

# SuperServer 1019P-FRDN2T



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



## Key Applications

- 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)

## Key Features

1. Single Socket P (LGA 3647) supports 2nd Gen Intel® Xeon® Scalable processor (Cascade Lake)<sup>†</sup>
2. 6 DIMMs; up to 1.5TB 3DS ECC DDR4-2933MHz<sup>†</sup> RDIMM/LRDIMM
3. 2 PCI-E 3.0 x16 (FHFL) slots
4. 2 Fixed 2.5" Drive Bays
5. 2x 10 Gigabit Ethernet Ports
6. 2x USB 3.0, 2x USB 2.0
7. 5 Hot-swappable Fan Trays
8. 600W DC Redundant Power Supplies

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

## Specifications ^

### Product SKUs

**SYS-1019P-FRDN2T** SuperServer 1019P-FRDN2T (Black)

### Motherboard

### Super X11SPW-TF

### Processor/Cache

<b>CPU</b>	Single Socket P (LGA 3647) 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors <sup>†</sup> Support CPU TDP 70-205W*
<b>Cores</b>	Up to 28 Cores
<b>Note</b>	* Certain high frequency optimized CPU are not supported, such as Intel Gold 6250 and 6256. Please contact Supermicro Technical Support for additional information.
<b>Note</b>	<sup>‡</sup> BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

### System Memory

<b>Memory Capacity</b>	6 DIMM slots Up to 1.5TB 3DS ECC DDR4-2933MHz <sup>†</sup> RDIMM/LRDIMM
<b>Memory Type</b>	2933 <sup>†</sup> /2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
<b>Note</b>	<sup>†</sup> 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro <sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info.

### On-Board Devices

<b>Chipset</b>	Intel® C622 chipset
<b>SATA</b>	SATA3 (6Gbps)
<b>Network Controllers</b>	Dual 10GBase-T LAN with Intel® X722 + X557
<b>IPMI</b>	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
<b>Video</b>	ASPEED AST2500 BMC

### Input / Output

<b>SATA</b>	2 SATA3 (6Gbps) ports
<b>LAN</b>	2 RJ45 10GBase-T LAN ports 1 RJ45 dedicated IPMI LAN port
<b>USB</b>	2 USB 3.0 ports 2 USB 2.0 ports
<b>Video</b>	1 VGA port
<b>Serial Port / Header</b>	1 COM port
<b>SuperDOM</b>	Ports default connect to hard drive bays

### System BIOS

**BIOS Type** AMI 32Mb SPI Flash ROM

### Management

<b>Software</b>	Intel® Node Manager <a href="#">IPMI 2.0</a> KVM with dedicated LAN NMI <a href="#">SPM</a> , <a href="#">SUM</a> <a href="#">SuperDoctor® 5</a> Watch Dog
<b>Power Configurations</b>	ACPI / APM Power Management

### PC Health Monitoring

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

### Chassis

**Form Factor** 1U Rackmount  
**Model** CSE-515M-R601

### Dimensions and Weight

<b>Height</b>	1.7" (43mm)
<b>Width</b>	17.2" (437mm)
<b>Depth</b>	15.7" (399mm)
<b>Package</b>	8" (H) x 27" (W) x 24" (D)
<b>Weight</b>	Gross Weight: 29 lbs (13.15 kg) Net Weight: 18 lbs (8.16 kg)
<b>Available Colors</b>	Black

### Front Panel

<b>Buttons</b>	Power On/Off button System Reset button
<b>LEDs</b>	Power LED Hard drive activity LED Network activity LEDs System Information LED Information LED (temp., status)

### Expansion Slots

<b>PCI-Express</b>	2 PCI-E 3.0 x16 (FHFL) slots
<b>M.2</b>	1x M.2 Interface: PCI-E 3.0 x4 and SATA Form Factor: 2280, 22110 Key: M-Key Double Height Connector

### Drive Bays

**Fixed** 2 Fixed 2.5" Drive Bays

### System Cooling

**Fans** 5x 40x56 Hot-Swappable Fan Trays

### 600W -48V DC input Redundant Power Supplies

<b>Total Output Power</b>	600W: -44Vdc to -65Vdc
<b>Dimension (W x H x L)</b>	54.5 x 40 x 220 mm
<b>DC Input</b>	-44Vdc to -65Vdc / 18 - 10A
<b>+12V</b>	Max: 50A / Min: 0A
<b>+5V sb</b>	Max: 3A / Min: 0A
<b>Output Type</b>	Gold Finger Connector Mating with Molex 45984-4343

### Operating Environment

<b>RoHS</b>	RoHS Compliant
<b>Environmental Spec.</b>	Operating Temperature: 10°C ~ 40°C (50°F ~ 104°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
<b>Motherboard / Chassis</b>	MBD-X11SPW-TF	1	Super X11SPW-TF Motherboard
	CSE-515M-R601	1	1U Chassis
<b>Cable 1</b>	CBL-0484L	2	55CM 30AWG SATA S-S CBL
<b>Cable 2</b>	CBL-OTHR-1214-24	2	FAN cbl,1x4,M, to 1x4,F,14CM,3A/pin,22AWG,RoHS
<b>FAN 1</b>	FAN-0207L4	5	40x40x56 mm, 13K-11K RPM,Counter-rotating, Hot-swappable Fan
<b>Air Shroud</b>	MCP-310-51507-0B	1	Mylar Air Shroud for SC515M + X11SPW/X12SPW
<b>Riser Card</b>	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots
<b>Heatsink / Retention</b>	SNK-P0071VS	1	1U Proprietary Passive CPU Heat Sink (124 mm Long) for SYS-2029BZ-HNR Series Servers (X11 2U4N 3UPI Big Twin)
<b>* Power Supply</b>	PWS-601D-1R	2	-48V DC input, 12V and 5Vsb 600W output for 1U redundancy
<b>* Power Distributor</b>	PDB-PT515M-2424	1	1U support redundancy up to 800W for SC515M chassis with ATX

### Optional Parts List

	Part Number	Qty	Description
<b>Network Card(s)</b>	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
<b>TPM security module</b>	AOM-TPM-9670VAOM-TPM-9671V	11	TPM 2.0, vertical form factor TPM 1.2, vertical form factor
<b>Global Services &amp; Support</b>	<a href="#">QS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">QSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
<b>Software</b>	<a href="#">SFT-OOB-LIC</a> • eStore	1	OOB Management Package (per node license)
<b>Software</b>	<a href="#">SFT-DCMS-Single</a>	1	DataCenter Management Package (per node license)

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