set DRAM burst length.
The options are: 4, 8.

DRAM Command Rate

This item allows users to set Address Time After command.
The options are: 2T Command, l T Command.

Write Recovery Time

This item allows users to set write recovery time.
The options are: 2T, 3T.

tWTR

This item allows users to set DRAM tWTR timing control.
The options are: 2T, 1T.

Chapter 3
BIOS Setup

AGP & P2P Bridge Control

AGP Aperture Size

It allows you to select the main memory frame size for AGP use.
The options list presents all provided possibilities.

AGP Mode

This feature allows users to select the AGP mode when an AGP add-on
card installed. The options are: 4X, 2X, 1X.

AGP Driving Control / AGP Driving Value

These two features allow user to improve the performance of AGP card
manually by pressing Page Down/Page UP key if necessary.
The options of AGP Driving Control are: Auto, Manual.

AGP Fast Write

This feature allows you to set AGP fast write mode.
The options are: Disabled, Enabled.

AGP Master 1 WS Write

When enabled, the AGP bus master write access to DRAMs will add one
wait-state cycle. The options are: Enabled, Disabled.

AGP Master 1 WS Read

When enabled, the AGP bus master read access to the DRAMs will add one
wait-state cycle. The options are: Disabled, Enabled.

AGP 3.0 Calibration cycle

This feature allows users to enable or disable AGP 3.0cablibration cycle.
The options are: Disabled, Enabled.

**Chapter 3
BIOS Setup**

CPU & PCI Bus Control

PCI Master 0 WS Write

> When enabled, allows a zero-wait-state-cycle delay when the PCI master drive writes data to DRAM. The options are: Enabled, Disabled.

VLink 8X Support

> Enables VLink 8X support. The options are: Enabled, Disabled.

PCI Delay Transaction

> Enable it to abort the current PCI master cycle and accept a new PCI master request, it reaccepts the original PCI master, returns PCI data phase to the original PCI master. The options are: Disabled, Enabled.

System BIOS Cacheable

> When enabled, allows the ROM area F000H-FFFFH to be cacheable when cache controller is activated. The options are: Enabled, Disabled.

Integrated Peripherals
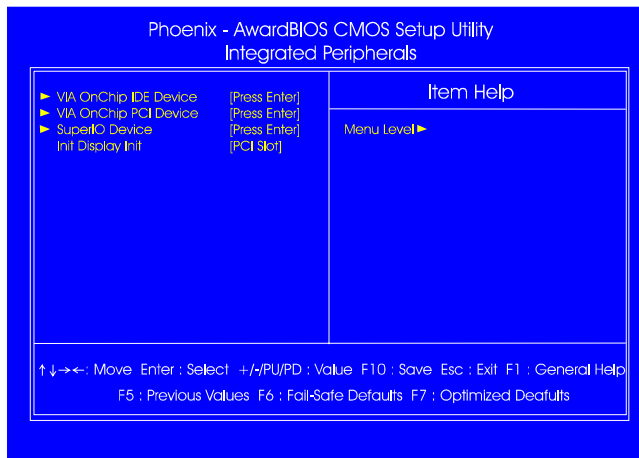
VIA OnChip IDE Device

OnChip SATA (KT-600 Pro only)

This item allows you to diable the serial ATA controller embedded in South Bridge. The options are: Enabled, Disabled.

SATA Mode (KT-600 Pro only)

This item allows users to select the serial ATA mode
The options are: IDE, Raid.

OnChip Primary/Secondary IDE

When enabled, allows you to use the onboard primary/secondary PCI IDE. If a hard disk controller card is used, set at Disabled.
The options are: Enabled, Disabled.

IDE Prefetch Mode

When set at Enabled, it allows data to be posted to and prefetched from the primary IDE data ports. Data prefetching is initiated when a data port read occurs. The read prefetch eliments latency to the IDE data ports and allows them to be performed back to back for the highest possible PIO data transfer rates. The first data port read of a sector is called the demand read. Subsequent data port reads from the sector are called prefetch reads. The demand read and all prefetch reads must be of the same size (16 or 32 bits). The options are: Enabled, Disabled.

Primary Master/Slave PIO

Allows an automatic or a manual configuration of the PCI primary IDE hard drive (master/slave) mode.

Secondary Master/Slave PIO

Allows an automatic or a manual configuration of the PCI secondary IDE hard drive (master/slave) mode.
The options are: Auto, Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

Primary Master/Slave UDMA

Allows an automatic configuration of the PCI primary IDE hard drive (master/slave) mode if Ultra DMA is supported both on the motherboard and the hard disk. The options are: Auto, Disabled.

Secondary Master/Slave UDMA

Allows an automatic configuration of the PCI secondary IDE hard drive (master/slave) mode if Ultra DMA is supported both on the motherboard and the hard disk. The options are: Auto, Disabled.

IDE HDD Block Mode

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

VIA OnChip PCI Device
Onboard 1394 Support

It allows users to disable the onboard 1394 feature.
The options are: Enabled, Disabled.

VIA-3058 AC97 Audio

It allows users to disable AC97 audio function in South Bridge.
The options are: Auto, Disabled.

VIA Onchip LAN

It allows users to disable onboard LAN feature.
The options are: Enabled, Disabled.

Onboard Lan Boot ROM

Enables and disables the onboard LAN Boot ROM.
The options are: Enabled, Disabled.

OnChip USB Controller

Disable this option if you are not using the onboard USB 1.1 and USB 2.0 feature. The options are: Disabled, Enabled.

OnChip USB2.0 Controller

It allows users to disable the onboard USB2.0 Enhanced Host Controller Interface (EHCI) function. The options are: Enabled, Disabled.

Chapter 3
BIOS Setup

3 - 13

USB Legacy Support

When a USB keyboard is installed, please set at Enabled.
The options are: Disabled, Enabled, Auto.

SuperIO PCI Device

Onboard FDC Controller

When enabled, the floppy diskette drive (FDD) controller is activated.
The options are: Enabled, Disabled.

Onboard Serial Port 1/2

If the serial port 1/2 uses the onboard I/O controller, you can modify your
serial port parameters.The options are: 3F8/IRQ4, 3E8/IRQ4, 2F8/IRQ3, 2E8/
IRQ3, Disabled.

UART Mode Select

Allows you to select the IR modes if the serial port 2 is used as an IR port.
Set at Standard, if you use COM2 as the serial port as the serial port,
instead as an IR port. The options are: Normal, IrDA, ASKIR, SCR.

UR2 Duplex Mode

Allows you to select the IR modes. The options are: Half, Full.

Onboard Parallel Port

Allows you to select from a given set of parameters if the parallel port uses
the onboard I/O controller.
The options are: Disabled, 378/IRQ7, 278/IRQ5, 3BC/IRQ7.

Parallel Port Mode

Allows you to connect with an advanced printer via the port mode it
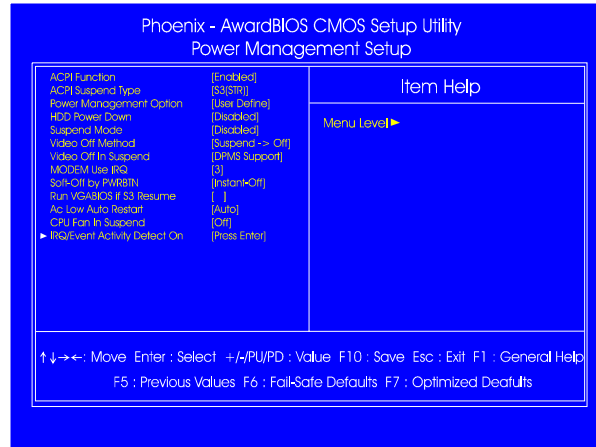supports. The options are: SPP, EPP, ECP, ECP+EPP.

ECP Mode Use DMA

This feature allows you to select Direct Memory Access (DMA) channel if
the ECP mode selected. The options are: 1, 3.

Init Display First

When you install a PCI VGA card on the board, this feature allows you to
select the first initiation of the monitor display from PCI or onboard AGP.
The options are: PCI Slot, AGP.

Power Management Setup


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

  ACPI Function              [Enabled]
  ACPI Suspend Type          [S3(STR)]              Item Help
  Power Management Option     [User Define]
  HDD Power Down             [Disabled]          Menu Level ▶
  Suspend Mode               [Disabled]
  Video Off Method           [Suspend -> Off]
  Video Off In Suspend       [DPMS Support]
  MODEM Use IRQ              [3]
  Soft-Off by PWRBTN         [Instant-Off]
  Run VGABIOS if S3 Resume   [   ]
  Ac Low Auto Restart        [Auto]
  CPU Fan In Suspend         [Off]
▶ IRQ/Event Activity Detect On  [Press Enter]


↑↓→←: Move  Enter : Select  +/-/PU/PD : Value  F10 : Save  Esc : Exit  F1 : General Help
        F5 : Previous Values  F6 : Fail-Safe Defaults  F7 : Optimized Deafults
```

ACPI function

This item allows you to disable the ACPI function.
The options are: Enabled, Disabled.

ACPI Suspend Type

This item allows you to select ACPI suspend types.
The options are: S1(POS), S3 (STR), S1&S3.

Power Management Option

This item allows you to adjust the power management features.

Select User Define for configuring your own power management features.
Min Saving initiates all predefined timers in their minimum values. Max
Saving, on the other hand, initiates maximum values. The options are: User
Define, Min Saving, Max Saving.

HDD Power Down

The option lets the BIOS turn the HDD motor off when system is in Sus-
pend mode. Selecting 1 Min..15 Min allows you define the HDD idle time
before the HDD enters the Power Saving Mode.
The options 1 Min..15 Min will not work concurrently. When HDD is in the
Power Saving Mode, any access to the HDD will wake the HDD up.
The options are: Disable, 1 Min..15 Min.

Suspend Mode

When disabled, the system will not enter Suspend mode. The specified time option defines the idle time the system takes before it enters Suspend mode. The options are: Disable, 1, 2, 4, 6, 8, 10, 20, 30, 40 Min, 1 Hour.

Video Off Option

This feature provides the selections of the video display power saving mode. The option Suspend - Off allows the video display to go blank if the system enters Suspend mode. The option All Modes - Off allows the video display to go blank if the system enters Doze mode or Suspend mode. The option Always On allows the video display to stay in Standby mode even when the system enters Doze or Suspend mode.
The options are: Suspend - Off, All Modes -> Off, Always On.

Video Off Method

The option *V/H SYNC+Blank* allows the BIOS to blank off screen display by turning off the V-Sync and H-Sync signals sent from add-on VGA card. *DPMS Support* allows the BIOS to blank off screen display by your add-on VGA card which supports DPMS (Display Power Management Signaling function). *Blank Screen* allows the BIOS to blank off screen display by turning off the red-green-blue signals.
The options are: V/H SYNC+Blank, DPMS Support, Blank Screen.

MODEM Use IRQ

This feature allows you to select the IRQ# to meet your modem IRQ#.
The options are: NA, 3, 4, 5, 7, 9, 10, 11.

Soft-Off by PWRBTN

The selection Delay 4 Sec. will allow the system shut down after 4 seconds after the power button is pressed. The selection Instant-Off will allow the system shut down immediately once the power button is pressed.
The settings are: Delay 4 Sec, Instant-Off.

Run VGABIOS if S3 Resume

This determines whether or not to enable the system to run the VGA BIOS when resuming from S3(STR) or S1&S3.
The options are: Auto, Yes, No.

AC Loss Auto Restart

When the system is shut down owing to the power failure, the system will not be back to power on by itself. This feature allows you to set the system back to which power status of the system when the system power is resumed. It always will be back to on if set at On. The system always be back to off if set at Off. The options are Auto, On, Off.

IRQ/Event Activity Detect

PS2KB Wakeup Select

This item allows you to select Hot Key or Password to wake-up the system by PS2 Keyboard. When select Password, please press ENTER key to change password max 8 numbers. The options are : Hot key, Password.

PS2KB Wakeup from S1-S3

It allows you to set a Hot Key to wake-up the system by PS2 Keyboard. The options are: Disable, Ctrl+F1,..., Ctrl+F12, Power, Wake, Any key. *Power and Wake are Windows98 Keyboard button.*

PS2MS Wakeup from S1-S3

This item allows you to wake-up the system by PS2 Mouse.
The options are: Enabled, Disabled.

USB Resume from S1-S3

This item allows you to wake-up the system by USB device when you save the computer power at S1-S3. The options are: Enabled, Disabled.

VGA

When set at On, any VGA activity will aThe options are: wake the system. The options are: OFF, ON.

LPT & COM

When LPT/COM is selected, any access of LPT and COM ports will awake the system. Likewise, either LPT or COM is chosen, the system will be awaken by any activity of LPT or COM port.
The options are: LPT/COM, LPT, COM, NONE.

HDD & FDD

When it is set at ON, any access happened at hard drives and floppy drives will awake the system. The options are: OFF, ON.

PCI Master

To set this feature at ON activates that Power Management feautre (PM) wake-up event for the PCI bus master card. The options are: OFF, ON.

PowerOn by PCI Card

When set at Enabled, any PCI-PM event awakes the system from a PCI-PM controlled state. The options are Disabled, Enabled.

Wake Up On LAN/Ring

When set at Enabled, an input signal comes from the other client/server on the LAN/ring awakes the system from a soft off state if connected over LAN/modem. The options are Disabled or Enabled.

RTC Alarm Resume

Enabled allows you to set the time the system will be turned on from the system power-off status. The options are: Enabled, Disabled.

Date (of Month)

This feature allows you to set the day of the alarm starts when the RTC Alarm Resume From Soft Off is set to be Enabled. The options are: 0, 1..31.

Resume Time (hh:mm:ss)

If an ATX power supply is installed and when RTC Alarm Resume is Enabled, this feature allows you to set the time of the alarm starts when the RTC Alarm Resume From Soft Off is set to be Enabled.
The options are: hh (*hour*) - 0, 1, 2,.., 23; mm (*minute*) - 0, 1, 2,..,59; ss (*second*) - 0, 1, 2,..,59.

Primary INTR

If set at ON, the Primary interrupt (the Primary option in the feature of IRQ# Acitivity) will make the power management wake up the system.
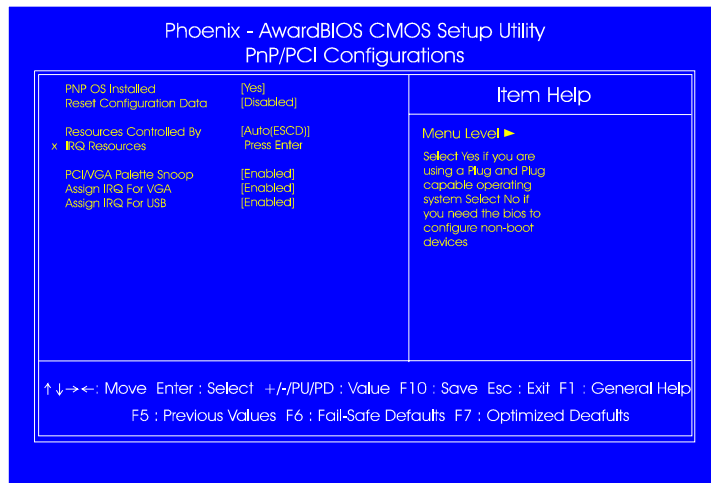The options are: ON, OFF.

IRQs Activity Monitoring

After the time period which you set, the system advances from doze mode to suspend mode in which the CPU clock stops and the screen display is off. At this moment, if the IRQ activity occurs, the system goes back to full-on mode directly.

If the IRQ activity which is defined as Non Primary takes place, the system remains off until the corresponding IRQ handler finishes.

The options of IRQ 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 are: Enabled, Disabled.

PnP/PCI Configurations

```
              Phoenix - AwardBIOS CMOS Setup Utility
                     PnP/PCI Configurations

    PNP OS Installed          [Yes]              Item Help
    Reset Configuration Data  [Disabled]
                                               Menu Level ▶
    Resources Controlled By   [Auto[ESCD)]
  x  IRQ Resources             Press Enter     Select Yes if you are
                                               using a Plug and Plug
    PCI/VGA Palette Snoop      [Enabled]        capable operating
    Assign IRQ For VGA         [Enabled]        system Select No if
    Assign IRQ For USB         [Enabled]        you need the bios to
                                               configure non-boot
                                               devices


  ↑↓→←: Move  Enter : Select  +/-/PU/PD : Value  F10 : Save  Esc : Exit  F1 : General Help
          F5 : Previous Values  F6 : Fail-Safe Defaults  F7 : Optimized Deafults
```

PNP OS Installed

If your operating system is a Plug-and-Play one, such as Windows NT, Windows 95, select Yes. The options are: No, Yes.

Reset Configuration Data

Enabling it to reset the system Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on card and the system reconfiguration has caused such a serious conflict that the operating system can not boot. The options are: Disabled, Enabled.

Resources Controlled By

If set at Auto, the BIOS arranges all system resources. If there exists conflict, select Manual. The options are: Auto (ESCD), Manual.

The manual options of **IRQ- / DMA**- assigned to are: PCI/ISA PnP, Legacy ISA.

PCI/VGA Palette Snoop

Set this feature to be enabled if any ISA adapter card installed in the system requires the VGA palette snoop function.

The options are: Disabled, Enabled.

Assign IRQ For VGA

If your PCI VGA card devices do not need an IRQ, select Disabled; therefore, an IRQ can be released for the system use.
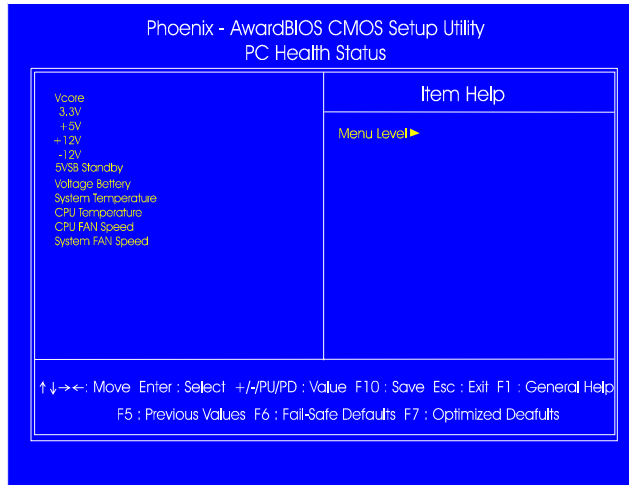
The options are: Enabled, Disabled.

Assign IRQ For USB

If your USB devices do not need an IRQ, select Disabled; therefore, an IRQ can be released for the system use.
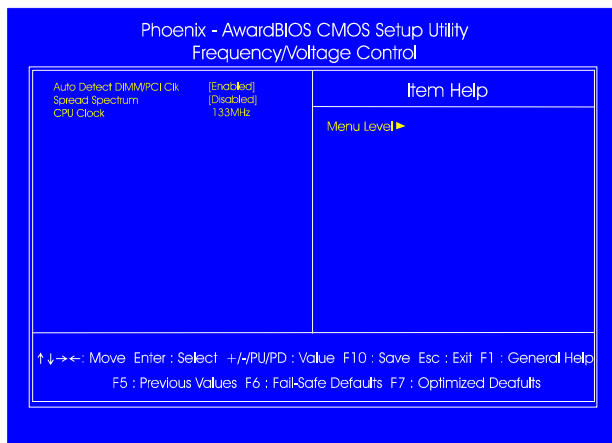
The options are: Enabled, Disabled.

PC Health Status

Phoenix - AwardBIOS CMOS Setup Utility
PC Health Status

	Item Help
Vcore 3.3V +5V +12V -12V 5VSB Standby Voltage Battery System Temperature CPU Temperature CPU FAN Speed System FAN Speed	Menu Level ►

↑↓→←: Move Enter : Select +/-/PU/PD : Value F10 : Save Esc : Exit F1 : General Help
F5 : Previous Values F6 : Fail-Safe Defaults F7 : Optimized Deafults

Vcore / 3.3V / +5V / +12V / -12V / -5VSB Standby / Voltage Battery / System Temperature / CPU Temperature / CPU FAN Speed / System FAN Speed

These items allow end users and technicians to monitor data provided by the BIOS on this mainboard. It is not user-configurable.

Frequency/Voltage Control

Auto Detect DIMM/PCI Clk

When enabled, BIOS will detect the PCI slot and DIMM slot. If no any device in, BIOS will auto disable its clock.
The options are: Enabled, Disabled.

Spread Spectrum

This feature is used to select the spread Spectrum range or disable it.
The options are: Disabled, +/-0.25%, -0.5%, +/-0.5%, +/-0.75%,

CPU Clock

This feature allows you to set the CPU clock frequency. If you set a unappropriate option which leads to a booting problem, keep pressing the Insert key until the display appears will solve it.
The option list all supported by this mainboard.

Load Optimized Defaults

This submenu is selected for default settings which provide the best system performance.

Supervisor/User Password

To enable the Supervisor/User passwords, select the item from the Standard CMOS Setup. You will be prompted to create your own password. Type your password up to eight characters and press Enter. You will be asked to confirm the password. Type the password again and press Enter. To disable password, press Enter twice when you are prompted to enter a password. A message appears, confirming the password is disabled.

Under the BIOS Feature Setup, if *Setup* is selected under the Security Option field and the Supervisor/User Password is enabled, you will be prompted password every time you try to enter the CMOS Setup Utility. If *System* is selected and the Supervisor/User Password is enabled, you will be requested to enter the Password every time when you reboot the system or enter the CMOS Setup utility.

Save and Exit Setup

After you have made changes under Setup, press Esc to return to the main menu. Move cursor to Save and Exit Setup or press F10 and then press Y to change the CMOS Setup. If you did not change anything, press Esc again or move cursor to Exit Without Saving and press Y to retain the Setup settings. The following message will appear at the center of the screen to allow you to save data to CMOS and exit the setup utility: **SAVE to CMOS and EXIT (Y/N)?**

Exit without Saving

If you select this feature, the following message will appear at the center of the screen to allow you to exit the setup utility without saving CMOS modifications: **Quit Without Saving (Y/N)?**

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**Chapter 3
BIOS Setup**