

1028GR-TRT



Integrated Board



X10DRG-HT

Available Color:

Black



Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1TB ECC, up to DDR4 2133MHz; 16x DIMM sockets
3. 4x PCI-E 3.0 x16 slots (3x GPU/MIC cards optional), 1x PCI-E 3.0 x8 LP slot
4. Intel X540 Dual port 10GBase-T
5. 4x Hot-swap 2.5" SATA3 Drive Bays
6. 1600W Redundant Power Supplies **Platinum Level (94%+)**
7. 10x Counter rotating fans w/ optimal fan speed control
8. Smart server management tools

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

Specifications

Product SKUs

- SYS-1028GR-TRT** ■ SuperServer 1028GR-TRT (**Black**)

Motherboard

Super X10DRG-HT

Processor/Cache

- CPU** ■ Intel® Xeon® processor E5-2600 v3 family (up to 145W TDP **)
 ■ Dual Socket R3 (LGA 2011)

- Cores / Cache** ■ Up to 18 Cores / Up to 45MB Cache

- System Bus** ■ QPI up to 9.6 GT/s

- Note** ** Please contact your Supermicro sales representative for additional details.

GPU/Xeon Phi Support

- K1/K2/K10/K40M/K80/Xeon Phi

System Memory

- Memory Capacity** ■ 16x 288-pin DDR4 DIMM slots
 ■ Up to 1TB ECC LRDIMM, 512GB ECC RDIMM
- Memory** ■ 2133/1866/1600MHz ECC DDR4 SDRAM

Chassis

- Form Factor** ■ 1U Rackmount
- Model** ■ **CSE-118GH-R1K66B**

Dimensions and Weight

- Height** ■ 1.7" (43mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 30.6" (777mm)
- Package** ■ 24" (H) x 8" (W) x 40" (D)
- Weight** ■ Net Weight: 35 lbs (15.9 kg)
 ■ Gross Weight: 48 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 (3x GPU/Xeon Phi cards optional)

Type	72-bit
DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB
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 Express 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"> Intel® X540 Dual Port 10GBase-T Virtual Machine Device Queues reduce I/O overhead Supports 10GBASE-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"> 10x SATA3 (6Gbps) ports
LAN	<ul style="list-style-type: none"> 2x RJ45 10GBase-T ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 4x USB 3.0 ports (2 rear, 2 via header) 2x USB 2.0 ports (2 via headers)
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

- 1x PCI-E 3.0 x8 (in x16) low-profile slot

Drive Bays

- Hot-swap**
 - 4x 2.5" Hot-swap drive bays

System Cooling

- Fans**
 - 10x counter-rotating fans with optimal fan speed control

Power Supply

- 1000W/1600W 1U Redundant Power Supply
- AC Input**
 - 1000W @ 100-127V, 12.9A Max., 50-60Hz
 - 1600W @ 200-240V, 9.5A Max., 50-60Hz
 - DC Output**
 - 1000W: +12V/82A; +12Vsb/2A
 - 1600W: +12V/132A; +12Vsb/2A

Certification



Platinum Level
(Cert. in progress)

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
- FAN**
 - Total of ten 4-pin PWM fans
 - 10x fans with tachometer monitoring
 - Status monitor for speed control
 - Status monitor for on/off control
 - Low noise fan speed control
- Temperature**
 - Monitoring for CPU and chassis environment
 - CPU thermal trip support
 - Thermal Control for 10x Fan Connectors
 - PSU I²C temperature sensing logic
 - Thermal Monitor 2 (TM2) support
 - PECI
- LED**
 - Power Fail / Overheat LED
 - Suspend-state Indicator LED
 - UID LED
- Other Features**
 - SDDC Support

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-HT	1	Super X10DRG-HT Motherboard
	CSE-118GH-R1K66B	1	CSE-118GH-R1K66B Chassis
Air Shroud	MCP-310-11803-0N	1	Air Shroud for Air X9DRG/X10DRG boards in CSE-118GH-R1K66B
Backplane	BPN-SAS-118G-4	1	SAS-118G-4; supports 4X2.5" SATA HDD,
Cable 1	CBL-0157L-02	1	8 pin to 8 pin ribbon SGPIO cable with tube, 27cm, PBF
Cable 2	CBL-0460L	1	8 Pin to Two 4 Pin Backplane Power Ext. 28/22cm. 18AWG
Cable 3	CBL-PWEX-0582	3	8 pin to two 6+2 pin 12V GPU power cable, 30 cm 16/20 AWG,HF,RoHS/REACH,PBF
Cable 4	CBL-0484L	4	55cm 30AWG SATA S-S cable
Cable 5	CBL-0296L	5	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
Riser Card	RSC-R1UG-E16R+II	1	R1UG-E16R+II
Riser Card	RSC-R1UG-A2E16-X9	1	RSC-R1UG-A2E16-X9
Riser Card	RSC-R1UG-E16AR+II	1	R1UG-E16AR+II
Riser Card	RSC-R1UG-E16-X9	1	RSC-R1UG-E16-X9
Heatsink / Retention	SNK-P0047PS	1	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Heatsink / Retention	SNK-P0047PSC	1	1U Passive Front CPU Heat Sink w/ a Side Air Channel for X9, X10 Systems Equipped with a Narrow ILM MB
Power Supply	PWS-1K66P-1R	2	1U 1600W Redundant Platinum Power Supply 73.5mm width,RoHS/REACH,PBF
Cable 6	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
Fan 1	FAN-0141L4	10	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
Drive Tray(s)	MCP-220-00047-0B	4	Black gen 3rd hot-swap 2.5inch HDD tray
Mounting Rails	MCP-290-00054-0N	1 set	Rail set, quick/quick, optional for 1U 17.2

Optional Parts List

	Part Number	Qty	Description
Cable	CBL-PWEX-0665	-	PCIe 8 pin female(black) to CPU 8 pin female(white), GPU power for 300W card, 30cm, 18AWG
Onsite Service Program	QS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
Onsite Service Program	QSNBD3/2/1	-	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)