

# SuperServer 2029GP-TR



## Integrated Board



**X11DPG-SN**

## Key Features

- Supports up to 6 GPUs

1. Dual socket P (LGA 3647) supports Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s
2. Up to 2TB ECC 3DS LRDIMM, up to DDR4-2666MHz; 16 DIMM slots
3. 6 PCI-E 3.0 x16 slots, 1 PCI-E 3.0 x8 (in x16) slots
4. 8 Hot-swap 2.5" SAS/SATA drive bays, 2 Hot-swap 2.5" SAS/SATA/NVMe drive bays
5. 1 **SIOM** for flexible Networking
6. 5x 8cm heavy duty fans with optimal fan speed control
7. 2000W Redundant Power Supplies Platinum Level (94%)

Barebones and Complete System must be installed with at least one SIOM or network card per system

[▶ Drivers & Utilities](#)
[▶ BIOS](#)
[▶ IPMI](#)
[▶ Tested Memory](#)
[▶ NVMe Options](#)
[▶ Manuals](#)
[▶ OS Certification Matrix](#)
[▶ Compatible GPU List](#)
[▶ Drive Options](#)

Note: Image above may show a varied configuration or optional parts. Please refer to parts list for standard parts included.

## Specifications

### Product SKUs

SYS-2029GP-TR ■ SuperServer 2029GP-TR (Black)

### Motherboard

Super X11DPG-SN

### Processor/Cache

**CPU**

- Dual Socket P (LGA 3647)
- Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s
- Support CPU TDP 70-205W

**Cores**

- Up to 28 Cores with Intel® HT Technology

**GPU Support**

- Please refer to: [Compatible GPU list](#)

### System Memory

**Memory Capacity**

- 16 DIMM slots
- Up to 2TB ECC 3DS LRDIMM, 2TB ECC RDIMM, DDR4 up to 2666MHz

**Memory**

- 2666/2400/2133MHz ECC DDR4 SDRAM

### Chassis

**Form Factor**

- 2U Rackmount

**Model**

- CSE-218GH-R2K03B

### Dimensions and Weight

**Height**

- 3.5" (89mm)

**Width**

- 17.2" (437mm)

**Depth**

- 31" (787mm)

**Package**

- 26.5" (H) x 11" (W) x 44.5" (D)

**Weight**

- Net Weight: 39.5 lbs (17.9 kg)
- Gross Weight: 54 lbs (24.5 kg)

**Available Color**

- Black

### Front Panel



**Buttons**

- Power On/Off button
- System Reset button

**LEDs**

- Power LED
- Hard drive activity LED
- Network activity LEDs
- System Overheat LED / Fan fail LED /

Type	
<b>On-Board Devices</b>	
Chipset	▪ Intel® C621 chipset
SATA	▪ SATA3 (6Gbps) with RAID 0, 1, 5, 10
IPMI	▪ Support for Intelligent Platform Management Interface v.2.0 ▪ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	▪ ASPEED AST2500 BMC
<b>Input / Output</b>	
SATA	▪ 2 SATA3 (6Gbps) ports, 2 miniSAS ports
LAN	▪ 1 RJ45 Dedicated IPMI LAN port
USB	▪ 2 USB 3.0 ports (rear)
Video	▪ 1 VGA port
Serial Header	▪ 1 Fast UART 16550 header
<b>System BIOS</b>	
BIOS Type	▪ AMI 256Mb SPI Flash ROM
<b>Management</b>	
Software	▪ Intel® Node Manager ▪ IPMI 2.0 ▪ KVM with dedicated LAN ▪ SSM, SPM, SUM ▪ SuperDoctor® 5 ▪ Watch Dog
Power Configurations	▪ ACPI / APM Power Management
<b>PC Health Monitoring</b>	
CPU	▪ Monitors for CPU Cores, Chipset Voltages, Memory. ▪ 4+1 Phase-switching voltage regulator
FAN	▪ Fans with tachometer monitoring ▪ Status monitor for speed control ▪ Pulse Width Modulated (PWM) fan connectors
Temperature	▪ Monitoring for CPU and chassis environment ▪ Thermal Control for fan connectors

<b>UID LED</b>	
<b>Expansion Slots</b>	
PCI-Express	▪ 6 PCI-E 3.0 x16 slots ▪ 1 PCI-E 3.0 x8 (in x16, LP) slot
<b>Drive Bays</b>	
Hot-swap	▪ 10 Hot-swap 2.5" drive bays
<b>System Cooling</b>	
Fans	▪ 5x 8cm Heavy duty fans with optimal fan speed control
<b>Power Supply</b>	
2000W 1U Redundant Power Supplies with PMBus	
Total Output Power	▪ 1000W/1800W/1980W/2000W
Dimension (W x H x L)	▪ 73.5 x 40 x 265 mm
Input	▪ 100-120Vac / 12.5-10.5A / 50-60Hz ▪ 200-220Vac / 10-9.5A / 50-60Hz ▪ 220-230Vac / 10-9.8A / 50-60Hz ▪ 230-240Vac / 10-9.8A / 50-60Hz ▪ 200-240Vac / 10-9.8A (UL/cUL only) ▪ 200-240Vdc / 10-9.1A (CCC only)
+12V	▪ Max: 83.3A / Min: 0.1A (100-120Vac) ▪ Max: 150A / Min: 0.1A (200-220Vac) ▪ Max: 165A / Min: 0.1A (220-230Vac) ▪ Max: 166.7A / Min: 0.1A (230-240Vac) ▪ Max: 166.7A / Min: 0.1A (200-240Vac) (UL/cUL only)
12V SB	▪ Max: 3.5A / Min: 0A
Output Type	▪ 25 Pairs Gold Finger Connector
Certification	  Platinum Level [ <a href="#">Test Report</a> ]
<b>Operating Environment</b>	
RoHS	▪ RoHS Compliant
Environmental Spec.	▪ Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) ▪ Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) ▪ Operating Relative Humidity: 8% to 90% (non-condensing) ▪ Non-operating Relative Humidity: 5% to 95% (non-condensing)

### Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DPG-SN	1	Super X11DPG-SN Motherboard
	CSE-218GH-R2K03B	1	CSE-218GH-R2K03B Chassis
Backplane	BPN-SAS3-218GH-N2	1	2U 10-Port Hybrid Backplane Supports 8 x 2.5" SAS3/SATA3 HDD/SSD and 2 x 2.5" SAS3/SATA3/NVMe Storage Device for GPU Platform, HF, RoHS
Cable 1	CBL-0157L	1	CBL, SGPIO, 2X4F TO 2X4F, P2.54, RIBBON IN RND TUBE, 40CM, 28AWG
Cable 2	CBL-PWEX-1028	6	GPU, 2x4F/CPU to 2x4F/CPU, P4.2, 30CM, 16AWG, 10A/pin, -40~105C

Cable 3	CBL-PWEX-1064	1	8pin CPU 12V to 4pin x 2pcs 280mm,HF,RoHS
Cable 4	CBL-SAST-0624	2	SATA,INT,ROUND,ST-ST,70CM,30AWG
Cable 5	CBL-SAST-0974-1	2	OcuLink v 1.0,INT,PCIe NVMe SSD, 37CM,34AWG
Cable 6	CBL-SAST-1014	2	MINI SAS HD(RA)-MINI SAS,INT,70CM,30AWG,RoHS
Riser Card	RSC-G2B-A66-X1	1	2U Rear Left hand side Active GPU riser card with two PCI-E
Riser Card	RSC-G2F-A66-X1	1	2U Front LHS Active GPU riser card with two PCI-E x16 slots
Riser Card	RSC-G2FR-A66	1	RSC-G2FR-A66-O-P
Riser Card	RSC-R2UG-E16R-X9	1	RSC-R2UG-E16R-X9
Heatsink / Retention	SNK-P0068PS	1	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Heatsink / Retention	SNK-P0068PSC	1	2U Passive CPU Heat Sink with a Side Air Channel for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Power Supply	PWS-2K03P-1R	2	1U 2000W Redundant Power Supply Platinum 73.5mm width.,RoHS/REACH
Rail Set	MCP-290-00054-0N	1	Rail set, quick/quick, optional for 1U 17.2"W SC815

#### Optional Parts List

	Part Number	Qty	Description
AOC-S3008L-L8i (SAS3)	CBL-SAST-0593	2	Internal Mini-SAS HD to Mini-SAS HD 60cm
AOC-S3108L-H8IR-16DD (SAS3)	CBL-SAST-0593	2	Internal Mini-SAS HD to Mini-SAS HD 60cm
AOC-S3108L-H8IR (SAS3)	CBL-SAST-0593	2	Internal Mini-SAS HD to Mini-SAS HD 60cm
Super Cap for LSI 3108	BKT-BBU-BRACKET-05	1	Mounting Bracket for LSI BBUs
	BTR-TFM8G-LSICVM02	1	LSI Super Cap
Global Services & Support	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)