X13 **WIO**

Industry's Widest Variety of I/O Optimized Servers

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

- **Single socket 5th/4th Gen Intel® Xeon® Scalable processors**
- **8 DIMM slots supporting DDR5-5600MHz**
- **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)**

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 including 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 5th Gen Intel Xeon processors means more applications can be handled with just a single processor, with an increased number of CPU SKUs in the 5th Gen Intel Xeon lineup optimized for single socket configurations.

Top-Loading Expansion

The X13 WIO systems feature a completely redesigned rear window 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 5th Gen Intel Xeon Processors

5th 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 5th/4th Gen Intel® Xeon® Scalable processor Up to 300W TDP (air cooled)†	Single 5th/ 4th Gen Intel® Xeon® Scalable processor Up to 300W TDP (air cooled)†	Single 5th/4th Gen Intel® Xeon® Scalable processor Up to 300W TDP (air cooled)†
Memory Slots & Capacity	8 DIMM slots; Up to 2TB DDR5 5600MT/s	8 DIMM slots; Up to 2TB DDR5 5600MT/s	8 DIMM slots; Up to 2TB DDR5 5600MT/s
I/O Ports	2 1GbE RJ45 ports with Intel® Ethernet Controller i210 (rear) 1 RJ45 dedicated IPMI LAN port (rear) 4 USB 3.2 Gen 1 port(s) (2 front/2 rear) 2 USB 2.0 ports (rear) 1 VGA port (rear) 1 serial port (rear)	2 1GbE RJ45 ports with Intel® Ethernet Controller i210 (rear) 1 RJ45 dedicated IPMI LAN port (rear) 4 USB 3.2 Gen 1 ports (2 headers/2 rear) 2 USB 2.0 ports (rear) 1 VGA port (rear) 1 serial port (rear)	2 1GbE RJ45 ports with Intel® Ethernet Controller i210 (rear) 1 RJ45 dedicated IPMI LAN port (rear) 4 USB 3.2 Gen 1 ports (2 headers/2 rear) 2 USB 2.0 ports (rear) 1 VGA port 1 serial port (rear)
Motherboard	X13SEW-F	X13SEW-F	X13SEW-F
Form Factor	1U Rackmount 597mm/23.5" depth	1U Rackmount 650mm/25.6" depth	2U Rackmount 647mm/25.5" depth
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	10 hot-swap 2.5" NVMe/SATA/SAS drive bays; 10 2.5" NVMe hybrid	4 hot-swap 3.5" SATA/SAS drive bays Optional slim DVD module	8 hot-swap 3.5" SATA/SAS drive bays; 4 3.5" NVMe hybrid 2 optional 2.5" hot-swap SATA drive bays (rear) Optional slim DVD module
Cooling	5 heavy duty 4cm fans (1 optional fan)	5 heavy duty 4cm fans (1 optional fan)	3 heavy duty 8cm fans
Power	Redundant 860W Platinum level (94%)	Redundant 860W Titanium level (96%)	Redundant 1000W Titanium level (96%)

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

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