

SuperServer 1028GQ-TR



Integrated Board



X10DGQ

**Views: | [Angled View](#) | [Top View](#) |
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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. Intel i350 Dual port GbE 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-TR ■ SuperServer 1028GQ-TR (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/Xeon Phi Support ■ 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 ■ 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 ■ 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)

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

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

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)

Video	<ul style="list-style-type: none"> 1x VGA Connector
Serial Port	<ul style="list-style-type: none"> 1x 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: 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	<ul style="list-style-type: none"> Max: 3.5A / Min: 0A
Output Type	<ul style="list-style-type: none"> 25 Pairs Gold Finger Connector
Certification	 Platinum 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 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
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment CPU thermal trip support Thermal Control for 9x 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 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)

Список деталей

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-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
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	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)

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