

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 information about the mainboard components, and the configuration of other devices that are connected to it. The system uses this information to test and initialize components when it is started up, and to make sure everything runs properly when the system is operating.

The setup utility is installed with a set of default values. The default values are designed to ensure that the system will operate adequately. 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 which 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 press the **Delete** key to start setup, the main menu of the utility appears.

The main menu of the setup utility shows a list of the options that are available in the utility. 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 you verify that 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 the User Password or Supervisor Password have this kind of dialog box.

ROM PCI/ISA BIOS (P5SS-ME0)
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 SETUP DEFAULTS	
Esc : Quit	↑ ↓ → ← : Select Item
F10 : Save & Exit Setup	(Shift)F2 : Change Color

Some options lead to tables of items. These items 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. You can change the color scheme of the utility by pressing the **F2** key while holding down the **Shift** 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 one of the options 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 **F1** key. You can change the color scheme of the utility by pressing the **F2** key while holding down the **Shift** key. You can 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. You can press **F6** to load the displayed items with a standard list of default values. You can press **F7** to load the displayed items with a high-performance list of default values.

Standard CMOS Setup Option

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

ROM PCI/ISA BIOS (P5SS-ME0)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

Date (mm:dd:yy) : Mon, Nov 30 1998 Time (hh:mm:ss) : 10 : 12 : 25								
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								
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 four available IDE channels. (Note that SCSI hard disk drives do not appear here.) 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 select USER, and then manually enter the characteristics of the drive. The documentation provided with your drive provides 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.

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 Feature 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-ME0)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU Internal Cache	: Enabled	C8000-CBFFF Shadow	: Disabled
External Cache	: Enabled	CC000-CFFFF Shadow	: Disabled
Quick Power On Self Test	: Enabled	D0000-D3FFF Shadow	: Disabled
Boot From LAN First	: Enabled	D4000-D7FFF Shadow	: Disabled
Boot Sequence	: A,C,SCSI	D8000-DBFFF Shadow	: Disabled
Swap Floppy Drive	: Disabled	DC000-DFFFF Shadow	: 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		
PCI/UGA Palette Snoop	: Disabled		
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	

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 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.	
Typematic Rate (Chars/Sec)	Default: 6
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.	
Typematic Delay (Msec)	Default: 250
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.	
Security Option	Default: Setup
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.	
PCI/VGA Palette Snoop	Default: Disabled
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.	
OS Select For DRAM > 64 MB	Default: Non-OS2
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.	
Video BIOS Shadow	Default: Enabled
This item allows the video BIOS to be copied to system memory for faster performance.	
XXXXX-XXXXX Shadow	Default: Disabled
These items allow the BIOS of other devices to be copied to system memory for faster performance.	

Chipset Features 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. If you change the values, or load the optimum settings, you may introduce fatal errors or recurring instability into your system. The item list below shows only the default values for some items.

ROM PCI/ISA BIOS (P5SS-ME0) CHIPSET FEATURES SETUP AWARD SOFTWARE, INC.			
Auto Configuration	: Enabled	AGP Aperture Size	: 64MB
Refresh Rate Control	: 15.6us	System BIOS Cacheable	: Enabled
Ref/Act Command Delay	: 6T	Video BIOS Cacheable	: Enabled
Refresh Queue Depth	: 12	Memory Hole at 15M-16M	: Disabled
RAS Precharge Time	: 3T	UGA Shared Memory Size	: 4 MB
RAS to CAS Delay	: 3T	UGA Memory Clock (MHz)	: 66
ISA Bus Clock Frequency	: PCICLK/4	DRAM Controller 1 T WR	: Enabled
Starting Point of Paging	: 1T	DRAM Controller 1 T RD	: Enabled
MA# Enable	: Disabled	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-1-1-1		
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 Setup Defaults	
CPU to PCI Post Write	: Enabled		

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: 3T

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.

RAS to CAS Delay

Default: 3T

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.

ISA Bus Clock Frequency	Default: PCICLK/4
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.	
Starting Point of Paging	Default: 1T
This item controls the start timing of memory paging operations. We recommend that you leave this item at the default setting.	
NA# Enable	Default: Disabled
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.	
L2 cache Burst RD Cycle	Default: Delay 1 T
This item determines the burst mode timing for the level 2 cache. Leave this item at the default value.	
Asyn/Sync Mode CPU/DRAM	Default: Synchronous
This item determines if asynchronous or synchronous timing is used between the CPU and memory. Leave this item at the default value.	
SDRAM CAS Latency	Default: 3T
SDRAM WR Retire Rate	Default: X-1-1-1
These items define the timing for SDRAM memory. Leave these items at the default value.	
DRAM Opt RAS Precharge	Default: Enabled
This item defines the precharge time for the Row Address Strobe for DRAM. Leave this item at the default value.	
PCI Peer Concurrency	Default: Enabled
Leave this item at the default value Enabled.	
Read Prefetch Memory RD	Default: Enabled
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.	
Assert TRDY After Prefet	Default: 2 QWs
Leave this item at the default value.	
CPU to PCI Burst Mem. WR	Default: Enabled
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
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.	
AGP Aperture Size	Default: 64MB
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.	

Video BIOS Cacheable	Default: Enabled
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System BIOS Cacheable	Default: Enabled
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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 value Enabled.

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: Enabled
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DRAM Controller 1 T RD	Default: Enabled
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These items define timing parameters for installed DRAM. Leave these items at the default values.

PCI Post Write Buffer	Default: Disabled
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PCI Delayed Transaction	Default: Disabled
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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
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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 mainboard supports ACPI (advanced configuration and power interface).

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****. If the hard disk has been powered down it will automatically resume to full power when an access to the hard disk is required (this takes just a few seconds).

ROM PCI/ISA BIOS (P5SS-ME0) POWER MANAGEMENT SETUP AWARD SOFTWARE, INC.			
ACPI function	: Enabled	UGA Activity	: Enabled
Power Management	: User Define	IRQ [3-7,9-15],MMI	: 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	Ring Power Up Control	: Disabled
Doze Speed (div by):	2/8	KB Power ON Password	: Enter
Stdby Speed(div by):	1/8	Power Up by Alarm	: Disabled
MODEM Use IRQ	: 3		
AC Resume	: Disabled		
** PM Timers **			
HDD Off After	: Disable		
Doze Mode	: Disable		
Standby Mode	: Disable		
Suspend Mode	: Disable		
** 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
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

ACPI Function

Default: Enabled

This mainboard supports ACPI (advanced configuration and power interface), so we recommend that you leave this item at the default value Enabled.

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).

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.

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.

Doze Mode**Default: Disabled**

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.

Standby Mode**Default: Disabled**

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.

Suspend Mode**Default: Disabled**

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.

HDD Ports Activity**Default: Enabled**

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.

COM Ports Activity**Default: Enabled**

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.

LPT Ports Activity**Default: Enabled**

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.

VGA Activity**Default: Enabled**

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.

IRQ [3-7,9-15],NMI**Default: Enabled**

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.

IRQ 8 Break Suspend**Default: Disabled**

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.

Power Button Over Ride**Default: Instant Off**

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.

Ring Power Up Control**Default: Disabled**

When this item is enabled, any activity through an internal modem that is connected to the Wake On Modem connector can resume the system from a power saving mode or a software power off.

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-ME0)
PNP/PCI CONFIGURATION
AWARD SOFTWARE, INC.

PNP OS Installed : No	PCI IRQ Activated By : Level
Resources Controlled By : Auto	Assign IRQ For VGA : Enabled
Reset Configuration Data : Disabled	Assign IRQ For USB : Enabled
<p>ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults</p>	

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: Auto

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

If you change this item 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 VGA

Default: Enabled

When this item is enabled, the system can assign an IRQ to devices connected to the VGA connector.

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 Setup Defaults 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-ME0)
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

Internal PCI/IDE : Both	Onboard Parallel Mode : SPP
IDE Primary Master PIO : Auto	ECP Mode Use DMA : 3
IDE Primary Slave PIO : Auto	Parallel Port EPP Type : EPP1.9
IDE Secondary Master PIO: Auto	PS/2 mouse function : Enabled
IDE Secondary Slave PIO: Auto	USB Controller : Enabled
Primary Master UltraDMA: Auto	USB Keyboard Support : Disabled
Primary Slave UltraDMA: Auto	Init Display First : PCI Slot
Secondary MasterUltraDMA: Auto	
Secondary Slave UltraDMA: Auto	
IDE Burst Mode : Enabled	Current CPUFAN1 Speed :
IDE Data Port Post Write: Disabled	Current CPUFAN2 Speed :
IDE HDD Block Mode : Enabled	+12(V): +5 (V):
	I/O(V): CPU(V):
Onboard FDD 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
UART 2 Mode : Normal	F6 : Load BIOS Defaults
IR Function Duplex : Half	F7 : Load Setup Defaults
RxD , TxD Active : Hi,Hi	
Onboard Parallel Port : 378/IRQ7	

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**

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**

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**

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**

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**

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**

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).

UART 2 Select**Default: Normal**

This item defines the operation of serial port 2. In the default Normal setting, serial port 2 is assigned to the connector on the mainboard. If you have installed an optional infrared port, you must change the setting of this item to one of the Infrared settings (usually IrDA

or FIR). These settings will disable the mainboard serial port connector and assign serial port 2 to the infrared device. If you have selected an IR mode, two items appear, *IR Function Duplex* and *RxD, TxD Active*, which let you set the duplex and transmission parameters for the Infrared port. See the documentation of your infrared port for help on these items.

Onboard Parallel Port**Default: 378/IRQ7**

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 EPP or ECP, new items appear to let you configure the EPP and ECP modes.

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.

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 will appear.
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 will be 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.