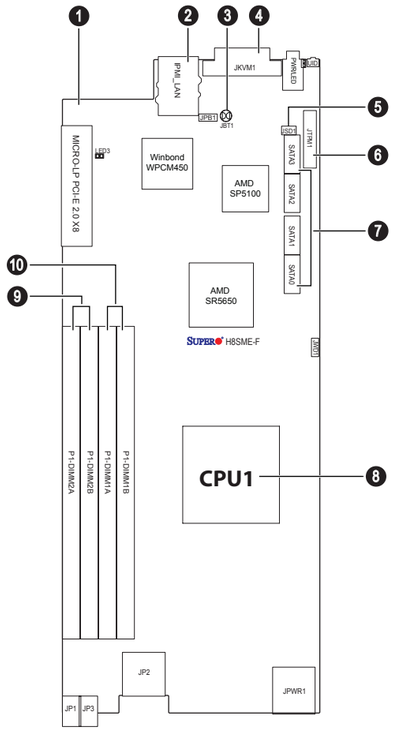
SUPERMICRO® SuperServer 3012MA-H12TRF Quick Reference Guide

Board Layout



No.	Description
1	PCI-E 2.0 x8 (Micro LP slot)
2	IPMI: Dedicated IPMI LAN Port
3	JBT1 = CMOS Reset
4	JKVM1: Keyboard, Video, Mouse Backpanel Connector
5	JSD1: SATA DOM (Device_On_Module) Power Connector
6	JTPM1: Trusted Platform Module Header
7	SATA0~SATA3 : SATA Ports
8	CPU1 socket
9	P1-DIMM2A/P1-DIMM2B slot
10	P1-DIMM1A/P1-DIMM1B slot

Beep Codes

When a recoverable type of error occurs during POST, BIOS will display a POST code that describes the problem. BIOS may also issue one of the following beep codes:

1 long and two short beeps - video configuration error

1 repetitive long beep - no memory detected

1 continuous beep with the front panel Overheat LED on - system overheat

8 short beeps - display memory read/write error

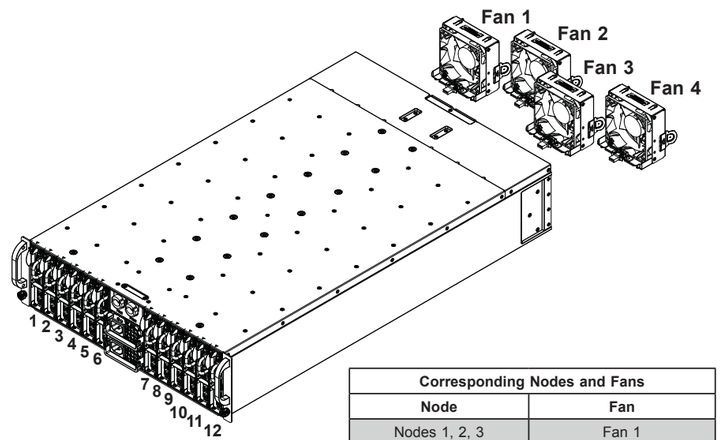
MEMORY

DIMM Module Population Configuration

For memory to work properly, follow the tables below for memory installation:

Per Channel DIMM Populations Options					
DIMM Type	**DIMM A**	**DIMM B**	**Max. MHz, 1.5V DIMMs**	**Max. MHz, 1.35V DIMMs**	**Max. GB/ Channel**
UDIMM	SR or DR	Empty	1600 MHz	1333 MHz	8 GB
	SR	SR	1600 MHz	1333 MHz	4 GB
	DR	DR	1333 MHz	1066 MHz	16 GB

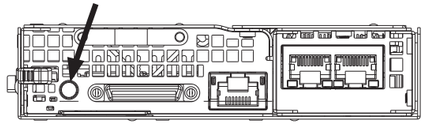
Corresponding Nodes, Fans and Hard Drives



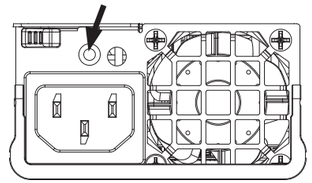
Corresponding Nodes and Fans	
Node	**Fan**
Nodes 1, 2, 3	Fan 1
Nodes 4, 5, 6	Fan 1
Nodes 7, 8, 9	Fan 2
Nodes 10, 11, 12	Fan 4

LED Indicator

Node LED

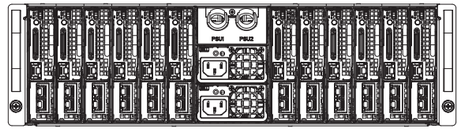


Power Module LED



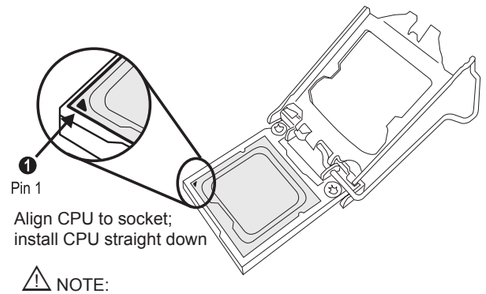
LED Appearance	Description
Green	The power module is on and operating normally
Amber	The system is off, the power module is not turned on or needs service
Off	AC power is not connected to the power module or the module needs service

Front View



LED Appearance	Description
Green	The node is powered on and operating normally
Solid Red	The node is detecting an overheat condition
1Hz Blinking Red	The node is detecting a fan failure
.25Hz Blinking Red	The node is detecting a power failure
No Illumination	The node is powered down

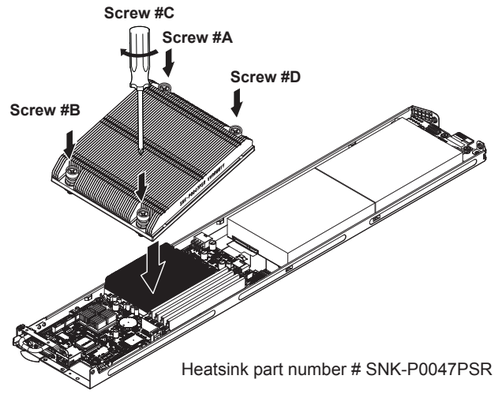
CPU Installation



Align CPU to socket;
install CPU straight down

⚠ NOTE:
Do not bend pin inside socket

Heatsink Installation



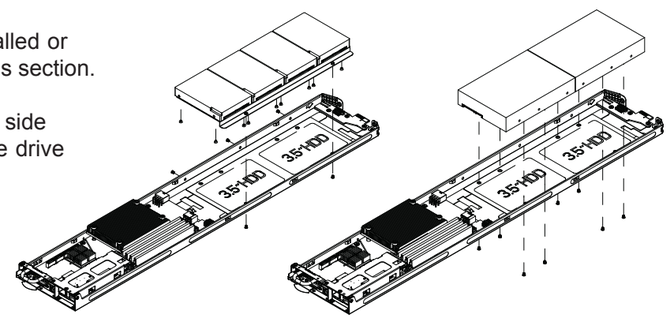
Heatsink part number # SNK-P0047PSR

1. Place heatsink on top of installed CPU
2. Line up the four screws to socket
3. Push down heatsink and screw down as shown (cross pattern, in order: A, C, B, D)
4. NOTE: Only use 6-8 lb/f of torque; otherwise, hand-tighten each screw, to avoid damaging the system

Installing/Removing Hard Drives

Installing/Removing Hard Drives from the Sled

1. Remove the node to have 2.5 or 3.5 HDDs installed or removed by following the procedure in the previous section.
2. Place the sled on a flat, non-conductive surface.
3. Insert the hard drive with the printed circuit board side facing downward so that the mounting holes in the drive align with those in the bottom of the sled.
4. Secure the hard drive to the sled with the screws included with the drive.
5. When finished installing or removing drives, push the node/sled back into the bay it was removed from.
6. Use the node's power to power it back on.



2.5" Hard Drives (Optional) **3.5" Hard Drives**

Caution

⚠ **SAFETY INFORMATION**
IMPORTANT: See installation instructions and safety warning before connecting system to power supply.
http://www.supermicro.com/about/policies/safety_information.cfm

⚠ **WARNING:**
To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets.
If any CPU socket empty, install protective plastic CPU cap

⚠ **CAUTION:**
Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

For more information go to :
http://www.supermicro.com/support