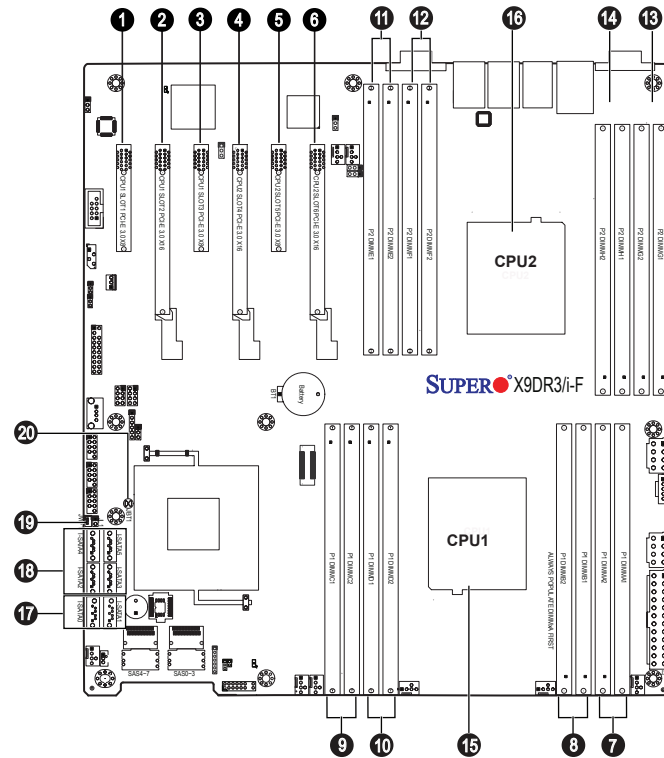


Board Layout



| No. | Description |
|-----|---|
| 1 | CPU1 Slot1 PCI-E 3.0 x8 |
| 2 | CPU1 Slot2 PCI-E 3.0 x16 |
| 3 | CPU1 Slot3 PCI-E 3.0 x8 |
| 4 | CPU2 Slot4 PCI-E 3.0 x16 |
| 5 | CPU2 Slot5 PCI-E 3.0 x8 |
| 6 | CPU2 Slot6 PCI-E 3.0 x16 |
| 7 | DIMMA1(Blue)/DIMMA2 slot |
| 8 | DIMMB1 (Blue)/DIMMB2 slot |
| 9 | DIMMC1 (Blue)/DIMMC2 slot |
| 10 | DIMMD1 (Blue)/DIMMD2 slot |
| 11 | DIMME1 (Blue)/DIMME2 slot |
| 12 | DIMMF1 (Blue)/DIMMF2 slot |
| 13 | DIMMG1 (Blue)/DIMMG2 slot |
| 14 | DIMMH1 (Blue)/DIMMH2 slot |
| 15 | CPU1 (Install CP1 first) |
| 16 | CPU2 |
| 17 | (I-)SATA 0/1 Intel SB SATA 3.0 Connectors 0/1 (Color: White) |
| 18 | (I-)SATA 2/5 Intel SB SATA 2.0 Connectors: 2/4 (Color: Black) |
| 19 | JBT1 = Clear CMOS |
| 20 | JSD1 = SATA Device Power Connector |

MEMORY

| Processors and their Corresponding Memory Modules | | | | | | | | |
|---|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| CPU# | Corresponding DIMM Modules | | | | | | | |
| CPU1 | P1-A1 | P1-B1 | P1-C1 | P1-D1 | P1-A2 | P1-B2 | P1-C2 | P1-D2 |
| CPU2 | P2-E1 | P2-F1 | P2-G1 | P2-H1 | P2-E2 | P2-F2 | P2-G2 | P2-H2 |

| Processor and Memory Module Population | |
|--|---|
| Number of CPUs+DIMMs | CPU and Memory Population Configuration Table (*For memory to work proper, please install DIMMs in pairs) |
| 1 CPU & 2 DIMMs | CPU1 P1-A1/P1-B1 |
| 1 CPU & 4 DIMMs | CPU1 P1-A1/P1-B1, P1-C1/P1-D1 |
| 1 CPU & 5-8 DIMMs | CPU1 P1-A1/P1-B1, P1-C1/P1-D1 + Any memory pairs in P1-A2/B2-C2/D2 DIMM slots |
| 2 CPUs & 4 DIMMs | CPU1 + CPU2 P1-A1/P1-B1, P2-E1/P2-F1 |
| 2 CPUs & 6 DIMMs | CPU1 + CPU2 P1-A1/P1-B1/P1-C1/P1-D1, P2-E1/P2-F1 |
| 2 CPUs & 8 DIMMs | CPU1 + CPU2 P1-A1/P1-B1/P1-C1/P1-D1, P2-E1/P2-F1/P2-G1/P2-H1 |
| 2 CPUs & 10-16 DIMMs | CPU1/CPU2 P1-A1/P1-B1/P1-C1/P1-D1, P2-E1/P2-F1/P2-G1/P2-H1 + Any memory pairs in P1, P2 DIMM slots |
| 2 CPUs & 16 DIMMs | CPU1/CPU2 P1-A1/P1-B1/P1-C1/P1-D1, P2-E1/P2-F1/P2-G1/P2-H1, P1-A2/P1-B2/P1-C2/P1-D2, P2-E2/P2-F2/P2-G2/P2-H2 |

DIMM Module Population Configuration

For memory to work properly, follow the tables below for memory installation:

| RDIMM Support POR on the E5-2600 Series Processor Platform | | | | |
|--|---------------------------------|--------------------------------------|---------------------|----------------------------------|
| DIMM Slots per Channel | DIMMs Populated per DDR Channel | RDIMM Type (RDIMM: Reg.= Registered) | POR Speeds (in MHz) | Ranks per DIMM (Any Combination) |
| 1 | 1 | Reg. ECC DDR3 | 800/1066/1333/1600 | SR, DR, or QR |
| 2 | 1 | Reg. ECC DDR3 | 800/1066/1333/1600 | SR, DR, or QR |
| 2 | 2 | Reg. ECC DDR3 | 800/1066/1333/1600 | Mixing SR, DR, QR |

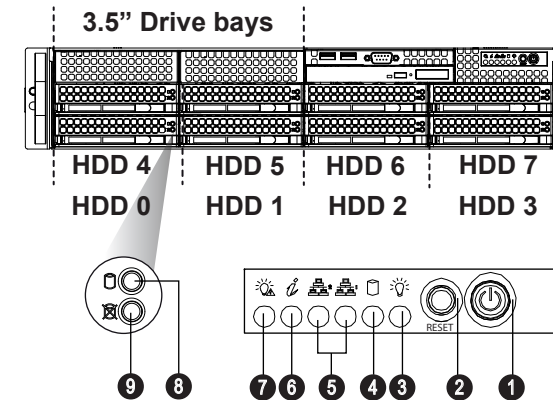
Population Rules:
 1. Any combination of x4 and x8 RDIMMs with 1 Gb or 2 Gb DRAM Density are supported.
 2. Populate DIMMs starting with DIMM A1.
 3. When mixing QR with SR or DR on the same DDR channel, put the QR in DIMMA1 first.

Note: For the memory modules to work properly, please install DIMM modules in pairs (with an even number of DIMMs installed).
Note: All channels in a system will run at the fastest common frequency.

| Possible System Memory Allocation & Availability | | |
|--|--------|--|
| System Device | Size | Physical Memory Available (4 GB Total System Memory) |
| Firmware Hub flash memory (System BIOS) | 1 MB | 3.99 GB |
| Local APIC | 4 KB | 3.99 GB |
| Area Reserved for the chipset | 2 MB | 3.99 GB |
| I/O APIC (4 Kbytes) | 4 KB | 3.99 GB |
| PCI Enumeration Area 1 | 256 MB | 3.76 GB |
| PCI Express (256 MB) | 256 MB | 3.51 GB |
| PCI Enumeration Area 2 (if needed) -Aligned on 256-M boundary- | 512 MB | 3.01 GB |
| VGA Memory | 16 MB | 2.85 GB |
| TSEG | 1 MB | 2.84 GB |
| Memory available for the OS & other applications | | 2.84 GB |

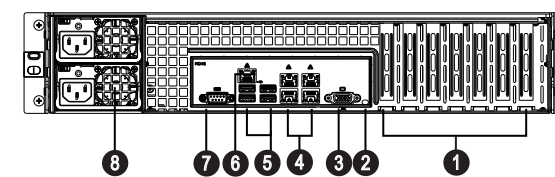
Note: For detailed information on memory support and updates, please refer to the SMC Recommended Memory List posted on our website at <http://www.supermicro.com/support/resources/mem.cfm>.

Front View & Interface



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

Rear View

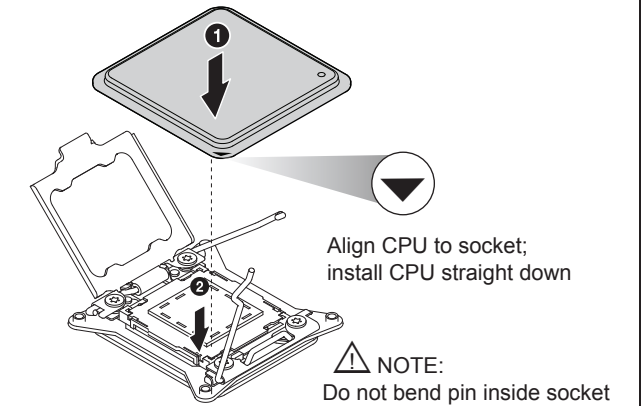


| No. | Description | No. | Description |
|-----|---------------------|-----|-------------------------------|
| 1 | PCI Expansion Slots | 5 | USB 0/1/2/3 Ports |
| 2 | UID Button | 6 | Dedicated LAN for IPMI |
| 3 | VGA Port | 7 | COM Port |
| 4 | LAN 1/2/3/4 Ports | 8 | Redundant Power Supply Module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

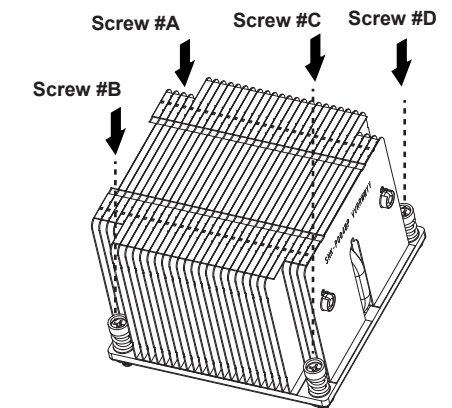
Beep Codes

| BIOS 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 |
| 5 long beeps + 2 short beeps | Display memory read/write status | Video adapter missing or with faulty memory |
| 1 continuous beep | System | System overheat |

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

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>

