SuperServer 1029UX-LL1-S16/-LL2-S16/-LL3-S16 Quick Reference Guide

Board Layout
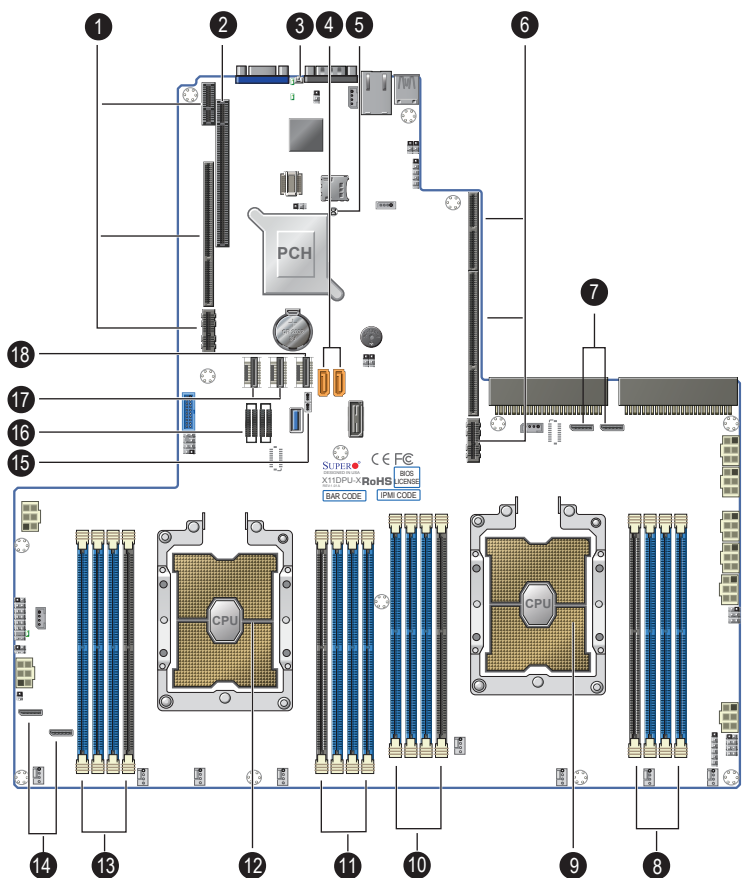
No.	Description
1	SXB1A/1B/1C: WIO Left Riser Slots
2	SXB2: WIO Right Riser Slot
3	JUIDB2: Unit Identifier (UID) Switch
4	SATA 4,5: SATA Ports (Supports SuperDOM)
5	JBT1: CMOS Clear
6	SXB3A/3B/3C: Ultra Riser Slot
7	NVME10, NVME11: P1_NVMe1, P1_NVMe2; On-Board NVMe 1 and 2 for high speed PCI-E storage devices on CPU1
8	P1-DIMMA2(Black)/P1-DIMMA1(Blue)/P1-DIMMB1(Blue)/P1-DIMMC1(Blue) slot
9	CPU1
10	P1-DIMMD2(Black)/P1-DIMMD1(Blue)/P1-DIMME1(Blue)/P1-DIMMF1(Blue) slot
11	P2-DIMMA2(Black)/P2-DIMMA1(Blue)/P2-DIMMB1(Blue)/P2-DIMMC1(Blue) slot
12	CPU2
13	P2-DIMMD2(Black)/P2-DIMMD1(Blue)/P2-DIMME1(Blue)/P2-DIMMF1(Blue) slot
14	NVME12, NVME13: P2_NVme1, P2_NVMe2; On-Board NVMe 1 and 2 for high speed PCI-E storage devices on CPU2
15	JSD1 - JSD2: SATA DOM Power Connectors
16	JHSSI1 - JHSSI2: Connector for FPGA GPIO signal
17	I-SATA0~3, I-SATA4~7: Intel® PCH SATA 3.0 Ports
18	S-SATA0-3: Intel® PCH SATA 3.0 Ports

Memory
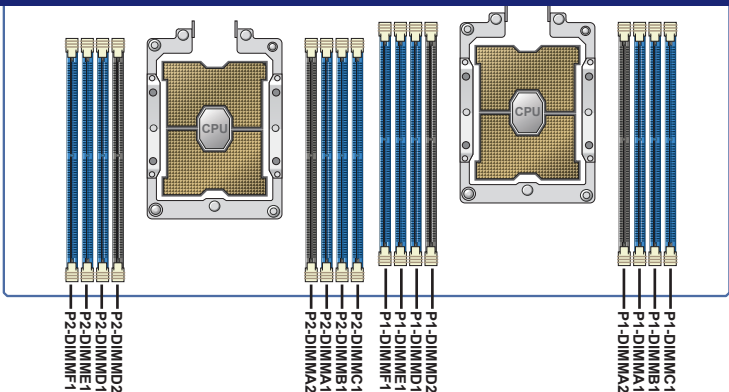
DDR4 Memory Support (for 1-Slot Per-Channel Configuration)

Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slots per Channel (SPC) and DIMMs per Channel (DPC)
				1 Slots per Channel
				1DPC (1-DIMM per Channel)
		4 Gb	8 Gb	1.2 V
RDIMM	SRx4	8 GB	16 GB	2666
RDIMM	SRx8	4 GB	8 GB	2666
RDIMM	DRx8	8 GB	16 GB	2666
RDIMM	DRx4	16 GB	32 GB	2666
RDIMM 3Ds	QRX4	N/A	2H-64GB	2666
	8RX4	N/A	4H-128GB	2666
LRDIMM	QRx4	32 GB	64 GB	2666
LRDIMM 3Ds	QRX4	N/A	2H-64GB	2666
	8Rx4	N/A	4H-128 GB	2666

Key Parameters for DIMM Configurations

Parameters	Possible Values
Number of Channels	1, 2, 3, 4, 5, or 6
Number of DIMMs per Channel	1DPC (1 DIMM Per Channel)
DIMM Type	RDIMM (w/ECC), LRDIMM, 3DS-LRDIMM

### General Population Requirements

DIMM Mixing Rules

- Please populate all memory modules with DDR4 DIMMs only.
- Mixing of LRDIMMs and RDIMMs is not allowed in the same channel, across different channels, and across different sockets.
- Mixing of non-3DS and 3DS LRDIMM is not allowed in the same channel, across different channels, and across different sockets.

Hard Drive Installation

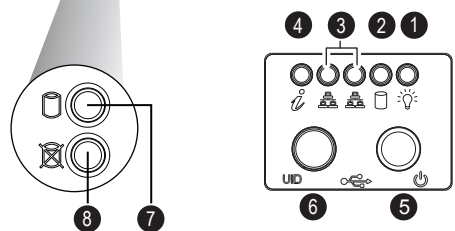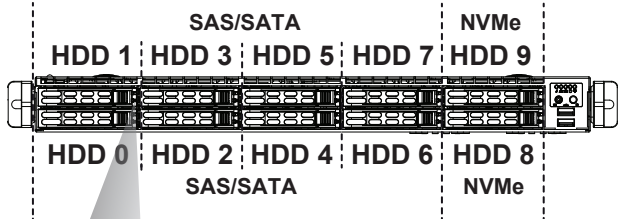### Removing a Hot-Swap Drive Carrier from the Chassis

1. Press the release button on the drive carrier, which will extend the drive carrier handle.
2. Use the drive carrier handle to pull the drive out of the chassis.
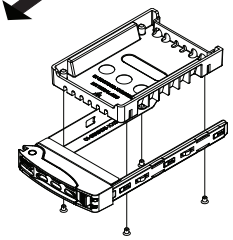
Installing a Drive

1. Remove the dummy drive, by removing the screws securing the dummy drive to the carrier. These screws are not used to mount the actual hard drive.
2. Insert a drive into the carrier with the PCB side facing down and the connector end toward the rear of the carrier. Align the drive in the carrier so that the screw holes line up.
3. Secure the drive to the carrier with four M3 screws, included in the chassis accessory box.
4. Insert the drive carrier with the disk drive into its bay, keeping the carrier oriented so that the release button is on the right side. When the carrier reaches the rear of the bay, the release handle retracts.
5. Push the handle in until it clicks into its locked position.

Front & Interface

SAS/SATA — **NVMe**

HDD 1 | HDD 3 | HDD 5 | HDD 7 | HDD 9

HDD 0 | HDD 2 | HDD 4 | HDD 6 | HDD 8

SAS/SATA — **NVMe**

No.	Description	No.	Description
1	Power LED	5	Power Button
2	Device Activity LED	6	UID Button
3	LAN1 LED & LAN2 LED	7	HDD Activity LED
4	Universal Information LED	8	HDD Status LED

Rear View
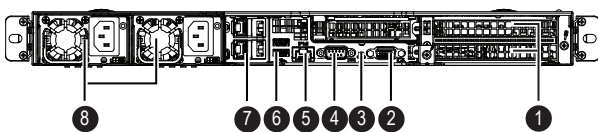
No.	Description
1	2 PCI-E 3.0 x16 Expansion Slots
2	VGA Port
3	UID Button (Unit Identifier Button)
4	COM Port
5	Dedicated LAN for IPMI
6	2 USB 3.0 Ports
7	4 GbE LAN Ports
8	Redundant Power Supply Module

Beep Codes

| Beep Code	Error Message	Description
1 short	Refresh	Circuits have been reset (Ready to power up)
5 short and 1 long	Memory error	No memory detected in the system
5 long and 2 short	Display memory read/write error	Video adapter missing or with faulty memory
1 long continuous	System OH	System overheat condition

CPU & Heatsink Installation

Attach the processor to the thin processor clip to create the processor package
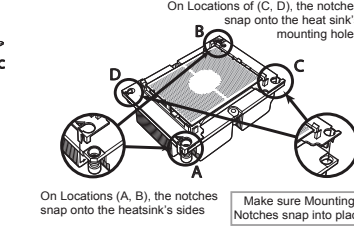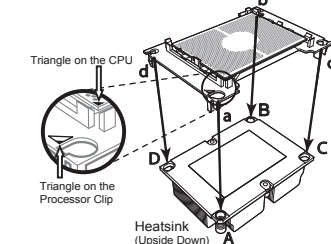
For Non-F Model Processor | For F Model Processor
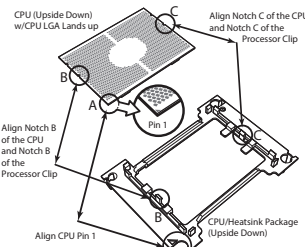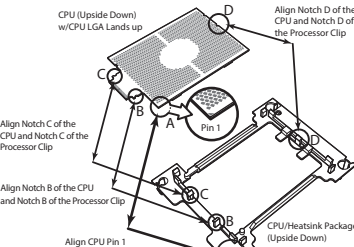
Attaching the Processor Package Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)
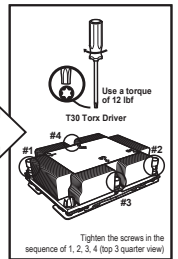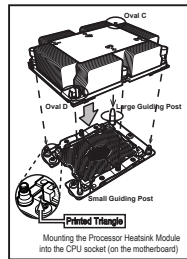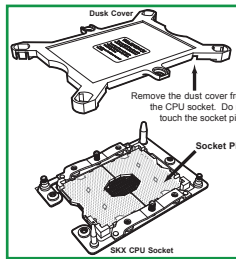
Removing the Dust Cover from the CPU Socket

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 LGA lands and the processor.

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

Remove the dust cover from the CPU socket, exposing the SKX socket and socket pins as shown on the illustration below.
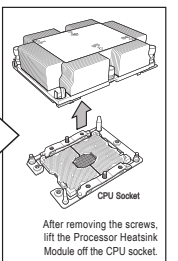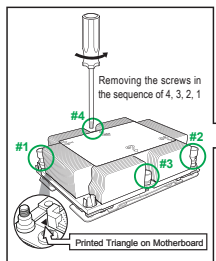**Note:** Do not touch the socket pins to avoid damaging them, causing the CPU to malfunction.

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