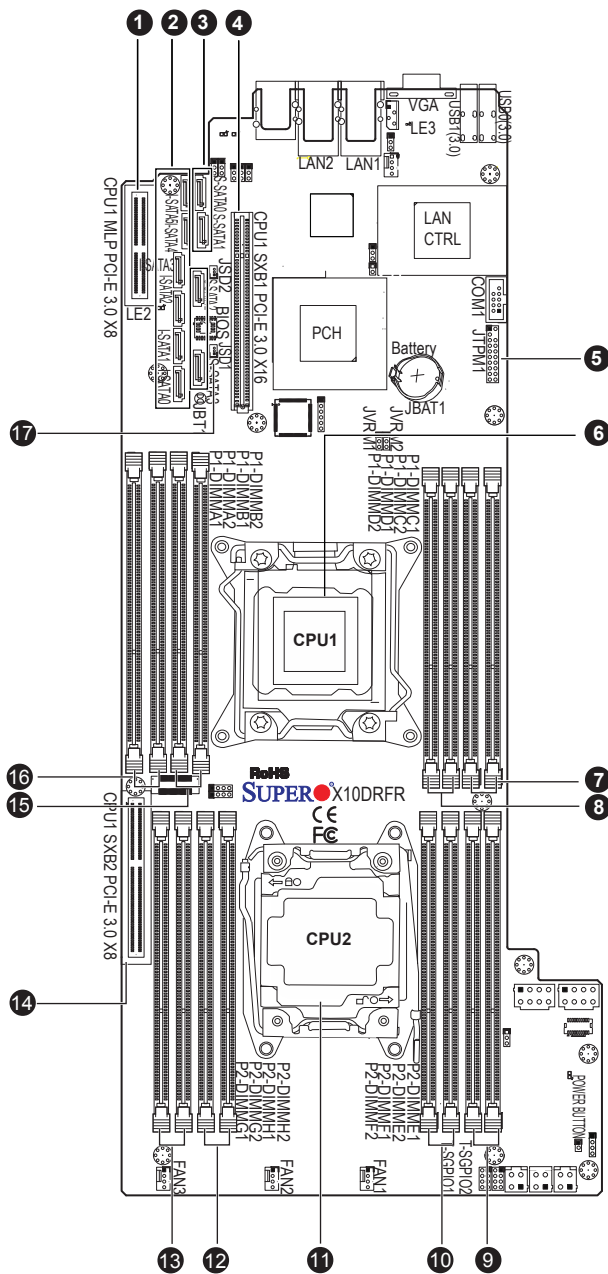


SUPERMICR SuperServer F628R3-RTB+/R72B+ Quick Reference Guide

Board Layout



| No. | Description                           |
|-----|---------------------------------------|
| 1   | CPU1 MLP PCI-E 3.0 x8                 |
| 2   | I-SATA0~5: Supported by Intel PCH     |
| 3   | S-SATA0~3: Supported by Intel SCU2    |
| 4   | CPU1_SXB_PCI-E 3.0 x16                |
| 5   | JTPM1: Trusted Platform Module Header |
| 6   | CPU1 Socket                           |
| 7   | P1-DIMMC1 (Blue Slot) / DIMMC2        |
| 8   | P1-DIMMD1 (Blue Slot) / DIMMD2        |
| 9   | P2-DIMME1 (Blue Slot) / DIMME2        |

| No. | Description                          |
|-----|--------------------------------------|
| 10  | P2-DIMMF1 (Blue Slot) / DIMMF2       |
| 11  | CPU2 Socket                          |
| 12  | P2-DIMMH1 (Blue Slot) / DIMMH2       |
| 13  | P2-DIMMG1 (Blue Slot) / DIMMG2       |
| 14  | CPU1_SXB2 PCI-E 3.0 x8 Slot          |
| 15  | P1-DIMMB1 (Blue Slot) / DIMMB2       |
| 16  | P1-DIMMA1 (Blue Slot) / DIMMA2       |
| 17  | JSD2: Disk-On-Module power connector |

Memory

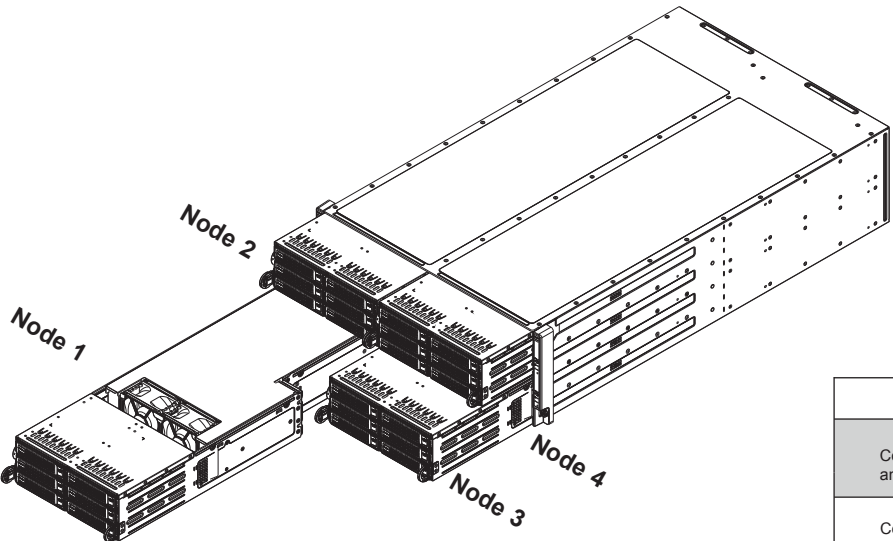
| Processors and their Corresponding Memory Modules |                            |           |           |           |           |           |           |           |
|---------------------------------------------------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| CPU#                                              | Corresponding DIMM Modules |           |           |           |           |           |           |           |
| CPU 1                                             | P1-DIMMA1                  | P1-DIMMB1 | P1-DIMMC1 | P1-DIMMD1 | P1-DIMMA2 | P1-DIMMB2 | P1-DIMMC2 | P1-DIMMD2 |
| CPU 2                                             | P2-DIMME1                  | P2-DIMMF1 | P2-DIMMG1 | P2-DIMMH1 | P2-DIMME2 | P2-DIMMF2 | P2-DIMMG2 | P2-DIMMH2 |

| Processors and Memory Module Population for Optimal Performance |                                                                                                                                                                                  |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of CPUs + DIMMs                                          | CPU and Memory Population Configuration Table (For memory to work properly, follow the instructions below)                                                                       |
| 1 CPU & 2 DIMMs                                                 | CPU1 & P1-DIMMA1/P1-DIMMB1                                                                                                                                                       |
| 1 CPU & 4 DIMMs                                                 | CPU1 & P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1                                                                                                                                  |
| 1 CPU & 5~8 DIMMs                                               | CPU1 & P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1 + Any memory pairs in P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2 slots                                                              |
| 2 CPUs & 4 DIMMs                                                | CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1                                                                                                                           |
| 2 CPUs & 6 DIMMs                                                | CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1                                                                                                       |
| 2 CPUs & 8 DIMMs                                                | CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1                                                                                   |
| 2 CPUs & 10~16 DIMMs                                            | CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1 + Any memory pair in P1, P2 DIMM slots                                            |
| 2 CPUs & 16 DIMMs                                               | CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1, P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2, P2-DIMME2/P2-DIMMF2/P2-DIMMG2/P2-DIMMH2 |

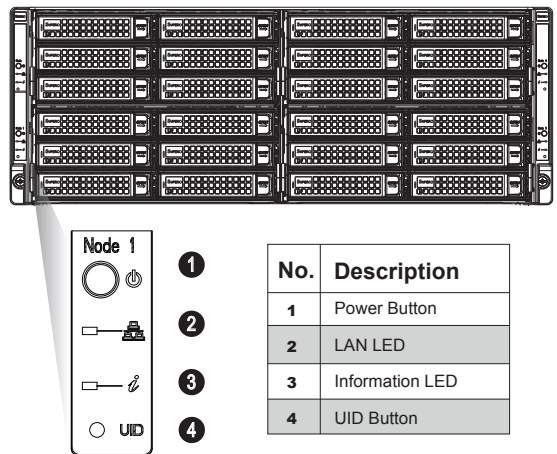
| Populating RDIMM/LRDIMM DDR4 Memory Modules |                               |                    |            |                                                                                |            |       |       |
|---------------------------------------------|-------------------------------|--------------------|------------|--------------------------------------------------------------------------------|------------|-------|-------|
| Type                                        | Ranks Per DIMM and Data Width | DIMM Capacity (GB) |            | Speed (MT/s); Voltage (V); Slots per Channel (SPC) and DIMMs per Channel (DPC) |            |       |       |
|                                             |                               |                    |            | 2 Slots per Channel                                                            |            |       |       |
|                                             |                               |                    |            | 1 DPC                                                                          |            | 2 DPC |       |
|                                             |                               | E5-2600 V3         | E5-2600 V4 | E5-2600 V3                                                                     | E5-2600 V4 |       |       |
|                                             |                               | 4 GB               | 8 GB       | 1.2 V                                                                          | 1.2 V      | 1.2 V | 1.2 V |
| RDIMM                                       | SRx4                          | 8 GB               | 16 GB      | 2133                                                                           | 2400       | 1866  | 2133  |
| RDIMM                                       | SRx8                          | 4 GB               | 8 GB       | 2133                                                                           | 2400       | 1866  | 2133  |
| RDIMM                                       | DRx8                          | 8 GB               | 16 GB      | 2133                                                                           | 2400       | 1866  | 2133  |
| RDIMM                                       | DRx4                          | 16 GB              | 32 GB      | 2133                                                                           | 2400       | 1866  | 2133  |
| LRDIMM                                      | QRx4                          | 32 GB              | 64 GB      | 2133                                                                           | 2400       | 2133  | 2400  |
| LRDIMM 3DS                                  | 8Rx4                          | 64 GB              | 128 GB     | 2133                                                                           | 2400       | 2133  | 2400  |

Note: For detailed information on memory support and updates, please refer to the SMC Recommended Memory List posted on our website at <http://www.supermicro.com/support/resources/mem.cfm>.

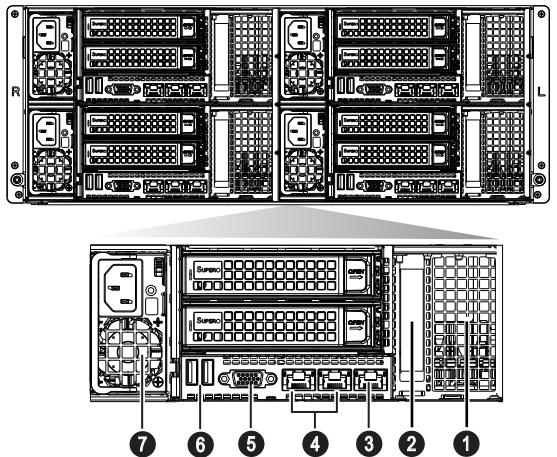
Nodes and Corresponding Hard Drives



Front View & Interface



Rear View

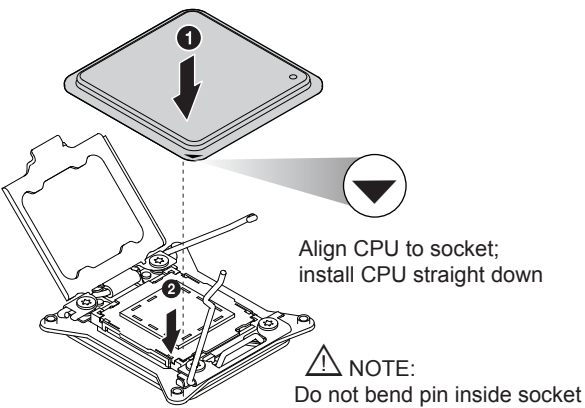


| No. | Description                      |
|-----|----------------------------------|
| 1   | Micro-Low Profile Card           |
| 2   | Low-Profile PCI-E Expansion Slot |
| 3   | Dedicated LAN for IPMI           |
| 4   | GbE LAN1/LAN2 Ports              |
| 5   | VGA Port                         |
| 6   | USB 0/1 Ports                    |
| 7   | Power Supply Module              |

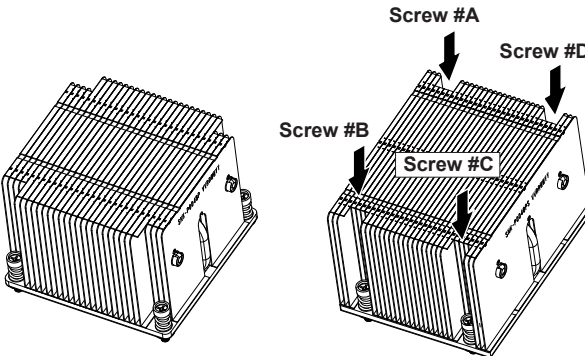
F424AS Node Locations in the Chassis

| Node 2                                                      | Node 4                                                      |
|-------------------------------------------------------------|-------------------------------------------------------------|
| Controls six 3.5" HDDs, B1-B6 and two rear 3.5" HDDs, B7-B8 | Controls six 3.5" HDDs, D1-D6 and two rear 3.5" HDDs, D7-D8 |
| Node 1                                                      | Node 3                                                      |
| Controls six 3.5" HDDs, A1-A6 and two rear 3.5" HDDs, A7-A8 | Controls six 3.5" HDDs, C1-C6 and two rear 3.5" HDDs, C7-C8 |

CPU Installation



Heatsink Installation



SNK-P0048P for CPU1      SNK-P0048PS for CPU2

- Place the heatsink on top of the installed CPU.
- Align the four screws to the socket.
- Holding the heatsink in place, 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 CPU.

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>

