

IoT SuperServer SYS-211E-FRDN2T


[More details here](#)

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 E (LGA-4677) 5th/4th Gen Intel® Xeon® Scalable processors;
- 8 DIMM slots; Up to 2TB 3DS ECC DDR5-5600; R-DIMM/R-DIMM 3DS;
- Up to 6 Configurable PCIe 5.0 slots (4 standard + 2 optional); Up to 3 PCIe 5.0 x16 FHHL, 1 PCIe 5.0 X16 HHHL & 1 PCIe 5.0 x8 FHHL expansion slots for Accelerator Add-On-Cards;
- Onboard 2x 10GbE ports;
- 2x 2.5" NVMe drive bays;
- Redundant 600W DC -48V Power Supplies;
- Ultra short depth, 2U Front I/O Edge Server;



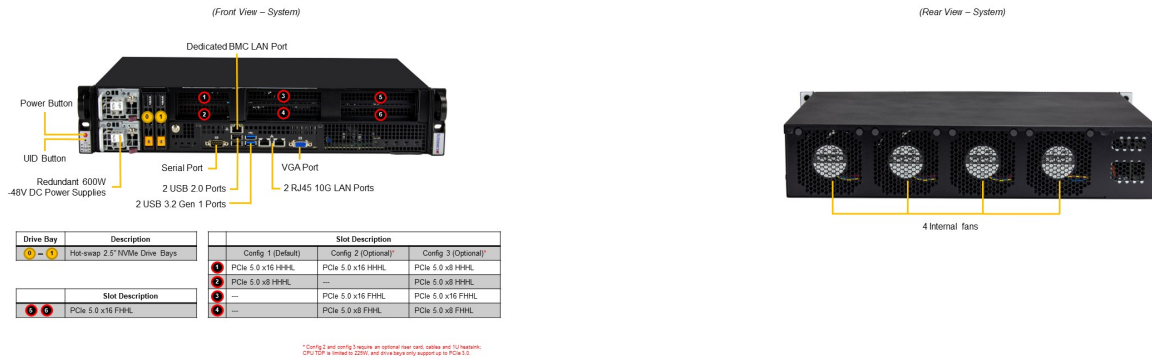
Form Factor	2U Rackmount Enclosure: 436.88 x 88.9 x 298.8mm (17.2" x 3.5" x 11.8") Package: 490 x 188 x 590mm (19.3" x 7.4" x 23.3")
Processor	Single Socket E (LGA-4677) 5th Gen Intel® Xeon®/4th Gen Intel® Xeon® Scalable processors Up to 60C/120T; Up to 112.5MB Cache
GPU	Max GPU Count: Up to 3 single-width GPU(s) Supported GPU: Intel PCIe: Intel Data Center GPU Flex 140 NVIDIA PCIe: A2 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 8 DIMM slots Max Memory (2DPC): Up to 2TB 5600MT/s ECC DDR5 RDIMM
Drive Bays	2x 2.5" hot-swap NVMe drive bays (2x 2.5" NVMe dedicated) 2 M.2 NVMe M-Key, 2280/22110
Expansion Slots	1 PCIe 5.0 x16 or x8 HHHL slot(s) 1 PCIe 5.0 x8 HHHL or Disable slot(s) 2 PCIe 5.0 x16 FHHL slot(s) 1 (Optional) PCIe 5.0 x16 or x8 FHHL slot(s) 1 (Optional) PCIe 5.0 x8 FHHL slot(s)
On-Board Devices	NVMe: NVMe; RAID 0/1 support (Intel® VROC RAID Key required) Chipset: Intel® C741 Network Connectivity: 2x 25GbE QSFP28 with Intel® XXV710 (optional) 2x 40GbE QSFP+ with Intel® XL710-BM2 (optional) 4x 1GbE BaseT with Intel® i350 (optional) 2x 200GbE QSFP56 with Mellanox® MT28908A0-XCCF-HVM (optional) 2x 100GbE QSFP28 with Intel® E810-CAM2 (optional) 2x 10GbE BaseT with Intel® X550 2x 10GbE SFP+ with Intel® X710-BM2 (optional) 2x 100GbE QSFP56 with Mellanox® CX-6 DX (optional) 4x 25GbE QSFP28 with Intel® E810-CAM1 (optional) 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	LAN: 2 RJ45 10GbE (Intel® X550-AT2) 1 RJ45 Dedicated BMC LAN port

USB: 2 USB 2.0 port(s) (2 front)

2 USB 3.2 Gen1 port(s) (2 front)

Video: 1 VGA port(s)

Serial Port: 1 COM Port(s) (1 front COM port)



System Cooling	Fans: 4x 4-PIN PWM 8cm Fan(s)
Power Supply	2x 600W Redundant Typical 90%+ Level power supplies
System BIOS	BIOS Type: AMI 256MB SPI Flash
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0
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 ~ 45°C (32°F ~ 113°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 X13SEM-TF
Chassis	CSE-211M

Parts List

Standard Parts (Parts Included)

Motherboard / Chassis					
Part Number	MBD-X13SEM-TF		CSE-211M		
Qty	1		1		
Description	Super X13SEM-TF Motherboard		2U Chassis		
Backplane					
Part Number	BPN-NVME5-826N-B2B				
Qty	1				
Description	2-Port PCIe Gen 5 U.2 NVMe SSD Storage Backplane				
Cable					
Part Number	CBL-MCIO-1230M5 CBL-MCIO-1218M5R OR	CBL-PCBA-G5T16-0809 CBL-MCIO-1218M5R-1	CBL-PWCD-09T4 CBL-MCIO-1230M5R OR	CBL-MCIO-1218M5 OR CBL-MCIO-1230M5R-1	CBL-MCIO-1218M5-1 CBL-CDAT-1058
Qty	1 1	1 -	2 1	1 -	- 1
Description	[NR] MCIO x8 (STR to STR),30CM,85OHM,RoHS MCIO (x8 STR to x8 RA),18CM,85OHM,RoHS	[NR] 2 PCIe Gen5 x16+pwr 08/09cm,30AWG,85 Ohm,RoHS MCIO x8 (STR to RA),18CM,85OHM,RoHS	48VDC input power cable, 2M, 12AWG, 3 wires, RoHS/REACH,RoHS MCIO x8 (STR to RA),30CM,85OHM,RoHS	MCIO x8 (STR to STR),18CM,85OHM,RoHS	MCIO x8 (STR to STR),18CM,85OHM,RoHS [NR] NCSI 2x8 to 2x8, PH2.54, 60cm shielded,28AWG, RoHS,RoHS
Drive Tray(s)					
Part Number	MCP-220-00167-0B		MCP-220-00147-0B		
Qty	2		2		
Description	Gen 3 2.5-inch Tool-less NVMe drive tray (clip design),RoHS		Black gen-3 hot-swap 2.5"; Tool-less HDD tray (clip design)		
Parts					
Part Number	MCP-260-21102-0B				
Qty	1				
Description	1U height IO shield for X13SEM-F/TF MBD, with gasket, bl				
Air Shroud					
Part Number	MCP-310-21105-0B				
Qty	1				
Description	Mylar air shroud for 211M w/ X13SEM-TF				
Manual					
Part Number	MNL-2519-QRG				
Qty	1				
Description	211E-FRDN2T/FRN2T Quick Reference Guide				
Power Distributor					
Part Number	PDB-PT211M-3424				
Qty	1				
Description	2U support redundancy powers up to 800W for SC211M with 2 Mi				
Power Supply					
Part Number	PWS-601S-1R				
Qty	2				
Description	1U 600W Redundant DC48V input w/PMBus power supply, W54,5xH4				
Riser Card					
Part Number	RSC-S-68G5				
Qty	1				
Description	1U LHS Standard riser card with one PCIe 5.0X16andonePC				
Software					
Part Number	SFT-OOB-LJC				
Qty	1				
Description	License key for enabling OOB BIOS management				
Heatsink / Retention					
Part Number	SNK-P0088P				
Qty	1				
Description	2U Passive CPU HS for X13 Intel Eagle Stream Platform				
*Fan					
Part Number	FAN-0220L4				
Qty	4				
Description	80x80x38 mm, 14.9K RPM Exhaust Fan for SYS-120P-FRDN6T Serve				
*Front Panel					
Part Number	FPB-TB826				
Qty	1				
Description	16 pin Cable Adaptor Board for SC826				
*Rail Set					
Part Number	MCP-290-21106-0N				
Qty	1				
Description	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.

[Global SKU \(/en/products/SMC_global_skus\)](#)