

# SuperServer 5019P-MTR



## Integrated Board



## Super X11SPi-TF

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

- ❑ **Web Hosting, VM**
- ❑ **Application and Data Serving**
- ❑ **Database Applications**

1. Single Socket P (LGA 3647) supports 2nd Gen. Intel® Xeon® Scalable processor (Cascade Lake/Skylake)<sup>‡</sup>
2. 8 DIMMs; up to 2TB 3DS ECC DDR4-2933MHz<sup>†</sup> RDIMM/LRDIMM
3. 1 PCI-E 3.0 x16 slot
4. 4 Hot-swap 3.5" SATA3 bays w/ RAID
5. 2x 10GBase-T ports with Intel X722 + X557
6. Integrated IPMI 2.0 and KVM with Dedicated LAN
7. 1 VGA, 2 COM, 4 USB 3.0, 2 USB 2.0
8. 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-5019P-MTR** ■ SuperServer 5019P-MTR (**Black**)

## Motherboard

### Super X11SPi-TF

## Processor/Cache

- CPU** ■ Single Socket P (LGA 3647)
  - 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)‡
  - Support CPU TDP 70-205W

- Cores** ■ Up to 28 Cores

- Note** ‡ BIOS version 3.0b or above is required to support 2nd Gen. Intel® Xeon® Scalable processors

## System Memory

- Memory Capacity** ■ 8 DIMM slots
  - Up to 2TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM

- Memory Type** ■ 2933†/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM

- Note** † 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro
  - †† Cascade Lake only. Contact your Supermicro sales rep for more info.

## On-Board Devices

- Chipset** ■ Intel® C622 chipset

- SATA** ■ SATA3 (6Gbps) via C622 controller
  - RAID 0, 1, 5, 10 support

- Network Controllers** ■ Dual 10GBase-T LAN with Intel® X722 + X557

- 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

- SATA** ■ 10 SATA3 (6Gbps) ports

- LAN** ■ 2 RJ45 10GBase-T 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)

- SuperDOM** ■ 2 SuperDOM (Disk on Module) ports with built-in power

## System BIOS

## 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: 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
  - Network activity LEDs
  - System Information LED

## Expansion Slots

- PCI-Express** ■ 1 PCI-E 3.0 x16 slot

- M.2** ■ 1x M.2 Interface: PCI-E 3.0 x4 and SATA
  - Form Factor: 2280, 22110
  - Key: M-Key
  - Double Height Connector

## Drive Bays

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

## Peripheral Drives

- Optional** ■ Optional slim optical device bay, optional FDD/USB bay

## System Cooling

- Fans** ■ 4x 40mm PWM fans
  - Optional 2 PWM fans for AOC

## 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

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

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**Management**

- Software**
- Intel® Node Manager
  - IPMI 2.0
  - KVM with dedicated LAN
  - NMI
  - SPM, SUM
  - SuperDoctor® 5
  - Watch Dog
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- Power Configurations**
- ACPI Power Management
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**PC Health Monitoring**

- CPU**
- Monitors for CPU Cores, Chipset Voltages, Memory.
  - 4+1 Phase-switching voltage regulator
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- FAN**
- Fans with tachometer monitoring
  - Status monitor for speed control
  - Pulse Width Modulated (PWM) fan connectors
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- Temperature**
- Monitoring for CPU and chassis environment
  - Thermal Control for fan connectors
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**Certification**



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

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**Operating Environment / Compliance**

- RoHS**
- RoHS Compliant
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- 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)
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# Parts List

## Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X11SPI-TF	1	Super X11SPI-TF 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-1920-QRG	1	5019P-MT/MTR, 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-P0067PS	1	1U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
<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>2.5" to 3.5" 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	
	CBL-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	
<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	

<b>Front Bezels</b>	<u>CSE-PTFB-813LB</u>	-	Black front bezels
	<u>CSE-PTFB-813-02B</u>	-	Black Front Bezel w / Round Venting Holes
<b>TPM security module</b>	<u>AOM-TPM-9670V</u>	1	TPM 2.0, vertical form factor
	<u>AOM-TPM-9671V</u>	1	TPM 1.2, vertical form factor
<b>Global Services &amp; Support</b>	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	3/2/1-year onsite NBD service
<b>Software</b>	<u>SFT-OOB-LIC</u> • <i>eStore</i>	1	OOB Management Package (per node license)
<b>Software</b>	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)