

System Board Specifications

CPU:

- Intel 486SX / DX - 25/ 33/ 50, 486DX2 - 50/66, AMD 486DX-40, 486DX2-50/66
- S-series Intel 486 SX/DX-33, DX2-66
- AMD DXL-40, Cyrix M7-40
- PGA or PQFP packaging

Cache memory:

- Supports 128K, 256K or 512K cache memory

Main memory:

- 4 pieces 30-pin SIMM sockets support 1 bank of memory with 256K, 1M, 4M, and 16M DRAM.
- 2 pieces 72-pin SIMM sockets support 4 banks of memory with 1M, 2M, 4M, 8M, 16M and 32M DRAM.

Slots:

- Three 32-bit Local Bus slots, 1 Master and 2 Slave, for the VESA standard
- Seven 16-bit AT bus slots

Battery:

- 3.6V/480mA or 3.6V/60mA on-board battery

Dimensions:

- 26cm x 22cm x 4 layers

Mounting:

- 6 mounting holes

System Board Layout

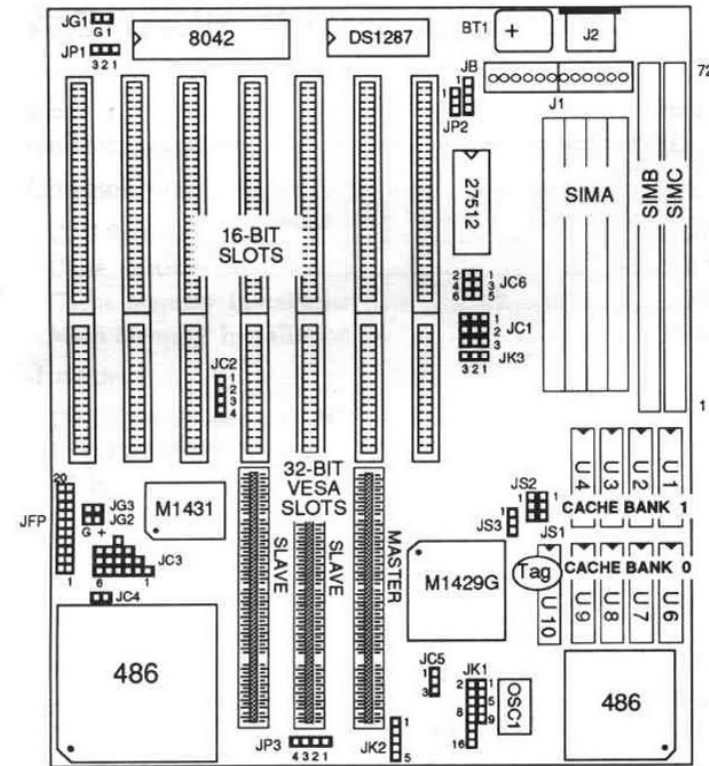
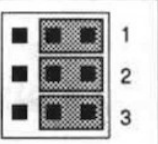
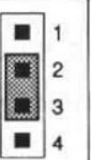
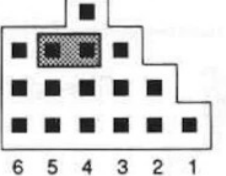
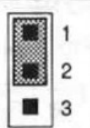
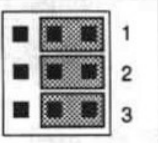
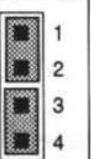
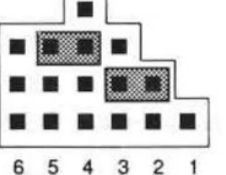
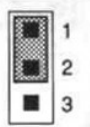
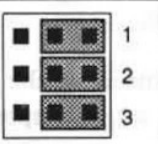

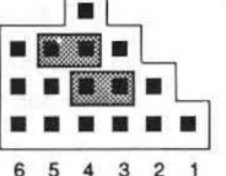
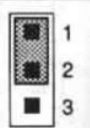
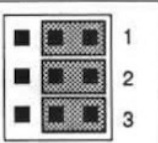
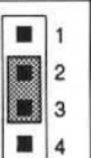
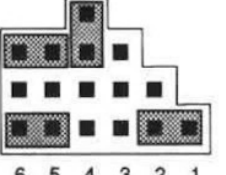
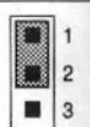


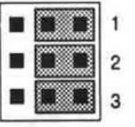
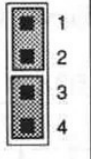
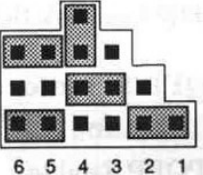
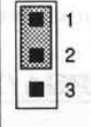
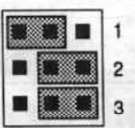
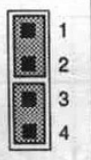
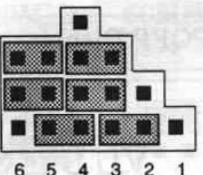

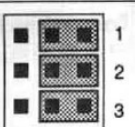
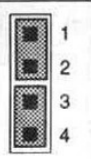
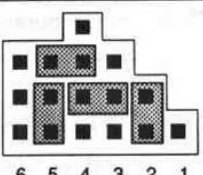
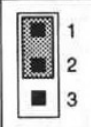
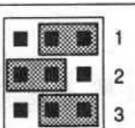
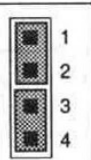
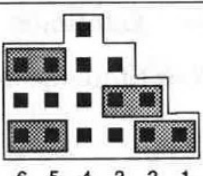
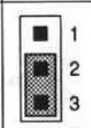
Figure 1-1. System board Layout

CPU Type Selectors: JC1, JC2, JC3, JC5

The ALI-486G system board can support several types of CPU. For the board to recognize which type of CPU is installed, set jumpers as below. See Figure 1-1 for jumper locations.

CPU Selectors: JC1, JC2, JC3, JC5



	JC1	JC2	JC3	JC5
486SX				
487SX				
486DX				
Intel 486SX-SL				

	JC1	JC2	JC3	JC5
Intel 486DX-SL				
Cyrix 486SX-M7				
AMD 486DX-DXL				
P24T				

CPU PGA/PQFP Selector: JC4

Set JC4 for the board to recognize which type of CPU is installed, PQFP or PGA. See Figure 1-1 for jumper location.


PGA/PQFP Selector: JC4

Setting	JC4
PQFP Enable	
PQFP Disable	


VL Bus Selector: JP3

For best VL bus performance set JP6 as below. See Figure 1-1 for jumper location.

High Speed Write Settings: JP3

High Speed Write	JP3
Zero Wait State	Pins 1-2 Open
One Wait State (default)	 4 3 2 1

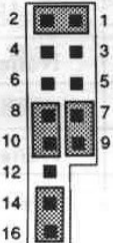
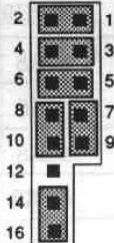
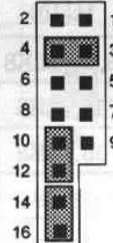
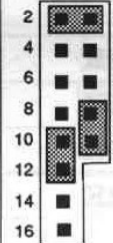
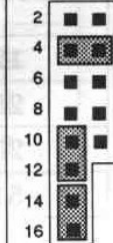
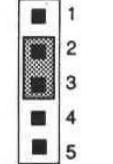
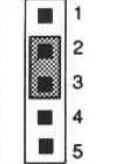
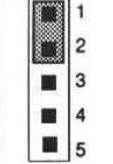
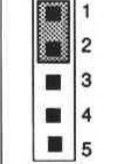
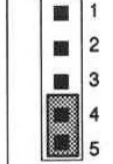





CPU Speed Settings: JP3

CPU Speed	JP3
≤ 33 MHz	Pins 3-4 Open
> 33 MHz	

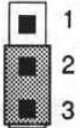
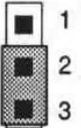
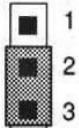
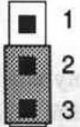
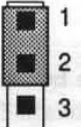
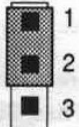
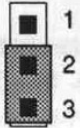
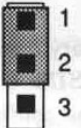
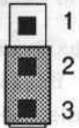
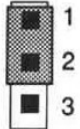
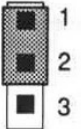
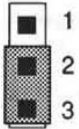
CPU Clock Selectors: JK1~JK3

For different frequency output of the clock generator chip, set JK1~JK3 according to the CPU clock. See Figure 1-1 for jumper locations.

CPU Clock Selectors: JK1~JK3

	25MHz	33MHz	40MHz	50MHz	AMD DX-40 DXL-40
JK1					
JK2					
JK3					

Cache Size Selection: JS1, JS2, JS3

Cache Size	JS3	JS2	JS1
128K 32Kx4			
256K 32Kx8			
256K 64Kx8			
512K 128Kx8			

External Battery Connector

A battery must be used to retain the system board configuration in CMOS RAM. You can use either the on-board battery or an external battery. If you use the on-board battery you must short pins 2-3 of JB. For an external battery, the battery's cable connector attaches to pins 1 and 4 of JB. See Figure 1-1 for the connector's location.

JB: External Battery Connector

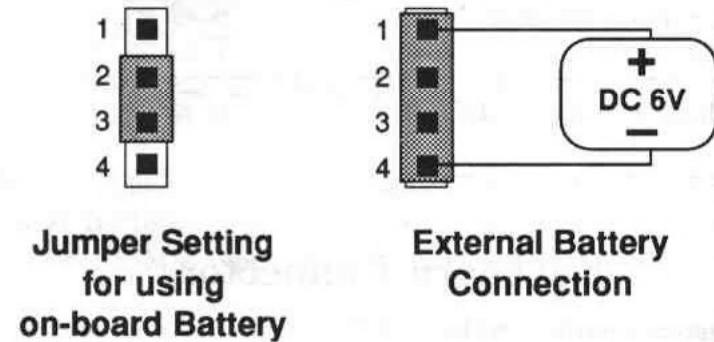


Figure 2-1. Setting the External Battery Connector - JB