

3 Jumpers and Connectors

Setting the Jumpers

The table below summarizes the function and jumper settings of each jumper on the P5HX-LA. You can refer to the next section for the graphic descriptions.

Function			Jumper Settings
CPU Type	Intel Pentium (P54C) (P54CT) (P54CTB)	Intel 75MHz (50MHz Host Clock)	JP5 short 1-2 JP6 short 1-2 JP8 short 2-3 JP20 short 2-3 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		Intel 90MHz (60MHz Host Clock)	JP5 short 1-2 JP6 short 1-2 JP8 short 1-2 JP20 short 2-3 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		Intel 100MHz (66MHz Host Clock)	JP5 short 1-2 JP6 short 1-2 JP8 short 2-3 JP20 short 1-2 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		Intel 120MHz (60MHz Host Clock)	JP5 short 2-3 JP6 short 1-2 JP8 short 1-2 JP20 short 2-3 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2

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Function			Jumper Settings
CPU Type	Intel Pentium (P54C) (P54CT) (P54CTB)	Intel 133MHz (66MHz Host Clock)	JP5 short 2-3 JP6 short 1-2 JP8 short 2-3 JP20 short 1-2 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		Intel 150MHz (60MHz Host Clock)	JP5 short 2-3 JP6 short 2-3 JP8 short 1-2 JP20 short 2-3 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		Intel 166MHz (66MHz Host Clock)	JP5 short 2-3 JP6 short 2-3 JP8 short 2-3 JP20 short 1-2 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		Intel 200MHz (66MHz Host Clock)	JP5 short 1-2 JP6 short 2-3 JP8 short 2-3 JP20 short 1-2 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
	Intel Pentium (P55C) (Optional) (U45 must be mounted)	Intel 166MHz (66MHz Host Clock)	JP5 short 2-3 JP6 short 2-3 JP8 short 2-3 JP20 short 1-2 JP14 short 2-3 JP15 short 2-3 JP16 short 2-3 JP17 short 2-3

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Function			Jumper Settings
CPU Type	Intel Pentium (P55C) (Optional) (U45 must be mounted)	Intel 200MHz (66MHz Host Clock)	JP5 short 1-2 JP6 short 2-3 JP8 short 2-3 JP20 short 1-2 JP14 short 2-3 JP15 short 2-3 JP16 short 2-3 JP17 short 2-3
	Cyrix(6x86)	100MHz (P120+) (50MHz Host Clock)	JP5 short 2-3 JP6 short 1-2 JP8 short 2-3 JP20 short 2-3 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		110MHz (P133+) (55MHz Host Clock)	JP5 short 2-3 JP6 short 1-2 JP8 short 1-2 JP20 short 1-2 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		120MHz (P150+) (60MHz Host Clock)	JP5 short 2-3 JP6 short 1-2 JP8 short 1-2 JP20 short 2-3 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2
		133MHz (P166+) (66MHz Host Clock)	JP5 short 2-3 JP6 short 1-2 JP8 short 2-3 JP20 short 1-2 JP14 short 1-2 JP15 short 1-2 JP16 short 1-2 JP17 short 1-2

Continued.....

Function		Jumper Settings
CPU Core Voltage ☆1	2.5V	JP21 short 1-2
	2.8V (default)	JP21 short 3-4
	2.9V	JP21 short 5-6
CPU Voltage Selection	3.3V (STD)	JP13 short 1-2
	3.52V (VRE) (default)	JP13 short 3-4
CMOS RAM Clear Switch	Normal	JP11 short 2-3
	CMOS Data Clear	JP11 short 1-2
On Board Cache	Exist	JP4 short
	Not Exist	JP4 open
L2 Cache Memory Size	256KB	JP12 short 1-2 open 3-4
	512KB	JP12 short 3-4 open 1-2
	No L2 Cache	JP12 open 1-2, 3-4
VGA	Enabled	JP1 open 1-2
	Disabled	JP1 short 1-2
	Interrupt Enabled	JP1 open 3-4
	Interrupt Disabled	JP1 short 3-4
	Spare I/O Decoding	JP1 open 5-6
	Block I/O Decoding	JP1 short 5-6
Audio ☆2	Enabled Audio	JP23 short 2-3
	Disabled Audio	JP23 short 1-2

Table 3 -1. Jumper Settings

☆1: This function is available on PCB 1.0/1.0A and later version.

☆2: This function is available on PCB 1.0A and later version.



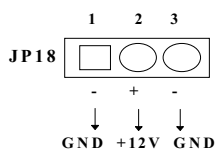
The table below presents the detailed Jumper Settings for different CPU Clock. For example, if Pentium 100MHz CPU is installed, you should set Host Clock as 66 MHz and CPU Core Clock as Host Clock *1.5.

Host Clock	50 MHz	JP8 short 2-3 JP20 short 2-3
	55 MHz	JP8 short 1-2 JP20 short 1-2
	60 MHz	JP8 short 1-2 JP20 short 2-3
	66 MHz	JP8 short 2-3 JP20 short 1-2
CPU Core Clock	Host Clock * 1.5	JP5 short 1-2 JP6 short 1-2
	Host Clock * 2	JP5 short 2-3 JP6 short 1-2
	Host Clock * 2.5	JP5 short 2-3 JP6 short 2-3
	Host Clock * 3	JP5 short 1-2 JP6 short 2-3

Green Function

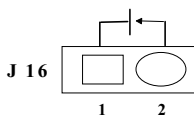
CPU Cooling Fan Control

P5HX-LA 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 power to JP18 in order to make it work.

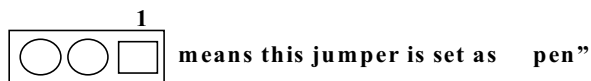
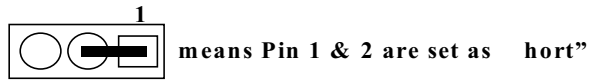


Green Function Indicator

Connect the **LED** to J16 to LED blinking indicate the system in low-power suspend mode.



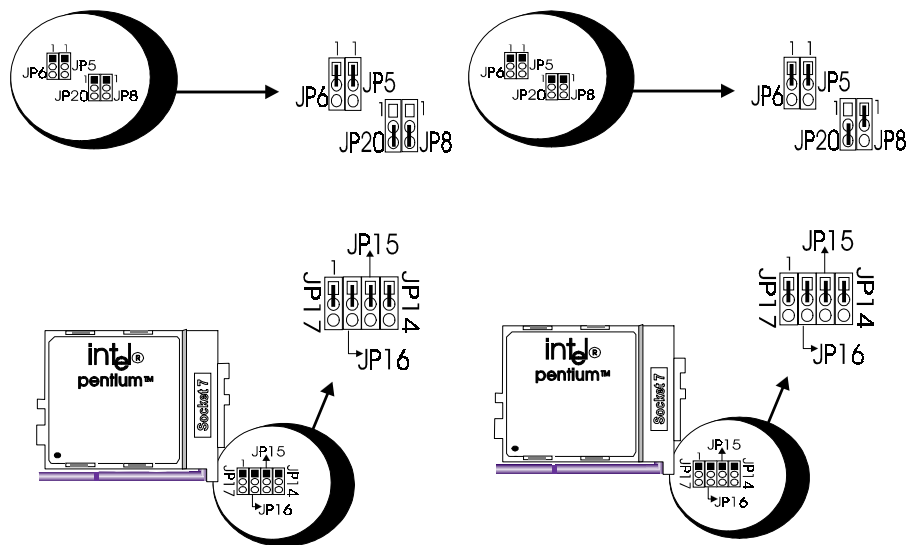
Graphic Descriptions of Jumper Settings



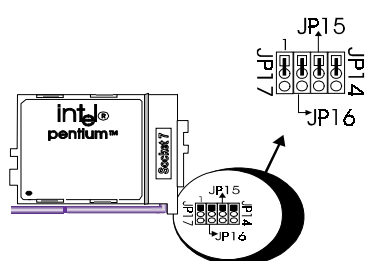
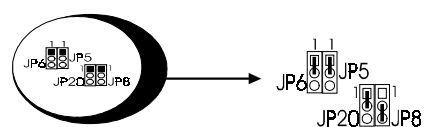
CPU Type

1. Intel Pentium 75MHz
(P54C/P54CT/P54CTB) CPU
(50MHz Host Clock) installed
on board

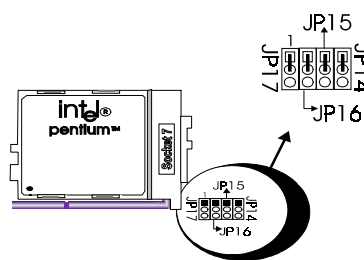
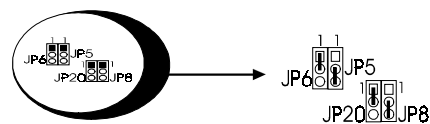
2. Intel Pentium 90MHz
(P54C/P54CT/P54CTB) CPU
(60MHz Host Clock) installed
on board



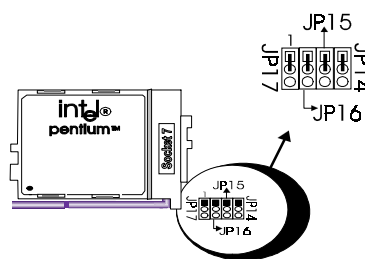
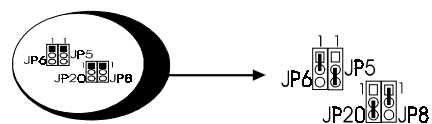
3. Intel Pentium 100MHz
(P54C/P54CT/P54CTB) CPU
(66MHz Host Clock) installed
on board



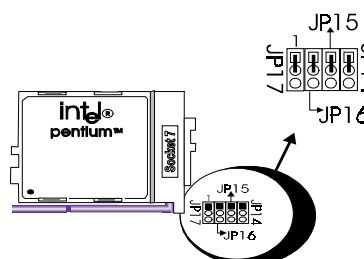
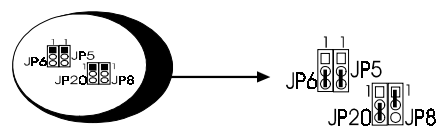
5. Intel Pentium 133MHz
(P54C/P54CT/P54CTB) CPU
(66MHz Host Clock) installed
on board



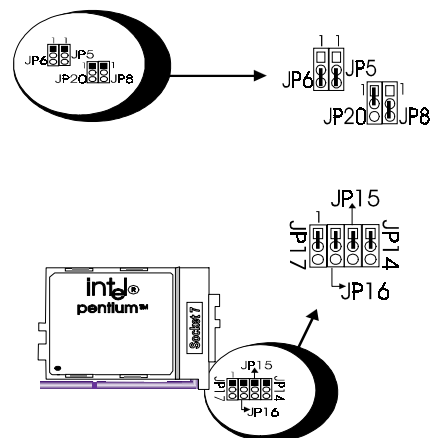
4. Intel Pentium 120MHz
(P54C/P54CT/P54CTB) CPU
(60MHz Host Clock) installed
on board



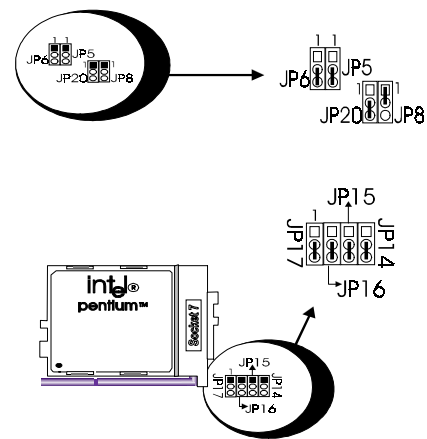
6. Intel Pentium 150MHz
(P54C/P54CT/P54CTB) CPU
(60MHz Host Clock) installed
on board



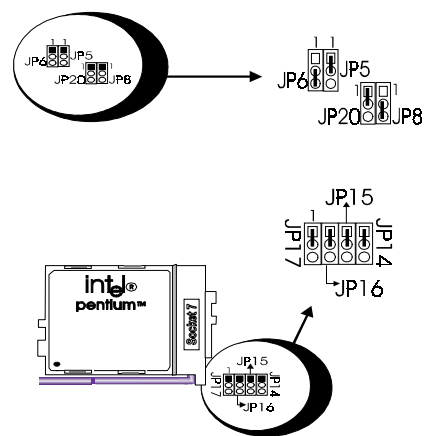
7. Intel Pentium 166MHz (P54C/P54CT/P54CTB) CPU (66MHz Host Clock) installed on board



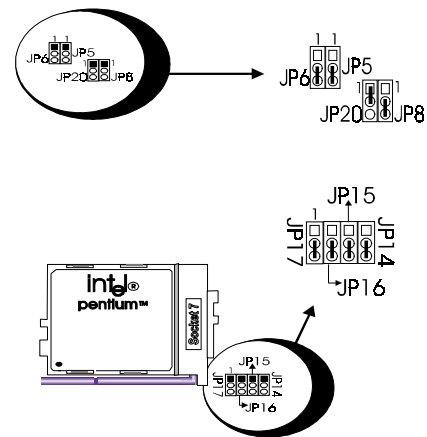
9. Intel Pentium 150MHz (P55C) CPU (60MHz Host Clock) installed on board



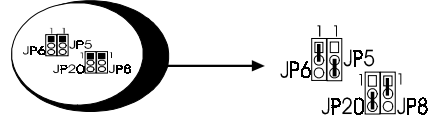
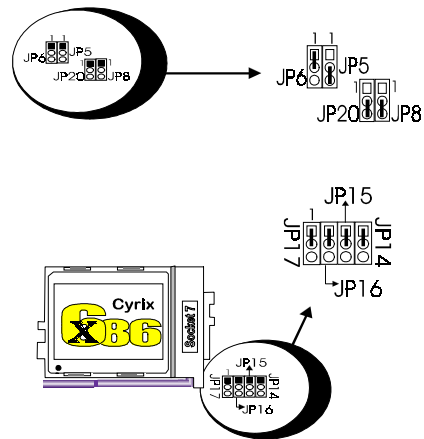
8. Intel Pentium 200MHz (P54C/P54CT/P54CTB) CPU (66MHz Host Clock) installed on board



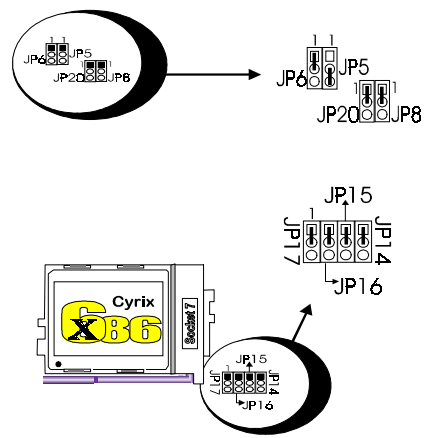
10. Intel Pentium 166MHz (P55C) CPU (66MHz Host Clock) installed on board



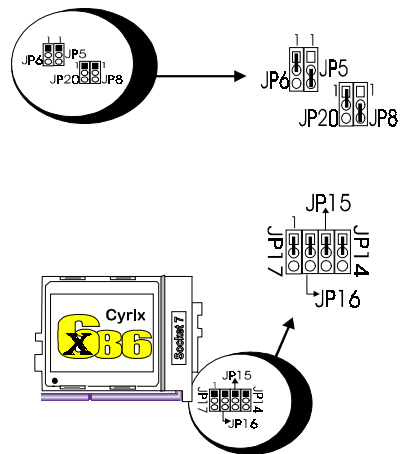
11. Cyrix 6X86 (P120+) 100MHz
CPU (50MHz Host Clock)
installed on board



12. Cyrix 6X86 (P133+) 110MHz
CPU (55MHz Host Clock)
installed on board

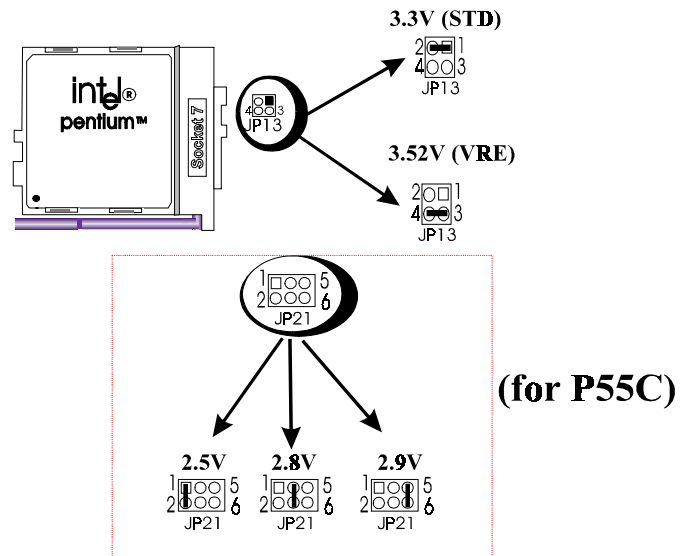


14. Cyrix 6X86 (P166+) 133MHz
CPU (66MHz Host Clock)
installed on board



13. Cyrix 6X86 (P150+) 120MHz
CPU (60MHz Host Clock)
installed on board

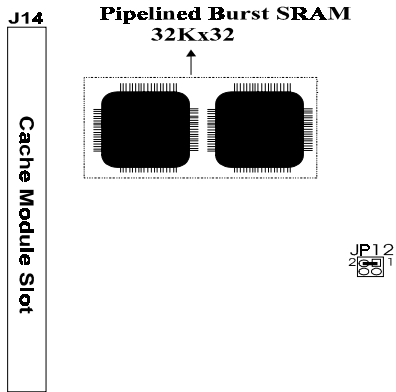
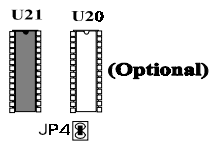
CPU Voltage Selection



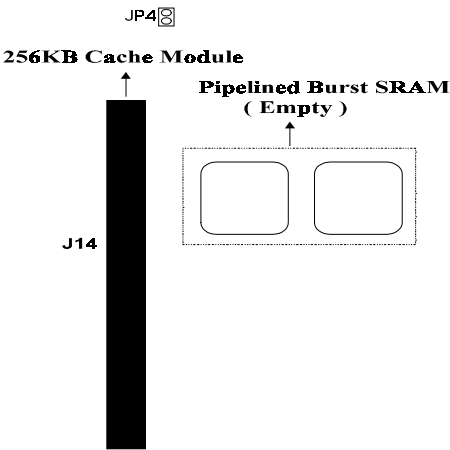
Cache Memory Size

1. 256KB

a. On-Board Cache

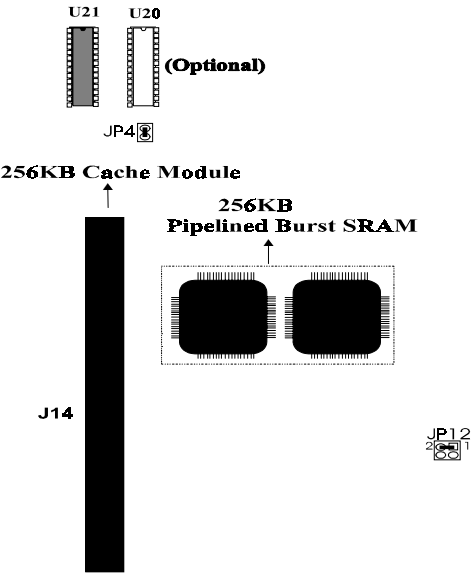


b. Cache Module Only

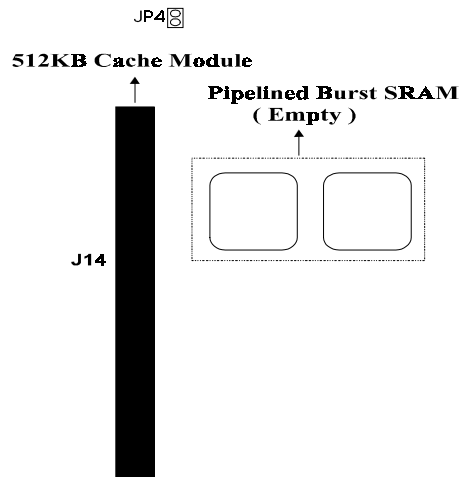


2. 512KB

a. 256KB On-Board Cache + 256KB Cache Module



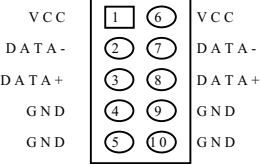
b. Cache Module Only



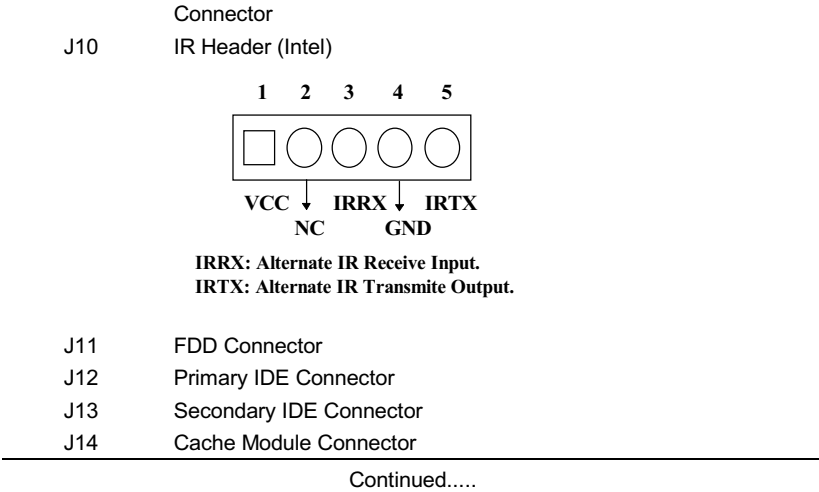
Connectors

The following table lists all connectors located on the P5HX-LA. They can be used to connect with some peripheral devices to enhance the operating performance of the system. Please refer to the mainboard layout figure on page 3-16 for the positions of all the connectors.

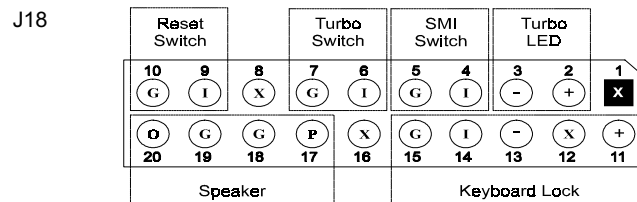
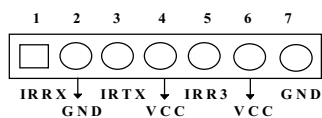
Connector	Function
J1	COM1/ COM3
J2	COM2/ COM4
J3	Printer Port
J4	PS/2 Mouse Connector
J5	PS/2 Keyboard Connector
J6	VGA Monitor Connector
J7	CD Audio In
J8	USB Header



J9 VGA Feature Connector and AMC (ATI Multimedia Connector)



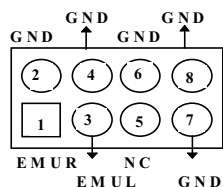
Connector	Function
J15	HDD LED
J16	Green Mode LED
J17	Fast IR Header (Temic / IBM & HP) (SMC 37C669 FR only)



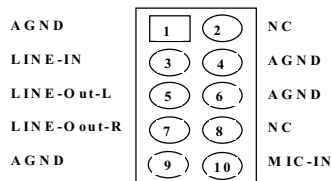
X: No Function I: Input O: Output
G: GND P: Power

JP18 CPU Cooling Fan Control (Green Function)

JP19 Wave Table (for Creative CT1920 only)



J20 Modem Blaster Pro Interface Connector (for Creative only)



Continued.....

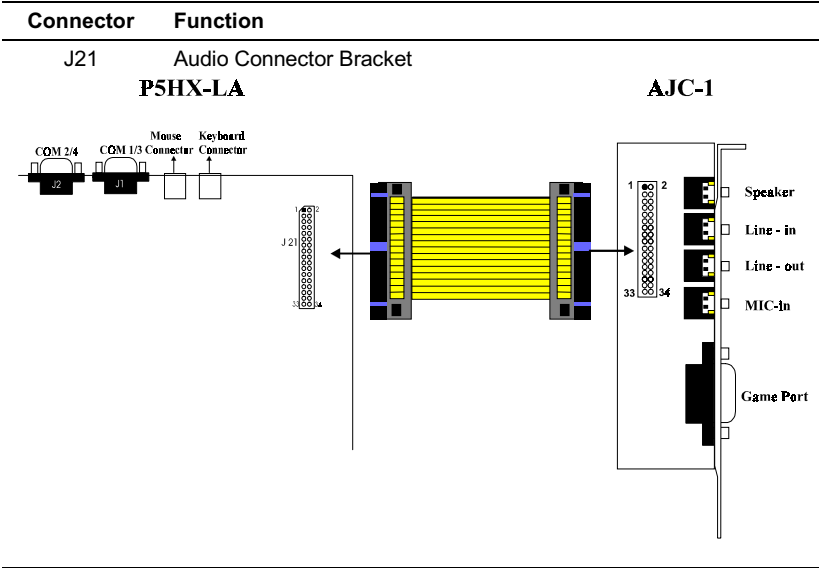


Table 3 -2. Connectors

Board Layout

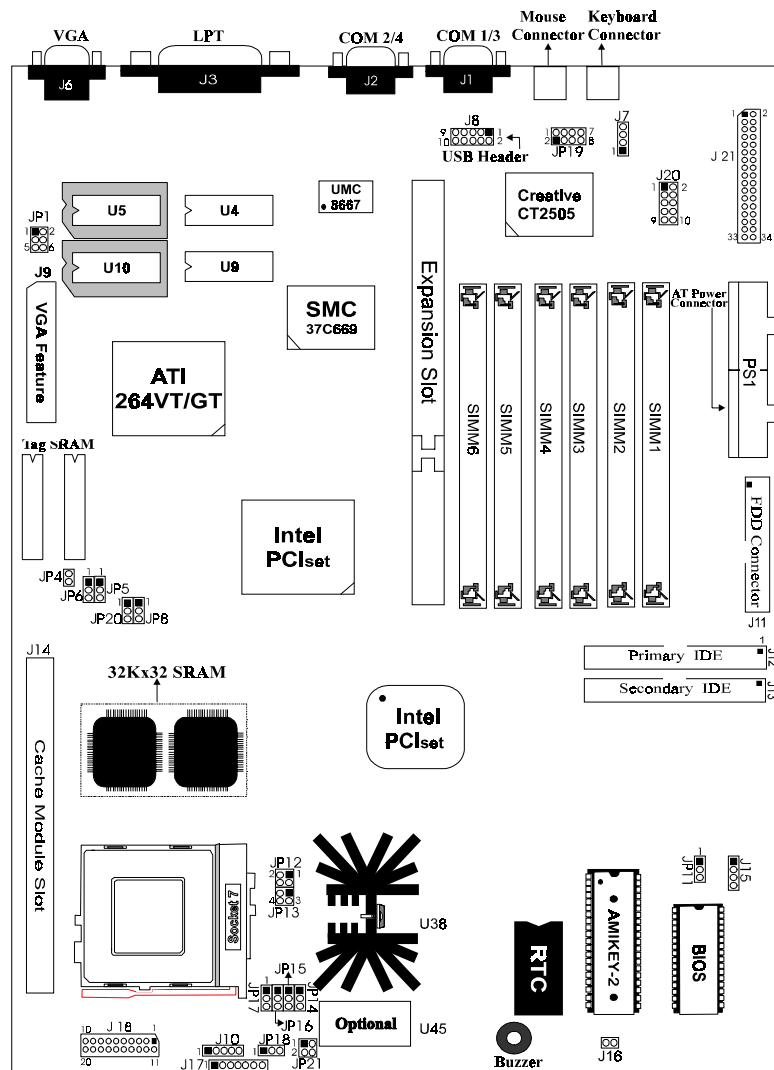


Figure 3 -1. P5HX-LA Mainboard Layout