Chapter 3

AWARD® BIOS SETUP

Award® BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This type of information is stored in battery-backed RAM (CMOS RAM), so that it retains the Setup information when the power is turned off.

Entering Setup

Power on the computer and press <Del> immediately to allow you to enter Setup. The other way to enter Setup is to power on the computer. When the message below appears briefly on the bottom of the screen during the POST (Power On Self Test), press <Del> key or simultaneously press <Ctrl>, <Alt>, and <Esc> keys to enter BIOS Setup utility.

TO ENTER SETUP BEFORE BOOT, PRESS <CTRL-ALT-ESC>
OR <DEL> KEY

If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will be asked to,

PRESS <F1> TO CONTINUE, <CTRL-ALT-ESC>
OR <DEL> TO ENTER SETUP

Getting Help

Main Menu

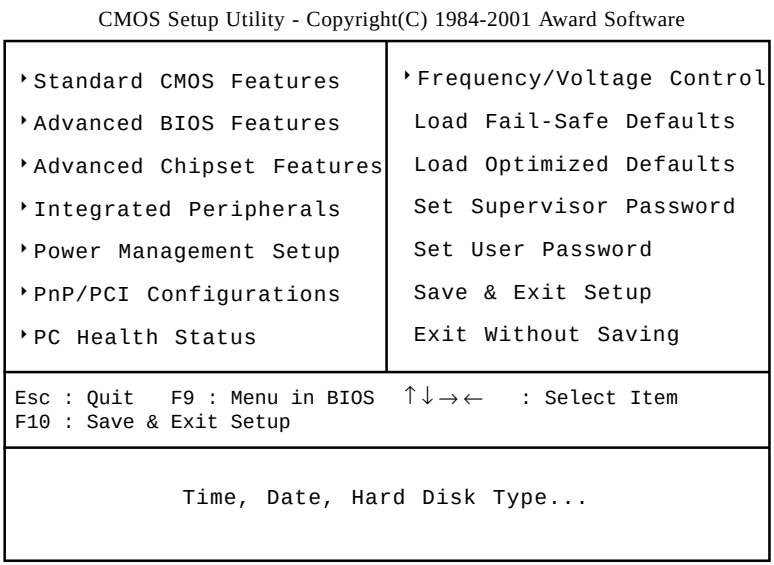
The on-line description of the highlighted setup function is displayed on the bottom of the screen.

Status Page Setup Menu/Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window, press <Esc>.

The Main Menu

Once you enter Award® BIOS CMOS Setup Utility, the Main Menu (Figure 1) will appear on the screen. The Main Menu allows you to select from twelve setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.



Standard CMOS Features

Use this Menu for basic system configurations.

Advanced BIOS Features

Use this menu to set the Advanced Features available on your system.

Advanced Chipset Features

Use this menu to change the values in the chipset registers and optimize your system's performance.

Integrated Peripherals

Use this menu to specify your settings for integrated peripherals.

Power Management Setup

Use this menu to specify your settings for power management.

PnP/PCI Configurations

This entry appears if your system supports PnP/PCI.

PC Health Status (Optional)

This entry shows your PC health status. This is only available if there is Hardware Monitor onboard.

Frequency/Voltage Control

Use this menu to specify your settings for frequency/voltage control.

Load Fail-Safe Defaults

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

Load Optimized Defaults

Use this menu to load the BIOS default values that are factory settings for optimal performance system operations.

Set Supervisor/User Password

Use this menu to set User and Supervisor Passwords.

Save & Exit Setup

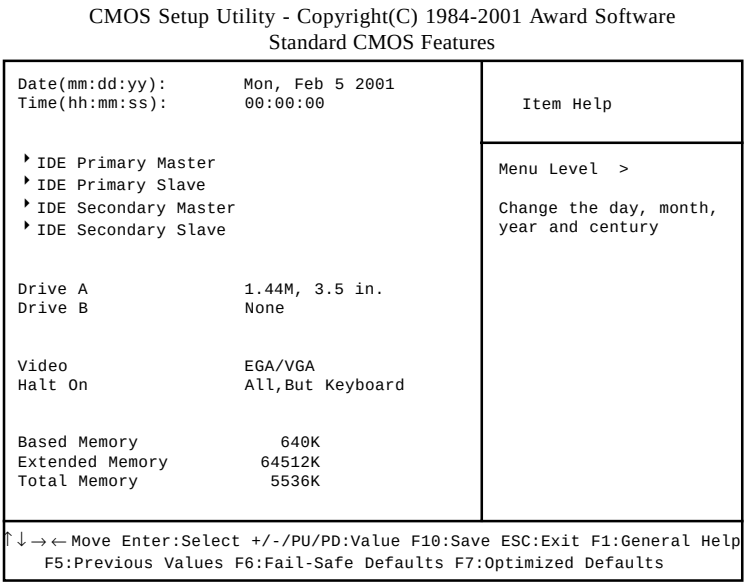
Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes none, 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.



Date

The date format is <day><month> <date> <year>.

Day	Day of the week, from Sun to Sat, determined by BIOS. Read-only.
month	The month from Jan. through Dec.
date	The date from 1 to 31 can be keyed by numeric function keys.
year	The year, depends on the year of the BIOS

Time

The time format is <hour> <minute> <second>.

PrimaryMaster/PrimarySlave
SecondaryMaster/Secondary Slave

Press PgUp/<+> or PgDn/<-> to select Manual, None, Auto type. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use Manual to define your own drive type manually.

If you select Manual, related information is asked to be entered to the following items. Enter the information directly from the keyboard. This information should be provided in the documentation from your hard disk vendor or the system manufacturer.

If the controller of HDD interface is SCSI, the selection shall be "None".
If the controller of HDD interface is CD-ROM, the selection shall be "None".

Access Mode	The settings are Auto, CHS, Large, LBA
Capacity	The formatted size of the storage device
Cylinder	Number of cylinders
Head	Number of heads
Precomp	Write precompensation
Landing Zone	Cylinder location of the landing zone

Sector	Number of sectors

Drive A/B

This item allows you to set the type of floppy dirves installed. Available options are None, 360K, 5.25 in., 1.2M, 5.25 in., 720K, 3.5 in., 1.44M, 3.5 in., 2. 88M, 3.5 in.. The default value for Floppy Drive A is 1.44M, 3.5 in, and for Floppy Drive B is None.

Video

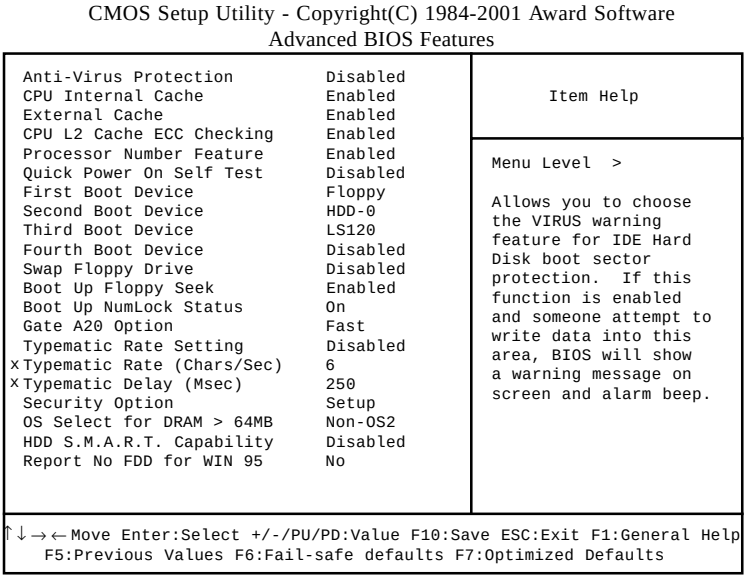
The item sets the type of video adapter used for the primary monitor of the system . Available options are EGA/VGA , CGA 40, CGA 80 and MONO. Default value is EGA/VGA.

Halt On

The item determines whether the system will stop if an error is detected at boot. Available options are:

All Errors	The system stops when any error is detected.
No Errors	The system doesn't stop for any detected error.
All, But Keyboard	The system doesn't stop for a keyboard error.
All, But Diskette	The system doesn't stop for a disk error.
All, But Disk/Key	The system doesn't stop for either a disk or a keyboard error.

Advanced BIOS Features



Anti-Virus Protection

Allows you to choose the VIRUS Warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.

Disabled (default)	No warning message appears when any attempts to access the boot sector or hard disk partition table occur.
Enabled	Activates automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector of hard disk partition table.

CPU Internal Cache

The default value is Enabled.

Enabled (default)	Enable CPU internal cache
Disabled	Disable CPU internal cache

Note: The internal (L1) cache is built in the processor.

External Cache

Choose Enabled or Disabled. This option can enable the CPU level 2 cache memory.

CPU L2 Cache ECC Checking

Choose Enabled or Disabled. This option enables the level 2 cache memory ECC (Error Check Correction) feature.

Processor Number Feature

This option is for Pentium® III processor. During Enabled, this will check the CPU Serial number. Disable this option if you don't want the system to know the serial number.

Quick Power On Self Test

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

Enabled	Enable quick POST
Disabled (default)	Normal POST

First/Second/Third/Fourth Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items. The settings are Floppy, LS120, HDD-0, SCSI, CDROM, HDD-1/HDD-2/HDD-3, ZIP100, LAN and Disabled.

Swap Floppy Drive

Switches the floppy disk drives between drive A and B. Default is Disabled.

Boot Up Floppy Seek

If set to Enabled, BIOS will check and determine if the floppy disk drive installed is 40 or 80 tracks during POST. 360K type is 40 tracks while 760K, 1.2M and 1.44M are all 80 tracks.

Boot Up NumLock Status

The default value is On.

On (default)	Keypad is numeric keys.
Off	Keypad is arrow keys.

Gate A20 Option

A20 refers to the first 64KB of extended memory.

Normal	The A20 signal is controlled by keyboard controller or chipset hardware.
Fast (default)	The A20 signal is controlled by port 92 or chipset specific method resulting in faster system performance.

Typematic Rate Setting

Key strokes repeat at a rate determined by the keyboard controller. When enabled, the typematic rate and typematic delay can be adjusted manually. The settings are Enabled and Disabled.

Typematic Rate (Chars/Sec)

Sets the number of times to repeat a key stroke in a second when you hold the key down. The settings are 6, 8, 10, 12, 15, 20, 24 and 30.

Typematic Delay (Msec)

Sets the delay time after the key is held down before it begins to repeat the keystroke. The settings are 250, 500, 750 and 1000.

Security Option

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

System A password prompt appears every time when the compuer is powered on or when end users try to run Setup. The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt.

Setup (default) The password prompt appears only when end users try to run Setup. Access to Setup will be denied if the correct password is not entered at the prompt.

OS Select For DRAM > 64MB

Allows OS/2® to be used with DRAM larger than 64 MB. Settings are Non-OS2 (default) and OS2. Set to OS2 if using more than 64MB DRAM and running OS/2®.

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

This allows you to activate the S.M.A.R.T. (Self-Monitoring Analysis & Reporting Technology) capability for the hard disks. S.M.A.R.T. is an utility that monitors your disk status to predict hard disk failure. This gives you an opportunity to move data from a hard disk that is going to fail to a safe place before it becomes offline. Settings are Enabled and Disabled (default).

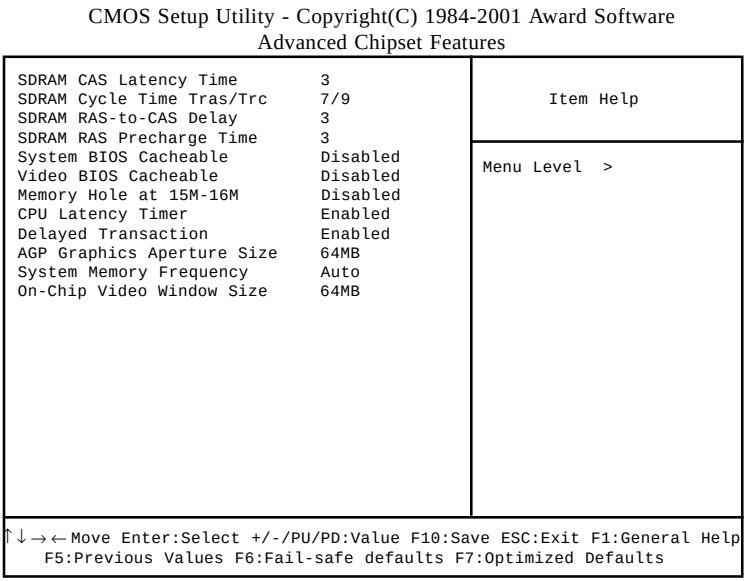
Report No FDD For WIN 95

This specifies whether to report no FDD for Windows® 95 or not. The settings are Yes and No.

Advanced Chipset Features

The Advanced Chipset Features Setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.

Choose the "ADVANCED CHIPSET FEATURES" from the Main Menu and the following screen will appear.



Note: Change these settings only if you are familiar with the chipset.

SDRAM CAS Latency Time

Controls the time delay (in clock cycles) before SDRAM starts a read command after receiving it. The settings are 2, 3 and Auto (default).

SDRAM Cycle Time Tras/Trc

Selects the number of SCLKs for an access cycle. The settings are 5/7 and 7/9. The default setting is 7/9.

SDRAM RAS-to-CAS Delay

This field lets you insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. *2* gives faster performance and *3* gives more stable performance. This field applies only when synchronous DRAM is installed in the system. The settings are 2 and 3.

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 data. *2* gives faster performance; and *3* gives more stable performance. This field applies only when synchronous DRAM is installed in the system. The settings are 2 and 3.

System BIOS Cacheable

Selecting Enabled allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result. The settings are Enabled and Disabled.

Video BIOS Cacheable

Selecting Enabled allows caching of the video BIOS , resulting in better system performance. However, if any program writes to this memory area, a system error may result. The settings are Enabled and Disabled.

Memory Hole At 15M-16M

In order to improve performance, certain space in memory can be reserved for ISA cards. This memory must be mapped into the memory space below 16MB. When this area is reserved, it cannot be cached. The settings are Enabled and Disabled.

CPU Latency Timer

When set to Enabled, a deferrable CPU cycle will only be deferred after it has been in a Snoop Stall for 31clocks and another ADS# has arrived. During Disabled, a deferrable CPU cycle will be deferred immediately after the GMCH receives another ADS#.

Delayed Transaction

The chipset has an embedded 32-bit posted write buffer to support delayed transactions cycles. Select *Enabled* to enable delayed transaction and compliance with PCI specification version 2.1. The settings are Enabled and Disabled.

AGP Graphics Aperture Size

This option determines the effective size of the graphics aperture used in the particular PAC configuration. The AGP aperture is memory-mapped, while graphics data structure can reside in a graphics aperture. The aperture range should be programmed as not cacheable in the processor cache, accesses with the aperture range are forwarded to the main memory, then PAC will translate the original issued address via a translation table that is maintained on the main memory. The option allows the selection of an aperture size of 32MB and 64MB.

System Memory Frequency

Selects the system memory frequency. The settings are 100 MHz, 133 MHz and Auto.

On-Chip Video Window Size (Optional)

The field appears only when the optional VGA port is integrated onboard. Video Window is the amount of system memory that can be used by the on-chip VGA controller. The settings are 64MB and Disabled.

Integrated Peripherals

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

On-Chip Primary PCI IDE	Enabled	Item Help
On-Chip Secondary PCI IDE	Enabled	
IDE Primary Master PIO	Auto	
IDE Primary Slave PIO	Auto	Menu Level >
IDE Secondary Master PIO	Auto	
IDE Secondary Slave PIO	Auto	
IDE Primary Master UDMA	Auto	
IDE Primary Slave UDMA	Auto	
IDE Secondary Master UDMA	Auto	
IDE Secondary Slave UDMA	Auto	
USB Controller	Enabled	
USB Keyboard Support	Disabled	
USB Mouse Support	Disabled	
Init Display First	PCI Slot	
AC97 Audio	Auto	
AC97 Modem	Auto	
IDE HDD Block Mode	Enabled	
POWER ON Function	BUTTON ONLY	
KB Power ON Password	Enter	

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

Hot Key Power ON	Ctrl-F1	
Onboard FDC Controller	Enabled	
Onboard Serial Port 1	3F8/IRQ4	
Onboard Serial Port 2	2F8/IRQ3	
UART Mode Select	Normal	
RxD, TxD Active	Hi, Lo	
IR Transmission Delay	Enabled	
UR2 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	
PWRON After PWR-Fail	Off	
Game Port Address	201	
Midi Port Address	330	
Midi Port IRQ	10	
Power Status Led	Single	

On-Chip Primary/Secondary PCI IDE

The integrated peripheral controller contains an IDE interface with support for two IDE channels. Select *Enabled* to activate each channel separately. The settings are Enabled and Disabled.

IDE Primary/Secondary Master/Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device. The settings are Auto, Mode 0, Mode 1, Mode 2, Mode 3 and Mode 4.

IDE Primary/Secondary Master/Slave UDMA

Ultra DMA implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/33, Ultra DMA/66 and Ultra DMA/100, select Auto to enable BIOS support. The settings are Auto and Disabled.

USB Controller

Select *Enabled* if your system contains a Universal Serial Bus (USB) controller and your system has USB peripherals. The settings are Enabled and Disabled.

USB Keyboard/Mouse Support

Select *Enabled* if your system contains a Universal Serial Bus (USB) controller and you want to use the USB keyboard/mouse while entering the BIOS setup utility or in DOS system without installing any USB keyboard/ mouse driver. The settings are Enabled and Disabled.

Init Display First

This item allows you to decide whether to activate the VGA card on PCI Slot or AGP card on AGP Slot first. The settings are PCI Slot and AGP. **Note:** If optional VGA port is onboard, the setting "AGP" is changed to **Onboard/AGP**, which will activate the on-chip VGA when selected.

AC97 Audio

This item allows you to decide to enable/disable the 815E/EP chipset family to support AC97 Audio. The settings are Auto and Disabled.

AC97 Modem

This item allows you to decide to enable/disable the 815E/EP chipset family to support AC97 Modem. The settings are Auto and 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 settings are Enabled and Disabled.

POWER ON Function

This function allows you to select the item to power on the system. The settings are BUTTON ONLY, Mouse Left, Mouse Right, Password, Hot KEY and Keyboard 98.

KB Power ON Password

If **POWER ON Function** is set to Password, then you can set a password in this field for the PS/2 keyboard to power on the system.

Hot Key Power ON

If **POWER ON Function** is set to Hot Key, then you can specify a hot key combination in the field for the PS/2 keyboard to power on the system. Settings are Ctrl-F1 through Ctrl-F12.

Onboard FDC Controller

Select Enabled if your system has a floppy disk controller (FDD) installed on the system board and you wish to use it. If you install add-on FDC or the system has no floppy drive, select Disabled in this field. The settings are Enabled and Disabled.

Onboard Serial Port 1/2

Select an address and corresponding interrupt for the first and second serial port. The settings are 3F8/IRQ4, 2E8/IRQ3, 3E8/IRQ4, 2F8/IRQ3, Disabled and Auto.

UART Mode Select

This item allows you to determine which InfraRed (IR) function of the onboard I/O chip is used. Settings are Normal (default), IrDA and ASKIR.

RxD, TxD Active

The item determines the active of RxD, TxD. Settings are "Hi, Lo" (default), "Hi, Hi", "Lo, Hi" and "Lo, Lo".

IR Transmission Delay

This enables or disables IR transmission delay feature. Settings are Enabled and Disabled. Default is Enabled.

UR2 Duplex Mode

This specifies a duplex value for the IR device connected to the IR connector. Full-Duplex mode permits simultaneous two-direction transmission. Half-Duplex mode permits transmission in one direction only at a time. Settings are Half and Full. Default is Half .

USE IR Pins

Consult your IR peripheral documentation to select the correcting of the TxD and RxD signals. Settings are "IR-Rx2Tx2" and "RxD2, TxD2".

Onboard Parallel Port

Disabled
"3BC/IRQ7"/
"278/IRQ5"/
"378/IRQ7"

There is a built-in parallel port on the on-board Super I/O chipset that provides Standard, ECP, and EPP features. It has the following address/IRQ options:

Disabled	
3BC/IRQ7	Line Printer port 0
278/IRQ5	Line Printer port 2
378/IRQ7	Line Printer port 1

Parallel Port Mode

SPP : Standard Parallel Port
EPP : Enhanced Parallel Port
ECP : Extended Capability Port

SPP/EPP/ECP/ ECP+EPP

To operate the onboard parallel port as Standard Parallel Port only, choose "SPP." To operate the onboard parallel port in the EPP modes simultaneously, choose "EPP." By choosing "ECP", the onboard parallel port will operate in ECP mode only. Choosing "ECP + EPP" will allow the onboard parallel port to support both the ECP and EPP modes simultaneously. The ECP mode has to use the DMA channel, so users can choose DMA channel 1 or 3 for ECP mode in the **ECP Mode Use DMA** field. The onboard parallel port is EPP Spec. compliant, so after the user sets the onboard parallel port to EPP mode, users can select either EPP 1.7 spec. or EPP 1.9 spec. in the **EPP Mode Select** field.

PWRON After PWR-Fail

This option will determine how the system will respond after a power failure or interrupt. Settings are:

Off (default)	Leaves the computer in the power off state.
On	Reboots the computer.
Former-Sts	Restores the system to the status before power failure or interrupt occurs.

Game Port Address/Midi Port Address/Midi Port IRQ

This will determine which Address or IRQ the Game Port/Midi Port will use.

Power Status LED

This item determines how the system uses Power LED to indicate the suspend/sleep state. Settings are Blinking, Dual, and Single. Blinking makes the power LED blink when the system enters the suspend mode. Dual makes the power LED change its color during suspend mode. Choose Single and the power LED will always remain lit without changing its color.

Power Management Setup

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

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

IPCA Function	Enabled	Item Help
ACPI Suspend Type	S1(POS)	
Power Management	User Define	
Video Off Method	DPMS	
Video Off In Suspend	Yes	Menu Level >
Suspend Type	Stop Grant	
Modem Use IRQ	3	
Suspend Mode	Disabled	
HDD Power Down	Disabled	
Soft-Off by PWR-BTTN	Instant-Off	
Wake Up by PCI card	Disabled	
Power On by Ring	Enabled	
Wake-Up On LAN	Enabled	
USB KB Wake-Up From S3	Disabled	
CPU Thermal-Throtting	50.0%	
Resume by Alarm	Disabled	
x Date(of Month) Alarm	0	
x Time(hh:mm:ss) Alarm	0 0 0	
Reload Global Timer Events		
Primary IDE 0	Disabled	
Primary IDE 1	Disabled	
Secondary IDE 0	Disabled	
Secondary IDE 1	Disabled	
FDD, COM, LPT Port	Disabled	
PCI PIRQ[A-D]#	Disabled	

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

IPCA Function

This item allows you to enable/disable the Advanced Configuration and Power Management (ACPI). The settings are Enabled and Disabled.

ACPI Suspend Type

This item will set which ACPI suspend type will be used.

S1 (POS)

The S1 sleeping state is low wake-up latency sleeping state. In this state, no system context is lost (CPU or chip set) and hardware maintains all system context.

S3 (STR)

The S3 state is a low wake-up latency sleeping sate where all system context is lost expect system memory. CPU, cache, and chipset context are lost in this state. Hardware maintains memory context and restores some CPU and L2 configuration context.

Power Management

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

1. Suspend Mode
2. HDD Power Down

There are three selections for Power Management, two of which have fixed mode settings.

Min Saving	Minimum power management. Suspend Mode = 1hr., and HDD Power Down = 15 min.
Max Saving	Maximum power management — Suspend Mode = 1 min., and HDD Power Down = 1 min.
User Define (default)	Allows you to set each mode individually. When not disabled, each of the ranges are from 1 min. to 1 hr. except for HDD Power Down which ranges from 1 min. to 15 min. and disable.

Video Off Method

This determines the manner in which the monitor is blanked.

V/HSYNC+Blank	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 (default)	Initial display power management signaling.

Video Off In Suspend

This determines whether the monitor is blanked during the suspend mode. The settings are Yes and No.

Suspend Type

Selects the Suspend Type. The settings are PwrOn Suspend and Stop Grant.

Modem Use IRQ

This determines the IRQ which the MODEM can use.
The settings are 3, 4, 5, 7, 9, 10, 11 and NA.

Suspend Mode

After the set time (specified in the field) of system inactivity, all devices except the CPU will be shut off. The settings are 1/2/4/8/12/20/30/40 Min, 1 Hour and Disabled.

HDD Power Down

After the set time (specified in the field) of system inactivity, the hard disk drive will be powered down while all other devices remain active.
The settings are 1/2/3/4/5/6/7/8/9/10/11/12/13/14/15Min and Disabled.

Soft-Off by PWR-BTTN

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state. The settings are Delay 4 Sec. and Instant-Off.

Wake Up by PCI card

This will enable the system to wake up through PCI Card peripheral if any activity on the card is detected. The settings are Enabled and Disabled.

Power On by Ring

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

Wake Up on LAN

To use this function, you need a LAN add-on card which support power on functions. It should also support the wake-up on LAN jumper (JWOL1).

Enabled	Wake up on LAN supported.
Disabled	Wake up on LAN not supported.

USB KB Wake-Up From S3

This item enables or disables the activity of an USB keyboard to wake up the system during S3/STR suspend state. The settings are Enabled and Disabled (default).

CPU Thermal-Throttling

Select the CPU THRM-Throttling rate. The settings are 12.5%, 25.0%, 37.5%, 50.0%, 62.5%, 75.0% and 87.5%.

Resume by Alarm

This function is for setting date and time for your computer to boot up. During Disabled, you cannot use this function. During Enabled, choose the Date and Time Alarm:

Date(of month) Alarm	You can choose which month the system will boot up. To boot every day, set to 0.
Time(hh:mm:ss) Alarm	You can choose which hour, minute and second the system will boot up.

Note: If you have changed the setting, you must let the system boot up until it goes to the operating system before this function can work.

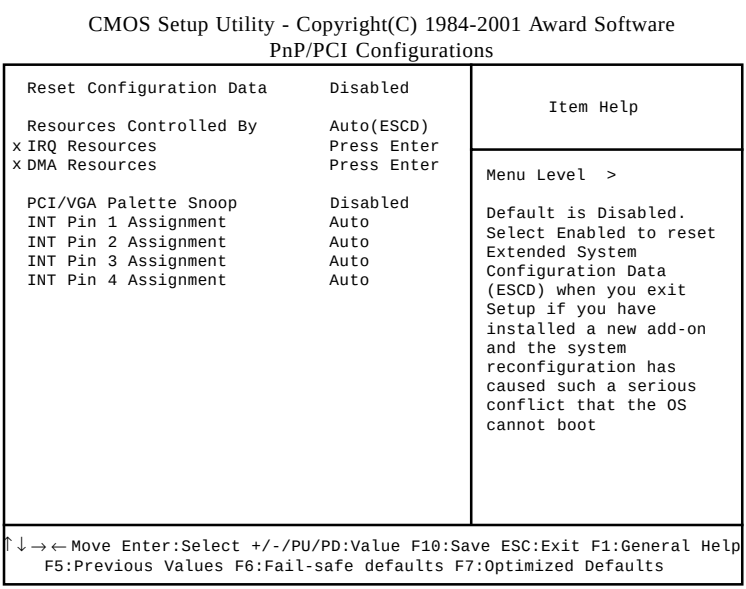
Reload Global Timer Events

Reload Global Timer events are I/O events whose occurrence can prevent the system from entering a power saving mode or can awaken the system from such a mode. In effect, the system remains alert for anything which occurs to a device which is configured as *Enabled* , even when the system is in a power down mode.

Primary IDE 0
Primary IDE 1
Secondary IDE 0
Secondary IDE 1
FDD, COM, LPT Port
PCI PIRQ[A-D] #

PnP/PCI Configuration Setup

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



Reset Configuration Data

Normally, you leave this field to 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 .

Resource Controlled By

The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as Windows®95/98. If you set this field to "manual," choose specific resources by going into each of the sub menu that follows this field (a sub menu is preceded by a "➢"). The settings are Auto(ESCD) and Manual.

IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt. The settings are PCI/ISA PnP and Legacy ISA.

DMA Resources

This sub-menu can let you assign each DMA channel a type, depending on the type of device using the DMA channel. The settings are PCI/ISA PnP and Legacy ISA.

PCI/VGA Palette Snoop

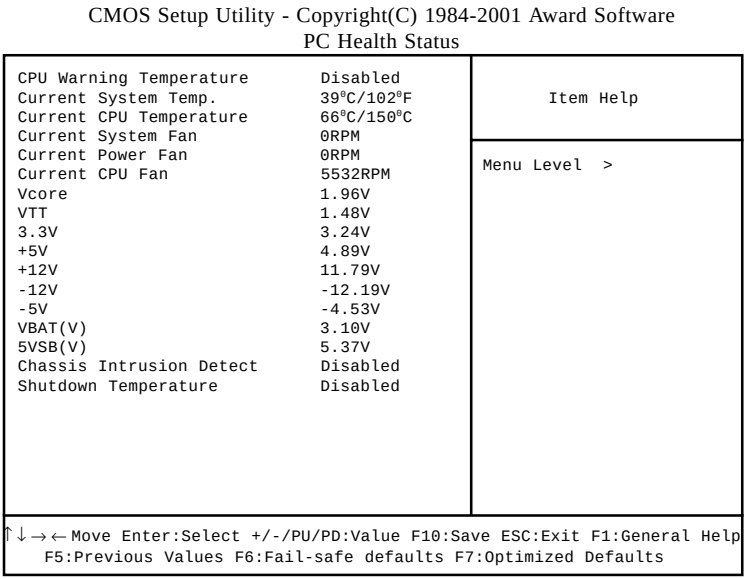
Leave this field at *Disabled*. The settings are Enabled and Disabled. When *Enabled*, multiple VGA devices operating on different buses (such as PCI bus and ISA bus) can handle data from CPU on each set of palette registers on every video device. Bit 5 of the command register in the PCI device configuration space is the VGA Palette Snoop bit (0 is disabled). The setting must be set to Enabled if any ISA adapter card installed in the system requires VGA palette snooping.

INT Pin 1/2/3/4 Assignment

The items let you assign an IRQ line to INT Pin#1~4 separately. Selecting Auto allows BIOS to determine the best IRQ for each INT Pin.

PC Health Status (optional)

This section shows the Status of you CPU, Fan, Warning for overall system status. This is only available if there is Hardware Monitor onboard.



CPU Warning Temperature

During Enabled, this will warn the user when the CPU temperature reaches a specific temperature specified in the field.

Current System Temp./Current CPU Temperature/Current System Fan (optional)/Current Power Fan/CPU Fan/Vcore/ VTT/3.3V/+5V/+12V/-12V/-5V/VBAT(V)/5VSB(V)

This will display the CPU/FAN/System temperatures, voltage status and FAN speeds.

Chassis Intrusion Detect

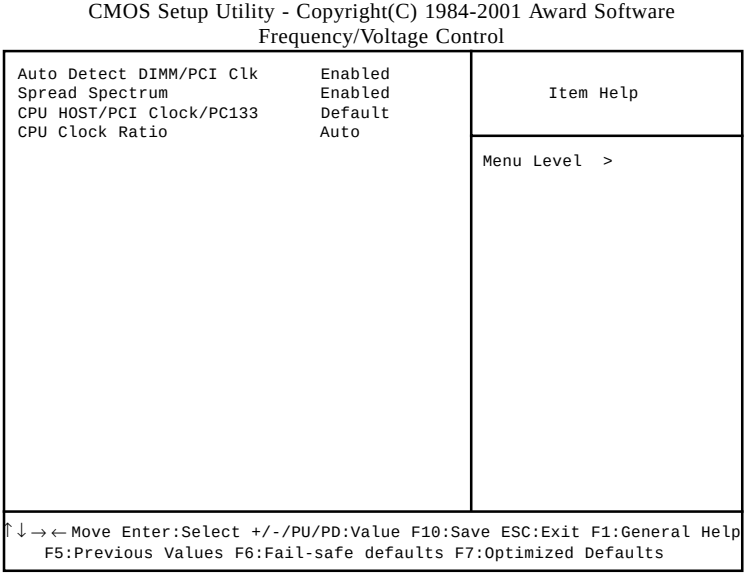
Set this option to Enabled, Reset, or Disabled the chassis intrusion detector. During Enabled, any intrusion on the system chassis will be recorded. The next time you turn on the system, it will show a warning message on the screen. To clear the warning message, choose Reset in the field. After clearing the message it will go back to Enabled.

Shutdown Temperature

This option is for setting the Shutdown temperature level for the processor. When the processor reaches the temperature you set, the system will shutdown. The settings are Disabled, 80°C/176°F, 85°C/185°F and 90°C/ 194°F.

Frequency/Voltage Control

This section is for setting CPU Frequency/Voltage Control.



Auto Detect DIMM/PCI Clk

This item allows you to enable/disable the feature of auto detecting the clock frequency of the installed DRAM DIMMs and PCI bus. The settings are Enabled and Disabled.

Spread Spectrum

This item allows you to enable/disable the Spread Spectrum feature. When overclocking the processor, always set it to Disabled.

CPU HOST/PCI Clock/PC133

This item allows you to slightly adjust the CPU FSB (Front Side Bus) and PCI clock frequency and determine whether PC133 SDRAM is installed or not. Settings are Default, 67/33Mhz/No, 70/35Mhz/No, 75/37Mhz/No, 80/40Mhz/No, 83/41Mhz/No, 100/33Mhz/No, 103/34Mhz/No, 105/35Mhz/No,

110/37Mhz/No, 115/38Mhz/No, 134/33Mhz/Yes, 137/34Mhz/Yes, 140/35Mhz/Yes, 145/36Mhz/Yes, 150/37Mhz/Yes and 160/40Mhz/Yes.

CPU Clock Ratio

This item allows you to select the CPU ratio (multiplier). Settings are Auto, x 3.5, x 4, x 4.5, x 5, x 5.5, x 6, x 6.5, x 7, x 7.5 and x 8.

Load Fail-Safe/Optimized Defaults

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

Load Fail-Safe Defaults (Y/N) ? N

Pressing 'Y' loads the BIOS default values for the most stable, minimal-performance system operations.

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

Load Optimized Defaults (Y/N) ? N

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

Set Supervisor/User Password

You can set either supervisor or user password, or both of them. The differences are:

Supervisor password : Can enter and change the options of the setup menus.

User password : Can only enter but do not have the right to change the options of the setup menus. 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 the password, up to eight characters in length, and press <Enter>. The password typed 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 a password, just press <Enter> when you are prompted to enter the password. A message will confirm the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

PASSWORD DISABLED.

When a password has been enabled, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

Additionally, when a password is enabled, you can also require the BIOS to request a password every time your system is rebooted. This would prevent unauthorized use of your computer.

You determine when the password is required within the BIOS Features Setup Menu and its Security option. If the Security option is set to "System", the password will be required both at boot and at entry to Setup. If set to "Setup", prompting only occurs when trying to enter Setup.