

What's New - ThinkSystem SR860 V2 and SR850 V2 Article

Introducing the new ThinkSystem SR860 V2 and ThinkSystem SR850 V2 servers. These are new 4-socket high-performance servers based on the new third-generation Intel Xeon Scalable processors and Intel Optane Persistent Memory 200 Series. These servers offer broad storage and memory support, and in the case of the SR860 V2, extensive GPU support. Learn about the materials we've published to introduce the new servers.

Learn more about the announcement:
<https://www.lenovo.com/data-insights/>

ThinkSystem SR860 V2

The Lenovo ThinkSystem SR860 V2 is designed for the most demanding, mission-critical workloads, such as in-memory databases, large transactional databases, AI, real-time analytics, ERP, CRM, and virtualized server workloads.



Figure 1. ThinkSystem SR860 V2

Key specifications:

- 4U rack mount server
- Up to four 3rd Generation Intel Xeon Processor Scalable family CPUs up to 250W
- Up to 12TB DDR4 memory
- Supports Intel Optane Persistent Memory 200 Series
- Up to 48x 2.5" front-accessible drive bays, up to 24 of which can be NVMe
- Up to 14x PCIe 3.0 expansion slots + dedicated OCP 3.0 slot for networking
- Up to 4x NVIDIA V100S GPUs or 8x NVIDIA T4 GPUs

Learn more about the SR860 V2 server with these resources:

- [SR860 V2 product web page](#)
- Article, [Five Highlights of the Lenovo ThinkSystem SR860 V2](#)
- Article, [Unique Intel Features Available with ThinkSystem SR850 V2 and SR860 V2](#)
- [SR860 V2 Datasheet](#)
- [SR860 V2 interactive 3D Tour](#)
- [SR860 V2 Walkthrough Video](#)
- [SR860 V2 Product Guide](#)
- [Compare the SR860 V2 to other servers in the portfolio](#)
- [DCSC configurator](#)

ThinkSystem SR850 V2

The Lenovo ThinkSystem SR850 V2 is designed for high-growth workloads; in-memory computing, databases and virtualization, with large memory and storage capacities.



Figure 2. ThinkSystem SR850 V2

Key specifications:

- 2U rack mount server
- Up to four 3rd Generation Intel Xeon Processor Scalable family CPUs up to 250W
- Up to 12TB DDR4 memory
- Supports Intel Optane Persistent Memory 200 Series
- Up to 24x 2.5" front-accessible drive bays, all of which can be NVMe if desired
- Up to 7x PCIe 3.0 expansion slots + dedicated OCP 3.0 slot for networking
- Up to 2x NVIDIA T4 GPUs

Learn more SR850 V2 server with these resources:

- [SR850 V2 product web page](#)
- Article, [Five Highlights of the Lenovo ThinkSystem SR850 V2](#)
- Article, [Unique Intel Features Available with ThinkSystem SR850 V2 and SR860 V2](#)
- [SR850 V2 Datasheet](#)
- [SR850 V2 interactive 3D Tour](#)
- [SR850 V2 Walkthrough Video](#)
- [SR850 V2 Product Guide](#)
- [Compare the SR850 V2 to other servers in the portfolio](#)
- [DCSC configurator](#)

New server options

In addition to the SR850 V2 and SR860 V2 servers, we've also announced these new server options. Click the links to view the product guide for the new options:

- [Intel Optane Persistent Memory 200 Series](#)
- [Mellanox ConnectX-6 Lx 10/25GbE SFP28 Ethernet Adapters](#)
 - ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port OCP Ethernet Adapter
 - ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter
- [Intel S4510 SSDs in the 7mm hot-swap form factor](#) :
 - ThinkSystem 7mm Intel S4510 240GB Entry SATA 6Gb Hot Swap SSD
 - ThinkSystem 7mm Intel S4510 480GB Entry SATA 6Gb Hot Swap SSD
 - ThinkSystem 7mm Intel S4510 960GB Entry SATA 6Gb Hot Swap SSD
- 7.68TB capacities of the 2.5-inch S4510 and S4610 SSDs:
 - [ThinkSystem 2.5" Intel S4510 7.68TB Entry SATA 6Gb Hot Swap SSD](#)
 - [ThinkSystem 2.5" Intel S4610 7.68TB Mainstream SATA 6Gb Hot Swap SSD](#)
- [High-endurance Intel Optane P4800X SSD](#) :
 - ThinkSystem U.2 Intel Optane P4800X 750GB Performance NVMe PCIe 3.0 x4 Hot Swap SSD 60DWPD

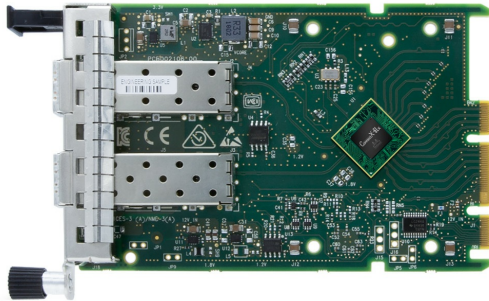


Figure 3. ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port OCP Ethernet Adapter

New #1 Benchmarks

The SR860 V2 server has achieved 37 new #1 benchmark results, to date:

- 6 World Records with New SPECcpu Benchmark Results
- 2 World Records with New TPC-E Benchmark Result
- 3 World Records with New SAP BW Edition for SAP HANA (1.3B Records) Benchmark Result
- 3 World Records with New SAP BW Edition for SAP HANA (7.8B Records) Benchmark Result
- 2 World Records with New 1-node SPECmpiM Benchmark Result
- 2 World Records with New 2-node SPECmpiM Benchmark Result
- 2 World Records with New 3-node SPECmpiM Benchmark Result
- 2 World Records with New 4-node SPECmpiM Benchmark Result
- 2 World Records with New 1-node SPECmpiL Benchmark Result
- 2 World Records with New 2-node SPECmpiL Benchmark Result
- 2 World Records with New 3-node SPECmpiL Benchmark Result
- 2 World Records with New 4-node SPECmpiL Benchmark Result
- 2 World Records with New SPEC ACCEL OpenACC Benchmark Result
- 2 World Records with New SPEC ACCEL OpenMP Benchmark Result
- 2 World Records with New SPEC ACCEL OpenCL Benchmark Result
- 1 World Record with New SPECCompG Benchmark Result

For details of these benchmark results, see the reports on the web site:

<https://lenovopress.com/servers/thinksystem-v2/sr860-v2#rt=performance-benchmark-result>

Related product families

Product families related to this document are the following:

- [ThinkSystem SR860 V2 Server](#)
- [ThinkSystem SR850 V2 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.
1009 Think Place - Building One
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 2021. All rights reserved.

This document, LP1346, was created or updated on December 4, 2020.

Send us your comments in one of the following ways:

- Use the online Contact us review form found at:
<http://lenovopress.com/LP1346>
- Send your comments in an e-mail to:
comments@lenovopress.com

This document is available online at <http://lenovopress.com/LP1346>.

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®

ThinkSystem

The following terms are trademarks of other companies:

Intel®, Intel Optane™, and Xeon® are trademarks of Intel Corporation or its subsidiaries.

TPC and TPC-E are trademarks of Transaction Processing Performance Council.

SPEC® and SPEC ACCEL® are trademarks of the Standard Performance Evaluation Corporation (SPEC).

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