

ThinkSystem SR635 V3 Sets 2 World Records with New SPECcpu Benchmark Result Performance Benchmark Result

The Lenovo ThinkSystem SR635 V3 server has set two performance world records for compute-intensive applications with new results of the SPEC CPU2017 benchmark.

The benchmark world records are:

- Best SPECspeed2017_fp_base score on a 1-processor system
- Best SPECspeed2017_fp_peak score on a 1-processor system

These new benchmark results, published in new SPEC reports on October 10, 2024, demonstrate that the ThinkSystem SR635 V3 continues Lenovo's leadership with outstanding performance for the server industry.



The ThinkSystem SR635 V3 achieved the following two top SPEC CPU2017 scores:

- **SPECspeed2017_fp_base: 410 (1)**
- **SPECspeed2017_fp_peak: 412 (2)**

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 SR635 V3 server was configured as follows:

- 1x AMD EPYC 9655 processor - 96 cores, 2.60 GHz, 384 MB L3 cache
- 384 GB system memory
- Red Hat Enterprise Linux 9.4

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

(1) Best overall 1 CPU SPECspeed2017_fp_base score. Used RHEL9.4
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44888.html>

(2) Best overall 1 CPU SPECspeed2017_fp_peak score. Used RHEL9.4
<https://spec.org/cpu2017/results/res2024q4/cpu2017-20240924-44888.html>

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

About the ThinkSystem SR635 V3

The versatile ThinkSystem SR635 V3 provides better performance per cost, powered by a single 5th Gen AMD EPYC™ "Turin" family processor. The SR635 V3 is designed with storage-rich flexibility, by including up to 20x 3.5" hot-swappable drives with combinations of SAS/SATA, NVMe, or AnyBay™ technologies. It is easily configured for today's workloads, such as virtualization and private cloud, and can easily scaled up or down as needed.

Ideal for business applications and intensive workloads, the SR635 V3 is reliable, secure and easy to manage. ITIC named Lenovo servers #1 for reliability and uptime. Security with Lenovo ThinkShield also begins at the factory with our Root of Trust and follows the server throughout its life. The addition of Lenovo XClarity system management software also enable easy management from any location.

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 SR635 V3 server, visit the SR635 V3 product web page: <https://www.lenovo.com/us/en/p/servers-storage/servers/racks/thinksystem-sr635-v3/7d9ga010na>

Related product families

Product families related to this document are the following:

- [1-Socket Rack Servers](#)
- [SPECcpu Benchmark Results](#)
- [ThinkSystem SR635 V3 Server](#)

Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service. Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

Lenovo (United States), Inc.
8001 Development Drive
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary. Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk. Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

© Copyright Lenovo 2024. All rights reserved.

This document, LP2042, was created or updated on October 16, 2024.

Send us your comments in one of the following ways:

- Use the online Contact us review form found at:
<https://lenovopress.lenovo.com/LP2042>
- Send your comments in an e-mail to:
comments@lenovopress.com

This document is available online at <https://lenovopress.lenovo.com/LP2042>.

Trademarks

Lenovo and the Lenovo logo are trademarks or registered trademarks of Lenovo in the United States, other countries, or both. A current list of Lenovo trademarks is available on the Web at <https://www.lenovo.com/us/en/legal/copytrade/>.

The following terms are trademarks of Lenovo in the United States, other countries, or both:

Lenovo®

AnyBay®

ThinkShield®

ThinkSystem®

XClarity®

The following terms are trademarks of other companies:

AMD and AMD EPYC™ are trademarks of Advanced Micro Devices, Inc.

Linux® is the trademark of Linus Torvalds in the U.S. and other countries.

SPEC®, SPEC CPU®, SPECrate®, and SPECspeed® are trademarks of the Standard Performance Evaluation Corporation (SPEC).

Other company, product, or service names may be trademarks or service marks of others.