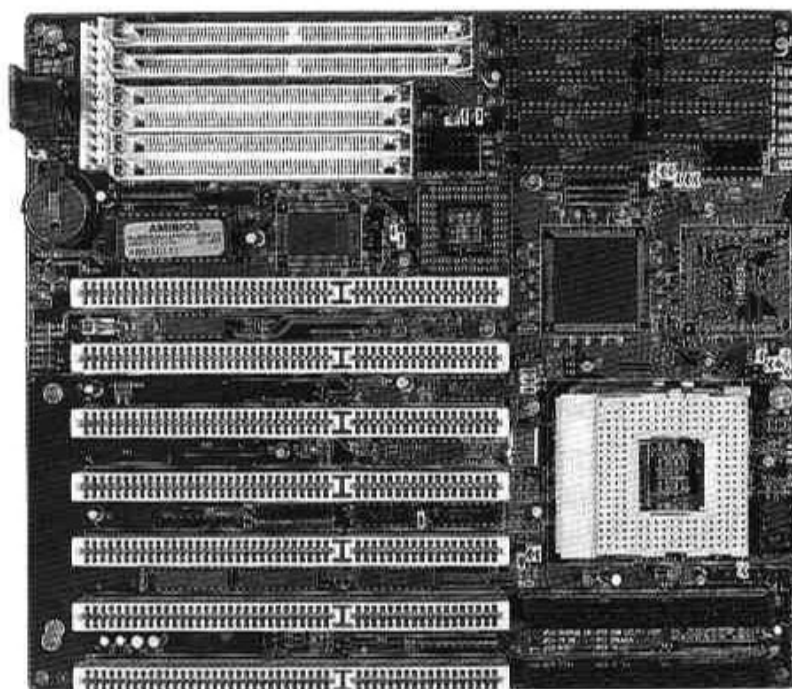


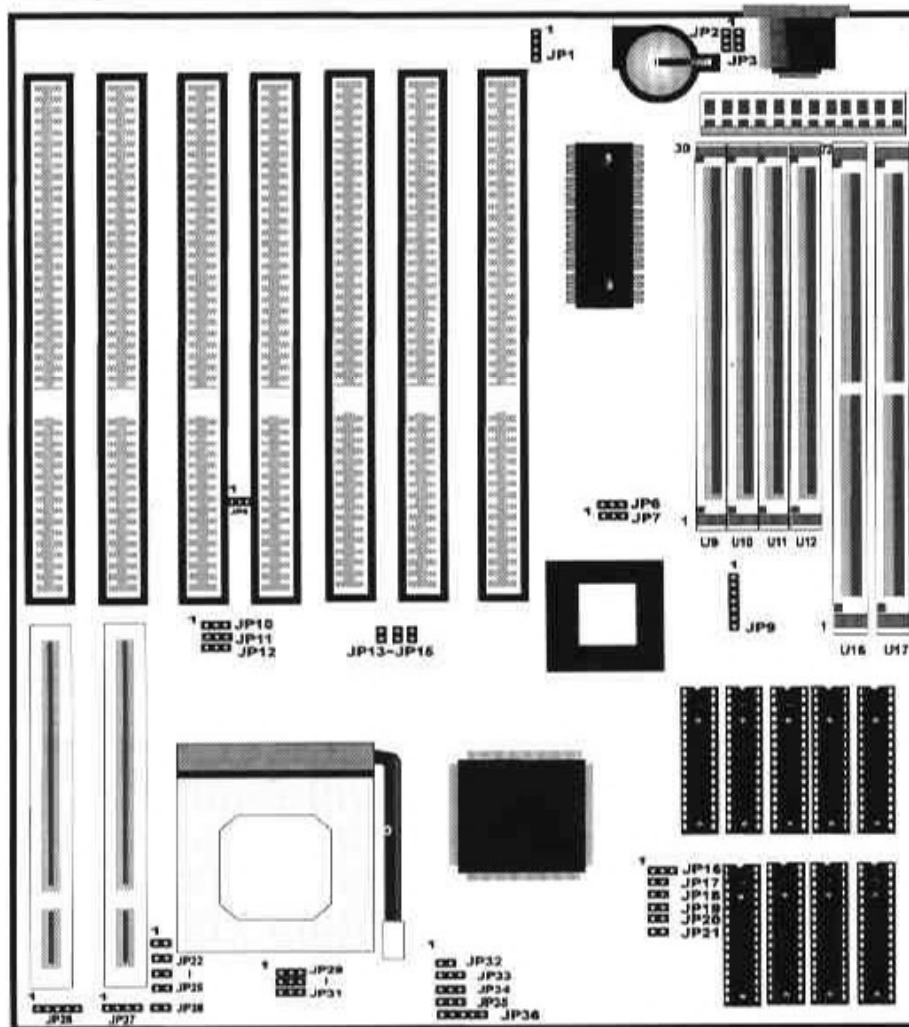
# 486 VESA MAINBOARD



## KEY FEATURES

- Support Microprocessor running at 25/33/40/50/66/80Mhz
  - TI486SXL/SXL2    -UMC 80486SX-SL    -AMD 486DX/DX2/DX4    - Cyrix 80486SX/DX/DX2
  - INTEL 80486DX/SX/DX2/DX4-SL    -INTEL 80486DX/SX/DX2
- CPU VCC Support 3.3V and 5V
- Support 80387 coprocessor and PGA socket.
- L1 write back or write through cache.
- L2 write back policy for high performance.
- Flexible cache RAM size 64/128/256/512/1024 KB in two banks or one bank with 16 bytes line size.
- DRAM auto-detection / banking
- Four banks of DRAM with memory size up to 64 MB using combinations of 256K,1M,2M,4M,8M and 16M SIMM modules.
- Providing Green PC power management.
- Level 2 cache power saving.
- Fully support Microsoft APM (advance power management).
- Providing Flash ROM support.
- On-board CR2032 3V volt Lithium battery.
- ZIF socket.
- 2 VESA slots and 7 ISA slots.

# MAINBOARD LAYOUT



# MEMORY ARCHITECTURE




































The DRAM sub-system contain 4 banks. Four 30-pin SIMM Socket U9-12 using as bank2; two 72-pin SIMM Socket. U16 using as bank 1 and 3; U17 using as bank 0 and 2.

**NOTE**

So You can not install 30-pin SIMM if using 2 banks type DRAM on to U17 and you can install 30-pin SIMM if using 1 bank type DRAM on to U17.

U9-U12	U17	U16
BANK 0	BANK 0 , 2	BANK 1 , 3
INSTALL	1 BANK TYPE DARM OR NONE	2 BANKS TYPE DARM OR 1 BANK TYPE DARM OR NONE
NONE	2 BANKS TYPE DARM OR 1 BANK TYPE DARM OR NONE	2 BANKS TYPE DARM OR 1 BANK TYPE DARM OR NONE

**JP6-JP8,JP10-12,JP23,JP33-37 : CPU SELECTOR JUMPER**

JUMPER\CPU	TI486SXL/SXL2	486DX/DX2	486SX	CX486DX/DX2
JP6				
JP7				
JP8		OFF	OFF	OFF
JP10				
JP11				
JP12				
JP23	OFF	ON	ON	ON
JP33	OFF		OFF	
JP34				
JP35				
JP36				
JP 37	ON	ON	ON	OFF

## JP13~JP15 - CLOCK GENERATOR SETTING

	20MHz	25MHz	33MHz	40MHz	50MHz	66MHz	80MHz
JP13	OFF	ON	ON	ON	OFF	ON	OFF
JP14	OFF	OFF	ON	ON	OFF	OFF	ON
JP15	OFF	OFF	ON	OFF	ON	ON	ON

## JP22 - SUSPEND SWITCH CONNECTOR

In order to force system enter suspend mode, you can attach a push button to this connector.

## JP24 - TURBO SWITCH CONNECTOR

OPEN : TURBO MODE

SHORT : LOW SPEED MODE

In addition to switching clock speed using hardware control via the turbo switch, you can also switch the clock speed using software control via keyboard commands.

The keyboard commands are as follows:

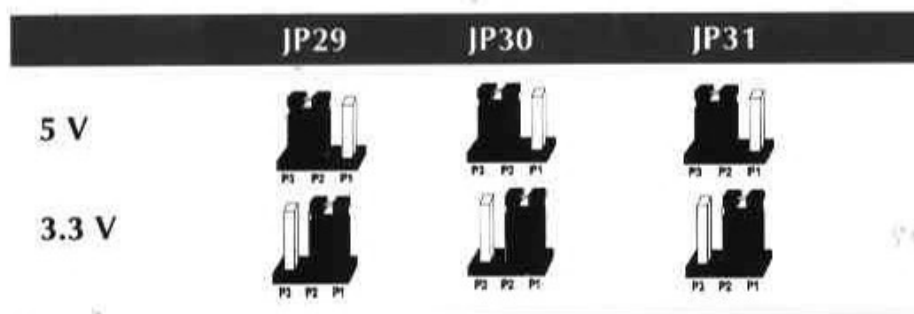
CTRL,ALT,[+] : Press these three keys simultaneously to select TURBO MODE.

CTRL,ALT,[-] : Press these three keys simultaneously to select LOW SPEED MODE.

### NOTE

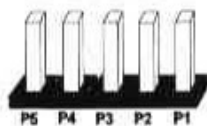
That hardware control and software control are alternately activated. Before you can activate software control from hardware control, and vice versa, the system must be in High Speed Mode.

## JP29 ~ 31 - CPU VCC SELECTOR



## J 1 - KEYBOARD CONNECTOR

A standard five-pin female DIN keyboard connector is located at the rear of the board (J1). Plug the jack on the keyboard cable into this connector.



Pin 1 : Keyboard Clock  
Pin 3 : Spare  
Pin 5 : + 5V

Pin 2 : Keyboard Data  
Pin 4 : Ground

## J 9 - POWER SUPPLY CONNECTORS

The power supply connector has two six-pin male header connectors. Plug the dual connectors from the power directly onto the board connectors.

Pin 1 : Power Good  
Pin 8 : Ground  
Pin 4 : - 12V DC  
Pin 11 : + 5V DC

Pin 7 : Ground  
Pin 3 : + 12V DC  
Pin 10 : + 5V DC  
Pin 6 : Ground

Pin 2 : + 5V DC  
Pin 9 : - 5V DC  
Pin 5 : Ground  
Pin 12 : + 5V DC