

IoT SuperServer SYS-210P-FRDN6T

NEW

Key Applications

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



Key Features

1. Single Socket P+ (LGA-4189) 3rd Generation Intel® Xeon® Scalable Processors
2. 8 DIMM slots; Up to 2TB 3DS ECC DDR4-3200: RDIMM/LRDIMM/Intel® DCPMM
3. Up to 3 PCI-E 4.0 FHHL & 2 HHHL expansion slots for Accelerator Add-On-Cards
4. Onboard 2x 10GbE ports & 4x 1GbE ports
5. 2x Internal 2.5" drive bays for SATA drives
6. Redundant 600W DC -48V Power Supplies
7. Ultra short depth, 2U Front I/O Edge Server

Specifications

Product SKUs

SYS-210P-FRDN6T	<ul style="list-style-type: none"> SuperServer SYS-210P-FRDN6T (Silver/Black)
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Motherboard

Super X12SPM-LN6TF

Processor

CPU	<ul style="list-style-type: none"> Support CPU TDP 85-270W
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System Memory

Memory	<ul style="list-style-type: none"> Memory Capacity: 8 DIMM slots Memory Type: 3200MHz ECC DDR4 RDIMM/LRDIMM
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Memory Voltage	<ul style="list-style-type: none"> 1.2 V
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Error Detection	<ul style="list-style-type: none"> ECC
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On-Board Devices

SATA	<ul style="list-style-type: none"> SATA3 (6Gbps); RAID 0/1 support
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Chipset	<ul style="list-style-type: none"> Intel® C621A
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Network Connectivity	<ul style="list-style-type: none"> 2x 1/10GbE port(s); 4x 1GbE port(s)
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IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
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Input / Output

USB	<ul style="list-style-type: none"> 2 USB 2.0 port(s) (2 front) 2 USB 3.0 port(s) (2 front)
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Video	<ul style="list-style-type: none"> 1 VGA port(s)
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Serial Port	<ul style="list-style-type: none"> 1 COM Port(s) (1 rear)
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Management

Software	<ul style="list-style-type: none"> SUM SSM Redfish API IPMI 2.0 Intel® Node Manager SPM KVM with dedicated LAN NMI Watch Dog SuperDoctor® 5
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Power Configurations	<ul style="list-style-type: none"> ACPI Power Management
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PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, Chipset Voltages, Memory
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Chassis

Form Factor	<ul style="list-style-type: none"> 2U Rackmount
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Model	<ul style="list-style-type: none"> CSE-211M
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Dimensions and Weight

Height	<ul style="list-style-type: none"> 3.5" (88.9mm)
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Width	<ul style="list-style-type: none"> 17.2" (436.88mm)
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Depth	<ul style="list-style-type: none"> 11.8" (298.8mm)
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Package	<ul style="list-style-type: none"> 7.4" (H) x 19.3" (W) x 23.3" (D)
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Weight	<ul style="list-style-type: none"> Net Weight: 17 lbs (7.7 kg) Gross Weight: 22 lbs (10 kg)
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Available Color	<ul style="list-style-type: none"> Silver/Black
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Front Panel

Buttons	<ul style="list-style-type: none"> Power On/Off UID button
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LEDs	<ul style="list-style-type: none"> HDD activity LAN1 activity LAN2 activity Power status System information
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Expansion Slots

PCI-Express (PCI-E)	<ul style="list-style-type: none"> 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
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Drive Bays / Storage

Hot-swap	<ul style="list-style-type: none"> 2x 2.5" hot-swap SATA drive bays
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M.2	<ul style="list-style-type: none"> 1 M.2 NVMe OR 1 M.2 SATA3 M-Key, 2280/22110
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System Cooling

Fans	<ul style="list-style-type: none"> 4 heavy duty fans with optimal fan speed control
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Power Supply

600W Redundant DC -48V Power Supplies with PMBus

Total Output Power	<ul style="list-style-type: none"> 600W : (-44) - (-65) Vdc
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Dimension (W x H x L)	<ul style="list-style-type: none"> 54.5 x 40 x 220 mm
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+12V	<ul style="list-style-type: none"> Max: 50A
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5V SB	<ul style="list-style-type: none"> Max: 3A / Min: 0A
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FAN

- Fans with tachometer monitoring
- Pulse Width Modulated (PWM) fan connectors
- Status monitor for speed control

Temperature

- CPU thermal trip support, PEPI
 - Monitoring for CPU and chassis environment
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Certification

[Test Report]

Operating Environment**Environmental Spec.**

- Operating Temperature: 0°C ~ 35°C (41°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)
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Parts List

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	[NR]MicroHi 2x2F to 2x2M MicroFit, all PH3.0 ,20cm,8.5A/p,18
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	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.