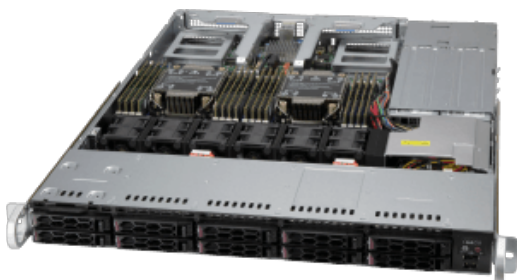


CloudDC SuperServer SYS-120C-TN10R



Key Applications

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

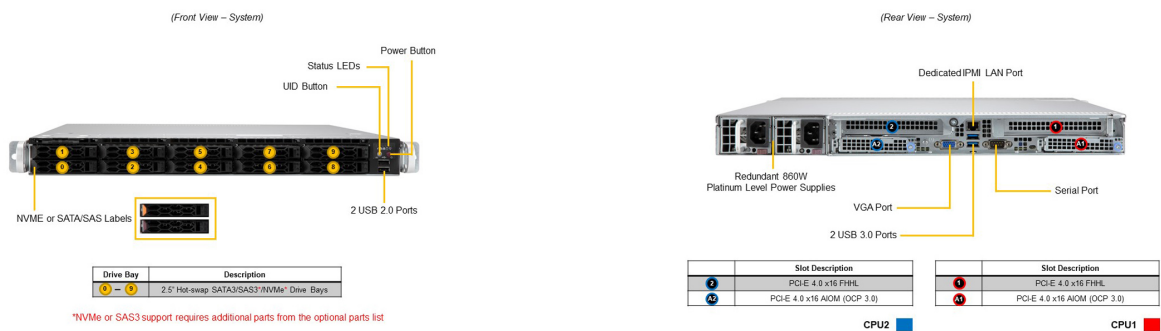
Key Features

- Dual sockets P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors;
- Intel® C621A Chipset;
- 16 DIMMs up to 6TB 3DS ECC DDR4-3200: LRDIMM/RDIMM/Intel® DCPMM;
- 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;
- Dual AIOM with NCSI (OCP 3.0) for networking, 1 dedicated IPMI LAN;
- 10x 2.5" hot-swap hybrid NVMe/SATA/SAS drive bays;
- 6 counter-rotating 4 cm PWM fans with optimal fan speed control, 2 air shrouds;
- 860W redundant Platinum level 100-240Vac and 200-240 Vdc power supplies;
- 1 VGA, 1 COM, 2 USB 3.0 (rear), 2 USB 2.0 (front);

[More details here](#)



Form Factor	1U Rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 602 x 196 x 808mm (23.7" x 7.7" x 31.8")
Processor	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI
System Memory	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 4 TB Intel® DCPMM, DDR4-3200MHz
Drive Bays	10x 2.5" hot-swap NVMe/SATA/SAS hybrid drive bays; Optional RAID support via RAID controller AOC
Expansion Slots	Slot 1: PCI-E 4.0 x16 FHHL Slot 2: PCI-E 4.0 x16 FHHL
On-Board Devices	SATA: SATA3 (6Gbps); RAID 0/1/5/10 support NVMe: U.2 NVMe; RAID 0/1/5/10 support (*VROC is required) 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) 2 USB 2.0 port(s) (2 front) Video: 1 VGA port(s) Serial Port: 1 COM Port(s) (1 rear) DOM: 1 SuperDOM (Disk on Module) port



Cooling System	6x 4cm heavy duty fan(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
System BIOS	BIOS Type: AMI 32MB SPI FLASH ROM
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; SCC
PC Health Monitoring	CPU: 4+1 Phase-switching voltage regulator Monitors for CPU Cores, Chipset Voltages, Memory. Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors FAN: Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Fans with tachometer monitorin
Dimensions and Weight	Height: 1.7" (43 mm) Width: 17.2" (437 mm) Depth: 23.5" (597 mm) Gross Weight: 40 lbs (18.14 kg) Packaging: 7.7" (H) x 23.7" (W) x 31.8" (D) Available Color: Black
Operating Environment	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)
Motherboard	Super X12DDW-A6
Chassis	CSE-LB16AC10-R860AW

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12DDW-A6	1	Super X12DDW-A6 Motherboard
	CSE-LB16AC10-R860AW	1	1U Chassis
Backplane	BPN-SAS3-LB16A-N10	1	1U 10-Slot SFF Hybrid Backplane Supports 10xSAS3/SATA3/NVMe4 Storage Devices with 1x(2x4) + 2x(1x4) + 1x(2x2) Power Connectors
Cable 1	CBL-SAST-1274LP-100	1	SlimlineLP x8 (LE) to 2x Slimline x4 (STR),68/76CM,100 O
Cable 2	CBL-SAST-1285LP-100	1	SlimlineLP x4 (STR) to Slimline x4 (STR),57CM,100 OHM,Ro
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-2332-QRG	1	120C-TN10R 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 3	CBL-CDAT-0680-55	1	NCSI,2x10F to 2x10F,IDC,PH2.54,55cm,shield,28AWG,RoHS
*Cable 4	CBL-CUSB-1001-57	1	[NR] USB2.0,2x5,PH2.54 to 2x5,PH2.54,57CM,28AWG
*Cable 5	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-FP116	1	Front control board for SC116 (USB 2.0 x 2)
*Parts	MCP-160-00028-0B	1	Mylar Cable Channel for Cloud-DC, X12 DDW
*Drive Tray(s)	MCP-220-00188-0B	10	Black gen-5.5 tool-less cost-effective 2.5
*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-1260-100	1	MiniSAS HD x8 (LE) to 2x Slimline x4 (STR),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-240-00203-0N	1	SuperCap mounting bracket for PCI-E location
	MCP-240-21747-0N	1	SuperCap mounting card for AIOM location
	MCP-240-00127-0N	1	SuperCap mounting tray for 2.5" drive location
3808 HBA Card	CBL-SAST-1276F-100	1	Slimline x8 (LE) to 2x Slimline x4 (STR),76/76CM Alternative: CBL-SAST-1264F-100 (64 CM)
	<u>AOC-S3808L-L8IT</u>	1	Standard LP, 8 internal ports (12Gb/s) Gen-4, 16HDD; HBA;
3816 HBA Card	CBL-SAST-1265F-100	1	Slimline x8 (STR) to Slimline x4 (STR),64CM
	AOC-S3816L-L16IT	1	Standard LP, 16 internal ports (12Gb/s) Gen-4, 122HDD; HBA;
	CBL-SAST-1276F-100	1	Slimline x8 (LE) to 2x Slimline x4 (STR),76/76CM Alternative: CBL-SAST-1264F-100 (64 CM)
3908 RAID Card	<u>AOC-S3908L-H8IR-16DD</u>	1	Standard LP, 8 internal ports (12Gb/s) Gen-4, 122HDD; RAID 0, 1, 5, 6, 10, 50, 60;
	CBL-SAST-1276F-100	1	Slimline x8 (LE) to 2x Slimline x4 (STR),76/76CM Alternative: CBL-SAST-1264F-100 (64 CM)
3908/3916 CacheVault	BTR-CVPM05	1	CacheVault for Broadcom 3908/3916 (requires a SuperCap mount)
	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.
3916 RAID Card	CBL-SAST-1265F-100	1	Slimline x8 (STR) to Slimline x4 (STR),64CM
	<u>AOC-S3916L-H16IR-32DD</u>	1	Standard LP, 16 internal ports (12Gb/s) Gen-4, 32HDD; RAID 0, 1, 5, 6, 10, 50, 60;
	CBL-SAST-1276F-100	1	Slimline x8 (LE) to 2x Slimline x4 (STR),76/76CM Alternative: CBL-SAST-1264F-100 (64 CM)
Add-on card for additional M.2	<u>AOC-SLG3-2M2</u>	-	Low Profile PCI-E x8 add-on card supports 2 PCI-E 3.0 x4 M-Key M.2 NVMe Modules
	<u>AOC-SLG3-2H8M2</u>	-	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)	<u>AOC-A25G-b2SM</u>	-	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-A25G-i2SM	-	OCP 3.0 AIOM NIC, 2x 25GbE SFP28, PCI-E x8, Intel E810-XXVAM2
	<u>AOC-A100G-b2CM</u>	-	OCP 3.0 AIOM NIC, 2x 100GbE QSFP28, PCI-E 4.0 x16, Broadcom® BCM57508
	<u>AOC-AH25G-m2S2TM</u>	-	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)
	<u>AOC-AG-i4SM</u>	-	OCP 3.0 AIOM NIC, 4x 1GbE SFP, PCI-E 2.1 x4, Intel® i350-AM4
	<u>AOC-AG-i4M</u>	-	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
	<u>AOC-AG-i2M</u>	-	OCP 3.0 AIOM NIC, 2x 1GbE RJ45, PCI-E 2.1 x4, Intel® i350-AM2
	<u>AOC-ATG-i2TM</u>	-	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
	<u>AOC-ATG-i2T2SM</u>	-	OCP 3.0 AIOM NIC, 4x 10GbE RJ45 & SFP+, PCI-E x8, Intel® X710-TM4
	Cable Management Arm	MCP-290-00152-0N eStore	1
Fan Upgrade	FAN-0163L4 eStore	6	40x40x56 mm, 23.3K-20.3K RPM, Counter-rotating Fan
Inlet Temp Sensor	MCP-280-00033-0N	1	Universal Thermal sensor kit with 80cm I2C cable
Intel VROC Key	<u>AOC-VROCSTNMOD</u>	1	Intel VROC Standard, RAID 0, 1, 10
	<u>AOC-VROCPREMOD</u>	1	Intel VROC Premium, RAID 0, 1, 5, 10
	<u>AOC-VROCINTMOD</u>	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only)
NVMe Cables Kit	CBL-KIT-120C-TN10R-10	1	Supports 10 NVMe drives. Kit includes: 4x CBL-SAST-1219LP-85 (NVMe drive slots # 0-3, 6-9) 1x CBL-SAST-1234FLP-85 (NVMe drive slots # 4-5)
Power Supply Upgrade	PWS-1K27A-1R eStore	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-S-FIPS	1	SPI capable TPM 2.0 with Infineon 9670 controller w/ FIPS; vertical form factor
	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor