

# Altos BrainSphere™ R389 F4

Altos BrainSphere™ R389 F4, equipped latest Intel® Xeon® Scalable series CPU, is a robust two-socket 2U system that is ideal for almost any type of applications. This dynamic and balanced system can function as a database server for Big Data Analytics, a computing node for your HPC (High-Performance Computing) environments, or used for virtualization purposes in your cloud infrastructure. Extremely powerful and highly efficient, this system functions as the core for your most demanding data-center needs.

## Rich Computing Power

Powered by Intel® Xeon® Scalable series with the TDP up 205W and 6 channels of memory per socket, these dual Intel Xeon® processor strikes the perfect balance of computing power, memory, and raw IO, to deliver most optimized performance and support most demanding workloads.

## Excellent Expandability

In additional, Altos BrainSphere™ R389 F4 provides up to 24 DDR4 DIMM slots, up to 8 PCIe slots, and up to 24 2.5" drive bays, to perfectly fulfill demands of high-capacity memory and storage.

## Robust Availability

Altos BrainSphere™ R389 F4 supports 1+1 redundancy power supply and it comes with multiple options, 800W or 1200W 80 PLUS Platinum power to offer flexibility to meet customer's target budget, while leverage cost/performance. Additional with four hot-swappable system fans, it supports high system availability.

## Accelerate AI development

With Altos BrainSphere™ AI Development Platform API service agent, it integrates system, GPU and AI Deep Learning container management to fast build and deploy AI development environments.



CPU	Processor type	<ul style="list-style-type: none"> <li>• Intel® 1<sup>st</sup> and 2<sup>nd</sup> Xeon® Scalable series processor, TDP Up to 205W<sup>(1)</sup></li> <li>• Intel® Xeon® Platinum, Gold, Silver and Bronze series processor</li> </ul>		
	Number of processors	2		
On-board Devices	Chipset	Intel® C621 Express		
	IPMI	ASPEED AST2500		
	Graphics	ASPEED AST2500 BMC		
	Network controller	<ul style="list-style-type: none"> <li>• Dual 1GbE LAN ports with Intel® I350-AM2</li> <li>• One 10/100/1000 management LAN port</li> </ul>		
Memory	Memory slot	24 DIMM slots		
	Memory type	6-Channel, DDR4 2933Mhz RDIMM / LRDIMM		
	Memory density	RDIMM Up to 64GB, LRDIMM Up to 128GB		
Expansion slots	PCIe	<ul style="list-style-type: none"> <li>• 2 x PCIe x16 slots (Gen3 x16 or x8), Full height half-length</li> <li>• 2 x PCIe x8 slots (Gen3 x0 or x8), Full height half-length</li> <li>• 2 x PCIe x8 slots (Gen3 x8), Full height half-length</li> <li>• 1 x PCIe x8 slot (Gen3 x0 or x8), Low height half-length</li> <li>• 1 x PCIe x16 slot (Gen3 x16 or x8), Low height half-length</li> <li>• 2 x OCP mezzanine slots<sup>2</sup> (PCIe Gen3 x 16, type P1, P2, P3, P4, K2, K3)</li> </ul>		
I/O ports	Front I/O ports	<ul style="list-style-type: none"> <li>• 2 x USB 3.0 ports</li> </ul>		
	Rear I/O ports	<ul style="list-style-type: none"> <li>• 1 x VGA port</li> <li>• 1 x COM port (RJ45 Type)</li> <li>• 1 x RJ45 management LAN port</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x USB 3.0 ports</li> <li>• 2 x RJ45 LAN ports</li> </ul>	
Management & Security	Server Management	<ul style="list-style-type: none"> <li>• IPMI2.0, KVM with dedicated LAN</li> <li>• Altos Smart Server Manager</li> <li>• Smart Console remote monitoring</li> </ul>		
	System Security	<ul style="list-style-type: none"> <li>• 1 x TPM Header ; Optional TPM 2.0 module (LPC Interface)</li> </ul>		
Software/Utility	Altos BrainSphere™ AI Development Platform API			
Drive Bays	12 x 3.5" Standard sku	Front side: 12 x 3.5"/2.5" SAS/SATA hot-swappable bays for HDD/SSD		
	12 x 3.5" GPU sku	Front side: 12 x 3.5"/2.5" SAS/SATA hot-swappable bays for HDD/SSD		
	24 x 2.5" Standard sku	Front side: 4 x 2.5" U.2 + 20 x 2.5" SAS/SATA hot-swappable bays for HDD/SSD		
	12 x 3.5" GPU sku only	Rear side: 2 x 2.5" SATA/SAS swappable HDD/SSD bays (only GPU sku)		
Power supply	<ul style="list-style-type: none"> <li>• 2 x 1200W redundant power supply, 80 PLUS Platinum</li> <li>• 2 x 800W redundant power supply, 80 PLUS Platinum</li> </ul>			
Form factor	Form factor	2U, Rackmount		
	Dimensions (D x W x H)	730 x 438 x 87.5 mm approximately		
Tested OS	<ul style="list-style-type: none"> <li>• Window Server 2019, 2016</li> <li>• Red Hat® Enterprise Linux® 7.x and 8.0</li> </ul>		<ul style="list-style-type: none"> <li>• VMware ESXI 6.7 Update 3</li> </ul>	
Regulatory Compliance	EMC	CE	FCC	BSMI
	Safety	CB	MET	BSMI

1. R389 F5 GPU sku can only support up to Intel CPU TDP up to 165W
2. 1 OCP mezzanine slot is occupied for 4 x U.2 mezzanine card

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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.

