

2 Configuring the LPX54

Although the LPX54 system board is packaged in protective materials, it is important to use care while unpacking and setting up.

Static Electricity

The LPX54 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. After you have grounded yourself, ground the LPX54 via the solder pads surrounding one of its mounting holes.

Once the LPX54 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.

LPX54 Components

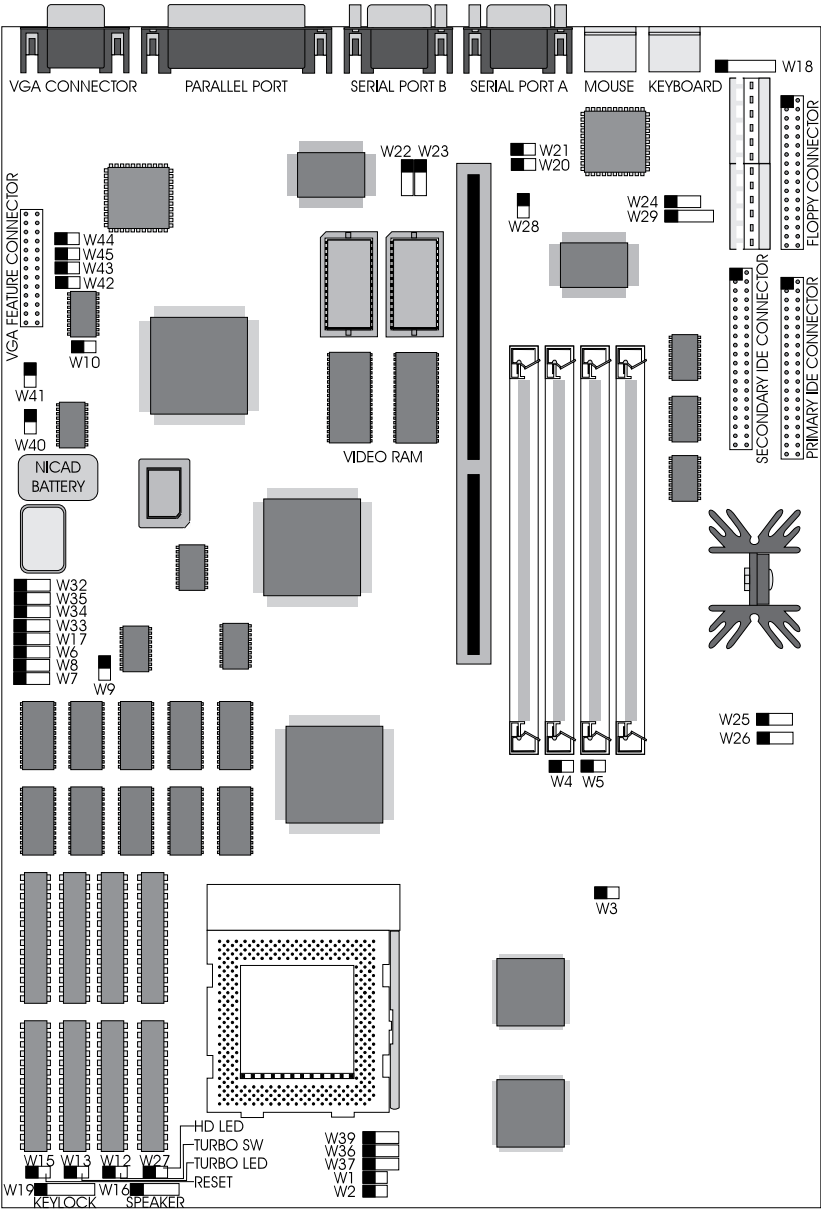


Figure 2-1 LPX54 System Board

Jumper Settings

Table 2-1 lists the jumper settings to select the speed of the CPU.

Jumper	CPU Speed Bus Speed	75MHz 50MHz	90MHz 60MHz	100MHz 66MHz
W3		close	close	open
W4		close	open	close
W5		open	close	open
W38		open	open	close

Table 2-1 CPU Speed Selection

Table 2-2 lists the jumper settings to set the board speed to CPU speed ratio.

Jumper	Function	Setting
W2	2/3 (1.5X) Clock (default)	open
	1/2 (2.0X) Clock	close

Table 2-2 CPU Bus Speed Selection

Note:

The setting for the Pentium 50/75 (board speed/CPU speed), the Pentium 60/90, and the Pentium 66/100 is 1.5X Clock.

Table 2-3 lists the jumper settings to select the size of the external cache.

Jumper	Cache	256K	512K
W6		1-2	2-3
W7		1-2	2-3
W8		1-2	2-3

Table 2-3 Cache Size Selection

Table 2-4 lists the jumper settings to select between write-back and write-through internal cache.

Jumper	Function	Setting
W1	Write-back (default)	open
	Write-through	close

Table 2-4 Cache Type Selection

Table 2-5 lists the jumper settings to select the type of video installed.

Jumper	Function	Setting
W20	Color (default)	close
	Monochrome	open

Table 2-5 Video Selection

Table 2-6 lists the jumper settings for installing a PS/2 mouse.

Jumper	Function	Setting
W21	PS/2 mouse installed (default)	close
	No PS/2 mouse installed	open

Table 2-6 PS/2 Mouse Selection

Table 2-7 lists the jumper settings to set the IRQs for the IDE controllers. Leave the PCI IDE hard disk controller for IRQ14 unless you are using a SCSI controller and need to free up an unnecessary IRQ.

Primary IDE Interrupt	Secondary IDE Interrupt	W24	W28	W29
none	none	open	open	open
none	ISA IRQ15	2-3	open	open
PCI INT A	none	open	close	open
PCI INT A	ISA IRQ15	2-3	close	open
ISA IRQ14	none	open	open	1-2
ISA IRQ14 (default)	ISA IRQ15	2-3	open	1-2

Table 2-7 IDE IRQ Selection

Table 2-8 lists the jumper settings to select the ISA IDE controller's DMA channel.

DMA Channel Jumper	None (default)	DMA6	DMA7
W25	open	1-2	2-3
W26	open	1-2	2-3

Table 2-8 ISA IDE DMA Channel Selection

Table 2-9 lists the jumper settings to select the parallel port DMA channel for ECP mode.

DMA Channel Jumper	None (default)	DMA1	DMA3
W22	open	1-2	2-3
W23	open	1-2	2-3

Table 2-9 Parallel Port DMA Channel Selection

Table 2-10 lists the jumper settings to disable the on-board VGA controller.

Jumper	Function	Setting
W40	On board VGA enabled (default)	open
	On board VGA disabled	close
W42	VGA hardware enabled (default)	open
	VGA hardware disabled	close

Table 2-10 VGA Controller Disable

Table 2-11 lists the jumper settings for BIOS operation.

Jumper	Function	Setting
W9	Normal (default)	2-3
	Recovery mode	1-2
W10	Flash BIOS programmable (default)	close
	Flash BIOS write-protected	open

Table 2-11 BIOS Operation Selection

Note:

Jumper W9 must be reconfigured to update (Flash) the BIOS. If problems occur during the flash procedure, reset W9 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 2-12 lists the jumper settings to reset the BIOS. With the computer's power off, move the jumper to pins 2 and 3 for about five seconds and place the jumper back on pins 1 and 2.

Jumper	Function	Setting
W17	Normal operation (default)	1-2
	Clear CMOS RAM settings	2-3

Table 2-12 BIOS Reset Jumper

Note:

This will reset all BIOS settings to their defaults. Any changes you have made will be lost.

Table 2-13 lists jumpers with factory reserved settings. **Do not reconfigure these jumpers.**

Jumper	Function	Setting
W32	Reserved	1-2
W33	Reserved	1-2
W34	Reserved	1-2
W35	Reserved	1-2
W36	Reserved	1-2
W37	Reserved	2-3
W39	Reserved	2-3
W41	Reserved	close
W43	Reserved	open
W44	Reserved	open
W45	Reserved	open
W46	Reserved	2-3

Table 2-13 Reserved Jumper Settings

Table 2-14 lists the jumper settings for case and peripheral connections.

Jumper	Function	Notes
J15	PCI IDE Connector	Primary
J14	ISA IDE Connector	Secondary
J10	Floppy Connector	
J13	Parallel Port Connector	Can be disabled at the CMOS configuration screen.
J11	Serial Port (Com1)	Can be disabled at the CMOS configuration screen.
J12	Serial Port (Com 2)	Can be disabled at the CMOS configuration screen.
J18	VGA Connector	
J17	VGA Feature Connector	
J9	PS/2 Keyboard	
J6	PS/2 Mouse	
W18	Ext. Keyboard	1- Clock(Keybd), 2-Data, 3-N/C, 4-Ground, 5-VCC
J2 & J3	Power Supply Connector	
J4 & J5	3.3V Power Connector	
W27	Hard Disk LED	1-+5V DC, 2-Ground
W15	Reset	
W12	Turbo Switch	
W13	Turbo LED	1-+5V DC, 2-Ground
W19	Keylock/Power LED	1-Power; 2-N/C; 3-Ground; 4-Keyboad Lock; 5-Ground
W16	Speaker Connector	1-Speaker; 2-N/C; 3-Ground; 4-5V DC
J1	Reserved	

Table 2-14 Case and Peripheral Connections

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to the next chapter.....**