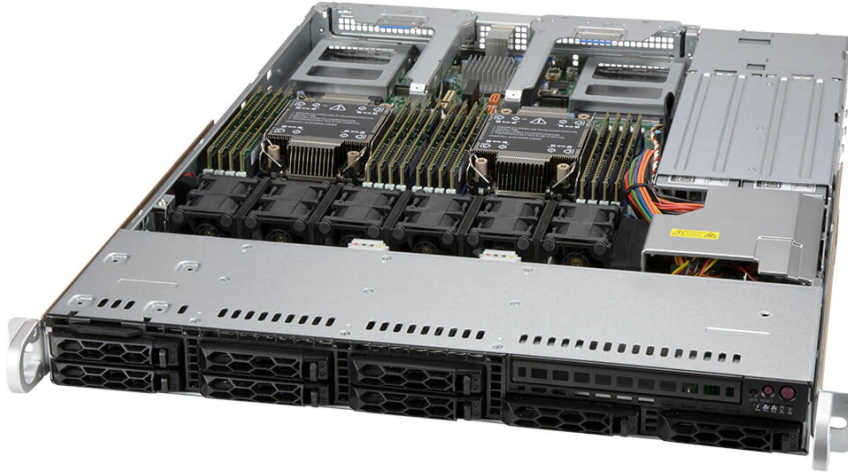


CloudDC SuperServer SYS-120C-TR (Complete System Only)

NEW



Key Applications

- Web Server, Firewall Application
- Data Center Optimized, Value IaaS
- Cloud Computing, Compact Server
- DNS & Gateway Servers, Firewall Application
- CDN, Edge Nodes

Key Features

1. Dual sockets P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors

2. Intel® C621A Chipset

3. 16 DIMMs up to 6TB 3DS ECC DDR4-3200: LRDIMM/RDIMM/Intel® DCPMM

4. 2 PCI-E 4.0 x16 FHHL;
2 PCI-E 4.0 x16 AIOM (OCP 3.0);
2 PCI-E 3.0 x2 NVMe M.2

5. Dual AIOM with NCSI (OCP 3.0) for networking, 1 dedicated IPMI LAN

6. 8x 2.5" hot-swap SATA/SAS drive bays

7. 6 counter-rotating 4 cm PWM fans with optimal fan speed control, 2 air shrouds

8. 860W redundant Platinum level 100-240Vac and 200-240 Vdc power supplies

9. 1 VGA, 1 COM, 2 USB 3.0 (rear)

Specifications

Product SKUs

- SYS-120C-TR** ■ SuperServer SYS-120C-TR (Black)

Motherboard

Super X12DDW-A6

Processor

- CPU**
- Dual Socket P+ (LGA-4189)
 - 3rd Gen Intel® Xeon® Scalable processors
 - Support CPU TDP 270W
 - **CPUs with TDP higher than 185W may have support conditions due to power and thermal limitations.**

- Cores**
- Up to 40C/80T; Up to 60MB Cache

System Memory

- Memory**
- Memory Capacity: 16 DIMM slots
 - Up to 4TB: 16x 256 GB DRAM
 - Up to 6TB: 8x 256 GB DRAM and 8x 512 GB PMem
 - Memory Type: 3200/2933/2666MHz ECC DDR4 RDIMM;LRDIMM
 - Intel® Optane™ persistent memory 200 series

- Memory Voltage**
- 1.2 V

- Error Detection**
- ECC

On-Board Devices

- SATA**
- SATA3 (6Gbps); RAID 0/1/5/10 support

- Chipset**
- Intel® C621A

- Network Connectivity**
- Via Slim-AIOM

- IPMI**
- Support for Intelligent Platform Management Interface v.2.0
 - IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

Input / Output

- LAN**
- 1 Dedicated IPMI LAN port

- USB**
- 2 USB 3.0 port(s) (2 rear)

- Video**
- 1 VGA port(s)

- Serial Port**
- 1 COM Port(s) (1 rear)

- DOM**
- 1 SuperDOM (Disk on Module) port

System BIOS

Chassis

- Form Factor**
- 1U

- Model**
- **CSE-LB13AC2-R860AW**

Dimensions and Weight

- Height**
- 1.7" (43mm)

- Width**
- 17.2" (437mm)

- Depth**
- 23.5" (597mm)

- Package**
- 7.7" (H) x 23.7" (W) x 31.8" (D)

- Weight**
- Gross Weight: 40 lbs (18.14 kg)

- Available Color**
- Black

Front Panel

- Buttons**
- Power On/Off
 - Reset button
 - Universal Information (UID)

- LEDs**
- Drive activity
 - Network activity
 - Power status
 - Universal Information (UID)

Expansion Slots

- PCI-Express (PCI-E)**
- Slot 1: PCI-E 4.0 x16 FHHL
 - Slot 2: PCI-E 4.0 x16 FHHL

Drive Bays / Storage

- Hot-swap**
- 8x 2.5" hot-swap SATA/SAS drive bays

- M.2**
- 2 M.2 NVMe
 - M-Key, 2280

- Peripheral Bays**
- 1 DVD-ROM drive bays (optional)

System Cooling

- Fans**
- 6x 4cm heavy duty fans with optimal fan speed control

- Air Shroud**
- 2 Air Shroud(s)

Power Supply

AC 860W, Platinum Level, Redundant Power Supply, 54.5mm width

- Dimension (W x H x L)**
- 54.5 x 40.25 x 320 mm

- Output Type**
- Gold Finger

- Certification**
-   **Platinum Level**

[[Test Report](#)]

Operating Environment

BIOS Type ■ AMI 32MB SPI FLASH ROM

Management

- Software**
- SCC
 - Redfish API
 - IPMI 2.0
 - SSM
 - Intel® Node Manager
 - SPM
 - KVM with dedicated LAN
 - SUM
 - NMI
 - Watch Dog
 - SuperDoctor® 5
-

Power Configurations ■ ACPI/APM Power Management

PC Health Monitoring

- CPU**
- 4+1 Phase-switching voltage regulator
 - Monitors for CPU Cores, Chipset Voltages, Memory.
-

- FAN**
- Fans with tachometer monitorin
 - Pulse Width Modulated (PWM) fan connectors
 - Status monitor for speed control
-

- Temperature**
- Monitoring for CPU and chassis environment
 - Thermal Control for fan connectors
-

- Environmental Spec.**
- Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)
 - Non-operating Temperature: -40°C to 60°C (-40°F to 140°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-X12DDW-A6	1	Super X12DDW-A6 Motherboard
	CSE-LB13AC2-R860AW	1	1U Chassis
Backplane	BPN-SAS3-113A-N2	1	8-port 1U SAS3 12Gbps Hybrid backplane, support up to 6x 2.5-inch SAS3/SATA3 HDD/SSD and 2x SAS3/SATA3 Storage Devices
Cable 1	CBL-SAST-1270LP-100	1	SlimlineLP x8 (LE) to 2x MiniSAS HD x4(STR),70/60CM,100
FAN 1	FAN-0101L4	2	40x56,4 Pin PWM,Primary for SC809,111, Sec.for SC816,819,808
Parts	MCP-150-00015-0B	6	Rubber pad, 3.0mm H, 10x10mm
Air Shroud	MCP-310-00105-0B	2	Mylar Air Shroud for LA15-AW, LB13-AW, LB16-AW + X12DDW
Manual	MNL-2330-QRG	1	120C-TR Quick Reference Guide
Riser Card	RSC-D-6G4	1	1U LHS DCO Riser card with one PCI-E 4.0 x16 slot,HF,RoHS
Riser Card	RSC-DR-6G4	1	1U RHS DCO Riser card with one PCI-E 4.0 x16 slot,HF,RoHS
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0077P	2	1U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
*Power Supply	PWS-860P-1R2	2	1U 860W, Redundant power supply, 54.5mm width, Platinum with
*Power Distributor	PDB-PT116-SL8824	1	Based on PDB-PT116-L8824 to optimize 24Pin etc cable lengths
*Cable 2	CBL-CDAT-0680-55	1	NCSI,2x10F to 2x10F,IDC,PH2.54,55cm,shield,28AWG,RoHS
*Cable 3	CBL-PWCD-0160-IS	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,16AWG,RoHS/REACH
*FAN 2	FAN-0101L4	4	40x56,4 Pin PWM,Primary for SC809,111, Sec.for SC816,819,808
*Front Panel	FPB-FP112	1	Front control board for SC113,113M (U/C share)
*Parts	MCP-160-00028-0B	1	Mylar Cable Channel for Cloud-DC, X12 DDW
*Drive Tray(s)	MCP-220-00188-0B	8	Black gen-5.5 tool-less cost-effective 2.5" HDD tray (no dummy)
*Rear Window	MCP-240-00173-0N	1	1U X12 AWIO Rear window for LA15, LB16, LB13 Redundant PWS
*Power Supply	MCP-250-00009-0N	1	SC113 Redundant Power Distributor Cover
*Rail Set	MCP-290-00063-0N	1set	Rail set, quick/quick, default for 1U 17.2"W for SC113/SC116,RoHS/REACH
*Fan Holder	MCP-320-00056-0B	24	40X56 rubber fan pin for SC819U, SC119U,RoHS/REACH
*Fan Holder	MCP-320-00066-0B	1	Fan holder with cable channel, 40X56mm fan, for LA15, LB16, LB13
*Parts	MCP-320-00067-0B	1	Chassis base Air Foam block set (L+R) for Cloud-DC
*Fan Holder	MCP-340-00035-0B	2	Dummy fan 40x56mm for 40x56 counter-rotating fan (cost-effective)

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
3108 CacheVault	BTR-CV3108-1U1	1	CacheVault for Broadcom 3108 with SuperCap mounting in 1U 40x56 fan tray. Recommended to add only if all PCI-E, drive and AIOM locations are occupied. It will replace one fan in the system.
	BTR-TFM8G-LSICVM02	1	CacheVault for Broadcom 3108 (requires a SuperCap mount)
3108 RAID Card	CBL-SAST-0593 • eStore	2	Internal Mini-SAS HD to Mini-SAS HD 60cm
	AOC-S3108L-H8IR-16DD	1	Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60;
3108/3908/3916 SuperCap Mount	MCP-240-21747-0N	1	SuperCap mounting card for AIOM location
	MCP-240-00127-0N	1	SuperCap mounting tray for 2.5" drive location
	BKT-BBU-BRACKET-05	1	SuperCap mounting bracket for PCI-E location
3808 HBA Card	CBL-SAST-1264-100	1	Slimline x8 (STR) to 2x MiniSAS HD x4,65CM
	AOC-S3808L-L8IT	1	Standard LP, 8 internal ports (12Gb/s) Gen-4, 16HDD; HBA;
3908 RAID Card	AOC-S3908L-H8IR-16DD	1	Standard LP, 8 internal ports (12Gb/s) Gen-4, 122HDD; RAID 0, 1, 5, 6, 10, 50, 60;
	CBL-SAST-1264-100	1	Slimline x8 (STR) to 2x MiniSAS HD x4,65CM
3908/3916 CacheVault	BTR-CV3916-1U1	1	CacheVault for Broadcom 3908/3916 with a SuperCap mount in 1U 40x56 fan tray. Recommended to add only if all PCI-E, drive and AIOM locations are occupied. It will replace one fan in the system.
	BTR-CVPM05	1	CacheVault for Broadcom 3908/3916 (requires a SuperCap mount)
Add-on card for additional M.2	AOC-SLG3-2M2	-	Low Profile PCI-E x8 add-on card supports 2 PCI-E 3.0 x4 M-Key M.2 NVMe Modules
	AOC-SLG3-2H8M2	-	Low Profile PCI-E x8 add-on card supports 2 PCI-E 3.0 x4 M-Key M.2 NVMe/SATA Modules; RAID 0,1
AIOM Network Card(s)	AOC-ATG-i2T2SM	-	OCP 3.0 AIOM NIC, 4x 10GbE RJ45 & SFP+, PCI-E x8, Intel® X710-TM4
	AOC-A25G-b2SM	-	OCP 3.0 AIOM NIC, 2x 25GbE SFP28, PCI-E x8, Broadcom® BCM57414
	AOC-ATG-i2SM	-	OCP 3.0 AIOM NIC, 2x 10GbE SFP+, PCI-E 3.0 x8, Intel® X710-BM2
	AOC-A100G-m2CM	-	OCP 3.0 AIOM NIC, 2x 100GbE QSFP28, PCI-E 4.0 x16, Mellanox® CX-6 DX
	AOC-ATGC-i2TM	-	OCP 3.0 AIOM NIC, 2x 10GbE RJ45, PCI-E 3.0 x4, Intel X710-AT2
	AOC-A100G-b2CM	-	OCP 3.0 AIOM NIC, 2x 100GbE QSFP28, PCI-E 4.0 x16, Broadcom® BCM57508
	AOC-AG-i4SM	-	OCP 3.0 AIOM NIC, 4x 1GbE SFP, PCI-E 2.1 x4, Intel® i350-AM4
	AOC-AG-i4M	-	OCP 3.0 AIOM NIC, 4x 1GbE RJ45, PCI-E 2.1 x4, Intel® i350-AM4
	AOC-ATG-i4SM	-	OCP 3.0 AIOM NIC, 4x 10GbE SFP+, PCI-E 3.0 x8, Intel® XL710-BM1
	AOC-AG-i2M	-	OCP 3.0 AIOM NIC, 2x 1GbE RJ45, PCI-E 2.1 x4, Intel® i350-AM2
	AOC-ATG-i2TM	-	OCP 3.0 AIOM NIC, 2x 10GbE RJ45, PCI-E 3.0 x4, Intel® X550-AT2
	AOC-A25G-m2SM	-	OCP 3.0 AIOM NIC, 2x 25GbE SFP28, PCI-E x8, Mellanox® CX-6 LX
	AOC-AH25G-m2S2TM	-	OCP 3.0 AIOM NIC, 2x 25GbE SFP28 & 2x 10GbE RJ45, PCI-E x8/x4, Mellanox® CX4 Lx EN & Intel® X550-AT2 (Add 1x MCP-310-00107-0B per card to support this NIC)

Cable Management Arm	MCP-290-00152-0N • eStore	1	1U Supermicro Cable Management Arm 2nd Gen
DVD Reader	DVM-TEAC-DVD-SBT5	1	BLACK TEAC SLIM DVD SATA DRIVE
	DVM-TEAC-DVDRW-SBT5	1	BLACK TEAC SLIM DVD-RW SATA DRIVE
	DVM-PLDS-DVDRW-SBT5	1	PHILIPS SLIM BLACK DVD-RW SATA DRIVE
	CBL-0161L	1	15 cm power Y-split to 2x small 4-pins
	CBL-0234L • eStore	1	Big-4-pin M Y-split to two Big-4-pin F
	MCP-220-81502-0N • eStore	1	Slim SATA DVD mounting kit. Add 1 per DVD
Fan Upgrade	FAN-0163L4 • eStore	6	40x40x56 mm, 23.3K-20.3K RPM, Counter-rotating Fan
Front USB Kit	MCP-220-00087-0B • eStore	1	Black USB tray for slim DVD bay
Inlet Temp Sensor	MCP-280-00033-0N	1	Universal Thermal sensor kit with 80cm I2C cable
Intel VROC Key	AOC-VROCSTNMOD	1	Intel VROC Standard, RAID 0, 1, 10
	AOC-VROCPREMOD	1	Intel VROC Premium, RAID 0, 1, 5, 10
	AOC-VROCINTMOD	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only)
Power Supply Upgrade	PWS-1K27A-1R	2	1000W/1200W 1U 54.5Wx322Lx40H mm redundant Titanium
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)
TPM security module	AOM-TPM-9671V	1	SPI capable TPM 1.2 with Infineon 9670 controller; vertical form factor
	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor
	AOM-TPM-9670V-S-FIPS	1	SPI capable TPM 2.0 with Infineon 9670 controller w/ FIPS; vertical form factor