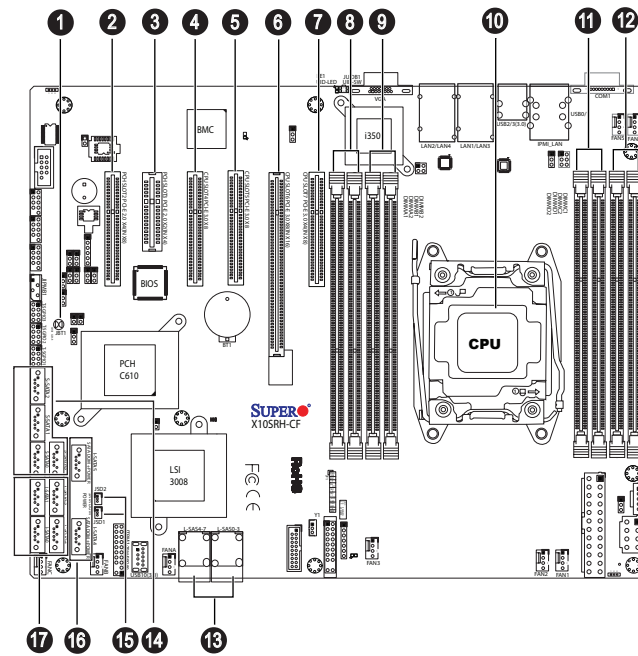


# SUPERMICR<sup>®</sup> SuperServer 5028R-E1CR12L Quick Reference Guide

## Board Layout

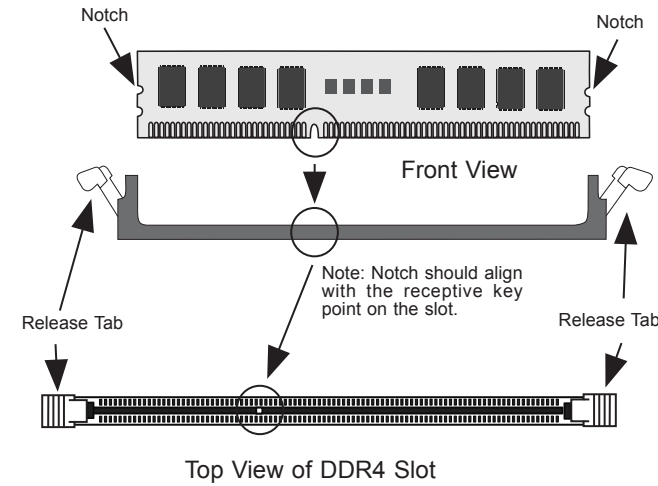


| No. | Description  |
|-----|--|
| 1   | JBT1 = CMOS Clear  |
| 2   | PCH Slot2 PCI-E 2.0 x4 (in x8)                                       |
| 3   | PCH Slot3 PCI-E 2.0 x2 (in x4)                                       |
| 4   | CPU Slot4 PCI-E 3.0 x8   |
| 5   | CPU Slot5 PCI-E 3.0 x8   |
| 6   | CPU Slot6 PCI-E 3.0 x8 (in x8)                                       |
| 7   | CPU Slot7 PCI-E 3.0 x4 (in x8)                                       |
| 8   | DIMMA1 (BLUE)/DIMMA2 slot  |
| 9   | DIMMB1 (BLUE)/DIMMB2 slot  |
| 10  | CPU  |
| 11  | DIMMD1 (BLUE)/DIMMD2 slot  |
| 12  | DIMMC1 (BLUE)/DIMMC2 slot  |
| 13  | L-SAS 0~3, 4~7: SAS 3.0 Ports 0-7 (supported by LSI 3008 controller) |
| 14  | S-SATA 0~3: SATA 3.0 Ports   |
| 15  | JSD1/JSD2 = SATA DOM (Device on Module) Power Connectors             |
| 16  | I-SATA 4~5: SATA DOM (Device on Module) Ports                        |
| 17  | I-SATA 0~3: SATA 3.0 Ports   |

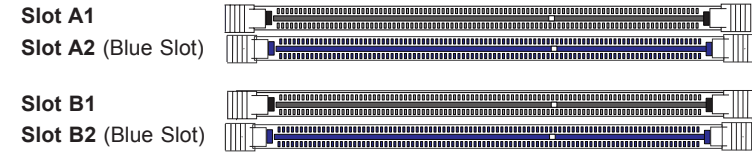
## Beep Codes

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

## Memory



↑ Towards the edge of the motherboard

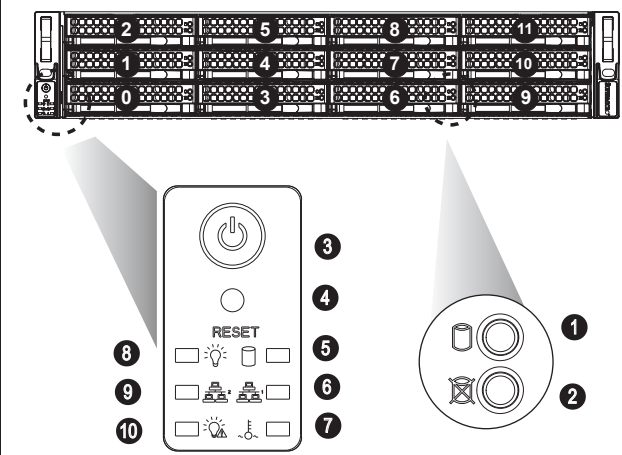


↓ Towards the CPU

### Recommended Population (Balanced)

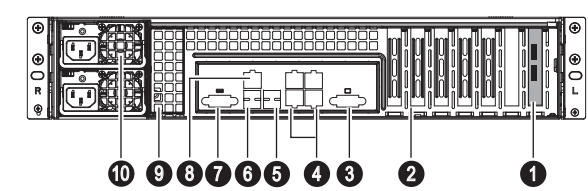
| DIMMA1 | DIMMA2 | DIMMB1 | DIMMB2 | DIMMC1 | DIMMC2 | DIMMD1 | DIMMD2 | Total Memory |
|--------|--------|--------|--------|--------|--------|--------|--------|--------------|
| 2GB    | 2GB    |        |        |        |        |        |        | 4GB          |
| 2GB    | 2GB    | 2GB    | 2GB    |        |        |        |        | 8GB          |
| 2GB    | 2GB    | 2GB    | 2GB    | 2GB    | 2GB    |        |        | 12GB         |
| 2GB    | 2GB    | 2GB    | 2GB    | 2GB    | 2GB    | 2GB    | 2GB    | 16GB         |
| 4GB    | 4GB    |        |        |        |        |        |        | 8GB          |
| 4GB    | 4GB    | 4GB    | 4GB    |        |        |        |        | 16GB         |
| 4GB    | 4GB    | 4GB    | 4GB    | 4GB    | 4GB    |        |        | 24GB         |
| 4GB    | 4GB    | 4GB    | 4GB    | 4GB    | 4GB    | 4GB    | 4GB    | 32GB         |
| 8GB    | 8GB    |        |        |        |        |        |        | 16GB         |
| 8GB    | 8GB    | 8GB    | 8GB    |        |        |        |        | 32GB         |
| 8GB    | 8GB    | 8GB    | 8GB    | 8GB    | 8GB    |        |        | 64GB         |
| 8GB    | 8GB    | 8GB    | 8GB    | 8GB    | 8GB    | 8GB    | 8GB    | 128GB        |
| 16GB   | 16GB   |        |        |        |        |        |        | 32GB         |
| 16GB   | 16GB   | 16GB   | 16GB   |        |        |        |        | 64GB         |
| 16GB   | 16GB   | 16GB   | 16GB   | 16GB   | 16GB   |        |        | 96GB         |
| 16GB   | 16GB   | 16GB   | 16GB   | 16GB   | 16GB   | 16GB   | 16GB   | 128GB        |
| 32GB   | 32GB   |        |        |        |        |        |        | 64GB         |
| 32GB   | 32GB   | 32GB   | 32GB   |        |        |        |        | 128GB        |
| 32GB   | 32GB   | 32GB   | 32GB   | 32GB   | 32GB   |        |        | 192GB        |
| 32GB   | 32GB   | 32GB   | 32GB   | 32GB   | 32GB   | 32GB   | 32GB   | 256GB        |

## Front View & Interface



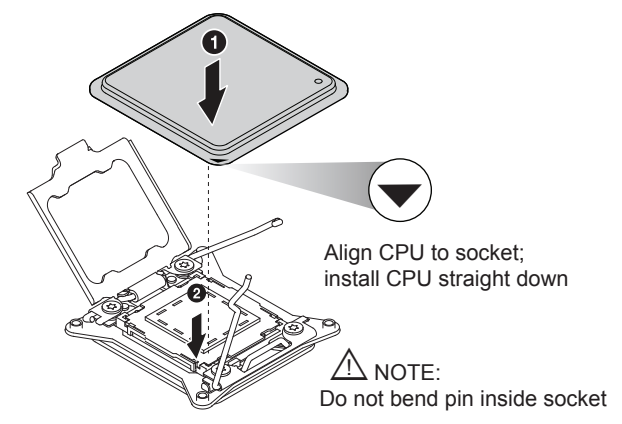
| No. | Description             |
|-----|-------------------------|
| 1   | Hard Drive Signal       |
| 2   | Hard Drive Fail         |
| 3   | Power Button            |
| 4   | Reset Button            |
| 5   | Device Activity LED     |
| 6   | LAN1 LED                |
| 7   | Overheat & Fan Fail LED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

## Rear View

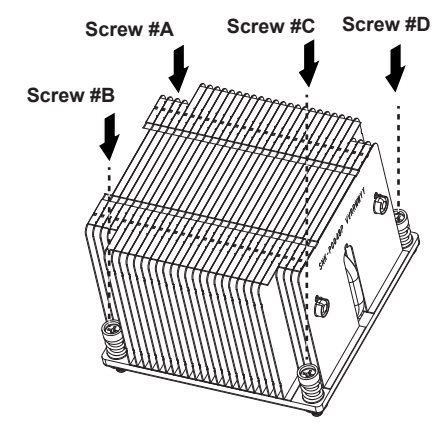


| No. | Description                    |
|-----|--------------------------------|
| 1   | JBOD Expansion Port            |
| 2   | 5 Low-profile PCI Slots        |
| 3   | VGA Port                       |
| 4   | GbE LAN1/LAN2/LAN3/LAN4 Ports  |
| 5   | USB 3.0 (2~3 Ports)            |
| 6   | USB 2.0 (0~1 Ports)            |
| 7   | COM1 Port                      |
| 8   | Dedicated LAN for IPMI         |
| 9   | Optional Drive Bays            |
| 10  | Redundant Power Supply Modules |

## CPU Installation



## Heatsink Installation



- Place heatsink on top of installed CPU
- Line up the four screws to socket
- Push down heatsink and screw down as shown (cross pattern, in order: A, C, B, D)
- 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](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>

