

SuperServer 5039MS-H12TRF



Views: | [Angled View](#) | [Node View](#) | [Front View](#) | [Rear View](#) |



Key Features (per node)

- Cloud Computing
 - Web Cache
 - Web Hosting, VM
 - Social Networking
 - Corporate-WINS, DNS, Print, Login
1. Single socket H4 (LGA 1151) supports Intel® Xeon® processor E3-1200 v6/v5, Intel® 7th/6th Gen. Core™ i3 series, Intel® Celeron® and Intel® Pentium®
 2. 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVMe + 2x 2.5" SATA3 or 2x 2.5" NVMe + 1x 3.5" SATA3
 3. Up to 64GB DDR4 VLP ECC UDIMM 2400MHz support in 4 slots
 4. 2 GbE LAN ports via Intel i350
 5. 1 Centralized IPMI managemet port
 6. 2 USB 2.0, 1 VGA, 1 COM port, (with KVM dongle)
 7. 1 USB 3.0 (Type A), 1 SATA DOM
 8. 4 heavy duty 9cm hot-swap fans with optimal cooling zone (per system)
 9. 2000W Redundant power supplies **Titanium Level Certified** (per system)

Drivers & Utilities	BIOS	IPMI	Tested Memory	NVMe Options	Manuals	OS Certification Matrix	Drive Options
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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-5039MS-H12TRF (Black)

Motherboard

Super X11SSE-F

Processor/Cache

CPU	Single Socket H4 (LGA 1151) supports: Intel® Xeon® processor E3-1200 v6/v5, Intel® 7th/6th Gen Core™ i3, Intel® Pentium®, Intel® Celeron® processors CPU TDP up to 80W
Note	BIOS version 2.0 or above is required to support Intel® Xeon® Processor E3-1200 v6 series or 7th Generation Intel® Core™ Processors

System Memory (per node)

Memory Capacity	4x 288-pin DDR4 DIMM slots Supports up to 64 GB DDR4 VLP ECC Un-Buffered memory (UDIMM)
Memory Type	2400MHz/2133MHz ECC DDR4 (VLP) SDRAM 72-bit, 288-pin gold-plated UDIMMs
DIMM Sizes	16GB
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® C236 chipset
SATA	SATA3 (6Gbps) via C236 controller
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	1 Type A USB 3.0
Graphics	ASPEED AST2400 Graphics (BMC with Graphic controller)

Network Devices (per node)

Micro-LP NIC	Intel® i350 GbE controller Dual RJ-45 connectors Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output Intel® I/O Acceleration Technology (I/O AT) MicroLP Adapter Matrix (Networking options)
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Input / Output (per node)

SATA	2 SATA3 (6Gbps) ports
LAN	2 RJ45 Gigabit Ethernet LAN ports
DOM	SATA DOM (Disk on Module) power connector support
KVM	1 VGA, 1 COM and 2 USB 2.0 (with KVM dongle)

System BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	DMI 2.3 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3

Front Window (each node)

Switch	Power / UID
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Chassis

Form Factor	3U
Model	CSE-939HS-R2K04B

Dimensions and Weight

Height	5.21" (132.5 mm)
Width	17.5" (444.5 mm)
Depth	29.5" (749.3 mm)
Package	16.1" (H) x 28.35" (W) x 42.36" (D)
Weight	Net Weight: 95lbs (43.09kg) Net Weight w/ 2.5" HDDs: 115lbs (52.16kg) Net Weight w/ 3.5" HDDs: 132lbs (59.87kg) Gross Weight: 125lbs (56.70kg)
Color	Black

Drive Bays (per node)

Internal	2x 3.5" SATA3 OR 4x 2.5" SATA3 HDDs OR 2x 2.5" NVMe + 1x 3.5" SATA3 OR 2x 2.5" NVMe + 2x 2.5" SATA3; up to 48x 2.5" drives total Enterprise SATA HDD only recommended
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System Cooling

Fans	4 Heavy duty 9cm fans with optimal cooling zone
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Power Supply (76mm Width)

2000W Titanium Redundant Power Supplies with PMBus and Reverse Airflow

Total Output Power	1000W: 100 – 127Vac 1800W: 200 – 220Vac 1980W: 220 – 230Vac 2000W: 230 – 240Vac 2000W: 200 – 240Vac (UL/CUL only)
Dimension (W x H x L)	76 x 40 x 336 mm
Input	1000W: 100-127 Vac / 12.5-9.5 A / 50-60 Hz 1800W: 200-220 Vac / 10-9.5 A / 50-60 Hz 1980W: 220-230 Vac / 10-9.8 A / 50-60 Hz 2000W: 230-240 Vac / 10-9.8 A / 50-60 Hz 2000W: 200-240 Vac / 11.8-9.8 A / 50-60 Hz (UL/cUL only)
+12V	Max: 83.3A / Min: 0A (100Vac-127Vac) Max: 150A / Min: 0A (200Vac-220Vac) Max: 165A / Min: 0A (220Vac-230Vac) Max: 166.7A / Min: 0A (230Vac-240Vac) Max: 166.7A / Min: 0A (200-240 Vac) (UL/cUL only)
+5Vsb	Max: 1A / Min: 0A
Output Type	27 Pairs Gold Finger Connector
Certification	

PC Health Monitoring

CPU	Monitors for CPU Cores, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages. 3-Phase-switching voltage regulator with auto-sense from 0.5V-2.3V
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-X11SSE-F	12	Super X11SSE-F Motherboard
	CSE-939HS-R2K04B	1	3U Chassis
Add-on Card / Module	AOM-PDB-MC12S-P	12	AOM-PDB-MC12S
Add-on Card / Module	AOM-CGP-I2M-P	12	AOM-CGP-I2M-O-P
Add-on Card / Module	AOM-GEM-001-P	1	[NR]AOM-GEM-001-O-P
Add-on Card / Module	AOM-LAN-MC12S-P	1	[NR]AOM-LAN-MC12S-P
Add-on Card / Module	AOM-BPN-MC12S-P	12	AOM-BPN-MC12S
Backplane	BPN-SAS-939HS	1	12-port 3U (CSE-939HS) 12-node MicroCloud hot swappable midplane
Cable 1	CBL-0218L	1	USB/KVM/SUUI,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
Heatsink / Retention	SNK-P0047PSR	12	LP CPU Heat Sink for 12-node Micro Cloud Servers
Heatsink / Retention	SNK-P0047PSRK	12	Low Profile CPU Heat Sink for MBI-6119G-C2 Micro Blade Server
Power Supply	PWS-2K04F-1R	2	AC-DC 2000W, Titanium Level, Redundancy, 1U, PMBus 1.2, 360x76x40 mm,HF,RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
Network Card(s)	AOM-CTG-i2SM-12	-	MicroLP 2x 10GbE SFP+, PCI-E 3.0 x8, Intel 82599ES
	AOM-C25G-m1SM	-	MicroLP, 1x 25GbE SFP28, PCI-E 3.0 x8, Mellanox®
	AOM-C25G-i2SM-12	-	MicroLP module 2-Port 25G SFP28, Intel E810-XXVAM2, for MicroCloud 12node
	AOM-CTGS-i2TM	-	MicroLP, 2x 10GbE Base-T, PCI-E 3.0 x4, Intel® X550
	AOM-CTG-i1SM	-	MicroLP, 1 x 10GbE SFP+, PCI-E 2.0 x8, Intel® 82599EN, ver 1.21 only
	AOM-CIBF-m1M	-	MicroLP, 1 x 40GbE QSFP, PCI-E 3.0 x8, Mellanox® ConnectX-3 FDR controller
TPM security module (optional, not included)	AOM-TPM-9665H-C	-	Horizontal TPM 2.0 module with Infineon 9665 and TXT Ready
	AOM-TPM-9665H	-	Horizontal TPM 2.0 module with Infineon 9665
	AOM-TPM-9665H-C	-	Horizontal TPM 1.2 module with Infineon 9665 and TXT Ready
	AOM-TPM-9655H	-	Horizontal TPM 1.2 module with Infineon 9655
Add-on Card / Module	AOM-BPN-MC12S4-P	12	4x NVMe U.2 connectors BPN for MicroCloud 12 node system,HF,RoHS
Bracket	MCP-240-93912-0N	12	Bracket for 4NVMe MB tray with NVMe standoff
	MCP-290-93903-0N-PACK	1	SC939HN bracket with FAN
SATA DOM	MEM-IDSAHM3A-016G	-	SATA3 DOM SH 3ME 16GB MLC 1ch Horizontal
	MEM-IDSAHM3A-032G	-	SATA3 ServerDOM MH 3ME 32GB MLC w/ Pin8 VCC Horizontal
	MEM-IDSAHM3A-064G	-	SATA3 ServerDOM MH 3ME 64GB MLC w/ Pin8 VCC Horizontal
	MEM-IDSAHM3A-128G	-	SATA3 DOM SH 3ME3 V2 128GB MLC w/ Pin8 VCC Horizontal
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)

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