



OSS
ONE STOP SYSTEMS

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THE EMBEDDED EDGE

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DATASHEET

PCIe Gen 4 3U Short Depth AMD Server

Part Number: OSS-SDS-3U-4a

FEATURES

- AMD EPYC™ 7003 Series Processor(s)
- 20" depth
- 2x Internal PCIe 4.0 M.2 Boot Drives
- 8 or 16 U.2/U.3 SATA/SAS/NVMe drives
- Up to 7 x16 PCIe 4.0 expansion slots
- System Monitoring
- AC or DC Power Supplies
- Resource expanded BIOS for large expansion capability
- Guaranteed to operate with all OSS expansion products



The Gen 4 PCIe SDS-3U-4a contains options for Dual or Single-Socket AMD EPYC™ 7003 Series Processors and provides a feature packed server platform for GPU or FPGA accelerated computing, U.2/U.3 NVMe storage and the most native PCIe Gen 4 x16 slots available on the market. This functionality is delivered in a size efficient edge ready rugged chassis with 3U height and 20" depth. This allows the edge optimized server to stand alone as a hyperconverged PCIe Gen 4 server or form the core CPU and memory resources for a scale-out, rack level, expandable or composable solution in the shallowest available racks. The SDS-3U-4a features up to 7 PCIe Gen 4 x16 slots, and 16 SATA/SAS/NVMe drives. The server supports up to 2TB of memory per CPU socket and a resource expanded BIOS for scale-out device enumeration and large memory mapped I/O used for GPUs and accelerators.

SPECIFICATIONS

Dimensions	5.2" H x 17.2" (19.2" with rack ears) W x 20.0" D
CPUs	AMD EPYC™ 7002 (Rome) and 7003 (Milan) Series Processors up to 225W TDP LGA 4094 single or dual socket SP3
System Memory	8x DDR4 3200/2933/2666/2400 RDIMM slots per CPU socket LRDIMM (Modules up to 256GB Supported) 8 (Single-Socket) or 16 (Dual-Socket) Memory Channels, 1.2V DIMMs
Expansion Slots	6x PCIe 4.0 x16 FH, 10.5" length slots 1x PCIe 4.0 x16 FH, half-length slot or 2x M.2 (2230/2242/2260/2280) or no PCIe Slot +2x miniSAS-HD, + 2x Oculink by jumper
Storage Subsystem	8 or 16 hot-swap configurable SATA-3, SAS-3 or NVMe x4 2.5" x 15mm drive carriers - o 12Gb SAS-3 or 6Gb SATA-3 SFF-8680 slots -or- - o NVMe x4 32Gb slots Up to 8 SATA-3 slots use no PCIe slots 8x and 16x SAS-3 slots require 1 and 2 PCIe x16 HHHL slots respectively 8x and 16x NVMe x2 slots require 1 and 2 x16 PCIe HHHL slots respectively Further expansion up to 4PB possible using OSS JBOF expansion systems such as SB2000 2x M.2 x4 or 4x NVMe internal drive connections possible with jumper option
USB	2x USB 3.2 1x USB 3.1 Gen 2 (Type C)
Ethernet	2x RJ45 10GBASE-T LAN from Intel® X550-AT2 1 x RJ45 Dedicated IPMI LAN port from RTL8211E
BIOS	32 MB AMI UEFI BIOS
Cooling Fans	(6) 40x56mm and (1) 80x38mm high powered fans mount behind front bezel and cool add-in-cards up to 300w
Chassis	Rugged and lightweight aluminum construction

SPECIFICATIONS CONTINUED

Part Number: OSS-SDS-3U-4a

Weight	45lbs
Power Supply	Dual N+1 2600-watt AC 110-240V CPRS Power Supplies Dual N+1 48V DC Input Power Supplies
Environment	Operating: -10°C to 50°C* (14°F to 122°F) at 0 to 3,000m (10,000ft) altitude 5% to 90% non-condensing relative humidity, max dew point 21°C, max rate of change 5°C/hr Non-Operating: -40°C to 85°C (-40°F to 185°F) 5% to 90% non-condensing relative humidity, max dew point 27°C, max rate of change 5°C/hr
Agency	Tested to conform to the following standards: - FCC - Verified to comply with Part 15 of the FCC Rules, Class A - Canada ICES-003, issue 4, Class A - CE Mark (EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3) - CISPR 22, Class A - MIL-STD-810G Designed to conform to the following extended standards: - NOM-019 - Argentina IEC60950-1 - Japan VCCI, Class A - Australia/New Zealand AS/NZS CISPR 22, Class A - China CCC (GB4943), GB9254 Class A, GB17625.1 - Taiwan BSMI CNS13438, Class A; CNS14336-1 - Korea KN22, Class A; KN24 - Russia/GOST ME01, IEC-60950-1, GOST R 51318.22, GOST R 51318.24, GOST R 51317.3.2, GOST R 51317.3.3 - TUV-GS (EN60950-1 /IEC60950-1,EK1-ITB2000)
Compliance	RoHS 3, WEEE

*These temperature ranges may require GPU/CPU throttling.