

# SuperServer 5039MS-H8TRF



## Key Features (per node)

- Cloud Computing
- Web Cache
- Web Hosting, VM
- Social Networking

1. Single socket H4 (LGA 1151) supports Intel® Xeon® processor E3-1200 v5, Intel® 6th Gen. Core™ i3 series, Intel® Celeron® and Intel® Pentium®
2. 2x 3.5" SATA3 by default; 2x 2.5" SATA3 HDDs w/ Optional kits
3. Up to 64GB ECC UDIMM DDR4-2133MHz in 4 sockets
4. 2x GbE LAN ports via Intel i350, 1x dedicated LAN for IPMI Remote Management
5. 1x PCI-E 3.0 x8 and 1x Micro-LP
6. 2x USB 2.0, 1x VGA, 1x COM port, (with KVM dongle)
7. 1x USB 3.0 (Type A), 1x SATA DOM
8. 4x 8cm heavy duty hot-swap fans with optimal cooling zone (per system)
9. 1600W Redundant power supplies Titanium Level Certified (per system)

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

## Specifications

### Product SKUs

SuperServer ■ SYS-5039MS-H8TRF (Black)

### Motherboard

Motherboard ■ MBD-X11SSD-F

### Processor/Cache

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

### System Memory (per node)

Memory Capacity ■ 4x 288-pin DDR4 DIMM slots  
 ■ Supports up to 64 GB DDR4 ECC Un-Buffered memory (UDIMM)

### Chassis

Form Factor ■ 3U  
 Model ■ CSE-938BH-R1K68B

### Dimensions and Weight

Height ■ 5.21" (132.5 mm)  
 Width ■ 17.26" (438.4 mm)  
 Depth ■ 23.2" (589 mm)  
 Package ■ 11.65" (H) x 26.26" (W) x 34" (D)  
 Weight ■ Net Weight: 62.2 lbs (28.21 kg)  
 ■ Gross Weight: 88 lbs (39.92 kg)  
 Color ■ Black

### Front Panel

Buttons ■ Power On/Off button

|                 |  |
|-----------------|--|
| Memory Type     | <ul style="list-style-type: none"> <li>2133MHz ECC DDR4 SDRAM 72-bit, 288-pin gold-plated UDIMMs</li> </ul>                        |
| DIMM Sizes      | <ul style="list-style-type: none"> <li>16GB, 8GB, 4GB</li> </ul>   |
| Memory Voltage  | <ul style="list-style-type: none"> <li>1.2 V</li> </ul>  |
| Error Detection | <ul style="list-style-type: none"> <li>Corrects single-bit errors</li> <li>Detects double-bit errors (using ECC memory)</li> </ul> |

#### Expansion Slots (per node)

|             |  |
|-------------|--|
| PCI-Express | <ul style="list-style-type: none"> <li>1x PCI-E 3.0 x8 Low-profile slot</li> <li>1x Micro-LP for Dual GbE (pre-installed); 10GbE or IB AOC optional</li> </ul> |
|-------------|--|

#### Network Devices (per node)

|              |   |
|--------------|---|
| Micro-LP NIC | <ul style="list-style-type: none"> <li>Intel® i350 GbE controller</li> <li>Dual RJ-45 connectors</li> <li>Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>Intel® I/O Acceleration Technology (I/O AT)</li> <li><a href="#">MicroLP Adapter Matrix</a> (Networking options)</li> </ul> |
|--------------|---|

#### On-Board Devices (per node)

|          |  |
|----------|--|
| Chipset  | <ul style="list-style-type: none"> <li>Intel® C236 chipset</li> </ul>  |
| SATA     | <ul style="list-style-type: none"> <li>SATA3 (6Gbps) via C236 controller</li> </ul>  |
| IPMI     | <ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM over LAN support</li> <li>ASPEED AST2400 BMC</li> </ul> |
| Headers  | <ul style="list-style-type: none"> <li>1x Type A USB 3.0</li> </ul>  |
| Graphics | <ul style="list-style-type: none"> <li>ASPEED AST2400 Graphics (BMC with Graphic controller)</li> </ul>  |

#### Input / Output (per node)

|      |   |
|------|---|
| SATA | <ul style="list-style-type: none"> <li>2x SATA3 (6Gbps) ports</li> </ul>  |
| LAN  | <ul style="list-style-type: none"> <li>2x RJ45 Gigabit Ethernet LAN ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul> |
| DOM  | <ul style="list-style-type: none"> <li>SATA DOM (Disk on Module) power connector support</li> </ul>                           |
| KVM  | <ul style="list-style-type: none"> <li>1x VGA, 1x COM and 2x USB 2.0 (with KVM dongle)</li> </ul>                             |

#### System BIOS

|               |   |
|---------------|---|
| BIOS Type     | <ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>  |
| BIOS Features | <ul style="list-style-type: none"> <li>DMI 2.3</li> <li>ACPI 1.0 / 2.0</li> <li>USB Keyboard support</li> <li>SMBIOS 2.3</li> </ul> |

#### Rear Window (each node)

|        |   |
|--------|---|
| Switch | <ul style="list-style-type: none"> <li>Power / UID</li> </ul> |
|--------|---|

|      |  |
|------|--|
| LEDs | <ul style="list-style-type: none"> <li>Power LED</li> <li>Node status LED</li> </ul> |
|------|--|

#### Drive Bays (per node)

|          |   |
|----------|---|
| Internal | <ul style="list-style-type: none"> <li>2x 3.5" Hot-swap SATA3 (6Gbps) HDDs per node (or 2x 2.5" SATA3 with optional kits); up to 16 HDDs total</li> <li>Enterprise SATA HDD only recommended</li> </ul> |
|----------|---|

#### System Cooling

|      |  |
|------|--|
| Fans | <ul style="list-style-type: none"> <li>4x 8cm Heavy duty fans with optimal cooling zone</li> </ul> |
|------|--|

#### Power Supply (76mm Width)

|   |   |
|---|---|
| 1600W Redundant Power Supplies with PMBus |   |
| Total Output Power                        | <ul style="list-style-type: none"> <li>800W/1600W</li> </ul>  |
| Dimension (W x H x L)                     | <ul style="list-style-type: none"> <li>76 x 40.4 x 336 mm</li> </ul>  |
| Input                                     | <ul style="list-style-type: none"> <li>100-140Vac / 10-7A / 50-60Hz</li> <li>180-240Vac / 11-8A / 50-60Hz</li> </ul>        |
| +12V                                      | <ul style="list-style-type: none"> <li>Max: 66A / Min: 0A (100-127Vac)</li> <li>Max: 133A / Min: 0A (200-240Vac)</li> </ul> |
| +5Vsb                                     | <ul style="list-style-type: none"> <li>Max: 1A / Min: 0A</li> </ul>   |
| Output Type                               | <ul style="list-style-type: none"> <li>27 Pairs Gold Finger Connector</li> </ul>  |

Certification



UL/cUL/CB/BSMI/CE/CCC Titanium Level [ [Test Report](#) ]

#### PC Health Monitoring

|             |   |
|-------------|---|
| CPU         | <ul style="list-style-type: none"> <li>Monitors for CPU Cores, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages.</li> <li>3-Phase-switching voltage regulator with auto-sense from 0.5V-2.3V</li> </ul> |
| FAN         | <ul style="list-style-type: none"> <li>Cooling zone</li> </ul>  |
| Temperature | <ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> </ul>  |

#### Operating Environment / Compliance

|                     |   |
|---------------------|---|
| RoHS                | <ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>  |
| Environmental Spec. | <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> |

## Parts List

| Parts List - (Items Included) |                  |     |   |
|-------------------------------|------------------|-----|---|
|                               | Part Number      | Qty | Description   |
| <b>Motherboard / Chassis</b>  | MBD-X11SSD-F     | 8   | Super X11SSD-F Motherboard                                      |
|                               | CSE-938BH-R1K68B | 1   | 3U Chassis  |
| <b>Add-on Card / Module</b>   | AOC-CGP-I2-P     | 8   | AOC-CGP-I2-O-P  |
| <b>Air Shroud</b>             | MCP-310-93804-0B | 8   | 938 mylar airshroud for X10SLD-F (X9 compatible),RoHS/REACH,PBF |
| <b>Backplane</b>              | BPN-SAS-938H     | 1   | Backplane for SC938, 16x 3.5" SAS/SATA                          |
| <b>Cable 1</b>                | CBL-0218L        | 1   | 11.5CM KVM/SUVI 36 PIN TO 9 PIN/15 PIN 2USB, 30/28AWG           |
| <b>Label</b>                  | LBL-0108         | 1   | CAUTION LABEL FOR REDUNDANT PWR SYSTEMS                         |
| <b>Riser Card</b>             | RSC-RR1U-E8      | 8   | RSC-RR1U-E8 (Rev 4.00)  |
| <b>Heatsink / Retention</b>   | SNK-P0047PS+     | 8   | Customized Passive CPU Heat Sink for Micro Cloud Series Servers |
| <b>Power Supply</b>           | PWS-1K68A-1R     | 2   | 1U 1600W Redundant Titanium Power Supply 76mm width 27Pair,PBF  |

| Optional Parts List                      |   |     |  |
|--|---|-----|--|
|  | Part Number   | Qty | Description  |
| <b>Cable</b>                             | CBL-SAST-0664<br>CBL-0118L-03<br>CBL-0476L  | -   | For AOC-S3008L-L8i/AOC-S3108L-H8iR<br>For AOC-S2308L-L8i<br>For AOC-SAS2LP-H8iR  |
| <b>Storage Control Card and Cable(s)</b> | AOC-S3008L-L8i<br>AOC-S3108L-H8iR<br>AOC-S2308L-L8i<br>AOC-SAS2LP-H8iR  | -   | Std LP, 8 internal ports, 12Gb/s per port- Gen3, RAID 0/1/10 (requires heatsink SNK-P0047PSM)<br>Std LP, 8 internal ports, 12Gb/s per port- Gen3, RAID 0/1/5/6/10/50/60 (requires heatsink SNK-P0047PSM)<br>Std LP, 8 internal ports, 6Gb/s per port- Gen3, RAID 0/1/10<br>Std LP, 8 internal ports, 6Gb/s per port- Gen3, RAID 0/1/5/6/10/50/60<br>NOTE: SYS-5039MS-H8TRF is designed to support max 6GB/s  |
| <b>Network Card(s)</b>                   | AOC-CGP-i2<br>AOC-CTGS-i2T<br>AOC-CTG-i1S<br>AOC-CTG-i2S<br>AOC-CIBF-m1<br>AOC-CIBQ-m1<br>AOC-S40G-i2Q<br>AOC-SGP-i2<br>AOC-SGP-i4<br>AOC-STG-i2<br>AOC-STG-i2T<br>AOC-STGN-i1S<br>AOC-STGN-i2S<br>AOC-STG-b4S<br>AOC-STG-i4S | -   | MicroLP, 2x 1GbE, PCI-E 2.0 x4, Intel® i350<br>MicroLP, 2x 10GbE Base-T, PCI-E 3.0 x4, Intel® X550<br>MicroLP, 1 x 10GbE SFP+, PCI-E 2.0 x8, Intel® 82599EN<br>MicroLP, 2 x 10GbE SFP+, PCI-E 2.0 x8, Intel® 82599EN<br>MicroLP, 1x QSFP PCI-E 3.0 x8, Mellanox® ConnectX-3 FDR<br>MicroLP, 1x QSFP PCI-E 3.0 x8, Mellanox® ConnectX-3 QDR<br>Standard LP 2-port 40GbE controller, Intel Fortville XL710<br>Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350AM2<br>Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350<br>Standard LP, 2x 10GbE CX4, PCI-E x8, Intel 82598EB<br>Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540<br>Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel 82599EN<br>Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES<br>Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S<br>Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel XL710-AM1 |
| <b>Drive Tray(s)</b>                     | MCP-220-93801-0B  | -   | Black gen 3rd hot-swap 2.5" HDD tray   |
| <b>Onsite Service Program</b>            | <a href="#">OS4HR3/2/1</a>  | -   | 3/2/1-year onsite 24x7x4 service   |
| <b>Onsite Service Program</b>            | <a href="#">OSNBD3/2/1</a>  | -   | 3/2/1-year onsite NBD service  |
| <b>Software</b>                          | SFT-OOB-LIC   | 1   | OOB Management Package (per node license)  |
| <b>Software</b>                          | SFT-DCMS-Single   | 1   | DataCenter Management Package (per node license)   |