

Chapter 2

Introduction

This chapter discusses the Award Setup program built into the ROM BIOS. The Setup program allows the user to modify the basic system configuration. This special information is then stored in battery-backed RAM so that it retains the setup information when the power is turned off.

The Award BIOS installed in your computer system's ROM (Read Only Memory) is a custom version of an industry standard BIOS. This means that it supports Intel PIII Celeron and Tualatin CPU Processor. The BIOS provides critical low-level support for standard devices such as disk drives and serial and parallel ports.

The rest of this manual is intended to guide you through the process of configuring your system using Setup.

Plug and Play Support

This AWARD BIOS supports the Plug and Play Version 1.0A specification. ESCD(Extended System Configuration Data)write is supported.

EPA Green PC Support

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

PCI Bus Support

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

APM Support

This AWARD BIOS supports Version 1.1&1.2 of the Advanced Power Management(APM) specification. Power management features are implemented via the System Management Interrupt(SMI). Sleep and Suspend power management modes are supported. Power to the hard disk drives and video monitors can be managed by this AWARD BIOS.

DRAM Support

SDRAM (Synchronous DRAM) are supported.

Support CPU

This AWARD BIOS supports the Intel PIII Celeron and Tualatin CPU Processor.

Using Setup

In general, you use the arrow keys to highlight items, press <Enter> to select, use the <PgUp> and <PgDn> keys to change entries, press <F1> for help and press <Esc> to quit. The following table provides more detail about how to navigate in the Setup program by using the keyboard.

Note:

(BIOS version 1.0 is for reference only. If there is a change in BIOS version, please use the actual version on the BIOS.)

Keystroke	Function
Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item on the left(menu bar)
Right arrow	Move to the item on the right(menu bar)
Esc	Main Menu: Quit without saving changes Submenus: Exit Current page to the next higher level menu
Move Enter	Move to item you desired
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
+Key	Increase the numeric value or make changes
-Key	Decrease the numeric value or make changes
Esc Key	Main menu-Quit and not save changes into CMOS Status Page Setup Menu and option Page Setup Menu-Exit Current page and return to Main Menu
F1 Key	General help on Setup navigation keys.
F5 Key	Load previous values from CMOS
F6 Key	Load the fail-safe defaults from BIOS default table
F7 Key	Load the optimized defaults
F10 Key	Save all the CMOS changes and exit

2.1 Main Menu

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

“WARNING”

The information about BIOS defaults on manual (Figure 1,2,3,4,5,6,7,8,9,10,11,12,13,14) is just for reference, please refer to the BIOS installed on the board for updated information.

© **Figure 1. Main Menu**

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Standard CMOS Features	Frequency/Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Load Standard Defaults
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PNP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc : Quit F9 : Menu in BIOS ←→↑↓: Select Item	
F10 : Save & Exit Setup	
Time , Date , Hard Disk Type ...	

Standard CMOS Features

This setup page includes all the items in standard compatible BIOS.

Advanced BIOS Features

This setup page includes all the items of the BIOS special enhanced features.

Advanced Chipset Features

This setup page includes all the items of the Chipset special enhanced features.

Integrated Peripherals

This selection page includes all the items of the IDE hard drive and Programmed Input/Output features.

Power Management Setup

This setup page includes all the items of the power management features.

PnP/PCI Configurations

This setup page includes the user defined or default IRQ Setting.

PC Health Status

This page shows the hardware Monitor information of the system.

Frequency / Voltage Control

This setup page controls the CPU's clock and frequency ratio.

Load Optimized Defaults

These settings are more likely to configure a workable computer when something is wrong. If you cannot boot the computer successfully, select the BIOS Setup options and try to diagnose the problem after the computer boots. These settings do not provide optional performance.

Load Standard Defaults

Use this menu to load the BIOS default values for the minimal/stable performance for your system to operate.

Set Supervisor Password

Change, set, or, disable password. It allows you to limit access to the system and Setup, or just to Setup.

Set User Password

You can specify both a User and a Supervisor password. When you select either password option, you are prompted for a 1-6 character password. Enter the password and then retype the password when prompted.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

2.2 Standard CMOS Features

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

© Figure 2. Standard CMOS Features

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Standard CMOS Features

Date(mm:dd:yy)	Tue,Jun 6 2000	Item Help
Time (hh:mm:ss)	11:26:10	
IDE Primary Master	Press Enter None	Menu Level
IDE Primary Slave	Press Enter None	
IDE Secondary Master	Press Enter None	Change the day, month, year and century.
IDE Secondary Master	Press Enter None	
Drive A	1.44M,3.5 in	
Drive B	None	
Video	EGA/VGA	
Halt On	All,But Keyboard	
Base Memory	640K	
Extended Memory	65472K	
Total	1024K	

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

Main Menu Selections

This table shows the selections that you can make on the Main Menu.

Item	Options	Description
Date	Month DD YYYY	Set the system,date. Note that the 'Day' automatically changes when you set the data.
IDE Primary Master	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Primary Slave	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Secondary Master	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Secondary Slave	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
Drive A Drive B	None 360K,5.25in 1.2M,5.25in 720K,3.5in 1.44M,3.5in 2.88M,3.5in	Select the type of floppy disk drive installed in your system.
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video device.

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

CMOS Setup Utility-Copyright (C) 1984-2001 Award Software IDE
Primary Master

IDE HDD Auto-Detection	Press Enter	Item Help
IDE Primary Master	Auto	Menu Level
Access Mode	Auto	
Capacity	13022MB	
Cylinder	25232	
Head	16	
Precomp	0	
Landing Zone	25231	
Sector	61	

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

2.3 Advanced BIOS Features

© Figure 3. Advanced BIOS Features

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Advanced BIOS Features

Virus Warning	Disabled	Item Help
CPU Internal Cache	Enabled	Menu Level
External Cache	Enabled	
CPU L2 Cache ECC Checking	Disabled	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 sound an alarm
Processor Number Feature	Enabled	
Quick Power On Self Test	Enabled	
First Boot Device	Floppy	
Second Boot Device	HDD-0	
Third Boot Device	LS120	
Fourth Boot Device	Disabled	
Swap Floppy Drive	Disabled	
Boot Up Floppy Seek	Enabled	
Boot Up NumLock Status	Off	
Gate A20 Option	Fast	
Typematic Rate Setting	Disabled	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	Setup	
OS Select For DRAM >64MB	Non-OS2	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit

F1:General Help F5:Previous Values F6:Fail-Safe Defaults

F7:Optimized Defaults

Virus Warning

This option 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.

The Choices: Disabled(default), Enabled.

CPU Internal Cache

These two categories speed up memory access. However, it depends on CPU/chipset design.

Enabled (default) Enabled cache.

Disabled Disabled cache.

External Cache

This fields allow you to Enable or Disable the CPU'S "Level 2" secondary cache. Caching allows better performance.

Enabled (default) Enabled cache.

Disabled Disabled cache.

CPU L2 Cache ECC Checking

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

The Choices: Disabled(default), Enabled.

Processor Number Feature

The item will show up when you install the Pentium III processor.

Enabled (default) Pentium Processor Number Feature.

Disabled Disabled.

Quick Power On Self Test

This category speeds up Power on Self-Test(POST) after you power up the computer. If it is set to Enable, BIOS will shorten or skip some check items during POST.

Enabled (default) Enabled quick POST.

Disabled Normal POST.

First/Secondary/Third Boot Device

This BIOS attempts to load the operating system from the devices in the sequence selected in these items.

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

Fourth Boot Device

The Choices: Disabled(default), Enabled.

Swap Floppy Drive

If the system has two floppy drives, you can swap the logical drive name assignments.

The Choices: Disabled(default), Enabled.

Boot Up Floppy Seek

Seek disk drives during boot up. Disabled speeds boot-up.

The Choices: Enabled(default), Disabled.

Boot Up NumLock Status

Select power on state for Numlock.

On Numpad is number keys.

Off (default) Numpad is arrow keys.

Gate A20 Option

Select if chipset or keyboard controller should control Gate A20.

Normal A pin in the keyboard controller controls Gate A20.

Fast (default) Lets chipset control Gate A20.

Typematic Rate Setting

Enabled Enabled this option to adjust the keystroke repeat rate.

Disabled (default) Disabled.

Typematic Rate (Char/Sec)

Range between 6(**default**) and 30 characters per second.

This option controls the speed of repeating keystrokes.

Typematic Delay (Msec)

This option sets the time interval for displaying the first and the second characters.

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

Security Option

This category allows you to limit access to the system and Setup, or just to Setup.

System

The system will not boot and access to Setup will be denied if the correct password is not entered in prompt.

Setup (default)

The system will boot, but access to Setup will be denied if the correct password is not entered in prompt.

OS Select For DRAM >64MB

Select the operating system that is running with greater than 64MB of RAM on the system.

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

2.4 Advanced Chipset Features

This section allows you to configure the system based on the specific features of the installed chipset. This chipset manages bus speeds and access to system memory resources, such as DRAM and external cache. It also coordinates communications of the PCI bus. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide the best operating conditions for your system. The only time you might consider making any changes would be if you discovered that data was lost while using your system.

© Figure 4. Advanced Chipset Features

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Advanced Chipset Features

Advanced DRAM Control 1	Press Enter	Item Help
System BIOS Cacheable	Enabled	Menu Level
Video RAM Cacheable	Enabled	
Memory Hole At 15M-16M	Disabled	
AGP Aperture Size	64MB	
Graphic Window WR Combin	Enabled	
Concurrent function (MEM)	Enabled	
Concurrent function (PCI)	Enabled	
CPU Pipeline Control	Enabled	
PCI Delay Transaction	Disabled	
Memory Parity Check	Disabled	

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

Auto Configuration

If you leave this item at *Auto*, the system will automatically detect and configure any DRAM devices it finds. If it fails to find a memory module, change the value to *Manual* and then manually configure the memory module by entering its characteristics in the items below (SDRAM RAS,... etc.) Refer to your DRAM's documentation if you need to obtain this information.

The Choices: *Auto*(default).

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Advanced DRAM Control 1

Auto Configuration	Auto	Item Help
SDRAM RAS Active Time	5T	Menu Level
SDRAM RAS Precharge Time	3T	
RAS to CAS Delay	4T	
Dram Background Command	Delay 1T	
LD-Off Dram RD/WR Cycle	Delay 1T	
Write Recovery Time	2T	
VCM ACCT-ACT/REF Delay	9T	
Early CKE Delay 1T Cntrl	Normal	
Early CKE Delay Adjust	7ns	
Mem Command Output Time	Delay 1T	
SDRAM/VCM CAS Latency	3T	

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

SDRAM RAS Active Time

This field let's you insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. Fast gives faster performance; and Slow gives more stable performance. This field applies only when synchronous DRAM is installed in the system.

The Choices: 5T(default), 6T.

SDRAM RAS Precharge Time

If an insufficient number of cycles is allowed for the RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete and the DRAM may fail to retain date. Fast gives faster performance; and Slow gives more stable performance. This field applies only when synchronous DRAM is installed in the system.

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

RAS to CAS Delay

2T Set RAS to CAS Delay in 2T.
3T Set RAS to CAS Delay in 3T.
4T (default) Set RAS to CAS Delay in 4T.

Dram Background Command

When the delay is set at 1T, background commands are issued 1 clock cycle behind the memory address (MA) which has been issued. When set to normal, background commands and MAs are issued at the same time.

The Choices: Delay 1T(default).

LD-Off Dram RD/WR Cycle

When the delay is set at 1T, memory read and write commands are issued 1 clock cycle behind the memory address (MA) which has been issued. When set to Normal, read/write commands and MAs are issued at the same time.

The Choices: Delay 1T(default).

SDRAM /VCM CAS Latency

2T

Set SDRAM/VCM CAS latency Time to 2T.

3T (default)

Set SDRAM/VCM CAS latency Time to 3T.

System BIOS Cacheable

When enabled, the access to the system BIOS ROM address at F0000H-FFFFFFH is cached.

The Choices: Enabled(default), Disabled.

Video RAM Cacheable

Enabled (default)

Enabled Video RAM Cacheable.

Disabled

Disabled Video RAM Cacheable.

Memory Hole At 15M-16M

In order to improve performace, certain space in memory can be reserved for ISA cards. This memory must be mapped into the memory's space below 16MB.

The Choices: Diasbled(default), Enabled.

AGP Aperture Size

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

The Choices: **64MB**(default), 1MB, 2MB, 4MB, 8MB, 16MB, 32MB, 128MB, 256MB.

PCI Delay Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select Enabled to support compliance with PCI specification version 2.1.

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

Memory Parity Check

Enable this item to allow BIOS to perform a parity check to the POST memory tests. Enable only if the system DRAM supports parity checking. After you have made your selections in the Chipset Features Setup screen, press ESC to go back to the main screen.

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

2.5 Integrated Peripherals

© Figure 5. Integrated Peripherals

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Integrated Peripherals

Onchip IDE Function	Press Enter	Item Help
Onchip Device Function	Press Enter	
Winbond Super IO Device	Press Enter	Menu Level
Init Display First	PCI Slot	
System Share Memory Size	8MB	

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

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Onchip IDE Function

Internal PCI/IDE	Both	Item Help
Primary Master PIO	Auto	
Primary Slave PIO	Auto	Menu Level
Secondary Master PIO	Auto	
Secondary Slave PIO	Auto	
Primary Master UDMA	Auto	
Primary Slave UDMA	Auto	
Secondary Master UDMA	Auto	
Secondary Slave UDMA	Auto	
IDE Burst Mode	Enabled	
IDE HDD Block Mode	Enabled	
IDE Prefetch Mode	Enabled	

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

Internal PCI/IDE

Use this item to enable or disable the IDE channels that are integrated on the mainboard. Leaving this item at Both enables you to set the IDE Primary/Secondary Master/Slave PIO, Primary/Secondary Master/Slave UltraDMA, and IDE Burst Mode fields. Setting this item to Primary enables you to set the IDE Primary Master/Slave PIO, Primary Master/Slave UltraDMA and IDE Burst Mode fields. If you set this item to Secondary, it enables you to set the IDE Secondary Master/Slave PIO, Secondary Master/Slave UltraDMA and IDE Burst Mode fields.

The Choices: Both(default).

Primary Master PIO (for onboard IDE 1st channel)

- Auto (default)** BIOS will automatically detect the IDE HDD Accessing mode.
- Mode 0~4** Manually set the IDE Accessing mode.

Primary Slave PIO (for onboard IDE 2nd channel)

- Auto (default)** BIOS will automatically detect the IDE HDD Accessing mode.
- Mode 0~4** Manually set the IDE Accessing mode.

Secondary Master PIO (for onboard IDE 1st channel)

- Auto (default)** BIOS will automatically detect the IDE HDD Accessing mode.
- Mode 0~4** Manually set the IDE Accessing mode.

Secondary Slave PIO (for onboard IDE 2nd channel)

- Auto (default)** BIOS will automatically detect the IDE HDD Accessing mode.
- Mode 0~4** Manually set the IDE Accessing mode.

Primary Master Ultra DMA

- Auto (default)** BIOS will automatically detect the IDE HDD Accessing mode.
- Disabled** Disabled.

Primary Slave Ultra DMA

- Auto (default)** BIOS will automatically detect the IDE HDD Accessing mode.
- Disabled** Disabled.

Secondary Master Ultra DMA

Auto (default)	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disabled.

Secondary Slave Ultra DMA

Auto (default)	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disabled.

IDE Burst Mode

Enables or disables the IDE Bus Master generating PCI burst cycle control.

The Choices: Enabled(default), Disabled.

IDE HDD Block Mode

Enabled (default)	Enabled.
Disabled	Disabled.

IDE Prefetch Mode

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

The Choices: Enabled(default), Disabled.

AC97 Sound Device

The default setting of this item utilizes an onboard sound chip for audio output. There is no need to buy and insert a sound card. If a sound card is installed, disable this item.

The Choices: Enabled(default), Disabled.

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Onchip Device Function

AC97 Sound Device	Enabled	Item Help
Game Port Address	201	Menu Level
Midi Port Address	330	
Midi Port IRQ	10	
AMR Modem Device	Enabled	
Ethernet Function	Enabled	
Ethernet Address ID Input	Press Enter	
Current Mac address is 003018-000001		
USB Controller	Enabled	
USB Keyboard Support	Disabled	

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

Game Port Address**201 (default)**

Set onboard game port to 201.

209

Set onboard game port to 209.

Disabled

Disabled.

Midi Port Address**300**

Set Midi Port address to 300.

330 (default)

Set Midi Port address to 330.

Disabled

Disabled.

Midi Port IRQ**10 (default)**

Set Midi Port IRQ to 10.

5

Set Midi Port IRQ to 5.

AMR Modem Device

The item allows you to control the onboard MC97 Modem controller.

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

Ethernet Address ID Input

The item allows you to setting the Mac address from 003018 to 000001 .

USB Connector

This should be enabled if your system has a USB installed on the system board and you wish to use it. Even when so equipped, if you add a higher performance controller, you will need to disable this feature.

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

USB Keyboard Support

Select Enabled if your system contains a Universal Serial Bus(USB) controller and you have a USB keyboard.

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

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Winbond Super IO Device

Onboard FDD Controller	Enabled	Item Help
Onboard Serial Port 1	3F8/IRQ4	Menu Level
Onboard Serial Port 2	2F8/IRQ3	
UART2 Mode	Normal	
RxD,TxD Active	Hi,Hi	
IR Transmission Delay	Enabled	
IR Duplex Mode	Half	
Use IR Pins	IR-Rx2Tx2	
Onboard Parallel Port	378/IRQ7	
Parallel Port Mode	SPP	
EPP Mode Select	EPP1.7	
ECP Mode Use DMA	3	

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

Onboard FDD Controller

Enabled (default)

Enabled onboard FDD Controller.

Disabled

Disabled onboard FDD Controller.

Onboard Serial Port 1

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

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

Onboard Serial Port 2

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

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

UART2 Mode

This item allows you to select which Infra Red(IR) function of the onboard I/O chip you wish to use.

The Choices: **Normal**(default), IrDA, SCR, ASKIR.

IR Duplex Mode

This item allows you to select which Infra Red(IR) function of the onboard I/O chip you wish to use.

The Choices: **Half**(default), Full.

Onboard Parallel Port

This item allows you to select the I/O address with which to access the onboard parallel port controller.

The Choices: **378/IRQ7**(default), Disabled, 278/IRQ5, 3BC/IRQ7.

Parallel Port Mode

SPP (default)	Using Parallel port as Standard Parallel Port.
EPP	Using Parallel port as Enhanced Parallel Port.
ECP	Using Parallel port as Extended Capabilities Port.
ECP+EPP	Using Parallel port as ECP+EPP mode.

EPP Mode Select

The Choices: **EPP1.7**(default), EPP1.9.

ECP Mode Use DMA

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

2.6 Power Management Setup

The Power Management Setup allows you to configure your system to most effectively save energy while operating in a manner consistent with your own style of computer use.

© Figure 6. Power Management Setup

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Power Management Setup

ACPI Function	Enabled	Item Help
Video Off Option	Susp,Stby->Off	Menu Level
Video Off Method	V/H SYNC+Blank	
Switch Function	Break/Wake	
Modem Use IRQ	3	
Hot Key Function As	Disabled	
HDD Off After	Disabled	
Power Button Override	Instant Off	
PM Wake up Events	Press Enter	

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

ACPI Function

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

Video Off Option

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

The Choices: Suspend->off(default), Always on.

Video Off Method

This determines the manner in which the monitor is blanked.

V/H SYNC+Blank (default)	This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.
Blank Screen	This option only writes blanks to the video buffer.
DPMS Support	Initial display power management signaling.

Switch Function

Enables you to set the System Management Interrupt (SMI) button function in DOS.

The Choices: **Break/Wake**(default).

Modem Use IRQ

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

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

Hot Key Function As

Enables you to set the power button function in DOS.

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

HDD Off After

The IDE hard drive will spin down if it is not accessed within a specified length of time. Options are from 1 Min to 15 Min and Disable.

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

Power Button Override

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has “hung”.

The Choices: **Instant-Off**(default), Delay 4 Sec.

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PM Wake Up Events

IRQ [3-7,9-15],NMI	Enabled	Item Help
IRQ 8 Break Suspend	Disabled	Menu Level
Ring Power Up Control	Disabled	
MACPME Power Up Control	Disabled	
PCIPME Power Up Control	Disabled	
KB Power On Password	Enter	
Power Up by Alarm	Disabled	
Month Alarm	NA	
Day of Month Alarm	0	
Time (hh:mm:ss) Alarm	0 0 0	

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

IRQ [3-7,9-15],NMI

When enabled, any event occurring at IRQs 3 through 15 (excluding IRQ 8) will awaken a system, which has been powered down.

The Choices: Enabled(default), Disabled.

IRQ 8 Break Suspend

This field allows you to enable or disable monitoring of IRQ8 so that it does not awaken the system from a suspend mode.

The Choices: Disabled(default), Enabled.

Ring Power Up Control

When set to Enabled, the system power will be turned on if there is any modem activity.

The Choices: Disabled(default), Enabled.

MACPME Power Up Control

During Disabled, the system will ignore any incoming call from the EtherNet controller. During Enabled, the system will boot up if there's an incoming call from the EtherNet controller.

The Choices: Disabled(default), Enabled.

PCIPME Power Up Control

When set to “Enabled,” the system power will be turned on if there is any PCI card activity from PCI cards that trigger a PME event, such as LAN or Modem cards.

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

KB Power On Password

You can use this item to install a power on password. Press Enter to display the Password dialog box.

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

Power Up by Alarm

When set to Enabled, the following three fields become available and you can set the month, date (day of the month), hour, minute and second to turn on your system.

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

2.7 PnP/PCI Configurations

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

© Figure 7. PnP/PCI Configurations

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PnP/PCI Configurations

Reset Configuration Data	Disabled	Item Help
Resources Controlled By	Manual	Menu Level
IRQ Resources	Press Enter	
PCI/VGA Palette Snoop	Disabled	When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt

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

Reset Configuration Data

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

Resources Controlled By

By Choosing “Auto” (default), the system BIOS will detect the system resources and automatically assign the relative IRQ and DMA channel for each peripheral. By Choosing “Manual”, the user will need to assign IRQ & DMA for add-on cards. Be sure that there are no IRQ/DMA and I/O port conflicts.

IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

IRQ-3	assigned to: PCI Device
IRQ-4	assigned to: PCI Device
IRQ-5	assigned to: PCI Device
IRQ-6	assigned to: PCI Device
IRQ-7	assigned to: PCI Device
IRQ-8	assigned to: PCI Device
IRQ-9	assigned to: PCI Device
IRQ-10	assigned to: PCI Device
IRQ-11	assigned to: PCI Device
IRQ-12	assigned to: PCI Device
IRQ-13	assigned to: PCI Device
IRQ-14	assigned to: PCI Device
IRQ-15	assigned to: PCI Device

PCI / VGA Palette Snoop

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

However, the color information coming from the VGA controller is drawn from the palette table inside the VGA controller to generate the proper colors, and the graphic controller needs to know what is in the palette of the VGA controller. To do this, the non-VGA graphic controller watches for the write access to the VGA palette and registers the snoop data. In PCI based systems, the Write Access to the palette will not show up on the ISA bus if the PCI VGA controller responds to the Write.

In this case, the PCI VGA controller should not respond to the Write, it should only snoop the data and permit the access to be forwarded to the ISA bus. The non-VGA ISA graphic controller can then snoop the data on the ISA bus. Unless you have the above situation, you should disable this option.

Disabled (default)	Function Disabled.
Enabled	Function Enabled.

2.8 PC Health Status

◎ Figure 8. PC Health Status

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PC Health Status

CPU Warning Temperature	Disabled	Item Help
Shut down Temperature	Disabled	
Show PC Health in Post	Enabled	Menu Level
Current CPU Temp.	28°C/82°F	
Current System Temperature	29°C/84°F	
Current CPUFan Speed	4687 RPM	
Current SYSFan Speed	0 RPM	
Vcore	1.69V	
VCC3.3	3.31V	
+5V	5.00V	
+12V	+12.02V	
-12V	-12.16V	
5VSB(V)	5.45V	

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

CPU Warning Temperature(°C)

Disabled (default)

Disabled.

50°C / 122°F

Monitor CPU Temp.at 50°C / 122°F.

53°C / 127°F

Monitor CPU Temp.at 53°C / 127°F.

56°C / 133°F

Monitor CPU Temp.at 56°C / 133°F

63°C / 145°F

Monitor CPU Temp.at 63°C / 145°F

66°C / 151°F

Monitor CPU Temp.at 66°C / 151°F

70°C / 158°F

Monitor CPU Temp.at 70°C / 158°F

Show PC Health in Post

During Enabled, it displays information list below.

The Choices: Enabled(default), Disabled.

Shutdown Temperature(°C / °F)**Disabled (default)**

Disabled.

60°C / 140°F

Monitor CPU Temp.at 60°C / 140°F, if Temp.>60°C / 140°F system will automatically power off.

65°C / 149°F

Monitor CPU Temp.at 65°C / 149°F, if Temp.>65°C / 149°F system will automatically power off.

70°C / 158°F

Monitor CPU Temp.at 70°C / 158°F, if Temp.>70°C / 158°F system will automatically power off.

75°C / 167°F

Monitor CPU Temp.at 75°C / 167°F, if Temp.>75°C / 167°F system will automatically power off.

Current Voltage(V) CPU Vcore / VCC3.3V / +-12V /+5V/ 5VSB

Detect system's voltage status automatically.

Current CPU / System Temperature(°C / °F)

This field displays the current CPU temperature,if your computer contains a monitoring system.

Current CPUFan / SYSFan Speed

These field displays the current speed of up to System Fans,if your computer contains a monitoring system.

2.9 Frequency / Voltage Control

◎ Figure 9. Frequency / Voltage Control

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Frequency / Voltage Control

Cyrix III Clock Ratio	Default	Item Help
Auto Detect DIMM/PCI CLK	Enabled	Menu Level
Spread Spectrum	Disabled	
CPU Host/DRAM Clock	Default	
CPU Clock Ratio Jumperless	X3.0	

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

Cyrix III Clock Ratio

This option is allow you to set Cyrix III clock ratio

The Choices: X3.5~X6.

Auto Detect DIMM/PCI CLK

This item allows you to enable/disable auto detect DIMM / PCI CLOCK.

The Choices: Enabled(default), Disabled.

Spread Spectrum

This function is designed for the EMI test only.

The Choices: Disabled(default), Enabled.

CPU Host/DRAM Clock

This item allows you to select the CPU Host Clock (CPU/ PCI).

The Choices: 66/66MHz~133/133MHz.

CPU Clock Ratio

This option will not be shown if you are using a CPU with the locked ratio.

The Choices: X3.0(default).

2.10 Load Optimized Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:

© Figure 10. Load Optimized Defaults

CMOS Setup Utility-Copyright (C) 1984-2001 Award Software

Standard CMOS Features	Frequency/Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Load Standard Defaults
Integrated Peripherals	Set Supervisor Password
Power Management	Load Optimized Default (Y/N)? N
PNP/PCI Configuration	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc : Quit F9 : Menu in BIOS ←→↑↓: Select Item	
F10 : Save & Exit Setup	
Time , Date , Hard Disk Type ...	

Pressing ‘Y’ loads the default values that are factory settings for optimal performance of system operations.

2.11 Load Standard Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:

© **Figure 11. Load Standard Defaults**

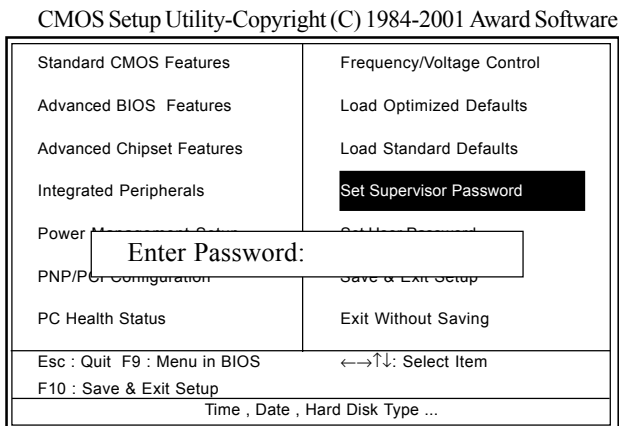
CMOS Setup Utility-Copyright (C) 1984-2001 Award Software

Standard CMOS Features	Frequency/Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Load Standard Defaults
Integrated Peripherals	Set Supervisor Password
Power	Load Standard Default (Y/N)? N
PNP/PCI Configuration	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc : Quit F9 : Menu in BIOS ←→↑↓: Select Item	
F10 : Save & Exit Setup	
Time , Date , Hard Disk Type ...	

Pressing 'Y' loads the default values that are factory settings for optimal performance of system operations.

2.12 Set Supervisor / User Password

© Figure 12. Set Supervisor / User Password



When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Enter Password

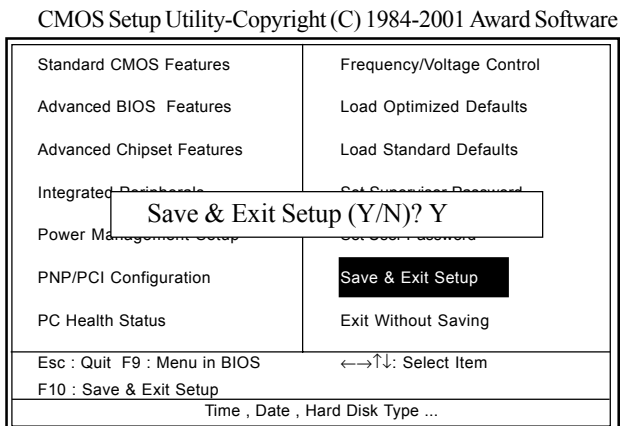
Type a password, up to eight characters, and press <Enter>. The password you type now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <ESC> to abort the selection and not enter a password. To disable the password, just press <Enter> when you are prompted to enter a password. A message will confirm that you wish to disable the password. Once the password is disabled, the system will boot and you can enter setup freely.

Password Disabled

If you select “System” at the Security Option of BIOS Features Setup Menu, you will be prompted for the password every time when the system is rebooted, or any time when you try to enter Setup. If you select “Setup” at the Security Option of BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

2.13 Save & Exit Setup

© Figure 13. Save & Exit Setup



Typing “Y” will quit the Setup Utility and save the user setup value to RTC CMOS RAM.

Typing “N” will return to the Setup Utility.

2.14 Exit Without Saving

© Figure 14. Exit Without Saving

CMOS Setup Utility-Copyright (C) 1984-2001 Award Software

Standard CMOS Features	Frequency/Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Load Standard Defaults
Integrated Peripherals	
Power Management Setup	Set User Password
PNP/PCI Configuration	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc : Quit F9 : Menu in BIOS ←→↑↓: Select Item	
F10 : Save & Exit Setup	
Time , Date , Hard Disk Type ...	

Typing “Y” will quit the Setup Utility without saving to RTC CMOS RAM.

Typing “N” will return to the Setup Utility.