ThinkAgile VX Series
Simplify IT and accelerate time-to-value

Modernize your IT infrastructure with Lenovo ThinkAgile VX

- Supports DDR5 Memory and PCIe Gen5 critical for AI/ML
- 1.5x performance improvement[1]
- Hardware accelerator support with data processing units (DPU) for Intel platforms
  - 27% lower latency[2]
  - 20% Core savings[2]
  - 36% Higher transaction processing[2]

Sources:

1 - Lenovo internal testing

2 - VMware internal testing August 2022

ThinkAgile VX V3 1U Front View 8x 2.5″ drive bays

ThinkAgile VX V3 2U Front View 8x 3.5″ drive bays

Private Cloud Infrastructure with Hybrid Capabilities

Differentiating yourself from the competition is vital in today's fast-moving business environment. Lenovo ThinkAgile VX Series enables you to focus on the business outcome rather than on building your infrastructure by providing simple, agile, and cost-effective solutions to support your business needs.

ThinkAgile VX Series helps you implement a hybrid cloud with VMware Cloud Foundation or modernize your data center with VMware vSphere Foundation by arriving from the factory as a complete engineered system, preconfigured, tested, validated, software preloaded and optimized to provide the simplest way to bring a new environment, based on VMware by Broadcom software stack, online. Available in several models, VX Series allows you to start with as few as three nodes (four nodes for a VMware Cloud Foundation (VCF) environment) and scale capacity and performance easily, without disruption to day-to-day operations.

ThinkAgile VX Series is also available as a pay-as-you go OpEX model via TruScale Infrastructure services that offer a cloud-like experience with metering capabilities that eliminate overprovisioning. Services include Infrastructure as a service and TruScale Hybrid Cloud with VMware.

Infrastructure Performance and Reliability

ThinkAgile VX supports the latest 5th or 4th Gen Intel® Xeon® family processors or AMD 4th Generation EPYC™ Series Processors, that boast enhancements in performance, security, and energy efficiency. These new generations support new DDR memory, PCIe Gen5 PCIe I/O and our Intel platforms will also enable hardware accelerator (Data Processing Unit – DPU) support. Both all-flash and hybrid platforms are supported. All-flash models support inline de-duplication, compression, and encryption to give you an optimized, secure, high-performance platform with maximum usable capacity.

ThinkAgile VX Series offers the broadest selection of components that are vSAN compliant giving customers the flexibility to configure the systems they need to meet any use-case. For 9 years in a row, Lenovo servers have held the #1 reliability rating among all x86 server brands worldwide, according to the latest ITIC Global Server Hardware and OS Reliability Survey.† This same independent survey also ranked Lenovo servers as one the most secure systems in the market today.

Simplified Operations and Lifecycle Management

Lenovo ThinkAgile VX Series streamlines the deployment, configuration, and management of your HCI environments with full integration directly into vSphere Lifecycle Manager (vLCM) for single pane of glass management via Lenovo XClarity integrator (LXCi) Hardware Support Manager (HSM). vLCM simplifies and speeds up software and hardware firmware updating with task automation via Best Recipes. These are released frequently throughout the year to ensure you are compliant and secure. This enables you to free up valuable personnel for more productive tasks.

Support variety workloads based on unique use cases

Designed for any size business from SMBs through large enterprises, ThinkAgile VX Series can be used as infrastructure in the core data center or for remote office/branch office (ROBO) and retail stores. It supports a wide variety of applications such as virtual desktop infrastructure (VDI) applications, SQL and Oracle databases, business critical enterprise applications like SAP HANA, Online Transaction Processing OLTP for retail and airline industry. Use cases range from data center modernization, deploying a private or hybrid cloud, leveraging cloud native applications on premise as well as backup and disaster recovery while leveraging external storage solutions like Lenovo ThinkSystem DE and DM storage.

Single Point of Support

Lenovo ThinkAgile gives you a direct phone line to a team of experts who specialize in ThinkAgile solutions. The experts will rapidly diagnose any hardware or software issues and remain with you as the single-point-of-contact throughout the entire support process. Lenovo also provides comprehensive services such as deployment services, assessment workshops, hybrid cloud assessment, enterprise server software support, managed services, and health checks.

Licensing

ThinkAgile VX Series is available with the VMware Cloud Foundation (VCF) and VMware vSphere Foundation (VVF) primary software stack options. Licenses can be purchased through flexible term subscription-based models with 3-year or 5-year durations. In addition to the primary stack options, advanced service add-on options are available for features like vSAN additional capacity, Live Recovery, Firewall with Advanced Threat Prevention, Avi Load Balancer and Private AI Foundation.

For an optimal and complete support experience, it is advised that you purchase your VMware by Broadcom software licenses from Lenovo with your ThinkAgile VX Series product.

Warranty

Lenovo ThinkAgile VX Series Integrated Systems can be configured with a three- or five-year hardware warranty with 24x7 Single Point of Support (Lenovo server hardware and VMware by Broadcom software; requires an active software support contract purchased from Lenovo) and various levels of coverage with a well-defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions. Optional service upgrades such as managed services, Technical Account Management (TAM), Enterprise Server Software Support, YourData YourDrive, Health Check are also available.

Bottom Line

ThinkAgile VX Series enables you to simplify your IT infrastructure and drive down costs through the combination of preloaded easy-to-use software on powerful, extremely reliable hardware. All ThinkAgile VX Series models are backed by world-class Lenovo services and support.

ThinkAgile VX Series Specifications - Intel

The ThinkAgile VX Intel based Series are built with 5th or 4th Gen Intel® Xeon® Scalable processors and are available in 1U and 2U form factor servers.

Model	VX630 V3	VX650 V3	VX650 V3 SAP HANA
Target Workloads	SMB, Remote Office/Branch Office (ROBO), VDI	Compute Heavy	Compute Heavy with SAP HANA
Form Factor	1U	2U	2U
Processor	1x or 2x 5th Gen or 4th Gen Intel® Xeon® Scalable processors		2x 4th Gen Intel® Xeon® Scalable processors
Memory	32x DDR5 5600MHz (8TB maximum)		
GPU	3x SW GPUs up to 75W each	3x DW GPUs up to 300W each 8x SW GPUs up to 75W each 6x SW GPUs up to 150W each	Not supported
DPU[1]	Not supported	1x NVIDIA BlueField-2 25GbE Ethernet DPU[1]	1x NVIDIA BlueField-2 25GbE Ethernet DPU[1]
Drive Configurations	All Flash or Hybrid		All Flash
Drive Bays	12x 2.5" (HS) NVMe/SAS/SATA 4x 3.5" (HS) SAS/SATA	32*x 2.5" (HS) NVMe/SAS/SATA 20x 3.5" (HS) SAS/SATA	32*x 2.5" (HS) NVMe/SAS/SATA
OCP Networking	1x OCP 3.0 adapter 1GbE, 10GbE, 25GbE, 100GbE		
PCIe Networking	3x adapters 1GbE, 10GBASE-T, 10GbE, 25GbE, 100GbE	8x adapters 1GbE, 10GBASE-T, 10GbE, 25GbE, 100GbE, 200GbE	
Number of Disk Groups	1 – 4	1 – 5	2 – 4
Product Guide	VX630 V3	VX650 V3	VX650 V3 SAP HANA

Model	VX850 V3	VX850 V3 SAP HANA
Target Workloads	Database & Analytics, ERP & CRM Applications	Compute Heavy with SAP HANA
Form Factor	2U	2U
Processor	2x or 4x 4th Gen Intel® Xeon® Scalable processors	
Memory	64x DDR5 4800MHz (16TB maximum)	
GPU	2x DW GPUs up to 300W each 4x SW GPUs up to 75W each	Not supported
DPU[1]	Not supported	1x NVIDIA BlueField-2 25GbE Ethernet DPU[1]
Drive Configurations	All Flash	
Drive Bays	24x 2.5" (HS) NVMe	
OCP Networking	2x OCP 3.0 adapter 1GbE, 10GBASE-T, 10GbE, 25GbE, 100GbE	
PCIe Networking	12x adapters 1GbE, 10GBASE-T, 10GbE, 25GbE, 100GbE, 200GbE	
Number of Disk Groups	Not applicable (vSAN ESA only)	
Product Guide	VX850 V3	VX850 V3 SAP HANA

[1]DPU support available with unique models (VX650 V3 DPU, VX650 V3 DPU SAP HANA & VX850 V3 DPU SAP HANA). No GPU support will be available on these models.

*Maximum up to 40x 2.5" (HS) SAS/SATA supported with expander via CORE request

ThinkAgile VX Series Specifications - AMD

The ThinkAgile VX Series - AMD based are built with 4th Gen AMD EPYC™ 9004 Processors (formerly codenamed "Genoa") and are available in 1U and 2U form factor servers.

Model	VX635 V3	VX645 V3	VX655 V3	VX665 V3
Target Workloads	SMB, Remote Office/Branch Office (ROBO), VDI, Data Analytics & Backup		High performance computing (HPC), Big Data & Analytics and I/O intensive operations	
Form Factor	1U		2U	
Processor	1x 4th Gen AMD EPYC™ 9004 Processors	1x or 2x 4th Gen AMD EPYC™ 9004 Processors	1x 4th Gen AMD EPYC™ 9004 Processors	1x or 2x 4th Gen AMD EPYC™ 9004 Processors
Memory	12x DDR5 4800MHz (3TB maximum)	24x DDR5 4800MHz (6TB maximum)	12x DDR5 4800MHz (3TB maximum)	24x DDR5 4800MHz (6TB maximum)
GPU	3x SW GPUs up to 75W each		3x DW GPU up to 300W each 8x SW GPU up to 75W each 6x SW GPU up to 150W each	
DPU	Not supported			
Drive Configurations	All Flash or Hybrid			
Drive Bays	12x 2.5" (HS) NVMe/SAS/SATA	12x 2.5" (HS) NVMe/SAS/SATA	32*x 2.5" (HS) NVMe/SAS/SATA 20x 3.5" (HS) SAS/SATA	
OCP Networking	1x OCP 3.0 adapter 1GbE, 10GBASE-T, 10GbE, 25GbE,100GbE			
PCIe Networking	3x adapters 1GbE, 10GBASE-T, 10GbE, 25GbE, 100GbE		8x adapters 1GbE, 10GBASE-T, 10GbE, 25GbE, 100GbE	
Number of Disk Groups	1 – 4		1 – 5	
Product Guide	VX635 V3	VX645 V3	VX655 V3	VX665 V3

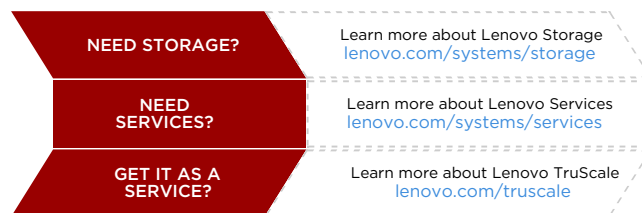*Maximum up to 40x 2.5" (HS) SAS/SATA supported with expander via CORE request

† ITIC Global Reliability Study.

About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US$62 billion revenue global technology powerhouse, ranked #171 in the Fortune Global 500, employing 77,000 people around the world, and serving millions of customers every day in 180 markets. Focused on a bold vision to deliver smarter technology for all, Lenovo is expanding into new growth areas of infrastructure, mobile, solutions and services. This transformation is building a more inclusive, trustworthy, and sustainable digital society for everyone, everywhere.

For More Information

To learn more about Lenovo ThinkAgile VX Series, contact your Lenovo representative or Business Partner or visit lenovo.com/thinkagile

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