X14 5G Telco and Edge

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 Telco and Edge systems will also support Intel Xeon 6700 with P-cores in Q1'25**
- **Up to 3 PCIe 5.0 x1 FHFL slots with support for double-width GPU accelerator cards**
- **Dual 10GbE RJ45 or SFP+ network connectivity**
- **Front I/O, power and serviceability for space constrained edge environments**
- **Both AC and DC power configurations available with redundant power supplies**

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. A compact design brings data center levels of compute performance to the edge in a 1U or 2U short-depth form factor, with a broad range of powerful connectivity options and edge AI capabilities. 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 and edge AI environments, these short-depth 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. With a large selection of available add-on cards, including AI accelerators, advanced networking cards, and storage, Supermicro's edge and telco systems can be optimized for a broad range of workloads.

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

Compared to previous generations, the new Intel Xeon 6 processors deliver higher performance-per-watt, enhanced on-board accelerators, and more cores in the same or lower power envelope. These improvements allow for heavier workloads in power-constrained environments, and result in more efficient systems optimized for edge and telco workloads.

5G Telco and Edge	SYS-212B-FN4TP	SYS-112B-FWT/FDWR
Processor Support	Single Intel® Xeon® 6700 processor with E-cores up to 350W†	Single Intel® Xeon® 6700 processor with E-cores up to 350W†
Memory Slots & Capacity	8 DIMM slots; Up to 1TB DDR5-6400MT/s	8 DIMM slots; Up to 1TB DDR5-6400MT/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	X14SBM-TP4F	X14SBW-F
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-35°C (32°F-95°F)	0°C-40°C (32°F-104°F)
Power	Optional: 600W 48 Vdc power supply Optional: 800W Redundant Platinum Level (94%) Optional: 800W Redundant Titanium Level (96%)	800W AC Redundant power supply (SYS-111E-FWT) 600W DC Redundant power supply (SYS-111E-FDWR)

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

5G Telco and Edge	SYS-212B-FN2T	SYS-212B-FLN2T
Processor Support	Single Intel® Xeon® 6700 processor with E-cores up to 350W†	Single Intel® Xeon® 6700 processor with E-cores up to 350W†
Memory Slots & Capacity	8 DIMM slots; Up to 1TB DDR5-6400MT/s	8 DIMM slots; Up to 1TB DDR5-6400MT/s
Compliance Features		
I/O Ports	1 RJ45 dedicated BMC LAN port (front) 2 RJ45 10GbE ports (front) 2 USB 3.2 ports (front) 1 VGA port (front)	1 RJ45 dedicated BMC LAN port (front) 2 RJ45 10GbE ports (front) 2 USB 3.2 ports (front) 1 VGA port (front)
Motherboard	X14SBM-TF	X14SBI-TF
Form Factor	2U Rackmount 450mm/17.7" depth	1U Rackmount 450mm/17.7" depth
Expansion Slots	2 PCIe 5.0 x16 FHFL slots ††	2 PCIe 5.0 x16 HHFL slots †† 3 PCIe 5.0 x8 HHFL slot
Drive Bays	4 hot-swap 2.5" NVMe drive bays 2 M.2 NVME slots (M-key2280/22110)	4 hot-swap 2.5" NVMe drive bays 2 M.2 NVME slots (M-key2280/22110)
Cooling	4x 4-pin PWM 8cm fans	4x 4-pin PWM 8cm fans
Operating Temperature	0°C-40°C (32°F-104°F)	0°C-40°C (32°F-104°F)
Power	2000W Redundant Titanium Level (96%) power supply	2000W Redundant Titanium Level (96%) power supply

†CPUs with high TDP supported under specific conditions. Contact Technical Support for details.
†† Alternative configurations available. Visit website for details.