

# Altos BrainSphere™ R185 F5

Altos BrainSphere R185 F5, equipped with single AMD EPYC 7003/7002 series processor, is a robust single 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 AMD EPYC 7003/7002 series CPUs (Rome) with the latest 7nm advanced process technology, this CPU series can support up to 64 cores and 8 channels of RDIMM/LRDIMM memory per socket, the AMD EPYC processor strikes the perfect balance of threads/cores, memory, and raw IO, to deliver most optimized performance and support most demanding workloads.

## Excellent Expandability

Altos BrainSphere R185 F5 is equipped up to 16 DIMM slots to support up to 2TB DDR4-3200 total memory size, up to 6 latest PCIe Gen4.0 with 2x speed comparing with its previous generation and flexible expandable storage options from 12bay LFF to 26bay SFF HDD trays



## Robust Availability

Altos BrainSphere R185 F5 has dual 800W PSU 80Plus Platinum for 1+1 redundancy, four hot-swappable system for high availability.



## Accelerate AI development

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

|                       |                       |  |   |      |
|-----------------------|-----------------------|--|---|------|
| CPU                   | Processor type        | <ul style="list-style-type: none"> <li>AMD EPYC™ 7002 and 7001 series</li> <li>Up to 64-core, 128 threads per processor; TDP up to 240W</li> </ul>   |   |      |
|                       | Number of processors  | 1  |   |      |
| On-board Devices      | Chipset               | System on Chip   |   |      |
|                       | IPMI                  | ASPEED AST2500 (2D Controller)   |   |      |
|                       | Graphics              | ASPEED AST2500 BMC (2D Controller)   |   |      |
|                       | 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           | 16 DIMM slots  |   |      |
|                       | Memory Type           | Up to 2TB (16 x 128GB) DDR4-3200/2933MHz ECC   |   |      |
|                       | Memory Channel        | RDIMM/LRDIMM   |   |      |
| Expansion slots       | PCIe                  | <ul style="list-style-type: none"> <li>3 x PCIe Gen4 x16 (in x16 slots)</li> <li>1 x PCIe Gen4 x8 (in x16 slot)</li> <li>1 x PCIe Gen3 x16 or x8 (in x16 slot)</li> <li>1 x PCIe Gen3 x8 or x0 (in x8 slot)</li> <li>1 x OCP 2.0 Mezzanine Slot with PCIe Gen3 x16 (support Type1, P1, P2, P3, P4, Type 2 P5 with NCSI)</li> </ul> |   |      |
|                       | M.2                   | 2 x M.2 2280/2260/2242 slot (M-key, w/PCIe 3.0 x4)   |   |      |
| I/O ports             | Front I/O ports       | <ul style="list-style-type: none"> <li>2 x USB 3.0</li> </ul>  |   |      |
|                       | Rear I/O ports        | <ul style="list-style-type: none"> <li>2 x RJ45 Ethernet LAN ports</li> <li>1 x RJ45 Dedicated IPMI LAN port</li> </ul>  | <ul style="list-style-type: none"> <li>3 x USB 3.0</li> <li>1 x VGA port</li> <li>1 x COM port</li> </ul> |      |
| Management & Security | Management            | <ul style="list-style-type: none"> <li>IPMI 2.0, KVM with dedicated LAN</li> <li>Smart Console remote monitoring</li> <li>Altos Smart Server Manager</li> </ul>  |   |      |
|                       | TPM                   | 1 TPM with SPI interface (optional for TPM module)   |   |      |
| System Fan            |                       | 4 x 80x80x38mm 16300rpm  |   |      |
| Drive Bays            | 12 x 3.5" SKU         | 12 x 3.5"/2.5" hot-swappable bays SAS/SATA HDD/SSD + 2 x 2.5" bay SAS/SATA HDD/SSD (Rear)  |   |      |
|                       | 24 x 2.5" SKU         | 24 x 2.5" bay SAS/SATA HDD/SSD (Front) + 2 x 2.5" bay SAS/SATA HDD/SSD (Rear)  |   |      |
| Power Supply          |                       | 2 x 800W redundant power supply, 80 PLUS Platinum  |   |      |
| System Cooling        |                       | <ul style="list-style-type: none"> <li>Passive Heat-Sink with Air-duct</li> <li>4 x 80x80x38mm 16300rpm</li> </ul>   |   |      |
| Form Factor           | Form factor           | 2U Rack  |   |      |
|                       | Dimension (D x W x H) | 438 x 87.5 x 660 (mm)  |   |      |
| Software              |                       | Altos BrainSphere™ AI Development Platform API   |   |      |
| OS                    |                       | <ul style="list-style-type: none"> <li>Microsoft® Windows Server® 2022 and 2019</li> <li>Red Hat® Enterprise Linux® 8.0 and 7.6</li> </ul>   |   |      |
| Certification         | EMI                   | CE   | FCC   | BSMI |
|                       | Safety                | CB   | MET   | BSMI |
| Warranty              |                       | 3 years  |   |      |

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Altos provides solutions and services to government, academia, cloud service providers, datacenter operators and enterprises.

