

SuperServer 6019P-WTR



Integrated Board



Super X11DDW-L

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 Features

**Web Server, Firewall Apps.
Corporate-Wins, DNS, Print, Login
Gateway, provisioning servers
Compact Network Appliance
Cloud Computing**

1. Dual Socket P (LGA 3647) support
2nd Gen Intel® Xeon® Scalable
processors (Cascade Lake/Skylake)[‡]
2. 12 DIMMs; up to 3TB 3DS ECC
DDR4-2933MHz[†] RDIMM/LRDIMM,
Supports Intel® Optane™ DCPMM^{††}
3. 2 PCI-E 3.0 x16 (FHHL) slots,
1 PCI-E 3.0 x8 (LP) slot,
1 PCI-E 3.0 x16 for Add-on-Module
(Support SAS3 Storage controller),
1 PCI-E 3.0 x4 NVMe M.2 slot
4. 4 Hot-swap 3.5" SAS3/SATA3 drive bays
5. 2 1GbE LAN ports via Intel C621
6. 1 VGA, 4 USB 3.0 (rear)
7. 750W Redundant Power Supplies
Platinum Level High-efficiency

Specifications

Product SKUs

SYS-6019P-WTR ■ SuperServer 6019P-WTR (Black)

Motherboard

Super X11DDW-L

Processor/Cache

CPU ■ Dual Socket P (LGA 3647)
 ■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors[‡],
 Dual UPI up to 10.4GT/s
 ■ Support CPU TDP 70-165W*

Cores ■ Up to 28 Cores

Note * Certain high frequency optimized CPUs within 165W TDP are not supported, such as Intel Gold 6144, 6146, 6244, 6246, 6250 and 6256.

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 ■ 12 DIMM slots
 ■ Up to 3TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
 ■ Supports Intel® Optane™ DCPMM^{††}

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® C621 chipset

SATA ■ SATA3 (6Gbps); RAID 0, 1, 5, 10

Network Controllers ■ Dual LAN with Gigabit Ethernet from C621

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 ■ 4 SATA3 (6 Gbps) ports

LAN ■ 2 RJ45 Gigabit Ethernet ports
 ■ 1 RJ45 Dedicated IPMI LAN port

USB ■ 4 USB 3.0 ports (rear)

Chassis

Form Factor ■ 1U Rackmount

Model ■ **CSE-815TQC-R706WB2**

Dimensions and Weight

Width ■ 17.2" (437mm)

Height ■ 1.7" (43mm)

Depth ■ 25.6" (650mm)

Gross Weight ■ 46 lbs (20.9kg)

Available Colors ■ Black

Front Panel

Buttons ■ Power On/Off button
 ■ UID button

LEDs ■ Power status LED
 ■ HDD activity LED
 ■ Network activity LEDs
 ■ Universal Information (UID) LED

Expansion Slots

PCI-Express ■ 2 PCI-E 3.0 x16 (FHHL) slots
 ■ 1 PCI-E 3.0 x8 (LP) slot
 ■ 1 PCI-E 3.0 x16 for Add-on-Module (AOM)
 ■ 1 PCI-E 3.0 x4 NVMe M.2 slot
(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram and [AOC Support](#) for details.)

Drive Bays

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

Backplane

SAS/SATA HDD Backplane

System Cooling

Fans ■ 4 Counter-rotating 4cm PWM fans

AC/DC240V Input Redundant Power Supply

700W/750W Redundant Power Supplies with PMBus

Total Output Power ■ 700W/750W

Dimension (W x H x L) ■ 54.5 x 40.25 x 320 mm

Input ■ 100 - 140Vac / 8 - 6A / 50-60Hz
 ■ 200 - 240Vac / 4.5 - 3.8A / 50-60Hz
 ■ 200 - 240Vdc / 4.5 - 3.8A (CCC Only)

+12V ■ Max: 58A / Min: 0.5A (100 - 140Vac)
 ■ Max: 62A / Min: 0.5A (200 - 240Vac)
 ■ Max: 62A / Min: 0.5A (200 - 240Vdc) (CB/CCC Only)

+5V sb ■ Max: 3A / Min: 0A

Video	<ul style="list-style-type: none"> 1 VGA port
DOM	<ul style="list-style-type: none"> 2 SuperDOM (Disk on Module) ports

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 IPMI 2.0 KVM with dedicated LAN SSM, SPM, SUM SuperDoctor® 5 Watch Dog
Power Configurations	<ul style="list-style-type: none"> ACPI / APM Power Management

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

Output Type	<ul style="list-style-type: none"> Gold Finger Connector Mating with Molex 45984-4343
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Certification	 Platinum Certified [Test Report]
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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 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-X11DDW-L	1	Super X11DDW-L Motherboard
	CSE-815TQC-R706WB2	1	1U Chassis
Backplane	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5
Storage Cable	CBL-SAST-0388L-02	1	MINI SAS-4 SATA,INT,75/75/90/90CM,90CM SB,30AWG
Rubber Pad	MCP-150-00015-0B	2	Rubber pad, 3.0mm H, 10x10mm
Air Shroud	MCP-310-19019-0B	2	SC113/SC116/SC815/SC515, DP X11DDW Mylar air shroud
Air Block	MCP-320-00061-0B	1	CR foam for air block in SC113/SC116/SC815
Manual	MNL-1943-QRG	1	SYS-6019P-WT /WTR Quick Reference Guide,HF,RoHS
Riser Card (left)	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots
Riser Card (right)	RSC-R1UW-E8R	1	1U RHS WIO Riser card with one PCI-E x8 slot
Heatsink w/ Retention	SNK-P0067PSMB	2	1U Passive High Performance Front CPU Heat Sink w/ an 18-mm Wide Middle Air Channel for X11 Purley Platform Equipped w/ a Narrow Retention Mechanism/Bolster
* Power Supply	PWS-706P-1R	2	1U 750W redundant power width 54.5mm(Platinum),HF,RoHS/REACH,PBF
* Power Cord	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
* FAN	FAN-0156L4	4	40x40x56 mm 13K-11K RPM Counter-rotating Fan,RoHS/REACH
* Rail Set	MCP-290-00054-0N	1	Rail set, quick/quick, optional for 1U 17.2"W SC815

Notes:

1. Parts with * come with the chassis
2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

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 / RW & Mounting Kit	DVM-TEAC-DVD-SBT5 & MCP-220-81502-0N	1	BLACK TEAC SLIM DVD SATA DRIVE, HF, RoHS Slim SATA DVD mounting kit
	DVM-TEAC-DVDRW-SBT5 & MCP-220-81502-0N		BLACK TEAC SLIM DVD-RW SATA DRIVE, HF, RoHS Slim SATA DVD mounting kit
	DVM-PLDS-DVDRW-SBT5 & MCP-220-81502-0N		PHILIPS SLIM BLACK DVD-RW SATA DRIVE, HF, RoHS/REACH 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-SAST-0624	2	SATA,INT,ROUND,ST-ST,70CM,30AWG
	CBL-0289L	1	Y split, big 4 pin to two RA SATA power extension 30cm, 20AWG
Add-on card for internal M.2 NVMe	AOC-SLG3-2M2	-	Low Profile PCI-E x8 add-on card supports 2 PCI-E 3.0 x4 M-Key M.2 NVMe Modules
Intel VROC RAID Key	<u>AOC-VROCINTMOD</u>	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only)
	<u>AOC-VROCSTNMOD</u>		Intel VROC Standard, RAID 0, 1, 10
	<u>AOC-VROCPREMOD</u>		Intel VROC Premium, RAID 0, 1, 5, 10
Additional Fan	FAN-0156L4	-	40x40x56 mm 13K-11K RPM Counter-rotating Fan

Storage Controller Card(s) & Cables(s)	AOM-S3108M-H8 & 1x CBL-SAST-0699 & 1x FAN-0156L4	-	Supermicro LP, 8 internal ports (12Gb/s) SAS Mezzanine; RAID 0, 1, 5, 6, 10, 50, 60; 40x40x56 mm 13K-11K RPM Counter-rotating Fan
	AOC-S3108L-H8IR-16DD & 1x CBL-SAST-0699		Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i & 1x CBL-SAST-0699		Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 1x CBL-SAST-0699		Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA
CacheVault (for 3108)	BTR-CV3108-1U1	1	CacheVault for Broadcom 3108 with SuperCap mounting in 1U 40x56 fan tray
	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05		CacheVault for Broadcom 3108; SuperCap mounting bracket for PCI-E location
	BTR-TFM8G-LSICVM02 & MCP-240-00127-0N		CacheVault for Broadcom 3108; SuperCap mounting bracket for 2.5" HDD location
Network Card(s)	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel® i350AM2
	AOC-SGP-i4		Standard LP, 4x GbE RJ45, PCI-E x4, Intel® i350AM4
	AOC-STGS-i1T		Standard LP, 1x 10GbE RJ45, PCI-E x4, Intel® X550-AT
	AOC-STGS-i2T		Standard LP, 2x 10GbE RJ45, PCI-E x4, Intel® X550-AT2
	AOC-STG-i4T		Standard LP, 4x 10GbE RJ45, PCI-E x8, Intel® XL710-BM1
	AOC-STGN-i1S		Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel® 82599EN
	AOC-STGN-i2S		Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel® 82599ES
	AOC-STG-i4S		Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel® XL710-BM1
	AOC-S25G-i2S		Standard LP, 2x 25GbE SFP28, PCI-E x8, Intel® XXV710 + Marvell Unionville
	AOC-MCX555A-ECAT		Standard LP, 1x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5
	AOC-MCX556A-ECAT		Standard LP, 2x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5
Front Bezel	CSE-PTFB-813-02	1	Front Bezel w/ Round Venting Holes
	CSE-PTFB-813-02B		Black Front Bezel w/ Round Venting Holes
Cable Management Arm	MCP-290-00085-0N	1	Supermicro Cable Management Arm for 1U Chassis
Inlet Thermal Sensor	MCP-280-00033-0N	-	Universal Thermal sensor kit with 80cm I2C cable
TPM security module (optional, not included)	AOM-TPM-9670V-S	1	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor
	AOM-TPM-9671V-S		SPI capable TPM 1.2 with Infineon 9670 controller; vertical form factor
Global Services & Support	QS4HR3/2/1	-	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)