X13 Hyper-E

Best-in-class Performance and Flexibility for Edge Data Centers

Flagship performance in a short-depth form factors

- **Short-depth form factor (574mm/22.6“) for space-constrained environments**
- **Dual 5th/4th Gen Intel® Xeon® Scalable Processors**
- **Enhanced serviceability in the field with front I/O**
- **Up to 3 PCIe 5.0 x16 double-width or 6 PCIe 5.0 x16 single-width slots**
- **AC and DC power supply options**

Short-depth, Maximum Performance

Hyper-E brings the performance and flexibility of Supermicro’s flagship Hyper series to the edge with short-depth form factors designed for edge data center and telco deployments. Telco-optimized configurations are NEBS Level 3 certified and feature optional DC power supplies on selected models.

Optimized for 5G and Telco Applications

The compact form factor, many expansion options, and powerful compute make Hyper-E ideal for 5G, telco and intelligent edge applications including Cloud, Network Function Virtualization, AI Edge Inferencing, Telco Data Center and 5G Core/Edge. All I/O and expansion slots are front-accessible for easy servicing in space-constrained environments, while maintenance-friendly design innovations eliminate the need for tools when servicing, simplifying rollout and installation.

AI at the Edge

Hyper-E is able to accommodate up to 3 double-width GPU/FPGA cards, enabling it to support demanding AI workloads such as ML training and data inferencing at the Edge. When combined with its compact form factor and front access design, this makes the Hyper-E a powerful platform for AI inferencing in edge data centers.

Powered by 5th Gen Intel Xeon Scalable Processors

Get data center performance at the Edge with dual 5th Gen Intel Xeon Scalable Processors up to 350W TDP each. The new processors are available in edge-optimized SKUs which feature the built-in Intel vRAN Boost accelerator which can deliver up to 2x RAN capacity at the same power envelope and reduce power consumption by up to 20% on vRAN workloads.

Hyper-E	SYS-221HE-FTNR	SYS-221HE-FTNRD
Processor Support	Dual 5th/4th Gen Intel® Xeon® Scalable processors Up to 350W TDP (air cooled)†	Dual 5th/4th Gen Intel® Xeon® Scalable processors Up to 350W TDP (air cooled)†
Memory Slots & Capacity	32 DIMM slots; up to 8TB DDR5-5600MT/s	32 DIMM slots; up to 8TB DDR5-5600MT/s
Network Connectivity	2x 100GbE QSFP28 with Broadcom® BCM57508 (optional) 2x 100GbE QSFP28 with Intel® E810-CAM2 (optional) 2x 100GbE QSFP28 with Mellanox® CX-6 DX (optional) 2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 4x 10GbE RJ45 with Intel® X550 (optional) 4x 10GbE SFP+ with Intel® X710-BM2 (optional) via AIOM 1 RJ45 dedicated BMC LAN port 2 USB 2.0 ports (front) 1 VGA ports	2x 100GbE QSFP28 with Broadcom® BCM57508 (optional) 2x 100GbE QSFP28 with Intel® E810-CAM2 (optional) 2x 100GbE QSFP28 with Mellanox® CX-6 DX (optional) 2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 4x 10GbE RJ45 with Intel® X550 (optional) 4x 10GbE SFP+ with Intel® X710-BM2 (optional) via AIOM 1 RJ45 dedicated BMC LAN port 2 USB 2.0 ports (front) 1 VGA ports
MotherBoard	X13DEM	X13DEM
Form Factor	2U Rackmount 574mm/22.6" depth	2U Rackmount 574mm/22.6" depth
Expansion Slots	Configurable PCIe slot options: up to 8 PCIe 5.0 x8 (6 FHFL+ 2 FHHL) or 4 PCIe 5.0 x16 (3 FHFL + 1 FHHL)	Configurable PCIe slot options: up to 8 PCIe 5.0 x8 (6 FHFL+ 2 FHHL) or 4 PCIe 5.0 x16 (3 FHFL + 1 FHHL)
Drive Bays	6 hot-swap 2.5" NVMe/SAS/SATA drive bays; 6x 2.5" NVMe hybrid; optional RAID support via RAID controller AOC	6 hot-swap 2.5" NVMe/SAS/SATA drive bays; 6x 2.5" NVMe hybrid; optional RAID support via RAID controller AOC
Cooling	6 heavy duty fans	6 heavy duty fans
Power	Redundant 2000W Titanium level (96%)	Redundant 1300W -48Vdc single output

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