

## BIOS Setup

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

### CMOS Setup Utility

ROM PCI/ISA BIOS (2A69KF09) CMOS SETUP UTILITY AWARD SOFTWARE, INC.	
STANDARD CMOS SETUP BIOS FEATURES SETUP CHIPSET FEATURES SETUP POWER MANAGEMENT SETUP PNP/PCI CONFIGURATION LOAD BIOS DEFAULTS LOAD SETUP DEFAULTS	INTEGRATED PERIPHERALS SUPERVISOR PASSWORD USER PASSWORD IDE HDD AUTO DETECTION SAVE & EXIT SETUP EXIT WITHOUT SAVING
Esc : Quit F10 : Save & Exit Setup	↑ ↓ → ← : Select Item (Shift)F2 : Change Color
Time, Date, Hard Disk Type...	

A Setup program, built into the system BIOS, is stored in the CMOS RAM. This Setup utility program allows changes to the motherboard configuration settings. It is executed when the 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. Use the arrow keys to select and press Enter to run the selected program.

## Standard CMOS Setup

ROM PCI/ISA BIOS (2A69KF09)									
STANDARD CMOS SETUP									
AWARD SOFTWARE, INC.									
Date (mm:dd:yy): Tue, Jun 2 1998									
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	0	Auto
Primary Slave	: Auto	0	0	0	0	0	0	0	Auto
Secondary Master	: Auto	0	0	0	0	0	0	0	Auto
Secondary Slave	: Auto	0	0	0	0	0	0	0	Auto
Drive A : 1.44M, 3.5 in.					Base Memory: 640K Extended Memory: 31744K Other Memory: 384K Total Memory: 32768K				
Drive B : None									
Floppy 3 Mode Support: Disabled									
Video : EGA/VGA									
Halt On : All Errors									
Esc : Quit		↑ ↓ → ← : Select Item			PU/PD/+/- : Modify				
F1 : Help		(Shift)F2 : Change Color							

The Standard CMOS Setup screen is displayed above. Each item may have one or more option settings. The system BIOS automatically detects memory size, thus no changes are necessary. 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.

### Hard Disk Configurations

**TYPE:** Select User to fill the remaining fields. Select Auto to detect the HDD type automatically.

**SIZE:** The hard disk size. The unit is Mega Bytes.

**CYLS:** The cylinder number of the hard disk.

**HEAD:** The read/write head number of hard disk.

**PRECOMP:** The cylinder number at which the disk drive changes the write current.

**LANDZ:** The cylinder number that the disk drive heads (read/write) are seated when the disk drive is parked.

**SECTOR:** The sector number of each track defined on the hard disk.

**MODE:** Select Auto to detect the mode type automatically. If your hard disk supports the LBA mode, select LBA or Large. However, if your hard disk cylinder is more than 1024 and does not support the LBA function, set at Large. Select Normal if your hard disk supporting cylinders is below 1024.

### Floppy 3 Mode Support

This feature allows you to install a 3.5" (1.2MB) NEC 9801 floppy drive.  
The options are: Both , Disabled (Default), Drive A, Drive B.

### Software Turbo Speed

The BIOS supports Software Turbo Speed feature. Instead of pressing the Turbo Speed Button on the front panel, simply press the **Alt, Ctrl, and +** keys at the same time to enable the Turbo Speed feature; and press the **Alt, Ctrl, and -** keys at the same time to disable the feature.

## BIOS Features Setup

ROM PC/ISA BIOS (2A69KF09) BIOS FEATURES SETUP AWARD SOFTWARE, INC.		
Detect Boot Virus By Trend	: Enabled	Video BIOS Shadow : Enabled
CPU Internal Cache	: Enabled	
External Cache	: Enabled	
Quick Power On Self Test	: Enabled	
Boot From LAN First	: Enabled	
Boot Sequence (LS120/ZIP100)	: A, C, SCSI	
Swap Floppy Drive	: Disabled	
Boot Up Floppy Seek	: Enabled	
Boot Up NumLock Status	: On	
Typematic Rate Setting	: Disabled	
Typematic Rate (Chars/Sec)	: 6	
Typematic Delay (Msec)	: 250	
Security Option	: Setup	
PS/2 mouse function control	: Enabled	
OS Select For DRAM > 64MB	: Non-OS2	
		Esc: Quit      ++-- : Select Item
		F1 : Help      PU/PD/+/- : Modify
		F5 : Old Values (Shift)F2 : Color
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

### Detect Boot Virus By Trend

This feature starts the virus scan tool to detect if boot virus in boot sector of the first hard disk drive when booting up.  
The options are: Enabled (Default), Disabled.

### CPU Internal Cache

When enabled, improves the system performance. Disable this item when testing or trouble-shooting. The options are: Enabled (Default), Disabled.

### External Cache

When enabled, supports an optional cache SRAM.  
The options are: Enabled (Default), Disabled.

#### Quick Power On Self Test

When enabled, allows the BIOS to bypass the extensive memory test.  
The options are: Enabled (Default), Disabled.

#### Boot From LAN First

This feature makes the system bootable by the remote server via LAN.  
The options are: Enabled (Default), Disabled.

#### Boot Sequence (LS120/ZIP100)

Allows the system BIOS to first try to boot the operating system from the selected disk drive.  
The options are: A, C, SCSI (Default); C, A, SCSI; C, CDROM, A; CDROM, C, A; D, A, SCSI; E, A, SCSI; F, A, SCSI; SCSI, A, C; SCSI, C, A; C Only; LS/ZIP, C.

#### Swap Floppy Drive

Allows you to switch the order in which the operating system accesses the floppy drives during boot up.  
The options are: Enabled, Disabled (Default).

#### Boot Up Floppy Seek

When enabled, assigns the BIOS to perform floppy diskette drive tests by issuing the time-consuming seek commands.  
The options are: Enabled (Default), Disabled.

#### Boot Up Numlock Status

When set to On, allows the BIOS to automatically enable the Num Lock Function when the system boots up.  
The options are: On (Default), Off.

#### Typematic Rate Setting

The term typematic means that when a keyboard key is held down, the character is repeatedly entered until the key is released. When this item is enabled, you may change the typematic repeat rate.  
The options are: Disabled (Default), Enabled.

#### Typematic Rate (Chars/Sec)

Sets the rate of a character repeat when the key is held down.  
The options are: 6 (Default), 8, 10, 12, 15, 20, 24, 30.

### Typematic Delay (Msec)

Sets the delay time before a character is repeated.

The options are: 250 (Default), 500, 750, 1000 millisecond.

### Security Option

Allows you to set the security level of the system.

The options are: Setup (Default), System.

### PS/2 Mouse Function Control

When stay with the default, Enabled; the system will detect the PS/2 mouse and set IRQ12 service. When disabled, or no PS/2 mouse, the system will release IRQ12. The options are: Enabled (Default), Disabled.

### OS Select For DRAM > 64MB

If your operating system (OS) is OS/2, select the option OS2. Otherwise, stay with the default setting Non-OS2.

The options are: Non-OS2 (Default), OS2.

### Video BIOS Shadow

Allows the BIOS to copy the video ROM code of the add-on video card to the system memory for faster access. The options are: Enabled (Default), Disabled.

## Chipset Features Setup

ROM PCI/ISA BIOS (2A69KF09) CHIPSET FEATURES SETUP AWARD SOFTWARE, INC.	
SDRAM CAS latency Time	: 3
DRAM Data Integrity Mode	: Non-ECC
System BIOS Cacheable	: Enabled
Video RAM Cacheable	: Disabled
8 Bit I/O Recovery Time	: 1
16 Bit I/O Recovery Time	: 1
Memory Hole At 15M-16M	: Disabled
Passive Release	: Enabled
Delayed Transaction	: Disabled
AGP Aperture Size (MB)	: 64
Spread Spectrum Modulated	: Disabled
CPU Clock Frequency	: Default
CPU Warning Temperature	: 70°C/158°F
Shutdown System Temp.	: 80°C/176°F
Current CPU Temperature	: 29°C/84°F
Current System Temp.	: 35°C/95°F
Current CPU FAN1 Speed	: 0 RPM
Current CPU FAN2 Speed	: 0 RPM
V CORE	: 2.25 V +3.3 (V) : 3.32 V
+5.0 (V)	: 4.94 V +12 (V) : 11.85 V
-12 (V)	: -11.41 V -5 (V) : -5.01 V
Esc: Quit      ↑↓←→: Select Item F1: Help      PU/PD/+/=: Modify F5: Old Values      (Shift)F2: Color F6: Load BIOS Defaults F7: Load Setup Defaults	

#### SDRAM CAS latency Time

If any SDRAM DIMM is installed, this feature allows you to select the CAS Latency. The options are: 3 (Default), 2.

#### DRAM Data Integrity Mode

This feature provides software configurability of selecting between ECC (ECC generation and checking/correction) mode or non-ECC mode of operation of the DRAM interface. The options are: Non-ECC (Default), ECC.

#### System BIOS Cacheable

Select Enabled allows caching of the system BIOS ROM at F000h-FFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.  
The options are: Disabled, Enabled (Default).

#### Video RAM Cacheable

Selecting Enabled allows caching of the video BIOS ROM at C0000h to C7FFFh, resulting in better video performance. However, if any program writes to this memory area, a system error may result.  
The options are: Enabled (Default), Disabled.

#### 8 Bit I/O Recovery Time

The recovery time is the length of time, measured in CPU clocks, which the system will delay after the completion of an input/output request. This delay takes place because the CPU is operating so much faster than the input/output bus that the CPU must be delayed to allow for the completion of the I/O. The options are: 1 (Default), 2, 3, 4, 5, 6, 7, 8, NA. Unit: Bus clock.

#### 16 Bit I/O Recovery Time

This item allows you to determine the recovery time allowed for 16 bit I/O. The options are: 1 (Default), 2, 3, 4, NA. Unit: Bus clock.

#### Memory Hole At 15M-16M

For some special add-on cards, certain space in memory can be reserved for ISA cards. This memory must be mapped into the memory space below 16 MB. Selecting Enabled for memory hole supported, and Disabled for memory hole not supported. The options are: Enabled, Disabled (Default).

#### Passive Release

Set this option to Enabled to enable passive release for the Intel PIIX4E chip. The options are: Enabled (Default), Disabled.

**Delayed Transaction**

Set this option to Enabled to enable delayed transactions for the Intel PIIX4E chip. The options are: Enabled (Default), Disabled.

**AGP Aperture Size (MB)**

This option specifies the amount of system memory that can be used by the Accelerated Graphics Port (AGP).

The options are: 4, 8, 16, 32, 64 (Default), 128, 256.

**Spread Spectrum Modulated**

This feature is used to set the spread Spectrum to be center spread type or down spread type. The options are: Enabled, Disabled (Default).

**CPU Clock Frequency**

This feature allows you to set the CPU clock frequency. The default setting, Default, will detect your CPU clock frequency automatically. The recommended CPU clock frequencies are 66 and 100MHz. The other options may effect the system performance. If you set a unappropriate option which leads to a booting problem, keep pressing the Insert key until the display appears will solve it.

The options are: Default (Default), 75, 83, 66, 103, 112, 133, 100MHz.

**Shutdown System Temp.**

When Windows 98 installed, this feature helps to shutdown the system when the system temperature is as high as the selected temperature to prevent from the overheat problem.

The options are: 80°C/176°F (Default), Disabled, 70°C/158°F, 75°C/167°F.

**System Hardware Monitor -**

(CPU Warning Temperature, Current CPU Temperature, Current System Temp., CPUFAN1 Speed, Current CPUFAN2 Speed, VCORE)

This feature allows end users and technicians to monitor the data provided by the LDCM function of this board.

## Power Management Setup

ROM PCI/ISA BIOS (2A69KF09)	
POWER MANAGEMENT SETUP	
AWARD SOFTWARE, INC.	
Power Management	: Disable
PM Control by APM	: Yes
Video Off Method	: DPMS
Video Off After	: Suspend
MODEM Use IRQ	: 3
Doze Mode	: Disable
Standby Mode	: Disable
Suspend Mode	: Disable
HDD Power Down	: Disable
Suspend Mode Option	: PowerOn Suspend
Throttle Duty Cycle	: 62.5%
VGA Active Monitor	: Disabled
Soft-Off by PWR-BTTN	: Delay 4 Sec.
PWRON After PWR-Fail	: Former-Sts
CPUFAN Off In Suspend	: Enabled
Resume by Ring	: Enabled
Resume by LAN	: Enabled
Resume by Alarm	: Disabled
IRQ 8 Break Suspend	: Disabled
<b>** Reload Global Timer Events **</b> IRQ[3-7, 9-15], NMI : Enabled Primary IDE 0 : Disabled Primary IDE 1 : Disabled Secondary IDE 0 : Disabled Secondary IDE 1 : Disabled Floppy Disk : Disabled Serial Port : Enabled Parallel Port : Disabled	
Esc : Quit      **--> : Select Item F1 : Help      PU/PD+/- : Modify F5 : Old Values    (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults	

### Power Management

This item allows you to adjust the power management features. Select Disable for disabling global power management features. Select User Defined for configuring your own power management features. MIN Saving initiates all predefined timers in their minimum values. MAX Saving, on the other hand, initiates maximum values. The options are: Disabled (Default), User Defined, MIN Saving, MAX Saving.

### 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 power saving mode when all tasks are done. The options are: No, Yes (Default).

### Video Off Method

The option V/H SYNC+Blank allows the BIOS to blank off screen display by turning off the V-Sync and H-Sync signals sent from add-on VGA card. DPMS Supported allows the BIOS to blank off screen display by your add-on VGA card which supports DPMS (Display Power Management Signaling function). Blank Screen allows the BIOS to blank off screen display by turning off the red-green-blue signals.



The options are: V/H SYNC+Blank, DPMS (Default), Blank Screen.

#### Video Off After

This feature allows you to select under which mode to power off your monitor. The options are: Standby, Doze, N/A, Suspend (Default).

#### MODEM Use IRQ

This feature allows you to select the IRQ# of the system that is the same IRQ# as the modem use. The options are: NA, 3 (Default), 4, 5, 7, 9, 10, 11.

#### Doze Mode

When disabled, the system will not enter Doze mode. The specified time option defines the idle time the system takes before it enters Doze mode.

The options are: Disable (Default), 1, 2, 4, 8, 12, 20, 30, 40 Min, 1 Hr.

#### Standby Mode

When disabled, the system will not enter the Standby mode. The specified time option defines the idle time before enters Standby mode.

The options are: Disable (Default), 1, 2, 4, 8, 12, 20, 30, 40 Min, 1 Hr.

#### Suspend Mode

When disabled, the system will not enter Suspend mode. The specified time option defines the idle time the system takes before it enters Suspend mode.

The options are: Disable (Default), 1, 2, 4, 8, 12, 20, 30, 40 Min, 1 Hr.

#### HDD Power Down

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

The options are: Disable (Default), 1 Min..15 Min, When Suspend.

#### Suspend Mode Option

When an ATX power supply installed, this feature offers an advanced way to saving more power and prompt your system performance. If you stay with the default setting, PowerOn Suspend option, the system will enter the suspend mode (monitor off, CPU off) from full-on power status by press the power button. If set at Suspend to Disk, however, the status will directly back to the working stage of the system at the moment that is off. This can

be done owing to the system saves all the configurations to the hard disk first (hard disk must have sufficient space to accomodate these data), then shut off.

For using this feature, a command (see the NOTE below) is needed to be excute while boot the system. The options are: PowerOn Suspend (Default), Suspend to Disk.

**CAUTION:**

1. If Windows 95 or DOS used, the command: *ZVHDD /c /file* is recommended. The hard disk available space must be larger than memory space plus 4MB.
2. If Windows NT or OS2 is used, *the command: ZVHDD /c /partition* is recommended. *It* creates a new partition in the hard disk. To make sure that at least one partition is not used is important.
3. Suspend\_to\_Disk feature may fail if you have improper add-on devices. For example, your PCI VGA adapter is non-VESA complaint or your sound card is not Sound Blaster compatible or does not have APM driver. It may lead to data corruption.

Please read the related README file in the CD (or floppy disk) that comes with this board for detail information before your operate this feature.

**Throttle Duty Cycle**

When the system enters Doze mode, the CPU clock runs only part of the time. You may select the percent of time that the clock runs.

The settings are 12.5 %, 25 %, 37.5 %, 50 %, 62.5 % (Default), 75%, 87.5%.

**VGA Active Monitor**

Enable this feature will cause any screen update to reload the global time.

The options are: Disabled (Default), Enabled.

**Soft-Off by PWR-BTTN**

This feature is designed for the case when you use an ATX power supply.

The selection Delay 4 Sec. will allow the system shut down after 4 seconds after the power button is pressed. The selection Instant-Off will allow the system shut down immediately once the power button is pressed.

The settings are Delay 4 Sec. (Default) or Instant-Off.

**PWRON After PWR-Fail**

When the system is shut down owing to the power failure, the system will not be back to power on by itself. This feature allows you to set the system back to which power status of the system when the system power is resumed. The options are Former-Sts (Default), On, or Off.

#### CPUFAN Off In Suspend

Enabling this feature will allow the CPU fan stop running when the system enters Suspend mode. The options are Disabled or Enabled (Default).

#### Resume by Ring

An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from a soft off state. The options are Disabled or Enabled (Default).

#### Resume by LAN

When Enabled, this feature allows the system to resume normal operation if connected over LAN. The options are Disabled or Enabled (Default).

#### Resume by Alarm

When set at Enabled, it allows you to set the time when the system to be turned on from the system power-off status. The settings are Disabled (Default) or Enabled.

#### Date (of Month) Alarm

If Resume by Ring is set at Enabled , this feature allows you to set the day of the alarm starts when the RTC Alarm Resume From Soft Off is set to be Enabled. The options are: 0 (Default), 1..31.

#### Time (hh:mm:ss) Alarm

If Resume by Ring is set at Enabled , this feature allows you to set the time of the alarm starts when the RTC Alarm Resume From Soft Off is set to be Enabled. The options are: 7: 0: 0 (Default). hh (*hour*) - 0, 1, 2,..., 23; mm (*minute*) - 0, 1, 2,...,59; ss (*second*) - 0, 1, 2,...,59.

#### IRQ 8 Break Suspend

You can turn On or Off monitoring of IRQ8 (the Real Time Clock) so it does not awaken the system from Suspend mode. The settings are Disabled (Default) or Enabled.

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

When Enabled, an event occurring on each device uses these resources to restart the global time for Standby mode. The settings are Disabled or Enabled. The default setting is Enabled.

### Primary IDE 0, Primary IDE 1, Secondary IDE 0, Secondary IDE 1, Floppy Disk, Serial Port, Parallel Port

Enable this feature will keep the system restarting the global time when the selected device is active. The settings are Disabled or Enabled.

The default setting is Disabled, except Serial Port.

## PNP/PCI Configuration

ROM PCI/ISA BIOS (2A69KF09) PNP/PCI CONFIGURATION AWARD SOFTWARE, INC.	
PNP OS Installed : No	Slot 1 Use IRQ No. : Auto
Resources Controlled By : Auto	Slot 2 Use IRQ No. : Auto
Reset Configuration Data : Disabled	Slot 3 Use IRQ No. : Auto
	Slot 4 Use IRQ No. : Auto
	PCI IRQ Activate By : Level
	Init Primary Display : PCI
	Assign IRQ For VGA : Enabled
Esc : Quit      ++-- : Select Item	
F1 : Help      PU/PD/+/- : Modify	
F5 : Old Values (Shift)F2 : Color	
F6 : Load BIOS Defaults	
F7 : Load Setup Defaults	

### PNP OS Installed

If your operating system is a Plug-and-Play one, such as Windows 95, select Yes. The options are: No (Default), Yes.

### Resources Controlled By

If set at Auto, the BIOS arranges all system resources. If there exists conflict, select Manual. The options are: Auto (default), Manual. The manual options of **IRQ- / DMA- assigned to** are: Legacy ISA, PCI/ISA PnP.

### Reset Configuration Data

When enabled, allows the system to clear the last BIOS configuration data and reset with the default data. The options are: Enabled, Disabled (default).

### Slot 1/2/3/4 Use IRQ No.

This feature allows you to assign the PCI IRQ numbers for PCI slots. Selecting the default, AUTO, allows the PCI controller to automatically allocate the IRQ numbers.

The options are: Auto (Default), 3, 4, 5, 7, 9, 10, 11, 12, 14, 15.

#### PCI IRQ Activate By

We suggest that you set this to its default configuration unless you are a qualified technician. The options are: Level (Default), Edge.

#### Init Primary Display

When you install an AGP VGA card and/or a PCI VGA card on the board, this feature allows you to select the initiation of the monitor display from which card. The options are: PCI (Default), AGP.

#### Assign IRQ For VGA

If your PCI VGA card does not need an IRQ, select Disabled to release an IRQ for system use. The options are: Enabled, Disabled (Default).

### Load BIOS Defaults

BIOS defaults contain the most appropriate values of the system parameters that allow minimum system performance. The OEM manufacturer may change the defaults through MODBIN before the binary image burns into the ROM.

### Load Setup Defaults

Selecting **this field** loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

## Integrated Peripherals

ROM PCI/ISA BIOS (2A69KF09) INTEGRATED PERIPHERALS AWARD SOFTWARE, INC.			
IDE HDD Block Mode	: Enabled	POWER ON Function	: BUTTON ONLY
On-Chip Primary PCI IDE	: Enabled		
On-Chip Secondary PCI IDE	: Enabled		
IDE Primary Master PIO	: Auto	KBC input clock	: 8 MHz
IDE Primary Slave PIO	: Auto	Onboard FDC Controller	: Enabled
IDE Secondary Master PIO	: Auto	Onboard Serial Port 1	: 3F8/IRQ4
IDE Secondary Slave PIO	: Auto	Onboard Serial Port 2	: 2F8/IRQ3
IDE Primary Master UDMA	: Auto	UART Mode Select	: Normal
IDE Primary Slave UDMA	: Auto	Onboard Parallel Port	: 378/IRQ7
IDE Secondary Master UDMA	: Auto	Parallel Port Mode	: SPP
IDE Secondary Slave UDMA	: Auto	Esc : Quit	↑↓←→ : Select Item
HDD S.M.A.R.T. Capability	: Disabled	F1 : Help	PU/PD+/- : Modify
USB Controller	: Disabled	F5 : Old Values (Shift)F2 : Color	
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

### IDE HDD Block Mode

When enabled, the system executes read/write requests to hard disk in block mode. The options are: Enabled (Default), Disabled.

### On-Chip Primary PCI IDE

When enabled, allows you to use the onboard primary PCI IDE.  
The options are: Enabled (Default), Disabled.

### On-Chip Secondary PCI IDE

When enabled, allows you to use the onboard secondary PCI IDE.  
The options are: Enabled (Default), Disabled.

### IDE Primary Master PIO

Allows an automatic or a manual configuration of the PCI primary IDE hard disk (master) mode.  
The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

### IDE Primary Slave PIO

Allows an automatic or a manual configuration of the PCI primary IDE hard disk (slave) mode.  
The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

#### IDE Secondary Master PIO

Allows an automatic or a manual configuration of the PCI secondary IDE hard disk (master) mode.

The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

#### IDE Secondary Slave PIO

Allows an automatic or a manual configuration of the PCI secondary IDE hard disk (slave) mode.

The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

#### IDE Primary Master UDMA

Allows you to select the first PCI IDE channel of the first master hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

#### IDE Primary Slave UDMA

Allows you to select the first PCI IDE channel of the first slave hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

#### IDE Secondary Master UDMA

Allows you to select the second PCI IDE channel of the secondary master hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

#### IDE Secondary Slave UDMA

Allows you to select the second PCI IDE channel of the secondary slave hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

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

“S.M.A.R.T” is the abbreviation of “Self-Mointoring, Analysis and Reproting Technology”. To enable it will assist you in preventing some (but not all) system down time due to hard disk drive failure.

The options are: Enabled, Disabled (Default).

#### USB Controller

If you do not use the onboard USB feature, it allows you to disable it.

The options are: Enabled, Disabled (Default).





### BIOS Support USB Keyboard

If Enabled is selected in the above feature, this feature will appear.

If your USB devices cannot be detected automatically by the system BIOS or some driver diskettes came with your USB devices, please set at DOS for allowing you to install the driver.

The options are: Setup (Default), DOS.

### POWER ON Function

This feature provides you with several ways to power on the system; they are: BUTTON ONLY (press the power button), Password (enter a password to power on the system), Mouse Right (click the mouse right button), Mouse Left (click the mouse left button), Hot Key (press the selected hot key). To use this feature, you have to set the jumper KB\_PWN in Chapter 2 at Enable.

The options are: BUTTON ONLY (Default), Password, Mouse Right, Mouse Left, Hot Key.

### KB Power On Password

When set the POWER ON Function at Password, this feature will appear on the monitor. It allows you to set a password to power the system. Press the Enter key when you are prompted to set the power-on password. Type it up to five characters and press the Enter key; then confirm it by typing the password again and pressing the Enter key to complete the setting procedures. To disable the power-on password, press the Enter key when it is disabled. When the power-on password is set, the system can not be powered on by the power button, mouse, or hot key. Once the power-on password is set, you can power on the system simply by entering the password. This feature offers the security on your computer system.

### Hot Key Power ON

When set POWER ON Function at Hot Key, this feature will appear on the monitor. It allows you to select a hot key to power on your computer.

The options are: Ctrl-F1 (Default), Ctrl-F2, Ctrl-F3, Ctrl-F4, Ctrl-F5, Ctrl-F6, Ctrl-F7, Ctrl-F8, Ctrl-F9, Ctrl-F10, Ctrl-F11, Ctrl-F12.

### KBC input clock

This feature allows you to select different KBC input clocks which your keyboard actually supported. Please read your keyboard manual also for more information.

The options are: 6, 8 (Default), 12, 16 MHz.

#### Onboard FDC Controller

When enabled, the floppy diskette drive (FDD) controller is activated.  
The options are: Enabled (Default), Disabled.

#### Onboard Serial Port 1

If the serial port 1 uses the onboard I/O controller, you can modify your serial port parameters. If an I/O card needs to be installed, COM3 and COM4 may be needed.  
The options are: 3F8/IRQ4 (Default), 3E8/IRQ4, 2F8/IRQ3, 2E8/IRQ3, Disabled.

#### Onboard Serial Port 2

If the serial port 2 uses the onboard I/O controller, you can modify your serial port parameters. If an I/O card needs to be installed, COM3 and COM4 may be needed.  
The options are: 2F8/IRQ3 (Default), 3E8/IRQ4, 2E8/IRQ3, 3F8/IRQ4, Disabled.

#### UART Mode Select

Allows you to select the IR modes if the serial port 2 is used as an IR port. Set at Normal, if you use COM2 as the serial port as the serial port, instead as an IR port.  
The options are: Normal (Default), IrDA, ASKIR.

#### RxD , TxD Active

The feature allows you to select the active signals of the reception end and the transmission end. This is for technician use only.  
The options are: Hi, Hi (Default); Hi, Lo; Lo, Hi; Lo, Lo.

#### IR Transmission Delay

When Enabled, the transmission delays 4 characters-time (40 bit-time) if SIR is changed from RX mode to TX mode. When Disabled, no transmission delay if SIR is changed from RX mode to TX mode.  
The options are: Enabled (Default), Disabled.

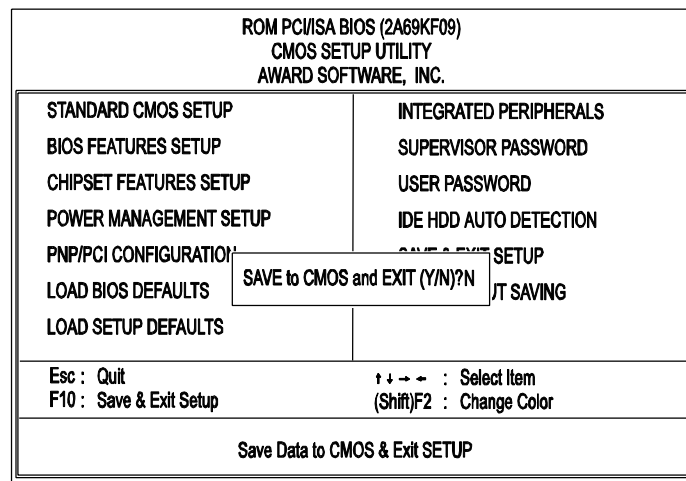
#### Onboard Parallel Port

Allows you to select from a given set of parameters if the parallel port uses the onboard I/O controller.  
The options are: 378/IRQ7 (Default), 278/IRQ5, 3BC/IRQ7, Disabled.

Allows you to connect with an advanced printer.  
The options are: SPP (Default), EPP, ECP, ECP+EPP.

If you select EPP or ECP+EPP in Parallel Port Mode, this feature allows you to select the EPP type version.  
The options are: EPP1.9, EPP1.7 (Default).

If you select ECP or ECP+EPP in Parallel Port Mode, this feature allows you to select Direct Memory Access (DMA) channel.  
The options are: 3 (Default), 1.



Under the BIOS Feature Setup, if System is selected under the Security Option field and the Supervisor Password is enabled, you will be prompted for the Supervisor Password every time you try to enter the CMOS Setup Utility. If System is selected and the User Password is enabled, you will be requested to enter the User Password every time you reboot the system. If Setup is selected under the Security Option field and the User Password is enabled, you will be prompted only when you reboot the system.

### Clear Password

If you forget your password, turn off the system power first and remove the system unit cover. Please refer to Page 2, **Clear Password** to clear the password and then reset the system. At this point, you will not be asked for the password to enter Setup.

## IDE HDD Auto Detection

ROM PCI/ISA BIOS (2A69KF09) CMOS SETUP UTILITY AWARD SOFTWARE, INC.							
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR MODE
Primary Master :							
Select Primary Master Option (N=Skip) : N							
OPTIONS	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
2 (Y)	851	825	32	0	1650	63	LBA
1	852	1651	16	65535	1650	63	NORMAL
3	851	825	32	65535	1650	63	LARGE
Note : Some OSes (like SCO-UNIX) must use "NORMAL" for installation							
ESC : Skip							

The IDE Hard Disk Drive Auto Detection feature automatically configures your new hard disk. Use it for a quick configuration of new hard drives. This feature allows you to set the parameters of up to four IDE HDDs. The option with (Y) are recommended by the system BIOS. You may also keys in your own parameters instead of setting by the system BIOS. After all settings, press Esc key to return the main menu. For confirmation, enter the Standard CMOS Setup feature.

## Save and Exit Setup

ROM PCI/ISA BIOS (2A69KF09) CMOS SETUP UTILITY AWARD SOFTWARE, INC.	
STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP
LOAD BIOS DEFAULTS	EXIT SAVING
LOAD SETUP DEFAULTS	
SAVE to CMOS and EXIT (Y/N)?N	
Esc : Quit                      ↑ ↓ → ← : Select Item F10 : Save & Exit Setup        (Shift)F2 : Change Color	
Save Data to CMOS & Exit SETUP	

After you have made changes under Setup, press Esc to return to the main menu. Move cursor to Save and Exit Setup or press F10 and then press Y to change the CMOS Setup. If you did not change anything, press Esc again or move cursor to Exit Without Saving and press Y to retain the Setup settings. The following message will appear at the center of the screen to allow you to save data to CMOS and exit the setup utility:

**SAVE to CMOS and EXIT (Y/N)?**

### Exit without Saving

If you select this feature, the following message will appear at the center of the screen to allow you to exit the setup utility without saving CMOS modifications:

**Quit Without Saving (Y/N)?**

**NOTE:** Default values of the various Setup items on this chapter may not necessarily be the same ones.