

SUPERMICR SuperServer 1029U-TN10RT Quick Reference Guide

Board Layout

Diagram showing the board layout with components numbered 1 through 19. A callout shows the BMC Password Label.

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)

Memory Support

Memory Population Table	
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-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
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-DIMMD1/P1-DIMMD2/P1-DIMME1/P1-DIMME2 CPU2: P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMMD2/P2-DIMME1/P2-DIMME2
2 CPUs & 16 DIMMs	CPU1: P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMMD2/P1-DIMME1/P1-DIMME2 CPU2: P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMMD2/P2-DIMME1/P2-DIMME2
2 CPUs & 18 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMMD2/P1-DIMME1/P1-DIMME2 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMMD2/P2-DIMME1/P2-DIMME2
2 CPUs & 20 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMMD2/P1-DIMME1/P1-DIMME2 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMMD2/P2-DIMME1/P2-DIMME2
2 CPUs & 22 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMMD2/P1-DIMME1/P1-DIMME2 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMMD2/P2-DIMME1/P2-DIMME2
2 CPUs & 24 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMMD2/P1-DIMME1/P1-DIMME2 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMMD2/P2-DIMME1/P2-DIMME2

Front view

Diagram showing the front view of the server with components numbered 1 through 9. A callout shows the BMC Password Label.

No.	Description
1	Universal Information LED
2	LAN1 LED & LAN2 LED
3	Device Activity LED
4	Power LED
5	UID Button
6	Power Button
7	Device Activity LED
8	Device Status LED
9	BMC password label

Rear View

Diagram showing the rear view of the server with components numbered 1 through 12.

No.	Description
1	Slot 1, N/A
2	Slot 2, N/A
3	Slot 3, PCI-E 3.0 x16 Slot FH, 10.5"L (CPU2)
4	Slot 4, PCI-E 3.0 x16 Slot FH, 10.5"L (CPU2)
5	VGA port
6	UID Button (Unit Identifier Button)
7	COM Port
8	Dedicated LAN for IPMI
9	2x USB 3.0 Ports
10	LAN Port2 (10G Base-T)
11	LAN Port1 (10G Base-T)
12	Redundant Power Supply Module (See user manual for LED guidance)

Beep Codes

Beep Code	Error Message	Description
1 short	Refresh	Circuits have been reset (Ready to power up)
5 short, 1 long	Memory error	No memory detected in system
5 long, 2 short	Display memory read/write error	Video adapter missing or with faulty memory
1 long continuous	System OH	System overheat condition

Caution

SAFETY INFORMATION
IMPORTANT: See installation instructions and safety warning before connecting system to powersupply.
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.

BMC Password Label

Pull-out tag with BMC unique password underneath.

Each system comes with a unique default password for the ADMIN user. This can be found on a sticker on the motherboard and a sticker underneath the service tag on chassis. 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>

CPU Installation

Align Notch C of the CPU and Notch B of the Processor Clip

Align CPU Pin 1

Align Notch B of the CPU and Notch B of the Processor Clip

Allow carrier to latch onto CPU

Processor Carrier Assembly

Processor Carrier Assembly (with CPU mounted on the Processor Clip)

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

On Locations (A, B), the notches snap onto the heatsink's sides

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.

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.

Note: Do not touch the socket pins to avoid damaging them, causing the CPU to malfunction.

Use a torque of 12lbf-in

Tighten the screws in the sequence of 1, 2, 3, 4 (top 3 quarter view)