

SuperServer 5039MC-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 E-2100/E-2200, 8th Gen. Intel® Core™ i3 / Pentium® / Celeron® Processors, Intel® Celeron®, Intel® Pentium®
 2. Intel® C246 chipset
 3. Up to 128GB unbuffered VLP ECC, up to DDR4-2666MHz; 4 DIMM slots
 4. 1 Micro-LP slot (MicroLP upgradeable)
 5. 2x 3.5" SATA3 drives or 4x 2.5" SATA3 drives or 2x 2.5" NVMe + 2x 2.5" SATA3 drives or 2x 2.5" NVMe + 1x 3.5" SATA3 drive
 6. **M.2 Interface:** 1 PCI-E 3.0 x4 and SATA
M.2 Form Factor: 2280, 22110
M.2 Key: M-Key
 7. 2 GbE LAN ports via Intel i350
 8. Aspeed AST2500 graphics
 9. 4x 9cm Heavy duty fans with optimal cooling zone (per system)
 10. 2000W Redundant power supplies
Titanium Level Certified (per system)

[Drivers & Utilities](#) [BIOS](#) [IPMI](#) [Tested Memory](#) [Tested M.2 List](#) [NVMe Options](#) [Manuals](#) [OS Certification Matrix](#) [Drive Options](#)

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-5039MC-H12TRF (Black)
Motherboard	
Super X11SCE-F	
Processor (per Node)	
CPU	Single Socket H4 (LGA 1151), CPU TDP support up to 95W Support Intel® Xeon® processor E-2100 / E-2200 series, 8th Gen. Intel® Core™ i3 / Pentium® / Celeron® Processors
Cores	8 cores max.
Note	BIOS 1.0b or above is required to support Intel® Xeon® processor E-2200 series
System Memory (per Node)	
Memory Capacity	4 DIMM slots Up to 128GB Unbuffered ECC Up to DDR4-2666MHz
Memory Type	2666/2400/2133MHz ECC DDR4 SDRAM
DIMM Sizes	32GB, 16GB, 8GB, 4GB
On-Board Devices (per node)	
Chipset	Intel® C246 chipset
SATA	SATA3 (6Gbps) via Intel® C246 controller; RAID 0, 1, 5, 10
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM over LAN support ASPEED AST2500 BMC
Network Controllers	Dual LAN with Intel® i350
Graphics	Aspeed AST2500 graphics
Input / Output (per node)	
SATA	2 SATA3 (6Gbps) ports
LAN	2 RJ45 Gigabit Ethernet LAN ports
System BIOS	
BIOS Type	UEFI 128Mb
BIOS Features	ACPI 1.0 / 2.0 / 3.0 / 4.0 APM 1.2 DMI 2.3 Hardware BIOS Virus protection PCI 2.3 Plug and Play (PnP) RTC (Real Time Clock) Wakeup SMBIOS 2.7.1 UEFI 2.3.1 USB Keyboard support
Front Window (each node)	
Switch	Power / UID

Chassis	
Form Factor	3U
Model	CSE-939HN-R2K04BP
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: 132lbs (59.87kg) Gross Weight: 125lbs (56.70kg)
Color	Black
Expansion Slots (per Node)	
Micro-LP	1 Micro-LP slot (MicroLP upgradeable)
M.2	M.2 Interface: 1 PCI-E 3.0 x4 and SATA M.2 Form Factor: 2280, 22110 M.2 Key: M-Key
Drive Bays (per node)	
Internal	2x 3.5" SATA3 drives or 4x 2.5" SATA3 drives or 2x 2.5" NVMe + 2x 2.5" SATA3 drives or 2x 2.5" NVMe + 1x 3.5" SATA3 drive
System Cooling	
Fans	4x 9cm Heavy duty fans with optimal cooling zone
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-X11SCE-F	12	Super X11SCE-F Motherboard	
	CSE-939HN-R2K04BP	1	3U Chassis	
Add-on Card / Module	AOM-BPN-MC12S-P	12	AOM-BPN-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-PDB-MC12S-P	12	AOM-PDB-MC12S	
Backplane	BPN-SAS-939HS	1	12-port 3U (CSE-939HS) 12-node MicroCloud hot swappable midplane	
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	
Air Shroud	MCP-310-93904-0N	12	Mylar air shroud for VLP 4 DIMM (short gap, quick install)	
Heatsink / Retention	SNK-P0047PSR	12	LP CPU Heat Sink for 12-node Micro Cloud Series 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	
* Power Distributor	PDB-PT939-DSG	2	Adapter Board for SC939 special gold finger directly plug to BP.	
* Cable 3	CBL-0355L	2	ETHERNET, CAT5E, RJ45 W/BOOT, GREEN, UTP, 2FT (60CM), 24AWG	
* Cable 4	CBL-CDAT-0662	1	CBL, SGPIO, 2X4F TO 2X4F, P2.54, ROUND CABLE, 61.5CM, 28AWG	
* Cable 5	CBL-PWCD-0859	1	PWCD, US, IEC60320 C14 TO RA C13 w/SR for 939HS PSU1, 3FT, 14AWG	
* Cable 6	CBL-PWCD-0860	1	PWCD, US, IEC60320 C14 TO RA C13 w/SR for 939HS PSU2, 3FT, 14AWG	
* FAN 1	FAN-0195L4	4	92x92x76 mm Counter-rotating Cooling Fan for 3U12N Microcloud	
* Rail Set	MCP-290-41803-0N	1	Fat twin F418 / F424 Static Rail set support 28-33.5 inch depth rail, RoHS/REACH, PBF	

- Notes:
1. Parts with * are inside the chassis
 2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

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
SATA DOM	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
TPM security module	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller, Vertical form factor
TPM security module	AOM-TPM-9671V	1	SPI capable TPM 1.2 with Infineon 9670 controller, Vertical form factor
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
Global Services & Support	OS4HR3/2/1	-	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)

Global SKU [English](#)

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