

SuperServer 5019P-MT



Integrated Board



Super X11SPi-TF

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

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

Key Features

1. Single Socket P (LGA 3647) supports 2nd Gen Intel® Xeon® Scalable processor (Cascade Lake/Skylake)[†]
2. 8 DIMMs; up to 2TB 3DS ECC DDR4-2933MHz[†] 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. 350W High-efficiency Power Supply **Platinum Level Certified**

Specifications

Product SKUs

SYS-5019P-MT ■ SuperServer 5019P-MT (Black)

Motherboard

Super X11SPI-TF

Processor

CPU ■ Single Socket P (LGA 3647)
 ■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors[‡]
 ■ Support CPU TDP 70-205W*

Cores ■ Up to 28 Cores

Note * Certain high frequency optimized CPU are not supported, such as Intel Gold 6242R, 6244, 6246R, 6248R, 6250, 6254, 6256 and 6258R

* Certain CPUs with high TDP may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information.

Note ‡ BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

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

Chassis

Form Factor ■ 1U Rackmount

Model ■ **CSE-813MFTQC-350CB2**

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 / Storage

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

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

USB	<ul style="list-style-type: none"> 5 USB 3.0 ports (2 rear + 2 headers + 1 Type A) 6 USB 2.0 ports (2 rear + 4 headers)
Video	<ul style="list-style-type: none"> 1 VGA port
Serial Port / Header	<ul style="list-style-type: none"> 2 COM ports (1 rear, 1 front)
SuperDOM	<ul style="list-style-type: none"> 2 <u>SuperDOM</u> (Disk on Module) ports with built-in power

System BIOS

BIOS Type	<ul style="list-style-type: none"> AMI 32Mb SPI Flash ROM
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Management

Software	<ul style="list-style-type: none"> Intel® Node Manager <u>IPMI 2.0</u> KVM with dedicated LAN NMI <u>SPM, SUM</u> <u>SuperDoctor® 5</u> Watch Dog
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Power Configurations	<ul style="list-style-type: none"> ACPI Power Management
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PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment Thermal Control for fan connectors

Certification



Platinum Level Certified
[[Test Report](#)]

Operating Environment

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 10°C ~ 35°C (50°F ~ 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
Motherboard / Chassis	MBD-X11SPi-TF	1	Super X11SPi-TF Motherboard
	CSE-813MFTQC-350CB2	1	1U Chassis
Backplane	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5
Cable 1	CBL-0186L	1	SATA,INT,ROUND,SET OF 4,ST-RA 56/45.5/35/23CM,26AWG
Cable 2	CBL-CDAT-0661	1	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,40CM,28AWG
Parts	MCP-120-00031-0N	1	Riser card bracket for SC812,813,813M,815,111,113,113M
Drive Tray(s)	MCP-220-00129-0B	1	Black 2x USB3.0/COM port tray in slim FDD bay
Air Shroud	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
Manual	MNL-1920-QRG	1	5019P-MT/MTR, QRG,HF,RoHS/REACH
Riser Card	RSC-RR1U-E16	1	RSC-RR1U-E16 with PIC-E x16 output
Heatsink / Retention	SNK-P0067PS	1	1U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Power Supply	PWS-350-1H	1	1U Single AC-DC 350W Platinum Level, multiple output power supply (180mm)
FAN 1	FAN-0154L4	4	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
3.5" to 2.5" Converter Tray	MCP-220-00043-0N	-	Black Hot-swap Gen-4 2.5" to 3.5" HDD tray
DVD-ROM / DVD-RW	DVM-TEAC-DVD-SBT5	1	TEAC slim DVD-ROM SATA drive
	DVM-PLDS-DVDRW-SBT5	1	PHILIPS slim DVD-RW SATA drive
DVD-ROM Accessory	MCP-220-81502-0N	1	Slim SATA DVD mounting kit
Internal 2.5" HDD Tray (FDD slot)	MCP-220-83601-0B	1	Black FDD dummy tray support 1x 2.5" slim HDD
Internal 2.5" HDD Tray (DVD slot)	MCP-290-00036-0B	1	Black DVD dummy tray support 1x 2.5" slim HDD
Cable for internal HDD	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
Hot-swap 2.5" kit (FDD slot)	MCP-220-81504-0N	1	Single slim 2.5" SAS3 (12Gb/s) hot swap in slim FDD form factor
Hot-swap 2.5" kit (DVD slot)	MCP-220-81506-0N	1	Single slim 2.5" SAS3 (12Gb/s) hot swap in slim DVD form factor
USB/COM port tray (FDD slot)	MCP-220-00129-0B	1	Black 2x USB3.0/COM port tray in slim FDD form factor
Cooling Fan	FAN-0154L4	-	40x40x28mm 22.5K RPM, SC813MF Middle Cooling Fan
Storage Controller card & cable	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
	AOC-S3008L-L8e & 1x CBL-SAST-0811	-	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD HBA
Network Card(s)	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

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