

WIO SuperServer SYS-512B-WR

1U UP WIO with 4 hot-swap 3.5" NVMe/SAS/SATA bays and 3 PCIe 5.0 slots



Key Applications

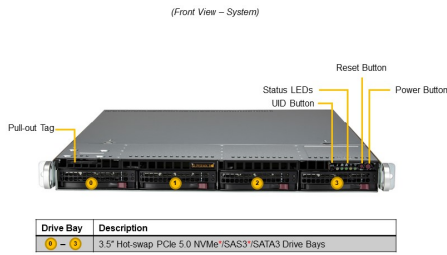
Enterprise Applications, General Purpose Computing, Cloud Computing, Web/Hosting Application, Network Appliance, Database/Storage, Storage Headnode, Entry GPU server,

Key Features

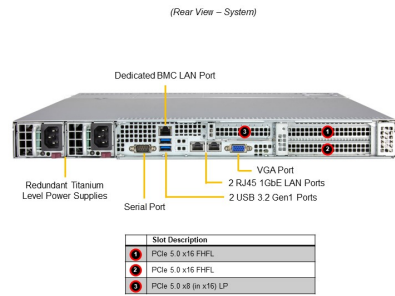
- WIO systems offer flexible I/O configurations in a cost-effective architecture to deliver truly optimized systems for specific enterprise requirements.;
- Single Intel® Xeon® 6 6700 series processor with E-cores;
- 8 DIMM slots supporting up to 1TB of memory (6700E series CPU).;
- Tool-less, Top-loading riser design support 3 PCIe 5.0 Expansion (2x FHFL + 1x LP).;
- Native SATA drives supported, with option PCIe 5.0 NVMe and SAS.;
- Trusted Platform Module (TPM) 2.0 onboard.;



Form Factor	1U Rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7")
Processor	Single Socket E2 (LGA-4710) Intel® Xeon® 6700 series processors with E-cores Up to 144C/144T; Up to 108MB Cache
GPU	Max GPU Count: Up to 1 double-width or 2 single-width GPUs CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect
System Memory	Slot Count: 8 DIMM slots/8 Channels Max Memory (1DPC): Up to 1TB 6400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 4 bays <ul style="list-style-type: none"> • 4 front hot-swap 3.5" SAS*/SATA drive bays Option A: Total 4 bays <ul style="list-style-type: none"> • 4 front hot-swap 3.5"/2.5" PCIe 5.0 x4 NVMe*/SAS*/SATA drive bays (*NVMe/SAS support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key 2280/22110; VROC required for RAID) Peripheral Bays: 2 slim peripheral bays
Expansion Slots	Default <ul style="list-style-type: none"> • 2 PCIe 5.0 x16 FHFL slots • 1 PCIe 5.0 x8 (in x16) LP slot
On-Board Devices	SATA: SATA (6Gbps) NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required) Chipset: System on Chip Network Connectivity: 2 RJ45 1GbE with Intel® I210
Input / Output	LAN: 2 RJ45 1 GbE LAN ports 1 RJ45 1 GbE Dedicated BMC LAN port (IPMI shared on LAN port 1) USB: 2 USB 3.2 Gen1 Type-A ports(rear) 2 USB 3.2 Gen1 ports(Header) Video: 1 VGA port Serial: 1 COM port(Rear) 1 COM port(Header) TPM: 1 TPM header



*NVMe or SAS3 support requires additional parts from the optional parts list



System Cooling	Fans: 1 AOC cooling Fan(s) (optional) 5 middle cooling PWM 40x40x56mm Fan(s) Air Shroud: 1 CPU Air Shroud
Power Supply	2x 860W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash EEPROM
Management	SuperCloud Composer; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 8 Phase-switching voltage regulator FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Weight: Gross Weight: 34.5 lbs (15.46 kg) Net Weight: 21.5 lbs (9.75 kg) Available Color: Black
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -30°C to 60°C (-22°F to 140°F) Operating Relative Humidity: 8% to 80% (non-condensing) Non-operating Relative Humidity: 8% to 90% (non-condensing)
Motherboard	Super X14SBW-F
Chassis	CSE-815BTS-R000WNP