

A+ Server 1114CS-TNR (Complete System Only)



Integrated Board



Super H12SSW-AN6

Views: | [Angled View](#) | [Top View](#) |
| [Front View](#) | [Rear View](#) |

Complete System Only: To maintain quality and integrity, this product is sold only as a completely-assembled system (For optimal performance, 8 DIMMs are recommended). Minimum requirement is 1 CPU, 4 DIMMs, 1 HDD/NVMe and 1 AIOM/AOC NIC card.

▶ [Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Tested M.2 List](#) ▶ [NVMe Options](#) ▶ [Tested AOC](#) ▶ [Manuals](#) ▶ [OS Certification Matrix](#) ▶ [Compatible GPU List](#) ▶ [Quick-References Guide](#) ▶ [Drive Options](#) ▶ [Tested AIOM](#)

Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Key Applications

- Financial Services
- Cloud Computing
- Network Appliance
- Private Cloud
- Content Delivery Network (CDN)
- Deep Learning Inferencing

Key Features

1. Single AMD EPYC™ 7002/7003 Series Processor
(The latest AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer)
2. 16 DIMMs; up to 4TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM
3. Expansion slots:
2 PCI-E 4.0 x16 (FHHL) slots,
2 AIOM slots for flexible networking
(One x8 AIOM slot and one x16 AIOM slot)
4. Integrated IPMI 2.0 + KVM with dedicated LAN
• **Software Out of Band License key (SFT-OOB-LIC) included for OOB BIOS management**
5. 10 Hot-swap 2.5" SATA3 drive bays, optional 10x SAS3/NVMe support via additional SAS/NVMe kit
M.2 Interface: 2 PCI-E 4.0 x4
M.2 Form Factor: 2242, 2260, 2280, 22110
M.2 Key: M-Key
6. 2 USB 3.0 ports (rear),
1 VGA, 1 COM,
ASPEED AST2600 BMC graphics
7. Tool-less Drive Trays and Tool-less Brackets
8. 860W Redundant Platinum Level Power Supplies
(Full redundancy based on configuration and application load)



Specifications

Product SKUs

AS -1114CS-TNR ■ A+ Server 1114CS-TNR (**Black**)

Motherboard

Super H12SSW-AN6

Processor/Chipset

CPU ■ Single AMD EPYC™ 7002/7003 Series Processor (The latest AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer)

- Socket SP3
- Supports CPU TDP up to 280W

Cores ■ Up to 64 Cores

System Memory

Memory Capacity ■ 16 DIMM slots
■ Up to 4TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM

Memory Type ■ DDR4 3200 MHz Registered ECC, 288-pin gold-plated DIMMs

On-Board Devices

Chipset ■ System on Chip

SATA ■ SATA3 (6Gbps)

Network Controllers ■ Flexible networking provided via AIOM

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

Video ■ ASPEED AST2600 BMC

Input / Output

SATA ■ 16 SATA3 (6 Gbps) ports

LAN ■ Networking provided via AIOM
■ 1 RJ45 Dedicated IPMI LAN port

USB ■ 2 USB 3.0 ports (rear)

COM ■ 1 COM Port (rear)

Video ■ 1 VGA port

System BIOS

BIOS Type ■ AMI 256Mb SPI Flash EEPROM

Management

Software ■ Super Doctor 5
■ Watch Dog
■ NMI
■ SUM
■ IPMI 2.0, KVM with dedicated LAN

Power Configurations ■ ACPI / APM Power Management

Chassis

Form Factor ■ 1U Rackmount

Model ■ **CSE-LB16TS-R860AWP2**

Dimensions and Weight

Width ■ 17.2" (437mm)

Height ■ 1.7" (43mm)

Package ■ 7.76" (H) 23.82" (W) 32.36" (D)

Depth ■ 23.5" (597mm)

Gross Weight ■ 46 lbs (20.9kg)

Available Colors ■ Black

Front Panel

Buttons ■ Power On/Off button
■ UID button

LEDs ■ Power status LED
■ HDD activity LED
■ Network activity LEDs
■ Universal Information (UID) LED

Expansion Slots

PCI-Express ■ 2 PCI-E 4.0 x16 (FHHL) slots
■ 2 PCI-E 4.0 x16 AIOM networking slots (One x8 AIOM slot and one x16 AIOM slot)

Drive Bays

Hot-swap ■ 10 Hot-swap 2.5" SATA3 drive bays
■ Optional 10 SAS3/NVMe drive support via additional SAS/NVMe kit

Backplane

SAS/SATA/NVMe HDD Backplane

System Cooling

Fans ■ 6 Counter-rotating 40x40x56mm PWM fans

Power Supply

800W/860W 1U redundant power supply

Total Output Power and Input ■ 800W with Input 100 - 127Vac
■ 860W with Input 200 - 240Vac
■ 860W with Input 200 - 240Vdc

Dimension (W x H x L) ■ 54.5 x 40.25 x 322 mm

AC Input Frequency ■ 50-60Hz

+12V ■ Max: 66.6A / Min: 0A (100Vac-127Vac)
■ Max: 71.6A / Min: 0A (200Vac-240Vac)

+5Vsb ■ Max: 4A / Min: 0A

Output Type ■ Backplanes (gold finger)

PC Health Monitoring

CPU	<ul style="list-style-type: none">■ Monitors for CPU Cores, Chipset Voltages, Memory.■ 4+1 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none">■ 6 Fans with tachometer monitoring■ Status monitor for speed control■ Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none">■ Monitoring for CPU and chassis environment■ Thermal Control for fan connectors

Certification**Operating Environment**

RoHS	<ul style="list-style-type: none">■ RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none">■ 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-H12SSW-AN6	1	Super H12SSW-AN6 Motherboard
	CSE-LB16TS-R860AWP2	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-1222-100	1	Slimline x8 (LE) to 2x Slimline x4 (STR),22/22CM,100 OH
Cable 2	CBL-SAST-1230LP-100	1	SlimlineLP x4 (STR) to Slimline x4 (STR),30CM,100 OHM
FAN	FAN-0141L4	6	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
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
Heatsink / Retention	SNK-P0062P	1	1U Passive CPU Heat Sink for AMD Socket SP3 Processors
*Power Supply	PWS-860P-1R2	2	1U 860W, Redundant power supply, 54.5mm width, Platinum with
*Power Distributor	PDB-PT112-S2424	1	WIO X11 Support,PDB-PT112-S2424 is based on PDB-PT112-2424
*Rail Set	MCP-290-00063-0N	1set	Rail set, quick/quick, default for 1U 17.2"W for SC113/SC116,RoHS/REACH
Software	<u>SFT-OOB-LIC</u> • eStore	1	OOB Management Package (per node license)

Notes:

- Parts with * are inside the chassis
- 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
Storage Control Card and Cable(s)	AOC-S3008L-L8e 1x CBL-SAST-1260-100 (support up to 8 SAS3 HDD)	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 122HDD, HBA; MiniSAS HD x8 (LE) to 2x Slimline x4 (STR),60CM,100 OHM
	AOC-S3008L-L8i 1x CBL-SAST-1260-100 (support up to 8 SAS3 HDD)	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 63HDD, RAID 0,1,1E; MiniSAS HD x8 (LE) to 2x Slimline x4 (STR),60CM,100 OHM
	AOC-S3108L-H8iR/16DD 1x CBL-SAST-1260-100 (support up to 8 SAS3 HDD)	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60; MiniSAS HD x8 (LE) to 2x Slimline x4 (STR),60CM,100 OHM
	AOC-S3616L-L16IT 1x CBL-SAST-1285-100 1x CBL-SAST-1260-100 (support up to 10 SAS3 HDD)	-	16 int 12Gb/s ports, 16xGen3, IOC/IT mode - LP; Internal Mini-SAS HD to Mini-SAS HD 60cm,30AWG,12Gb/s; MiniSAS HD x8 (LE) to 2x Slimline x4 (STR),60CM,100 OHM
	<u>AOC-S3808L-L8IT</u> 1x CBL-SAST-1276F-100 (support up to 8 SAS3 HDD)	-	Standard LP, 8 internal ports (12Gb/s) Gen-4, 16HDD; HBA; Slimline x8 (LE) to 2x Slimline x4 (STR),76/76CM
	<u>AOC-S3816L-L16IT</u> 1x CBL-SAST-1276F-100 1x CBL-SAST-1265F-100 (support up to 12 SAS3 HDD)	-	Standard LP, 16 internal ports (12Gb/s) Gen-4, 122HDD; HBA; Slimline x8 (LE) to 2x Slimline x4 (STR),76/76CM; Slimline x8 (STR) to Slimline x4 (STR),64CM
Cable Management Arm	MCP-290-00152-0N	1	1U Supermicro Cable Management Arm 2nd Gen
CacheVault(s)	BTR-TFM8G-LSICVM02	-	CacheVault for Broadcom 3108

Optional Parts List	Part Number	Qty	Description
	BKT-BBU-BRACKET-05		Supercap mounting bracket for PCI-E location
	BTR-TFM8G-LSICVM02	-	CacheVault for Broadcom 3108
	MCP-240-00127-0N		Supercap mounting bracket for 2.5" HDD location
Optional Kit for NVMe Solution	CBL-SAST-1222-85 (Support 2 NVMe drives slot per cables for HDD slot 0~3 and 8~9)	-	Slimline X8 (LE) to Slimline X8 (STR), 22CM,85 OHM,RoHS
	CBL-SAST-1219LP-85 (Support 2 NVMe drives slot per cables for HDD slot 4~7)	-	Slimline x8 (STR) to 2x SlimlineLP x4 (RE/LE),FFC,19CM,8
M.2 by AOC	AOC-SLG3-2H8M2	1	2x Hybrid NVMe/SATA M.2 RAID Carrier, Standard LP,RoHS
TPM	AOM-TPM-9655V	-	Vertical TPM with Infineon 9655 TCG 1.2
	AOM-TPM-9665V	-	AOM-TPM-9665V using SLB9665 Chipset supporting TPM2.0,RoHS/REACH
Global Services & Support	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	3/2/1-year onsite NBD service
Software	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)