

# 2 Setting Up the Mpower 4 plus

Although the Mpower 4 plus system board is packaged in protective materials, it is important to use care while unpacking and setting it up.

## Static Electricity

The Mpower 4 plus is shipped from the factory in an antistatic bag. To reduce the possibility of damage, it is important to neutralize any accumulated static charges on your body before handling the board. The best way to do this is to ground yourself using a special wrist or ankle strap. If you do not have a strap, you should touch both of your hands to a safely grounded object (any silver part of the case should suffice). After you have grounded yourself, ground the Mpower 4 plus via the solder pads surrounding one of its mounting holes.

Once the Mpower 4 plus is removed from its packaging, place it on top of the antistatic bag. Carefully inspect the board for damage which may have occurred during shipment.

## Office Environment

Make sure the finished computer system is in an area with good ventilation. The system should not be in direct sunlight, near heaters, or exposed to moisture, dust, or dirt.

# Mpower 4 plus Components

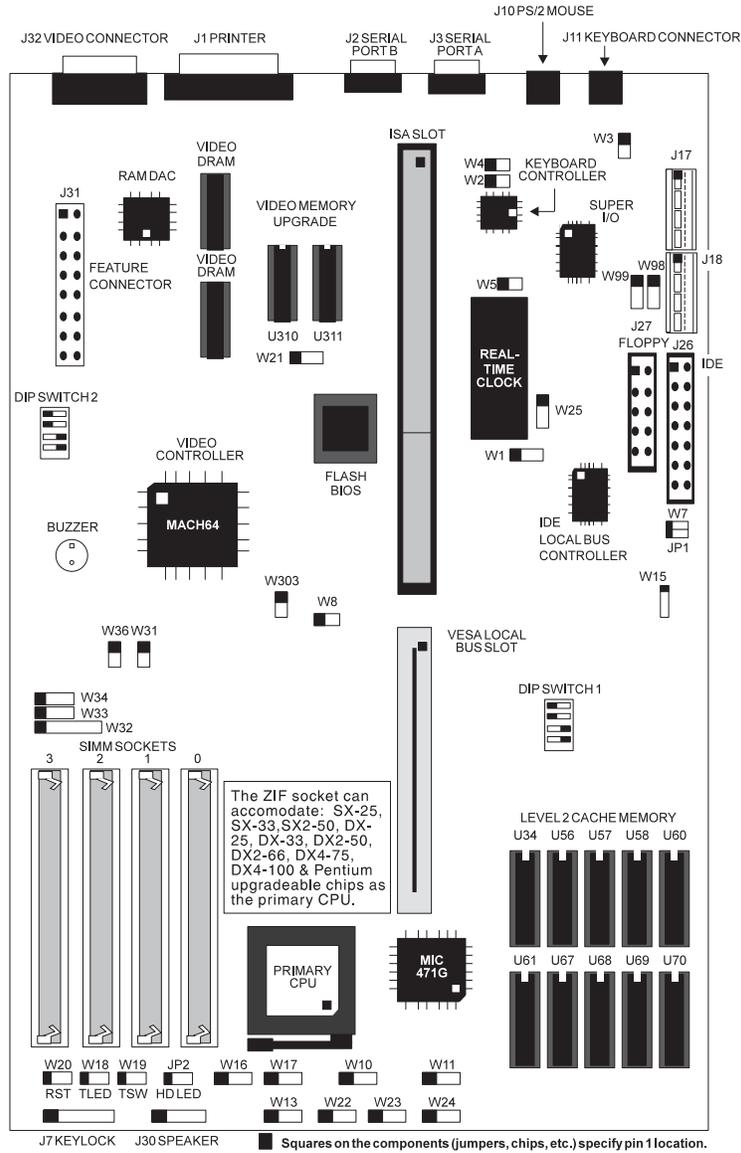


Figure 2-1 Mpower 4 plus System Board

*Note:*  
For information on battery disposal or fuse replacement, see Appendix D.

## Jumper Settings

Table 2-1 lists jumper settings for the real-time clock.

Jumper	Function	Setting
W1	DALLAS Real-Time Clock	Installed
W5	Discharge DALLAS Real-Time Clock Normal operation	Installed Not Installed

**Table 2-1 Real-Time Clock Settings**

Table 2-2 lists jumper settings for the type of video monitor display used with the system board.

Jumper	Function	Setting
W2	Color (Default) Monochrome	Installed Not Installed

**Table 2-2 Video Monitor Display Selection**

Table 2-3 lists the jumper settings for the mouse configuration.

Jumper	Function	Setting
W3	IRQ12 for PS/2 Mouse (Default) No PS/2 Mouse Supported	Installed Not Installed

**Table 2-3 Mouse Configuration Selection**

Table 2-4 lists the jumper settings for the parity configuration.

Jumper	Function	Setting
W4	Parity Enabled (Default) Parity Disabled	Installed Not Installed

**Table 2-4 Parity Configuration Selection**

Table 2-5 lists the jumper settings for the Super I/O.

Jumper	Function	Setting
W7	Enable Super I/O	Not Installed
	Disable Super I/O	Installed
JP1	Enable CMD IDE (Default)	Not Installed
	Disable CMD IDE	Installed

Table 2-5 Super I/O Selection

*Note:*

*The floppy connector, serial ports, and parallel port are disabled when the Super I/O is disabled.*

Table 2-6 lists the jumper settings for BIOS operation.

Jumper	Function	Setting
W8	Normal (Default)	Not Installed
	Recovery	Installed
W21	BIOS	Open 1-2
	Write Protect (Default)	
	BIOS Write Enable (Flash)	

Table 2-6 BIOS Operation Selection

**NOTE:**

*Jumper W21 must be reconfigured to update (Flash) the BIOS. If problems occur during the flash procedure, reset W8 to the BIOS Recovery Mode. A special diskette is needed for the recovery mode. Contact your computer dealer for the Flash Utility diskette or call Micronics' BBS number at (510) 651-6837 to download the utility.*

Table 2-7 lists jumper settings for external (L2) cache selection.

Jumper	64K	128K	256K
W10 (Tag)	1-2	1-2	2-3
W11 (Tag)	1-2	2-3	2-3
W22 (Data)	2-3	1-2	2-3
W23 (Data)	2-3	1-2	2-3
W24 (Data)	1-2	2-3	2-3

**Table 2-7 External Cache Selection**

Table 2-8 lists the jumper settings for the type of CPU used on the system board.

Jumper	Function	Setting
W13	PQFP Not Installed (Default)	Not Installed
	PQFP Disabled by <i>OverDrive</i> <sup>TM</sup> CPU	1-2
	PQFP Manually Disabled	2-3
W32	DX4 CPU	1-2
	All other CPUs	Not Installed
W33	486 SX, PGA	2-3
	486 SX2, PGA	3-4
	All other CPUs, including the DX4	1-2 & 3-4
W34	DX4 CPU	3-4
	All other CPUs	Not Installed

**Table 2-8 CPU Selection**

Table 2-9 lists reserved jumpers with factory determined settings. Do not reconfigure these jumpers.

Jumper	Function	Setting
W15	Reserved	1-2
W31	Reserved	Not Installed

Table 2-9 Reserved Jumpers

Table 2-10 lists jumper settings for external (L2) cache size configuration.

Jumper	64K	128K	256K
W16	1-2	1-2	2-3
W17	1-2	2-3	2-3

Table 2-10 External Cache Size Selection

Table 2-11 lists the jumper settings for the parallel port selection.

Jumper	Function	Setting
W25	IRQ7 for Parallel Port (Default)	2-3
	IRQ5 for Parallel Port	1-2
W98	DMA Channel 1 (Default)	1-2
	DMA Channel 3	2-3
W99	DMA Channel 1 (Default)	1-2
	DMA Channel 3	2-3

Table 2-11 Parallel Port Selection

Table 2-12 lists the jumper settings for the video selection.

Jumper	Function	Setting
W303	Disable VGA IRQ9 (Default)	Not Installed
	Enable VGA IRQ9	Installed

**Table 2-12 Video Selection**

Table 2-13 lists the jumper settings for case and peripheral connections.

Jumper	Function	Notes
W18	Turbo LED	
W19	Turbo Switch	
W20	Reset Switch	1-Signal; 2-Ground
J1	Parallel Port Connector	
J2	Serial Port B	Can be Disabled at the CMOS configuration screen.
J3	Serial Port A	Can be Disabled at the CMOS configuration screen.
J7	Power LED/Keylock	1-Power LED; 2-N/C; 3-Ground; 4-Keybd Lock; & 5-Ground
J10	PS/2 Mouse Connector	
J11	Keyboard Connector	
J17 & 18	Power Supply Connector	
J26	IDE Connector	
J27	Floppy Connector	
J30	Speaker Connector	
J31	Video Feature Connector	
J32	Video Port Connector	
JP2	Hard Drive LED	

**Table 2-13 Case and Peripheral Connections**

Table 2-14 lists the jumper settings for DIP Switch 1.

Switch	Function	Setting
SW 1-1	SX25MHz/DX25MHz/DX2-50MHz/DX4-75MHz SX33MHz/DX33MHz/DX2-66MHz/DX4-100MHz	OFF ON
SW 1-2	Reserved	ON
SW 1-3	0 Wait Write Min 1 Wait Write Min	OFF ON
SW 1-4	CPU Speed less than or equal to 33 MHz CPU Speed greater than 33 MHz	OFF ON

**Table 2-14 DIP Switch 1 Settings**

Table 2-15 lists the settings for DIP Switch 2.

Switch	Function	Setting
SW 2-1*	Disable ATI Chip Enable ATI Chip	ON OFF
SW 2-2*	RAMDAC at Snooping Mode RAMDAC at Regular Mode	ON OFF
SW 2-3*	Disable On-board VGA BIOS Enable On-board VGA BIOS	ON OFF
SW 2-4**	Select On-board Buzzer Select External Speaker	ON OFF

**Table 2-15 DIP Switch 2 Settings**