

Chapter 3: Setup

About the Setup Utility

This chapter explains how to use and modify the BIOS setup utility that is stored on the mainboard. The setup utility stores data about the mainboard components and the configuration of devices that are connected to it. This information is used to test and initialize components at start-up time and to make sure everything runs properly when the system is operating.

The setup utility is installed with a set of default values. You will probably have to make changes to the setup utility whenever you add new components to your system such as new disk drives. You may be able to generate increased performance by changing some of the timing values in the setup, but this can be limited by the kind of hardware you are using, for example the rating of your memory chips. In certain circumstances, the system may generate an error message that asks you to make changes to the setup utility. This happens when the system finds an error during the POST (Power On Self Test) that it carries out at start up.

Starting the Setup Utility

You can only start the setup utility shortly after the computer has been turned on. A prompt appears on the computer display which says “*Press DEL to run Setup*”. When you see this prompt, press the **Delete** key, and the system will start the setup utility and display the main menu of the utility.

Using the Setup Utility

When you start setup, the main menu appears. The main menu of the setup utility shows a list of the options that are available. A highlight shows which option is currently selected. You can use the cursor arrow keys to move the highlight to other options. When an option is highlighted, you can execute the option by pressing the **Enter** key.

Some options lead to dialog boxes which ask to you verify that you wish to execute that option. You usually answer these dialogs by typing **Y** for yes and **N** for no. Some options lead to dialog boxes which ask for more information. Setting passwords have this kind of dialog box.

ROM PCI/ISA BIOS (P5SS-ML)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	PASSWORD SETTING
CHIPSET FEATURES SETUP	IDE HDD AUTO DETECTION
POWER MANAGEMENT SETUP	SAVE & EXIT SETUP
PNP/PCI CONFIGURATION	EXIT WITHOUT SAVING
LOAD BIOS DEFAULTS	
LOAD OPTIMUM SETTINGS	
Esc : Quit F10 : Save & Exit Setup	↑ ↓ → ← : Select Item (Shift)F2 : Change Color

Some options lead to tables of items that usually have a value on the right side. The value of the first item is highlighted, and you can use the cursor arrow keys to select any of the other values in the table of items. When an item is highlighted, you can change the value by pressing the **PageUp** or **PageDown** keys, or the **Plus** or **Minus** keys. The **PageUp** and **Plus** keys cycle forward through the available values, the **PageDown** and **Minus** keys cycle backwards through the values.

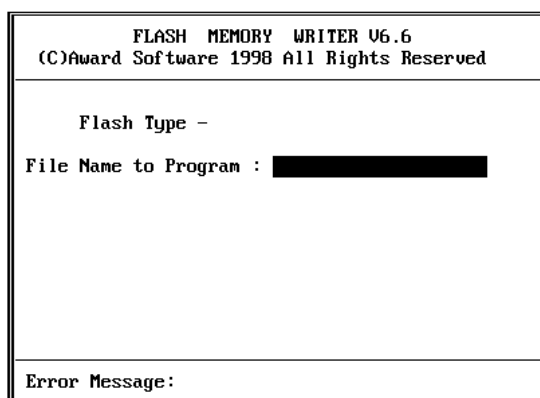
When you are in the main menu, you can exit the utility by pressing the **Escape** key. You can save the current selections and exit the utility by pressing the **F10** key. When you are in one of the options that displays a dialog box, you can return to the main menu by pressing the **Escape** key.

When you are in an option that displays a table of items, you can return to the main menu by pressing the **Escape** key. For some items, you can display a help message by pressing the **F2** key. You can display a general help screen by pressing **F1**. Press **F5** to discard any changes you have made and return all items to the value that they held when the setup utility was started. Press **F6** to load the displayed items with a standard list of fail-safe values. Press **F7** to load the displayed items with a high-performance list of default values.

How to Flash a New BIOS

You can install an updated BIOS for this motherboard that you can download from the manufacturer's website. A new BIOS may provide support for new peripherals, improvements in performance, or fixes to address known bugs. Install a new BIOS as follows:

1. Some mainboards have a Flash BIOS jumper that protects the current BIOS from being changed or overwritten. If your mainboard has this jumper, change the setting to allow flashing a new BIOS.
2. Some Setup programs have an item called Firmware Write Protect that prevents the BIOS from being overwritten. If your BIOS has this item (check the Advanced BIOS Features Setup page) disable it for the present.
3. Your computer must be running in a real-mode DOS environment, not the DOS window of Windows NT or Windows 95/98. We recommend that you create a new formatted DOS system floppy diskette.
4. Locate the flash memory utility on the support CD-ROM. It's called AWD712.EXE. Copy this file to the new system diskette.
5. Copy the new BIOS file that you downloaded from the manufacturer's website to the newly formatted system diskette.
6. Turn off your computer and insert the newly formatted DOS diskette in your computer's diskette drive.
7. You might need to run the setup utility and change the boot priority items on the Advanced BIOS Features Setup page, to force your computer to boot from the floppy diskette drive first.
8. At the A:\ prompt, after your computer has booted a clean DOS from the diskette, type in the filename AWD712 and press **Enter**.



9. In the opening dialog box, type in the filename of the new BIOS and follow the onscreen directions to flash the new BIOS to the motherboard.
10. When the installation is complete, remove the floppy diskette from the diskette drive and restart your computer. If your mainboard has a Flash BIOS jumper, don't forget to reset the jumper to protect the newly installed BIOS from being overwritten.

Standard CMOS Setup Option

This option displays a table of items which defines basic information about your system.

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ROM PCI/ISA BIOS (P5SS-ML)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

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Date (mm:dd:yy) : Thu, Aug 5 1999							
Time (hh:mm:ss) : 10 : 25 : 23							
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR MODE
Primary Master	:	0	0	0	0	0	0 NORMAL
Primary Slave	:	0	0	0	0	0	0 NORMAL
Secondary Master	:	0	0	0	0	0	0 NORMAL
Secondary Slave	:	0	0	0	0	0	0 NORMAL
Drive A : 1.44M, 3.5 in.							
Drive B : None							
Floppy 3 Mode Support : Disabled							
Video : EGA/UGA							
Halt On : All Errors							
ESC : Quit		↑ ↓ → ← : Select Item		PU/PD/+/- : Modify			
F1 : Help		(Shift)F2 : Change Color					

Date and Time

The Date and Time items show the current date and time held by your computer. If you are running a Windows operating system, these items will automatically be updated whenever you make changes to the Windows Date and Time Properties utility.

Hard Disks

Defaults: None

These items show the characteristics of any hard disk drives on the two available IDE channels. You can automatically install most modern hard disks using the IDE HDD Auto Detect Option from the main menu. However, if you find that a drive cannot be automatically detected, you can use these items to manually enter the characteristics of the drive. Give the drive a unique TYPE number. The documentation provided with your drive has the data you need to fill in the values for CYLS (cylinders), HEAD (read/write heads), and so on.

The documentation provided with the drive may not tell you what value to use under the MODE heading. If the drive is smaller than 528 MB, set MODE to Normal. If the drive is larger than 528 MB and it supports Logical Block Addressing, set MODE to LBA. Very few high-capacity drives do not support Logical Block Addressing. If you have such a drive, you might be able to configure it by setting the MODE to Large. If you're not sure which MODE setting is required by your drive, set MODE to Auto and let the setup utility try to determine the mode automatically.

Drive A and Drive B**Default: 1.44M, 3.5 in., None**

These items define the characteristics of any diskette drive attached to the system. You can connect one or two diskette drives.

Floppy 3 Mode Support**Default: Disabled**

Floppy 3 mode refers to a 3.5" diskette with a capacity of 1.2 MB. Floppy 3 mode is sometimes used in Japan.

Video**Default: EGA/VGA**

This item defines the video mode of the system. This mainboard has a built-in VGA graphics system so you must leave this item at the default value.

Halt On**Default: All Errors**

This item defines the operation of the system POST (Power On Self Test) routine. You can use this item to select which kind of errors in the POST are sufficient to halt the system.

BIOS Features Setup Option

This option displays a table of items which defines more advanced information about your system. You can make modifications to most of these items without introducing fatal errors to your system.

ROM PCI/ISA BIOS (P5SS-ML)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

CPU Host Bus Frequency	: 66 MHz	Report No FDD For WIN 95	: Yes
CPU Core:Bus Freq.Multiple	: 3.0x	K6 Write Allocate	: Enabled
CPU Voltage	: Default	Video BIOS Shadow	: Enabled
CPU clock failed reset	: Disabled	C8000-CBFFF Shadow	: Disabled
Virus Warning	: Disabled	CC000-CFFFF Shadow	: Disabled
CPU Internal Cache	: Enabled	D0000-D3FFF Shadow	: Disabled
External Cache	: Enabled	D4000-D7FFF Shadow	: Disabled
Quick Power On Self Test	: Enabled	D8000-DBFFF Shadow	: Disabled
Boot From LAN First	: Enabled	DC000-DEFFF Shadow	: Disabled
Boot Sequence	: A,C,SCSI	Cyrix 6x86/MII CPUID	: Enabled
Swap Floppy Drive	: Disabled		
Boot Up Floppy Seek	: Enabled		
Boot Up NumLock Status	: On		
Typeomatic Rate Setting	: Disabled		
Typeomatic Rate (Chars/Sec)	: 6		
Typeomatic Delay (Msec)	: 250	ESC : Quit	↑↓←→ : Select Item
Security Option	: Setup	F1 : Help	PU/PD/+/- : Modify
PCI/VGA Palette Snoop	: Disabled	F5 : Old Values (Shift)	F2 : Color
OS Select For DRAM > 64MB	: Non-OS2	F6 : Load BIOS Defaults	
HDD S.M.A.R.T. capability	: Disabled	F7 : Load Optimum Defaults	

CPU Host Bus Frequency

Default: 66 MHz

This item selects the system bus frequency (front side bus frequency). The frequency is determined by the kind of processor you have installed in the system. See the documentation supplied with the processor you installed for information on what bus frequency is required, or see Appendix 2 of this manual which has data for many common socket-7 processors.

CPU Core:Bus Freq.Multiple

Default: 3.0x

Use this item to set a multiple. The multiple times the system bus frequency must equal the core speed of the installed processor e.g. **3.5 (multiple) x 100 MHz (system bus) = 350 MHz (installed processor clock speed)**.

CPU Voltage

Default: Default

This item sets the voltage for the processor. The default value allows the processor voltage to be detected automatically.

CPU Clock Failed Reset

Default: Disabled

If this item is enabled, and your system crashes because you have overclocked the processor, press the power button three times. This action automatically adjusts the speed of the processor to the system bus speed multiplied by two.

Virus Warning***Default: Disabled***

When this item is enabled it provides some protection against viruses which try to write to the boot sector and partition table of your hard disk drive. This item is disabled as a default so that you can install an operating system. We recommend that you enable Virus Warning as soon as you have installed your disk with an OS.

CPU Internal Cache***Default: Enabled***

All the processors that can be installed in this mainboard use internal (level 1) cache memory to improve performance. Leave this item at the default value Enabled for better performance.

External Cache***Default: Enabled***

This mainboard can be installed with external (level 2) cache memory to improve performance. Leave this item at the default value Enabled for better performance.

Quick Power On Self Test***Default: Enabled***

You can enable this item to shorten the power on testing and have your system start up a little faster. You might like to enable this item after you are confident that your system hardware is operating smoothly.

Boot From LAN First***Default: Enabled***

Enable this item if you want your computer to remote boot an operating system from a network server.

Boot Sequence***Default: A,C,SCSI***

This item defines where the system will look for an operating system, and the order of priority. You can boot an operating system from many locations including a SCSI device, a ZIP drive, a floppy diskette drive or an LS-120 high-capacity diskette drive.

Swap Floppy Drive***Default: Disabled***

If you have two floppy diskette drives in your system, this item allows you to swap around the assigned drive letters so that drive A becomes drive B, and drive B becomes drive A.

Boot Up Floppy Seek***Default: Enabled***

If this item is enabled, the system will check the number of tracks on any installed floppy disk drives. This is required in order to detect 360 KB floppy diskette drives. If you don't have this kind of drive, we recommend you disable this item for a faster start up.

Boot Up NumLock Status***Default: On***

This item defines if the keyboard Num Lock key is active when your system is started.

Typematic Rate Setting***Default: Disabled***

If this item is enabled, you can use the following two items to set the typematic rate and the typematic delay settings for your keyboard.

<i>Typematic Rate (Chars/Sec)</i>	<i>Default: 6</i>
If the item Typematic Rate Setting is enabled, you can use this item to define how many characters per second are generated by a held-down key.	
<i>Typematic Delay (Msec)</i>	<i>Default: 250</i>
If the item Typematic Rate Setting is enabled, you can use this item to define how long many milliseconds must elapse before a held-down key begins generating repeat characters.	
<i>Security Option</i>	<i>Default: Setup</i>
If you have installed password protection, this item defines if the password is required at system start up, or if it is only required when a user tries to enter the setup utility.	
<i>PCI/VGA Palette Snoop</i>	<i>Default: Disabled</i>
This item is designed to overcome some problems that can be caused by some non-standard VGA cards. This board includes a built-in VGA system that does not require palette snooping so you must leave this item disabled.	
<i>OS Select For DRAM > 64 MB</i>	<i>Default: Non-OS2</i>
This item is only required if you have installed more than 64 MB of memory and you are running the OS/2 operating system. Otherwise, leave this item at the default Non-OS2.	
<i>HDD S.M.A.R.T. capability</i>	<i>Default: Disabled</i>
SMART is an industry acronym for Self-Monitoring, Analysis and Reporting Technology. If the documentation of your drive states that SMART is supported, you can enable this item.	
<i>Report No FDD for WIN 95</i>	<i>Default: Yes</i>
If you are running a system with no floppy drive and using the Windows 95 OS, select Yes for this item to ensure compatibility with the Windows 95 logo certification.	
<i>K6 Write Allocate</i>	<i>Default: Enabled</i>
If you are using an AMD CPU, you can improve performance by enabling this item.	
<i>Video BIOS Shadow</i>	<i>Default: Enabled</i>
This item allows the video BIOS to be copied to system memory for faster performance.	
<i>XXXXXX-XXXXXX Shadow</i>	<i>Default: Disabled</i>
These items allow the BIOS of other devices to be copied to system memory for faster performance.	
<i>Cyrix 6x86/MII CPUID</i>	<i>Default: Enabled</i>
The Cyrix 6x86 and MII series of processors are installed with a unique processor identification number which can be used to verify internet communications, e-commerce transactions, and so on. Use this item to turn the identification number on or off.	

Chipset Features Setup Option

This option displays a table of items that define critical timing parameters of the mainboard components including the CPU, the memory, and the system logic. As a general rule, you should leave the items on this page at their default values unless you are very familiar with the technical specifications of your system hardware.

ROM PCI/ISA BIOS (P5SS-ML)
CHIPSET FEATURES SETUP
AWARD SOFTWARE, INC.

Auto Configuration	: Enabled	AGP Aperture Size	: 64MB
Refresh Rate Control	: 15.6us	System BIOS Cacheable	: Disabled
Ref/Act Command Delay	: 6T	Video BIOS Cacheable	: Enabled
Refresh Queue Depth	: 12	Memory Hole at 15M-16M	: Disabled
RAS Precharge Time	: 5T	UGA Shared Memory Size	: 4 MB
RAS to CAS Delay	: 4T	UGA Memory Clock (MHz)	: 66
ISA Bus Clock Frequency	: PCICLK/4	DRAM Controller 1 T WR	: Disabled
Starting Point of Paging	: 2T	DRAM Controller 1 T RD	: Enabled
MA# Enable	: Enabled	PCI Post Write Buffer	: Disabled
L2 Cache Burst RD Cycle	: Delay 1 T	PCI Delayed Transaction	: Disabled
Asyn/Sync Mode CPU/DRAM	: Synchronous	Auto Detect DIMM/PCI Clk	: Enabled
SDRAM CAS Latency	: 3T	Spread Spectrum	: Disabled
SDRAM WR Retire Rate	: X-2-2-2		
DRAM Opt RAS Precharge	: Enabled	ESC : Quit	↑↓←→ : Select Item
PCI Peer Concurrency	: Enabled	F1 : Help	PU/PD/+/- : Modify
Read Prefetch Memory RD	: Enabled	F5 : Old Values (Shift)	F2 : Color
Assert TRDY After Prefet	: 2 QWs	F6 : Load BIOS Defaults	
CPU to PCI Burst Mem. WR	: Enabled	F7 : Load Optimum Defaults	
CPU to PCI Post Write	: Enabled		
Linear Mode SRAM Support	: Disabled		

Auto Configuration **Default: Enabled**

Leave this item at the default value enabled. Auto configuration installs preset default values for many of the timing parameters of your system.

Refresh Rate Control **Default: 15.6us** **Ref/Act Command Delay** **Default: 6T** **Refresh Queue Depth** **Default: 12**

These items define the timing and method that the system uses to refresh the DRAM memory. We recommend that you leave these items at the default settings.

RAS Precharge Time: **Default: 5T**

The precharge time defines the number of clock cycles used by the Row Address Strobe (RAS) to accumulate charge for a refresh. If insufficient time is allowed, the refresh may be incomplete and data can be lost. We recommend that you leave this item at the default setting.

<i>RAS to CAS Delay</i>	<i>Default: 4T</i>
This item defines the delay between the Row Address Strobe (RAS) and Column Address Strobe (CAS) signals. A shorter delay gives better performance and a longer delay improves stability. We recommend that you leave this item at the default value.	
<i>ISA Bus Clock Frequency</i>	<i>Default: PCICLK/4</i>
This item sets the timing for the ISA bus by dividing the frequency of the PCI bus. The PCI bus is usually set to 33 MHz, and we recommend that you divide this by four to set the ISA bus frequency.	
<i>Starting Point of Paging</i>	<i>Default: 2T</i>
This item controls the start timing of memory paging operations. We recommend that you leave this item at the default setting.	
<i>NA# Enable</i>	<i>Default: Enabled</i>
This item enables pipelining so that the chipset can signal the CPU for new memory addresses before all the data transfers for the current cycle are complete. We recommend that you leave this item disabled.	
<i>L2 cache Burst RD Cycle</i>	<i>Default: Delay 1 T</i>
This item determines the burst mode timing for the level 2 cache. Leave this item at the default value.	
<i>Asyn/Sync Mode CPU/DRAM</i>	<i>Default: Synchronous</i>
This item determines if asynchronous or synchronous timing is used between the CPU and memory. Leave this item at the default value.	
<i>SDRAM CAS Latency</i>	<i>Default: 3T</i>
<i>SDRAM WR Retire Rate</i>	<i>Default: X-2-2-2</i>
These items define the timing for SDRAM memory. Leave these items at the default value.	
<i>DRAM Opt RAS Precharge</i>	<i>Default: Enabled</i>
This item defines the precharge time for the Row Address Strobe for DRAM. Leave this item at the default value.	
<i>PCI Peer Concurrency</i>	<i>Default: Enabled</i>
Leave this item at the default value Enabled.	
<i>Read Prefetch Memory RD</i>	<i>Default: Enabled</i>
When this item is enabled, the system is allowed to prefetch the next read instruction and initiate the next process. Leave this item at the default value enabled for better performance.	
<i>Assert TRDY After Prefet</i>	<i>Default: 2 QWs</i>
Leave this item at the default value.	
<i>CPU to PCI Burst Mem. WR</i>	<i>Default: Enabled</i>
When this item is enabled, the system can assemble long PCI bursts from data held in buffers. Leave this item at the default value enabled for better performance.	

CPU to PCI Post Write	Default: Enabled
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When this item is enabled, writes from the CPU to the PCI bus are buffered to compensate for the different speeds of the CPU and PCI buses. Leave this item at the default value enabled.

Linear Mode SDRAM Support	Default: Disabled
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Select Enabled if your system is installed with a processor that require linear mode, for example the Cyrix M1/M2 series.

AGP Aperture Size	Default: 64MB
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This item defines the size of the aperture if you use an AGP graphics adapter. It refers to a section of the PCI memory address range dedicated for graphics memory.

System BIOS Cacheable	Default: Disabled
Video BIOS Cacheable	Default: Enabled

These two items allow the system and video BIOS to be cached for faster performance. We recommend that you leave these items at the default values.

Memory Hole at 15M-16M	Default: Disabled
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This item can be used to reserve memory space for some ISA cards that require it. We recommend that you leave this item at the default value Disabled.

VGA Shared Memory Size	Default: 4 MB
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This system uses a shared memory architecture which allows the graphics system to share some of the main memory. Use this item to define the size of the shared graphics memory.

VGA Memory Clock	Default: 66
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This item sets the speed of the VGA memory clock. Leave this item at the default value.

DRAM Controller 1 T WR	Default: Disabled
DRAM Controller 1 T RD	Default: Enabled

These items define timing parameters for installed DRAM. Leave these items at the default values.

PCI Post Write Buffer	Default: Disabled
PCI Delayed Transaction	Default: Disabled

These items define if the chipset can use a buffer for posted writes, and if delayed transaction cycles are supported. Leave these items at the default values disabled.

Auto Detect DIMM/PCI Clk	Default: Enabled
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If this item is enabled, the system will reduce the occurrence of electromagnetic interference (EMI) by turning off the clock generator signal to DIMM slots or PCI slots which are unoccupied.

Spread Spectrum**Default: Disabled**

When this item is enabled, it can significantly reduce the EMI (electromagnetic interference) that your system generates by modulating the extreme values of the clock generator pulses. Enabling this item might cause problems with timing-critical devices such as SCSI adapters. We recommend that you leave this item at the default value disabled.

Power Management Setup Option

This option displays a table of items which lets you control the power management of the system. Modern operating systems take care of much of the routine power management. This system supports three levels of power-saving modes; doze mode, standby mode, and suspend mode. Standby mode uses less power than doze mode and suspend mode uses the least power.

The power management in the setup utility lets you specify a timeout for each of the power-saving modes, and a timeout for a hard disk drive power down. A timeout, means a period of time when the system (or the hard disk drive) is inactive. If the timeout completes, the system power-saving mode will execute, or the hard disk drive will power down.

You can resume from the power-saving modes by carrying out any of the activities which are enabled in the list ****PM Events****.

ROM PCI/ISA BIOS (P5SS-ML)
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC.

Power Management : User Define	IRQ [3-7,9-15],NMI : Enabled
Video Off Option : Susp,Stby -> Off	IRQ 8 Break Suspend : Disabled
Video Off Method : DPMS Supported	Power Button Over Ride : Instant Off
Switch Function : Break/Wake	Lan/Ring Wake Up : Enabled
Doze Speed (div by): 2/8	Modem WakeUp : Enabled
Stdby Speed(div by): 1/8	PME# WakeUp : Disabled
MODEM Use IRQ : 3	KB Power ON Password : Enter
Hot Key Function As: Power On	Power Up by Alarm : Disabled
AC Resume : Disabled	
** PM Timers **	
HDD Off After : Disabled	
Doze Mode : Disabled	
Standby Mode : Disabled	
Suspend Mode : Disabled	
** PM Events **	
HDD Ports Activity : Enabled	ESC : Quit ↑↓←→ : Select Item
COM Ports Activity : Enabled	F1 : Help PU/PD/+/- : Modify
LPT Ports Activity : Enabled	F5 : Old Values (Shift)F2 : Color
VGA Activity : Enabled	F6 : Load BIOS Defaults
	F7 : Load Optimum Defaults

Power Management**Default: User Define**

This item acts like a master switch for the power-saving modes and hard disk timeouts. If this item is set to Max Saving, doze, standby, and suspend mode, will occur after a timeout of 10 seconds. If this item is set to Min Saving, doze, standby, and suspend mode will occur after a timeout of 4 hours. If the item is set to User Define, you can insert your own timeouts for the power-saving modes.

Video Off Option**Default: Susp, Stby -> Off**

This option defines which level of power-saving mode is required in order to power down the video display. As a default, the video powers down both in suspend mode and standby mode.

Video Off Method**Default: DPMS Supported**

This item defines how the video is powered down to save power. As a default, this is set to DPMS Support (display power management software).

Switch Function**Default: Break/Wake**

If this item is enabled, it permits the use of a suspend switch. If the item is set to Break, the suspend switch puts the system in suspend mode. If the item is set to Break/Wake, you can press the suspend switch a second time to wake up the system. If the item is set to Disabled, the suspend switch does not function.

Doze Speed (div by)**Default: 2/8**

This item defines the clock speed of the CPU when the system is in the Doze power saving mode. As a default, the CPU will run at a quarter of its rated speed.

Stby Speed (div by)**Default: 1/8**

This item defines the clock speed of the CPU when the system is in the Standby power saving mode. As a default, the CPU will run at a 1/8 of its rated speed.

Modem Use IRQ**Default: 3**

If you would like an incoming call on a modem to automatically resume the system from suspend mode, use this item to specify the interrupt request line (IRQ) that is used by the modem.

Hot Key Function As:**Default: Power On**

Your system may be programmed to turn on or off in response to pressing hot keys on the keyboard. This item lets you select if the system responds with a power on or off or goes into suspend mode. The hot keys to press are CTRL + ALT + Backspace.

AC Resume**Default: Disabled**

When this item is enabled, the system will wake up or power up when the AC power supply is reconnected to the system.

HDD Off After**Default: Disabled**

You can use this item to set a timeout for a hard disk powerdown. You can set a time from 1 to 15 minutes. If the hard disk is inactive for the time specified, it will power down. It will automatically return to full power when it is next accessed.

<i>Doze Mode</i>	<i>Default: Disabled</i>
If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 10 seconds to 4 hours.	
<i>Standby Mode</i>	<i>Default: Disabled</i>
If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 10 seconds to 4 hours.	
<i>Suspend Mode</i>	<i>Default: Disabled</i>
If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 10 seconds to 4 hours.	
<i>HDD Ports Activity</i>	<i>Default: Enabled</i>
When this item is enabled, any activity on the disk drives connected to the system can reset power-saving mode timeouts to zero, or resume the system from a power saving mode.	
<i>COM Ports Activity</i>	<i>Default: Enabled</i>
When this item is enabled, any transmission through the serial ports connected to the system can reset power-saving mode timeouts to zero, or resume the system from a power saving mode.	
<i>LPT Ports Activity</i>	<i>Default: Enabled</i>
When this item is enabled, any transmission through the parallel ports connected to the system can reset power-saving mode timeouts to zero, or resume the system from a power saving mode.	
<i>VGA Activity</i>	<i>Default: Enabled</i>
When this item is enabled, any activity on the graphics system can reset power-saving mode timeouts to zero, or resume the system from a power saving mode.	
<i>IRQ [3-7,9-15],NMI</i>	<i>Default: Enabled</i>
When this item is enabled, any activity through the system interrupt request lines 3-7, 9-15 and the non-masked interrupt can reset power-saving mode timeouts to zero, or resume the system from a power saving mode.	
<i>IRQ 8 Break Suspend</i>	<i>Default: Disabled</i>
When this item is enabled, any activity through the system interrupt request line 8 can reset power-saving mode timeouts to zero, or resume the system from a power saving mode. IRQ 8 is normally used by the system realtime clock.	
<i>Power Button Over Ride</i>	<i>Default: Instant Off</i>
Under ACPI (advanced configuration and power interface) the system can be turned off mechanically (by the power button) or it can undergo a software power off. If the system has been turned off by software, the system can be resumed by a LAN, MODEM or ALARM wake up signal. This item allows you to define a software power off using the power button. If the value is set to Instant-Off, the power button will automatically cause a software power off. If the value is set to Delay 4 Sec. the power button must be held down for a full four seconds to cause a software power off.	

Lan/Ring Wake Up***Default: Enabled***

If this item is enabled, the system can resume from a power-saving mode or software power down when there is incoming traffic to an installed LAN network adapter.

Modem WakeUp***Default: Enabled***

If this item is enabled, the system can resume from a power-saving mode or software power down when there is an incoming call to an installed modem card.

PME# WakeUp***Default: Disabled***

If this item is enabled, then the Power Management Events on this page that are enabled, can resume the system from a power-saving mode or a software power down. If this item is disabled, the Power Management Events on this page that are enabled can only reset the timeout counters.

KB Power ON Password***Default: Enter***

If your system is installed with a keyboard power on capability, this item lets you add a password that must be typed on the keyboard in order to turn on the power.

Power Up by Alarm***Default: Disabled***

If you enable this item, new fields appear which let you set a date and time for an alarm that can resume the system from a power saving mode or a software power off.

PNP/PCI Configuration Option

This option displays a table of items that configures how PNP (Plug and Play) and PCI expansion cards operate in your system. If you have not installed a riser card with expansion slots, you do not need to make any changes to this option.

ROM PCI/ISA BIOS (P5SS-ML)
PNP/PCI CONFIGURATION
AWARD SOFTWARE, INC.

PNP OS Installed : No	PCI IRQ Activated By : Level
Resources Controlled By : Manual	Assign IRQ For USB : Enabled
Reset Configuration Data : Disabled	
IRQ-3 assigned to : PCI/ISA PnP	
IRQ-4 assigned to : PCI/ISA PnP	
IRQ-5 assigned to : Legacy ISA	
IRQ-7 assigned to : PCI/ISA PnP	
IRQ-9 assigned to : PCI/ISA PnP	
IRQ-10 assigned to : PCI/ISA PnP	
IRQ-11 assigned to : PCI/ISA PnP	
IRQ-12 assigned to : PCI/ISA PnP	
IRQ-14 assigned to : PCI/ISA PnP	
IRQ-15 assigned to : PCI/ISA PnP	
DMA-0 assigned to : PCI/ISA PnP	
DMA-1 assigned to : PCI/ISA PnP	
DMA-3 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	
	ESC : Quit ↑↓←→ : Select Item
	F1 : Help PU/PD/+/~ : Modify
	F5 : Old Values (Shift)F2 : Color
	F6 : Load BIOS Defaults
	F7 : Load Optimum Defaults

PNP OS Installed

Default: No

If you have installed a Plug and Play operating system such as Windows 95 or 98, you can change this item to Yes. When the item is set to Yes you can use the Device Manager utility in the operating system to make changes to the configuration of expansion cards.

Resources Controlled By

Default: Manual

This item is set at the default Manual. If you find that you cannot get a particular expansion card to work properly, you might be able to solve the problem by setting this item to Manual, and defining the characteristics of the card in the new items which appear.

When this item is set to Manual, the display will list a series of items that allow you to define the assignments of the system interrupt lines (IRQs) and Direct Memory Access (DMA) channels. As a default, these items are set to PCI/ISA PnP. If you install an ISA-bus card that does not support PNP, and it requires a special IRQ and DMA, you can modify the list of assignments. Change the values of the IRQ and DMA that are required to Legacy ISA.

Reset Configuration Data**Default: Disabled**

If you enable this item and restart the system, any PNP configuration data stored in the BIOS setup will be cleared from memory. New updated configuration data will be created.

PCI IRQ Activated By**Default: Level**

This item defines the signal that is used by the PCI device to trigger an interrupt. Unless you have a PCI device which you know uses an edge signal, leave this item at the default value Level.

Assign IRQ For USB**Default: Enabled**

When this item is enabled, the system can assign an IRQ to devices connected on the USB port.

Load BIOS Defaults Option

This option displays a dialog box which allows you to install BIOS defaults for all appropriate items in the whole setup utility. Press the **Y** key and then the **Enter** key to install the defaults. Press the **N** key and then **Enter** to not install the defaults. The BIOS defaults do not place great demands on the system and are generally very stable. If your system is not functioning correctly, you might like to install the BIOS defaults as a first step in getting your system working properly again. If you only want to install BIOS defaults for a specific option, select and display that option, and then press the **F6** key.

Load Optimum Settings Option

This option displays a dialog box which allows you to install optimum defaults for all appropriate items in the whole setup utility. Press the **Y** key and then the **Enter** key to install the defaults. Press the **N** key and then **Enter** to not install the defaults. The optimum defaults can place some demands on the system that are greater than the performance level of the components, such as the processor and the memory. You could cause fatal errors or recurring instability if you install the setup defaults when your hardware does not support it. If you only want to install setup defaults for a specific option, select and display that option, and then press the **F7** key.

Integrated Peripherals Option

This option displays a list of items which defines the operation of some peripheral items on the system's input/output ports.

ROM PCI/ISA BIOS (P5SS-ML)
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

Internal PCI/IDE : Both	Parallel Port Mode : SPP
IDE Primary Master PIO : Auto	PS/2 mouse function : Enabled
IDE Primary Slave PIO : Auto	USB Controller : Enabled
IDE Secondary Master PIO: Auto	USB Keyboard Support : Disabled
IDE Secondary Slave PIO: Auto	Init Display First : PCI Slot
Primary Master UltraDMA: Auto	Current CPU Temperature :
Primary Slave UltraDMA: Auto	Current FAN Speed :
Secondary MasterUltraDMA: Auto	+12(V) +5 (V)
Secondary Slave UltraDMA: Auto	1/0(V) CPU(V)
IDE Burst Mode : Enabled	
IDE Data Port Post Write: Disabled	
IDE HDD Block Mode : Enabled	
Onboard FDC Controller : Enabled	ESC : Quit ↑↓←→ : Select Item
Onboard Serial Port 1 : 3F8/IRQ4	F1 : Help PU/PD/+/- : Modify
Onboard Serial Port 2 : 2F8/IRQ3	F5 : Old Values (Shift)F2 : Color
IR Address Select : Disable	F6 : Load BIOS Defaults
Onboard Parallel Port : 378/IRQ7	F7 : Load Optimum Defaults

Internal PCI/IDE

Default: Both

This item lets you enable or disable the primary and secondary PCI/IDE channels that are integrated into this mainboard. Leave this item at the default value unless you intend using other IDE channels installed on an expansion card.

IDE Primary Master PIO

Default: Auto

IDE Primary Slave PIO

Default: Auto

IDE Secondary Master PIO

Default: Auto

IDE Secondary Slave PIO

Default: Auto

Each IDE channel supports a master device and a slave device. These four items let you assign which kind of PIO (Programmed Input/Output) is used by IDE devices. You can choose Auto, to let the system auto detect which PIO mode is best, or you can install a PIO mode from 0-4.

Primary Master UltraDMA	Default: Auto
Primary Slave UltraDMA	Default: Auto
Secondary Master UltraDMA	Default: Auto
Secondary Slave UltraDMA	Default: Auto

Each IDE channel supports a master device and a slave device. This motherboard supports UltraDMA. UltraDMA technology provides faster access to IDE devices. If you install a device which supports UltraDMA, change the appropriate item on this list to Auto. You may have to install the UltraDMA driver supplied with this motherboard in order to use an UltraDMA device.

IDE Burst Mode	Default: Enabled
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Burst mode transfers can improve the access to IDE devices. Enable this item for improved performance. If your IDE drives cannot support high performance, or if you feel that too many disk errors are being generated, disable this item.

IDE Data Port Post Write	Default: Disabled
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If this item is enabled, it speeds up the processing of drive reads and writes, but it can cause instability in IDE subsystems that cannot support such fast performance. If you are getting disk drive errors, set this item to disabled.

IDE HDD Block Mode	Default: Enabled
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Block mode transfers can improve the access to IDE devices. Enable this item if your IDE devices support block mode transfers.

Onboard FDC Controller	Default: Enabled
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Use this item to turn on or off the floppy disk controller that is built into this mainboard.

Onboard Serial Port 1	Default: 3F8/IRQ4
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This item lets you disable the built-in serial port 1, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ).

Onboard Serial Port 2	Default: 2F8/IRQ3
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This item lets you disable the built-in serial port 2, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ).

IR Address Select	Default: Disabled
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If you have installed an optional infrared port, you must change the setting of this item to one of the available addresses. Two new items then appear. Use *IR Mode* to select the mode of the IR port. Use *IR IRQ Select* to assign an IRQ to the IR port.

Onboard Parallel Port	Default: 378/IRQ7
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This item lets you disable the built-in parallel port, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ).

Onboard Parallel Mode**Default: SPP**

This item defines the operation of the parallel port. As a default it is set to SPP (standard parallel port). If you are connected to a parallel device that supports the higher-performance EPP (enhanced parallel port) or the ECP (extended capabilities port) make the appropriate changes to this item. If you change the parallel port to ECP, one new item appears to let you define a DMA channel for the ECP port.

PS/2 mouse function**Default: Enabled**

This item lets you disable the PS/2 mouse connector on this system. You should disable this item if you are using a mouse or pointing device which connects through a serial port.

USB Controller**Default: Enabled**

This item lets you enable or disable the USB ports that are integrated into this mainboard.

USB Keyboard Support**Default: Disabled**

Enable this item if you are using a keyboard connected through the USB interface.

Init Display First**Default: PCI Slot**

Use this item to define if your graphics adapter is installed in one of the PCI slots, or if you have installed an AGP graphics adapter into the AGP slot.

Current CPU Temp., Current System Temp., etc.

If you are using the hardware monitoring features of this system, you can use these items to set thermal and electrical parameters for the system.

Password Settings

This item can be used to install a password. To install a password, follow these steps:

1. Highlight the item *Password Settings* on the main menu and press **Enter**.
2. The password dialog box appears.
3. If you are installing a new password, carefully type in the password. You cannot use more than 8 characters or numbers. The password will differentiate between upper case and lower characters. Press **Enter** after you have typed in the password. If you are deleting a password that is already installed just press **Enter** when the password dialog box appears.
4. The system will ask you to confirm the new password by asking you to type it in a second time. Carefully type the password again and press **Enter**, or just press **Enter** if you are deleting a password that is already installed.

5. If you typed the password correctly, the password is installed.

IDE HDD Auto Detection Option

This item automatically detects and installs any hard disk drives installed on the primary and secondary IDE channel. Most modern drives can be detected. If you are using a very old drive that can't be detected, you can install it manually using the Standard CMOS Setup option.

Setup will check for two devices on the primary IDE channel and then two devices on the secondary IDE channel. At each device, the system will flash an **N** in the dialog box. Press **Enter** to skip the device and proceed to the next device. Press **Y**, then **Enter** to tell the system to auto-detect the device.

Save And Exit Setup Option

Highlight this item and press **Enter** to save the changes that you have made in the setup utility and exit the setup program. When the *Save and Exit* dialog box appears, press **Y** to save and exit, or press **N** to return to the setup main menu.

Exit Without Saving Option

Highlight this item and press **Enter** to discard any changes that you have made in the setup utility and exit the setup program. When the *Exit Without Saving* dialog box appears, press **Y** to discard changes and exit, or press **N** to return to the setup main menu.