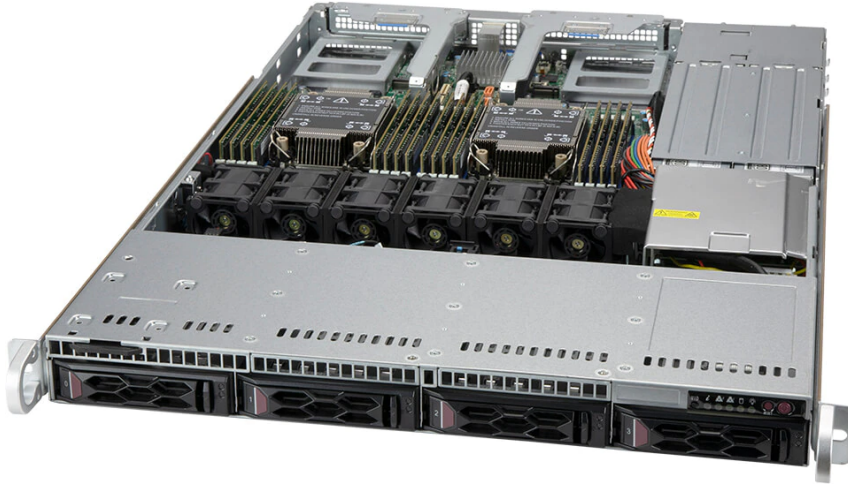


# CloudDC SuperServer SYS-610C-TR (Complete System Only )

**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. 4x 3.5/2.5" 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-610C-TR** ■ SuperServer SYS-610C-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-LA15TQC-R860AW**

## Dimensions and Weight

- Height**
- 1.7" (43mm)

- Width**
- 17.2" (437mm)

- Depth**
- 25.6" (650mm)

- Package**
- 7.7" (H) x 23.7" (W) x 34.1" (D)

- Weight**
- Gross Weight: 28 lbs (12.7 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**
- 4x 3.5" hot-swap SATA/SAS drive bays (4x 3.5" NVMe hybrid) (Default 3.5" drive trays can also support 2.5" drives.)

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

- Peripheral Bays**
- 2x 2.5" 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**
- 54.5 x 40.25 x 320 mm

**(W x H x L)**

- Output Type**
- Gold Finger

**Certification**



**Platinum Level**

**[ Test Report ]**

**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

**Operating Environment**

- 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
<b>Motherboard / Chassis</b>	MBD-X12DDW-A6	1	Super X12DDW-A6 Motherboard
	CSE-LA15TQC-R860AW	1	1U Chassis
<b>Backplane</b>	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5
<b>Cable 1</b>	CBL-SAST-1295LP-100	1	SlimlineLP x4 (STR) to 4x SATA (STR),75/75/90/90/75CM,10
<b>FAN 1</b>	FAN-0101L4	2	40x56,4 Pin PWM,Primary for SC809,111, Sec.for SC816,819,808
<b>Parts</b>	MCP-150-00015-0B	6	Rubber pad, 3.0mm H, 10x10mm
<b>Air Shroud</b>	MCP-310-00105-0B	2	Mylar Air Shroud for LA15-AW,LB13-AW,LB16-AW + X12DDW
<b>Manual</b>	MNL-2343-QRG	1	610C-TR Quick Reference Guide
<b>Riser Card</b>	RSC-D-6G4	1	1U LHS DCO Riser card with one PCI-E 4.0 x16 slot,HF,RoHS
<b>Riser Card</b>	RSC-DR-6G4	1	1U RHS DCO Riser card with one PCI-E 4.0 x16 slot,HF,RoHS
<b>Software</b>	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
<b>Heatsink / Retention</b>	SNK-P0077P	2	1U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
<b>*Power Supply</b>	PWS-860P-1R2	2	1U 860W, Redundant power supply, 54.5mm width, Platinum with
<b>*Power Distributor</b>	PDB-PT116-SL8824	1	Based on PDB-PT116-L8824 to optimize 24Pin etc cable lengths
<b>*Cable 2</b>	CBL-CDAT-0680-55	1	NCSI,2x10F to 2x10F,IDC,PH2.54,55cm,shield,28AWG,RoHS
<b>*Cable 3</b>	CBL-PWCD-0160-IS	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,16AWG,RoHS/REACH
<b>*FAN 2</b>	FAN-0101L4	4	40x56,4 Pin PWM,Primary for SC809,111, Sec.for SC816,819,808
<b>*Front Panel</b>	FPB-FP815U	1	815 UIO front control board (U)
<b>*Parts</b>	MCP-160-00028-0B	1	Mylar Cable Channel for Cloud-DC, X12 DDW
<b>*Drive Tray(s)</b>	MCP-220-00184-0B	4	Black gen-9 tool-less cost-effective 3.5
<b>*Rear Window</b>	MCP-240-00173-0N	1	1U X12 AWIO Rear window for LA15,LB16,LB13 Redundant PWS
<b>*Power Supply</b>	MCP-250-81502-0N	1	SC815 Redundant Power Distributor Cover
<b>*Rail Set</b>	MCP-290-00054-0N	1set	Rail set, quick/quick, optional for 1U 17.2
<b>*Fan Holder</b>	MCP-320-00056-0B	24	40X56 rubber fan pin for SC819U, SC119U,RoHS/REACH
<b>*Fan Holder</b>	MCP-320-00066-0B	1	Fan holder with cable channel, 40X56mm fan, for LA15,LB16,LB13
<b>*Parts</b>	MCP-320-00067-0B	1	Chassis base Air Foam block set (L+R) for Cloud-DC
<b>*Fan Holder</b>	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
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<b>3108 CacheVault</b>	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)
<b>3108 RAID Card</b>	CBL-SAST-0699 • <a href="#">eStore</a>	1	Mini SAS HD-4 SATA, 12G, 75/75/90/90CM, 75CM SB
	AOC-S3108L-H8IR-16DD	1	Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60;
<b>3108/3908/3916 SuperCap Mount</b>	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
	MCP-240-21747-0N	1	SuperCap mounting card for AIOM location
<b>3808 HBA Card</b>	CBL-SAST-1275A-100	1	Slimline x8 (STR) to 4x SATA, 75/75/90/90CM, 75CM SB
	<a href="#">AOC-S3808L-L8IT</a>	1	Standard LP, 8 internal ports (12Gb/s) Gen-4, 16HDD; HBA;
<b>3908 RAID Card</b>	<a href="#">AOC-S3908L-H8IR-16DD</a>	1	Standard LP, 8 internal ports (12Gb/s) Gen-4, 122HDD; RAID 0, 1, 5, 6, 10, 50, 60;
	CBL-SAST-1275A-100	1	Slimline x8 (STR) to 4x SATA, 75/75/90/90CM, 75CM SB
<b>3908/3916 CacheVault</b>	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)
<b>Add-on card for additional M.2</b>	<a href="#">AOC-SLG3-2M2</a>	-	Low Profile PCI-E x8 add-on card supports 2 PCI-E 3.0 x4 M-Key M.2 NVMe Modules
	<a href="#">AOC-SLG3-2H8M2</a>	-	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
<b>AIOM Network Card(s)</b>	<a href="#">AOC-ATGC-i2TM</a>	-	OCP 3.0 AIOM NIC, 2x 10GbE RJ45, PCI-E 3.0 x4, Intel X710-AT2
	<a href="#">AOC-A100G-b2CM</a>	-	OCP 3.0 AIOM NIC, 2x 100GbE QSFP28, PCI-E 4.0 x16, Broadcom® BCM57508
	<a href="#">AOC-AG-i4SM</a>	-	OCP 3.0 AIOM NIC, 4x 1GbE SFP, PCI-E 2.1 x4, Intel® i350-AM4
	<a href="#">AOC-AG-i4M</a>	-	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
	<a href="#">AOC-AG-i2M</a>	-	OCP 3.0 AIOM NIC, 2x 1GbE RJ45, PCI-E 2.1 x4, Intel® i350-AM2
	<a href="#">AOC-ATG-i2TM</a>	-	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
	<a href="#">AOC-ATG-i2T2SM</a>	-	OCP 3.0 AIOM NIC, 4x 10GbE RJ45 & SFP+, PCI-E x8, Intel® X710-TM4
	<a href="#">AOC-A25G-b2SM</a>	-	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
	<a href="#">AOC-AH25G-m2S2TM</a>	-	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)
	<b>Cable Management Arm</b>	MCP-290-00152-0N • <a href="#">eStore</a>	1

<b>Fan Upgrade</b>	FAN-0163L4 • <a href="#">eStore</a>	6	40x40x56 mm, 23.3K-20.3K RPM, Counter-rotating Fan
<b>Fixed 2.5" Drive Kit</b>	CBL-0289L	1	30CM SATA Power Cable (1 TO 2 SATA)
	MCP-220-81511-0N	2	FDD-size tray support for 1x 2.5" 7mm drive
	CBL-SAST-0624 • <a href="#">eStore</a>	2	70cm SATA Cable S-S
<b>Inlet Temp Sensor</b>	MCP-280-00033-0N	1	Universal Thermal sensor kit with 80cm I2C cable
<b>Intel VROC Key</b>	<a href="#">AOC-VROCPREMOD</a>	1	Intel VROC Premium, RAID 0, 1, 5, 10
	<a href="#">AOC-VROCINTMOD</a>	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only)
	<a href="#">AOC-VROCSTNMOD</a>	1	Intel VROC Standard, RAID 0, 1, 10
<b>Power Supply Upgrade</b>	PWS-1K27A-1R	2	1000W/1200W 1U 54.5Wx322Lx40H mm redundant Titanium
<b>Software</b>	<a href="#">SFT-DCMS-Single</a>	1	DataCenter Management Package (per node license)
<b>TPM security module</b>	<a href="#">AOM-TPM-9671V</a>	1	SPI capable TPM 1.2 with Infineon 9670 controller; vertical form factor
	<a href="#">AOM-TPM-9670V</a>	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