

ThinkSystem SR665 V3 Sets 12 World Records with New SPECcpu Benchmark Result

Performance Benchmark Result

The Lenovo ThinkSystem SR665 V3 server has set twelve performance world records for compute-intensive applications with new results of the SPEC CPU2017 benchmark.

The benchmark world records are:

- Best SPECspeed2017_int_energy_base score on a 2-processor system
- Best SPECspeed2017_int_energy_peak score on a 2-processor system
- Best SPECspeed2017_int_peak score on a 2-processor system
- Best SPECspeed2017_int_peak score
- Best SPECspeed2017_fp_energy_base score on a 2-processor system
- Best SPECspeed2017_fp_energy_peak score on a 2-processor system
- Best SPECrate2017_int_energy_peak score on a 2-processor system
- Best SPECrate2017_int_energy_peak score
- Best SPECrate2017_fp_energy_base score on a 2-processor system
- Best SPECrate2017_fp_energy_base score
- Best SPECrate2017_fp_energy_peak score on a 2-processor system
- Best SPECrate2017_fp_energy_peak score

These new benchmark results, published in new SPEC reports on October 10, 2024, demonstrate that the ThinkSystem SR665 V3 continues Lenovo's leadership with outstanding performance for the server industry.



The ThinkSystem SR665 V3 achieved the following SPEC CPU2017 scores:

- **SPECspeed2017_int_energy_base: 87.8** (1)
- **SPECspeed2017_int_energy_peak: 89.6** (2)
- **SPECspeed2017_int_peak: 21.6** (3,4)
- **SPECspeed2017_fp_energy_base: 833** (5)
- **SPECspeed2017_fp_energy_base: 844** (6)
- **SPECrate2017_int_energy_peak: 2470** (7,8)
- **SPECrate2017_fp_energy_base: 2490** (9,10)
- **SPECrate2017_fp_energy_peak: 2500** (11,12)

SPECspeed2017 scores are ideal for measuring single-threaded compute-intensive applications, such as High Frequency Trading (HFT) and other financial industry workloads.

SPECrate2017 scores are ideal for measuring multi-threaded compute-intensive applications, such as High Performance Computing (HPC) workloads.

The Lenovo ThinkSystem SR665 V3 server was configured as follows:

- Processors
 - 2 x AMD EPYC 9655 processor - 96 cores, 2.60 GHz, 384 MB L3 cache

- 2x AMD EPYC 9575F processor - 64 cores, 3.30 GHz, 256 MB L3 cache
- Up to 384 GB and 768 GB system memory
- SUSE Linux Enterprise Server 15 SP6

The results are current as of October 10, 2024. To view details of the results, see the following SPEC web pages:

(1) Best overall 2 CPU SPECspeed2017_int_energy_base score. Used 9575F, 384 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44930.html>

(2) Best overall 2 CPU SPECspeed2017_int_energy_peak score. Used 9575F, 384 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44930.html>

(3) Best overall 2 CPU SPECspeed2017_int_peak score. Used 9575F, 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44936.html>

(4) Best overall SPECspeed2017_int_peak score. Used 9575F, 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44936.html>

(5) Best overall 2 CPU SPECspeed2017_fp_energy_base score. Used 9575F, 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44928.html>

(6) Best overall 2 SPECspeed2017_fp_energy_peak score. Used 9575F, 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44928.html>

(7) Best overall 2 CPU SPECrated2017_int_energy_peak score. Used 9655, 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44929.html>

(8) Best overall CPU SPECrated2017_int_energy_peak score. Used 9655, 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44929.html>

(9) Best overall 2 CPU SPECrated2017_fp_energy_base score. Used 9655 , 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44927.html>

(10) Best overall CPU SPECrated2017_fp_energy_base score. Used 9655 , 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44927.html>

(11) Best overall 2 CPU SPECrated2017_fp_energy_peak score. Used 9655 , 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44927.html>

(12) Best overall CPU SPECrated2017_fp_energy_peak score. Used 9655 , 768 GB & SUSE 15SP6
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44927.html>

To view all SPEC CPU2017 results, go to
<http://www.spec.org/cpu2017/results/>

About the ThinkSystem SR665 V3

The ThinkSystem SR665 V3 is a 2S 2U rack server built with the performance and flexibility to manage a complex set of workloads like data management, analytics, virtualization, cloud, and AI. The 320 cores of the dual 5th Gen AMD EPYC™ "Turin" family processors with up to 160 PCIe lanes and up to 6TB of the latest DDR5 memory, maximize the performance of this 2U server.

The SR665 V3 is designed to support today's infrastructure and easily scale to prepare for next gen workloads. Multiple drive options using SAS/SATA and NVMe with hot-swap capabilities and XClarity system management software enable changes to be made quickly with ease. The versatile design doesn't stop at storage, the SR665 V3 includes support for multiple options for GPU and PCIe to satisfy graphics, speed, and budget requirements.

About SPEC CPU2017

SPEC CPU 2017 is SPEC's next-generation, industry-standardized, CPU intensive suite of benchmarks for measuring and comparing compute intensive performance, stressing a system's processor, memory subsystem and compiler. This benchmarks provides a comparative measure of compute-intensive performance using workloads developed from real user applications.

The SPEC CPU 2017 benchmark suite measures server performance in the following ways:

- SPECSpeed 2017 is to compare time for a computer to complete single tasks
- SPECrate 2017 is to measure the throughput or work per unit of time.

This benchmark is targeted for use by hardware vendors, IT industry, computer manufacturers, and government.

Learn more

To learn more about 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 V3 server, visit the SR665 V3 product web page: <https://www.lenovo.com/us/en/p/servers-storage/servers/racks/thinksystem-sr665-v3/len21ts0009>

Related product families

Product families related to this document are the following:

- [2-Socket Rack Servers](#)
- [SPECcpu Benchmark Results](#)
- [ThinkSystem SR665 V3 Server](#)

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