

1027GR-TRFT



Available Color: Black



Integrated Board



X9DRG-HTF

Key Features

1. Intel® Xeon® processor E5-2600 family support; QPI up to 8.0 GT/s
2. Up to 256GB DDR3 1600MHz reg. ECC DIMM
3. 3x PCI-E 3.0 x16 slots (support GPU/Xeon Phi cards), 1x PCI-E 3.0 x8 (in x16) low-profile slot
4. Integrated IPMI 2.0 with KVM and Dedicated LAN
5. Intel® X540 10GbBase-T Controller
6. 4x Hot-swap 2.5" SATA3 Drive Bays
7. 1800W Redundant Power Supplies **Platinum Level (94%+)**
8. 10x Counter rotating fans w/ optimal fan speed control
9. 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-1027GR-TRFT**
- SuperServer 1027GR-TRFT (**Black**)

Motherboard

Super X9DRG-HTF

Processor/Cache

- CPU**
- Intel® Xeon® processor E5-2600 family (up to 130W TDP)
 - Dual Socket R (LGA 2011)

- Cache**
- Up to 20MB

- System Bus**
- QPI up to 8 GT/s

- GPU/Xeon Phi Support**
- M2090, up to 130W CPU at 30°C
 - M2075, up to 130W CPU at 35°C
 - K10/K20/K20X (Kepler), up to 130W CPU at 30°C
 - Xeon Phi, up to 130W CPU at 30°C

System Memory

- Memory Capacity**
- 8x 240-pin DDR3 DIMM sockets
 - Supports up to 256 GB DDR3 ECC Registered memory (RDIMM)
 - Up to 48 GB DDR3 ECC & non-ECC UDIMM

Chassis

- Form Factor**
- 1U Rackmount
- Model**
- **CSE-118GQ-R1800B**

Dimensions

- Height**
- 1.7" (43mm)
- Width**
- 17.2" (437mm)
- Depth**
- 31" (787mm)
- 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**
- 3x PCI-E 3.0 x16 slots (support GPU/Xeon Phi cards)
 - 1x PCI-E 3.0 x8 (in x16) low-profile slot

Memory Type	<ul style="list-style-type: none"> 1600/1333/1066MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	<ul style="list-style-type: none"> 32GB, 16GB, 8GB, 4GB, 2GB, 1GB
Memory Voltage	<ul style="list-style-type: none"> 1.5 V, 1.35 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors Detects double-bit errors (using ECC memory)

On-Board Devices

Chipset	<ul style="list-style-type: none"> Intel® C602 Chipset
SATA	<ul style="list-style-type: none"> SATA 2.0 3Gbps with RAID 0, 1, 5, 10 SATA 3.0 6Gbps with RAID 0, 1
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 Nuvoton WPCM450 BMC
Network Controllers	<ul style="list-style-type: none"> Intel® X540 Dual Port 10GBase-T 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"> Matrox G200eW

Input / Output

SATA	<ul style="list-style-type: none"> 2 SATA 3.0 ports (6Gbps) 2 SATA 2.0 ports (3Gbps)
LAN	<ul style="list-style-type: none"> 2x RJ45 10GBase-T ports 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2 USB 2.0 ports
Video	<ul style="list-style-type: none"> 1 VGA Connector
Keyboard/Mouse	<ul style="list-style-type: none"> 1 PS/2 Keyboard/Mouse port
Serial Port	<ul style="list-style-type: none"> 1 Serial header

System BIOS

BIOS Type	<ul style="list-style-type: none"> 16Mb 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 2.2 ACPI 1.0 / 2.0 USB Keyboard support Hardware BIOS Virus protection SMBIOS 2.3 UEFI RTC (Real Time Clock) Wakeup

Drive Bays

Hot-swap	<ul style="list-style-type: none"> 4x 2.5" Hot-swap drive bays
-----------------	---

System Cooling

Fans	<ul style="list-style-type: none"> 10x counter-rotating fans with optimal fan speed control
-------------	--

Power Supply

1800W (1+1) Redundant 1800W power supply with PMBus

AC Input	<ul style="list-style-type: none"> 1000W Output @ 100-120V, 12-10A, 50-60Hz 1200W Output @ 120-140V, 12-10A, 50-60Hz 1800W Output @ 200-240V, 10-8.5A, 50-60Hz
DC Output	<ul style="list-style-type: none"> 1000W: +12V/84A; +5Vsb/4A 1200W: +12V/100A; +5Vsb/4A 1800W: +12V/150A; +5Vsb/4A

Certification



Platinum Certified

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. CPU Core 6-Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X9DRG-HTF	1	Super X9DRG-HTF Motherboard
	CSE-118GQ-R1800B	1	1U Black SC118GQ Chassis
Air Shroud	MCP-310-11802-0N	1	Air Shroud for X9DRG used in SC118GQ-R1800B
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-0207L	1	59CM SATA ROUND S-S PBF.26AWG
Cable 3	CBL-0227L	1	48CM SATA ROUND S-RA PBF.26AWG
Cable 4	CBL-0228L	2	55CM SATA ROUND S-RA PBF 26AWG
Cable 5	CBL-0296L	5	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
Cable 6	CBL-0333L	3	6+2 pin to 8 pin GPU power extension from MB, 30cm. 18/20AWG
Cable 7	CBL-0460L	1	8 Pin to Two 4 Pin Backplane Power Ext. 28/22cm. 18AWG
Riser Card	RSC-R1UG-E16A-X9	1	RSC-R1UG-E16A-X9-O-P
Riser Card	RSC-R1UG-E16AR-X9	1	A Right Hand Side Riser Card with PCI-E x16
Riser Card	RSC-R1UG-E16B-X9	1	RSC-R1UG-E16B-X9-O-P
Riser Card	RSC-R1UG-E16R-X9	1	A 1U Right Hand Side Riser Card with PCI-E x16
Heatsink / Retention	SNK-P0047PS	1	1U Passive CPU Heat Sink for X9 Generation Motherboards w/ Narrow ILM
Heatsink / Retention	SNK-P0047PSC	1	1U Passive Front CPU Heat Sink for X9DRG-HF 1U GPU Server
Power Supply	PWS-1K81P-1R	2	1800W Platinum Redundant Single Output
Cable 8	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