

Altos BrainSphere™ R680 F4

Altos BrainSphere R680 F4 GPU server, equipped with up to 8x NVIDIA GPUs, can significantly enhance performance by using parallel computing power for various applications, such as oil & gas, defense, financial services, research, manufacturing, media & entertainment and, 3D rendering, deep learning, and mission-critical applications.

Extremely Powerful

Powered by 2nd Gen Intel® Xeon® Scalable Processors and the DDR4 memory technology, it allows owners to upgrade computing performance without compromising power consumption. This allows you to save unnecessary datacenter cooling cost and achieve higher DCIE (Data center infrastructure efficiency) value.

Support for 8 x GPUs

To succeed in a competitive world, customers need computing results with greater precision and speed. The “GPU server” supports up to eight PCIe x16 slots for GPU cards. With NVIDIA’s GPGPU solutions, this server offers excellent VDI performance with rapid data accessibility from an array of mobile and tablet devices and enables smooth 3D virtual desktop rendering, which cannot be achieved with traditional VDI.

High Flexible

Adding 9th PCIe x16 slot for NVMe deployment or high speed networking like 100 Gigabit EDR Infiniband or Intel Onmi-path fabric. And an internal PCIe x8 storage mezzanine slot for SAS HBA or SAS RAID. Users can rest assured the Altos BrainSphere R680 F4 will keep up in any high-performance scenario.



CPU	Processor type	Up to 2 x Intel® Xeon® Scalable Processor / 2nd Gen Intel® Xeon® Scalable Processor
On-board Devices	Chipset Graphics RAID	Intel® C621 PCH (LBG-1G) + (4) PLX PEX8747 PCIe Switches BMC embedded controller Intel® RSTe 5.0 software SATA RAID 0, 1, 5, 10 (Windows OS support only) Optional hardware SAS RAID card or SAS HBA
	Network controller Storage	2 x 10GBASE-T ports (Intel® X550-AT2) 14 x hot-swap 2.5" SATA/SAS 12G HDDs (optional up to 4 x U.2 NVMe SSDs)
Memory	Memory slot	24 x DDR4 DIMM slots
	Memory type Max memory	Registered / Load Reduced DDR4 2933/2666 memory Up to 768GB RDIMM/ 1,536GB LRDIMM/ 2,048GB RDIMM 3DS/LRDIMM 3DS *Follow latest Intel DDR4 Memory POR
Expansion slots	PCIe	<ul style="list-style-type: none"> • 8 x double-wide PCIe Gen.3 x16 slots for GPU deployment • 1 x single-wide PCIe x16 slot • 1 x PCIe x8 storage mezzanine card slot • 1 x PCIe x8 LAN/InfiniBand mezzanine card slot
I/O ports	Front I/O ports	<ul style="list-style-type: none"> • LED indicators: System status, UID, LAN 1-3, HDD, Individual hot-swap drive bays 0-13 • Button: Power with LED, ID, NMI, Reset • 2 x USB 3.0 ports • 1 x VGA port • 1 x Serial port
	Rear I/O ports	<ul style="list-style-type: none"> • Button: ID with LED • 2 x 10GbE LAN ports (RJ-45) • Management port (RJ-45) • 1 x Serial port (optional)
Power Supply Unit		3 x 1600W (200-240Vac) / 1000W (100-127Vac) 80 PLUS® Platinum-level hot-swap power supply module, (2+1) redundant
Cooler		Six managed, hot-swappable fans keep the system running cool at all times
Form Factor	Form Factor Dimensions	4U rack 438mm x 176mm x 770mm
Operating System		<ul style="list-style-type: none"> • Microsoft® Windows Server® 2016/2019 • VMware ESXi™ 6.7 U3 • SUSE® Linux® Enterprise Server 12 SP3 • Red Hat® Enterprise Linux® 7.6 / 7.x
Server management utilities and applications		<ul style="list-style-type: none"> • Remote monitoring and optional KVM over IP management to OS level • System ID LED buttons, System Health LED • Altos Smart Server Manager • Embedded BMC controller with IPMI 2.0 compatibility
Certifications	EMC & Safety Industry standard compliance	BSMI CE (Class A) FCC (Class A) CB A) UL

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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.

