X14 5G Edge and IoT

Compact and Short-depth Systems for Telco and Network Edge Deployments

High-density processing power and data throughput with front access I/O design

- **Single socket Intel® Xeon® 6700 series processors with E-cores**
- **5G Edge and IoT systems will also support Intel Xeon 6700 with P-cores in Q1'25**
- **RJ45 10GbE or SFP 25Gb network connectivity**
- **Front I/O, power and serviceability for space constrained edge environments**
- **Both AC and DC power configurations available with redundant power supplies**
- **Enhanced operating temperatures from -5°C to 45°C (CPU TDP-dependent)**

Data Center Compute at the Network Edge

Supermicro X14 edge and telco systems are optimized for remote and on-premise locations where power and space are at a premium. The flagship Hyper-E dual processor configuration facilitates maximum core density for edge data centers while also supporting multiple double-width GPUs for edge AI inferencing. X14 short-depth systems feature front I/O, optional DC power supplies, and NEBS compliance, enabling easy integration into existing telco and edge infrastructure.

Designed for Remote Data Center Deployment

Designed for remote and space-constrained telco environments, these short-depth and compact systems are available with both AC and DC redundant power options as well as NEBS-compliant designs on some architectures to easily integrate into existing edge infrastructure. The systems have also been designed to support a wider range of operating temperatures from -5°C to 45°C to ensure reliable operation in the harsh remote environments typical of edge deployments.

Efficiency and Flexibility

Efficiency is everything at the edge, and no matter what kind of 5G or Edge workload, Supermicro has an optimized system designed to maximize compute while adhering to thermal and power constraints which are commonly encountered outside the data center. Systems feature front-accessible I/O and power for compatibility with existing telco cabinet and rack infrastructure, with multiple PCIe 5.0 slots to accommodate a range of networking, FPGA and retimer cards specific to 5G and Edge computing workloads.

Powered by Intel® Xeon® 6 Processors with E-cores

The new Intel Xeon 6700 series processors with E-cores bring up to 2.5x higher core density per rack compared to 4th Gen Intel Xeon and improved performance per watt to enable Supermicro X14 multi-node solutions to delivery significantly more compute capacity in a smaller physical footprint

5G Edge and IoT	SYS-212B-FN2T/FN4TP	SYS-112B-FWT/FDWR
Processor Support	Single Intel® Xeon® 6 processor with E-cores up to 350W†	Single Intel® Xeon® 6 processor with E-cores up to 350W†
Memory Slots & Capacity	8 DIMM slots; Up to 2TB DDR5-5600MT/s	8 DIMM slots; Up to 2TB DDR5-5600MT/s
Compliance Features	Designed for with compliance to NEBS Level 3	
I/O Ports	1 RJ45 dedicated BMC LAN port (front) 2 RJ45 10GbE ports (Intel X550-AT2; front) 2 USB 2.0 ports (front) 2 USB 3.0 ports (front) 1 VGA port (front) 1 COM port (front)	1 RJ45 Dedicated IPMI LAN port (front) 2 RJ45 10GbE ports (Intel® X550-AT2; front) 2 USB 2.0 ports (front) 2 USB 3.0 ports (front) 1 VGA port (front) 1 COM port (front)
Motherboard	X13SEM-TF	X13SEW-TF
Form Factor	2U Rackmount 298.8mm/11.8 depth	1U Rackmount 429.3mm/16.9″ depth
Expansion Slots	1 PCIe 5.0 x16 HHHL slot 1 PCIe 5.0 x8 HHHL slot 2 PCIe 5.0 x16 FHHL slots	2 PCIe 5.0 x16 FHFL slots 1 PCIe 5.0 x16 LP slot
Drive Bays	2 hot-swap 2.5″ NVMe drive bays	2 fixed internal 2.5″ SATA drive bays
Cooling	4 heavy duty fans	4 heavy duty fans
Operating Temperature	0°C-45°C (32°F-113°F)	0°C-40°C (32°F-104°F)
Power	800W Redundant AC power supply (SYS-211-FRN2T) 600W Redundant short depth DC48V input power supply (SYS-211E-FRDN2T)	800W AC Redundant power supply (SYS-111E-FWTR) 600W DC Redundant power supply (SYS-111E-FDWTR)

†CPUs with high TDP supported under specific conditions. Contact Technical Support for details.

5G Edge and IoT	SYS-E403-14B-FRN2T
Processor Support	Single Intel® Xeon® 6 processor with E-cores up to 350W[†]
Memory Slots & Capacity	8 DIMM slots; Up to 2TB DDR5-5600MT/s
I/O Ports	1 RJ45 Dedicated IPMI LAN port (front) 2 RJ45 10GbE ports (Intel® X550-AT2; front) 2 USB 2.0 ports (front) 2 USB 3.2 ports (front) 1 VGA port (front) 1 serial port (front)
Motherboard	X13SEW-TF
Form Factor	Embedded Box 117.35x266.7x406.4mm/4.62x10.5x16" (HxWxD)
Expansion Slots	3 PCIe 5.0 x16 FHFL slots
Drive Bays	2 hot-swap 2.5" NVMe drive bays
Cooling	3 heavy duty 8cm fans
Operating Temperature	0°C-45°C (32°F-113°F)
Power	800W AC Redundant power supply

[†] CPUs with high TDP supported under specific conditions. Contact Technical Support for details.