

R152-P31

ARM Server - 1U UP 10-Bay Rack Server



AMPERE®



Features

- Hardware-level root of trust support
- Single socket Ampere® Altra® Processor
- 8-Channel RDIMM/LRDIMM DDR4, 16 x DIMMs
- 2 x 1Gb/s LAN ports (Intel® I350-AM2)
- 1 x Dedicated management port
- 6 x SATA and 4 x NVMe 2.5" hot-swap HDD/SSD bays
- 2 x Ultra-Fast M.2 with PCIe Gen4 x4 interface
- 1 x PCIe Gen4 x16 expansion slot
- Aspeed® AST2500 management controller
- 650W 80 PLUS Platinum redundant power supply

Specification

Dimensions	1U (W438 x H43.5 x D660 mm)	Backplane I/O	Backplane P/N: 9CBP10A3NR-00 Speed and bandwidth: PCIe Gen3 x4, SATA 6Gb/s
Motherboard	MP32-AR1	TPM	1 x TPM header with SPI interface Optional TPM2.0 kit: CTM010
CPU	Ampere® Altra® Processor Single processor, 7nm technology, LGA4926 socket Up to 80-core per processor	Power Supply	Dual 650W 80 PLUS Platinum redundant power supply AC Input: 100-240V
Chipset	System on Chip	System Management	Aspeed® AST2500 management controller GIGABYTE Management Console (AMI MegaRAC SP-X)
Memory	8-Channel DDR4 memory, 16 x DIMM slots RDIMM/LRDIMM modules up to 256GB supported Up to 4TB of memory capacity supported per processor Memory speed: Up to 3200 MHz NOTE: Only supports configurations with 1, 2, 4, 6, 8, 12, or 16 DIMMs	OS Compatibility	RHEL 8.3 / 8.5 (ARM64) CentOS 8.3-2011 / 8.4.2105 / 8.5.2111 (ARM64) SLES 15 SP2 / 15 SP3 (ARM64) Ubuntu 18.04.5 LTS / 20.04.1 LTS (ARM64) Fedora Server 33-1.2 / 35-1.2 (ARM64) FreeBSD 14.0-CURRENT (ARM64) OracleLinux R8 U2 / R8 U5 (ARM64) Debian 10.9 (Buster) / 11.1 (ARM64)
LAN	2 x 1GbE LAN ports (1 x Intel® I350-AM2) 1 x 10/100/1000 management LAN	System Fans	5 x 40x40x56mm (23'000rpm)
Video	Integrated in Aspeed® AST2500 2D Video Graphic Adapter with PCIe bus interface 1920x1200@60Hz 32bpp, DDR4 SDRAM	Operating Properties	Operating temperature: 10°C to 35°C Operating humidity: 8-80% (non-condensing) Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing)
Storage	6 x 2.5" SATA hot-swap HDD/SSD bays from CSTO180 (ASM1164) SATA HBA - SATA device supported only 4 x 2.5" NVMe hot-swap HDD/SSD bays from onboard U.2 ports	Packaging Content	1 x R152-P31 system 1 x CPU heatsink 1 x Rail kit
SAS	N/A	Reference Numbers	Barebone package: 6NR152P31MR-00 - Motherboard: 9MP32AR1NR-00 - Rail kit: 25HB2-3A0202-K0R - CPU heatsink: 25ST1-2534Z0-C1R - OCP type SATA HBA Card: 9CSTO180NR-00 - Power supply module: 25EP0-206506-F3S
RAID	N/A		
Expansion Slots	1 x PCIe x16 slot (4.0 x16), Full height half-length 1 x OCP 2.0 mezzanine slot, occupied by CSTO180 SATA HBA 2 x M.2 slots (4.0 x4), supports 2242/2260/2280/22110 cards		
Front I/O	1 x USB 3.0		
Rear I/O	3 x USB 3.0, 1 x VGA, 1 x COM, 2 x RJ45, 1 x MLAN		



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