

VXZ
Socket 370 Motherboard
USER'S MANUAL

Model : **VXZ**
Manual Version : **English, version 2.1**
Release Date : **June 10th , 2000**

Copyright

Copyright © 2000 by this company. All rights reserved.

No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form or by any means, electronic, mechanical, magnetic, optical, manual or otherwise, without the prior written consent of the copyright holders.

User's Notice

The contents of this publication are subject to change. This company reserves the right to alter the contents of this publication at any time and without notice. The contents of this publication may contain inaccuracies or typographical errors and is supplied for informational use only.

Intel and Pentium are registered trademarks of Intel Corporation.

OS/2 and IBM are registered trademarks of International Business Machines.

Windows and MS-DOS are registered trademarks of Microsoft Corporation.

AWARD is a registered trademark of Award Software Inc.

Other brand, corporate, and product names may or may not be registered trademarks or copyright of their respective companies.

FCC & DOC Compliance

Federal communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- ◆ This device may not cause harmful interference.
- ◆ This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communication. 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:

- ◆ Re-orient or relocate the receiving antenna.
- ◆ Increase the separation between the equipment and the receiver.
- ◆ Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- ◆ Consult the dealer or an experienced radio/TV technician for help.

Warning

The use of shielded cables for the connection of the monitor to the graphics card is required to assure compliance with FCC regulations changes or modifications to this authority to operate this equipment.

Chapter 1 Overview

General Description.....	1-1
Check Your Items.....	1-1
VXZ Specifications.....	1-2
Motherboard Layout.....	1-3

Chapter 2 Hardware Installation

Set Jumpers.....	2-2
Clear CMOS.....	2-3
Install CPU.....	2-4
CPU Setting.....	2-5
CPU Type Selection.....	2-5
CPU Ratio.....	2-6
CPU Clock Frequency.....	2-7
System Memory Installation.....	2-8
Install DIMM.....	2-9
Removing a Memory Module.....	2-9
Install Expansion Cards.....	2-10
Connector Devices.....	2-11
Panel Connector.....	2-11
Power Connector.....	2-11
PS/2 Mouse & Keyboard Connectors.....	2-12
Fan Connector.....	2-12
USB device Connector.....	2-13
Serial Device (com1, com2), VGA & Printer Connectors.....	2-13
Floppy drive Connector.....	2-14
IrDA Connector.....	2-14
IDE Hard Disk Connector.....	2-15
AMR Connector.....	2-15
LAN & MODEM Wake Up Connectors.....	2-16
Game/Audio & CD_IN Connectors.....	2-16

Chapter 3 CMOS Setup Utility

CMOS Setup Main Menu.....	3-1
Standard CMOS Setup.....	3-3
Advanced BIOS Features.....	3-6
Advanced Chipset Features.....	3-9
Integrated Peripherals.....	3-14
Power Management.....	3-17
PnP / PCI Configurations.....	3-23
PC Health Status.....	3-24
Load Fail-Safe Defaults.....	3-26
Load Optimized Defaults.....	3-26
Set Supervisor / User Password.....	3-27
Save & Exit Setup.....	3-28
Exit Without Saving.....	3-28

Chapter 4 Software Utility

AGP Driver Program.....	4-1
IDE Driver Program.....	4-1
Chipset Register Driver Program.....	4-1
Audio Codec Driver Program.....	4-1
VIA USB Driver Program.....	4-1

Chapter 1

Overview

General Description

Thanks for purchasing **VXZ Socket 370** motherboard. **VXZ** is based on VIA chipset (North Bridge VT82C694X & South Bridge VT82C686A). Its new features include that it support AGP 2x/4x, super I/O, and voltage, temperature, and fan speed hardware monitoring, and there are four USB connectors on board as well. It includes all of the required specifications like Ultra DMA 66 interface, meanwhile it supports PC 133 system memory. **VXZ** provides you perfect function to be the same with your system operation and end user. This user's manual contains all the information and features that show you how to use the **VXZ** motherboard. Please take a moment to familiarize yourself with the design and organization of this manual.

Check Your Items

This **VXZ** motherboard package contains the following items. Please inspect the package contents and confirm that everything is there. If anything is missing or damaged, call your vendor for instructions before operating.

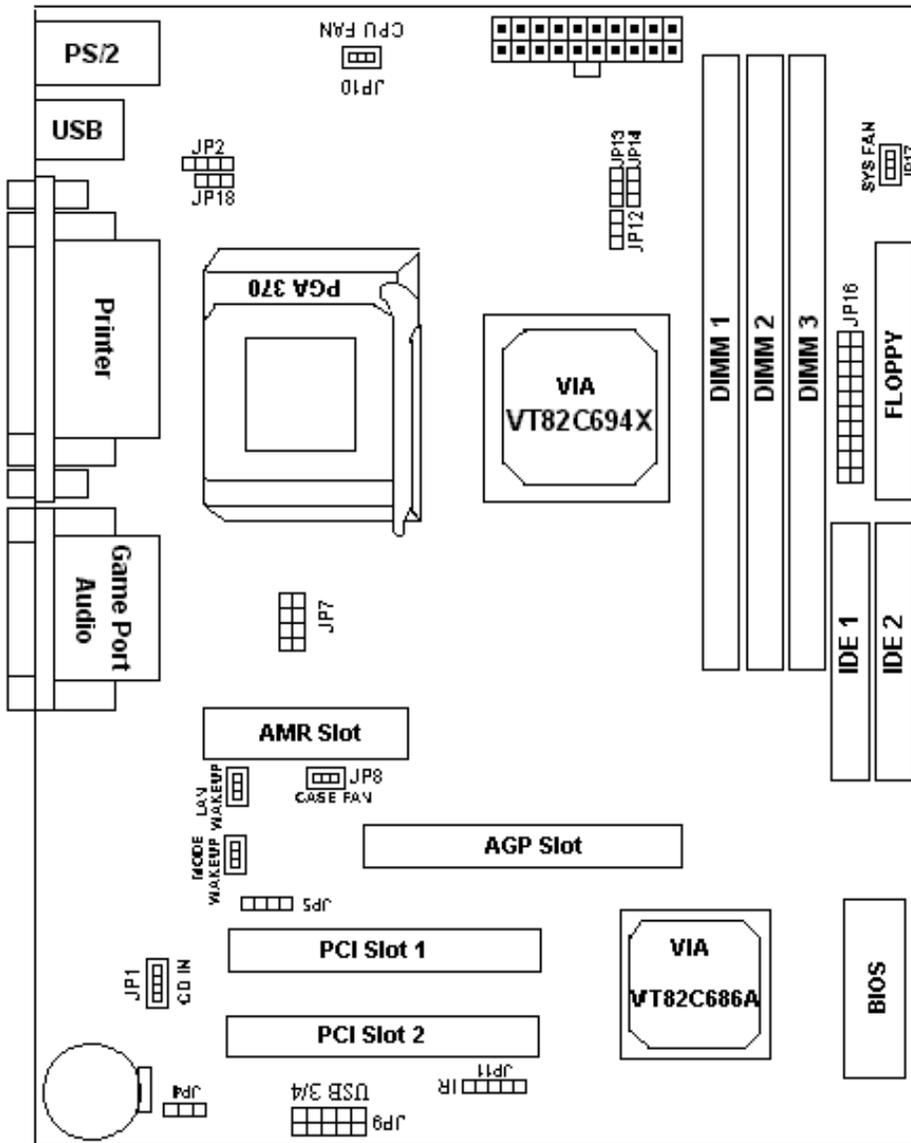
The Package includes:

- ☞ **One VXZ motherboard**
- ☞ **One Floppy Interface Cable**
- ☞ **One IDE Interface Cable**
- ☞ **One Motherboard Resource CD**
- ☞ **One User's Manual**

VXZ Specifications:

Form Factor	<ul style="list-style-type: none"> • Micro ATX form factor
Board Size	<ul style="list-style-type: none"> • 24.4cm x 19.3cm
CPU	<ul style="list-style-type: none"> • Supports Socket 370 Celeron (PPGA),Coppermine (FC-PGA) and VIA Cyrix III serial CPUs. • Supports CPU Clock Frequency: 66/100/103/112/124/133/140/150MHz
System Memory	<ul style="list-style-type: none"> • DIMM 168-pin x 3 SDRAM maximum 1.5G • Supports 64M-bit SDRAM technology
Chipset	<ul style="list-style-type: none"> • VIA Chipset including: <ul style="list-style-type: none"> - VIA VT82C694X (North bridge) - VIA VT82C686A (South bridge)
Expansion Slots	<ul style="list-style-type: none"> • 1 x AGP Slot • 2 x PCI Slots (all of them can be PCI master) • 1 x AMR Slot
Serial Port	<ul style="list-style-type: none"> • Two serial ports UART 16550 compatible
Parallel Port	<ul style="list-style-type: none"> • One parallel port supports: <ul style="list-style-type: none"> - SPP-standard parallel port - EPP-enhanced parallel port - ECP-extended capabilities port
Floppy Interface	<ul style="list-style-type: none"> • Support drivers inches / format with <ul style="list-style-type: none"> - 3.5 inches-720KB/1.44MB/2.88MB - 5.25 inches-360KB/1.2MB
IDE Interface	<ul style="list-style-type: none"> • The VT82C686A includes dual channel master mode PCI support 4 IDE devices. • Support PIO Mode 4, ULTRA DMA /33 & ULTRA DMA/66
USB Port	<ul style="list-style-type: none"> • Four USB ports supported • Support USB Legacy Keyboard function
PS/2 Mouse	<ul style="list-style-type: none"> • PS/2 mouse supported by connector onboard
PS/2 keyboard	<ul style="list-style-type: none"> • PS/2 keyboard supported by connector onboard
Sound Function	<ul style="list-style-type: none"> • On-board AC'97 System • VIA 1611A Audio Codec
Fuse	<ul style="list-style-type: none"> • Supports Recoverable fuse for USB, KB & MOUSE
RTC and Battery	<ul style="list-style-type: none"> • Built in South Bridge • Lithium (CR-2032) battery
Power Connector	<ul style="list-style-type: none"> • ATX
Wake up Function	<ul style="list-style-type: none"> • Modem ring wake up • LAN wake up • RTC Alarm wake up
Hardware Monitor	<ul style="list-style-type: none"> • System fan speed monitor • Voltage monitoring • Temperature monitoring
BIOS	<ul style="list-style-type: none"> • Award BIOS • Supports Suspend To RAM(optional) • Supports APM, DMI and ACPI • Supports virus warning • Supports Flash / Upgrade BIOS functions
LED Indicator	<ul style="list-style-type: none"> • System Power LED • HDD activity LED

Motherboard Layout:



Jumpers

- | | | |
|----|------------------------|-------------------------|
| 1. | JP4 | Clear CMOS |
| 2. | JP7 | Ratio selection for CPU |
| 3. | JP2, JP18 | Select CPU's type |
| 4. | JP12, JP13, JP14, JP19 | CPU Clock Frequency |
| 5. | JP5 | AMR jumper setting |
| 6. | JP9 | USB Connector 3/4 |

Expansion Slots

- | | | |
|----|--------------------|--|
| 1. | AGP | AGP Expansion slot |
| 2. | PCI slot1 to slot2 | 32-bit PCI Bus Expansion slot |
| 3. | AMR | AMR Expansion Slot for AC'97 and MC'97 |
| 4. | DIMM 1 to DIMM 3 | Support 168-pin DIMM Memory |

Connectors

- | | | |
|-----|-------------------|---------------------------------------|
| 1. | IDE 1 | Primary IDE Connector |
| 2. | IDE 2 | Secondary IDE Connector |
| 3. | Floppy | Floppy Drive Connector |
| 4. | IrDA (JP11) | Infrared Ray Port Connector |
| 5. | SYS Fan (JP17) | System Fan Connector |
| 6. | CPU Fan (JP10) | CPU Fan Connector |
| 7. | Chassis Fan (JP8) | Chassis Fan Connector |
| 8. | Wake on LAN | LAN Wake Up Connector |
| 9. | Wake on MODEM | MODEM Wake Up Connector |
| 10. | ATX Power | ATX Power Connector |
| 11. | COM1/COM2 | Serial Port1/Serial Port2 Connector |
| 12. | CD_IN (JP1) | Audio CD-IN Connector |
| 13. | Audio/Game Port | Audio / Game Port Connector |
| 14. | Printer | Printer (Parallel) Port Connector |
| 15. | USB | Universal Serial Bus Port1 and Port2 |
| 16. | PS/2 connectors | PS/2 Mouse & PS/2 Keyboard Connectors |
| 17. | Panel | |

- | | |
|------------|---------------------------------------|
| -PowerOn | ATX Power on / off switch (2-pin) |
| -Reset | Reset Switch Connector (2-pin) |
| -HDD LED | HDD LED Connector (2-pin) |
| -Power LED | ATX Power LED Connector (3-pin) |
| -Speaker | Chassis Speaker Connector (4-pin) |
| -KBLCK | Keyboard Lock Switch Connector(2-pin) |

Chapter 2

Hardware Installation

This chapter gives you a step-by-step procedure on how to install your system and set jumper. The motherboard has several user-adjustable jumpers on the board that allow you to configure your system to suit your requirements.

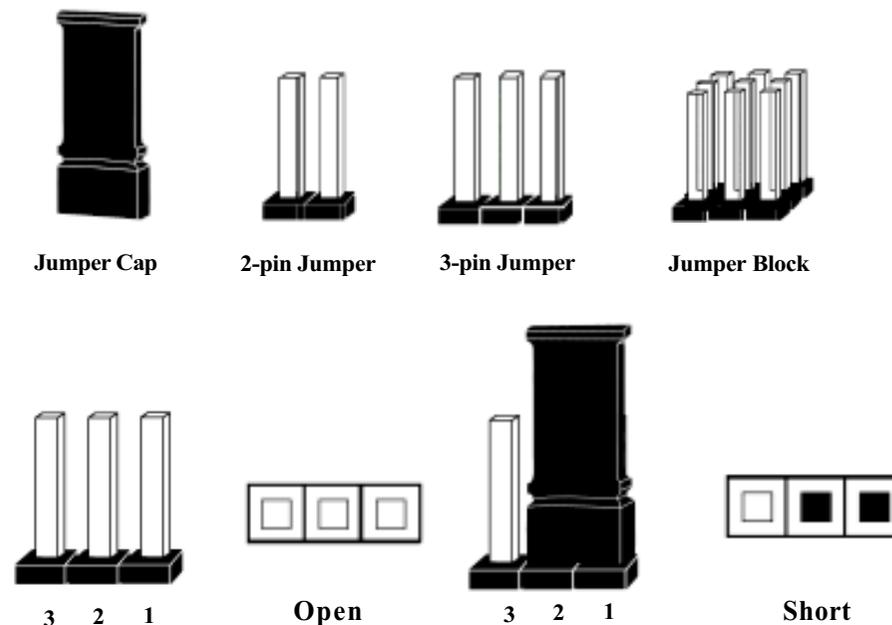
Cautions: Protecting Against Electrostatic Discharge

Static electricity can harm delicate components inside your system. To prevent static damage, discharge static electricity from your body before you touch any of your motherboard electronic components, such as the microprocessor. Observe the following precautions:

- Do not remove the motherboard from its anti-static packaging until you are ready to install it into a computer case.
- Before you handle the motherboard in any way, touch a grounded, antistatic surface, such as an unpainted portion of the system chassis, for a few seconds to discharge any built-up static electricity.
- Handle add-in cards and modules by the edges or mounting bracket.

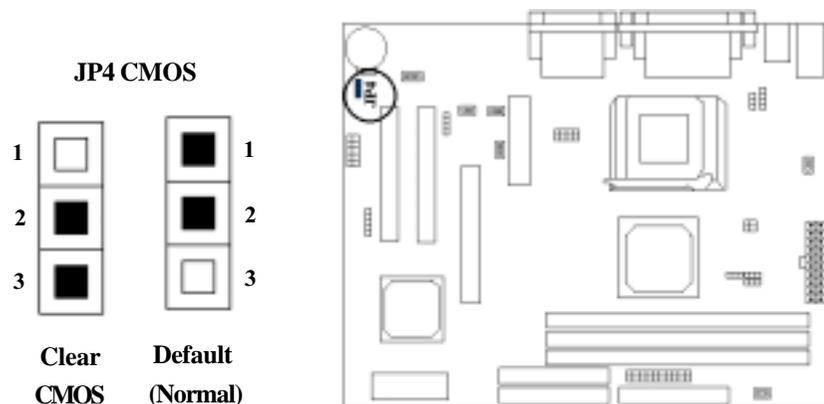
Set Jumpers:

Jumpers are used to select the operation modes for your system. Some jumpers on the board have three metal pins with each pin representing a different function. A “1” is written besides pin 1 on jumpers with three pins. To set a jumper, a black cap containing metal contacts is placed over the jumper pin/s according to the required configuration. A jumper is said to be shorted when the black cap has been placed on one or two of its pins. The types of jumpers used in this manual are shown below:



Note:

Users are not encouraged to change the jumper settings not listed in this manual. Changing the jumper settings improperly may adversely affect system performance.

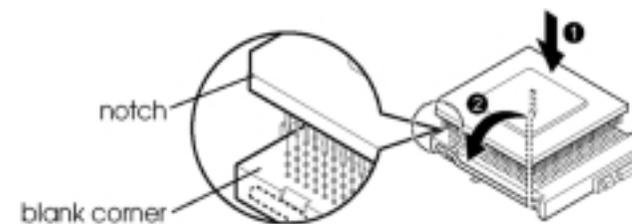
Clear CMOS: JP4**To Clear CMOS, please follow the steps below:**

1. Power off the system and unplug the chassis AC power cord.
2. Short JP4 at pin 2-3 for few seconds.
3. Set JP4 back to its Normal position at pin1-2
4. Plug the AC power cord to the chassis.
5. Power on the system and load the BIOS set up default.

Install CPU

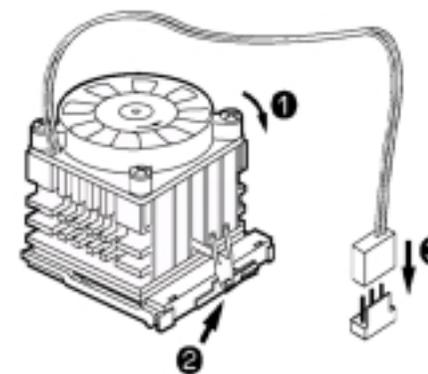
The CPU module resides in the socket 370 on the motherboard. Please following the steps introduced below to complete the CPU installation.

- 1) Locate the new processor you are installing over the socket so that the notched corner on the processor (pin 1) can be aligned with the blank corner on the socket. Then gently push the processor straight into the socket until its pins are completely inserted into the holes of the socket.

**Caution:**

If you install the processor chip in the wrong orientation, you may burn the chip and void your warranty. So you should install it careful deeply.

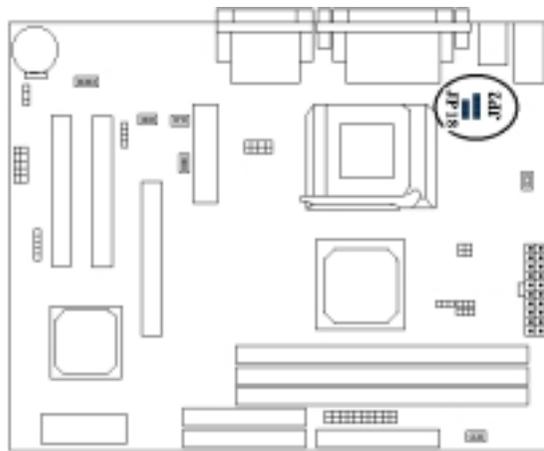
- 2) Press the ZIF handle back to close it.
- 3) Attach the heat sink to the processor socket and then connect a fan connector cable from the CPU fan to the CPU fan connector.



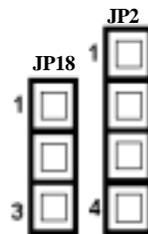
CPU Setting

After installing the CPU, you must set the clock selection jumpers to match the frequency of the CPU. Find the jumpers labeled **JP7** and **JP12, JP13, JP14, JP19, JP20**, set these jumpers according to the figure below and table for CPU Clock Ratio & Clock Frequency. Also **JP2** and **JP18** are used for CPU Type setting. We recommend them to users.

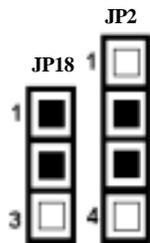
1. CPU Type Selection: JP2, JP18



JP2, JP18
CPU Type Selection

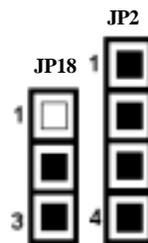


Intel

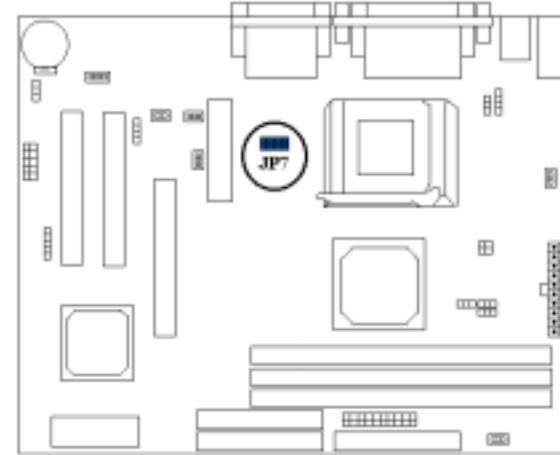


JP2	JP18	CPU TYPE
2-3	1-2	Intel
1-2, 3-4	2-3	Joshua

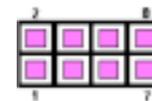
VIA Cyrix III
--Joshua



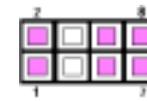
2. CPU Ratio: JP7



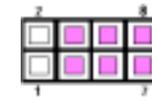
JP7
Clock Ratio



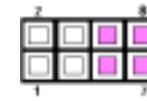
Item 1



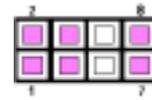
Item 2



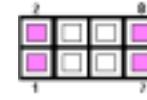
Item 3



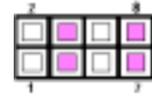
Item 4



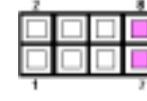
Item 5



Item 6



Item 7



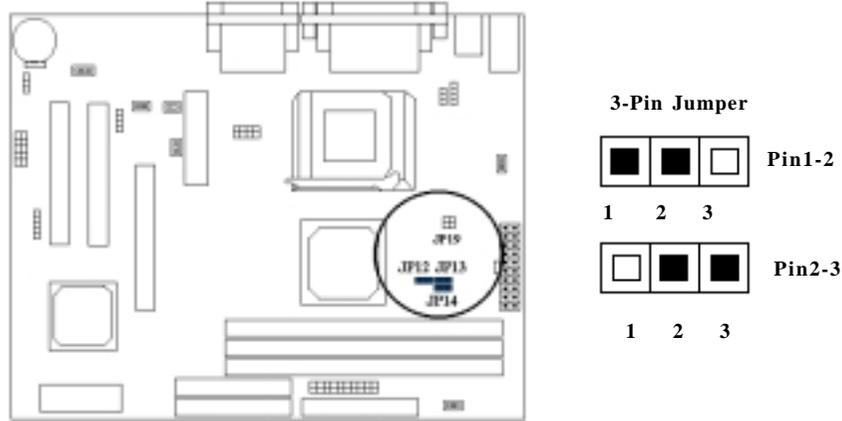
Item 8

Item	Core Freq./BUS Freq.	JP7 Clock Ratio
Item 1	2	1-2 3-4 5-6 7-8
Item 2	3	1-2 5-6 7-8
Item 3	4	3-4 5-6 7-8
Item 4	5	5-6 7-8
Item 5	2.5	1-2 3-4 7-8
Item 6	3.5	1-2 7-8
Item 7	4.5	3-4 7-8
Item 8	5.5	7-8

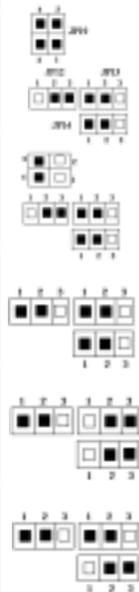
Note:

JP7 Ratio setting is useless for the locked-CPU.

3. CPU 外频设置: JP12, JP13, JP14, JP19



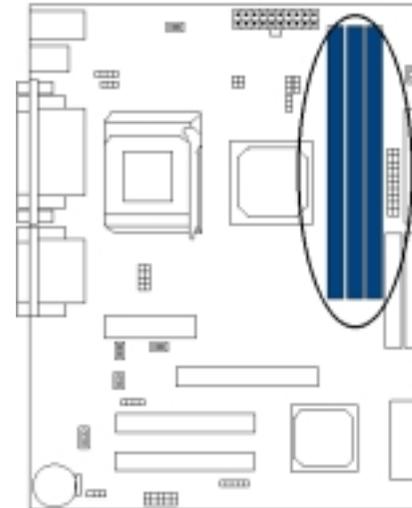
CPU(MHz)	JP19	JP12	JP13	JP14
66	1-2, 3-4	2-3	1-2	1-2
100	3-4	2-3	1-2	1-2
133	OPEN	1-2	1-2	1-2
140		1-2	2-3	2-3
150		1-2	1-2	2-3



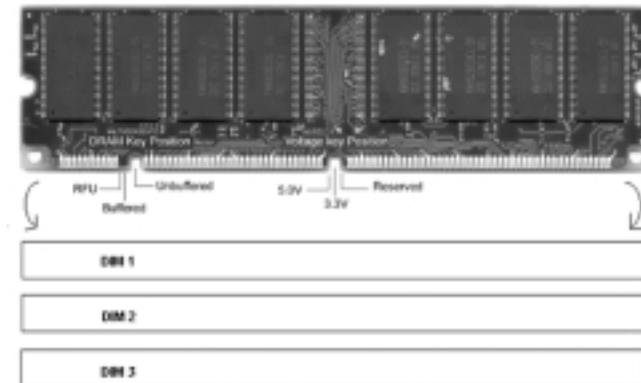
System Memory Installation

There are 3 pieces 168-pin DIMM (Dual Inline Memory Module) sockets on the motherboard which support SDRAM and EDO DRAM memory.

- ◆ To ensure reliability, it is recommended to use PC 100 SDRAM or PC 133 SDRAM for your high clock SDRAM performance requirement.
- ◆ If you are using low clock SDRAMs, you should set the SDRAM clock option of the BIOS's Chipset Feature Setup to HCLK-33 to ensure stability.
- ◆ DIMM Sizes supported: **8MB, 16MB, 32MB, 64MB, 128MB, 256MB.**
- ◆ Total Memory Size = DIMM1 + DIMM2 + DIMM3, maximum up to 768MB.

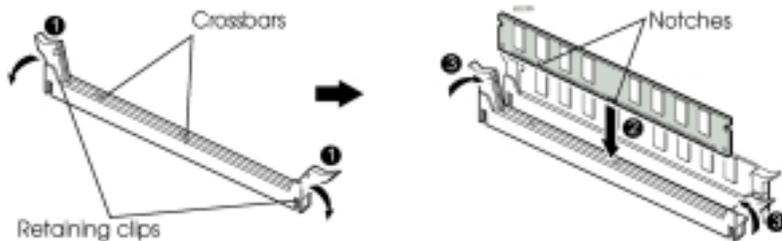


There are 3x168-pin DIMM slots (DIMM1, DIMM2, DIMM3) that allow you to install the system memory max up to 768MB SDRAM.



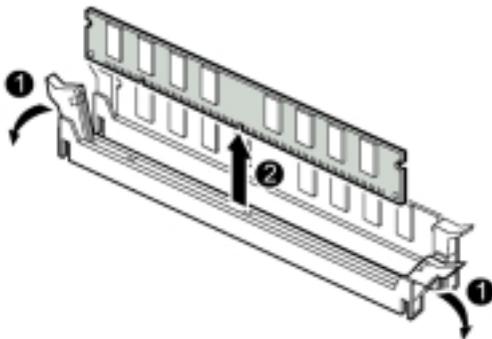
1. Install DIMM

- 1) After remove the cover, install the DIMM in the sockets marked with DIMM2, if the DIMM has been installed in the DIMM1 socket. Release the plastic retaining clips at each end of the socket by pressing the clips outward until they snap open.
- 2) Orient a DIMM to the socket so the two notches in the DIMM connector are aligned with the crossbars in the socket.
- 3) Press the DIMM straight into the socket until the retaining clips snap into place around the ends of the DIMM.



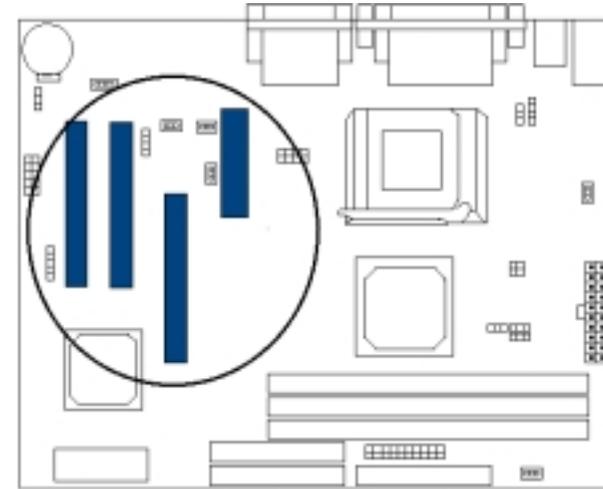
2 Removing a Memory Module

To remove memory modules, press the retaining clips outward simultaneously until the DIMM disengages from the socket and then carefully remove the DIMM from the socket.



Install Expansion Cards

This section describes how to connect an expansion card to one of your system's expansion slots. Expansion cards are printed circuit boards that, when connected to the mainboard, increase the capabilities of your system. VXZ features two PCI bus, one AGP bus and one AMR bus expansion slots.



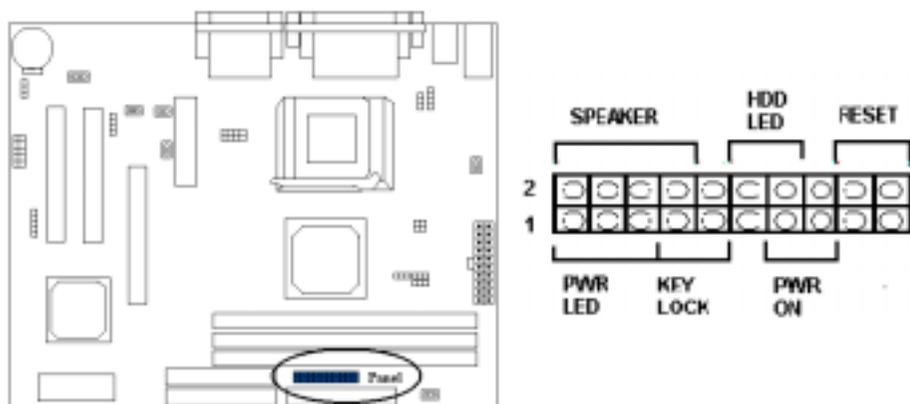
Caution:

Adjust any switches or jumpers on the expansion card, if necessary. When you handle the card, be careful not to touch any components on the circuit board or the gold-edged connector.

- 1) After removing the cover, insert a flat blade screwdriver into a hole of the slot cover you wish to remove.
- 2) Move the screwdriver up and down until the slot cover breaks away from the chassis. Then lift the slot cover out of the chassis.
- 3) Hold the card along the top corners and guide it into the slot. When the expansion card reaches the slot on the motherboard, push the card in firmly to insert it fully.
- 4) Secure the end of the card to the computer with retaining screw.
- 5) Connect any cables that should be attached to the card, and replace the system cover.

Connector Devices

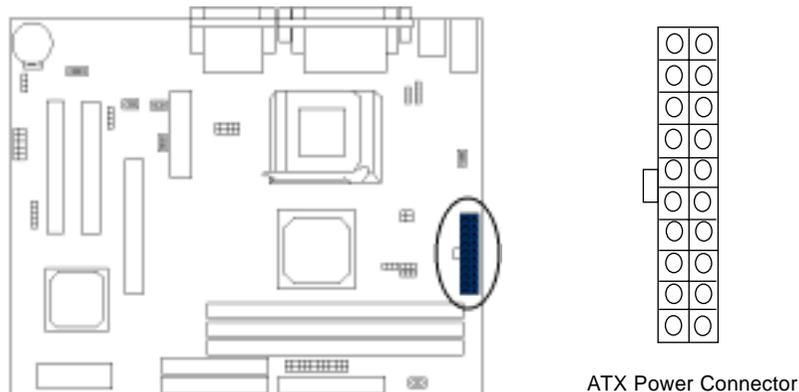
1. Panel Connector



- **PWRON** ATX Power Swith Connector(3 pins)
- **RESET** Reset Swith Connector (2 pins)
- **HDDLED** HDD LED Connector (2 pins)
- **PWRLED** ATX Power LED Connector (3 pins)
- **SPEAKER** Chassis Speaker Connector (4 pins)
- **KEY LOCK** Keyboard Lock Connector (2 pins)

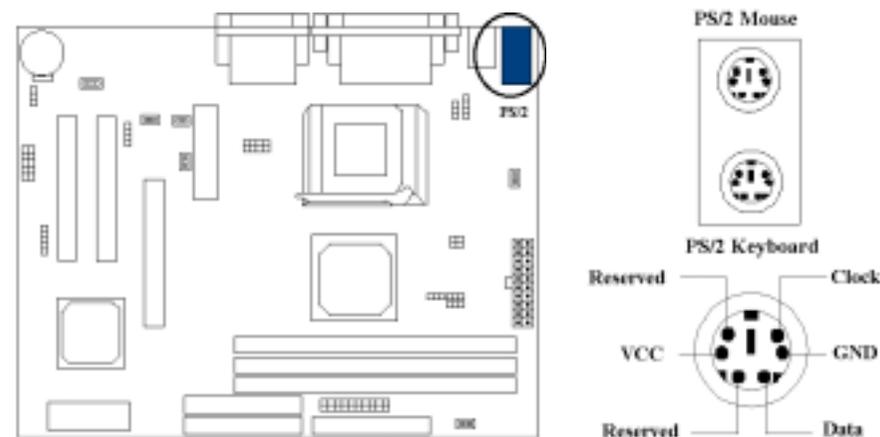
2. Power Connector

Connect the 20-pin ATX power supply cable to this power connector. Make sure the right plug-in direction and the power supply is off before connecting or disconnecting the power cable.



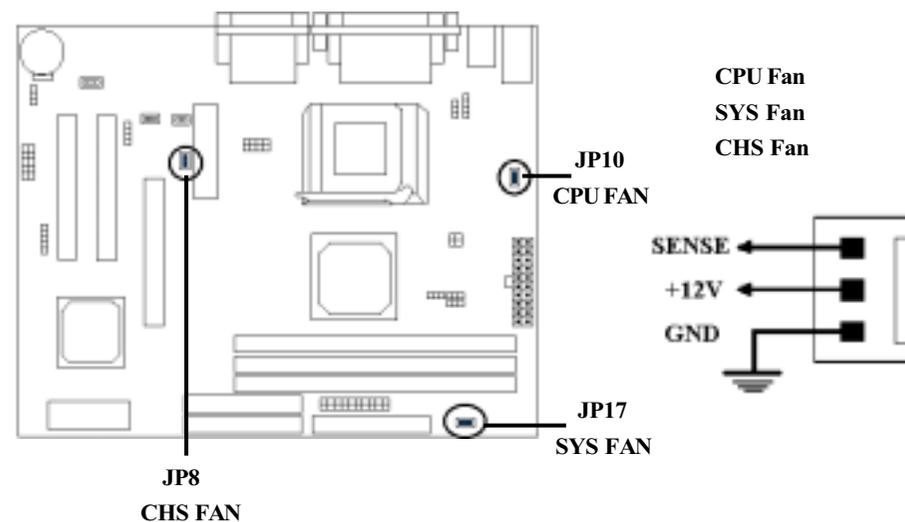
3. PS/2 Mouse & Keyboard Connectors

Connect the PS/2 mouse and keyboard to the onboard 6-pin Mini-Din connector marked as **MOUSE** and **KB**.



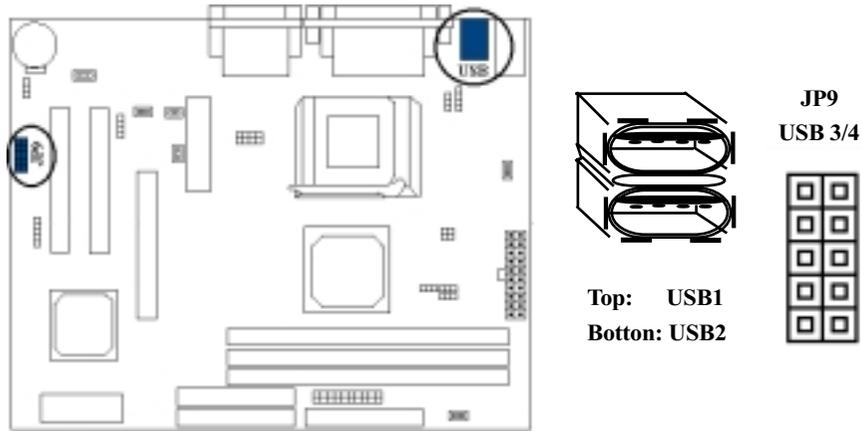
4. FAN Connectors

Connect the CPU and SYS fan cables to the fan connectors shown below. The fan connectors are marked as: **CPUFAN**, **SYSFAN** and **CASE FAN** on the motherboard.



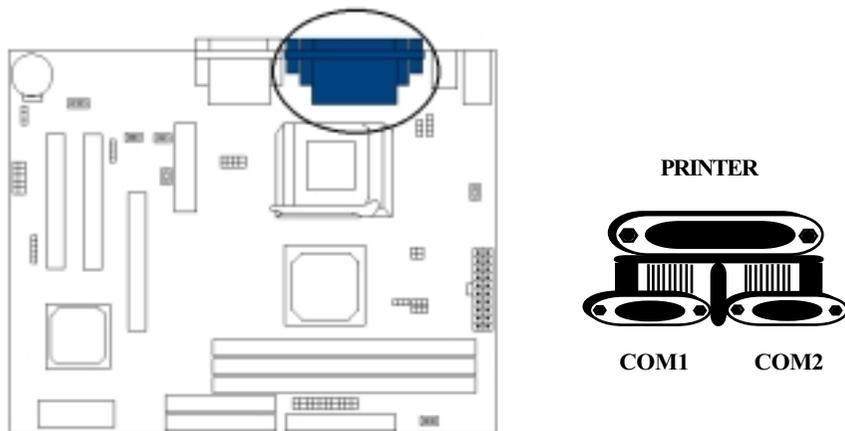
5. USB Connectors: JP9

Connect your USB devices to the USB connector onboard marked as **USB**.



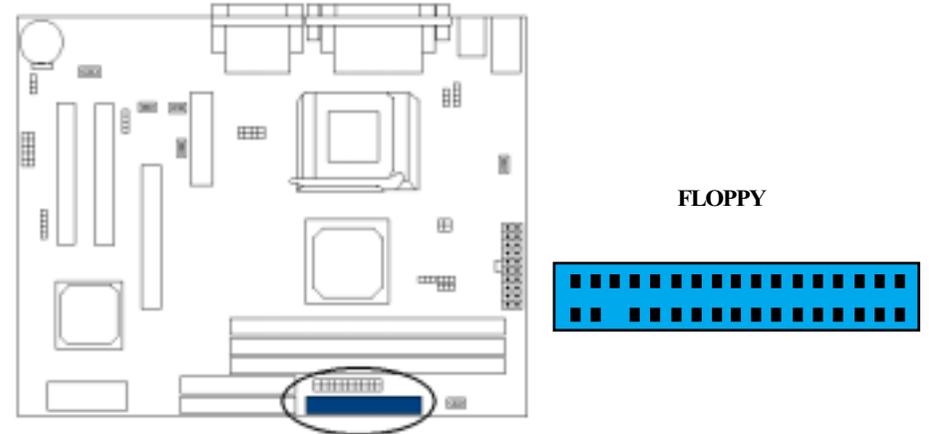
6. Serial Device (COM1/COM2) and Printer Connectors

Connect your serial device(s) to the onboard 9-pin serial connectors marked as **COM1** and **COM2**. Connect your local printer to the onboard 25-pin printer connector marked as **PRINTER**.



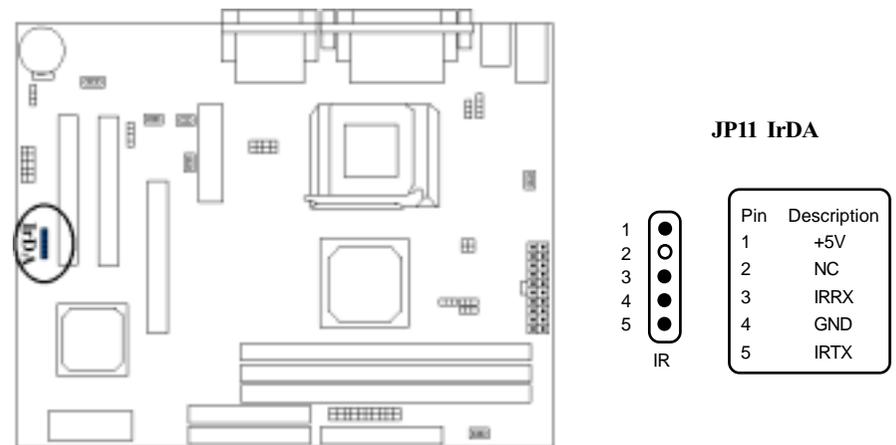
7. Floppy Drive Connector

Connect the floppy drive cable to the onboard 34-pin floppy drive connector marked as **FDD**.



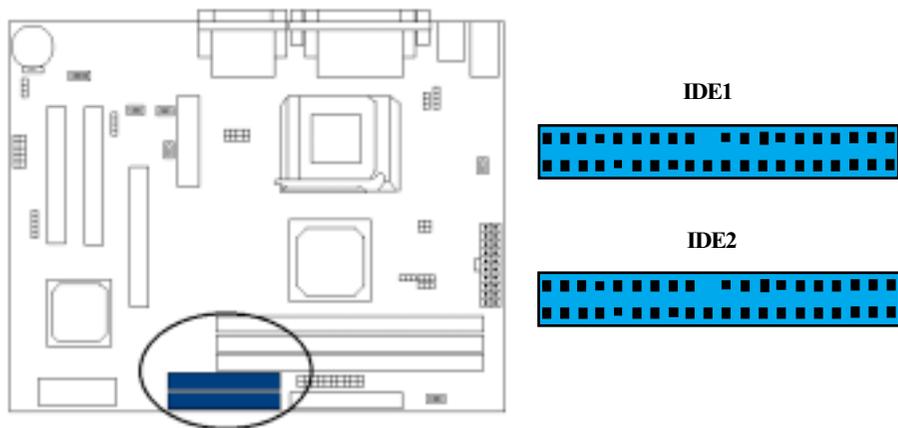
8. IrDA Connector

Connect your IR device to the IrDA connector onboard marked as **JP11**.



9. IDE Hard Drives Connector

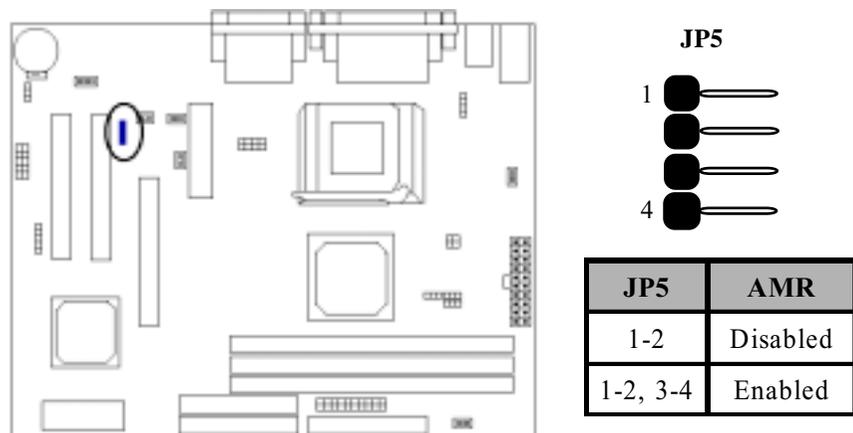
Connect your IDE devices to the 40-pin IDE connectors onboard marked as **IDE1** and **IDE2**.



Each IDE channel, either Primary or Secondary, supports two IDE devices which must be set differently to master mode and slave mode. (Refer to your hard disk and CD-ROM user manual for detailed settings of IDE master and slave mode.)

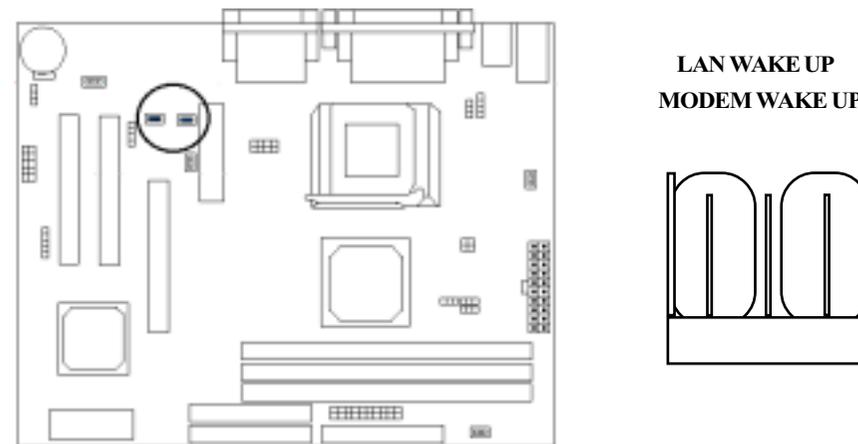
10. AMR Connectors:

Connect the AMR card to the onboard AMR connector marked as **JP5**. According to the following table, sets JP5 jumper.



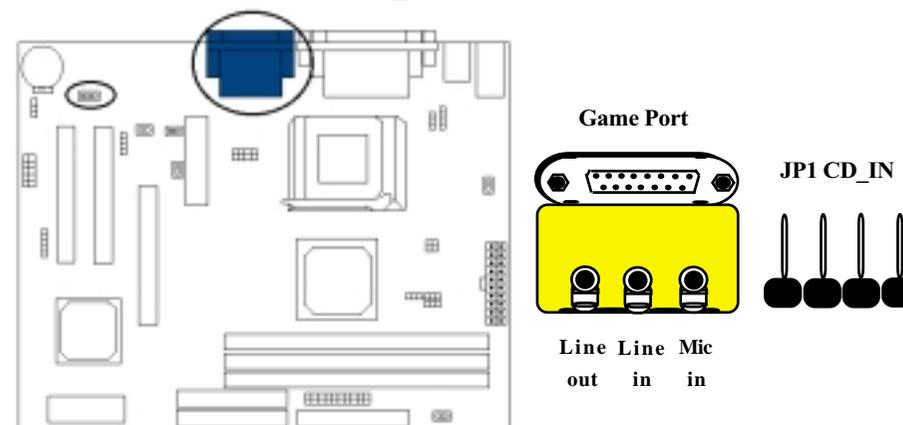
10. LAN & Modem Wake Up Connectors

This motherboard supports LAN wake up and MODEM wake up functions. To use these two functions, you need a **LAN Wake Up & Modem Wake Up** supported network cards and softwares. To use the LAN Wake Up or Modem Wake Up functions, you must enable the **Power On By Ring/LAN** field in the **Power Management Setup** of the Award BIOS.



11. Game / MIDI & CD_IN Connectors:

Connect the game device to the onboard Game / Audio connector marked as **GAME PORT**. The onboard CD_IN connector marked as **CD-IN JP1**.



Standard CMOS Setup

The items in Standard CMOS Setup Menu are divided in 10 categories. Each catalogue includes one or more than one setup items. Use the keys to highlight the item and then use the $\uparrow \downarrow \leftarrow \rightarrow$ / <PgUp> / <PgDn> keys to select the value you want in each item.

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
Standard CMOS Features

Date (mm:dd:yy):	Mon, Mar 29 2000	Item Help
Time (hh:mm:ss):	16:19:20	
» IDE Primary Master	Press Enter None	Menu Level » Change the day, month, year and century
» IDE Primary Slave	Press Enter None	
» IDE Secondary Master	Press Enter None	
» IDE Secondary Slave	Press Enter None	
Drive A	1.44M. 3.5in	↑↓←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save F6: Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults
Drive B	None	
Video	EGA / VGA	
Halt On	All, But Keyboard	
Base Memory	640K	
Extended Memory	30720K	
Total Memory	31744K	

Date & Time

To set the date and time, highlight the date area. Press $\uparrow \downarrow \leftarrow \rightarrow$ / <PgUp> / <PgDn> to set the current date. The date format is month: Jan. ~ Dec; date: 1 ~ 31; year: 1994 ~ 2079; hour: 00 ~ 23; and second: 00 ~ 59.

- **Hard Disks** → IDE Primary Master
- **Hard Disks** → IDE Primary Slave
- **Hard Disks** → IDE Secondary Master
- **Hard Disks** → IDE Secondary Slave

Press <Enter> to enter the submenu of detailed options, the following table shows the IDE primary master submenu.

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
IDE Primary Master

IDE HDD Auto-Detection	<i>Press Enter</i>	Item Help
IDE Primary Master	Auto	
Access Mode	Auto	Menu Level » Change the day, month, year and century
Capacity	0MB	
Cylinder	0	
Head	0	
Precomp	0	
Landing Zone	0	
Sector	0	
↑↓←→: Move Enter: Select +/-/PU/PD: Value F10: Save Esc:Exit F1: General Help F5 : Previous Values F6 : Fail-safe defaults F7 : Optimized Defaults		

IDE HDD Auto-detection

Press enter to auto - detect the HDD on the channel. If detection is successful, it fills the remaining fields on the menu.

IDE Primary Master

Selecting 'manual' lets you set the remaining fields on the screen. Selects the type of fixed disk. "User Type" will let you select the number of cylinders, heads, etc.

Note: PRECOMP=65535 means NONE!

The optional are: None, **Auto (Default)**, Manual

The following options are selectable only if the 'IDE Primary Master' item is set to 'Manual':		
Cylinder	Min = 0 Max = 65535	Set the number of cylinders for this hard disk.
Head	Min = 0 Max = 255	Set the number of read/write heads
Precomp	Min = 0 Max = 65535	Warning: Setting a value of 65535 means no hard disk
Landing zone	Min = 0 Max = 65535	
Sector	Min = 0 Max = 255	Number of sectors per track

Access Mode

Choose the access mode for this hard disk.

The optional are: Normal, LBA, Large, **Auto (Default)**.

Capacity

Disk drive capacity (approximated). Note that this size is usually slightly greater than the size of the formatted disk given by a disk checking program.

The optional are: Auto display your drive size.

Drive A / Drive B

Select the floppy drive type installed in your system. The available options for Drive A and Drive B.

The optional are: 360K 5.25 in, 1.2M 5.25 in, 720K 3.5 in, 1.44M 3.5 in(**Drive A default**), 2.88M 3.5 in and NONE (**Drive B default**).

Video

Select the video display card type installed in your system.

The optional are: **EGA/VGA (Default)**, CGA 40, CGA 80 and Mono.

Halt On

This item defines the operation of the system POST (Power On Self-Test). You can use this item to select which kind of errors will cause the system to halt during POST.

The optional are: All Errors, No Errors, **All But Keyboard (Default)**, All But Diskette and All But Disk / Key

Advanced BIOS Features

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software

Advanced BIOS Features

Virus Warning	Disabled	Item Help
CPU Internal Cache	Enabled	
External Cache	Enabled	Menu Level »
CPU L2 Cache ECC Checking	Enabled	
Quick Power On Self Test	Disabled	
First Boot Device	Floppy	Allows you to choose the VIRUS
Second Boot Device	HDD-0	warning feature for IDE Hard Disk
Third Boot device	LS/ZIP	boot sector protection. If this
Boot other device	Enabled	function is enabled and someone
Swap Floppy Drive	Disabled	attempt to write data into this area,
Boot Up Floppy Seek	Enabled	BIOS will show a warning message
Boot Up Numlock Status	On	on screen and alarm beep.
Gate A20 Option	Fast	
Typeomatic Rate Setting	Disabled	
* Typeomatic Rate (Chars/Sec)	6	
* Typeomatic Delay (Msec)	250	
Security Option	Setup	
OS Select For DRAM > 64MB	Non-OS2	
Video BIOS shadow	Enabled	
C8000-CBFFF shadow	Disabled	
CC000-CFFFF shadow	Disabled	
D0000-D3FFF shadow	Disabled	
D4000-D7FFF shadow	Disabled	
D8000-DBFFF shadow	Disabled	
DC000-DFFFF shadow	Disabled	
↑↓←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save F6 : Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults		

Virus Warning

If this function enabled and someone attempt to write data into this area, BIOS will automatically show a warning message on screen and alarm beep.

The optional are: Enabled, **Disabled (Default)**

CPU Internal / External cache

These two items controls Enable / Disable the CPU internal / external cache.

The optional are: **Enabled (Default)**, Disabled

CPU L2 Cache ECC Checking

This item allows you to enable / disable CPU L2 Cache ECC Checking.

The optional are: **Enabled (Default)**, Disabled

Quick Power On Self Test

This item speeds up Power On Self Test (POST) after you power up the computer. If it is set to Enable, BIOS will shorten or skip some check items during POST.

The optional are: Enabled, **Disabled (Default)**

First / Second / Third Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items.

The optional are: **Floppy (First Default), HDD-0(Second Default), LS /ZIP (Third Default)**, HDD-1/2/3, ZIP 100, SCSI, CDROM, LAN, Disabled.

Boot Other Device

Select your Boot Device Priority.

The optional are: **Enabled (Default)**, Disabled

Swap Floppy Drive

If the system has two floppy drives, choose enable to assign physical drive B to logical drive A and vice-versa.

The optional are: Enabled, **Disabled (Default)**

Boot Up Floppy Seek

Seeks disk drives during boot up.

The optional are: **Enabled (Default)**, Disabled

Boot Up NumLock Status

Selects power on state for NumLock.

The optional are: Off, On **(Default)**

Gate A20 Option

Normal-a pin in the keyboard controller controls Gate A20.

Fast- lets chipset control Gate A20.

The optional are: Normal, **Fast (Default)**

Typematic Rate Setting

Keystrokes repeat at a rate determined by the keyboard controller, when enabled, the typematic rate and typematic delay can be selected.

The optional are: Enabled, **Disabled(Default)**

Typematic Rate (Chars/Sec)

Sets the number of times a second to repeat a key stroke when you hold the key down.

The optional are: **6 (Default)**, 8, 10, 12, 15, 20, 24, 30

Typematic Delay (Msec)

Select the delay time after the key is held down before it begins to repeat the key strokes.

The optional are: **250 (Default)**, 750, 1000

Security option

Select whether the password is required every time when you enter setup.

Setup -- The system will boot up.

System -- The system will not boot and access to setup will be denied if the correct password is not entered at the prompt.

The optional are: **Setup (Default)**, System

OS Select for DRAM > 64MB

Select OS2 only if you are running OS/2 operating system with greater than 64MB of RAM on the system.

The optional are: **Non-OS/2 (Default)**, OS/2

Video BIOS Shadow

This item defines if you leave default setting, video BIOS memory will be copied from ROM into DRAM area to enhance system performance as DRAM access time is faster than ROM.

The optional are: **Enabled (Default)**, Disabled

C8000-CBFFF to DC000-DFFFF Shadow

Set Enabled if you know the address that your add on card ROM used to shadow them. If the item is Enabled, BIOS will copy the selected area from ROM to RAM to increase system performance.

The optional are: **SDRAM 10ns(Default)**, SDRAM 8ns, Normal, Medium, Fast, Turbo

Advanced Chipset Features

This item allows you to configure the system based on the specific features of the chipset. This chipset manages bus speed and access to system memory resources, and external cache. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide you the best operating conditions for your system. The only time you might consider making any changes if you discovered that the data were being lost while control your system.

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
Advanced Chipset Features

		Item Help
Bank 0/1 DRAM Timing	SDRAM 10ns	
Bank 2/3 DRAM Timing	SDRAM 10ns	
Bank 4/5 DRAM Timing	SDRAM 10ns	Menu Level ↵
SDRAM Cycle Length	3	
DRAM Clock	Host CLK	
Memory Hole	Disabled	
P2C/C2P Concurrency	Enabled	
Fast R-W Turn Around	Disabled	
System BIOS Cacheable	Disabled	
Video RAM Cacheable	Disabled	
AGP Aperture Size	64M	
AGP-4x Mode	Enabled	
AGP Driving Control	Auto	
AGP Driving Value	DA	
Onchip USB	Enabled	
USB Keyboard Support	Disabled	
USB Mouse Support	Disabled	
Onchip Sound	Enable	
Onchip Modem	Enable	
CPU to PCI Write Buffer	Enabled	
PCI Dynamic Bursting	Enabled	
PCI Master 0 WS Write	Enabled	
PCI Delay Transaction	Enabled	
PCI#2 Access #1 Retry	Enabled	
AGP Master 1 WS Write	Disabled	
AGP Master 1 WS Read	Disabled	
Memory Parity / ECC Check	Disabled	

↑↓←→: Move Enter: Select F5: Previous Values +/-/PU/PD: Value F10: Save
F6: Fail-safe defaults Esc:Exit F1: General Help F7: Optimized Defaults

Bank 0/1 2/3 4/5 DRAM Timing

This item allows you to select the value in this field, depending on whether the board has paged DRAMs or EDO (extended data output) DRAMs.

The optional are: **SDRAM 10ns(Default)**, SDRAM 8ns, Normal, Medium, Fast, Turbo

SDRAM Cycle Length

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. Do not reset this field from the default value specified by the system designer.

The optional are: **3(Default)**, 2

DRAM Clock

This item allows you to control the DRAM speed.

The optional are: **Host CLK(Default)**, Host-33M, Host+33M

Memory Hole

In order to improve performance, certain space in memory is reserved for ISA cards.

This memory must be mapped into the memory space below 16MB.

The optional are: 15M-16M **Disabled(Default)**

P2C/C2P Concurrency

This allows you to enable/disable the PCI to CPU, CPU to PCI concurrency.

The optional are: **Enabled(Default)**, Disabled

Fast R-W Turn Around

This item controls the DRAM timing. It allows you to enable/disable the fast read / write turn around.

The optional are: Enabled, **Disabled(Default)**

System BIOS Cacheable

Selecting *Enabled* allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Video RAM Cacheable

Selecting *Enabled* allows caching of the Video RAM, resulting in better system performance. However, if any program writes to this memory area, a system error may result. The optional are: Enabled, **Disabled(Default)**

AGP Aperture Size

Select the size of Accelerated Graphics Port(AGP) aperture. The aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation. The optional are: 128M, **64M(Default)**, 32M, 16M, 8M, 4M

AGP - 4X Mode

This item allows you to enable / disable the AGP - 4X mode. The optional are: **Enabled(Default)**, Disabled

AGP Driving Control

This item allows you to adjust the AGP Driving force. Choose Manual to key in a AGP driving Value in the next selection. This field is recommended to set in Auto for avoiding any error in your system. The optional are: **Auto(Default)**, Manual

On Chip USB

This should be enabled if your system has a USB installed on the system board and you want to use it. Even when so equipped, if you add higher performance controller, you will need to disable this feature. The optional are: **Enabled (Default)**, Disabled

USB Keyboard Support

Select Enabled if your system contains a Universal Serial Bus Controller and you have a USB keyboard. The optional are: **Disabled (Default)**, Enabled

USB Mouse Support

Select Enabled if your system contains a Universal Serial Bus Controller and you have a USB Mouse. The optional are: **Disabled (Default)**, Enabled

Onchip Sound

This item allows you to control the onboard AC97 audio. The optional are: **Enabled (Default)**, Disabled

Onchip Modem

This item allows you to control the onboard MC97 modem. The optional are: **Enabled (Default)**, Disabled

CPU to PCI Write Buffer

When this field is *Enabled*, writes from the CPU to the PCI bus are buffered, to compensate for the speed difference between the CPU to the PCI bus. When Disabled, the writes are not buffered and the CPU must wait until the write is complete before starting another write cycle. The optional are: **Enabled (Default)**, Disabled

PCI Dynamic Bursting

When Enabled, every write transaction goes to the write buffer. Burstable transactions then burst on the PCI bus and nonburstable transactions do not. The optional are: **Disabled (Default)**, Enabled

PCI Master 0 WS Write

When Enabled, writes to the PCI bus are executed with zero wait state. The optional are: **Enabled (Default)**, Disabled

PCI Delay Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select *Enabled* to support compliance with PCI specification version 2.1. The optional are: **Enabled (Default)**, Disabled

PCI #2 Access #1 Retry

When disabled, PCI#2 will not be disconnected until access finishes (default). When enable, PCI#2 will be disconnected if max retries are attempted without success.

The optional are: **Disabled (Default)**, Enabled

AGP Master1 WS Write

When Enabled, writes to AGP(Accelerated Graphics Port) are executed with one wait states.

The optional are: **Disabled (Default)**, Enabled

AGP Master1 WS Read

This item enabled to detect the memory parity and error checking & Correcting.

The optional are: **Disabled (Default)**, Enabled

Integrated Peripherals

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software

Integrated Peripherals

		Item Help
OnChip IDE Channel 0	Enabled	
OnChip IDE Channel 1	Enabled	
IDE Prefetch Mode	Enabled	Menu Level ▶
Primary Master PIO	Auto	
Primary Slave PIO	Auto	
Secondary Master PIO	Auto	
Secondary Slave PIO	Auto	
Primary Master UDMA	Auto	
Primary Slave UDMA	Auto	
Secondary Master UDMA	Auto	
Secondary Slave UDMA	Auto	
Init Display First	PCI Slot	
IDE HDD Block Mode	Enabled	
Onboard FDD Controller	Enabled	
Onboard Serial Port1	Auto	
Onboard Serial Port1	Auto	
UART 2 Mode	Standard	
* IR function Duplex	Half	
* TX, RX inverting enable	No, Yes	
Onboard Parallel Port	378/IRQ7	
Onboard Parallel Port Mode	Normal	
* ECP Mode Use DMA	3	
* Parallel Port EPP Type	EPP1.9	
Onboard Legacy Audio	Enabled	
Sound Blaster	Disabled	
SB I/O Base Address	220H	
SB IRQ Select	IRQ 5	
SB DMA Select	DMA 1	
MPU-401	Disabled	
MPU-401 I/O Address	330-333H	
Game Port (200-207)	Enabled	

↑←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save
F6 : Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults

On-Chip IDE Channel 0 / 1

The chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the primary IDE interface. Select Disabled to deactivate this interface.

The optional are: **Enabled (Default)**, Disabled

IDE Prefetch Mode

The onboard IDE drive interfaces supports IDE prefetching for faster drive accesses. If you install a primary and/or secondary add-in IDE interface, set this field to *Disabled* if the interface does not support prefetching.

The optional are: **Enabled (Default)**, Disabled

Primary / Secondary Master / Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

The optional are: **Auto (Default)**, Mode 0, Mode 1, Mode 2, Mode3, Mode 4

Primary / Secondary Master / Slave UDMA

Ultra DMA/66 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 98 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/66, select Auto to enable BIOS support.

The optional are: **Auto(Default)**, Disabled

Init Display First

This item allows you to decide to active whether PCI Slot of VGA card or AGP first.

The optional are: **PCI Slot (Default)**, AGP

IDE HDD Block Mode

Block mode is also called block transfer, multiple commands, or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support.

The optional are: **Enabled (Default)**, Disabled

Onboard FDD Controller

Select Enabled if your system has a floppy disk controller (FDC) installed on the system board and you want to use it. If you install add-in FDC or the system has no floppy drive, select Disabled in this field.

The optional are: Enabled (**Default**), Disabled

Onboard Serial Port 1/2

Select an address and corresponding interrupt for the first and second serial ports.

The optional are: **Auto (Port 1 & Port 2 Default)**, Disabled, 3F8 / IRQ4, 2F8 / IRQ3, 3E8 / IRQ4, 2E8 / IRQ3

UART 2 Mode

This item allows you to select which mode for the Onboard Serial Port 2.

The optional are: **Standard (Default)**, HPSIR, ASKIR

IR Function Duplex

This item allows you to select the IR half/full duplex function.

The optional are: Half (**Default**), Full

TX, RX inverting enable

This item allow you to enable the TX, RX inverting which depends on different H/W requirement. This field is not recommended to change its default setting for avoiding any error in your system

The optional are: No & No, **No & Yes(Default)**, Yes & No, Yes & Yes.

Onboard Parallel Port

Select a logical LPT port address and corresponding interrupt for the physical parallel port.

The optional are: **378/IRQ7(Default)**, 278/IRQ5, 3BC/IRQ7, Disabled

Onboard Parallel Mode

Select an operating mode for the onboard parallel (printer) port. Select *Normal*, *Compatible*, or *SPP* unless you are certain your hardware and software both support one of the other available modes.

The optional are: **Normal (Default)**, EPP, ECP, ECP/EPP

ECP Mode Use DMA

Select a DMA channel for the parallel port for use during ECP mode.

The optional are: **3 (Default)**, 1

EPP Parallel Port EPP Type

Select EPP port type 1.7 or 1.9.

The optional are: **EPP 1.9(Default)**, EPP 1.7

Onboard Legacy Audio

This field controls the onboard legacy audio.

- Sound Blaster : **Disabled(Default)**
- SB I/O Base Address : **220H(Default)**
- SB IRQ Select : **IRQ 5(Default)**
- SB DMA Select : **DMA 1(Default)**
- MPU-401 : **Disabled(Default)**
- MPU-401 I/O Address : **330-333H(Default)**
- Game Port (200-207H) : **Enabled(Default)**

Power Management Setup

The Power Management Setup allows you to configure your system effectively save energy while operating in a manner consistent with your own style of computer use.

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
Power Management Setup

		Item Help
ACPI function	Enabled	
▶Power Management	Press Enter	
ACPI Suspend Type	S1(POS)	Menu Level »
PM Control by APM	Yes	
Video Off Option	Suspen →Off	
Video Off Method	V/H SYNC Blank	
MODEM Use IRQ	3	
Soft-Off by PWR-BTTN	Instant-Off	
▶Wake up event	Press Enter	

↑↓←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save
F6 : Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults

ACPI Function

This item allows you to enable/disable the Advanced Configuration and Power Management (ACPI).

The optional are: **Enabled(Default)**, Disabled

Power Management

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
Power Management

	User Define	Item Help
Power Management	Disabled	
HDD Power Down	Disabled	
Doze Mode	Disabled	Menu Level »
Suspend Mode	Disabled	

↑↓←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save
F6 : Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

1. HDD Power Down
2. Doze Mode
3. Suspend Mode

HDD Power Down

When enabled and after the set time of system inactivity, the hard disk drive will be powered down while all other devices remain active.

The optional are: **Disable (Default)**, 1 Min--15 Min

Doze Mode

When enabled and after the set time of system inactivity, the CPU clock will run at slower speed while all other devices still operate at full speed.

The optional are: **Disable(Default)**, 1Min, 2Min, 4Min, 6Min, 8Min, 10Min, 20Min, 30Min, 40Min, 1Hour

Suspend Mode

When enabled and after the set time of system inactivity, all devices except the CPU will be shut off.

The optional are: **Disable(Default)**, 1Min, 2Min, 4Min, 6Min, 8Min, 10Min, 20Min, 30Min, 40Min, 1Hour

There are four selections for Power Management, three of which have fixed mode settings.

Disable (default)	No Power Management. Disables all four modes
Min. Power Saving	Minimum power management. Doze Mode = 1 hr. Standby Mode = 1 hr., Suspend Mode = 1 hr., and HDD Power Down = 15 min.
Max. Power Saving	Maximum power management ONLY AVAILABLE FOR SL CPU'S. Doze Mode = 1 min., Standby Mode = 1 min., Suspend Mode = 1 min., and HDD Power Down = 1 min.
User Defined	Allows you to set each mode individually. When not disabled, each of the ranges are from 1 min. to 1 hr. except for HDD Power Down which ranges from 1 min. to 15 min. and disable.

ACPI Suspend Type

This item lets you select a method of ACPI suspend.
The optional are: **S1(POS) (Default)**, S3(STR)

PM Control by APM

When enabled, an Advanced Power Management device will be activated to enhance the Max. Power Saving mode and stop the CPU internal clock. If Advance Power Management (APM) is installed on your system, selecting Yes gives better power savings.
The optional are: No, **Yes(Default)**

Video Off Option

When enabled, this feature allows the VGA adapter to operate in a power saving mode.

Always On	Monitor will remain on during power saving modes.
Suspend →Off	Monitor blanked when the systems enters the Suspend mode.
All Modes→Off	Monitor blanked when the system enters any power saving mode.

The optional are: Always On, **Suspend →off (Default)**, All Modes →Off

Video Off Method

This determines the manner in which the monitor is blanked.

V/H SYNC+Blank	This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.
Blank Screen	This option only writes blanks to the video buffer.
DPMS Support	Select this option if your monitor supports the Display Power Management Signaling (DPMS) standard of the Video Electronics Standards to select video power management values.

The optional are: **V/H SYNC + Blank (Default)**, Blank Screen, DPMS Support

MODEM User IRQ

This determines the IRQ in which the MODEM can use.
The optional are: NA, **3(Default)**, 4, 5, 7, 9, 10, 11

Soft-Off by PWRBTN

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has “hung.”
The optional are: Delay 4 sec, **Instant-Off (Default)**

Wake Up Events(PM events)

PM events are I/O events whose occurrence can prevent the system from entering a power saving mode or can awaken the system from such a mode. In effect, the system remains alert for anything which occurs to a device which is configured as *On*, even when the system is in a power down mode.

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software

Wake Up Events

VGA	Off	Item Help
LPT & COM	LPT/COM	
HDD & FDD	On	Menu Level →
PCI Master	Off	
KB Power On	Disabled	
Modem, Ring LAN	Disabled	
RTC Alarm Resume	Disabled	
* Date (Of Month)	0	
* Resume Time (hh:mm:ss)	0	
* Resume Time (hh:mm:ss)	0	
* Resume Time (hh:mm:ss)	0	
IRQs Activity Monitoring	Press Enter	

↑↓←→: Move Enter: Select F5: Previous Values +/-/PU/PD: Value F10: Save F6: Fail-safe defaults Esc:Exit F1: General Help F7: Optimized Defaults

VGA

When *On*, you can set the VGA awakens the system.

The optional are: **Off (Default)**, On

LPT & COM

When *On of* LPT & COM, any activity from one of the listed system peripheral devices or IRQs wakes up the system.

The optional are: NONE, LPT, COM, **LPT/COM (Default)**

HDD & FDD

When *On of* HDD & FDD, any activity from one of the listed system peripheral devices wakes up the system.

The optional are: **On(Default)**, Off

PCI Master

When *On of* PCI Master, any activity from one of the listed system peripheral devices wakes up the system.

The optional are: **Off(Default)**, On

KB POWER ON

The item lets you select power on with keyboard.

The optional are: Enabled, **Disabled(Default)**

Modem Ring Resume

An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from a soft off state.

The optional are: Enabled, **Disabled(Default)**

RTC Alarm Resume

When *Enabled*, your can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode.

The optional are: Enabled, **Disabled(Default)**

IRQs Activity Monitoring

The following is a list of IRQ's, interrupt ReQuests, which can be exempted much as the COM ports and LPT ports above can. When an I/O device wants to gain the attention of the operating system, it signals this by causing an IRQ to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service.

When set *On*, activity will neither prevent the system from going into a power management mode nor awaken it.

CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
IRQs Activity Monitoring

Primary INTR	ON	Item Help	
IRQ3 (COM2)	Primary	Menu Level »	
IRQ4 (COM1)	Primary		
IRQ5 (LPT 2)	Primary		
IRQ6 (Floppy disk)	Primary		
IRQ7 (LPT 1)	Primary		
IRQ8 (RTC Alarm)	Disabled		
IRQ9 (IRQ2 Redir)	Secondary		
IRQ10 (Reserved)	Secondary		
IRQ11 (Reserved)	Secondary		
IRQ12 (PS/2 Mouse)	Primary		
IRQ13 (Coprocessor)	Primary		
IRQ14 (Hard Disk)	Primary		
IRQ15 (Reserved)	Disabled		
↑↓←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save F6 : Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults			

PnP / PCI Configurations

This section describes configuring the PCI bus system. PCI- Peripheral Component Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed of CPU itself using when communicates with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

**CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
PnP / PCI Configuration**

PNP OS Installed	No	Item Help
Reset Configuration Data	Disabled	
Resources Controlled By	Auto(ESCD)	Menu Level »
* IRQ Resources	Press Enter	Select Yes if you are using a Plug and Play capable operating system. Select No if you need the BIOS to configure non-boot devices
* DMA Resources	Press Enter	
PCI/VGA Palette Snoop	Disabled	
Assign IRQ For VGA	Enabled	
Assign IRQ For USB	Enabled	
↑↓←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save F6 : Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults		

PNP OS Installed

This item allows you to determine PnP OS is installed or not.

The optional: Yes, **No (Default)**

Reset Configuration Data

Normally, you leave this field Disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system cannot boot.

The optional are: Enabled, **Disabled(Default)**

Resources controlled By

The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as Windows®98.

The optional are: **Auto(ESCD) (Default)**, Manual

PCI/VGA Palette Snoop

Leave this field at Disabled.

The optional are: Enabled, **Disabled(Default)**

Assign IRQ For VGA & USB

Enable/Disable to assign IRQ for VGA & USB.

The optional are: **Enabled(Default)**, Disabled

PC Health Status

This section helps you to get more information about your system including CPU temperature, FAN speed and voltages. It is recommended that you contact with your motherboard supplier to get proper value about your setting of the CPU temperature.

**CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
PC Health Status**

Current CPU Temp.	Item Help
Current System Temp.	
Current CPUFAN1 Speed	
Current CPUFAN2 Speed	
Vcore	
2.5V	
3.3V	
5V	
12V	
↑↓←→: Move Enter: Select F5 : Previous Values +/-/PU/PD: Value F10: Save F6 : Fail-safe defaults Esc:Exit F1: General Help F7 : Optimized Defaults	

Set Supervisor / User Password

Password prevents unauthorized use of your computer. If you set a password, the system prompts for the correct password before boot or access to setup. The main difference between Supervisor Password and User Password is the privilege. Because Supervisor Password allows you to modify all CMOS setup but User password only some of them.

Their steps all as follows:

1. Highlight the item Set Supervisor Password / Set User Password on the main menu and press ENTER.
2. The password dialog box will appear.
3. If you are installing a new password, carefully type in the password. Press ENTER after you have typed in the password. If you are deleting a password that is already installed just press ENTER when the password dialog box appears.
4. The system will ask you to confirm the new password by asking you to type it in a second time. Carefully type the password again and press ENTER, or just press ENTER if you are deleting a password that is already installed.
5. If you typed the password correctly, the password will be installed.

[NOTE]

If you forget your password, or you want to cancel your password, you can do the steps as the following:

(1) Password forgotten:

- i. Turn off the system.
- ii. Short JP1 at Pin 2-3 for a few seconds to clear CMOS.
- iii. Set the JP1 back to Pin 1-2.
- iv. Power on the system.

(2) Clear Password:

Clear your password by key in the password you installed before, then go to password setting to press ENTER twice.

Save & Exit Setup

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

Exit Without Saving

Use this option to exit setup utility without saving the CMOS value changes.

Chapter 4

Software Utility

This Page Is Blank For Note

The support software for this motherboard is supplied in a CD. All the support programs are stored in separate folders, so you can find the program you need easily enough. We recommend you to choose the program which you need most, it will assist your computer system to high performance. The support software contains the following programs:

- ☛ **AGP Driver Program**
- ☛ **IDE Driver Program**
- ☛ **Chipset Register Driver Program**
- ☛ **Audio Codec Driver Program**
- ☛ **VIA USB Driver Program**

AGP Driver Program

AGP Driver Program: \ide\via\AGP4X\setup\setup.exe

IDE Driver Program

IDE Driver Program: \ide\via\IDE\setup.exe

Chipset Register Driver Program

Chipset Register Driver Program: \ide\via\Reg\setup\setup.exe

Audio Codec Driver Program

Audio Codec Driver Program: \audio\via1611\setup.exe

VIA USB Driver Program

VIA USB Driver Program: \ide\via\viausb\setup.exe