

Setting BIOS Features

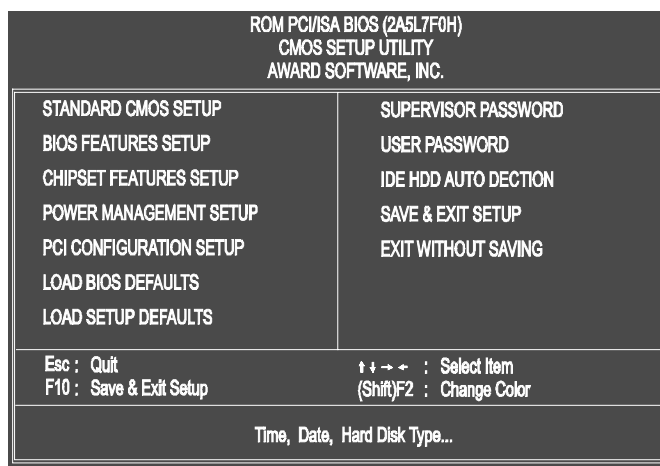
All computer mainboards provide a Setup utility program for specifying the system configuration and settings. If the mainboard came in a computer system, the proper configuration entries may have already been made. If you are installing the mainboard or reconfiguring the system or if you receive a Run Setup message, you will need to enter new setup information.

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

A Setup program built into the system BIOS, is stored in the CMOS RAM. This Setup utility program allows changes to the mainboard configuration settings. It is executed when user changes system configuration; user changes system backup battery; or the system detects a configuration error and asks the user to run the Setup program. At power-on RAM testing, the message Press <Delete> key to enter Setup appears. If you are a little bit late pressing the mentioned key, POST (Power-On Self Test) will continue with its test routines, thus preventing you from calling up Setup. If you still need to call Setup, reset the system by simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys, or by pushing the Reset button on the system case. You can also restart by turning the system off and then back on again. But do so only if the first two methods fail. Use the arrow keys to select and press <Enter> key to run the selected program.

Main CMOS Setup

When you run Setup, the CMOS SETUP UTILITY main program screen will appear with the following options:



A section at the bottom of the above screen displays the control keys for this screen. Take note of these keys and their respective uses. Another section just below the control keys section displays information on the currently highlighted item in the list.

Load Defaults

The “Load BIOS Defaults” option loads the minimized settings for troubleshooting. “Load Setup Defaults” on the other hand, is for loading optimized defaults for regular use. Choosing defaults at this level will modify all applicable settings.

Standard CMOS Setup

The “Standard CMOS Setup” option allows you to record some basic system hardware configuration and set the system clock and error handling. If the mainboard is already installed in a working system, you will not need to select this option anymore. However, if the configuration stored in the CMOS memory on the mainboard gets lost or damaged, or if you change the system hardware configuration, you will need to re-specify the configuration values. The

configuration values usually get lost or corrupted when the power of the onboard CMOS battery weakens.

```

ROM PCI/ISA BIOS (2A5LA9F09)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

Date (mm:dd:yy): Tue, June 3 1997
Time (hh:mm:ss): 15:37:55

HARD DISKS      TYPE  SIZE  CYLS  HEAD  PRECOMP  LANDZ  SECTOR  MODE
Primary Master  : Auto   0     0     0       0       0       0   Auto
Primary Slave   : Auto   0     0     0       0       0       0   Auto
Secondary Master: Auto   0     0     0       0       0       0   Auto
Secondary Slave : Auto   0     0     0       0       0       0   Auto

Drive A : 1.44M, 3.5 in.
Drive B : 1.2M, 5.25 in.

Video : EGA/VGA
Halt On : All Errors

Base Memory: 640K
Extended Memory: 7168K
Other Memory: 384K
Total Memory: 8192K

Esc : Quit      ↑ ↓ → ← : Select Item      PU/PD/+/- : Modify
F1 : Help      (Shift)F2 : Change Color
  
```

The above screen provides you with a list of options. At the bottom are the control keys for this screen. Take note of these keys and their respective uses. User-configurable fields appear in a different color. If you need information on the selected field, press the <F1> key. The help menu will then appear to provide you with the information you need. The memory display at the lower right-hand side of the screen is read-only and automatically adjusts accordingly.

Date

To set the date, highlight the “Date” field and then press the page up/page down or +/- keys to set the current date. Follow the month, day and year format. Valid values for month, day and year are: Month: (1 to 12), Day: (1 to 31), Year: (up to 2099).

Time

To set the time, highlight the “Time” field and then press the page up/page down or +/- keys to set the current time. Follow the hour, minute and second format. Valid values for hour, minute and second are: Hour: (00 to 23), Minute: (00 to 59), Second: (00 to 59), just press the <Enter> key twice if you do not want to modify the current settings.

Hard Disks

This field records the specifications for all non-SCSI hard drives installed in the system. The onboard PCI IDE connectors provide Primary and Secondary channels for connecting up to four IDE hard disks or other IDE devices. Each channel can

support up to two hard disks; the first of which is the “master” and the second is the “slave”.

Specifications for SCSI hard disks need not be entered here since they operate using device drives and are not supported by any BIOS. If you installed a SCSI controller card, please refer to their respective documentation on how to install the required SCSI drivers.

For an IDE hard disk drive setup, you can:

- Use the *Auto* setting for detection during bootup.
- Use the IDE HDD AUTO DETECTION in the main menu to automatically enter the drive specifications.
- Enter the specifications yourself manually by using the “User” option.

The entries for specifying the hard disk type include CYLS (number of cylinders), HEAD (number of read/write heads), PRECOMP (write precompensation), LANDZ (landing zone), SECTOR (number of sectors) and MODE. The SIZE field automatically adjusts according to the configuration you specified. The documentation that comes with the hard disk should provide you with the information regarding the drive specifications.

The MODE entry is for IDE hard disks only, and can be ignored for MFM and ESDI drives. This entry provides three options: *Normal*, *Large*, *LBA*, or *Auto*. Set MODE to the *Normal* for IDE hard disks smaller than 528MB; set it to *LBA* for drives over 528MB that support Logical Block Addressing (LBA) to allow large IDE hard disks; set it to *Large* for drives over 528MB that do not support LBA. *Large* type of drives can only be used with MS-DOS and is very uncommon. Most IDE drives over 528MB support the *LBA* mode.

Auto Detection of Hard Disks on Bootup

For each field: Primary Master, Primary Slave, Secondary Master, and Secondary Slave, you can select *Auto* under the TYPE and MODE fields. This will enable auto detection of your IDE drives during Bootup. This will allow you to change your hard drives (with the power off) and then power on without having to reconfigure your hard drive type. If you use older hard drives which do not support this feature, then you must configure the hard drive in the standard method as described above by the “User” option.

<p>NOTE : After the IDE hard disk information has been entered into BIOS, new IDE hard disks must be partitioned (such as with FDISK) and then formatted before data can be read from and write on. Primary IDE hard drives must have its partition set to <i>active</i> (also possible with FDISK).</p>

Drive A / Drive B

These fields record the types of floppy drives installed in the system. The available options for drives A and B are: *None (default)*; *360KB, 5.25 in.*; *1.2MB, 5.25 in.*; *720KB, 3.5 in.*; *1.44MB, 3.5 in.*; *2.88MB, 3.5 in.* To enter the configuration value for a particular drive, highlight its corresponding field and then select the drive type using the left- or right-arrow key.

Floppy 3 Mode Support

This is the Japanese standard floppy drive. The standard stores 1.2MB in a 3.5inch diskette. This is normally disabled but you may choose from either: *Disabled* (default), *Drive A*, *Drive B*, and *Both*.

Video

Set this field to the type of video display card installed in the system. The options are: *EGA/VGA* (default), *Mono* (for Hercules or MDA), *CGA 40*, and *CGA 80*. If you are using a VGA or any higher resolution card, choose the “EGA/VGA” option.

Halt On

This field determines which types of errors will cause the system to halt. Choose from *All Errors* (default); *No Errors*; *All, But Keyboard*; *All, But Diskette*; and *All, But Disk/Key*.

BIOS Features Setup

The “BIOS Features Setup” option consists of configuration entries that allow you to improve the system performance, or lets you set up some system features according to your preference. Some entries here are required by the mainboard’s design to remain in their default settings.

ROM PCI/ISA BIOS (2A5L9F09) BIOS FEATURES SETUP AWARD SOFTWARE, INC.			
Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
External Cache	: Enabled	C8000 - CBFFF Shadow	: Disabled
Quick Power On Self Test	: Disabled	CC000 - CFFFF Shadow	: Disabled
Boot Sequence	: A, C, CD-ROM	D0000 - D3FFF Shadow	: Disabled
Swap Floppy Drive	: Disabled	D4000 - D7FFF Shadow	: Disabled
Boot Up Floppy Seek	: Enabled	D8000 - D8FFF Shadow	: Disabled
Boot Up NumLock Status	: On	DC000 - DFFFF Shadow	: Disabled
Port 92H Fast A20G	: Fast		
Typematic Rate Setting	: Disabled		
Typematic Rate (Char/Sec)	: 6		
Typematic Delay (Msec)	: 250		
Security Option	: Setup	Esc: Quit	↑↓←→: Select Item
P/S2 Mouse Function Control	: Disabled	F1: Help	PU/PD/+/=: Modify
PCI/VGA Palette Snoop	: Disabled	F5: Old Values (Shift)F2	: Color
		F6: Load BIOS Defaults	
		F7: Load Setup Defaults	

A section at the lower right of the screen displays the control keys you can use. Take note of these keys and their respective uses. If you need information on a particular entry, highlight it and press the <F1> key. A pop-up help menu will appear to provide you with the information you need. <F5> loads the last set values, <F6> and <F7> loads the BIOS default values and Setup default values, respectively.

Virus Warning

This field protects the boot sector and partition table of the hard disk against accidental modifications. Any attempt to write to them will cause the system to halt and display a warning message. If this occurs, you can either allow the operation to continue or use a bootable virus-free floppy disk to reboot and investigate the system. This setting is recommended because of conflicts with new operating systems. Installation of new operating systems require that you disable this to prevent write errors. The options are *Disabled* (default); *Enabled*.

External Cache

These fields allow you to turn on or off the CPU’s Internal and External built-in cache. The options are *Enabled* (default); *Disabled*.

Quick Power On Self Test

This field speeds up the Power-On Self Test (POST) routine by skipping re-testing a second, third, and fourth time. A complete test of the system is done on each test. The options are *Disabled* (default); *Enabled*.

Boot Sequence

This field determines where the system looks first for an operating system. The setup default setting is to check first the floppy drive and then the hard drive; that is, A, C. The options are A, C, *CDROM* (default); C, A, *CDROM*; C, *CDROM*, A; *CDROM*, C, A.

Swap Floppy Drive

When enabled, it allows you to switch the order in which the operating system accesses the floppy drives during bootup. The options are: *Disabled* (default); *Enabled*.

Boot Up Floppy Seek

When enabled, the BIOS will seek the floppy “A” drive one time. The options are *Enabled* (default); *Disabled*.

Boot Up NumLock Status

This field enables user to activate the Number Lock function upon system boot. The options are *On* (default); *Off*.

Port 92H Fast A20G

When enabled, it allows the A20G Bus line signal generated from the VIA VT82C575M PC/AT chipset to directly pass to port 92H instead of the keyboard controller. It will speed up the system performance. The options are *Fast* (default); *Normal*.

Typematic Rate Setting

When enabled, you can set the two typematic controls listed next. The options are *Disabled* (default); *Enabled*.

Typematic Rate (Chars/Sec)

This field controls the speed at which the system registers repeated keystrokes. The options are 6 (default); 8; 10; 12; 15; 20; 24; and 30.

Typematic Delay (Msec)

This field sets the time interval for displaying the first and second characters. The options are 250 (default); 500; 750; and 1000 millisecond.

Security Option

This field determines when the system prompts for the password. The default setting is *Setup*, where the system always boots up, and prompts for the Supervisor Password only when the Setup utility is called up. The other option is *System*, where the system prompts for the User Password every time you boot up. You can specify a password by using the *Supervisor Password* or *User Password* option from the main screen as explained later in this section. The options are *Setup* (default); *System*.

PS/2 Mouse Function Control

When enabled, it allows you to release IRQ12 for the PS/2 mouse's use. The options are *Disabled* (default); *Enabled*.

Video BIOS Shadow

This field allows you to change the video BIOS location from ROM to RAM. Relocating to RAM enhances system performance, as information access is faster than the ROM. The options are *Enabled* (default); *Disabled*.

C8000-CBFFF to DC000-DFFFF Shadow

These fields are used for shadowing other expansion card ROMs. If you install other expansion cards with ROMs on them, you will need to know which addresses the ROMs use to shadow them specifically. Shadowing a ROM reduces the memory available between 640KB and 1024KB by the amount used for this purpose. The options are *Disabled* (default); *Enabled*.

Chipset Features Setup

The “Chipset Features Setup” option controls the configuration of the board’s chipset. Control keys for this screen are the same as for the previous screen.

ROM PCI/ISA BIOS (2A5L9F09) CHIPSET FEATURES SETUP AWARD SOFTWARE, INC.	
Decoupled Refresh : Enabled	Onboard FDD Controller : Enabled
Video BIOS Cacheable : Enabled	Onboard Serial Port 1 : COM1/3F8
System BIOS Cacheable : Enabled	Onboard Serial Port 2 : COM2/2F8
Memory Hole At 15Mb Addr. : Disabled	Serial Port 2 IR Mode : Disabled
Cache Timing Control : Fast	Onboard Parallel Port : 378H/IRQ7
DRAM Timing Control : Fast	Onboard Parallel Mode : Normal
SRAM Tag/Alt Bk Config : 7 Tags+ALT	
CPU to DRAM Write Buffer : Enabled	
OnChip IDE First Channel : Enabled	
OnChip IDE Second Channel : Enabled	
IDE HDD Block Mode : Enabled	
IDE Primary Master PIO : Auto	
IDE Primary Slave PIO : Auto	
IDE Secondary Master PIO : Auto	
IDE Secondary Slave PIO : Auto	
Esc: Quit ↑↓→←: Select Item	
F1: Help PU/PD/+-: Modify	
F5: Old Values (Shift)F2: Color	
F6: Load BIOS Defaults	
F7: Load Setup Defaults	

Decoupled Refresh

When enabled, the onboard DRAM will be decoupled from the ISA Bus memory device so that the processor can re-access the onboard DRAM without waiting for the completion of the ISA Bus memory refresh. Disable it if you are using ISA-type ET-4000 VGA card. The options are: *Enabled* (default); *Disabled*.

Video BIOS Cacheable

Allows the video BIOS to be cached to allow for faster execution. Leave on default setting of *Enabled* for better performance, otherwise *Disabled*. The options are *Enabled* (default), *Disabled*.

System BIOS Cacheable

When enabled, allows the ROM area of F000H-FFFFH to be cacheable when the cache controller is activated. The options are *Enabled* (default), *Disabled*.

Memory Hole at 15MB Addr.

Enabling this feature reserves 15MB to 16MB memory address space to ISA expansion cards that specifically require this setting. This makes the memory from 15MB and up unavailable to the system. Expansion cards can only access memory up to 16MB. The options are *Disabled* (default), *Enabled*.

Cache Timing Control

This option allows you to adjust the access speed of the 82C575M to external cache. The options are *Turbo* (default); *Normal*, *Fast*.

DRAM Timing Control

This option allows you to speed up the data access of the 82C575M. The options are *Fast* (default); *Normal*.

SRAM Tag/Alt Bit Config

This option allows you to select the alter bit that checks whether or not the external cache writes back data to DRAMs. The options are *7Tags+ALT* (default); *10Tags+ALT*, *8Tags*.

OnChip IDE First Channel

When enabled, allows the IDE drive to use the first channel of the primary IDE. The options are *Enabled* (default); *Disabled*.

OnChip IDE Second Channel

When enabled, it allows the IDE drive to use the second channel of the primary IDE. The options are *Enabled* (default); *Disabled*.

IDE HDD Block Mode

When enabled, it allows the system to execute read/write requests to the hard disk in block mode. The options are *Enabled* (default); *Disabled*.

IDE Primary Master PIO

This option allows you to select the first PCI IDE channel of the primary master hard disk mode or to detect it by the BIOS. The options are *Auto* (default); *Mode 0*; *Mode 1*, *Mode 2*, *Mode 3*, *Mode 4*.

IDE Primary Slave PIO

This option allows you to select the first PCI IDE channel of the primary slave hard disk mode or to detect it by the BIOS. The options are *Auto* (default); *Mode 0*, *Mode 1*, *Mode 2*, *Mode 3*, *Mode 4*.

IDE Secondary Master PIO

This option allows you to select the first PCI IDE channel of the secondary master hard disk mode or to detect it by the BIOS. The options are *Auto* (default); *Mode 0*, *Mode 1*, *Mode 2*, *Mode 3*, *Mode 4*.

IDE Secondary Slave PIO

This option allows you to select the first PCI IDE channel of the secondary slave hard disk mode or to detect it by the BIOS. The options are *Auto* (default); *Mode 0*, *Mode 1*, *Mode 2*, *Mode 3*, *Mode 4*.

Onboard FDD Controller

When enabled, it allows the floppy disk controller (FDC) to be activated. The options are *Enabled* (default); *Disabled*.

Onboard Serial Port 1

If serial port 1 uses the onboard I/O controller, you can modify the serial port parameters. If an I/O card needs to be installed, COM3 and COM4 may be needed. The options are *COM1/3F8* (default); *COM3/3E8*, *COM4/2E8*, *Disabled*.

Onboard Serial Port 2

This option allows you to select an advanced IR device mode when it is connected to serial port 2. The options are *COM2/2F8* (default); *COM3/3E8*, *COM4/2E8*, *Disabled*.

Serial Port 2 IR Mode

When enabled, it allows the serial port 2 to be used as an IR port. If the mainboard does not support the IR function (W83787F onboard), set it at *Disabled* to release the serial port 2. The options are *Disabled* (default); *FdxHPSIR1*, *FdxHPSIR2*, *FdxASKIR1*, *FdxASKIR2*, *FdxASKIR3*, *FdxASKIR4*, *HdxHPSIR1*, *HdxHPSIR2*, *HdxASKIR1*, *HdxASKIR2*, *HdxASKIR3*, *HdxASKIR4*.

Onboard Parallel Port

This option allows you to select from a given set of parameters if the parallel port uses the onboard I/O controller. The options are *378H/IRQ7* (default), *278H/IRQ5*, *3BCH/IRQ7*, *Disabled*.

Onboard Printer Mode

This option allows you to connect with an advanced printer I/O mode. The options are *Normal* (default); *ECP*, *EPP/SPP*, *ECP/EPP*.

Power Management Setup

The “Power Management Setup” option allows you to reduce the power consumption of the system. This feature turns off the video display and shuts down the hard drive after a period of inactivity.

ROM PCI/ISA BIOS (2A5L9F09) POWER MANAGEMENT UTILITY AWARD SOFTWARE, INC.	
Power Management : Disable	IRQ9 (IRQ2 Redir) : Primary
PM Control by APM : Yes	IRQ10 (Reserved) : Primary
Video Off Option : Suspend -> Off	IRQ11 (Reserved) : Primary
Video Off Method : DPMS Support	IRQ12 (PS/2 Mouse) : Primary
	IRQ14 (Hard Disk) : Primary
	IRQ15 (Reserved) : Primary
** PM Timers **	
HDD Power Down : Disable	
Doze Mode : Disable	
Suspend Mode : Disable	
** PM Events **	
VGA : OFF	
LPT & COM : LPT/COM	
HDD & FDD : ON	
IRQ3 (COM2) : Primary	
IRQ4 (COM1) : Primary	
IRQ5 (LPT2) : Primary	
IRQ7 (LPT1) : Primary	
IRQ8 (RTC Alarm) : Secondary	
	Esc: Quit ↑↓→←: Select Item
	F1: Help P/+/D/-/: Modify
	F5: Old Values (Shift)F2: Color
	F6: Load BIOS Defaults
	F7: Load Setup Defaults

Power Management

This field acts as the master control for the power management modes. *Enabled* puts the system into power saving mode after a brief period of system inactivity while *Disabled* disables the power saving features. The options are *Disabled* (default); *Enabled*.

PM Control by APM

The option *No* allows the BIOS to ignore the APM (Advanced Power Management) specification. Selecting *Yes* will allow the BIOS wait for APM's prompt before it enters Doze mode, Standby mode, or Suspend mode. If the APM is installed, it will prompt the BIOS to set the system into the power saving mode after all tasks are done. The options are *Yes* (default); *No*.

Video Off Option

This item allows you to activate the video off feature for the display monitor power management. The option *Suspend -> Off* allows the video display to blank out when the system enters Suspend mode. The option *All Modes -> Off* allows the video display to blank out when the system enters Doze mode or Suspend mode. The option *Always On* allows the video display to stay at Standby mode even when the system enters Doze or Suspend mode. The options are *Suspend -> Off* (default); *Always On*; *All Modes -> Off*.

Video Off Method

This field defines the video off features. *V/H SYNC + Blank* blanks the screen and turns off vertical and horizontal scanning; *DPMS Support* allows the BIOS to control the video display card if it supports the DPMS feature; *Blank Screen* only blanks the screen. Use the latter for display monitors that do not support the “Green” (no power management) feature. Screensaver softwares does not work with this feature. With the CRT monitor shut off, this software cannot display. The options are *DPMS Support* (default); *Blank Screen*; *V/H Sync + Blank*.

HDD Power Management

Selecting *Disabled* will not turn off the hard disk drive (HDD) motor. Selecting *1 Min., . . . 15 Min.* allows you to define the HDD idle time before HDD enters Power Saving mode. The option *When Suspend* lets BIOS turn the HDD motor off when the system is in Suspend mode. The options *1 Min., . . . 15 Min.* and *When Suspend* will not work concurrently. When HDD is in Power Saving mode, any access to the HDD will wake the HDD up. The options are *Disabled* (default); *1 Min.; . . . 15 Min., When Suspend*.

Doze Mode

Sets the period of time after which Doze mode activates. User has the option to set it at *8 Sec; 32 Sec; 2 Min; 8 Min; 16 Min; or 32 Min; 40 Min; or 1 Hour*. The default value is *Disabled*.

Suspend Mode

Sets the period of time after which Suspend mode activates. User has the option to set it at *1 Min; 2 Min; 5 Min; 10 Min; 20 Min; 30 Min; or 1 Hour*. The default value is *Disabled*.

VGA

Selecting *ON* will enable the power management timer when a no activity event is detected in the VGA. Select *OFF* to disable the power management timer even if a no activity event is detected. The options are *OFF* (default), *ON*.

LPT & COM

Selecting *LPT/COM* will enable the power management timer when a no activity event is detected in the LPT and COM ports. Selecting *LPT* or *COM* will enable the power management timer when a no activity event is detected in the LPT or COM port. Selecting *NONE* will disable the power management timer even if a no activity event is detected. The options are *LPT/COM* (default); *NONE; LPT; COM*.

HDD & FDD

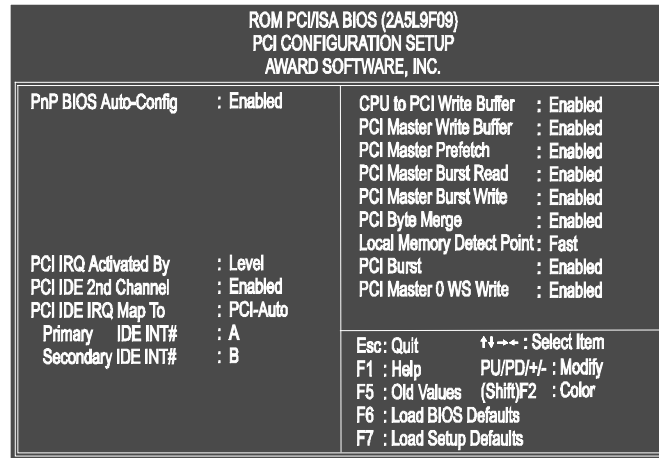
Selecting *ON* will enable the power management timer when a no activity event is detected in the hard disk drive and floppy disk drive. Selecting *OFF* will disable the power management timer even if a no activity event is detected. The options are *ON* (default); *OFF*.

IRQ# Activity

When set at *Primary*, the processor will power down only after BIOS detects a no IRQ activity during the time specified by the Suspend timer. If set at *Secondary*, the system will distinguish whether an interrupt accesses an I/O address or not. If it does, the system enters the Standby mode. If not, the system enters Dream mode; that is, the system goes back to full-on status but leaves the display monitor blank. For instance, when the system connects to a LAN and receives an interrupt from its file server, the system will enter Dream mode to execute the corresponding calling routine. The options are *Primary*; *Secondary*. The default value for IRQ 3, 4, 5, 7, 9, 10, 11, 12, 14, 15 is *Primary* while the default value for IRQ8 is *Secondary*.

PCI Configuration Setup

The “PCI Configuration Setup” option configures the PCI Bus slots. All PCI Bus slots on the system use INTA#, thus all installed PCI cards must be set to this value. The PCI slots can be used either as a master or a slave slot. A master slot is an agent slot that initiates a Bus transaction while a slave slot is an agent slot that responds to a Bus transaction initiated by a master slot.



PNP BIOS Auto-Config

When enabled, the available IRQs used on the ISA slots are configured automatically by the BIOS. The options are *Disabled* (default), *Enabled*.

Available IRQ

When the above item PNP BIOS Auto-Config is set at *Disabled*, it allows you to assign an available IRQ to the attached PCI device that needs an IRQ to access the mainboard. The options are *NA* (default); *5*, *7*, *9*, *10*, *11*.

PCI IRQ Activated By

If the IDE card you are using is triggered by edge, set it at *Edge*. The options are *Level* (default); *Edge*.

PCI IDE 2nd Channel

When enabled, it allows you to use the second channel of the PCI IDE. The options are *Enabled* (default); *Disabled*.

PCI IDE IRQ Map To

Set at *PCI-Auto* to allow the system BIOS to automatically detect which interrupt is used by the PCI master drive. The options are *PCI-AUTO* (default), *PCI-SLOT1*, *PCI-SLOT2*, *PCI-SLOT3*, *ISA*.

CPU To PCI Write Buffer

When enabled, it allows data and address access to the internal buffer of the 82C576MV so that the processor can be released from the Wait state. The options are *Disabled* (default), *Enabled*.

PCI Master Write Buffer

When enabled, it allows PCI write operation by informing the CPU of pending data from the PCI device. The processor is released from the Wait state by a signal from the master card. The options are *Enabled* (default), *Disabled*.

PCI Master Prefetch

When enabled, it allows data and address to be saved in the internal buffer of the 82C576MV to reduce the master drive's access time. The options are *Enabled* (default), *Disabled*.

PCI Master Burst Read

When enabled, it allows the PCI master drive to burst read data from the system instead of the normal speed (32 bits at a time). It increases the data transfer from PCI to system. The options are *Enabled* (default), *Disabled*.

PCI Master Burst Write

When enabled, it allows the PCI master drive to burst write data to the system instead of the normal speed (32 bits at a time). It increases data transfer from PCI to system. The options are *Enabled* (default), *Disabled*.

PCI Byte Merge

When enabled, it allows the PCI cycle to send data out only after the internal buffer of the 82C576M is filled up completely. If you are using a Trident 9440 PCI VGA card (VC-910), ADVANCE ALG 2301 PCI VGA card, or a KELVIN 64-PCI (Cirrus

5434) PCI VGA card, keep this feature *Disabled*. The options are *Enabled* (default), *Disabled*.

Local Memory Detect Point

If set at *Fast*, the PCI access to the same 1KB address in memory will be reduced one PCI cycle. If you are using the Adaptec PCI SCSI card AHA-2940/45, set it at *Medium*. The options are *Fast* (default), *Medium*.

PCI Burst

When enabled, data transfer on PCI Buses will improve. Disable this item when trouble-shooting the system. The options are *Enabled* (default), *Disabled*.

PCI Master 0 WS Write

When enabled, it allows a zero wait cycle delay when the PCI master drive writes data to DRAM. The options are *Enabled* (default), *Disabled*.

PCI Slots Interrupt Assignments

SLOT NUMBER	INT OF SLOT	INT OF VT82C576
Slot 1	A	A
	B	B
	C	C
	D	D
Slot 2	A	B
	B	C
	C	D
	D	A
Slot 3	A	C
	B	D
	C	A
	D	B

Load BIOS Defaults

The “Load BIOS Defaults” option allows you to load the troubleshooting default values permanently stored in the BIOS ROM. These default settings are non-optimal and disables all high performance features. To load these default settings, highlight “Load BIOS Defaults” on the main screen and then press the <Enter> key. The system displays a confirmation message on the screen. Press the <Y> key and then the <Enter> key to confirm. Press the <N> key and then the <Enter> key to abort. This feature does not affect the fields on the Standard CMOS Setup screen.

Load Setup Defaults

The “Load Setup Defaults” option allows you to load the default values to the system configuration fields. These default values are the optimized configuration settings for the system. To load these default values, highlight “Load Setup Defaults” on the main screen and then press the <Enter> key. The system displays a confirmation message on the screen. Press the <Y> key and then the <Enter> key to confirm. Press the <N> key and then the <Enter> key to abort. This feature does not affect the fields on the Standard CMOS Setup screen.

Supervisor Password and User Password

These two options set the system passwords. “Supervisor Password” sets a password that will be used to protect the system and the Setup utility; “User Password” sets a password that will be used exclusively on the system. By default, the system comes without any passwords. To specify a password, highlight the type you want and then press the <Enter> key. A password prompt appears on the screen. Taking note that the password is case sensitive, and can be up to 8 alphanumeric characters long, type in your password and then press the <Enter> key. The system confirms your password by asking you to type it again. After setting a password, the screen automatically reverts to the main screen. To implement the password protection, specify in the “Security Option” field of the BIOS Features Setup screen when the system will prompt for the password. If you want to disable either password, press the <Enter> key instead of entering a new password when the “Enter Password” prompt appears. A message confirms the password has been disabled.

Clear Password

If you were to forget your password, exit Windows and turn off the system power first to remove the system unit cover. Locate jumper JCP on the mainboard and cap it. After restoring the system unit cover, power on the system and old password is now cleared from memory. To set new password, exit Windows and turn off the system power to remove the system unit cover. Locate jumper JCP on the mainboard and remove the jumper cap. After restoring the system unit cover, power on the system and enter Setup to set new password.

IDE HDD Auto Detection

The “IDE HDD Auto Detection” option detects the parameters of an IDE hard drive and automatically enters them into the Standard CMOS Setup screen. Up to four IDE drives can be detected, with parameters for each listed inside the box. To accept the optimal entries, press the <Y> key or else select from the numbers displayed under the OPTIONS field; to skip to the next drive, press the <N> key. If you accept the values, the parameters will appear listed beside the drive letter on the screen. The process then proceeds to the next drive letter. Pressing the <N> key to skip rather than to accept a set of parameters causes the program to enter zeros after that drive letter.

Remember that if you are using another IDE controller that does not feature Enhanced IDE support for four devices, you can only install two IDE hard drives. The IDE controller must support the Enhanced IDE features in order to use Drive E and Drive F.

When auto-detection is completed, the program automatically enters all entries you accepted on the field for that drive in the Standard CMOS Setup screen. Skipped entries are ignored and are not entered in the screen.

If you are auto-detecting a hard drive that supports the LBA mode, three lines will appear in the parameter box. Choose the line that lists LBA for an LBA drive. Do not select Large or Normal.

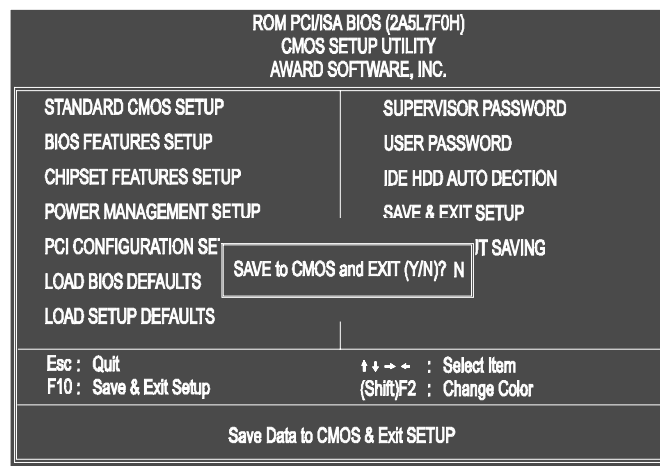
The auto-detection feature can only detect one set of parameters for a particular IDE hard drive. Some IDE drives can use more than one set. This is not a problem if the drive is new and there is nothing on it.

NOTE : If your hard drive was already formatted on an older previous system, incorrect parameters may be detected. You will need to enter the correct parameters manually or use low-level format if you do not need the data stored on the hard drive.

If the parameters listed differ from the ones used when the drive was formatted, the drive will not be readable. If the auto-detected parameters do not match the ones that should be used for your drive, do not accept them. Press the <N> key to reject the presented settings and enter the correct ones manually from the Standard CMOS Setup screen.

Save & Exit Setup

Select this option to save into the CMOS memory all modifications you specified during the current session. To save the configuration changes, highlight the “Save & Exit Setup” option on the main screen and then press the <Enter> key.



Exit Without Saving

Select this option to exit the Setup utility without saving the modifications you specified during the current session. To exit without saving, highlight the “Exit Without Saving” option on the main screen and then press the <Enter> key.

— This Page Intentionally Left Blank —