

X13 SuperEdge

High-Density Computing and Flexibility at the Intelligent Edge



Compact yet versatile system designed for maximum performance at the Edge

- 2U Short-depth (430mm), 3-node system
- Single 4th Gen Intel® Xeon® Scalable processor per node
- Front-access hot-swappable nodes
- Up to 8 DIMMs slots per node supporting DDR5-4800
- Up to 3 PCIe 5.0 slots per node
- Operating temperatures from -5°C to 55°C (CPU TDP-dependent)

Data Center-Class Performance and Expandability at the Edge

Supermicro's SuperEdge is designed to handle increasing compute and I/O density requirements of modern edge applications. With 3 customizable single-processor nodes, SuperEdge delivers high-class performance in a 2U, short-depth form factor. Each node is hot-swappable and offers front access I/O, making the system ideal for remote IoT, edge, or telco deployments. Each node can accommodate three PCIe 5.0 slots, enabling a wide range of add-on cards that allow the SuperEdge to be outfitted for networking, FPGA, DPU, eASIC, and TimeSync Options.

AI at the Edge

The SuperEdge's powerful and versatile design makes it ideal for AI workloads at the edge, such as data inferencing and training. Each node can be equipped with any of a wide range of accelerators or add-on cards, with each node working independent of the others to support a combination of workloads. This allows the system to simultaneously run networking workloads while also providing low-latency data inferencing for intelligent edge solutions.

Designed for Harsh Edge Environments

X13 SuperEdge features an optimized thermal design to allow maximum airflow over internal components, providing an ambient operating temperature range from -5°C to 55°C. The SuperEdge architecture has also been designed to withstand a wide range of humidity and other environmental conditions, making it suitable for deployment in harsh conditions outside of the traditional data center.

Powered by 4th Gen Intel Xeon Scalable Processors

Get data center performance at the edge with 4th Gen Intel Xeon Scalable Processors up to 300W TDP per node. The new processors are available in Edge-optimized SKUs which feature the built-in Intel vRAN Boost accelerator which can reduce power consumption by up to 20% on vRAN workloads.



SuperEdge	SYS-211SE-31A/AS	SYS-211SE-31D/DS
Processor Support	Single Socket E (LGA-4677) 4th Gen Intel® Xeon® Scalable processor [†]	Single Socket E (LGA-4677) 4th Gen Intel® Xeon® Scalable processor [†]
Outstanding Features	Three front hot-swappable nodes with single CPU socket and 8 DIMM design Front access IO design, and tool less serviceability 16.9" (430mm) chassis depth	Three front hot-swappable nodes with single CPU socket and 8 DIMM design Front access IO design, and tool less serviceability 16.9" (430mm) chassis depth
Memory Slots & Capacity	8 DIMM slots; Up to 2TB: DDR5 ECC RDIMM/RDIMM	8 DIMM slots; Up to 2TB: DDR5 ECC RDIMM/RDIMM
I/O Ports	1x 1GbE RJ45 port (SYS-211SE-31A) 1x 1GbE SFP port (SYS-211SE-31AS) 1 VGA port 1 COM Port(1 COM) 1 KVM dongle (output VGA x1, COM x1, USB 2.0 x2 through KVM cable)	1x 1GbE RJ45 port (SYS-211SE-31D) 1x 1GbE SFP port (SYS-211SE-31DS) 1 VGA port 1 COM Port (1 COM) 1 KVM dongle (output VGA x1, COM x1, USB 2.0 x2 through KVM cable)
Motherboard	X13SEED-F	X13SEED-F
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")	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")
Expansion Slots	2 PCIe 5.0 x16 FHHL, PCIe 5.0 x16 LP	2 PCIe 5.0 x16 FHHL, PCIe 5.0 x16 LP
Drive Bays	N/A	N/A
Cooling	4 heavy duty fan(s)	4 heavy duty fan(s)
Power	2000W AC Redundant PSUs	2000W DC Redundant PSUs

[†] Supports up to 270W TDP CPUs (Aircooled). CPUs with high TDP supported under specific conditions. Contact Technical Support for details.