



## PCIe 4.0 2U Expansion Optimized Server (EOS-2U-4a)

The EOS-2U-4a contains an AMD EPYC™ 7002 Series Processor and provides the widest BIOS compatibility with dense storage and accelerator expansion systems. This allows the highly integrated server to stand alone or form the core CPU and memory resources for a scale-out, rack level, expandable solution. The EOS-2U-4a features six PCIe 4.0 x16 half-height slots and 1 PCIe 3.0 x16 half height slot. The EOS-2U-4a provides options for 7x add-in cards or 24x U.2 or U.3 drives. The server supports up to 2TB of memory and a resource expanded BIOS for scale-out device enumeration and large memory mapped I/O used for GP-GPUs and accelerators.

PN: OSS- EOS-2U-4a



### Features

- AMD EPYC™ 7002 Series (Rome) Processor
- Options for 7x add-in cards or 24x U.2/U.3 drives
- Up to six x16 PCIe 4.0 HH slots
- Supports OSS 256Gb/s PCIe 4.0 expansion
- Dual 1+1 redundant universal AC input power supplies
- Resource expanded BIOS for large expansion capability
- Guaranteed to operate with all OSS expansion products

## Specifications

<b>Dimensions:</b>	3.45" H x 17.2" (19" with rack ears) W x 28" D (8.7 x 43.7 x 71 cm)
<b>CPUs:</b>	AMD EPYC™ 7002 Series (Rome) Processor up to 225W TDP LGA 4094 single socket SP3
<b>System Memory</b>	8x DDR4 3200/2933/2666/2400 R DIMM slots (Modules Up to 64GB Supported) LR DIMM (Modules up to 256GB Supported) 8 Memory Channels, 1.2V low profile DIMMs
<b>Expansion Slots:</b>	EOS configuration: <ul style="list-style-type: none"> <li>• 5 x PCIe 4.0 x16 HHFL slots</li> <li>• 1 x PCIe 4.0 x16 HHFL slot or 2x M.2 (2230/2242/2260/2280) + 2x miniSAS-HD + 2x Oculink by jumper</li> <li>• 1 x PCIe 3.0 x16 HHFL slot</li> </ul> NVMe configuration: <ul style="list-style-type: none"> <li>• 2 x PCIe 4.0 x16 HHFL slots available with 48 PCIe 3.0 lanes routed to NVMe drives</li> <li>• 1 x PCIe 4.0 x16 HHFL slot or 2x M.2 (2230/2242/2260/2280) + 2x miniSAS-HD + 2x Oculink by jumper</li> <li>• 1 x PCIe 3.0 x16 HHFL slot</li> </ul>
<b>Storage Subsystem:</b>	EOS configuration: <ul style="list-style-type: none"> <li>• 24x hot-swap configurable SATA-3, SAS-3 or NVMe x4 2.5" x 15mm drive carriers <ul style="list-style-type: none"> <li>• 12Gb SAS-3, 6Gb SATA-3 SFF-8680, NVMe x4 32Gb slots</li> </ul> </li> <li>• Up to 8 SATA-3 slots use no PCIe slots</li> <li>• 12x and 24x SATA/SAS slots require 1 and 2 PCIe x16 HHFL slots respectively</li> <li>• 8x and 16x NVMe x2 slots require 1 and 2 x16 PCIe HHFL slots respectively (for 24x NVMe x4 use NVMe config)</li> <li>• Further expansion up to 4PB possible using OSS JBOF expansion systems</li> <li>• 2x M.2 x4 and 4x NVMe internal drive connections possible with jumper option</li> </ul> NVMe configuration: <ul style="list-style-type: none"> <li>• 24x hot-swap NVMe x4 2.5" x 15mm drive carriers</li> <li>• Up to 8 NVMe drive bays can be SATA-3 configured</li> <li>• 1x M.2 x4 internal drive connections possible with jumper option</li> </ul>
<b>USB:</b>	4 USB 3.1 Gen 1 (2 from Rear I/O, 2 via Header) 3 USB 3.1 Gen 2 (1 from Type C, 2 via Header)



<b>Ethernet</b>	2x RJ45 10GBASE-T LAN from Intel® X550-AT2 1 x RJ45 Dedicated IPMI LAN port from RTL8211E
<b>BIOS:</b>	32 MB AMI UEFI BIOS Supports PnP, PCI 4.0, ACPI 2.0 Wake, SMBIOS 2.8 support, Instant Flash 1TB BAR1 max size and 256 PCI bus enumeration expansion support
<b>Cooling Fans:</b>	Four 80mm x 38mm PWM hot-swap Cooling fans
<b>Chassis:</b>	Rugged steel enclosure Liquid paint with customizable front bezel
<b>Weight:</b>	33-48lbs (15-22 kg)
<b>Power Supply</b>	1000W 90-264VAC, 47-63Hz Input: <ul style="list-style-type: none"><li>• 1+1 Redundant 80plus Silver efficiency with Active PFC, PM Bus and Over Voltage Protection</li><li>• 15A input current at 115VAC and 7.5A at 230VAC each module</li><li>• 15A @ 115VAC and 30A @ 230VAC max inrush current each module</li></ul> EPS 12V Output type with 22A at +5V, 83A at +12V, 0.5A at -12V, 22A at +3.3V and 3A at +5V Standby
<b>Environment:</b>	Operating: <ul style="list-style-type: none"><li>• 5°C to 35°C (41°F to 95°F) at 0 to 915m (3,000ft) altitude</li><li>• 5% to 90% non-condensing relative humidity, max dew point 21°C, max rate of change 5°C/hr</li></ul> Non-Operating: <ul style="list-style-type: none"><li>• -20°C to 60°C (-40°F to 140°F)</li><li>• 5% to 90% non-condensing relative humidity, max dew point 27°C, max rate of change 5°C/hr</li></ul>
<b>Agency:</b>	Tested to conform to the following standards: <ul style="list-style-type: none"><li>• FCC - Verified to comply with Part 15 of the FCC Rules, Class A</li><li>• Canada ICES-003, issue 4, Class A</li><li>• CE Mark (EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3)</li><li>• CISPR 22, Class A</li></ul> Designed to conform to the following extended standards: <ul style="list-style-type: none"><li>• NOM-019</li><li>• Argentina IEC60950-1</li><li>• Japan VCCI, Class A</li><li>• Australia/New Zealand AS/NZS CISPR 22, Class A</li><li>• China CCC (GB4943), GB9254 Class A, GB17625.1</li><li>• Taiwan BSMI CNS13438, Class A; CNS14336-1</li><li>• Korea KN22, Class A; KN24</li><li>• Russia/GOST ME01, IEC-60950-1, GOST R 51318.22, GOST R 51318.24, GOST R 51317.3.2,</li><li>• GOST R 51317.3.3</li><li>• TUV-GS (EN60950-1 /IEC60950-1,EK1-ITB2000)</li></ul>
<b>Compliance:</b>	RoHS 6 of 6, WEEE