

ThinkSystem SR655 Sets World Record with New 2U 1-Socket SPECpower Result Performance Benchmark Result

The Lenovo ThinkSystem SR655 has set a new one-processor performance world record with a 2U rack server 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 server and multi-node servers.

The ThinkSystem SR655 server delivered the following SPECpower_ssj 2008 1-socket world record performance result for a 2U rack server:



- **SPECpower_ssj2008 = 19,149 overall ssj_ops/watt**

The SR655 was configured as follows:

- 1x AMD EPYC 7742 processor (64 cores, 2.25 GHz core frequency, 256 MB L3 cache)
- 128 GB of Lenovo TruDDR4 memory
- 1x 128GB M.2 SSD
- SUSE Linux Enterprise Server 12 SP4
- Oracle Java HotSpot 64-bit Server VM, version 11.0.3 (JVM)

Results referenced are current as of August 7, 2019.

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

https://www.spec.org/power_ssj2008/results/res2019q3/power_ssj2008-20190717-00986.html

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

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

About the ThinkSystem SR655

The Lenovo ThinkSystem SR655 is a 1-socket 2U server that features the AMD EPYC 7002 "Rome" and AMD EPYC 7003 "Milan" families of processors. With up to 64 cores per processor and support for the PCIe 4.0 standard for I/O, the SR655 offers the ultimate in single-socket server performance. With up to 128 PCIe lanes, the server is ideal for workloads that can take advantage of GPU processing and high-performance NVMe drives.

ThinkSystem SR655 is a multi-GPU optimized rack server, with support for up to 6 single-wide GPUs providing 200% more workload acceleration in AI, SDI and VDI instances. Capacity for up to 32x 2.5" low-latency NVMe drives that pairs well with the demands of low-latency, high-bandwidth storage such as clustered SAN solutions and software-defined storage. Eight PCIe Gen4 slots offer 2x faster I/O and support for 16 DIMMs with 2TB of DDR4 memory capacity ensure the SR655 is ideal for high performance database applications.

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 SR655 server, visit the SR655 product web page: <https://www.lenovo.com/us/en/data-center/servers/racks/ThinkSystem-SR655-Server/p/77XX7SRSR75>

Related product families

Product families related to this document are the following:

- [1-Socket Rack Servers](#)
- [SPECpower Benchmark Results](#)
- [ThinkSystem SR655 Server](#)

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