

SuperServer 5019P-MR



Integrated Board



Super X11SPM-F

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

► [Drivers & Utilities](#) ► [BIOS](#) ► [IPMI](#) ► [Tested Memory](#) ► [Tested M.2 List](#) ► [Manuals](#) ► [OS Certification Matrix](#) ► [Quick-References Guide](#) ► [Drive Options](#) ► [Network Card \(AOC\) Matrix](#)

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) |
|---------------------|--------------------------------|

Motherboard

Super X11SPM-F

Processor/Cache

- | | |
|------------|--|
| CPU | ■ Single Socket P (LGA 3647)
■ 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)†
■ Support CPU TDP 70-165W |
|------------|--|

- | | |
|--------------|------------------|
| Cores | ■ Up to 28 Cores |
|--------------|------------------|

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

System Memory

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|------------------------|--|
| Memory Capacity | ■ 6 DIMM slots
■ Up to 1.5TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM |
|------------------------|--|

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|--------------------|---|
| 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 |
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On-Board Devices

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|----------------|-----------------------|
| Chipset | ■ Intel® C621 chipset |
|----------------|-----------------------|

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|-------------|---|
| 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 SuperDOM (Disk on Module) ports with built-in power |
|-----------------|---|

System BIOS

- | | |
|------------------|------------|
| BIOS Type | ■ AMI UEFI |
|------------------|------------|

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

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|----------------|--|
| Buttons | ■ Power On/Off button
■ System Reset button |
|----------------|--|

- | | |
|-------------|---|
| LEDs | ■ Power LED
■ Hard drive activity LED
■ Network activity LEDs
■ System Information LED |
|-------------|---|

Expansion Slots

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|--------------------|---------------------------------|
| PCI-Express | ■ 1 PCI-E 3.0 x16 slot (FH, HL) |
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|------------|--|
| M.2 | ■ 1x M.2 Interface: PCI-E 3.0 x4
■ Form Factor: 2242, 2280
■ Key: M-Key
■ Double Height Connector |
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Drive Bays

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

Peripheral Drives

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

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

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|---------------------------|--------|
| Total Output Power | ■ 400W |
|---------------------------|--------|

- | | |
|------------------------------|----------------------|
| Dimension (W x H x L) | ■ 54.5 x 40 x 220 mm |
|------------------------------|----------------------|

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|--------------|---|
| Input | ■ 100 - 240Vac / 6.0 - 3.0A / 50-60Hz
■ 200 - 240Vdc / 3.4 - 3.2A (CCC Only) |
|--------------|---|

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|-------------|------------------------|
| +12V | ■ Max: 33A / Min: 0.5A |
|-------------|------------------------|

- | | |
|---------------|---------------------|
| +5V sb | ■ Max: 3A / Min: 0A |
|---------------|---------------------|

- | | |
|--------------------|--|
| Output Type | ■ Gold Finger Connector Mating with Molex 45984-4343 |
|--------------------|--|

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]
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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 w ith PIC-E x16 output
Heatsink / Retention	SNK-P0067PS	1	1U Passive CPU Heat Sink for X11 Purley Platform Equipped w ith 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-sw ap 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	PHILPS 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 straigh cable
	CBI-0289L	1	Y split, big 4 pin to tw o RA SATA pow er estension 30cm
Hot-swap 2.5" kit (FDD slot)	MCP-220-81504-0N	1	Single slim 2.5" SAS3 (12Gb/s) hot sw ap 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 sw ap 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	-	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8,
	& 1x CBL-SAST-0811		RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8iR-16DD		Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8,
	& 1x CBL-SAST-0811		16HDD RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i		Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8,
	& 1x CBL-SAST-0811		63HDD, RAID 0, 1, 10
Network Card(s)	AOC-S3008L-L8e	-	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8,
	& 1x CBL-SAST-0811		122HDD HBA
	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
Front Bezels	AOC-S25G-m2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Mellanox CX-4 LX
	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)