CloudDC A+ Server AS -1115CS-TNR
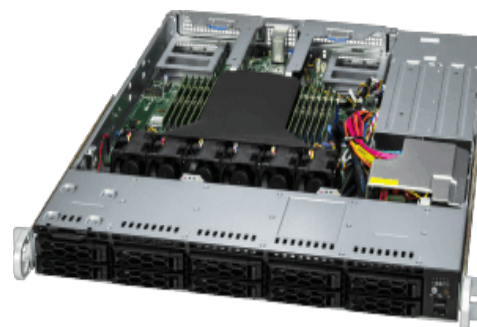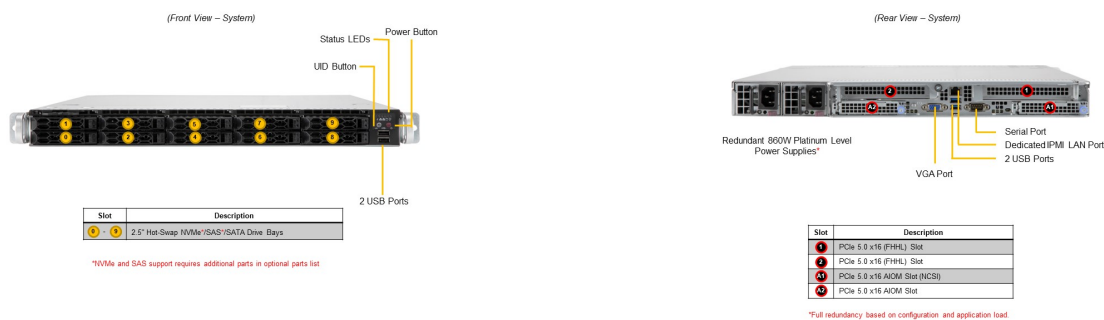
Key Applications

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

Key Features

- Single 4th Generation AMD EPYC™ 9004 Series Processors;
- 12 DIMM slots up to 3TB 3DS ECC RDIMM DDR5-4800MHz ;
- 2 PCIe 5.0 x16 FHHL;
- Dual AIOM with NCSI (OCP 3.0) for networking, 1 dedicated IPMI LAN;
- 10x 2.5" hot-swap hybrid NVMe/SATA/SAS drive bays;
- 860W redundant Platinum level 100-240Vac and 200-240 Vdc power supplies;(*Full redundancy based on configuration and application load);
- 2 On-board PCIe 3.0 x2 M.2 NVMe 80mm/110mm (Boot);

Form Factor	1U Rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 605 x 197 x 822mm (23.8" x 7.8" x 32.4")
Processor	Single Socket SP5 AMD EPYC™ 9004 Series Processors Up to 128C/256T
GPU	Max GPU Count: Up to 2 single-width GPU(s) Supported GPU: NVIDIA PCIe: A2,L4 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 12 DIMM slots Max Memory (1DPC): Up to 3TB 4800MT/s ECC DDR5 RDIMM
Drive Bays	10x 2.5" hot-swap NVMe/SATA/SAS drive bays (10x 2.5" NVMe hybrid)(10x 2.5" SATA by default) 2x NVMe (PCIe Gen 3x2, Boot drive only) M-Key, 2280/22110
Expansion Slots	2 PCIe 5.0 x16 FHHL slot(s) 2 PCIe 5.0 x16 AIOM slot(s)
On-Board Devices	Chipset: System on Chip 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) TPM: TPM header Serial Port: 1 COM Port(s) (1 rear)

(Front View – System)

Status LEDs
Power Button
UID Button
2 USB Ports

Slot	Description
0 - 9	2.5" Hot-Swap NVMe*/SAS*/SATA Drive Bays

*NVMe and SAS support requires additional parts in optional parts list

(Rear View – System)

Redundant 860W Platinum Level Power Supplies*
Serial Port
Dedicated IPMI LAN Port
2 USB Ports
VGA Port

Slot	Description
1	PCIe 5.0 x16 (FHHL) Slot
2	PCIe 5.0 x16 (FHHL) Slot
A1	PCIe 5.0 x16 AIOM Slot (NCSI)
A2	PCIe 5.0 x16 AIOM Slot

*Full redundancy based on configuration and application load.

System Cooling	Fans: 6x 4cm heavy duty fans with optimal fan speed control Air Shroud: 1 Air Shroud(s)
Power Supply	860W Redundant Platinum Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI FLASH ROM BIOS Features: USB Keyboard support
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0

PC Health Monitoring	FAN: Fans with tachometer monitoring
	    Status monitor for speed control
	    Pulse Width Modulated (PWM) fan connectors
	Temperature: Monitoring for CPU and chassis environment
	    Thermal Control for fan connectors
	Voltage:
	System temperature, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, CPU thermal trip support

Dimensions and Weight	Height: 1.7" (43 mm) Width: 17.2" (437 mm) Depth: 23.5" (597 mm) Gross Weight: 46 lbs (20.9 kg) Net Weight: 25 lbs (11.3 kg) Packaging: 7.8" (H) x 23.8" (W) x 32.4" (D) Available Color: Black front & sliver body
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 H13SSW](#)
Chassis	CSE-LB16TS-R860AWP-A

Parts List

Standard Parts (Parts Included)

Motherboard / Chassis

Part Number	MBD-H13SSW	CSE-LB16TS-R860AWP-A
Qty	1	1
Description	Super H13SSW Motherboard	1U Chassis

Backplane

Part Number	BPN-NVME5-LB16A-S10
Qty	1
Description	1U 10-port backplane, 10x SAS3/SATA3/NVME5 for X13 CloudDC

Cable

Part Number	CBL-MCIO-1227EQS4	CBL-MCIO-1243S4Y	CBL-CDAT-0680-55	CBL-PWCD-0160-IS
Qty	1	1	1	2
Description	MCIO X8/STR+pTab to SlimSAS X4/STR+pTab,27CM,32AWG,RoHS	(MCIO x8 to 2 SlimSAS x4), STR, 43cm, 85Ohm, RoHS,RoHS	NCSI,2x10F to 2x10F,IDC,PH2.54,55cm,shield,28AWG,RoHS	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,16AWG,RoHS/REACH

Fan

Part Number	FAN-0163L4
Qty	6
Description	40x40x56 mm, 23.3K-20.3K RPM, Counter-rotating Fan

Front Panel

Part Number	MCP-280-00033-0N	FPB-FP116
Qty	1	1
Description	Universal Thermal sensor kit with 80cm I2C cable	Front control board for SC116 (USB 2.0 x 2)

Air Shroud

Part Number	MCP-310-LB005-0B	MCP-310-LB006-0B
Qty	1	1 set
Description	Mylar Air Shroud for AMD 1U CloudDC with H13SSW	Air block (L+R) set for LB16-AW-A 1U CloudDC with H13SSW

Manual

Part Number	MNL-2579-QRG
Qty	1
Description	AS -1115CS-TNR Quick Reference Guide

Riser Card

Part Number	RSC-D-6G5	RSC-DR-6G5
Qty	1	1
Description	1U LHS DCO Riser card with one PIC-E 5.0 X16 slot,HF,RoH	1U RHS DCO Riser card with one PCIe 5.0 X16 slot,HF,Ro

Software

Part Number	SFT-OOB-LIC
Qty	1
Description	License key for enabling OOB BIOS management

Heatsink / Retention

Part Number	SNK-P0082P
Qty	1
Description	1U Passive CPU Heat Sink for AMD Socket SP5 Processors

*Power Supply

Part Number	PWS-860P-1R2	MCP-250-00009-0N
Qty	2	1
Description	1U 860W, Redundant power supply, 54.5mm width, Platinum with	SC113 Redundant Power Distributor Cover

*Power Distributor

Part Number	PDB-PT116-SL8824
Qty	1
Description	Based on PDB-PT116-L8824 to optimize 24Pin etc cable lengths

*Parts

Part Number	MCP-160-00028-0B
Qty	1
Description	Mylar Cable Channel for Cloud-DC, X12 DDW

*Drive Tray(s)

Part Number	MCP-220-00188-0B
Qty	10
Description	Black gen-5.5 tool-less cost-effective 2.5

*Rear Window

Part Number	MCP-240-00173-0N
Qty	1
Description	1U X12 AWIO Rear window for LA15,LB16,LB13 Redundant PWS

*Rail Set

Part Number	MCP-290-00016-0N	MCP-290-00063-0N
Qty	1	1set
Description	1U open rack bracket set for CSE-PT51L,MCP-290-00054-0N	Rail set, quick/quick, default for 1U 17.2"W for SC113/SC116,RoHS/REACH

*Fan Holder

Part Number	MCP-320-00027-0B	MCP-320-00028-0B	MCP-340-00035-0B
Qty	24	1	2
Description	Plastic pin for 40x28, 40x56 fan	Fan holder for 6pcs 40x56 fan, assemble-able for SC819/SC119/SC818/SC116	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

10 NVMe Optional Cables

Part Number	CBL-MCIO-1228M5RE	CBL-MCIO-1218M5RE-J
Qty	1	4
Description	MCIO x8 (STR to RE), 28cm, 30#, Gen5, 85Ohm	MCIO x8 (STR to RE), 18cm,G5,32AWG

3908/3916 CacheVault

Part Number	BTR-CVPM05
Qty	1
Description	CacheVault for Broadcom 3908/3916 (requires a SuperCap mount)

3908/3916 SuperCap Mount

Part Number	MCP-240-00203-0N	MCP-240-00127-0N	MCP-240-21747-0N
Qty	1	1	1
Description	SuperCap mounting bracket for PCIe location	SuperCap mounting tray for 2.5" drive location	SuperCap mounting card for AIOM location

Cable Management Arm

Part Number	MCP-290-00152-0N
Qty	1
Description	1U Supermicro Cable Management Arm 2nd Gen

Global Services & Support

Part Number	OSNBD3/2/1 (/support/Global_Services.cfm)	OS4HR3/2/1 (/support/Global_Services.cfm)
Qty	-	-
Description	3/2/1-year onsite NBD service	3/2/1-year onsite 24x7x4 service

M.2 by AOC

Part Number	AOC-SLG4-2H8M2
Qty	1
Description	2x Hybrid Gen 4 NVMe/SATA M.2 RAID 0/1 Carrier, Standard LP

Software

Part Number	SFT-DCMS-Single
Qty	1
Description	DataCenter Management Package (per node license)

Storage Control Card and Cable(s)

Part Number	AOC-S3808L-L8iT **OR**	AOC-S3908L-H8iR(-16DD/-32DD)	1x CBL-SAST-1276F-100	**OR**
Qty	-			
Description	8 int 12Gb/s SAS3 ports, x8 Gen4, HBA - LP, 122 HDD	8 int 12Gb/s ports, x8 Gen4, ROC - LP, 240 HDD	Slimline x8 (LE) to 2x Slimline x4 (STR),FFC,76/76CM	

TPM security module

Part Number	AOM-TPM-9670V
Qty	1
Description	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor