

Installation Procedures

The mainboard has several user-adjustable jumpers on the board that allow you to configure your system to suit your requirements. This chapter contains information on the various jumper settings on your mainboard.

To set up your computer, you must complete the following steps:

- Step 1 - Set system jumpers
- Step 2 - Install memory modules
- Step 3 - Install the Central Processing Unit (CPU)
- Step 4 - Install expansion cards
- Step 5 - Connect ribbon cables, cabinet wires, and power supply
- Step 6 - Set up BIOS software
- Step 7 - Install supporting software tools



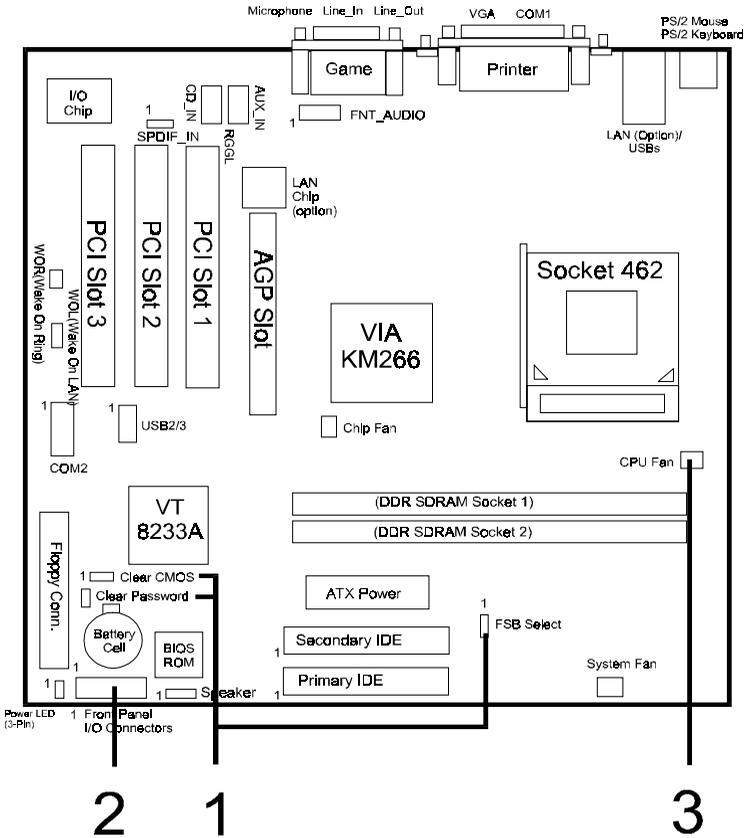
WARNING: Excessive torque may damage the mainboard. When using an electric screwdriver on the mainboard, make sure that the torque is set to the allowable range of 5.0 ~ 8.0kg/cm.

Mainboard components contain very delicate Integrated Circuit (IC) chips. To prevent static electricity from harming any of the sensitive components, you should follow the following precautions whenever working on the computer:

1. Unplug the computer when working on the inside.
2. Hold components by the edges and try not to touch the IC chips, leads, or circuitry.
3. Wear an anti-static wrist strap which fits around the wrist.
4. Place components on a grounded anti-static pad or on the bag that came with the component whenever the components are separated from the system.

Quick Reference (from Page 2-2 to 2-4) Mainboard Layout

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* When link to Line_Out jack, please use a speaker that with amplifier.

1). Clear CMOS, Clear Password, FSB Speed Select

CLR
(Clear CMOS)



Clear CMOS



Normal
(Default)

CLP
(Clear Password)



Clear
Password



Normal
(Default)

FSB
(FSB Select)



133MHz



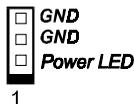
100MHz
(Default)

2). Front Panel Block Cable Connection

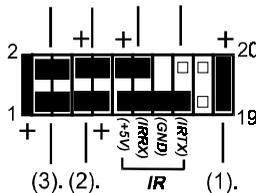
SPK1
(Speaker)



PL_LED
(Power LED, 3 Pins)



(4). (5). (6). +5V



- (6). Suspend Button
- (5). Power Button
- (4). Dual Power LED
- (1). Power LED
- (2). Reset Button
- (3). HDD LED

(If use dual power LED,
green: Pin2, yellow: Pin4;
otherwise, Pin2 is positive,
Pin4 is negative.)

3). CPU Fan Installation



CAUTION:

1. The heatsink and fan you installed must be approved by AMD.
2. The mainboard must be placed on a solid place to avoid shaking while install the heatsink and fan on the board.
3. The heatsink must be contact with the CPU top tightly.
4. Never run the processor without the heatsink properly and firmly attached. PERMANENT DAMAGE WILL RESULT!

Without sufficient air circulation, the CPU may overheat resulting in damage to both the CPU and the mainboard.

Damage may occur to the mainboard and/or the CPU fan if these pins are used incorrectly. These are not jumpers, do not place jumper caps over these pins.

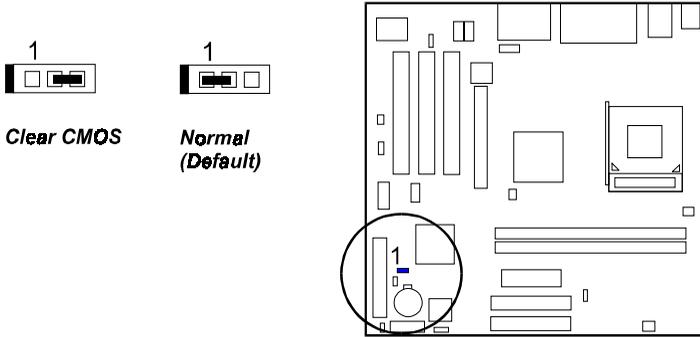
1). Set System Jumpers



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

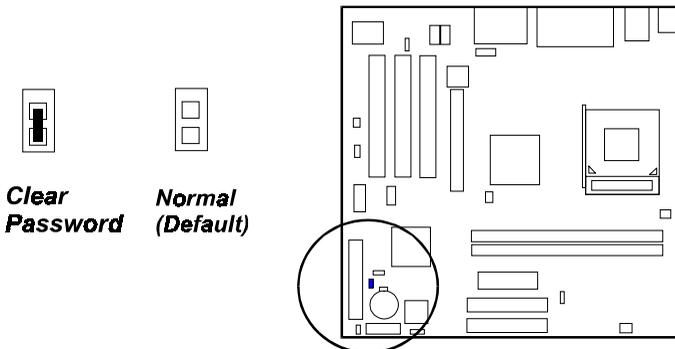
Clear CMOS: CLR

The CMOS RAM is powered by the onboard button cell battery. To clear the RTC data: (1) Turn off your computer (2) Place the jumper cap onto the pinpair 2-3 at least 6 seconds to clear CMOS (3) Place the jumper cap onto the pinpair 1-2 to Normal (4) Turn on your computer until CMOS checksum error appears (5) Hold down the **Delete** key when boots (6) Enter the BIOS Setup to re-enter user preferences.



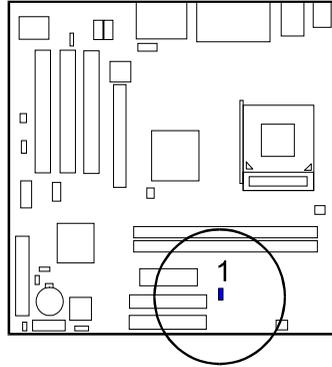
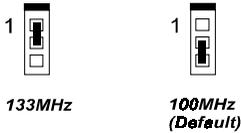
Clear Password: CLP

This jumper allows you to enable or disable the password configuration. You may need to enable it if you forget your password. To clear the password setting: (1) Turn off your computer (2) Place the jumper cap onto pinpair (3) Turn on your computer (4) Hold down the **Delete** key during bootup and enter BIOS Setup to clear password (5) Save the setting and exit (6) Turn off your computer.



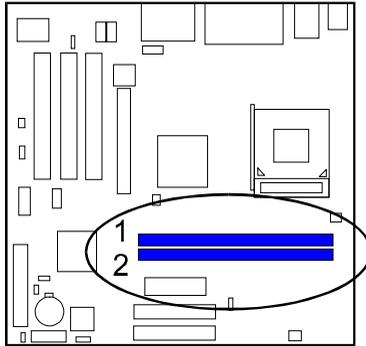
FSB Frequency Select: FSB

This jumper allows you to select the front side bus frequency of the board.



2). Install Memory Modules

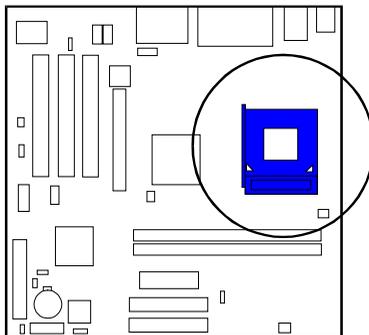
1. Locate the DIMM slots on the mainboard.
2. Install the DIMM straight down into the DIMM slot using both hands.
3. The clip on both ends of the DIMM slot will close up to hold the DIMM in place when the DIMM reaches the slot bottom.



Press the clips with both hands to remove the DIMM.

3). Install the CPU

The AMD CPU module resides in the socket on the board. Please follow the steps introduced below to complete the CPU installation.



CAUTION:

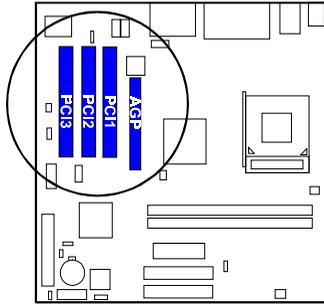
1. The heat sink and fan you installed must be approved by AMD.
2. The mainboard must be placed on a solid place to avoid shaking while install the heat sink and fan on the board.
3. The heat sink must be contact with the CPU top tightly.
4. Never run the processor without the heat sink properly and firmly attached. PERMANENT DAMAGE WILL RESULT!

To install the CPU, do the following:

1. Lift the lever on the side of the CPU socket.
2. Handle the chip by its edges and try not to touch any of the pins.
3. Place the CPU in the socket. The chip has two notches to correctly locate the chip. Align two notches of the processor with the two triangular marks on the socket. Do not force the chip. The CPU should slide easily into the socket.
4. Swing the lever to the down position to lock the CPU in place.
5. Install the cooling fan with heat sink on top of the installed CPU.
6. Place the mainboard (with the CPU, its cooling fan, and heat sink) into the system chassis and affix it with screws.

4). Install Expansion Cards

This section describes how to connect an expansion card to one of your system expansion slots. Expansion cards are printed circuit boards that, when connected to the mainboard, increase the capabilities of your system. For example, expansion cards can provide video and sound capabilities. The mainboard features one AGP(2X/4X) and three PCI bus expansion slots.



CAUTION: Make sure to unplug the power supply when adding or removing expansion cards or other system components. Failure to do so may cause severe damage to both the mainboard and expansioncards.

Always observe static electricity precautions.

Please read **Handling Precautions** at the start of this manual.

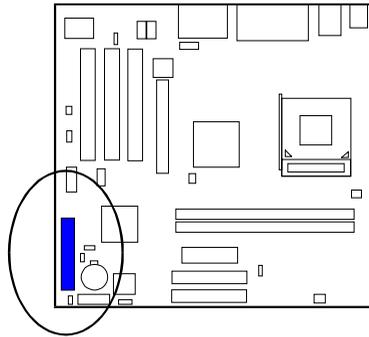
To install an expansion card, follow the steps below:

1. Remove the chassis cover and select an empty expansion slot.
2. Remove the corresponding slot cover from the computer chassis. Unscrew the mounting screw that secures the slot cover and pull the slot cover out from the computer chassis. Keep the slot cover mounting screw nearby.
3. Holding the edge of the peripheral card, carefully align the edge connector with the expansion slot.
4. Push the card firmly into the slot. Push down on one end of the expansion card, then the other. Use this rocking motion until the add-on card is firmly seated inside the expansion slot.
5. Secure the board with the mounting screw removed in Step 2. Make sure that the card has been placed evenly and completely into the expansion slot.
6. Replace the computer system cover.
7. Setup the BIOS if necessary.
8. Install the necessary software drivers for the expansion card.

5). Connect Devices

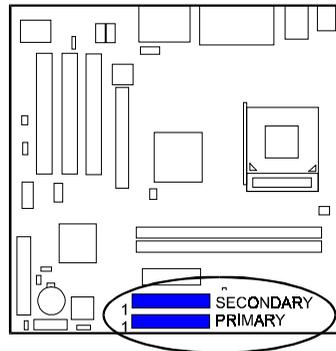
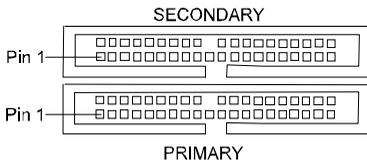
Floppy Diskette Drive Connector

This connector provides the connection with your floppy disk drive. The red stripe of the ribbon cable must be the same side with the Pin 1.



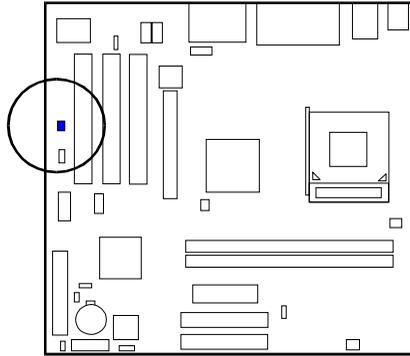
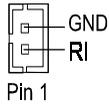
IDE Device Connectors

The two connectors, PRIMARY and SECONDARY, are used for your IDE hard disk drives, CD drives, LS-120 drives, or IDE ZIP drives. The red stripe of the ribbon cable must be the same side with the Pin 1.



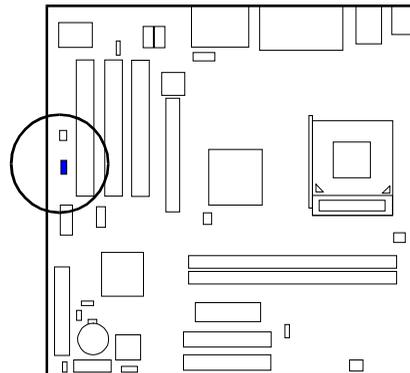
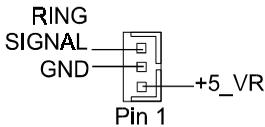
Wake-On-Ring Connector

The 2-pin connector allows you to link with your modem card which outputs a WOR signal; the system can be turned on from the power-off status by a remote phone call via the modem card.



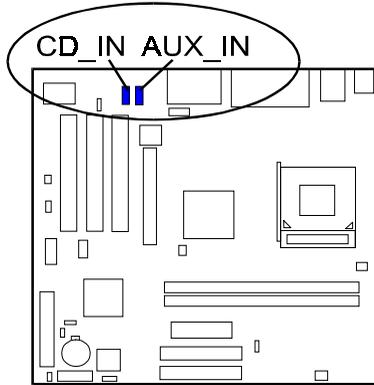
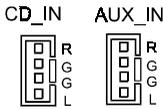
Wake-On-Lan Connector

This 3-pin connector allows the remove servers to manage the system that installed this mainboard via your network adapter which also supports WOL.



CD Audio-In Connectors

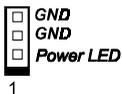
The CD_IN connector is used as a port for audio input from CD drive. The AUX_IN provided users with one extra audio input port from CD drive.



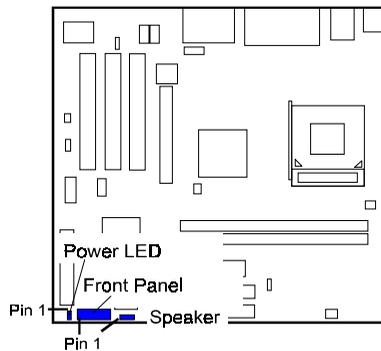
Front Panel Block, Power LED and Speaker Connector

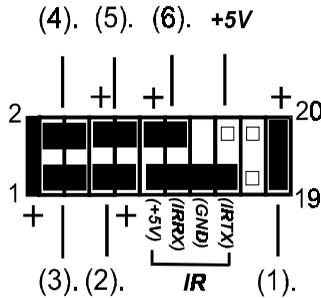
This block connector includes the connectors for linking with HDD LED, power LED (2 and 3 pins), dual power LED, power button, suspend button, reset button, and IR on the front panel of the system case. Please identify polarities of plug wires for the case speaker and LEDs. Please ask vendor about this information when you buy them and install the system by yourself. The plug wires polarities of these buttons will not affect the function.

PL_LED
(Power LED, 3 Pins)



SPK1
(Speaker)





NOTE: When a dual power LED is used, Pin 2 is for green one and Pin 4 is for yellow one. If single power LED installed, Pin 2 is for positive and Pin 4 is for negative.

- 1. Power LED (2-Pin)** is connected with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode. There is a 3-Pin Power LED connector on board for some cases that with a 3-pin plug.
- 2. Reset Button** is connected to the reset button. Push this switch to reboot the system instead of turning the power button off and on.
- 3. HDD LED** is connected to the IDE device indicator. This LED will blink when the hard disk drives are activated.
- 4. Dual Power LED** it is in green light when the system in power on status. It is in yellow light when the system in suspend mode.
- 5. Power Button** is connected with power button. Push this switch allows the system to be turned on and off rather than using the power supply button.
- 6. Suspend Button** is connected with suspend button. To enter the system into power saving mode, simply press this button when the system is in full-on mode.

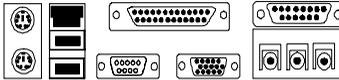
Speaker is connected with the case speaker.

IR is a 4-pin connector that is used for linking with your ID device to allow transmission of data to another system that also supports the IR feature. An IR module mounts to a small opening on system cases that support it.

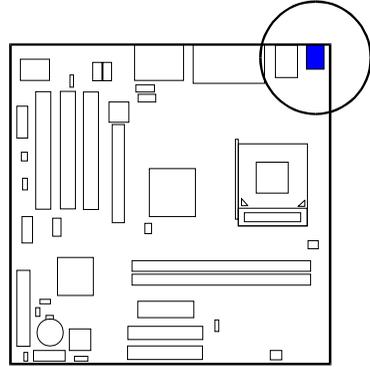
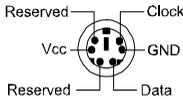
PS/2 Keyboard and Mouse Connector

These two 6-pin female (PS/2 keyboard is purple color and PS/2 mouse is green color) connectors are used for your PS/2 keyboard and PS/2 mouse.

PS/2 Mouse



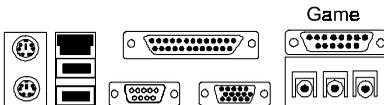
PS/2 Keyboard



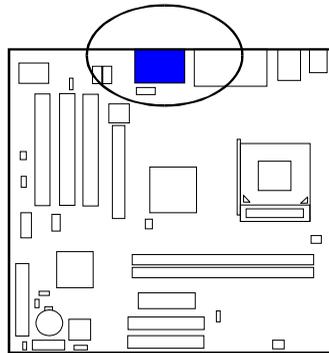
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Game/MIDI Connector

This 15-pin female gold-colored connector allows you to connect game joysticks or game pads. Connect MIDI devices for playing or editing audio.

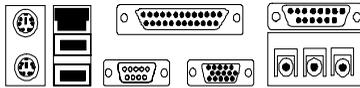


Game

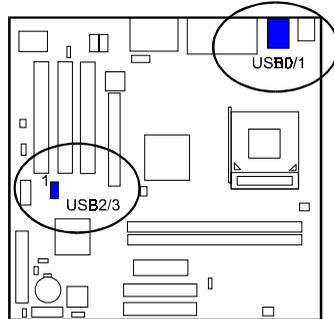


Universal Serial Bus Connectors

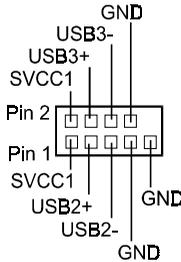
These two black jacks are integrated on the rear edge of the board for linking with USB devices. This board has a pinhead, USB2/3, for two extra USB ports that either on front or rear panel.



2 USBs

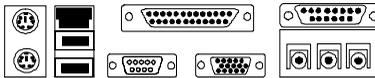


The figure below is the pin assignment of the USB2/3.



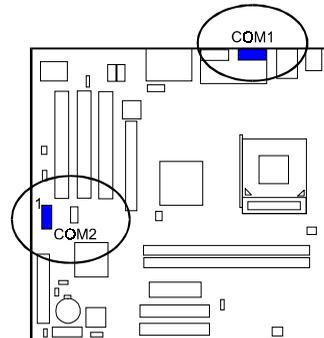
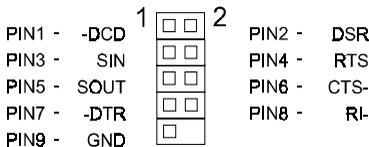
Serial Port Connectors

COM1 (9-pin D-sub male connector with teal color) and COM2 (9-pin male connector) allow you to connect with your devices that use serial ports, such as a serial mouse or an external modem.



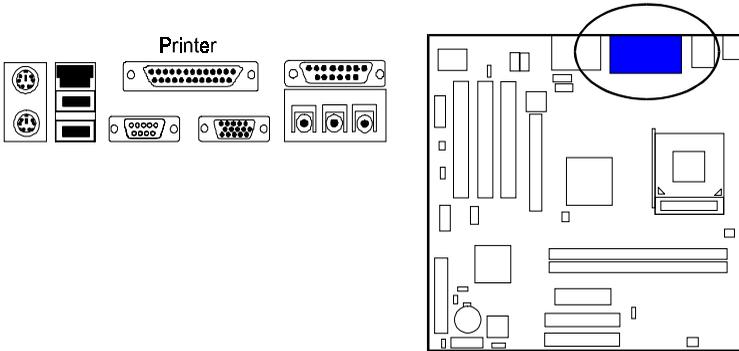
COM1

COM2 Port



Printer Connector

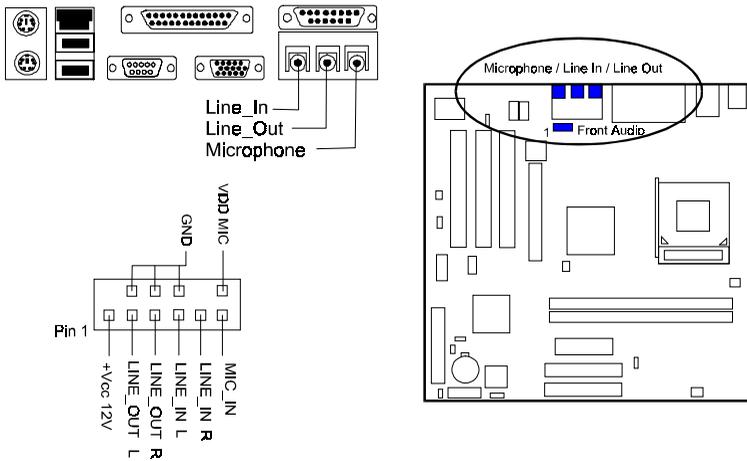
This 25-pin D-Sub female burgundy-colored connector is attached to your printer.



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Audio I/O Jacks

LINE_OUT (lime) can be connected to headphones or preferably powered speakers. LINE_IN (light blue) allows tape players or other audio sources to be recorded by your computer or played through the LINE_OUT. MIC_IN (pink) allows microphones to be connected for voice input. The mainboard also provides you with a front panel audio port connector, FNT_AUDIO, when needed. Its pin definitions were presented below.



LAN Connector (optional)

The optional LAN jack is connected to the LAN cable.

