



- Supports external modem ring power-on.
- Supports wake-up on LAN and wake-up on internal modem.
- Supports auto fan off when the system enters suspend mode.
- On-board W83782D supports system monitoring (monitors the CPU & system temperature, system voltages, chassis intrusion and FAN speed) (manufacturing option).
- Provides management application such as ManageEasy, and LDCM(LANDesk Client Manager). (manufacturing option)
- Supports keyboard password power-on function.
- Supports SecurityEasy function. (manufacturing option)
- System status resumes after AC power failure.

#### **BIOS**

- Licensed advanced AWARD BIOS, supports DIP flash ROM BIOS with 2MB memory size, plug and play ready.
- Supports IDE CD-ROM or SCSI boot up.

#### **Green function**

- Supports ACPI (Advanced Configuration and Power Interface) and ODPM (OS Directed Power Management).
- Supports three green modes: Doze, Standby and Suspend.

#### **Expansion slots**

- 2 PCI slots and 1 ISA/PCI shared slot.
- 1 AGP Slot



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## Chapter 2

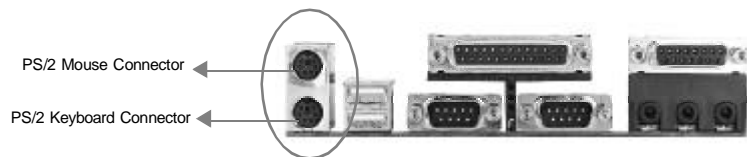
### Installation Instructions

This section covers External Connectors, Jumper Settings, and Memory Configuration. Refer to the motherboard layout chart for locations of all the jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pins assignment for your reference. The particular state of the jumpers, connectors and ports are illustrated in the following figures. Before setting the jumpers or inserting these connectors, please pay attention to the directions.

#### External Connectors

##### PS/2 Keyboard Connector, PS/2 Mouse Connector

PS/2 keyboard connector is for the usage of PS/2 keyboard. If you choose to use a standard AT size keyboard, an adapter should be used to fit this connector. PS/2 mouse connector is for the usage of PS/2 mouse.



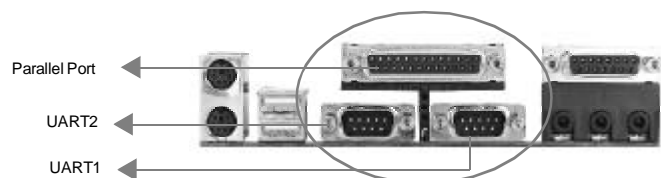
##### USB1, USB2

Two USB ports are available for connecting USB devices.



##### Parallel Port Connector and Serial Port Connector (UART1, UART2)

The parallel port connector can be connected to a parallel device such as a printer, while the serial port connectors can be connected to serial port devices such as a serial port mouse. You can enable/disable them and choose the IRQ or I/O address in "Integrated Peripherals" from AWARD BIOS SETUP.





## Line-in jack, Microphone-in jack and Line/Speaker-out jack

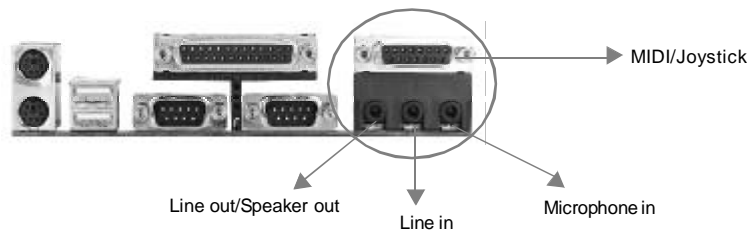
### MIDI/Joystick Connector

The Line-in jack can be connected to devices such as a cassette or Minidisc player for playback or recording.

The Microphone-in jack can be connected to a microphone for voice input.

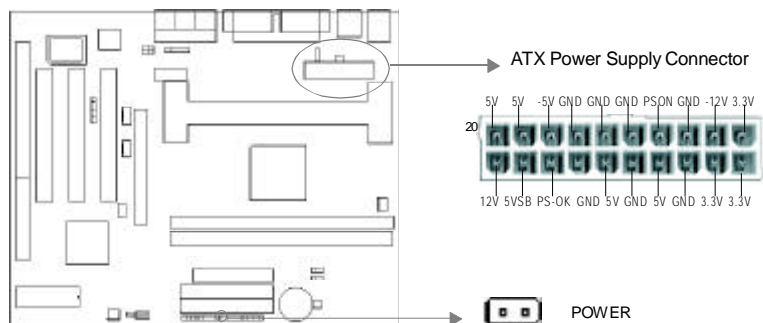
The Line/Speaker-out jack is controlled by the jumper JP10 & JP11 (refer to **Jumper Settings** below for details). If set as Line out, this allows you to bypass the built-in power amplifier to connect powered speakers or an external amplifier for audio output. If set as Speaker out, this allows you to connect speakers or headphones for audio output from the internal amplifier.

The MIDI/Joystick connector allows you to connect a game joystick or a MIDI device.



## ATX Power Supply Connector & Power Switch (POWER)

ATX/SFX power supply can both be used on this system. Be sure to connect the power supply plug to this connector in its proper orientation. The power switch (POWER) should be connected to a momentary switch. When powering up your system, first turn on the mechanical switch of the power supply if one is provided, then push once the button of the momentary switch. When powering off the system, you needn't turn off the mechanical switch, just ***Push once*** the button of the momentary switch.



**Note:** \* If you change “soft-off by PWR-BTTN” from default “Instant-off” to “Delay 4 Secs” in the “POWER MANAGEMENT SETUP” section of the BIOS, the power button should be pressed for more than 4 seconds before the system powers down.



### Hard Disk LED Connector (HD\_LED)

The connector connects to the case's IDE indicator LED to show the activity status of IDE hard disk.

### Reset Switch (RESET)

The connector connects to the case's reset switch. Press the switch once, the system resets.

### Speaker Connector (SPEAKER)

The connector can be connected to the speaker on the case.

### Power LED Connector (PWR\_LED)

The power LED has three status. When no AC power supply is present, the LED is off. When the system is in soft power-down status, the LED glows dimly. When the system is powered up, the LED is on.

### Key-Lock Connector (KEY\_L)

The connector can be connected to the keyboard lock switch on the cabinet for locking the keyboard.

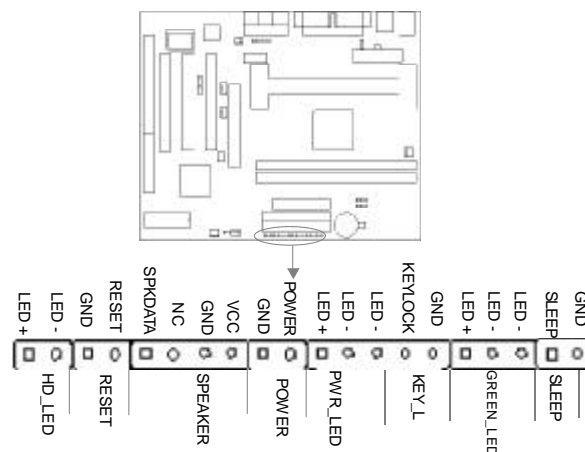
### Green LED Connector (GREEN\_LED)

The LED connected to this header shows the status of the system as described below:

LED Status	System Status
Off	No AC power supply is present.
On	Power-up status.
Flashing at a frequency of about 1.5Hz	Soft power-down status.
Flashing at a frequency of about 0.5Hz	Green Mode.
Flashing at a frequency of about 1/6Hz	Lock status.

### Hardware Green Connector (SLEEP)

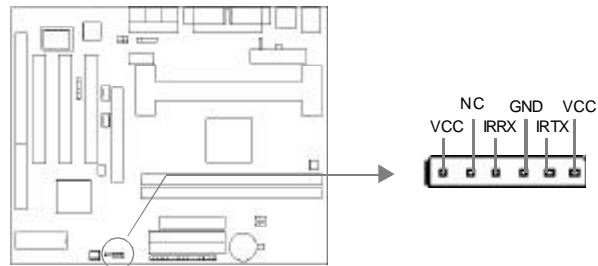
If the SecurityEasy function is enabled, push once the switch connected to this header and the system will enter lock status. If the lock function is disabled, push once the switch, the system enters suspend mode.





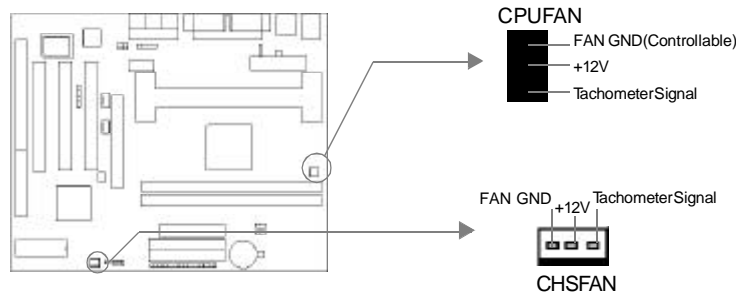
### Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. If using this function, set "Serial Port 2 Mode" to IrDA or ASKIR then configure the settings in the "INTEGRATED PERIPHERALS" section of the BIOS.



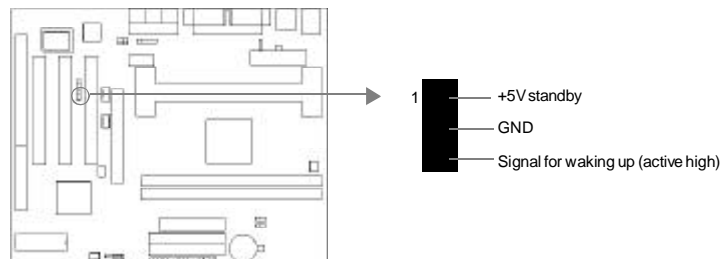
### Fan Connector (CPUFAN, CHSFAN)

These two fans are controllable. They will be automatically turned off after the system enters suspend mode. You also can choose not to turn the CPUFAN off by setting "CPUFAN Off In Suspend" as Disabled in the "POWER MANAGEMENT SETUP" section of the BIOS.



### Wake-Up On LAN (WOL)

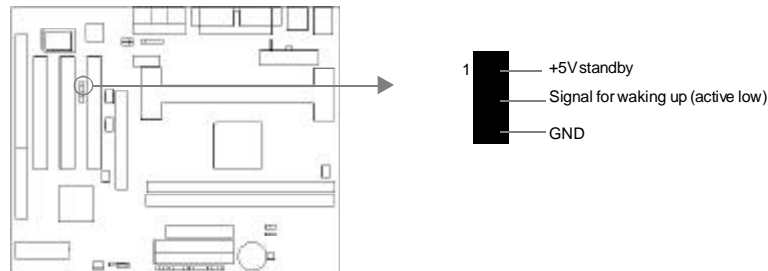
Through the Wake-Up On LAN function, a wake event occurring from the network can wake up the system. If this function is to be used, please be sure an ATX 2.01 power supply of which 5VSB line is capable of delivering 720mA, and a LAN adapter which supports this function are used. Then connect this header to the relevant connector on the LAN adapter, set "Wake Up On LAN" as Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.





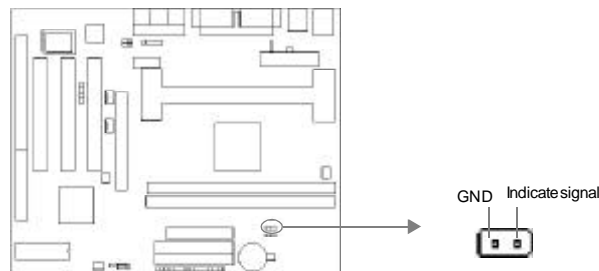
### Wake-Up On Internal Modem (WOM)

Through the Wake-Up On Internal Modem function, the system which is in the power-off status can be powered on by a ring signal received from the internal modem. If this function is to be used, be sure an internal modem card which supports the function is used. Then connect this header to the relevant connector on the modem card, set "Resume by Ring" to Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.



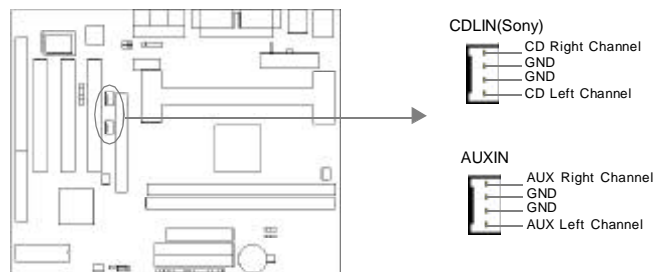
### Chassis Security Switch (CHSSEC)

If the switch is off, this indicates the chassis is closed. Otherwise, it indicates the chassis is opened.



### Digital Audio Connector (CDLIN, AUXIN)

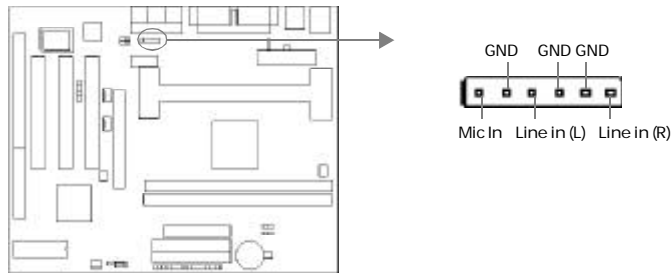
CDLIN is a CD audio connector which can be connected to a CD-ROM drive (Sony standard) through a CD audio cable. AUXIN is an auxiliary audio connector. With the speakers connected to Line/Speaker-out jack, you can listen to audio from the CD-ROM drive.





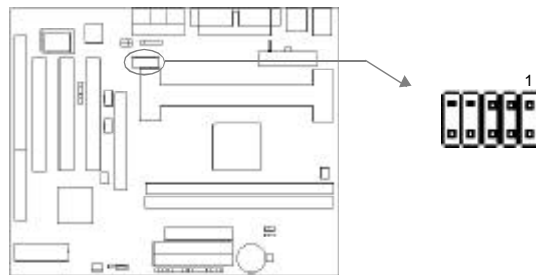
### Microphone-in and Line-in Connector (BLSND)(manufacturing option)

This connector allows you to connect the audio devices or microphone with cable.



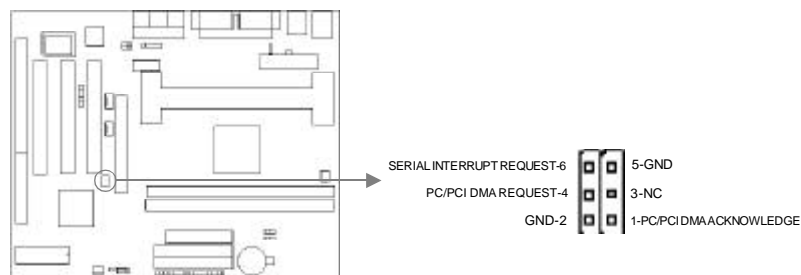
### First COM Port Connector (1STCOM)(manufacturing option)

This connector allows you to connect the COM port device inside the cabinet. If this COM port is already occupied, note the other one located on the back panel (UART1) can't be used.



### Sound Connector (PC-PCI)(manufacturing option)

This connector is for the usage of PCI sound card.










## Expansion Slots & I/O Ports description

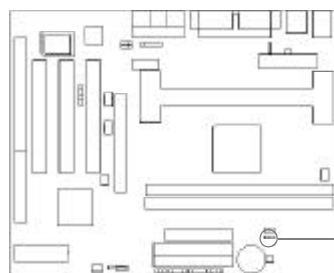
Slot / Port	Description
ISA 1	ISA slot.
PCI1	First PCI slot.
PCI2	Second PCI slot.
PCI3	Third PCI slot.
IDE 1	Primary IDE port.
IDE2	Secondary IDE port.
FLOPPY	Floppy Driver Port.
AGP	Accelerated Graphics Port

## Jumper Settings

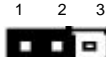
Jumpers are located on the motherboard, they represent, clear CMOS jumper JCC, enable keyboard password power-on function jumper JP2 and Speaker/Line-out selection jumper JP10 & JP11. Pin 1 for all jumpers are located on the side with a thick white line ( Pin1→  ), referring to the motherboard's silkscreen . Jumpers with three pins will be shown as  to represent pin1& pin2 connected and  to represent pin2 & pin3 connected.

## Clear CMOS (JCC)

If you want to clear CMOS, unplug the AC power supply first, close JCC(pin1& pin2) once, set JCC back to the normal status with pin2 & pin3 connected, then power on the system.



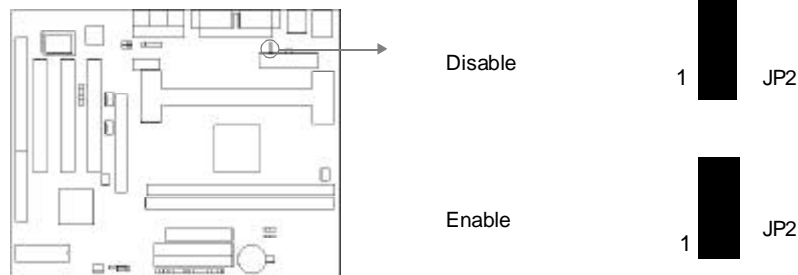
Normal status:  JCC

Clear CMOS:  JCC  
(Unplug the AC power supply)



### Enable keyboard password power-on function (JP2)

The motherboard provides the advanced keyboard password power-on function. When wanting to use this function, set JP2 with pin1 & pin2 closed. Otherwise, set JP2 with pin2 & pin3 closed for disabling this function.



In order to implement this function, set “POWER ON Function” to **Password** and enter the keyboard power-on password in the “INTEGRATED PERIPHERALS” section of the BIOS. Save and exit, then power off your system. In this case, the power button’s power-on function has been disabled. The only way to power up the system is to enter the correct password. If you forget the password, clear CMOS and set it again. Refer to BIOS description on page 46 for detail information.

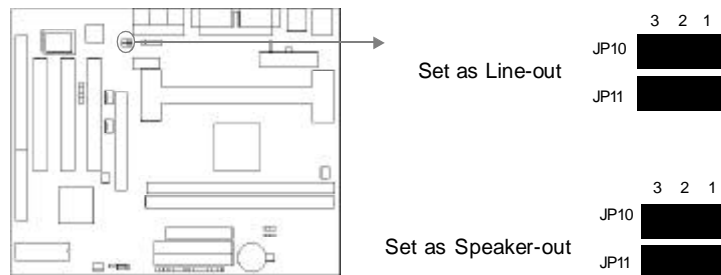
**Note: 1.If wanting to use this function, 5VSB line of the power supply should be capable of delivering 200mA, or the system can’t be powered up.**

**2.If you set JP2 with pin2 & pin3 closed, set “POWER ON Function” to BUTTON ONLY, don’t set it to Password, or this will prevent you from powering up your system.**

**3. If you encounter problems above, clear CMOS and set the jumper and BIOS option properly again.**

### Speaker/Line out selection ( JP10, JP11)

If you want to set the Line-out/Speaker-out jack as Line out, set JP10 & JP11 with pin2&pin3 closed. Otherwise, set JP10 & JP11 with pin1& pin2 closed for Speaker out.





## **Memory Configuration**

This motherboard provides two 168 pin 3.3V un-buffered DIMM sockets to support a flexible memory size ranging from 8MB/256MB for SDRAM or from 8MB/512MB for EDO memory. Both 66MHz/100MHz SDRAM and 66MHz EDO DIMMs are supported. The following set of rules allows for optimum configurations.

Rules for populating a 440ZX memory array:

- Pentium II processors with 100MHz front-side bus should be paired only with 100MHz SDRAM. Processors with 66MHz front-side bus can be paired with either 66MHz or 100MHz SDRAM.
- NO registered DIMM support.
- The DRAM Timing register, which provides the DRAM speed grade control for the entire memory array, must be programmed to use the timing of the slowest DRAMs installed.
- Possible SDRAM DIMM memory sizes are 8MB, 16MB, 32MB, 64MB, 128MB in each DIMM socket.
- Possible EDO DIMM memory sizes are 8MB, 16MB, 32MB, 64MB, 128MB, 256MB in each DIMM socket.



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## Chapter 3

### SecurityEasy

There are two ways to prevent unauthorized entry or use of the system:  
System Password and SecurityEasy.

#### System Password

Set system password in the "PASSWORD SETTING" section of the BIOS, and set the "Password Setting" to **System** in the "BIOS FEATURES SETUP" section. You will be prompted for the password every time the system boots or any time you try to enter CMOS Setup. If the "Password Setting" is set as "Setup", you will be prompted for the password only when entering CMOS Setup.

#### SecurityEasy

The ZillioX 5 provides additional SecurityEasy function to protect the system from unauthorized entry or use.

- Push once the button connected to the two-pin header SLEEP. If the lock function is disabled, this button is used as SLEEP button.
- When "Keyboard Inactive Timer" is counted to the preset value—from 1 minute to 1 hour.

In the Lock status, the power switch and reset buttons are unresponsive, PS/2 mouse is locked, and the Keyboard is locked except for the SecurityEasy Password entering. You can preset the Video as blank in the LOCK status. The only way to exit the LOCK status is to enter the SecurityEasy Password with the keyboard. This means if you set the Lock function as enabled, you must also set the SecurityEasy Password.

Please read the notes below thoroughly.

**Note 1:** The Green function and the Lock function can not be enabled at the same time.

**Note 2:** If the lock function is enabled, you must set the SecurityEasy password no more than 6 characters.

**Note 3:** When entering the SecurityEasy Password to exit the LOCK status, use the <Enter> key located on the alphabetic pad and not the <Enter> key located on the numeric pad.

**Note 5:** See also chapter 4 "BIOS Description".



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## Chapter 4

### BIOS Description

#### Utility Support:

##### FLASH.EXE

This is a flash memory write/read utility which can be used for the purpose of updating your BIOS when necessary. Before doing so, please note:

- **We strongly recommend you only upgrade BIOS when encountering problems.**
- **Before upgrading your BIOS, review the description below to avoid making mistakes, resulting in a destroyed BIOS and a non-working system.**

When you are encountering problems, for example, you find your system doesn't support the new CPU which is released after our current motherboard, you may therefore update the BIOS.

Follow the steps exactly for a successful upgrade.

1. Create a bootable system floppy diskette, type Format A:/s from the DOS prompt under DOS6.xx or Windows 9x environment.
2. Copy FLASH.EXE from the directory \Utility on the QDI Motherboard Utility CD onto your new bootable diskette.
3. Download the updated BIOS file from the Website (<http://www.qdigrp.com>) Please be sure to download the suitable BIOS file for your motherboard.
4. Uncompress the file download, copy the BIOS file (xx.bin) onto the bootable diskette, and note the checksum of this BIOS which is located in readme file.
5. Reboot the system from the bootable diskette created.
6. Then run the FLASH utility at the **A:\** prompt. During the process, the system will prompt : ' Do you want to save the BIOS(Y/N)' . If you type ' Y' , the system will prompt for the BIOS name. The system will also display the checksum which should be exactly the same as the checksum you copy from the readme file. Don't turn off power or reset the system until the BIOS upgrade has been completed.

Concerning how to run the FLASH utility, please refer to the following descriptions:

Usage: FLASH [BIOSfile] [/c[<command...>]][/n]

FLASH [BIOSfile] [/g]

/c: Flashing memory will clear previous settings. Default allows settings to remain.

<command> function definition:

c: clear CMOS;

p: clear PnP;

d: clear DMI.



/n: programs BIOS without prompting. If this option is chosen:

Be sure your new BIOS is compatible with your MB. If not, the system will be damaged.

/g: Retrieves BIOS file from BIOS ROM.

Examples:

A:\FLASH.EXE BIOSfile.bin

A:\FLASH.EXE BIOSfile.bin /cdpc/n

A:\FLASH.EXE BIOSfile.bin /g

**Note: FLASH utility runs incorrectly at Windows DOS prompt.**





## AWARD BIOS Description

### Entering Setup

Power on the computer, when the following message briefly appears at the bottom of the screen during the POST (Power On Self Test), press <Del> key or simultaneously press the <Ctrl> + <Alt> + <Esc> keys, to enter the AWARD BIOS CMOS Setup Utility.

#### Press <Del> to enter SETUP

Once you have entered, the Main Menu (Figure 1) will appear on the screen. The main menu allows you to select from twelve setup functions and two exit choices. Use the arrow keys to select among the items and press the <Enter> key to accept or enter the sub-menu.



Figure-1 Main Menu

**Note:**The “System Monitor SETUP” item will not be displayed if there is no W83782D chip on the motherboard.

### Load Setup Defaults

The Setup Defaults are common and efficient. It is recommended that users load the setup defaults first, then modify the needed configuration settings.

### Standard CMOS Setup

The basic CMOS settings included in “Standard CMOS Setup” are Date, Time, Hard Disk Drive Types, Floppy Disk Drive Types, and VGA etc. Use the arrow keys to highlight the item, then use the <PgUp> or <PgDn> keys to select the value you want in each item.

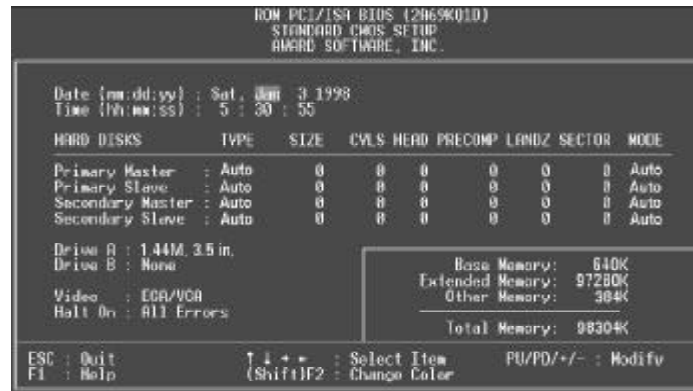


Figure-2 Standard CMOS Setup Menu

## Hard Disk

### Primary Master/Primary Slave/Secondary Master/Secondary Slave

The categories identify the HDD types of 2 IDE channels installed in the computer system. There are three choices provided for the Enhanced IDE BIOS: None, Auto, and User. "None" means no HDD is installed or set; "Auto" means the system can auto-detect the hard disk when booting up; by choosing "user", the related information should be entered regarding the following items. Enter the information directly from the keyboard and press <Enter>:

CYLS	number of cylinders	HEAD	number of heads
PRECOMP	write pre-compensation	LANDZ	landing zone
SECTOR	number of sectors	MODE	HDD access mode

## Video

Set this field to the type of video display card installed in your system.

EGA/VGA	Enhanced Graphics Adapter / Video Graphic Array. For EGA, VGA, SEGA, SVGA, or PGA monitor adapters.
CGA 40	Color Graphic Adapter, powering up in 40 column mode.
CGA 80	Color Graphic Adapter, powering up in 80 column mode.
MONO	Monochrome adapter, including high resolution monochrome adapters.



## Halt On

This category determines whether or not the computer will stop if an error is detected during powering up.

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

## Memory

This category displays only what 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.
Extended Memory	The BIOS determines how much extended memory is presented during the POST.
Other Memory	This is the memory that can be used for different applications. Most used for this area is Shadow RAM.
Total Memory	Total memory of the system equals the sum of the above memory.



## SpeedEasy CPU Setup



Figure-3 SpeedEasy CPU Setup

The following indicates the options of each item and describes their meanings .

<u>Item</u>	<u>Option</u>	<u>Description</u>
• CPU Model		BIOS can automatically detect the CPU model, therefore this item is shown only. It could be Pentium(R)II or Intel (R) Celeron(TM), depending on the processor chosen.
• CPU Speed	<i>SpeedEasy</i>	CPU frequency should be set according to the CPU type. For Celeron™ or Pentium®II (66MHz front-side bus) processors you can choose from 200MHz (66X3), 233MHz(66X3.5), 266MHz (66x4), 300MHz(66X4.5), or 333MHz (66X5). For Pentium®II processors with 100MHz front-side bus, you can select from 300MHz(100X3), 350MHz (100X3.5), 400MHz (100X4), 450MHz(100X4.5), or 500MHz(100X5).
	<i>Jumper Emulation</i>	This item is only for users who understand all the CPU parameters, i.e. System Bus Frequency, "100MHz / 66MHz" and multiplication of Processor Core Frequency to System Bus frequency "x3, x3.5, x4, x4.5, x5, x5.5".

**Warning:**

**Do not set CPU frequency higher than its working frequency. If you do, we will not be responsible for any damages caused.**