

A+ Server 2123US-TN24R25M (Complete System Only)



Integrated Board



H11DSU-iN

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 16 DIMMs & at least 24/32 cores per CPU is recommended). Minimum requirement is 2 CPUs, 4 DIMMs, 1 NVMe HDD drive.

▶ [Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [NVMe Options](#) ▶ [Tested AOC](#) ▶ [Manuals](#) ▶ [OS Certification Matrix](#) ▶ [Quick-References Guide](#) ▶ [Drive Options](#)

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

Key Features

Virtualization
Cloud Computing
High-End Enterprise Server
Hyperconverged Storage

1. Dual AMD EPYC™ 7001/7002* Series Processors (*AMD EPYC 7002 series drop-in support requires board revision 2.x)
2. 4TB Registered ECC DDR4 2666MHz SDRAM in 32 DIMMs (7001 Processors)
8TB Registered ECC DDR4 3200MHz SDRAM in 32 DIMMs (Board revision 2.x required + 7002 Processors)
3. Integrated IPMI 2.0 + KVM with dedicated LAN
• **Software Out of Band License key (SFT-OOB-LIC) included for OOB BIOS management**
4. Dual 25G SFP28 LAN ports
5. Drive Bays:
24 hot-swap 2.5" U.2 NVMe drive bays
6. 1600W Redundant Power Supplies
Titanium Level (96%)
(Full redundancy based on configuration and application load)



Specifications

Product SKUs

AS -2123US-TN24R25M	<ul style="list-style-type: none"> A+ Server 2123US-TN24R25M
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Motherboard

H11DSU-iN

Processor/Chipset

CPU	<ul style="list-style-type: none"> Dual AMD EPYC™ 7001/7002* series Processors (* Board revision 2.x required) Socket SP3 Supports CPU cTDP up to 280W**
Cores	<ul style="list-style-type: none"> Up to 32 Cores (Board revision 1.x + 7001 Processors) Up to 64 Cores (Board revision 2.x + 7002 Processors)
Chipset	<ul style="list-style-type: none"> System on Chip (SoC)
Note	** Certain CPUs with high TDP higher than 225W may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information about specialized system optimization

System Memory

Memory Capacity	<ul style="list-style-type: none"> 32 DIMM slots Supports up to 4TB Registered ECC DDR4 2666MHz SDRAM (7001 Processors) Supports up to 8TB Registered ECC DDR4 3200MHz SDRAM (Board revision 2.x required + 7002 Processors) 8-channel memory bus
Memory Type	<ul style="list-style-type: none"> DDR4 2666 MHz Registered ECC, 288-pin gold-plated DIMMs (7001 Processors) DDR4 3200 MHz Registered ECC, 288-pin gold-plated DIMMs (Board revision 2.x required + 7002 Processors)
DIMM Sizes	<ul style="list-style-type: none"> 4GB, 8GB, 16GB, 32GB, 64GB, 128GB, 256GB* (* Board revision 2.x required + 7002 Processors)
Memory Voltage	<ul style="list-style-type: none"> 1.2V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors Detects double-bit errors (using ECC memory)

On-Board Devices

IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ASPEED AST2500 BMC
Network Connectivity	<ul style="list-style-type: none"> Dual 25GbE SFP28 ports via AOC-2UR68-M2TS-O (Mellanox ConnectX-4 Lx EN)
VGA	<ul style="list-style-type: none"> ASPEED AST2500 BMC

Expansion Slots

2U	<ul style="list-style-type: none"> No expansion slot available.*
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Chassis

Form Factor	<ul style="list-style-type: none"> 2U
Model	<ul style="list-style-type: none"> CSE-219U2TS-R1K62P

Dimensions and Weight

Height	<ul style="list-style-type: none"> 3.5" (89mm)
Width	<ul style="list-style-type: none"> 17.2" (437mm)
Depth	<ul style="list-style-type: none"> 28.46" (723mm)
Package	<ul style="list-style-type: none"> 9.96" (H) 24.60" (W) 45.43" (D)
Weight	<ul style="list-style-type: none"> Net Weight: 39 lbs (17.7 kg) Gross Weight: 63 lbs (28.6 kg)

Front Panel

Buttons	<ul style="list-style-type: none"> Power On/Off button System Reset button
LEDs	<ul style="list-style-type: none"> Power LED Hard drive activity LED 2x Network activity LEDs System Overheat LED / Fan fail LED / UID LED

Drive Bays


Hot-swap	<ul style="list-style-type: none"> 24 hot-swap 2.5" U.2 NVMe drive bays
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System Cooling

Fans	<ul style="list-style-type: none"> 4 heavy-duty PWM fans with optimal fan speed control
Air Shroud	<ul style="list-style-type: none"> 1 Air Shroud

Power Supply

1600W Redundant Power Supplies with PMBus

Total Output Power	<ul style="list-style-type: none"> 1600W/1000W
Dimension (W x H x L)	<ul style="list-style-type: none"> 73.5 x 40 x 203 mm
Input	<ul style="list-style-type: none"> 100-127Vac / 13 - 9A / 50-60Hz 200-240Vac / 10 - 8A / 50-60Hz
+12V	<ul style="list-style-type: none"> Max: 83.3A / Min: 0A (100-127Vac) Max: 133A / Min: 0A (200-240Vac)
12Vsb	<ul style="list-style-type: none"> Max: 2.1A / Min: 0A
Output Type	<ul style="list-style-type: none"> 25 Pairs Gold Finger Connector
Certification	

PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors CPU Core Voltages, +12V, +3.3V, +5V, +5V standby, 3.3V standby, VBAT CPU switching voltage regulator
FAN	<ul style="list-style-type: none"> Up to 4-fan status tachometer monitoring Up to four 4-pin fan headers Status monitor for speed control Pulse Width Modulated (PWM) fan connectors

Input / Output

NVMe	<ul style="list-style-type: none"> 24 U.2 NVMe support
LAN	<ul style="list-style-type: none"> Dual 25G SFP28 LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 3 USB 3.0 ports (2 rear + 1 Type A)
VGA	<ul style="list-style-type: none"> 2 VGA ports (1 rear, 1 onboard)
Others	<ul style="list-style-type: none"> 1 COM port 2 SATA DOM power connectors TPM 2.0 header

System BIOS

BIOS Type	<ul style="list-style-type: none"> AMI 128Mb SPI Flash EEPROM
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) DMI 2.3 PCI 2.2 ACPI 5.1 USB Keyboard Support SMBIOS 3.1.1

Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment CPU Thermal Trip Support Thermal control for 4x Fan connectors I²C Temperature Sensing Logic
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LED	<ul style="list-style-type: none"> CPU / System Overheat LED
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Other Features	<ul style="list-style-type: none"> Chassis Intrusion Detection Chassis Intrusion Header
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Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
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Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
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* Please refer to the system manual for more information.

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard	MBD-H11DSU-iN	1	Super H11DSU-iN Motherboard
Chassis	CSE-219U2TS-R1K62P	1	2U Chassis
Add-on Card / Module	AOC-2UR68-M2TS-P	1	2U Ultra 2-port 25G SFP28, 1x PCI-E 3.0 x8 (internal)
Add-on Card / Module	AOC-SLG3-2E4R-P	2	NVMe AOC by 8,HF,RoHS/REACH
Add-on Card / Module	AOC-SLG3-4E4R-P	4	NVMe AOC by 16,HF,RoHS/REACH
Backplane	BPN-NVME3-216N-S4	1	24-port 2U (SC216/219) NVMe direct-attached backplane, support 24x 2.5-inch NVMe devices, 4 of them are hybrid ports also support SAS3/SATA3
Cable 1	CBL-0088L	4	4 PIN MIDDLE FAN POWER CABLE (PWM). 27cm, 24AWG
Cable 2	CBL-0174L	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,14AWG,15A,125V,RoHS/REACH
Cable 3	CBL-0318L	1	CBL,FRONT CNTL,16 TO 16 PIN,RA,RND TUBE,24CM,28AWG
Cable 4	CBL-PWEX-1018	1	BPN PWR,2X4F/GPU-White to 2x2F,P4.2, 12V, 42CM,18AWG, 11A/pin, -25~85C
Cable 5	CBL-PWEX-1019	2	BPN PWR,2X4F/GPU-White to 2x2F,P4.2, 12V, 67CM,18AWG, 11A/pin, -25~85C
Cable 6	CBL-PWEX-1048	1	BPN PWR,2X4F/GPU-White to 2x2F,P4.2, 12V, 82CM,18AWG, 11A/pin, -25~85C
Cable 7	CBL-SAST-0818	2	OCuLink v. 1.0,INT,PCIe NVMe SSD, 55CM,34AWG
Cable 8	CBL-SAST-0819	2	OCuLink v 1.0,INT,PCIe NVMe SSD, 65CM,34AWG,RoHS/REACH
Cable 9	CBL-SAST-0841	8	MiniSAS HD source to OcuLink v 1.0,INT,PCIe, 76CM,34AWG,RoHS
Cable 10	CBL-SAST-0849	12	MiniSAS HD source to OcuLink v 1.0,INT,PCIe, 57CM,34AWG
FAN 1	FAN-0158L4	4	80x80x38 mm, 10.5K RPM, Optional Middle Cooling Fan for X10 2U Ultra and HFT Series Servers,RoHS/REACH
Drive Tray(s)	MCP-220-00121-0B	20	Black gen-3 2.5 NVMe drive tray, Orange tab with lock (improved EMI for hotswap NVMe drive)
Drive Tray(s)	MCP-220-00121-0B	4	Black gen-3 2.5 NVMe drive tray, Orange tab with lock (improved EMI for hotswap NVMe drive)
Air Shroud	MCP-310-81905-0B	1	Plastic air shroud for SC819U, 119U, 829U, 219U (PWS),RoHS/REACH
Power Supply	PWS-1K62A-1R	2	AC-DC 1600W, Titanium Level, Redundancy, 1U, DC Output: +12V and +12Vs, 203 x 73.5 x 40 mm, AC Input: 90 - 264 VAC/47-63Hz, PMBus 1.2 with DSP controller,HF,RoHS/REACH
Riser Card	RSC-W2-66	1	RSC-W2-66
Riser Card	RSC-WR-6	1	1U RHS WIO Riser card with one PCI-E 4.0 x16 slot,HF,RoHS
Heatsink / Retention	SNK-P0063P	2	2U Passive CPU Heat Sink for AMD Socket SP3 Processors

Optional Parts List

	Part Number	Qty	Description
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)