

SUPERMICR SuperServer 6019U-T Series Quick Reference Guide

Board Layout

BMC Password Label

XXXXXXXXXXXX

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-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

HDD 0 (SATA3)* **HDD 1 (SATA3)*** **HDD 2 (SATA3)*** **HDD 3 (SATA3)***

*NVMe Support from CPU 1 on N4 models
#NVMe Support from CPU 2 on N4 models

1 UID Button
2 Universal Information LED
3 LAN1 LED & LAN2 LED
4 Device Activity LED
5 Power LED
6 Reset Button
7 Power Button
8 Device Activity LED
9 Device Status LED
10 BMC password label

Rear View

Two 25G LAN ports
Two to four 1G/10G LAN ports

No.	Description
1	Slot 1, PCI-E 3.0 x8 / x16* internal LP Slot HL, 6.6" (CPU1)
2	Slot 2, PCI-E 3.0 x8 LP Slot HL, 6.6" (CPU2)
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	2-4 LAN Port (Reference LAN port configuration table)
11	Redundant Power Supply Module (See user manual for LED guidance)

* PCI-E 3.0 x16 available on TR25M model

LAN Port Configuration for 6019U Series Models

System	LAN Ports	Ultra Riser Card
SYS-6019U-TR25M	Two 25 GbE	AOC-URN4-M2TS
SYS-6019U-TR4	Four GbE	AOC-UR-i4G
SYS-6019U-T(N4)R4T	Four 10GBase-T	AOC-UR-i4XT
SYS-6019U-T(N4)RT	Two 10GBase-T	AOC-UR-i2XT
SYS-6019U-TRTP	Two 10G SFP+	AOC-URN2-i2XS
SYS-6019U-TRTP2	Two GbE, Two 10G SFP+	AOC-URN2-i4GXS

Beep Codes

Beep Code	Error Message	Description
1 beep	Refresh	Circuits have been reset (Ready to power up)
5 short and 1 long	Memory error	No memory detected in the system
5 long and 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 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>

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

CPU (Upside Down) w/CPU LGA Lands up

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

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

Align CPU Pin 1

CPU/Heatsink Package (Upside Down)

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)

Triangle on the CPU

Triangle on the Processor Carrier

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

Make sure Mounting Notches snap into place

Heatsink (Upside Down)

Removing the Dust Cover from the CPU Socket

Dust Cover

Remove the plastic protective cover from the CPU socket. Do not touch or bend the socket pins.

Socket Pins

CPU Socket

Installing the Processor Heatsink Module (PHM)

Oval C (Large Guiding Post)

Oval D

Printed Triangle

Small Guiding Post

Use a torque of 12lbf-in

T30 Torx Driver

Mounting the Processor Heatsink Module into the CPU socket (on the motherboard)

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

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.