
2. BIOS Setup

Introduction

This manual discussed 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 AMD Duron/ Athlon 200MHz /266MHz processors input/output system. 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.

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.

PCI Bus Support

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

Support CPU

This AWARD BIOS supports the AMD Duron/Athlon 200MHz /266MHz 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 Setup 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)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	Load Optimized Defaults
Advanced BIOS Features	Load Standard Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configurations	Exit Without Saving
Miscellaneous Control	
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.

Miscellaneous Control

Use the menu to specify your settings for Miscellaneous control.

Load Standard Defaults

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

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.

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 2001	Item Help
Time (hh:mm:ss)	11:26:10	Menu Level
IDE Primary Master	Press Enter None	Change the day, month, year and century.
IDE Primary Slave	Press Enter None	
IDE Secondary Master	Press Enter None	
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.

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IDE Primary Master

IDE HDD Auto-Detection	Press Enter	Item Help
IDE Primary Master Access Mode	Auto Auto	Menu Level
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

Anti-Virus Protection	Disabled	Item Help
Recovery Genius	Enabled	Menu Level 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
PhoneixNet Support	Disabled	
CPU L1 Cache	Enabled	
CPU L2 Cache	Enabled	
Quick Power On Self Test	Enabled	
First Boot Device	Floppy	
Second Boot Device	HDD-0	
Third Boot Device	CDROM	
Boot Other Device	Enabled	
Swap Floppy Drive	Disabled	
Boot Up Floppy Seek	Enabled	
Boot Up NumLock Status	On	
Gate A20 Option	Normal	
Typematic Rate Setting	Disabled	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	Setup	
OS Select For DRAM	Non-OS2	
HDD S.M.A.R.T Capability	Disabled	
Video BIOS Shadow	Enabled	

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

Anti-Virus Protection

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 L1 & L2 Cache

This fields allow you to Enable or Disable the CPU'S "Level 1" & "Level 2" cache. Caching allows better performance.

Enabled (default) Enabled cache.

Disabled Disabled cache.

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.

Boot Other Device

The Choices: Enabled(default), Disabled.

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 (default) Numpad is number keys.

Off 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

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

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

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

Enabled	Enabled HDD S.M.A.R.T. Capability.
Disabled (default)	Disabled HDD S.M.A.R.T. Capability.

Video BIOS Shadow

Determines whether video BIOS will be copied to RAM for faster execution.

Enabled (default) Optional ROM is enabled.

Disabled Optional ROM is disabled.

C8000-CFFFF Shadow / D0000-DFFFF Shadow

Determines whether video BIOS will be copied to RAM for faster execution.

Enabled Optional ROM is Shadowed.

Disabled (default) Optional ROM is not
Shadowed.

Note: For C8000-DFFFF option-ROM on PCI BIOS, BIOS will automatically enable the shadow RAM. User does not have to select the item.

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

DRAM Timing Settings	Press Enter	Item Help
AGP Timing Settings	Press Enter	Menu Level
PCI Timing Settings	Press Enter	
System BIOS Cacheable	Disabled	
Video RAM Cacheable	Disabled	
Memory Hole	Disabled	

←→↑↓: 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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DRAM Timing Settings

Auto Configuration	Optimized	Item Help
RAS Active Time	5T	Menu Level
RAS Precharge Time	2T	
RAS to CAS Delay	2T	
CAS Latency	3 T	
Bank Interleave	4 Bank	

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

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: 6T(default), 5T.

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: 2T(default), 3T.

RAS to CAS Delay

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

CAS Latency

3 (default)	Set CAS Latency Time to 3.
2	Set CAS Latency Time to 2.

Bank Interleave

The item allows you to set how many banks of SDRAM support in your mainboard.

The Choices: 4 Bank(default), 2Bank, Disabled.

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AGP Timing Settings

AGP Transfer Aperture Size	128M	Item Help
AGP Mode	Auto	Menu Level
AGP Driving Control	Auto	
AGP Driving Value	DA	
AGP Fast Write	Disabled	
AGP Master 1WS Write	Disabled	
AGP Master 1WS Read	Disabled	
CPU to AGP Post Write	Enabled	
AGP Delay Transaction	Disabled	

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

AGP Transfer 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: 128M(default), 64M, 32M, 16M, 8M, 4M.

AGP Mode

The Choices: Auto(default), 4X, 2X, 1X.

AGP Driving Control

By choosing “Auto” the system BIOS will enable the AGP output Buffer Drive strength that were defined by AGP Card. By choosing “Manual”, it allows user to set AGP output Buffer Drive strength by manual.

The Choices: Auto(default), Manual.

AGP Fast Write

The Choices: Disabled(default), Enabled.

AGP Master 1WS Write

When Enabled, write data to the AGP (Accelerated Graphic Port) that will be executed with one wait states.

The Choices: Disabled(default), Enabled.

AGP Master 1WS Read

When Enabled, read data to the AGP (Accelerated Graphic Port) that will be executed with one wait states.

The Choices: Disabled(default), Enabled.

AGP Delay Transaction

The Choices: Disabled(default), Enabled.

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PCI Timind Settings

PCI Master 0 WS Write	Disabled	Item Help
PCI Master 0 WS Write	Disabled	
CPU to AGP Post Write	Enabled	Menu Level
PCI Delay Transaction	Disabled	

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

PCI Master 1 WS Write

When this field is Disabled, write data to the PCI bus are executed with first wait states.

The Choices: Disabled(default), Enabled.

PCI Master 1 WS Read

When this field is Disabled, Read data to the PCI bus are executed with first wait states.

The Choices: Disabled(default), Enabled.

PCI Delay Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles

The Choices: Disabled(default), Enabled.

System BIOS Cacheable

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

The Choices: Disabled(default), Enabled.

Video RAM Cacheable

Enabled	Enabled Video RAM Cacheable.
Disabled (default)	Disabled Video RAM Cacheable.

Memory Hole

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

The Choices: Disabled(default), 15M-16M(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	
Onboard Super IO Function	Press Enter	Menu Level
Init Display First	PCI Slot	

←→↑↓: 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

On-Chip IDE Channel 0	Enabled	Item Help
On-Chip IDE Channel 1	Enabled	
Primary Master PIO	Auto	Menu Level
Primary Slave PIO	Auto	
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 32-bit Transfer Mode	Enabled	
IDE HDD Block Mode	Enabled	
IDE Prefetch Mode	Enabled	
Delay For HDD (Secs)	0	

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

On-Chip IDE Channel 0

Enabled (default)

Enabled onboard 1st channel
IDE port.

Disabled

Disabled onboard 1st channel
IDE port.

On-Chip IDE Channel 1

Enabled (default)

Enabled onboard 2nd channel
IDE port.

Disabled

Disabled onboard 2nd channel
IDE port.

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 UDMA

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

Primary Slave UDMA

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

Secondary Master UDMA

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

Secondary Slave UDMA

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

IDE HDD Block Mode

Enabled (default)	Enabled.
Disabled	Disabled.

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Onchip Device Function

AC97 Sound Device	Auto	Item Help
Game Port Address	201	Menu Level
Midi Port Address	Disabled	
Midi Port IRQ	10	
AC97 Modem Device	Auto	
USB Host Controller	Enabled	
USB Keyboard Legacy 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

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: Auto(default), Disabled

AC97 Modem Device

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

The Choices: Auto(default), Disabled.

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	Set Midi Port address to 330.
Disabled (default)	Disabled.

Midi Port IRQ

10 (default)	Set Midi Port IRQ to 10.
5	Set Midi Port IRQ to 5.

USB Host 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 Legacy 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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Onboard Super IO Function

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,Lo	
IR Duplex Mode	Half	
Use IR Pins	IRRx/IRTX	
Onboard Parallel Port	378/IRQ7	
Parallel Mode	SPP	
EPP Mode Select	EPP1.9	
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 Port1

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

Auto	BIOS will automatically setup the Serial Port 2 address.
3F8/IRQ4	Enabled onboard Serial Port 2 and address is 3F8.
2F8/IRQ3 (default)	Enabled onboard Serial Port 2 and address is 2F8.
3E8/IRQ4	Enabled onboard Serial Port2 and address is 3E8.
2E8/IRQ3	Enabled onboard Serial Port2 and address is 2E8.
Disabled	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.

Disabled.

378/IRQ7.

278/IRQ5. (default)

3BC/IRQ7.

Parallel 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: EPP1.9(default), EPP1.7.

ECP Mode Use DMA

The Choices: 3(default), 1.

Init Display First

PCI Slot (default)

Set Init Display First to PCI Slot.

AGP

Set Init Display First to onboard AGP.

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	Suspend->Off	Menu Level
Video Off Method	V/H SYNC+Blank	
Modem Use IRQ	3	
Power Button Function	Instant-Off	
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.

Modem Use IRQ

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

3(default)

4/5/7/9/10/11/NA

Power Button Function

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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Wake up Events

VGA	OFF	Item Help
LPT & COM	LPT/COM	
HDD & FDD	ON	Menu Level
PCI Master	OFF	
Wake-up on Ring	Disabled	
Wake-up on PCI PME	Disabled	
PS2 KB Wakeup Selections	Hot Key	
Wake-up on Hot Key (PS2 KB)	Disabled	
Wake-up on RTC Alarm	Disabled	
Date of Month Alarm	0	
Time (hh:mm:ss) Alarm	0 0 0	
IRQs Activities	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

Wake up Events

If you highlight the “Press Enter” next to the “Wake Up Events” label and then press the enter key, it will take you to a submenu with the following options:

VGA

When set to On, any event occurring at a VGA port will awaken a system which has been powered down.

LPT & COM

When set to On, any event occurring at a COM(serial) / LPT (printer) port will awaken a system which has been powered down.

HDD & FDD

When set to On(default), any event occurring at a hard or floppy drive will awaken a system which has been powered down.

PCI Master

When set to On, any event occurring at a PCI port will awaken a system which has been powered down.

Wake-up on Ring/PME

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

The Choices: Disabled(default).

Wake-up on RTC Alarm

When "Enabled", you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode.

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IRQs Activity

Primary INTR	ON	Item Help
IRQ 3 (COM2)	Enabled	Menu Level
IRQ 4 (COM1)	Enabled	
IRQ 5 (LPT2)	Enabled	
IRQ 6 (Floppy Disk)	Enabled	
IRQ 7 (LPT1)	Enabled	
IRQ 8 (RTC Alarm)	Disabled	
IRQ 9 (IRQ2 Redir)	Disabled	
IRQ 10 (Reserved)	Disabled	
IRQ 11 (Reserved)	Disabled	
IRQ 12 (PS2/Mouse)	Enabled	
IRQ 13 (Coprocessor)	Disabled	
IRQ 14 (Hard Disk)	Enabled	
IRQ 15 (Reserved)	Disabled	

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

IRQs Activity

When set to On(default), any event occurring at Primary INTR will awaken a system which has been powered down.

The following is a list of IRQ, Interrupt ReQuests, which can be exempted much as the COM ports and LPT ports above can. When an I/O device wants to gain the attention of the operating system, it signals this by causing an IRQ to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service. As above, the choices are On and Off. Off is the default. When set On, activity will neither prevent the system from going into a power management mode nor awaken it.

IRQ3	(COM1)
IRQ4	(COM2)
IRQ5	(LPT2)
IRQ6	(Floppy Disk)
IRQ7	(LPT1)
IRQ8	(RTC Alarm)
IRQ9	(IRQ2 Redir)
IRQ10	(Reserved)
IRQ11	(Reserved)
IRQ12	(PS/2 Mouse)
IRQ13	(Coprocessor)
IRQ14	(Hard Disk)
IRQ15	(Reserved)

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 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.

© Figure 7. PnP/PCI Configurations

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PnP/PCI Configurations

PNP OS Installed	No	Item Help
Reset Configuration Data	Disabled	Menu Level
Resources Controlled By IRQ Resources	Manual Press Enter	Select Yes if you are using a Plug and Play capable operating system
PCI/VGA Palette Snoop	Disabled	select No if you need the BIOS to configure non- boot devices
Assign IRQ For VGA	Enabled	
Assign IRQ For USB	Enabled	

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

PNP OS Installed

When set to YES, BIOS will only initialize the PnP cards used for booting (VGA, IDE, SCSI). The rest of the cards will be initialized by the PnP operating system like Windows 95. When set to No, BIOS will initialize all the PnP cards. Therefore for non-PnP operating systems (DOS, Netware), this option must be set to No.

Reset Configuration Data

The system BIOS supports the PnP feature so the system needs to record which resource is assigned and proceeds resources from conflict. Every peripheral device has a node, which is called ESCD. This node records which resources are assigned to it. The system needs to record and update ESCD to the memory locations. These locations (4K) are reserved at the system BIOS. If Disabled (Default) is chosen, the system's ESCD will update only when the new configuration varies from the last one. If Enabled is chosen, the system is forced to update ESCDs and then is automatically set to the "Disabled" mode.

The above settings will be shown on the screen only if "Manual" is chosen for the resources controlled by function.

Legacy is the term which signifies that a resource is assigned to the ISA Bus and provides for non-PnP ISA add-on cards. PCI/ISA PnP signifies that a resource is assigned to the PCI Bus or provides for ISA PnP add-on cards and peripherals.

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.

IRQ3	assigned to: PCI Device
IRQ4	assigned to: PCI Device
IRQ5	assigned to: PCI Device
IRQ6	assigned to: PCI Device
IRQ7	assigned to: PCI Device
IRQ8	assigned to: PCI Device
IRQ9	assigned to: PCI Device
IRQ10	assigned to: PCI Device
IRQ11	assigned to: PCI Device
IRQ12	assigned to: PCI Device
IRQ13	assigned to: PCI Device
IRQ14	assigned to: PCI Device
IRQ15	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.

Assign IRQ For VGA

Lets the user choose which IRQ to assign for the VGA.

Assign IRQ For USB

Lets the user choose which IRQ to assign for the USB.

2.8 Miscellaneous Control

© Figure 8. Miscellaneous Control

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Miscellaneous Control

Auto Detect DIMM / PCI CLK	Enabled	Item Help
Spread Spectrum	Disabled	
** Current Host Clock is		Menu Level
Host Clock at Next Boot is 100MHz		
** Current DRAM Clock is		
DRAM Clock at Next Boot is		

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

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 to EMI test only.

The Choices: Disabled(default), Enabled..

Host Clock at next Boot is

This item allows you to select CPU frequency step by step increasing.

The Choices: 100~132MHz, 133MHz~200MHz.

DRAM Clock at next Boot is

This field displays the capability of the memory modules that you can use. The choice is either 100MHz or 133MHz (only select CPU Frequency 100MHz.)

2.9 Load Optimized Defaults

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

© **Figure 9. Load Optimized Defaults**

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

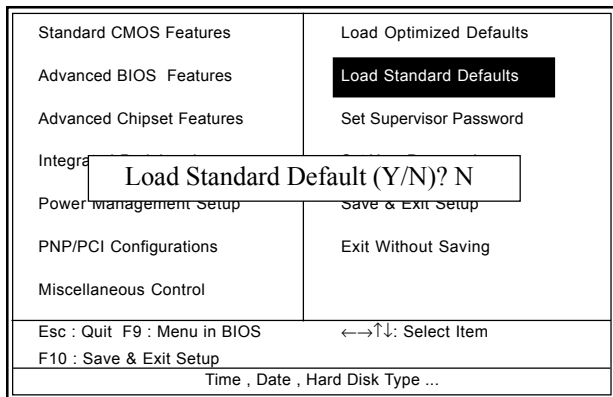
Pressing ‘Y’ loads the default values that are factory settings for optimal performance of system operations.

2.10 Load Standard Defaults

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

© **Figure 10. Load Standard Defaults**

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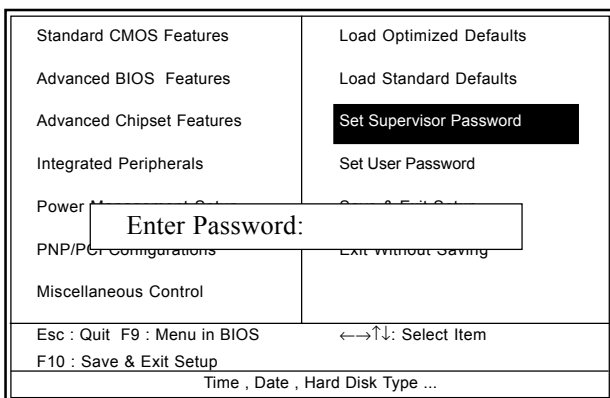


Pressing ‘Y’ loads the default values that are factory settings for optimal performance of system operations.

2.11 Set Supervisor / User Password

© Figure 11. Set Supervisor / User Password

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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 the BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

2.12 Save & Exit Setup

© Figure 12. Save & Exit Setup

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

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.

2.13 Exit Without Saving

© Figure 13. Exit Without Saving

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Standard CMOS Features	Load Optimized Defaults
Advanced BIOS Features	Load Standard Defaults
Exit Without Saving (Y/N)? Y	
Advanced	
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configurations	Exit Without Saving
Miscellaneous Control	
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.