

## PCIe 4.0 2U Expansion Optimized Server

Part Number: OSS-EOS-2U-4i

DATASHEET

## FEATURES

- Dual Socket Intel 3rd gen Xeon Ice Lake Processor
- Options for 7x add-in cards or 24x U.2/U.3 drives
- Up to seven 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



The EOS-2U-4i contains dual Intel Xeon Ice Lake 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-4i features six PCIe 4.0 x16 half-height slots and 1 PCIe 4.0 x8 half height slot. The EOS-2U-4i provides options for 7x add-in cards or 24x U.2 or U.3 drives. The server supports up to 4TB of memory and a resource expanded BIOS for scale-out device enumeration and large memory mapped I/O used for GP-GPUs and accelerators.

## SPECIFICATIONS

Dimensions	3.45" H x 17.2" (19" with rack ears) W x 28" D $(8.7 \times 43.7 \times 71 \text{ cm})$
CPUs	Intel 3rd Gen Xeon Ice Lake Processor up to 270W TDP LGA 4189 dual socket P+
System Memory	16x ECC DDR4 3200/2933/2666/2400 R DIMM slots (Modules Up to 64GB Supported) LR DIMM (Modules up to 256GB Supported) 16 Memory Channels, 1.2V low profile DIMMs
Expansion Slots	EOS configuration: o 6x PCIe 4.0 x16 HHFL slots o 1 x PCIe 4.0 x8 HHFL slot NVMe configuration: o 2 x PCIe 4.0 x16 HHFL slots available with 48 PCIe 3.0 lanes routed to NVMe drives o 1 x PCIe 4.0 x16 HHFL slot or 2x M.2 (2230/2242/2260/2280) + 2x miniSAS-HD + 2x Oculink by jumper o 1 x PCIe 4.0 x8 HHFL slot
Storage Subsystem	EOS configuration: <ul> <li>24x hot-swap configurable SATA-3, SAS-3 or NVMe x4 2.5" x 15mm drive carriers</li> <li>12Gb SAS-3, 6Gb SATA-3 SFF-8680, NVMe x4 32Gb slots</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 HHHL slots respectively</li> <li>8x and 16x NVMe x2 slots require 1 and 2 x16 PCIe HHHL 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 PCIe 4.0</li> </ul> NVMe configuration: <ul> <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> </ul>
USB	2 USB 2.0 ports (2 via headers) 6 USB 3.1 Gen1 ports (3 Rears Type A + 1 Rear Type C, 1 via header, 1 via header, 1 Type A) 6 USB 3.2 Gen1 ports (4 rear + 1 via header + 1 Type A)
Ethernet	2x RJ45 10GBASE-T LAN from Intel® X550 1 x RJ45 Dedicated IPMI LAN port from ASPEED AST2600 BMC



## SPECIFICATIONS CONTINUED

Part Number: OSS-EOS-2U-4i

BIOS	AMI UEFI BIOS Supports PnP, PCI 4.0, ACPI 1.0/2.0/3.0/4.0, SMBIOS 2.7.1 support, Instant Flash 1TB BAR1 max size and 256 PCI bus enumeration expansion support
Cooling Fans	Four 80mm x 38mm PWM hot-swap Cooling fans
Chassis	Rugged steel enclosure Liquid paint with customizable front bezel
Weight	33-48lbs (15-22 kg)
Power Supply	<ul> <li>1000W 90-264VAC, 47-63Hz Input:</li> <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> <li>EPS 12V Output type with 22A at+5V, 83A at +12V, 0.5A at-12V, 22A at+3.3V and 3A at +5V Standby</li> </ul>
Environment	Operating: o 5°C to 35°C (41°F to 95°F) at 0 to 915m (3,000ft) altitude o 5% to 90% non-condensing relative humidity, max dew point 21°C, max rate of change 5°C/hr Non-Operating: o -20°C to 60°C (-40°F to 140°F) o 5% to 90% non-condensing relative humidity, max dew point 27°C, max rate of change 5°C/hr
Agency	<ul> <li>Tested to conform to the following standards:</li> <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> <li>Designed to conform to the following extended standards: <ul> <li>NOM-019</li> <li>Argentina IEC60950-1</li> <li>Japan VCCI, Class A</li> </ul> </li> <li>o 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>
Compliance	RoHS 6 of 6, WEEE