

X13 WIO

Industry's Widest Variety of I/O Optimized Servers



Wide-ranging flexibility for any enterprise workload

Supermicro WIO systems offer a wide range of I/O options to deliver truly optimized systems for specific requirements. Users can optimize the storage and networking alternatives to accelerate performance, increase efficiency and find the perfect fit for their applications. In addition to enabling customizable configurations and optimization for multiple application requirements, the Supermicro WIO family of servers also provides attractive cost advantages and investment protection.

Highly Flexible for a Range of Enterprise Workloads

Supermicro WIO systems offer flexibility and value for everyday virtualization, cloud computing, enterprise and data center workloads. Enhanced PCIe expansion slot configurations with tool-less brackets allow for accelerators and other add-on cards to handle entry-level GPUs for AI inferencing or DPU modules to maximize networking efficiency.

Do More with Less

The single processor design of the WIO family delivers the perfect balance of performance and value in a mid-range rackmount system, while also reducing power and licensing costs for certain workloads. The increased core count and performance of the new 4th Gen Intel Xeon Scalable processors means more applications can be handled with just a single processor, with an increased number of CPU SKUs in the 4th Gen Intel Xeon Scalable lineup optimized for single socket configurations.

Single-processor optimized architecture supporting up to 4 PCIe 5.0 devices

- Single socket 4th Gen Intel® Xeon® Scalable processors
- 8 DIMM slots supporting DDR5-4800MHz
- Support for double-width GPUs via top-loading expansion mechanism
- Hot-swappable 2.5" or 3.5" SATA/NVMe storage
- Up to 10x NVMe hybrid storage supported (optional)

Top-Loading Expansion

The X13 WIO systems feature a completely redesigned rear windows and expansion assembly, with a tool-less design meaning any add-on card can be added or removed without the need for a screwdriver. The updated top-loading expansion allows double-width GPUs to be installed in Supermicro WIO systems for the first time, bringing a new level of accelerated compute to this popular workhorse family.

Powered by 4th Gen Intel Xeon Scalable Processors

4th Gen Intel Xeon Scalable processors include optimizations 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.



WIO	SYS-111E-WR	SYS-511E-WR	SYS-521E-WR
Processor Support	Single Socket E (LGA-4677) 4th Gen Intel® Xeon® Scalable processor [†]	Single Socket E (LGA-4677) 4th Gen Intel® Xeon® Scalable processor [†]	Single Socket E (LGA-4677) 4th Gen Intel® Xeon® Scalable processor [†]
Outstanding Features	Maximum I/O support: 3 x16 expansion slots in 1U form factor Max 10x PCIe 5.0 NVMe drives supported in 1U Form Factor	Maximum I/O support: 3 x16 expansion slots in 1U form factor Cost optimized 1U X13 solution	Up to 4 expansion slots with optional riser card Max 4x hybrid PCIe 5.0 NVMe drives supported at front Flexible I/O expansion
Memory Slots & Capacity	8 DIMM slots Up to 2TB: 8x 256GB DRAM	8 DIMM slots Up to 2TB: 8x 256GB DRAM	8 DIMM slots Up to 2TB: 8x 256GB DRAM
I/O Ports	2x 1GbE RJ45 port(s) with Intel® Ethernet Controller i210 1 RJ45 Dedicated IPMI LAN port 4 USB 3.2 Gen 1 port(s) (2 front; 2 rear) 3 USB 2.0 port(s) (2 rear; 1 Type A) 1 VGA port 2 COM Port(s) (1 header; 1 rear)	2x 1GbE RJ45 port(s) with Intel® Ethernet Controller i210 1 RJ45 Dedicated IPMI LAN port 4 USB 3.2 Gen 1 port(s) (2 headers; 2 rear) 3 USB 2.0 port(s) (2 rear; 1 Type A) 1 VGA port 2 COM Port(s) (1 header; 1 rear)	2x 1GbE RJ45 port(s) with Intel® Ethernet Controller i210 1 RJ45 Dedicated IPMI LAN port 4 USB 3.2 Gen 1 port(s) (2 headers; 2 rear) 3 USB 2.0 port(s) (2 rear; 1 Type A) 1 VGA port 2 COM Port(s) (1 header; 1 rear)
Motherboard	X13SEW-F	X13SEW-F	X13SEW-F
Form Factor	1U Rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 609.6 x 203.2 x 812.8mm (24" x 8" x 32")	1U Rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 596.9 x 215.9 x 855.98mm (23.5" x 8.5" x 33.7")	2U Rackmount Enclosure: 437 x 89 x 647mm (17.2" x 3.5" x 25.5") Package: 673.1 x 279.4 x 863.6mm (26.5" x 11" x 34")
Expansion Slots	Slot 1: PCIe 5.0 x16 FHFL Slot 2: PCIe 5.0 x16 FHFL Slot 3: PCIe 5.0 x8 (in x16) LP	Slot 1: PCIe 5.0 x16 FHFL Slot 2: PCIe 5.0 x16 FHFL Slot 3: PCIe 5.0 x8 (in x16) LP	Slot 1: PCIe 5.0 x16 FHFL Slot 3: PCIe 5.0 x16 FHFL Slot 5: PCIe 5.0 x8 LP Slot 6: PCIe 5.0 x8 LP
Drive Bays	10x 2.5" NVMe/SATA/SAS drive bays (10x 2.5" NVMe hybrid)	4x 3.5" SATA/SAS drive bays	8x 3.5" NVMe/SATA/SAS drive bays; 4x 3.5" NVMe hybrid
Cooling	5x 4cm heavy duty fan(s)	5x 4cm heavy duty fan(s)	3x 8cm heavy duty fan(s)
Power	Redundant 860W Platinum level (94%)	Redundant 860W Platinum level (94%)	Redundant 920W platinum level

[†] Supports up to 300W TDP CPUs (Aircooled). CPUs with high TDP supported under specific conditions. Contact Technical Support for details.