

# What's New in April - 2nd Gen Intel Xeon Scalable Processors, Optane DC Persistent Memory and Server Options

## Article

### New servers with Gen 2 processors

Announcing the new Lenovo ThinkSystem servers, based on the *second generation of the Intel Xeon Processor Scalable Family (Xeon SP Gen 2)*. The links below take you to the Lenovo Press materials where you can learn about the new systems.

#### 4S-8S rack servers

- Lenovo ThinkSystem SR950 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SR860 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SR850 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)



#### 2S rack servers

- Lenovo ThinkSystem SR650 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SR630 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SR590 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SR570 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)



- Lenovo ThinkSystem SR550 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SR530 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)

#### Density optimized server

- Lenovo ThinkSystem SD530 Server (Xeon SP Gen 2) and D2 Enclosure
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SD650 Server (Xeon SP Gen 2) and n1200 DWC Enclosure
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)



#### Compute nodes for Flex System

- Lenovo ThinkSystem SN550 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)
- Lenovo ThinkSystem SN850 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)



#### Tower servers

- Lenovo ThinkSystem ST550 Server (Xeon SP Gen 2)
  - [Datasheet \(Updated\)](#)
  - [Product Guide \(New\)](#)
  - [Interactive 3D Tour \(Updated\)](#)



In addition, we have published these three materials to support the launch of the new servers:

- Performance paper, [Balanced Memory Configurations with Second-Generation Intel Xeon Scalable Processors](#)
- Article, [Lenovo Security in the Data Center Powered by ThinkShield](#)
- [OSIG - Operating System Interoperability Guide](#)

## New Intel Optane DC Persistent Memory

Intel Optane DC Persistent Memory is an innovative technology that delivers a unique combination of affordable large memory capacity and persistence (non-volatility). Persistent Memory is supported on most ThinkSystem servers with second-generation Intel Xeon Scalable processors.

Learn more about this new offering from Lenovo:

- [Video walkthrough](#)
- [Product guide](#)
- App Direct Mode paper, [Analyzing the Performance of Intel Optane DC Persistent Memory in App Direct Mode in Lenovo ThinkSystem Servers](#)

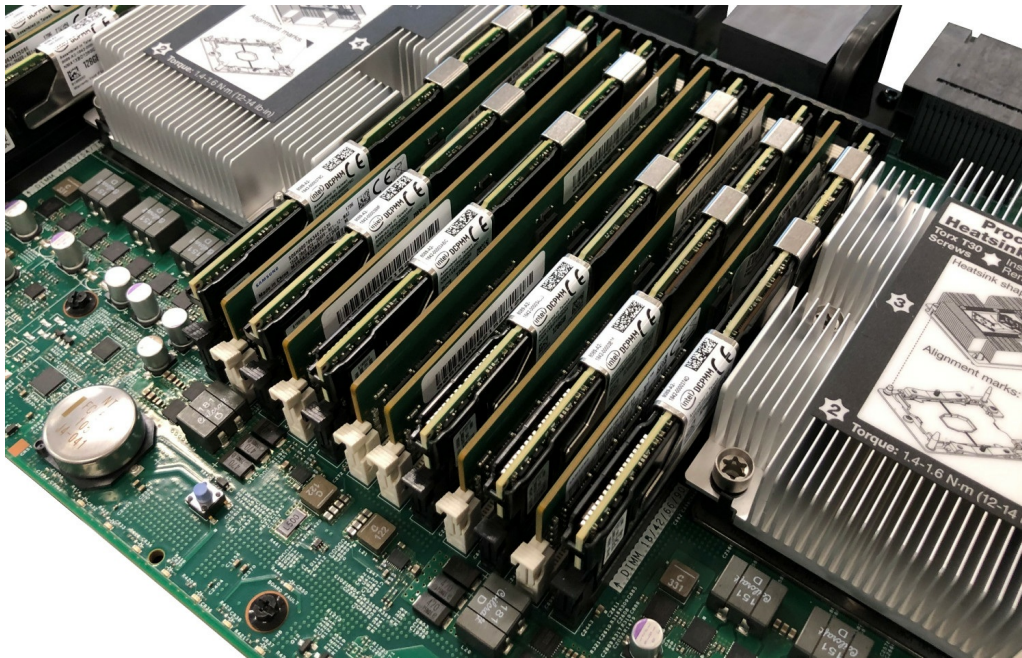


Figure: DCPMMs installed in an SR950 system board

## New Benchmark Results

The following performance benchmark reports have been published, highlighting the leadership performance of our ThinkSystem SR950 and SR650 servers:

ThinkSystem SR950 performance benchmark reports:

- [ThinkSystem SR950 Sets World Record with New SAP BW Edition for SAP HANA \(10.4B Records\) Benchmark Result](#)
- [ThinkSystem SR950 Sets Three World Records with Four-Socket SPECvirt\\_sc2013 Benchmark Result](#)
- [ThinkSystem SR950 with Intel Optane DC Persistent Memory Sets New World Records with New STAC-M3 Result](#)
- [ThinkSystem SR950 Delivers Outstanding Result with 8-Socket SAP SD Two-Tier Benchmark Result](#)
- [ThinkSystem SR950 Sets World Record with 4-Socket SAP SD Two-Tier Benchmark Result](#)
- [ThinkSystem SR950 Sets World Record with New 3-Socket SPECCompG Result](#)
- [ThinkSystem SR950 Sets World Record with New One-Node 8-Socket SPECmpiM Result](#)
- [ThinkSystem SR950 Sets World Record with New One-Node 6-Socket SPECmpiM Result](#)
- [ThinkSystem SR950 Sets World Record with New One-Node 3-Socket SPECmpiM Result](#)

ThinkSystem SR650 performance benchmark reports:

- [ThinkSystem SR650 with Intel Optane DC Persistent Memory Sets New World Records with New STAC-M3 Result](#)
- [ThinkSystem SR650 Achieves Single-Socket Leadership Performance per Watt with SPECpower\\_ssj2008 Benchmark Result](#)
- [ThinkSystem SR650 Sets World Record with New One-Node SPEC ACCEL OpenMP Result](#)
- [ThinkSystem SR650 Sets World Record with New One-Node SPEC ACCEL OpenCL Result](#)
- [ThinkSystem SR650 Sets World Record with New One-Node SPEC ACCEL OpenACC Result](#)
- [ThinkSystem SR650 Sets World Record with New Two-Node SPECmpiM Result](#)
- [ThinkSystem SR650 Sets World Record with New Three-Node SPECmpiM Result](#)
- [ThinkSystem SR650 Sets World Record with New Five-Node SPECmpiM Result](#)
- [ThinkSystem SR650 Sets World Record with New Six-Node SPECmpiM Result](#)

## Server Options

This month, we announced a new M.2 capacity point and a 3.5-inch version of a PM883 drive:

- [ThinkSystem M.2 5100 240GB SATA 6Gbps Non-Hot Swap SSD](#)
- [ThinkSystem 3.5" PM883 3.84TB Entry SATA 6Gb Hot Swap SSD](#)

This month we also expanded server support of the following options:

- Drives:
  - [ThinkSystem 5200 6Gb SATA Entry SSDs](#)
  - [ThinkSystem 5200 Mainstream SATA 6Gb SSDs](#)
  - [ThinkSystem Intel S4610 Mainstream SATA 6Gb SSDs](#)
  - [ThinkSystem Intel P4610 Mainstream NVMe PCIe 3.0 x4 SSDs](#)
- GPUs - See [ThinkSystem GPU Summary](#):
  - NVIDIA Tesla T4
  - AMD Radeon Pro V340
- Network adapters:
  - [Mellanox ConnectX-4 Adapters](#)
  - [ThinkSystem QLogic QL41262 PCIe 25Gb 2-Port SFP28 Ethernet Adapter](#)
  - [Intel XXV710-DA2 PCIe 25Gb 2-Port SFP28 Ethernet Adapter](#)
- Flash storage adapters
  - [ThinkSystem KCM51V Mainstream NVMe PCIe 3.0 x4 Flash Adapters](#)
- Backup units
  - [ThinkSystem Internal Half High LTO Gen8 SAS Tape Drive](#)

## HPC offerings

The following documents were updated in support of our updated HPC offerings:

- Lenovo Intelligent Computing Orchestration (LiCO) 5.3
  - [Datasheet](#)
  - [Product Guide](#)
- Lenovo Scalable Infrastructure (LeSI)
  - [Datasheet](#)
  - [Product Guide](#)
- Lenovo Distributed Storage Solution for IBM Spectrum Scale (DSS-G)
  - [Datasheet](#)
  - [Product Guide](#)

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