PM-V06

English Manual

Mainboard

V2.0

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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, uses 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.

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Chapter 1

Introduction

1-1 Summary

Thanks for purchasing this PM-V06 series mainboard, which is a high-performance computer mainboard based on the VIA KT133(E) /KT 133A chipset. There are two designs of this series: PM-V06A and PM-V06G.

KT133/KT133(E) is adopted in PM-V06G to support 200MHz system front side bus, while KT133A chipset is used in PM-V06A, which support 266Mhz and PowerNow. PM-V06 series mainboard is designed for new Althon and Dulon processor. The VIA VT82C686B south bridge chipset also provides full support of Ultra DMA 33/66/100, delivering quick & reliable data transmission and conversion.

1-2 Packing Check List

This mainboard package contains the following items:

- A VIA KT133(E)/KT133A series chipset ATX Mainboard
- A UDMA 100 Data Cable
- A Floppy Interface Cable
- A piece of Driver CD
- A USB connector cable
- A COM2 (serial port) connector cable
- An IEEE1394 connector cable
- A User's Manual

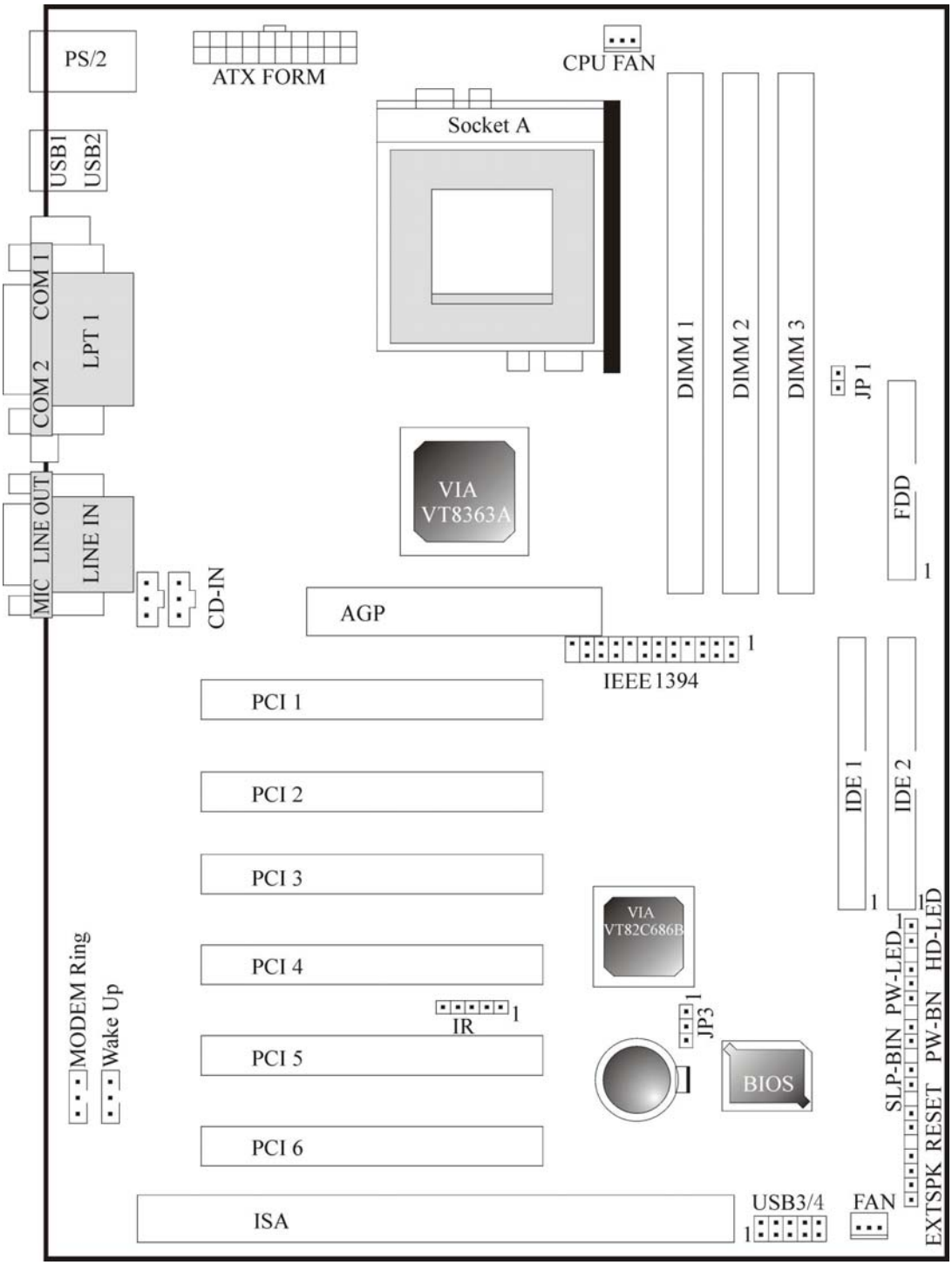
1-3 Mainboard Specification

Form Factor	● ATX
Board Size	● 30.5 cm x 21.3cm
C P U	● KT133（E）/KT133A ● PM-V06A（KT133A） VIA VT8363A+VT82C696B ● PM-V06G（KT133/E） VIA VT8363（E）+VT82C686B ● Support AMD Duron series，Athlon series and Socket A processor ◆ Support CPU host clock 550MHz-1GHz or higher ◆ Support CPU Clock Ratio 3.5- 9 times or higher（limited by CPU） ◆ Support CPU clock frequency PM-V06A——200-266Mhz(over clock to 332 Mhz) ● PM-V06G -----200MHz（over clock to 266MHz） ◆ Jumperless Overclock ◆ Support CPU type/clock by BIOS setup ◆ Support linear adjustment of CPU Clock Frequency: ◆ Frequency over clock （non-recommended）
System Memory	● DIMM 168pin x 3, maximum capability 1.5GB ● Support 16M bit/64M bit/128M bit/256M bit /512M SDRAM ● Refresh Mechanism：CBR supported only ● Enhance Open page Arbitration SDRAM paging scheme
Audio	● AC'97 ALC200 audio chipset ● Provides LINE –OUT, LINE-IN and Microphone connector ● Provides CD-IN connector
Expansion Slots	● 1 x AGP bus slot (AGP 4X) ● 6 x PCI slot ● 1 x ISA slot

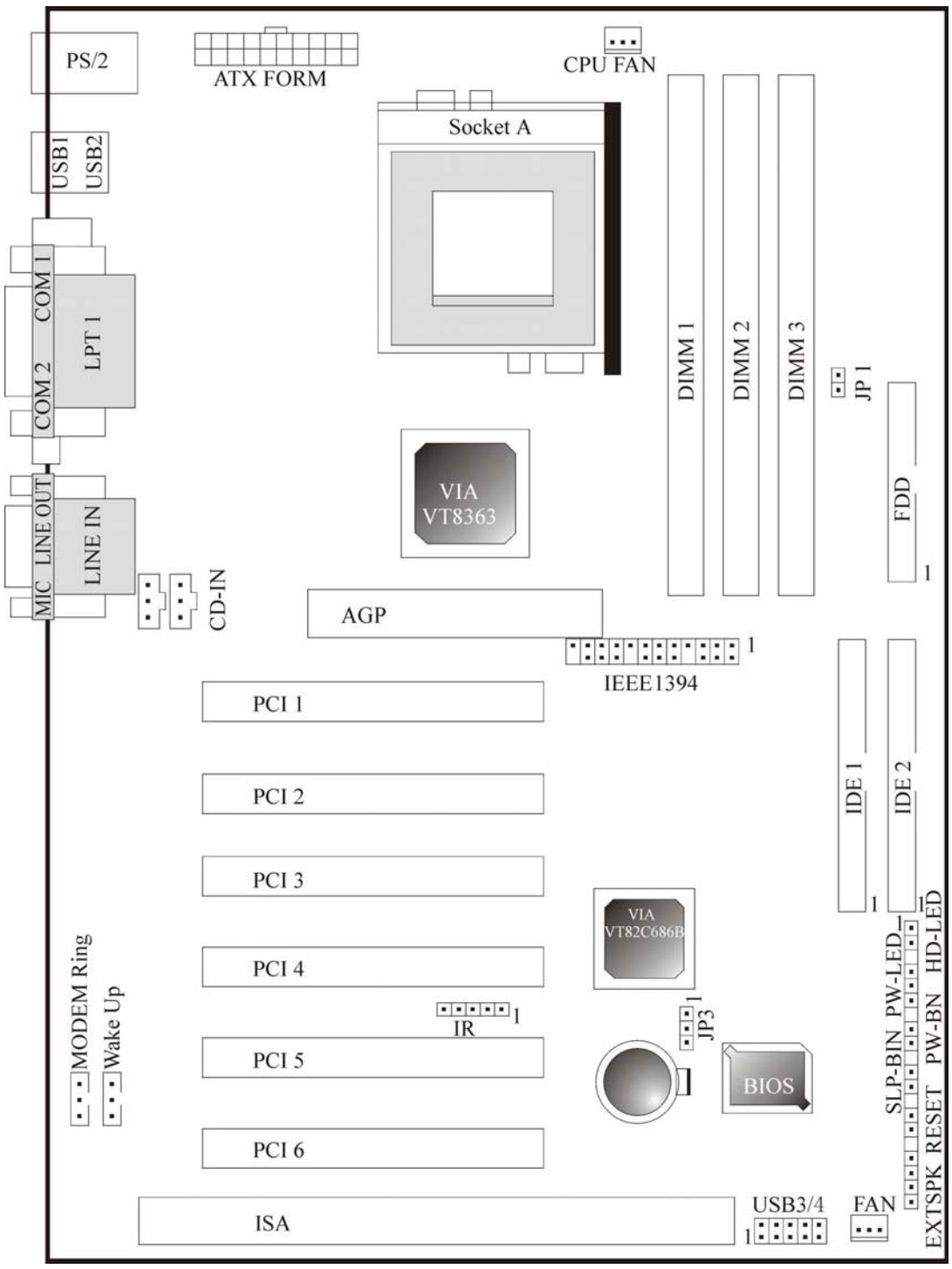
Serial Port	● Two serial ports UART 16C550 Compatible ● Sets serial port 2 to operate in normal mode, IrDA
Parallel Port	A parallel port support: ● SPP-Standard parallel port ● EPP-enhanced parallel port ● ECP-extended capabilities port
Floppy Interface	Support drivers inches/ format with ● 3.5 inches -720KB/1.44MB/2.88MB ● 5.25 inches -360KB/1.2MB
I D E Interface	● Dual PCI IDE interface support up to 4 x EIDE/ IDE devices ● Support PIO mode4, DIMA mode 2 and Ultra DMA33/66/100 mode
U S B Interface	● Two USB ports supported ● Two additional USB ports, connected to the ports by cable (optional) ● USB legacy keyboard/mouse function supported ● Support up to 127 USB devices
P S / 2 mouse	● PS/2 mouse port supported by connector onboard
Keyboard	● PS/2 keyboard supported by connector onboard
Battery	● Lithium (CR-2032) battery
Wake up Function	● Modem ring wake up ● LAN wake up ● Keyboard wake up ● Supports Wake –up from Sleeping State S1-S4
Synchronous Switching Register	● High efficient synchronous switching regulator to CPU core voltage from 1.3V to 2.05V ● Supports over-voltage /over current protection function
Hardware Monitor	● 3 fans (CPU fan, Housing fan, Auxiliary fan) monitoring ● Monitor 9 kinds of system voltage (5V_Dual, 12V, 5V, 1.5V, 3.3V, VCORE, -12V, -5V, battery), Detects VCORE from VID0-4
Power Connector	● Supports ATX (20-pin) power connector
B I O S	● 2M bit Award BIOS ● SM BIOS 2.3 ● Year 2000Compliance

	● PCI 2.2 Compliance ● PnP BIOS V1.0 ● APM V1.2 Compliance ● DMI 2.0 Compliance ● Flash Upgrade BIOS write protection ● Support ACPI（Advance Configuration and Power Interface）and OS direct Power Management ● Support SOFT power off ● Floppy drive detection function supported ● Bus speed selected by BIOS ● Integrated hardware Random Number Generator（RNG） ● Register based locking ● Hardware-based locking
L E D Indicator	● System power LED ● HDD activity LED ● System Suspend LED (programming LED blinking to S1-S4 mode)

1-4 Mainboard Layout



V06A Mainboard Layout



V06G Mainboard Layout

Chapter 2

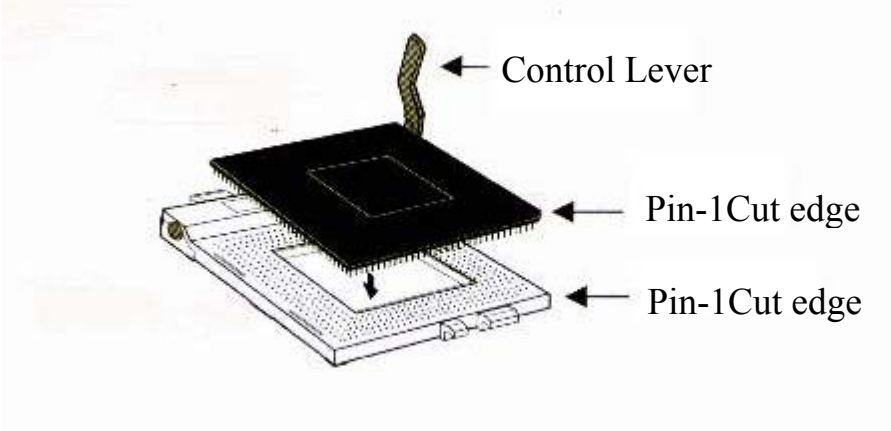
Hardware Installation

This section gives you a step-by-step procedure on how to install your system. Follow each section accordingly.

2-1 CPU

2-1.1 CPU Installation Procedures

The mainboard uses a CPU socket called Socket 370 for easy installation, please follow the below figure to install the CPU.



2-1.2 CPU Clock Ratio Setting

System Frequency= CPU Clock Ratio × CPU Clock Frequency

The mainboard support jumperless CPU type setting, no jumper or switch is needed.

This mainboard also support CPU over-clock by adjusting the CPU Clock Frequency and CPU Clock Ratio under BIOS Setup.

The available settings are:：

-CPU Clock Frequency

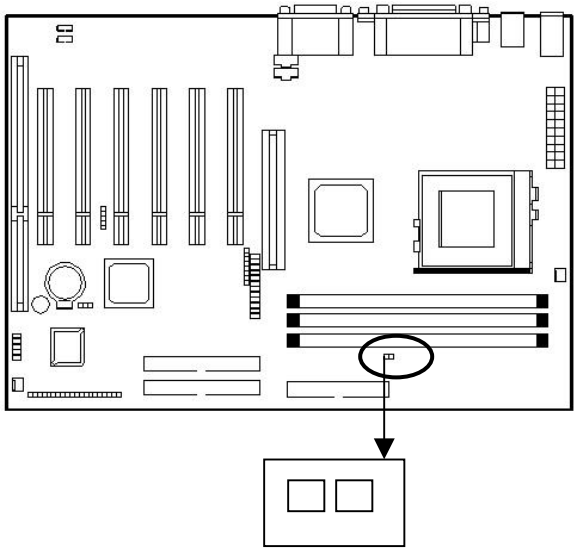
66 –166 linear （step1MHz） over clock

-CPU Clock Ratio

For AMD series CPU, due to the clock ratio is locked at present, the clock ratio is

auto-detected and cognized by the mainboard.

Clock Frequency:



JP 1

The mainboard supports CPU Host Clock over speed. Disable JP1 , the jumper will run CPU at standard 1 clock frequency 200 / 266MHz(Default)

When JP1 enabled, CPU will be forced to run at clock frequency 266 / 332 MHz.

★ Warning:

At this moment, AMD Dulon and Authlon series CPU normally support 200 / 266MHz Clock Frequency，Besides normal CPU clock frequency（recommended）， the other CPU clock frequency such as 266-330MHz are available only for internal test or end-user over-clocking testing which may cause your system unstable or error damage.

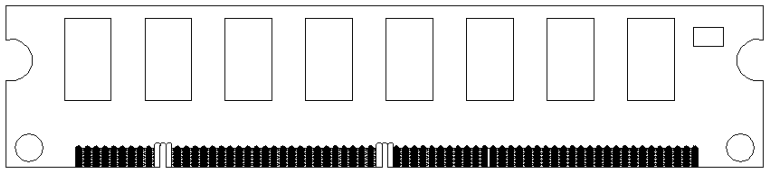
2-1.3 Memory Installation

System Memory Installation Procedures

1、The DIMM slot has 2 notch keys, so the DIMM memory module can only fit in one direction.

2、Insert the DIMM memory bank vertically into DIMM slot, then press it down placidly and uniformly.

3、The plastic clip at the side of the DIMM will automatically close.



There are 2 pcs 168 pin DIMM sockets on the mainboard which support Synchronous DRAM and Registered SDRAM, and it allows you to install system maximum up to 1024MB.

2-1.4 Type

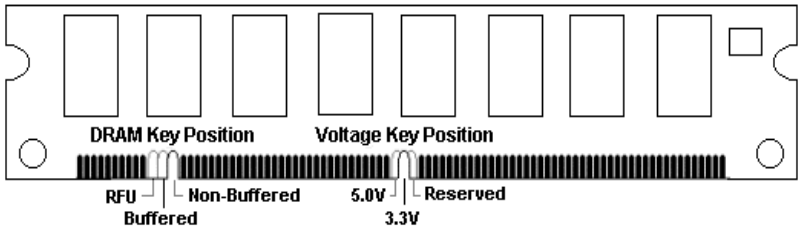
The mainbaord supports 168PIN Synchronous DRAM and Registered SRAM. However, mixing DRAM and Registered SDRAM is not allowed. Install one type only in your system for better compatibility.

2-1.5 Speed

This motherboard supports PC-66、PC-100 or PC-133 memory only for high speed operation.

2-1.6 Buffered and non-buffered

Only the non-buffered DIMM can be used in this mainboard. The difference between buffered and non-buffered DIMM can be identified by the notch position shown above.



2-1.7 2-clock and 4-clock signal

2- clock and 4 -clock SDRAM DIMM is supported by this mainboard.

2-1.8 Parity and Non-parity

This mainboard supports standard 64 bit(Non-parity) and 72 bit (parity) DIMM modules.

2-1.9 Memory Auto-detected by BIOS

This mainboard BIOS can automatically detect the DIMM memory size and type, so you do not need to adjust any hardware or software settings. The maximum memory size supported up to 512MB×2.

2-1.10 Recommended SDRAM combination

The mainboard support maximum up to 1.5GB （512M×3） , it has three 168-pin non-buffered DIMM (Double In-Line Memory Module) socket. The mainboard support the following SDRAM combination.

DIMM Location	DIMM Size	Max. Memory Size
DIMM 1	SDRAM 8, 16, 32, 64 128, 256MB	512MB
DIMM 2	SDRAM 8, 16, 32, 64 128, 256MB	512MB
DIMM 3	SDRAM 8. 16, 32, 64, 128, 256MB	512MB
	Total System Memory	1.5GB

★ Warning

There are two kinds of DIMM specification supported by this mainboard（PC133 and PC100）. If you use 200MHz CPU, PC100 & PC133 DIMM spec. is supported. If you use 266 MHz CPU, only PC133 DIMM spec. is supported.

The memory speed normally pitch

-15，-12，-10，-7，-8，PC-100，PC-133

The meaning is:

-15=15ns, and the maximum clock is 66MHz

-12=12ns, and the maximum clock is 83MHz

-10=10ns, and the maximum clock is 100MHz

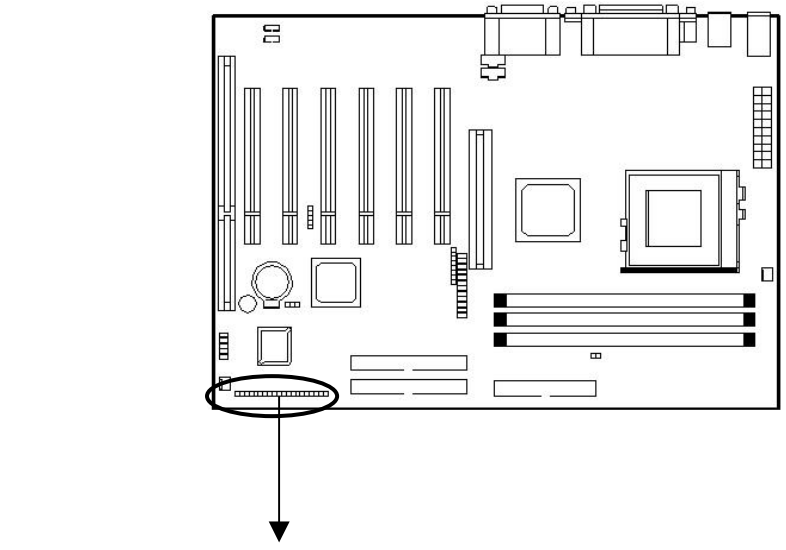
-8=7ns, and the maximum clock is 125MHz

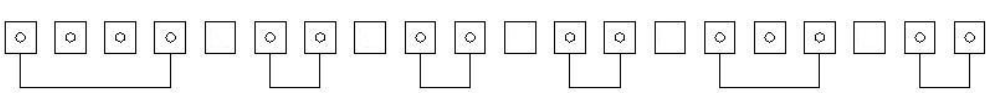
-7=7ns, and the maximum clock is 142MHz

PC-100/PC133 = New Intel specification for high memory speed with 100/133MHz or above CPU Bus Clock.

This motherboard supports all the above memory speeds. For better system performance and reliability issue, we suggest that you use PC-100 SDRAM or above CPU Bus Clock is used in your system.

2-2 Panel Connector





EXTSPK RESET SLP-BIN PW-BN PW-LED HD-LED

Speaker：EXTSPK

Speaker from the system case is connected to this pin.

Pin	Description
1	Data out
2	N.C.
3	Ground
4	+5V

RESET Switch: RESET

RESET switch is used to reboot the system rather than turning the power On/Off. Do not reboot the system when the HDD LED is flickering, you can connect the RESET switch from the system case on this pin.

Setting	Description
Open	Normal Mode
Close	Reset system

Sleeping Switch: SLP-BIN

When you short this switch, the system will be in sleep.

ATX Soft-power Switch Connector: PW-BIN

Connect to a 2-pin push power button switch from Computer case, .it provides instant On/Off function

Keylock and Power LED Connector:　PW-LED

Keylock allows you to disable the keyboard for security purpose. You can connect the keyboard to this pin, or you can connect the PW-LED cable to the 1-3 pin.

Pin	Description
1	LED output
2	N.C.
3	Ground
4	Keylock
5	Ground

HDD LED Connector: HD-LED

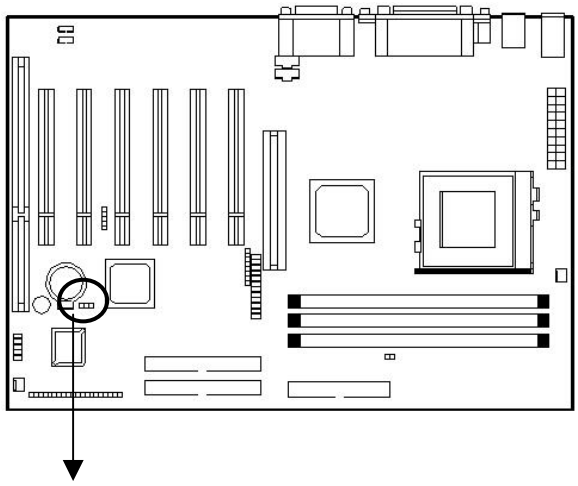
HDD LED shows the activity of a hard disk drive. Avoid turning the power off while the HDD led is twinkling. You can connect HDD LED from the system case to this pin.

Pin	Description
1	Active Signal
2	Ground
3	Ground
4	Active Signal

2-2.1 CMOS Clear Setting

CMOS Jumper

Please refer the following figures for the locations of the jumper on the mainboard.



To clear CMOS, please follow the steps below:

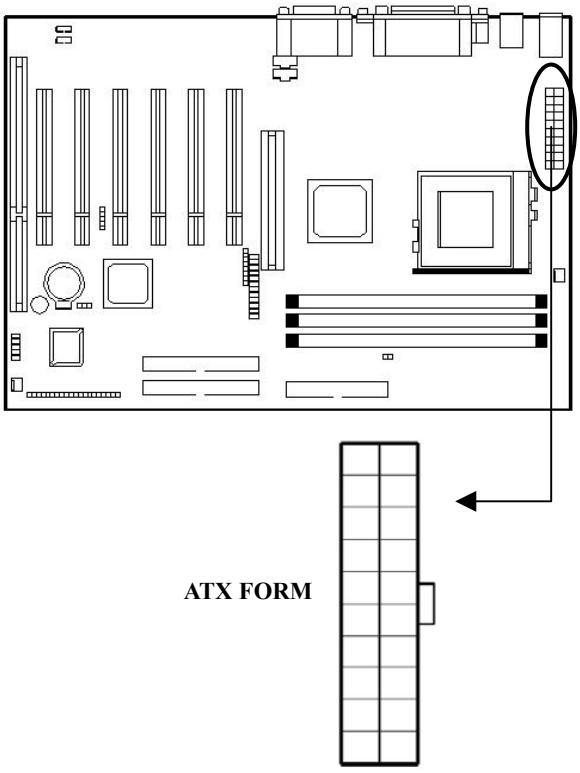
1. Power off the system and unplug the chassis AC power cord.
2. Short JP7 at pin2-3 for 10-15 seconds.
3. Set JP7 back to its Normal position at pin1-2.
4. Plug the AC power cord to the chassis.
5. Power on the system and load the BIOS setup defaults.

★ Note:

You can clear CMOS by shorting 2-3 pin for 10-15 seconds, while the system is off. Then, return to 1-2 in position, Avoid clearing the CMOS while the system is on, it will damage the mainboard.

2-3 Power Supply Connector

Connect the power supply cable to the power connector. Using the ATX power supply functions such as wake-Up Modem is supported by this mainboard.



★ Warning:

Since the mainboard has the instant power on function, make sure that all components are installed properly before inserting the power connector to ensure that no damage will be done.

The ATX power supply provides a single 20-pin connector.

Pin	Description	Pin	Description
1	3.3V	11	3.3V
2	3.3V	12	-12V
3	Ground	13	Ground
4	+5V	14	PS-ON
5	Ground	15	Ground
6	+5V	16	Ground
7	Ground	17	Ground
8	Power OK	18	-5V
9	5VSB	19	+5V
10	+12V	20	+5V

★ **Note:**

Some ATX–power does not have –5V voltage output, it will effect some function of ADD-ON card devices.

2-4 Hard Disk and Floppy Drive Connector: IDE1、IDE2 and FDD

The mainboard has a 32-bit Enhanced IDE controller that provides PIO mode 0-4, Bus Master, and Ultra DMA33/66 function. It has two HDD connectors IDE1 (primary) and IDE2 (secondary). You can connect up to four hard disk drives, CD-ROM and other devices to IDE1 and IDE2.

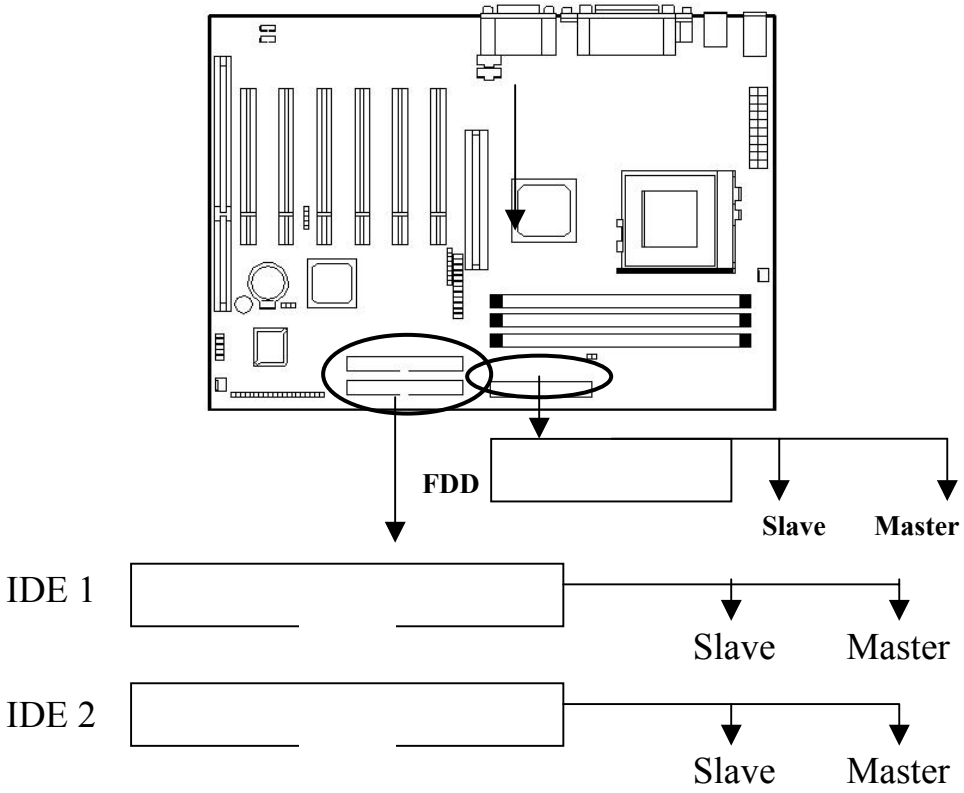
Moreover, to each group of IDE connector, IDE can connect a Master and a Slave driver.

IDE1（Primary IDE Connector marked with blue）

The first hard drive should always be connected to IDE1. IDE1 can connected a Master and a slave drive. You must configure second hard drive to slave mode by setting the jumper accordingly.

IDE2（Secondary IDE Connector）

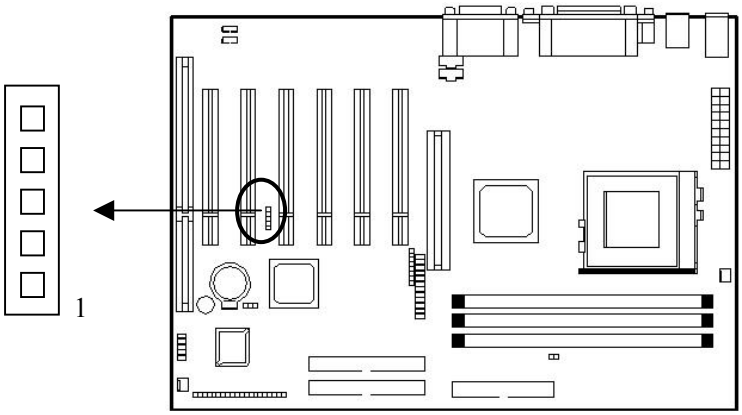
IDE2 can also connect a Master and a Slave drive.



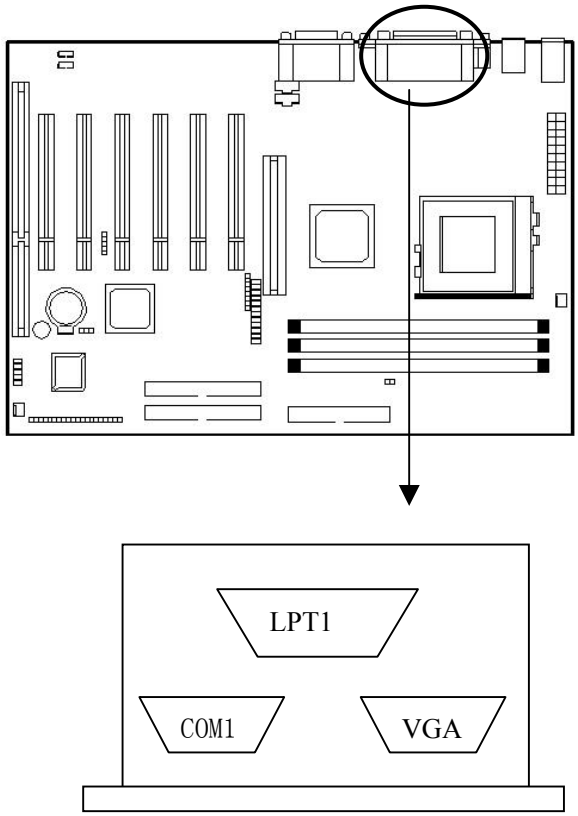
It is suggested that you connect the IDE devices to your IDE cable as the figure shown above. Each IDE channel either primary or secondary supports two IDE device which must be set differently to master mode and slave mode.(Refer to you hard disk and CD-Rom user manual for detailed settings of IDE master and slave mode.)

2-5 IrDA Infrared Module Connector

The mainboard provides 4-pin infrared (IR) connector for IR modules. This connector is for optional wireless transmitting and receiving infrared module. You must configure the setting through the BIOS setup to use the IR function.



2-6 Serial devices（COM1/COM2）, Parellel devices（LPT1）



There is a 15 pin monitor connector on the VGA connector mainboard, please connect the monitor or other VGA compatible device to this connector..

Serial Port Connectors: COM1 and COM2

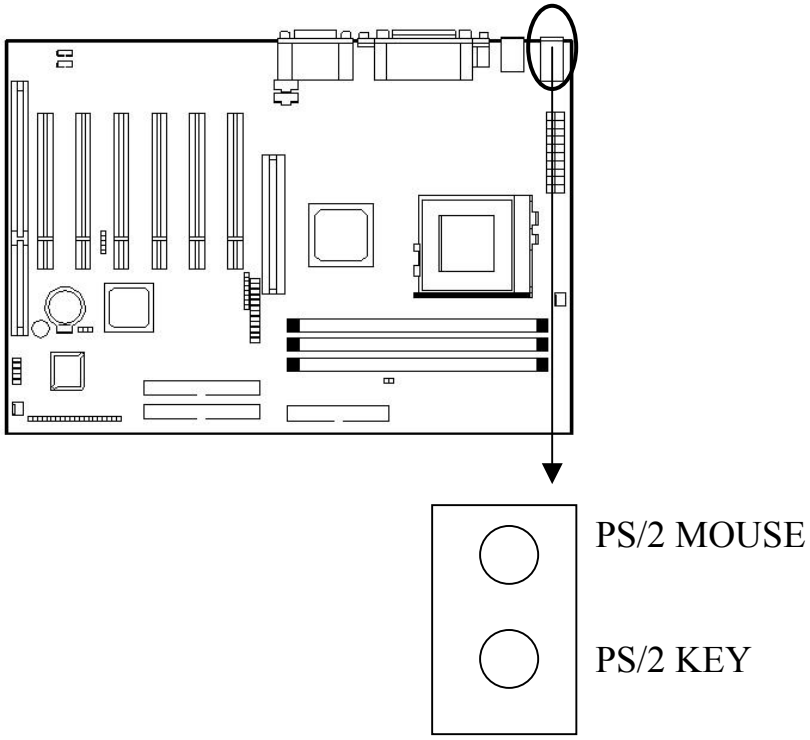
The mainboard has two 9-pin male DIN connectors for serial port COM 1 and COM 2. These ports are 16550A high speed communication port that send/receive 16 bytes FIFOS. You can attach a mouse or a modem cable directly into this connector.

Parallel Port Connector: LPT

The mainboard provides a 25-pin female connector for LPT. A parallel port is a standard printer port that also supports Enhanced Parallel Port (EPP) and Extended Capabilities Parallel Port (ECP).

2-7 PS/Keyboard, Mouse connector

Connect the PS/2 mouse and mouse separately to the onboard 6-pin connectors.



Mouse Connector

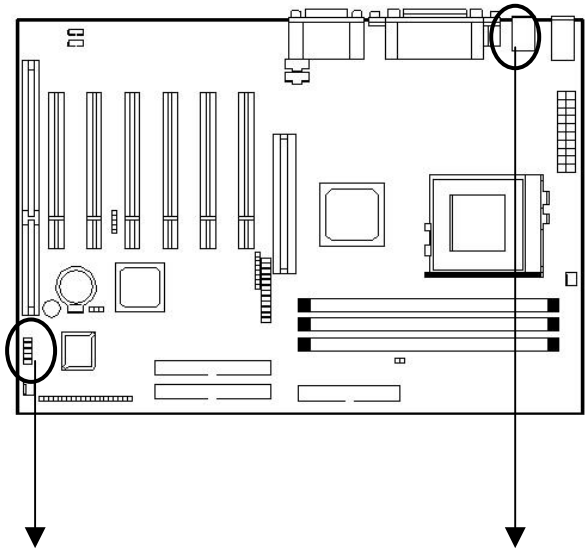
The mainboard provides a standard PS/2 mouse mini DIN connector for attaching a PS/2 mouse. You can plug a PS/2 mouse directly into this connector.

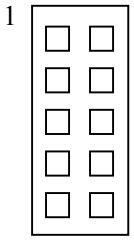
Keyboard Connector

The mainboard provides a standard PS/2 keyboard mini DIN connector for attaching a keyboard. You can plug a keyboard cable directly to this connector.

2-8 USB devices connector

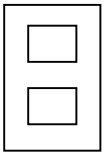
Connect your USB devices to the onboard USB connector.





USB3、4

USB 3 / 4 – connnect USB port cable (w/ bracket) to this connector.



USB2

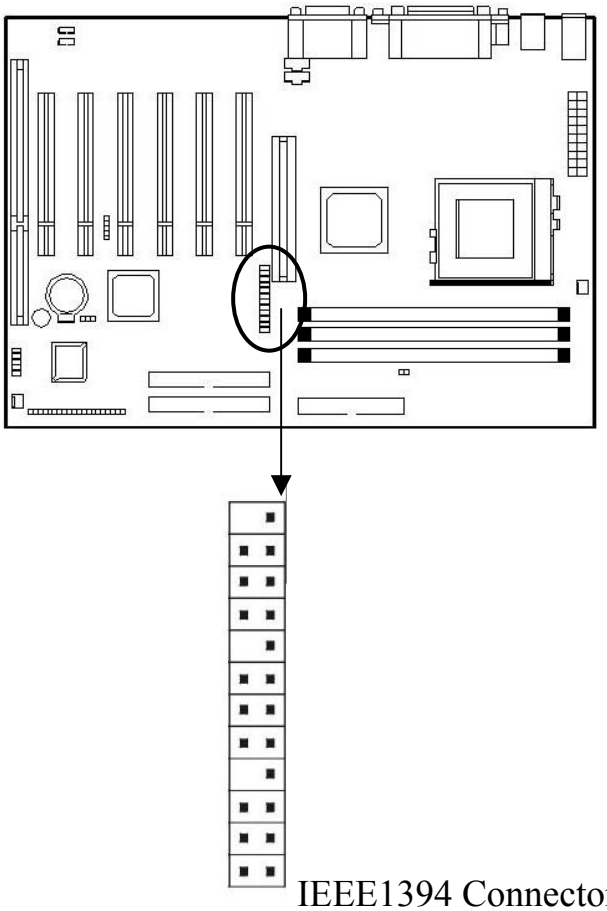
USB1

USB 1 / 2 – onboard connector.

USB Connectors

The mainboard provides four USB connectors, each connectors supports maximum 127 USB devices like: keyboard, mouse or other USB devices. For USB 1/2 , you may connect them directly USB devices; but for the USB 3/4 connector, you need connect them to one end of USB connector cable thrown in the mainboard, and connect the USB devices to the other end of USB outlet. (See the figure).

2-9 IEEE1394 connector



IEEE1394 Connector

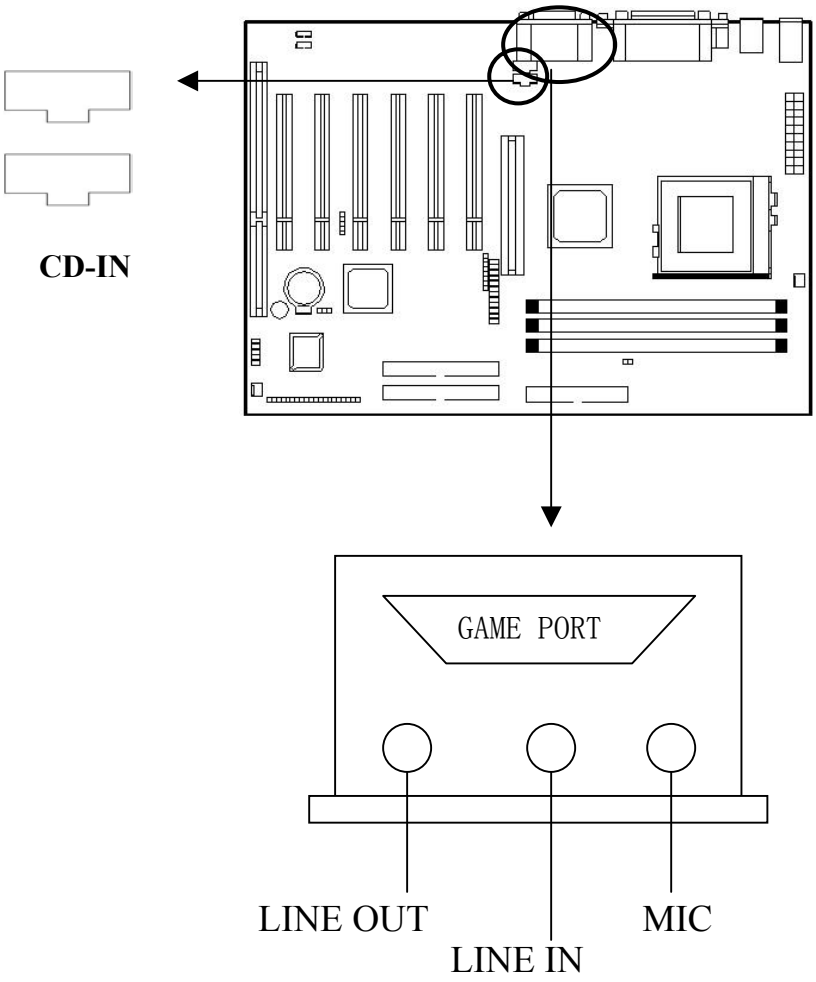
The mainboard provides two sets IEEE1394 connector and support 3 IEEE1394 connector there is a connector cable on the mainboard, you may connect the cable to the connector shown as the figure, then connect the IEEE1394 devices to connector of the panel ;

Note: Both two sets of IEEE1394 connector have the bridged holes to prevent from being inserted in wrong direction.

※ IEEE1394 is a high speed serial bus designed to enhance the connection between the external multi-media devices and PC, the transmissibility could be up to 400Mbps. And up to 63 IEEE1394 devices could be connected to each port at the same time.

2-10 Audio/ Game Connector

Connect your audio devices to the audio connector as below.



Game Joystick Port / MIDI Port

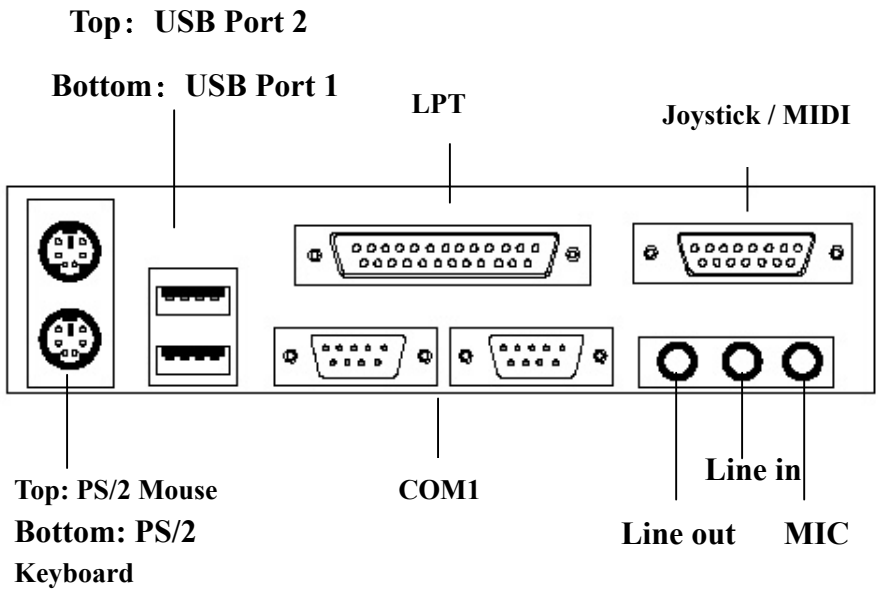
You can connect a joystick or game pad to this connector.

Mic/ Line-In/Line- Out

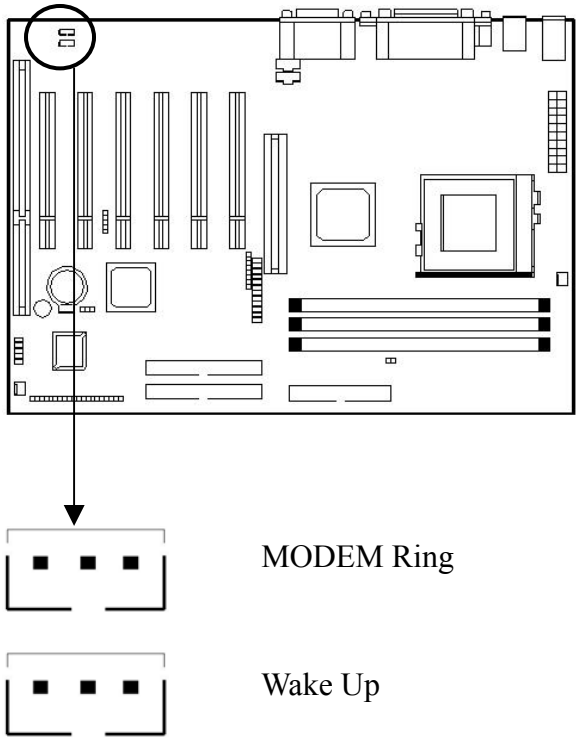
Mic is connector for the microphones. Line-In is used for external CD player, Tape player or other audio devices. Line-Out is a connector for speakers or headphones.

CD-IN

This connector allows you to use the audio cable to connect the audio connector by a audio cable, however when you are play the CD music, what the sound card receives is not analog signals any more, but digital signals from the CD-ROM. By this way, you may listen to more fair-sounding music.



2-11 LAN Wake up/Modem Wake up



A network adapter is used in the Wake-Up LAN connector to support Wake-up on LAN function. To make use of this function, you need connect this connector to the Wake –Up LAN

connector on the net-card, and set the “Wake-Up on LAN” to “Enabled” at the BIOS Power Management Setup.

A network adapter is used in the Wake-Up Modem connector. If you need to use this function, this connector should be connected to the Wake –Up LAN connector on the modem, and set the “Modem Ring Resume” to “Enable” at the BIOS Power Management Setup.

★ **Note:**

To be able to use this function, you need a power supply that provide enough power for this feature. (Power supply with 740MA 5V Stand-by)

Chapter 3

BIOS Setup

3-1 Entering BIOS Setup

The BIOS is immediately activated when you first power on the computer. The BIOS reads the system information contained in the CMOS and begin the process of checking out the system and configuring it. When is finishes, the BIOS will seek an operating system on one of the disk and then launch and turn control over to the operating system.

While the BIOS is in control, the Setup program can be in activated in one of two ways:

1、By pressing <Del> immediately after switching the system on, or

2、By pressing the <Del> key when the following message appears briefly at the bottom of the screen during the POST(Power On Self-Test).

Press DEL to enter SETUP.

If the message disappears, before you respond and you still wish to enter Setup, restart the system or try again by turning it OFF then ON or pressing the “RESET” button to the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys. 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, DEL TO ENTER SETUP.

3-1.1 Using Setup

In general , you use the arrow key to highlight items, press <Enter>to select , use the <Page Up> and <Page Down> keys to change entries, press <F1> for help and press <Esc> to quit. The Following table provides more detail about how to navigate in the Setup program using the keyboard.

Key	Function
Up Arrow	Move to the previous item
Down Arrow	Move to the next item
Left Arrow	Move to the item on the left (menu bar)

Right Arrow	Move to the item on the right (menu bar)
Esc	Main Menu: Quit without saving changes Submenu: Exit Current page to the next higher level menu.
Move Enter	Move to the item you desired
PgUp key	Increase the numeric values or make changes
PgDn key	Decrease the numeric values or make changes
+ key	Increase the numeric values or make changes
- key	Decrease the numeric values or make changes
Esc key	Main menu-quit and not save changes onto CMOS Status page Setup Menu and Option Page Setup Menu - Exit current page and return to Main Menu
F1 key	General help on Setup navigation keys
F5 key	Load previous values from CMOS
F6 key	Load the fail-safe defaults from BIOS default table
F7 key	Load the optimize defaults
F10 key	Save all the CMOS changes and exit

Table 1 Legend Keys

3-1.2 Navigating through the menu bar

- Use the left and right arrow key to choose the menu you want to be in.
- To display a sub-menu, use the arrow keys to move the curson to the sub-menu you want. Then press<Enter>. A "➢" pointer marks all sub menu.

3-2 Getting Help

Press F1 to pop up a small help window that describe the appropriate key so use and the possible selections for the highlighted item. To exit the Help Window press <Esc> or the F1 key again.

★ **Note：** **The best advise is to only alter settings which you thoroughly understand. To this end, we strongly recommend that you avoid making any changes to the chipset defaults. These defaults have been carefully chosen by both Award and your system manufacturer to provide the absolute maximum performance and reliability.**

3-3 Main Menu

Once you enter the BIOS CMOS Setup Utility , the Main Menu will appear on the screen. The Main Menu allows you to select from several setup functions and two exit choices. Use the arrow keys to select among the items and press <Enter> to accept and enter the sub-menu.

Standard CMOS Feature	Frequency / Voltage Control
Advanced Bios Feature	Load Fall-Safe Defaults
Advanced Chipset Feature	Load Optimized Defaults
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PnP / PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc: Quit F10: Save & Exit Setup	↑ ↓ ← → : Select Item
Virus Protection, Boot Sequence	

★ **Note: A brief description of each highlighted selection appears at the bottom of the screen.**

3-4 Setup Items

This main menu includes the following main setup categories. Recall that some system may not include all entries.

3-4.1 Standard CMOS Features

Use this menu for basis system configuration.

3-4.2 Advanced BIOS Features

Use this menu to set the Advanced Features available on your system.

3-4.3 Advanced Chipset Features

Use this menu to change the values in the chipset registers and optimize your systems performance.

3-4.4 Integrated Peripherals

Use this menu to specify your settings for integrated peripherals.

3-4.5 Power Management Setup

Use this menu to specify your settings for power management.

3-4.6 PnP / PCI Configuration

This entry appears if your system supports PnP / PCI.

3-4.7 PC Health Status

Use this menu to get the information about your system including CPU temperature, Fan speed and Voltages.

3-4.8 Frequency / Voltage Control

Use the menu to specify your settings for frequency / voltage control.

3-4.9 Load Fail-Safe Defaults

Use this menu to load the BIOS defaults values for the minimal / stable performance for your system to operate.

3-4.10 Load Optimize Defaults

Use this menu to load the BIOS defaults values that are factory settings for optimize performance system operations. While Award has designed the custom BIOS to maximize performance, the factory has the right to change these defaults to meet their needs.

3-4.11 Supervisor / User Password

Use this menu to set User and Supervisor Passwords.

3-4.12 Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

3-4.13 Exit Without Save

Abandon all CMOS value changes and exit setup.

3-5 Standard CMOS Setup

The item in Standard CMOS Setup Menu are divided into 10 categories. Each category includes no, one or more than one setup items. 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.

1984-2000 Award Software
Standard CMOS Features

Date: (mm:dd:yy) Sat, Jan 13 2001		Item Help
Time: (hh:mm:ss) 23:28:30		
IDE Primary Master	[None]	Menu Level ➢
➢IDE Primary Slave	[None]	
➢IDE Secondary Master	[None]	Change the day, month,
➢IDE Secondary Slave	[None]	year and century
Drive A	[1.44M, 3.5 in]	
Drive B	[None]	
Video	[EGA/VGA]	
Halt On	[All, But Keyboard]	
Based Memory	[640K]	
Extended Memory	[121856K]	
Total Memory	[122880K]	
↑↓←→Move Enter: Select +/-/PU/PD: Value F10:Save ESC: Exit		
F1:General Help F5:Previous Values F6:Fail-safe defaults		
F7:Optimized Defaults		

图 1． Main Menu

3-6 Main Menu Selections

This table shows the selections that you can make on the Main Menu.

Item	Options	Description
Date	Month DD YYYY	Set the system date. Note that the "Day" automatically changes when you set the date.
Time	HH: MM: SS	Set the system time
IDE Primary Master	Options are in its sub-menu (described in Table 3)	Press <Enter> to enter the sub-menu of detailed options

IDE Primary Slave	Options are in its sub-menu (described in Table 3)	Press <Enter> to enter the sub-menu of detailed options
IDE Secondary Master	Options are in its sub-menu (described in Table 3)	Press <Enter> to enter the sub-menu of detailed options
IDE Secondary Master	Options are in its sub-menu (described in Table 3)	Press <Enter> to enter the sub-menu of detailed options
Drive A Drive B	None 360K, 5.25 in 1.2M, 5.25 in 720K, 3.5 in 1.44M, 3.5 in 2.88M, 3.5 in	Select the type of floppy disk drive installed in your system
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video driver
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/Key	Select the situation in which you want the BIOS to stop the POST process and notify you
Base Memory	N/A	Displays the amount of conventional memory detected during boot up
Extended Memory	N/A	Displays the amount of extended memory detected during boot up
Total Memory	N/A	Displays the total memory available in the system

Table 2 Main Menu Selections

3-7 Advanced BIOS Features

This selection allows you to configure your system for basis operation. You have the opportunity to select the system's default speed, boot-up sequence, keyboard operation, shadowing and security.

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Advanced BIOS Features

Virus Warning	[Disabled]	Item Help
CPU Internal Cache	[Enabled]	_____
External Cache	[Enabled]	
CPU L2 Cache ECC Checking	[Enabled]	Menu Level
Processor Number Feature	[Disabled]	
Quick Power On Self Test	[Disabled]	Allows you to choose the
First Boot Device	[Floppy]	VIRUS warning feature for
Second Boot Device	[HDD-0]	IDE Hard Disk boot sector
Third Boot Device	[IS120]	protection. If this function is
Boot other Device	[Enabled]	enabled and someone attempt
Swap Floppy Drive	[Disabled]	to write data into this area,
Boot Up Floppy Seek	[Enabled]	BIOS will show a warning
Boot Up NumLock Status	[On]	message on screen and alarm
Gate A20 Option	[Fast]	beep
Typematic Rate Setting	[Disabled]	
X Typematic Rate (Chars/Sec)	[6]	
X Typematic 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	[Disable]	
D8000-DFFFF Shadow	[Disabled]	
DC000-DFFFF Shadow	[Disabled]	
Small logo (EPA) Show	[Disabled]	

↑↓←→Move Enter: Select +/-/PU/PD: Value F10:Save ESC: Exit F1:General Help

F5:Previous Values F6:Fail-safe defaults F7:Optimized Defaults

3-7.1 Virus Warning

Allow you to choose the VIRUS Warning features for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area. BIOS will show a warning message in screen and alarm beep.

Enabled	Activate automatically when the system boots up causing a warning message to appear when anything attempt to access the boot sector or hard disk partition table.
Disabled	No warning message will appear when anything attempts to access the boot sector or hard disk partition table.

Note:

Enable this function may cause some software or operation system could not be installed (e.g: Windows98, etc.)

3-7.2 CPU Internal Cache/External Cache

These two categories speed up memory access. However, it depends on CPU/ chipset design.

Enabled	Enable cache
Disabled	Disable cache

3-7.3 CPU L2Cache ECC Checking

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

The Choice: Enabled, Disabled.

3-7.4 Processor Number Feature

The Choice: Enabled, Disabled.

3-7.5 Quick Power on Self Test

This category 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.

Enabled	Enable quick POST
Disabled	Normal POST

3-7.6 First / Second/ Third/Other Boot Device:

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

The Choice: Floppy, LS/ZIP, HDD, SCSI, CDROM, Disabled.

3-7.7 Swap Floppy Drive:

If the system has two floppy drivers, you can swap the logical drive name assignments.

The choice: Enabled / Disabled.

3-7.8 Boot Up Floppy Seek

Seeks disk drives during boot up. Disabling speeds boot up.

The choice: Enabled/ Disabled.

3-7.9 Boot Up NumLock Status

Select power on state for NumLock.

The choice: Enabled/ Disabled.

3-7.10 Gate A20 option:

Select if chipset or keyboard controller should control Gate A20.

Normal	A pin in the keyboard controller control GateA20
Fast	Lets chipset control (GateA20)

3-7.11 Typematic Rate Setting

Key strokes repeat at a rate determined by the keyboard controller. When enabled, the typematic rate and typematic delay can be selected.

The choice; Enabled/ Disable.

3-7.12 Typematic Rate (Chars/ Sec)

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

The choice: 6, 8, 10, 12, 15, 20, 24, 30.

3-7.13 Typematic Delay (Msec)

Set the delay item after the key is held down before it begins to repeat the keystroke.

The choice: 250, 500, 750, 1000.

3-7.14 Security Option:

Select whether the password is required every time the system boots or only when you enter system.

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

Note:

If you need to disable password boot-up, choose Password Settings from the main menu, just press <Enter> when you are prompted to enter the password. Password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

3-7.15 OS Select For DRAM> 64MB

Select the operating system that is running with greater than 64MB of RAM on the system.

The choice: Non-OS, OS2.

Note:

Select OS2 only when the OS/2 operation system is installed and the system memory is over 64MB, otherwise, choose Non-OS2.

3-7.16 Video BIOS Shadow

Determines whether video BIOS will be copied to RAM for faster execution. Video Shadow will increase the video performance.

Enabled (Default)	Video shadow is enabled.
Disabled	Video shadow is disabled.

3-7.17 C8000-CBFFF / DC000-DFFFF Shadow

Determine whether the optional ROM will be compiled to RAM for faster execution.

Enabled	Optional shadow is enabled.
Disabled (Default)	Optional shadow is disabled.

3-7.18 Small Logo (EPA) Show

This item allows you to select whether small logo will be shown on the upper right corner of the screen when power on.

The choice: Enabled, Disabled.

3-8 Advanced Chipset Features

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Advanced Chipset Features

DRAM Timing by SPD	[Enabled]	Item Help
XDRAM clock	[Host Clk]	
XSDRAM Cycle Length	[3]	Menu Level ➢
XBANK Interleave	[Disabled]	
Memory Hole	[Enabled]	
P2C/ C2P Concurrency	[Enabled]	
PCI Master Pipeline Req	[Disabled]	
Fast R-W Turn Around	[Disabled]	
System BIOS Cacheable	[Disabled]	
Video RAM Cacheable	[Disabled]	
Frame Buffer Size	[8M]	
AGP Buffer Size	[8M]	
On chip USB	[Enabled]	
USB Keyboard Support	[Enabled]	
Onchip Sound	[Enabled]	
Onchip Modem	[Enabled]	
CPU to PCI write Bursting	[Enabled]	
PCI Dynamic Battery	[Disabled]	
PCI Master 0 W S write	[Enabled]	
PCI Delay Transaction	[Disabled]	
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 +/-/PU/PD: Value F10:Save ESC: Exit F1:General Help
F5:Previous Values F6:Fail-safe defaults F7:Optimized Defaults

This selection allows you to configure the system based on the specific features of the installed chipset. This chipset manages bus speeds add access to system memory resources, such as DRAM and the external cache. If also coordinates communications between the conventional ISA bus and the PCI bus. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide the best operating conditions for your system. The only time you might consider making any change would be if you discovered that data was being lost while using your system.

3-9 DRAM Settings

The first chipset settings deal with CPU access to dynamic random access memory (DRAM). The default timing have been carefully chose and should only be altered if data is being lost. Such a scenario might well occur if your system had mixed speed DRAM chips installed so that greater delays may be required to preserve the integrity of the data held in the slower memory chips.

3-9.1 DRAM Clock

The default value for this item is Host Clk.

Host Clk	DRAM Clock equals to host (system clock).
HCLK-33M	DRAM Clock equals to host clock minus 33Mhz.

3-9.2 SDRAM Cycle Length

The item allows you to select the value for SDRAM Cycle delay time. The default value is 3ns.

The selections are: 2ns and 3ns.

3-9.3 Bank Interleave

The choice: Disabled, Enabled.

3-9.4 Memory Hole 15M-16M

You can reserve this area of system memory for ISA adapter ROM. When this area is reserved, it can not be cached. The user information of peripherals that need to use this areas of system memory usually discussed their memory requirement.

The choice: Enabled, Disabled.

3-9.5 P2C/C2P Concurrency

Select Enabled allows caching of the system BIOS ROM at F000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Enabled	BIOS access cached
Disabled	BIOS access not cached

3-9.6 PCI Master Pipeline Req

This item will enable / disable the PCI Master Pipeline Req.

The choice: Enabled, Disabled.

3-9.7 Fast R-W Turn Around

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

The choice: Enabled, Disabled.

3-9.8 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.

The choice: Enabled, Disabled.

3-9.9 Video Ram Cacheable

Select 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 choice: Enabled, Disabled

3-9.10 Frame Buffer Size

The choice: 8M, 2M, 4M

3-9.11 AGP Aperture Size:

This item allows you to adjust the VGA share main memory as video memory, for the 3D video card on the mainboard, in order to improve the display speed, you may set the size of share main memory, which is always small than the actual physical memory.

The choice: 64MB, 32MB

3-9.12 Onchip USB

This items allows you to Enable or Disable the USB function. The default value of this item is Enabled.

The choice: Enabled, Disabled.

3-9.13 USB Keyboard Support

This items allows you to Enable or Disable the USB keyboard function.

The choices are: Disabled, Enabled.

3-9.14 OnChip Sound

This item allows you to control the onboard AC97 audio.

The choice: Auto, Disabled.

3-9.15 OnChip Modem

This item allows you to control the onboard MC97 modem.

The choice: Auto, Disabled.

3-9.16 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 differences between the CPU and the PCI bus. When Disabled, the writes are not buffered and the CPU must wait until the write is complete before starting another writing cycle…

The choice: Enabled, Disabled.

3-9.17 PCI Dynamic Bursting

When Enabled, every write transaction goes to the write buffer. Burstable transactions then burst on the PCI bus and non-burstable transactions don't..

The choice: Enabled, Disabled.

3-9.18 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 choice: Enabled, Disabled.

3-9.19 PCI#2 Access #1 Retry

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

The choice: Enabled, Disabled.

3-9.20 AGP Master 1 WS Write

When Enabled, writes to the AGP are executed with one wait states.

The choice: Enabled, Disabled.

3-9.21 AGP Master 1 WS Read

When Enabled, read to the AGP are executed with one wait states.

The choice: Enabled, Disabled.

3-9.22 Memory Parity / ECC Check

This item Enabled to detect the memory parity and error checking & correcting.

The choice: Enabled, Disabled.

3-10 Integrated Peripherals

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Integrated Peripherals

On-chip IDE Channel 0	[Enabled]	Item Help
On-chip IDE Channel 1	[Enabled]	Menu Level ➢
IDE Prefetch Mole	[Disabled]	If your IDE hard drive supports block mode select Enabled for automatic detection of the optimal number of block read/write per sector the drive can support
Primary Master PIO	[Auto]	
Primary Slave PIO	[Auto]	
Secondary Master PIO	[Auto]	
Secondary Slave PIO	[Auto]	
Primary Master UDMA	[Auto]	
Primary Master UDMA	[Auto]	
Secondary Master UDMA	[Disabled]	
Secondary Slave UDMA	[Disabled]	
Init Display First	[PCI slot]	
IDE HDD Blank Mode	[Disabled]	
Onboard FDD Controller	[Enabled]	
Onboard Serial Port1	[Auto]	

Onboard Serial Port2	[Auto]	
UART Mode 2	[Standard]	
X IR Function Duplex	[Half]	
X TX, RX inverting enabled	[NO, YES]	
Onboard Parallel Port	[378/IRQ7]	
Onboard Parallel Mode	[Normal]	
X ECP Mode Use DMA	[3]	
X Parallel Port EPP Type	[EPP 1.9]	
Onboard Legacy Audio	[Enabled]	
Sound Blaster	[Disabled]	
SB 1/O Base Address	[22 OH]	
SB IRQ Select	[1RQ 5]	
SB DMA Select	[DMA 1]	
MPU –401	[Disabled]	
MPU-401 I/O address	[330-333H]	
Game Port (200-207H)	[Enabled]	
↑↓←→ Move Enter: Select +/-/PU/PD: Value F10:Save ESC: Exit F1:General Help F5:Previous Values F6:Fail-safe defaults F7:Optimized Default		

3-10.1 OnChip IDE Channel0

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.

3-10.2 OnChip IDE Channel1

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

3-10.3 IDE Pre-fetch 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.

3-10.4 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 for 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 choice: Auto , mode 0, Mode 1, Mode 2, Mode 3, Mode4.

3-10.5 Primary/ Secondary Master/ Slave UDMA

Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver.). IF your hard drive and your system software both support Ultra DMA /33, select Auto to enable BIOS support.

The Choice: Auto, Disabled.

3-10.6 Init Display First

This item will allows you to determine if the PCI or onboard VGA will be start using first.

PCI Slot	If both PCI VGA card and AGP card are installed, the system will display the PCI VGA card first.
AGP	If both PCI VGA and AGP card are installed, the system will show the AGP card first.

3-10.7 IDE HDD Block Mode

Block mode is also called bock transfer, multiple commands, or multiples sector read/ write. If your IDE hard drive supports bloc mode (most new drive do). Select Enabled for automatic detection of the optional number of bloc read/ write per sector the drive can support.

The Choice: enabled, Disabled.

3-10.8 Onboard FDD Controller

Select Enabled if your system has a floppy desk controller (FDD) installed in the system board and you wish to use it. If you installed and in FDC or the system has no floppy drive, select Disabled in this field.

The choice: enabled, Disabled.

3-10.9 Onboard Serial Port 1/2

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

The choice:: 3F8/IRQ4，2E8/IRQ3，3E8/IRQ4, 2F8/IRQ3, Disabled, Auto.

3-10.10 Onboard Parallel Port

The choice：3F8/IRQ4，2E8/IRQ3，3E8/IRQ4, 2F8/IRQ3, Disabled, Auto.

3-10.11 Onboard Parallel Mode

SPP	Standard Parallel Port
EPP	Enhanced Parallel Port
ECP	Extended Capability Port

3-10.12 IR Function Duplex

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

The choice: Half, Full.

3-10.13 TX, RX inverting enabled

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 choice: No, No/No, Yes (Default)/Yes, No/Yes, Yes.

3-10.14 ECP Mode Use DMA

The choice: 3

3-10.15 Parallel Port EPP Type

The choice: EPP1.9

3-10.16 Onboard Legacy Audio

This field controls the onboard legacy audio.

- Sound Blaster
- SB I/O Base Address
- SB IRQ Select
- SB DMA Select
- MPU-401
- MPU-401 I/O Address

3-10.17 Game Port (200-207H)

The choice: Enabled, Disabled.

3-11 Power Management

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

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Power Management Setup

ACPI Function	[Enabled]	Item Help
Power Management	[Press Enter]	
ACPI Suspend Type	[S1(POS)]	Menu Level ➢
PM Control by APM	[Yes]	
Video Off Option	[Suspend –Off]	
Video Off Method	[V/H SYNC+Blank]	
MODEM Use IRQ	[3]	
Soft Off By PWRBTN	[Instant-off]	
Wake Up Events	[Press Enter]	
↑↓←→Move Enter: Select +/-/PU/PD: Value F10:Save ESC: Exit F1:General Help		
F5:Previous Values F6:Fail-safe defaults F7:Optimized Defaults		

3-11.1 ACPI Function

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

The Choice：Enabled, Disabled.

3-11.2 Power Management

This category allows you a 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

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

Disable (default)	No power management. Disable 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= 15min.
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 Enabled, 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.

3-11.3 ACPI Suspend Type

The choice： S1 (POS0), S3 (STR)

3-11.4 PM Control by APM

No	System BIOS will ignore APM when power managing the system.
Yes	System BIOS will wait for APM'S prompt before it enter any PM mode.

Note:

Enable this for OS with APM like Windows® 95/98, Windows® NT etc.

3-11.5 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 writes blank to the video buffer.
Blank Screen	This option only writes blanks to the video buffer.
DPMS	Initial display power management signaling.

3-11.6 MODEM Use IRQ

This determines the IRQ in which the MODEM can use.

The choice: 3，4，5，6，7，9，10，11，NA.

3-11.7 Soft-Off by PWRTN

Pressing the power button for more tan 4-seconds forces the system to enter the Soft-Off state when the system has “hung”.

The choice: Delay 4 Sec，Instant-Off.

3-11.8 Wake Up Events:

The choice: Enabled, Disabled.

3-12 PnP/PCI Configuration Setup

This section describe configuring the PCI bus system. PCI, or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed the CPU itself uses when communication 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.

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PnP/PCI Configurations

PnP OS Installed	[NO]	Item Help
Reset Configuration Data	[Disabled]	----------
X Resources Controlled By	[Auto (ESCO)]	Menu Level ➢
IRQ Resources	[Press Enter]	
X PCI/VGA Palette Snoop	[Disabled]	Default is 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 OS cannot boot
Assign IRQ For VGA	[Enabled]	
Assign IRQ For USB	[Enabled]	

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

3-12.1 PNP OS Installed

This item allows you to determine install PnP OS or not.

The choice：YES, NO

3-12.2 Reset Configuration Data

Normally, you have 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 can not boot.

The choice：Enabled, Disabled

3-12.3 Resource 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 95. If you set this field to “manual” chose specific resources by giving into each of the sub menu that follows this field (a sub menu is preceded by a “➢”).

The choice: Auto (ESCD), Manual.

3-12.4 IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

IRQ3/4/5/7/9/10/11/12/14/15 assigned to

This item allows you to determine the IRQ assigned to the ISA bus and is not available to any PCI slot. Legacy ISA for devices compliant with the original PC/AT bus specification, PCI / ISA PnP for devices compliant with the Plug and Play standard whether designed for PCI or ISA bus architecture.

The choice: Legacy ISA and PCI/ ISA PnP.

3-12.5 PCI/ VGA Palette Snoop

Leave this field at Disabled.

The choice：Enabled，Disabled.

3-12.6 Assign IRQ for USB / VGA

This item allows the user to Enable/Disable the Assign IRQ for USB / VGA.

The choice: Enabled, Disabled.

3-13 PC Health Status

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

CMOS Setup Utility – Copyright © 1984-1999 Award Software
PC Health Status

Current CPU Temp. Current System Temp. 22℃/71 Current CPUFAN1 Speed ORPM Current CPUFAN2 Speed ORPM Vcore 1.50V 2.5V 2.48V 3.3V 3.35V 5V 5.00V 12V 12.06V	Item Help ---------- Menu Level ➢
↑↓←→ Move Enter: Select +/-/PU/PD: Value F10:Save ESC: Exit F1:General Help F5:Previous Values F6:Fail-safe defaults F7:Optimized Defaults	

Current System Temperature

Show you the current system temperature.

Current CPU FAN1 Speed

Show you the current CPU FAN1 Speed.

Current CPU FAN2 Speed

Show you the current CPU FAN2 Speed.

Vcore

Show you the current system voltage.

3-14 Frequency/ Voltage Control

CMOS Setup Utility – Copyright © 1984-1998 Award Software
Frequency/Voltage Control

Auto Detect DIMM/PCI CLK	[Enabled]	Item Help
Spread Spectrum	[Disabled]	----------
CPU Host Clock(CPU/PCI)	[Default]	Menu Level ➢

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

3-14.1 Auto Detect

This item allows you to enabled/ disabled auto detect DIMM/PCI。

The choice：Enabled，Disabled。

3-14.2 Spread Spectrum Modulated

This item allows you to enable/ disabled the spread spectrum modulate.

The choice：Enabled，Disabled。

3-14.3 CPU Host Clock (CPU/PCI)

This item allows you to select the CPU host clock.

3-15 Defaults Menu

Selecting “Defaults” from the main menu shows you two options which are described below.

3-15.1 Load Fail-safe Defaults

When you press <Enter>on this item you get a confirmation dialog box with a message similar to:

Load Fail-Safe Defaults（Y/N）？ N

Pressing “Y” loads the BIOS default values for the most stable , minimal performance system operations.

3-15.2 Load Optimized Defaults

When you press <Enter> on this item you get a confirmation dialog box with a massage similar to :

Load Optimized Defaults（Y/N）？ N

Pressing “Y” Loads the defaults values tat are factory settings for optimal performance system operations.

3-16 Supervisor / User Password Setting

You can set either supervisor or user password or both of them. The differences between are:

3-16.1 Supervisor password:

can enter and change the options of the setup menus.

3-16.2 User password:

just can only enter but do not have the right to change the options of the setup menus. When you select the 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 in length, 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>. Yu may also press <Esc> to abort the selection and not enter a password.

To disable a password, just press <Enter> when you are prompted to enter the password. A message will confirm the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

PASSWORD DISABLED

When a password has been enabled, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

Additionally, when a password is enabled, you can also require the BIOS to request a

password every time your system is rebooted. This would prevent unauthorized use of your computer.

You determine when the password is required within the BIOS Features Setup menu and its Security options (see Section3). If the Security option is set to “System”, the password will be required both at boot and at entry to Setup. Of set toe “Setup”, prompting only occurs when trying to enter Setup.

3-17 Exiting Selecting

3-17.1 Save & Exit Setup

Pressing<Enter> on this item ask for confirmation:

Save to CMOS and EXIT（Y / N）？ Y

Press “Y” store the selections made in the menu in CMOS- a special section of memory that stays on after you turn your system off. The next time you boot your computer , the BIOS configure your system according to the Setup selection stored in CMOS. After saving the values the system is restarted again.

3-17.2 Exiting Without Saving

Pressing <Enter> on this item ask for confirmation:

Quit without saving（Y / N）？ Y

This allows you to exit Setup without in CMOS any change. The previous selection remain in effect. This exit the Setup utility and restarts your computer.

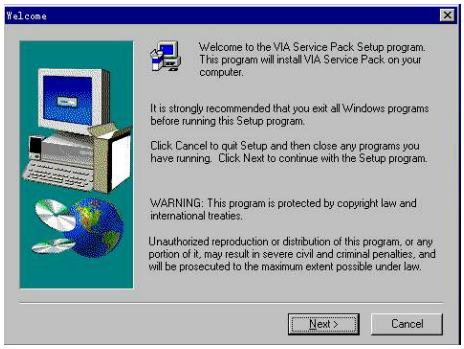
Chapter 4

Driver Installation

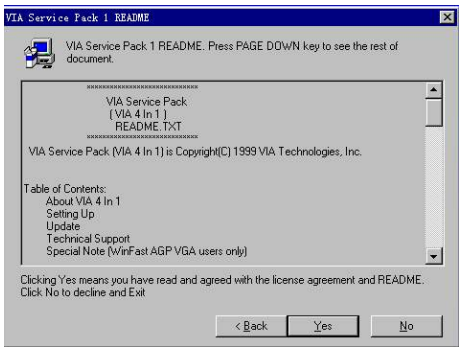
4-1 Driver Installation for Windows 95 / 98

4-1.1 Installation of VIA 4in1 driver:

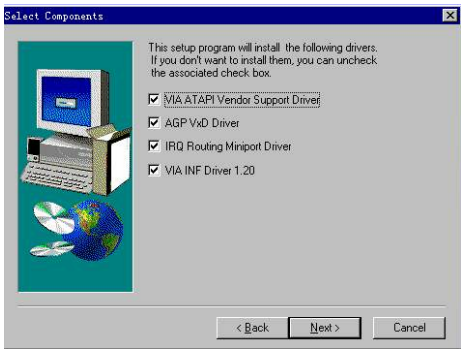
1、 Run CD-ROM: \ KT133\4in1\4in1429\4in1429(a)\setup.exe, click “Next” to go on.



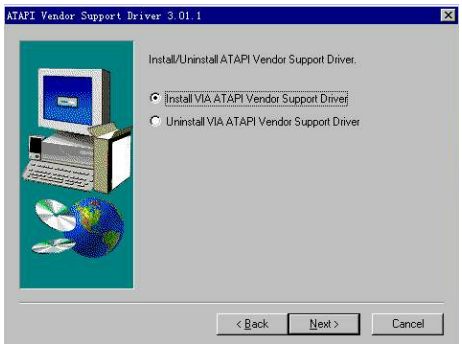
2、 Readme file appears, click “Yes” to go on.



3、 Select Components, click “Next” to go on.

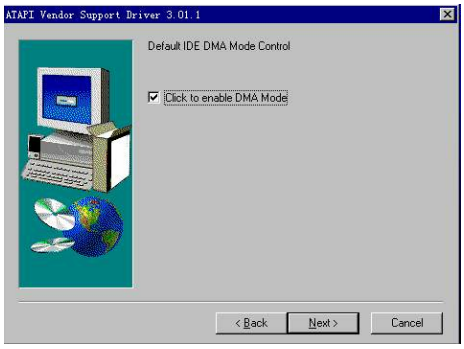


4、 “ATAPI” driver installation, click “Next” to go on.

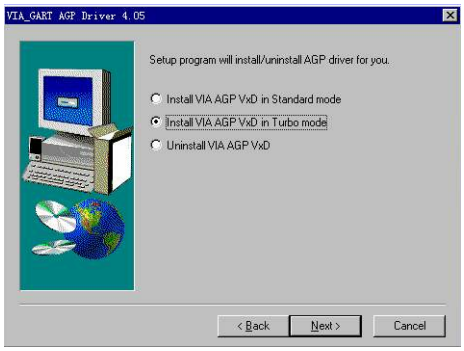


j

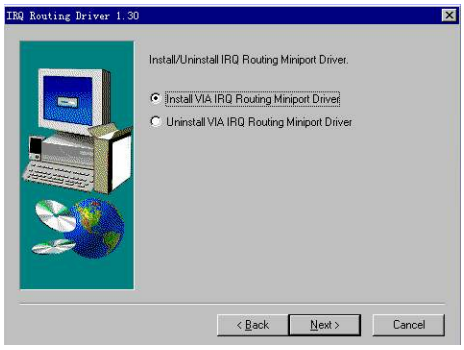
5、 DMA mode selection, click “Next” to go on.



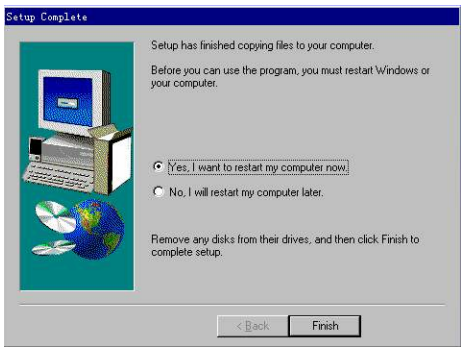
6、 Select AGP driver installation mode , click “Next” to go on.



7、 Select “Install IRQ driver”, click “Next” to go on.



8、 Click “Finish” to end the 4 in 1 driver installation.

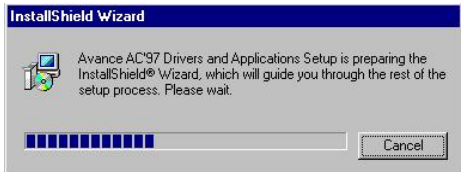


4-1.2 Installation of AGP 4X patch program

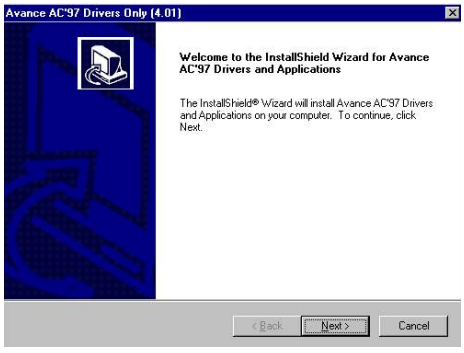
Run CD-ROM:\KT133\4xpatch\via4x.reg，click “Yes” to add the file information into registration table.

4-1.3 Sound Driver Installation:

1、 Run CD-ROM: \Audio\setup.exe, start to install sound driver.

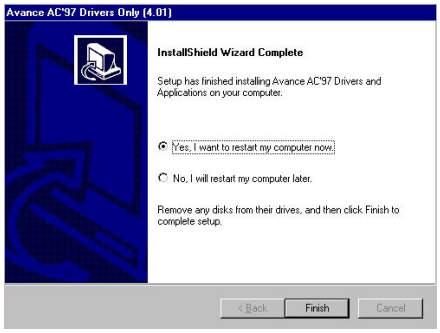


2、 Click “Next” to go on.



3、 Click “OK”, remove the old device before installing.

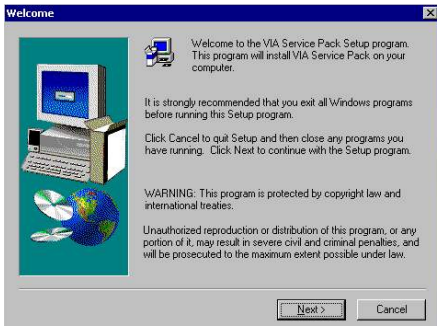
4、 The installation complete, click “Finish” to restart the computer.



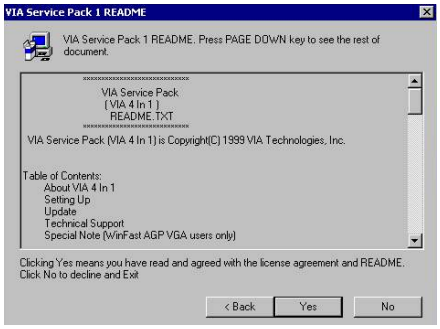
4-2 Driver Installation for Windows 2000

4-2.1 4in 1 driver Installation

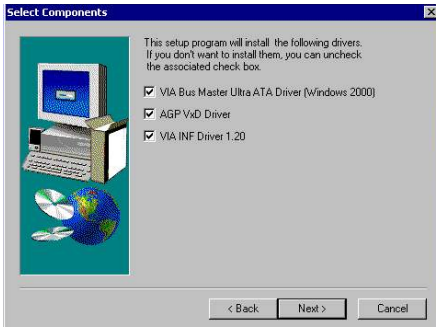
1、 Run CD-ROM:\ KT133\4in1\4in1429\4in1429(a)\setup.exe, click “Next” to go on.



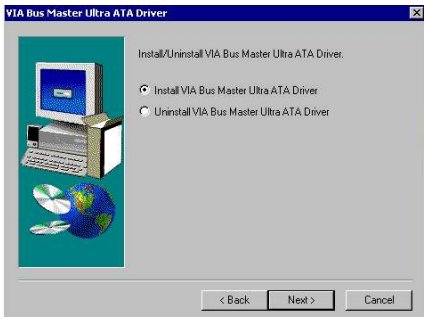
2、 README file appears, click “Next”.



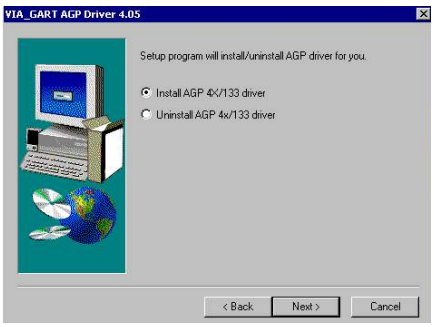
3、 Select components of the installation, click “Next” to go on.



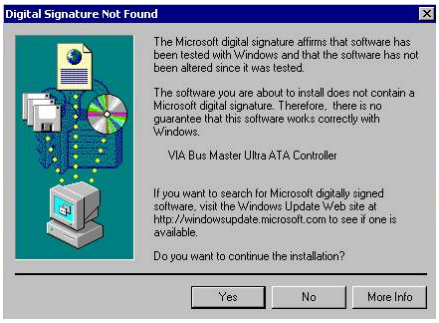
4、 Select “Install VIA Bus Master Ultra ATA Driver”, click “Next” to go on.



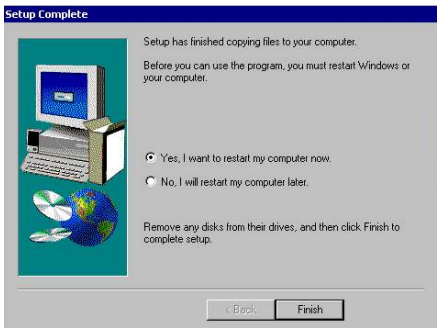
5、 Select “Install AGP 4X/133 driver”, then click “Next”.



6、 Click “Yes” to go on.



7、Click “Finish”, the installation finished.

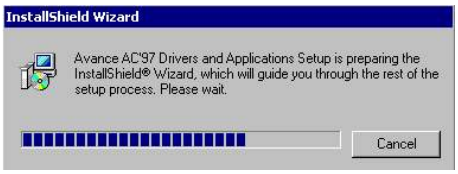


4-2.2 Installation of AGP 4X Patch Program

Run CD-ROM:\KT133\4xpatch\via4x.reg，click “Yes” to add the file information into registration table.

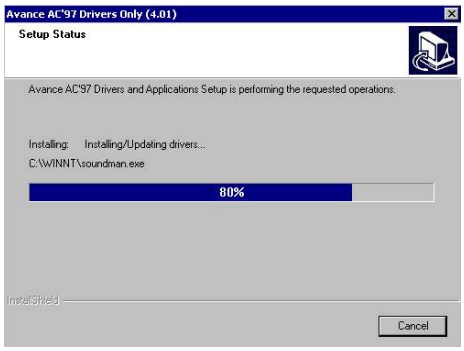
4-2.3 Sound Driver Installation:

1、 Run CD-ROM:\ KT133\Audio\setup.exe, start to install the driver.

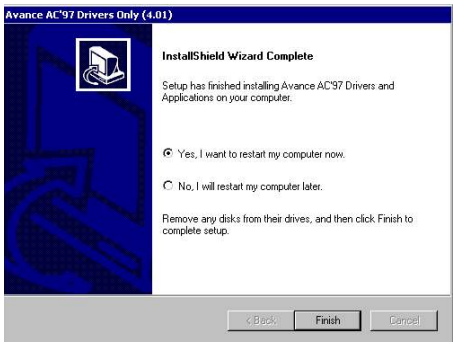


2、 Click “Next” to go on.

3、 System is installing the driver.



4. Select “Yes”, them click “Finish” to end the installation.



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