

## 3 Jumpers and Connectors

### Setting the Jumpers

#### Set bus frequency and CPU frequency

Core CPU Freq. (MHz)	Host Clock	JP4	Clock Multiplier	JP2☆	JP3
75	50	short 1-2, 3-4	1.5	short 1-2	short 1-2
90	60	short 3-4	1.5	short 1-2	short 1-2
100	66	short 1-2	1.5	short 1-2	short 1-2
110	55	open	2	short 1-2	short 2-3
120	60	short 3-4	2	short 1-2	short 2-3
133	66	short 1-2	2	short 1-2	short 2-3
150	60	short 3-4	2.5	short 2-3	short 2-3
166	66	short 1-2	2.5	short 2-3	short 2-3
200	66	short 1-2	3	short 2-3	short 1-2

Table 3 -1. Host Clock, CPU type and Speed Settings



Cyrix 6x86 CPU does not have multiplier 1.5 and 2.5 . Leave JP2 open for Cyrix 6x86 CPU.



Cyrix 6x86 CPU and AMD K5 CPU use P-rating as the CPU frequency. Refer the following table to get the CPU core frequency. For AMD K5 CPU, check your CPU vendor for detailed information.

Cyrix 6x86	Core CPU Frequency (MHz)
P120+	100
P133+	110
P150+	120
P166+	133

### Set CPU Voltage Type

Single Voltage CPU	JP11, JP12 JP13, JP14	CPU Voltage	JP10		
	short 1-2 short 1-2 short 1-2 short 1-2	3.3V (STD) (default)	short 1-2		
		3.52V (VRE)	short 3-4		
Dual Voltage CPU	JP11, JP12 JP13, JP14	CPU I/O Voltage	JP10	CPU core Voltage	JP17★
	short 2-3 short 2-3 short 2-3 short 2-3	3.3V (STD)	short 1-2	2.51V	short 1-2
				2.73V	short 3-4
				2.91V	short 5-6
		3.52V (VRE)	short 3-4	2.51V	short 1-2
				2.73V	short 3-4
				2.91V	short 5-6

Table 3 -2 CPU Voltage Settings



Check your processor documentation for correct voltage setting to avoid the damage of CPU.

**Single Voltage CPU :** Intel Pentium and OverDrive series, Cyrix 6x86, AMD K5.

**Dual Voltage CPU:** Intel Pentium with MMX technology (P55C), Cyrix 6x86L, M2 dual voltage, AMD K5 dual voltage CPU.

## Set Cache Memory Size

<b>256KB</b> (256KB Cache on-board)	JP15 short	JP16 short 1-2
<b>256KB</b> (256KB Cache Module only)	JP15 open	JP16 short 1-2
<b>512KB</b> (on-board 256KB 32Kx32 Burst SRAM and 256KB Cache Module)	JP15 short	JP16 short 3-4
<b>512KB</b> (on-board 512KB 64Kx32 Burst SRAM only)	JP15 short	JP16 short 3-4
<b>0 KB</b>	JP15 open	JP16 open

Table 3 -3 Cache Memory Size Settings

## Set CMOS RAM Clear Switch

BIOS Setting values and password are stored in CMOS RAM. To clear CMOS Data, please open your computer chassis; short JP5; power on your system carefully ; power off your system ; close your computer chassis; and then CMOS data will be cleared.

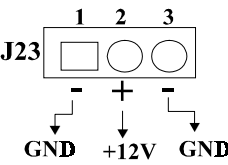
<b>Normal (default)</b>	JP5 short 2-3
<b>CMOS Data Clear</b>	JP5 short 1-2

Table 3 -4. CMOS RAM Clear Settings

## Green Function

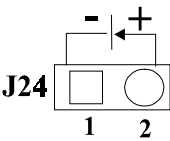
### *CPU Cooling Fan Control*

P5HX-A provides the ability to turn the CPU cooling fan off while the system is in low-power suspend mode. Please connect the CPU cooling fan to J23 and enable “CPU Fan Power Green” function in BIOS “Power Management Setup “ in order to make it work.



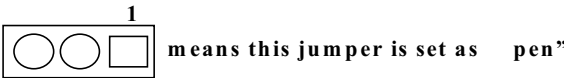
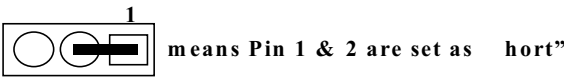
**Green Function Indicator**

Connect the **LED** to J24. The LED blinking indicates the system in low-power suspend mode.



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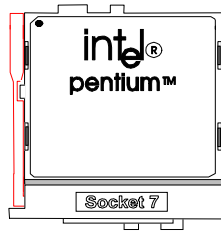
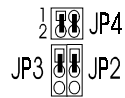
**Graphic Descriptions of Jumper Settings**



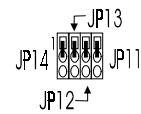
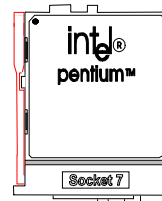
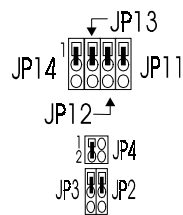
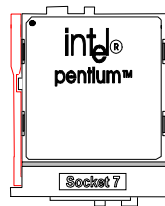
**CPU Type (The Jumpers block for most used CPU)**

1.

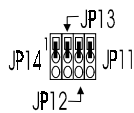
Intel Pentium 75MHz CPU (50MHz Host Clock) installed on board



2. Intel Pentium 90MHz CPU (60MHz Host Clock) installed on board

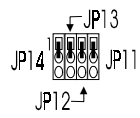
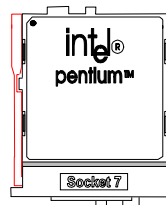


3. Intel Pentium 100MHz CPU (66MHz Host Clock) installed on board

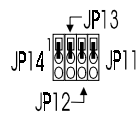
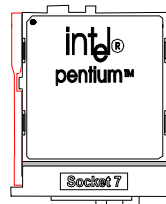


4. Intel Pentium 120MHz CPU (60MHz Host Clock) installed on board

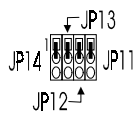
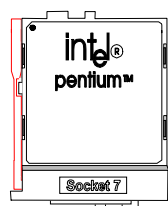
*P5HX-B*



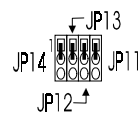
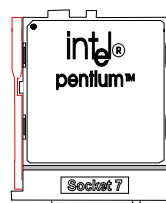
5. Intel Pentium 133MHz CPU  
(66MHz Host Clock) installed  
on board



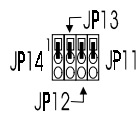
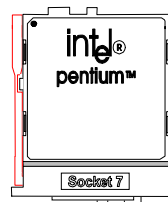
6. Intel Pentium 150MHz CPU  
(60MHz Host Clock) installed  
on board



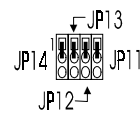
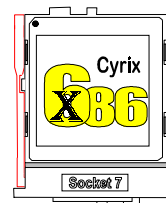
8. Intel Pentium 200MHz CPU  
(66MHz Host Clock) installed  
on board



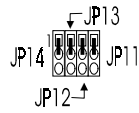
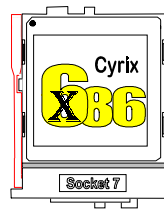
7. Intel Pentium 166MHz CPU  
(66MHz Host Clock) installed  
on board



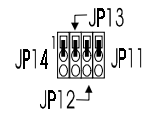
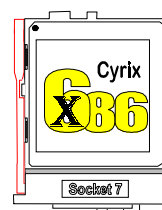
9. Cyrix 6X86 100MHz CPU  
(50MHz Host Clock) installed  
on board



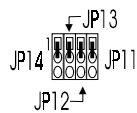
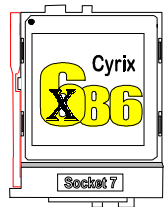
10. Cyrix 6X86 110MHz CPU  
(55MHz Host Clock) installed  
on board



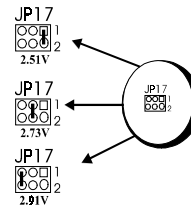
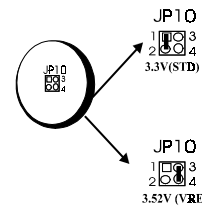
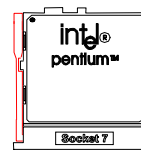
12. Cyrix 6X86 133MHz CPU  
(66MHz Host Clock) installed  
on board



11. Cyrix 6X86 120MHz CPU  
(60MHz Host Clock) installed  
on board

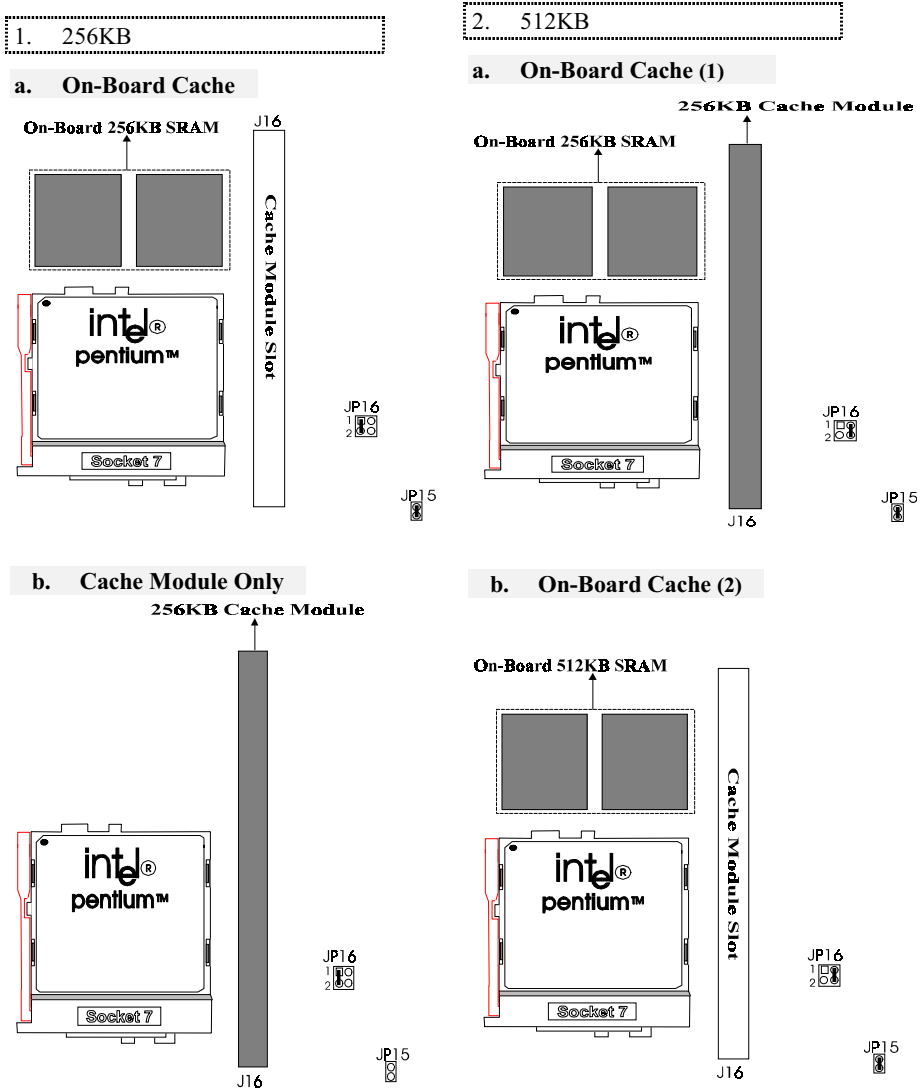


## CPU Voltage Selection

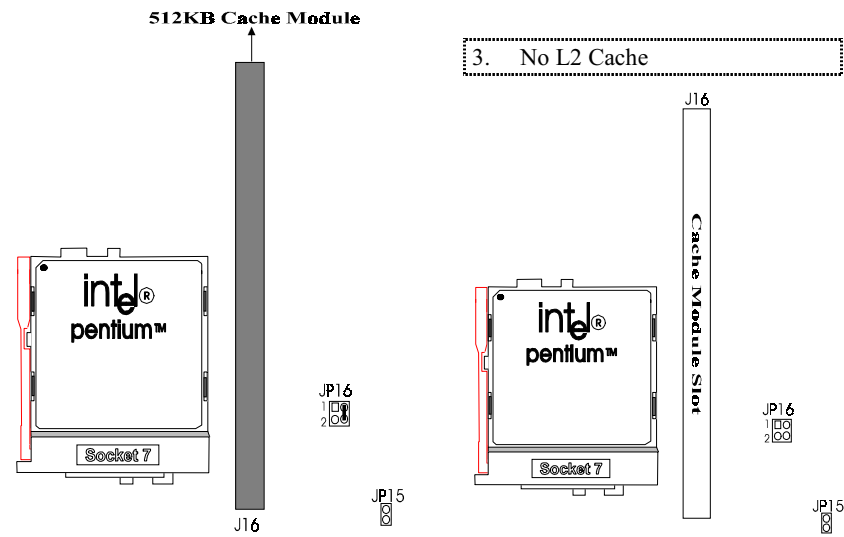




Cache Memory Size

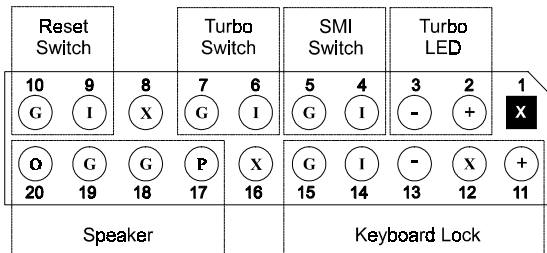
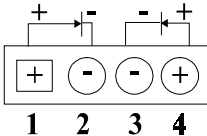


c. Cache Module Only



## Connectors

There are several connectors located on the P5HX-B. Their function is listed below.

Connector	Function
J1	PS/2 Keyboard Connector
J2	AT Keyboard Connector
J3	PS/2 Mouse Connector
J4	COM1/ COM3
J5	COM2/ COM4
J6	Printer Port
J9	FDD Connector
J10	Primary IDE Connector
J11	Secondary IDE Connector
J12	 <p> <b>X: No Function</b>    <b>I: Input</b>    <b>O: Output</b>  <b>G: GND</b>        <b>P: Power</b> </p>
J13	HDD LED 
J16	Cache Module Connector
J17	USB Header (for 2 channels of USB bracket)
J19	IR Header (IBM) (manufacture option)

Continued.....

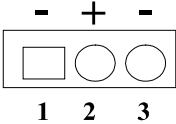
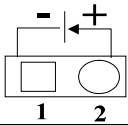
Connector	Function
J20	IR Header (Intel)
J21	PS/2 Mouse Header (for one connector of PS/2 mouse bracket)
J22	CPU Fan Connector ( Normal) (manufacture option)
J23	CPU Fan Connector ( Green Function)
	
J24	Green Function Indicator
	

Table 3 -5. Connectors

## Board Layout

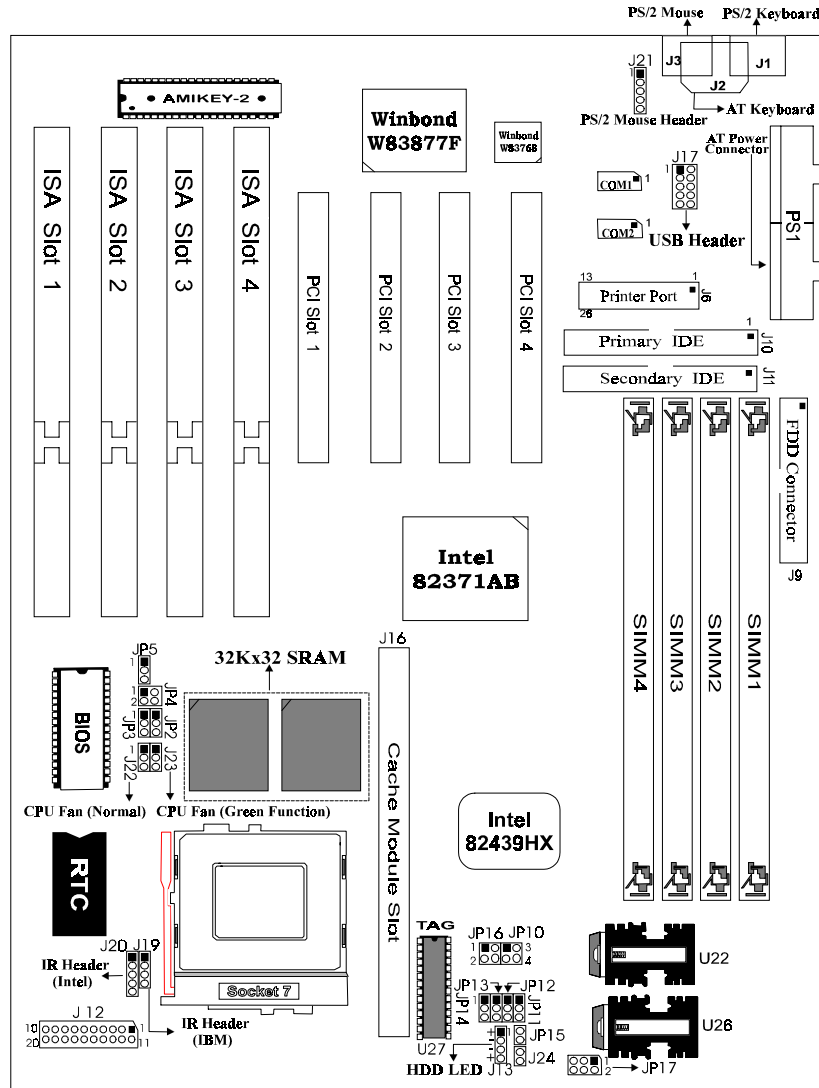


Figure 3-1. P5HX-B Mainboard Layout