Cache Memory:

- On-board 256KB cache memory
- Upgradeable to 512KB cache with one 256KB COAST module plugged into J3.

Slots:

- Four 32-bit Master PCI Bus slots and four 16-bit ISA bus slots. One shared slot that can be used as ISA or PCI.

On-Board Peripherals:

- On-Board peripherals include:
  - —1 floppy port supports 2 FDD
  - —2 serial ports (ComA + ComB)
  - —1 Parallel port supports ECP or EPP mode
  - —2 PCI Bus Master IDE ports (up to four IDE HDD)
  - —USB (Reserved)

Remote Control:

- Supports Remote Control Power ON/OFF operations

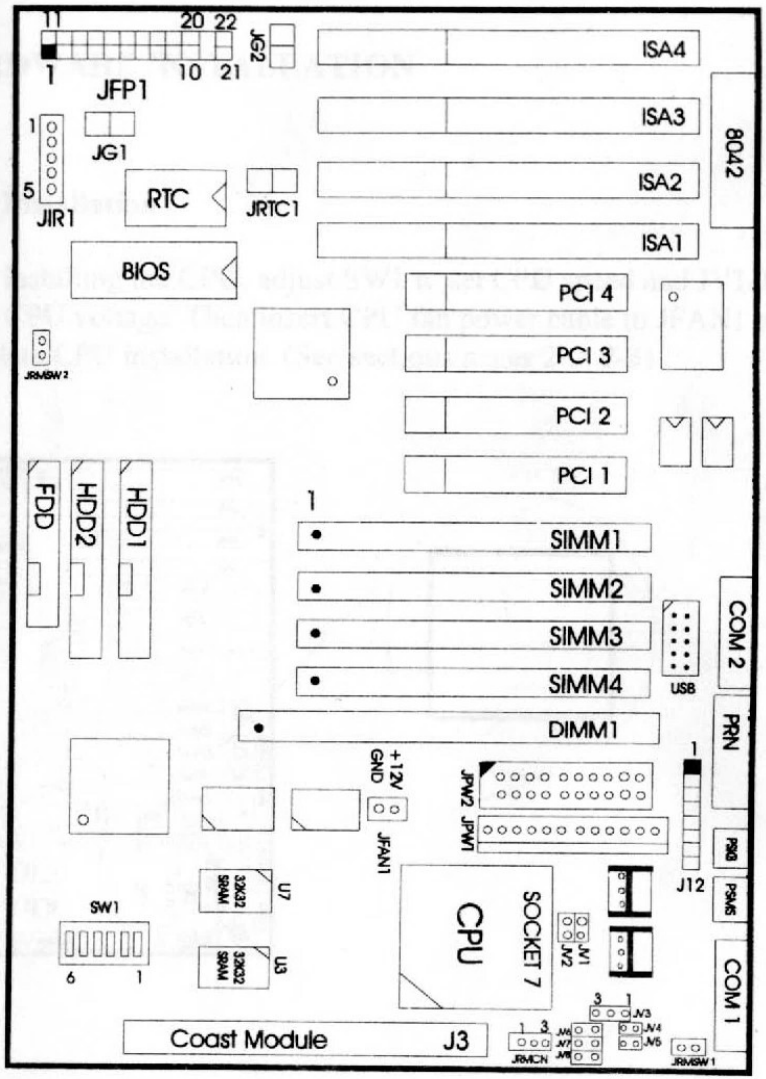
Dimensions:

- ATX Form Factor
- 22 cm(L) × 30.5 cm(W) × 4 layer PCB

Mounting:

- 8 mounting holes

System Board Layout



CPU Speed Setting (SW1)

Adjust SW1 (Dip switch) to set CPU speed. Figure 2-1 shows the location of SW1.

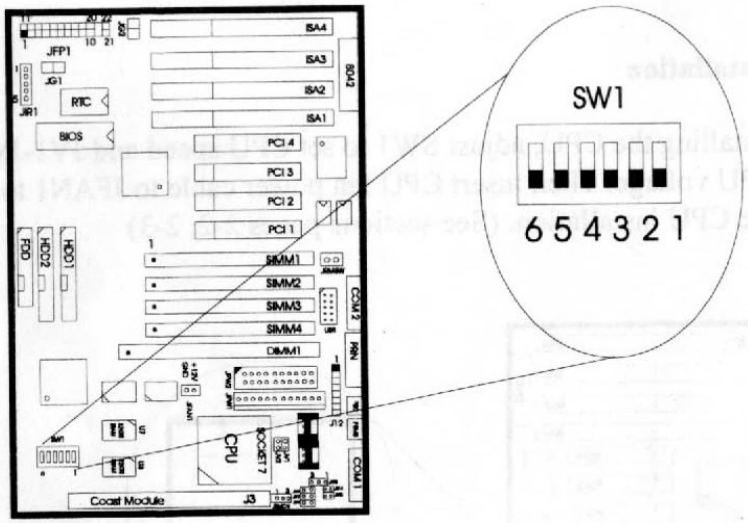
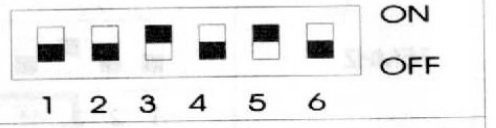
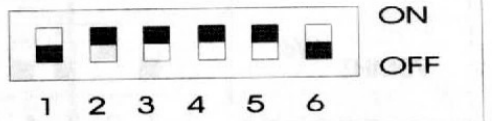
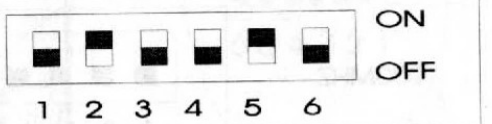
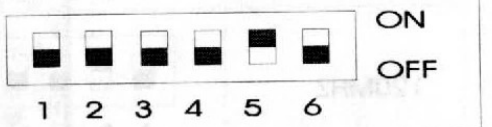


Figure 2-1

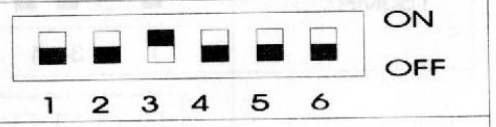
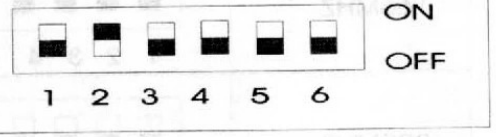
INTEL P54C CPU SPEED SETTING

CPU SPEED	SW1 Settings
75MHZ	ON / OFF — 1 2 3 4 5 6
90MHZ	ON / OFF — 1 2 3 4 5 6
100MHZ	ON / OFF — 1 2 3 4 5 6
120MHZ	ON / OFF — 1 2 3 4 5 6
133MHZ	ON / OFF — 1 2 3 4 5 6
150MHZ	ON / OFF — 1 2 3 4 5 6
166MHZ	ON / OFF — 1 2 3 4 5 6
200MHZ	ON / OFF — 1 2 3 4 5 6

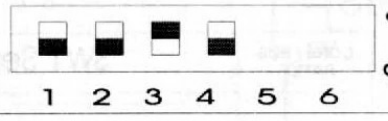
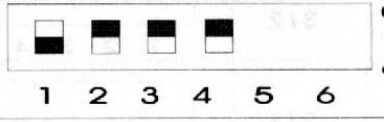
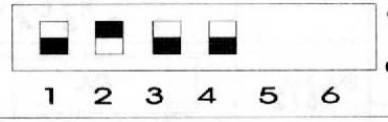
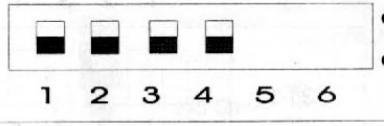
CYRIX 6x86 CPU SPEED SETTING

CPU SPEED	SW1 Settings
P120+ (100MHZ)	
P133+ (110MHZ)	
P150+ (120MHZ)	
P166+ (133MHZ)	

AMD 5k86 CPU SPEED SETTING

CPU SPEED	SW1 Settings
P75 (75MHZ)	
P90 (90MHZ)	

Note 1: The 4 Host Clock Frequencies that the system supports are 50MHz, 55MHz, 60MHz, and 66.6MHz.(By adusting pins 1,2,3,and 4 of SW1 the Host Clock Frequency can be selected). See the following chart to set the different Host Clock frequencies.

HOST CLK	SW1 Settings
50MHz	
55MHz	
60MHz	
66MHz	

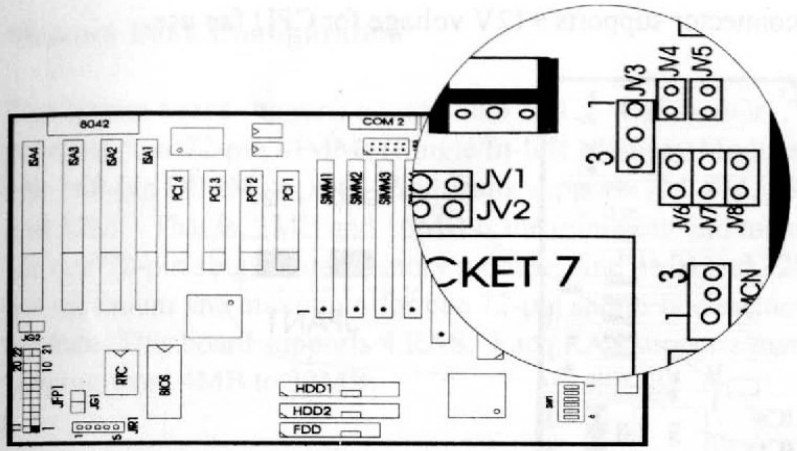
Note 2: Pins #5 and #6 of the DIP Switch SW1 are used to set the Core/Bus (Fraction) ratio of the CPU. The actual core speed of the CPU is the Host Clock Frequency multiplied by the Core/Bus ratio. For example:

if Host Clock = 66.6MHz
Core/Bus ratio = 3/2
then CPU core speed = Host Clock x Core/Bus ratio
= 66.6MHz x 3/2
= 100MHz

CORE / BUS RATIO	SW1 Settings
3 / 2	ON / OFF 1 2 3 4 5 6
2 / 1	ON / OFF 1 2 3 4 5 6
5 / 2	ON / OFF 1 2 3 4 5 6
3 / 1	ON / OFF 1 2 3 4 5 6

Note 3:The PCI Bus Clock is the Host Clock Frequency divided by 2.

CPU Voltage Setting: JV1-JV8

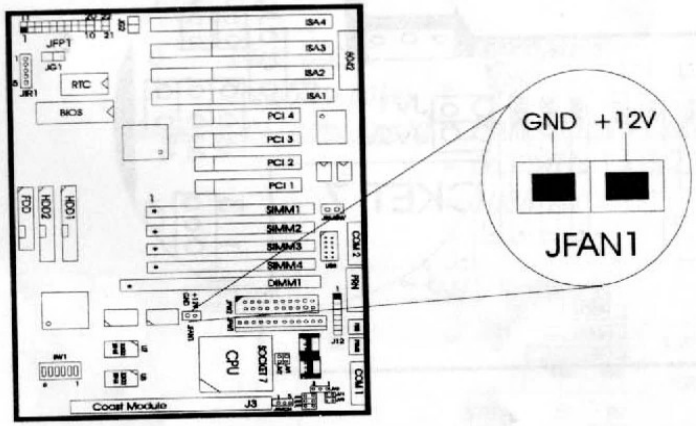


CPU Voltage Selection: JV1-JV8

Vcore	VI/O	JV1-JV2	JV3	JV4-JV8
3.38	3.38	JV1 / JV2	1 2 3	JV4 Short (JV4,JV5) / JV6,JV7,JV8
3.52	3.52			JV5 Short
2.5	3.3	JV1 / JV2 Open	1 2 3	JV6 Short
2.8	3.3			JV7 Short
2.9	3.3			JV8 Short

CPU Fan Power Connector (JFAN1)

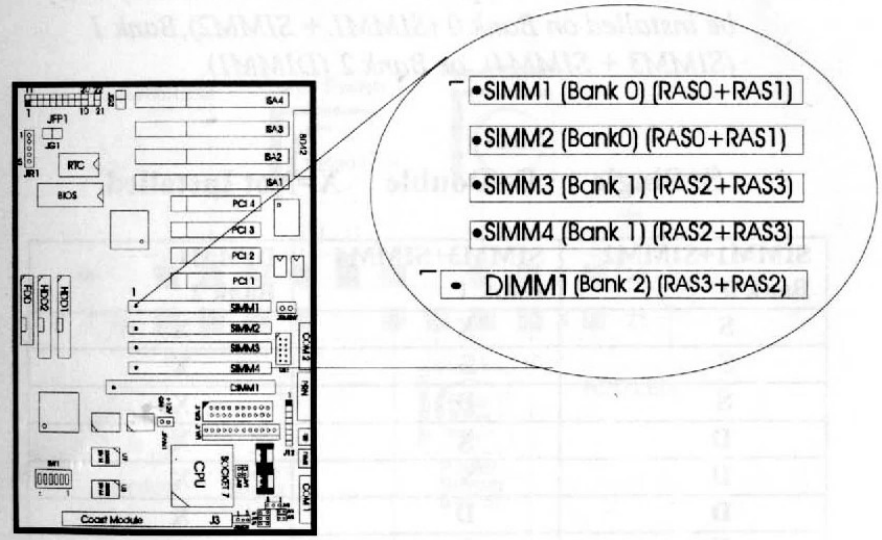
JFAN1 connector supports +12V voltage for CPU fan use.



Memory Installation

Memory Bank Configuration

The system board supports a maximum of 128M of memory, and provides four 72-pin SIMMs (Single In-line Memory Module) and one 168-pin DIMM sockets. Each bank supports 4M, 8M, 16M, and 32M. That is, 2MB and 16MB is the minimum and maximum for one 72-pin single side memory module. And 4MB and 32MB is the minimum and maximum for one 72-pin single side memory module. This board supports 4 RAS. Each RAS supports memory ranging from 4MB to 32MB.



Warning! Memory bank 0 & 1's SIMM power level is 5 volts. Memory bank 2's DIMM power level is 3.3.volts. We suggest not to install both the SIMM & DIMM at the same time. But if you want to install both SIMM &DIMM slot, you must use a 3.3 volt DIMM with 5 volt I/O signal tolerance otherwise it may cause damage to the DIMM..

Note 1: Important! The DIMM bank only support 3.3V EDO, 3.3V FP and unbuffered 3.3V 2-clock type SDRAM Module. It can't support 4-clock type SDRAM Module.

Note 2: Make sure the SIMM banks are using the same type and equal size and density memory.

Note 3:To operate properly at least two 72-pin SIMM module must be installed in the same bank or the one 168-pin DIMM module must be installed. The system cannot operate with only one 72-pin SIMM module installed.

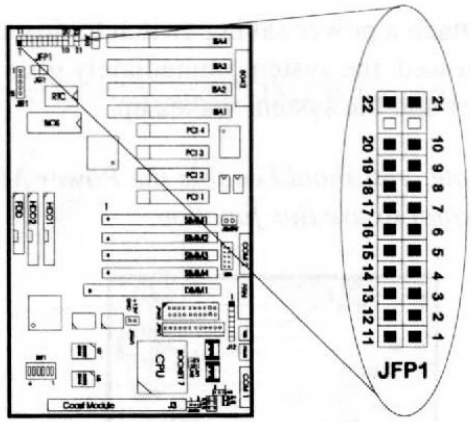
Note 4: This mainboard supports Table Free so memory can be installed on Bank 0 (SIMM1 + SIMM2),Bank 1 (SIMM3 + SIMM4), or Bank 2 (DIMM1).

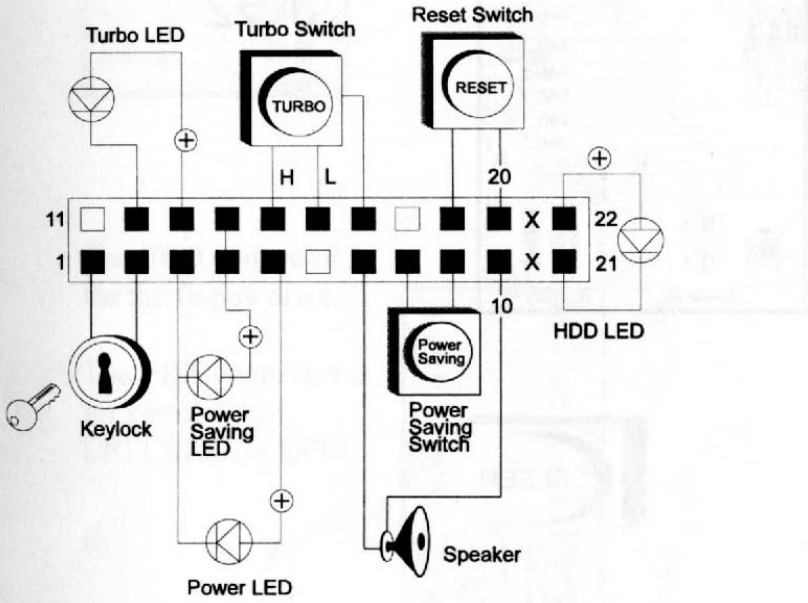
S=Single D=Double X=Not Installed

SIMM1+SIMM2 Bank 0	SIMM3+SIMM4 Bank 1	DIMM1 Bank 2
S	X	X
S	S	X
S	D	X
D	X	X
D	S	X
D	D	X
X	S	X
X	X	S
X	D	X
X	X	D

Case connector: (JFP1)

The Turbo LED, Turbo Switch, Hardware Reset, Key lock, Power LED, Power Saving LED, Sleep Switch, Speaker,and HDD LED all connect to the JFP1 connector block as below.





Note : The hardware Turbo switch is not functional. The Turbo LED is always ON and cannot be toggled.