SUPERMICRO® SuperServer 1029P-NMR36L/1029P-NMR36LR Quick Reference Guide

Board Layout
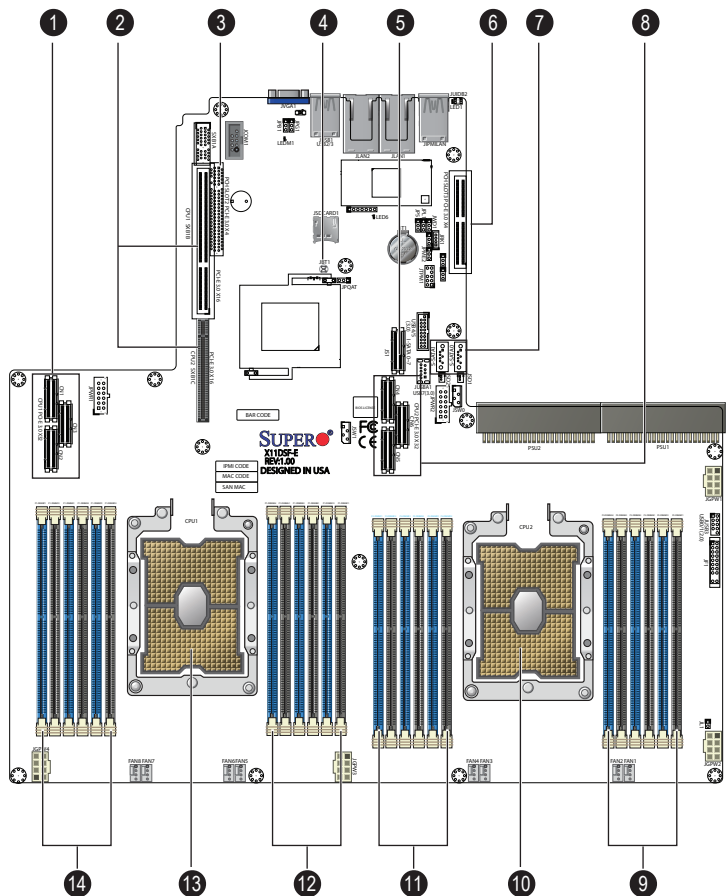
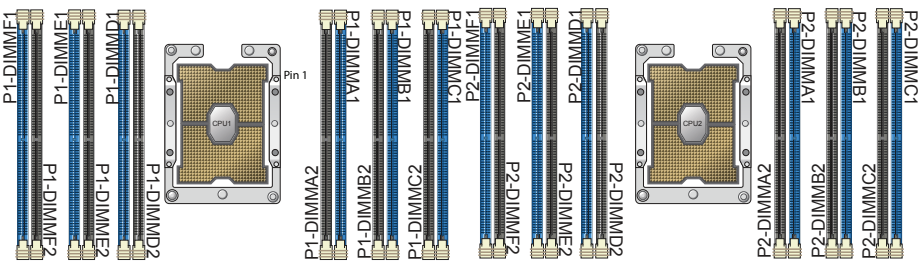| No.	Description	No.	Description
1	PCI-E x32 Tray Cable connector interface for NF1 subsystem	8	PCI-E x32 Tray Cable connector interface for NF1 subsystem
2	CPU0 slot 0 PCI-E 3.0 x16; CPU1 slot 1 PCI-E 3.0 x16	9	P2-DIMM slots A1~C1 & A2~C2
3	PCH slot 2 PCI-E 3.0 x4	10	CPU2 slot
4	CMOS Clear Button	11	P2-DIMM slots F1~D1 & D2~F2
5	I-SATA0 ~7 SATA 3.0 ports	12	P1-DIMM slots A1~C1 & A2~C2
6	PCH SLOT3 PCI-E 3.0 X4	13	CPU1 slot
7	S-SATA0/S-SATA1 connectors support of SuperDOMs	14	P1-DIMM slots F1~D1 & D2~F2

Memory

### DDR4 Memory Support for Two Slots per Channel

Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s)	
				Two Slots per Channel	
				One DIMM per Channel	Two DIMMs per Channel
		4 Gb	8 Gb	1.2 V	1.2 V
RDIMM	SRx4	8 GB	16 GB	2666	2666
RDIMM	SRx8	4 GB	8 GB	2666	2666
RDIMM	DRx8	8 GB	16 GB	2666	2666
RDIMM	DRx4	16 GB	32 GB	2666	2666
RDIMM 3Ds	QRX4	N/A	2H-64GB	2666	2666
	8RX4	N/A	4H-128GB	2666	2666
LRDIMM	QRx4	32 GB	64 GB	2666	2666
LRDIMM 3Ds	QRX4	N/A	2H-64GB	2666	2666
	8Rx4	N/A	4H-128 GB	2666	2666

Memory Population for X11 DP Motherboard, 24 DIMM Slots

| 2 CPUs & 20 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1
2 CPUs & 22 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1/P2-DIMMF1
2 CPUs & 24 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1

Front View & Interface
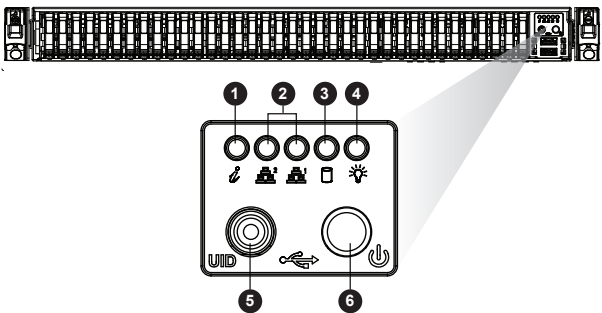
No.	Description
1	Universal Information LED
2	NIC 1/2
3	SSD LED
4	Power LED
5	UID Button
6	Power Switch

Rear View
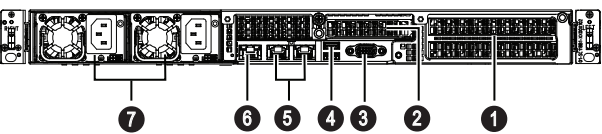
No.	Description
1	2 PCI-E 3.0 x16 Slots
2	PCI-E 3.0 x4 LP Slot
3	VGA Port
4	USB 3.0 Ports
5	10GbE LAN1 / LAN2 Ports
6	Dedicated LAN for IPMI
7	Redundant Power Supply Module

CPU Installation

Supports an Intel Xeon 81xx/61xx/51xx/41xx/31xx series (Socket P0-LGA3647) processor with a thermal design power (TDP) of up to 205W and 56 cores
Note:The X11DSF-E motherboard does not support FPGA or Fabric processors.
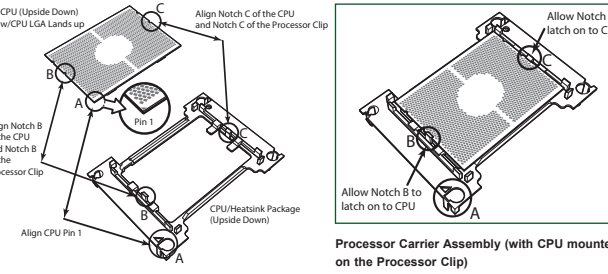
Attaching the Non-F Model Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)
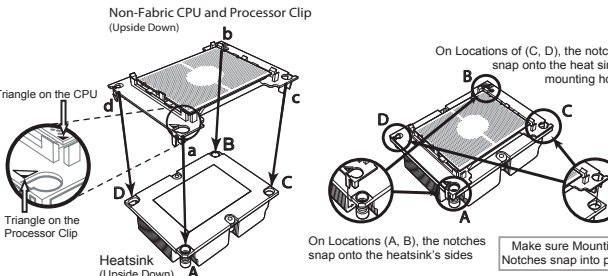
Removing the Dust Cover from the CPU Socket
Remove the dust cover from the CPU socket, exposing the SKX socket and socket pins as shown on the illustration below. **Note:** Do not touch the socket pins to avoid damaging the CPU to malfunction.
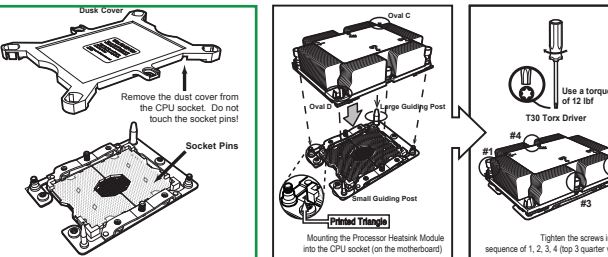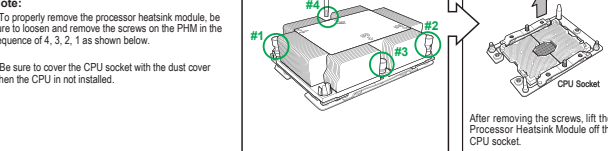
Installing the Processor Heatsink Module (PHM)
Note: Do not use excessive force when tightening the screws to avoid damaging the LGA lands and the processor.
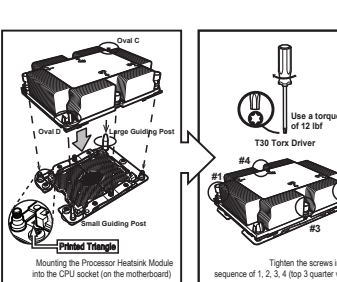
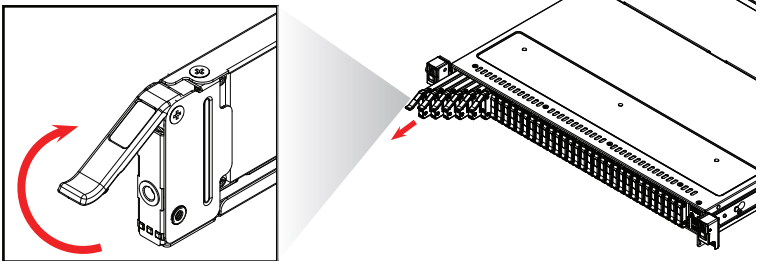**Removing the Processor Heatsink Module (PHM) from the Motherboard**
Before removing the processor heatsink module (PHM), unplug power cord from the power outlet.

Note:
• To properly remove the processor heatsink module, be sure to loosen and remove the screws on the PHM in the sequence of 4, 3, 2, 1 as shown below.

• Be sure to cover the CPU socket with the dust cover when the CPU in not installed.
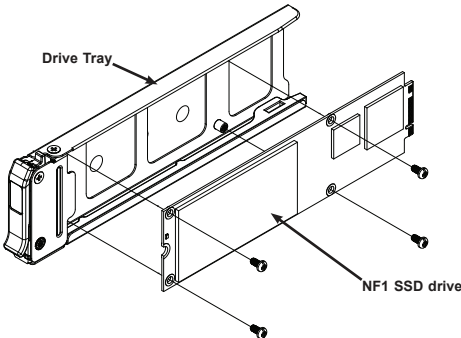
SATA Drive Installation

Removing the NF1 SSD Drive Trays

Pull up lever to unlock.

Installing/Removing NF1 SSD

The NF1 SSD drives are installed on drive trays with four Phillips-head screws.

NF1 LED definition

	Behavior		
	ON	OFF	Blinking
Green	Device Present	Device Absent	Data access
Amber	Fault	Normal	Device Locate (4Hz)

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

⚠ **WARNING:**
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