

What's New - August 2021

Article

New ThinkAgile HX systems

This month, Lenovo announced 10 new ThinkAgile HX appliances and certified nodes, based on the 3rd Gen Intel Xeon Scalable processors:

- New ThinkAgile HX systems based on the 1U rack server, ThinkSystem SR630 V2 - Appliances (HXnnn0) and Certified Nodes (HXnnn1):
 - HX1330 and HX1331 for entry systems
 - HX2330 and HX2331 for remote office and branch office
 - HX3330 and HX3331 for VDI, server virtualization, and private cloud
- New ThinkAgile HX 2U systems based on the 2U rack server, ThinkSystem SR650 V2:
 - HX5530 and HX5531 for storage-heavy workloads
 - HX7530 and HX7531 for high performance workloads

For details, see the ThinkAgile HX product guides:

- ThinkAgile HX 1U Appliances & Certified Nodes (Intel Xeon SP Gen 3)
<https://lenovopress.com/lp1481>
- ThinkAgile HX 2U Appliances & Certified Nodes (Intel Xeon SP Gen 3)
<https://lenovopress.com/lp1482>



Figure 1. Lenovo ThinkAgile HX system with 2.5-inch drive bays, based on the SR650 V2 server

New Lenovo RAID adapters and HBAs

This month, we announced new RAID adapters and SAS host bus adapters that we are manufacturing in-house:

- ThinkSystem 4350-8i SAS/SATA 12Gb HBA, 4Y37A72480
- ThinkSystem 4350-16i SAS/SATA 12Gb HBA, 4Y37A72481
- ThinkSystem RAID 5350-8i PCIe 12Gb Adapter, 4Y37A72482
- ThinkSystem RAID 9350-8i 2GB Flash PCIe 12Gb Adapter, 4Y37A72483
- ThinkSystem RAID 9350-16i 4GB Flash PCIe 12Gb Adapter, 4Y37A72485

These new PCIe 3.0 adapters are initially supported on the SR650 V2 and SR630 V2 servers but we plan to support other servers later in the year. Customers in the EMEA market also have access to new models with one of the new RAID adapters standard.

The ThinkSystem RAID 9350-16i is shown in the following figure.



Figure 2. ThinkSystem RAID 9350-16i 4GB Flash PCIe 12Gb Adapter

Details about the new adapters in the following product guides:

- ThinkSystem 4350-16i and 4350-8i Internal SAS HBAs
<https://lenovopress.com/LP1439>
- ThinkSystem RAID 5350-8i Adapter
<https://lenovopress.com/LP1438>
- ThinkSystem RAID 9350-16i and 9350-8i Advanced RAID Adapters
<https://lenovopress.com/LP1437>

To compare these adapters to others in our portfolio, see our updated ThinkSystem RAID Adapter and HBA Reference:

<https://lenovopress.com/lp1288-thinksystem-raid-adapter-and-hba-reference>

New storage controller support

This month we added the following support:

- Intel VROC NVMe RAID support on the following systems
 - Now supported on SR650
 - Now supported on SR630
- ThinkSystem 1611-8P PCIe Gen4 Switch Adapter, 4Y37A09737
 - Now supported on SR665
- ThinkSystem 440-16e SAS/SATA PCIe Gen4 12Gb HBA, 4Y37A09724
 - Now supported on SR645
- ThinkSystem 4-Port PCIe Gen4 NVMe Retimer Adapter, 4C57A65446
 - Now supported on SR645

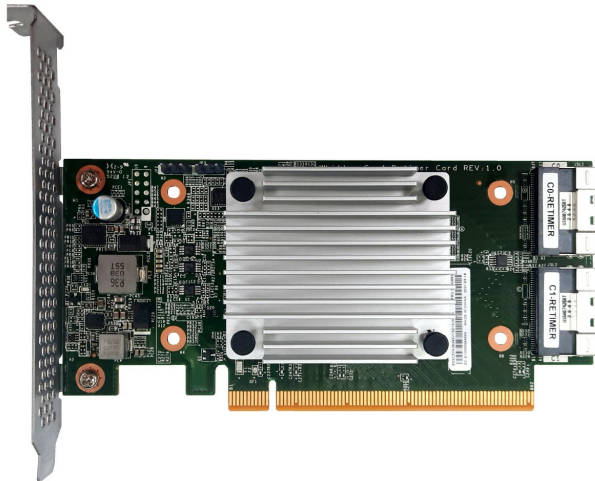


Figure 3. ThinkSystem 4-Port PCIe Gen4 NVMe Retimer Adapter

You can see all server support and compare the controllers with the Lenovo ThinkSystem RAID Adapter and HBA Reference:

<https://lenovopress.com/lp1288-thinksystem-raid-adapter-and-hba-reference>

New drive options for servers

This month we announced the following new drive options:

- New Intel S4620 Mixed Use SATA 6Gb SSDs
 - Form factors: 2.5-inch, 3.5-inch hot-swap and 3.5-inch simple-swap
 - Capacities: 480GB, 960GB, 1.92TB and 3.84TB capacities
 - See the S4620 product guide: <https://lenovopress.com/LP1504>
- New S4520 Read Intensive SATA 6Gb SSDs
 - Form factors: 2.5-inch, 3.5-inch hot-swap, 3.5-inch simple-swap and 7mm form factors
 - Capacities: 240GB, 480GB, 960GB, 1.92TB, 3.84TB and 7.68TB capacities
 - See the S4520 product guide: <https://lenovopress.com/LP1503>



Figure 4. ThinkSystem S4520 Read Intensive SATA 6Gb SSD (without the hot-swap drive tray)

We also announced the following drive support:

- New SED drive (SSD and HDD) support for the SR645 and SR665 servers:
 - ThinkSystem 2.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD SED, 4XB7A38141
 - ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD SED, 4XB7A38191
 - ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD SED, 4XB7A38192
 - ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD SED, 4XB7A38193
 - ThinkSystem 2.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD SED, 4XB7A64222
 - ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD FIPS, 7XB7A00047
- New 3.5-inch HDD for the SR650 server:
 - ThinkSystem 3.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD, 4XB7A77004
- New 7mm drive support on the SR850 V2 and SR860 V2 servers:
 - ThinkSystem 7mm 5300 240GB Entry SATA 6Gb SSD, 4XB7A38181
 - ThinkSystem 7mm 5300 480GB Entry SATA 6Gb SSD, 4XB7A38182
 - ThinkSystem 7mm 5300 960GB Entry SATA 6Gb SSD, 4XB7A38183
- New SSD support on the SR250 and ST250 servers:
 - ThinkSystem 3.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD, 4XB7A17085
 - ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD, 4XB7A17079

You can see all server support and compare the SSDs with our Lenovo ThinkSystem SSD Portfolio reference:

<https://lenovopress.com/lp1261-lenovo-thinksystem-ssd-portfolio>

New drives for ThinkAgile VX with AMD processors

Our ThinkAgile VX systems based on AMD EPYC 7003 processors now support the Seagate Nytro Write-Intensive SAS SSDs:

- 2.5-inch drive options:
 - ThinkSystem 2.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70006
 - ThinkSystem 2.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70005
 - ThinkSystem 2.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70004
 - ThinkSystem 2.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70003
- 3.5-inch drive options:
 - ThinkSystem 3.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70011
 - ThinkSystem 3.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70010
 - ThinkSystem 3.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70009
 - ThinkSystem 3.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70008

Details in the ThinkAgile VX3575-G, VX5575, VX7575 and VX7576 product guide:

<https://lenovopress.com/lp1473>

18TB drives for the Lenovo Storage D1212 and D3284

The Lenovo Storage D3284 and Lenovo Storage D1212 now support 18TB NL-SAS drives for even greater storage density.



Figure 5. Lenovo Storage D3284 High Density Expansion Enclosure

The D3284 now supports these part numbers:

- Lenovo Storage 18TB 7.2K 3.5" NL-SAS HDD, 4XB7A77020
- Lenovo Storage 18TB 7.2K 3.5" NL-SAS HDD (14 pack), 4XB7A77019

The D1212 now supports these part numbers:

- Lenovo Storage 18TB 7.2K 3.5" NL-SAS HDD, 4XB7A77021

For more information, see the product guides:

- Lenovo Storage D3284 External High Density Drive Expansion Enclosure
<https://lenovopress.com/LP0513>
- Lenovo Storage D1212 and D1224 Drive Enclosures
<https://lenovopress.com/LP0512>

New storage & network adapter support

This month we announced a new 64Gb Fibre Channel adapter:

- ThinkSystem Emulex LPe36002 64Gb 2-port PCIe Fibre Channel Adapter, 4XC7A77485

For details, see the Emulex LPe36002 product guide:

<https://lenovopress.com/LP1496>

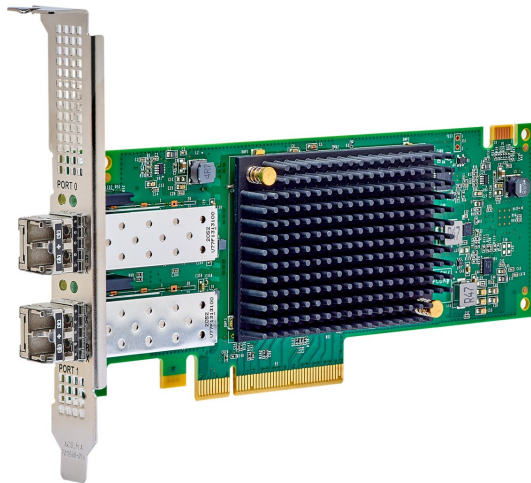


Figure 6. ThinkSystem Emulex LPe36002 64Gb 2-port PCIe Fibre Channel Adapter

We also announced a new 100Gb Data Center Accelerator adapter:

- ThinkSystem Xilinx Alveo U50 Data Center Accelerator Adapter, 4XC7A76757

For details, see the Xilinx Alveo U50 product guide:

<https://lenovopress.com/LP1505>

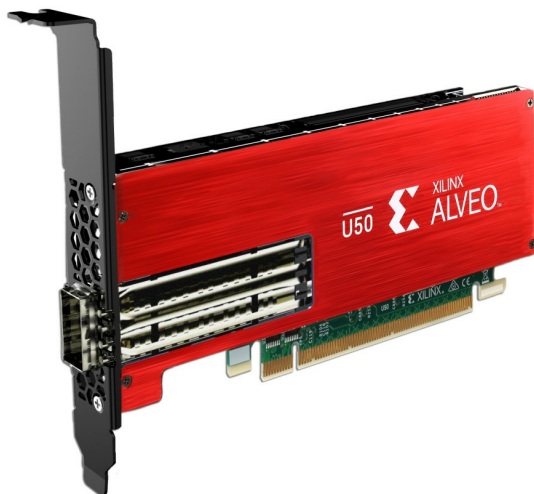


Figure 7. ThinkSystem Xilinx Alveo U50 Data Center Accelerator Adapter

We also extended support of the following network adapters to additional servers:

- ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port OCP Ethernet Adapter, 4XC7A08294
- ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter, 4XC7A08295
- ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port OCP Ethernet Adapter, 4XC7A62582

- ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter, 4XC7A62580
- ThinkSystem Broadcom 57508 100GbE QSFP56 2-port PCIe 4 Ethernet Adapter, 4XC7A08297

We announced the following low-latency HDR InfiniBand cable support to our ConnectX-6 HDR and HDR100 adapters:

- Mellanox HDR IB Optical QSFP56 Low Latency Cables, from 3m to 30m lengths
- Mellanox HDR IB to 2x HDR100 Splitter Optical QSFP56 Low Latency Cable, from 3m to 30m lengths

GPU support

This month we announced the following new GPU with 80GB of onboard memory (initially supported in the SR665):

- ThinkSystem NVIDIA A100 80GB PCIe Gen4 Passive GPU, 4X67A76715

We also extended support of the following GPUs:

- ThinkSystem NVIDIA A40 48GB PCIe Gen4 Passive GPU, 4X67A72593
 - Now supported in the SR655
- ThinkSystem NVIDIA A30 24GB PCIe Gen4 Passive GPU, 4X67A76581
 - Now supported in the SR650, SR655 and SR665
- ThinkSystem NVIDIA A10 24GB PCIe Gen4 Passive GPU, 4X67A71311
 - Now supported in the SR665

Details in our ThinkSystem and ThinkAgile GPU Summary:

<https://lenovopress.com/lp0768>



Figure 8. ThinkSystem NVIDIA A100 80GB PCIe Gen4 Passive GPU

ThinkSystem 18.5-inch LCD Console

The ThinkSystem 18.5-inch LCD Console is a flat-panel console that offer a convenient way to manage space-constrained rack environments from a single console. This densely packed 1U solution let you easily set up and control rack-mounted servers. It offers additional space savings by allowing the mounting of a KVM switch in the space behind the console. The console includes an 18.5-inch LCD display and US English keyboard.

The ThinkSystem 18.5-inch LCD Console is shown in the following figure.



Figure 9. ThinkSystem 18.5-inch LCD Console

Read about the new ThinkSystem 18.5-inch LCD Console in the product guide:
<https://lenovopress.com/LP1487>

Intel Transparent Supply Chain

Lenovo has one of the world's best supply chains, as ranked by Gartner Group, backed by extensive and mature supply chain security programs that exceed industry norms and US Government standards. Now we are the first Tier 1 manufacturer to offer Intel Transparent Supply Chain in partnership with Intel, offering you an unprecedented degree of supply chain transparency and assurance.

We've now extended support for Intel Transparent Supply Chain in our manufacturing processes to the following servers:

- Air-cooled and water-cooled HPC servers:
 - SD630 V2
 - SD650 V2
 - SD650-N V2
 - SR670 V2
 - SR670
- 1-socket Intel servers:
 - SR150
 - SR250
 - ST250
- 2-socket Intel server:
 - ST550

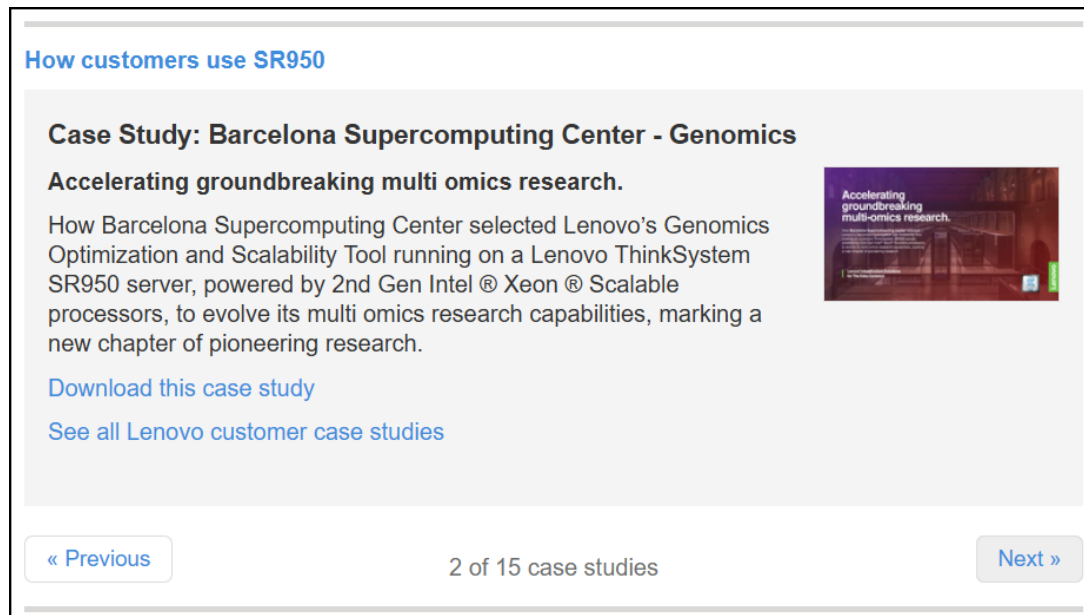
For information on this offering, including the complete list of supported servers, see the paper *Introduction to Intel Transparent Supply Chain on Lenovo ThinkSystem Servers*:

<https://lenovopress.com/lp1434>

Lenovo Customer Case Studies

The Lenovo Press web site now shows case studies where we show how customers use our products to achieve their business objectives. We enabled them to appear in the product guides of the servers and storage that the customers have used in their configurations.

Here's an example from the [SR950 product guide](#), a case study from Barcelona Supercomputing Center.



The screenshot shows a case study card titled "How customers use SR950". The main heading is "Case Study: Barcelona Supercomputing Center - Genomics". Below this is the sub-heading "Accelerating groundbreaking multi omics research." followed by a paragraph: "How Barcelona Supercomputing Center selected Lenovo's Genomics Optimization and Scalability Tool running on a Lenovo ThinkSystem SR950 server, powered by 2nd Gen Intel® Xeon® Scalable processors, to evolve its multi omics research capabilities, marking a new chapter of pioneering research." To the right of the text is a small image with the text "Accelerating groundbreaking multi-omics research." Below the text are two links: "Download this case study" and "See all Lenovo customer case studies". At the bottom of the card, there are three elements: a "« Previous" button, the text "2 of 15 case studies", and a "Next »" button.

Figure 10. Barcelona Supercomputing Center case study in the SR950 product guide

Whenever you see the case studies in product guides or other pages on the site, you can click to **Download** the specific case study shown, or you can click the **Next** and **Previous** buttons to view the other case studies that use the same product.

Look for case studies in many of the server and storage product guides as well as the product landing pages on Lenovo Press. As soon as we publish additional case studies, they'll be automatically added to the product guides. We'd love to hear your feedback on this new feature!

Related product families

Product families related to this document are the following:

- [Direct-Attached Storage](#)
- [Drives](#)
- [Ethernet Adapters](#)
- [GPU adapters](#)
- [Host Bus Adapters](#)
- [RAID Adapters](#)
- [ThinkAgile HX Series for Nutanix](#)

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