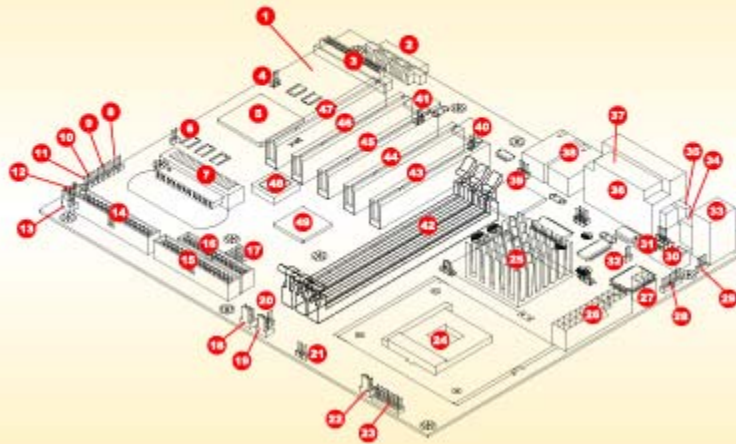


## Motherboard Components



1 System Board	16 floppy	31 JP37: USB wake up
2 Ultra160 SCSI CH B (P45BR only)	17 USB2/3	32 JP38: watch dog
3 Ext. Ultra160 SCSI CH B (P45BR only)	18 Chassis Fan1	33 Mouse and Keyboard Conn.
4 JPA2: LVD SCSI Ch B term	19 OH Fan	34 USB0/1
5 AIC-7899W (P3T5SR only)	20 JP38: OH fan On/Standby	35 COM1
6 JPA1: LVD SCSI Ch A term	21 PWD LED	36 Parallel port
7 Ultra160 SCSI CH A (P45BR only)	22 CPU Fan	37 VGA port
8 JL1: chassis intrusion header	23 JF1: Front control panel	38 LAN1 & LAN2
9 JBT1: CMOS clear	24 CPU	39 JP3: VGA Enable/Disable
10 JWOR	25 North bridge	40 JP35: LAN1 Enable/Disable
11 Speaker	26 JJ21: ATX power (20-pin)	41 JP31: LAN2 Enable/Disable
12 WOL	27 JJ24: ATX power (4-pin)	42 DDR Memory
13 Chassis fan2	28 J45: Infrared device header	43, 44, 45, 46, 47 PCI 1,2,3,4,5
14 IDE#1	29 JPWAKE	48 BIOS FWH
15 IDE#2	30 COM2	49 South Bridge

\* SuperServer 5012B-E: P45BR Motherboard  
\* SuperServer 5012B-E: P45BE Motherboard

## Front Panel Functions

5012B-6



5012B-E



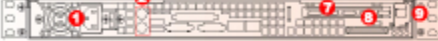
- Hot-plug SCSI hard drive, SCSI ID 1,0
- 2 x 3.5" IDE drive bays
- CD-ROM/diskette drive assembly
- Floppy drive
- Overheat: indicates an overheat condition in the system
- NIC2: Indicates network activity on LAN2 when flashing
- NIC1: Indicates network activity on LAN1 when flashing
- HDD: Indicates IDE channel activity.
- Power: Indicates power is being supplied to the system's power supply units

## P45BE Quick Reference

Jumpers	Description	Default Setting
JBT1	CMOS Clear	Pins 1-2 (Normal)
JP3	VGA Enable/Disable	Pins 1-2 (Enabled)
JP31	LAN2 Enable/Disable	Closed (Enabled)
JP35	LAN1 Enable/Disable	Closed (Enabled)
JP37	USB Wakeup	Pins 1-2 (Disabled)
JP38	OH Fan On/Standby	Open (standby)
JP39	Watchdog Enable/Disable	Open (disabled)
JPWAKE	Keyboard Wake-Up	Pins 1-2 (Disabled)

## Rear Panel Functions

5012B-6



5012B-E

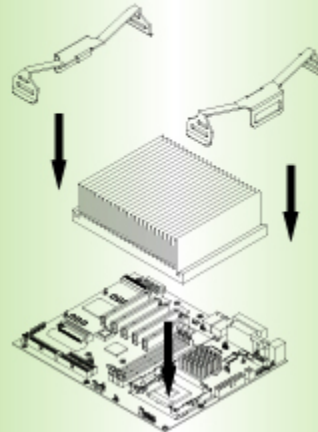


1. AC Power connector
2. PS/2 Mouse and Keyboard ports
3. 2 USB ports
4. 2 COM ports (1 internal)
5. 1 VGA port
6. 2 x Intel 82558 LAN ports
7. 64/32-bit Expansion slot
8. External High Density SCSI Connector (5012B-6 only)
9. PCI Card Release Latch

## P4SBR Quick Reference

Jumpers	Description	Default Setting
JBT1	CMOS Clear	Pins 1-2 (Normal)
JPA1	LVD SCSI ChA Term	Open (Enabled)
JPA2	LVD SCSI ChB Term	Open (Enabled)
JP3	VGA Enable/Disable	Pins 1-2 (Enabled)
JP31	LAN2 Enable/Disable	Closed (Enabled)
JP34	SCSI Enabled/Disable	Pins 1-2 (Enabled)
JP35	LAN1 Enable/Disable	Closed (Enabled)
JP37	USB Wakeup	Pins 1-2 (Disabled)
JP38	OH Fan On/Standby	Open (standby)
JP39	Watchdog Enable/Disable	Open (disabled)
JPWAKE	Keyboard Wake-Up	Pins 1-2 (Disabled)

## Cooling Fan Installation



### Warning !

#### CPU Heat Sink Installation Procedure (For Supermicro SuperServer 1U Systems)

Due to the fact that adequate air flow and proper thermal control are very critical in maintaining 1U 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 1U Dual Processor Servers with speeds of 1 GHz and above.

- 1) Only those CPU heat sinks 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 heat sink on top of the CPU.
- 4) Place the heat sink spring on top of the CPU heat sink and secure the clip of the spring into its notch. (Make sure the clip position is the same as the picture shown above.)

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