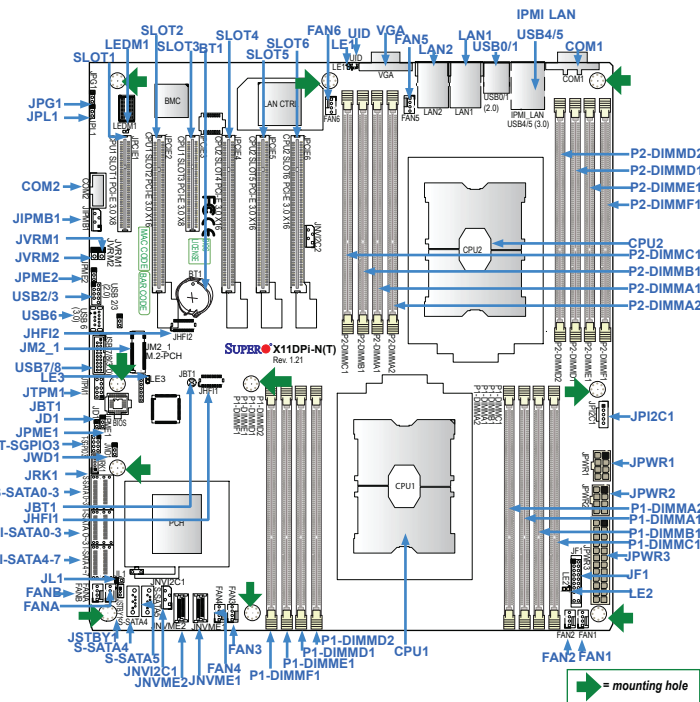


# SUPERMICRO® SuperServer 2029P-C1R/C1RT Quick Reference Guide

## Board Layout



Jumper	Description	Default Setting
JBT1	CMOS Clear	Open (Normal)
JPG1	Audio Enable	Pins 1-2 (Enabled)
JPL1	LAN1/LAN2 Enable	Pins 1-2 (Enabled)
JPME1	ME Recovery	Pins 1-2 (Normal)
JPME2	Manufacturing Mode Select	Pins 1-2 (Normal)
JVRM1/ JVRM2	VRM SMB Clock (to BMC or PCH)	Pins 1-2 (BMC, Normal)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset to System)
Connector		
BT1	Onboard CMOS battery socket	
COM1/COM2	Back panel COM port/COM header for front access	
FAN1-6, FANA/FANB	System cooling fan headers (FAN1-FAN6, FAN A, FAN B)	
IPMI_LAN	Dedicated IPMI_LAN port	
I-SATA0-3, I-SATA4-7	SATA 3.0 connection header supported by the Intel PCH	
JD1	Power LED header	
JF1	Front Panel Control header	
JHF11/JHF12	Host Fabric Interface (HFI) sideband headers for the HFI cards	
JIPMB1	4-pin BMC External I°C header (for an IPMI-supported card)	
JL1	Chassis Intrusion header	
JM2_1	M.2 slot	
JNVFC1	NVMe I°C header	
JNVME1/JNVME2	NVMe Slot1/NVMe Slot2	
JPPC1	Power Supply SMBus I°C header	
JPWR1/JPWR2	8-pin Power Supply connectors	
JPWR3	24-pin ATX main power supply connector	
JRK1	RAID Key for onboard SATA devices	
JSTBY1	Standby power header	
JTPM1	Trusted Platform Module (TPM)/Port 80 connector	
LAN1/LAN2 (Note)	Gigabit LAN/10G LAN Ethernet ports on the backpanel	
S-SATA0-3	S-SATA 3.0 connection Header supported by the Intel SCU	
S-SATA4/S-SATA5	Powered S-SATA Ports SuperDOM (Disk On Module) devices	
SLOT1/SLOT3	PCI-Express 3.0 X8 Slots supported by CPU1	
SLOT2	PCI-Express 3.0 X16 Slot supported by CPU1	
SLOT4/SLOT5/SLOT6	PCI-Express 3.0 X16 Slots supported by CPU2	
T-SGPIO3	General Purpose Serial I/O port	
UID	Unit Identifier (UID) switch	
USB0/1 & USB4/5	Backpanel USB 2.0 ports (USB0/1) & USB 3.0 ports (USB4/5)	
USB2/3	Front Accessible USB 2.0 header for USB 2/3	
USB6	Type A USB 3.0 Header	
USB7/8	Front Accessible USB 3.0 header for USB7/8	
VGA	VGA Port	

## Memory

This system supports dual Intel Xeon Scalable-SP or 2nd Gen Intel Xeon Scalable-SP series processors with support of UltraPath Interconnect (UPI) of up to 10.4 GT/s.

### Memory Support

This system supports up to 4TB of 3DS LRDIMM, LRDIMM, 3DS RDIMM, RDIMM, NV-DIMM DDR4 (288-pin) ECC 2933/2666/2400/2133 MHz memory modules in 16 slots.

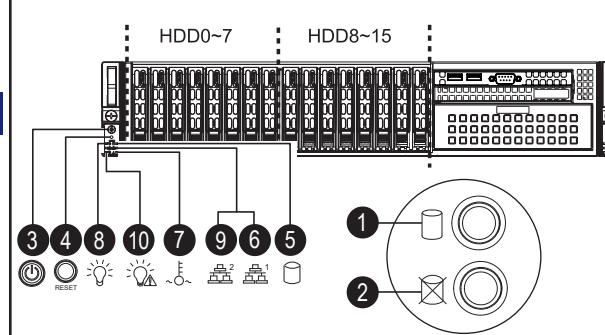
Notes:

- Up to 5TB is supported with (L)RDIMM and DCPMM populated in a balanced memory configuration.
- 2933 MHz memory is supported by 2nd Gen Intel Xeon Scalable-SP(82xx/62xx) series processors only.
- Unbalanced memory configuration decreases memory performance and is not recommended.

### Memory Population Table

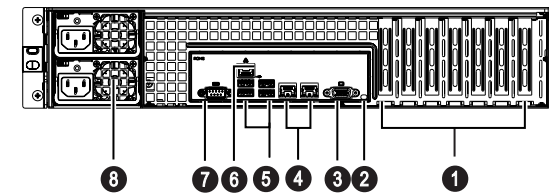
When 1 CPU is used:	Memory Population Sequence
1 CPU & 1 DIMM	CPU1: P1-DIMMA1
1 CPU & 2 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1
1 CPU & 3 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1
1 CPU & 4 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 5 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 6 DIMM	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
1 CPU & 7 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
1 CPU & 8 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
When 2 CPUs are used:	Memory Population Sequence
2 CPUs & 2 DIMMs	CPU1: P1-DIMMA1 CPU2: P2-DIMMA1
2 CPUs & 4 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1 CPU2: P2-DIMMA1/P2-DIMMD1
2 CPUs & 6 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1
2 CPUs & 8 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1 CPU2: P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 10 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 12 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 14 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 16 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/P2-DIMME1/P2-DIMMF1

## Front View & Interface



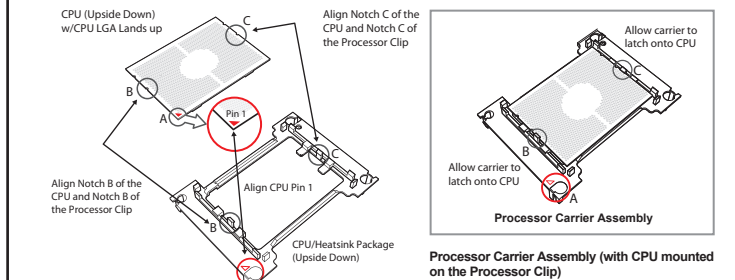
No.	Description
1	Hard Drive Signal
2	Hard Drive Fail
3	Power Button
4	Reset Button
5	Device Activity LED
6	LAN1 LED
7	Overheat & Fan Fail LED
8	Power LED
9	LAN2 LED
10	Power Failure LED

## Rear View

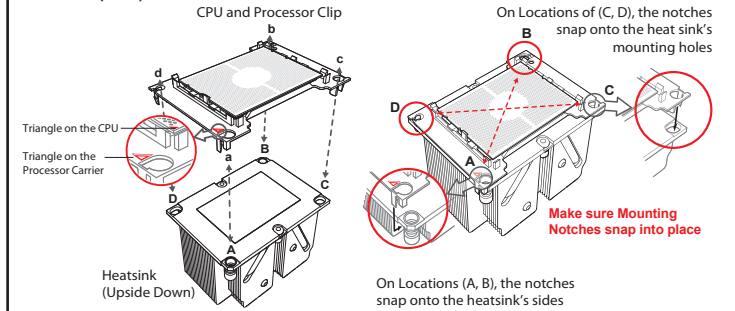


No.	Description
1	PCI Expansion Slots
2	UID
3	VGA Port
4	LAN 1/2 Ports
5	USB 0/1/2/3 Ports
6	Dedicated LAN for IPMI
7	COM Port
8	Redundant Power Supply Modules

## CPU Installation

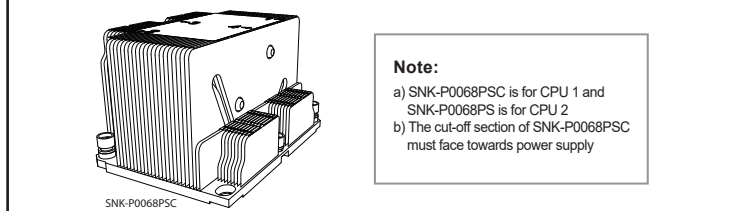
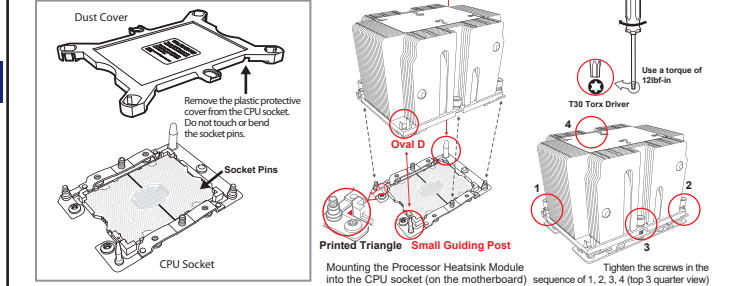


Attaching the Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)



Removing the Dust Cover from the CPU Socket

Installing the Processor Heatsink Module (PHM)



## 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](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>

