Board Layout

SUPER® X10SSH-LN4F
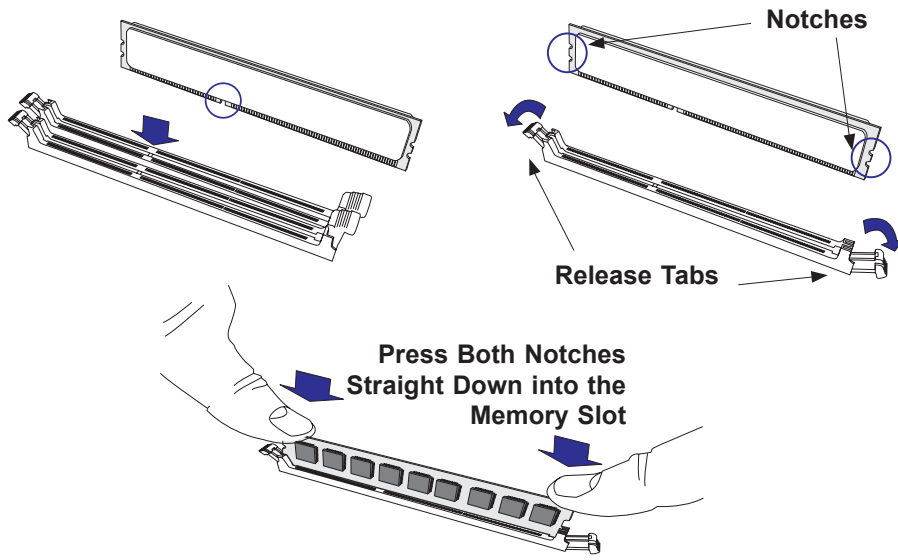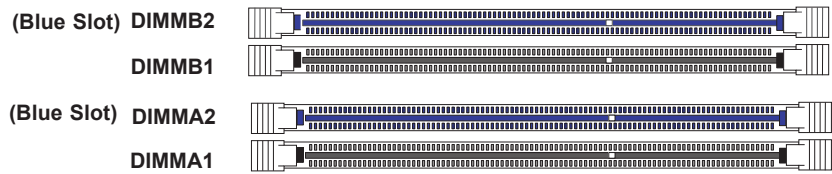
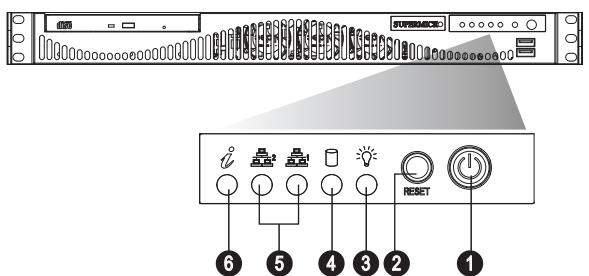| No.	Description
1	PCH Slot4 PCI-E 3.0 x4 (in x8) slot
2	CPU Slot5 PCI-E 3.0 x8 slot
3	CPU Slot6 PCI-E 3.0 x8/x16 slot
4	DIMMA1/DIMMA2 (Blue Slot)
5	DIMMB1/DIMMB2 (Blue Slot)
6	CPU
7	JSD1 & JSD2: SATA DOM power connector
8	I-SATA 0~1: SATA 3.0 Connectors via Intel PCH (6Gb/s)
9	I-SATA 2~7: SATA 3.0 Connectors via Intel PCH (6Gb/s)
10	JBT1 = CMOS Clear

MEMORY

Memory Module Population						
DIMM Slots per Channel	DIMM Type	POR Speeds	Ranks per DIMM	Layer Count	FW Base	Supported Voltage
2	Unbuffered DDR4 ECC	2133,1866, 1600, 1333	SR, DR	6	SPS	1.2V1

Memory Module Population		
Max Memory Possible	4GB DRAM Technology	POR Speeds
Single Rank UDIMM	16GB (4x 4GB DIMMs)	32GB (4x 8GB DIMMs)
Dual Rank UDIMM	32GB (4x 8GB DIMMs)	64GB (4x 16GB DIMMs)

Polpulating these DIMM modules with a pair of memory modulesof the same type and same size wil result in interleaved memory, which will improve memory performance
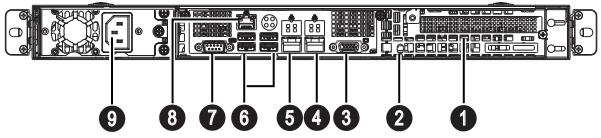
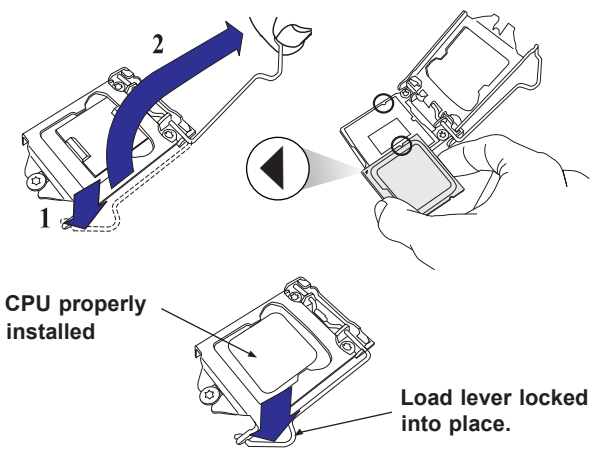|	
(Blue Slot)	DIMMB2
	DIMMB1
(Blue Slot)	DIMMA2
	DIMMA1

Notches

Release Tabs

Press Both Notches Straight Down into the Memory Slot

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 Button
3	VGA Port
4	GbE LAN2 Port
5	GbE LAN1 Port
6	USB 4/5/6/7 Ports
7	COM1 Port
8	Dedicated LAN for IPMI
9	Single Power Supply Module

Beep Code

BIOS Error Beep Codes		
Beep Code/LED	Error Message	Description
1 beep	Refresh	Circuits have been reset. (Ready to power up)
5 short beeps + 1 long beep	Memory error	No memory detected in the system
8 beeps	Display memory read/write error	Video adapter missing or with faulty memory
OH LED On	System OH	System Overheat

CPU Installation

CPU properly installed

Load lever locked into place.

Heatsink Installation

Screw #C

Screw #A
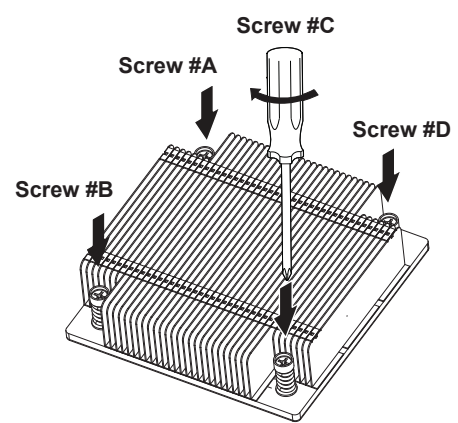
Screw #D

Screw #B

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

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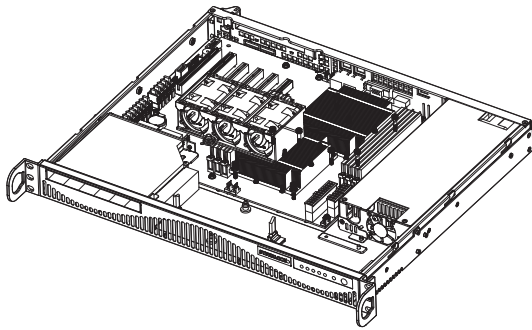
For more information go to :
http://www.supermicro.com/support

Serial ATA Drive Installation

1. First power down the system and then remove the top cover of the chassis.
2. Secure the drive to the tray with the four screws.
3. Replace the top cover when finished.

Note: the 5019S-ML can accommodate two internal SATA hard drives, one on each side of the fans.

⚠ Enterprise level hard disk drives are recommended for use in Supermicro chassis and servers. For information on recommended HDDs, visit the Supermicro Web site at http://www.supermicro.com