

# IoT SuperServer SYS-210P-FRDN6T



## Key Applications

5G Core and Edge  
AI Inference and Machine Learning  
Network Function Virtualization  
Cloud Computing

## Key Features

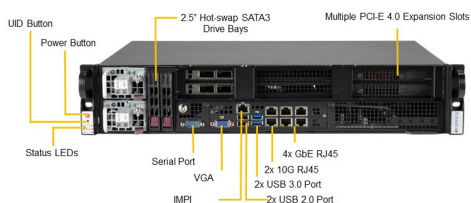
- Design with compliance to NEBS-Level 3;
- Single Socket P+ (LGA-4189) 3rd Generation Intel® Xeon® Scalable Processors;
- 8 DIMM slots; Up to 2TB 3DS ECC DDR4-3200: RDIMM/LRDIMM/Intel® DCPMM;
- Up to 2 PCI-E 4.0 FHHL & 2 HHHL expansion slots for Accelerator Add-On-Cards;
- Onboard 2x 10GbE ports & 4x 1GbE ports;
- 2x Internal 2.5" drive bays for SATA drives;
- Redundant 600W DC -48V Power Supplies;
- Ultra short depth, 2U Front I/O Edge Server;

[More details here](#)

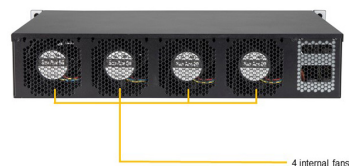


<b>Form Factor</b>	2U Rackmount Enclosure: 436.88 x 88.9 x 298.8mm (17.2" x 3.5" x 11.8") Package: 490 x 188 x 590mm (19.3" x 7.4" x 23.3")
<b>Processor</b>	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;
<b>System Memory</b>	8 DIMM slots Up to 2TB ECC LRDIMM, DDR4-3200MHz Up to 2TB ECC RDIMM, DDR4-3200MHz
<b>Drive Bays</b>	2x 2.5" hot-swap SATA drive bays;
<b>Expansion Slots</b>	Slot 1: PCIe 4.0 x16 or x8 slot (low profile) Slot 2: PCIe 4.0 x16 x8 slot (low profile will be disabled if slot 1 is configured as PCIe 4.0 x16) Slot 3: 1 PCI-E 4.0 x8 FHHL (optional if CPU is less than 165W with 1U heat sink) Slot 5: 1 PCI-E 4.0 x16 FHHL Slot 6: 1 PCI-E 4.0 x16 FHHL
<b>On-Board Devices</b>	SATA: SATA3 (6Gbps); RAID 0/1 support Chipset: Intel® C621A Network Connectivity: 2x 1/10GbE port(s); 4x 1GbE 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
<b>Input / Output</b>	USB: 2 USB 3.0 port(s) (2 front) 2 USB 2.0 port(s) (2 front) Video: 1 VGA port(s) Serial Port: 1 COM Port(s) (1 rear)

(Front View – System)



(Rear View – System)




Cooling System	4 heavy duty fan(s)
Power Supply	600W Redundant DC -48V Power Supplies with PMBus Dimension (W x H x L): 54.5 x 40 x 220 mm
Management	SuperDoctor® 5; Watch Dog; NMI; KVM with dedicated LAN; SPM; Intel® Node Manager; IPMI 2.0; Redfish API; SSM; SUM
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment CPU thermal trip support, PEPI
Dimensions and Weight	Height: 3.5" (88.9 mm) Width: 17.2" (436.88 mm) Depth: 11.8" (298.8 mm) Gross Weight: 22 lbs (10 kg) Net Weight: 17 lbs (7.7 kg) Packaging: 7.4" (H) x 19.3" (W) x 23.3" (D) Available Color: Silver/Black
Operating Environment	Operating Temperature: 0°C ~ 35°C (32°F ~ 95°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)
Motherboard	<a href="#">Super X12SPM-LN6TF</a>
Chassis	CSE-211M

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12SPM-LN6TF	1	Super X12SPM-LN6TF Motherboard
	CSE-211M	1	2U 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-0010L	1	9 PIN SERIAL PORT DTK CABLE, LF
Cable 2	CBL-0206L	2	48CM SATA ROUND S-S PBF
Cable 3	CBL-CDAT-0662	1	8 Pin to 8 Pin Round SGPIO Cable, 61.5cm, 28AWG, Pinout 1-1
Cable 4	CBL-PWCD-0974	2	48VDC input power cable, 2M, 12AWG, 3 wires, RoHS/REACH,RoHS
Cable 5	CBL-PWEX-1132-20	1	MicroHi 2x2F to 2x2M MicroFit, PH3.0, 20cm,7A/p,18#,RoHS
Cable 6	CBL-SAST-1206LP-85	1	SlimSASLP x8 (RA) to SlimSAS x8 (STR),26CM,85 OHM,RoH
Cable 7	CBL-SAST-1207LP-85	1	SlimSASLP x8 (STR,RSC) to SlimSAS x8 (STR),26CM,85 OHM
Cable 8	CBL-SAST-1270A-85	1	2x PCIe x16 on riser PCBA to 2x x16 edge cards,90CM,RoH
Power Distributor	PDB-PT211M-3424	1	2U support redundancy powers up to 800W for SC211M with 2 Mi
Power Distributor	PDB-PT211M-8824	1	(EOL)2U support redundancy powers up to 800W for SC211.,RoHS
Power Supply	PWS-601S-1R	2	1U 600W Redundant DC48V input w/PMBus power supply, W54.5xH4
Riser Card	RSC-H2-68G4	1	2U LHS Hyper riser card with one PCI-E 4.0 x16 and one PCI-E
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0078P	1	2U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
*Cable 9	CBL-CDAT-1058	1	[NR] NCSI 2x8 to 2x8, Ph2.54, 60cm shielded,28AWG, RoHS,RoHS
*FAN 1	FAN-0220L4	4	80x80x38 mm, 14.9K RPM Exhaust Fan for SYS-120P-FRDN6T Serve
*Front Panel	FPB-TB826	1	16 pin Cable Adaptor Board for SC826
*Drive Tray(s)	MCP-220-00147-0B	2	Black gen-3 hot-swap 2.5"; Tool-less HDD tray (clip design)
*Rail Set	MCP-290-21106-0N	1	1U height sliding rail for SC211M chassis

- Notes:
- 1. Parts with \* are inside 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
1U heat sink	SNK-P0077V 	-	Optional 1U heatsink if CPU < 165W
2U riser card	RSC-S2R-68G4	-	Optional 2U Riser card for PCI-E slot 3 (PCI-E x8 FHHL) if CPU < 165W
TPM security module	AOM-TPM-9670V	-	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor
	AOM-TPM-9671V	-	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor