

SuperServer 4028GR-TRT



Integrated Board



X10DRG-OT+-CPU



X9DRG-O-PCIE

**Views: | [Angled View](#) | [Top View](#) |
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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 **3TB[†]** ECC 3DS LRDIMM , up to DDR4- **2400[†]**MHz ; 24 DIMM slots
3. Expansion slots:
8 PCI-E 3.0 x16 (double-width) slots
2 PCI-E 3.0 x8 (in x16) slots
1 PCI-E 2.0 x4 (in x16) slot
4. Dual 10GBase-T LAN with Intel® X540
5. 24 Hot-swap 2.5" drive bays
6. 8 Hot-swap 92mm cooling fans
7. 1600W Redundant (2+2) Power Supplies; **Platinum Level (94%+)**

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

Specifications

Product SKUs

SYS-4028GR-TRT	■ SuperServer 4028GR-TRT (Black)
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Motherboard

Super X10DRG-OT+-CPU

Processor/Cache

CPU	■ Intel® Xeon® processor E5-2600 v4 [†] / v3 family (up to 160W 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® K10/K40/K80/M40/M60/Xeon Phi

System Memory

Memory Capacity	■ 24x 288-pin DDR4 DIMM slots ■ Up to 3TB [†] ECC 3DS LRDIMM, 1.5TB 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	■ 4U Rackmountable ■ Rackmount Kit (MCP-290-00057-0N)
Model	■ CSE-418GTS-R3200B

Dimensions

Height	■ 7.0" (178mm)
Width	■ 17.2" (437mm)
Depth	■ 29" (737mm)
Weight	■ Net Weight: 65.5 lbs (29.7 kg) ■ Gross Weight: 100 lbs (45.3 kg)
Available Colors	■ Black

Drive Bays

Hot-swap	■ 24 Hot-swap 2.5" hard drive bays
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Expansion Slots

PCI-Express	■ 8 PCI-E 3.0 x16 (double-width) slots ■ 2 PCI-E 3.0 x8 (in x16) slots ■ 1 PCI-E 2.0 x4 (in x16) slot
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Backplane

SAS/SATA HDD Backplane

System Cooling

Fans	■ 8 Hot-swap 92mm cooling fans
Shrouds	■ 1 Air Shroud (MCP-310-41808-0B)

Power Supply

1600W 1U Redundant Power Supplies with PMBus

Total Output Power	■ 1000W: 100 – 127Vac ■ 1600W: 200 – 240Vac
Dimension (W x H x L)	■ 73.5 x 40 x 265 mm
Input	■ 100-127Vac / 12.9A Max / 50-60Hz ■ 200-240Vac / 9.5A Max / 50-60Hz
+12V	■ Max: 82A / Min: 0.1A (100-127Vac) ■ Max: 132A / Min: 0.1A (200-240Vac)
12V SB	■ Max: 2A / Min: 0.2A
Output Type	■ 25 Pairs Gold Finger Connector

Certification	 Platinum Level [Test Report]
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PC Health Monitoring

Input / Output

SATA	■ 10 SATA3 (6Gbps) ports
LAN	■ 2 RJ45 10GBase-T LAN ports ■ 1 RJ45 Dedicated IPMI LAN port
USB	■ 4 USB 3.0 ports
Video	■ 1 VGA Connector
Serial Port	■ 1 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

CPU

- Monitors for CPU Cores, +1.2V, 1.5V, +3.3V, +12V, (+3V, 1.0V, 1.2V, 1.8V, 1.1V) Standby, VBAT, Memory, Chipset Voltages.
- 4-Phase-switching voltage regulator with auto-sense from 0.6V-1.35V

FAN

- 4-pin fan headers with tachometer status monitoring
- Low noise fan speed control mode

Temperature

- Monitoring for CPU and system environment
- Thermal Control for 8 fan connectors

Other Features

- Chassis intrusion detection

Operating Environment / Compliance

RoHS

- RoHS Compliant

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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRG-OT+-CPU	1	Super X10DRG-OT+-CPU Motherboard
	MBD-X10DRG-O-PCIE	1	Super X10DRG-O-PCIE Motherboard
	MBD-X9DRG-O-PCIE	1	CSE-418GTS-R3200B Chassis
	CSE-418GTS-R3200B		
Air Shroud	MCP-310-41808-0B	1	Mylar PCIe air shroud for SC418G
Backplane	BPN-SAS3-216A	1	24-port 2U SAS3 12Gbps direct-attached backplane, support up to 24x 2.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-PWEX-0582	8	8 pin to two 6+2 pin 12V GPU power cable, 30 cm 16/20 AWG, 10A/pin(16AWG), 6A/pin(20AWG), -25~85C, RoHS/REACH
Cable 2	CBL-SAST-0591	2	MINI SAS HD-4 SATA,6G,INT,RF,Cross Over,75CM,75CM SB,30AWG
Cable 3	CBL-0449L	2	HDD power extension for X8OBN, special 8 pin to 4 HDD. 45cm. 18AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1800-QRG	1	SYS-4028GR-TR(T) Quick Reference Guide,HF,RoHS/REACH
Riser Card	RSC-X9DRG-O	4	RSC-X9DRG-O
Heatsink / Retention	SNK-P0048PS	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-1K66P-1R	4	1U 1600W Redundant Platinum Power Supply 73.5mm width,RoHS/REACH,PBF
Fan	FAN-0151L4	8	92x92x38 mm, 11.5K RPM, SC418G Middle Fan w/ Housing,RoHS/REACH,PBF

Optional Parts List

	Part Number	Qty	Description
Cable	CBL-PWEX-0665	-	PCIe 8 pin female(black) to CPU 8 pin female(white), K80/M60/M40/P100/P40 GPU power for 300W card, 30cm, 18AWG
Add-on Card Dummy	MCP-240-00096-0N	-	GPU / Add-on Card Dummy Assembly (2 Slots)-Single Pack
Bracket	MCP-120-00016-00	-	Blank FH L-bracket (with Tesla P4)
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.