AMD Socket A Mainboard

User's Manual

VIA KT133 and KT133A ATX Chipsets

For AMD Duron™and Athlon™ processor

Supporting Model

KT133TX
KT133BX
KT133BL
KT3ABX
KT3ABL
KT3EBX

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Package Checklist

This package contains the following items:
- Mainboard
- Users manual
- One IDE cable for ATA/33, ATA/66 or ATA100IDE drives
- One 34-pin floppy disk drive cable
- One Driver Utility CD

If any of these items are missing or damaged, please contact your dealer or sales representative for assistance.

Technical Support

If you require additional information, assistance during installation, please contact your dealer. Your dealer will be able to provide the latest information. If you need additional help, please visit our web site for technical support.

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Chapter 1 – Introduction

1.1   MAINBOARD LAYOUT
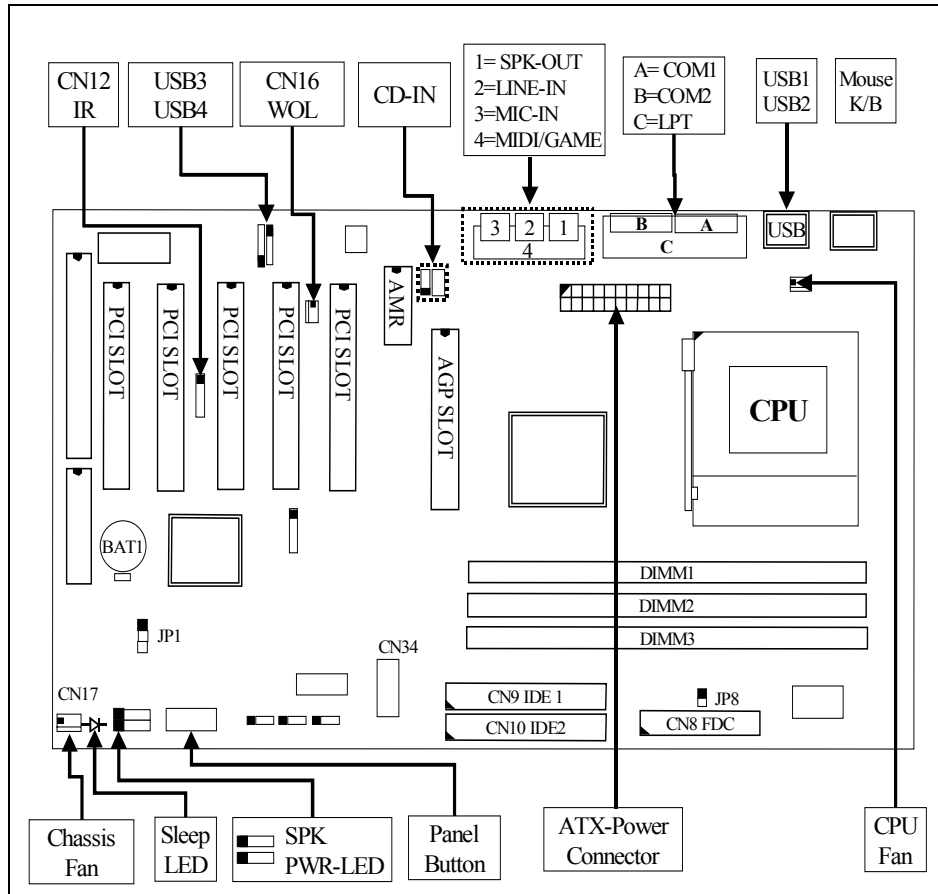
Note! Audio port (CN18) and AMR slot are only available in KT133TX, KT133BX KT3EBX and KT3ABX models only.

1.1.1   Mainboard Dimension

- Width & Length: 305 mm x 210 mm.
- Height: 1 1/2 inches
- PCB Thickness: 4 layers, 0.05 inches.
- Weight: 18 ounces.

1.1.2   Environment Limitation

- Operating Temperature: 10   to 40   . (50   to 104   )
- Required Airflow: 50 linear feet per minute across CPU.
- Storage Temperature: - 40   to 70   . (- 40   to 158   )
- Humidity: 0 to 90% non-condensing.
- Altitude: 0 to 10,000 feet

1.2 ATX Form Factor Connector
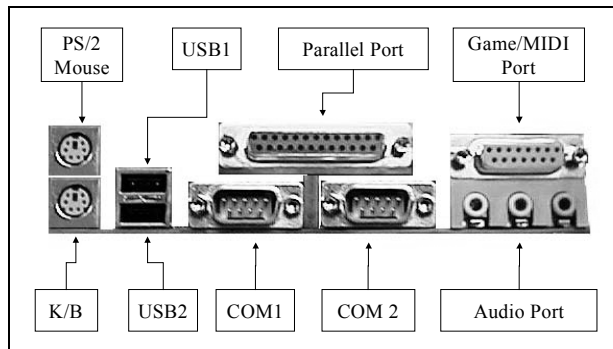
1.3 Features and Specifications

Processor

- Support AMD Duron^{TM} and Athlon^{TM} Socket A processors.

Chipset

- VIA ® VT8363/VT82C686A enhanced AGPset (PC-133) for KT133TX.
- VIA ® VT8363/VT82C686B enhanced AGPset (PC-133) for KT133BX and KT133BL.
- VIA® VT8363E/VT82C686B enhanced AGPset (PC-133) for KT3EBX.
- VIA ® VT8363A/VT82C686B enhanced AGPset (PC-133) for KT3ATX and KT3ABL.

CPU Switching Voltage Regulator

- Equipped with a switching voltage regulator that automatically detects +1.10V to1.8V DC power supply.

System Memory

- 32MB to1.5GB memory using VCM (Virtual Channel Memor y) SDRAM.
- Three 168-pin DIMM sockets.
- Uses x64 PC SDRAM, 3.3V.
- Support PC-100 SDRAM DIMM and PC-133 SDRAM DIMM.

Expansion Slots

- The mainboard is equipped with 1 dedicated AGP slot (support 1x, 2x and 4x AGP graphic card), 4 dedicated PCI slots, 1-sharedPCI/ISA slot and 1 AMR (Audio/Modem Riser) slot. AMR is an interface designed for installing audio riser card, modem riser card or audio/modem riser card that is compliant to the AMR specification.

Note: For KT133BL and KT3ABL, the mianboard have no AMR slot onboard.

Onboard Audio Features
- Supports Microsoft ® DirectSound/DirectSound 3D.
- AC97 supported full duplex, independent sample rate converter for audio recording and playback.

> **Note: KT133BL and KT3ABL do not have the 3D audio interface onboard**

Word Size
- Data Path: 8-bit, 16-bit, 32-bit, 64-bit.
- Address Path: 32-bit.

FRONT SIDE BUS FREQUENCY
- KT133TX, KT133BX, KT133BL and KT3EBX support 200MHz. [100MHz DDR (Double Data Rate)] FSB.
- KT3ABX and KT3ABL support 200 and 266MHz. [133MHz DDR (Double Data Rate)] FSB.

BIOS
- Award BIOS, Windows ® 95/98 Plug and Play compatible.
- Supports SCSI sequential boot-up.
- Flash EPROM for easy BIOS upgrades (2Mbit).
- Supports DMI 2.0 function.

Desktop Management Interface (DMI)
- The mainboard comes with a DMI 2.0 built into the BIOS. The DMI utility in the BIOS will automatically records various information about your system configuration and store these information in the DMI pool, which is a part of the system board's Plug and Play BIOS. DMI, along with the appropriately networked software, is designed for easy inventory, maintenance and simplify troubleshooting of computer systems.

WOL (Wake-On-Lan) Port
- One WOL connector supports Wake-On-LAN functionality.

USB Ports
- The mainboard is equipped with 4 USB ports. USB allows data exchange between your computer and a wide range of simultaneously accessible external Plug and Play peripherals. (Optional cable for two connectors is sold separately).

Connectors
- One connector for IrDA interface.
- Two IDE connectors.
- One floppy drive interface supports up to two 2.88MB floppy drives.
- One 20-pin ATX power supply connector.
- CPU, chassis and AGP fan connectors.
- Three CD audio-in connectors.
- One TAD connector for telephony audio devices.

ATX Double Deck Ports (PC 99 color-coded connectors)
- Two USB ports.
- Two NS16C550A-compatible DB-9 serial ports (URATs).
- One SPP/ECP/EPP DB-25 parallel port.
- One mini-DIN-6 PS/2 mouse port.
- One mini-DIN-6 PS/2 keyboard port.
- One game/MIDI port.
- Three audio jacks: line-out, line-in and mic-in.

PCI Bus Master IDE Controller
- Two PCI IDE interfaces support up to four IDE devices.
- Supports ATA/33 and ATA/66 hard drives for KT133TX.
- Support ATA/33, ATA/66 and ATA100 hard drives for KT133BX, KT133BL, KT3EBX, KT3ABX and KT3ABL.
- PIO Mode 3 and Mode 4 Enhanced IDE (data transfer rate up to 16.6MB/sec.).
- Bus mastering reduces CPU utilization during disk transfer.
- Supports ATAPI CD-ROM, LS-120 and ZIP

IrDA Interface

- The mainboard is equipped with an IrDA connector for wireless connectivity between your computer and peripheral devices. It supports peripheral devices that meet the HPSIR or ASKIR standard.

1.4   System Health Monitor Functions

- The mainboard is capable of monitoring the following system health conditions: -

1. Monitors processor/system temperature and overheat alarm.
2. Monitors VCORE/3.3V/5V/12V/2.5V voltages and failure alarm.
3. Monitors processor/chassis fan speed and failure alarm.
4. Automatic fan on/off control.
5. Read back capability that displays temperature, voltage and fan speed.

1.4.1   Hardware Monitoring System Utility

- The mainboard comes with the Hardware Monitoring System utility contained in the provided CD (CD Driver). It is capable of monitoring the system's hardware conditions such as the temperature of the processor and system, voltage, and speed of the CPU and chassis fans. You are allowed to manually set a range to the items being monitored. If the values are over or under the set range, a warning message wills pop-up. The utility can also be configured to allow a beeping alarm to sound whenever an error occurs. We recommend that you use the Default Setting, which is the ideal setting that would maintain the system in good working condition.

Note: Use this utility only in Windows ® 95 or Windows ® 98 operating system.

1.4.2   Installation

To install the utility, please insert the CD Driver into the CD-ROM drive. The auto run screen (Driver Utility) will automatically appear. Click the Hardware Monitoring button, chose the chipset, model number and OS to install. Please refer to the Driver CD "Readme" file for further installation instructions.

1.5   Intelligence

Automatic CPU/Chassis Fan Off: -
- The CPU and chassis fans will automatically turn off once the system enters the Suspend mode.

Dual Function Power Button: -
- Depending on the setting in the Soft-Off By Power-Button field of the Power Management Setup, this switch   allow the system to enter the Soft-Off or Suspend mode.

External Modem Ring-on
- The Modem Ring-on feature allows the system that is in the Suspend mode or Soft Power Off mode to wake-up/power-on to respond to incoming calls. This feature only supports external modem only.

RTC Timer to Power-on the System
- The RTC installed on the system board allows your system to automatically power-on on the set date and time.

Wake-On-LAN Ready
- The Wake-On-LAN function allows the network to remotely wake up a Soft Power Down (Soft-Off) PC. Your LAN card must support the remote wakeup function. The 5VSB power source of your power supply must be at least 720mA.

AC Power Failure Recovery
- When power supply returns after an AC power failure, you may choose to power-on the system manually or automatically. Refer to Selecting the Power Lost Resume State in chapter 3 for more information.

ACPI Ready
The mainboard is designed to meet the ACPI (Advanced Configuration and Power Interface) specification. ACPI has energy saving features supporting OS Direct Power Management (OSPM) for round the clock PC operation.

Chapter 2 - Hardware Installation

Before you start installation, a grounded anti-static mat is recommended. Attached an anti static wristband to your wrist and have it grounded to the same point as the anti-static mat.

The following steps must be completed before your can use your PC: -

- **Check and Setup Mainboard Settings.**
- **Install Central Processing Unit (CPU).**
- **Install Memory Modules.**
- **Install Expansion Cards.**
- **Connect Ribbon Cables, Panel Wires and Power Supply.**

2.1 Mainboard Setting

CPU FRONT SIDE BUS SPEED SETTING

AMD K7 processor uses DDR transfer technology for its data and address busses that generate 200MHz or 266MHz front side system bus speed. Our mainboard comes with various models that support 200Mhz or 266Mhz FSB speed as follows:

Models	FSB Speed
KT133TX/KT133BX/KT133BL/KT3EBX	200Mhz
KT3ABX /KT3ABL	266Mhz

To set the FSB speed, you need to enable or disable the JP8 (jumper 8) as follows:

200Mhz	
JP 8 – Open	
	Without Jumper cap insert

266Mhz
JP 8 Short

JP8
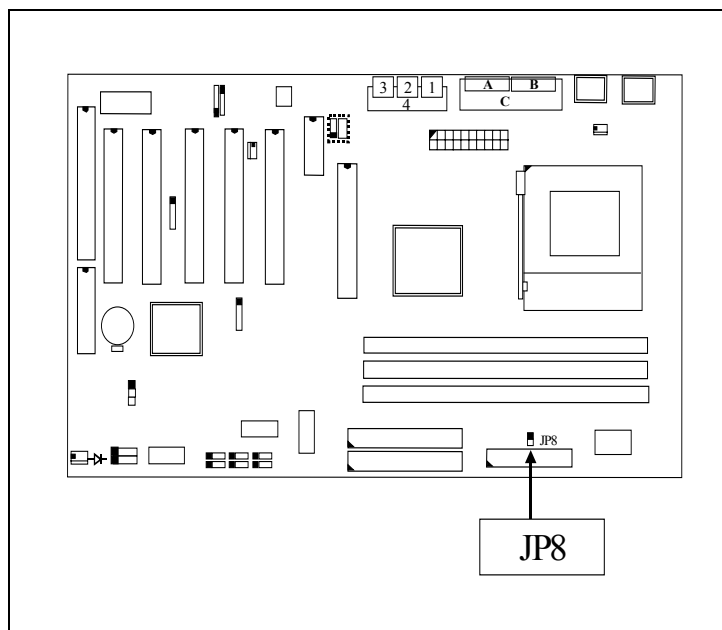
	With Jumper cap insert

2.2 Installation of Processor (CPU)

Before you install the AMD processor, make sure that you have an approved Heat Sink with Cooling Fan. Without proper heat sink with cooling fan will damage the processor and mainboard.

> **Caution!** **According to the documentation from AMD, Duron™ and Athlon™ processors require larger heat sink. The rotation speed of the cooling fan is 6,600 RPM or above. Thermal grease must be applied between the heat sink and the CPU to improve heat dissipation. Also, ensure that the heat sink is fastened securely on the CPU.**

To install your AMD processor, please do the following:

1. Locate a small dot marked on top of the CPU. The marking indicate Pin 1 of the CPU.

2. Locate the Socket Pin 1 marking on the mainboard.

3. Push the lever sideway and lift it upwards to 90-degree angle. Insert the CPU into the Socket. Please make sure that the CPU Pin 1 is insert to the socket Pin 1 location.

4. Install an approved heat sink with cooling fan for proper heat dissipation. Falling to install a heat sink with cooling fan may cause overheating and burnout your CPU

5. Snap back the lever into place

> **Caution! Be careful not to scrape the mainboard when mounting a clamp-style processor fan to prevent damage to the mainboard.**
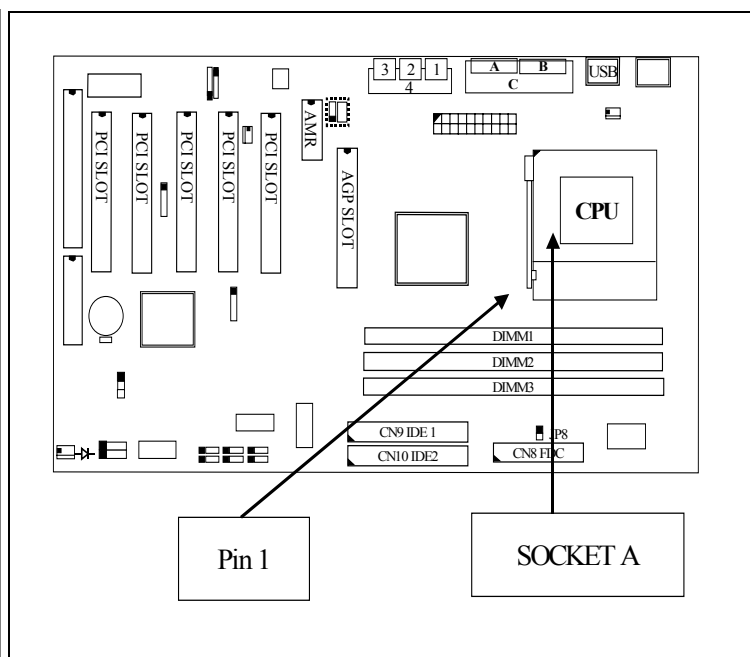
2.3 Installing of DIMM Memory

This mainboard uses only Dual Inline Memory Module. Sockets are available for **3.3-volt** (power level) un-buffered Synchronous Dynamic Random Access (SDRAM) memory system of 16, 32, 64, 128 or 256MB.

It's support single-side or double-side SDRAM DIMM module and the maximum memory size supported is 1536MB.
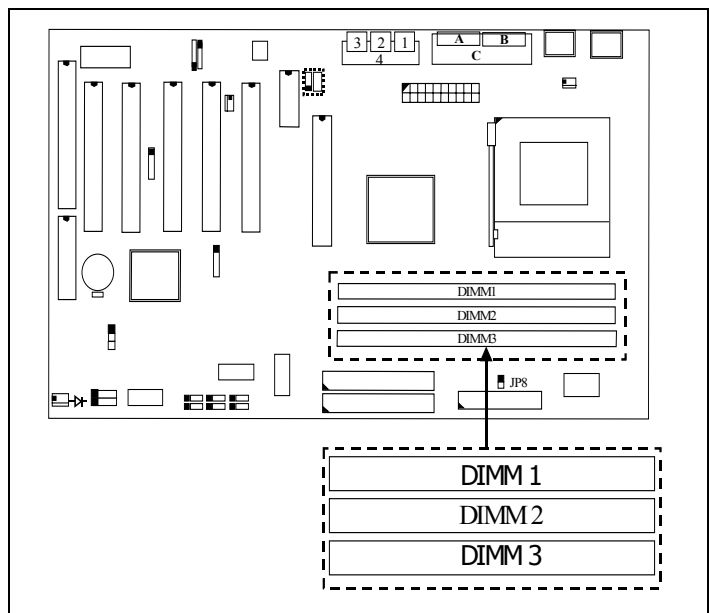
Note! DIMM1 or DIMM2 must be installed first

2.4 Internal Connector

2.4.1 PCI Slot and ISA Slot

Both PCI and PCI expansion cards may require IRQs, this mainboard complies with Plug and Play (PnP) specification that allow automatic system configuration whenever a PnP compliant card is added. For PnP card, IRQs are assigned automatically for those available.

If older legacy cards that are not support by the BIOS, please contact your vendor for an ISA Configuration Utility.

ISA slots

PCI slots
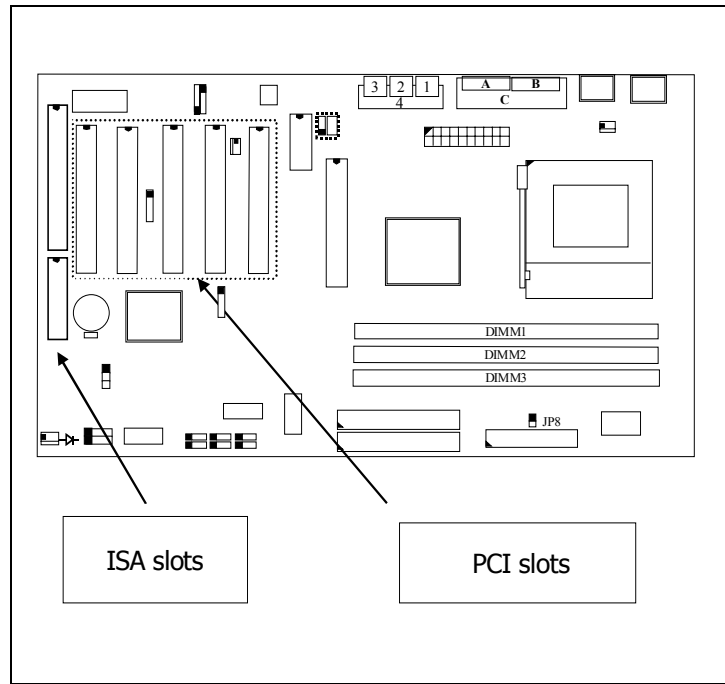
2.4.2 AMR Slot

This connector support a specially designed audio and/or modem card called Audio Modem Riser.

Since main processing is done through software and the mainboard I/O controller, it's provide a low cost solution for upgradeable Audio and/or modem card.

AMR Slot
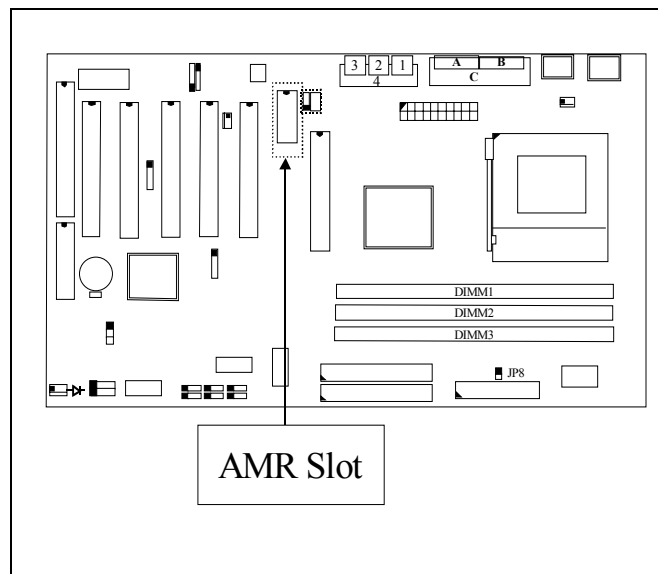
2.4.3 Floppy Disk Drive Connector

This connector support two Floppy drives. Uses the ribbon cable provided and make sure that the red strip is connect to PIN 1 of the connector.

CN8: FDC Connector
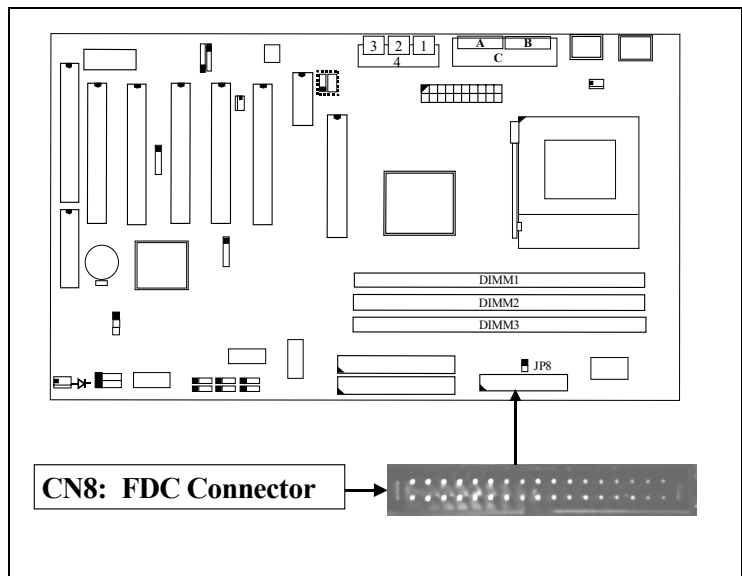
2.4.4 Primary and Secondary IDE Connectors

Each IDE connector supports two IDE drives. If you install two hard drives, you need to configure the second drive to Slave mode. Please refer to the hard drive manual for appropriate jumper setting.

CN9: IDE 1

CN10: IDE 2

Hardware Installation
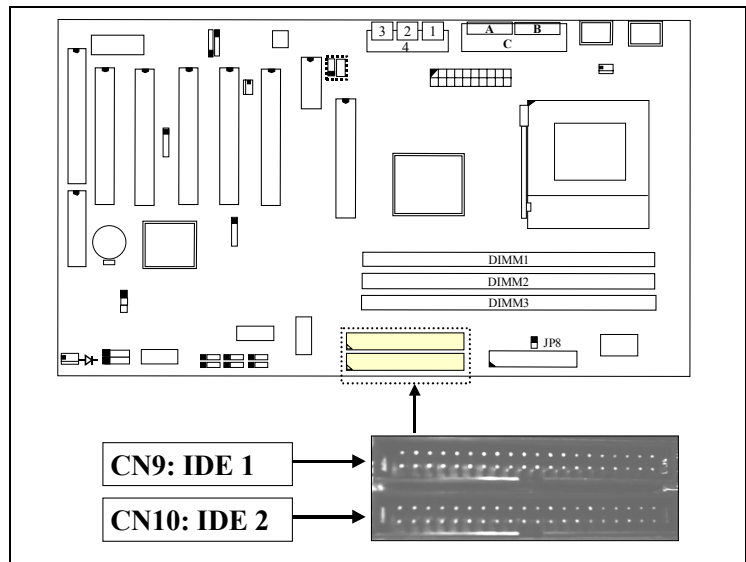
2.4.5 Standard Infrared (SIR) Connector

This IR connector (SIR) supports optional wireless transmitting and receiving infrared module.

You must configure the setting through URAT2 to select whether URAT2 is directed for use with COM 2 or IrDra.

1 (+5VDC)
2 (NO CONNECTION)
3 (IR RECEIVE)
4 (GROUND)
5 (IR TRANSMIT)

CN 12: IR (SIR) CONNECTOR
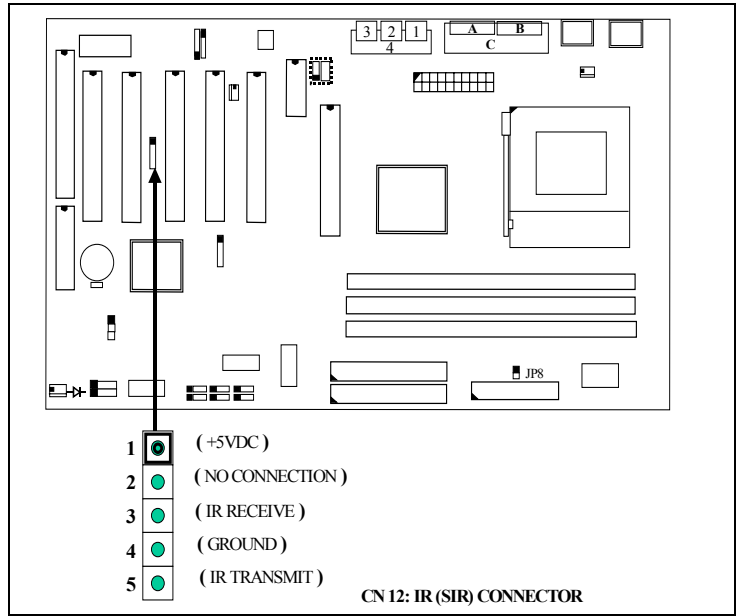
2.4.6 Cooling and Chassis Fan Power Connector

Please install your cooling fan power connector on CN13. If the hardware-monitoring feature is installed, you could monitor the rotating speed of the CPU cooling fan in your Windows operation system.

Chassis Fan is to be installed on CN17.
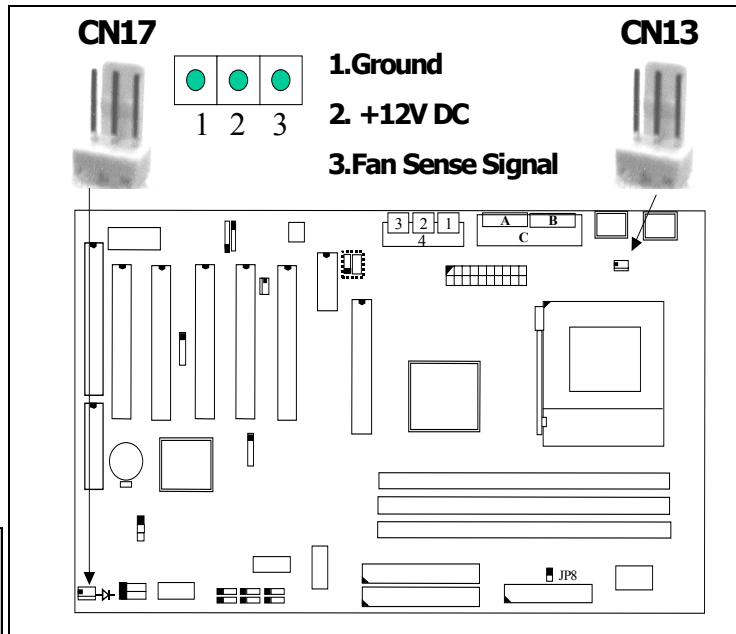
Warning! These are not jumpers; do not place caps over these pins.

CN17   CN13

1.Ground

2. +12V DC

3.Fan Sense Signal

2.4.7 ATX Power Connector

This connector connects to an ATX power supply. The plug from the power supply will only insert in one orientation because of the different hole sizes. Find the right orientation and push down firmly and make sure that the pins are aligned.

Important! Ensure that your ATX power supply can supply at least 10mA on the +5 volt standby lead (+5VSB).

CN15

ATX Power connector
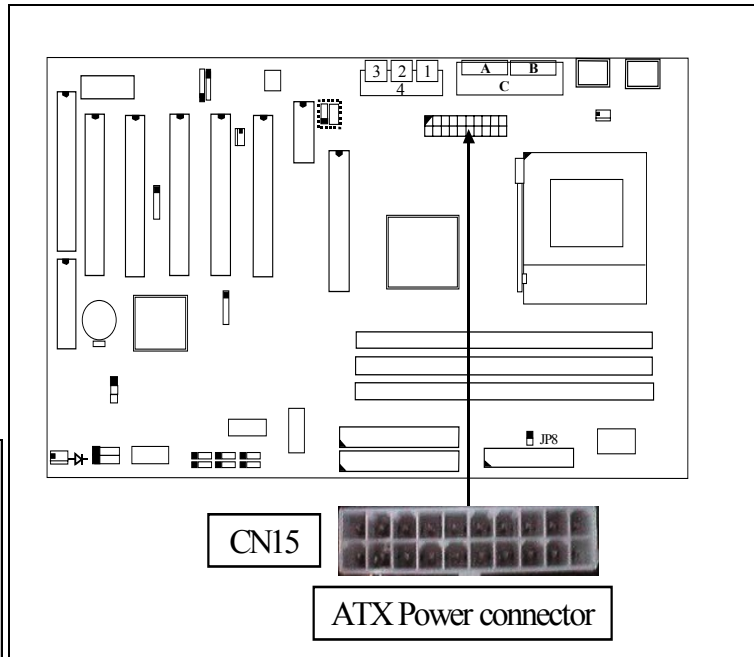
2.4.8 WOL (Wake On LAN) Connector

This connector need to contacts to a LAN card with Wake-On-Lan output. The connector power up the system when a wakeup packet or signal is received through the LAN card.

In order to use the WOL LAN card to trigger the power of the PC system, the switching power supply must be able to provide at least 700mA current driving ability on the "5V standby" voltage.

CN 16
WOL

1
2
3
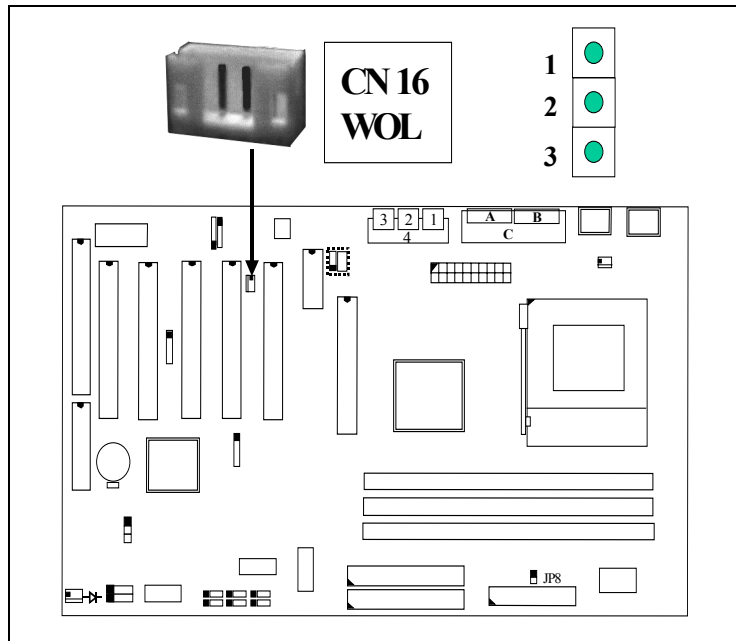
Hardware Installation

2.4.9 CD Audio-in Connector

The CD audio-in connectors on the board are used to connect CD ROM audio out. There are two different types of connectors, depending on the type of your CD ROM drive cable supplied and insert the correct to either connector.

Note! These connectors are absent on KT133BL and KT3ABL, you need to connect the CD Audio-in to your sound card.

L = Left channel audio-out
R = Right channel audio-out
G = Audio Ground
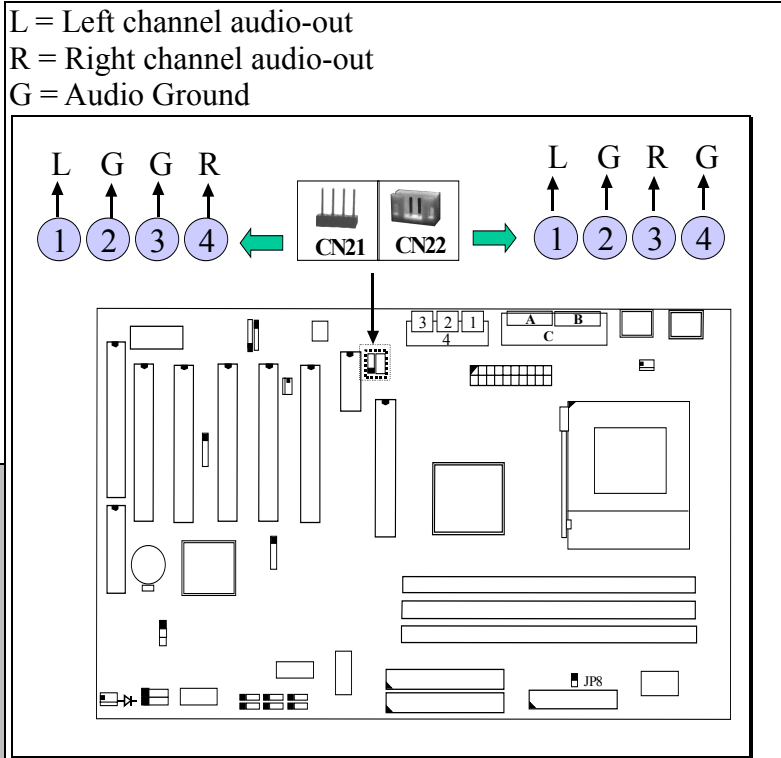
2.4.10 USB (Universal Serial Bus) 3 and 4 Connector (optional)

This connect allows you to expansion your USB port to support 4 USB devices.

Note! USB cables are not included and need to purchase separately. Please consult your dealer for more details. Improper cables used may damage the mainboard.
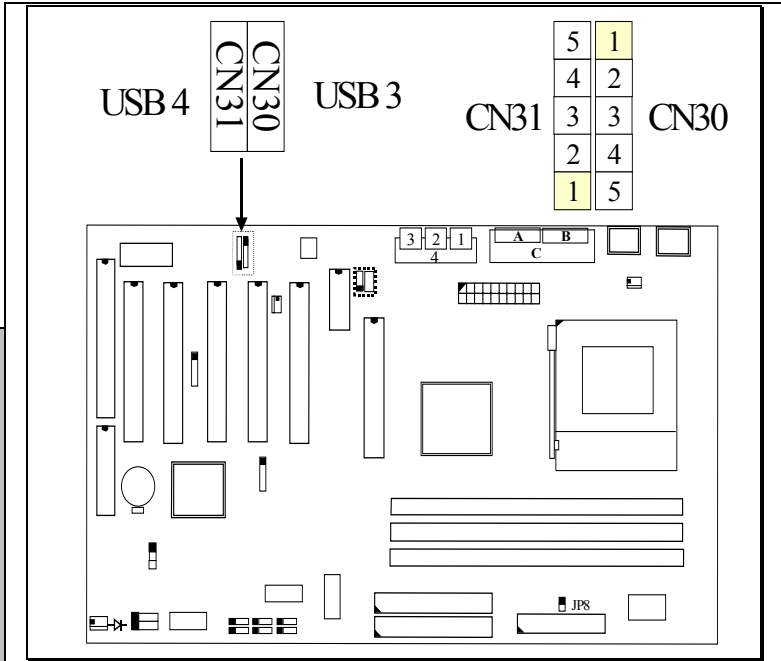
■ **Pin assignment of USB connector**

CN 31 (USB4)		CN 30 (USB3)	
Pin #	Assignment	Pin #	Assignment
5	Ground **(BLACK WIRE)**	1	+5V DC **(RED WIRE)**

4	Ground **(BLACK WIRE)**	2	DATA- **(WHITE WIRE)**
3	DATA+ **(GREEN WIRE)**	3	DATA+ **(GREEN WIRE)**
3	DATA- **(WHITE WIRE)**	4	Ground **(BLACK WIRE)**
1	+5V DC **(RED WIRE)**	5	Ground **(BLACK WIRE)**

2.4.11 System Panel buttons and LED connectors

RS: Reset Button Connector

When connected to the chassis reset button, you can reset your PC when press this button.

Pin #   Signal name
1   Reset Control
2   Ground

HL: IDE HDD LED Connector

When connect to the chassis HDD connector, read and write activity by HDD will cause the LED to light up.

RS: Reset Button connector
HL: HDD LED connector
SL: Sleep LED connector
PW: Power On / Off Suspend switch

System Panel Button and LED Connector
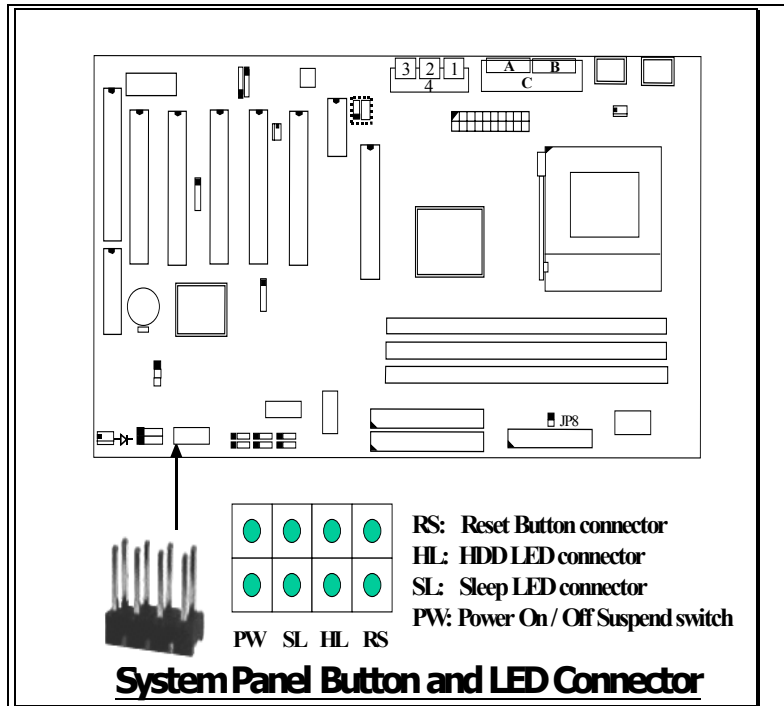
SL: Sleep LED Connector

This LED wills light when the AC power is connected and the system is power off, no light when the AC power is disconnected or the system is powered on. The purpose is to remind you that there is active power in your PC and warn you against plugging out any connected external devices.

PW: Power On / Off and External Suspend Switch Connector

The Power On/Off connector has two functions. It can be the Power Switch or Suspend Switch of your PC system. You can either chose "**Delay 4 Sec or Instant OFF**" (Please refer to the Aware BIOS setup in Chapter 4)

Option 1: If you chose "**Delay 4 Sec.**" In the BIOS CMOS Setup, the function of "PW" will be:
    A. When system power is "OFF", press this switch, the system will power on.
    B. When system power is "ON", you can select two different mode: -

Mode 1: Press the Power ON button and release (less than 4 seconds); the system will be turned into Suspend mode (turn into the GREEN mode) When the system is in Suspend mode:-

- Press the Power on button (less than 4 seconds), the system will return to Full-ON mode.
- Press and hold the Power On Button for more than 4 seconds, the system will be powered off.

Mode 2: Press and hold the Power ON button for more than 4 seconds, the system will be completely powered off.

Hardware Installation

Option 2: If you chose "**Instant OFF**." In the BIOS CMOS Setup, it will operate like normal ON / OFF Power button.

2.4.12 Speaker and Power LED connector

Connect your chassis speaker to this four pins connector. It allows you to hear systems beeps and warnings sound.

1

Pin #
Signal name

-
1
+ 5V DC

-
2
No Connection

-
3
No Connection

-
4
Speaker Data Signal

Speaker & Power LED Connectors
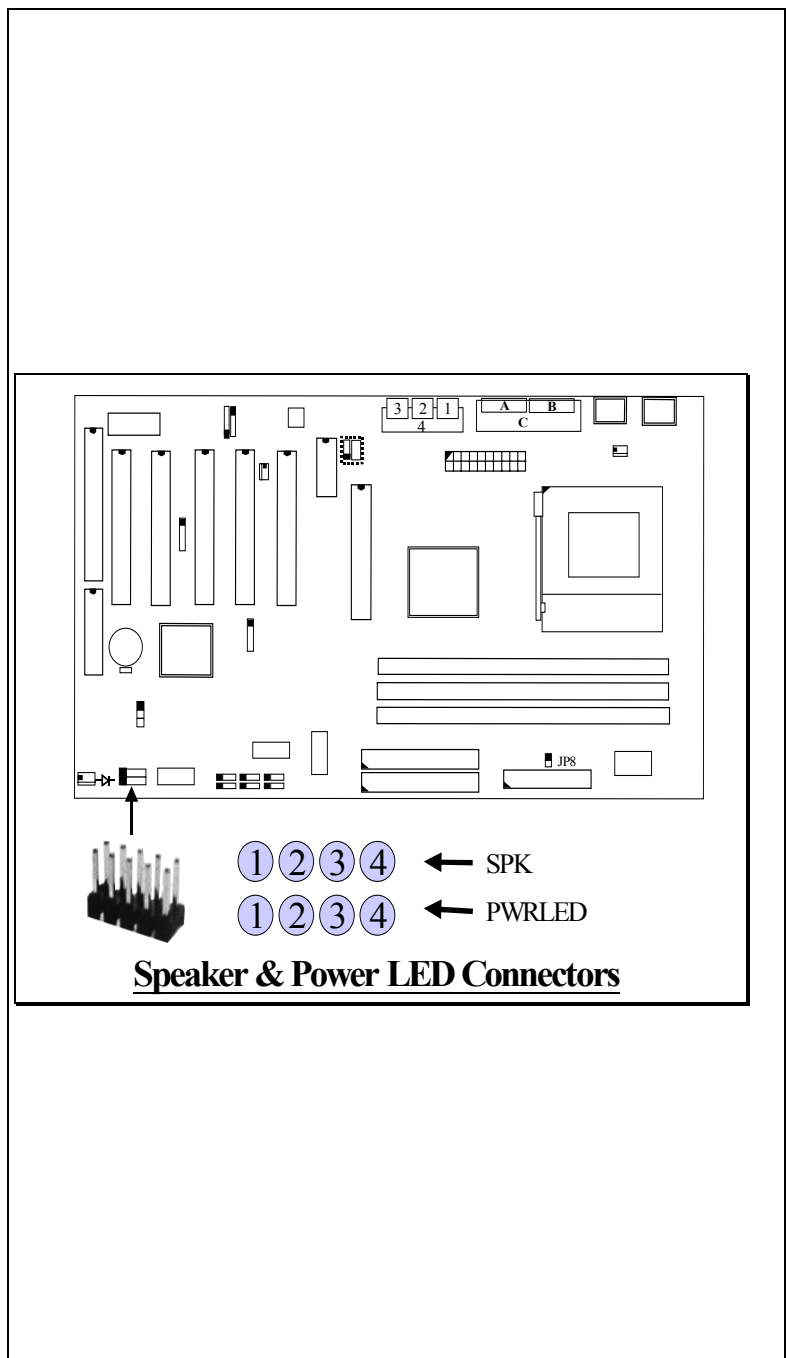
4
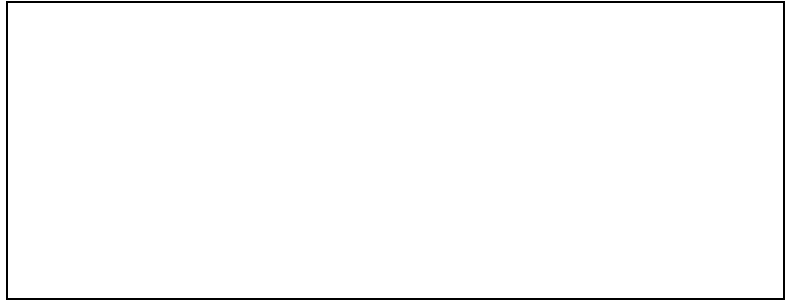
PWRLED: Front Panel Power LED Connector

Connect your chassis Power LED connector to this four pins connector.

1	Pin #	Signal name
●	1	Pullup (+ 5V DC for Power LED)
●	2	No Connection
●	3	Ground
●	4	No Connection
4		

2.5.1   External Connectors

Warning! Some pins are used for connectors or power sources. These are different from jumpers in the mainboard layout. Placing jumper caps on these jumpers will cause damage to the mainboard.

Ribbon cable should always be connected with the red strip to the PIN 1 on the connector of the devices such as CD ROM and Hard Drive. Check the connector for Pin 1 before installation.

2.5.1 PS/2 Mouse and Keyboard Connector

This connector only supports PS/2 mouse and keyboard plugs.

If you have a standard AT size (large DIN) keyboard plug, you need to use a mini DIN adapter.
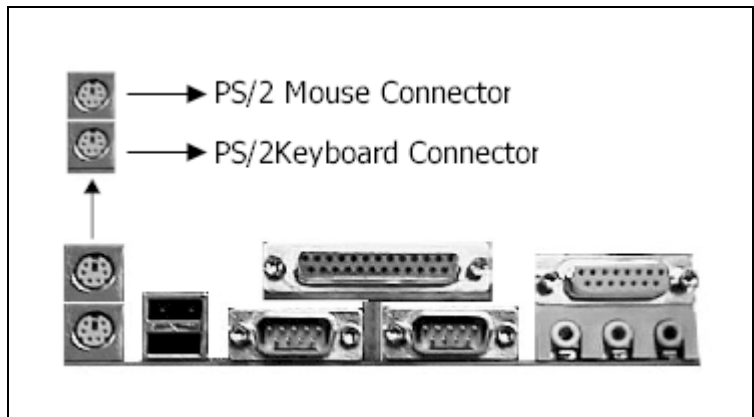
2.5.2 Serial Port COM 1 and 2 Connector

Two serial ports are available for mouse and other serial devices.

(I/O addresses used are 3F8H/2F8H/3E8H/2E8H and IRQ3/IRQ4, selected by CMOS setup.)
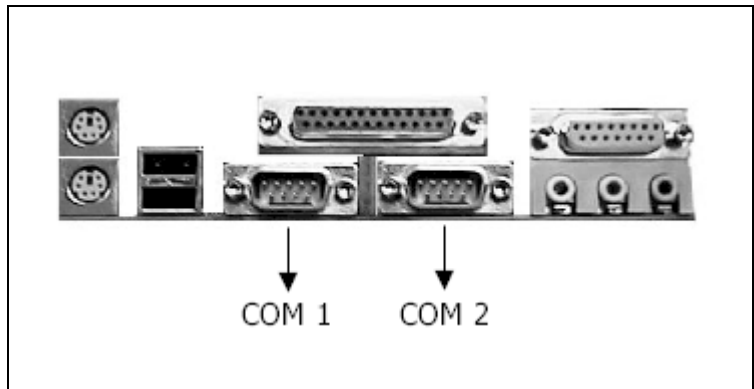
2.5.3 Parallel Port Connector

This parallel port for use in printer supports SPP/EPP/ECP modes, IRQ7 or IRQ5 is selectable, ECP mode will use either DMA 3 or DMA 1 which can be selected by the BIOS setup program)
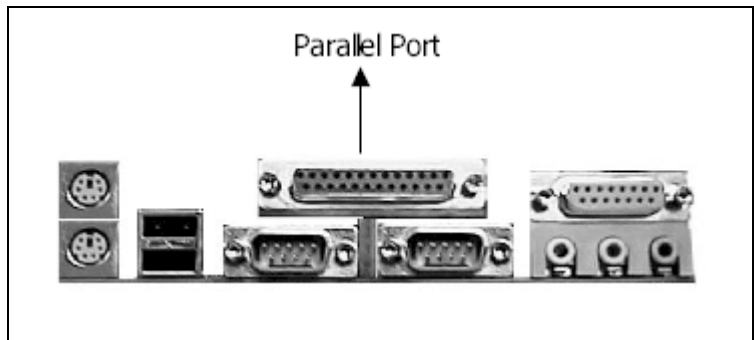
2.5.4 Universal Serial Bus (USB) Port 1 & 2

Two USB ports are available for connecting USB devices.

The mainboard is also equipped with an expansion connector that supports two additional USB external connectors. (The USB cable is not included in with the mainboard)
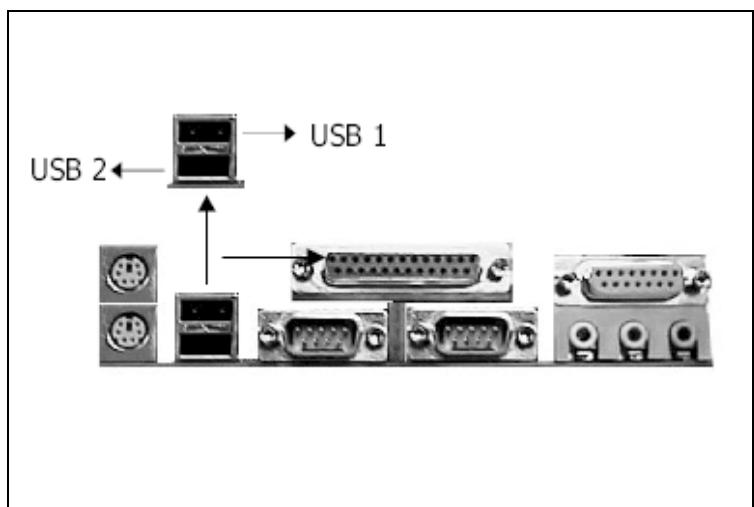
2.5.5 Audio/Game Port Connector

There is the 3D audio interface built on this mainboard (audio interface is optional on the board.). Please refer to the following picture for the audio interface.
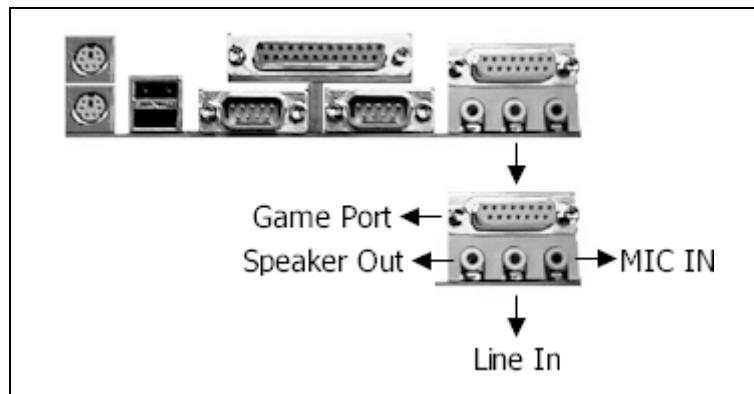
Chapter 3   Managing the PC BIOS

3.1   Award BIOS CMOS Setup Utility

The EEPROM on the mainboard stores the AWARD BIOS CMOS Setup Utility to allows you to configure your system. Anytime, you wish to configure your system BIOS, you need to run BIOS CMOS Setup Utility (for example, you may wish to ensure the Security Password System or changing your Power Management Setting).

GETTING STARTED

Each time when you started your computer, the system provides you with the opportunity to run the BIOS CMOS Setup Utility. Immediately when you turn on your system, press the <Delete> button to call up the BIOS CMOS Setup Utility.

The BIOS CMOS Setup Utility will not activate if your computer finish the POST (Power-On-Self-Test). You need to restart the system again to call up the BIOS CMOS Setup Utility. To restart the system, either you can power off, press the reset button on your chassis or simultaneously press the <Ctrl> + <Alt> + <Delete> button. The system will restart and you need to press the <Delete> immediately to call up the BIOS CMOS Setup Utility.

3.2   MAIN MENU

Once you have call up the BIOS CMOS Setup Utility, the following screen will appears:

Note! Due to constantly updating of BIOS software, the BIOS screen and descriptions are only for reference purpose and may not reflect the exact BIOS screen

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

Standard CMOS Setup	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving
PC Health Status	

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

Time, Date, Hard Disk Type ...

CONTROL KEYS

At the bottom of the utility, you will notice a legend bar. The keys in the legend bar allow you to navigate through the various setup menus. The table below lists the control keys with their corresponding functions: -

Up Arrow	Move to previous item.
Down Arrow	Move to next item.
Left Arrow	Move to item on the left.
Right Arrow	Move the item on the right.
Enter	Select the desired item.
F1	Display the help screen for the selected feature.
Esc key	Exit to the previous screen.
PgUp(-)/PgDn(+)	Modify or change the content of the highlighted item.
F5	Restore the previous CMOS value (only the current page setup will be restored)
F7	Loads the SETUP default values from BIOS default table, (only the current page setup will be loaded).
F10	Save changes to CMOS and exit setup.

3.3 STANDARD CMOS SETUP

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

Date (mm : dd : yy) : Tue, Aug 1 2000,		Item Help
Time (hh : mm : ss) : 16 : 03 : 33		Menu Level
IDE Primary Master	Maxtor 52049H4	Change this day, month,
IDE Primary Slave	None	Year and century
IDE Secondary Master	None	
IDE Secondary Slave	None	
Drive A	1.44, 3.5 in.	
Drive B	None	
Video	EGA/VGA	
Halt On	All, But Keyboard	
Base Memory	640K	
Extended Memory	15360K	
Total Memory	16384K	

Date (mm : dd : yy)

Sets your system to the date that you specific (usually the current date). The format is month, day, and year. Press the right or left arrow key to move to the desired field (month, date, year). Press the PgUp or PgDn key to increment the setting, or type the desired value into the field.

Time (hh : mm : ss)

Sets your system to the time you specific (usually the current time). The format is hour, minute, second. The time format is based on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00. Press the right or left arrow key to move to the desired field. Press the PgUp or PgDn key to increment the setting, or type the desired value into the field.

IDE Primary / Secondary Master / Slave:

This mainboard supports four IDE Hard Drives. These fields allow you to set your Hard Drive parameters. (For detail installing of IDE Hard Drive, please refer to 2.2.6 Primary and Secondary IDE Connector).

Move the selection bar to the appropriate field and press "ENTER" key, the system BIOS will detect the HDD type automatically.

Drive A /B:

Select the correct specifications for the diskette drive(s) installed in the computer.

None	No diskette drive installed
360K, 5.25 in	5-1/4 inch PC-type standard drive; 360 kilobyte capacity
1.2M, 5.25 in	5-1/4 inch AT-type high-density drive; 1.2 megabyte capacity
720K, 3.5 in	3-1/2 inch double-sided drive; 720 kilobyte capacity
1.44M, 3.5 in	3-1/2 inch double-sided drive; 1.44 megabyte capacity

Video:

Select the type of primary video subsystem in your computer. The BIOS CMOS Setup Utility will detect the correct video type automatically.

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

HALT ON:

This field allows you to decide which type of errors you want to halt the system when detected during Power On Self Test.

BIOS Setup

Base Memory / Extended Memory / Total Memory

This field displays the amount of memory detected by the system during boot up. This is a display only field and you don't have to make changes to this field.

Base Memory: Indicates the memory installed below the conventional 1MB space.
Extended Memory: Indicates the memory installed above the 1MB space.
Total Memory: Indicates the total memory installed in the PC system.

3.4   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	:	Enabled
First Boot Device	:	Floppy
Second Boot Device	:	HDD-0
Third Boot Device	:	LS120
Boot Other Device	:	Enabled
Swap Floppy Drive	:	Disabled
Boot Up Floppy Seek	:	Enabled
Boot Up NumLock Status	:	On
Gate A20 Option	:	Normal
Typematic Rate Setting	:	Disabled
Typematic Rate (Chars/Sec)	:	6
Typematic Delay (Msec)	:	250
Security Option	:	Setup
PS/2 mouse function control	:	Enable
OS Select For DRAM > 64MB	:	Non-OS2
HDD S.M.A.R.T Capability	:	Disabled
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

Allows you to choose the Virus warning feature for IDE Hard disk boot sector protection. If this function is enabled and some attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.

Virus Warning

When enabled, you receive a warning message if a program (specifically, a virus) attempts to write to the boot sector or the partition table of the hard disk drive. You should then run an anti-virus program. Keep in mind that this feature protects only the boot sector, not the entire hard drive.

NOTE! Many disk diagnostic programs that access the boot sector table can trigger the virus-warning message. If you plan to run such a program, we recommend that you first disable the virus warning.

CPU Internal Cache / External Cache:

Cache memory is additional memory that is much faster than conventional DRAM (system memory). CPUs from 486-type on up contain internal cache memory, and most, but not all, modern PCs have additional (external) cache memory. When the CPU requests data, the system transfers the requested data from the main DRAM into cache memory, for even faster access by the CPU.

CPU L2 Cache ECC Checking:

When you select Enabled, memory checking is enabling when the external cache contains ECC SDRAMs.

Quick Power On Self Test:

Select Enabled to reduce the amount of time required to run the power-on self-test (POST). A quick POST skips certain steps. We recommend that you normally disable quick POST. Better to find a problem during POST than lose data during your work.

First / Second / Third Boot Device:
These fields allow you to decide the boot sequence of your bootable devices such as Hard Drive, CD ROM...etc

Swap Floppy Drive:

This field is effective only in systems with two floppy drives. Selecting Enabled assigns physical drive B to logical drive A, and physical drive A to logical drive B.

Boot Up Floppy Seek:

When enabled, the BIOS tests (seeks) floppy drives to determine whether they have 40 or 80 tracks. Only 360-KB floppy drives have 40 tracks; drives with 720 KB, 1.2 MB, and 1.44 MB capacity all have 80 tracks. Because very few modern PCs have 40-track floppy drives, we recommend that you set this field to Disabled to save time.

Boot Up NumLock Status

Toggle between On or Off to control the state of the NumLock key when the system boots. When toggled On, the numeric keypad generates numbers instead of controlling cursor operations.

Security Option

This field allows you to select Setup or System Security option and it need to work along with the " Set Supervisor Password" in the main menu.

When "Setup" option is selected, you will be prompt to input your "Passwords" before you can start the BIOS CMOS Setup Utility. When you select "System" option, you will be prompt to input your password in order to load the Operation System (Window OS or Linux OS).

■ **Forgotten Your Password**

If you happen to forget your password, you can clear the password by erasing the CNOS Real Time Clock (RTC) Ram. To erase the RTC Ram Data, please do the following.

Clear RTC RAM

1. Unplug your PC.
2. Short the PIN 2 and PIN 3 of Jumper 1 (JP1)
3. Turn on your PC.
4. Press the <Delete> button during boot up and enter the BIOS CMOS Setup Utility to re-enter new password again.

1-2 Short: Normal Setting.

2-3 Short: Clear CMOS.
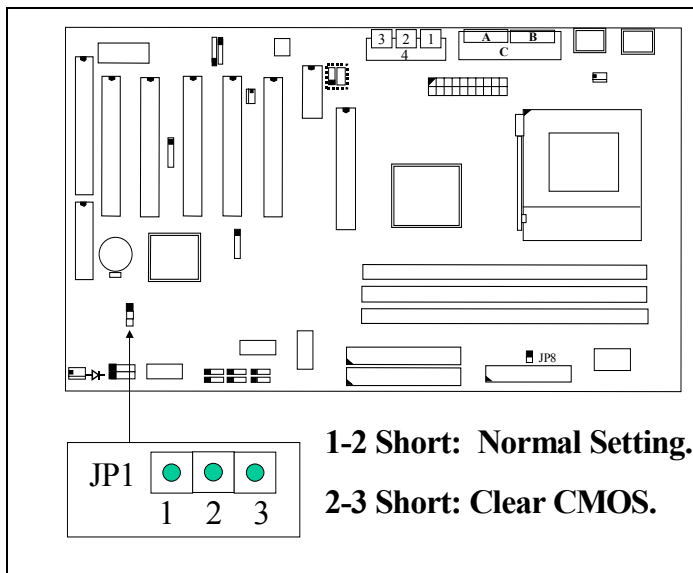
Tips! Use a jumper to insert into the PIN 2 and PIN 3 on JP1.

PS/2 mouse function control

This mainboard has a built-in PS/2™ mouse port. If you are using the PS/2™ mouse, please leave this field as "Enabled". In case you prefer to connect a serial mouse to the serial port instead of using the PS/2™ mouse, you may choose "Disable" in this field so that the IRQ12 can be released for other devices.

OS Select For DRAM > 64MB

Select OS2 only if you are running OS/2 operating system with greater than 64 MB of RAM on your system. Otherwise, use the default setting "Non-OS2" for all other operating systems.

HDD S.M.A.R.T Capability

If your Hard Drive support the S.M.A.R.T. technology (Self Monitoring Analysis Reporting Technology) feature, you may "enable" this item to monitor and report your Hard Drive healthy status. Check with your Hard Drive Vendor for further information about SMART feature.

Note! Using this feature may decrease system performance.

Video BIOS / XXXX-XXXX Shadow

These fields allow you to change the Video BIOS location from ROM to RAM. The system performance is enhancing when you enable this option, as information access is faster through RAM than ROM.

3.5 ADVANCED CHIPSET FEATURES

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software
Advanced Chipset Features

		Item Help
DRAM Timing By SPD	: Disabled	
DRAM Clock	100MHz	
SDRAM Cycle Length	3	Menu Level ➢
Bank Interleave	Disabled	
Memory Hole	Disabled	
PCI Master Pipeline Req	Enabled	
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	Disabled	
AGP Driving Control	Auto	
AGP Driving Value	DA	
AGP Fast Write	Disabled	
On Chip USB	Enabled	
USB Keyboard Support	Disabled	
OnChip Sound	Auto	
OnChip Modem	Auto	
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	

This section allows you to configure the system based on the features of the VIA KT133 chipset. This chipset manages bus speeds and access to system memory resources, such as DRAM and the external cache. It also coordinates communications between the

conventional ISA bus and the PCI bus. The default settings have been chosen because they provide the best operating conditions for your system. So please do not change the default setting unless you have sound technical background.

DRAM Timing By SPD

When enabled, the system BIOS will read the DRAM parameters from the SPD (Special Presence Detect) chip on the DIMM module and set the DRAM timing automatically.

DRAM Clock

This field allows you to select the DRAM access speed to control the memory performance.

DRAM Cycle Length

This setting defines the CAS timing parameter of the SDRAM in term of clock, to The default value is 3.

BANK Interleave

This field allows you to select how many bank of DRAM is installed on the mainboard so that the system BIOS will be able to adjust the SDRAM interleave access mode to optimize the SDRAM performance.

Memory Hole

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

- ■ **Enabled:** The memory space between 15 ~ 16MB will be remapped for ISA cards.
- ■ **Disabled:** No memory will be remapped.

BIOS Setup

PCI Master Pipeline Req

This field allows you to enable or disable the PCI pipeline access.

P2C/C2P Concurrency

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

Fast R-W Turn Around

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

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

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.

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.

AGP- 4X Mode

This item allows you to enable / disable the AGP-4X Mode. Please make sure your AGP card supports the 4X AGP display mode before you can select Enable.

AGP Driving Control

This item allows you to adjust the AGP driving force. Choose Manual to key in an AGP Driving Value in the next selection. Basically, "Auto" is recommended to avoiding any error in your system.

AGP Driving Value

This item allows you to adjust the AGP driving force.

AGP Fast Write

When Enabled, writes to the AGP (Accelerated Graphics Port) are executed with fast writing mode.

On-Chip USB

You should select Enabled as the mainboard Universal Serial Bus (USB) controller for you to utilities your USB peripherals.

USB Keyboard Support

You should select Enabled as the mainboard Universal Serial Bus (USB) controller for you to utilities your USB Keyboard peripherals.

On-Chip Sound

This item allows you to control the onboard AC 97 audio.

On-Chip Modem

This item allows you to control the onboard MC 97 Modem.

BIOS Setup

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 writes cycle.

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.

PCI Master 0 WS Write

When enabled, writes to the PCI bus are executed with zero wait states.

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.

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.

AGP Master 1 WS Write

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

AGP Master 1 WS Read

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

3.6 Integrated Peripherals

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software
Integrated Peripherals

On-Chip IDE Chanel0	Enabled	Item Help
On-Chip IDE Chanel1	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 Port 1	Auto	
Onboard Serial Port 2	Auto	
UART 2 Mode	Standard	
IR Function Duplex	Half	
TX, RX inverting enable	No, Yes	
Onboard Parallel Port	378/IRQ7	
Onboard Parallel Mode	Normal	
ECP Mode Use DMA	3	
Parallel Port EPP Type	EPP 1.9	
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	Enabled	
MPU-401 I/O Address	330-333H	
Game Port (200-207H)	Enabled	

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.

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.

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.

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.

Init Display First

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

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.

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.

Onboard Serial Port 1/Port 2

These two selection fields allow you to select the I/O address and corresponding interrupt for the first and second serial ports.

UART 2 Mode

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

IR Function Duplex

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

TX, RX inverting enable

This item allows 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.

Onboard Parallel Port

This item allows you to determine onboard parallel port controller I/O address setting.

Onboard Parallel Port 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.

ECP Mode Use DMA

This item allows you to select a DMA channel for the parallel port for use during ECP mode.

EPP Mode Select

This field allows you to select EPP port type between 1.7 or 1.9.

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
> Game Port (200-207H)

4.7   Power Management Setup

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software
Power Management Setup

ACPI Function	Disabled	Item Help
Power Management	Press Enter	Menu Level ➢
ACPI Suspend Type	S1 (POS)	
PM Control By APM	Yes	
Video Off Option	Suspend -> off	
Video Off Method	Blank Screen	
Modem Use IRQ	3	
Soft-Off by PWRBTN	Instant – off.	
Wake-Up Events	Press Enter	

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

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

Power Management:

When click the "Enter" key on this selection field, the following setup screen will be triggered:

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

Power Management

Disable	No power management. Disable all power saving 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**. Doze Mode = 1 min., Standby Mode = 1 min., Suspend Mode = 1 min., and HDD Power Down = 1 min.
User Defined	Allow 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.

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.

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.

Suspend Mode

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

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.

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.

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.

MODEM Use IRQ

This determines the IRQ in which the MODEM can use for power saving purpose. This mainboard has the ACPI feature designed on the board and it wills "wakeup" automatically when it detects the incoming modem Ring-in signal. Before you can use the Ring-in signal to wakeup your PC system, you have to install the "External" modem to your PC system and tell the PC system which serial port connects to the modem by selecting the IRQ in this field, (officially, COM 1 uses IRQ4, and COM 2 uses IRQ3)

Soft-Off by PWR BTN

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

Suspend Type: (Default setting: "Stop Grant")

This field allows to select the suspend type, you can choose the CPU Stop Grand Suspend or the PwrOn Suspend.

Wake Up Events:

When click the "Enter" key on this selection field, the following setup screen will be triggered:

		Item Help
VGA	OFF	
LPT & COM	LPT / COM	Menu Level ➤
HDD & FDD	ON	
PCI Master	OFF	
Wake Up On LAN/Ring	Disabled	
RTC Alarm Resume	0	
Date (of Month)	0	
Resume Time (hh:mm:ss)	0 0 0	
Primary INTR	ON	
IRQs Activity Monitoring	Press Enter	

VGA

When Enabled, you can set the VGA awakens the system.

LPT & COM

When you set to LPT & COM mode, any activity from one of the listed system peripheral devices or IRQs wakes up the system.

HDD & FDD

When you set to HDD & FDD mode, any activity from one of the listed system peripheral devices wakes up the system.

PCI Master

When you set to PCI Master mode, any activity from one of the listed system peripheral devices wakes up the system.

Wake Up On LAN/Ring

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.

RTC Alarm Resume

When enabled, you can use the following two fields to select the time and date to wake ups the PC system from power saving mode.

Date (of Month)

■ Resume Time (hh:mm:ss)

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

IRQs Activity Monitoring

The following is a list of IRQ's, **I**nterrupt **R**e**Q**uests, 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.

		Item Help
IRQ3 (COM 2)	Enabled	
IRQ4 (COM 1)	Enabled	Menu Level ➤
IRQ5 (LPT 2)	Enabled	
IRQ6 (Floppy Disk)	Enabled	
IRQ7 (LPT 1)	Enabled	
IRQ8 (RTC Alarm)	Disabled	

IRQ9 (IRQ2 Redir)	Disabled	
IRQ10 (Reserved)	Disabled	
IRQ11 (Reserved)	Disabled	
IRQ12 (PS/2 Mouse)	Enabled	
IRQ13 (Coprocessor)	Enabled	
IRQ14 (Hard Disk)	Enabled	
IRQ15 (Reserved)	Disabled	

3.8   PNP/PCI CONFIGURATION

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software
PnP/PCI Configuration

		Item Help
PnP OS Installed	: No	Menu Level ➢
Reset Configuration Data	: Disabled	
Resources Controlled By	: Auto (ESCD)	
x IRQ Resources	: Press Enter	Select yes if you are
x DMA Resources	: Press Enter	using a plug and play
PCI/VGA Palette Snoop	: Disabled	capable operating
Assign IRQ For VGA	: Enabled	system. Select No if
Assign IRQ for USB	: Enabled	you need the BIOS to
		configure non-boot
		device.

BIOS Setup
___

PNP OS Installed

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

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.

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®98.

IRQ Resources

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

Legacy ISA Devices compliant with the original PC AT bus specification, requiring a specific interrupt (such as IRQ4 for serial port 1). PCI/ISA PnP Devices compliant with the Plug and Play standard, whether designed for PCI or ISA bus architecture.

DMA Resources
When resources are controlled manually, assign each system DMA channel as one of the following types, depending on the type of device using the interrupt.

Legacy ISA Devices compliant with the original PC AT bus specification, requiring a specific interrupt (such as IRQ4 for serial port 1). PCI/ISA PnP Devices compliant with the Plug and Play standard, whether designed for PCI or ISA bus architecture.

PCI/VGA Palette Snoop

Leave this field at *Disabled* all the time

Assign IRQ For VGA/USB:

Enable/Disable to assign IRQ for USB/VGA

4.9   PC Health Status

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PC Health Status

Current CPU Temp.	40°C/104°F	Item Help
Current System Temp.	22°C/71°F	
Current CPUFAN1 Speed	5080 RPM	Menu Level ➢
Current CPUFAN2 Speed	0 RPM	
Vcore	1.83 V	
2.5V	2.57 V	
3.3V	3.38	
5V	4.92 V	
12V	12.48V	

The table above allows you to monitor the PC system healthy status. You can check on the related field and monitor the status like voltage, Temperature … etc.

Current CPU Temp.

This field will show you the current CPU temperature

Current System Temp.

This field will show you the current temperature inside the PC system.

Current CPUFAN1 Speed

This field will show you the current CPU Cooling FAN1 speed.

BIOS Setup

Current CPUFAN2 Speed

This field will show you the current CPU Cooling FAN2 speed.

Vcore

This field and the files blow show you the current system voltage

3.10 Frequency/Voltage Control

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software
Frequency/Voltage Control

Auto Detact DIMM/PCI Clk	Disabled	Item Help	
Spread Spectrum	Disabled		
Clock By Slight Adjust	100	Menu Level	➢

Auto Detect DIMM/PCI Clk

When "Enabled" is selected, the mainboard will detect the presence of devices on DIMM and PCI slots. When there is no device presented on some of the PCI or DIMM connector, the clock on the related DIMM and PCI slot will be disabled to reduce the Electro-Magnetic Interference (EMI).

Spread Spectrum

When Spread Spectrum is enabled, the EMI radiation on this mainboard will be reduced.
Clock By Slight Adjust

You can use this field to adjust the front side system bus clock speed of the CPU. The adjustment of the clock frequency in this field is +/- 1MHz increment so you can fine-tune the system performance.

3.11 Load Optimized Defaults

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Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	**Load Optimized Defaults**
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving
PC Health Status	
ESC : Quit F10 : Save & Exit Setup	↑↓→← : Select Item
Time, Date, Hard Disk Type ...	

There is the CMOS memory on the mainboard that can be used to store the system settings. In case that you don't know how to use the Award BIOS CMOS Setup Utility to select the settings, you may use this field to load the optimized default which is defined in the system BIOS. Basically, our engineer recommends the Optimized Default and it will give a series of parameters for ensuring the best reliability and performance.

If you lost the CMOS data or you don't know how to complete the setup procedure, you may use this option to load the Optimized default values from the BIOS default table.

In case that the CMOS data is corrupted, or if you made some CMOS setting and found that the PC system becomes very unstable, you should try to load the optimized default value first and then re-configure step by step again.

3.12 SET SUPERVISOR PASSWORD

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software

Standard CMOS Features	Frequency / Voltage Control

Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	**Set Supervisor Password**
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving
PC Health Status	

ESC : Quit	↑↓→← : Select Item
F10 : Save & Exit Setup	

Time, Date, Hard Disk Type ...

The "SUPERVISOR PASSWORD" is for you to control unauthorized access to your BIOS CMOS Setup or Booting into the your PC system. The Supervisor Password option is used together with the Security Option in section.

When "Setup" is selected in Security Option:
If you want to change the BIOS setting, you will have to key-in the Supervisor Password so that you can start the BIOS CMOS Setup Utility and change the system setting..

When "System" is selected in Security Option:

When turn on the PC system, it will request you to enter the Password in order to boot up your system. Without the correct password, the PC system will stop and the operation system will not be loaded.

3.13 SET USER PASSWORD

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Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	**Set User Password**
Power Management Setup	Save & Exit Setup

PNP/PCI Configuration PC Health Status	Exit Without Saving
ESC : Quit F10 : Save & Exit Setup	↑↓→← : Select Item
Time, Date, Hard Disk Type ...	

The User Password can be used to check the user's authority. However, this password entry is different from the "SUPERVISOR PASSWORD" mentioned in previous section. The User Password will have different function according to the "Supervisor Password" and the "Security Option" setup in Section 4.5:

A. When there is the password stored in the "SUPERVISOR PASSWORD"

1. When "Setup" is selected in Security Option:
When you use the "User Password" to log into the BIOS setup program, you can only select "User Password", "SAVE & EXIT SETUP" and "EXIT WITHOUT SAVING" from the main menu. (Using Supervisor Password to log into the PC system, you will have the complete right to on all BIOS settings.)

2. When "System" is selected in Security Option:

When turn on the PC system, it will request you to enter the Password. Without correct password, PC system will stop and the operation system won't be loaded.

B. When there is no password stored in the "SUPERVISOR PASSWORD"

BIOS Setup

1. When "Setup" is selected in Security Option:

Users can use the "User Password" to log into the BIOS setup program, and they can make all the change in the BIOS setup program.

2. When "System" is selected in Security Option:

When turn on the PC system, it will request you to enter the Password. Without the correct password, the PC system will stop and the operation system will not be loaded.

4.14 SAVE & EXIT SETUP / EXIT WITHOUT SAVING

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password

```
┌─────────────────────────────┬──────────────────────────────┐
│                             │                              │
│  Integrated  Peripherals    │  Set  User  Password         │
│                             │                              │
│  Power  Management  Setup   │  Save  &  Exit  Setup        │
│                             │                              │
│  PNP/PCI  Configuration     │  Exit  Without  Saving       │
│                             │                              │
│  PC  Health  Status         │                              │
├─────────────────────────────┼──────────────────────────────┤
│  ESC  :  Quit               │  ↑↓→←  :  Select  Item       │
│  F10  :  Save  &  Exit  Setup                              │
├────────────────────────────────────────────────────────────┤
│           Time,  Date,  Hard Disk  Type ...                │
└────────────────────────────────────────────────────────────┘
```

Save & Exit Setup:

This option will save all setup values to CMOS RAM & EXIT SETUP routine. Move the selection bar to "SAVE & EXIT SETUP" and pressing "Enter" key, then types "Y" and "Enter" key, the values will be saved and all the information will be stored in the CMOS memory.

BIOS Setup

Exit Without Saving

This item exit the setup routine without saving any changed values to CMOS RAM, When you do not want to save your change to the CMOS memory, you may choose to run this option and the setting what you made in the BIOS setup routine will be abundant.