IoT SuperServer SYS-210SE-31A

X12 SuperEdge 2U3-Node UP front I/O short-depth server
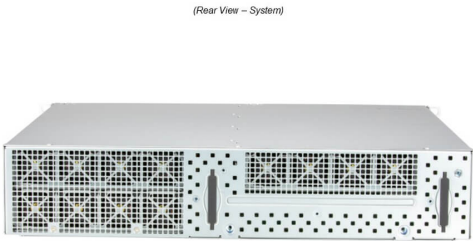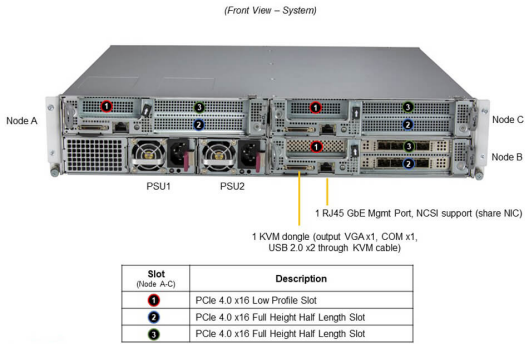
Key Applications

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

Key Features

- Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processor (per node);
- 8 DIMMs; Up to 2TB 3DS ECC DDR4-3200: RDIMM/LRDIMM (per node);
- 2 PCIe Gen4 x16 FHHL slot and 1 PCIe Gen4 x16 HHHL slot (per node);
- 2 NVMe M.2 2280/22110 (per node);
- 4 counter-rotated fan speed control (per node); 1 Air Shroud (per node);
- Front-access 2000W AC Redundant Power Supplies (per system);
- Three hot-pluggable systems (nodes) in a 2U form factor. Each node supports the following:;

Form Factor	2U Rackmount Enclosure: 449 x 88 x 430mm (17.7" x 3.5" x 16.9") Package: 750 x 240 x 590mm (29.5" x 9.5" x 23.2")
Processor	Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Up to 32C/64T; Up to 48MB Cache
System Memory	Slot Count: 8 DIMM slots Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM
Drive Bays Configuration	2 M.2 NVMe slots (M-key 2280/22110)
Expansion Slots	Default • 1 PCIe 4.0 x16 HHHL slot • 2 PCIe 4.0 x16 FHHL slots
On-Board Devices	Chipset: Intel® C621A Network Connectivity: 1 RJ45 1GbE with Intel® I210-AT
Input / Output	LAN: 1 RJ45 1 GbE LAN port (Intel® I210-AT) (IPMI shared on LAN port 1) TPM: 1 TPM header Others: 1 KVM dongle (output 1x VGA/1x COM/2x USB 2.0 via KVM cable) port

(Front View – System)

(Rear View – System)

Node A

Node C

Node B

PSU1   PSU2

1 RJ45 GbE Mgmt Port, NCSI support (share NIC)

1 KVM dongle (output VGA x1, COM x1, USB 2.0 x2 through KVM cable)

Slot (Node A-C)	Description
❶	PCIe 4.0 x16 Low Profile Slot
❷	PCIe 4.0 x16 Full Height Half Length Slot
❸	PCIe 4.0 x16 Full Height Half Length Slot

System Cooling	Air Shroud: 3 Air Shrouds Fans: 12x 4cm heavy duty fans with optimal fan speed control 40x40x56mm Fan(s)
Power Supply	2x 2000W Redundant (1 + 1) power supplies
System BIOS	BIOS Type: AMI 32MB UEFI BIOS Features: SMBIOS 2.8 Plug and Play (PnP) PCI FW 3.2 ACPI 6.4 UEFI 2.8A SMBIOS 2.8/3.5
Management	SuperCloud Composer; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
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	Weight: Gross Weight: 70.6 lbs (32 kg) Net Weight: 55.1 lbs (25 kg) Available Color: Silver
Operating Environment	RoHS Compliant 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	**Super X12SPED-F**
Chassis	**CSE-SE201-R2K07P**