Warning
=======
To ensure the reliability of the Computer DO NOT reconfigure the board
while the Power is ON. If you wish to reconfigure the board, make sure
that the power to the system is OFF before changing any hardware
setting such as Jumper setting or DIP switch.

Checklist
=========
Your 486VL3 Cache pakage contain the following:
* 486VL3 Cache Mother board.
* User's manual.

Mother Board Features
=====================
* OPTI chipset 82(3895, 82C822 and 82C602
* Support 80486 SX/DX/DX2, P24T, P24C, AMD 486 SL-Enhanced
  P23S, P4S, P24S (DX4) and Cyrix M6F17 Microprocessor
* Memory up to 128MB
* Optional 64KB, 128KB or 256KB external cache
* Five 16bit slots, Three VESA slots 1 Slave/2 Master and Three PCI
  slots
* Dimension: 22 x 25 cm with 4 Layers
* Ix clock source, supporting systems running from 25 to 50 MHz
* Support System Memory Management (SMM) for Power Management
* Support full SMI Interface
* Power Management port for specific control during all modes of
  operation

Jumpers and Connectors reference
=================================
Before installing the mother board, make sure the jumpers setting are
set for your configurationt. The Function of each jumpers are as
follows:

CPU Type Selector JP7,JP8,JP10,JP11,JP15,JP36,
                                        JP37,JP38
SL-enhance CPU Selector ·············· JP13,JP17,JP21
P24C Clock Selector ················· JP12
M7 Clock Selector ··················· JP6
CPU Voltage Selector JP16
Clock Generator Frequency Selector JP30,JP31,JP32,JP33,JP34

```
PCI Clock Selector ................... JP4,JP5
Memory Selector ...................... JP45
Mono / Color Selector ................ JP1
Charge / Discharge CMOS .............. JP2
Cache Option ......................... JP20,JP22,JP23,JP24
VL-BUS Option ........................ JP18,JP19
Monitor Power Saving ................. JP3
RESET Switch Connector ............... S1
External Battery Connector ........... J2
Keylock & Power LED Connector ........ J16
Keyboard Connector ................... J1
Power Supply Connector ............... PL1
Turbo Switch Connector ............... JP28
Turbo LED Connector .................. JP27
Speaker Connector .................... JP25
Micellaneous Jumpers ................. JP9,JP14,JP29,JP39,JP40
                                       JP41,JP42,JP43,JP44,JP46
```

CPU Type Selector

CPU Type Selector is used to select different type of CPU.

CPU TYPE	JP7	JP8	JP10	JPI1	JP15	JP36	JP37	JP38
486SX	OPEN	OPEN	OPEN	OPEN	2-3	CLOSE	OPEN	OPEN
487SX	2-3	OPEN	OPEN	OPEN	1-2,3-4	CLOSE	OPEN	OPEN
486DX	1-2	OPEN	OPEN	OPEN	1-2,3-4	CLOSE	OPEN	OPEN
M6	OPEN	OPEN	1-2	OPEN	2-3	OPEN	CLOSE	OPEN
M7	1-2	OPEN	OPEN	OPEN	1-2,3-4	OPEN	CLOSE	OPEN
P24C	1-2	OPEN	OPEN	OPEN	1-2,3-4	CLOSE	OPEN	OPEN
P24D	1-2	CLOSE	OPEN	CLOSE	1-2,3-4	CLOSE	OPEN	CLOSE
P24T	1-2	OPEN	2-3	OPEN	1-2,3-4	CLOSE	OPEN	OPEN

NOTE: If Enhance CPU is used note JP13, JP17, JP21 SL-enhance CPU
      Selector SL-enhance CPU have SMI function that support stop
      clock, other CPU have AUTO GREEN function only.

NOTE: If P24C (DX4-100 MHz) CPU is used note JP12 P24C CLOCK
      Selector, JP16 CPU VOLTAGE Selector and Clock Generator
      Frequency selector. For DX-4 100 MHz select 33/16 P24C
      CLK 3X. It does not support Doze mode.

WARNING: Wrong CPU Voltage to P24C will DAMAGE the CPU.

NOTE: If CYRIX M7 CPU is used note JP6 CYRIX M7 CLOCK Selector.

SL-enhance CPU Selector

```
JP13    JP17    JP21
CLOSE   CLOSE   CLOSE    for SL-enhance CPU
OPEN    OPEN    OPEN     for Other CPU
```

P24C Clock Selector
```
===================
OPEN    P24C X3    CLK
1-2     P24C X2.5 CLK
2-3     P24C X2    CLK
```

CYRIX M7 Clock Selector
```
=======================
1-2     M7 X1 CLK
2-3     M7 X2 CLK
OPEN    OTHER CPU
```

CPU VOLTOGE Selector
```
====================
1-2, 4-5  5.0  VOLTS    OTHER CPU
2-3, 5-6  3.45 VOLTS    P24C  CPU
```

Clocl Generator Frequency Selector
```
===================================
        JP30    JP31    JP32     JP33    JP34
25/8    OPEN    OPEN    OPEN     OPEN    OPEN
33/8    CLOSE   CLOSE   OPEN     OPEN    OPEN
40/8    OPEN    CLOSE   OPEN     OPEN    OPEN
50/16   CLOSE   OPEN    OPEN     OPEN    OPEN
33/16   CLOSE   OPEN    OPEN     CLOSE   OPEN
```

PCI Clock Selector
```
==================
JP4     JP5
1-2     2-3     ASYNC Clock (with external OSC.)
2-3     1-2     SYNC Clock
```

Memory Selector
```
===============
1-2 SIMM 72 pin as BANK O
2-3 SIMM 72 pin as BANK 1
```

NOTE: If 30 pin SIMM module is useci, 72 pin SIMM module can not be
       set to Bank O

```
Mono/Color Selector
===================
OPEN   MONO include EGA and VGA
CLOSE  COLOR for CGA only


Charge / Discharge CMOS
=======================
1-2   DISCHARGE CMOS    NOTE: All DATAS in the CMOS will be ERASED.
2-3   CHARGE CMOS


CACHE Option
============
SIZE     JP20    JP22    JP24    JP23   TAG RAM
64 K     2-3     OPEN    OPEN    1-2    8K * 8
128 K    1-2     CLOSE   OPEN    1-2    8K * 8
256 K    2-3     CLOSE   CLOSE   2-3    16K * 8
                                 1-2    32K * 8


CACHE TYPE
==========
SRAM      BANK O        BANK 1        TAG RAM
64 K      8K * 8        8K * 8        8K * 8
128 K     32K * 8       NONE          8K * 8
256 K     32K * 8       32K * 8       32K * 8 /16K * 8

BANK O (U25, U28, U33, U39)
BANK 1 (U26, U29, U34, U40)


VL-BUS Option
=============
JP18                    JP19
OPEN     <=33 MHz       OPEN   O W/S
CLOSE    > 33 MHz       CLOSE  1 W/S


CONNECTORS
==========
JP3    Monitor Power Saving. NOTE: This function need a Green function
       power supply and also note of polarity.

S1     Reset Connector

J2     External Battery Connector ( Note of the POLARITY )
       NOTE: PIN 1 fort (+) PIN 4 for (-)

J16    Keylock & Power LED
```

```
J1       Keyboard Connector

PL1      Power Supply Connector
         NOTE: Wrong connection will damage the mainboard.

JP28     Turbo Switch      OPEN  :NORMAL SPEED
                           CLOSE :TURBO SPEED

JP27     Turbo LED ( Note of the POLARITY)
         OPEN  NORMAL SPEED    LED WILL LIGHT OFF
         CLOSE TURBO SPEED     LED WILL LIGHT ON
         NOTE: If KEYBOARD is used to change the speed TURBO LED will
               not change.

JP25     Speaker Connector


Micellaneous Jumpers (PLEASE DON'T CHANGE THE FOLLOWING JUMPERS)
====================
JP9  JP14  JP29  JP39  JP40  JP41  JP42  JP43  JP44  JP46
2-3  1-2   1-2   1-2   1-2   2-3   OPEN  OPEN  OPEN  1-2


Memory Configuration
====================
The system board Memory can be expanded from 2MB to 128MB. Memory can
be installed by using 256K*9/36, 1M*9/36, 4M*36 and 16M * 36 SIMM RAM
Module.
```

MEMORY SIZE	SIMM 30 PIN	SIMM1	SIMM2
2M		256K* 36	256K* 36
		512K* 36	
4M	256K* 9		
		1M*36	
		512K* 36	512K* 36
8M		1M*36	1M*36
		2M*36	
12M	256K* 9		2M*36
		512K* 36	2M*36
16M	4M*9		
		4M*36	
		2M*36	2M*36
32M	4M*9	4M*36	
		4M*36	4M*36

```
64M                          16M* 36

128M                         16M* 36      16M* 36
```

NOTE: SIMM 30 X 4 SIMM MODULE IN ONE BANK. SIMMI & SIMM2 CAN BE USED AS
      SINGLE OR DUOBLE BANK SIMM MODULE 72 PIN.

AWARD BIOS SETUP
================
Award BIOS support plug and play function and has a built-in setup
program that allows the users to modify the basic system configuration.
This type of information is stored in CMOS so that it retains the setup
information when the power is turned off.

1. Turn on or reboot the system. when the below message appears at the
   bottom of the screen during the POST (Power On Self Test) press
   DEL key to enter setup.

2. Press the DEL key to enter the Award BIOS program and the main menu
   will appear on the screen. The main menu allows you to select from
   ten setup functions and two exit choices.

3. For the safe, please select "LOAD SETUP DEFAULTS" for BIOS setup.

                        --- end of manual ---