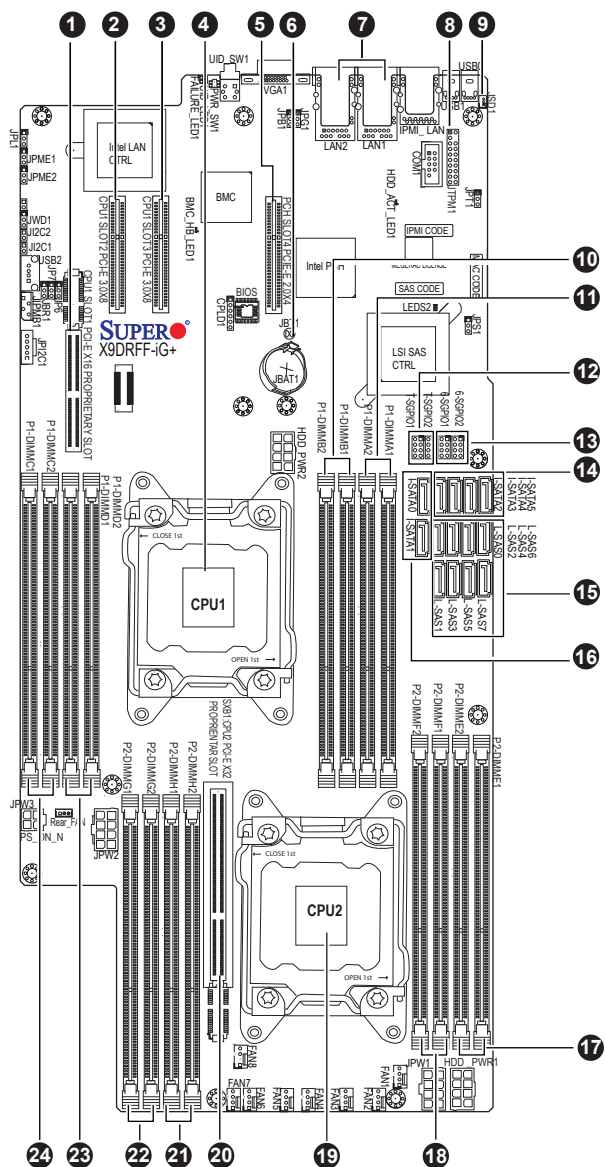


# SUPERMICR® SuperServer F627G3-FT+/FTPT+/F73+/F73PT+ Quick Reference Guide

## Board Layout



| No. | Description                                                             | No. | Description                        |
|-----|-------------------------------------------------------------------------|-----|------------------------------------|
| 1   | CPU1 Slot1 PCI-E 3.0 x16 Proprietary Slot                               | 13  | 6-SGPIO 1/2: LSI SAS SGPIO         |
| 2   | CPU1 Slot2 PCI-E 3.0 x8                                                 | 14  | I-SATA2~5: Internal SATA 2.0 Ports |
| 3   | CPU1 Slot3 PCI-E 3.0 x8                                                 | 15  | L-SAS 0~7: SAS 2.0 Connectors 0~7  |
| 4   | CPU1 Socket                                                             | 16  | I-SATA0~1: Internal SATA 3.0 Ports |
| 5   | PCH Slot4 PCI-E 2.0 x4                                                  | 17  | P2-DIMME1 / P2-DIMME2              |
| 6   | JBT1: CMOS Clear                                                        | 18  | P2-DIMMF1 / P2-DIMMF2              |
| 7   | G-bit LAN ports 1/2 (X9DRFF-7G+)<br>10G_bit LAN Ports 1/2 (X9DRFF-7TG+) | 19  | CPU2 Socket                        |
| 8   | JTPM1: Trusted Platform Module Header                                   | 20  | SXB1 CPU2 PCI-E 3.0 x32            |
| 9   | JSD1: SATA Device Power Connector                                       | 21  | P2-DIMMH1 / P2-DIMMH2              |
| 10  | P1-DIMMB1 / P1-DIMMB2                                                   | 22  | P2-DIMMG1 / P2-DIMMG2              |
| 11  | P1-DIMMA1 / P1-DIMMA2                                                   | 23  | P1-DIMMD1 / P1-DIMMD2              |
| 12  | T-SGPIO 1/2: Intel SATA SGPIO                                           | 24  | P1-DIMMC1 / P1-DIMMC2              |

## 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<br>(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/<br>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<br>+ 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,<br>P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2, P2-DIMME2/P2-DIMMF2/P2-DIMMG2/P2-DIMMH2 |

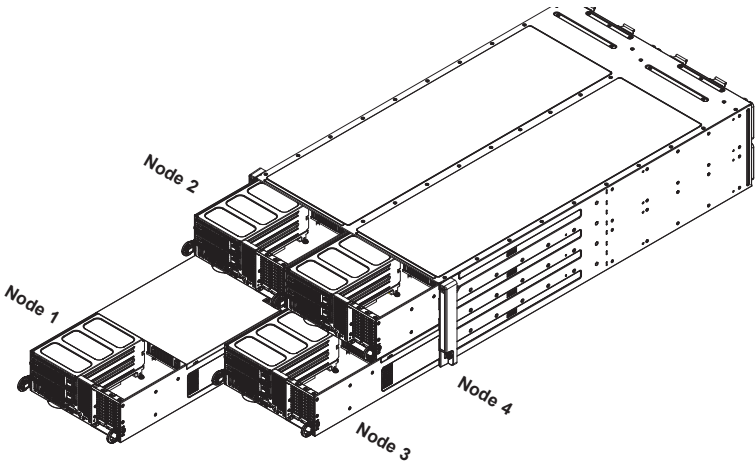
### Installing RDIMM Memory

| Intel E5-2600 v2 Series Processor RDIMM Memory Support |                                               |      |      |                                                                                         |                        |            |                  |  |
|--------------------------------------------------------|-----------------------------------------------|------|------|-----------------------------------------------------------------------------------------|------------------------|------------|------------------|--|
| Ranks per DIMM & Data Width                            | Memory Capacity Per DIMM (See the Note below) |      |      | Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC) |                        |            |                  |  |
|                                                        |                                               |      |      | 2 Slots Per Channel                                                                     |                        |            |                  |  |
|                                                        |                                               |      |      | 1DPC                                                                                    |                        | 2DPC       |                  |  |
|                                                        |                                               |      |      | 1.35V                                                                                   | 1.5V                   | 1.35V      | 1.5V             |  |
| SRx8                                                   | 1GB                                           | 2GB  | 4GB  | 1066, 1333                                                                              | 1066, 1333, 1600, 1866 | 1066, 1333 | 1066, 1333, 1600 |  |
| DRx8                                                   | 2GB                                           | 4GB  | 8GB  | 1066, 1333                                                                              | 1066, 1333, 1600, 1866 | 1066, 1333 | 1066, 1333, 1600 |  |
| SRx4                                                   | 2GB                                           | 4GB  | 8GB  | 1066, 1333                                                                              | 1066, 1333, 1600, 1866 | 1066, 1333 | 1066, 1333, 1600 |  |
| DRx4                                                   | 4GB                                           | 8GB  | 16GB | 1066, 1333                                                                              | 1066, 1333, 1600, 1866 | 1066, 1333 | 1066, 1333, 1600 |  |
| QRx4                                                   | 8GB                                           | 16GB | 32GB | 800                                                                                     | 800, 1066              | 800        | 800              |  |
| QRx8                                                   | 4GB                                           | 8GB  | 16GB | 800                                                                                     | 800, 1066              | 800        | 800              |  |

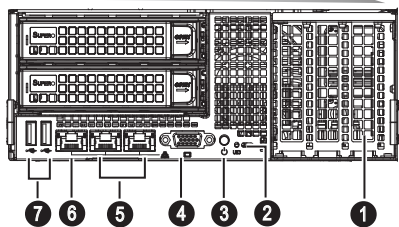
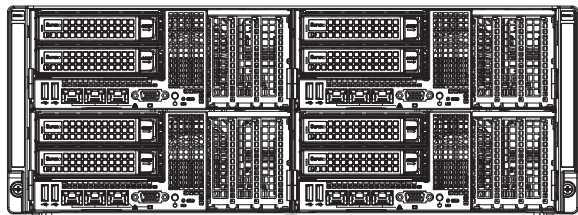
### Installing UDIMM (ECC/non-ECC) Memory

| Intel E5-2600 v2 Series Processor UDIMM Memory Support |                                               |     |     |                                                                                         |                        |            |                  |  |
|--------------------------------------------------------|-----------------------------------------------|-----|-----|-----------------------------------------------------------------------------------------|------------------------|------------|------------------|--|
| Ranks per DIMM & Data Width                            | Memory Capacity Per DIMM (See the Note below) |     |     | Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC) |                        |            |                  |  |
|                                                        |                                               |     |     | 2 Slots Per Channel                                                                     |                        |            |                  |  |
|                                                        |                                               |     |     | 1DPC                                                                                    |                        | 2DPC       |                  |  |
|                                                        |                                               |     |     | 1.35V                                                                                   | 1.5V                   | 1.35V      | 1.5V             |  |
| SRx8 Non-ECC                                           | 1GB                                           | 2GB | 4GB | NA                                                                                      | 1066, 1333, 1600, 1866 | NA         | 1066, 1333, 1600 |  |
| DRx8 Non-ECC                                           | 2GB                                           | 4GB | 8GB | NA                                                                                      | 1066, 1333, 1600, 1866 | NA         | 1066, 1333, 1600 |  |
| SRx16 Non-ECC                                          | 512MB                                         | 1GB | 2GB | NA                                                                                      | 1066, 1333, 1600, 1866 | NA         | 1066, 1333, 1600 |  |
| SRx8 ECC                                               | 1GB                                           | 2GB | 4GB | 1066, 1333                                                                              | 1066, 1333, 1600, 1866 | 1066, 1333 | 1066, 1333, 1600 |  |
| QRx8 ECC                                               | 2GB                                           | 4GB | 8GB | 1066, 1333                                                                              | 1066, 1333, 1600, 1866 | 1066, 1333 | 1066, 1333, 1600 |  |

## Nodes and Corresponding Hard Drives

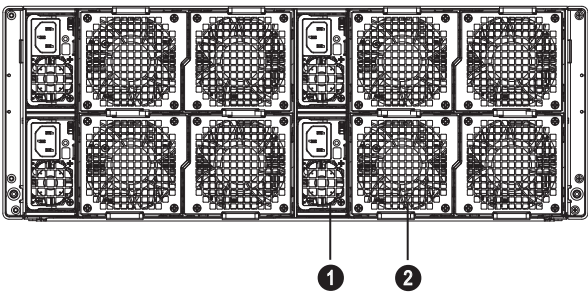


## Front View & Interface



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

## Rear View

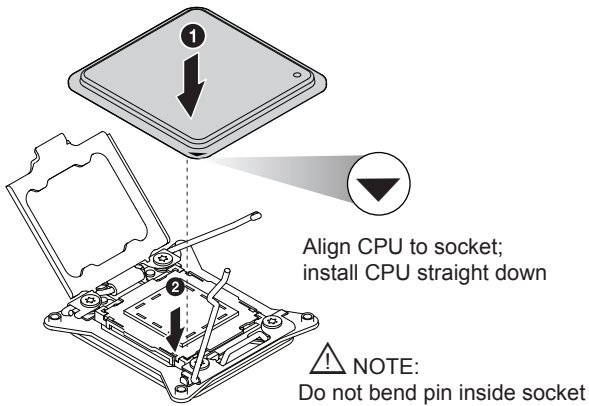


| No. | Description         |
|-----|---------------------|
| 1   | Power Supply Module |
| 2   | Rear Fan            |

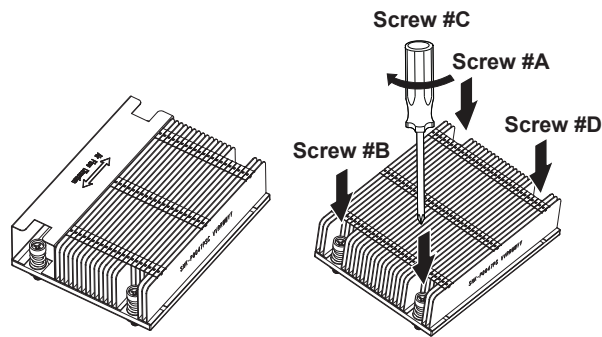
### F424AG Node Locations in the Chassis

|                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| Node 2<br>Controls two 3.5" HDDs, B1-B2 | Node 4<br>Controls two 3.5" HDDs, D1-D2 |
| Node 1<br>Controls two 3.5" HDDs, A1-A2 | Node 3<br>Controls two 3.5" HDDs, C1-C2 |

## CPU Installation



## Heatsink Installation



SNK-P0047PSC for CPU1

SNK-P0047PS for CPU2

1. Place the heatsink on top of the installed CPU.
2. Align the four screws to the socket.
3. Holding the heatsink in place, screw down as shown (cross pattern, in order: A, C, B, D).
4. 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>

