

SuperServer 5019P-WT



Integrated Board



Super X11SPW-TF

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Key Features

- ❑ **DB Processing & Storage**
- ❑ **Data Center Applications**
- ❑ **Firewall Applications**

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. 2 PCI-E 3.0 x16 (FHFL) slots, 1 PCI-E 3.0 x8 (LP) slot
4. 4 Hot-swap 3.5" SATA3 drive bays, 1 slim DVD-ROM drive bay
5. 2x 10GBase-T ports with Intel X722 + X557
6. 1 VGA, 2 COM, 2 USB 3.0, 2 USB 2.0
7. 2 SuperDOM (Disk on Module) ports
8. 600W Multi Output Power Supply, **Platinum Level** High-efficiency

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-WT** ■ SuperServer 5019P-WT (Black)

Motherboard

Super X11SPW-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** ■ 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
†† Cascade Lake only. Contact your Supermicro sales rep for more info.

On-Board Devices

- Chipset** ■ Intel® C622 chipset
- SATA** ■ SATA3 (6Gbps); RAID 0, 1, 5, 10
- 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)
■ 7 USB 2.0 ports (2 rear + 5 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 32Mb SPI Flash ROM

Chassis

- Form Factor** ■ 1U Rackmount

- Model** ■ CSE-815TQC-605WB

Dimensions and Weight

- Height** ■ 1.7" (43mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 25.6" (650mm)
- Package** ■ 23.5" (W) x 8.5" (H) x 33.7" (L)
- Weight** ■ Gross Weight: 46 lbs (20.87 kg)
■ Net Weight: 22 lbs (9.98 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
■ Information LED (temp., status)

Expansion Slots

- PCI-Express** ■ 2 PCI-E 3.0 x16 (FHFL) slots
■ 1 PCI-E 3.0 x8 (LP) 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

- DVD-ROM** ■ 1 Slim DVD-ROM drive bay

System Cooling

- Fans** ■ 5 Counter-rotation 40x56mm PWM fans
■ 1 fan for AOC cooling (option)

Power Supply

600W High-Efficiency Power Supply w/PMBus 1.2, PFC, and Digital Switching

- AC Input** ■ 100-240V, 50-60Hz
- DC Output** ■ +3.3V: 15A
■ +5V: 18A
■ +5V standby: 3A
■ +12V: 49A
■ -12V: 0.5A

Certification



Platinum Certified
[Test Report]

Management

Software

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

Power Configurations

- ACPI / APM 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

Operating Environment

RoHS

- RoHS Compliant

Environmental Spec.

- Operating Temperature:
10°C ~ 35°C (50°F ~ 95°F)
- Non-operating Temperature:
-40°C to 60°C (-40°F to 140°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-X11SPW-TF	1	Super X11SPW-TF Motherboard
	CSE-815TQC-605WB	1	1U Chassis
Backplane	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5
Cable 1	CBL-0180L-01	1	SATA,INT,ROUND,SET OF 4,ST-RA 70/59/48/38CM,26AWG
Cable 2	CBL-0296L	1	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
Cable 3	CBL-CDAT-0660	1	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,27CM,28AWG
FAN 1	FAN-0156L4	1	40x40x56 mm 13K-11K RPM Counter-rotating Fan,RoHS/REACH
Manual	MNL-1921-QRG	1	5019P-WT/WTR, QRG,HF,RoHS/REACH
Riser Card	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots
Riser Card	RSC-R1UW-E8R	1	1U RHS WIO Riser card with one PCI-E x8 slot
Heatsink / Retention	SNK-P0067PS	1	1U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Power Supply	PWS-605P-1H	1	1U 600W Multi Output Power Supply Pmbus
Rear Window	MCP-240-00097-0N	1	WIO rear window for SC113,SC116, SC815 Single PWS
FAN	FAN-0156L4	4	40x40x56 mm 13K-11K RPM Counter-rotating 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
	CBL-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-0156L4	-	40x40x56mm 13K-11K RPM Counter-rotating Fan
Storage Controller card & cable	AOC-S3108L-H8iR	-	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8,
	& 1x CBL-SAST-0699		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-0699		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-0699		63HDD, RAID 0, 1, 10
CacheVault	AOC-S3008L-L8e	-	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8,
	& 1x CBL-SAST-0699		122HDD HBA
	BTR-CV3108-1U1		CacheVault for Broadcom 3108 with SuperCap mounting in 1Y 40x56 fan tray
	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05	-	CacheVault for Broadcom 3108 with SuperCap mounting bracket for PCI-E location

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)