Introduction

System Overview

The board incorporates system board, ISA I/O and PCI IDE in one board that provides all the PC solutions. The mainboard is a Pentium II^{TM} micro processor based PC/AT system, supports single processors with ISA Bus , PCI Local Bus and AGP Bus to upgrade your system performance. It is ideal for multi-tasking and fully supports MS-DOS, Windows, Windows NT, Novell, OS/2, Windows95/98, UNIX, SCO UNIX etc. This manual also explains how to install the mainboard for operation, and how to setup your CMOS configuration with BIOS setup program.

Features

- **Hardware**

CPU

– The Pentium II^{TM} micro Processor provides the new generation power for high-end workstations and servers.

– Provides slot1.

Speed

– Supports from 233MHz to 333MHz CPU speed.

– Supports 33MHz PCI Bus speed.

– I/O clock 8MHz for ISA Bus.

– Supports 66MHz / 133MHz AGP Bus.

DRAM Memory

– Supports 8/16/32/64.......MB DIMM module socket.

– Supports EDO (3.3V) & Synchronous DRAM (3.3V).

– Supports a maximum memory size of 256MB with SDRAM, or 512MB with EDO.

Green Function

– Supports power management operation via BIOS.

– Power down timer from 1 min to 15 mins.

– Wakes up by any key pressed or mouse activity.

Shadow RAM

– A memory controller that provides shadow RAM and supports 8-bit ROM BIOS.

BUS Slots

– Provides two 16-bit ISA Bus slots and three PCI Bus slots, one AGP Bus slot.

Flash Memory

– Supports flash memory.

– Supports ESCD Function.

PCI Enhanced IDE Built-in On Board

– Supports 4 IDE hard disk drives.

– Supports PIO mode 4, Master Mode, high performance hard disk drives.

– Supports Ultra DMA/33, Bus Master Mode.

– Supports IDE interface with CD-ROM.

– Supports high capacity hard disk drives.

– Supports LBA mode.

ISA I/O Built-in On Board

– Supports one multi-mode Parallel Port.

 (1) Standard & Bidirection Parallel Port.

 (2) Enhanced Parallel Port (EPP).

 (3) Extended Capabilities Port (ECP).

– Supports two serial ports, 16550 UART.

– Supports one Infrared transmission (IR). (optional)

– Supports PS/2 Mouse.

– Supports 360KB, 720KB, 1.2MB, 1.44MB and 2.88MB floppy disk drivers.

Universal Serial Bus

– Supports two Universal Serial Bus (U.S.B.) Ports.

– Supports 48 MHz USB.

Dimension(ATX form-factor)

– 26.5 cm X 18 cm (W x L)

● Software

BIOS

    – AWARD legal BIOS.
    – Supports APM1.2.
    – Supports USB Function.

O.S.

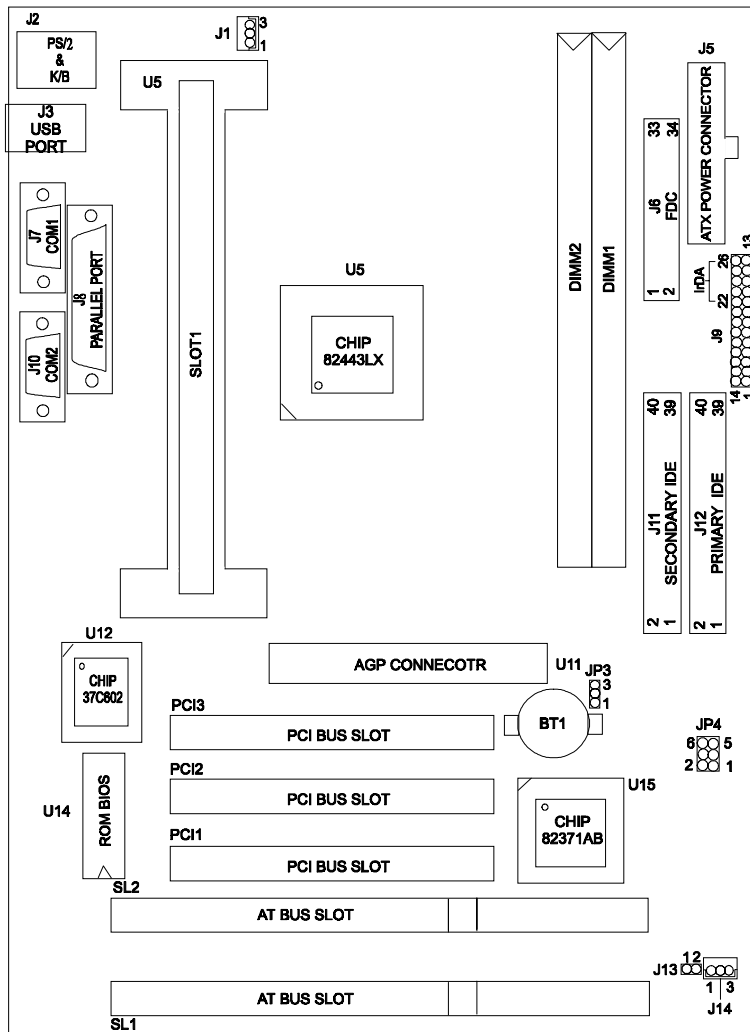   – Offers the highest performance for MS-DOS, OS/2, Windows, Windows NT, Windows 95 / 98, Novell, UNIX, SCO UNIX etc.

● Attachments

    – HDD Cable
    – FDD Cable
    – Flash Memory Writer for BIOS Update (optional)
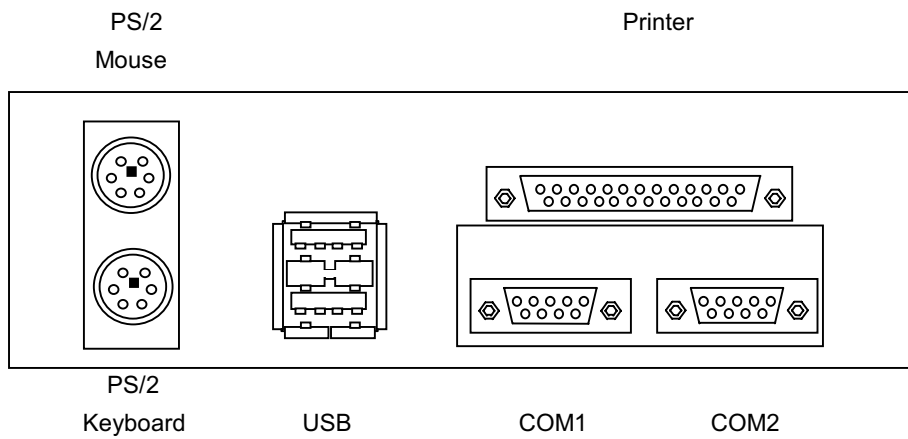   – Retention Kits for CPU
    – IDE Driver Disk

Mainboard Installation

Layout of Mainboard

Model No. M6TLD   Ver:1 and afterwards

| Component labels (from diagram) |
|---|
| J2 PS/2 & K/B |
| J1 3 / 1 |
| U5 |
| J3 USB PORT |
| J7 COM1 |
| J8 PARALLEL PORT |
| J10 COM2 |
| SLOT1 |
| U5 CHIP 82443LX |
| DIMM2 DIMM1 |
| J5 ATX POWER CONNECTOR |
| J6 FDC 33 34 / 1 2 |
| IrDA 26 22 / J9 14 1 / 13 |
| J11 SECONDARY IDE 40 39 / 2 1 |
| J12 PRIMARY IDE 40 39 / 2 1 |
| U12 CHIP 37C802 |
| AGP CONNECOTR |
| U11 JP3 3 1 |
| PCI3 PCI BUS SLOT |
| BT1 |
| JP4 6 5 / 2 1 |
| PCI2 PCI BUS SLOT |
| U15 CHIP 82371AB |
| U14 ROM BIOS |
| PCI1 PCI BUS SLOT |
| SL2 AT BUS SLOT |
| J13 12 / 1 3 / J14 |
| SL1 AT BUS SLOT |

Back I/O panel

Jumper Settings

A jumper is several pins which may or may not be covered by a plastic jumper cap. A jumper is used to select different system options.
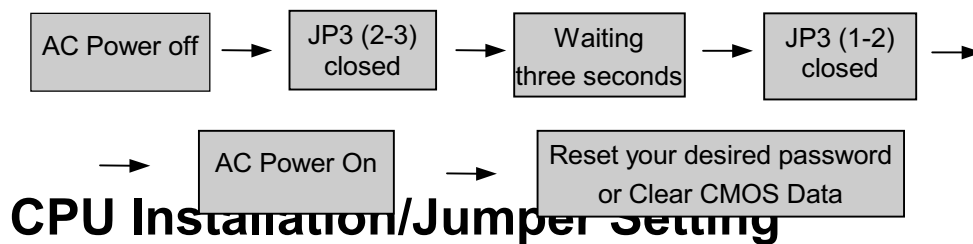
(A)   JP3   CMOS Function Select
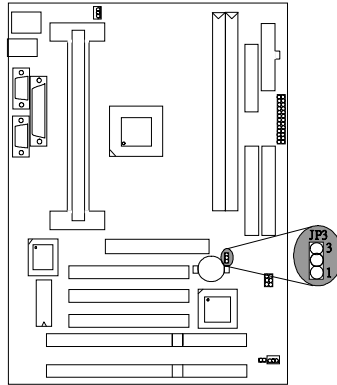
JP3	Assignment
1 ⬜⬜⬜ 3 1-2 Closed	Normal Operation (default)
1 ⬜⬜⬜ 3 2-3 Closed	Clear CMOS Data (*Note)
1 ⬜⬜⬜ 3 Open	Onboard Battery Disabled

*Note : Please follow the procedure as below to clear CMOS Data.
Note : Please follow the procedure as below to clear BIOS Password if your password is lost or forgotten.


AC Power off → JP3 (2-3) closed → Waiting three seconds → JP3 (1-2) closed →

→ AC Power On → Reset your desired password or Clear CMOS Data

CPU Installation/Jumper Setting

Pentium II CPU Installation Procedure

Step 1: Insert the Retention Mechanism Attach Mount at the bottom of the mainboard.

Step 2: Insert the Retention Mechanism Attach Mount at the bottom of the mainboard.

Look for the key on Slot 1, and match it with the Notch Key on the Retention Mechanism for proper direction. Then, attach the Retention Mechanism to the Retention Mechanism Attach Mount. Use a Screwdriver to secure the Retention Mechanism.
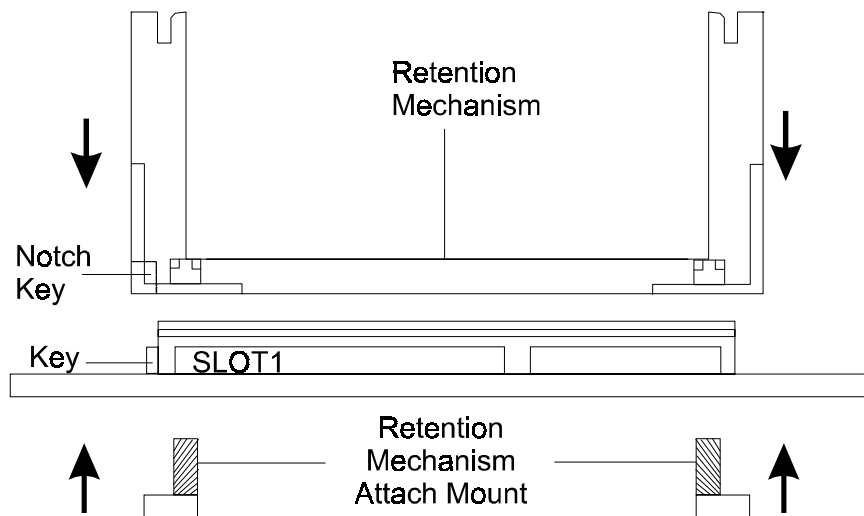
Step 3: Insert the Heat Sink Support Base.

Look for the Two holes across Slot 1, and match it with the Two legs of

the Heat Sink Support Base for the proper direction.   Take note that one hole/leg is bigger than the other.   The Four top pins of the Heat Sink Support Base should also be oriented towards Slot 1.

**Heat Sink
Support Pin**

pins

**Heat Sink
Support Base**

Leg
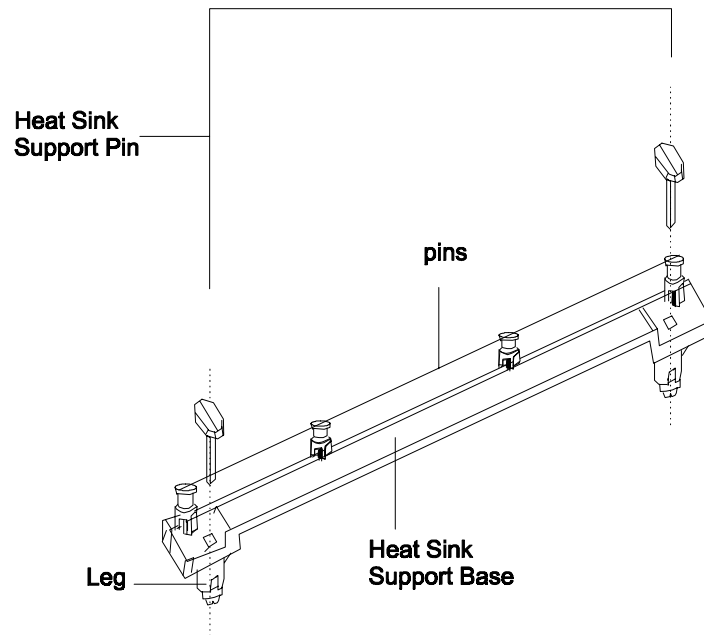
Push the Heat Sink Support Base onto the mainboard, until you hear a click sound.   Check for a perfect fit.

Step 4:   Insert the Heat Sink Support Pin.

Push the Heat Sink Support Pins onto the two holes of the Heat Sink Support Base.   Check for a perfect fit.   These pins are used to secure the Heat Sink Support Base.
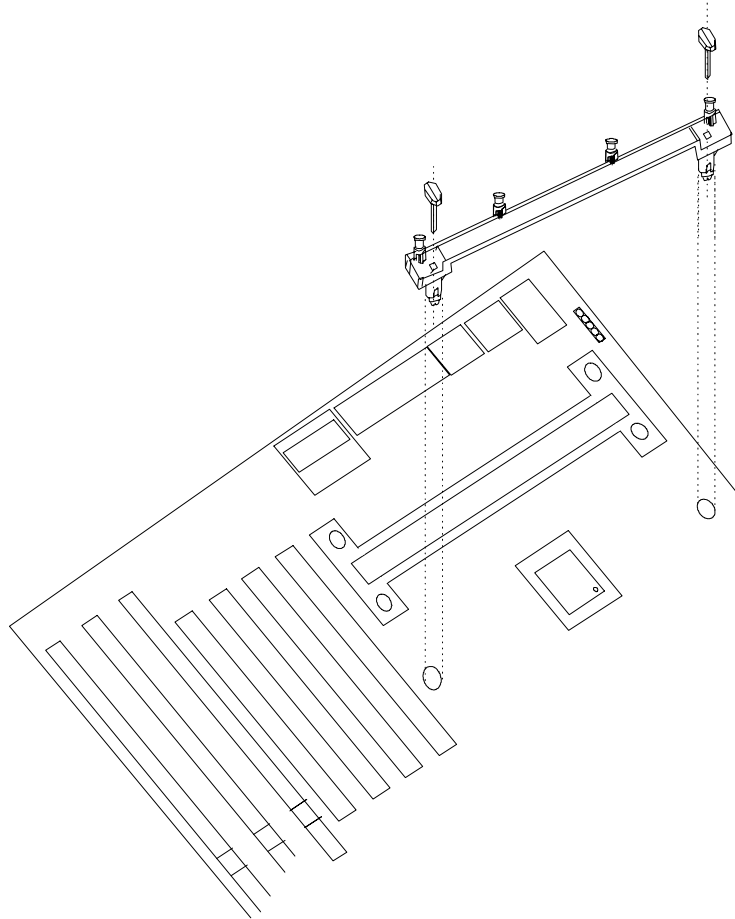
Step 5:

Note : Please remove plastic of the heat sink before installation of the Fan.
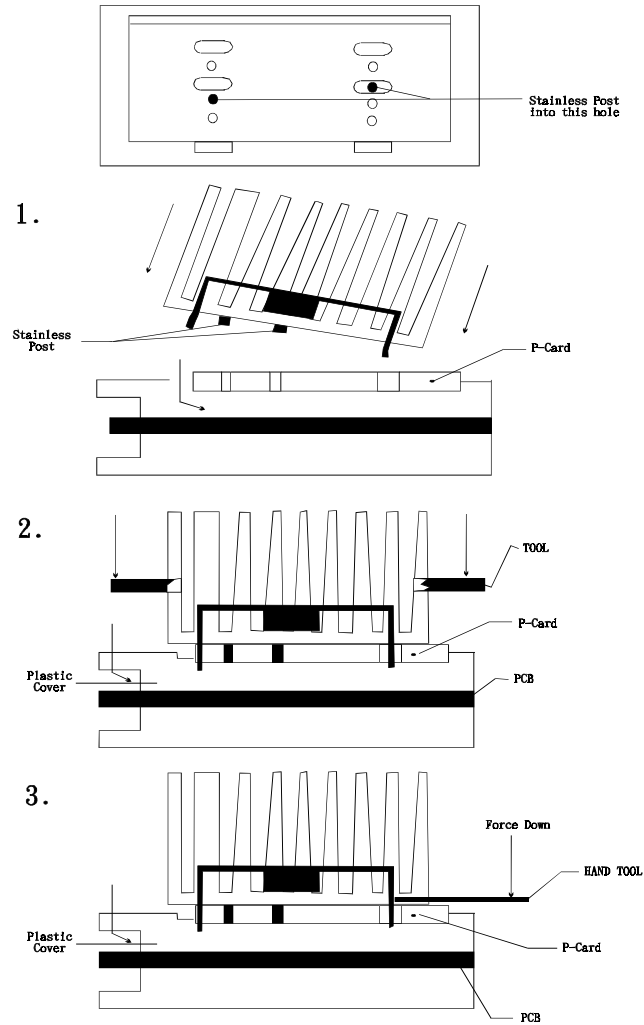
Step 6:
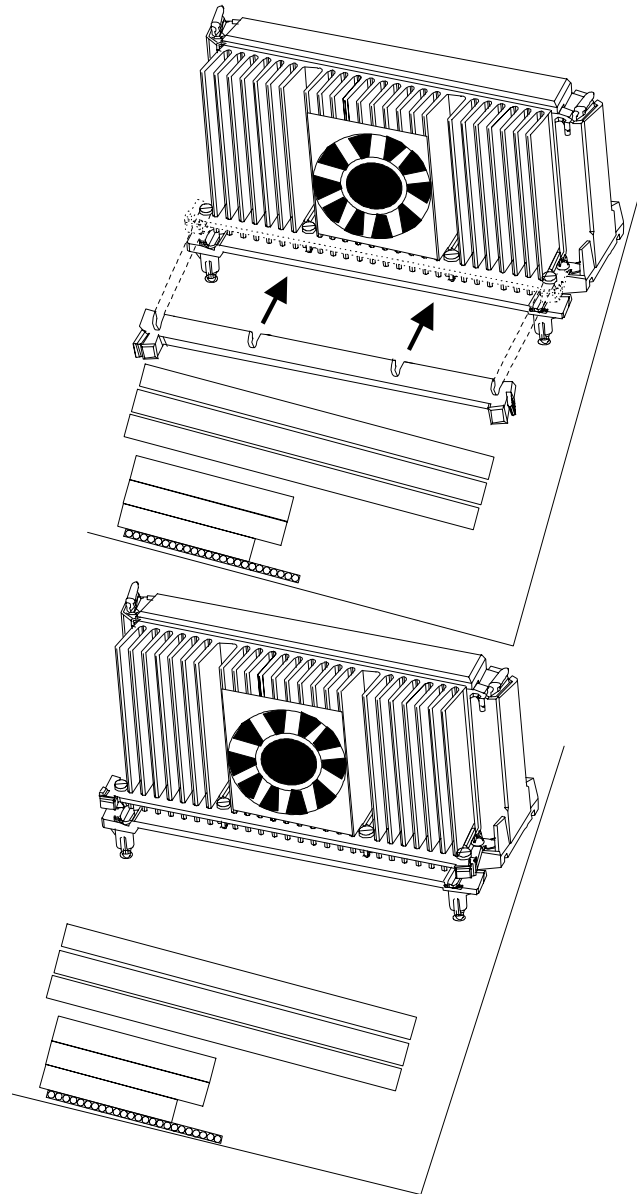
(A)   JP4   INTEL CPU Clock Select
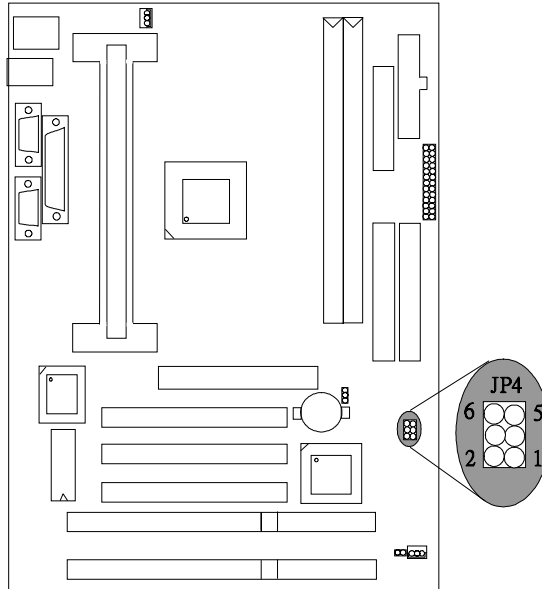
CPU Speed	JP4 (1-2)	JP4 (3-4)	JP4 (5-6)
200MHz	closed	open	closed
233MHz	open	open	closed
266MHz	closed	closed	open
300MHz	open	closed	open
333MHz	closed	open	open

Connectors

(A)   J9
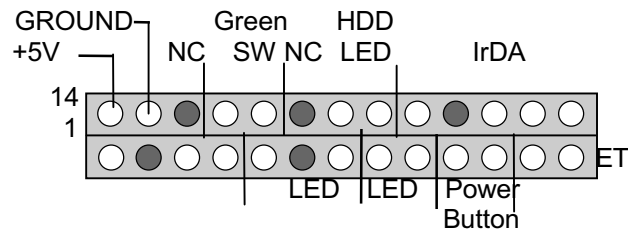
Pin No.	Assignment	Function	Pin No.	Assignment	Function
1	Speaker	Speaker Connector	14	+5V	VCC Ground
2	NC		15	Ground	
3	Ground		16	NC	
4	+5V		17	Green Control	Green Switch
5	Power LED(+)	Power LED	18	Green Control	
6	NC		19	NC	HDD LED
7	Ground		20	HDD LED(-)	
8	Green LED +	Green LED	21	HDD LED(+)	
9	Green LED -		22	+5V	IrDA Connector
10	Power Switch	ATX Power Button	23	NC	
11	Standby Voltage		24	IRRX	
12	Reset Control	Reset	25	Ground	
13	Ground		26	IRTX	

(B)   J14   Wake-On-LAN Header
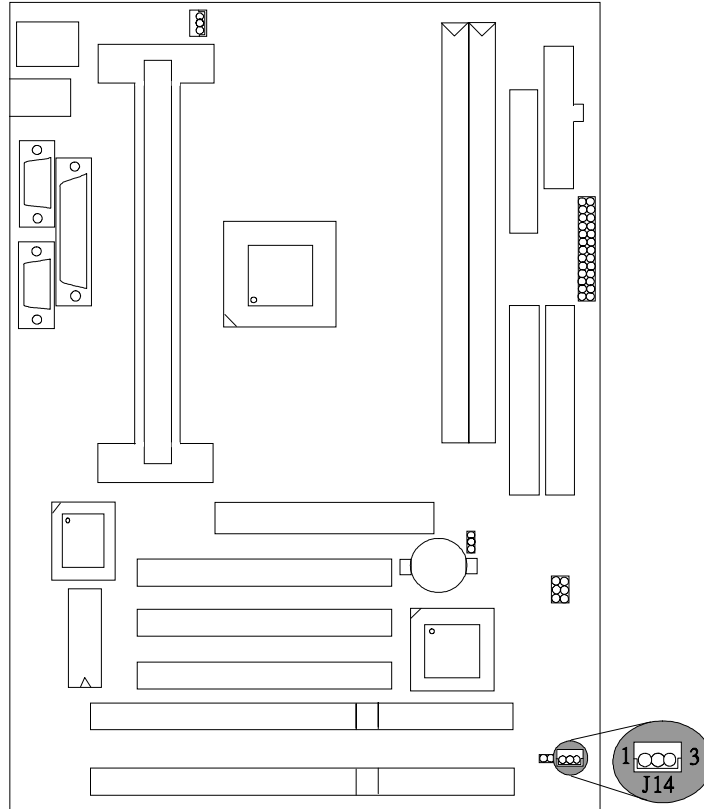
Pin No.	Assignment
1	+5 VSB
2	Ground
3	MP-Wakeup

(C)   J13   Wake-On-Internal Modem
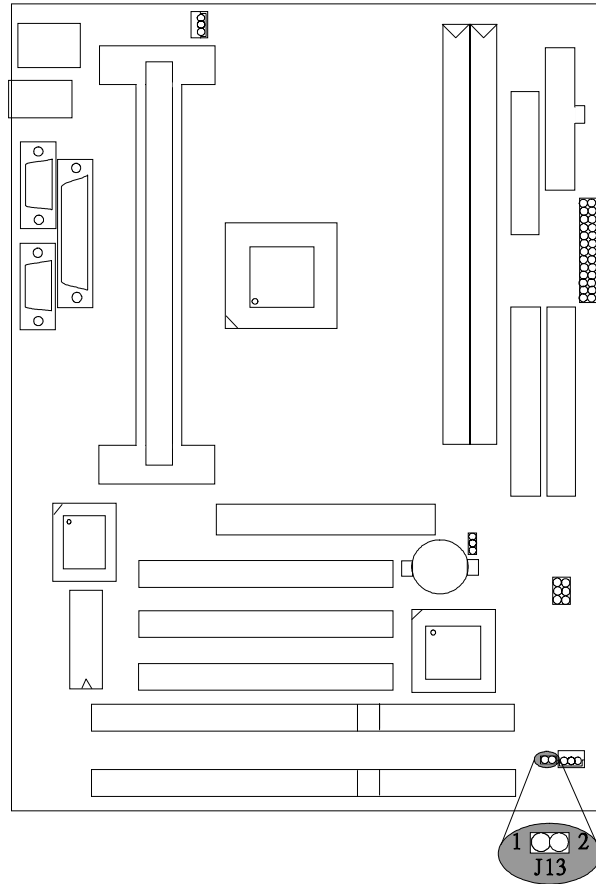
Pin No.	Assignment
1	Ring
2	GND

(D)   J1   CPU Cooling Fan Power Connector
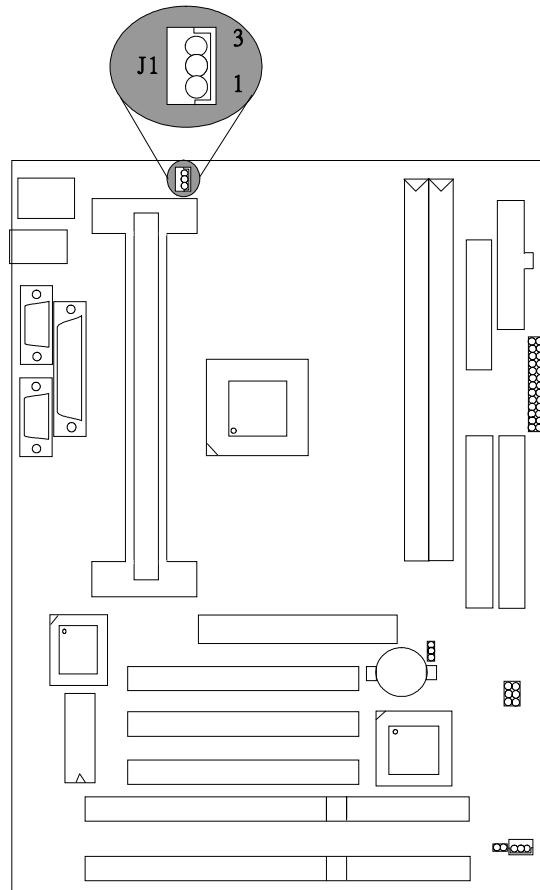
Pin No.	Assignment
1	Ground
2	+12V
3	Sense

AWARD BIOS Setup

Entering Setup

Power on the computer and press <**Del**> immediately will allow you to enter Setup. The other way to enter Setup is to power on the Computer, when the below message appears briefly at the bottom of the screen during the POST (Power On Self Test), press <**Del**> key or simultaneously press <**CTRL**>, <**Alt**>, and <**Esc**> keys.

TO ENTER SETUP BEFORE BOOT PRESS CTRL-ALT-ESC OR DEL KEY

If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously pressing < **CTRL**>, <**Alt**>, and <**Delete**> key. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to,

PRESS F1 TO CONTINUE, CTRL-ALT-ESC OR DEL TO ENTER SETUP

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu/Option Page Setup Menu

Press <**F1**> to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window Press <**Esc**>.

Control Keys

Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item in left hand
Right arrow	Move to the item in right hand
Esc key	Main Menu-Quit and not save changes into COMS Status Page Setup Menu and Option Page Setup Menu-Exit current page and return to Main Menu
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
+ key	Increase the numeric value or make changes
- key	Decrease the numeric value or make changes
F1 key	General help, only for Status Page Setup Menu and Option Page Setup Menu
(Shift) F2 key	Change color from total 16 colors. F2 to select color forward, (Shift) F2 to select color backward
F3 key	Reserved
F4 key	Reserved
F5 key	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
F6 key	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
F7 key	Load the default
F8 key	Reserved
F9 key	Reserved
F10 key	Save all the CMOS changes, only for Main Menu

Main Menu

Once you enter AWARD BIOS CMOS Setup Utility, the Main Menu(**Figure 1**) will appear on the screen. The Main Menu allows you to select among the items and press <**Enter**> to accept or enter the sub-menu.

■ **Figure 1. Main Menu**

```
                    ROM PCI/ISA BIOS (xxxxxxxx)
                       CMOS SETUP UTILITY
                     AWARD SOFTWARE, INC.
```

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PCI / PCI CONFIGURATION	SAVE & EXIT SETUP
LOAD SETUP DEFAULTS	EXIT WITHOUT SAVING

Esc : Quit   ↑ ↓ → ← : Select Item
F10 : Save & Exit Setup   (Shift) F2   : Change Color

Time, Date, Hard Disk Type...

Standard CMOS Setup

This setup page includes all the items in a standard compatible BIOS.

BIOS Features Setup

This setup page includes all the items of BIOS special enhanced features.

Chipset Features Setup

This setup page includes all the items of chipset special features.

Power Management Setup

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

PnP / PCI Configuration

This category specifies the value (in units of PCI bus clocks) of the latency timer for this PCI bus master and the IRQ level for PCI device.

Load Setup Defaults

Chipset defaults indicates the values required by the system for the maximum performance. The OEM manufacturer may change to defaults through MODBIN before the binary image burn into the ROM.

Integrated Peripherals

This setup page includes all the items of Integrated Peripherals features.

Supervisor Password / User Password Setting

Change, set, or disable password. It allows you to limit access to the system and Setup, or just to Setup.

IDE Hdd Auto Detection

Automatically configure hard disk parameters.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

Standard CMOS Setup Menu

The items in Standard CMOS Setup Menu are divided into categories. Each category includes no, one or more than one setup item. Use the arrow keys to highlight the item and then use the **<PgUp>** or **<PgDn>** keys to select the value you want in each item.

■ **Figure 2. Standard CMOS Setup Menu**

ROM PCI/ISA BIOS (xxxxxxxx)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

```
Date (mm:dd:yy) : Mon  Mar   3 1997
Time (hh:mm:ss) : 11 : 37 : 30

HARD DISKS          TYPE  SIZE  CYLS   HEAD   PRECOMP  LAND   SECTOR   MODE
Primary Master    :  Auto    0     0      0       0        0       0      Auto
Primary Slave     :  Auto    0     0      0       0        0       0      Auto
Secondary Master :  Auto    0     0      0       0        0       0      Auto
Secondary Slave   :  Auto    0     0      0       0        0       0      Auto


Drive A    :1.44MB, 3.5 in.
Drive B    :None                    Base Memory      :        0K
                                    Extended Memory  :        0K
Video      :EGA/VGA                 Other Memory     :      512K
                                    Total Memory     :      512K
Halt On    :All, But Keyboard

Esc : Quit              ↑ ↓ → ← : Select Item         PU/PD/+/-:Modify
F1  : Help              (Shift) F2 : Change Color
```

Date

The Date format is **<day><month><date><year>**.

day	The day, from Sun to Sat, determined by the BIOS and is display-only
date	The date, from 1 to 31 (or the maximum allowed in the month)
month	The month, Jan through Dec
year	The year, from 1994 through 2079

Time

The time format is **<hour><minute><second>**. The time is calculated based on the 24-hour military-time clock. For example, 2 p.m. is 14:00:00.

Hard Disks Type

The categories identify the types of hard disk that have been installed in the computer. There are 46 predefined types and a user definable type. Type 1 to Type 45 are predefined. Type User is user-definable. Type Auto is automatic-define by BIOS.

Press **<PgUp>** or **<PgDn>** to select a numbered hard disk type or type the number and press **<Enter>**. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use Type User to define your own drive type manually.

If you select type User, related information is asked to be entered to the following items. Enter the information directly from the keyboard and press **<Enter>**. This information should be provided in the documentation from your hard disk vendor or the system manufacturer.

CYLN	number of cylinders
HEAD	number of heads
WPCOM	write precom
SEC	number of sectors
LBA MODE	type of LBA mode
BLK MODE	type of Block mode
PIO MODE	type of PIO
32BIT MODE	type of 32-Bit transfer mode

If a hard disk has not been installed select NOT Installed and press **<Enter>**.

Driver A Type/Drive B Type

The category identifies the types of floppy disk drive A or drive B that have been installed in the computer.

None	No floppydrive installed
360K, 5 1/4	5-1/4 inch PC-type standard drive; 360 kilobyte capacity
1.2M, 5 1/4	5-1/4 inch AT-type high-density drive; 1.2 megabyte capacity
720K, 3 1/2	3-1/2 inch double-sided drive; 720 kilobyte capacity
1.44M, 3 1/2	3-1/2 inch double-sided drive; 1.44 megabyte capacity
2.88M, 3 1/2	3-1/2 inch double-sided drive; 2.88 megabyte capacity

Video

The category selects the type of adapter used for the primary system monitor that must match your video display card and monitor. Although secondary monitors are supported, you do not have to select the type in Setup.

EGA/VGA	Enhanced Graphics Adapter/Video Graphics Array. FOR EGA, VGA, SEGA, or PGA monitor adapters.
CGA 40	Color Graphics Adapter, power up in 40 column mode

CGA 80	Color Graphics Adapter, power up in 80 column mode
MONO	Monochrome adapter, includes high resolution monochrome adapters

Halt On

The category determines whether the computer will stop if an error is detected during power up.

No errors	Whenever the BIOS detects a non-fatal error the system will be stopped and you will be prompted.
All errors	The system boot will not be stopped for any error that may be detected.
All, But Keyboard	The system boot will not stop for a keyboard error, it will stop for all other errors.
All, But Diskette	The system boot will not stop for a disk error, it will stop for all other errors.
All, But Disk/Key	The system boot will not stop for a keyboard or disk error, it will stop for all other errors.

Memory

The category is display-only which is determined by POST (Power On Self Test) of the BIOS.

Base Memory

The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system. The value of the base memory is typically 512K for system with 512K memory installed on the motherboard, or 640K for system with 640K or more memory installed on the motherboard.

Extended Memory

The BIOS determines how much extended memory is presented during the POST. This is the amount of memory located above 1MB in the CPU's memory address map.

Other Memory

This refers to the memory located in the 640K address space. This is the

memory that can be used for different applications. DOS uses this area to load device drivers to keep as much base memory free application programs. Most use for this area is Shadow RAM.

BIOS Features Setup

> *!! **WARNING !!** The information about BIOS defaults on manual (**Figure 3.4.5.6.8)** is just for reference, please refer to the BIOS installed on board, for update information.*

■ **Figure 3. BIOS Features Setup Menu**

```
               ROM PCI/ISA BIOS (xxxxxxxx)
                  BIOS FEATURES SETUP
                  AWARD SOFTWARE, INC.
```

Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU Intermal Cache	: Enabled	C8000-CBFFF Shadow	: Disabled
Extemal Cache	: Enabled	CC000-CFFFF Shadow	: Disabled
CPU L2 Cache ECC Checking	: Enabled	D0000-D3FFF Shadow	: Disabled
Quick Power On Self Test	: 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/VGA 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	

Chipset Features Setup

The Chipset Features Setup option is used to change the values of the chipset registers.   These registers control most of the system options in the computer.

■ **Figure 4. Chipset Feature Setup Menu**

ROM PCI/ISA BIOS (xxxxxxxx)
CHIPSET FEATURES SETUP
AWARD SOFTWARE, INC.

Auto Configuration	: Enabled	SDRAM CAS latency Time : 2
DRAM Timing	: 60 ns	
MA Wait State	: Slow	
EDO RAS# To CAS# Delay	: 3	
EDO RAS# Precharge Time	: 4	
EDO DRAM Read Burst	: x222	
EDO DRAM Write Burst	: x333	
DRAM Data Integrity Mode	:Non-ECC	
CPU-To-PCI IDE Posting	: Enabled	
System BIOS Cacheable	: Enabled	
Video BIOS Cacheable	: Enabled	
Video RAM Cacheable	: Disabled	
8 Bit I/O Recovery Time	: 1	
16 Bit I/O Recovery Timing	: 1	
Memory Hole At 15M-16M	: Disabled	
Passive Release	: Enabled	ESC : Quit ↑↓ → ←: Select Item
Delayed Transaction	: Enabled	F1 : Help PU/PD/+/- : Modify
AGP Aperture Size (MB)	: 64	F5 : Old Values <Shift> F2 : Color
SDRAM RAS-to-CAS Delay	: Fast	F6 : Load BIOS Defaults
SDRAM RAS Precharge Time	: Fast	F7 : Load Setup Defaults

Power Management Setup

■ **Figure 5. Power Management Setup Menu**

ROM PCI/ISA BIOS (xxxxxxxx)
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC.

Power Management	: Disabled	** Reload Global Timer Events **	
PM Control by APM	: Yes	IRQ [3-7 , 9-15] , NMI	: Enabled
Video Off Method	: DPMS	Primary IDE 0	: Enabled
Video Off After	: Standby	Primary IDE 1	: Enabled
MODEM Use IRQ	: 3	Secondary IDE 0	: Disabled
		Secondary IDE 1	: Disabled
Doze Mode	: Disabled	Floppy Disk	: Enabled
Standby Mode	: Disabled	Serial Port	: Enabled
Suspend Mode	: Disabled	Parallel Port	: Enabled
HDD Power Down	: Disabled		
Throttle Duty Cycle	: 62.5 %		
ZZ Active in Suspend	: Disabled		
VGA Active Monitor	: Enabled		
Soft-Off by PWR-BTTN	: Instant - Off		
Resume by Ring	: Enabled	ESC : Quit ↑↓ → ← Select Item	
Resume by RTC Alarm	: Disabled	F1 : Help PU/PD/+/- : Modify	
		F5 : Old Values <Shift> F2 : Color	
		F6 : Load BIOS Defaults	
IRQ 8 Break Suspend	: Disabled	F7 : Load Setup Defaults	

PNP / PCI Configuration Setup

■ **Figure 6. PNP / PCI Configuration Setup Menu**

ROM PCI/ISA BIOS (xxxxxxxx)
PNP / PCI FUNCTION SETUP
AWARD SOFTWARE, INC.

```
PNP OS Installed           : No        PCI IDE IRQ Map To      : PCI-AUTO
Resources Controlled BY    : Manual       Primary    IDE INT#    : A
Reset Configuration Data   : Disabled     Secondary IDE INT#     : B

IRQ-3     assigned to  : PCI / ISA PnP
IRQ-4     assigned to  : PCI / ISA PnP
IRQ-5     assigned to  : PCI / ISA PnP
IRQ-7     assigned to  : PCI / ISA PnP
IRQ-9     assigned to  : PCI / ISA PnP
IRQ-10    assigned to  : PCI / ISA PnP
IRQ-11    assigned to  : PCI / ISA PnP
IRQ-12    assigned to  : PCI / ISA PnP
IRQ-14    assigned to  : PCI / ISA PnP
IRQ-15    assigned to  : PCI / ISA PnP
DMA-0     assigned to  : PCI / ISA PnP
DMA-1     assigned to  : PCI / ISA PnP    ESC : Quit        ↑↓ → ←Select Item
DMA-3     assigned to  : PCI / ISA PnP    F1    : Help          PU/PD/+/- : Modify
DMA-5     assigned to  : PCI / ISA PnP    F5    : Old Values    <Shift> F2 : Color
DMA-6     assigned to  : PCI / ISA PnP    F6    : Load BIOS Defaults
DMA-7     assigned to  : PCI / ISA PnP    F7    : Load Setup Defaults
```

Load Setup Defaults

Chipset defaults indicates the values required by the system for maximum performance.

■ **Figure 7. Load Setup Defaults Screen**

ROM PCI/ISA BIOS (xxxxxxxx)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PCI & PCI CONFIGU	**Load SETUP Defaults (Y/N) ? N** ETUP
LOAD SETUP DEFA	AVING

Esc : Quit   ↑ ↓ → ← : Select Item
F10 : Save & Exit Setup   (Shift) F2   : Change Color

Load SETUP Defaults except Standard CMOS SETUP

If you wish to load the SETUP Defaults, change the prompt to <**Y**> and press <**ENTER**>.

Integrated Peripherals Setup

■ **Figure 8. Integrated Peripherals Setup Menu**

ROM PCI/ISA BIOS (xxxxxxxx)
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

```
IDE HDD Block Mode          : Enabled   Onboard Parallel Port      : 378/IRQ7
IDE Primary Master PIO      : Auto      Parallel Port Mode         : SPP
IDE Primary Slave PIO       : Auto
IDE Secondary Master PIO    : Auto
IDE Secondary Slave PIO     : Auto
IDE Primary Master UDMA     : Auto
IDE Primary Slave UDMA      : Auto
IDE Secondary Master UDMA   : Auto
IDE Secondary Slave UDAM    : Auto
On-Chip Primary PCI IDE     : Enabled
On-Chip Secondary PCI IDE   : Enabled
USB Keyboard Support        : Disabled

Onboard FDC Controller      : Enabled
Onboard Serial Port 1       : 3F8/IRQ4
Onboard Serial Port 2       : 2F8/IRQ3   ESC : Quit        ↑↓→←: Select Item
UART2 Mode                  : Standard   F1   : Help        PU/PD/+/- : Modify
                                         F5   : Old Values    <Shift> F2 : Color
                                         F6   : Load BIOS Defaults
                                         F7   : Load Setup Defaults
```

Supervisor / User Password Setting

■ **Figure 9. Supervisor Password Setting**

ROM PCI/ISA BIOS (xxxxxxxx)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP / PCI CONFIGURATION	SAVE & EXIT SETUP
LOAD SETUP DEFA **Enter Password :** AVING	

Esc : Quit   ↑ ↓ → ← : Select Item
F10 : Save & Exit Setup   (Shift) F2   : Change Color

Change / SCT / Disable Password

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

ENTER PASSWORD

Type the password, up to eight characters, and press <**Enter**>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <**Enter**>. You may also press <**ESC**> to abort the selection and not enter a password. To disable password, just press <**Enter**> when you are prompted to enter password. A message will confirm the password begin disable. Once the password is disabled, the system will boot and you can enter setup freely.

PASSWORD DISABLED

If you select System at Security Option of BIOS Features Setup Menu, you will be prompted for the password every time the system is rebooted or any time you try to enter Setup. If you select Setup at Security Option of BIOS Feature Setup Menu, you will be prompted only when you try to enter Setup.

IDE HDD Auto Detection

Automatically configure hard disk parameters. The parameters on this figure are just for reference.

■ **Figure 10. Auto Configuration with Optimal Settings Screen**

ROM PCI/ISA BIOS (xxxxxxxx)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LAND	SECTOR	MODE
Primary Master	:User	343	665	16	65535	664	63	NORMAL

Select Primary Slave Option (N=Skip)   N

OPTIONS	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
1(Y)	0	0	0	0	0	0	NORMAL

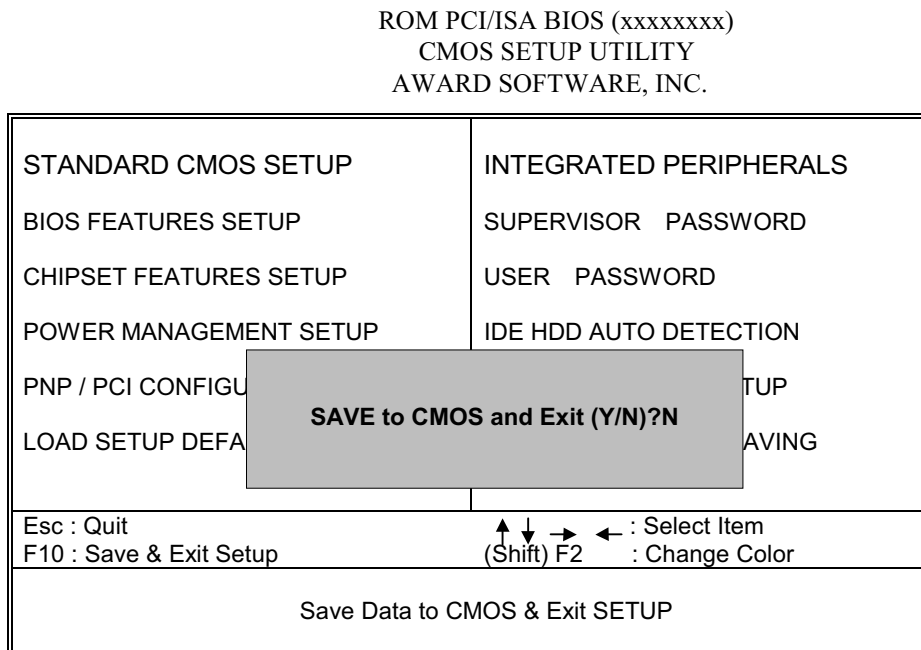Note : Some Oses (like SCO-UNIX) must use "NORMAL" for installation

ESC : Skip

When you enter this utility, the screen asks you to select a specific hard disk for Primary Master.   If you accept a hard disk detected by the BIOS, you can enter **"Y"** to confirm and then press <**Enter**> to check next hard disk.   This function allows you to check four hard disks and you may press the <**Esc**> after the <**Enter**> to skip this function and go back to the Main Menu.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

■ **Figure 11. Save & Exit Setup Screen**

ROM PCI/ISA BIOS (xxxxxxxx)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP / PCI CONFIGU	SAVE to CMOS and Exit (Y/N)?N	TUP
LOAD SETUP DEFA		AVING

Esc : Quit   ↑ ↓ → ← : Select Item
F10 : Save & Exit Setup   (Shift) F2   : Change Color

Save Data to CMOS & Exit SETUP

Pressing **<N>** and **<ENTER>** will return you to the Main Menu.

1-31

Pressing **<Y>** and **<ENTER>** will save the system parameters and continue with the booting process.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

■ **Figure 12. Save Settings and Exit Screen**

ROM PCI/ISA BIOS (xxxxxxxx)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD COMS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP / PCI CONFIGU	**Quit Without Saving (Y/N)?N**	UP
LOAD SETUP DEFA	VING

Esc : Quit   ↑ ↓ → ← : Select Item
F10 : Save & Exit Setup   (Shift) F2   : Change Color

Abandon all Datas & Exit SETUP

Pressing **<N>** and **<ENTER>** will return you to the Main Menu.

Pressing **<Y>** and **<ENTER>** will continue with booting process without saving any system parameters.

Application Software

– Please make sure if any flash memory in your system

– Please use the "BIOS Utility" diskette to setup Flash Memory.

– The diskette contains the intelligent installation utility **AWDFLASH.EXE**, showing as follow.

■ **Figure 13. Flash Memory Writer**

```
┌──────────────────────────────────────────────────────────┐
│                 FLASH MEMORY WRITER vX.X                   │
│        Copyright    (C) 1992-1994 Award Software, Inc.,    │
├──────────────────────────────────────────────────────────┤
│   For xxxxxx-xxx-xxxxxxxxx                DATE: xx/xx/xxxx  │
│   Flash   Type -                                           │
│                                                            │
│ File Name to Program:   ┌──────────────────┐               │
│                         │                  │               │
│                         └──────────────────┘               │
│                                                            │
│                                                            │
│                                                            │
├──────────────────────────────────────────────────────────┤
│ Error Message :              Do You Want To Save Bios (Y/N)?│
└──────────────────────────────────────────────────────────┘
```

PIIX4 Patch Files Setup

This program is designed for following versions of BIOSTAR
Mainboard to fix the problem that IDE BUS Master, USB and
Power management entries cannot be configured correctly
in the device manager.

This section describes how to install the software on a
system where **Windows 95*** is installed.

"**Windows 95***" means the following versions of Windows 95
operating system:
  Version 950 Windows 95 (**Retail Release**)
  Version 950A Windows 95 OEM Service Release 1 (**OSR1**)
  Version 950B Windows 95 OEM Service Release 2.0 (**OSR2**)
                  or Windows 95 OEM Service Release 2.0 plus
                  USB Supplement (**OSR2.1**)

1. Check the System Requirements. Windows 95* must
   be fully installed and running on the system prior
   to running this software.

2. Close any running applications.

3. Remove references to installed real-mode IDE device
   drivers in the **AUTOEXEC.BAT** and **CONFIG.SYS** files
   (especially any drivers that control ATAPI CD-ROM
   and special IDE features). Use the Notepad utility
   to do this.

4. The driver files are stored in an integrated
   application setup program. This program is a
   Windows 95* program that allows the driver files
   to be INSTALLED.
   Execute the driver setup program.
   *** Run **BSFIX.EXE**.

5. Click '**Start**' on Main Screen to begin the install
   procedure.
    NOTE: If you click '**Cancel**', program will
   terminate.

6. After the install procedure completed, click '**OK**'
   to restart the system when prompted to do so. If
   you don't want to reboot immediately, you must
   remember to reboot your system later!

7. Follow the screen instructions and use default
   settings to complete the setup when Windows 95* is
   re-started.
   Upon re-start, Windows 95* will display that it has
   found an **Intel PCI Bus Master IDE controller
   hardware** and also installing hardware for it.
   If a "**New Hardware Found**" dialog box is displayed
   requesting the location of the drivers, use the
   mouse to click on the scrollbar and click on the
   <Windows 95* directory> \ System \ IOSubSys path:
   For example:
   a. Click on '**C:\WINDOWS\SYSTEM\IOSUBSYS**'
   b. Click '**OK**'.

8. Select '**Yes**', when prompted to re-start Windows
   95*.

9. Select '**Yes**' again, when you prompted to re-start
   Windows 95*.