

A+ Server 1113S-WN10RT (Complete System Only)



Integrated Board



H11SSW-NT

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 (with 1 CPU, minimum 8 DIMMs, 1 NVMe). Recommended configuration for best performance is at least 24 or 32 Cores per CPU.

▶ [Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Tested M.2 List](#) ▶ [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
All Flash Storage

1. Single AMD EPYC™ 7001/7002* Series Processor (*AMD EPYC 7002 series drop-in support requires board revision 2.x)
2. 2TB Registered ECC DDR4 2666MHz SDRAM in 16 DIMMs
4TB Registered ECC DDR4 3200MHz SDRAM in 16 DIMMs (Board revision 2.x required)
3. Expansion slots:
2 PCI-E 3.0 x16 (FH/HL) slots,
1 PCI-E 3.0 x16 (LP) slot
M.2 Interface: PCI-E 3.0 x2 (NVMe based)
M.2 Form Factor: 2280, 22110
M.2 Key: Onboard M-key
Number of M.2: Dual
4. Integrated IPMI 2.0 + KVM with dedicated LAN
• **Software Out of Band License key (SFT-OOB-LIC) included for OOB BIOS management**
5. 2x 10GBase-T LAN ports via Broadcom BCM57416
6. 10 hot-swap 2.5" U.2 NVMe drive bays, optional 4 SATA3 drive support with additional cables
7. 750W Redundant Power Supplies
Platinum Level (94%)
(Full redundancy based on configuration and application load)



Specifications

Product SKUs

AS -1113S-WN10RT	<ul style="list-style-type: none"> A+ Server 1113S-WN10RT
-------------------------	--

Motherboard

H11SSW-NT

Processor/Chipset

CPU	<ul style="list-style-type: none"> Single AMD EPYC™ 7001/7002* series Processor (*Board revision 2.x required) Socket SP3 Supports CPU TDP 225W / cTDP up to 240W*
------------	---

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)
----------------	--

System Memory

Memory Capacity	<ul style="list-style-type: none"> 16 DIMM slots Supports up to 2TB Registered ECC DDR4 2666MHz SDRAM (7001 Processors) Supports up to 4TB 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 Controllers	<ul style="list-style-type: none"> Broadcom BCM57416 Controller
----------------------------	--

VGA	<ul style="list-style-type: none"> ASPEED AST2500 BMC
------------	--

Expansion Slots

PCI Express	<ul style="list-style-type: none"> 2 PCI-E 3.0 x16 (FH/HL) slots 1 PCI-E 3.0 x16 (LP) slot
--------------------	--

M.2	<ul style="list-style-type: none"> Interface: PCI-E 3.0 x2 (NVMe based) Form Factor: 2280, 22110 Key: Onboard M-key Number of M.2: Dual
------------	---

Chassis

Form Factor	<ul style="list-style-type: none"> 1U
--------------------	--

Model	<ul style="list-style-type: none"> CSE-116TS-R706WBP3
--------------	--

Dimensions and Weight

Height	<ul style="list-style-type: none"> 1.7" (43mm)
---------------	---

Width	<ul style="list-style-type: none"> 17.2" (437mm)
--------------	---

Depth	<ul style="list-style-type: none"> 23.5" (597mm)
--------------	---

Package	<ul style="list-style-type: none"> 7.63" (H) 23.42" (W) 31.45" (D)
----------------	---

Weight	<ul style="list-style-type: none"> Net Weight: 20 lbs (9.1 kg) Gross Weight: 33 lbs (15.0 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"> 10 hot-swap 2.5" U.2 NVMe drive bays
-----------------	--

Backplane

Hybrid Backplane	<ul style="list-style-type: none"> Supports up to 10x 2.5" NVMe storage devices, 4 of them SAS3/SATA3 compatible
-------------------------	---

System Cooling

Fans	<ul style="list-style-type: none"> 6 heavy-duty PWM fans with optimal fan speed control
-------------	--

Air Shroud	<ul style="list-style-type: none"> 1 Air Shroud
-------------------	--

AC/DC240V Input Redundant Power Supply

700W/750W Redundant Power Supplies with PMBus

Total Output Power	<ul style="list-style-type: none"> 700W/750W
---------------------------	---

Dimension (W x H x L)	<ul style="list-style-type: none"> 54.5 x 40.25 x 320 mm
------------------------------	---

Input	<ul style="list-style-type: none"> 100 - 140Vac / 8 - 6A / 50-60Hz 200 - 240Vac / 4.5 - 3.8A / 50-60Hz 200 - 240Vdc / 4.5 - 3.8A (CCC Only)
--------------	--

+12V	<ul style="list-style-type: none"> Max: 58A / Min: 0.5A (100 - 140Vac) Max: 62A / Min: 0.5A (200 - 240Vac) Max: 62A / Min: 0.5A (200 - 240Vdc) (CB/CCC Only)
-------------	---

+5V sb	<ul style="list-style-type: none"> Max: 3A / Min: 0A
---------------	---

Output Type	<ul style="list-style-type: none"> Gold Finger Connector Mating with Molex 45984-4343
--------------------	--

Certification	<ul style="list-style-type: none">  Platinum Certified [Test Report]
----------------------	---

PC Health Monitoring

Input / Output

NVMe	<ul style="list-style-type: none"> Up to 10 U.2 NVMe support
SATA	<ul style="list-style-type: none"> Optional 4 SATA3 (6 Gbps) support via additional cables
LAN	<ul style="list-style-type: none"> 2x 10GbBase-T LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 7 USB 3.0 ports (4 rear + 2 front + 1 Type A)
VGA	<ul style="list-style-type: none"> 1 VGA port
Others	<ul style="list-style-type: none"> 1 COM port 2 SATA DOM power connectors TPM 1.2 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

CPU

- Monitors CPU Core Voltages, +12V, +3.3V, +5V, +5V standby, 3.3V standby, VBAT
- CPU switching voltage regulator

FAN

- Up to 6-fan status tachometer monitoring
- Up to six 4-pin fan headers
- Status monitor for speed control
- Pulse Width Modulated (PWM) fan connectors

Temperature

- Monitoring for CPU and chassis environment
- CPU Thermal Trip Support
- Thermal control for 6x Fan connectors
- I²C Temperature Sensing Logic

LED

- CPU / System Overheat LED

Other Features

- Chassis Intrusion Detection
- Chassis Intrusion Header

Operating Environment / Compliance**RoHS**


- RoHS Compliant

Environmental Spec.

- Operating Temperature: 10°C to 30°C (50°F to 86°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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard	MBD-H11SSW-NT	1	Super H11SSW-NT Motherboard
Chassis	CSE-116TS-R706WBP3	1	1U Chassis
HD Backplane	BPN-SAS3-116A-N10	1	10-port 1U SAS3 12Gbps Hybrid backplane, support up to 10x 2.5-inch NVMe storage devices, 4 of them are SAS3/SATA3 drives compatible.
Cable(s)	CBL-PWEX-1072	2	PWEX,2X2M/P4.2 TO 2X2F/P4.2,BLK*1,YEL*1,28CM,16AWG
Cable(s)	CBL-PWEX-1073	2	PWEX,2X2F/P4.2 TO 1X4M/P5.08,BLK*2,YEL*1,RED*1,5CM,18AWG
Cable(s)	CBL-SAST-0814	1	SLIMLINE SAS x8 (LA) to 2x Oculink x4,INT,13CM,34AWG
Cable(s)	CBL-SAST-0815	3	SLIMLINE SAS x8 to 2x Oculink x4,INT, 22CM,34AWG
Cable(s)	CBL-SAST-0816	1	SLIMLINE SAS x8 (LA) to 2x Oculink x4,INT, 28CM,34AWG
Riser Card	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots
Riser Card	RSC-WR-6	1	1U RHS WIO Riser card with one PCI-E x16 slot,HF,RoHS
Heatsink / Retention	SNK-P0062P	1	1U Passive CPU Heat Sink for AMD Socket SP3 Processors
Mounting Rail(s)	MCP-290-00063-0N	1set	Rail set, quick/quick, default for 1U 17.2"W for SC113/SC116,RoHS/REACH
Drive Tray(s)	MCP-220-00127-0B-BULK	10	Black gen3 Hotswap 2.5 NVMe drive tray, Orange tab/Lock/Bulk
Fan(s)	FAN-0101L4	5	40x56,4 Pin PWM,Primary for SC809,111, Sec.for SC816,819,808
Software	<u>SFT-OOB-LIC</u> • 	1	OOB Management Package (per node license)

Optional Parts List

	Part Number	Qty	Description
Storage Controller card & cable	AOC-S3008L-L8e & 1x CBL-SAST-0699	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 122HDD, HBA MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM SB,28/30AWG
	AOC-S3008L-L8i & 1x CBL-SAST-0699	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 63HDD, RAID 0,1,1E
	AOC-S3108L-H8iR & 1x CBL-SAST-0699	-	MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM SB,28/30AWG
		-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60 MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM SB,28/30AWG
Cable Management Arm	MCP-290-00085-0N	-	Supermicro Cable Management Arm for 1U Chassis
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
Optional Kit for 4 SATA Drive Support	CBL-SAST-0813	1	SLIMLINE SAS x8 (LA) to SATA x4,INT, 16/26CM,32AWG
	MCP-220-00147-0B	4	Black gen-3 hot-swap 2.5" Tool-less HDD tray (clip design)
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)