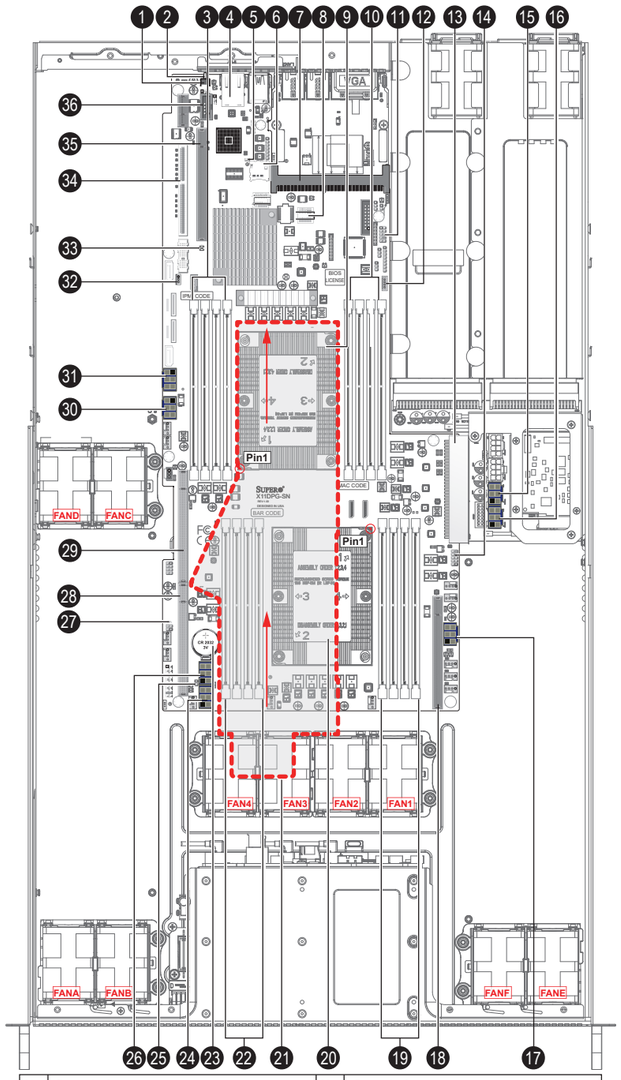
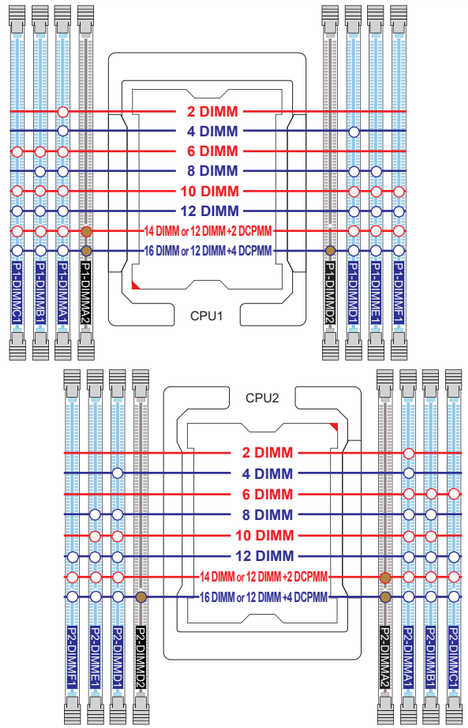
SUPERMICRO® SuperServer 1029GP-TR Quick Reference Guide

System Layout



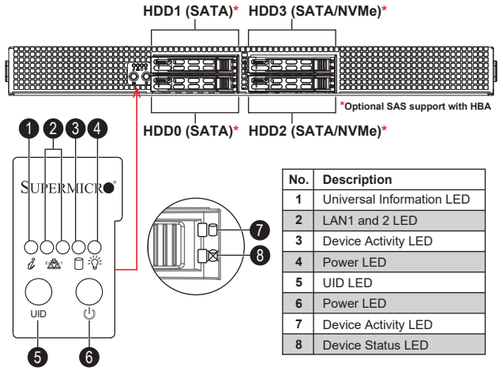
No.	Description	No.	Description
1	JUIDB1 UID	19	P2-DIMMA1~C1(Blue)/P2-DIMMA2 slot
2	LED1	20	CPU2 w/ Middle Air Channel Heatsink
3	P1-DIMMA1~C1(Blue)/P1-DIMMA2 slot	21	Airshroud Location
4	Dedicated IPMI LAN Port	22	P2-DIMMD1~F1(Blue)/P2-DIMMD2 slot
5	BMC Heartbeat LED	23	Onboard CMOS Battery
6	Micro SD Card Slot Reserved	24	8-pin auxiliary power to Backplane
7	JSIOM: PCI-Express 3.0 x16 slot from CPU1	25	Chassis Intrusion Header
8	BIOS Chip	26	8-pin auxiliary power to GPU1
9	CPU1 with Standard Heatsink	27	Front Panel Power LED
10	P1-DIMMD1~F1(Blue)/P1-DIMMD2 slot	28	PCI-Express 3.0 X16 slot from CPU1
11	Trusted Platform Module/Port 80 Connector	29	PCI-Express 3.0 x16 Slot from CPU2
12	Intel Raid Key Header	30	8-pin auxiliary power to GPU3
13	SMCI-proprietary main power connector	31	8-pin auxiliary power Reserved
14	Power supply sideband connector	32	Standby Power Connector
15	8-pin auxiliary power Reserved	33	CMOS Clear
16	8-pin auxiliary power GPU2	34	PCI-Express 3.0 X16 slot from CPU1
17	8-pin auxiliary power Reserved	35	PCI-Express 3.0 X8 slot from CPU2
18	PCI-Express 3.0 x16 Slot from CPU2	36	COM Port

Memory Population



* For more info including System Requirements see *DCPMM Memory Configuration for Supermicro Motherboards Users Guide*. Unbalanced memory configuration if using standard DIMMs.

Front view



No.	Description
1	Universal Information LED
2	LAN1 and 2 LED
3	Device Activity LED
4	Power LED
5	UID LED
6	Power LED
7	Device Activity LED
8	Device Status LED

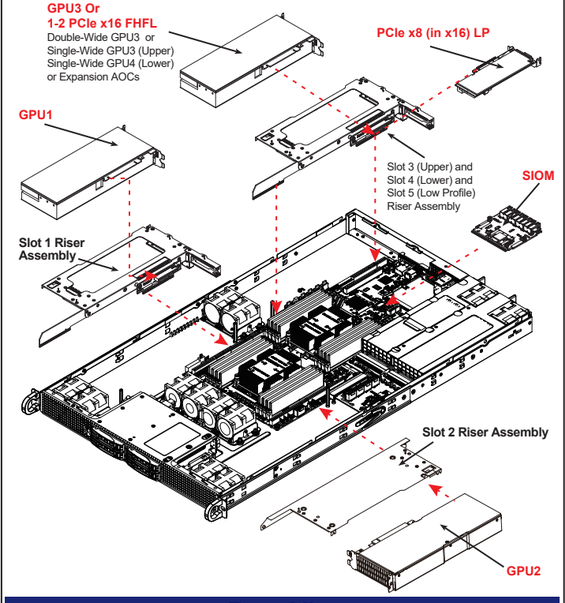
Information LED	
Status	**Description**
Continuously on and red	An overheat condition has occurred. (This may be caused by cable airflow interference.)
Blinking red (1Hz)	Fan failure, check for an inoperative fan.
Solid blue	Local UID has been activated. Use this function to locate the server in a rackmount environment.
Blinking blue	Remote UID is on. Use this function to identify the server from a remote location.

GPGPU & Expansion Card Installation

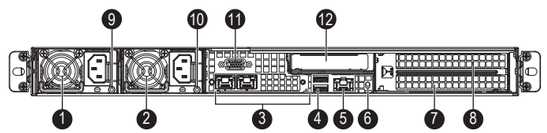
The system supports up to three double-width graphics processor unit (GPU) cards, which are mounted with brackets to riser PCIe slots. GPUs may have auxiliary PCIe power cables. Rear slot 4 is available when using single-width GPUs or NICs.

Rear Slots 3,4,5 remove screws & riser assembly and install expansion cards with appropriate brackets that come with the PCIe cards. Front Slots 1 & 2 don't require IO brackets that come with PCIe card but instead use custom brackets that are pre-installed in chassis.
GPUs such as single-width models may use optional bracket kit.

The SIOM card provides options for network connection. It is inserted into a SIOM slot on the motherboard. SIOM installation is usually performed by a system integrator or manufacturer.



Rear View

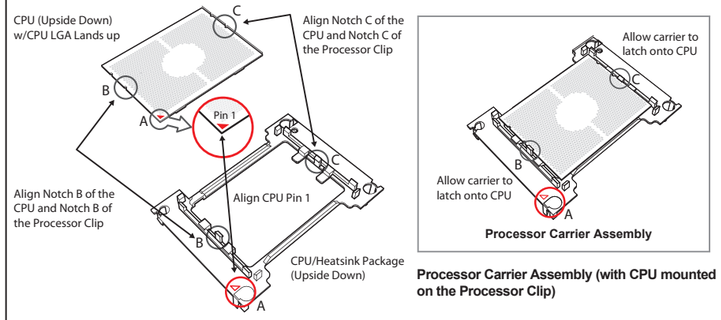


No.	Description	No.	Description
1	Power Supply Module 1 (See PSU table for LED guidance)	7	Slot 4, PCI-E 3.0 x16 (CPU1) for Single Width, FHFL GPU (if no double width in Slot 3)
2	Power Supply Module 2 (See PSU table for LED guidance)	8	Slot 3, PCI-E 3.0 x16 (CPU2) for Double or Single Width, FHFL GPU
3	SIOM Slot (CPU1)	9	Power Supply Module 1 LED
4	2 USB 3.0 Ports	10	Power Supply Module 2 LED
5	IPMI LAN Port RJ45	11	VGA Port
6	Unit ID Switch Push Button and LED	12	Slot 5, PCI-E 3.0 x8 (in x16), (CPU2)

SIOM Options
4 Port 1G-RJ45
4 Port 10G-SFP+
4 Port 10G-RJ45
4 Port 25G-SFP28
2 Port 40G-QSFP & 2 Port 1G-RJ45
1 Port 100G-QSFP28

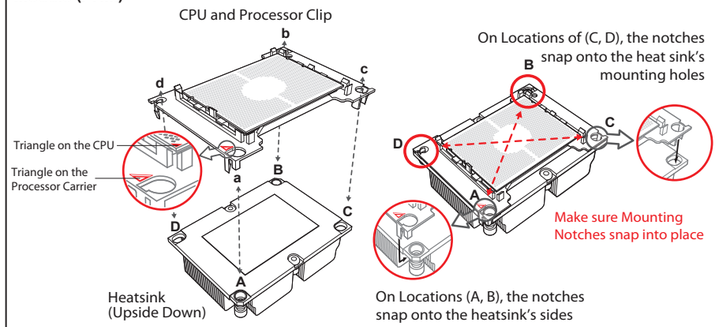
	Bicolor	
Power Supply Condition	**GREEN LED**	**AMBER LED**
No AC power to all power supplies	OFF	OFF
Power supply critical event causing a shutdown; failure, OCP, OVP, Fan Fail, OTP, UVP	OFF	AMBER
Power supply warning events where the power supply continues to operate; high temp (inlet temperature >60deg(PMBus reading), or hot spot temperature >95deg(PMBus reading)), high power, high current, slow fan (<1200rpm).	OFF	1Hz Blink AMBER
AC present Only 12VSB on (PS off) or PS in Smart Redundant state	1Hz Blink GREEN	OFF
Output ON and OK	ON	OFF
AC cord unplugged	OFF	AMBER

CPU Installation



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)

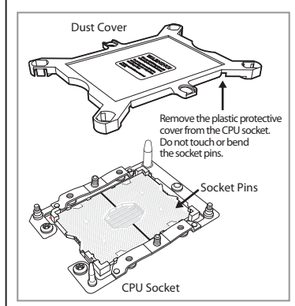


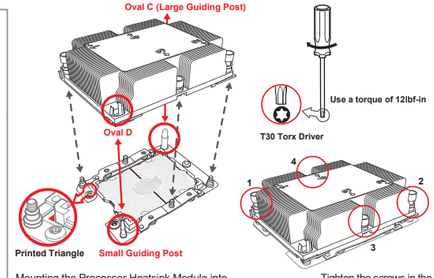
Removing the Dust Cover from the CPU Socket

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.





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)

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