

SUPERMICRO® SuperServer 1012A-MRF Quick Reference Guide

Board Layout

No.	Description
1	Slot5 PCI-E 2.0 x4
2	Slot6 PCI-E 2.0 x4 (in x8)
3	Slot7 PCI-E 2.0 x8 (in x16)
4	CPU1
5	DIMM1A / DIMM1B (Blue Slot)
6	DIMM2A / DIMM2B (Blue Slot)
7	JBT1 = CMOS Clear
8	JTPM1: Trusted Platform Module Header
9	JSD1 = SATA DOM Power Connector
10	SATA0 ~ SATA5: SATA Ports

MEMORY

Memory Population for Optimal Performance

# DIMMs	Channel 1	Channel 2		
2 DIMMs	DIMM1A	DIMM2A		
4 DIMMs	DIMM1A	DIMM1B	DIMM2A	DIMM2B

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

Note 1: Due to OS limitations, some operating systems may not show more than 4 GB of memory.

Note 2: Due to memory allocation to system devices, the amount of memory that remains available for operational use will be reduced when 4 GB of RAM is used. The reduction in memory availability is disproportional.

Front View & Interface

No.	Description
1	Power Button
2	Reset Button
3	Power LED
4	Device Activity LED
5	LAN1 LED & LAN2 LED
6	Information LED

Rear View

No.	Description
1	PCI-E Expansion Slot (w/riser card)
2	UID
3	GbE LAN2 Port
4	GbE LAN1 Port
5	VGA Port
6	COM1 Port
7	USB 0/1 Ports
8	Dedicated LAN for IPMI
9	PS2 keyboard (purple) & Mouse (green) Ports
10	Power Supply Module

CPU Installation

1. Place the CPU on the socket
2. Secure the CPU with the cap
3. Lock the load lever

Heatsink Installation

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/in of torque; otherwise, hand-tighten each screw, to avoid damaging the system

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>

SATA Drive Installation

Installing a 3.5" SATA Drive

- Power down the system and unplug the AC power cord.
- Remove the chassis cover as described.
- Use screws to secure the drive directly into the left side of the chassis as shown in the figure.

Installing 2.5" SATA Drives

- Power down the system and unplug the AC power cord.
- Remove the chassis cover.
- Use screws to secure the drive into the hard drive bracket:
For two drives the bracket is p/n MCP-220-00044-0N.
For one drive the bracket is p/n MCP-220-00051-0N.
- Use screws to secure the bracket/drive assembly into the left side of the chassis as shown in the figure.

The 2.5" hard drives (1) must be installed in the (optional) bracket (2) before they are screwed into the chassis.

<http://www.supermicro.com> MNL-1506-QRG