2. BIOS Setup

Introduction

This manual discussed Award Setup program built into the ROM BIOS. The Setup program allows 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-Athlon / Duron 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

These 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

These 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.

DRAM Support

SDRAM (Synchronous DRAM) are supported.

Support CPU

This AWARD BIOS supports the AMD Athlon/Duron CPU.

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.

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

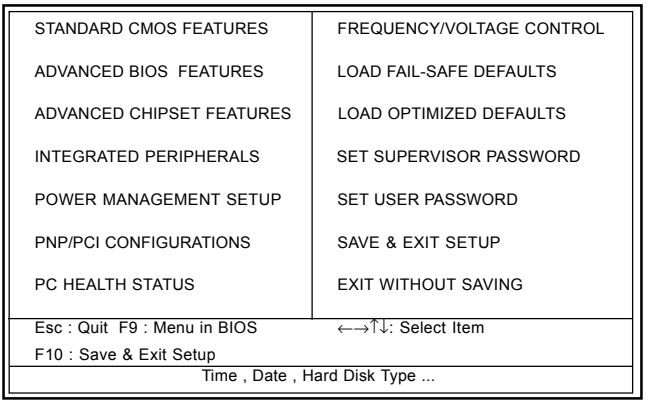
Once you enter AWARD BIOS CMOS Set up Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup function. Use the arrow keys to select among the items and press<Enter> to accept and enter the sub-menu.

"WARNING"

The information about BIOS defaults on manual (Figure 1,2,3,4,5,6,7,8,9,10,11,12,13,14)is just for reference,please refer to the BIOS installed on the board for update information.

◎ Figure 1. Main Menu

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software



Standard CMOS Features

This setup page includes all the item in standard compatible BIOS.

Advanced BIOS Features

This setup page includes all the item of BIOS special enchanced features.

Advanced Chipset Features

This setup page includes all the item of Chipset special enchanced features.

Integrated Peripherals

This selection page includes all the item of IDE hard drive and Programmed Input/Output features.

Power Management Setup

This setup page includes all the item of power management features.

PnP/PCI Configuration

This setup page includes IRQ Setting by user define or default.

PC Health Status

This page shows the hardware Monitor information of the system.

Frequency / Voltage Control

This setup page is control CPU's clock and frequency ratio.

Load Fail-Safed 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 seccessfully, 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 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

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software Standard CMOS Features

Date(mm:dd:yy)	Tue,Jun 6 2000	Item Help
Time (hh:mm:ss)	11:26:10	Menu Level
IDE Primary Master	Press Enter None	
IDE Primary Slave	Press Enter None	Change the day,
IDE Secondary Master	Press Enter None	month,year
IDE Secondary Master	Press Enter None	and century.
Drive A	1.44M,3.5 in	
Drive B	None	
Video	EGA/VGA	
Halt On	All,But Keyboard	
Base Memory	xxxx	
Extended Memory	xxxx	
Total	xxxx	

↔↑↓: 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.

2.3 Advanced BIOS Features

◎ Figure 3. Advanced BIOS Features

CMOS Setup Utility-Copyright(C) 1984-2000 Award

Software Advanced BIOS Features

Virus Warning	Disabled	Item Help
CPU Internal Cache	Enabled	
External Cache	Enabled	Menu Level
CPU L2 Cache ECC Checking	Enabled	
Quick Power On Self Test	Enabled	Allows you to
First Boot Device	Floopy	choose the
Second Boot Device	HDD-0	VIRUS warning
Third Boot Device	CD-ROM	feature for IDE
Boot Other Device	Enabled	Hard Disk boot
Swap Floppy Drive	Disabled	sector protection.
Boot Up Floppy Seek	Disabled	If this function
Boot Up NumLock Status	On	is enabled and
Gate A20 Option	Fast	someone attempt
Typematic Rate Setting	Disabled	to write data into
Typematic Rate (Chars/Sec)	6	this area,BIOS
Typematic Delay (Msec)	250	will show a
Security Option	Setup	warning message
OS Select For DRAM	Non-OS2	on screen and
Video BIOS Shadow	Enabled	alarm beep

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

Virus Warning

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

The Choices:Disabled(default),Enabled.

CPU Internal Cache

These two categories speed up memory access. However, it depends on CPU/chipset design.

Enabled(default)	Enabled cache.
Disabled	Disabled cache.

External Cache

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

Enabled(default)	Enabled cache.
Disabled	Disabled cache.

CPU L2 Cache ECC Checking

The item allows you to enable/disable CPU L2 Cache ECC Checking.

The Choices:Enabled(default),Disabled.

Quick Power On Self Test

This category seeds 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 Other Device

These BIOS attempts to load the operating system from the devices in the sequence selected in these items.

The Choices: Floppy, LS120, HDD-0, HDD-1, HDD-2, HDD-3, SCSI, CDROM, Enabled, ZIP, LAN, Disabled.

Swap Floppy Drive

If the system has two floppy drives, you can swap the logical drive name assignments.

The Choices:Disabled,Enabled(default).

Boot Up Floppy Seek

Seek disk drives during boot up. Disabled speeds boot-up.
The Choices:Disabled(default),Enabled.

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.

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 defined if the correct password is not entered in prompt.
Setup(default)	The system will boot,but access to Setup will be defined 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

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 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

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software Advanced Chipset Features

DRAM Timary By SPD	Disabled	Item Help
DRAM Clock	100	
SDRAM Cycle Length	3	
Bank Interleave	Disabled	
Memory Hole	Disabled	Menu Level
PCI Master Pipeline Req	Enabled	
P2C/C2P Concurrency	Disabled	
Fast R-W Turn Around	Disabled	
System BIOS Cache	Disabled	
Video RAM Cacheable	Disabled	
Frame Buffer Size	128M	
AGP Aperture Size	64M	
AGP Mode	2X	
AGP Driving Control	Auto	
AGP Driving Value	DA	
On Chip USB	Enabled	
On Chip USB2	Enabled	
USB Keyboard Support	Disabled	
On Chip Sound	Auto	
On Chip Modem	Auto	
CPU to PCI Write Buffer	Enabled	
PCI Dynamic Bursting	Enabled	
PCI Master 0 WS Write	Enabled	
PCI Delay Transaction	Disabled	
PCI #2 Access #1 Retry	Enabled	
AGP Master 1WS Write	Disabled	
AGP Master 1WS Read	Disabled	

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

DRAM Timary by SPD
The Choices:Disabled(default),Enabled

SDRAM Cycle Length

When synchronous DRAM is installed, the number of clock cycle of CAS latency depends on the DRAM timing. Do not reset this field from the default value specified by the system designer.
The Choices:3(default),2,Auto.

DRAM Clock

This item determines DRAM Clock following the CPU host clock,or .
The Choices:100(default),133.

P2C/C2P Concurrency

The item allows you to enable/disable the PCI to CPU to PCI concurrency.
The Choices:Disabled(default),Enabled.

Fast R-W Turn Around

The item controls the DRAM timing.It allows you to enable/disable the fast read/write turn around.
The Choices:Disabled(default),Enabled.

Frame Buffer Size

The item onchip VGA share memory size.
The Choices:128M(default),4M,8M,16M,32M,64M.

AGP Mode

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

Onchip Sound

The default setting of this item unilizes an onboard sound chip for audio output. There is no need to buy and insert a sound card. If sound card is installed,disable this item.
The Choices:Auto(default),Disabled

Onchip Modem

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

The Choices:Auto(default),Disabled.

Onchip USB/USB2

This should be enabled if your system has a USB installed on the system board and you whish 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 Support

Select Enabled if your system contains a Universal Serial Bus(USB) controller and you have a USB keyboard.

The Choices:Disabled(default),Enabled.

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

AGP Driving Control

By choosing "Auto" the system BIOS will the AGP output Buffer Drive strength P Ctrl by AGP Card. By choosing "Manual",it allows user to set AGP output Buffer Drive strength P Ctrl by manual.

The Choices:Auto(default),Manual.

PCI Delay Transaction

The Choices:Disabled(default),Enabled.

AGP Master 1WS Write

When Enabled,write to the AGP (Accelerated Graphic Port) are executed with one wait states.

The Choices:Disabled(default),Enabled.

AGP Master 1WS Read

When Enabled,read to the AGP (Accelerated Graphic Port) are executed with one wait states.

The Choices:Disabled(default),Enabled.

2.5 Integrated Peripherals

◎ Figure 5. Integrated Peripherals

CMOS Setup Utility-Copyright(C) 1984-2000 Award

Software Integrated Peripherals

On-Chip IDE Channel 0	Enabled	Item Help
On-Chip IDE Channel 1	Enabled	
IDE Prefetch Mode	Enabled	Menu Level
Primary Master PIO	Auto	
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	
Init Display First	PCI Solt	
IDE HDD Block Mode	Enabled	
Onboard FDC Controller	Enabled	
Onboard Serial Port 1	Auto	
Onboard Serial Port 2	Auto	
UART 2 Mode	Standard	
IR Function Duplex	Half	
RxD,TxD Active	No,Yes	
Onboard Parallel Port	378/IRQ7	
Parallel Onboard Mode	ECP/EPP	
ECP Mode Use DMA	3	
EPP Mode Type	EPP1.9	
Onboard Legacy Audio	Enabled	
Sound Blaster	Disabled	
SB I/O Base Address	220H	
SB IRQ Select	IRQ 5	
SB DMA Select	DMA1	
MPU - 401	Disabled	
MPU - 401 I/O Address	330-333H	
Game Port (200-270H)	Enabled	

←→↑↓: 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.

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.

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.

USB Controller

Enabled(default)	Enabled.
Disabled	Disabled.

USB Keyboard Support

Enabled(default)	Enabled.
Disabled	Disabled.

Init Display First

PCI Slot(default)	Set Init Display First to PCI Slot.
Onboard AGP	Set Init Display First to onboard AGP.

IDE HDD Block Mode

Enabled(default)	Enabled.
Disabled	Disabled.

Onboard FDC Controller

Enabled(default)	Enabled.
Disabled	Disabled.

Onboard Serial Port1/Port2

Select an address and corresponding interrupt for the first and second serial ports.

The Choices:Auto(default),(3F8/IRQ4),(2F8/IRQ3), (3E8/IRQ4),(2E8/IRQ3).

UART 2 Mode

This item allows you decide which Infra Red(IR) function of the onboard I/O chip,you wish to use.

The Choices:Standard (default),SCR,ASKIR.

IR Function Duplex

This item allows you decide which Infra Red(IR) function of the onboard I/O chip.

The Choices:Half (default),Full.

Parallel Port Mode

SPP	Using Parallel port as Standard Parallel Port.
EPP	Using Parallel port as Ex-hancedParallel Port.
ECP	Using Parallel port as Ex-tended Capabilites Port.
ECP+EPP(default)	Using Parallel port as ECP+EPP mode.

Onboard Parallel Port

This item allows you decide access onboard parallel port controller with which I/O address.

The Choices:378/IRQ7

Onboard Legacy Audio

The Choices:Enabled(default),Disabled.

Sound Blaster

The Choices:Disabled(default),Enabled.

MPU -401

The Choices:Disabled(default),Enabled.

MPU -401 I/O Address(330-333H)

Change the SoundBlaster Pro MPU-401 I/O address.

Game Port (200-270H)

Change the joystick connect address.

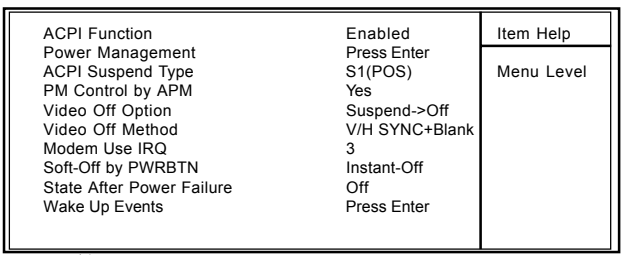
The Choices:Enabled(default),Disabled.

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

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software Power Management Setup



ACPI Function

This item display status of the Advanced Configuration and Power Management (ACPI).

Power Management

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

1.HDD Power Down.

2.Doze Mode.

3.Suspend Mode.

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

Power Management

This option allows you to set each mode individually. When not disabled, each of the ranges are from 1 min. to 1 hr. except for HDD Power Down which ranges from 1 min. to 15 min. and disable.

The Choices:User Define (default), Min Saving, Max Saving.

HDD Power Down

By default,this is "Disabled", meaning that no matter the mode the rest of system, the hard drive will remain ready. Otherwise,you have a range of choices from 1 to15 minutes or Suspend. This means that you can select to have your hard disk drive be turned off after a selected number of minutes or when the rest or the system goes into a suspend mode.

Disabled(default).

Doze Mode/Suspend Mode

The **Doze Mode** , and **Suspend Mode** fields set the Period of time after each of these modes actives. At Max Saving, these modes activate sequentially (in the given order) after one minute; at Min Saving after one hour.

ACPI Suspend Type

The item allows you to select the suspend type under ACPI operating system.

S1(POS)(default)	Power on Suspend.
S3(STR)	Suspend to RAM.

PM Control by APM

No	System BIOS will ignore APM when Power Management is on.
Yes(default)	System BIOS will wait for APM'S prompt before it enters any PM mode.

Video Off Option

This field determines when to activate the vedio off feature for monitor power management.

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

Soft-Off by PWRBTN

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.

State After Power Failure

The allows you to set whether you want your system to reboot after the power has been interrupted. [Off] leaves your system off and [On] reboots your system. [Auto] returns your computer back to the state it was in before the power failure.

The Choices:Off(default),On,Auto.

Wake Up Events

If you highlight the literal “Press Enter” next to the “Wake Up Events” label and then press the enter key, it will take you 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.

Modem Ring Resume

To use this function, you need a LAN add-on card which support power on function. It should also support the wake-up on LAN jump.**The Choices:Disabled**(default).

RTC Alarm Resume

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

Primary INTR

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 interrupt 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 user should make any changes to the default settings.

◎ Figure 7. PnP/PCI Configurations

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software PnP/PCI Configurations

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

←→↑↓: 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 system(DOS, Netware), this option must 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.

IRQ3	assigned to:PCI/ISA PnP
IRQ4	assigned to:PCI/ISA PnP
IRQ5	assigned to:PCI/ISA PnP
IRQ6	assigned to:PCI/ISA PnP
IRQ7	assigned to:PCI/ISA PnP
IRQ8	assigned to:PCI/ISA PnP
IRQ9	assigned to:PCI/ISA PnP
IRQ10	assigned to:PCI/ISA PnP
IRQ11	assigned to:PCI/ISA PnP
IRQ12	assigned to:PCI/ISA PnP
IRQ13	assigned to:PCI/ISA PnP
IRQ14	assigned to:PCI/ISA PnP
IRQ15	assigned to:PCI/ISA PnP
DMA-0	assigned to:PCI/ISA PnP
DMA-1	assigned to:PCI/ISA PnP
DMA-2	assigned to:PCI/ISA PnP
DMA-3	assigned to:PCI/ISA PnP
DMA-4	assigned to:PCI/ISA PnP
DMA-5	assigned to:PCI/ISA PnP
DMA-6	assigned to:PCI/ISA PnP
DMA-7	assigned to:PCI/ISA PnP

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 automatcally 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 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.

DMA Resources

When resources are controlled manually, assign each DMA channel a type, depending on the type of device using the DMA channel.

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, where the bus, 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 forward to the ISA bus. The non-VGA ISA graphic controller can then snoop the data on the ISA bus. Unless you have the above sistuation, you should disable this option.

Disabled(default)	Disabled the function.
Enabled	Enabled the function.

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 PC Health Status

◎ Figure 8. PC Health Status

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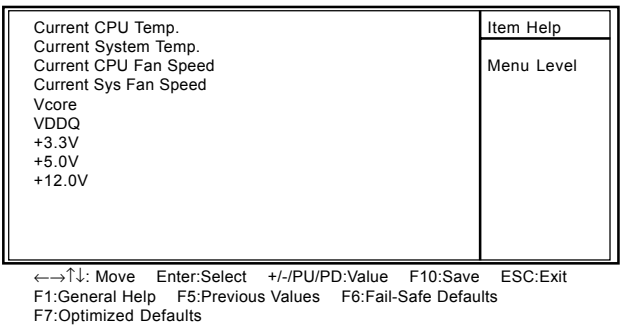
Software PC Health Status



Current CPU Temp.

This field displays the current CPU temperature, if you computer contain a monitoring system.

Current System Temp.

This field displays the current system temperature, if you computer contain a monitoring system.

Current CPU Fan Speed

These field displays the current speed of up to CPU Fans, if you computer contain a monitoring system.

Current System Fan Speed

These field displays the current speed of up to System Fans, if you computer contain a monitoring system.

Current CPU Vcore VccSRAM,3.3V,5V,12V

Detect system's voltage status automatically.

2.9 Frequency / Voltage Control

◎ Figure 9. Frequency / Voltage Control

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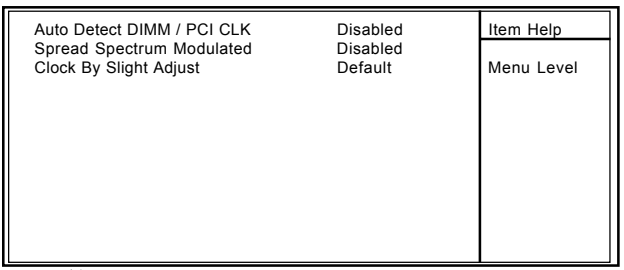
Software Frequency / Voltage Control



Auto Detect DIMM / PCI CLK

This item allows you to enable/disable auto detect DIMM / PCI CLOCK.

The Choices:Disabled(default),Enabled.

Clock By Slight Adjust 100

This item allows you to select CPU Clock .

NOTE:

If unfortunately,the system's frequrency that you are selected is not functioning,there are two methods od booting-up the system.

Method1:Clear the COMS data by setting the JP2((2-3) closed) as "On" status.All the COMS data will be loaded as default setting.

Method2:Press the<Insert>key and Power button simultaneously, after that keep-on pressing the<Insert> key until the Power-on screen showed. This action will boot-up the system according to FSB of the processor.

2.10 Load Fail-Safe Defaults

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

◎ Figure 10. Load Fail-Safe Defaults

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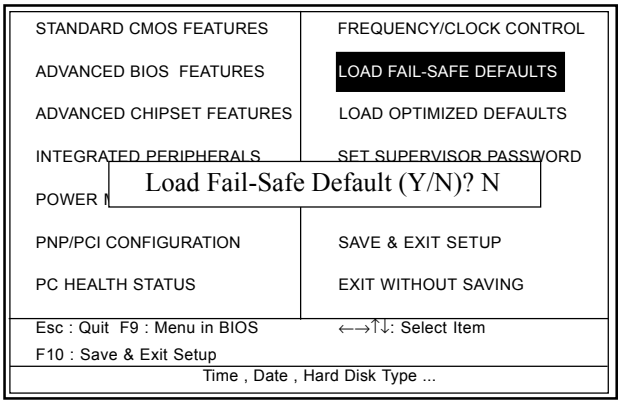

Pressing 'Y' loads the default values that are factory settings for optimal performance system operations.

2.11 Load Optimized Defaults

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

◎ Figure 11. Load Optimized Defaults

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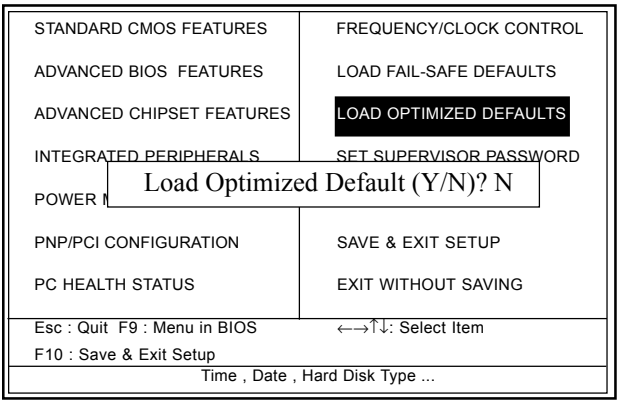

Pressing 'Y' loads the default values that are factory settings for optimal performance system operations.

2.12 Set Supervisor / User Password

◎ Figure 12. Set Supervisor / User Password

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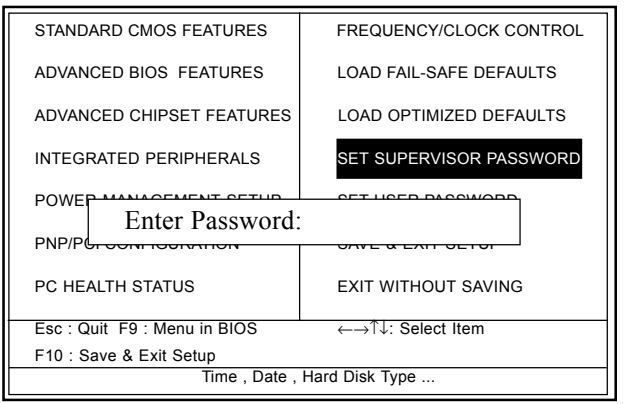

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Enter Password

Type the 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 comfirm the password. Type the password again and press <Enter>. You may also press <ESC> to about the selection and not enter a password. To disable password, just press <Enter> when you are prompted to enter password. A message will comfirm 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 willbe 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 Security Option of BIOS Features Setup Menu, you willbe prompted only when you try to enter Setup.

2.13 Save & Exit Setup

◎ Figure 13. Save & Exit Setup

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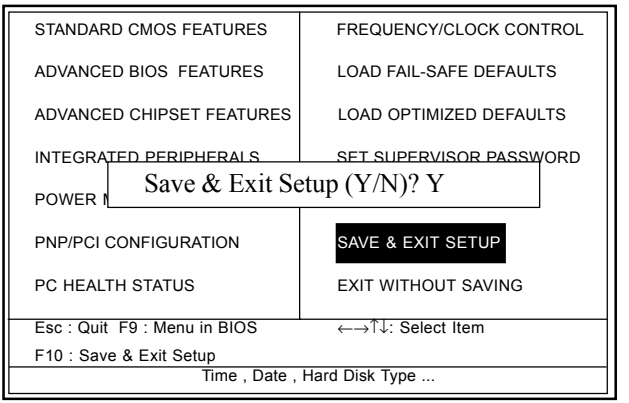

Type “Y” will quit the Setup Unility and save the user setup value to RTC CMOS RAM.

Type “N” will return Setup Unility.

2.14 Exit Without Saving

◎ Figure 14. Exit Without Saving

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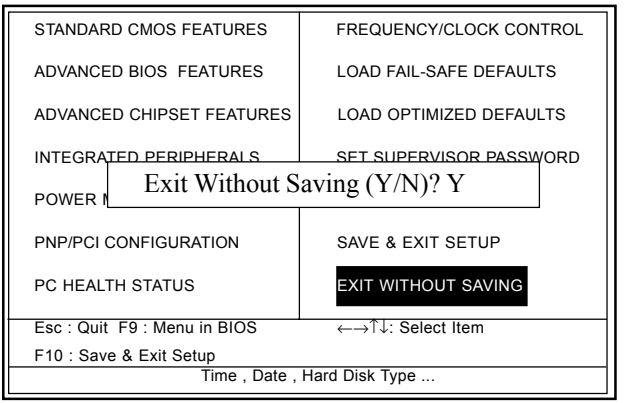


Type “Y” will quit the Setup Unility without saving to RTC CMOS RAM.

Type “N” will return Setup Unility.

Date : / /

Warranty Card/Technical Fault Report

M/B Model No.:_____ **Vender**

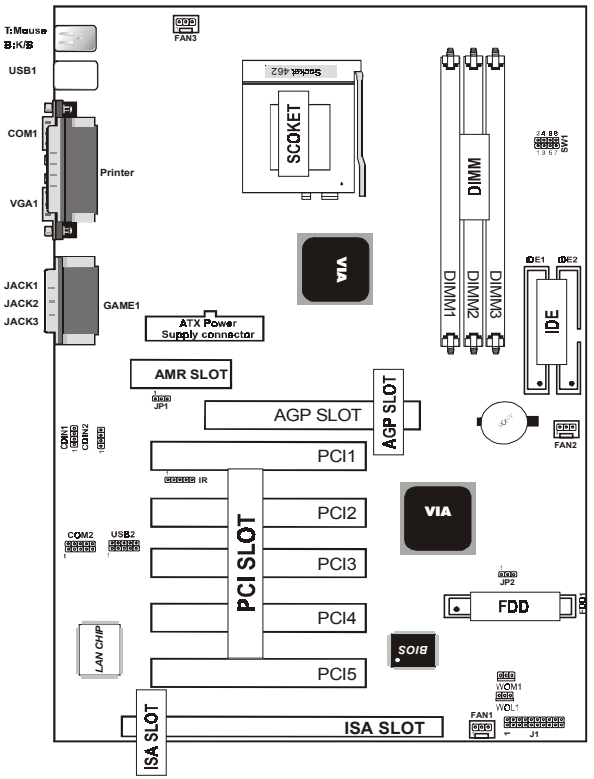
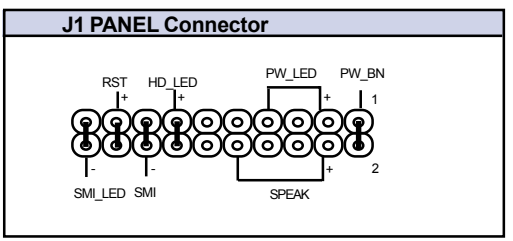
Serial No. :_____

Date of Purchasing: _____

Hardware Configuration Used :

CPU	
RAM (Brand,MB)	
Video Card	
Hard Drive	
Other Card	

Diagnostic Software Used :

Fault Description :

The 7KMA Mainboard layout