

SuperServer 5038MR-H8TRF



Integrated Board



Super X10SRD-F

Views: | [Angled View](#) | [Node View](#) |
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Key Features (per node)

1. Single socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4[†]/ v3 & E5-1600 v4[†]/ v3* family
2. 2x 3.5" Hot-swap SATA3/SAS drive bays by default; or 2x 2.5" SATA3 HDD Bays w/ optional kits (SAS requires RAID/HBA AOC)
3. 1x PCI-E 3.0 x8 and 1x Micro-LP
4. Up to **512GB[†]** ECC 3DS LRDIMM , up to DDR4- **2400[†]**MHz ; 4x DIMM slots
5. 2x GbE LAN ports via Intel® i350
6. 1x Dedicated LAN for IPMI Remote Management
7. 4x 8cm heavy duty hot-swap fans with optimal cooling zone (per system)
8. 1620W Redundant power supplies **Platinum Level Certified** (per system)

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

Specifications

Product SKUs

SuperServer ■ **SYS-5038MR-H8TRF (Black)**

Motherboard

Super X10SRD-F

Processor

CPU ■ Intel® Xeon® processor E5-2600 v4[†]/ v3, E5-1600 v4[†]*/ v3* family (up to 145W TDP)
■ Single Socket R3 (LGA 2011)

Core / Cache ■ Up to **22 Cores**[†] / Up to **55MB**[†] Cache

Note [†] BIOS version 2.0 or above is required

Note * Ambient temperature should be no higher than 25°C

System Memory

Memory Capacity ■ 4x 288-pin DDR4 DIMM slots
■ Up to 512GB ECC 3DS LRDIMM
■ Up to 256GB ECC LRDIMM
■ Up to 128GB ECC RDIMM

Memory Type ■ **2400**[†]/ 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit, 288-pin (RDIMM / LRDIMM) / 284-pin gold-plated DIMMs

DIMM Sizes ■ 3DS LRDIMM: 128GB
■ LRDIMM: 64GB, 32GB
■ RDIMM: 32GB, 16GB, 8GB, 4GB

Memory Voltage ■ 1.2 V

Error Detection ■ Corrects single-bit errors
■ Detects double-bit errors (using ECC memory)

On-Board Devices (per node)

Chipset ■ Intel® C612 chipset

SATA ■ 1x SATA DOM
■ SATA 3.0 (6Gbps) with RAID 0, 1

IPMI ■ 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

Headers ■ 1x USB Type A 3.0, TPM ready

Graphics ■ Aspeed AST2400 BMC

Network Devices (per node)

MicroLP NIC ■ Intel® i350, 2x Gigabit LAN ports
■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
■ Intel® I/OAT 3 support for fast, scalable, and reliable networking
■ VMDq support for better performance of virtualization
■ [MicroLP Adapter Matrix](#) (Networking options)

Input / Output (per node)

Chassis

Form Factor ■ 3U

Model ■ **CSE-938BH-R1620B**

Dimensions

Height ■ 5.21" (132.5 mm)

Width ■ 17.26" (438.4 mm)

Depth ■ 23.2" (589 mm)

Package ■ 11.65" (H) x 26.26" (W) x 34" (D)

Weight ■ Net Weight: 62.2 lbs (28.21 kg)
■ Gross Weight: 88 lbs (39.92 kg)

Color ■ Black

Front Panel

Buttons ■ Power On/Off button

LEDs ■ Power LED
■ Node status LED

Expansion Slots (per node)

PCI-Express ■ 1 (x8) PCI-E 3.0 Low-profile slot
■ 1x Micro-LP for Dual GbE (pre-installed), 10GbE or IB AOC option; [MicroLP Adapter Matrix](#) (Networking options)

Drive Bays (per node)

Hot-swap ■ 2x 3.5" hot-swap SATA3 (6Gbps) HDDs per node (or 2x 2.5" SATA3 with optional kits); up to 16 HDDs total
■ Enterprise SATA HDD only recommended

System Cooling

Fans ■ 4x 8cm 11K RPM, 4-pin PWM cooling fans

Power Supply

1620W high-efficiency redundant power supply w/ PMBus

AC Input ■ 1000W Output @ 100-120V, 12-10A, 50-60Hz
■ 1200W Output @ 120-140V, 12-10A, 50-60Hz
■ 1620W Output @ 180-240V, 10.5-8A, 50-60Hz

DC Output ■ 1000W: +12V/84A; +5Vsb/4A
■ 1200W: +12V/100A; +5Vsb/4A
■ 1620W: +12V/150A; +5Vsb/4A

Certification



Platinum Certified
[[Test Report](#)]

PC Health Monitoring

CPU ■ Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages.
■ 6-Phase-switching voltage regulator with auto-sense from 0.8375V-1.60V

Serial ATA	■ 2x SATA 3.0 ports (6Gbps)
LAN	■ 2x RJ45 Gigabit Ethernet LAN ports ■ 1x RJ45 Dedicated IPMI LAN port
KVM	■ 1x VGA, 1x COM, and 2x USB 2.0 (with KVM dongle) ports

System BIOS

BIOS Type	■ 128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	■ Plug and Play (PnP) ■ APM 1.2 ■ ACPI 1.0 / 2.0 ■ USB Keyboard support ■ SMBIOS 2.3 ■ RTC (Real Time Clock) Wakeup

Rear Window (each node)

Switch	■ Power / UID
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FAN	■ Cooling zone
Temperature	■ Monitoring for CPU and chassis environment

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-X10SRD-F	8	Super X10SRD-F Motherboard
	CSE-938BH-R1620B	1	3U Chassis
Add-on Card / Module	AOC-CGP-I2-P	8	AOC-CGP-I2-O-P
Air Shroud	MCP-310-93803-0B	8	Mylar air shroud portion-1 for SC938, X9SRD
Backplane	BPN-SAS-938H	1	16-port 3U (CSE-938) MicroCloud 6Gbps backplane, support up to 16x 3.5-inch SAS/SATA HDD
Cable 1	CBL-0218L	1	USB/KVM/SUVI,36 PIN TO 9 PIN/15 PIN/2 USB CH,11.5CM,30/28AWG
Cable 2	CBL-PWCD-0578	2	PWCD,US,IEC60320 C14 TO C13,3FT,14AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Riser Card	RSC-RR1U-E8	8	RSC-RR1U-E8
Heatsink / Retention	SNK-P0047PS	8	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-1K62P-1R	2	1620W REDUNDANT POWER MODULE

Optional Parts List

	Part Number	Qty	Description
Cable	CBL-SAST-0616	-	For AOC-S3008L-L8i/AOC-SAS3-9361-4I
	CBL-0118L-03		For AOC-S2308L-L8i
	CBL-0476L		For AOC-SAS2LP-H8iR
Storage Controller Card(s)	AOC-S3008L-L8i	-	Std LP, 8 ports, 12Gb/s Gen3, RAID 0/1/10
	AOC-SAS3-9361-4I		Std LP, 4 ports, 12Gb/s Gen3, RAID 0/1/5/6/10/50/60
	AOC-S2308L-L8i		Std LP, 8 ports, 6Gb/s Gen3, RAID 0/1/10
	AOC-SAS2LP-H8iR		Std LP, 8 ports, 6Gb/s Gen3, RAID 0/1/5/6/10/50/60 NOTE: SYS-5038MR-H8TRF is designed to support max 6GB/s Heatsink SNK-P0047PSM is required for AOC HBA card
Network Card(s)	AOC-CTGS-i2T	-	MicroLP, 2x 10GbE Base-T, PCI-E 3.0 x4, Intel® X550
	AOC-CTG-i1S		MicroLP, 1 x 10GbE SFP+, PCI-E 2.0 x8, Intel® 82599EN
	AOC-CTG-i2S		MicroLP, 2 x 10GbE SFP+, PCI-E 2.0 x8, Intel® 82599EN
	AOC-CIBF-m1		MicroLP, 1x QSFP PCI-E 3.0 x8, Mellanox® ConnectX-3 FDR
	AOC-CIBQ-m1		MicroLP, 1x QSFP PCI-E 3.0 x8, Mellanox® ConnectX-3 QDR
	AOC-S40G-i2Q		Standard LP 2-port 40GbE controller, Intel Fortville XL710
	AOC-SGP-i2		Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350AM2
	AOC-SGP-i4		Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STG-i2		Standard LP, 2x 10GbE CX4, PCI-E x8, Intel 82598EB
	AOC-STG-i2T		Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540
	AOC-STGN-i1S		Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel 82599EN
	AOC-STGN-i2S		Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
Drive Tray(s)	MCP-220-93801-0B	-	Black gen 6 hot-swap 3.5-to-2.5 HDD tray
Drive Tray(s)	MCP-220-00158-0B	-	Black gen 6.5 hot-swap 3.5-to-2.5 Tool-less drive tray
Global Services & Support	QS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)