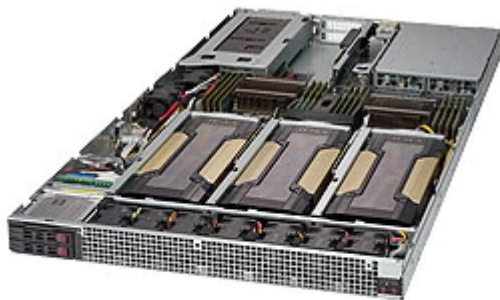


SuperServer 1028GQ-TRT



Integrated Board



X10DGQ

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

► [Drivers & Utilities](#) ► [BIOS](#) ► [IPMI](#) ► [Tested Memory](#) ► [Tested M.2 List](#) ► [Manuals](#) ► [OS Certification Matrix](#) ► [Compatible GPU List](#) ► [Quick-References Guide](#) ► [Drive Options](#)

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

Key Features

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. 4 PCI-E 3.0 x16 slots (4 NVIDIA GPU/Xeon Phi cards opt.), 2 PCI-E 3.0 x8 (in x16) LP slot
4. Dual port 10GbE LAN
5. 2 Hot-swap 2.5" drive bays, 2 internal 2.5" drive bays
6. 9x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
7. 2000W Redundant Power Supplies **Platinum Level (94%+)**



Specifications

Product SKUs

SYS-1028GQ-TRT	SuperServer 1028GQ-TRT (Black)
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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.
<u>GPU/Xeon Phi Support</u>	NVIDIA® Tesla® K1/K2/K10/K40/K80/M40/M60/Xeon Phi

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: 64GB, 32GB 3DS LRDIMM: 128GB
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	- Dual Port 10GbE - Virtual Machine Device Queues reduce I/O overhead - Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Graphics	ASPEED AST2400 BMC

Chassis

Form Factor	1U Rackmount
Model	CSE-118GQE-R2K03P

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 2x Network activity LEDs - System Overheat LED / Fan fail LED / UID LED

Expansion Slots

PCI-Express	4x PCI-E 3.0 x16 slots (4x GPU/Xeon Phi cards optional) 2x PCI-E 3.0 x8 (in x16) low-profile slot
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Drive Bays

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

System Cooling

Fans	9x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
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Power Supply

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)

Input / Output

SATA	■ 4x SATA3 (6Gbps) ports
LAN	■ 2x RJ45 Gigabit Ethernet ports ■ 1x RJ45 Dedicated IPMI LAN port
USB	■ 2x USB 3.0 ports (2 via headers)
Video	■ 1x VGA Connector
Serial Port	■ 1x Serial header

System BIOS

BIOS Type	■ 128Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	■ 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	■ 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)
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12V SB	■ Max: 3.5A / Min: 0A
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Output Type	■ 25 Pairs Gold Finger Connector
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Certification	 Platinum Level [Test Report]
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PC Health Monitoring

CPU	■ Monitors for CPU Cores, +1.5V, +3.3V, +5V, +12V, +5 Stdbv, +3.3 Stdbv, VBAT, Memory Voltages. ■ 5 Phase-switching voltage regulator
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FAN	■ Total of nine 4-pin PWM fans ■ 9x fans with tachometer monitoring ■ Status monitor for speed control ■ Status monitor for on/off control ■ Low noise fan speed control
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Temperature	■ Monitoring for CPU and chassis environment ■ CPU thermal trip support ■ Thermal Control for 9x Fan Connectors ■ PSU I ² C temperature sensing logic ■ Thermal Monitor 2 (TM2) support ■ PECI
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LED	■ Power Fail / Overheat LED ■ Suspend-state Indicator LED ■ UID LED
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Other Features	■ SDDC Support
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Operating Environment / Compliance

RoHS	■ RoHS Compliant
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Environmental Spec.	■ Operating Temperature: 10°C to 35°C (50°F to 95°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)
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Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DGQ	1	Super X10DGQ Motherboard
	CSE-118GQE-R2K03P	1	CSE-118GQE-R2K03P Chassis
Add-on Card / Module	AOM-PIO-I2XT-P	1	AOM-PIO-I2XT
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
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-6	3	RSC-G-6-O-P
Riser Card	RSC-GR-6	1	RSC-GR-6-O-P
Riser Card	RSC-GR-A88	1	RSC-GR-A88-O-P
Heatsink / Retention	SNK-P0057P	2	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Square ILM MB
Power Supply	PWS-2K03P-1R	2	1U 2000W Redundant Power Supply Platinum 73.5mm width.,RoHS/REACH
Fans	FAN-0163L4	9	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
Cable	CBL-PWEX-0782	1	NVIDIA Tesla V100/K80/M60/M40/P100/P40 Cable (8-pin EPS 12V connector)
	CBL-PWEX-0783	2	
	CBL-PWEX-0814	1	
Cable	CBL-PWEX-0784	1	NVIDIA Tesla K40/M10 Cable (6+2-pin PCIe 12V connector)
	CBL-PWEX-0785	2	
	CBL-PWEX-0786	1	
Cable	CBL-PWEX-0787	1	Generic GPU cables (6+2/6-pin PCIe 12V connector)
	CBL-PWEX-0788	2	
	CBL-PWEX-0789	1	
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	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	3/2/1-year onsite NBD service
Software	<u>SFT-OOB-LIC</u> • eStore	1	OOB Management Package (per node license)
Software	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)

Note: For Coprocessors, GPUs, VCA, FPGA cards not listed in table above please contact sales to discuss compatibility.

