

PCIe Gen 4 3U Short Depth Intel Server

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

FEATURES

- Dual Intel® Xeon™ Scalable Ice Lake Processors
- 20" Depth
- 2x Internal PCIe 4.0 M.2 Boot Drives
- 8 or 16 U.2/U.3 SATA/SAS/NVMe drives
- 4 x16 FH dual width plus 2 x16 FH and 1 x8 FH single width PCIe 4.0 slots
- Embedded Dual-Port 10 GbE Network Interfaces
- System Monitoring
- AC or DC Input Power Supplies
- Resource expanded BIOS for large expansion capability
- Guaranteed to operate with all OSS expansion products



The 20" deep SDS-3U-4i contains two Intel Scalable Processors and provides a feature packed server platform for GPU or FPGA accelerated computing, U.2/U.3 NVMe storage, or PCIe Gen 4 expansion slots. This functionality is delivered in a size efficient, edge ready rugged chassis with 3U height and 20" depth. This edge optimized server can operate stand alone as a hyperconverged PCIe Gen 4 server or form the core CPU and memory resources for a scale-out, rack level, expandable and composable solution in the shallowest available racks. The SDS-4U-4i features six PCIe Gen 4 x16 full-height slots (four of which are double-width), one PCIe Gen 4 x8 full-height slot and options for 8 or 16 SATA/SAS/NVMe 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 GPUs and accelerators.

SPECIFICATIONS

Dimensions	5.2" H x 17.2" (19.2" with rack ears) W x 20.0" D
CPUs	Dual Intel® Xeon® Ice Lake Scalable CPUs up to 270W TDP and 40 cores LGA 4189 socket P with 3 UPI chip-to-chip bus up to 11.2GT/s
System Memory	16x 288-pin DDR4 DIMM sockets Up to 4TB DDR4-2933MHz 3DS ECC RDIMM or LRDIMM, 1.2V low profile 2933/2666/2400/2133MHz Frequencies in 64GB, 128GB and 256GB capacities each module
Expansion Slots	4x PCIe 4.0 x16 full height, 10.5" length, double width slots suitable for GPUs 2 x PCIe 4.0 x16 full height, half length, single width slots 1 x PCIe 4.0 x8 full Height, half length, single width slot with x8 physical connector
Storage Subsystem	8x or 16x hot-swap configurable SATA-3, SAS-3 or NVMe x4 2.5" x 15mm drive carriers <ul style="list-style-type: none"> 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 the SB2000 2x M.2 x4 and 2x SATA-DOM internal drive connections
On-board Devices	2x Intel X550 10Gigabit Ethernet each with an RJ-45 Additional 25, 40 and 100Gb Ethernet, 100Gb Infiniband or 32Gb Fiber Channel interfaces available
Network Controllers	2x RJ45 10GBASE-T LAN from Intel® X550-AT2 1 x RJ45 Dedicated IPMI LAN port from RTL8211E
USB	6x USB 3.0 with 4 on rear panel, 1x header and 1x Type A internal 2x USB 2.0 (1 internal header)
Input/Output	7.1HD Audio Header, 1 VGA port, 2 COM ports (1 rear and 1 internal header) 2x Disk-on-Module ports 1x Trusted Platform Management TPM 1.2 20-pin header

SPECIFICATIONS CONTINUED

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

BIOS	128 Mb SPI flash EEPROM with AMI BIOS Supports PnP, PCI 3.0, ACPI 1.0-4.0, USB keyboard support, UEFI 2.3.1, 1TB BAR1 max size and 256 PCI bus enumeration support
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
Weight	45lbs
Power Supply	Dual N+1 2600 watt AC 115-240V CRPS Power Supplies Dual N+1 48V DC Input Power Supplies
Environment	Operating: <ul style="list-style-type: none"> o -10°C to 50°C* (14°F to 122°F) at 0 to 3,000m (10,000ft) altitude o 5% to 90% non-condensing relative humidity, max dew point 21°C, max rate of change 5°C/hr Non-Operating: <ul style="list-style-type: none"> o -40°C to 85°C (-40°F to 185°F) o 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: <ul style="list-style-type: none"> o FCC - Verified to comply with Part 15 of the FCC Rules, Class A o Canada ICES-003, issue 4, Class A o CE Mark (EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3) o CISPR 22, Class A o MIL-STD-810G Designed to conform to the following extended standards: <ul style="list-style-type: none"> o NOM-019 o Argentina IEC60950-1 o Japan VCCI, Class A o Australia/New Zealand AS/NZS CISPR 22, Class A o China CCC (GB4943), GB9254 Class A, GB17625.1 o Taiwan BSMI CNS13438, Class A; CNS14336-1 o Korea KN22, Class A; KN24 o Russia/GOST ME01, IEC-60950-1, GOST R 51318.22, GOST R 51318.24, GOST R 51317.3.2, GOST R 51317.3.3 o TUV-GS (EN60950-1 /IEC60950-1,EK1-ITB2000)
Compliance	RoHS 3, WEEE

*These temperature ranges may require GPU/CPU throttling.