

## 3 Jumpers and Connectors

### Setting the Jumpers

The table below summarizes the function and jumper settings of CPU type on the P6FX2-A. You can refer to the next section for the graphic descriptions.

Function		Jumper Settings	
CPU Type	Intel Pentium Pro 150MHz (60 MHz Host Clock) (2.5X)	JP4	open 1-2 short 3-4
		JP8	open 1-2 short 3-4 short 5-6 short 7-8
	Intel Pentium Pro 166MHz (66 MHz Host Clock) (2.5X)	JP4	short 1-2 open 3-4
		JP8	open 1-2 short 3-4 short 5-6 short 7-8
	Intel Pentium Pro 180MHz (60 MHz Host Clock) (3X)	JP4	open 1-2 short 3-4
		JP8	short 1-2 open 3-4 short 5-6 short 7-8
	Intel Pentium Pro 200MHz (66 MHz Host Clock) (3X)	JP4	short 1-2 open 3-4
		JP8	short 1-2 open 3-4 short 5-6 short 7-8

Table 3 -1. CPU Type Settings



*In order to get a balanced system, the user should use the same types of CPU at the same time while two processors are installed on the main board.*

## P6FX2-A

The following table shows all the jumpers' descriptions on P6FX2-A.

JP2	CMOS RAM Clear Jumper
JP4	Host Bus Frequency Selection Jumper
JP8	CPU/Bus Ratio Selection
J13, Pin 1-2	Clear Password

### **JP2: CMOS RAM Clear Jumper**

This 2X1 header is used to clear the CMOS RAM.

short 1-2 : To clear the CMOS RAM.

open 1-2 : Normal function. (Default Setting)

### **JP4: Host Bus Frequency selection Jumper**

This 2X2 header is used to select the Host Bus Frequency.

JP4		HOST FREQ (MHz)	PCI FREQ (MHz)	ISA FREQ (MHz)	REMARKS
1-2	3-4				
short	short	50	25	7.5	Note
short	open	66	33	8.33	
open	short	60	30	7.5	
open	open	55	27.5	7.5	Note



**DO NOT USE** this bus frequency if user wants to get higher performance.

### **JP8: CPU/Bus Ratio Select**

This 4X2 header is used to select the CPU/Bus Ratio.

*Note: The setting of this jumper will affect both of CPU #1 and CPU #2.*

JP8				Core Freq.
7-8	5-6	3-4	1-2	
short	short	short	short	2X
short	short	short	open	2.5X
short	short	open	short	3X
short	short	open	open	3.5X
short	open	short	short	4X

### **J13, pin 1-2: Clear Password**

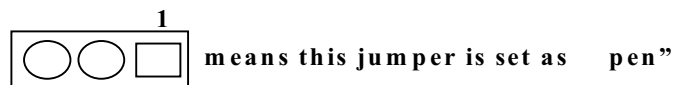
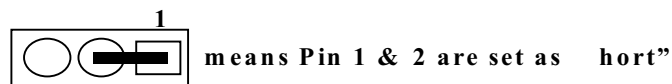
This jumper is used to clear the supervisor password.

short 1-2 : To clear Password

open 1-2 : Normal function. (Default Setting)

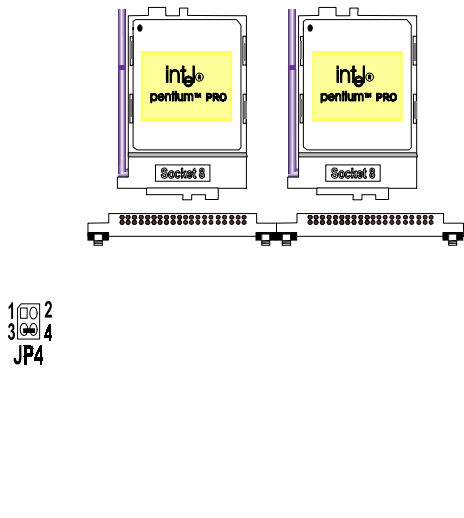
---

## **Graphic Descriptions of Jumper Settings**

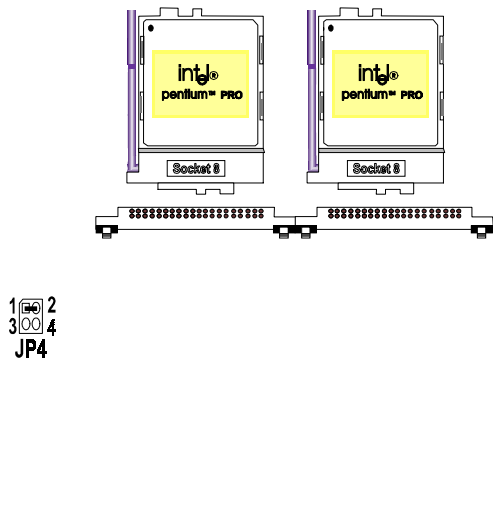


CPU Type

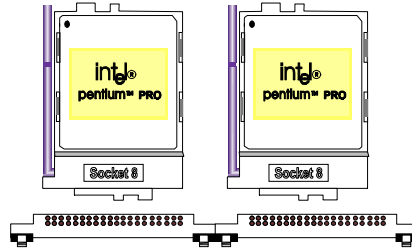
1. Intel Pentium Pro 150MHz CPU (60MHz Host Clock) (2.5X) installed on board



2. Intel Pentium Pro 166MHz CPU (66MHz Host Clock) (2.5X) installed on board



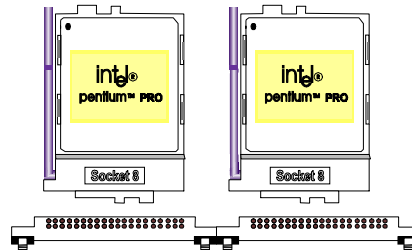
3. Intel Pentium Pro 180MHz CPU (60MHz Host Clock) (3X) installed on board



1 2  
3 4  
JP4

1 2  
3 4  
7 8  
JP8

4. Intel Pentium Pro 200MHz CPU (66MHz Host Clock) (3X) installed on board

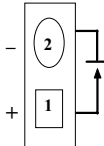


1 2  
3 4  
JP4

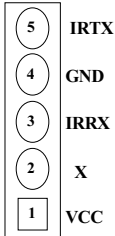
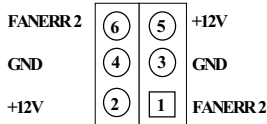
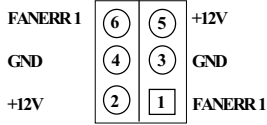
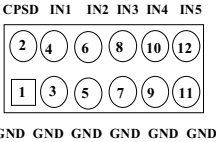
1 2  
3 4  
7 8  
JP8

Connectors

There are several connectors located on the P6FX2-A. Users can refer to the following diagram for the clear figure of connectors. The function is listed below.

Connector	Function																																								
J1	PS/2 Keyboard Connector																																								
J2	PS/2 Mouse Connector																																								
J3	COM 1 / 3 Port																																								
J4	Parallel Port Connector																																								
J5/J6	IDE Active LED																																								
																																									
J7	COM 2 / 4 Port																																								
J8	<table border="1"><thead><tr><th colspan="6">Keyboard Lock</th><th colspan="4">Speaker</th></tr></thead><tbody><tr><td>11 +</td><td>12 X</td><td>13 G</td><td>14 I</td><td>15 G</td><td>16 X</td><td>17 P</td><td>18 G</td><td>19 G</td><td>20 O</td></tr><tr><td>X 1</td><td>+ 2</td><td>- 3</td><td>I 4</td><td>G 5</td><td>X 6</td><td>G 7</td><td>X 8</td><td>I 9</td><td>G 10</td></tr><tr><td colspan="3">Power LED</td><td colspan="3">SMI</td><td colspan="4">Reset Switch</td></tr></tbody></table>	Keyboard Lock						Speaker				11 +	12 X	13 G	14 I	15 G	16 X	17 P	18 G	19 G	20 O	X 1	+ 2	- 3	I 4	G 5	X 6	G 7	X 8	I 9	G 10	Power LED			SMI			Reset Switch			
Keyboard Lock						Speaker																																			
11 +	12 X	13 G	14 I	15 G	16 X	17 P	18 G	19 G	20 O																																
X 1	+ 2	- 3	I 4	G 5	X 6	G 7	X 8	I 9	G 10																																
Power LED			SMI			Reset Switch																																			
	<div>X: No Function    I: Input    O: Output G: GND            P: Power</div>																																								
J9	FIR Connector																																								
	<table border="1"><tbody><tr><td>7</td><td>GND</td></tr><tr><td>6</td><td>VCC</td></tr><tr><td>5</td><td>IRR 3</td></tr><tr><td>4</td><td>VCC</td></tr><tr><td>3</td><td>IRITX</td></tr><tr><td>2</td><td>GND</td></tr><tr><td>1</td><td>IRRX</td></tr></tbody></table>	7	GND	6	VCC	5	IRR 3	4	VCC	3	IRITX	2	GND	1	IRRX																										
7	GND																																								
6	VCC																																								
5	IRR 3																																								
4	VCC																																								
3	IRITX																																								
2	GND																																								
1	IRRX																																								

Continued.....

Connector	Function
J10	IR Connector
	
J11	CPU Cooling Fan Connector for CPU #2
	
J12	CPU Cooling Fan Connector for CPU #1
	
J13	External Sensor Connector
	 <p><b>CPSD: Clear Password</b></p>
J14	Remote Power On Switch
J15	FDD Connector
J16	Primary IDE Connector
J17	Secondary IDE Connector

Continued.....

Connector	Function
J18	USB Header
	<div><div><div>GNDGNDUSBP0+USBP0-VCC</div><div><div>54321</div><div>109876</div></div><div>GNDGNDUSBP1+USBP1-VCC</div></div></div>
J19	Green Mode LED
	<div><div><div>-+</div><div>12</div></div><div><div></div><div></div></div></div>
PS1	ATX Power Supply Connector
	<div><div><div>3.3V3.3VGND5VGND5VGNDPw-On5VSB12V</div><div><div>12345678910</div><div>11121314151617181920</div></div><div>3.3V-12VGNDPS-OnGNDGNDGND-5V5V5V</div></div></div>
PS2	Standard Power Connector
	<div><div><div>5V5V5V-5VGNDGNDGNDGND-12V12V5VPWR-GD</div><div><div>121110987654321</div></div></div></div>

Table 3 -2. Connectors



---

## Installation Guide:

The P6FX2-A is a fully symmetric multiprocessor (SMP) system. It means that there is no master-slave relationship between these two processors. The users can base on the following guide lines to install the system:

### 1. Single Processor System:

The users can install a Pentium Pro (PPro) processor on any processor socket with related VRM (Voltage Regulator Module) installed. For example, the users can insert a PPro processor on U11 with a VRM installed on U17. (It's not necessary to install a VRM on U16 in this case) or insert a PPro processor on U10 with a VRM installed on U16. (It's also not necessary to install a VRM on U17 in this case)

### 2. Dual Processor System:

The users can install dual Pentium Pro processor to get ultra-performance from the P6FX2-A mainboard. The installation processes are very simple:

- 1) Install two Pentium Pro processors on U10 and U11.
- 2) Install CPU cooling fans on U10 and U11.
- 3) Install VRMs on U17 and U16.



*Please use Multiprocessor operating system (MP OS) to get benefit gaining from dual processors. Any OS that is MPS V1.1 \* compliant can be used on P6FX2-A mainboard. The known OSs which are MPS V1.1 compliant are : Windows NT, OS/2 SMP, SCO UNIX, Solaris , Unix ware, Netware SMP,.....*



*Multi-Processor specification, which released by Intel co., , defines a MP table that can be accessed by the operating system. The intent of this specification is to establish an MP platform interface standard that extends the performance of the existing PC/AT platform beyond the traditional single processor limit, while maintaining 100% PC/AT binary compatibility. The users can down load the detailed specification from Intel's web server.*

- 4) Set the proper Host Bus frequency (JP4) and CPU/Bus ration (JP8).

## Board Layout : (for PCB V1.1)

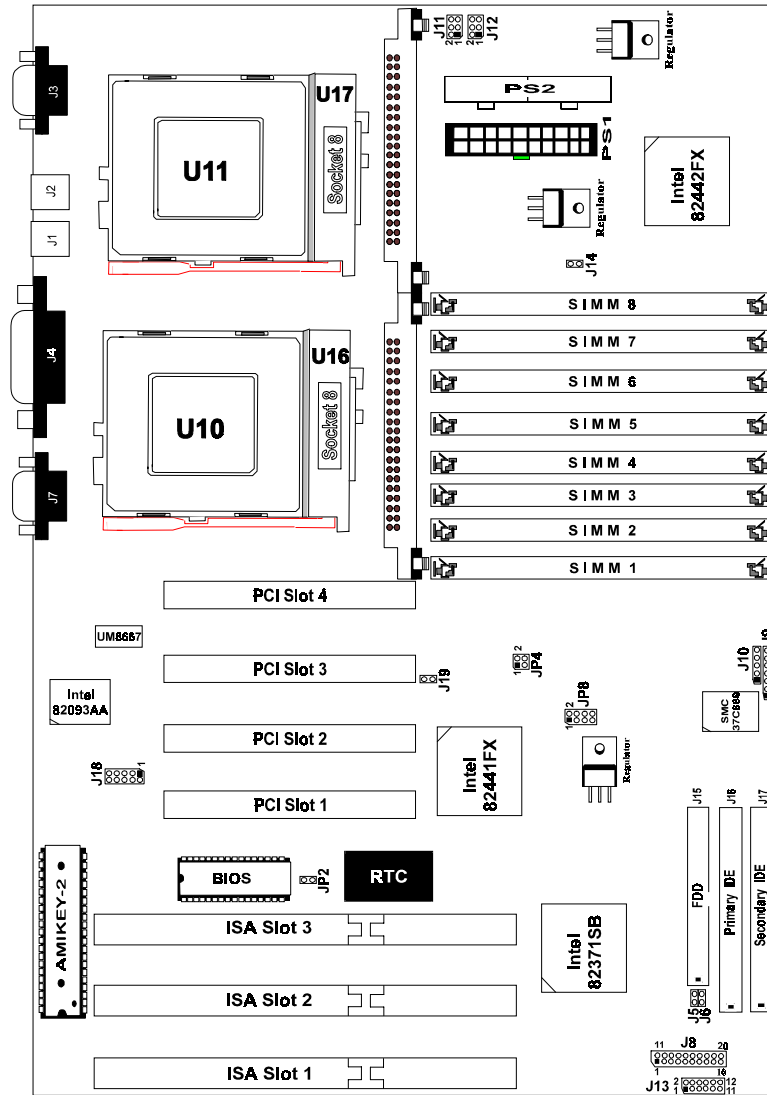


Figure 3 -1. P6FX2-A Mainboard Layout