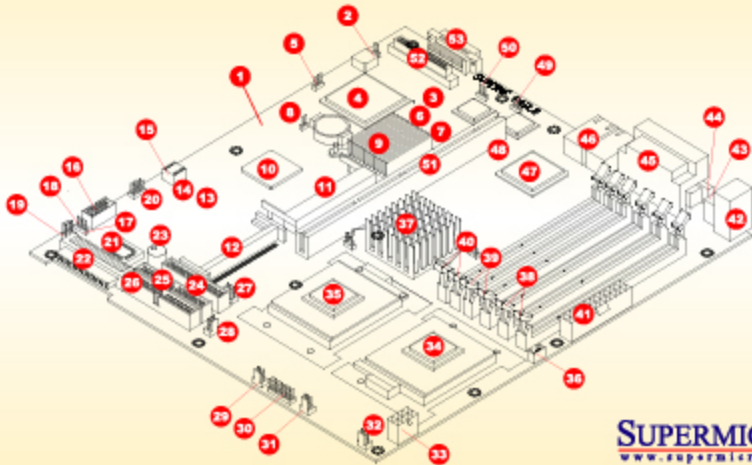


## Motherboard Components

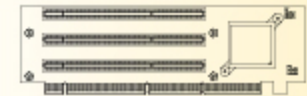


1 Super P4DLR motherboard	18 J10: sleep button header	34, 35 CPU1, CPU2
2 JPA1: SCSI channel B Termination	19 Chassis fan	36 JP46: Third power supply fail header
3 WOL: wake-on-LAN header	20 COM2	37 North bridge
4 Adaptec 7899W SCSI chip	21 BIOS	38, 39, 40 Bank 1, 2, 3
5 JA4: SCSI enable/disable	22 JA2: Ultra III LVD/SE ch A	41 ATX power conn.
6, 7 JP4, P2 PCI-X bus speed setting	23 JP2: speaker enable/disable	42 keyboard/mouse
8 JPA2: SCSI channel B Termination	24 Floppy	43 USB 0/1 ports
9 I/O bridge	25 IDE#1	44 COM1, VGA ports
10 South bridge	26 IDE#2	45 Parallel port
11 SCSI RAID port	27 CPU2 fan	46 LAN 1, 2 ports
12 IPMI port	28 JPS8: CPU2/chassis fan select	47 ATI rage XL graphic chip
13 JBT1: CMOS clear	29 CPU1 fan	48 JPS6: VGA enable/disable
14 JP3: watch dog	30 JF1: front control panel conn.	49 JPS5: LAN 2 enable/disable
15 SW4	31 CPU1/chassis fan	50 JPS4: LAN 1 enable/disable
16 COM2	32 Overheat/chassis fan	51 PCI-X slot
17 JPS7: chassis intrusion header	33 Secondary ATX power conn.	52, 53 Ultra III LVD/SE ch B

## P4DLR Quick Reference

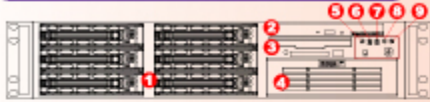
Jumpers	Description	Default Setting
JPA1	SCSI channel B term.	Open (Enabled)
JPA2	SCSI channel A term.	Open (Enabled)
JBT1	CMOS clear	Pins 1-2 (Normal)
JP3	Watch Dog en/disable	Open (Disabled)
JP46	Chassis/overheat fan select	Closed (chassis)
JP2	Speaker enable/disable	Closed (Enabled)
JPS4	LAN1 enable/disable	Pins 1-2 (Enabled)
JPS5	LAN2 enable/disable	Pins 1-2 (Enabled)
JPS6	VGA enable/disable	Pins 1-2 (Enabled)
JPS8	CPU/chassis fan select	Open (CPU)
JA4	SCSI enable/disable	Pins 1-2 (Enabled)
JPA1	SCSI channel B termination	Open (terminated)
JPA2	SCSI channel A termination	Open (terminated)
JP4	33 MHz PCI Force	Pins 1-2 (Enable)

## PCI-X Risercard RR2U-LE Bus Speed Setting



JP1	JP2	JP3	PCIX#2	JP4	JP5	JP6	PCIX#3
Off	Off	Off	PCIX 133	Off	Off	Off	PCIX 133
Off	On	Off	PCIX 100	Off	On	Off	PCIX 100
Off	On	1-2	PCIX 66	Off	On	1-2	PCIX 66
Off	On	2-3	PCI 66	Off	On	2-3	PCI 66
On	On	2-3	PCI 33	On	On	2-3	PCI 33

## Front Panel Functions



1. 6 SCA Ultra160 hot-swap drive bays
2. 1 slim CD-ROM drive
3. Floppy Drive
4. 1 x 5.25" drive bay
5. Overheat: Indicates an overheat condition in the system
6. NIC2: Indicates network activity on LAN2 when flashing
7. NIC1: Indicates network activity on LAN1 when flashing
8. HDD: Indicates IDE channel activity
9. Power: Indicates power is being supplied to the system's power supply units

## Rear Panel Functions

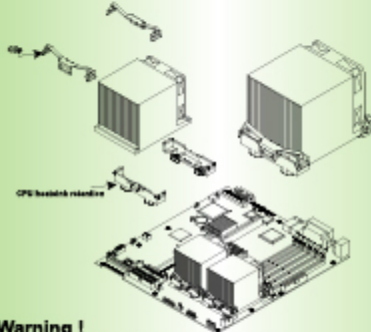


1. AC power connector
2. PS/2 mouse and keyboard ports
3. 2 USB ports
4. COM 1 port
5. VGA port
6. Parallel port
7. 2 x Intel 82550 LAN ports
8. 3 full-length PCI-X slots
9. External high density SCSI port

## PCI-X Bus Speed Jumper Setting Pin Definitions (P2, JP4)

P2	JP4	Protocol	Max. Freq.
Pins 1-2 Closed		PCI	33MHz
Pins 1-2 Open		PCI	66MHz
Pins 2-3 Either (n/a)		PCI-X	66MHz
Pins 3-4 Either (n/a)		PCI-X	100MHz
Pins 4-5 Either (n/a)		PCI-X	133MHz

## Cooling Fan Installation



### Warning ! CPU Heatsink Installation Procedures (For Supermicro SuperServer 2U Systems)

Due to the fact that adequate air flow and proper thermal control are very critical in maintaining 2U system's stability and performance, it is imperative that the proper installation procedures listed below be followed in order to maximize system performance. This is especially critical for 2U dual Xeon processor server solutions.

- 1) Only those CPU heatsinks that are provided by Supermicro should be used.
- 2) Apply a small amount of silicon compound on the CPU's die.
- 3) Place the CPU heatsink on top of the CPU.
- 4) Attach the heatsink clips to the heatsink retention pieces, one on each side of the heatsink as shown in the diagram at right.
- 5) The three tabs on each heatsink retention pieces should completely protrude through the corresponding holes on the heatsink clips.

To protect the system and components, it is essential that you reinstall the top panel after you have finished working on the system.