

New Lenovo ThinkSystem SC750 V4 and SC777 V4 Supercomputing Servers

Article

At [Lenovo Tech World 2024](#), we announced new Supercomputing servers for HPC and AI workloads. These new water-cooled servers use the latest processor and accelerator technology from Intel and NVIDIA.

ThinkSystem SC750 V4

Engineered for large-scale cloud infrastructures and High Performance Computing (HPC), the Lenovo ThinkSystem SC750 V4 Neptune excels in intensive simulations and complex modeling. It's designed to handle technical computing, grid deployments, and analytics workloads in various fields such as research, life sciences, energy, engineering, and financial simulation.

Supporting the new Intel Xeon 6900P-series 500W "Granite Rapids AP" processors and new 8800 MHz MRDIMM DDR5 memory, the SC750 V4 Neptune stands as a powerhouse for demanding HPC workloads. Its industry-leading direct water-cooling system ensures steady heat dissipation, allowing CPUs to maintain accelerated operation and maximize compute performance.

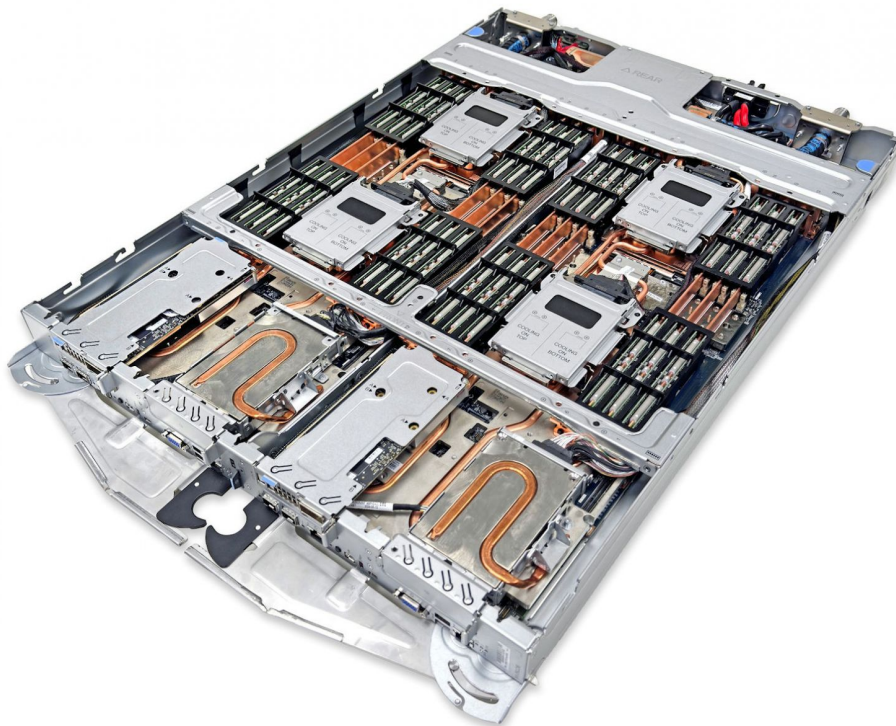


Figure 1. The Lenovo ThinkSystem SC750 V4 server tray with two distinct two-socket node

Learn more about the SC750 V4 with the following resources:

- [Datasheet](#)
- [3D Tour](#)
- [Product Guide](#)

ThinkSystem SC777 V4

Engineered specifically for High Performance Computing (HPC), the Lenovo ThinkSystem SC777 V4 Neptune excels in accelerated computing for intensive simulations and Hybrid AI. It's designed to handle technical computing, grid deployments, and analytics workloads in various fields such as research, life sciences, energy, engineering, and financial simulation.

The SC777 V4 is based on the powerful NVIDIA GB200 platform, heralding a new era in data center computing and delivering outstanding performance for HPC, vector database searches, and data processing. The SC777 V4 is equipped with Grace processors and Blackwell GPUs, and features the NVIDIA architecture.

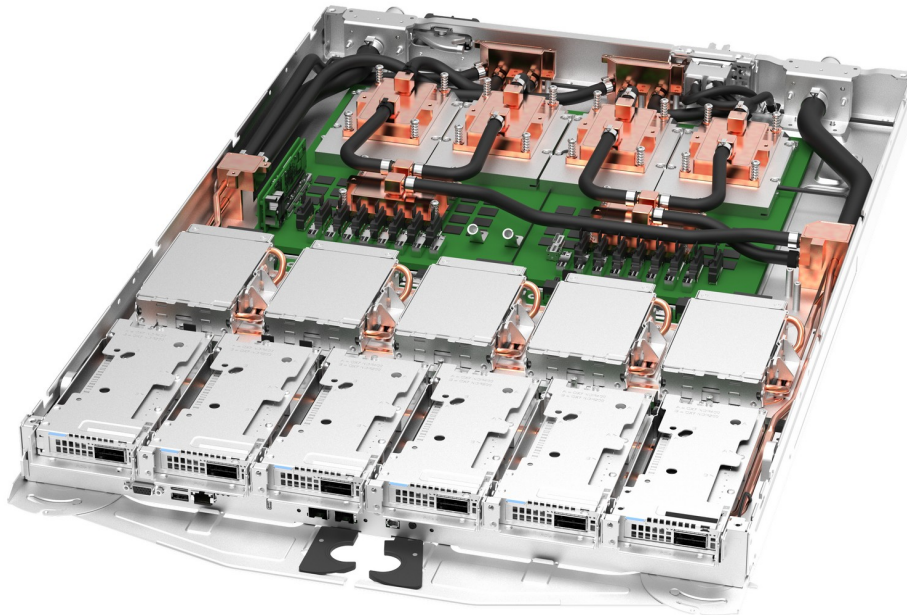


Figure 2. ThinkSystem SC777 V4 with the NVIDIA GB200 platform

Learn more about the SC777 V4 with the following resources:

- [Datasheet](#)
- [3D Tour](#)
- [Product Guide \(planned for 4Q/2024\)](#)

ThinkSystem N1380 Enclosure

The ThinkSystem N1380 Neptune chassis is the core building block for the SC750 V4 and SC777 V4 servers and represents the next generation of Neptune liquid cooling technology. The N1380 enables exascale-level performance while maintaining a standard 19-inch rack footprint. It is a 13U enclosure and supports 8 trays mounted vertically.

The N1380 enclosure uses warm water liquid cooling to remove heat and increase performance and is engineered for the next decade of computational technology. An innovative Power delivery and distribution design around a patented integrated Power Conversion Station enables the broadest data center compatibility.



Figure 3. ThinkSystem N1380 enclosure with 8x SC750 V4 trays installed

Learn more about the N1380 enclosure with the following resources:

- [Datasheet](#)
- 3D Tour: See the [SC750 V4 tour](#) and [SC777 V4 tour](#)
- Product guide: See the [SC750 V4 product guide](#)

More information

For more information, see our launch page:

- [New Hybrid AI Solutions at Tech World 2024](#)

Related product families

Product families related to this document are the following:

- [ThinkSystem SC750 V4 Server](#)
- [ThinkSystem SC777 V4 server](#)

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