

Features

- Full supports for the Pentium Pro processors and OverDrive Processors using Socket 8 from 150MHz to 200MHz
- CPU bus frequencies up to 66 MHz
- Intel 82440FX chipset, PCI Rev 2.1 compliant
- Supports wide range of DRAMS from 8MB to 384MB including:
 - FPM, EDO, and BEDO DRAM Types
 - 50, 60, and 70ns DRAM speeds
 - DRAM supports ECC or Parity function
 - Supports 6pcs SIMM DRAM Socket
- Supports 4PCI and 4ISA Add-In slots
- Integrated Fast IDE Controller
 - PIO Mode 4 transfers timing
 - PCI IDE Bus Master Support
 - Supports 2 IDE Connectors for the maximum of 4 IDE Drives (up to 8.4GB for each IDE device)
- On-board Super I/O Controller
 - One floppy port (include 3.5-inch, 1.2MB, 3 Mode function)
 - Two high speed UART ports (16550 compatible)
 - One parallel port with SPP/EPP/ECP capabilities
 - Integrated USB (Universal Serial Bus) controller w/ 2 USB ports
 - PS/2 mouse function
- Supports Power Management function
- Supports Award Plug & Play BIOS with Flash memory

Mainboard Layout with Default Settings

The default settings of the following figure is for the Pentium Pro 180/60.

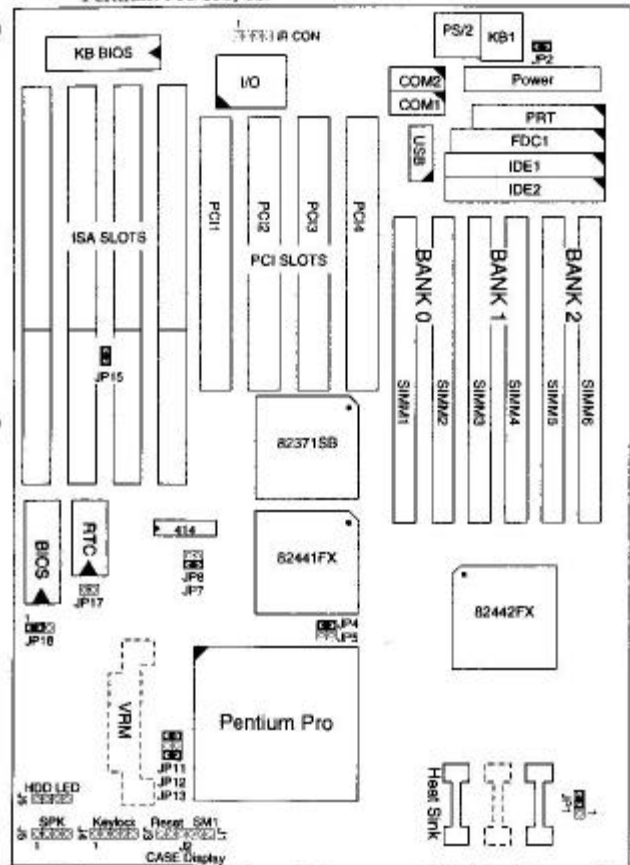




Figure 1-1. Motherboard Layout

Chapter 2 Hardware Setup



This chapter includes sections of setting up jumpers on the motherboard, the system memory configuration, the cache memory configuration, and attaching the connectors. Refer back to this chapter when you need to upgrade or reconfigure your system and remember to turn off the power of the system as well as all peripheral devices before performing any work on the system.

Symbols used in this chapter are described below:

For 2-pin jumper:

-  - Close the jumper by inserting the jumper cap over the two pins of the jumper.
-  - Open the jumper by removing the jumper cap.

For 3-pin jumper:

-  - Close pins 1 and 2 with a jumper cap.
3 2 1
-  - Close pins 2 and 3 with a jumper cap.
3 2 1

CPU Type Configuration

Set the motherboard jumpers JP4, JP5, JP7, JP8, and JP11-JP13 according to the CPU type as shown in the following figures.

CPU 2.5X Clock Setting

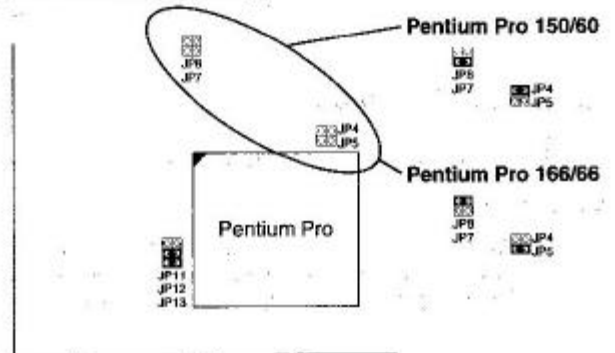


Figure 2-1. CPU Type Configuration

CPU 3.0X Clock Setting

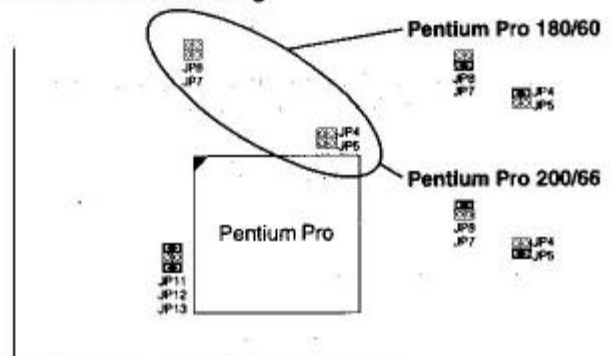


Figure 2-2. CPU Type Configuration

System Memory Configuration

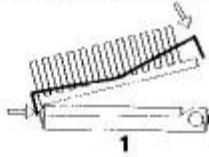
This 82440FX motherboard supports 72-pin SIMMs of 4MB, 8MB, 16MB, or 32MB to form a memory size between 8MB to 384MB. Each bank must have 2 pcs of DRAM modules (w/i same size and type) installed. 82440FX chipsets provide "Table-Free" function. It means that users can install DRAM with any configuration and in any bank, and that is why the DRAM table is not needed.

Cooling FAN Settings

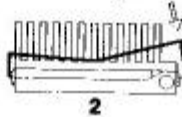
Note: Install a fan facing the heat sink, for better cooling effect,

Installation

1. Place CPU into your socket and put CPU cooler on top of CPU as shown in the following drawing. Slide one side hole of clip into the key way of the socket, then



2. Press another side hole of clip and slide into socket key way as shown in the following drawing

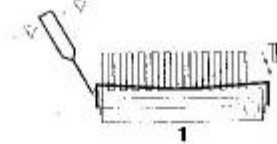


3. Complete the installation.

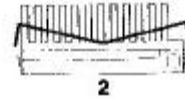


Removal

1. Insert your screw driver into one side hole of the clip and push, as shown in the following drawing:



2. Finished as in the following drawing.



Jumper Settings

Factory Fixed Jumpers

The following jumpers are set by the factory.

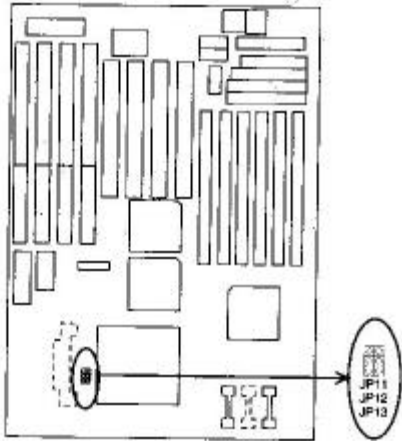
Jumpers	Factory settings
JP18	Factory setting at 1-2
JP1	Factory setting at 2-3
JP2	Factory setting at Short

JP11, JP12, JP13: Bus Ratio Select

Set these jumpers according to your CPU clock.

	2X	2.5X	3X	3.5X
JP11	● ●	○ ○	● ●	○ ○
JP12	● ●	● ●	○ ○	○ ○
JP13	● ●	● ●	● ●	● ●
	4X	4.5X	5X	5.5X
JP11	● ●	○ ○	● ●	○ ○
JP12	● ●	● ●	○ ○	○ ○
JP13	○ ○	○ ○	○ ○	○ ○

Notice that the cap colors of JP11~JP13 are RED.



JP17: Clear CMOS Data

Clear the CMOS memory by shorting this jumper momentarily; then remove the cap to retain new settings.

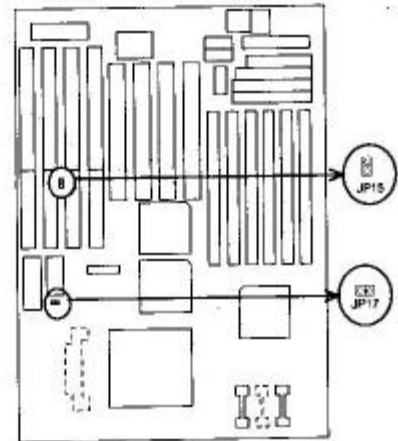
COMS Data	JP17
Clear Data	Close
Retain Data (default)	Open

JP15: ISA Clock Select

This jumper sets the ISA clock of different CPUs.





Clock	JP15
PCI Clock/3	Open
PCI Clock/4 (default)	Close

Notice that the cap color of JP15 is RED.

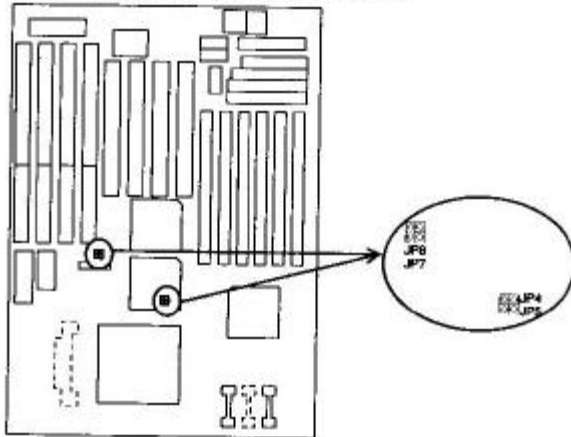


JP4, JP5, JP7, JP8: External Bus Frequency Select

These 4 jumpers instructs the clock generator what frequency to send to the CPU. Set these jumpers as shown, according to the CPU's internal clock speed.

Settings	JP4 JP5	JP8 JP7
60MHz (default)		
66MHz		

Notice that the color of the cap is RED.



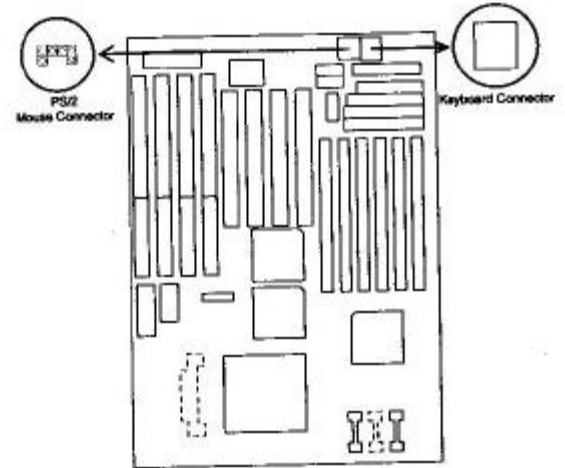
Connectors

KB1: Keyboard Connector

A 5-pin female DIN keyboard connector is located at the upper right corner of the motherboard. Plug the keyboard jack direct to this connector.

PS/2 Mouse Connector

Attach PS/2 mouse cable to this 6-pin connector.

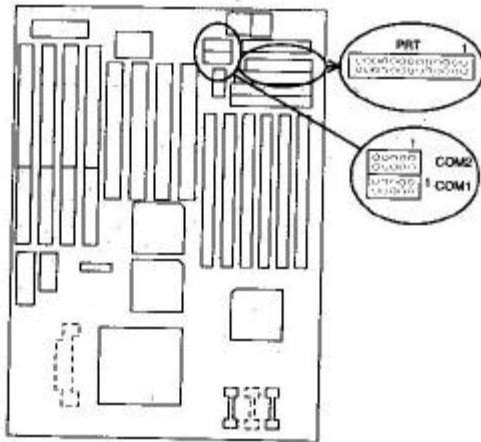


PRT: Parallel Port

The system board provides a 2x13-pin parallel port connector, PRT. Attach parallel port cable to this connector.

COM1 /COM2: Serial Port Connectors

The system board has two 2x5-pin serial port connectors, COM1 and COM2. Attach COM1/COM2 cables to these connectors.

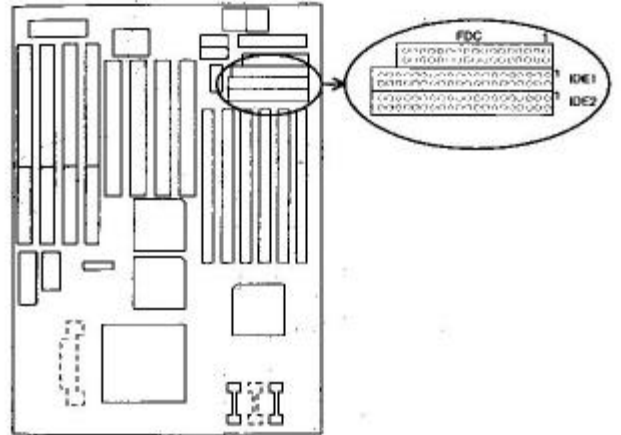


FDC: Floppy Drive Connector

The system board has a 2x17-pin floppy drive connector, FDC. Connect one end of a floppy drive cable to this connector and the other end to a floppy drive.

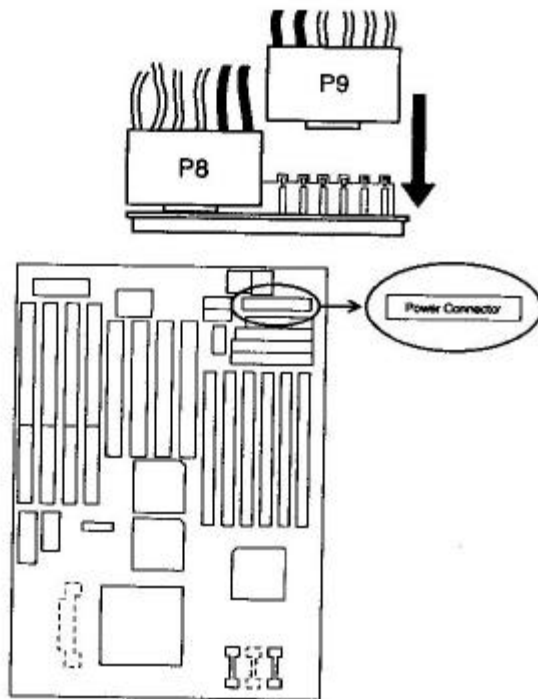
IDE1/IDE2: Primary/Secondary IDE Connectors

The system board has a 32-bit Enhanced PCI IDE Controller that provides for two HDD connectors, IDE1 (primary) and IDE2 (secondary).



Power Connector

The power connector has two 6-pin male header connectors. Plug the dual connectors from the power directly onto the board connector while making sure the black leads are in the center.



J1: SMI Switch

Toggle this jumper force the system to sleep and the system won't wake up until the hardware event is coming. (The BIOS Power Management setting must be Enabled.)

J2: CASE Display Connector

This connector is for CASE Digital Display.

J3: Reset Switch

The system board has a 2-pin connector for rebooting your computer without having to turn off your power switch. This prolongs the life of the system's power supply.

J4: Keylock Switch

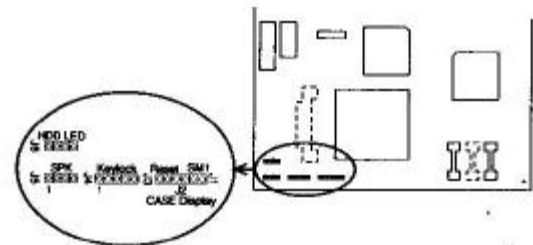
The keylock switch is a 5-pin connector for locking the keyboard for security purposes. (See the following drawing for jumper position, and pin1 is connected to Vcc.)

J5: Speaker Connector

The speaker connector is a 4-pin connector for connecting the system and the speaker. (See the following drawing for jumper position.)

J6: IDE LED Activity Light

These connectors connect to the hard disk activity indicator light on the case.



IR CON: Infrared Port Module Connector

The system board provides a 4-pin infrared connector—IR CON as an optional module for wireless transmitting and receiving. (The UART2 setting must set either ASKIR or HPSIR, refer to page 33 for more detail.) Pin 1 through 4 are Receive, GND, Transmit, and Vcc, respectively.

USB: USB Connector

This jumper connects to the USB cable to provide USB device. (USA function default is Disabled, refer to page 34 for more detail.)

VRM: VRM Connector (Option)

This VRM module provides CPU core voltage. It can be replaced by on-board design. If this slot is empty that means the circuit already onboard.

