

MP033 USER'S MANUAL  
OPTi PENTIUM 60/66 MOTHERBOARD

Warning

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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 586 Cache package contain the following:

- \* 586 Cache Mother board.
- \* User's manual.

ABOUT THIS MANUAL

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This manual is designed to provide the basic information necessary for the end user to understand and properly use of the 586 VIP Cache Motherboard. The mother board ensure superlative performance and complete compatibility with software written for IBM PC/AT 586 type of processor.

TRADEMARKS

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Mother Board Features

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- \* Opti chipset 82C596, 82C597, 82C822 and 82C206
- \* Fully support the Pentium Microprocessor
- \* 1X clock source, supporting system running up to 66 MHz
  
- \* Write Back, direct-mapped cache with size selection: 128K, 256K, 512K, 1M
  
- \* DRAM configuration up to 128M
- \* Programmable cache write policy: Write Back or Write Through
- \* Fully programmable cache and DRAM read / write cycles
- \* Support for two Programmable non-cacheable memory regions
- \* High performance 32 bit Local Bus support
- \* Hidden refresh with CAS before RAS refresh supported
- \* Asynchronous CPU VL Bus interface
- \* Option for cacheable, write protected, system and video BIOS
- \* Shadow RAM option
- \* Provides central arbiter to arbitrate the bus request between host CPU, PCI master, DMA/ISA master and refresh
  
- \* Five 16 bit slots, Three VESA slots , Four PCI slots
- \* Dimension 22 x 33 CM with 4 layers

## Jumpers and Connectors reference

Before installing the mother board, make sure the jumpers setting are set for your configuration. The Function of each jumpers are as follows:

Cache Option .....	JP1, JP2, JP15, JP9, JP10, JP11, JP12
Clock Generator Frequency Selector.....	JP17, JP18, JP19
Charge / Discharge CMOS .....	JP13
Speaker Connector .....	J13
Keylock & Power LED .....	J14
Reset Connector .....	J15
External Battery Connector .....	J2
Power Supply Connector .....	P1, P2
Keyboard Connector .....	J1
Micellaneous Jumpers .....	JP34, JP35, JP36, JP39

## JUMPER SWITCHES

These switches consist of two or three pins set in a plastic base. Two of the pins are covered by a cap which connect or short each other. It is possible to change the switch setting by moving the cap between the first or last two pins.

## JUMPERS OPEN & SHORT

If you wish to change any of the jumper setting, make sure the board is disconnected from the power source. This is to protect the mother board from getting damage.

## JP13 Charge/Discharge CMOS

CMOS Charge/Discharge CMOS is used to Charge and Discharge CMOS. If you discharge the CMOS all datas in the CMOS will be erase. To discharge CMOS, place a jumper cap in pin 1 & 2 then turn on the Power supply for 1 to 2 seconds then turn off the power supply. In this procedure the CMOS is discharge, all the datas in the CMOS is erase. Place the jumper cap in pin 2 & 3 for CMOS charge, then run setup.

JP13	1-2	Discharge CMOS
JP13	2-3	Charge CMOS

## JP1 , JP2, JP3, JP10, JP11, JP12, JP15 Cache Option

SIZE	JP1	JP2	JP12	JP11	JP10	JP9	JP15
128 K	2-3	2-3	OPEN	OPEN	OPEN	CLOSE	2-3
256 K	1-2	1-3	OPEN	OPEN	CLOSE	CLOSE	1-2
512 K	1-3	2-3	OPEN	CLOSE	CLOSE	CLOSE	2-3
512 K	1-2	1-2	OPEN	CLOSE	CLOSE	CLOSE	1-2
1M	1-2	1-2	CLOSE	CLOSE	CLOSE	CLOSE	1-2

	SRAM		TAG RAM
SIZE	BANK 0	BANK 1	U18
128 K	8K x 8	8K x 8	8K x 8
256 K	32K x 8	NONE	8K x 8
512 K	32K x 8	32K x 8	32K x 8
512 K	64K x 8	NONE	32K x 8
1M	128K x 8	NONE	32K x 8

BANK 0	U3, U6, U8, U16, U20, U23, U29, U34
BANK 1	U2, U5, U7, U15, U19, U22, U25, U28

Clock Generator Frequency Selector

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MX8315      JP17      JP18      JP19
66 MHz      CLOSE     OPEN      CLOSE
60 MHz      OPEN      CLOSE     OPEN

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IMI468
66 MHz      CLOSE     CLOSE     CLOSE
60 MHz      CLOSE     OPEN      CLOSE

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Micellaneous Jumpers  
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                DEFAULT  OPTION  FOR OLD VERSION OF PCI CARD
JP34 IRQ15 2-3      1-2,3-4
JP35 IRQ1Z 2-3      1-2,3-4
JP36 IRQ11 2-3      1-2,3-4

JP39 1-2 INTA#2 DEFAULT          PCI SLOT 2 ONLY
      3-4 IRQ14  EDGE TRIGGER IDE OPTION  PCI SLOT 2 ONLY
      5-6 IRQ15  EDGE TRIGGER IDE OPTION  PCI SLOT 2 ONLY

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Connectors  
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The mother board have Six connectors. Four of them resemble jumper switch without caps. The Fifth is a large double connector for the power supply and the last is for the keyboard connector.

J2 External Battery connector is used for the external battery. This is use when internal batter); is not conecteti.

J15 Reset switch connector will be connected io the reset switch of Jour computer case. Resetting the systemrt it will restart the computer from self-tesr without turning off the power supply. This connection is always in OFF position.

J14 Keylock and Power LED connector will be connected to your computer case. Keylock is used to lock the keyboard. Power LED will light up when you turn on your power supply.

J13 Speaker connector will be connected to the speakerofyour computer case.

P1 - P2 Power Supply connector is connected from the output of the power supply. Most of the power supply has two connectors which will be connected to the main board. Each connector has six wires, two of the wires are black. To connect to the main board, make sure that the black wires is in the middle. Wrong connection will cause damage of the main board.

J1 Keyboard connector: This is used for inputting signal from the keyboard.

Memory Configuration  
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The system board Memory can be expanded from 2MB to 128MB. Memo-ry can be installed by using 256K, 512K, 1M, 2M, 4M and 8M SIMM KAM Module 72 pins.

MEMORY SIZE	BANK 0		BANK 1	
	SM 4	SM 3	SM 2	SM 1
2M	256Kx36	256Kx36	NONE	NONE
4M	512Kx36	512Kx36	NONE	NONE

	256Kx36	256Kx36	256Kx36	256Kx36
8M	1Mx36 512Kx36	1Mx36 512Kx36	NONE 512Kx36	NONE 512Kx36
16M	2Mx36 1Mx36	2Mx36 1Mx36	NONE 1Mx36	NONE 1Mx36
32M	4Mx36 2Mx36	4Mx36 2Mx36	NONE 2Mx36	NONE 2Mx36
64M	8Mx36 4Mx36	8Mx36 4Mx36	NONE 4Mx36	NONE 4Mx36
128M	8Mx36	8Mx36	8Mx36	8Mx36

NOTE: 256Kx36 means 1MB Single Side SIMM  
512Kx36 means 2MB Double Side SIMM  
1Mx36 means 4MB Single Side SIMM  
2Mx36 means 8MB Double Side SIMM  
4Mx36 means 16MB Single Side SIMM  
8Mx36 means 32MB Double Side SIMM

#### Installing Memory Modules

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There are four sockets of 72 pins on the system board that can accommodate up to a maximum of 128 megabytes of memory. There are 2 bank of SIMM modules socket for use with 256K, 512K, 1M, 2M, 4M and 8M size RAM Modules with the access time of 70ns or faster. Extreme use of caution should be exercise when installing or removing the SIMM memory module in order to avoid damaging the SIMM socket.

Steps for installing SIMM RAM Modules in the system board.

(1). Insert the SIMM at an angle into the socket's edge connector slot	(2). Press it forward into the retaining clips	(3). The installed SIMM should be at 90 degree to the board
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- Carefully hold the SIMM. Insert the SIMM module's "GOLD EDGE" connector into the socket at a 70 degree angle and guide the component side of the module. (Note that the modules can only be fit into the socket one way.)
- Gently press the SIMM module into the socket in downward position, then snap it into place in the vertical position. The module should clip into the locking tabs at each end of the socket. The SIMM is probably not inserted fully into the socket if the pegs do not fit into the hole.
- To remove the module, gently push the edge of the sockets. Disengage one side of the modules first, then the other side, to avoid breaking the socket.

#### AWARD BIOS SETUP

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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.

- 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.
- 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.

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