

SUPERMICRO® SuperServer 1028R-WMR/WMRT Quick Reference Guide

Board Layout

| No. | Description |
|-----|--|
| 1 | SXB1C: SMC-Proprietary SPEC slot (Left) |
| 2 | SXB1B : (CPU1/CPU2) PCI-E 3.0 x16 + x16 slot add-on card slot (Left) |
| 3 | SXB1A: SMC-Proprietary SPEC slot (Left) |
| 4 | P2-DIMME1(Blue)/P2-DIMME2 slot |
| 5 | P2-DIMMF1(Blue)/P2-DIMMF2 slot |
| 6 | CPU2 |
| 7 | P2-DIMMH1(Blue)/P2-DIMMH2 slot |
| 8 | P2-DIMMG1(Blue)/P2-DIMMG2 slot |
| 9 | P1-DIMMA1(Blue)/P1-DIMMA2 slot |
| 10 | P1-DIMMB1(Blue)/P1-DIMMB2 slot |
| 11 | CPU1 (Install CPU1 first) |
| 12 | P1-DIMMD1(Blue)/P1-DIMMD2 slot |
| 13 | P1-DIMMC1(Blue)/P1-DIMMC2 slot |
| 14 | (I)-SATA 0~5: Intel SATA 3.0 connectors (0~5) from Intel PCH |
| 15 | (S)-SATA 0~3: SATA 3.0 connectors (0~3) from Intel SCU |

Memory

| Processors and their Corresponding Memory Modules | | | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| CPU# | P1-DIMMA1 | P1-DIMMB1 | P1-DIMMC1 | P1-DIMMD1 | P1-DIMMA2 | P1-DIMMB2 | P1-DIMMC2 | P1-DIMMD2 |
| CPU 1 | | | | | | | | |
| CPU2 | P2-DIMME1 | P2-DIMMF1 | P2-DIMMG1 | P2-DIMMH1 | P2-DIMME2 | P2-DIMMF2 | P2-DIMMG2 | P2-DIMMH2 |

| Processor and Memory Module Population for Optimal Performance | | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| Number of CPUs+DIMMs | CPU and Memory Population Configuration Table (For memory to work properly, please 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-DIMMA/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 & 9~16 DIMMs | CPU1/CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1 + Any memory pairs 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 | | | |
| | | | E5-2600 V3 | E5-2600 V4 | E5-2600 V3 | E5-2600 V4 | E5-2600 V3 | E5-2600 V4 |
| RDIMM | SRx4 | 4 GB | 8 GB | 1.2 V | 1.2 V | 1.2 V | 1.2 V | |
| 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 | |

Beep Codes

| Beep Code | Error Message | Description |
|-------------------------------|---------------------------------|--|
| 1 beep | Refresh | Circuits have been reset (Ready to power up) |
| 5 short beeps and 1 long beep | Memory error | No memory detected in the system |
| 5 beeps | No Con-In or No Con-Out devices | Con-In: USB or PS/2 keyboard, PCI or Serial Console Redirection, IPMI KVM or SOL Con-Out: Video Controller, PCI or Serial Console Redirection, IPMI SOL |
| 1 beep per device | Refresh | 1 beep for each USB device |

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 |

Information LED: Alerts operator of several states, as noted in the table below.

| Information LED | |
|-------------------------|---|
| Status | Description |
| Continuously on and red | An overheat condition has occurred. (This may be caused by cable congestion.) |
| Blinking red (1Hz) | Fan failure, check for an inoperative fan. |
| Blinking red (0.25Hz) | Power failure, check for a non-operational power supply. |
| Solid blue | Local UID has been activated. Use this function to locate the server in a rack mount environment. |
| Blinking blue | Remote UID is on. Use this function to identify the server from a remote location. |

Rear View

| No. | Description |
|-----|--|
| 1 | PCI-E 3.0 x8 Expansion Slot (FH, 6.6" L) |
| 2 | N/A |
| 3 | LAN1 & LAN2 (1GbE for WMR, 10GbE for WMRT) |
| 4 | USB 3.0 Ports |
| 5 | VGA Port |
| 6 | Redundant Power Supply Module |
| 7 | Dedicated LAN for IPMI |

CPU Installation

Align CPU to socket; install CPU straight down

NOTE:
Do not bend pin inside socket

Heatsink Installation

SNK-P0057PS (for CPU2)
SNK-P0047PSC (for CPU1)

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

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>

<http://www.supermicro.com>

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