

ThinkSystem SR950 Sets World Record with New 3-Socket SPECCompG Result

Performance Benchmark Result

The Lenovo ThinkSystem SR950 server has set a new 3-socket performance world record with the SPECCompG_base2012 metric of the SPEC OMP2012 Benchmark.

This new benchmark result, published in a new SPEC report on April 2, 2019, demonstrate that the ThinkSystem SR950 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 SR950 has achieved the following score (1):

- **SPECCompG_base2012 = 34.8**

This result is the best 3-socket performance in the industry.

The SR950 was configured as follows:

- Lenovo ThinkSystem SR950
- 3x Intel Xeon Platinum 8280 Processors (28 cores, 2.70GHz)
- 576 GB memory (36x 16 GB RDIMMs running at 2933 MHz)
- ThinkSystem 960GB NVMe SSD
- Red Hat Enterprise Linux Server 7.5, Kernel 3.10.0-862.3.2.el7.x86_64

Results referenced are current as of April 2, 2019.

(1) The new Lenovo result is described on this page:

<https://www.spec.org/omp2012/results/res2019q2/omp2012-20190312-00163.html>

To view all SPEC OMP2012 results, go to

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

About the ThinkSystem SR950

Lenovo ThinkSystem SR950 is designed for your most demanding, mission-critical workloads, such as in-memory databases, large transactional databases, batch and real-time analytics, ERP, CRM, and virtualized server workloads. The powerful 4U ThinkSystem SR950 can grow from two to eight second-generation Intel Xeon Scalable Family processors, and with 96 DIMM sockets, supports up to 24 TB of high-speed memory. The modular design of SR950 speeds upgrades and servicing with easy front or rear access to all major subsystems to maximize server availability. The ThinkSystem SR950 also supports Intel Optane DC Persistent Memory delivering a new, flexible tier of memory designed specifically for data center workloads that offer an unprecedented combination of high-capacity, affordability and persistence.

The SR950 packs numerous fault-tolerant and high-availability features into a high-density, 4U rack-optimized design that reduces the space needed to support massive network computing operations and simplify servicing. Lenovo XClarity Controller is an all-new hardware embedded management engine common in every ThinkSystem server. XClarity Controller features an uncluttered graphical user interface, industry standard Redfish-compliant REST APIs, and enables booting in half the time of prior generation servers, with up to 6x faster firmware updates.

Lenovo XClarity Administrator is a virtualized application that centrally manages ThinkSystem servers, storage, and networking. Via reusable patterns and policies, it ramps up and scales infrastructure provisioning and maintenance. It serves as a central integration point to extend your data center management processes to physical IT. Running XClarity Integrators in external IT applications, or integrating through REST APIs, helps you further speed services provisioning, streamline IT management, and contain costs.

ThinkShield is a comprehensive approach to security designed to secure the data center, from the foundation of your infrastructure to the network's edge and guard against a security breach. ThinkShield protects your business with each offering, from development through disposal.

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 SR950 server, visit the [SR950 product web page](#).

Related product families

Product families related to this document are the following:

- [Large Memory Capacity Servers](#)
- [SPECComp Benchmark Results](#)
- [ThinkSystem SR950 Server](#)

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