



Thor™

2U Four Node Dense Server Solution



Thor is an industry-leading, high performance dense server, optimized for hyperconverged and traditional server applications. Thor incorporates Intel Xeon® and 2nd Generation Intel Xeon Scalable Processors with the support for pure NVMe and the flexibility to mix different storage technologies. This unique feature set enables unparalleled performance and flexibility for the next generation of hyperconverged and traditional server applications.

Ultra-Powerful Server Nodes

Thor features dual socket Intel Xeon server nodes with support for up to 24 DDR4 DIMM sockets, including support for Intel Apache Pass and standard NVDIMMs. This provides the power necessary for the most demanding, memory intensive applications.

Flexible Hybrid Storage Options

The six 2.5" hot swappable drive bays per node support two hybrid drive slots for mixing any of the NVMe, SATA, or SAS drives. This enables leading edge flexibility to leverage the right mix of storage for the applications.

Standards-Based Enterprise-Class Manageability

Each Thor node integrates a base board management controller, which includes management software supporting both the IPMI and Redfish management standards.

Additionally, Thor provides two redundant, hot swappable management ports per node, providing the most dependable enterprise management implementation in the market today.

Unmatched Performance, Flexibility, and Density

Thor's combination of powerful computing, flexible hybrid storage options and dense memory sets it apart from the competition. Thor is on the leading edge of emerging hyperconverged solutions.

Simplified Serviceability

Servicing Thor couldn't be easier. Requiring no slide rails, Thor fits within a 1000mm rack with sufficient space for cable management. The Thor nodes hot plug from the front of the chassis, while the power supplies, fans and I/O modules hot plug from the rear of the chassis, without the need to slide the Thor enclosure out of the rack. Thor is optimized for quick service to minimize down time and service costs.

Multiple I/O Options

Up to three dedicated PCIe slots per node (for a total of 12 PCIe slots), one internal SAS mezzanine card per node, and two redundant I/O modules shared by all four nodes provide the flexibility to support many different I/O configurations.



Enterprise-Class Quality. Cloud Economics.

FEATURES

2U chassis, fits 19" rack

4x hot-swap computing nodes, front service

In each node:

- Dual (2) Intel Xeon CPU up to 140W
- 16x/24x DDR4 DIMMs support RDIMM/LRDIMM
- 6x 2.5" SATA/SAS/NVMe drives, hot-swappable
- 2x 2280 or 2x 22110 M.2 Boot SSD
- SAS mezzanine card (Optional)
- TPM2.0 (Optional)

4x I/O Expansion Module, rear service.

In each module:

- One x16 HHHH PCIe slot
- One x8 HHHH PCIe slot
- One x8 PCIe slot or x4 KR slot with Quad port 10GbE

2x redundant share I/O module with 1GbE (w/NCSI to BMC), rear service

Rear VGA/USB KVM function switching among 4 nodes

POWER AND COOLING

Two CRPS Platinum PSUs, 1200/1600/2000W

200-240V, AC input

1+1 redundant, hot-swappable

Five 60x76 FAN, hot-swapped with rear I/O module

ENVIRONMENTAL: OPERATING

Temperature: 10°C to 35°C

Humidity: 20% to 80% RH

Altitude: 0 to 3050 m (De-rate temperature 1°C per 300 m above 950 m)

Shock: 10G, 5ms half sine pulse width

Vibration: Random 0.27 Grms 5-500Hz

Acoustics: 7.5 Bels LwAd @ 23 +/- 2°C

ENVIRONMENTAL: NON-OPERATING

Temperature: -40°C to 60°C

Humidity: 5% to 90% RH

Altitude: 0 to 12,000 m

Shock: 20G, 7ms half sine pulse

Vibration: Random 1.04 Grms 2-200Hz package (transit)

APPLICATION TOPOLOGY

Performance-packed computing

- Address mainstream applications with the latest Intel Intel Xeon/2nd Gen Intel Xeon Scalable Processors
- The high-density design of Thor (2-socket configuration with up to 24 DDR4 RDIMM/LRDIMM) supports both consolidated and virtualized environments

Enormous storage capacity

- Twenty-four 2.5" storage bays support extensive local storage to quickly access and process vast amounts of data in midsize and large enterprise datacenters

Advanced I/O capabilities

- Balanced, scalable I/O capabilities, including integrated PCI-Express (PCIe) Gen 3.0-capable expansion slots

PHYSICAL DIMENSIONS

Height: 87.1 mm (3.43")

Width: 446 mm (17.56")

Depth: 860 mm (33.88") without Ear cover;
884.4 mm (34.85") with Ear cover

APPROVALS

EMC: Class A, CISPR 22, FCC, ICES-003, CE, VCCI

Safety: CB Scheme, UL, cUL, CE

Environment: RoHS

Note: All specifications and figures are subject to change without prior notice.

