

ThinkSystem SR665 Sets World Record with New SPECpower on Linux Benchmark Result Performance Benchmark Result

The Lenovo ThinkSystem SR665 has set a new two-processor 2U rack server performance world record on Linux for the SPECpower_ssj 2008 benchmark.

The SPECpower_ssj 2008 benchmark is the first industry-standard benchmark that evaluates the power and performance characteristics of single servers and multi-node servers.



The ThinkSystem SR665 server delivered the following SPECpower_ssj 2008 2-socket 2U world record performance result on Linux:

- **SPECpower_ssj2008 = 22,879 overall ssj_ops/watt**

The SR665 was configured as follows:

- 2x AMD EPYC 7742 Processors (64 cores, 2.25 GHz, 256 MB L3 Cache)
- 256 GB of DDR4 memory.
- 1x 128GB M.2 SSD
- SUSE Linux Enterprise Server 12 SP5
- Oracle Java HotSpot 64-bit Server VM, build 11.0.3+12-LTS mixed mode (JVM)

Results referenced are current as of May 5, 2020.

This benchmark result can be found at the following web page:

https://www.spec.org/power_ssj2008/results/res2020q2/power_ssj2008-20200407-01023.html

To view all SPECpower_ssj 2008 results, see the following page:

https://www.spec.org/power_ssj2008/results/

About the ThinkSystem SR665

The Lenovo ThinkSystem SR665 server, now with AMD EPYC 7003 Series processors, delivers outstanding TCO for transactional database, ERP, virtualization, big data & analytics and software-defined deployments. The combination of two AMD EPYC 7003 CPUs with class-leading memory speed, storage, and GPU density, rapidly outpaces the power of prior generation two-socket servers. Lenovo's lauded system reliability, management capabilities, and security infrastructure layer on to the exceptional value that the ThinkSystem SR665 brings to the data center. With the enterprise-class AMD EPYC 7003 Series or 7002 Series processor, the world's first 7nm data center CPU, the ThinkSystem SR665 features two processors with up to an unprecedented 128 total cores with 128 PCIe Gen4 lanes to reduce bottlenecks and increase server utilization.

Compared to the previous processor generations, ThinkSystem SR665 delivers up to 2X performance and 4X floating point capability, providing faster data transfer and analytics without sacrificing memory capacity or I/O with PCIe Gen4 support and faster memory speeds up to 3200 MHz.

Key features:

- 128 cores across two processors to handle heavy-lift ERP, CRM, and virtualization workloads; provides cutting edge application efficiency in health care applications such as medical imaging, EMR, and PACS, or electronic trading platforms for financial services applications.
- Multi-GPU optimized rack server, providing support for up to 8 single-wide GPUs that offer 200% more workload acceleration in AI Inference, and virtualized desktop infrastructure (VDI).
- Support for up to 32 NVMe solid-state drives; when paired with high speed networking, make the system an excellent choice for workloads that need large amounts of low-latency high-bandwidth storage, including virtualized clustered SAN solutions, software-defined storage (SDS), and applications leveraging NVMe over Fabrics.

About SPECpower

The SPEC Power benchmark suite measures the power and performance characteristics of server-class computer equipment. It is used to compare power and performance among different servers and serves as a toolset for use in improving server efficiency. This benchmark is targeted for use by hardware vendors, IT industry, computer manufacturers, and governments.

Learn more

To learn more about power-efficient solutions for compute-intensive applications, please contact your Lenovo Sales Representative.

To find out more about SPEC, visit <https://www.spec.org>

To learn more about the Lenovo ThinkSystem SR665 server, visit the SR665 product web page: <https://www.lenovo.com/us/en/data-center/servers/racks/ThinkSystem-SR665-Server/p/77XX7SR552S>

Related product families

Product families related to this document are the following:

- [2-Socket Rack Servers](#)
- [ThinkSystem SR665 Server](#)
- [SPECpower Benchmark Results](#)

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