## SuperServer 6019P-WT8



#### **Integrated Board**



Super X11DDW-L

Views: | <u>Angled View</u> | <u>Top View</u> | | <u>Front View</u> | <u>Rear View</u> |

 ▶ Drivers & Utilities
 ▶ BIOS
 ▶ IPMI
 ▶ Tested Memory
 ▶ Tested

 M.2 List
 ▶ Manuals
 ▶ OS Certification Matrix
 ▶ Quick 

 References Guide
 ▶ Drive Options
 ▶ Network Card (AOC) Matrix

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
- Dual Socket P (LGA 3647) support 2nd Gen Intel® Xeon® Scalable processors (Cascade Lake/Skylake)<sup>‡</sup>
- 12 DIMMs; up to 3TB 3DS ECC DDR4-2933MHz<sup>†</sup> RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM<sup>††</sup>
- 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 NVMe M.2 SSD slot
- 4. 8x 3.5" and 2x 2.5" Fixed drive bays
- 5. 2 GbE LAN ports via Intel C621
- 6. 1 VGA, 4 USB 3.0 (rear)
- 7. 600/650W Multi-output Power Supply Platinum Level High-efficiency

Chassis

# Specifications

Product SKUs				
SYS-6019P-WT8	■ SuperServer 6019P-WT8 ( <b>Black</b> )			
Motherboard				
Super X11DDW-L				
Processor/Cache				
CPU	Dual Socket P (LGA 3647)			
	<ul> <li>Dual Socket P (ESA Sock)</li> <li>2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors<sup>‡</sup>, Dual UPI up to 10.4GT/s</li> <li>Support CPU TDP 70-165W*</li> </ul>			
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	<sup>‡</sup> BIOS version 3.2 or above is require 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	<ul> <li>12 DIMM slots</li> <li>Up to 3TB 3DS ECC DDR4- 2933MHz<sup>†</sup> RDIMM/LRDIMM</li> <li>Supports Intel® Optane™ DCPMM<sup>††</sup></li> </ul>			
Memory Type	2933 <sup>†</sup> /2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM			
Note	<ul> <li><sup>†</sup> 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro</li> <li><sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info.</li> </ul>			
	purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your			
On-Board Devices	purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your			
Dn-Board Devices Chipset	purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your			
	purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info.			
Chipset	<ul> <li>purchased from Supermicro</li> <li><sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info.</li> <li>Intel® C621 chipset</li> </ul>			
SATA Network	<ul> <li>purchased from Supermicro <sup>++</sup> Cascade Lake only. Contact your Supermicro sales rep for more info.</li> <li>Intel® C621 chipset</li> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> <li>Dual LAN with Gigabit Ethernet from</li> </ul>			
Chipset SATA Network Controllers	<ul> <li>purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info. </li> <li>Intel® C621 chipset <ul> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> </ul> </li> <li>Dual LAN with Gigabit Ethernet from C621 <ul> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN</li> </ul> </li> </ul>			
Chipset SATA Network Controllers IPMI Video	<ul> <li>purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info. </li> <li>Intel® C621 chipset <ul> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> </ul> </li> <li>Dual LAN with Gigabit Ethernet from C621</li> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> </ul>			
Chipset SATA Network Controllers IPMI	<ul> <li>purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info. </li> <li>Intel® C621 chipset <ul> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> </ul> </li> <li>Dual LAN with Gigabit Ethernet from C621</li> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> </ul>			
Chipset SATA Network Controllers IPMI Video	<ul> <li>purchased from Supermicro <sup>1†</sup> Cascade Lake only. Contact your Supermicro sales rep for more info.</li> <li>Intel® C621 chipset</li> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> <li>Dual LAN with Gigabit Ethernet from C621</li> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>ASPEED AST2500 BMC</li> </ul>			

Form Factor	1U Rackmount				
Model	CSE-801STS-656DP				
Dimensions and W	eight				
Width	∎ 17.2" (437mm)				
Height	∎ 1.7" (43mm)				
Depth	∎ 32" (813mm)				
Package	■ 23.5" (W) x 7.8" (H) x 40.1" (D)				
Gross Weight	∎ 46 lbs (20.9kg)				
Available Colors	∎ Black				
Front Panel					
Buttons	Power On/Off button				
LEDs	Power status LED				
	<ul> <li>HDD activity LED</li> <li>Network activity LEDs</li> </ul>				
	<ul> <li>Network activity LEDs</li> <li>Universal Information (UID) LED</li> </ul>				
Expansion Slots					
PCI-Express	■ 2 PCI-E 3.0 x16 (FHHL) slots				
·	1 PCI-E 3.0 x8 (LP) slot				
	<ul> <li>1 PCI-E 3.0 x16 for Add-on-Module (AOM)</li> </ul>				
	<ul> <li>1 PCI-E NVMe M.2 SSD slot</li> </ul>				
	(Both CPUs need to be installed for				
	full access to PCI-E slots and				
	onboard controllers. See manual block diagram and <u>AOC Support</u> for				
	details.)				
Drive Bays					
Internal	8 Fixed 3.5" drive bays				
	2 Fixed 2.5" drive bays				
Paakulana					
Backplane					
SATA HDD Backpla	ine				
Ourstans O I'm					
System Cooling					
System Cooling Fans	6 Counter-rotating 4cm PWM fans				
Fans	6 Counter-rotating 4cm PWM fans				
Fans Power Supply					
Fans Power Supply	6 Counter-rotating 4cm PWM fans butput power supply w/ PFC for Rear I/O				
Fans Power Supply	output power supply w/ PFC for Rear I/O 100-127V, 50-60Hz				
Fans Power Supply 600W/650W Multi-c AC Input	output power supply w/ PFC for Rear I/O 100-127V, 50-60Hz 200-240V, 50-60Hz				
Fans Power Supply 600W/650W Multi-c	output power supply w/ PFC for Rear I/O 100-127V, 50-60Hz 200-240V, 50-60Hz +3.3V: 15A (Max.); 0.5A (Min.)				
Fans Power Supply 600W/650W Multi-c AC Input	Dutput power supply w/ PFC for Rear I/O 100-127V, 50-60Hz 200-240V, 50-60Hz +3.3V: 15A (Max.); 0.5A (Min.) +5V: 18A (Max.); 0.5A (Min.) +5V standby: 3A				
Fans Power Supply 600W/650W Multi-c AC Input	Dutput power supply w/ PFC for Rear I/O 100-127V, 50-60Hz 200-240V, 50-60Hz +3.3V: 15A (Max.); 0.5A (Min.) +5V: 18A (Max.); 0.5A (Min.) +5V standby: 3A +12V: 49A (100-127Vac)				
Fans Power Supply 600W/650W Multi-c AC Input	Dutput power supply w/ PFC for Rear I/O 100-127V, 50-60Hz 200-240V, 50-60Hz +3.3V: 15A (Max.); 0.5A (Min.) +5V: 18A (Max.); 0.5A (Min.) +5V standby: 3A				
Fans Power Supply 600W/650W Multi-c AC Input	Dutput power supply w/ PFC for Rear I/O 100-127V, 50-60Hz 200-240V, 50-60Hz +3.3V: 15A (Max.); 0.5A (Min.) +5V: 18A (Max.); 0.5A (Min.) +5V standby: 3A +12V: 49A (100-127Vac) 54A (200-240Vac)				
Fans Power Supply 600W/650W Multi-c AC Input DC Output	Dutput power supply w/ PFC for Rear I/O 100-127V, 50-60Hz 200-240V, 50-60Hz +3.3V: 15A (Max.); 0.5A (Min.) +5V: 18A (Max.); 0.5A (Min.) +5V standby: 3A +12V: 49A (100-127Vac) 54A (200-240Vac) -12V: 0.5A				

https://www.supermicro.com/en/products/system/1U/6019/SYS-6019P-WT8.cfm

Video	1 VGA port			
DOM	2 Super <u>DOM</u> (Disk on Module) ports			
System BIOS				
BIOS Type	AMI 32Mb SPI Flash ROM			
Management				
Software	■ Intel® Node Manager			
	<ul> <li>IPMI 2.0</li> <li>KVM with dedicated LAN</li> </ul>			
	<ul> <li>SSM, SPM, SUM</li> </ul>			
	SuperDoctor® 5			
	Watch Dog			
Power	ACPI / APM Power Management			
Configurations				

### PC Health Monitoring

CPU	<ul> <li>Monitors for CPU Cores, Chipset Voltages, Memory.</li> <li>4+1 Phase-switching voltage regulator</li> </ul>
FAN	<ul> <li>Fans with tachometer monitoring</li> <li>Status monitor for speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul>
Temperature	<ul> <li>Monitoring for CPU and chassis environment</li> <li>Thermal Control for fan connectors</li> </ul>

**Operating Environment** 

RoHS	<ul> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<ul> <li>Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</li> <li>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

## **Parts List**

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DDW-L CSE-801STS-656DP	1 1	Super X11DDW-L Motherboard 1U Chassis
Backplane	BPN-SAS-801T-A4	2	4-port 1U CSE-801 backplane with thermistor and individual HDD power cycle, support up to 4x 3.5-inch HDD/SSD
Storage Cable 1	CBL-0476L	1	MINI SAS-4 SATA,INT,55/45/35/30CM,55CM SB,30AWG
Storage Cable 2	CBL-SAST-0996-1	2	MINI SAS-4 SATA,INT,95 CM
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-2003-QRG	1	6019P-WT8 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-656P-1H	1	1U 600/650W Multi-output power supply with PMbus RoHS/REACH,PBF
* Power Cord	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
* FAN	FAN-0101L4	6	40x56,4 Pin PWM, Primary for SC809,111, Sec.for SC816,819,808
* Rail Set	MCP-290-00066-0N	1	Rail set, quick/quick, default for 1U 17.2 SC801S/SC801L

Notes:

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

	Part Number	Qty	Description
Storage Controller Card(s) & Cables(s)	AOM-S3108M-H8 & 2x CBL-SAST-0699	-	Supermicro Low Profile 12Gb/s Eight-Port SAS Internal Mezzanine RAID Adapter, RAID 0, 1, 5, 6, 10, 50, 60
CacheVault (for 3108)	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05 BTR-TFM8G-LSICVM02 & MCP-240-00127-0N	1	CacheVault for Broadcom 3108; SuperCap mounting bracket for PCI-E location CacheVault for Broadcom 3108; SuperCap mounting bracket for 2.5" HDD location
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	AOC-VROCINTMOD AOC-VROCSTNMOD AOC-VROCPREMOD	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only) Intel VROC Standard, RAID 0, 1, 10 Intel VROC Premium, RAID 0, 1, 5, 10
3.5" to 2.5" Converter Tray	MCP-240-00145-0N MCP-220-00134-0N	-	2.5" Fixed HDD Bracket for F414IS, SC816L, SC801S, SC801L,HF Tool-less 3.5" fixed HDD bracket for F414IS, 801L/S
TPM security module (optional, not included)	AOM-TPM-9670V AOM-TPM-9671V	1	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor SPI capable TPM 1.2 with Infineon 9670 controller; vertical form factor

#### **Optional Parts List**

### 6019P-WT8 | 1U | SuperServers | Products | Super Micro Computer, Inc.

AOC- AOC- AOC- AOC-	AOC-SGP-i2 AOC-SGP-i4 AOC-STGS-i1T AOC-STGS-i2T AOC-STG-i4T	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel® i350AM2 Standard LP, 4x GbE RJ45, PCI-E x4, Intel® i350AM4 Standard LP, 1x 10GbE RJ45, PCI-E x4, Intel® X550-AT Standard LP, 2x 10GbE RJ45, PCI-E x4, Intel® X550-AT2 Standard LP, 4x 10GBE RJ45, PCI-E x8, Intel® XL710-BM1
	AOC-STGN-i1S AOC-STGN-i2S AOC-STG-i4S AOC-S25G-i2S AOC-MCX555A-ECAT AOC-MCX556A-ECAT		Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel® 82599EN Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel® 82599ES Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel® XL710-BM1 Standard LP, 2x 25GbE SFP28, PCI-E x8, Intel® XXV710 + Marvell Unionville Standard LP, 1x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5 Standard LP, 2x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5
Global Services & Support	<u>OS4HR3/2/1</u> OSNBD3/2/1	-	3/2/1-year onsite 24x7x4 service 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)