

# A+ Server 1013S-MTR



Integrated Board



**H11SSL-i**

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

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

**Web Hosting, VM  
Cloud Computing  
Connectivity/Storage  
Computer Nodes**

1. Single AMD EPYC™ 7001/7002\* Series Processor (\*AMD EPYC 7002 series drop-in support requires board revision 2.x)
2. 1TB Registered ECC DDR4 2666MHz SDRAM in 8 DIMMs  
2TB Registered ECC DDR4 3200MHz SDRAM in 8 DIMMs (Board revision 2.x required)
3. Expansion slots:  
PCI-E 3.0 x16 (FH/HL) slot  
**M.2 Interface:** PCI-E 3.0 x4 (NVMe based)  
**M.2 Form Factor:** 2280, 22110  
**M.2 Key:** Onboard M-key  
**Number of M.2:** Single
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 1GbE LAN ports via Intel® I210
6. 4 hot-swap 3.5" SATA3 drive bays or 4 SAS3 ports (SAS Add-on Card is optional), 1 M.2 NVMe SSD Supported
7. 400W Redundant Platinum Level Power Supplies (Full redundancy based on configuration and application load)

## Product Review



# Specifications

## Product SKUs

**AS -1013S-MTR** ■ A+ Server 1013S-MTR

## Motherboard

### H11SSL-i

## Processor/Chipset

**CPU** ■ Single AMD EPYC™ 7001/7002\* series Processor (\*Board revision 2.x required)

- Socket SP3
- Supports CPU TDP 225W / cTDP up to 240W\*

**Cores** ■ Up to 32 Cores (Board revision 1.x + 7001 Processors)

- Up to 64 Cores (Board revision 2.x + 7002 Processors)

**Chipset** ■ System on Chip (SoC)

## System Memory

**Memory Capacity** ■ 8 DIMM slots

- Supports up to 1TB Registered ECC DDR4 2666MHz SDRAM (7001 Processors)
- Supports up to 2TB Registered ECC DDR4 3200MHz SDRAM (Board revision 2.x required + 7002 Processors)
- 8-channel memory bus

**Memory Type** ■ DDR4 2666 MHz Registered ECC, 288-pin gold-plated DIMMs

- DDR4 3200 MHz Registered ECC, 288-pin gold-plated DIMMs (Board revision 2.x required + 7002 Processors)

**DIMM Sizes** ■ 4GB, 8GB, 16GB, 32GB, 64GB, 128GB, 256GB\*

(\* Board revision 2.x required + 7002 Processors)

**Memory Voltage** ■ 1.2V

**Error Detection** ■ Corrects single-bit errors

- Detects double-bit errors (using ECC memory)

## On-Board Devices

**SATA** ■ SATA3 (6 Gbps)

**IPMI** ■ 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** ■ Intel® I210 Controller

**VGA** ■ ASPEED AST2500 BMC

## Expansion Slots

**PCI Express** ■ 1 PCI-E 3.0 x16 (FH/HL) slot

**M.2** ■ Interface: PCI-E 3.0 x4 (NVMe based)

- Form Factor: 2280, 22110
- Key: Onboard M-key
- Number of M.2: Single

## Chassis

**Form Factor** ■ 1U

**Model** ■ CSE-813MFTQC-R407CB

## Dimensions

**Height** ■ 1.7" (43mm)

**Width** ■ 17.2" (437mm)

**Depth** ■ 19.85" (503mm)

**Weight** ■ Net Weight: 20 lbs (9.1 kg)

- Gross Weight: 33 lbs (15.0 kg)

## Front Panel

**Buttons** ■ Power On/Off button

- System Reset button

**LEDs** ■ Power LED

- Hard drive activity LED
- 2x Network activity LEDs
- System Overheat LED / Fan fail LED / UID LED

## Drive Bays

**Hot-swap** ■ 4 hot-swap 3.5" SATA3 drive bays

## Peripheral Drives

**Optional** ■ Optional 2.5" drive adapter

- Optional slim DVD drive

## Backplane

**HDD Backplane** ■ Supports 4 SATA3 3.5" HDD

## System Cooling

**Fans** ■ 4x 40x28mm 4-pin PWM Cooling Fans

**Air Shroud** ■ 1 Air Shroud

## AC/DC240V Input Redundant Power Supplies

400W 1U Redundant Power Supplies with PMbus

**Total Output Power** ■ 400W

**Dimension (W x H x L)** ■ 54.5 x 40 x 220 mm

**Input** ■ 100 - 240Vac / 6.0 - 3.0A / 50-60Hz

- 200 - 240Vdc / 3.4 - 3.2A (CCC Only)

**+12V** ■ Max: 33A / Min: 0.5A

**+5V sb** ■ Max: 3A / Min: 0A

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

**Certification** ■  Platinum Level Certified [ Test Report ]

## PC Health Monitoring

**CPU** ■ Monitors CPU Core Voltages, +12V, +3.3V, +5V, +5V standby, 3.3V standby, VBAT

- CPU switching voltage regulator

**Input / Output**

<b>SATA</b>	<ul style="list-style-type: none"> <li>4 SATA3 (6 Gbps) ports</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>2x 1GbE LAN ports</li> <li>1 RJ45 Dedicated IPMI LAN port</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>5 USB 3.0 ports (2 rear + 2 via header + 1 Type A)</li> <li>4 USB 2.0 ports (2 rear, 2 via header)</li> </ul>
<b>VGA</b>	<ul style="list-style-type: none"> <li>1 VGA port</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>1 COM port (rear)</li> <li>2 SATA DOM power connector</li> <li>TPM 1.2 header</li> </ul>

**System BIOS**

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

<b>FAN</b>	<ul style="list-style-type: none"> <li>Up to 8-fan status tachometer monitoring</li> <li>Up to eight 4-pin fan headers</li> <li>Status monitor for speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul>
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<b>Temperature</b>	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>CPU Thermal Trip Support</li> <li>Thermal control for 8x Fan connectors</li> <li>I<sup>2</sup>C Temperature Sensing Logic</li> </ul>
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<b>LED</b>	<ul style="list-style-type: none"> <li>CPU / System Overheat LED</li> </ul>
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<b>Other Features</b>	<ul style="list-style-type: none"> <li>Chassis Intrusion Detection</li> <li>Chassis Intrusion Header</li> </ul>
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**Operating Environment / Compliance**

<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
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<b>Environmental Spec.</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>
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## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard</b>	MBD-H11SSL-i	1	Super H11SSL-i Motherboard
<b>Chassis</b>	CSE-813MFTQC-R407CB	1	1U Chassis
<b>HD Backplane</b>	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5" SAS3/SATA3 HDD/SSD
<b>Cable</b>	CBL-0488L	1	SATA,INT,ROUND,ST-RA,55CM,30AWG
<b>Cable</b>	CBL-SAST-0639	2	SATA,INT,ROUND,ST-RA,31CM,30AWG
<b>Cable</b>	CBL-SAST-0641	1	SATA,INT,ROUND,ST-RA,45CM,30AWG
<b>Part(s)</b>	MCP-120-00031-0N	1	Riser card bracket for SC812,813,813M,815,111,113,113M
<b>Air Shroud</b>	MCP-310-81305-0B	1	Mylar air shroud for 1U X11SPW-TF,RoHS
<b>Riser Card</b>	RSC-RR1U-E16	1	RSC-RR1U-E16 with PIC-E x16 output
<b>Heat Sink</b>	SNK-P0062P	1	1U Passive CPU Heat Sink for AMD Socket SP3 Processors
<b>Software</b>	SFT-OOB-LIC	1	License key for enabling OOB BIOS management

### Optional Parts List

	Part Number	Qty	Description
<b>Storage Control Card and Cable(s)</b>	AOC-S3008L-L8e	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 122HDD, HBA
	1x CBL-SAST-0811		MINI SAS HD-4 SATA (RA),12G,INT,50/50/60/70,70CM SB,30AWG,RoHS/REACH
	AOC-S3008L-L8i	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 63HDD, RAID 0,1,1E
	1x CBL-SAST-0811		MINI SAS HD-4 SATA (RA),12G,INT,50/50/60/70,70CM SB,30AWG,RoHS/REACH
	AOC-S3108L-H8iR	-	Std LP, 8 WIO L ports, 12Gb/s per port- Gen3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60
	1x CBL-SAST-0811		MINI SAS HD-4 SATA (RA),12G,INT,50/50/60/70,70CM SB,30AWG,RoHS/REACH
<b>CacheVault(s)</b>	BTR-TFM8G-LSICVM02	-	CacheVault for Broadcom 3108
	MCP-240-00127-0N		Supercap mounting bracket for 2.5" HDD location
	MCP-220-00043-0N		STD Black hot-swap screw type 3.5"-to-2.5" converter drive tray
<b>Hot-swap 3.5" to 2.5" Hard Disk Drive Tray</b>	MCP-220-00043-0N	-	STD Black hot-swap screw type 3.5"-to-2.5" converter drive tray
	MCP-220-00118-0B	-	STD Black hot-swap tool-less 3.5"-to-2.5" converter drive tray
<b>DVD-ROM / DVD-RW</b>	DVM-PNSC-DVD-SBT3	-	Black Panasonic Slim DVD-ROM SATA Drive
	MCP-220-81502-0N		Slim SATA DVD mounting kit
	CBL-0099		25CM FDD 4 PIN TO SLIM 4 PIN power cable,24AWG
	DVM-TEAC-DVD-SBT3	-	Black TEAC Slim DVD-ROM SATA Drive
	MCP-220-81502-0N		Slim SATA DVD mounting kit
	CBL-0099		25CM FDD 4 PIN TO SLIM 4 PIN power cable,24AWG
	DVM-PLDS-DVDRW-SBT4	-	Philips Slim Black DVD-RW SATA Drive, HF
	MCP-220-81502-0N		Slim SATA DVD mounting kit
	CBL-0099		25CM FDD 4 PIN TO SLIM 4 PIN power cable,24AWG
<b>Drive Tray(s)</b>	MCP-220-00129-0B	-	Black 2x USB 3.0 port tray in slim FDD bay
<b>Hot-Swap Drive Bays   2.5" HDD Tray (FDD Slot)</b>	MCP-220-81504-0N	-	12G 2.5-in Hot-swap Slim Floppy Size Drive Kit w/Status LED
	CBL-0210L (PWR)		

Optional Parts List	Part Number	Qty	Description
Hot-Swap Drive Bays   2.5" HDD Tray (DVD Slot)	MCP-220-81506-0N	-	12G 2.5-in Hot-swap Slim DVD Size Drive Kit with Status LED
Hot-Swap Drive Bays   2.5" HDD Tray (DVD Slot)	MCP-220-81504-0N	-	12G 2.5-in Hot-swap Slim DVD Size Drive Kit with Status LED
+	MCP-220-81506-0N		+
Hot-Swap Drive Bays   2.5" HDD Tray (FDD Slot)	CBL-SAST-0654 (data) x2		Slim DVD Size Drive Kit w/Status LED
	CBL-0210L (PWR)		
	CBL-0099 (PWR)		
	CBL-0161L (Y-cable)		
	CBL-PWEX-0702 (PWD)		
TPM	AOM-TPM-9665V	-	Vertical TPM with Infineon 9655 TCG 1.2
	AOM-TPM-9665V	-	AOM-TPM-9665V using SLB9665 Chipset supporting TPM2.0,RoHS/REACH
FAN	FAN-0154L4	2	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,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)

