X13 FatTwin®

Highly configurable 4U 8-node and 4-node systems

Optimzed for Compute or Storage Density

- **Single socket 4th Gen Intel® Xeon® Scalable processors per node**
- **16 DIMM slots per node supporting DDR5-4800MHz**
- **Front accessible service design for cold-aisle serviceability**
- **Hot-swappable drive bays – interchangeable NVMe, SAS or SATA**
- **Improved thermal management with new, optimized airflow designs**

Unified Platform for Compute and Storage

The X13 FatTwin high-density systems offer an advanced multi-node 4U twin architecture with 8 or 4 nodes (single processor per node). Front-accessible service design allows cold-aisle serviceability, with highly configurable systems optimized for data center infrastructure with compute and storage density and options. In addition, the FatTwin supports all-hybrid hot-swappable NVMe/SAS/SATA hybrid drive bays with up to 6 drives per node (8-node) and up to 8 drives per node (4-node).

Optimized for HCI, Cloud and Virtualization Applications

Supermicro multi-node solutions are designed for applications that require a large number of servers with high-speed interconnects for networked or clustered operations. Providing ultimate flexibility and serviceability, these solutions are ideal for applications such as:

- Hyperscale/Hyperconverged
- Telco Data Center and ETSI certified
- Data Center Enterprise Applications
- HPC and Big Data

Front-Accessible Nodes

The X13 FatTwin architecture provides a front-accessible node design allowing for cold-aisle serviceability, with highly configurable systems and supports Supermicro AIOM (OCP 3.0 networking) to provide flexible networking options for multiple use cases.

Powered by 4th Gen Intel® Xeon® Scalable Processors

Get maximum compute power in a single-socket node, with up to 60 cores in the most advanced Intel Xeon Scalable processors ever. Several CPU models are available, with optimizatons for storage, cloud or networking workloads as well as built-in accelerator engines. Intel's Data Streaming Accelerator (Intel DSA) offloads common data movement tasks to reduce overhead and increase CPU and memory workload performance, while Intel QuickAssist Technology (Intel QAT) offloads popular compression and cryptographic algorithms, increasing core workload capacity.

FatTwin	SYS-F511E2-RT	SYS-F521E3-RTB
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	Shared power architecture for best efficiency Redundant cooling and power configurations for high availability Optimized designs for storage and compute density HDD hot-swap capability 16 DIMMs Up to 4TB DDR5	Shared power architecture for best efficiency Redundant cooling and power configurations for high availability Optimized designs for storage and compute density HDD hot-swap capability 16 DIMMs Up to 4TB DDR5
Memory Slots & Capacity	16 DIMM slots Up to 4TB: 16x 256GB DRAM	16 DIMM slots Up to 4TB: 16x 256GB DRAM
I/O Ports	1x 1GbE RJ45 (BMC) port(s) via AIOM 1 VGA port, Aspeed AST2600 BMC	1x 1GbE RJ45 (BMC) port(s) via AIOM 1 VGA port, Aspeed AST2600 BMC
Motherboard	X13SEFR-A	X13SEFR-A
Form Factor	4U Rackmount Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: (28.3" x 15" x 42")	4U Rackmount Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: (28.3" x 15" x 42.4")
Expansion Slots	2 AIOM slot(s) M.2 slot(s) PCIe 5.0 x16 LP slot(s)	AIOM slot(s) M.2 slot(s) PCIe 5.0 x16 LP slot(s)
Drive Bays	8x 3.5" hot-swap NVMe/SATA/SAS drive bays;	6x 2.5" hot-swap NVMe/SATA/SAS drive bays;
Cooling	2x 8cm heavy duty fan(s)	3x 4cm heavy duty fan(s)
Power	Redundant 2000W Titanium level (96%)	Redundant 2000W Titanium level (96%)

† Supports up to 350W TDP CPUs (Aircooled). CPUs with high TDP supported under specific conditions. Contact Technical Support for details.