

A+ Server 1014S-WTRT



Integrated Board



Super H12SSW-NT

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

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

Key Features

**DB Processing & Storage
Data Center Applications
Firewall Applications**

1. Single AMD EPYC™ 7003/7002 Series Processor (7003 Series Processor drop-in support requires BIOS version 2.0 or newer)
2. 8 DIMMs; up to 2TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM
3. 2 PCI-E 4.0 x16 (FHFL) slots, 1 PCI-E 4.0 x16 (LP) 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. 4 Hot-swap 3.5" SATA3 drive bays, Optional 4 U.2 NVMe (PCI-E 3.0) drive support via additional kit for NVMe devices
6. 2x 10GBase-T LAN ports via Broadcom BCM57416 Controller
7. 1 VGA, 5 USB 3.0 (4 rear, 1 Type A)
8. 2 SuperDOM (Disk on Module) ports
9. 500W Redundant Power Supplies Platinum Level High-efficiency (Full redundancy based on configuration and application load)



Specifications

Product SKUs

- AS -1014S-WTRT** ■ A+ Server 1014S-WTRT (**Black**)

Motherboard

Super H12SSW-NT

Processor/Cache

- CPU**
 - Single AMD EPYC™ 7003/7002 Series Processor (7003 Series Processor drop-in support requires BIOS version 2.0 or newer)
 - Socket SP3
 - Support CPU TDP up to 280W

- Cores** ■ Up to 64 Cores

System Memory

- Memory Capacity**
 - 8 DIMM slots
 - Up to 2TB 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**
 - Dual 10GBase-T LAN with via Broadcom BCM57416
- 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 AST2500 BMC

Input / Output

- NVMe** ■ 4 U.2 NVMe Support via optional kit
- SATA** ■ 4 SATA3 (6 Gbps) ports
- LAN**
 - 2 RJ45 10GBase-T ports
 - 1 RJ45 Dedicated IPMI LAN port
- USB** ■ 5 USB 3.0 ports (4 rear, 1 Type A)
- Video** ■ 1 VGA port
- DOM** ■ 2 SuperDOM (Disk on Module) ports

System BIOS

- BIOS Type** ■ AMI 32Mb SPI Flash ROM

Management

Chassis

- Form Factor** ■ 1U Rackmount
- Model** ■ **CSE-815TS-R504WBP4**

Dimensions and Weight

- Height** ■ 1.7" (43mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 25.6" (650mm)
- Package** ■ 7.63" (H) 23.42" (W) 31.45" (D)
- Weight**
 - Gross Weight: 46 lbs (20.87kg)
 - Net Weight: 22 lbs (9.98kg)
- 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 (FHFL) slots
 - 1 PCI-E 4.0* x16 (LP) slot
 - 2 PCI-E / SATA 3.0 x2 NVMe M.2 slots
- * Limited Support:** On some PCI-E 4.0 devices, it will only run at PCI-E 3.0 speed.

Drive Bays

- Hot-swap**
 - 4 Hot-swap 3.5" SATA3 drive bays
 - Optional 4 U.2 NVMe (PCI-E 3.0) drive support via additional kit for NVMe devices
- Peripheral** ■ 1 Slim DVD-ROM drive bay (optional)

Backplane

SAS/SATA/NVMe HDD Backplane

System Cooling

- Fans** ■ 4 Counter-rotating 4cm PWM fans, 2 fans for cooling AOC

Power Supply

500W Redundant Power Supplies with PMBus

- Total Output Power** ■ 500W
- Dimension (W x H x L)** ■ 54.5 x 40.25 x 320 mm
- Input** ■ 100-240Vac, 50-60Hz, 6.1-2.6A

- Software**
- [Super Doctor 5](#)
 - Watch Dog
 - NMI
 - [SUM](#)
 - [IPMI 2.0](#), KVM with dedicated LAN

- Power Configurations**
- ACPI / APM Power Management

PC Health Monitoring

- CPU**
- Monitors for CPU Cores, Chipset Voltages, Memory.
 - 4+1 Phase-switching voltage regulator

- 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

- +12V**
- Max: 42A / Min: 0.5A

- +5Vsb**
- Max: 4A / Min: 0A

- Output Type**
- Gold Finger Connector Mating with Molex 45984-4343

- With Power Distributor**
- +5V: 25A
 - +3.3V: 12A
 - -12V: 0.6A

Certification



Platinum Certified
[[Test Report](#)]

Operating Environment

- RoHS**
- RoHS Compliant

- 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
Motherboard / Chassis	MBD-H12SSW-NT	1	Super H12SSW-NT Motherboard
	CSE-815TS-R504WBP4	1	1U Chassis
Backplane	BPN-SAS3-815TQ-N4	1	4-port 1U SAS3 12Gbps Hybrid backplane, support up to 4x 3.5-inch SAS3/SATA3/NVMe Storage Devices
Cable	CBL-SAST-0827	1	SLIMLINE SAS x8 (LE) to 8 SATA x4,INT, 70CM,32AWG, 85 O
Riser Card	RSC-W-66G4	1	1U LHS WIO Riser card with two PCI-E 4.0 x16 slots,HF,RoHS
Riser Card	RSC-WR-6	1	1U RHS WIO 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-504P-1R	2	500W 1U Redundant PWS W/ 54.5MM Wide
Power Distributor	PDB-PT112-S2424	1	WIO X11 Support,PDB-PT112-S2424 is based on PDB-PT112-2424
Fan	FAN-0141L4	4	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
Parts	MCP-240-00099-0N	1	1U WIO riser card bracket for SC113, SC815, SC119, SC819
Drive Tray(s)	MCP-220-00075-0B	4	Black gen 5.5 hot-swap 3.5" HDD tray
Rear Window	MCP-240-00098-0N	1	WIO rear window for SC113,SC116, SC815 Redundant PWS
Rail Set	MCP-290-00054-0N	1set	Rail set, quick/quick, optional for 1U 17.2"W SC815
Software	<u>SFT-OOB-LIC</u> • <i>eStore</i>	1	OOB Management Package (per node license)

Optional Parts List

	Part Number	Qty	Description
2.5" to 3.5" Converter Tray	MCP-220-00043-0N	-	Black Hot-swap Gen-4 2.5" to 3.5" HDD tray
2.5" to 3.5" Toolless Converter Tray	MCP-220-00118-0B	-	Black gen-5.5 tool-less 3.5-to-2.5 converter drive tray,RoHS/REACH
Optional Kit for 4 U.2 NVMe Drive Support	CBL-SAST-0817	2	SLIMLINE SAS x8 (LA) to 2x Oculink x4,INT, 36CM,34AWG
	MCP-220-00138-0B	4	Black gen-5.5 tool-less NVMe 3.5-to-2.5 drive tray, Orange tab
DVD-ROM / DVD-RW	DVM-TEAC-DVD-SBT5	1	TEAC slim DVD-ROM SATA drive
	DVM-PLDS-DVDRW-SBT5	1	PHILIPS slim DVD-RW SATA drive
DVD-ROM Accessory	MCP-220-81502-0N	1	Slim SATA DVD mounting kit
Cooling Fan	FAN-0141L4	2	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
Storage Controller card & cable	AOC-S3108L-H8iR	1	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	CBL-SAST-0699	1	MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM
	FAN-0141L4	2	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
	AOC-S3108L-H8iR-16DD	1	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, 16HDD RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	CBL-SAST-0699	1	MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM
	FAN-0141L4	2	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
	AOC-S3008L-L8i	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 63HDD, RAID 0, 1, 10
	CBL-SAST-0699	1	MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM
	FAN-0141L4	2	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
	AOC-S3008L-L8e	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD HBA
	CBL-SAST-0699	1	MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM
	FAN-0141L4	2	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan

CacheVault	BTR-CV3108-1U1	-	CacheVault for Broadcom 3108 with SuperCap mounting in 1Y 40x56 fan tray
	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05	-	CacheVault for Broadcom 3108 with SuperCap mounting bracket for PCI-E location
Front Bezels	CSE-PTFB-813LB	-	Black front bezels
	CSE-PTFB-813-02B	-	Black Front Bezel w/ Round Venting Holes
GPU Kit	MCP-310-81504-0B FAN-0141L4	1 2	SC815 and SC116 with X11SPW & H12SSW for Tesla T4,RoHS 40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
Cable Management Arm	MCP-290-00085-0N	-	Supermicro Cable Management Arm for 1U Chassis
TPM security module	AOM-TPM-9655V	-	Vertical TPM with Infineon 9655 TCG 1.2
	AOM-TPM-9655V-S	-	Based on AOM-TPM-9655V with Server TXT package
	AOM-TPM-9665V	-	AOM-TPM-9665V using SLB9665 Chipset supporting TPM2.0,RoHS/REACH
	AOM-TPM-9665V-S	-	Vertical TPM TCG 2.0 Provisioned for a server,RoHS/REACH
SATADOM	SSD-DM128-SMCMVN1	-	SMC SATADOM, 128GB, SATA 6Gb/s, MLC, uSSD, 15nm,HF,RoHS/REACH
	SSD-DM480-SMCMVN1	-	SMC SATADOM,480GB,SATA 6Gb/s,3D TLC,uSSD,HF,RoHS
	SSD-DM064-SMCMVN1	-	SMC SATADOM,64GB,SATA 6Gb/s,MLC,uSSD,15nm,HF,RoHS
	SSD-DM032-SMCMVN1	-	SMC SATADOM,32GB,SATA 6Gb/s,MLC,uSSD,15nm,HF,RoHS
	MEM-IDSAVS4-032G	-	SATA3DOM SL 3SE4 32GB SLC LP Pin8 VCC NH (L17725)
	MEM-IDSAVM8A-128G	-	SATA3DOM SL 3ME3 V2 128GB MLC LP Pin8 VCC NH (S17411)
	MEM-IDSAVM8A-256G	-	SATA3DOM ML 3ME3 V2 256GB MLC LP Pin8 VCC NH (S17411)
	MEM-IDSAVE1-064G	-	SATA3DOM SL 3IE3 V2 64GB iSLC LP Pin8 VCC NH (S17411i)
	MEM-IDSAVS3-032G	-	SATA3DOM SL 3SE 32GB SLC LP No Pin8 Vcc Support (S130710)
	MEM-IDSAVT1-256G	-	IND SATA3DOM SL 3TE7 256GB 3D TLC Pin8VCC Vertical LP
	Global Services & Support	<u>OS4HR3/2/1</u>	-
<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)