



Lenovo ThinkSystem SR670 V2 and SD650-N V2 Article

Drive AI workloads with GPU-optimized servers

Leverage exascale performance and efficiency with Lenovo's new ultra-dense, high performance ThinkSystem SD650-N V2 server, and the most versatile GPU platform, the ThinkSystem SR670 V2 server. These servers are ideal for compute-intensive AI and Enterprise workloads where performance is paramount.

The increasing need to run processes in parallel and the ever-growing compute power required to handle sophisticated artificial intelligence workloads prompt many high-performance computing professionals to turn to GPU-based systems.

ThinkSystem SD650-N V2

To capitalize on the performance gains of GPU computing, Lenovo announced at SC'20 the ThinkSystem SD650-N V2. This model adds to our ultra-dense server portfolio and features Lenovo Neptune[™] direct-to-node (DTN) liquid cooling. The SD650-N V2 brings Lenovo's Neptune DTN watercooling technology to a GPU-based system, including four board-mounted NVIDIA A100s in a 1U system, delivering up to 3 petaFLOPS of compute performance in a single rack.



Lenovo Neptune liquid cooling reduces energy

consumption by up to 40% while maintaining unprecedented compute power and density. Additionally, the SD650-N V2 is designed with a common board used by air-cooled systems, allowing you to share components across air and water-cooled systems.

ThinkSystem SR670 V2

Also, organizations of all sizes are running more complex workloads than ever before. Artificial Intelligence augments analytics, and remote graphics applications are pervasive. For the required performance boost to run these workloads, customers have turned to GPUs in the data center.

The Lenovo ThinkSystem SR670 V2 is a new GPUrich system that can hold up to eight NVIDIA A100 or T4 GPUs in a single 3U frame. A single ThinkSystem



SR670 V2 node delivers up to 100 petaFLOPS of compute performance. By leveraging Lenovo Neptune liquid-to-air heat exchangers, you get the benefits of liquid cooling without adding plumbing.

For more information, see the datasheets:

- ThinkSystem SR670 V2 datasheet
- ThinkSystem SD650-N V2 datasheet

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