

# SuperServer 5019S-MR



## Integrated Board



## Super X11SSH-F

Views: | [Angled View](#) | [Top View](#) |  
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## Key Applications

**HA, Web hosting, File/Print  
Mission-Critical, Light load VM**

## Key Features

1. Single Socket H4 (LGA 1151) supports Intel® Xeon® processor E3-1200 v6/v5, Intel® 7th/6th Gen. Core™ i3 series
2. Intel® C236 chipset
3. 4 Hot-swap 3.5" SATA3 bays w/ RAID
4. Up to 64GB Unbuffered ECC UDIMM DDR4 2400MHz; 4 DIMM slots
5. 1 PCI-E 3.0 x8 (in x16) AOC slot
6. 2 GbE ports with Intel® i210-AT
7. Integrated IPMI 2.0 and KVM with Dedicated LAN
8. 1 VGA, 2 COM, 4 USB 3.0, 2 USB 2.0
9. 400W Redundant Platinum Power Supplies w/ BBP® option

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

# Specifications

## Product SKUs

**SYS-5019S-MR** ■ SuperServer 5019S-MR (Black)

## Motherboard

**Super X11SSH-F**

## Processor

**CPU** ■ Single Socket H4 (LGA 1151) supports:  
 ■ Intel® Xeon® processor E3-1200 v6/v5,  
 Intel® 7th/6th Gen Core™ i3  
 ■ CPU TDP up to 80W

**Note** BIOS version 2.0 or above is required to support Intel® Xeon® Processor E3-1200 v6 series or 7th Generation Intel® Core™ Processors

## System Memory

**Memory Capacity** ■ 4x 288-pin DDR4 DIMM slots  
 ■ Up to 64GB DDR4 ECC UDIMM

**Memory Type** ■ 2400/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit, 288-pin (UDIMM) gold-plated DIMMs

**DIMM Sizes** ■ 16GB, 8GB, 4GB

**Memory Voltage** ■ 1.2 V

**Error Detection** ■ Corrects single-bit errors  
 ■ Detects double-bit errors (using ECC memory)

## On-Board Devices

**Chipset** ■ Intel® C236 chipset

**SATA** ■ SATA3 (6Gbps) via C236 controller  
 ■ RAID 0, 1, 5, 10 support

**IPMI** ■ Support for Intelligent Platform Management Interface v.2.0  
 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support  
 ■ ASPEED AST2400 BMC

**Network Controllers** ■ Dual Intel® I210-AT Gigabit Ethernet LAN ports  
 ■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output

**Video** ■ ASPEED AST2400 BMC

## Input / Output

**SATA** ■ 8 SATA3 (6Gbps) ports

**LAN** ■ 2 RJ45 Gigabit Ethernet LAN ports  
 ■ 1 RJ45 Dedicated IPMI LAN port

**USB** ■ 5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)  
 ■ 6 USB 2.0 ports (2 rear + 4 headers)

**Video** ■ 1 VGA port

**Serial Port / Header** ■ 2 COM ports (1 rear, 1 front)

## Chassis

**Form Factor** ■ 1U Rackmount

**Model** ■ **CSE-813MFTQC-R407CB**

## Dimensions and Weight

**Height** ■ 1.7" (43mm)

**Width** ■ 17.2" (437mm)

**Depth** ■ 19.85" (503mm)

**Package** ■ 8.5" (H) x 24" (W) x 29.5" (D)

**Weight** ■ Gross Weight: 33 lbs (15.0 kg)  
 ■ Net Weight: 20 lbs (9.1 kg)

**Available Colors** ■ Black

## Front Panel

**Buttons** ■ Power On/Off button  
 ■ System Reset button

**LEDs** ■ Power LED  
 ■ Hard drive activity LED  
 ■ 2 Network activity LEDs  
 ■ System Information LED

## Expansion Slots

**PCI-Express** ■ 1 PCI-E 3.0 x8 (in x16) AOC slot

**M.2** ■ 1x M.2 Interface: PCI-E 3.0 x2  
 ■ Form Factor: 2280  
 ■ Key: M-Key  
 ■ Double Height Connector

## 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

SAS/SATA HDD Backplane  
 (SAS support requires optional SAS controller)

## System Cooling

**Fans** ■ 4x 40x28mm 4-pin PWM Cooling Fans  
 ■ Optional 1x 40x28mm PWM fan

## 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)

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<b>SuperDOM</b>	<ul style="list-style-type: none"> <li>■ 2 <b>SuperDOM</b> (Disk on Module) ports with built-in power</li> </ul>
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**PC Health Monitoring**

<b>Voltage</b>	<ul style="list-style-type: none"> <li>■ Monitors for CPU Cores, +3.3V, +5V, +12V, +5V Standby, VBAT, HT, Memory, Chipset Voltages.</li> </ul>
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<b>FAN</b>	<ul style="list-style-type: none"> <li>■ Total of 5 fan headers supporting up to 5 fans</li> <li>■ 4 fans with tachometer status monitoring</li> <li>■ Status monitor for speed control</li> <li>■ Status monitor for on/off control</li> <li>■ Low noise fan 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>■ I<sup>2</sup>C temperature sensing logic</li> <li>■ Thermal Monitor 2 (TM2) support</li> <li>■ PECI</li> </ul>
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<b>LED</b>	<ul style="list-style-type: none"> <li>■ System Information LED</li> <li>■ Suspend static indicator LED</li> <li>■ UID/Remote UID</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> <li>■ RoHS, Halogen Free</li> </ul>
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<b>+12V</b>	<ul style="list-style-type: none"> <li>■ Max: 33A / Min: 0.5A</li> </ul>
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<b>+5V sb</b>	<ul style="list-style-type: none"> <li>■ Max: 3A / Min: 0A</li> </ul>
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<b>Output Type</b>	<ul style="list-style-type: none"> <li>■ Gold Finger Connector Mating with Molex 45984-4343</li> </ul>
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<b>Certification</b>	 <b>Platinum Level Certified</b> [ <a href="#">Test Report</a> ]
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**System BIOS**

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>■ 8MB SPI Flash EEPROM with AMI BIOS</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 / Chassis</b>	MBD-X11SSH-F	1	Super X11SSH-F Motherboard
	CSE-813MFTQC-R407CB	1	1U Chassis
<b>Backplane</b>	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5
<b>Cable 1</b>	CBL-0186L	1	SATA,INT,ROUND,SET OF 4,ST-RA 56/45.5/35/23CM,26AWG
<b>Cable 2</b>	CBL-CDAT-0661	1	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,40CM,28AWG
<b>Parts</b>	MCP-120-00031-0N	1	Riser card bracket for SC812,813,813M,815,111,113,113M
<b>Drive Tray(s)</b>	MCP-220-00129-0B	1	Black 2x USB3.0/COM port tray in slim FDD bay
<b>Air Shroud</b>	MCP-310-19007-0N	1	SC811/SC512L/SC512F/SC813M/SC113M/SC513L-410B/SC513L-420B/SC513F, UP X9SRE/I, X9 Mylar Air Shroud, 12"x9.6" MB
<b>Manual</b>	MNL-1779-QRG	1	5019S-M/MR,QRG,HF,RoHS/REACH
<b>Riser Card</b>	RSC-RR1U-E16	1	RSC-RR1U-E16 with PIC-E x16 output
<b>Heatsink / Retention</b>	SNK-P0046P	1	1U PASSIVE CPU HS FOR INTEL LGA1156
<b>Power Supply</b>	PWS-407P-1R	2	AC and DC 240V Input, 400W, Platinum Level, Redundancy power supply meet PMBus Revision 1.2 requirement,RoHS/REACH
<b>FAN 1</b>	FAN-0154L4	4	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH

### Optional Parts List

	Part Number	Qty	Description
<b>3.5" to 2.5" Converter Tray</b>	MCP-220-00043-0N	-	Black Hot-swap Gen-4 2.5" to 3.5" HDD tray
<b>DVD-ROM / DVD-RW</b>	DVM-TEAC-DVD-SBT5	1	TEAC slim DVD-ROM SATA drive
	DVM-PLDS-DVDRW-SBT5	1	PHILIPS slim DVD-RW SATA drive
<b>DVD-ROM Accessory</b>	MCP-220-81502-0N	1	Slim SATA DVD mounting kit
<b>Internal 2.5" HDD Tray (FDD slot)</b>	MCP-220-83601-0B	1	Black FDD dummy tray support 1x 2.5" slim HDD
<b>Internal 2.5" HDD Tray (DVD slot)</b>	MCP-290-00036-0B	1	Black DVD dummy tray support 1x 2.5" slim HDD
<b>Cable for internal HDD</b>	CBL-0484L	2	55cm 30AWG SATA straight to straight cable
	CBI-0289L	1	Y split, big 4 pin to two RA SATA power extension 30cm
<b>Hot-swap 2.5" kit (FDD slot)</b>	MCP-220-81504-0N	1	Single slim 2.5" SAS3 (12Gb/s) hot swap in slim FDD form factor
<b>Hot-swap 2.5" kit (DVD slot)</b>	MCP-220-81506-0N	1	Single slim 2.5" SAS3 (12Gb/s) hot swap in slim DVD form factor
<b>Cooling Fan</b>	FAN-0154L4	-	40x40x28mm 22.5K RPM, SC813MF Middle Cooling Fan
<b>Storage Controller card &amp; cable</b>	AOC-S3108L-H8iR & 1x CBL-SAST-0811	-	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8iR-16DD & 1x CBL-SAST-0811	-	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, 16HDD RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i & 1x CBL-SAST-0811	-	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 63HDD, RAID 0, 1, 10
	AOC-S3008L-L8e & 1x CBL-SAST-0811	-	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD HBA
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<b>Network Card(s)</b>	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350-AM2
	AOC-SGP-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STGN-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
	AOC-STGF-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel X710-BM2
	AOC-STG-B4S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STGS-i2T	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X550-AT2
	AOC-S25G-b2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Broadcom BCM57414
	AOC-S25G-m2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Mellanox CX-4 LX
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<b>Front Bezels</b>	CSE-PTFB-813LB	-	Black front bezels
	CSE-PTFB-813-02B	-	Black Front Bezel w/ Round Venting Holes

<b>TPM security module</b>	<a href="#">AOM-TPM-9665V</a>	1	TPM 2.0, vertical form factor
	<a href="#">AOM-TPM-9655V</a>	1	TPM 1.2, vertical form factor
<b>Global Services &amp; Support</b>	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
<b>Software</b>	<a href="#">SFT-OOB-LIC</a> • <a href="#">eStore</a>	1	OOB Management Package (per node license)
<b>Software</b>	<a href="#">SFT-DCMS-Single</a>	1	DataCenter Management Package (per node license)