

SuperServer 1028GQ-TXR (Complete System Only)



Integrated Board



X10DGQ

**Views: | [Angled View](#) | [Top View](#) |
| [Front View](#) | [Rear View](#) |**

Complete System Only: To maintain quality and integrity, this product is sold only as a completely-assembled system (with minimum 2 CPUs, 4 DIMMs, 2 GPUs installed).

[▶ Drivers & Utilities](#) | [▶ BIOS](#) | [▶ IPMI](#) | [▶ Tested Memory](#) | [▶ Tested M.2 List](#) | [▶ Manuals](#) | [▶ Compatible GPU List](#) | [▶ Drive Options](#)

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

Key Features

- Up to 4 NVIDIA® Tesla® P100 SXM2
- Up to 80 GB/s GPU-to-GPU NVIDIA® NVLINK™
- Supports NVIDIA® GPUDirect™ RDMA

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4[†]/ v3 family; QPI up to 9.6GT/s
2. Up to **1TB[†]** ECC 3DS LRDIMM , up to DDR4- **2400[†]**MHz ; 16 DIMM slots
3. 3 PCI-E 3.0 x16 slots, 1 PCI-E 3.0 x8 Low-profile slot
4. Intel i350 Dual port GbE LAN
5. 2 Hot-swap 2.5" drive bays, 2 internal 2.5" drive bays
6. 7x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
7. 2000W Redundant Power Supplies **Titanium Level (96%)**

Specifications

Product SKUs

- SYS-1028GQ-TXR** ■ SuperServer 1028GQ-TXR (**Black**)

Motherboard

Super X10DGQ

Processor/Cache

- CPU** ■ Intel® Xeon® processor E5-2600 v4[†]/ v3 family (up to 145W TDP) *
■ Dual Socket R3 (LGA 2011)
- Cores / Cache** ■ Up to **22 Cores**[†] / Up to **55MB**[†] Cache
- System Bus** ■ QPI up to 9.6 GT/s
- Note** [†] BIOS version 2.0 or above is required
- Note** * Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.
- GPU** ■ 4 NVIDIA® Tesla® P100 SXM2
■ NVIDIA® NVLINK™ up to 80GB/s

System Memory

- Memory Capacity** ■ 16x 288-pin DDR4 DIMM slots
■ Up to 1TB[†] ECC 3DS LRDIMM, 1TB ECC RDIMM
- Memory Type** ■ **2400**[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
- DIMM Sizes** ■ RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB
■ LRDIMM: 32GB
- Memory Voltage** ■ 1.2 V
- Error Detection** ■ Corrects single-bit errors

On-Board Devices

- Chipset** ■ Intel® C612 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
■ ASPEED AST2400 BMC
- Network Controllers** ■ Intel® i350 Dual Port Gigabit Ethernet
■ Virtual Machine Device Queues reduce I/O overhead
■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
- Graphics** ■ ASPEED AST2400 BMC

Input / Output

- SATA** ■ 6 SATA3 (6Gbps) ports
- LAN** ■ 2 RJ45 Gigabit Ethernet ports
■ 1 RJ45 Dedicated IPMI LAN port
- USB** ■ 2 USB 3.0 ports (2 via headers)
- Video** ■ 1 VGA Connector

Chassis

- Form Factor** ■ 1U Rackmount
- Model** ■ **CSE-118GQP-R2K05B**

Dimensions and Weight

- Height** ■ 1.7" (43mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 35.2" (894mm)
■ 39.3" (997mm) with rails
- Package** ■ 24" (H) x 8" (W) x 46" (D)
- Weight** ■ Net Weight: 45 lbs (15.9 kg)
■ Gross Weight: 58 lbs (21.8 kg)
- Available Color** ■ Black

Front Panel

- Buttons** ■ Power On/Off button
■ System Reset button
- LEDs** ■ Power LED
■ Hard drive activity LED
■ 2 Network activity LEDs
■ System Overheat LED / Fan fail LED / UID LED

Expansion Slots

- PCI-Express** ■ 3 PCI-E 3.0 x16 slots
■ 1 PCI-E 3.0 x8 low-profile slot

Drive Bays

- Hot-swap** ■ 2x 2.5" Hot-swap drive bays
- Fixed** ■ 2x 2.5" internal drive bays

System Cooling



- Fans** ■ 7x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control

Power Supply

2000W Redundant Power Supplies with PMBus

- Total Output Power** ■ 1000W: 100 – 120Vac
■ 1800W: 200 – 220Vac
■ 1980W: 220 – 230Vac
■ 2000W: 230 – 240Vac
■ 2000W: 200 – 240Vac (UL/CUL only)
- Dimension (W x H x L)** ■ 73.5 x 40 x 265 mm
- Input** ■ 100-120Vac / 12.5-9.5A / 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 / 11.8-9.8A / 50-60Hz (UL/CUL only)

Serial Port	<ul style="list-style-type: none"> 1 Serial header
System BIOS	
BIOS Type	<ul style="list-style-type: none"> 128Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) APM 1.2 DMI 2.3 PCI 2.3 ACPI 1.0 / 2.0 / 3.0 USB Keyboard support SMBIOS 2.7.1 UEFI

+12V	<ul style="list-style-type: none"> Max: 83.3A / Min: 0A (100-120Vac) Max: 150A / Min: 0A (200-220Vac) Max: 165A / Min: 0A (220-230Vac) Max: 166.7A / Min: 0A (230-240Vac) Max: 166.7A / Min: 0A (200-240Vac) (UL/cUL only)
12Vsb	<ul style="list-style-type: none"> Max: 2.1A / Min: 0A
Output Type	<ul style="list-style-type: none"> 25 Pairs Gold Finger Connector
Certification	  Titanium Level [Test Report]

PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, +1.5V, +3.3V, +5V, +12V, +5 Stdby, +3.3 Stdby, VBAT, Memory Voltages. 5 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> Total of seven 4-pin PWM fans 7 fans with tachometer monitoring Status monitor for speed control Status monitor for on/off control Low noise fan speed control
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment CPU thermal trip support Thermal Control for 8 Fan Connectors PSU I²C temperature sensing logic Thermal Monitor 2 (TM2) support PECI
LED	<ul style="list-style-type: none"> Power Fail / Overheat LED Suspend-state Indicator LED UID LED
Other Features	<ul style="list-style-type: none"> SDDC Support

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 10°C to 30°C (50°F to 86°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)

Список деталей

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DGQ	1	Super X10DGQ Motherboard
	CSE-118GQP-R2K05B	1	CSE-118GQP-R2K05B Chassis
Add-on Card / Module	AOM-PIO-I2G	1	AOM-PIO-I2G
Backplane	BPN-SAS3-118GQE	1	2-port 1U SAS3 12Gbps backplane, support up to 2x 2.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-0484L	4	SATA,INT,ROUND,ST-ST,55CM,30AWG
Cable 2	CBL-SAST-0934-12	4	Oculink-Oculink X8 Cable 50cm 34AWG,RoHS
Cable 3	CBL-PWEX-0954	2	GPU,2x4F/RA/PCIe to 2x4F/RA/CPU, P4.2, 5.5CM,17AWG, 8A/pin, -25~85C, RoHS/REACH
Cable 4	CBL-PWEX-0953	1	GPU,2x4F/RA/PCIe to 2x4F/CPU, P4.2, 42CM,17AWG, 8A/pin, -25~85C, RoHS/REACH
Cable 5	CBL-PWEX-0665	1	PCIe 8 pin female(black) to CPU 8 pin female(white), M60/M40 GPU power cable, 30cm, 18AWG, 10A/pin, 0~80C, RoHS/REACH
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1810-QRG	1	SYS-1028GQ-TR(T) Quick Reference Guide,HF,RoHS/REACH
Riser Card	RSC-G-66	1	1U GPU Riser Card with 2 PCI-E x16 slot
Riser Card	RSC-G-68	1	RSC-G-68
Heatsink / Retention	SNK-P0057P	2	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Square ILM MB
Heatsink / Retention	SNK-P4004V	4	1U Passive GPU Heat Sink for NVIDIA SXM2 Module Equipped with Pascal or Volta GPU
Power Supply	PWS-2K05A-1R	2	1U 2000W Redundant Titanium Power Supply W/PMbus 73.5x40x265mm,RoHS/REACH
Fans	FAN-0163L4	7	40x40x56 mm 23.3K-20.3K RPM Counter-rotating Fan
Rail Set	MCP-290-11809-0N	1	Rail set, Quick/Quick, Auto Latch, travel 535mm Short Version, Post to Post 685mm

Optional Parts List

	Part Number	Qty	Description
CAB	MCP-120-11812-0N	-	SC118GQP Pascal GPU Dummy & Air Shroud Mylar Module
AOC-S3008L-L8i (SAS3)	CBL-SAST-0699	1	Mini SAS HD to 4 SATA 12G
AOC-S3108L-H8IR-16DD (SAS3)	CBL-SAST-0699	1	Mini SAS HD to 4 SATA 12G
AOC-S3108L-H8IR (SAS3)	CBL-SAST-0699	1	Mini SAS HD to 4 SATA 12G
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	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)