

# SuperServer 5019S-M2



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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 Applications

- Embedded Security and Surveillance
- Appliance Server, Secure Storage
- Rack Workstation

### Key Features

- Single Socket H4 (LGA 1151) supports Intel® Xeon® processor E3-1200 v6/v5, Intel® 7th/6th Gen. Core™ i7/i5/i3, Intel® Celeron® and Intel® Pentium®
- Intel® C236 chipset
- 4 Hot-swap 3.5" SATA3 bays, Intel RST
- Up to 64GB Unbuffered ECC/Non-ECC UDIMM DDR4 2400MHz; 4 DIMM slots
- 1 PCI-E 3.0 x16 slot
- 1 GbE LAN w/ Intel® i210-AT, 1 GbE LAN w/ Intel® PHY i219LM
- Integrated IPMI 2.0 and KVM with Dedicated LAN
- 1 VGA, 1 COM, 4 USB 3.0, 2 USB 2.0
- 350W Platinum Level Power Supply

## Specifications ^

### Product SKUs

**SYS-5019S-M2** SuperServer 5019S-M2 (Black)

### Motherboard

#### Super X11SSZ-F

### Processor

- CPU** Single Socket H4 (LGA 1151) supports: Intel® Xeon® processor E3-1200 v6/v5, Intel® 7th/6th Gen Core™ i7/i5/i3, Intel® Pentium®, Intel® Celeron® processors 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/Non-ECC UDIMM
- Memory Type** 2400/2133/1866/1600MHz ECC/Non-ECC DDR4 SDRAM 72-bit, 288-pin (UDIMM) gold-plated DIMMs
- DIMM Sizes** 16GB, 8GB, 4GB
- Memory Voltage** 1.2 V

### On-Board Devices

- Chipset** Intel® C236 chipset
- SATA** 4x SATA3 (6Gbps) via Intel® 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** Intel® PHY i219LM + Intel® i210AT Gigabit Ethernet LAN Controllers  
Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
- Audio** RealTek ALC 888S High Definition Audio
- Video** ASPEED AST2400 BMC

### Input / Output

- SATA** 4 SATA3 (6Gbps) ports
- LAN** 2 RJ45 Gigabit Ethernet LAN ports  
1 RJ45 Dedicated IPMI LAN port
- USB** 4 USB 3.0 ports (2 rear + 2 headers)  
9 USB 2.0 ports (2 rear + 6 headers + 1 Type A)
- Audio** Front panel header
- Video/Display** 2 DP (Display Port), 1 DVI-I from Intel® HD Graphics, 1 VGA from AST2400  
3 Independent Displays from Processor Graphics, VGA is from AST2400 for BMC KVM
- Serial Port / Header** 2 COM ports (1 front, 1 header)

### PC Health Monitoring

- Voltage** Monitors for CPU Cores, +3.3V, +5V, +12V, +5V Standby, VBAT, HT, Memory, Chipset Voltages.
- FAN** Total of 6 fan headers supporting up to 6 fans  
4 fans with tachometer status monitoring  
Status monitor for speed control  
Status monitor for on/off control  
Low noise fan speed control  
Pulse Width Modulated (PWM) fan connectors
- Temperature** Monitoring for CPU and chassis environment  
CPU thermal trip support  
I<sup>2</sup>C temperature sensing logic  
Thermal Monitor 2 (TM2) support  
PECI
- LED** System Information LED  
Suspend static indicator LED  
UID/Remote UID
- Other Features** Chassis intrusion detection  
Chassis intrusion header  
RoHS, Halogen Free

### Chassis

**Form Factor** 1U Rackmount

**Model** [CSE-813MFTQC-350CB](#)

### Dimensions and Weight

- Height** 1.7" (43mm)
- Width** 17.2" (437mm)
- Depth** 19.85" (503mm)
- Package** 8.5" (H) x 24" (W) x 29.7" (D)
- Weight** Gross Weight: 30.4 lbs (13.8 kg)  
Net Weight: 17.6 lbs (8 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 x16 slot

### Drive Bays

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

### Backplane

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

### System Cooling

**Fans** 4x 4cm internal fans

### Power Supply

350W AC power supply w/ PFC

- AC Voltage** 100-240 V, 50-60 Hz, 5.0-2.5 Amp
- +5V** Max.: 15 Amp  
Min.: 0.2 Amp
- +5V standby** Max.: 3 Amp  
Min.: 0 Amp
- +12V** Max.: 29 Amp  
Min.: 0.5 Amp
- 12V** Max.: 0.2 Amp  
Min.: 0 Amp
- +3.3V** Max.: 12 Amp  
Min.: 0.2 Amp

**Certification** **Platinum Level Certified**  
[\[ Test Report \]](#)

### System BIOS

**BIOS Type** 8MB SPI Flash EEPROM with AMI BIOS

### Operating Environment / Compliance

- RoHS** RoHS Compliant
- Environmental Spec.** 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)

## Parts List ^

### Parts List - (Items Included)

|                              | Part Number        | Qty | Description  |
|------------------------------|--------------------|-----|--|
| <b>Motherboard / Chassis</b> | MBD-X11SSZ-F       | 1   | Super X11SSZ-F Motherboard   |
|                              | CSE-813MFTQC-350CB | 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>Parts</b>                 | MCP-260-00094-0N   | 1   | 1U I/O Shield for X11SSZ with EMI Gasket,RoHS/REACH  |
| <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-1821-QRG       | 1   | 5019S-M2 QRG   |
| <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-350-1H         | 1   | 1U Single AC-DC 350W Platinum Level, multiple output power supply (180mm)                                      |
| <b>FAN 1</b>                 | FAN-0147L4         | 4   | 40x40x28 mm, 17.5K RPM, SC813MTS Middle Cooling Fan,RoHS/REACH,PBF   |

### 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-SBT5DVM-PLDS-DVDRW-SBT5   | 11  | TEAC slim DVD-ROM SATA drivePHILPS slim DVD-RW SATA drive   |
| <b>DVD-ROM Accessory</b>                   | CDM-USATA-GCBL-0341L   | 11  | Mini-SATA to USB adapter for slim DVD70CM, INTERNAL USB CABLE FOR SLIM USB DVD ROM  |
| <b>Cooling Fan</b>                         | FAN0147L4  | -   | 40x40x28 mm, 17.5K RPM, SC813MTS Middle Cooling Fan,RoHS/REACH,PBF  |
| <b>Storage Controller card &amp; cable</b> | AOC-S3108L-H8iR<br>& 1x CBL-SAST-0811 AOC-S3108L-H8iR-16DD<br>& 1x CBL-SAST-0811 AOC-S3008L-L8i<br>& 1x CBL-SAST-0811 AOC-S3008L-L8e<br>& 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 Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, 16HDD RAID controller, RAID 0, 1, 5, 6, 10, 50, 60 Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 63HDD, RAID 0, 1, 10 Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD HBA |
| <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-STGS-i2T   | -   | Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X550-AT2  |
|  | AOC-S25G-b2S<br>AOC-S25G-m2S   | -   | Standard LP, 2x 25GbE SFP28, PCI-E x8, Broadcom BCM57414<br>Standard LP, 2x 25GbE SFP28, PCI-E x8, Mellanox CX-4 LX   |
| <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>                 | AOM-TPM-9665VAOM-TPM-9655V   | 11  | TPM 2.0, vertical form factorTPM 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   |

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