



Integrated Board



Super X11SPW-TF

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

Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Key Features

Multi-Access Edge Computing (MEC)
Centralized/Cloud Radio Access
Network (C-RAN)
Universal Customer Premise
Equipment (uCPE)
Advanced Network Security
Network Function Virtualization
(NFV)
Artificial Intelligence (AI) on Edge,
Machine Learning (ML)
Retail, Smart Medical Expert Systems

- Single Socket P (LGA 3647) supports 2nd Gen Intel® Xeon® Scalable processor ‡
- 2. 6 DIMMs; up to 1.5TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM
- 3. 2 PCI-E 3.0 x16 (FHFL) slots
- 4. 2 Hot-swap 2.5" SATA3 drive bays; 2 Internal 2.5" SATA3 drive bays (opt.)
- 5. 2x 10GBase-T ports with Intel X722 + X557
- 6. 1 VGA, 1 COM, 2 USB 3.0, 2 USB 2.0
- 7. M.2: 1 M-Key 2280/22110 PCI-E 3.0 x4 and SATA
- 8. 500W Platinum Level power supplies

Specifications

Product SKUs

SYS-1019P-FHN2T

■ SuperServer 1019P-FHN2T (Black)

Motherboard

Super X11SPW-TF

Processor/C	ache
CPU	 Single Socket P (LGA 3647) 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake-SP)[‡] Support CPU TDP 70-205W
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).
	Operating Temperature: 0°C ~ 35°C (32°F ~ 95°F) for Cascade Lake-R CPUs above 165W TDP, please contact Supermicro

System Memory

Memory
Capacity

- 6 DIMM slots
- Up to 1.5TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM

Technical Support for additional information.

- **Memory Type**
- 2933/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM

On-Board Devices

Chipset	■ Intel® C622 chipset					
SATA	■ Intel® C622 controller; 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	■ 4 SATA3 (6Gbps) ports
LAN	2 RJ45 10GBase-T LAN ports1 RJ45 dedicated IPMI LAN port
USB	2 USB 3.0 ports (front)2 USB 2.0 ports (front)
Video	■ 1 VGA port
Serial Port	■ 1 COM port (front)
SuperDOM	 2 <u>SuperDOM</u> (Disk on Module) ports with built-in power

System BIOS

Chassis

Form Factor ■ 1U Rackmount Model ■ CSE-513BTS-505WBP

Dimensions a	and Weight					
Height	■ 1.7" (43mm)					
Width	■ 17.2" (437mm)					
Depth	■ 15" (381mm)					
Package	■ 19.5" (W) x 6.9" (H) x 22.4" (D)					
Weight	■ Gross Weight: 26 lbs (11.79 kg) ■ Net Weight: 15 lbs (6.8 kg)					
Available Colors	■ Black					

Front Panel

Buttons	■ Power On/Off button ■ UID
LEDs	 Power LED Hard drive activity LED Network activity LEDs System Information LED

Expansion Slots

PCI-Express ■ 2 PCI-E 3.0 x16 (FHFL) slots

Drive Bays

Hot-swap	■ 2 Hot-swap 2.5" drive bays
Internal	2 Internal 2.5" SSD bays (optional)
M.2	 M.2 Interface: PCI-E 3.0 x4 and SATA Form Factor: 2280, 22110 Key: M-Key Double Height Connector

System Cooling

Fans ■ 6x 40x28mm PWM fans

500W High-Efficiency Power Supply w/ PMBus 1.2, I²C, and PFC

Certification	Platinum Certified
	+5V standby: 3A+12V: 41A-12V: 0.2A
DC Output	■ +3.3V: 12A ■ +5V: 15A
AC Input	■ 100-240V, 50-60Hz, 6.6A max



Operating Environment

RoHS ■ RoHS Compliant

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

■ Power-on mode for AC power recovery

AMI 32Mb SPI Flash ROM

BIOS Type

Configurations

Environmental Spec.

- Operating Temperature:

 0°C ~ 40°C (32°F ~ 104°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

	Part Number	Qty	Description	
Motherboard / Chassis	MBD-X11SPW-TF CSE-513BTS-505WBP	1	Super MBD-X11SPW-TF Motherboard 1U Chassis	
Backplane	BPN-SAS3-826TQ-B2B	1	2-port 2U SAS3 12Gbps backplane, support up to 2x 2.5-inch SAS3/SATA3 HDD/SSD	
Cable 1	CBL-0483L	2	SATA,INT,ROUND,ST-ST,29CM,30AWG	
Cable 2	CBL-CDAT-0662	1	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,61.5CM,28AWG	
FAN 1	FAN-0154L4	2	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH	
Air Shroud	MCP-310-51304-0B	1	Mylar Air Shroud for SC513B + X11SPW	
Riser Card	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots	
Heatsink / Retention	SNK-P0071VS	1	1U Proprietary Passive CPU Heat Sink (124 mm Long) for SYS-2029BZ-HNR Series Servers (X11 2U4N 3UPI Big Twin)	
* Power Supply	PWS-505P-1H	1	1U 500W Multi-output, Platinum level w/ PMbus 24pin, W100xL180xH40mm,RoHS/REACH	
* Cable 3	CBL-0160L	1	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for hig watt)	
* Cable 4	CBL-0335L	1	CBL,FRONT CNTL,20 TO 20 PIN,RA,RND TUBE,73CM,28AWG	
* FAN 2	FAN-0154L4	4	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH	
* Drive Tray(s)	MCP-220-00180-0B	2	2.5" New ID gen 3 hot-swap HDD tray with lock feature (with plastic bracket)	
* Parts	MCP-260-00078-0B	1	1U I/O shield for X11 Server MB with 5X5mm vent hole and EMI Gasket, Black	
* Front Panel	MCP-280-80901-0N	1	SC809 FRONT CONTROL PANEL ASSY	
* Rail Set	MCP-290-00102-0N	1 set	Outer rail, quick-release type, 25.6" to 33.05"	
* Rail Set	MCP-290-00108-0B	1 set	Inner rail, front, short (quick) for 1U 17.2	
* Fan Holder	MCP-320-00060-0N	1	Fan tray for six 40x28 fans	
* Bracket	MCP-240-51303-0N	1	Riser Card Bracket for WIO MB in SC513B	

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
Cable	CBL-0082L	-	Y split , big 4 pin to two RA SATA power extension 15cm, 18AWG
Cable	CBL-0473L	-	SATA,INT,ROUND,ST-ST,21CM,30AWG
Tray	MCP-220-00137-0N	-	Dual 2.5 HDD bracket (bracket base follow std 2.5" HDD screw holes)
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