LENOVO FOR THE DATA CENTER

Portfolio Guide

July 2021

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ThinkSystem ThinkAgile

Intel® Xeon® Scalable processor family

CONTENTS

ENABLING THE FUTURE-DEFINED DATA CENTER

By providing the strongest foundation of performance, reliability and security in the industry, Lenovo delivers an end-to-end portfolio of compute, storage and networking capabilities that seamlessly integrate and interoperate with any environment. To accelerate deployment and reduce time-to-value, Lenovo offers a suite of pre-tested and pre-engineered solutions, ready-to-deploy clients' workloads. Every phase of the IT lifecycle is taken care of by Lenovo Services, which help clients deliver the most from their technology investment.

- **Most reliable:** Lenovo servers ranked No.1 in uptime of any x86 systems for the past 7 years running, according to 2018-2019 ITIC reliability survey.

- **Most secure:** Lenovo provides the best and most airtight platform security with our Trusted Platform Assurance. Even after adding options at additional cost, our competitors offer fewer security capabilities than come standard on Lenovo ThinkSystem.

- **Strategic Relationships:** Unlike our major competitors, Lenovo does not have a proprietary software business and remains more open for industry leading partnerships. Because of this, Lenovo's customers can benefit from an open standards strategy that allows them to grow and change their IT systems as needed.

With our ever-growing portfolio, powered by the Intel® Xeon® processor Scalable family, with open, modular technologies designed to adapt easily and scale quickly, Lenovo's clients can excel and accelerate into the future. Find out more ThinkSystem: Server, storage and networking solutions that deliver the industry's best combination of performance, flexibility, and reliability. ThinkAgile: Next generation IT software-defined infrastructure that's easier to deploy and manage, and reduces costs and complexity.

Intel® Xeon® processor Scalable family

DATA CENTER INFRASTRUCTURE

By providing the strongest foundation of performance, reliability and security in the industry, Lenovo delivers an end-to-end portfolio of compute, storage and networking capabilities that seamlessly integrate and interoperate with any environment.

RACK & TOWER SERVERS

Flexible for even the most demanding workloads

Driving new levels of storage density and connectivity, Lenovo ThinkSystem servers powered by Intel® Xeon® Scalable processor family are the ideal platform to host private and public cloud, virtualisation, VDI, web serving, analytics and big data solutions.

Trust Lenovo to be your expert. Single point of contact for hardware, firmware and software support.

If you would like to find out more specific details regarding the products below, please visit here, remember to scroll down to find the products you are looking for.

Looking for feature comparison, then please visit here.

All our rack servers can be found here.

ThinkSystem SR590

ThinkSystem   ThinkAgile

Intel® Xeon® Platinum processor

TOWER SERVERS

Lenovo Model	ThinkSystem ST50	ThinkSystem ST250
Rack Units	4U	4U
Typical Workloads	Small-to-medium-sized business office applications, and remote office/branch office (ROBO) or retail applications.	Web serving, system management, and near-side data backup, blockchain, remote office/branch office (ROBO), retail applications.
Processor	1 x Intel Xeon E-2200, 6 cores max.	1 x Intel Xeon E-2200, 8 cores max.
Memory Maximum	64GB	128GB
Storage maximum (TB)	32TB	64TB
Product Guide	https://lenovopress.com/lp0960	https://lenovopress.com/lp0961

Lenovo Model	ThinkSystem ST550	ThinkSystem ST650 V2
Rack Units	4U	4U Tower
Typical Workloads	Email, file/print, private cloud, VDI, web serving, remote office/branch office (ROBO), retail applications.	The ST650 V2 is designed to handle a wide range of workloads, such as databases, virtualization and cloud computing, virtual desktop infrastructure (VDI), infrastructure security, systems management, enterprise applications, collaboration/email, streaming media, web, and HPC.
Processor	2 x Intel 2nd/3rd Generation Xeon Scalable Processor, 16 cores max.	2 x Intel 3rd Generation Xeon Scalable Processor, 36 cores max.
Memory Maximum	768GB	4TB
Storage maximum (TB)	154TB	256TB
Product Guide	https://lenovopress.com/lp1055	https://lenovopress.com/lp1390

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RACK SERVERS

Lenovo Model	SR250
Rack Units	1U
Typical Workloads	Web serving, virtualization, entry-cloud and data-analytics applications, blockchain, media streaming.
Processor	1 x Intel Xeon E-2200, 8 cores max
Memory Maximum	128GB
Storage maximum (TB)	32TB
Product Guide	https://lenovopress.com/lp0963

Lenovo Model	SR635
Rack Units	1U
Typical Workloads	Database, HPC, software-defined storage, SMB/ROBO.
Processor	1 x AMD EPYC 7002/7003, 64 cores max
Memory Maximum	2TB
Storage maximum (TB)	108TB
Product Guide	https://lenovopress.com/lp1160

Lenovo Model	SR655
Rack Units	2U
Typical Workloads	AI inference, VDI, video analytics, software-defined storage, network workloads (packet inspection, etc.)
Processor	1 x AMD EPYC 7002/7003, 64 cores max.
Memory Maximum	2TB
Storage maximum (TB)	280TB
Product Guide	https://lenovopress.com/lp1161
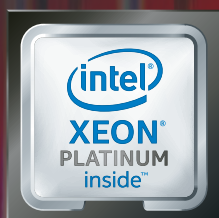
Intel® Xeon® Platinum processor

Lenovo Model	SR645	
Rack Units	1U	
Typical Workloads	HPC, database, virtualization, VDI.	
Processor	2 x AMD EPYC 7002, 7003, 64 cores max.	
Memory Maximum	4TB	
Storage maximum (TB)	92TB	
Product Guide	https://lenovopress.com/LP1280	

Lenovo Model	SR665	
Rack Units	2U	
Typical Workloads	Inference, virtualization, VDI, HPC, HCI.	
Processor	2 x AMD EPYC 7002, 7003, 64 cores max.	
Memory Maximum	4TB	
Storage maximum (TB)	320TB	
Product Guide	https://lenovopress.com/LP1269	

Lenovo Model	SR530	
Rack Units	1U	
Typical Workloads	Email, file/print, public/private cloud, Web serving.	
Processor	2 x Intel 2nd Generation Xeon Scalable Processor, 16 cores max.	
Memory Maximum	768GB	
Storage maximum (TB)	61TB	
Product Guide	https://lenovopress.com/lp1045	

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AMD

Lenovo Model	SR550
Rack Units	2U
Typical Workloads	Email, file/print, public/private cloud, Web serving, media streaming.
Processor	2 x Intel 2nd Generation Xeon Scalable Processor, 16 cores max.
Memory Maximum	768GB
Storage maximum (TB)	168TB
Product Guide	https://lenovopress.com/lp1046

Lenovo Model	SR570
Rack Units	1U
Typical Workloads	Email, file/print, web serving, public/private cloud, virtualization, HPC, big data, VDI.
Processor	2 x Intel 2nd Generation Xeon Scalable Processor, 16 cores max.
Memory Maximum	1TB
Storage maximum (TB)	77TB
Product Guide	https://lenovopress.com/lp1047

Lenovo Model	SR590
Rack Units	2U
Typical Workloads	Email, file/print, web serving, public/private cloud, virtualization, HPC, big data, VDI, media streaming.
Processor	2 x Intel 2nd Generation Xeon Scalable Processor, 16 cores max.
Memory Maximum	1TB
Storage maximum (TB)	196TB
Product Guide	https://lenovopress.com/lp1048

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Lenovo Model	SR630 V2
Rack Units	1U
Typical Workloads	The SR630 V2 is designed to handle a wide range of workloads, such as databases, virtualization and cloud computing, infrastructure security, systems management, enterprise applications, collaboration/email, streaming media, web, and HPC.
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 40 cores max.
Memory Maximum	4TB
Storage maximum (TB)	92.16TB
Product Guide	https://lenovopress.com/lp1391

Lenovo Model	SR650 V2
Rack Units	2U
Typical Workloads	The SR650 V2 is designed to handle a wide range of workloads, such as databases, virtualization and cloud computing, virtual desktop infrastructure (VDI), infrastructure security, systems management, enterprise applications, collaboration/email, streaming media, web, and HPC.
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 40 cores max
Memory Maximum	4TB
Storage maximum (TB)	360TB
Product Guide	https://lenovopress.com/lp1392

Lenovo Model	SR670 V2
Rack Units	3U
Typical Workloads	The server delivers optimal performance for Artificial Intelligence (AI), High Performance Computing (HPC)and graphical workloads across an array of industries. Retail, manufacturing, financial services and healthcare industries can leverage the processing power of the GPUs in the SR670 V2 to extract greater insights and drive innovation utilizing machine learning (ML) and deep learning (DL).
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 40 cores max
Memory Maximum	2TB
Storage maximum (TB)	64TB
Product Guide	https://lenovopress.com/lp1393

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HIGH END

Designed with your mission-critical workloads in mind

Lenovo's high-end rack servers are suited for heavy vertical workloads, virtualisation and legacy system replacements. The ThinkSystem portfolio brings new models designed for your most demanding, mission-critical workloads, such as in-memory databases, large transactional databases, batch and real-time analytics, ERP, CRM, and virtualised server workloads.

Everything within reach. Unmatched scalability with 4S & 8S in one 4U platform, modular drive tray, highest drive density, front and rear access for 12% faster serviceability.

For more specific details regarding the products below, please **visit here**.

If you're looking for feature comparison, please **visit here**.

All our rack servers can be found **here**.

ThinkSystem SR950

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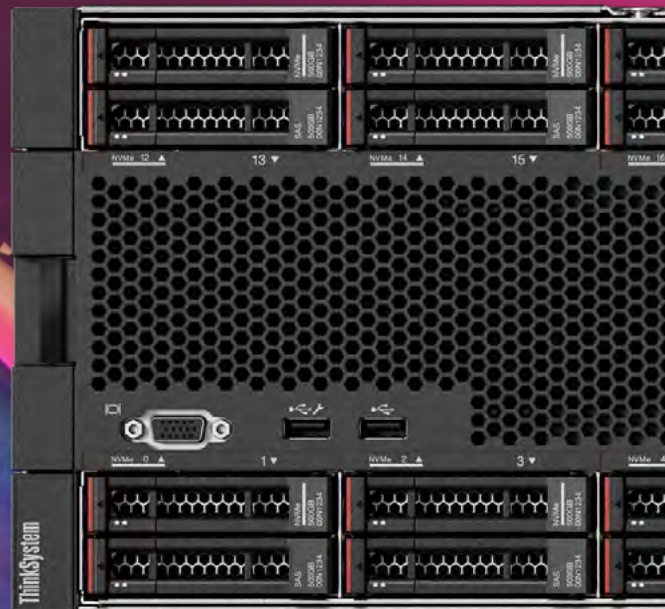
Intel® Xeon® Platinum processor

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Lenovo Model	SR850
Rack Units	2U
Typical Workloads	Business applications, server consolidation, database, virtualization.
Processor	4 x Intel 2nd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	6TB
Storage maximum (TB)	246TB
Product Guide	https://lenovopress.com/lp1052

Lenovo Model	SR850P
Rack Units	2U
Typical Workloads	Business applications, server consolidation, database, virtualization.
Processor	4 x Intel 2nd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	6TB
Storage maximum (TB)	123TB
Product Guide	https://lenovopress.com/lp1237

Lenovo Model	SR850 V2
Rack Units	2U
Typical Workloads	Mission critical workloads scaling up from 2S systems such as enterprise virtualization, CRM, ERP, SQL databases, VDI and small-mid sized SAP HANA computing environments.
Processor	4 x Intel 3rd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	6TB
Storage maximum (TB)	369TB
Product Guide	https://lenovopress.com/LP1301

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Lenovo Model	SR860
Rack Units	4U
Typical Workloads	Business consolidation, database virtualization, data analytics, and scientific/technical applications.
Processor	4 x Intel 2nd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	6TB
Storage maximum (TB)	246TB
Product Guide	https://lenovopress.com/lp1053

Lenovo Model	SR860 V2
Rack Units	4U
Typical Workloads	Mission critical workloads such as SAP HANA in-memory computing, transactional databases, deep learning, analytics, big data, and virtual machine density.
Processor	4 x Intel 3rd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	6TB
Storage maximum (TB)	737TB
Product Guide	https://lenovopress.com/LP1302

Lenovo Model	SR950
Rack Units	4U
Typical Workloads	Virtualization, analytics, database, HPC, VDI, mission-critical applications.
Processor	8 x Intel 2nd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	24TB
Storage maximum (TB)	369TB
Product Guide	https://lenovopress.com/lp1054

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BLADES

The orchestration platform for conducting tomorrow's business

Flexible infrastructure for ever-changing workloads. Resource management that leverages both hardware and systems management.

Flex System is the next generation of blade technology with more performance and bandwidth and far more capability to consolidate and virtualize than previous systems. Flex System is anchored by the Flex System Enterprise Chassis which enables high-speed performance with integrated servers and networking. Furthermore, its flexible design can meet the needs of varying workloads with independently scalable IT resource pools for higher utilization and lower cost per workload.

More info on chassis

Lenovo Model	SN550
Rack Units	0.7U
Typical Workloads	Flexible, high-performance blades for critical workloads, such as cloud, server virtualization, database, and virtual desktop infrastructure (VDI).
Processor	2 x Intel 2nd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	3TB
Storage maximum (TB)	31TB
Product Guide	https://lenovopress.com/lp1043

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Lenovo Model	SN850
Rack Units	1.4U
Typical Workloads	Optimized for high-end virtualization, mainstream database deployments, and memory-intensive, high-performance environments.
Processor	4 x Intel 2nd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	6TB
Storage maximum (TB)	61TB
Product Guide	https://lenovopress.com/lp1044

Lenovo Model	SN550 V2
Rack Units	0.7 U
Typical Workloads	Flexible, high-performance blades for critical workloads, such as cloud, server virtualization, database, and virtual desktop infrastructure (VDI).
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 36 cores max
Memory Maximum	2TB
Storage maximum (TB)	24TB
Product Guide	https://lenovopress.com/lp1397

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Lenovo Models	ThinkSystem NE2552E Flex Switch	
Ports	Internal: 28x 10/25 Gb Ethernet ports or 14x 50 Gb Ethernet ports supporting 2 and 4 port 10Gb, 25Gb and 50Gb adapters External: 8x SFP+/SFP28 ports and 4x QSFP+/QSFP28 ports supporting 10Gb, 25Gb, 40Gb, 50Gb and 100Gb port speeds	
Data Sheet Product Guide	https://lenovopress.com/datasheet/ds0040 https://lenovopress.com/lp0854	

Lenovo Models	EN4091 10Gb Pass thru	SI4091 System Interconnect Module
Base Configuration Ports	14 x 1/10Gb internal ports 14 x 1/10Gb SFP + external transceivers	14 x 10Gb internal 10 x 10Gb SFP+ external
Recommended for:	Low cost unmanaged 10Gb, 1-1 direct connectivity solution	Low cost 10Gb, simple management connectivity
Product Guide	https://lenovopress.com/tips0865	https://lenovopress.com/tips1196

Lenovo Models	EN4093R 10Gb Scalable Switch	SI4093 System Interconnect Module
Base Configuration Ports	Up to 28 x 10Gb internal Up to 14 x 10Gb SFP+ and 2 x 40Gb or 4 x 10Gb QSFP+ external	Up to 28 x 10Gb internal Up to 14 x 10Gb SFP+ and 2 x 40Gb or 4 x 10Gb QSFP+ external
Recommended for:	Demanding Layer 2/3 10Gb environments with optional 40Gb uplinks	10/40Gb simplified management connectivity, with enhanced scalability and performance
Product Guide	https://lenovopress.com/tips1292	https://lenovopress.com/tips1294

ThinkSystem SN550

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DENSE-OPTIMISED

Ready to adapt when you are

Powerful platforms for compute-intensive workloads, ranging from technical computing, to grid deployments, to analytics workloads, to large-scale cloud and virtualisation infrastructures.

ThinkSystem SD530

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Lenovo Model	SD530
Rack Units	0.5U
Typical Workloads	HPC, VDI, Web serving, public/private cloud, virtualization.
Processor	2 x Intel 2nd Generation Xeon Scalable Processor, 28 cores max.
Memory Maximum	2TB
Storage maximum (TB)	92TB
Product Guide	https://lenovopress.com/lp1041

Lenovo Model	SR670 V2
Rack Units	3U
Typical Workloads	The server delivers optimal performance for Artificial Intelligence (AI), High Performance Computing (HPC)and graphical workloads across an array of industries. Retail, manufacturing, financial services and healthcare industries can leverage the processing power of the GPUs in the SR670 V2 to extract greater insights and drive innovation utilizing machine learning (ML) and deep learning (DL).
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 40 cores max
Memory Maximum	2TB
Storage maximum (TB)	64TB
Product Guide	https://lenovopress.com/lp1393

ThinkSystem SR670

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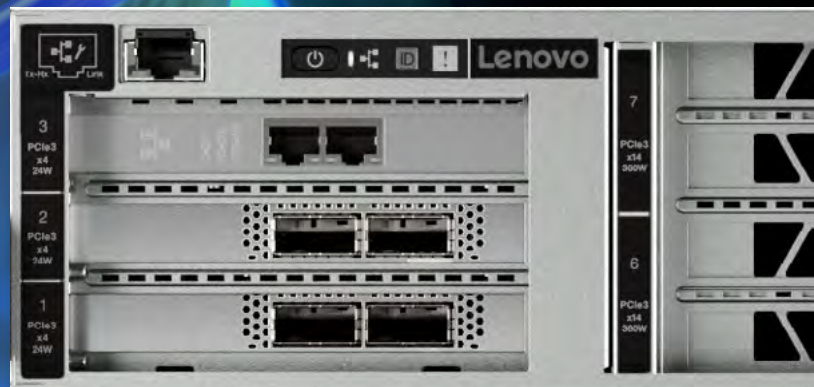
Lenovo Model	SD630 V2
Rack Units	0.5 U
Typical Workloads	The SD630 V2 is well suited for workloads ranging from cloud, analytics to AI and high performance computing application like Computer Aided Engineering (CAE) or Electronic Design Automation (EDA).
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 36 cores max
Memory Maximum	1TB
Storage maximum (TB)	92.16TB
Product Guide	https://lenovopress.com/lp1391

Lenovo ThinkSystem SD650 V2 and SD650-N V2 are based on our fourth generation Lenovo Neptune direct water cooling (DWC) platform leveraging two 3rd Gen Intel Xeon Scalable processors with NVIDIA HDR Infini Band networking. The ability to use water as the cooling method results in extreme performance in dense packaging. Direct water cooling is part of Lenovo's Neptune family of liquid cooling technologies which drive both greater energy efficiency and higher performance. Lenovo Neptune's approach uses liquid cooling to dissipate heat from systems with high thermal output, which, combined with Energy Aware Run time environments, enables data centers to run up to 40% more efficiently while maintaining uncompromised performance and preserving a dense data center footprint. With direct water cooling, Lenovo drives increased compute density, performance, and cooling efficiency for High Performance Computing and other workloads that require dense compute performance, such as Cloud, Grid, and Analytics. Direct water cooling is achieved by circulating the cooling water directly through cold plates that contact the CPU thermal case, DIMMs, and other high-heat-producing components in the server.

One of the main advantages of direct water cooling is the water can be relatively warm and still be very effective, as water conducts heat much more effectively than air. Depending on the server configuration,85 - 90% of the heat is removed by water cooling; the rest can easily be managed by a standard computer room air conditioner. With allowable inlet temperatures for the water being as high as 50°C (122°F), in many cases the water can be cooled by using ambient air and chilled water and a heat exchanger is not required.

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Lenovo Model	SD650 V2
Rack Units	1 U
Typical Workloads	Designed to industry-standards, the SD650 V2 is a general-purpose platform that is designed to give customers a flexible IT infrastructure. Customized solutions can be configured to provide an application-appropriate platform with a choice of servers, networking switches, adapters, and racks.
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 40 cores max
Memory Maximum	2TB
Storage maximum (TB)	3.84TB
Product Guide	https://lenovopress.com/lp1395
Lenovo Model	SD650-N V2
Rack Units	1 U
Typical Workloads	The ThinkSystem SD650-N V2 server is the next-generation high-performance GPU-rich server based on Lenovo's fourth generation Lenovo Neptune™ direct water cooling platform.
Processor	2 x Intel 3rd Generation Xeon Scalable Processor, 40 cores max
Memory Maximum	1TB - 2TB in plan for Q3
Storage maximum (TB)	3.84TB
Product Guide	https://lenovopress.com/lp1396

ThinkSystem SD530

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Lenovo EDGE SOLUTIONS

Overview

The world is more connected than ever, and most data is now being generated outside of the data center. Lenovo is here to help you speed things up by defining your IoT strategy and bringing compute capabilities wherever you need them. We also bring AI to the edge for faster processing with purpose-built solutions that use high-performance GPUs and your choice of integrated storage and data management.

Benefits

Our edge servers are rugged and secure with physical tamper-proofing, data encryption, and the ability to withstand conditions of all kinds. So no matter what you need, we'll find the right solution for you.

ThinkSystem SE350 Edge Server

The Lenovo ThinkSystem SE350 is the workhorse for Edge computing. Designed and built with the unique requirements for Edge servers in mind, it is versatile enough to stretch the limitations of server locations, providing a variety of connectivity and security options and easily managed with Lenovo XClarity Controller.

Lenovo Models	SE350
SE350	0.5U
Target workloads	Edge computing (IoT, AI, machine learning), retail, video security, inventory management, building control, telecommunications, manufacturing, distribution.
Processor	1 x Intel Xeon D-2100, 16 cores max.
Memory Maximum	256GB
Storage Maximum (TB)	16TB
Product Guide	https://lenovopress.com/lp1168

Intel® Xeon® Platinum processor

For more information on Edge solution visit **https://www.lenovo.com/gb/en/data-center/solutions/edge-computing/**

STORAGE

Lenovo offers a wide range of enterprise grade storage solutions that address the ever-growing needs of businesses, fit into existing budget and ensure data is ready when it is needed. The offering includes key data efficiency features like data compression and compaction along with thin provisioning and data encryption, all through a user-friendly interface.

Protect your business: On-board encryption, multi-factor authentication and synchronous replication headline a host of leading data management features.

ThinkSystem DM5000F

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THINKSYSTEM DM SERIES

The ThinkSystem DM Series all-flash and hybrid-flash portfolio is cloud, virtualisation and AI ready. Optimise, accelerate, and consolidate your data with SAN and NAS unified in one system.

Sub-Series	DM Hybrid Systems		
Model	DM7100H	DM5000H	DM3000H
Target Workloads	Hybrid Cloud, Artificial Intelligence, Big Data Analytics, Engineering and Design	Artificial Intelligence Data Analytics Enterprise Applications Engineering and Design	Virtualization Microsoft Solutions Backup & Recovery File Services
Max Drives per HA Pair (HDD/SSD)	720	144	144
Maximum Raw Capacity per HA Pair	11.2PB	720	720
Expansions Supported	DM240S, DM120S, DM600S		
Protocols Supported	FC, iSCSI, NFS, pNFS, CIFS/SMB, S3		
DM Series Hybrid Software	The ONTAP 9 software bundle includes a set of products that delivers leading data management, storage efficiency, data protection, high performance, and advanced capabilities such as instant cloning, data replication, application-aware backup and recovery, and data retention. For more details, visit the ONTAP datasheet.		
Datasheet	https://lenovopress.com/lp1270	https://lenovopress.com/lp0885	https://lenovopress.com/lp0884

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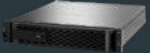| Sub-Series	DM All-Flash Systems		
Model	DM7100F	DM5100F	DM5000F
Target Workloads	Wide range of enterprise workloads, including big data and analytics, artificial intelligence, engineering and design, hybrid clouds, and other storage I/O-intensive application	Wide range of enterprise workloads, including big data and analytics, artificial intelligence, engineering and design, enterprise applications, and other storage I/O-intensive applications	Wide range of enterprise workloads, including big data and analytics, artificial intelligence, engineering and design, enterprise applications, and other storage I/O-intensive applications
Max Drives per HA Pair (SSD)	480 (48 NVMe + 432 SAS)	48 NVMe	144
Maximum Raw Capacity per HA Pair	7.37PB	737.28TB	2.2PB
Expansions Supported	DM240S, DM240N	DM240N	DM240S
Protocols Supported	FC, iSCSI, NFS, pNFS, SMB, NVMe/FC, S3	FC, iSCSI, NFS, pNFS, SMB, NVMe/FC, S3	FFC, iSCSI, NFS, pNFS, SMB, S3
DM Series Hybrid Software	The ONTAP 9 software bundle includes a set of products that delivers leading data management, storage efficiency, data protection, high performance, and advanced capabilities such as instant cloning, data replication, application-aware backup and recovery, and data retention. For more details, visit the ONTAP datasheet.		
Datasheet	http://lenovopress.com/LP1271	http://lenovopress.com/LP1365	http://lenovopress.com/LP0911

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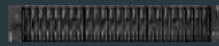
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THINKSYSTEM DE SERIES

All-flash and hybrid-flash arrays that deliver the perfect combination of per formance and economics to handle your most important data needs.

Sub-Series	DE Hybrid Systems		
Model	DE6000H	DE4000H	DE2000H
Target Workloads	Perfect fit for a wide range of enterprise workloads, including big data and analytics, video surveillance, technical computing, backup and recovery, and other storage I/O-intensive applications	Perfect fit for a wide range of enterprise workloads, including big data and analytics, video surveillance, technical computing, backup and recovery, and other storage I/O-intensive applications	Perfect fit for small offices and remote/branch offices of large enterprises that run a wide range of workloads, including big data and analytics, video surveillance, technical computing, backup and recovery, and other storage I/O-intensive application
Max Drives (HDD/SSD)	480/120	192/120	96/96
Maximum Raw Capacity	8.64PB	3.46PB	1.73PB
Expansions Supported	Up to 7 DE240S, DE120S Up to 3 DE600S	Up to 7 DE240S, DE120S Up to 3 DE600S	Up to 3 DE240S, DE120S
Protocols Supported	FC, iSCSI, SAS		
DE Series Optional Software	Drive Encryption, Snapshots upgrade, asynchronous mirroring, synchronous mirroring (DE6000H and DE4000H only)		
Datasheet	https://www.lenovopress.com/LP0883	https://www.lenovopress.com/LP0882	https://www.lenovopress.com/LP0881

Sub-Series	DE All-Flash Systems	
Model	DE6000F	DE4000F
Target Workloads	Perfect fit for a wide range of enterprise workloads, including big data and analytics, technical computing, and other storage I/O-intensive applications	Perfect fit for a wide range of enterprise workloads, including big data and analytics, technical computing, and other storage I/O-intensive applications
Max Drives (SSD)	120	120
Maximum Raw Capacity	1.84PB	1.84PB
Expansions Supported	Up to 4 DE240S	Up to 4 DE240S
Protocols Supported	FC, iSCSI, SAS	
Software Features	Snapshots, Asynchronous mirroring, Synchronous mirroring, Drive Encryption	
Datasheet	https://www.lenovopress.com/LP0910	http://www.lenovopress.com/LP0909

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LENOVO FIBRE CHANNEL SWITCHES & DIRECTORS

Combining Lenovo Servers and Lenovo Storage with Lenovo Fibre Channel SAN switches and directors provides customers a complete, innovative and affordable end-to-end solution to address dynamic business needs.

Management without complexity. Simply manage your network through integrated dashboards and easy-to-use GUI.

Model	ThinkSystem DB630	ThinkSystem DB720	ThinkSystem DB620	ThinkSystem DB610
Target Workloads	Perfect for the most demanding of Flash and NVMe Storage workloads in midsize to large enterprise environments	Perfect for Flash and NVMe Storage workloads in midsize enterprise environments	Perfect for highly virtualized environments to meet the demands of hyper-scale, private cloud storage, and growing flash-based storage environments	Perfect for Flash and NVMe Storage workloads in small to midsize enterprise environments
Ports	96x 32Gb SFP+ ports 8x 128Gb QSFP+ ports	56x 64Gb SFP+ ports	48x 32Gb SFP+ ports 4x 128Gb QSFP+ ports	24x 32Gb SFP+ ports
Power Supply	Redundant Hot Swap power supplies	Redundant Hot Swap power supplies	Redundant Hot Swap power supplies	One fixed power supply
Datasheet	https://lenovopress.com/lp1090	https://lenovopress.com/lp1358	https://lenovopress.com/lp0580	https://lenovopress.com/lp0582

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DIRECT ATTACH STORAGE (JBOD)

Capacity expansion for servers or Software Defined Storage

The Lenovo DAS portfolio provides traditional, as well as high density, storage for high-capacity applications, such as digital media, big data, HPC and video surveillance, at an affordable price. At near limitless scalability with disruptive levels of performance, the DAS portfolio easily satisfies your ever-growing storage needs.

Components	Lenovo D12XX Series (D1212/D1224)	Lenovo High–Density D3284
Target Workload	Big Data, Business Analytics, Video Surveillance, Media Streaming, Private Clouds, File and Print Serving, E-mail and Collaboration, Databases, SAP HANA, Software-defined Storage, Windows Storage Spaces	Big Data, Business Analytics, Video Surveillance, Private and Hybrid Clouds, File and Print Serving, Backup and Archiving, Software-defined Storage, Windows Storage Spaces
Form Factor	2U	5U
Drive Bays	D1212: 12 LFF hot-swap drive bays; up to 8x D1212 enclosures can be daisy chained on a supported RAID adapter or HBA for a total of up to 96 LFF drives. D1224: 24 SFF hot-swap drive bays; up to 8x D1224 enclosures can be daisy chained on a supported RAID adapter or HBA for a total of up to 192 SFF drives. Intermix of SFF and LFF enclosures is supported.	84 LFF hot-swap drive bays in two drawers. Each drawer has three drive rows, and each row has 14 drives. Up to 4x D3284 enclosures can be daisy chained on a supported adapter for a total of up to 336 LFF drives.
Storage Capacity	D1212: Up to 1.53 PB (96x 16 TB LFF NL SAS HDDs) D1224: Up to 1.47 PB (192x 7.68 TB SFF SAS SSDs	Up to 2.58 PB (336x 7.68 TB SAS SSDs)
Product Guide	https://lenovopress.com/lp0512	https://lenovopress.com/lp0513

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TAPE ARCHIVE SOLUTIONS
Cost-effective long-term retention or infrequent access

IBM Tape Series stores digital information on tape. Tape is the perfect choice for storing long term data, such as system back-up, disaster recovery or archive. Using less energy and space, infinitely scalable and media life of up to 30 years all speak in favour of the IBM TS Series portfolio.

Features	IBM TS22XX Tape Drives	TS2900 Tap Autoloader
Target Workload	Backup and archive	
Available Models	• LTO Ultrium 8 6160S8E • LTO Ultrium 7 6160S7E	• LTO Ultrium 8 6171S8R • LTO Ultrium 7 6171S7R
Number of drives	1	1
Number of cartridge slots	1	9
Cartridge Capacity	LTO 8: 12 TB native; up to 30 TB compressed (with 2.5:1 compression ratio) LTO 7: 6 TB native; up to 15 TB compressed (with 2.5:1 compression ratio)	
Total Backup capacity	Dependent on cartridge as above	LTO 8: Up to 108 TB / up to 270 TB* LTO 7: Up to 54 TB / up to 135 TB*
Data transfer rate	LTO 8: Up to 360 MB/s native; up to 750 MB/s compressed (with 2.5:1 compression) LTO 7: Up to 300 MB/s native; up to 750 MB/s compressed (with 2.5:1 compression)	
Product Guide	https://lenovopress.com/tips1305	https://lenovopress.com/tips1303

Features	IBM TS4300 Tape Library
Target Workload	Enterprise tape automation and reliability with open system affordability. It is a high-density, highly scalable, easy-to-manage solution designed to keep data securely stored long-term, while helping reduce the costs associated with data center space and utilities.
Available Models	TS4300 Tape Library Base Model 6741A1F TS4300 Tape Library Expansion Model 6741A3F
Form Factor	Base module: 3U rack-mount or stand-alone. Expansion module: 3U rack-mount; up to 6 expansion modules. 7-module library: 21U rack-mount.
Number of drives	Per module: Up to 1x full-high and 1x half-high tape drives, or up to 3x half-high tape drives. Per 7-module library: From up to 7x full-high and 7x half-high tape drives to up to 21x half-high tape drives.
Number of cartridge slots	Per module: 40. Per 7-module library: 280.
Cartridge Capacity	LTO 8: 12 TB native; up to 30 TB compressed (with 2.5:1 compression ratio) LTO 7: 6 TB native; up to 15 TB compressed (with 2.5:1 compression ratio)
Total Backup Capacity	Per module: LTO 8: Up to 480 TB LTO 7: Up to 240 TB Per 7-module library: LTO 8: Up to 3.36 PB LTO 7: Up to 1.68 PB
Total Backup Capacity	LTO 8: Up to 360 MB/s native; up to 750 MB/s compressed (with 2.5:1 compression) LTO 7: Up to 300 MB/s native; up to 750 MB/s compressed (with 2.5:1 compression)
Product Guide	https://lenovopress.com/lp0773

* With 2.5:1 compression ratio

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OEM SOLUTIONS

Get on-demand OEM that lives up to your product standards. You'll have award-winning global support, innovative technology, and flexible programs that deliver at low cost.

ON DEMAND SOLUTION OFFERINGS

Lenovo has partnered with several ISVs to offer you the following solutions through our unique ON DEMAND program. We offer complete solutions for security and video surveillance, hyperconverged infrastructure (HCI), data protection and backup/recovery, and a solution to deploy and manage containerized applications across on-premises and hybrid cloud infrastructures. Review our available solutions below.

TEAM UP WITH AN INDUSTRY-LEADING GLOBAL PARTNER FOR YOUR OEM SOLUTION

Let our innovation work for you

Bring your solutions to market rapidly and efficiently with complementary services, resources, and capabilities from Lenovo representatives you can trust. We offer dedicated resources to manage your product from concept to launch to lifestyle, as well as financing options.

Lenovo is a global supplier of IT products and solutions. With the most reliable x86 servers in the industry, as well as the best-selling brand of laptops in history, Lenovo truly is world-class. We've shipped more than 20M servers to 160+ markets, and work with over 2000 vetted suppliers.

Lenovo OEM solutions works across numerous verticals with some of the world's largest brands around the globe to help them go to market with their products and solutions built on a solid foundation of Lenovo technology. This is why you can depend on Lenovo to be your trusted OEM partner.

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LENOVO XCLARITY ADMINISTRATOR

Lenovo XClarity Administrator is a centralised resource management solution that is aimed at reducing complexity, speeding response and enhancing the availability of Lenovo server systems and solutions. With a simplified administration dashboard, the following functions can be easily achieved:

- **Discovery of existing or new Lenovo System x rack servers and Flex System infrastructure.**

- **Inventory of the discovered endpoints is gathered, so the managed hardware inventory and its status can be viewed-at-a-glance.**

- **Monitoring alerts and events are visible via the XClarity Administrator Dashboard, the status bar, and the alerts and events detail for the specific systems.**

- **Firmware updates can be applied and activated for all managed endpoints.**

- **Firmware compliance can be started to flag managed endpoints that do not comply with the defined firmware rules.**

- **Configuration management uses pattern-based configurations to quickly provision and re-provision a single server or multiple servers and compute nodes, all with a single set of configuration settings.**

- **Deployment of operating systems and hypervisors to bare metal servers. VMware ESXi, Windows Server, SUSE Linux Enterprise Server (SLES) and Red Hat Linux images can be imported and held in a repository for images. Up to 28 OS images can be deployed concurrently.**

Lenovo XClarity can be integrated into external, higher level management, automation, and orchestration platforms through open REST application programming interfaces (APIs) with Lenovo XClarity Integrators.

Download the free
Lenovo XClarity
trial version

XClarity Orchestrator

Simplify, accelerate and scale infrastructure deployment

Lenovo XClarity family of software simplifies and automates the deployment and management of Lenovo infrastructure so you have time to focus on other high-value projects.

Find out more **here**

SOFTWARE-DEFINED INFRASTRUCTURE

From the simplest hyperconverged building blocks of a software-defined data center to more complex cloud solution, Lenovo offers a variety of approaches tailored for any of your need. The Lenovo ThinkAgile family of products are engineered to simplify the user experience, software-defined infrastructure is designed to adapt to changing IT needs while reducing complexity and cost created by silos in traditional IT. Pre-integrated, pre-built and pre-tested offerings accelerate application deployment and add robust capabilities to your data center faster. All ThinkAgile solutions can be easily managed through a full integration of Lenovo XClarity into the original software vendor management software for the easiest and seamless operational daily tasks.

On top, ThinkAgile Advantage provides a first-class, white glove experience with end to end data center services to make the most of your Lenovo hyperconverged ThinkAgile products and solutions.

You'll have a remote single point of contact providing direct access to Level 2 technicians skilled in hardware, software, and advanced troubleshooting to help maintain smooth data center operations 24x7.

It also includes hardware and software deployment by skilled Lenovo professionals, onsite hardware repair and is included with ThinkAgile Advantage Support, 3 to 5 years.

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THINKAGILE SX FOR MICROSOFT AZURE STACK

Lenovo ThinkAgile SX for Microsoft Azure Stack Hub delivers a pre-integrated, easy-to-deploy rack-level solution for hybrid cloud to dramatically reduce time-to-value and total cost of ownership (TCO). The solution is based on Lenovo's industry-leading data center infrastructure and Microsoft Azure Stack Hub, an extension of Microsoft Azure Services to on-premises environments.

Suggested workloads for the ThinkAgile SX for Microsoft Azure Stack Hub include virtual desktop infrastructure (VDI), back-office applications, server consolidation, enterprise applications, databases, test and development environments, and cloud implementation. Starting with as few as four nodes to keep your acquisition costs down, the solution offers "pay as you grow" scalability as your needs grow.

The ThinkAgile SXM for Microsoft Azure Stack Hub ships fully integrated into a rack cabinet (optionally deployed in a customer provided cabinet), tested, configured, and ready to be plugged in and turned on and it is designed to integrate into an existing infrastructure effortlessly, to accelerate time to value and reduce infrastructure maintenance costs while extending Microsoft Azure technologies on-premises.

HYPERCONVERGED INFRASTRUCTURE

Lenovo's hyperconverged solutions leverage virtualisation and software-defined storage to natively collapse core storage, compute, and networking functions into a single pool of resources that are deployed as a scale-out cluster.

Lenovo Models	ThinkAgile SXM4400	ThinkAgile SXM4400	ThinkAgile SXM6400
Form Factor and Nodes	25U, 4 to 8 nodes	42U or customer provided rack, 4 to 16 nodes	42U, 16 nodes
Components	1x ThinkSystem SR630 management node Up to 16x ThinkSystem SR650 hyperconverged nodes, Hybrid or All Flash 2x Mellanox SN2410 25GbE network switches		
Software	Microsoft Windows Server 2019 with Hyper-V, Microsoft Storage Spaces Direct, Microsoft Azure Stack Hub, Lenovo XClarity Administrator Pro.		
Target workloads	Virtualized workloads DevOps - Dev/Test/QA SQL as a service Enterprise backup IOT BigData/Analytics Containers		
Product Guide	https://lenovopress.com/lp1177		

Microsoft

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THINKAGILE MX SERIES

Azure Stack HCI is an HCI host operating system from Microsoft, delivered as an Azure service, providing the latest and up-to-date security, performance and feature updates. Azure Stack HCI builds on the foundation of the Microsoft Windows Server Software Defined program and provides a certification path for Storage Spaces Direct solutions. Lenovo ThinkAgile MX Series, Appliances and Certified Nodes, combine the Storage Spaces Direct technology included in this new host OS, with industry leading Lenovo servers to deliver HCI building blocks that build your infrastructure solutions. Lenovo ThinkAgile MX appliances map to Microsoft Azure Stack HCI Integrated Systems and ThinkAgile MX Certified Nodes map to Microsoft Azure Stack HCI Validated Nodes.

ThinkAgile MX Series are built with certified hardware components, are easily orderable as appliances, and include deployment/update features built into Windows Admin Center. Benefits like these allow businesses to deploy solutions quickly and easily.

ThinkAgile MX Appliance models includes the preloaded Azure Stack HCI operating system only and requires activation via a CSP such as Lenovo Cloud Marketplace, with the option to purchase a Windows Server 2019 Datacenter license if unlimited guest OS VMs are desired, while ThinkAgile MX Certified Node can optionally have Windows Server 2019 Datacenter preinstalled.

ThinkAgile MX Series also features the MX102x model for Edge workloads and includes:

• Fully validated and integrated hardware and firmware.
• ThinkAgile Advantage and Single Point of Support.
• Enterprise Support Services.
• Optional deployment services.

Lenovo Models	ThinkAgile MX352x-F and MX352x-F (x=0 for Appliance, x=1 for Certified Node, F=All Flash, H= Hybrid)	ThinkAgile MX102x (x=0 for Appliance, x=1 for Certified Node)
Target Workload	LOB apps, large file services, SQL, VDI, collaboration	ROBO and Edge
Form Factor	2U	1U half-wide
Processor	2x Intel Xeon Scalable Gen 2 family processors	1x Intel Xeon D2100 Series
GPU	Nvidia T4, V100, AMD Radeon MI25, (up to 5x)	Nvidia T4 (max 1)
Software (included with Appliances, optional with Certified Nodes)	Appliances include the preloaded Azure Stack HCI operating system only and requires activation via a CSP. Windows Server 2019 Datacenter license is optional if unlimited guest OS VMs are desired. Certified Nodes can optionally have Windows Server 2019 Datacenter preinstalled.	
Product Guide	MX352x-F: https://lenovopress.com/lp1176 MX352x-H: https://lenovopress.com/lp1175	MX102x: https://lenovopress.com/lp1296

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ThinkAgile HX Series

Lenovo ThinkAgile HX Series, a best-in-class hyperconverged system with Nutanix's industry leading software preloaded on both Intel-based and AMD-based Lenovo platforms, dramatically simplifies data center management, freeing up IT staff and accelerating solution deployment.

This hyperconverged solution fully integrates Lenovo servers with core Nutanix software to provide:

• Application mobility.
• Distributed storage fabric and a hypervisor (all part of Nutanix Acropolis).
• System management software (Nutanix Prism to manage the cluster and virtual machines and Lenovo XClarity to manage the hardware resources).

ThinkAgile HX series has been designed, engineered, tailored and validated for a wide range of business solutions, so that you have the freedom to run any workload, at any scale, all the time, consolidating compute, storage and virtualization software into a resource pool, easily managed in scale-out clusters through a single interface. The HX series ships from Lenovo as fully integrated system (Appliances) and as validated building blocks (Certified Nodes), and delivers extreme reliability, security, scalability and simplified management. As a result, you can deploy applications faster, without the hassle, while dramatically reducing total cost of ownership. Lenovo also offers businesses with SAP deployments an opportunity to reap the efficiencies and cost savings of hyperconverged clusters. By migrating HANA workloads from complex, three-tiered legacy architectures to hyperconverged clusters, customers can enjoy all the benefits of hyperconverged infrastructure. Customers with hyperconverged architectures who require real-time analytics to guide their business decisions also have the option to leverage their existing IT to deploy SAP HANA.

THINKAGILE HX1000 SERIES (INTEL)	HX132x (x=0 for Appliance, x=1 for Certified Node)	HX1021 (Certified Node only)
Target Workload	Remote Office/Branch Office (ROBO) Replication Target	Edge
Form Factor	1U	1U half-width
Processor	1x Xeon Scalable Gen 2 family processors	1x Intel Xeon D2100 Series
Drive Bays	4x 3,5"	Up to 3x M.2 adapters for up to 10x M.2 drives
Software (included with Appliances, optional with Certified Nodes)	Nutanix Acropolis: Starter, Pro, and Ultimate editions. Nutanix Prism, Nutanix Calm (optional), Nutanix Flow (optional). Any other Nutanix licence can purchased through Lenovo and added to the configuration.	
Product Guide	HX1320: https://lenovopress.com/lp1119 HX1321: https://lenovopress.com/lp1127	HX1021: https://lenovopress.com/lp1384

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THINKAGILE HX2000 SERIES (INTEL)	HX2320		
Target Workload	Small and Medium Business		
Form Factor	1U		
Processor	2x Xeon Scalable Gen 2 family processors		
Drive Bays	4x 3,5"		
Software (included with Appliances, optional with Certified Nodes)	Nutanix Acropolis: Starter, Pro, and Ultimate editions. Nutanix Prism, Nutanix Calm (optional), Nutanix Flow (optional). Any other Nutanix licence can purchased through Lenovo and added to the configuration.		
Product Guide	HX2320: https://lenovopress.com/lp1120 HX2321: https://lenovopress.com/lp1128		
THINKAGILE HX3000 SERIES (INTEL)	HX332x (+ SAP HANA) (x=0 for Appliance, X=1 for Certified Node)	HX352x-G (x=0 for Appliance, X=1 for Certified Node)	HX372x (x=0 for Appliance, X=1 for Certified Node)
Target Workload	General Virtualization and VDI	Compute Heavy with GPU	Dense
Form Factor	1U	2U	2U 4N
Processors	2x Xeon Scalable Gen 2 family processors (per Node)		
GPU adapters		Nvidia M10, M60, V100, T4 (up to 5x)	
Drive Bays	up to 12x 2,5"	Up to 16x 2,5"	Up to 6x 2,5" per Node
Software (included with Appliances, optional with Certified Nodes)	Nutanix Acropolis: Starter, Pro, and Ultimate editions. Nutanix Prism, Nutanix Calm (optional), Nutanix Flow (optional). Any other Nutanix licence can purchased through Lenovo and added to the configuration.		
Product Guide	HX3320: https://lenovopress.com/lp1121 HX3320 SAP HANA: https://lenovopress.com/lp1216 HX3321: https://lenovopress.com/lp1129 HX3321 SAP HANA: https://lenovopress.com/lp1217	HX3520-G: https://lenovopress.com/lp1122 HX3521-G: https://lenovopress.com/lp1130	HX3720: https://lenovopress.com/lp1123 HX3721: https://lenovopress.com/lp1131
THINKAGILE HX3000 SERIES (AMD)	HX337x (x=5 for Appliance, x=6 for Certified Node)		
Target Workload	General Virtualization and VDI, Compute Heavy with GPU		
Form Factor	1U		
Processor	2x AMD EPYC 7002 family processors		
GPU adapters	Up to 2x Nvidia T4		
Drive Bays	up to 12x 2,5"		
Software (included with Appliances, optional with Certified Nodes)	Nutanix Acropolis: Starter, Pro, and Ultimate editions. Nutanix Prism, Nutanix Calm (optional), Nutanix Flow (optional). Any other Nutanix licence can purchased through Lenovo and added to the configuration.		
Product Guide	HX337x: https://lenovopress.com/lp1383		

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THINKAGILE HX5000 SERIES (INTEL)	HX552x (x=0 for Appliance, X=1 for Certified Node)	
Target Workloads	Big Data and High Capacity	
Form Factor	2U	
Processor	2x Xeon Scalable Gen 2 family processors	
Drive Bays	Up to 14x 3,5"	
Software (included with Appliances, optional with Certified Nodes)	Nutanix Acropolis: Starter, Pro, and Ultimate editions. Nutanix Prism, Nutanix Calm (optional), Nutanix Flow (optional). Any other Nutanix licence can purchased through Lenovo and added to the configuration.	
Product Guide	HX5520: https://lenovopress.com/lp1124 HX5521: https://lenovopress.com/lp1132	
THINKAGILE HX7000 SERIES (INTEL)	HX752x (+ SAP HANA) (x=0 for Appliance, X=1 for Certified Node)	HX782x (+SAP HANA) (x=0 for Appliance, X=1 for Certified Node)
Target Workloads	Databases and High Performance	
Form Factor	2U	4U
Processor	2x Xeon Scalable Gen 2 family processors	4x Xeon Scalable Gen 2 family processors
Drive Bays	Up to 24x 2,5"	
Drive Bays	Nutanix Acropolis: Starter, Pro, and Ultimate editions. Nutanix Prism, Nutanix Calm (optional), Nutanix Flow (optional). Any other Nutanix licence can purchased through Lenovo and added to the configuration.	
Product Guide	HX7520: https://lenovopress.com/lp1125 HX7520 SAP HANA: https://lenovopress.com/lp1218 HX7521: https://lenovopress.com/lp1133 HX7521 SAP HANA: https://lenovopress.com/lp1219	HX7820: https://lenovopress.com/lp1126 HX7820 SAP HANA: https://lenovopress.com/lp0992 HX7821: https://lenovopress.com/lp1134 HX7821 SAP HANA: https://lenovopress.com/lp0993

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THINKAGILE VX SERIES

Lenovo ThinkAgile VX Series enables you to meet requirements as being competitive in a fast-moving business environment, cost effectiveness and solution simplicity and scalability by focusing on the business outcome you require, rather than on building your infrastructure.

ThinkAgile VX Series, powered by VMware vSAN, designed on both Intel-based and AMD-based Lenovo platforms, is available in several models, Appliances and Certified Nodes, both pre-tested, pre-validated and optimized to provide the simplest way to bring a new VMware hyperconverged environment online, also granting an easy integration into an existing VMware environment.

As any Lenovo ThinkAgile solution, VX Series is delivered with the hardware configured, software installed, and the option of having Lenovo professional services to integrate it into your environment, making this solution easy to deploy, providing faster time-to-value, and reducing costs. VX Series includes powerful lifecycle management capabilities via vSphere Lifecycle Manager (vLCM) to speed deployment up, simplifying patching and updating software, with task automation.

ThinkAgile VX Series comes in a wide range of platforms and provides the flexibility to configure the system you need to meet any use-case, and supporting both All-Flash and Hybrid configurations.

THINKAGILE VX 2000 SERIES (INTEL)	ThinkAgile VX2320 and ThinkAgile VX 1U Certified Node
Target Workload	Small and Medium sized businesses
Form Factor	1U
Processor	Up to 2x Xeon Scalable Gen 2 family processors
Drive Bays	4x 3,5"
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.
Product Guide	VX2320: https://lenovopress.com/lp1135-thinkagile-vx2320 VX 1U Certified Node: https://lenovopress.com/lp1142

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THINKAGILE VX3000 SERIES (INTEL)	ThinkAgile VX3320 ThinkAgile VX 1U Certified Node	ThinkAgile VX3520-G ThinkAgile VX 2U Certified Node	ThinkAgile VX372x (x=0 for Appliance, X=1 for Certified Node)
Target Workloads	Compute-Heavy	VDI Graphic Intense	Dense
Form Factor	1U	2U	2U 4N
GPU Adapters		NVIDIA Tesla M10, M60, MI25, V340, P620, P4000, V100, T4 (up to 5)	
Processor	2x Xeon Scalable Gen 2 family processors (per Node)		
Drive Bays	up to 10x 2,5"	Up to 16x 2,5"	Up to 6x 2,5" per Node
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.		
Product Guide	VX3320: https://lenovopress.com/lp1136 VX 1U Certified Node: https://lenovopress.com/lp1142	VX3520-G: https://lenovopress.com/lp1137 VX 2U Certified Node: https://lenovopress.com/lp1143	VX3720: https://lenovopress.com/lp1138 VX3721: https://lenovopress.com/lp1131
THINKAGILE VX3000 SERIES (AMD)	ThinkAgile VX3575-G Integrated Appliance (*) ThinkAgile VX7576 Certified Node (**)		
Target Workloads	VDI Graphic Intensive		
Form Factors	2U		
GPU Adapters	Nvidia A100, V100 (16GB/32GB), P620, T4 (up to 8x)		
Processor	2x AMD EPYC 7003 Series Processors		
Drive Bays	Up to 24x 2,5"		
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.		
Product Guide	VX3575-G: https://lenovopress.com/lp1473 (this product guide is valid for whole VX AMD series, and for both Integrated Systems and Certified Nodes)		

 (*) : Integrated System is a new naming replacing Appliance
(**) : VX7576 is a common 2U Certified Node base platform that can be configured as VX3576-G, VX5576 or VX7576 Certified Node model

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THINKAGILE VX5000 SERIES (INTEL)	ThinkAgile VX5520 ThinkAgile VX 2U Certified Node
Target Workloads	Storage Heavy workloads Big Data/Analytics Email Large Databases and other high-capacity storage needs
Form Factor	2U
Processor	2x Xeon Scalable Gen 2 family processors
Drive Bays	Up to 14x 3,5"
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.
Product Guide	VX5520: https://lenovopress.com/lp1139 VX 2U Certified Nodes: https://lenovopress.com/lp1143
THINKAGILE VX5000 SERIES (AMD)	ThinkAgile VX5575 Integrated System (*) ThinkAgile VX7576 Certified Node (**)
Target Workloads	Storage Heavy workloads Big Data/Analytics Email Large Databases and other high-capacity storage needs
Form Factors	2U
Processor	1x or2x AMD EPYC 7003 Series Processors
Drive Bays	Up to 16x 3,5"
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.
Product Guide	VX5575: https://lenovopress.com/lp1473 (this product guide is valid for whole VX AMD series, and for both Integrated Systems and Certified Nodes)

(*) : Integrated System is a new naming replacing Appliance
(**) : VX7576 is a common 2U Certified Node base platform that can be configured as VX3576-G, VX5576 or VX7576 Certified Node model

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THINKAGILE VX7000 2P SERIES (INTEL)	ThinkAgile VX7320-N VX 1U Certified Nodes	ThinkAgile VX7520 VX 2U Certified Nodes
Target Workloads	High-performance workloads Databases load balancing clusters.	In-Memory Databases High-performance storage
Form Factor	1U	2U
Processor	2x Xeon Scalable Gen 2 family processors	
Drive Bays	10x 2,5" U.2 NVMe	Up to 24x 2,5"
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.	
Product Guide	VX7320-N: https://lenovopress.com/lp1140 VX 1U Certified Nodes: https://lenovopress.com/lp1142	VX7520: https://lenovopress.com/lp1141 VX 2U Certified Nodes: https://lenovopress.com/lp1143

THINKAGILE VX7000 2P SERIES (AMD)	ThinkAgile VX757x (X=5 for Integrated System (*), X=6 for Certified Node)
Target Workloads	High-performance workloads Databases
Form Factor	2U
Processor	Up to 2x AMD EPYC 7003 Series Processors
Drive Bays	Up to 26x 2,5" or up to 16x 3,5" or up to 32x NVMe
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.
Product Guide	VX757x: https://lenovopress.com/lp1473 (this product guide is valid for whole VX AMD series, and for both Integrated Systems and Certified Nodes)

(*) : Integrated System is a new naming replacing Appliance

THINKAGILE VX7000 4P/8P SERIES (INTEL)	ThinkAgile VX782x (x=0 for Appliance, X=1 for Certified Node) ThinkAgile VX7821 SAP HANA
Target Workloads	Mission Critical High Performance
Form Factor	4U
Processor	Up to 8x Xeon Scalable Gen 2 family processors
Drive Bays	Up to 24x 2,5"
Software (included with Appliances, optional with Certified Nodes)	Software licenses that must be purchased from Lenovo: • VMware vSAN: Standard, Advanced, Enterprise, or ROBO; or • HCI Kit: Essentials, Standard, Advanced, Enterprise, or ROBO; or • VMware Horizon: Advanced or Enterprise; or • VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise, or for VDI. Software licenses that can be purchased from Lenovo or provided by the customer: • VMware vSphere: Standard, Enterprise Plus, or ROBO. • VMware Horizon: Standard (optional). • VMware vCenter Server: Foundation or Standard.
Product Guide	VX7820: https://lenovopress.com/lp1338 VX7821 SAP HANA: https://lenovopress.com/lp1250

ThinkAgile

AMD

THINKAGILE ADVANTAGE SUPPORT FOR APPLIANCES AND CERTIFIED NODES

ThinkAgile Advantage provides a first-class, white glove experience with end to end data center services to make the most of your ThinkAgile products and solutions. You'll have a remote single point of contact providing direct access to Level 2 technicians skilled in hardware, software, and advanced troubleshooting to help maintain smooth data center operations 24x7.

ThinkAgile solutions are deployed by Lenovo Professionals, eliminating the need for customer's internal resources. We have tailored deployment options for our ThinkAgile solutions that accelerate your time to value and reduce your risk of managing large implementation projects. You can also purchase onsite Hardware Installation Services to streamline the project.

After deploying a ThinkAgile solution, you'll get supported by a dedicated phone number answered by highly skilled Lenovo technicians who are focused on understanding and resolving any issue, or you can submit a request online: because you reach a technically qualified expert on the first call, we can diagnose issues faster, helping to resolve problems more accurately, in less time.

ThinkAgile Advantage support grants

• A single point of support for managing all calls to conclusion
• End-to-end case management for the entire solution
• A dedicated Lenovo phone number to answer your calls 24x7, live answered
  by technical experts
• Simplified warranty entitlement
• Hardware and Software Deployment
• Response times to meet business needs (Foundation, Essential, Advanced)

Check on Lenovo.com to know more on Lenovo Services for Data Center.

intel.
XEON

ThinkAgile

Intel® Xeon® Scalable processor family

SOFTWARE FOR YOUR INFRASTUCTURE

Accelerate your success with Lenovo Strategic Alliances

Pair your Lenovo servers, storage, and networking systems with software that creates the right solution for your workloads and your business.

Providing the foundation upon which critical enterprise business applications are run. We partner with leading software providers to offer their infrastructure software with our extremely reliable, high-performance ThinkSystem and ThinkAgile servers.

Infrastructure software helps businesses become more agile, secure, and service-oriented. Lenovo complements that software with reliable and high-performance hardware systems and services expertise to help you successfully integrate innovative IT infrastructure with your operations and improve your overall business.

Pillars for a modern data center:
• Operating system
• Virtualization
• Data Protection

OPERATING SYSTEMS

Pair your Lenovo servers with a robust, scalable and secure operating system that works for your business.

MICROSOFT® WINDOWS SERVER®

Enterprise-class operating system providing advanced multilayer security, hyperconvergence capabilities, and support for hybrid environments. Microsoft Windows Server licenses from Lenovo are specifically optimized to install on Lenovo servers. Lenovo provides support for these optimized versions of Windows Server, giving customers a single point of support for their entire data center.

Offerings

Windows Server 2019
• Standard - for customers with low density or minimally virtualized environments
• Data center - for highly virtualized and software defined data center environments
• Essentials - for small businesses with up to 25 users and 50 devices

Windows Server 2016
• Standard
• Data center
• Essentials
• Storage - for dedicated OEM storage solutions. Available in Standard and Workgroup editions.

Find out more
https://lenovopress.com/lp1079

RED HAT® ENTERPRISE LINUX®

Open source operating system that is the foundation from which you can scale existing apps — and roll out emerging technologies — across bare-metal, virtual, container, and all types of cloud environments. Combining Red Hat Enterprise Linux with Lenovo servers gives you exceptional reliability and military-grade security, freeing you to deliver meaningful business results through technology.

Offerings

*   RHEL Server provides a stable, secure, and performance-driven foundation for applications
*   RHEL for Virtual Data centers allows for the deployment of unlimited guests in dense virtualized environments on supported hypervisors
*   RHEL with Smart Virtualization helps organizations virtualize critical applications while delivering performance, scalability, and security.
*   RHEL for HPC enables the creation, management and usage of a high-performance computing (HPC) cluster.

Find out more
https://lenovopress.com/lp1236

SUSE® LINUX ENTERPRISE SERVER

A scalable, secure, and modular operating system, SUSE Linux Enterprise Server helps simplify multi-platform (traditional, software defined and cloud) environments, makes traditional IT infrastructure more efficient and provides an engaging platform for developers. As a result, you can easily deploy and transition business-critical workloads across on-premise and public cloud environments.

Offerings

*   SLES x86 provides a stable, secure, and performance-driven foundation for applications on x86 servers
*   SLES CaaS Platform - enables IT and DevOps professionals to more easily deploy, manage, and scale container-based applications and services.
*   SLES for HPC - provides a parallel computing platform for high performance data analytics workloads such as artificial intelligence and machine learning
*   SLES for SAP - is optimized for SAP HANA, SAP NetWeaver and SAP S/4HANA environments

Find out more
https://lenovopress.com/lp1264

VIRTUALIZATION

Improve system utilization, reduce capital and operating costs, and minimize or eliminate downtime when running virtualization software on Lenovo servers.

Find out more
https://lenovopress.com/lp1265

DATA PROTECTION

The increased threat of data breaches has placed security as a top concern for IT managers. Today's enterprise requires enhanced security and backup solutions to protect and preserve sensitive data.

Find out more
https://en.resources.lenovo.com/solution-brief-documents

ENGINEERED SOLUTIONS

Accelerate cloud service delivery, extract insights from your data, and improve business outcomes with Lenovo Engineered Solutions. Developed to simplify configuration and deployment, Lenovo Engineered Solutions are designed, tested and certified to provide faster time-to-value and lower TCO. To meet your desired business outcomes, Lenovo partners with market leaders and technology leaders worked to develop high-performance, scalable offerings based on foundational ThinkSystem platforms and tested for enterprise applications matching your needs.

Cloud Solutions

Database Solutions

Big Data and Analytics

High Performance Computing

Business Applications

Client Virtualisation

To find out more about which engineered solution would suit you please visit
https://www.lenovo.com/gb/en/future-defined

LENOVO DSS-G

Lenovo Distributed Storage Solution for IBM Spectrum Scale (DSS-G) is a software-defined storage (SDS) solution for dense scalable file and object storage suitable for high-performance and data-intensive environments.

DSS-G combines the performance of the Lenovo ThinkSystem SR650 servers, Lenovo D1224 and D3284 storage enclosures, and industry leading IBM Spectrum Scale software to offer a high performance, scalable building block approach to modern storage needs.

Lenovo DSS-G is delivered as a pre-integrated, easy-to-deploy rack level engineered solution that dramatically reduces time-to-value and total cost of ownership (TCO). All DSS-G base offerings described in this product guide are built on Lenovo ThinkSystem SR650 servers, Lenovo Storage D1224 Drive Enclosures with high-performance 2.5-inch SAS solid-state drives, and Lenovo Storage D3284 High-Density Drive Enclosures with large capacity 3.5-inch NL SAS HDDs.

Combined with IBM Spectrum Scale (formerly IBM General Parallel File System, GPFS), an industry leader in high-performance clustered file system, you have an ideal solution for the ultimate file and object storage solution for HPC and Big Data.

Lenovo DSS-G

Project	DSS-G for IBM Spectrum Scale
Solution Definition	• 2 ThinkSystem SR650 Servers • Software: RedHat Enterprise Linux, IBM Spectrum Scale for DSS Standard or Data Management Edition • 2, 4 or 6 Storage Enclosures • Lenovo D3284 12Gb JBOD (5U84) or 4TB, 6TB, 8TB, 10TB, 12TB NL-SAS • 1, 2, 4 or 6 Storage Enclosures • Lenovo D1224 12Gb JBOD (2U24 or 0.3TB – 1.8TB SAS, 0.4TB – 3.8TB SSD • Connectivity 10GbE/25GbE/40GbE/100GbE/FDR IB/EDR IB/OPA
Target Market	HPC, Big Data, Cloud, Media & Entertainment, Digital Surveillance
Target Workloads	HPC and Distributed File Systems
Value Proposition	High storage density and I/O performance with superior availability, reliability and resiliency

For more info see this link
https://lenovopress.com/lp0837

Intel® Xeon® Platinum processor

LENOVO SERVICES

Maximize your ROI with award-winning services that ensure you have the best solution for every stage of your IT lifecycle

Lenovo offers a comprehensive portfolio of services that support the full lifecycle of a customer's Lenovo IT assets with support at every stage; plan, fulfil, deploy, support, optimise, and end of life. With Lenovo Professional Services expertise we can help clients gain the most from their technology investment.

Solution Services

From the simple to the complex, our experts work with you to find the right solution for your one-of-a-kind strategic and business needs.

• Assessment Services.
• Design Services.

Implementation Services

Accelerate your time to productivity so you can focus on taking care of your customers and growing your business.

• Hardware Installation.
• Deployment Service.
• Factory Integrated Service.

Support Services

Around the world and around the clock, our experts are standing by 24x7 to safeguard your IT investment.

• Premier Support.
• Preconfigured Support.
• Managed Services.
• Technical Account Manager.
• Enterprise Server Software Support.

For more information on Lenovo Services please visit **http://www.lenovo.com**.

Intel® Xeon® Scalable processor family

ThinkSystem **ThinkAgile**

Intel® Xeon® Scalable processor family

To learn more about Lenovo server, storage and enterprise services portfolio, contact your Lenovo representative or Business Partner, or visit **lenovo.com/data center** and **lenovopress.com**

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