

ThinkSystem SR655 V3 Sets 2 World Records with New SPECCompG Benchmark Result

Performance Benchmark Result

The Lenovo ThinkSystem SR655 V3 server has set two new 1-socket performance world records with the SPECCompG_base2012 and SPECCompG_peak2012 metrics of the SPEC OMP2012 Benchmark.

This new benchmark result, published in a new SPEC report on July 1, 2023, demonstrate that the ThinkSystem SR655 V3 continues Lenovo's leadership with outstanding performance for the server industry.



The SPEC OMP2012 Benchmark suite is the industry standard to evaluate performance using applications based on the OpenMP 3.1 standard for shared-memory parallel processing and includes 14 scientific and engineering application codes, covering everything from computational fluid dynamics (CFD) to molecular modeling to image manipulation.

The ThinkSystem SR655 V3 has achieved the following scores:

- **SPECCompG_base2012 = 52.7**
- **SPECCompG_peak2012 = 53.4**

This result is the best 1-socket performance in the industry.

The SR655 V3 was configured as follows for the benchmark audit:

- 1x AMD EPYC 9754 ("Bergamo") processor (128 cores, 2.25GHz)
- 1TB DDR5 memory (16x 64GB RDIMMs, 4800MHz)
- ThinkSystem 1 TB SATA HDD
- SUSE Enterprise for High-Performance Computing 15 SP4

Results referenced are current as of July 1, 2023.

The new Lenovo benchmark result can be found at:

<https://www.spec.org/omp2012/results/res2023q2/omp2012-20230516-00212.html>

To view all SPEC OMP2012 results, go to

<https://www.spec.org/omp2012/results/>

About the ThinkSystem SR655 V3

The Lenovo ThinkSystem SR655 V3 is a 1-socket 2U server that features the 4th Gen AMD EPYC processors. With up to 128 cores per processor and support for the new PCIe 5.0 standard for I/O, the SR655 V3 offers the ultimate 1-socket server performance in a 2U form factor. The server is ideal for dense workloads that can take advantage of GPU processing and high-performance NVMe drives.

The SR655 V3 server is a highly agile offering, supporting 31 different drive bay configurations utilizing the front, middle and rear locations of the server. It also includes 6 different slot configurations at the rear of the server. This adds flexibility to ensure that you can configure the server exactly the way your workload requires.

Combining performance and flexibility, the SR655 V3 server is a great choice for enterprises of all sizes. The server offers a broad selection of drive and slot configurations and offers high performance features that industries such as finance, healthcare and telco need. Outstanding reliability, availability, and serviceability (RAS) and high-efficiency design can improve your business environment and can help save operational costs.

About SPEC OMP2012

The SPEC OMP benchmark is designed for measuring performance using applications based on the OpenMP 3.1 standard for shared-memory parallel processing. The benchmark also includes an optional metric which includes power measurement.

The benchmark includes 14 scientific and engineering application codes, covering everything from computational fluid dynamics (CFD) to molecular modeling to image manipulation. The optional energy consumption measurements are based on the SPEC Power and Performance Benchmark Methodology, which provides details on how to integrate a power metric into standardized benchmarks.

SPEC OMP focuses on compute intensive performance, which means an emphasis of the performance of the following hardware and software:

- Processor
- Memory architecture
- Parallel support libraries
- Compilers

For more information about SPEC OMP 2012, go to <https://www.spec.org/omp2012/>

Learn more

To learn more about solutions for high performance applications that use shared-memory parallel processing, 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 V3 server, visit the SR655 V3 product web page: <https://www.lenovo.com/us/en/p/servers-storage/servers/racks/thinksystem-sr655-v3/len21ts0021>

Related product families

Product families related to this document are the following:

- [1-Socket Rack Servers](#)
- [SPECComp Benchmark Results](#)
- [ThinkSystem SR655 V3 Server](#)

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