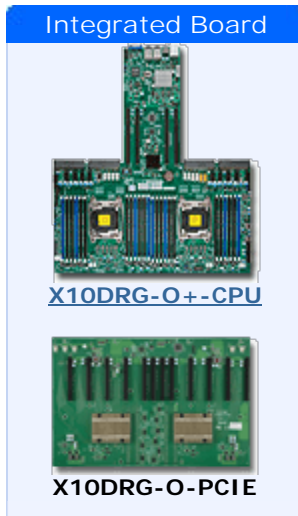


SuperServer 4028GR-TR2



Key Features

- Up to 10 Double-Width GPUs
- GPUs under Single-Root complex
- Supports 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 3TB† ECC 3DS LRDIMM , up to DDR4- 2400†MHz ; 24x DIMM slots
3. Expansion slots, Single Root Complex,
 - 11 PCI-E 3.0 x16 (FH, FL) slots
 - 1 PCI-E 3.0 x8 (in x16) slots
4. 2 GbE LAN with Intel® i350
5. 24x 2.5" Hot-swap drive bays
6. 8x 92mm RPM Hot-Swap cooling fans
7. 2000W Redundant (2+2) Power Supplies; Titanium Level (96%+)

[▶ Drivers & Utilities](#)
[▶ BIOS](#)
[▶ IPMI](#)
[▶ Tested Memory](#)
[▶ Manuals](#)
[▶ OS Certification Matrix](#)
[▶ 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-4028GR-TR2 ■ SuperServer 4028GR-TR2 (Black)

Motherboard

Super X10DRG-O+-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.

Chassis

Form Factor ■ 4U Rackmountable
 ■ Rackmount Kit (MCP-290-00057-0N)
 Model ■ CSE-418GTS-R4000B

Dimensions

Height ■ 7.0" (178mm)
 Width ■ 17.2" (437mm)
 Depth ■ 29" (737mm)
 Weight ■ Net Weight: 80 lbs (36.2 kg)
 ■ Gross Weight: 135 lbs (61.2 kg)
 Available Colors ■ Black

Drive Bays

Hot-swap ■ 24x 2.5" Hard drive bays

Expansion Slots

PCI-Express ■ 11 PCI-E 3.0 x16 (FH, FL) slots
 ■ 1 PCI-E 3.0 x8 (in x16) slots
 ■ Single Root Complex

System Memory	
Memory Capacity	<ul style="list-style-type: none"> 24x 288-pin DDR4 DIMM slots Up to 3TB[†] ECC 3DS LRDIMM, 1.5TB ECC RDIMM
Memory Type	<ul style="list-style-type: none"> 2400[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB 3DS LRDIMM: 128GB
Memory Voltage	<ul style="list-style-type: none"> 1.2 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors

On-Board Devices	
Chipset	<ul style="list-style-type: none"> Intel® C612 chipset
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps) with RAID 0, 1, 5, 10
IPMI	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Dual Gigabit Ethernet Ports with Intel® i350 Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Graphics	<ul style="list-style-type: none"> ASPEED AST2400 BMC

Input / Output	
SATA	<ul style="list-style-type: none"> 4 SATA3 (6Gbps) ports
LAN	<ul style="list-style-type: none"> 2 RJ45 Gigabit Ethernet LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 4 USB 3.0 ports
Video	<ul style="list-style-type: none"> 1 VGA Connector
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

Backplane	
SAS/SATA HDD Backplane	

System Cooling	
Fans	<ul style="list-style-type: none"> 8x 92mm RPM Hot-Swappable Cooling Fans
Shrouds	<ul style="list-style-type: none"> 1 Air Shroud (MCP-310-84808-0B)

Power Supply	
2000W Redundant Power Supplies with PMBus	
Total Output Power	<ul style="list-style-type: none"> 1000W/1800W/1980W/2000W
Dimension (W x H x L)	<ul style="list-style-type: none"> 73.5 x 40 x 265 mm

Input	<ul style="list-style-type: none"> 100-120Vac / 12-9.5A / 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) 	
	+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	  <ul style="list-style-type: none"> UL/cUL/CB/BSMI/CE/CCC Titanium Level [Test Report]
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PC Health Monitoring	
CPU	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 4-pin fan headers with tachometer status monitoring Low noise fan speed control mode
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and system environment Thermal Control for 8x fan connectors
Other Features	<ul style="list-style-type: none"> Chassis intrusion detection

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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRG-O+-CPU	1	Super X10DRG-O+-CPU Motherboard
	MBD-X10DRG-O-PCIE	1	Super X10DRG-O-PCIE Motherboard
	CSE-418GTS-R4000B	1	CSE-418GTS-R4000B Chassis
Air Shroud	MCP-310-41808-0B	1	Mylar PCIe air shroud for SC418G (X10),PBF
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,HF,RoHS/REACH,PBF
Cable 2	CBL-SAST-0591	2	cross-over mini SAS HD to 4 SATA w/SB, S. 75cm. 30AWG,HF,RoHS/REACH,PBF
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-2K05A-1R	4	1U 2000W Redundant Titanium Power Supply W/PMbus 73.5x40x265mm,RoHS/REACH

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 GPU power for 300W card, 30cm, 18AWG
Top Cover	MCP-230-41803-0N	-	Top cover for SC418G with GTX card support
Add-on Card Dummy	MCP-240-00096-0N	-	GPU / Add-on Card Dummy Assembly (2 Slots)-Single Pack
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	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)