

IoT SuperServer SYS-210SE-31D

COMING SOON



Key Applications

- Multi-Access Edge Computing
- Flex-RAN, Open-RAN vBBU
- Telecom DRAN, CRAN, and Edge Core Application
- Enterprise Edge Computing

Key Features

Three hot-pluggable systems (nodes) in a 2U form factor. Each node supports the following:

1. Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processor (per node)
2. 8 DIMMs; Up to 2TB 3DS ECC DDR4-3200: RDIMM/LRDIMM (per node)
3. 2 PCI-E Gen4 x16 FHHL slot and 1 PCI-E Gen4 x16 HHHL slot (per node)
4. 2 NVMe M.2 2280/22110 (per node)
5. 4 counter-rotated fan speed control (per node); 1 Air Shroud (per node)
6. Front-access 1+1 Redundant 2000W DC Power Supplies

Specifications

Product SKUs

SYS-210SE-31D	<ul style="list-style-type: none"> SuperServer SYS-210SE-31D (Silver)
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Motherboard

Super X12SPED-F

Processor (per Node)

CPU	<ul style="list-style-type: none"> Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Support CPU TDP 85-205W <p>Three hot-pluggable systems (nodes) in a 2U form factor. Each node supports the following:</p> <ul style="list-style-type: none"> Please contact Supermicro Technical Support for supporting conditions of high power (TDP >205W) processors.
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Cores	<ul style="list-style-type: none"> Up to 32C/64T; Up to 48MB Cache
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System Memory (per Node)

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 (per Node)

Chipset	<ul style="list-style-type: none"> Intel® C621A
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Network Connectivity	<ul style="list-style-type: none"> 1x 1GbE BaseT 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 (per Node)

LAN	<ul style="list-style-type: none"> 1 RJ45 GbE LAN port (Shared NIC)
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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 COM)
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Others	<ul style="list-style-type: none"> 1 KVM dongle (output VGA x1, COM x1, USB 2.0 x2 through KVM cable)
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Management

Software	<ul style="list-style-type: none"> SuperDoctor® 5 IPMI 2.0
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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-SE201-R2K06P
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Note	<ul style="list-style-type: none"> 16.9" (430mm) chassis depth Front access IO design, and tool less serviceability Three front hot-swappable nodes with single CPU socket and 8 DIMM design
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Dimensions and Weight

Height	<ul style="list-style-type: none"> 3.5" (88mm)
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Width	<ul style="list-style-type: none"> 17.7" (449mm)
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Depth	<ul style="list-style-type: none"> 16.9" (430mm)
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Package	<ul style="list-style-type: none"> 9.5" (H) x 29.5" (W) x 23.2" (D)
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Weight	<ul style="list-style-type: none"> Net Weight: 55.1 lbs (25 kg) Gross Weight: 70.6 lbs (32 kg)
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Available Color	<ul style="list-style-type: none"> Silver
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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 (per Node)

PCI-Express (PCI-E)	<ul style="list-style-type: none"> Slot 1: 1 PCIe PCI-E 4.0 x16 LP Slot 2: 1 PCIe PCI-E 4.0 x16 FHHL Slot 3: 1 PCIe PCI-E 4.0 x16 FHHL
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Drive Bays / Storage (per Node)

Drive Bays	<ul style="list-style-type: none"> N/A
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M.2	<ul style="list-style-type: none"> 2 M.2 NVMe M-Key, 2280/22110
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System Cooling

Fans	<ul style="list-style-type: none"> 12 heavy duty fans with optimal fan speed control (4 fans per node)
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Air Shroud	<ul style="list-style-type: none"> 1 Air Shroud(s)
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Power Supply

2000W Redundant DC -48V Power Supplies with PMBus

Total Output Power	<ul style="list-style-type: none"> 2000W : (-44) - (-60) Vdc
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Power Configurations	<ul style="list-style-type: none">■ ACPI Power Management■ Power-on mode for AC power recovery
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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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FAN	<ul style="list-style-type: none">■ Fans with tachometer monitoring■ Pulse Width Modulated (PWM) fan connectors■ Status monitor for speed control
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Temperature	<ul style="list-style-type: none">■ CPU thermal trip support, PEPI■ Monitoring for CPU and chassis environment
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Dimension (W x H x L)	<ul style="list-style-type: none">■ 73.5 x 40 x 265 mm
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+12V	<ul style="list-style-type: none">■ Max: 166.6A
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12V SB	<ul style="list-style-type: none">■ Max: 4A
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Certification

[[Test Report](#)]

Operating Environment

Environmental Spec.	<ul style="list-style-type: none">■ Operating Temperature: 0°C ~ 55°C (32°F ~ 131°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-X12SPED-F	3	Super X12SPED-F Motherboard
	CSE-SE201-R2K06P	1	2U Chassis
Add-on Card / Module	AOM-BPN-SE3N-P	1	Backplane for SuperEdge 2U3N,RoHS
Cable 1	CBL-0218L	1	11.5CM KVM/SUVI 36PIN TO 9PIN/15PIN/2USB
Cable 2	CBL-PWEX-1058	2	48VDC input power cable for PWS-2K03D-1R, 4M, 8AWG,RoHS
Riser Card	RSC-W-66G4	3	1U LHS WIO Riser card with two PCI-E 4.0 x16 slots,HF,RoHS
Riser Card	RSC-WR-6	3	1U RHS WIO Riser card with one PCI-E 4.0 x16 slot,HF,RoHS
Software	SFT-OOB-LIC	3	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P1044V	3	1U Passive CPU Heat Sink for B12 ICX/CPX CPU
*Power Supply	PWS-2K06F-1R	2	2000W 1U -48Vdc single output Redundancy power supply
*Power Distributor	PDB-PT201-DSG	2	Super Edge pass through board support Ultra powers up to 6KW
*Rail Set	MCP-290-20101-0N	1	2U fixed rail set, quick release, default for 2,3U , 17.6"W, 18.5-22

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
TPM security module	<u>AOM-TPM-9670V</u>	-	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor