

SuperServer 1028GR-TR



World Record Benchmark
STAC-A2™

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 i350-AM2 Dual port GbE LAN
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

Available Color:

Black



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-TR ■ SuperServer 1028GR-TR (Black)

Motherboard

Super X10DRG-H

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

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

System Memory

Memory Capacity	<ul style="list-style-type: none">16x 288-pin DDR4 DIMM slotsUp to 1TB ECC LRDIMM, 512GB ECC RDIMM
Memory Type	<ul style="list-style-type: none">2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none">RDIMM: 32GB, 16GB, 8GB, 4GBLRDIMM: 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.2.0IPMI 2.0 with virtual media over LAN and KVM-over-LAN supportASPEED AST2400 BMC
Network Controllers	<ul style="list-style-type: none">Intel® i350-AM2 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">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 Gigabit Ethernet ports1x 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 1.2DMI 2.3PCI 2.3ACPI 1.0 / 2.0 / 3.0USB Keyboard supportSMBIOS 2.7.1UEFI

Expansion Slots

PCI-Express	<ul style="list-style-type: none">4x PCI-E 3.0 x16 slots (3x GPU/Xeon Phi cards optional)1x PCI-E 3.0 x8 (in x16) low-profile slot
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Drive Bays

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

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

1000W/1600W 1U Redundant Power Supply	
AC Input	<ul style="list-style-type: none">1000W @ 100-127V, 12.9A Max., 50-60Hz1600W @ 200-240V, 9.5A Max., 50-60Hz
DC Output	<ul style="list-style-type: none">1000W: +12V/82A; +12Vsb/2A1600W: +12V/132A; +12Vsb/2A
Certification	 Platinum Level (Cert. in progress)

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.5 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none">Total of ten 4-pin PWM fans10x 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-X10DRG-H	1	Super X10DRG-H 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)