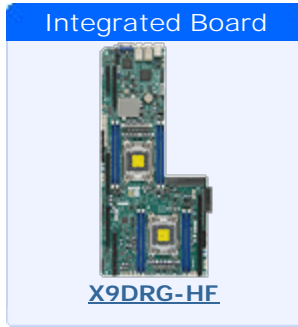


2027GR-TRFH



Available Colors:

Black



Key Features

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family†
2. Up to 512GB ECC DDR3, up to 1866MHz; 8x DIMM slots
3. 6x PCI-E 3.0 x16 slots (support GPU/Xeon Phi cards, opt.), 1x PCI-E 3.0 x8 (in x16) low-profile slot
4. Integrated IPMI 2.0 with KVM and Dedicated LAN
5. Intel® i350 Dual-Port GbE Controller
6. 10x Hot-swap 2.5" SATA Drive Bays
7. 1800W Redundant Power Supplies Platinum Level (94%+)
8. 5x heavy duty cooling fans
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-2027GR-TRFH	▪ SuperServer 2027GR-TRFH (Black)
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Motherboard

Super X9DRG-HF

Processor/Cache

CPU	<ul style="list-style-type: none"> ▪ Dual Socket R (LGA 2011) ▪ Intel® Xeon® processor E5-2600 and E5-2600 v2 family† (up to 130W TDP)
Note	† BIOS version 3.0 or above is required
Cache	▪ Up to 30MB

System Bus	▪ QPI up to 8 GT/s
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GPU/Xeon Phi Support	<ul style="list-style-type: none"> ▪ M2090/M2075/K10/K20M, up to 130W CPU at 30°C ▪ K20X/K40M (Kepler), up to 130W CPU at 25°C ▪ Xeon Phi 3120P*/5110P*/7120P*, up to 130W CPU
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*Note: Intel Xeon Phi 3120P/5110P/7120P can be supported with limited thermal condition, please contact Supermicro

Chassis

Form Factor	▪ 2U Rackmount
Model	▪ CSE-218G-R1800B

Dimensions

Height	▪ 3.5" (89mm)
Width	▪ 17.2" (437mm)
Depth	▪ 31" (787mm)
Gross Weight	▪ 54 lbs (24.5 kg)
Available Color	▪ Black

Front Panel

Buttons	<ul style="list-style-type: none"> ▪ Power On/Off button ▪ System Reset button
LEDs	<ul style="list-style-type: none"> ▪ Power LED ▪ Hard drive activity LED ▪ 2x Network activity LEDs ▪ System Overheat LED / Fan fail LED / UID LED

Expansion Slots

PCI-Express	<ul style="list-style-type: none"> ▪ 6x PCI-E 3.0 x16 slots (support GPU/Xeon Phi cards, option)
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sales and technical support for details.

System Memory

- | | |
|-----------------|---|
| Memory Capacity | <ul style="list-style-type: none">8x 240-pin DDR3 DIMM slotsUp to 512GB DDR3 ECC LRDIMMUp to 256GB DDR3 ECC Registered memory (RDIMM)Up to 48GB DDR3 ECC and non-ECC UDIMM |
| Memory Type | <ul style="list-style-type: none">1866/1600/1333/1066MHz 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 errorsDetects 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">Intel ICH10R SATA 3.0Gbps ControllerRAID 0, 1, 5, 10 support |
| IPMI | <ul style="list-style-type: none">Support for Intelligent Platform Management Interface v.2.0IPMI 2.0 with virtual media over LAN and KVM-over-LAN supportNuvoton WPCM450 BMC |
| Network Controllers | <ul style="list-style-type: none">Intel® i350 Dual Port Gigabit EthernetVirtual Machine Device Queues reduce I/O overheadSupports 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)8 SATA 2.0 ports (3Gbps) |
| LAN | <ul style="list-style-type: none">2 RJ45 Gigabit Ethernet LAN ports1 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">128Mb SPI Flash EEPROM with AMI® BIOS |
| BIOS Features | <ul style="list-style-type: none">Plug and Play (PnP)APM 1.2DMI 2.3PCI 2.2ACPI 1.0 / 2.0USB Keyboard supportHardware BIOS Virus protectionSMBIOS 2.3UEFIRTC (Real Time Clock) Wakeup |

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

Drive Bays

- | | |
|----------|--|
| Hot-swap | <ul style="list-style-type: none">10x 2.5" Hot-swap drive bays |
|----------|--|

System Cooling

- | | |
|------|---|
| Fans | <ul style="list-style-type: none">5x 8cm heavy duty 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, 50-60Hz1200W Output @ 120-140V, 12-10A, 50-60Hz1800W Output @ 200-240V, 10-8.5A, 50-60Hz |
| DC Output | <ul style="list-style-type: none">1000W: +12V/84A; +5Vsb/4A1200W: +12V/100A; +5Vsb/4A1800W: +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 Stdbv, +3.3 Stdbv, VBAT, Memory Voltages.CPU Core 6-Phase-switching voltage regulator |
| FAN | <ul style="list-style-type: none">Total of five 4-pin PWM fans5x fans with tachometer monitoringStatus monitor for speed controlStatus monitor for on/off controlLow noise fan speed control |
| Temperature | <ul style="list-style-type: none">Monitoring for CPU and chassis environmentCPU thermal trip supportThermal Control for 10x Fan ConnectorsPSU I²C temperature sensing logicThermal Monitor 2 (TM2) supportPECI |
| LED | <ul style="list-style-type: none">Power Fail / Overheat LEDSuspend-state Indicator LEDUID 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-HF	1	Super X9DRG-HF Motherboard
	CSE-218G-R1800B	1	2U Black SC218G Chassis
Backplane	BPN-SAS-218A	1	SAS Backplane for 2U GPU, x10 2.5
Cable 1	CBL-0157L	1	8 pin to 8 pin ribbon SGPIO cable with tube , 40cm, PBF
Cable 2	CBL-0333L	6	6+2 pin to 8 pin GPU power extension from MB, 30cm. 18/20AWG
Cable 3	CBL-0460L	1	8 Pin to Two 4 Pin Backplane Power Ext. 28/22cm. 18AWG
Cable 4	CBL-0207L	2	59CM SATA ROUND S-S PBF.26AWG
Cable 5	CBL-0294L-02	2	Cross-over lpass to 4 SATA w/SB. S. 58cm. 30AWG
Riser Card	RSC-R2UG-A2E16-A	1	RSC-R2UG-A2E16-A
Riser Card	RSC-R2UG-E16R-X9	1	RSC-R2UG-E16R-X9-O-P
Riser Card	RSC-R2UG-A2E16-B	1	RSC-R2UG-A2E16-B
Riser Card	RSC-R2UG-2E16R-X9	1	RSC-R2UG-2E16R-X9-O-P
Heatsink / Retention	SNK-P0048PS	1	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Heatsink / Retention	SNK-P0047PS	1	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB

Note: Different GPU/Xeon Phi cards require special brackets, for more information please refer to the user's manual