

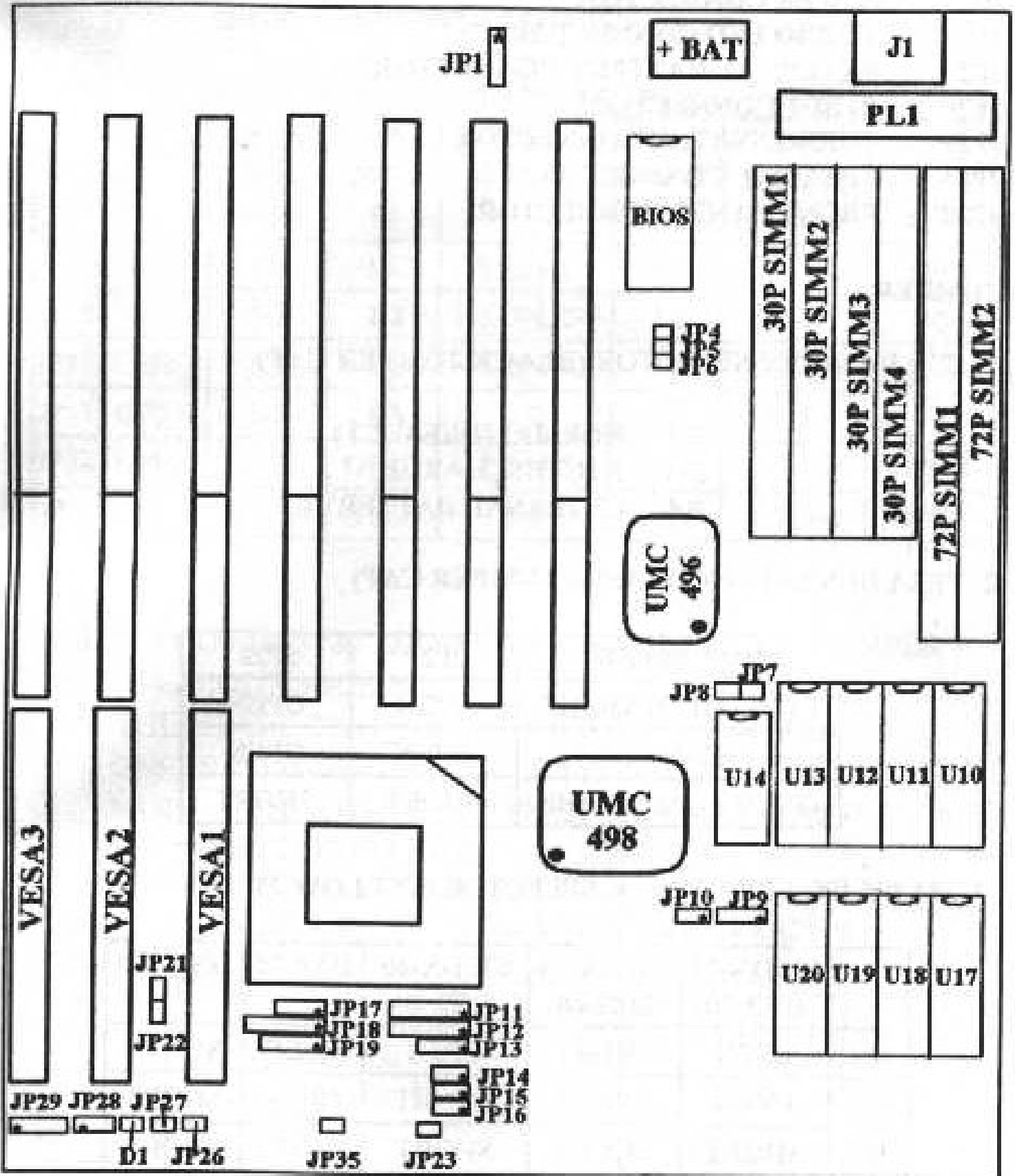
# Chapter 2 FEATURES

## 2.1 Specifications .

<b>CPU</b>	: 25-100 MHz Intel/AMD/Cyrix/UMC 486SX/DX/DX2/DX4, 3.3V/3.45V/4V/5V CPU.
<b>MEMORY</b>	: 2 X 72-pin SIMM and 4 X 30-pin SIMM sockets.
<b>EXP. SLOT</b>	: 3 X VESA, 7 X ISA
<b>CHIPSET</b>	: UMC 498, 496
<b>CACHE RAM</b>	: 128K/256K
<b>BIOS</b>	: AMI WINDOW'S BIOS
<b>SIZE</b>	: 25 CM X 22 CM

# CHAPTER 3. INSTALLATION

## 3.1 Layout reference



- J29 : Keylock**    **D1 : Turbo LED**    **JP27 : Turbo sw**    **JP26 : Reset**
- JP28 : Speaker**

## 3.2 UMC 498 VL JUMPER SETTINGS

- KB1 : KEYBOARD CONNECTOR.  
P1 : POWER CONNECTOR.  
D1 : TURBO LED CONNECTOR.  
JP1 : EXTERNAL BATTERY CONNECTOR.  
JP26 : RESET CONNECTOR.  
JP27 : TURBO SWITCH CONNECTOR.  
JP28 : SPEAKER CONNECTOR.  
JP29 : FRONT PANEL CONNECTOR.

### JUMPER

#### 1. JP1 : BATTERY SELECTOR (BLACK JUMPER CAP)

- 2-3 : NORMAL(DEFAULT)  
3-4 : RTC DISCHARGE  
1,4 : EXTERNAL BATTERY

#### 2. VESA BUS SETUP (YELLOW JUMPER CAP)

BUS SPEED	JP21	JP22
LESS THAN 33MHZ	OPEN	OPEN
33MHZ	OPEN	OPEN
OVER THAN 33MHZ	SHORT	SHORT

#### 3. JP4,JP5,JP6 : CPU CLOCK SELECTOR (YELLOW JUMPER CAP)

	SX/DX-25 DX2-50	SX/DX-33 DX2-66	SX/DX-40 DX2-80	DX4-75	DX4-100
JP4	OPEN	SHORT	OPEN	OPEN	SHORT
JP5	OPEN	SHORT	SHORT	OPEN	SHORT
JP6	SHORT	SHORT	SHORT	SHORT	SHORT

#### 4. JP7,JP8,JP9,JP10 : CACHE SIZE SELECTOR, REFER TO PAGE 7.

### 5. JP35 : AMD CPU TYPE SELECTOR FOR AMD CPU ONLY

(RED JUMPER CAP)

JP35 : OPEN AMD DX4-100/DX/DX2  
 SHORT AMD DX2-66/80(3.3V)

### 6. CPU TYPE SELECTOR (RED JUMPER CAP)

	486SX	486DX/ DX2 -SLE	486DX /DX2 ⊙	Cyrix DX/DX2	UMC 486SX -25/33	Intel DX4-75 DX4-100	AMD DX/DX2 /DX4
JP11	OPEN	1-2	OPEN	1-2, 3-4	2-3	1-2	OPEN
JP12	2-3	1-2	2-3	1-2, 3-4, 5-6	2-3	1-2	2-3
JP13	2-3	1-2, 3-4	1-2, 3-4	1-2, 3-4	2-3	1-2, 3-4	1-2, 3-4
JP17	OPEN	1-2	1-2	1-2	3-4	1-2	1-2
JP18	OPEN	5-6	OPEN	2-3, 4-5	1-2	5-6	OPEN
JP19	OPEN	1-2, 3-4	OPEN	2-3	OPEN	1-2, 3-4	OPEN

#### NOTE:

- ☞ ⊙ IF YOU FIND "&" ON INTEL CPU, PLEASE SET JUMPER AS "486DX/DX2-SLE".
- ⊙ THERE ARE TWO TYPES OF UMC 486 U5-40 PGA CPU, ONE IS "U5S-SUPER40", PLEASE SET AS "UMC 486SX MODE", THE OTHER IS "U5SD-SUPER40, YOU MUST SET AS "486DX/DX2" MODE.

### 7. 3.3V/3.45V/4V/5V CPU SELECTOR (RED JUMPER CAP)

	JP14	JP15	JP16	JP23
Intel DX4-75/100 AMD DX2/DX4 Cyrix DX2 66 3.3V/3.45V CPU	1-2	1-2	1-2	OPEN
Cyrix DX2-80 4V CPU	1-2	1-2	1-2	SHORT
ALL 5V CPU	2-3	2-3	2-3	X

### 3.3 Memory Configuration

This section provides information on how to install the DRAM and Cache SRAM. Improper installation of DRAM or Cache RAM will cause the system to shutdown.

### 3.4 Installation of DRAM

There are no jumpers for the DRAM configuration. The BIOS will test the DRAM type and size automatically. All you need to do is just plug in the SIMM DRAM. There are four banks of Memory (Bank0 - Bank2) on the system board, [ Bank0 consists of 4pcs of 30 pin SIMM DRAM & Bank 1-2 consists of 1pc of 72 pin SIMM DRAM each ]. The SIMM DRAM can be 256K x 9, 1M x 9 4M x 9, 1Mx36 2Mx36 or 4Mx36 modules. The possible combinations of the SIMM DRAM are as follows.

30P SIMM1-4	72P SIMM1	72P SIMM2	TOTAL
256KB	---	---	1MBytes
1MB	---	---	4MBytes
---	4MB	---	4MBytes
256KB	4MB	---	5MBytes
1MB	4MB	---	8MBytes
---	4MB	4MB	8MBytes
---	8MB	---	8MBytes
1MB	4MB	4MB	12MBytes
---	4MB	8MB	12MBytes
4MB	---	---	16MBytes
---	8MB	8MB	16MBytes
---	4MB	16MB	20MBytes
4MB	4MB	4MB	24MBytes
---	8MB	16MB	24MBytes
4MB	8MB	8MB	32MBytes
4MB	---	16MB	32MBytes
---	16MB	16MB	32MBytes
4MB	16MB	16MB	48MBytes
:	:	:	:

### 3.5 Cache RAM Configurations

The UMC 498 VL system is very flexible in its configuration of Cache SRAM. The Cache SRAM size can be 128K or 256KB. The following tables are the jumper setting and Cache RAM locations for different Cache RAM sizes.

**(BLACK JUMPER CAP)**

JMP	128K	256K (1 BANK)	256K (2 BANK)
JP7	OPEN	SHORT	SHORT
JP8	SHORT	SHORT	SHORT
JP9	1-2	1-2, 3-4	2-3
JP10	1-2	1-2	2-3

☞ **NOTE : PLEASE DO NOT CHANGE OR REMOVE THE DEFAULT JUMPER SETTINGS BY YOURSELF, CONTACT YOUR DEALER FOR DETAILS FIRST.**

**(1) 128KB Cache RAM**

- Bank 0 ( U10,U11,U12,U13 ) : 32Kx8 SRAM 4pcs.
- Bank 1 ( U17,U18,U19,U20 ) : EMPTY.
- Tag RAM ( U14 ) : 32Kx8/8Kx8 SRAM 1pc

**(2) 256KB Cache RAM ( 1 BANK )**

- Bank 0 ( U10,U11,U12,U13 ) : 64Kx8 SRAM 4pcs.
- Bank 1 ( U17,U18,U19,U20 ) : EMPTY.
- Tag RAM ( U14 ) : 32Kx8/16Kx8 SRAM 1pc

**(3) 256KB Cache RAM ( 2 BANK )**

- Bank 0 ( U10,U11,U12,U13 ) : 32Kx8 SRAM 4pcs.
- Bank 1 ( U17,U18,U19,U20 ) : 32Kx8 SRAM 4pcs.
- Tag RAM ( U14 ) : 32Kx8/16Kx8 SRAM 1pc