

SuperServer 5019P-MR



Integrated Board



Super X11SPM-F

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

- **Web Hosting, VM**
- **Compact Network Appliance**

1. Single Socket P (LGA 3647) supports 2nd Gen Intel® Xeon® Scalable processor (Cascade Lake/Skylake)[‡]
2. 6 DIMMs; up to 1.5TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
3. 1 PCI-E 3.0 x16 slot (FH, HL)
4. 4 Hot-swap 3.5" SATA3 bays w/ RAID
5. 2x 1GbE with Marvell® 88E1512
6. Integrated IPMI 2.0 and KVM with Dedicated LAN
7. 1 VGA, 1 COM, 2 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-MR	■ SuperServer 5019P-MR (Black)
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Motherboard

Super X11SPM-F

Processor/Cache

CPU	■ Single Socket P (LGA 3647) ■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors[‡] ■ Support CPU TDP 70-165W
Cores	■ Up to 28 Cores
Note	[‡] BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R). Extended thermal solutions may be required to support CPUs higher than 165W TDP, please contact Supermicro Technical Support for additional information.

System Memory

Memory Capacity	■ 6 DIMM slots ■ Up to 1.5TB 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

On-Board Devices

Chipset	■ Intel® C621 chipset
SATA	■ SATA3 (6Gbps) via C621 controller ■ RAID 0, 1, 5, 10 support
Network Controllers	■ Dual Gigabit Ethernet LAN with Marvell® 88E1512
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	■ 12 SATA3 (6Gbps) ports
LAN	■ 2 RJ45 1GbE 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 header)
SuperDOM	■ 2 <u>SuperDOM</u> (Disk on Module) ports with built-in power

Chassis

Form Factor	■ 1U Rackmount
Model	■ <u>CSE-813MFTQC-R407CB</u>

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 (FH, HL)
M.2	■ 1x M.2 Interface: PCI-E 3.0 x4 ■ Form Factor: 2242, 2280 ■ Key: M-Key ■ Double Height Connector

Drive Bays

Hot-swap	■ 4 Hot-swap 3.5" SATA3 drive bays
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Peripheral Drives

Optional	■ 1 Slim DVD-ROM drive ■ 1 USB + COM port tray
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System Cooling

Fans	■ 4x 40x28mm PWM fans ■ Optional 2 fans for AOC cooling
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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

System BIOS

BIOS Type ■ AMI UEFI

Management

Software ■ Intel® Node Manager
 ■ IPMI 2.0
 ■ KVM with dedicated LAN
 ■ NMI
 ■ SPM, SUM
 ■ SuperDoctor® 5
 ■ Watch Dog

Power Configurations ■ ACPI Power Management

PC Health Monitoring

CPU ■ Monitors for CPU Cores, Chipset Voltages, Memory.
 ■ 4+1 Phase-switching voltage regulator

FAN ■ Fans with tachometer monitoring
 ■ Status monitor for speed control
 ■ Pulse Width Modulated (PWM) fan connectors

Temperature ■ Monitoring for CPU and chassis environment
 ■ Thermal Control for fan connectors

Certification



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

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
Motherboard / Chassis	MBD-X11SPM-F	1	Super X11SPM-F Motherboard
	CSE-813MFTQC-R407CB	1	1U Chassis
Backplane	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5
Cable 1	CBL-SAST-0644	1	MINI SAS(RA)-4 SATA(RA),INT,75/75/90/90CM,90CM SB,30AWG
Parts	MCP-120-00031-0N	1	Riser card bracket for SC812,813,813M,815,111,113,113M
Manual	MNL-2008-QRG	1	5019P-M/MR Quick Reference Guide
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-407P-1R	2	AC and DC 240V Input, 400W, Platinum Level, Redundancy power supply meet PMBus Revision 1.2 requirement,RoHS/REACH
FAN 1	FAN-0154L4	4	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
2.5" to 3.5" 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
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	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	3/2/1-year onsite NBD service
Software	<u>SFT-OOB-LIC</u> • <i>eStore</i>	1	OOB Management Package (per node license)
Software	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)