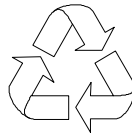


M3A System

User's Guide



100% Recycled Paper

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IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions carefully. Save these instructions for future reference.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. This product is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
9. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

-
10. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed 15 amperes.
 11. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
 12. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
 13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power cord or plug is damaged or frayed
 - b. If liquid has been spilled into the product
 - c. If the product has been exposed to rain or water
 - d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
 - e. If the product has been dropped or the cabinet has been damaged
 - f. If the product exhibits a distinct change in performance, indicating a need for service

-
14. Replace battery with the same type as the product's battery we recommend. Use of another battery may present a risk of fire or explosion. Refer battery replacement to a qualified serviceman.
 15. Warning! Battery may explode if not handled properly. Do not recharge, disassemble or dispose of in fire. Keep away from children and dispose of used battery promptly.
 16. Use only the proper type of power supply cord set (provided in your keyboard/manual accessories box) for this unit. It should be a detachable type: UL listed/CSA certified, type SVT/SJT, rated 6A 125V minimum, VDE approved or its equivalent. Maximum length is 15 feet (4.6 meters).

FCC Class B Radio Frequency Interference Statement

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/television technician for help.

Notice 1:

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2:

Shielded interface cables, if any, must be used in order to comply with the emission limits.

About this Manual

Purpose

This user's guide gives you all the information you need to operate the system properly.

Manual Structure

This user's guide consists of two chapters as follows:

Chapter 1 System Board

This chapter describes the system board and all its major components. It contains the system board layout, jumper settings, cache and memory configurations, and other internal devices.

Chapter 2 BIOS Utility

This chapter explains the system BIOS and tells how to configure the system by setting the BIOS parameters.

Conventions

The following conventions are used in this manual:

Text entered by user

Represents text input by the user.

Screen messages

Denotes actual messages that appear onscreen.

, , , etc.

Represent the actual keys that you have to press on the keyboard.



NOTE

Gives bits and pieces of additional information related to the current topic.



WARNING

Alerts you to any damage that might result from doing or not doing specific actions.



CAUTION

Suggests precautionary measures to avoid potential hardware or software problems.



IMPORTANT

Reminds you to take specific action relevant to the accomplishment of the procedure at hand.



TIP

Tells how to accomplish a procedure with minimum steps through little shortcuts.

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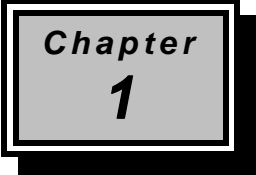
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A graphic consisting of a grey rectangle with a black border, containing the text "Chapter 1". The rectangle is set against a black background that has a slight shadow effect.

**Chapter
1**

System Board

This high-performance system board utilizes a 64-bit Intel Pentium® CPU running at 100/66, 120/60, 133/66, 150/60, 166/66, or 200/66 MHz. It has four ISA and four PCI slots (with one PCI- and ISA-shared slot) for future expansion. It also has six 72-pin SIMM sockets that allow memory upgrade to a maximum of 192 MB. To further enhance system performance, the board integrates a 256-KB/512-KB pipelined-burst cache.

Standard features such as two serial ports, one parallel port, a diskette drive interface, and two embedded hard disk interfaces are also incorporated in the system board. A Universal Serial Bus (USB) interface is added to the design to enable the system to support additional peripherals.

The system features the power-management function that conforms to the power-saving standards of the U.S. Environmental Protection Agency (EPA) Energy Star program. It also supports the Plug-and-Play feature. This feature saves the user from configuration troubles, thus making the system more user-friendly.

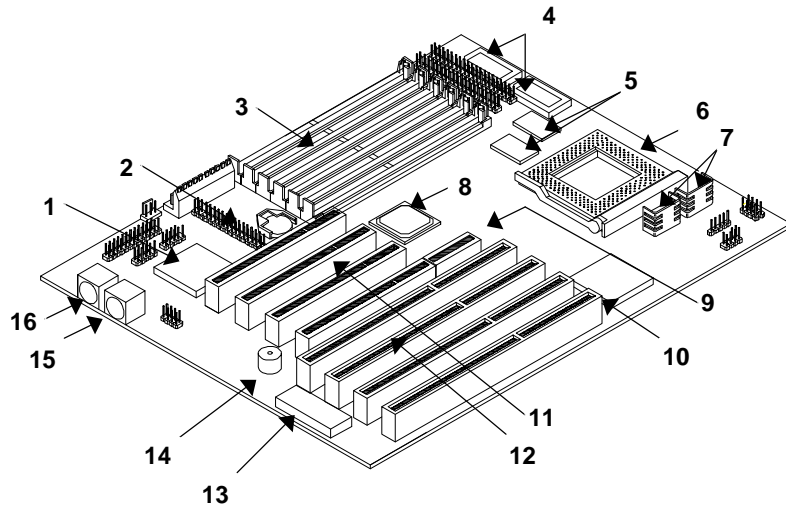
The system board may come with an optional SCSI/ASM card. This card enables the system to function as a server. The system is fully compatible with MS-DOS V6.X, OS/2, UNIX, Novell, Windows NT, and Windows 95 operating systems.

1.1 System Board Layout

The system board has the following features and components:

- Supports Intel Pentium CPU (100/66, 120/60, 133/66, 150/60, 166/66, 200/66 MHz), with 2.8V or 3.3V operating voltage
- 192-MB maximum system memory
- Six 72-pin SIMM sockets that accept single- (4 MB and 16 MB) and double- (8 MB and 32 MB) density SIMMs supporting either Extended Data Output (EDO) or EDO/Fast Page Mode (FPM) DRAM types (with or without Error Checking and Correction (ECC)/Parity function)
- 256-KB/512-KB pipelined-burst second-level cache
- Integrates an enhanced PCI local bus IDE controller
- 128-KB Flash ROM for system BIOS
- Four ISA- and four PCI-expansion slots (one PCI- and ISA-shared slot)
- Dual 16C550 buffered serial ports and one ECP/EPP parallel port
- Optional USB interface that enables the system to support more peripherals
- SCSI/ASM slot (for optional SCSI/ASM card)
- PS/2 mouse and keyboard interface
- Plug-and-Play function
- Power-management function

Figure 1-1 shows the board layout and the locations of the important components.



- | | |
|------------------------------------|----------------------------|
| 1 Super I/O controller | 11 PCI slots |
| 2 Battery | 12 ISA slots |
| 3 SIMM sockets | 13 Flash ROM |
| 4 Tag RAM | 14 Buzzer |
| 5 Pipelined-burst cache | 15 PS/2 mouse connector |
| 6 CPU socket | 16 PS/2 keyboard connector |
| 7 Voltage regulators with heatsink | |
| 8 Host-to-PCI bridge | |
| 9 SCSI/ASM card slot | |
| 10 PCI-ISA bridge | |

Figure 1-1 System Board Layout



The heatsink becomes very hot when the system is on. NEVER touch the heatsink with any metal or with your hands.

1.2 ESD Precautions

Electrostatic discharge (ESD) can damage your processor, disk drives, expansion boards, and other components. Always observe the following precautions before you install a system component.

1. Do not remove a component from its protective packaging until you are ready to install it.
2. Wear a wrist grounding strap and attach it to a metal part of the system unit before handling components. If a wrist strap is not available, maintain contact with the system unit throughout any procedure requiring ESD protection.

1.3 Pre-installation Instructions

Always observe the following before you install a system component:

1. Turn off the system power and all the peripherals connected to the unit before opening it.
2. Open the system according to the instructions in the housing installation manual.
3. Follow the ESD precautions in section 1.2 before handling a system component.
4. Remove any expansion boards or peripherals that block access to the SIMM sockets or CPU socket.
5. See the following sections for specific instructions on the component you wish to install.



Do not attempt the procedures described in the following sections unless you are a qualified service technician.

1.4 Installing a CPU



Observe the ESD precautions when installing components. See section 1.2.

The system board features a zero-insertion force (ZIF) socket for easy CPU installation.

Follow these steps to install a CPU:

1. Pull up the socket lever.
2. Insert the CPU, making sure that pin 1 (indicated by a notched corner) of the CPU connects to hole 1 of the socket.
3. Pull down the socket lever to lock the CPU into the socket.

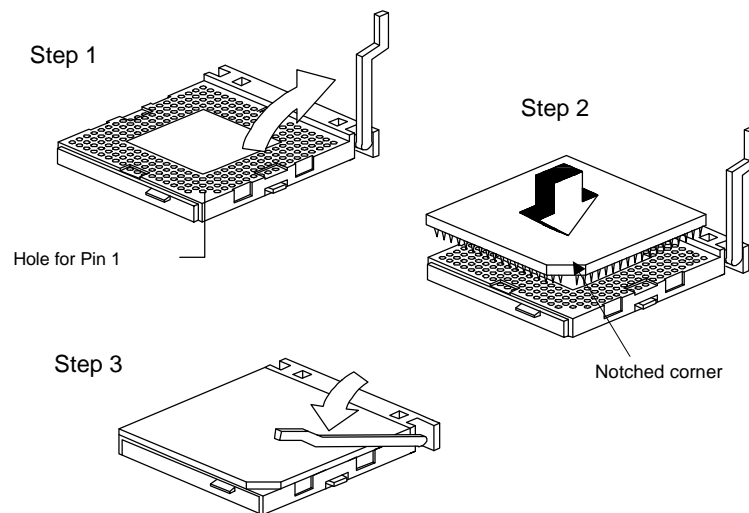


Figure 1-2 Installing a CPU



See section 1.9 for the post-installation instructions.

1.5 Upgrading the CPU

Follow these steps to upgrade the CPU:

1. Turn off the system power.
2. Pull up the socket lever.
3. Remove the installed CPU.
4. Install the upgrade CPU. Refer to section 1.4 on how to install a CPU.

1.6 Jumpers and Connectors

1.6.1 Jumper and Connector Locations

Figure 1-3 shows the jumper and connector locations on the system board.

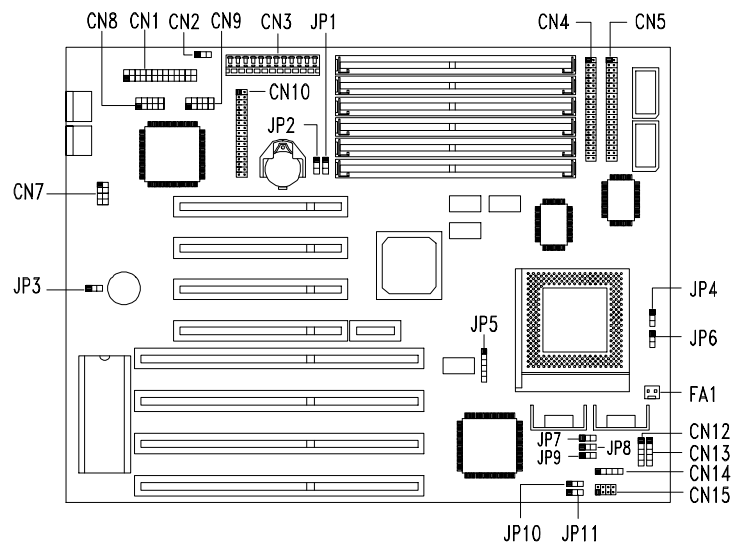


Figure 1-3 Jumper and Connector Locations



The blackened pin of a jumper or a connector represents pin 1.

1.6.2 Jumper Settings

Table 1-1 lists the system board jumpers with their corresponding settings and functions.

Table 1-1 Jumper Settings

Jumper	Setting	Function
BIOS Type JP1	1-2 2-3	Acer BIOS OEM BIOS
Password Check JP2	1-2 2-3	Check password Bypass password
Buzzer/Speaker JP3	1-2 2-3	Buzzer External speakers
Core/Bus Ratio JP4, JP6	1-2, 1-2 2-3, 1-2 2-3, 2-3 1-2, 2-3	5/2 2/1 3/2 3/1
CPU Frequency JP5	2-3, 4-5 1-2, 3-4 1-2, 4-5	66 MHz 60 MHz 50 MHz
CPU Type JP7, JP8, JP9	1-2 2-3	P54C CPU P55C CPU
Reset/SMM Switch JP10	1-2 2-3 3-4	Enable SMM switch Enable Reset switch Additional Reset switch
CPU Voltage JP11	1-2 2-3	3.45V 3.3V

1.6.3 Connector Functions

Table 1-2 lists the different connectors on the system board and their respective functions.

Table 1-2 Connector Functions

Connector	Function
CN1	Printer connector
CN2	Software shut-down power supply control connector
CN3	Power connector
CN4	IDE1 connector
CN5	IDE2 connector
CN7	Universal serial bus interface
CN8	COM2 connector
CN9	COM1 connector
CN10	Diskette drive connector
CN11	SCSI/ASM slot
CN12	HDD LED connector
CN13	Speaker connector
CN14	Keylock
CN15	LED board connector
FA1	CPU fan connector

1.6.4 USB Interface (optional)

The system board may come with an onboard USB connector and a separate bracket connector. The USB interface enables the system to support more peripherals.

To install a USB bracket connector, simply do the following:

1. Locate the USB connector on the system board. See Figure 1-3.
2. Attach the USB bracket connector onto the onboard USB connector. Notice that one pin of the USB bracket connector is covered. This is to ensure proper connection (refer to the following figure).

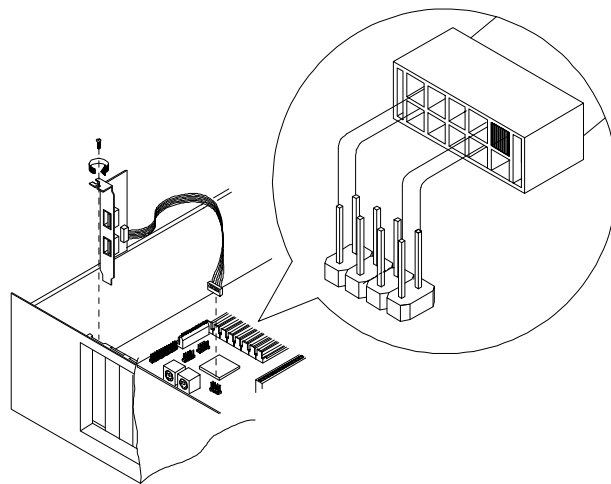


Figure 1-4 Installing a USB Bracket Connector

1.7 Installing Memory

The system memory is expandable to 192 MB by adding single in-line memory modules (SIMMs). See Figure 1-1 for the location of the SIMM sockets. Section 1.7.1 tells how to install SIMMs.

The six 72-pin SIMM sockets on board accept single-density (4- and 16-MB) and double-density (8- and 32-MB) SIMMs, with 70-ns or 60-ns DRAM speed. These SIMMs may support either EDO or FPM DRAM types, with or without ECC/Parity function. The ECC function allows the system to automatically correct one-bit errors and detect multiple-bit errors. Table 1-3 lists the possible memory configurations.

Table 1-3 Memory Configurations

Bank 0		Bank 1		Bank 2		Total Memory
Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6	
4 MB	4 MB					8 MB
4 MB	4 MB	4 MB	4 MB			16 MB
4 MB	4 MB	4 MB	4 MB	4 MB	4 MB	24 MB
8 MB	8 MB					16 MB
8 MB	8 MB	4 MB	4 MB			24 MB
8 MB	8 MB	4 MB	4 MB	4 MB	4 MB	32 MB
8 MB	8 MB	8 MB	8 MB			32 MB
8 MB	8 MB	8 MB	8 MB	4 MB	4 MB	40 MB
8 MB	8 MB	8 MB	8 MB	8 MB	8 MB	48 MB
16 MB	16 MB					32 MB
16 MB	16 MB	4 MB	4 MB			40 MB
16 MB	16 MB	4 MB	4 MB	4 MB	4 MB	48 MB
16 MB	16 MB	8 MB	8 MB			48 MB
16 MB	16 MB	8 MB	8 MB	4 MB	4 MB	56 MB
16 MB	16 MB	8 MB	8 MB	8 MB	8 MB	64 MB
16 MB	16 MB	16 MB	16 MB			64 MB

Table 1-3 *Memory Configurations (continued)*

Bank 0		Bank 1		Bank 2		Total Memory
Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6	
16 MB	16 MB	16 MB	16 MB	4 MB	4 MB	72 MB
16 MB	16 MB	16 MB	16 MB	8 MB	8 MB	80 MB
16 MB	16 MB	16 MB	16 MB	16 MB	16 MB	96 MB
32 MB	32 MB					64 MB
32 MB	32 MB	4 MB	4 MB			72 MB
32 MB	32 MB	4 MB	4 MB	4 MB	4 MB	80 MB
32 MB	32 MB	8 MB	8 MB			80 MB
32 MB	32 MB	8 MB	8 MB	4 MB	4 MB	88 MB
32 MB	32 MB	8 MB	8 MB	8 MB	8 MB	96 MB
32 MB	32 MB	16 MB	16 MB			96 MB
32 MB	32 MB	16 MB	16 MB	4 MB	4 MB	104 MB
32 MB	32 MB	16 MB	16 MB	8 MB	8 MB	112 MB
32 MB	32 MB	16 MB	16 MB	16 MB	16 MB	128 MB
32 MB	32 MB	32 MB	32 MB			128 MB
32 MB	32 MB	32 MB	32 MB	4 MB	4 MB	136 MB
32 MB	32 MB	32 MB	32 MB	8 MB	8 MB	144 MB
32 MB	32 MB	32 MB	32 MB	16 MB	16 MB	160 MB
32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	192 MB

1.7.1 Installing a SIMM



Observe the ESD precautions when installing components. See section 1.2.

Follow these steps to install a SIMM:

1. Carefully slip a SIMM at a 45° angle into a socket making sure that the curved edge indicating the pin 1 of the SIMM matches pin 1 of the socket.



A SIMM fits only in one direction. If you slip in a SIMM but would not completely fit, you may have inserted it the wrong way. Reverse the orientation of the SIMM.

2. Gently push the SIMM to a vertical position until the pegs of the socket slip into the holes on the SIMM, and the holding clips lock the SIMM into position. The SIMM should be at a 90° angle when installed.

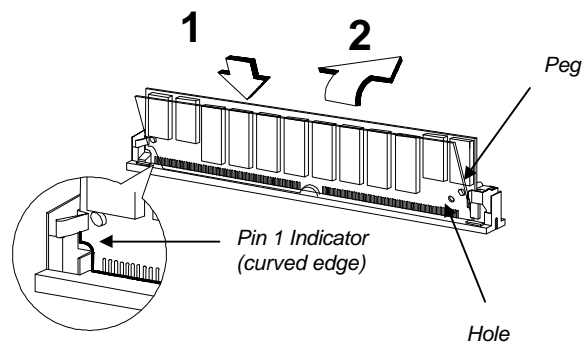


Figure 1-5 Installing a SIMM



See section 1.9 for the post-installation instructions.

1.7.2 Removing a SIMM

Follow these steps to remove a SIMM:

1. Press the holding clips on both sides of the SIMM outward to release it.
2. Move the SIMM to a 45° angle.
3. Pull the SIMM out of the socket.

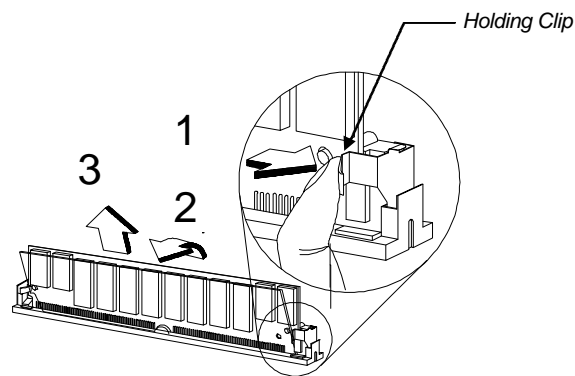


Figure 1-6 Removing a SIMM

1.7.3 Reconfiguring the System

The system automatically detects the amount of memory installed. Run Setup to view the new value for total system memory and make a note of it.

1.8 SCSI/ASM Card (optional)

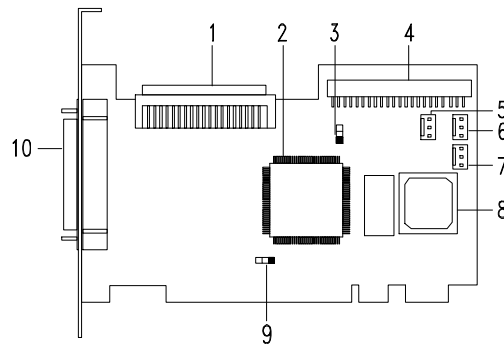
1.8.1 Features and Layout

The system board may come with or without a Small Computer System Interface/Advanced Server Management (SCSI/ASM) card. This card integrates the Adaptec AIC-7880 SCSI controller and an optional ASM module.

The SCSI/ASM card offers the following functions:

- CPU thermal detection
- 5V and 3.3V voltage detection
- PCI bus utilization calculation

Figure 1-6 shows the card layout.



- | | | | |
|---|------------------------------|----|------------------------------|
| 1 | 68-pin Wide SCSI connector | 6 | FAN3 connector * |
| 2 | SCSI controller | 7 | FAN2 connector * |
| 3 | Jumper JP1 | 8 | ASM chip (optional) |
| 4 | 50-pin Narrow SCSI connector | 9 | Jumper JP2 |
| 5 | FAN1 connector * | 10 | Narrow SCSI outlet connector |

Figure 1-7 SCSI/ASM Card Layout

* Housing fan connector

1.8.2 Jumper Settings

Table 1-4 lists the SCSI/ASM card jumpers with their corresponding settings and functions.

Table 1-4 SCSI/ASM Card Jumper Settings

Jumper	Setting	Function
JP1	1-2 2-3	Terminator ON Terminator by 7880 chip
JP2	1-2 2-3	For M3A Reserved

1.8.3 Installing the SCSI/ASM Card



Observe the ESD precautions when installing components. See section 1.2.

Follow these steps to install the SCSI/ASM card:

1. Remove the card from its protective packaging.
2. Locate the PCI/ISA-shared slot on the system board (see Figure 1-1).
3. Align the golden fingers of the SCSI/ASM card to the slot.

-
4. Gently but firmly insert the card. Make sure that the board is properly seated.

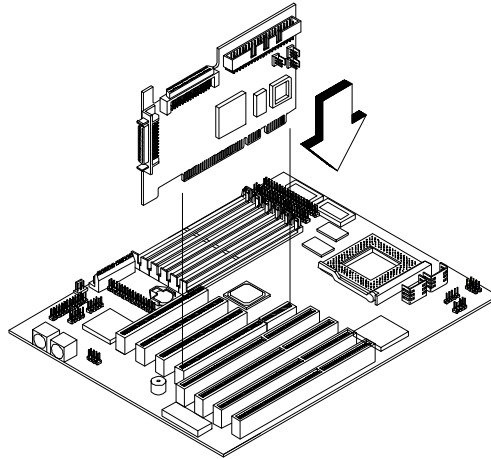


Figure 1-8 Installing the SCSI/ASM Card



See section 1.9 for the post-installation instructions.

1.9 Post-installation Instructions

Observe the following procedures after installing a system component:

1. See to it that the components are installed according to the step-by-step instructions in their respective sections.
2. Make sure you have set all the required jumpers. See section 1.6.2 for the correct jumper settings.
3. Replace any expansion boards or peripherals that you removed earlier.
4. Replace the system cover.
5. Connect the necessary cables and turn on the system.

1.10 Error Messages

In the event that you receive an error message, do not continue using the computer. Note the message and take corrective action immediately. This section describes the different types of error messages and suggests corrective measures.

There are two general types of error messages:

- Software
- System

1.10.1 Software Error Messages

Software error messages are returned by your operating system or application. These messages typically appear after you boot the operating system or when you run your applications. If you receive this type of message, consult your application or operating system manual for help.

1.10.2 System Error Messages

A system error message indicates a problem with the computer itself. These messages normally appear during the power-on self-test, before the operating system prompt appears. Table 1-5 lists the system error messages in alphabetical order.

Table 1-5 System Error Messages

Error Message	Corrective Action
Bad CMOS Battery	Replace battery. Contact your dealer.
CMOS Checksum Error	Run Setup.
Diskette Drive Controller Error	Check and connect the cable to the diskette drive or controller.
Diskette Drive Error	Diskette may be bad. If not, check the diskette drive and replace if necessary.
DRAM Configuration Error	Check and modify DRAM configuration to agree with Table 1-3.
Equipment Configuration Error	Run Setup.
Hard Disk Controller Error	Check and connect the cable to the hard disk drive or controller.
Hard Disk 0 Error	Check all cable connections. Check the hard disk and replace if necessary.
Hard Disk 1 Error	Check all cable connections. Check the hard disk and replace if necessary.
Hard Disk 0 Extended Type Error	Run Setup.
Hard Disk 1 Extended Type Error	Run Setup.
I/O Parity Error	Contact your dealer.
Keyboard Error or No Keyboard Connected	Check and connect the keyboard to the system unit.
Keyboard Interface Error	Contact your dealer.

Table 1-5 System Error Messages (continued)

Error Message	Corrective Action
Keyboard Locked	Unlock the keyboard.
Memory Error	Check SIMMs on the system board. Contact your dealer.
Memory Size Mismatch	Run Setup.
Serial 1 Conflict	Run Setup. Disable Onboard Serial 1.
Serial 2 Conflict	Run Setup. Disable Onboard Serial 2.
Parallel Port Conflict	Run Setup. Disable Onboard Parallel Port.
Pointing Device Error	Check or connect the pointing device. Contact your dealer.
Pointing Device Interface Error	Contact your dealer.
Press F1 key to continue or Ctrl-Alt-Esc for Setup	Press F1 or CTRL ALT ESC .
Press F1 to Setup or other key to continue	Press F1 and reconfigure the system.
Press Esc to turn off NMI, any key to reboot	Press ESC to disregard NMI error. Press any key to reboot the system.
Protected Mode Test Fail	Contact your dealer.
RAM BIOS Error	Contact your dealer.
Real Time Clock Error	Run Setup.
Shadow RAM Fail	Contact your dealer.
System Memory Address Error	Check SIMMs on system board or contact your dealer.

1.10.3 Correcting Error Conditions

As a general rule, the "Press F1 to continue" error message is caused by a configuration problem which can be easily corrected. An equipment malfunction is more likely to cause a fatal error, i.e., an error that causes complete system failure.

Here are some corrective measures for error conditions:

1. Run Setup. You must know the correct configuration values for your system before you enter Setup, which is why you should write these values down when the system is correctly configured. An incorrect Setup configuration is a major cause of power-on error messages, especially for a new system.
2. Remove the system cover according to the directions in the system housing installation guide. Check that the system board and any expansion boards are set correctly.
3. If you cannot access a new disk, it may be because your disk is not physically formatted. Physically format the disk using the FDISK and FORMAT commands.
4. Check that all connectors and boards are secure. Consult the system housing installation guide for assistance.

If you follow the corrective steps above and still receive an error message, the cause may be an equipment malfunction.

If you are sure that your configuration values are correct and your battery is in good condition, the problem may lie in a damaged or defective chip. Contact an authorized service center for assistance.

BIOS Utility

Most systems are configured by the manufacturer or the dealer. There is no need to run Setup when starting the computer unless you get a Run Setup message.

The Setup program loads configuration values into the battery-backed, nonvolatile memory called CMOS RAM. This memory area is not part of the system RAM.



If you repeatedly receive Run Setup error messages, check the computer's internal battery. If the battery is dead or not properly connected, the system cannot retain configuration values in CMOS RAM.

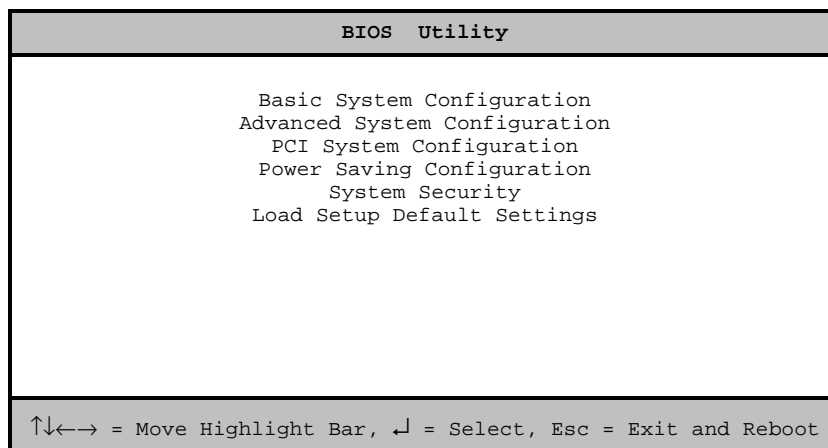
Before running, have the following information ready:

- **Diskette drive type** The standard diskette drive type is either 5.25-inch, 360 KB/1.2 MB or 3.5-inch, 720 KB/1.44 MB/2.88 MB.
- **Hard disk drive type** To determine your drive type, compare the information on the label pasted to your hard disk (or supplied in vendor documentation) with the disk types listed in Table 2-1.

2.1 Entering Setup

During power-on self test (POST), press the key combination **CTRL** **ALT** **ESC** to enter Setup. You do not need to insert a diskette or load an operating system. Just press the key combination.

The following screen shows the Setup main menu:



You can enter Setup only during POST.

The parameters on the screens show default values. These values may not be the same as those in your system.

2.2 Basic System Configuration

Select Basic System Configuration to input configuration values such as date, time and disk type.

The screen below shows the Basic System Configuration Setup menu:

Basic System Configuration		Page 1/2	
Date -----	[XX/XX/XX]		
Time -----	[XX:XX:XX]		
Diskette Drive A -----	[XXX MB, XX-inch]		
Diskette Drive B -----	[None]		
		Cylinder	Head
IDE Drive 0 (XXX MB)[Auto]		XXX	XX
IDE Drive 1 (XXX MB)[Auto]		XXX	XX
IDE Drive 2 [Auto]			
IDE Drive 3 [Auto]			
Base Memory-----	[XXX] KB		
Extended Memory-----	[XXXX] KB		
Total Memory-----	[XXXX] KB		
Math Coprocessor-----	[Installed]		
Video Display-----	[VGA/EGA]		
↑ ↓ = Move Highlight Bar, → ← = Change Setting PgDn/PgUp = Move Screen, F1 = Help, Esc = Exit			

The command line at the bottom of the display has three functions. It tells you how to view the configuration options for each parameter, how to move the highlight bar from one parameter to the next, and how to change the value for each parameter.

1. Press **↑** or **↓** to highlight the desired parameter.
2. Press **→** or **←** to select the desired option for an item.
3. Press **PGDN** to turn to the next page, or press **PGUP** to return to the previous page.
4. Press **ESC** to exit the configuration menu.

The screen below shows page 2 of the Basic System Configuration menu:

```
Basic System Configuration                               Page 2/2

Communication Settings
  Baud Rate----- [9600] BPS
  Parity----- [None]
  Stop Bits----- [ 1 ] Bit(s)
  Data Length----- [ 8 ] Bits

Enhanced IDE Features
  Hard Disk Block Mode----- [Enabled]
  Advanced PIO Mode----- [Enabled]
  Hard Disk Size > 504 MB----- [Enabled]
  Hard Disk 32 Bit Access----- [Enabled]

Large Memory Support Mode----- [Normal]
Num Lock After Boot ----- [Enabled]
Memory Test----- [Disabled]
Auto Configuration Mode----- [Enabled]
Fast Boot Mode----- [Enabled]



↑ ↓ = Move Highlight Bar, → ← = Change Setting
PgDn/PgUp = Move Screen, F1 = Help, Esc = Exit
```

To use the Help option, press **F1**. A window appears onscreen with a brief description of the currently highlighted parameter.

The following sections explain the different parameters and their settings.

2.2.1 Date and Time



Date

To set the date, highlight the Date parameter. Press  or  to set the current date, following the month, day, and year format.

Valid values for month, day, and year are:


Month	1 to 12
Day	1 to 31
Year	00 to 99

Time

To set the time, highlight the Time parameter. Press  or  to set the current time in the hour, minute, and second format.

Valid values for hour, minute, and second are:

Hour	00 to 23
Minute	00 to 59
Second	00 to 59

After setting the date and time, you need not set them again. As long as the internal battery remains good and is connected, the clock continues to keep the date and time accurately. When the operating system asks for the date and time, press  twice if you do not want to change the values of these parameters.

You can bypass the date and time prompts by creating an AUTOEXEC.BAT file. Refer to the MS-DOS manual.

2.2.2 Diskette Drives

To enter the configuration value for the first diskette drive (drive A), highlight Diskette Drive A. Press **→** or **←** to view the options and select the appropriate value.

The Diskette Drive parameters have the following options:

- None
- 360 KB, 5.25-inch
- 1.2 MB, 5.25-inch
- 720 KB, 3.5-inch
- 1.44 MB, 3.5-inch
- 2.88 MB, 3.5-inch

Follow the same procedure to enter the value for the Diskette Drive B parameter. Choose `None` if you do not have a second diskette drive.

2.2.3 IDE Drives

The system supports four IDE devices. The onboard IDE connector 1 is for the first and second IDE devices. The IDE connector 2 is reserved for the third and fourth IDE devices.

Move the highlight bar to IDE Drive 0 to configure the hard disk drive (drive C). Press **→** or **←** to display the hard disk options with their respective values. Select an option that corresponds to your hard disk type. Follow the same procedure to enter the values for the IDE Drive 1 parameter. Choose `None` if you do not have a second hard disk drive.

To automatically configure your third IDE device, highlight the parameter IDE Drive 2 and select `Auto`.

Highlight the parameter IDE Drive 3 and follow the same procedure to configure your fourth IDE device. Set both parameters to None if you want to bypass the feature.

Selecting the Auto Option

If you do not know the type of your hard disk, select the option *Auto*. When you select this option, the BIOS utility automatically determines the type of your hard disk during POST. You can see your hard disk values when you enter the BIOS Setup.

	Cylinder	Head	Sector
IDE Drive 0 (xx MB) [Auto]	xxx	xx	xx

You can also save the values under *User*.

	Cylinder	Head	Sector
IDE Drive 0 (xx MB) [User]	xxx	xx	xx

The next time you boot the system, BIOS does not have to auto-configure your hard disk as it detects the saved hard disk information during POST.



We recommend that you copy the hard disk values and keep them in a safe place in case you have to reconfigure the system in the future.

Follow the same procedure to auto-configure other installed disks.

Selecting the User Option

There are cases when you cannot use the `Auto` option. Instead, you have to select the `User` option. This is when you installed a hard disk that was previously formatted but not using the disk default parameters or structure. The disk type may be in the hard disk type list but the number of cylinders, heads, and sectors differ.

Follow these steps to use the `User` option:

1. Highlight `User`.
2. Type in the number of cylinders, heads, and sectors of the hard disk.



You must have obtained the correct hard disk information beforehand.

3. Choose `Yes` when asked if you want to save the CMOS data.



BIOS automatically configures the additional disk(s). However, if your system cannot recognize the hard disk type, connect your additional hard disk(s) to the IDE hard disk connector 1. Configure the hard disk either as IDE Drive 0 or IDE Drive 1. To configure, set the value to `User`. Press `ENTER` and type the value of the disk parameters

Hard Disk Types

The following table lists the hard disk types.

Table 2-1 Hard Disk Types

Type	Cylinders	Heads	Sectors per Track
0	(indicates SCSI or no hard disk)		
1	306	4	17
2	615	4	17
3	615	6	17
4	940	8	17
5	940	6	17
6	615	4	17
7	462	8	17
8	733	5	17
9	900	15	17
10	820	3	17
11	855	5	17
12	855	7	17
13	306	8	17
14	733	7	17
15	(reserved)		
16	612	4	17
17	977	5	17
18	977	7	17
19	1024	7	17
20	733	5	17
21	733	7	17
22	733	5	17
23	306	4	17

Table 2-1 Hard Disk Types (continued)

Type	Cylinders	Heads	Sectors per Track
24	612	4	17
25	306	4	17
26	612	4	17
27	698	7	17
28	976	5	17
29	306	4	17
30	611	4	17
31	732	7	17
32	1023	5	17
33	751	8	17
34	755	16	17
35	731	13	26
36	980	15	17
37	936	16	17
38	981	5	17
39	981	10	17
40	762	8	39
41	980	5	17
42	832	8	33
43	683	12	38
44	513	16	38
45	776	8	33
46	683	16	38
47	832	6	33
48	615	2	34
49	989	16	63
50	823	4	38
51	1001	5	17
52	1024	17	22

Table 2-1 Hard Disk Types (continued)

Type	Cylinders	Heads	Sectors per Track
53	723	13	51
54	548	8	38
55	1013	4	41
56	929	15	17
57	817	14	36
58	723	13	81
59	802	4	39
60	1024	9	17
61	895	5	55
62	(reserved)		
63	966	10	34
64	1024	8	17
65	1024	11	17
66	918	11	17
67	905	9	17
68	1024	10	17
69	1024	12	17
70	1024	13	17
71	1024	14	17
72	1024	2	17
73	1024	16	17
74	918	15	17
75	820	6	17
76	1024	5	17
77	1024	8	17
78	(reserved)		
79	1001	15	32
80	1024	16	63

Table 2-1 Hard Disk Types (continued)

Type	Cylinders	Heads	Sectors per Track
81	1024	10	17
82	1024	11	17
83	1024	15	17
84	776	8	33
85	926	13	17
86	805	4	26
87	976	5	17
88	745	4	28
89	747	2	28
90	782	2	1Bh
91	985	13	32
92	816	15	32
93	968	5	17
94	903	8	46
95	966	5	34
96	535	10	50
97	715	10	50
98 ~ 100	(reserved)		
Auto or User	(User-defined)		

2.2.4 System Memory

The system automatically detects the total amount of onboard memory and sets the corresponding value in the Setup program. This information is not adjustable by the user and is for display only. If you install additional memory, the system automatically updates the Total Memory parameter to show the new memory size.

```
Base Memory -----[ 640 ] KB
Extended Memory ----- --[ 7168 ] KB
Total Memory -----[ 7808 ] KB
```

2.2.5 Math Coprocessor

This parameter automatically detects the presence of the coprocessor and is for display only. The option set by the system is:

```
Math Coprocessor ----- [Installed ]
```

2.2.6 Video Display

The video display is the monitor on which the operating system prompt appears when you boot the system. The system automatically detects the video mode of your primary display and sets the configuration value accordingly.

```
Video Display ----- [VGA/EGA ]
```

2.2.7 Communication Settings

The Communication Settings parameters allow you to set the baud rate, parity, stop bit and data length for the first serial port. The values for this parameter are:

- Baud rate : 110 to 9600 bits per second (BPS)
- Parity : odd, even, or none
- Stop bit : 1 or 2 stop bits
- Data length : 7- or 8-bit data word



The baud rate maximum value 9600 BPS applies only to POST under UNIX environment. The system I/O chipset SMC 37C935 supports up to 460.8KBPS.

There is one restriction on the options available for the communication status parameters. If your data length parameter is an 8-bit data word, you must select one of the following combinations:

- 1 stop bit and odd or even parity
- 2 stop bits and no parity

2.2.8 Enhanced IDE Features

Hard Disk Block Mode

This function enhances disk performance depending on the hard disk in use. If enabled, it allows data transfers in block (multiple sectors) by increasing the data transfer rate to 256 bytes/cycle. However, if your system does not boot after enabling this parameter or if your hard disk does not support this function, change the setting to Disabled. The default is Enabled.

Advanced PIO Mode

Enabling this parameter improves system performance by allowing the use of faster hard drives. If your hard disk does not support this function, set this parameter to *Disabled*. The default is *Enabled*.

Hard Disk Size > 504 MB

This enhanced IDE feature only works under DOS, Windows 3.x and Windows 95 environments. If enabled, it allows you to use a hard disk with a capacity of more than 504 MB. This is made possible through the Logical Block Address (LBA) mode translation. Other operating systems require this parameter be set to *Disabled*. The default is *Enabled*.

Hard Disk 32-Bit Access

Enabling this parameter improves system performance by allowing the use of the 32-bit hard disk access. This enhanced IDE feature only works under DOS, Windows 3.x, Windows 95, and Novell NetWare. If your software or hard disk does not support this function, set this parameter to *Disabled*. The default is *Enabled*.

2.2.9 Large Memory Support Mode

The available settings for this parameter are *Normal* and *Advanced*. Set this parameter to *Advanced* if you are working under the Windows NT 3.1 environment. This setting allows your system to support an extended memory higher than 64 MB. The default setting is *Normal*.

2.2.10 Num Lock After Boot

This parameter enables users to activate the Num Lock function upon system boot.

2.2.11 Memory Test

The system performs a RAM test during the POST routine. Set this parameter to *Disabled* to bypass this test.

2.2.12 Auto-configuration Mode

Set this parameter to *Enabled* if you do not know the hard disk drive type parameters and the onboard communication port configuration. When enabled, this parameter sets the hard disk drive type to *Auto*, video RAM to *Shadow*, and enables the first-level cache. The default setting is *Enabled*.

2.2.13 Fast Boot Mode

This parameter allows the system to boot faster by skipping some POST routines. If enabled, it sets the System Speed to *High* and enables Shadow RAM, as well as the first-level cache. The default setting is *Enabled*.

2.3 Advanced System Configuration

Select the parameter Advanced System Configuration from the main menu to configure the system memory. The screen below shows the Advanced System Configuration menu.

Advanced System Configuration		Page 1/2
Shadow RAM		
E0000h - FFFFFh (System BIOS)-----	[Enabled]	
C0000h - C7FFFh (Video BIOS)-----	[Enabled]	
C8000h - CBFFFh -----	[Disabled]	
CC000h - CFFFFh -----	[Disabled]	
D0000h - D3FFFh -----	[Disabled]	
D4000h - D7FFFh -----	[Disabled]	
D8000h - DBFFFh -----	[Disabled]	
DC000h - DFFFFh -----	[Disabled]	
Internal Cache (CPU Cache) -----	[Enabled]	
External Cache -----	[Enabled]	
E0000h - FFFFFh (System BIOS) -----	[Cacheable]	
C0000h - C7FFFh (Video BIOS) -----	[Cacheable]	
Memory at 15 MB - 16 MB Reserved for ---	[System] Use	
ECC/Parity Mode Selection -----	[Disabled]	
Operation of ECC -----	[Both]	
↑ ↓ = Move Highlight Bar, → ← = Change Setting PgDn/PgUp = Move Screen, F1 = Help, Esc = Exit		

2.3.1 Shadow RAM

The Shadow RAM parameter allows you to change the system BIOS and video BIOS locations from ROM to RAM. When the system boots, the BIOS routines are copied into the RAM area. Relocating to RAM enhances system performance, as information access is faster than ROM.

The address range E0000h - FFFFFh is for shadowing the system BIOS. This item is always set to *Enabled* and is not user-configurable. The address range C0000h - C7FFFh is for shadowing the video BIOS. The remaining address ranges are for the expansion board's ROM.

To change the BIOS location from ROM to RAM, select *Enabled*. If you select *Disabled*, the BIOS information remains in ROM. The default setting for all RAM shadowing is *Disabled*.

2.3.2 Internal Cache (CPU Cache)

This parameter enables or disables the internal cache memory. The default setting is *Enabled*.

2.3.3 External Cache

This parameter lets you enable or disable the second-level cache. The default setting is *Enabled*.

2.3.4 E0000h - FFFFFh (System BIOS)

Set this parameter to *Cacheable* if you want the system BIOS to run directly from the cache memory, thus allowing your system to function faster. Set this to *Non-cacheable* to run the system BIOS from RAM. The default is *Cacheable*.

2.3.5 C0000h - C7FFFh (Video BIOS)

Set this parameter to `Cacheable` if you want the video BIOS to run directly from the cache memory, thus allowing your system to function faster. Set this to `Non-cacheable` to run the video BIOS from RAM. The default is `Cacheable`.

2.3.6 Memory at 15MB-16MB

To prevent memory address conflicts between the system and expansion boards, reserve this memory range for the use of either the system or an expansion board.

2.3.7 ECC/Parity Mode Selection

This parameter allows you to enable or disable the ECC and parity check feature. Select `Disabled` if you installed SIMMs without parity or ECC.

Operation of ECC

This parameter allows you to select the error detection mode. The following are the ECC operation options.

- `None` - detects single-bit errors and automatically corrects any error but does not set the single-bit error flag in the chipset. In this option, the operating system does not receive any signal even if there are system errors.
- `Single-bit` - detects single-bit errors, automatically corrects any error, and sets the single-bit error flag in the chipset. The setting of the single-bit error flag is a signal to the operating system that ECC detected single-bit errors.
- `Multiple-bit` - detects multiple-bit errors and sets the multiple-bit error flag in the chipset but does not correct the errors. The setting of the multiple-bit error flag is a signal to the operating system that ECC detected multiple-bit errors.

- Both - detects both single- and multiple-bit errors but corrects only single-bit errors. This option sets either the single- or the multiple-bit flags in the chipset to send signals to the operating system that ECC detected errors.

2.4 PCI System Configuration

The PCI System Configuration allows you to specify the settings for your PCI devices.

PCI System Configuration					Page 1/1
PCI IRQ Setting					[Auto]
		INTA	INTB	INTC	INTD
PCI Slot 1		[--]	[--]	[--]	[--]
PCI Slot 2		[--]	[--]	[--]	[--]
PCI Slot 3		[--]	[--]	[--]	[--]
PCI Slot 4		[--]	[--]	[--]	[--]
VGA Palette Snoop					[Disabled]
SCSI & ASM Adapter					[Disabled]
Boot Device					[Disabled]
↑↓ = Move Highlight Bar, → ← = Change Setting PgDn/PgUp = Move Screen, F1 = Help, Esc = Exit					

2.4.1 PCI IRQ Setting

This parameter allows for **Auto** or **Manual** configuration of PCI devices. If you use plug-and-play (PnP) devices, you can keep the default setting **Auto**. The system then automatically configures the PnP devices. If your device is not a PnP, you can manually assign the interrupt for each of the device or use the ICU utility to reserve system resource for the installed non-PnP devices.







Refer to your manual for technical information about the PCI card.

PCI Slots

These parameters allow you to specify the appropriate interrupt for each of the PCI devices. You can assign IRQ3, IRQ4, IRQ5, IRQ7, IRQ9, IRQ10, IRQ11, IRQ12, or IRQ15 to the slots, i.e., if these IRQs are not used by other devices.



Use the  or  key to move between fields.

Use the  or  key to select options.

2.4.2 VGA Palette Snoop

This parameter permits you to use the palette snooping feature if you installed more than one VGA card in the system.

The VGA palette snoop function allows the control palette register (CPR) to manage and update the VGA RAM DAC (Digital Analog Converter, a color data storage) of each VGA card installed in the system. The snooping process lets the CPR send a signal to all the VGA cards so that they can update their individual RAM DACs. The signal goes through the cards continuously until all RAM DAC data have been updated. This allows display of multiple images on the screen.

The default setting for this parameter is Disabled.



Some VGA cards have required settings for this feature. Check your VGA card manual before setting this parameter.

2.4.3 SCSI & ASM Adapter

This parameter allows you to enable or disable the SCSI function of the SCSI/ASM card installed in your system. If you do not have any, set this to Disabled.

Boot Device

During POST, the normal booting procedure starts with the initialization of the ISA card, followed by the PCI card, then the onboard SCSI, if present. Enabling this parameter changes the normal booting sequence of the system, doing the SCSI initialization prior to add-on card initialization.

This is configurable only if the SCSI & ASM Adapter parameter is enabled.

2.5 Power Saving Configuration

The following screen appears if you select the option Power Saving Configuration.

```
Power Saving Configuration                               Page 1/1
-----
Power Management Mode----- [Disabled]
IDE Hard Disk Standby Mode----- [ 15] Minute(s)
System Standby Mode----- [ 15] Minute(s)

System Wakeup Events
IRQ 0----- [Disabled]           IRQ 8 -----[Disabled]
IRQ 1----- [Enabled ]           IRQ 9 -----[Disabled]
IRQ 3----- [Disabled]           IRQ 10 -----[Disabled]
IRQ 4----- [Disabled]           IRQ 11 -----[Disabled]
IRQ 5----- [Disabled]           IRQ 12 -----[Enabled ]
IRQ 6----- [Disabled]           IRQ 13 -----[Disabled]
IRQ 7----- [Disabled]           IRQ 14 -----[Disabled]
                                   IRQ 15 -----[Disabled]

↑ ↓ = Move Highlight Bar, → ← = Change Setting
PgDn/PgUp = Move Screen, F1 = Help, Esc = Exit
```

2.5.1 Power Management Mode

The Power Management Mode allows you to reduce power consumption. If enabled, you can set the following parameters:

IDE Hard Disk Standby Mode

This parameter allows you to set the hard disk to go into Standby mode after inactivity of 1 ~ 15 minutes. When the hard disk is accessed again, allow 3 ~ 5 seconds (depending on the HDD in use) for the hard disk to return to normal speed. Turn this function off if your hard disk does not support this function.

```
IDE Hard Standby Mode-----[1/2/3.../15 min/Off]
```

System Standby Mode

This parameter provides a fast-on power saving mode by setting the CPU, monitor and IDE device(s) to go into Standby mode. If the system is idle for a specified period of time, it automatically enters the Suspend mode. Any action detected from the enabled system wakeup events returns the system to full power.

System Standby Mode----[1/2/3/.../15 min/Off]

2.5.2 System Wakeup Events





This function allows the user to configure the Power Management Mode by checking the activities of the IRQ channels. Any activity detected from the enabled channels resumes the system to full power. Disable the channels that you want to bypass.

2.6 System Security Setup

The Setup program has a number of security features to prevent unauthorized access to the system and its data.

Enter the Setup program and select the option System Security Setup. The following screen appears:

System Security		Page 1/1
Diskette Drive Control		
Diskette Drive -----		[Normal]
Hard Disk Drive -----		[Normal]
System Boot Drive -----		[Drive A then C]
Boot from CD-ROM (IDE)-----		[Disabled]
Onboard Communication Ports		
Serial Port 1 Base Address ---		[3F8h]
Serial Port 2 Base Address ---		[2F8h]
Parallel Port Base Address ---		[278h (IRQ5)]
Operation Mode -----		[Standard Parallel Port (SPP)]
		Mode
ECP DMA Channel-----		[--]
Onboard PS/2 Mouse (IRQ 12)-----		[Enabled]
Setup Password -----		[None]
Power On Password -----		[None]
↑ ↓ = Move Highlight Bar, → ← = Change Setting PgDn/PgUp = Move Screen, F1 = Help, Esc = Exit		

Press  or  to move the highlight from one parameter to the next.
Press  or  to change the setting.

2.6.1 Disk Drive Control

The disk drive control features allow you to enable or disable the read/write functions of a disk drive. These features can also control the diskette drive or the hard disk drive boot function to prevent loading operating systems or other programs from a certain drive while the other drives are operational.

Table 2-2 lists the drive control settings and their corresponding functions.

Table 2-2 *Drive Control Settings*

Diskette Drive	
Setting	Description
Normal	Diskette drive functions normally
Write Protect All Sectors	Disables the write function on all sectors
Write Protect Boot Sector	Disables the write function only on the boot sector
Disabled	Disables all diskette functions
Hard Disk Drive	
Setting	Description
Normal	Hard disk drive functions normally
Write Protect All Sectors	Disables the write function on all sectors
Write Protect Boot Sector	Disables the write function only on the boot sector
Disabled	Disables all hard disk functions

Table 2-2 Drive Control Settings (continued)

System Boot Drive	
Setting	Description
Drive A then C	The system checks drive A first. If there is a diskette in the drive, the system boots from drive A. Otherwise, it boots from drive C.
Drive C then A	The system checks drive C first. If there is a hard disk (drive C) installed, the system boots from drive C. Otherwise, it boots from drive A.
C:	The system always boots from drive C.
A:	The system always boots from drive A.
Boot from CD-ROM (IDE)	
Setting	Description
Enabled	The system checks for a bootable CD in the CD-ROM. If a CD is present, the system boots from the CD-ROM. Otherwise, it boots from the drive specified in the System Boot drive parameter.
Disabled	System boots from the drive specified in the System Boot Drive parameter.

2.6.2 Onboard Communication Ports

Serial Port 1 Base Address

This parameter allows you to set the serial port 1 logical base address.

Table 2-3 Serial Port 1 Settings

Setting	Description
3F8h	Serial port 1 with address 3F8h using IRQ4
2F8h	Serial port 1 with address 2F8h using IRQ3
3E8h	Serial port 1 with address 3E8h using IRQ4
2E8h	Serial port 1 with address 2E8h using IRQ3
Disabled	Disables serial port 1

Serial Port 2 Base Address

This parameter allows you to set the serial port 2 logical base address.

Table 2-4 Serial Port 2 Settings

Setting	Description
3F8h	Serial port 2 with address 3F8h using IRQ4
2F8h	Serial port 2 with address 2F8h using IRQ3
3E8h	Serial port 2 with address 3E8h using IRQ4
2E8h	Serial port 2 with address 2E8h using IRQ3
Disabled	Disables serial port 2



If you assign 3F8h to serial port 1, you may only assign 2F8h or 2E8h to serial port 2.

If you assign 2F8h to serial port 1, you may only assign 3F8h or 3E8h to serial port 2.

Parallel Port Base Address

The system has one parallel port. Table 2-5 lists the options for selecting the parallel port address. You also have the option to disable the parallel port.

Table 2-5 Parallel Port Settings

Setting	Function
3BCh (IRQ 7)	Corresponds to the parallel port with address 3BCh
378h (IRQ 7)	Corresponds to the parallel port with address 378h
278h (IRQ 5)	Corresponds to the parallel port with address 278h
Disabled	Disables the parallel port



The 3BCh (IRQ 7) setting works only with Standard Parallel Port (SPP) and Standard and Bidirectional operation modes.

To deactivate the parallel port, select the Disabled option. If you install an add-on card that has a parallel port whose address conflicts with the parallel port onboard, the system automatically disables the onboard functions.

Check the parallel port address on the add-on card and change the address to one that does not conflict.

OPERATION MODE

This item allows you to set the operation mode of the parallel port. Table 2-6 lists the different operation modes.

Table 2-6 *Parallel Port Operation Mode Settings*

Setting	Function
Standard Parallel Port (SPP)	Allows normal speed one-way operation
Standard and Bidirectional	Allows normal speed operation in a two-way mode
Enhanced Parallel Port (EPP)	Allows bidirectional parallel port operation at maximum speed
Extended Capabilities Port (ECP)	Allows parallel port to operate in bidirectional mode and at a speed higher than the maximum data transfer rate



When you select the Enhanced Parallel Port (EPP) or Extended Capabilities Port (ECP) as operation mode, the parallel port base address 3BCh (IRQ 7) is not available.

ECP DMA CHANNEL

This item becomes active only if you select Extended Capabilities Port (ECP) as the operation mode. It allows you to select DMA channel 1 or DMA channel 3 (as required in Windows95).

2.6.3 Onboard PS/2 Mouse (IRQ 12)

This parameter enables or disables the onboard PS/2 mouse. When set to *Enabled*, it allows you to use the onboard PS/2 mouse assigned with IRQ12. When set to *Disabled*, it deactivates the mouse and sets IRQ12 available for the use of other devices.

2.6.4 Setup Password

The Setup Password prevents unauthorized access to the BIOS utility.



Setting a Password

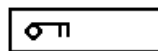
1. Make sure that JP2 is set to pins 2-3 (bypass password).



You cannot enter the BIOS utility if a Setup password does not exist and JP2 is set to pins 1-2 (password check enabled).

By default, JP2 is set to pins 2-3 (bypass password).


2. Enter BIOS utility and select System Security.
3. Highlight the Setup Password parameter and press the  or  key. The password prompt appears:

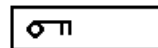
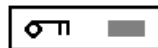


4. Type a password. The password may consist of up to seven characters.



Be very careful when typing your password because the characters do not appear on the screen.

5. Press . A prompt asks you to retype the password to verify your first entry.



-
6. Retype the password then press **ENTER**.

After setting the password, the system automatically sets the Setup Password parameter to `Present`.

7. Press **ESC** to exit the System Security screen and return to the main menu.
8. Press **ESC** to exit the BIOS utility. A dialog box appears asking if you want to save the CMOS data.
9. Select `Yes` to save the changes and reboot the system.
10. While rebooting, turn off the system then open the housing.
11. Set JP2 to pins 1-2 to enable the password function.

The next time you want to enter the BIOS utility, you must key-in your Setup password.

Changing or Removing the Setup Password

Should you want to change your setup password, do the following:

1. Enter the BIOS utility and select System Security.
2. Highlight the Setup Password parameter.
3. Press **←** or **→** to display the password prompt and key-in a new password.

or

Press **←** or **→** and select `None` to remove the existing password.
4. Press **ESC** to exit the System Security screen and return to the main menu.
5. Press **ESC** to exit the BIOS utility. A dialog box appears asking if you want to save the CMOS data.

-
6. Select **Yes** to save the changes.

Bypassing the Setup Password

If you forget your setup password, you can bypass the password security feature by hardware. Follow these steps to bypass the password:

1. Turn off and unplug the system.
2. Open the system housing and short pins 2-3 of JP2 to bypass the password function.
3. Turn on the system and enter the BIOS utility. This time, the system does not require you to type in a password.



*You can either change the existing Setup password or remove it by selecting **None**. Refer to the previous section for the procedure.*

2.6.5 Power On Password

The Power On Password secures your system against unauthorized use. Once you set this password, you have to type it whenever you boot the system. To set this password, enter the BIOS utility, select System Security, then highlight the Power On Password parameter. Follow the same procedure as in setting the Setup password.



Make sure to set JP2 to 1-2 to enable the Power On password.

2.7 Load Setup Default Settings

This parameter loads the default values to the system configuration parameters. The default values are the optimized configuration settings for the system. If you select this option, the following prompt appears:

BIOS Utility
Basic System Configuration Advanced System Configuration PCI System Configuration Power Saving Configuration System Security Load Setup Default Settings
Load Default Settings Are you sure ? [Yes] [No]
↑↓ = Move Highlight Bar, ← = Select, Esc = Exit and Reboot

Select Yes to automatically load the parameter default settings. Select No to disregard the option.



If the battery loses power or the CMOS chip is damaged, select Load Default Settings from the Setup main menu. This automatically re-loads the default settings and configures the system.

2.8 Leaving Setup

Examine the system configuration values. When you are satisfied that all the values are correct, write them down. Store the recorded values in a safe place, such as in this manual.

Press **ESC** to leave the system configuration setup. The following screen appears:

```
Do you want to save CMOS data?
      [Yes]      [No]
```

Use the arrow keys to select your response. Select **Yes** to store the new data in CMOS RAM. Select **No** to retain the old configuration values. Then press **ENTER**.