

SUPERMICR SuperServer 2029U-E Series Quick Reference Guide

Board Layout

Diagram showing the board layout with numbered callouts 1 through 19. Callout 1 points to the SXB1A/1B/1C slot. Callout 2 points to the SXB2 slot. Callout 3 points to the I-SATA0-3 ports. Callout 4 points to the S-SATA 4 and 5 ports. Callout 5 points to the JBT1 CMOS Clear button. Callout 6 points to the SXB3A/3B/3C slot. Callout 7 points to the BMC Password Label. Callout 8 points to the P1-DIMMC1 slot. Callout 9 points to the P1-DIMMB1 slot. Callout 10 points to the CPU1 socket. Callout 11 points to the P1-DIMMD1 slot. Callout 12 points to the P1-DIMME1 slot. Callout 13 points to the P2-DIMMC1 slot. Callout 14 points to the P2-DIMMB1 slot. Callout 15 points to the CPU2 socket. Callout 16 points to the P2-DIMMD1 slot. Callout 17 points to the P2-DIMME1 slot. Callout 18 points to the JSD1/JSD2 SATA DOM connectors. Callout 19 points to the S-SATA0-3 ports.

No.	Description
1	SXB1A/1B/1C: Proprietary PCI-e Slot used for WIO-Left Devices (supported by CPU2)
2	SXB2: Proprietary PCI-e Slot for WIO-Right Devices (supported by CPU2)
3	I-SATA0~3, I-SATA4~7: SATA 3.0 Ports (Intel PCH)
4	S-SATA 4, 5: SATA 3.0 Ports (Intel SCU)
5	JBT1: CMOS Clear
6	SXB3A/3B/3C: Proprietary PCI-e Slot for Ultra Riser Devices (supported by CPU1)
7	BMC Password Label
8	P1-DIMMC1(Blue) /P1-DIMMC2 /P1-DIMMB1 (Blue) slot
9	P1-DIMMB2 /P1-DIMMA1(Blue) /P1-DIMMA2 slot
10	CPU1 (Install CPU1 first)
11	P1-DIMMD2 /P1-DIMMD1(Blue) /P1-DIMME2 slot
12	P1-DIMME1(Blue) /P1-DIMMF2 /P1-DIMMF1 (Blue) slot
13	P2-DIMMC1(Blue) /P2-DIMMC2 /P2-DIMMB1 (Blue) slot
14	P2-DIMMB2/P2-DIMMA1(Blue)/P2-DIMMA2 slot
15	CPU2
16	P2-DIMMD2/P2-DIMMD1(Blue)/P2-DIMME2 slot
17	P2-DIMME1(Blue)/P2-DIMMF2/P2-DIMMF1(Blue) slot
18	JSD1/JSD2: SATA DOM (Device_on_Module) Power Connectors
19	S-SATA0~3: SATA 3.0 Ports (Intel SCU)

When 2 CPUs are used	Memory Population Sequence
2 CPUs & 2 DIMMs	CPU1: P1-DIMMA1 CPU2: P2-DIMMA1
2 CPUs & 4 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1 CPU2: P2-DIMMA1/P2-DIMMD1
2 CPUs & 6 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1
2 CPUs & 8 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1 CPU2: P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 10 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 12 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 14 DIMMs	CPU1: P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 16 DIMMs	CPU1: P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1 CPU2: P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1
2 CPUs & 18 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/ P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/ P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1
2 CPUs & 20 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/ P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/ P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1
2 CPUs & 22 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/ P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/ P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1
2 CPUs & 24 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/ P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/ P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1

Front View

Diagram showing the front view of the server with numbered callouts 1 through 11. Callout 1 points to the Power Button. Callout 2 points to the Reset Button. Callout 3 points to the Device Activity LED. Callout 4 points to the LAN1 LED. Callout 5 points to the Universal Information LED. Callout 6 points to the Power LED. Callout 7 points to the LAN2 LED. Callout 8 points to the Power Failure LED. Callout 9 points to the Device Activity LED. Callout 10 points to the Device Status LED. Callout 11 points to the Service/Asset Tag.

No.	Description
1	Power Button
2	Reset Button
3	Device Activity LED
4	LAN1 LED
5	Universal Information LED
6	Power LED
7	LAN2 LED
8	Power Failure LED
9	Device Activity LED
10	Device Status LED
11	Service/Asset Tag, Pull-out identifier (with BMC ADMIN default password underneath)

BMC Password Label

Diagram showing the BMC Password Label location and how to pull it out. The label is located on the left side of the service tag. To pull it out, use the pull-out tag with the BMC unique password on the left side of the service tag.

Each system comes with an unique default password for the ADMIN user. This can be found on a sticker on the motherboard and a sticker on the left side of the service tag. If necessary, the password can be reset by the Supermicro IPMICFG tool.

For more information, please visit <https://www.supermicro.com/en/solutions/management-software/bmc-resources>

Rear View

Diagram showing the rear view of the server with numbered callouts 1 through 15. Callout 1 points to the Slot 1, PCI-E 3.0 x16 slot. Callout 2 points to the Slot 2, PCI-E 3.0 x8 slot. Callout 3 points to the Slot 3, Internal PCI-E 3.0 x8 LP slot. Callout 4 points to the Slot 4, PCI-E 3.0 x8 LP slot. Callout 5 points to the Slot 5~8, PCI-E 3.0 x8 slot. Callout 6 points to the VGA Port. Callout 7 points to the UID Button. Callout 8 points to the COM Port. Callout 9 points to the Dedicated LAN for IPMI. Callout 10 points to the USB 3.0 Ports. Callout 11 points to the 2~4 LAN Ports. Callout 12 points to the Redundant Power Supply Module. Callout 13 points to the Slot 1, PCI-E 3.0 x16 slot. Callout 14 points to the Slot 2, PCI-E 3.0 x8 slot. Callout 15 points to the Slot 3, Internal PCI-E 3.0 x8 LP slot.

No.	Description
1	Slot 1, PCI-E 3.0 x16 slot (FH, 10.5" L) (CPU1)
2	Slot 2, PCI-E 3.0 x8 slot (FH, 10.5" L) (CPU1) or 2x 2.5" Hot-Swap Drive Bay
3	Slot 3, Internal PCI-E 3.0 x8 LP slot (CPU1)
4	Slot 4, PCI-E 3.0 x8 LP slot (CPU2)
5-8	Slot 5~8, PCI-E 3.0 x8 slot (FH, 10.5" L) (CPU2)
9	VGA Port
10	UID Button (Unit Identifier Button)
11	COM Port
12	Dedicated LAN for IPMI
13	USB 3.0 Ports
14	2~4 LAN Ports (Reference LAN port configuration table)
15	Redundant Power Supply Module (See User Manual for LED guidance)

CPU Installation

Diagram showing the steps for CPU installation. Step 1: Align Notch C of the CPU and Notch C of the Processor Clip. Step 2: Align Notch B of the CPU and Notch B of the Processor Clip. Step 3: Align CPU Pin 1. Step 4: Attach the Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM). Step 5: Removing the Dust Cover from the CPU Socket. Step 6: Installing the Processor Heatsink Module (PHM).

Attaching the Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)

On Locations (C, D), the notches snap onto the heat sink's mounting holes. Make sure Mounting Notches snap into place.

Removing the Dust Cover from the CPU Socket

Remove the dust cover from the CPU socket, exposing the socket and socket pins as shown on the illustration below. **Note:** Do not touch the socket pins to avoid damaging them, causing the CPU to malfunction.

Installing the Processor Heatsink Module (PHM)

Note: Do not use excessive force when tightening the screws to avoid damaging the LGA lands and the processor.

Caution

Diagram showing the caution for the processor carrier assembly. The diagram shows the processor carrier assembly with the processor mounted on it. The processor is mounted on the carrier assembly, and the carrier assembly is mounted on the heatsink. The processor is mounted on the carrier assembly, and the carrier assembly is mounted on the heatsink. The processor is mounted on the carrier assembly, and the carrier assembly is mounted on the heatsink.

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>