3

AWARD® BIOS Setup

The mainboard uses AWARD® BIOS ROM that provides a Setup utility for users to modify the basic system configuration. The information is stored in a battery-backed CMOS RAM so it retains the Setup information when the power is turned off.

Chapter 3 contains the following topics:

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Entering Setup

Power on the computer and the system will start POST (Power On Self Test) process. When the message below appears on the screen, press key to enter Setup.

Press DEL to enter SETUP

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On or pressing the RESET button. You may also restart the system by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys.

Control Keys

<^>	Move to the previous item
<\>	Move to the next item
<->>	Move to the item in the left hand
<→>	Move to the item in the right hand
<enter></enter>	Select the item
<esc></esc>	Jumps to the Exit menu or returns to the main menu from a submenu
<+/PU>	Increase the numeric value or make changes
<-/PD>	Decrease the numeric value or make changes
<f1></f1>	General help, only for Status Page Setup Menu and Option Page
	Setup Menu
<f5></f5>	Restore the previous CMOS value from CMOS, only for Option Page
	Setup Menu
<f6></f6>	Load the default CMOS value from Fail-Safe default table, only for
	Option Page Setup Menu
<f7></f7>	Load Optimized defaults
<f10></f10>	Save all the CMOS changes and exit

Getting Help

After entering the Setup utility, the first screen you see is the Main Menu.

Main Menu

The main menu displays the setup categories the BIOS supplies. You can use the arrow keys ($\uparrow\downarrow$) to select the item. The on-line description for the selected setup category is displayed on the bottom of the screen.

Sub-Menu

If you find a right pointer symbol appears to the left of certain fields (as shown in the right view), that means a sub-menu containing additional options for the field can be launched from this field. To enter the sub-menu, highlight the

```
IDE Primary Master
IDE Primary Slave
IDE Secondary Master
IDE Secondary Slave
```

field and perss <Enter>. Then you can use control keys to move between and change the settings of the sub-menu. To return to the main menu, press <Esc>.

General Help <F1>

The BIOS setup program provides a General Help screen. You can call up this screen from any menu by simply pressing <F1>. The Help screen lists the appropriate keys to use and the possible selections for the highlighted item. Press <Esc> to exit the Help screen.

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.

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Standard CMOS Features	Frequency/Voltage Control	
Advanced BIOS Features	Load Fail-Safe Defaults	
Advanced Chipset Features	Load Optimized 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 $\uparrow \downarrow \leftarrow \rightarrow$: Select Item		
F10 : Save & Exit Setup		
Time, Date, Hard Disk Type		

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

This entry shows your PC health status.

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 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.

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

Date(mm:dd:yy): Time(hh:mm:ss):		Item Help
IDE Primary Master IDE Primary Slave IDE Secondary Master IDE Secondary Slave	Press Enter None Press Enter None	Menu Level >
Drive A Drive B	1.44M, 3.5in. None	
Video Halt On	EGA/VGA All , But Keyboard	
Based Memory Extended Memory Total Memory	64512K	

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

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 can be selected by users.

Time

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

PrimaryMaster/PrimarySlave

SecondaryMaster/SecondarySlave

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.

Access Mode The settings are Auto, CHS, Large, LBA.

Cylinder number of cylinders
Head number of heads
Precomp write precom
Landing Zone landing zone
Sector number of sectors

Advanced BIOS Features

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

Virus Warning BIOS Flash Write Control CPU L1 & L2 Cache Ouick Power On Self Test	Enabled	Item Help
Gate Acoust on Series Test First Boot Device Second Boot Device Boot Other Device Swap Floppy Drive Boot Up Floppy Seek Boot Up Floppy Seek Boot Up Numlock Status Gate A20 Option Typematic Rate Setting Typematic Rate (Chars/Sec) Typematic Delay (Msec) Security Option OS Select for DRAM > 64MB HDD S.M.A.R.T. Capability Report No FDD for Win 95	Floppy HDD-0 LS120 Enabled Disabled Enabled On Fast Disabled 6 250 Setup Non-OS2 Disabled	Menu Level >
↑ → ← 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

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.

Disable (default) No warning message to appear when

anything attempts to access the boot sector or hard disk partition table.

Enable 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.

BIOS Flash Write Control

This option allows you to enable or disable the BIOS flash write control.

Enabled Allows you to update the BIOS with flash

utility.

Disabled (default) BIOS cannot be updated.

CPU L1 & L2 Cache

Cache memory is additional memory that is much faster than the conventional DRAM (system memory). When the CPU requests data, the system transfers the requested data from the main DRAM into cache memory, for even faster access by the CPU.

Enabled (default) Enable cache **Disabled** Disable cache

Note: The internal cache is built in the processor.

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 (default) Enable quick POST **Disabled** Normal POST

First/Second/Third Boot Device/Boot Other 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, CD-ROM, HDD-1/HDD-2/HDD-3, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, USB-HDD, LAN, Disabled.

Swap Floppy Drive

Switches the floppy disk drives between being designated as A and B. Default is Disabled.

Boot Up Floppy Seek

During POST, BIOS will determine if the floppy disk drive installed is 40 or 80 tracks. 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

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.

Typematic Rate Setting

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

Typematic Rate (Chars/Sec)

Sets the number of times a second to repeat a key stroke 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 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 system will boot, but access to Setup will

be denied if the correct password is not entered

at the prompt.

OS Selection for DRAM > 64MB

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

HDD S.M.A.R.T Capability

This item allows you to Enabled or Disabled the HDD S.M.A.R.T (Self-Monitoring Analysis and Reporting Technology) Capability. The default setting is Disabled.

Report No FDD For Win 95

Whether report no FDD for Win 95 or not. The settings are: Yes, 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.

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

	1	-
1 -	Auto Non-ECC Disabled Disabled	Item Help
Delayed Transaction AGP Aperture Size (MB)	Enabled	Menu Level >
T → ← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-safe defaults F7:Optimized Defaults		

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

RDRAM Bus Frequency

This will show the RDRAM Bus Frequency during boot-up. The settings are Auto, 400 MHz and 300 MHz.

DRAM Data Integrity Mode

This option allows you to select the Parity or ECC (Error-Checking and Correcting), according to the type of installed RDRAM.

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

Select 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.

Delayed 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 settings are Enabled and Disabled.

AGP Aperture Size (MB)

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 forwaded 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 4MB, 8MB, 16MB, 32MB, 64MB, 128MB and 256MB.

Integrated Peripherals

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

OnChip Primary PCI IDE OnChip Secondary PCI IDE IDE Primary Master PIO IDE Primary Slave PIO	Enabled Auto	Item Help
IDE Primary Slave PIO IDE Secondary Master PIO IDE Secondary Slave PIO IDE Primary Master UDMA IDE Primary Slave UDMA IDE Secondary Master UDMA IDE Secondary Master UDMA USB Controller USB Keyboard Support Init Display First AC97 Audio AC97 Modem IDE HDD Block Mode POWER ON Function KB Power ON Password Hot Key Power ON	Auto Auto Auto Auto Auto Auto Enabled	Menu Level >
Onboard FDC Controller Onboard Serial Port 1 Onboard Serial Port 2		

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

		1
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	EPP 1.7	
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	Blinking	

OnChip 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, Mode 4.

IDE Primary/Secondary Master/Slave UDMA

Ultra DMA/33 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 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 you have USB peripherals. The settings are Enabled and Disabled.

USB Keyboard Support

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

Init Display First

Initialize the AGP video display before initializing any other display device on the system. Thus the AGP display becomes the primary display. The settings are PCI slot and AGP.

AC97 Audio

This item allows you to decide to Enable/Disable the 850 chipset family to support AC97 Audio.

AC97 Modem

This item allows you to Enabled or Disabled the AC97 Modem.

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, Hotkey and Keyboard 98.

KB Power ON Password

Normally, this item is unselectable. To Enabled this function choose the "Password" setting in the Power On Function. This will allow you to input the password for the KB Power On.

Hot Key Power ON

If **Power On Function** is set to *Hot KEY*, then you can assign 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/Port 2

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

UART Mode Select

This item allows you to determine which InfraRed(IR) function of the onboard I/O chip, this functions uses.

RxD, TxD Active

This item allows you to determine the active of RxD, TxD. The settings are "Hi,Hi", "Lo,Lo", "Lo,Hi" and "Hi,Lo".

IR Transmission Delay

This item allows you to Enabled/Disabled the IR transmission delay. The settings are Enabled or Disabled.

UR2 Duplex Mode

This item allows you to select the IR half.full duplex function. The settings are Half and Full.

Use IR Pins

Consult your IR peripheral documentation to select the correct setting pf the TxD and RxD signals.

Onboard Parallel Port

Select a logical LPT port address and corresponding interrupt for the physical parallel port.

Parallel Port Mode

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 choose the onboard parallel port with the ECP feature. After selecting it, the following message will appear: "ECP Mode Use DMA" At this time, the user can choose between DMA channels 3 or 1. The onboard parallel port is EPP Spec. compliant, so after the user chooses the onboard parallel port with the EPP function, the following message will be displayed on the screen: "EPP Mode Select." At this time either EPP 1.7 spec. or EPP 1.9 spec. can be chosen.

SPP: Standard Parallel PortEPP: Enhanced Parallel PortECP: Extended Capability Port

PWRON After PWR-FAIL

This option will determine how the system will power on after a power failure.

Game Port Address/Midi Port Address

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

Midi Port IRQ

This determines the IRQ in which the MIDI Port can use.

Power Status Led

This item determines which state the Power LED will use. The settings are Blinking (default), Dual, and Single. During blinking, the power LED will blink when the system enters the suspend mode. When the mode is in Dual, the power LED will change its color. Choose the single and the power LED will always remain lit.

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

ACPI Suspend Type Power Management Video Off Method Video Off In Suspend	S1(POS) User Define DPMS Yes	Item Help
Suspend Type Modem Use IRQ Suspend Mode	Stop Grant 3 Disabled	Menu Level >
HDD Power Down	Disabled	
Soft-Off by PWR-BTTN Wake-Up by PCI card		
Power On by Ring		
Wake Up On LAN	Enabled	
USB KB/MS Wake-Up from S3		
CPU THRM-Throttling		
Resume By Alarm Date(of Month) Alarm		
	0 0 0	
**Reload Global Timer Events		
. 1	Disabled	
Primary IDE 1	Disabled	
Secondary IDE 0	Disabled	
Secondary IDE 1	Disabled	
FDD, COM, LPT Port		
PCI PIRQ[A-D]#	Disabled	1
$\uparrow \downarrow \rightarrow \leftarrow$ Move Enter:Select +/-/F	U/PD:Value F10:Sa	ave ESC:Exit F1:General Help

ACPI Suspend Type

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

F5:Previous Values F6:Fail-safe defaults F7:Optimized Defaults

S1 (POS)

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

S3 (STR)

The S3 state is a low wake-up latency sleeping state where all system context is lost except 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:

- Suspend Mode
- 2. HDD Power Down

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

Min. Power Saving Minimum power management. Suspend Mode = 1

hr., and HDD Power Down = 15 min.

Max. Power Saving Maximum power management — Suspend

Mode = 1 min., and HDD Power Down = 1 min.

User Defined (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/H SYNC+Blank This selection will cause the system to turn off

the vertical and horizontal synchronization ports and write blanks to the video buffer.

Blank Screen This option only writes blanks to the video

buffer.

DPMS (default) Initial display power management signaling.

Video Off In Suspend

This determines the manner in which the monitor is blanked. The settings are Yes and No.

Suspend Type

Select the Suspend Type. The settings are: PWRON Suspend, Stop Grant.

Modem Use IRQ

This determines the IRQ in which the MODEM can use.

The settings are 3, 4, 5, 7, 9, 10, 11 and NA.

Suspend Mode

When enabled and after the set time 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

When enabled and after the set time 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. 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/MS Wake-Up from S3

This item allows the USB keyboard/mouse to wake up the system from S3 sleep state. S3 is STR (Suspend to RAM) mode for ACPI, which saves different amount of system power. Settings are *Enabled* and *Disabled*. Default value: *Disabled*.

CPU THRM-Throttling

Select the CPU THRM-Throttling rate. The settings are: 12.5%, 25. 0%, 37.5%, 50.0%, 62.5%, 75.0%, 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 date the

system will boot up. Set to 0, to boot

every day.

Time(hh:mm:ss) Alarm You can choose what hour, minute and

second the system will boot up.

Note: If you have change the setting, you must let the system boot up

until it goes to the operating system, before this function will 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 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 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.

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software PnP/PCI Configurations

Reset Configuration Data	Disabled	Item Help
Resources Controlled By IRQ Resources	Auto (ESCD) Press Enter	-
PCI/VGA Palette Snoop	Disabled	Menu Level >
↑→→← 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 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.

PCI/VGA Palette Snoop

Leave this field at *Disabled*. The settings are Enabled and Disabled.

PC Health Status

This section is to monitor the current hardware status including CPU temperature, CPU Fan speed, Vcore etc. This is available only if there is hardware monitoring onboard.

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

Chassis Intrusion Detect CPU Warning Temperature Current System Temp. Current CPU Temperature	Disabled 39°C/102°F 66°C/150°F	Item Help
Current CPU FAN Speed Current SYS FAN Speed Current PSFAN1 Speed Voore +1.80V Vio +5V +12V -12V -5V VBAT(V) 5VSB(V) Shutdown Temperature	5532RPM 0RPM 1.65V 1.88V 3.24V 4.89V 11.79V -12.19V -4.53V 3.10V 5.37V	Menu Level >

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

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. To be able to clear those warning, choose reset. After clearing the message it will go back to Enabled.

CPU Warning Temperature

Select the combination of lower and upper limits for the CPU temperature. If the CPU temperature extends beyond either limit, any warning mechanism programmed into your system will be activated.

Current System Temp./Current CPU Temperature/Current CPU FAN Speed/SYS FAN Speed/PSFAN1 Speed/Vcore/+1.80V/Vio/+5V/+12V/-12V/-5V/VBAT(V)/5VSB(V)

This will show the CPU/FAN/System voltage chart and FAN Speeds.

Shutdown Temperature

This option is for setting the Shutdown temperature level for the processor. When the processor reaches the temperature you set, this will shutdown the system.

Frequency/Voltage Control

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software Frequency/Voltage Control

CPU Clock Ratio CPU Vcore Select Auto Detect PCI CLK Spead Spectrum	x8 Default Enabled +/-0.25%	Item Help
CPU Clock	100	Menu Level >
→ ← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-safe defaults F7:Optimized Defaults		

CPU Clock Ratio

The CPU Clock Ratio provides flexibility for overclockers from x8 to x 23.

Note: Most of the Pentium® 4 processor doesn't support clock ratio adjustment.

Always consult your reseller for further instructions.

CPU Vcore Select

The CPU Vcore Select allows you to adjust CPU Vcore Voltage. Setting options: Defatult, +25mv, +50mv, +75mv, +100mv.

Auto Detect PCI Clk

Use this item to enable or disable the feature of auto detecting the clock frequency of the installed PCI cards. Settings are: Enabled (default) and Disabled.

Spread Spectrum

This item is used to enable or disable the clock generator's Spread Spectrum feature. When overclocking the processor, always set it to Disabled. Settings are: Disabled, $\pm 0.25\%$ (default), $\pm 0.5\%$, $\pm 0.5\%$ and $\pm 0.38\%$.

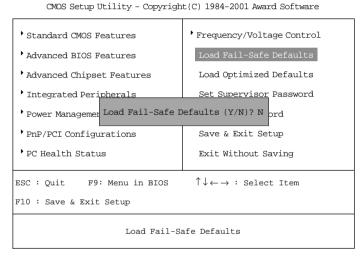
CPU Clock

This item specifies the clock frequency of CPU host bus (FSB) and provides a method for end users to overclock the processor accordingly. You are allowed to overclock the CPU at any frequency between 100MHz and 200MHz.

Load Fail-Safe/Optimized Defaults

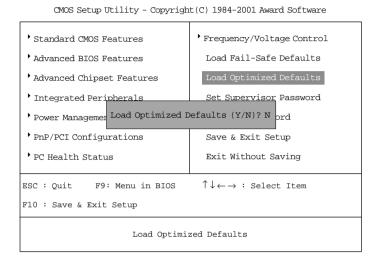
The two options on the main menu allow users to restore all of the BIOS settings to the default Fail-Safe or Optimized values. The Optimized Defaults are the default values set by the mainboard manufacturer specifically for the optimal performance of the mainboard. The Fail-Safe Defaults are the default values set by the BIOS vendor for the stable system performance.

When you select Load Fail-Safe Defaults, a message as below appears:



Pressing *Y* loads the BIOS default values for the most stable, minimal system performance.

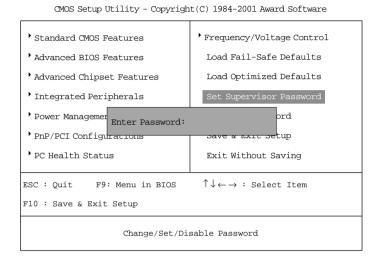
When you select Load Optimized Defaults, a message as below appears:



Pressing *Y* loads the default factory settings for optimal system performance.

Set Supervisor/User Password

When you select this function, a message as below will appear on the screen:



Type the password, up to eight characters in length, and press <Enter>. The password typed now will clear any previously set password from CMOS memory. You will be prompted to confirm the password. Re-type the password and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To clear a set password, just press <Enter> when you are prompted to enter the password. A message will show up confirming the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup without entering any password.

When a password has been set, 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 have BIOS to request a password each time the system is booted. This would prevent unauthorized use of your computer. The setting to determine when the password prompt is required is the Security Option of the Advanced BIOS Features menu. If the Security Option is set to *System*, the password is required both at boot and at entry to Setup. If set to *Setup*, password prompt only occurs when trying to enter Setup.

About Supervisor Password & User Password:

Supervisor password: Can enter and change the settings of the

setup menus.

User password: Can only enter but do not have the right to

change the settings of the setup menus