

# Altos BrainSphere™ R880 F6

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The Altos BrainSphere™ R880 F6 is a high-performance GPU server platform engineered to meet the intensive demands of large language models (LLMs), generative AI, high-performance computing (HPC), and advanced data analytics. Powered by dual 5th Gen Intel® Xeon® Scalable processors and high-capacity DDR5 memory, it features eight NVIDIA Blackwell B200 GPUs to deliver breakthrough compute performance in a compact 8U chassis.

## Extreme Compute Power for AI and HPC

Designed for demanding AI and HPC workloads, the R880 F6 integrates NVIDIA Blackwell B200 GPUs interconnected via NVLink™ and NVSwitch™, delivering up to 1,800 GB/s of total GPU-to-GPU bandwidth. This high-speed architecture enables efficient multi-GPU communication and massive parallel processing. With 1.4 TB of aggregated GPU memory and up to 64 TB/s of memory bandwidth, the R880 F6 accelerates large-scale generative AI and LLM training while maintaining exceptional compute density and energy efficiency.

## Advanced Thermal Design and Power Efficiency

The system features a purpose-built 8U chassis with advanced thermal management and 6+6 redundant 3000W 80 PLUS Titanium power supplies, ensuring optimal cooling and reliability for 24/7 workloads.

## Versatile Expansion and Connectivity Options

Equipped with multiple PCIe Gen5 slots and 2.5" NVMe/SATA hybrid bays, the R880 F6 offers flexible expansion for high-speed networking, M.2 storage, and additional accelerators—making it suitable for a wide range of AI, HPC, and cloud infrastructure deployments.

## Intelligent Management and AI Workflow Optimization

The R880 F6 combines ASPEED® AST2600 BMC-based remote management with Altos aiWorks integration to enhance resource orchestration, strengthen platform security, and maximize infrastructure efficiency for enterprise AI deployments.

Specification		
CPU	Number of processors	Dual 5th Gen Intel® Xeon® Scalable processors, TDP up to 350W
GPU	Modular GPU	NVIDIA HGX™ B200 with 8 x NVIDIA Blackwell GPUs (NVLink/NVSwitch)
Memory	Memory slot	32 DIMM slots, 8-Channel DDR5 RDIMM RDIMM: Up to 5600 MT/s (1DPC), 4400 MT/s (2DPC)
LAN		2 x 10GbE (Support NCSI function) 2 x 1 GbE Management
TPM		1 x TPM 2.0 module
Drive Bay		Up to 8 x 2.5" (Hot-swappable) NVMe/SATA 2x M.2 2280/2210
I/O ports		2 x USB 3.2 Gen1 ports (Type-A) 1 x VGA port 2 x 10GbE RJ45 ports 2 x 1 GbE Management ports
PCIe Expansion Slots	Rear	8 x FHHL single-slot PCIe Gen5 x16 slots 4 x FHHL dual-slot PCIe Gen5 x16 slots
Power supply		6+6 3000W 80 PLUS Titanium redundant power supplies AC Input: 115-240V
Cooling		Air cool
Operating Properties		Operating temperature: 10°C to 25°C Operating humidity: 8%-80% (non-condensing) Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing)
Form factor	Dimensions (D x W x H)	8U 447 (D) x 351 (W) x 923 (H) mm
Security and Manageability		ASPEED® AST2600 BMC TPM 2.0 (FIPS, CC-TCG certification) UEFI Secure Boot SNMP v3 Support
OS		Microsoft® Windows Server, Red Hat Enterprise Linux Server, Ubuntu Server LTS

**About Altos**  
Altos Computing Inc. (abbr. Altos) is established in 2017 and it is a subsidiary of Acer Inc. The business model of Altos is to provide the best streamlined and cost-effective integrated solutions thru in-house R&D working with ODM/IHV/ISV on servers, workstations, thin client, network and storage. In the era of demanding speed, Altos provides leading solution included, but not limited to High Performance Computing, Virtual Desktop Infrastructure, Cloud Infrastructure and Software Defined Storage, etc. Altos provides solutions and services to government, academia, cloud service providers, datacenter operators and enterprises.

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