IoT SuperServer SYS-110P-FRDN2T





Key Applications

- Multi-Access Edge Computing
- Flex-RAN, Open-RAN vBBU
- Artificial Intelligence (AI) on Edge, Machine Learning (ML)

Key Features

- 1. Socket P+ (LGA-4189) support 3rd Gen Intel® Xeon® Scalable processors
- 2. 8x DIMMs; Up to 2TB 3DS ECC DDR4-3200: RDIMM/LRDIMM
- 3. 2x PCI-E Gen4 x16 FHFL slot
- 4. 2x 2.5" drive bays; 1x M.2 NVMe OR 1x M.2 SATA3
- 5. 5x hot-swappable counter rotated fans with optimal fan speed control
- 6. Redundant 600W DC Power Supplies
- 7. Front-access I/O: 2x 10GBase-T, 1x Dedicated IPMI, 2x USB3.0, 2x USB2.0, 1x COM, 1x VGA

Specifications

Chassis

Form Factor	411				
	. 1U				
Model	<u>CSE-515M-R601</u>				
Dimensions and \	Veight				
Height	■ 1.7" (43mm)				
Width	■ 17.2" (437mm)				
Depth	■ 15.7" (399mm)				
Package	8" (H) x 27" (W) x 24" (D)				
Weight	■ Gross Weight: 18 lbs (8.16 kg)				
Available Color	■ Black				
Front Panel					
Buttons	■ Power On/Off				
	■ UID button				
LEDs	■ HDD activity				
	LAN1 activityLAN2 activity				
	Power status				
	■ System information				
Expansion Slots					
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PCI-Express (PCI-E)	 Slot 1: PCI-E 4.0 x16 FHFL Slot 2: PCI-E 4.0 x16 FHFL 				
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Drive Bays / Stora	age				
Drive Bays	■ 2x 2.5" SATA drive bays				
M.2	■ 1 M.2 NVMe OR 1 M.2 SATA3				
	■ M-Key, 2280/22110				
System Cooling					
Fans	■ 5 heavy duty fans with optimal fan				
	speed control				
Air Shroud	■ 1 Air Shroud(s)				
Power Supply					
	DC 49V Power Cumpling with DMDus				
	DC -48V Power Supplies with PMBus				
Total Output Power	■ 600W : (-44) - (-65) Vdc				
Dimension	■ 54.5 x 40 x 220 mm				
(W x H x L)					
+12V	■ Max: 50A				
5V SB	■ Max: 3A / Min: 0A				
Certification					

[Test Report]

Operating Environment

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SYS-110P-FRDN2T

■ SuperServer SYS-110P-FRDN2T

(Black)

Motherboard

Super X12SPW-TF

Processor

CPU ■ Single Socket P+ (LGA-4189)

■ 3rd Gen Intel® Xeon® Scalable processors

■ Support CPU TDP 85-205W

Cores ■ Up to 32C/64T; Up to 48MB Cache

System Memory

Memory

Memory Capacity: 8 DIMM slots

■ Up to 2TB: DRAM

■ Memory Type: 3200MHz ECC DDR4 RDIMM/LRDIMM

Memory Voltage

■ 1.2 V

Error Detection ■ ECC

On-Board Devices

SATA	■ SATA3 (6Gbps); RAID 0/1 support		
Chipset	■ Intel® C621A		
Network Connectivity	2x 10GbE BaseT port(s)		
IPMI	 Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support 		

Input / Output

Video

■ 1 VGA port(s)

Management

Software

SuperDoctor® 5

■ IPMI 2.0

Power Configurations ACPI Power Management Power-on mode for AC power

recovery

PC Health Monitoring

CPU	 Monitors for CPU Cores, Chipset Voltages, Memory 		
FAN	 Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control 		
Temperature	CPU thermal trip support, PEPIMonitoring for CPU and chassis environment		

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

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12SPW-TF	1	Super X12SPW-TF Motherboard
	CSE-515M-R601	1	1U Chassis
Cable 1	CBL-0483L	2	29CM 30AWG SATA S/S CBL
Cable 2	CBL-OTHR-1214-24	2	FAN cbl,1x4,M, to 1x4,F,14CM,3A/pin,22AWG,RoHS
Cable 3	CBL-PWCD-0974	2	48VDC input power cable, 2M, 12AWG, 3 wires, RoHS/REACH,RoHS
FAN 1	FAN-0207L4	2	40x40x56 mm, 13K-11K RPM,Counter-rotating, Hot- swappable Fan
Air Shroud	MCP-310-51507-0B	1	Mylar Air Shroud for SC515M + X11SPW/X12SPW
Riser Card	RSC-W-66G4	1	1U LHS WIO Riser card with two PCI-E 4.0 x16 slots,HF,RoHS
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0077V	1	X12 ICX/CPX CPU Heatsink (78x113x25.5mm), VC Base, Cu Fin
*Power Supply	PWS-601D-1R	2	-48V DC input, 12V and 5Vsb 600W output for 1U redundancy
*Power Distributor	PDB-PT515M-2424	1	1U support redundancy up to 800W for SC515M chassis with ATX

Notes:

- Parts with * are inside 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.

Optional Parts List

	Part Number	Qty	Description
TPM security module	<u>AOM-TPM-9671V</u>	-	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor
	<u>AOM-TPM-9670V</u>	-	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor