

ThinkSystem SR860 V2 Sets World Record with New SPECCompG Benchmark Result

Performance Benchmark Result

The Lenovo ThinkSystem SR860 V2 server has set a new 4-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 October 13, 2020, demonstrate that the ThinkSystem SR860 V2 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 SR860 V2 has achieved the following score:

- **SPECCompG_base2012 = 50.2**

This result is the best 4-socket performance in the industry.

The SR860 V2 was configured as follows for the benchmark audit:

- 4x Intel Xeon Platinum 8380H (28 cores, 2.90GHz)
- 1536 GB memory (48x 32GB RDIMMs at 3200MHz)
- ThinkSystem 1 TB SATA HDD
- Red Hat Enterprise Server 8.2, Kernel 4.18.0-193.el8.x86_64

Results referenced are current as of October 13, 2020.

The new Lenovo benchmark result can be found at:

<https://www.spec.org/omp2012/results/res2020q4/omp2012-20200917-00194.html>

About the ThinkSystem SR860 V2

The Lenovo ThinkSystem SR860 V2 server provides the speed and reliability you require today, with the scalability and workload versatility to you'll need to manage the explosive growth of data; its design offers considerable adaptability in order to match system configurations to projected workloads.

The ThinkSystem SR860 V2 is purpose-built to deliver affordable scalability in an industry-standard x86 platform, ideal for mission critical workloads such as SAP HANA in-memory computing, transactional databases, analytics, big data, and enterprise resource planning tasks.

Up to four 250W third-generation Intel® Xeon® Scalable CPUs configured with a mesh topology pair with up to four enterprise-class GPUs position the SR860 V2 to tackle compute-intensive applications, leveraging thousands of GPU processor cores and parallel architecture in combination with additional storage and networking that's both high-performing and flexible.

Key features:

- Up to four 250W 3rd Generation Intel Xeon Scalable CPUs configured with a mesh topology combines with up to 48 2.5" HDD or SSDs, of which 24 can be NVMe SSDs to speed database response times, reducing latency and eliminating storage as the throughput bottleneck in I/O-intensive applications such as transactional processing, HPC, and Big data applications.
- Supports two or four processors, allowing you to start with two processors and then upgrade to four when you need it.
- Capability to handle four double-width GPUs or eight single-width GPUs to accelerate AI inference and deep learning proficiencies.
- Support for up to 12TB of DDR4 memory with DIMMs operating at up to 3200 MHz at 2DPC, and Intel Optane™ Persistent Memory 200 Series accelerates performance for in-memory databases and applications, reducing downtime and increasing application availability.
- High I/O bandwidth coupled with a generous number of PCIe expansion slots provides the additional connectivity scalability as your business and workload demands increase.
- Full Lenovo XClarity and ThinkShield system support for seamless infrastructure management and improved data security.

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 SR860 V2 server, visit the SR860 V2 product web page: <https://www.lenovo.com/us/en/data-center/servers/mission-critical/ThinkSystem-SR860-V2-Server/p/77XX7HS86V2>

Related product families

Product families related to this document are the following:

- [4-Socket Rack Servers](#)
- [SPECComp Benchmark Results](#)
- [ThinkSystem SR860 V2 Server](#)

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