

## 3 Jumpers and Connectors

### Setting the Jumpers

The table below summarizes the functions and jumper settings of each jumper on the TS54P AIO. You can refer to the next section (Graphic Descriptions of Jumper Settings) for the correct methods to set jumpers.

Function	Jumper Settings	
CPU Type <sup>†</sup>	Pentium 75MHz (Host Clock 50MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 open JP5 open JP10 open JP11 open
	Pentium 90MHz (Host Clock 60MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 3-4 JP5 open JP10 open JP11 open
	Pentium 100MHz (Host Clock 66MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 1-2, 3-4 JP5 open JP10 open JP11 open
	Pentium 120MHz (Host Clock 60MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 3-4 JP5 short JP10 open JP11 open
	Pentium 133MHz (Host Clock 66MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 1-2, 3-4 JP5 short JP10 open JP11 open

Continued.....

	Function	Jumper Settings
<b>CPU Type</b> <sup>☆</sup>	Pentium 150mhz (Host Clock 60MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 3-4 JP5 short JP10 short JP11 open
	Pentium 166MHz (Host Clock 66MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 1-2, 3-4 JP5 short JP10 short JP11 open
	Cyrix 6x86-P120+ (Host Clock 50MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 open JP5 open JP10 open JP11 open
	Cyrix 6x86-P133+ (Host Clock 55mhz) (U22 uses IMI 604 only)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 1-2 JP5 open JP10 open JP11 open
	Cyrix 6x86-P150+ (Host Clock 60MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 3-4 JP5 open JP10 open JP11 open
	Cyrix 6x86-P166+ (Host Clock 66MHz)	J10 short 4-5, 6-7, 19-20, 21-22 JP4 short 1-2, 3-4 JP5 open JP10 open JP11 open
	Future CPU (Reserved)	J10 VRM JP11 short
	<b>CPU Voltage</b>	+3.3V (from +3.3V Power Supply Unit)

Continued....

Function		Jumper Settings	
<b>CPU Voltage</b>	+3.3V (from on-board regulator)	JP6	short 1-2, 3-4
		JP27	short 1-2, 3-4
		JP50	short 1-2, 3-4, 5-6, 7-8 (U25 is not installed)
		JP50	open (U25 is installed)
	+3.14V ~ +3.46V	JP28	short 1-2
	+3.30V ~ +3.46V	JP28	short 3-4
	+3.45V ~ +3.60V	JP28	short 5-6
<b>Internal Cache</b>	Write-Back	JP25	short 1-2
	Write Through	JP25	short 2-3
<b>External Cache Memroy Size</b>	256KB (Pipelined Burst SRAM) (U17, U18 is installed)	JP1	short 1-2
		JP20	short 1-2
		JP21	short 1-2
		JP22	short 1-2
		JP23	short 2-3
		JP24	short 1-2
	256KB (Standard SRAM) (U9~U16 is installed)	JP1	short 1-2 (pure +3.3V) short 2-3 (+3.3V/5V mix-mode)
		JP20	short 1-2
		JP21	short 1-2
		JP22	short 2-3
		JP23	short 2-3
		JP24	short 1-2
	512KB (Standard SRAM) (U9~U16 is installed)	JP1	short 1-2 (pure +3.3V) short 2-3 (+3.3V/5V mix-mode)
		JP20	short 2-3
		JP21	short 1-2
		JP22	short 2-3
		JP23	short 1-2
		JP24	short 2-3
<b>System Clock</b>	PCICLK/4	JP26	short 2-3
	PCICLK/3	JP26	short 1-2
<b>On-Board Multi-I/O</b>	Enabled	JP7	short 1-2
	Disabled	JP7	short 2-3
<b>CMOS Mode</b>	Normal (default)	JP15	open
	CMOS Data Clear	JP15	short

Continued .....

Function		Jumper Settings	
<b>ECP DMA Selection ( for SMC37C665GT only)</b>	DMA 1	JP8	short 1-2
		JP9	short 1-2
	DMA 3	JP8	short 2-3
		JP9	short 2-3
<b>IR Selection</b>	Normal COM2/4	J12	short 5-6, 7-8
	IR Function Connector	J12	open

Table 3 -1. Jumper Settings

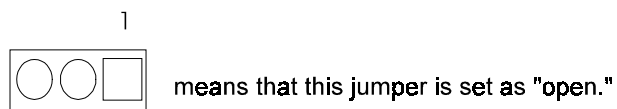
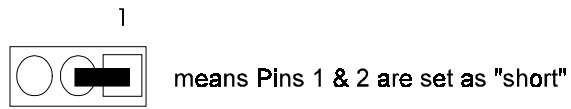
★: The table below presents the detailed jumper settings for different CPU clock. For example, if Pentium 100MHz CPU is installed, you should set Host Clock as 66MHz and CPU Core Clock as Host Clock x 1.5.

Function		Jumper Settings	
<b>Host Clock</b>	50 MHz	JP4	open
	55 Mhz (U22 uses IMI 604 only)	JP4	short 1-2
	60 MHz	JP4	short 3-4
	66 MHz (default)	JP4	short 1-2, 3-4
<b>CPU Core Clock</b>	Host Clock x 1.5	JP5	open
		JP10	open
	Host Clock x 2	JP5	short
		JP10	open
	Host Clock x 2.5	JP5	short
		JP10	short
	Host Clock x 3	JP5	open
		JP10	short

Table 3 -2. Jumper Settings of CPU Host & Core Clock

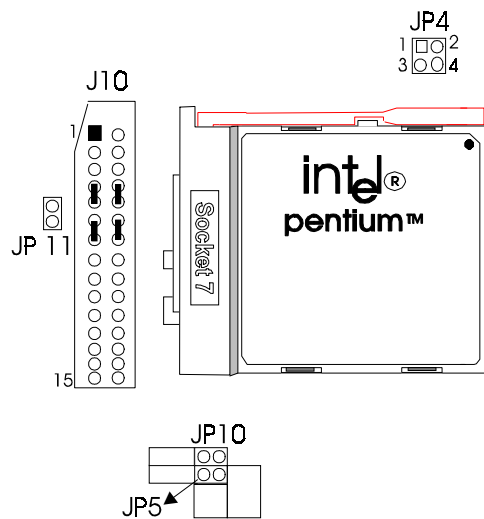
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## Graphic Descriptions of Jumper Settings

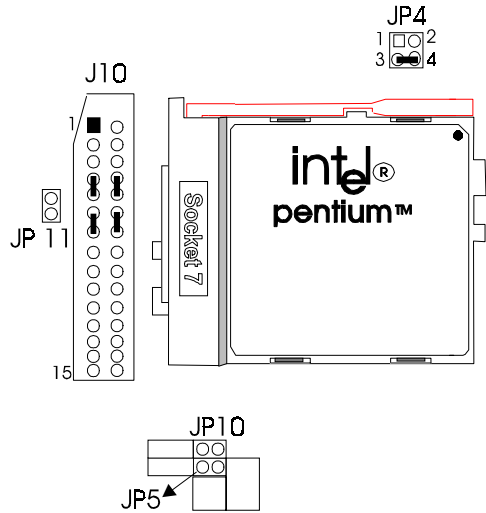


## CPU TYPE

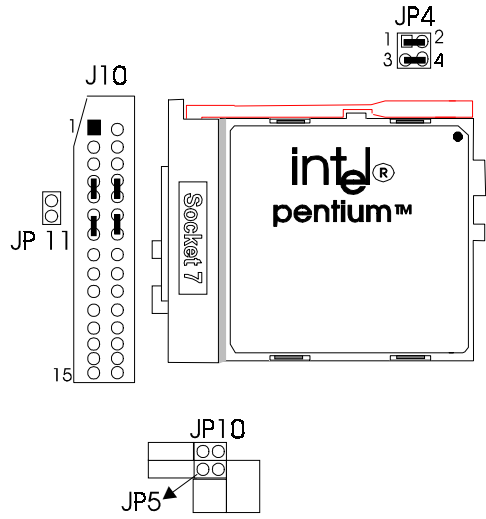
1. Pentium 75MHz (Host Clock 50MHz)



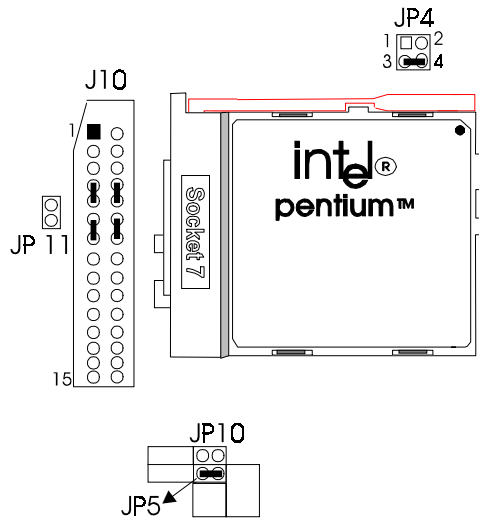
2. Pentium 90MHz (Host Clock 60MHz)



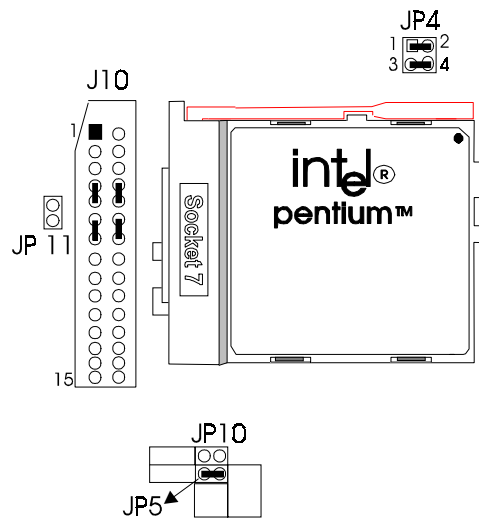
3. Pentium 100MHz (Host Clock 66MHz)



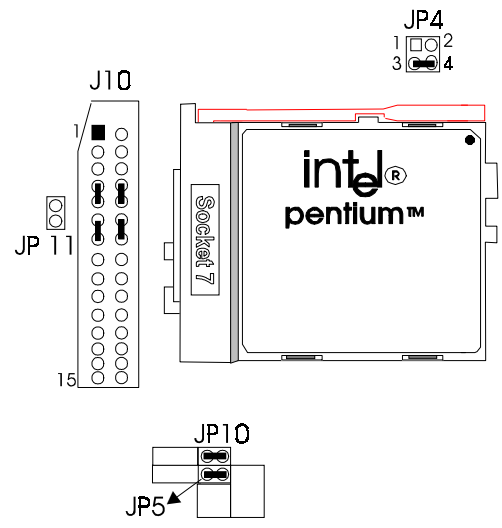
4. Pentium 120MHz (Host Clock 60MHz)



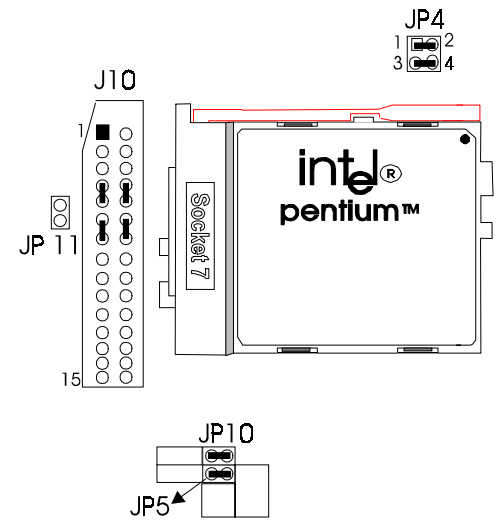
5. Pentium 133MHz (Host Clock 66MHz)



6. Pentium 150MHz (Host Clock 60MHz)

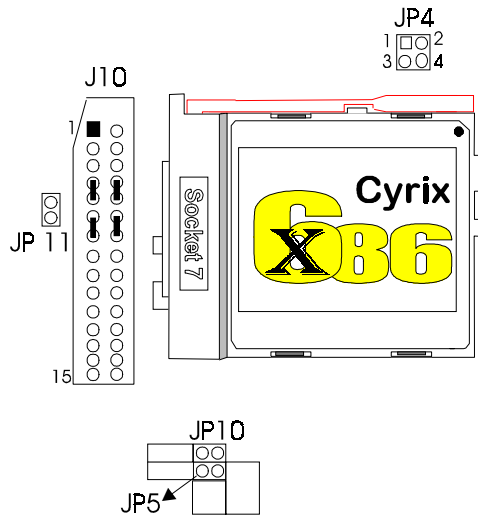


7. Pentium 166MHz (Host Clock 66MHz)

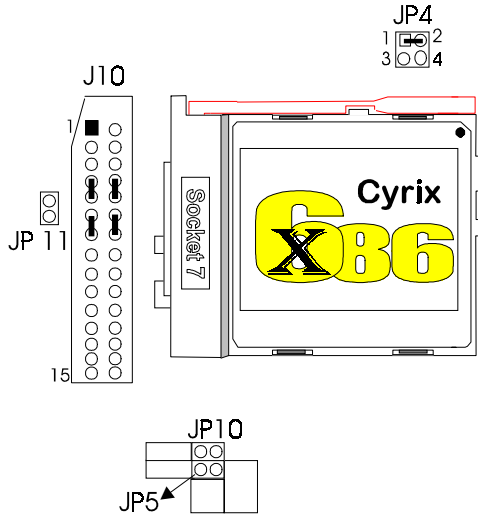




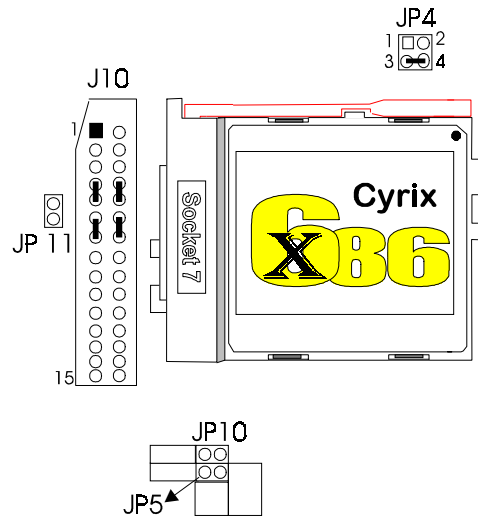
8. Cyrix 6X86-P120+ (Host Clock 50MHz)



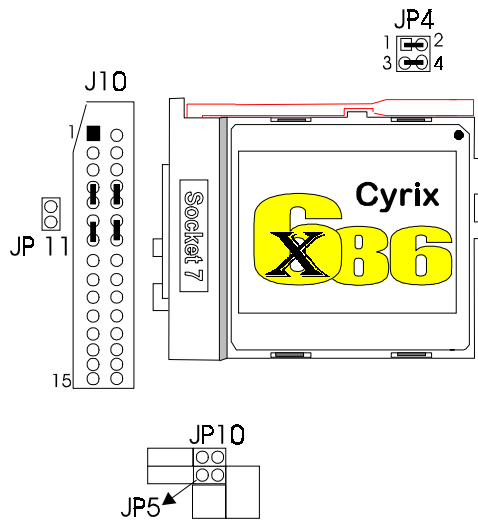
9. Cyrix 6X86-P133+ (Host Clock 55MHz) (U22 uses IMI604 only)



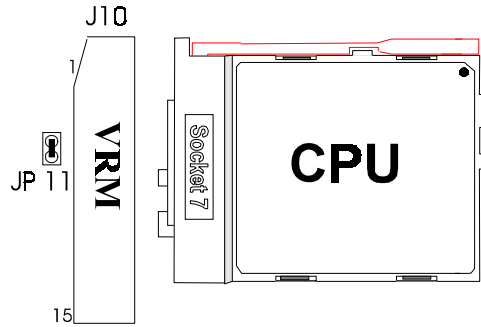
10. Cyrix 6X86-P150+ (Host Clock 60MHz)



11. Cyrix 6X86-P166+ (Host Clock 66MHz)

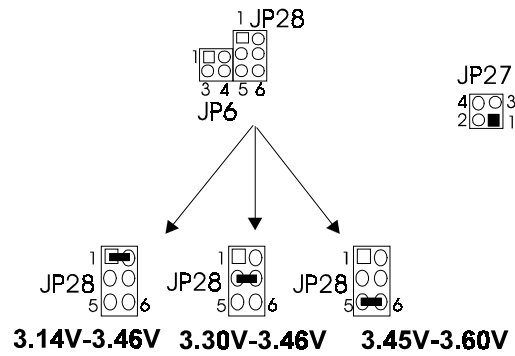
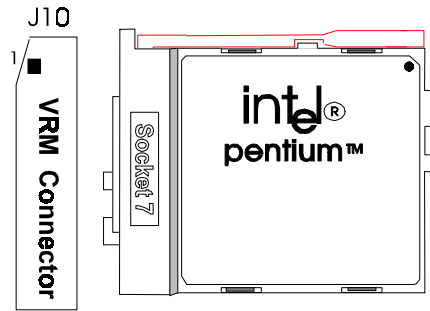


12. Future CPU (Reserved)

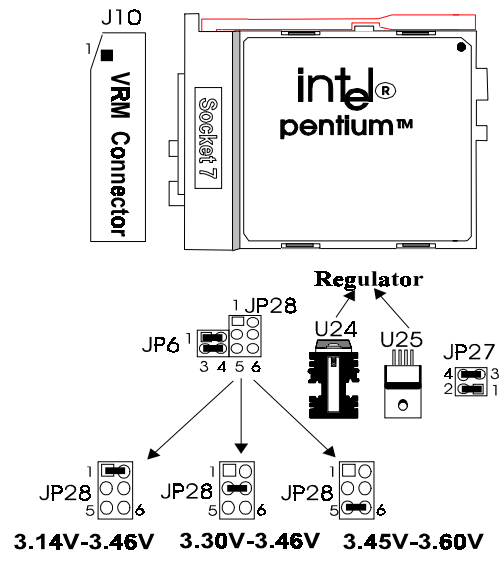


**CPU Voltage**

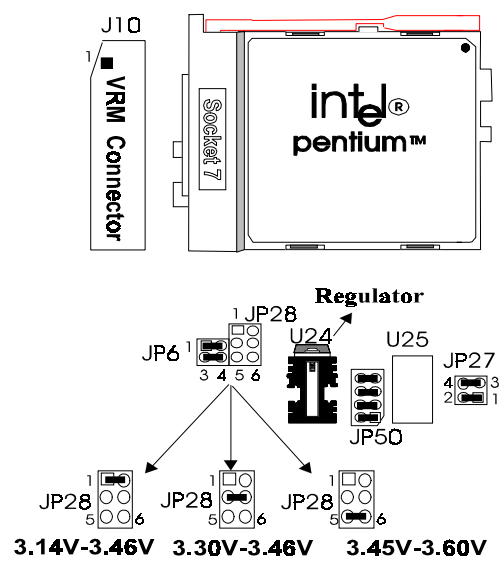
1. +3.3V (from +3.3V Power Supply Unit)



2. +3.3V (from on-board Regulator) ( if U25 is installed)

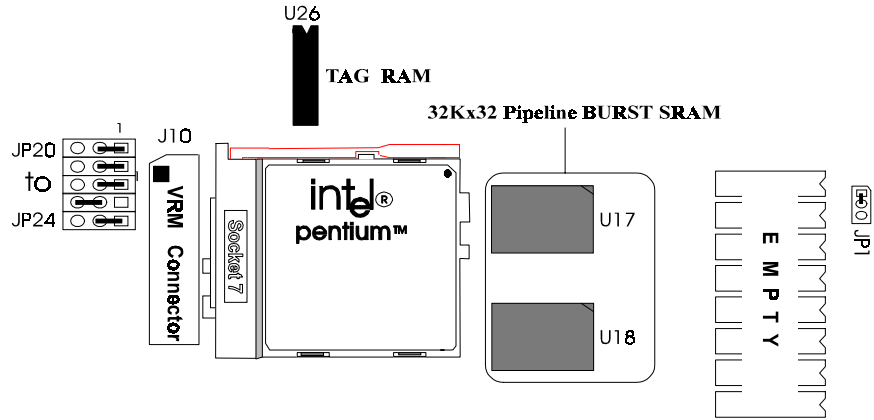


3. +3.3V (from on-board Regulator) (if U25 is not installed)

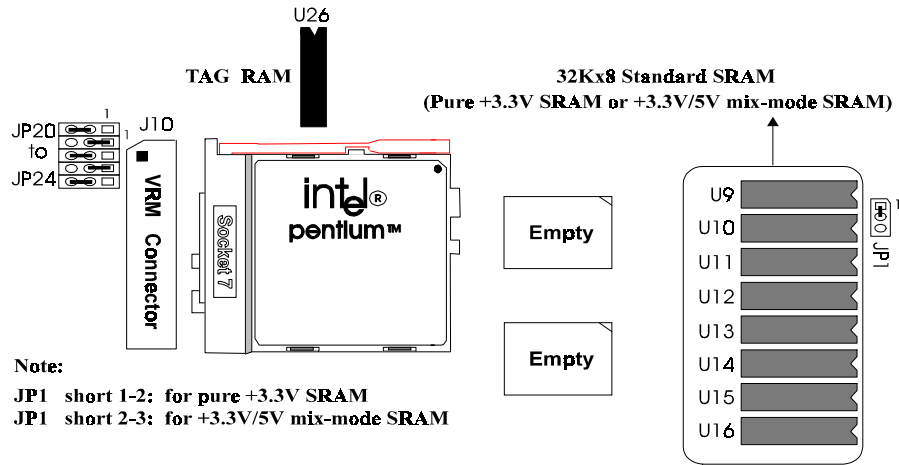


## External Cache Memory Size

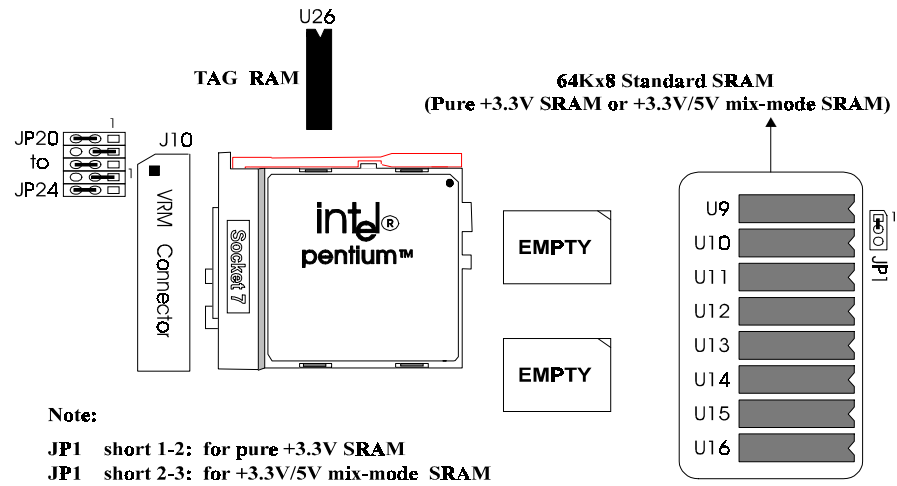
1. 256KB (Pipelined Burst SRAM installed on board) (default)



2. 256KB (Standard SRAM installed on board)



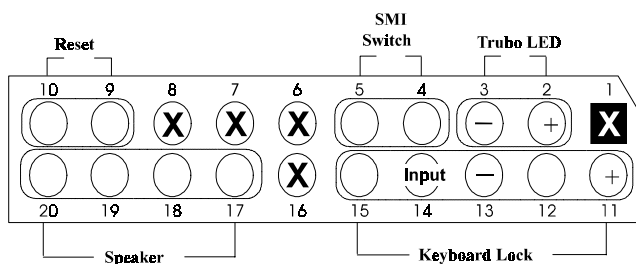
3. 512KB (Standard SRAM installed on board)



## Connectors

The following table lists the connectors located on the TS54P AIO. They are used to connect with some peripheral devices to enhance the operating performance of the system. Please refer to the mainboard layout figure on the next page for the positions of all the connectors.

Connector	Function
J1	PS/2 Keyboard Connector (optional)
J2	AT Keyboard Connector
J3	PS/2 Mouse Connector (optional)
J4	Floppy Connector
J5	Secondary IDE Connector
J6	COM1/ COM3
J7	COM2/ COM4
J8	LPT Connector
J9	Primary IDE Connector
J10	VRM Connector
J11	
J12	Reserved for future
J20	CPU Fan Power Connector
J21	PS/2 Mouse Connector
JP2	HDD LED Connector
JP16	External Battery Connector
PS1	Standard +5V Power Supply Connector
PS2	+3.3V Power Supply Connector



**X: No Function**

Table 3 -3. Mainboard Connectors

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## **Board Layout**



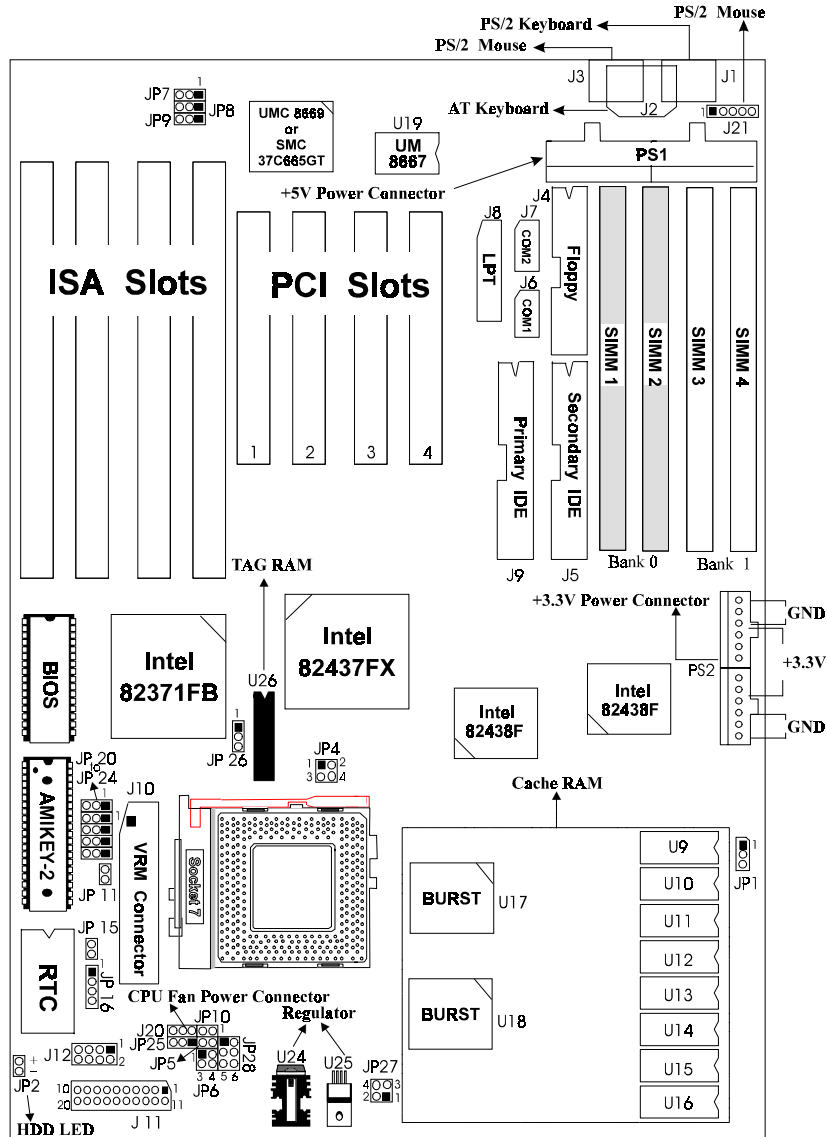


Figure 3 -1. TS54P AIO Mainboard Layout