Lenovo ThinkAgile VX2375, VX3375, VX7375-N, VX3376 1U Integrated Systems and Certified Nodes (AMD EPYC 7003)

Product Guide

The Lenovo ThinkAgile VX2375, VX3375 and VX7375-N Integrated Systems and VX3376 Certified Node are 2-socket 1U systems that feature the AMD EPYC 7003 "Milan" family of processors. With up to 64 cores per processor and support for the new PCIe 4.0 standard for I/O, the VX systems offer the ultimate in two-socket performance in a 1U form factor. VMware offers a unique, software-defined approach to hyper convergence, leveraging the hypervisor to deliver compute, storage and management in a tightly integrated software stack.

The 1U systems are available either as an Integrated System (VXnnn5) or Certified Node (HXnnn6):

- VX2375 for SMB, remote office and branch office
- VX3375 and VX3376 for VDI, server virtualization, and private cloud
- VX7375-N for high-performance workloads such as databases, Exchange, and SharePoint

Figure 1. Lenovo ThinkAgile VX with 2.5-inch drive bays

Did you know?

The ThinkAgile VX2375, VX3375 and VX7375-N Integrated Systems and VX3376 Certified Node are built on the Lenovo ThinkSystem SR645 server that features enterprise-class reliability, management, and security.

The VX2375, VX3375 and VX7375 Integrated Systems comes paired with Premier Support that offers a single point of support for quick 24/7 problem reporting and resolution.

Key features

ThinkAgile features

The ThinkAgile VX2375, VX3375 and VX7375-N Integrated Systems and VX3376 Certified Node offer the following key features:

- Factory-integrated, pre-configured ready-to-go appliances built on proven and reliable Lenovo ThinkSystem servers that provide compute power for a variety of workloads and applications and powered by industry-leading hyperconverged infrastructure software from VMware.
- Provide quick and convenient path to implement a hyperconverged solution powered by VMware Cloud Foundation (VCF) or VMware vSphere Foundation (VVF) software stacks with "one stop shop" and a single point of contact provided by Lenovo for purchasing, deploying, and supporting the solution..
- Meet various workload demands with cost-efficient hybrid or performance-optimized all-flash storage configurations.
- Deliver fully validated and integrated hardware and firmware that is certified with VMware by Broadcom.
- ThinkAgile Integrated Systems are bundled with Premier Support providing a single-point-of-contact for quick 24/7 hardware and software support, problem reporting and resolution.
- They also come with deployment delivered by Lenovo Professional Services and VMware software licenses.*
- Five-year hardware warranty, bundled with Premier Support that provides a 24x7 Single Point of Support.

The VMware software running on ThinkAgile VX2375, VX3375 and VX7375-N Integrated Systems and VX3376 Certified Node delivers the following key features:

- Distributed architecture that allows "pay-as-you-grow", non-disruptive scaling by adding new nodes to the cluster (scale-out) to increase capacity and performance.
- Advanced capacity management, including deduplication, compression, and erasure coding (RAID 5/6), which helps deliver greater storage utilization with dramatically lower storage capacity and costs.
- Automation of VM storage provisioning and control of storage service levels (capacity, performance, availability) with VM-centric policies to load balance storage resources.
- Native HCI security solution with two-factor authentication (SecurID and CAC) and data-at-rest encryption that does not require self-encrypting drives (SEDs).
- Stretched cluster with local and site failure protection between two geographically dispersed sites for higher level of availability with near zero downtime.
- Centralized management with provisioning, administering, and monitoring virtual resources across multiple hosts and clusters from a centralized interface.
- Rapid workload provisioning, simplified data center operations, increased business efficiency, and decreased CAPEX and OPEX costs.
- VM and data protection with agent-less, image-level virtual machine backups and application-aware protection for business-critical Microsoft applications (Exchange, SQL Server, SharePoint) along with WAN-efficient, encrypted backup data replication.
- Reduced unplanned downtime and virtually eliminated planned downtime for server and storage maintenance with live workload migration, high availability, and fault tolerance.
- Enhanced application performance and availability with resource management, load balancing, and access prioritization.
- Intelligent operations management and automation to proactively monitor and manage compute, storage, and networking resources, identify performance bottlenecks, and re-balance workloads by leveraging predictive analytics.
- Capacity planning and optimization guidance to address future needs with performance trends, projections and extended forecasts.

- Managing remote offices and branch offices with rapid provisioning of servers through virtualization, minimization of host configuration drift, and enhanced visibility into regulatory compliance, across multiple sites.

*Customers now have the ability to opt out of these features. Please check sections on Software and Deployment Services for more information.

Hardware features

The VX systems are based on the SR645 and have the following hardware features:

Scalability and performance

The VX systems offer numerous features to boost performance, improve scalability and reduce costs:

- Supports the AMD EPYC 7003 families of processors
- Supports processors with up to 64 cores and 128 threads, core speeds of up to 4.1 GHz, and TDP ratings of up to 280W.
- Support for up to 32 TruDDR4 memory DIMMs with two processors (16 DIMMs per processor). Each processor has 8 memory channels and 2 DIMMs per channel. With 1 DIMM installed per channel (8 DIMMs total), memory operates at 3200 MHz. Using Performance+ RDIMMs, the server supports 2 DIMMs per channel (16 DIMMs total) operating at 3200 MHz.
- Using 128GB 3DS RDIMMs, the server supports up to 4TB of system memory.
- Supports up to three single-width GPUs, each up to 75W for substantial processing power in a 1U system.
- Supports up to 12x 2.5-inch hot-swap drive bays, by using combinations of front-accessible (up to 10 bays) and rear-accessible (2 bays).
- Supports four 3.5-inch drive bays for lower-cost high-capacity HDD storage. 2.5-inch and 3.5-inch drive bays can be mixed if desired.
- Supports 12x NVMe drives without oversubscription of PCIe lanes (1:1 connectivity) and without the need for additional NVMe adapters. The use of NVMe drives maximizes drive I/O performance, in terms of throughput, bandwidth, and latency.
- Supports up to two externally accessible 7mm hot-swap drives with RAID functionality for operating system boot functions
- Supports M.2 drives for convenient operating system boot functions or data storage. Available M.2 adapters support either one M.2 drive or two M.2 drives in a RAID 1 configuration for performance and reliability.
- The server has a dedicated industry-standard OCP 3.0 small form factor (SFF) slot, with a PCIe 4.0 x16 interface, supporting a variety of Ethernet network adapters. Simple-swap mechanism with thumbscrews and pull-tab enables tool-less installation and removal of the adapter. Supports shared BMC network sideband connectivity to enable out-of-band systems management.
- The server offers PCI Express 4.0 I/O expansion capabilities that doubles the theoretical maximum bandwidth of PCIe 3.0 (16GT/s in each direction for PCIe 4.0, compared to 8 GT/s with PCIe 3.0). A PCIe 4.0 x16 slot provides 64 GB/s bandwidth, enough to support a 200GbE network connection.
- Up to three PCIe 4.0 slots, all with rear access, plus an internal bay for a cabled HBA, plus a slot dedicated to the OCP adapter.

Availability and serviceability

The VX systems provide many features to simplify serviceability and increase system uptime:

- The server uses ECC memory and supports memory RAS features including Single Device Data Correction (SDDC, also known as Chipkill), Patrol/Demand Scrubbing, DRAM Address Command Parity with Replay, and DRAM Uncorrected ECC Error Retry.
- The server offers hot-swap drives for greater system uptime.
- Boot drives, either using a pair of 7mm rear-accessible hot-swap drives or a pair of internal M.2 drives, both support RAID-1 which allows the two drives to be configured as a redundant pair.
- The server has up to two hot-swap redundant power supplies and up to eight hot-swap redundant fans to provide availability for business-critical applications.
- The power-source-independent light path diagnostics uses LEDs to lead the technician to failed (or failing) components, which simplifies servicing, speeds up problem resolution, and helps improve system availability.
- Solid-state drives (SSDs) offer more reliability than traditional mechanical HDDs for greater uptime.
- Proactive Platform Alerts (including PFA and SMART alerts): Processors, voltage regulators, memory, internal storage (SAS/SATA HDDs and SSDs, NVMe SSDs, M.2 storage, flash storage adapters), fans, power supplies, server ambient and subcomponent temperatures. Alerts can be surfaced through the XClarity Controller to managers such as Lenovo XClarity Administrator and VMware vCenter. These proactive alerts let you take appropriate actions in advance of possible failure, thereby increasing server uptime and application availability.
- The built-in XClarity Controller continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failures to minimize downtime.
- Built-in diagnostics in UEFI, using Lenovo XClarity Provisioning Manager, speed up troubleshooting tasks to reduce service time.
- Lenovo XClarity Provisioning Manager supports diagnostics and can save service data to a USB key drive or remote CIFS share folder for troubleshooting and reduce service time.
- Auto restart in the event of a momentary loss of AC power (based on power policy setting in the XClarity Controller service processor)
- Offers a diagnostics port on the front of the server to allow you to attach an external diagnostics handset for enhanced systems management capabilities.
- Support for the XClarity Administrator Mobile app running on a supported smartphone and connected to the server through the service-enabled USB port, enables additional local systems management functions.
- Three-year or one-year customer-replaceable unit and onsite limited warranty, 9 x 5 next business day. Optional service upgrades are available.

Manageability and security

Systems management features simplify local and remote management of the VX systems:

- The server includes an XClarity Controller (XCC) to monitor server availability. Optional upgrade to XCC Advanced to provide remote control (keyboard video mouse) functions. Optional upgrade to XCC Enterprise enables the additional support for the mounting of remote media files (ISO and IMG image files), boot capture, and power capping.
- Lenovo XClarity Administrator offers comprehensive hardware management tools that help to increase uptime, reduce costs and improve productivity through advanced server management capabilities.
- UEFI-based Lenovo XClarity Provisioning Manager, accessible from F1 during boot, provides system inventory information, graphical UEFI Setup, platform update function, RAID Setup wizard, operating system installation function, and diagnostic functions.
- Support for Lenovo XClarity Energy Manager which captures real-time power and temperature data from the server and provides automated controls to lower energy costs.

- An integrated industry-standard Unified Extensible Firmware Interface (UEFI) enables improved setup, configuration, and updates, and simplifies error handling.
- Support for industry standard management protocols, IPMI 2.0, SNMP 3.0, Redfish REST API, serial console via IPMI
- An integrated hardware Trusted Platform Module (TPM) supporting TPM 2.0 enables advanced cryptographic functionality, such as digital signatures and remote attestation.
- Administrator and power-on passwords help protect from unauthorized access to the server.
- Supports AMD Secure Root-of-Trust, Secure Run and Secure Move features to minimize potential attacks and protect data as the OS is booted, as applications are run and as applications are migrated from server to server.
- Supports Secure Boot to ensure only a digitally signed operating system can be used.
- Industry-standard Advanced Encryption Standard (AES) NI support for faster, stronger encryption.
- Additional physical security features are a chassis intrusion switch (standard in all models) and a lockable front bezel (optional).

Energy efficiency

The VX systems offer the following energy-efficiency features to save energy, reduce operational costs, and increase energy availability:

- Energy-efficient planar components help lower operational costs.
- High-efficiency power supplies with 80 PLUS Platinum and Titanium certifications
- Low-voltage 1.2 V DDR4 memory offers energy savings compared to 1.35 V and 1.5 V DDR3 DIMMs.
- Solid-state drives (SSDs) consume as much as 80% less power than traditional spinning 2.5-inch HDDs.
- The server uses hexagonal ventilation holes, which can be grouped more densely than round holes, providing more efficient airflow through the system and thus keeping your system cooler.
- Optional Lenovo XClarity Energy Manager provides advanced data center power notification and analysis to help achieve lower heat output and reduced cooling needs.

Components and connectors

The ThinkAgile VX2375, VX3375 and VX7375-N Integrated Systems and VX3376 Certified Node are based on the ThinkSystem SR645 server.

The following figure shows the front of the VX3375, VX7375-N and VX3376 with 2.5-inch drives.
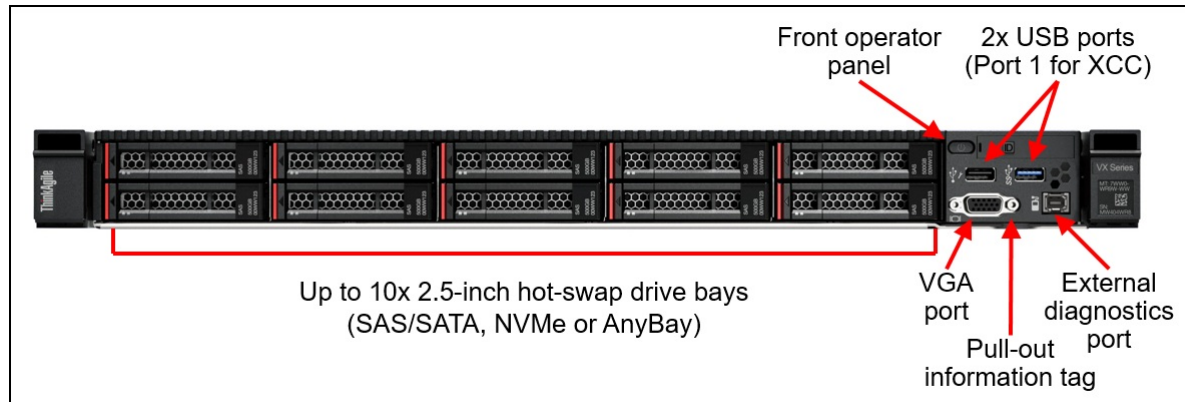
Figure 2. Front view of the ThinkAgile VX3375, VX7375-N and VX3376 with 2.5-inch drives

The following figure shows the front of the VX2375 and VX3376 with 3.5-inch drives.
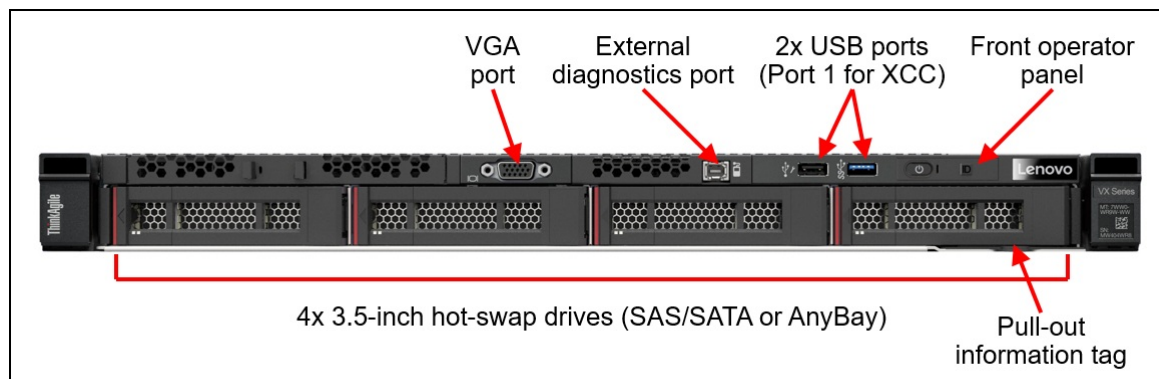
Figure 3. Front view of the ThinkAgile VX2375 and VX3376 with 3.5-inch drives

The following figure shows the components visible from the rear of the server. As shown, there are four different configurations available, including two with rear-mounted drive bays: two 2.5-inch hot-swap drive bays (SAS, SATA or NVMe) or new 7mm thickness hot-swap drives (SATA or NVMe).

Figure 4. Rear views of the VX systems

The following figure shows the locations of key components inside the systems.

Figure 5. Internal view of VX systems

Standard specifications

The ThinkAgile VX2375, VX3375 and VX7375-N Integrated Systems and VX3376 Certified Node are based on the ThinkSystem SR645 server.

The following table provides an overview comparison between the VX systems.

Table 1. Comparison of features

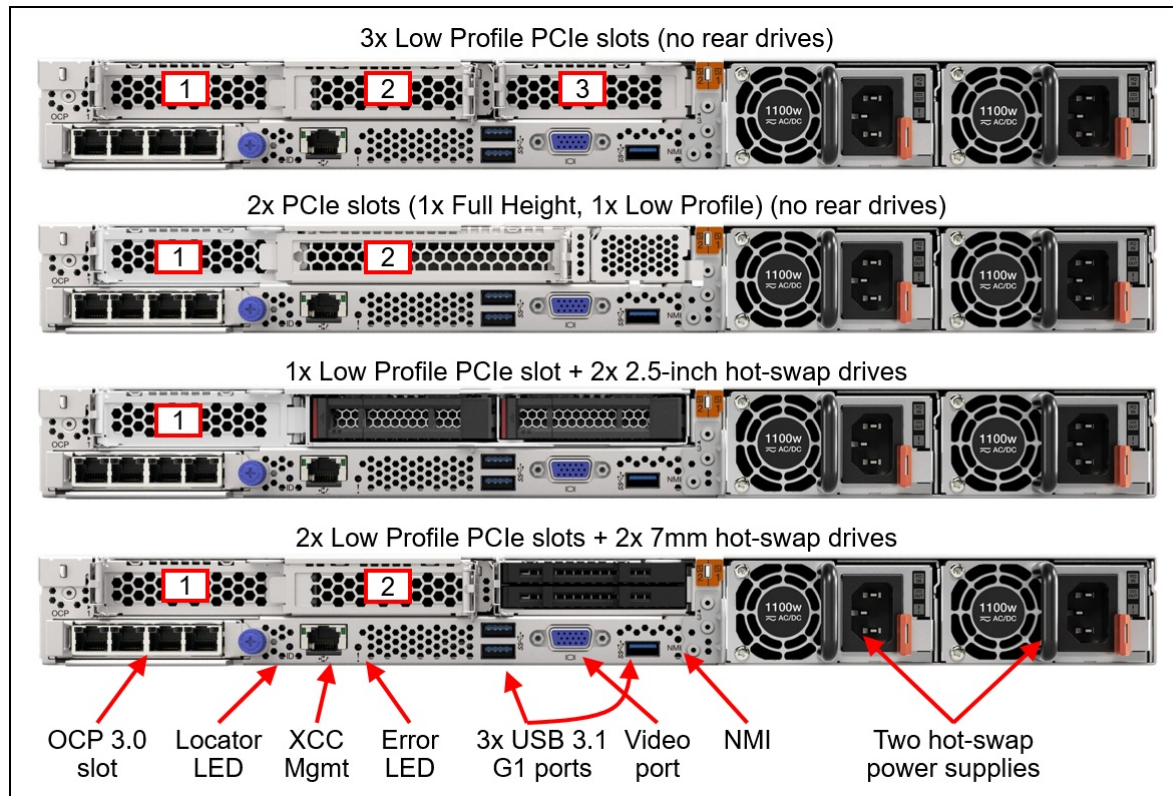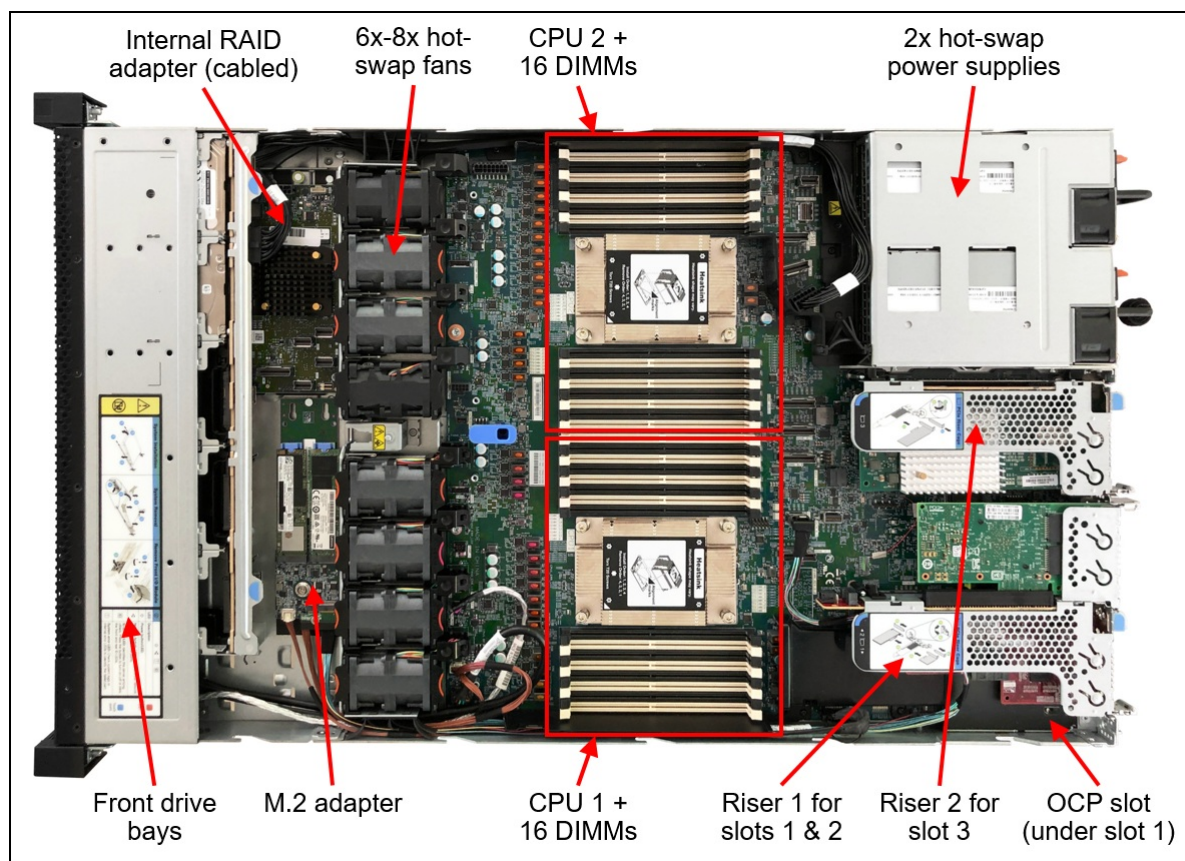|	VX2375	VX3375	VX7375-N	VX3376
VX offering type	Integrated System	Integrated System	Integrated System	Certified Node
Base model	7D82CTO1WW	7D82CTO2WW	7D82CTO3WW	7D82CTO4WW
Form factor	1U	1U	1U	1U
Base platform	SR645	SR645	SR645	SR645
CPU	1x or 2x EPYC 7003	1x or 2 EPYC 7003	1x or 2x EPYC 7003	1x or 2x EPYC 7003
Memory	32x DDR4 3200 MHz (4TB maximum)	32x DDR4 3200 MHz (4TB maximum)	32x DDR4 3200 MHz (4TB maximum)	32x DDR4 3200 MHz (4TB maximum)
Drive bays	Front: • 4x 3.5" SAS/SATA • 4x 3.5" AnyBay	Front: • 4, 8 or 10x 2.5" SAS/SATA • 10x 2.5" AnyBay • Combinations of bays Rear: • 2x 2.5" SAS/SATA	Front: • 10x 2.5" NVMe Rear: • 2x 2.5" NVMe	Front: • 4x 3.5" SAS/SATA • 4x 3.5" AnyBay • 4, 8 or 10x 2.5" SAS/SATA • 10x 2.5" AnyBay • Combinations of bays Rear: • 2x 2.5" SAS/SATA • 2x 2.5" NVMe
Drive Configuration	All Flash or Hybrid	All Flash or Hybrid	All Flash	All Flash or Hybrid
Disk groups	1 or 2 groups	Up to 4 groups	Up to 4 groups	Up to 4 groups
HBA	430-8i HBA	440-16i HBA Int 430-8i HBA 430-16i HBA	None	440-16i HBA Int 430-8i HBA 430-16i HBA
Boot drives	2x 7mm hot-swap SATA 2x 7mm hot-swap NVMe 2x M.2 SATA	2x 7mm hot-swap SATA 2x 7mm hot-swap NVMe 2x M.2 SATA	2x 7mm hot-swap SATA 2x 7mm hot-swap NVMe 2x M.2 SATA	2x 7mm hot-swap SATA 2x 7mm hot-swap NVMe 2x M.2 SATA
OCP networking	1x OCP 3.0 adapter 1Gb, 10Gb, 25Gb	1x OCP 3.0 adapter 1Gb, 10Gb, 25Gb	1x OCP 3.0 adapter 1Gb, 10Gb, 25Gb	1x OCP 3.0 adapter 1Gb, 10Gb, 25Gb
PCIe networking	Up to 2x adapters 1Gb, 10Gb, 25Gb, 100Gb, 200Gb	Up to 3x adapters 1Gb, 10Gb, 25Gb, 100Gb, 200Gb	Up to 3x adapters 1Gb, 10Gb, 25Gb, 100Gb, 200Gb	Up to 3x adapters 1Gb, 10Gb, 25Gb, 100Gb, 200Gb
GPUs	No support	No support	No support	Up to 3x single-wide GPUs
Hypervisor	VMware ESXi	VMware ESXi	VMware ESXi	VMware ESXi

The following table lists the standard specifications.

Table 2. Standard specifications

Components	Specification
Machine types	7D82
Form factor	1U rack
Cluster Size	With Lenovo ThinkAgile VX Series & VMware Cloud Foundation (VCF), you need a minimum of 4 nodes to create a management domain cluster. With Lenovo ThinkAgile VX Series & VMware vSphere Foundation (VVF), you can create a vSAN cluster with a minimum 3 hosts and a maximum of 64 hosts. Requires vSAN 7.0 and later releases.
Processor	One or two AMD EPYC 7003 Series processors (formerly codenamed "Milan"). Supports processors up to 64 cores, core speeds of up to 4.1 GHz, and TDP ratings of up to 280W.
Chipset	Not applicable (platform controller hub functions are integrated into the processor)
Memory	32 DIMM slots with two processors (16 DIMM slots per processor). Each processor has 8 memory channels, with 2 DIMMs per channel (DPC). Lenovo TruDDR4 RDIMMs and 3DS RDIMMs are supported: • Performance+ RDIMMs: 1 DPC at 3200 MHz, 2 DPC at 3200 MHz • RDIMMs: 1 DPC at 3200 MHz, 2 DPC at 2933 MHz • 3DS RDIMMs: 1 DPC at 2933 MHz, 2 DPC at 2666 MHz
Memory maximum	Up to 4TB with 32x 128GB 3DS RDIMMs
Persistent memory	Not supported
Memory protection	ECC, SDDC, Patrol/Demand Scrubbing, DRAM Address Command Parity with Replay, DRAM Uncorrected ECC Error Retry, Post Package Repair

Disk drive bays	Up to 4x 3.5-inch or 12x 2.5-inch hot-swap drive bays:
	
	• VX2375:
	  ○ Front drive bays: 4x 3.5-inch SAS/SATA or 4x 3.5-inch AnyBay
	  ○ Rear drive bays: None
	• VX3375:
	  ○ Front drive bays: 10x 2.5-inch SAS/SATA, AnyBay, or combinations of drive bays (10x NVMe not supported)
	  ○ Rear drive bays: 2x 2.5-inch SAS/SATA
	• VX7375-N
	  ○ Front drive bays: 10x 2.5-inch NVMe
	  ○ Rear drive bays: 2x 2.5-inch NVMe
	• VX3376:
	  ○ Front drive bays:
	    ■ 4x 3.5-inch SAS/SATA or 4x 3.5-inch AnyBay
	    ■ 10x 2.5-inch SAS/SATA, NVMe, AnyBay or combinations of drive bays
	  ○ Rear drive bays: 2x 2.5-inch SAS/SATA or NVMe
	
	For boot functions, all systems support either:
	
	• 2x 7mm hot-swap drive bays at the rear of the system (in lieu of 2.5-inch rear drive bays, if any)
	• Internal M.2 module supporting up to two M.2 drives

Components	Specification
Storage controller	- Onboard NVMe ports (RAID not supported) 12 Gb SAS/SATA non-RAID: 430-8i HBA 430-16i HBA 440-16i HBA Internal
Network interfaces	Dedicated OCP 3.0 SFF slot with PCIe 4.0 x16 host interface. Supports a variety of 2-port and 4-port adapters with 1GbE, 10GbE and 25GbE network connectivity. One port can optionally be shared with the XClarity Controller (XCC) management processor for Wake-on-LAN and NC-SI support.
PCI Expansion slots	Up to 3x PCIe 4.0 slots, all with rear access, plus a slot dedicated to the OCP adapter. Slot availability is based on riser selection and rear drive bay selection. Slot 3 requires two processors. Four choices for rear-access slots: 3x PCIe 4.0 x16 low-profile slots 1x PCIe 4.0 x16 full-height half-length slot + 1x PCIe 4.0 x16 low-profile slot 1x PCIe 4.0 x16 low-profile slot (also supports 2x rear 2.5-inch drive bays) 2x PCIe 4.0 x16 low-profile slot (also supports 2x rear 7mm 2.5-inch drive bays) For 2.5-inch front drive configurations, the server supports the installation of an HBA in a dedicated area that does not consume any of the PCIe slots. **Note**: Slot 3 is not available in a 1-processor configuration.
Ports	Front: 1x USB 3.1 G1 (5 Gb/s) port, 1x USB 2.0 port (also for XCC local management), External diagnostics port, optional VGA port. Rear: 3x USB 3.1 G1 (5 Gb/s) ports, 1x VGA video port, 1x RJ-45 1GbE systems management port for XCC remote management. Optional DB-9 COM serial port (installs in slot 3). Internal: 1x USB 3.1 G1 connector for license key purposes
Cooling	Up to 8x N+1 redundant hot swap 40 mm fans, configuration dependent. One fan integrated in each power supply.
Power supply	Up to two hot-swap redundant AC power supplies, 80 PLUS Platinum or 80 PLUS Titanium certification. 500 W, 750 W, 1100 W and 1800 W AC options, supporting 220 V AC. 500 W, 750 W and 1100 W options also support 110V input supply. In China only, all power supply options support 240 V DC. Also available is a 1100W power supply with a -48V DC input.
Video	G200 graphics with 16 MB memory with 2D hardware accelerator, integrated into the XClarity Controller. Maximum resolution is 1920x1200 32bpp at 60Hz.
Hot-swap parts	Drives, power supplies, and fans.
Systems management	Operator panel with status LEDs. Optional External Diagnostics Handset with LCD display. Models with 8x 2.5-inch front drive bays can optionally support an Integrated Diagnostics Panel. XClarity Controller (XCC) embedded management, XClarity Administrator centralized infrastructure delivery, XClarity Integrator plugins, and XClarity Energy Manager centralized server power management. Optional XClarity Controller Advanced and Enterprise to enable remote control functions.
Security features	Chassis intrusion switch, Power-on password, administrator's password, Trusted Platform Module (TPM), supporting TPM 2.0. In China only, optional Nationz TPM 2.0. Optional lockable front security bezel.

Components	Specification
Software	All ThinkAgile VX Series products (Integrated Systems and Certified Nodes) will support the following Primary Software Stack (3-year & 5-year terms) and Add-Ons. Primary Software 1. VMware Cloud Foundation 5 (VCF) 2. VMware vSphere Foundation 8 (VVF) Add-On Options (requires purchase of a Primary Software version) 1. VMware vSAN 8 (for capacity over TiB allocation from primary SKU) 2. VMware Live Recovery 3. VMware Firewall (requires VCF) 4. VMware Firewall with Advanced Threat Prevention (requires VCF) 5. VMware Avi Load Balancer 6. VMware Private AI Foundation (requires VCF)
Hypervisors supported	VMware ESXi. See the Operating system support section for specifics.
Limited warranty	Three-year customer-replaceable unit and onsite limited warranty with 9x5 next business day (NBD).
Service and support	Optional service upgrades are available through Lenovo Services: 4-hour or 2-hour response time, 6-hour fix time, 1-year or 2-year warranty extension, software support for Lenovo hardware and some third-party applications.
Dimensions	Width: 440 mm (17.3 in.), height: 43 mm (1.7 in.), depth: 773 mm (30.4 in.)
Weight	Maximum: 20.2 kg (44.6 lb)

Models

Factory-integrated models of the ThinkAgile VX Series Integrated Systems are configured by using the Lenovo Data Center Solution Configurator (DCSC), http://dcsc.lenovo.com.

During the configuration process, you are selecting one of the Configure-to-Order (CTO) base models first, and then you are adding components (processors, memory, drives, and network adapters) to the selected model.

> **Note:** You are required to engage a Lenovo representative in the project that includes the ThinkAgile VX Series Integrated Systems. ThinkAgile VX certified nodes do not have this requirement.

The following table lists the CTO base models.

Table 3. CTO base models

Machine Type/Model	Description
7D82CTO1WW	ThinkAgile VX2375 Integrated System
7D82CTO2WW	ThinkAgile VX3375 Integrated System
7D82CTO3WW	ThinkAgile VX7375-N Integrated System
7D82CTO4WW	ThinkAgile VX3376 Certified Node

Models of the VX systems are defined based on whether the systems have 2.5-inch drive bays at the front (called the 2.5-inch chassis) or whether they have 3.5-inch drive bays at the front (called the 3.5-inch chassis). For models, the feature codes for these chassis bases are as listed in the following table.

Table 4. Chassis base feature codes

Feature	Description	Maximum supported			
		VX2375	VX3375	VX7375-N	VX3376
BN50	ThinkAgile VX 1U 2.5" Chassis with 8 or 10 Bays	No	1	1	1
BN51	ThinkAgile VX 1U 3.5" Chassis with 4 Bays	1	No	No	1

Comparison with the ThinkSystem SR645

The ThinkAgile VX2375, VX3375 and VX7375-N Integrated Systems and VX3376 Certified Node are based on the ThinkSystem SR645 server, however there are key differences:

- No onboard SATA controller support
- No RAID adapter support
- No SATA HDDs
- No support for SED drives
- No Fibre Channel support
- No InfiniBand support
- Drives are categorized as Cache or Capacity drives and are formed as disk groups

For details about the ThinkSystem SR645, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server

To verify what specific hardware components are supported with the VX systems, see the DCSC configurator:
https://dcsc.lenovo.com

Processor options

The VX systems systems support the following third-generation AMD EPYC processors.

For details about these processors, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server#processor-options

Table 5. Processors

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
4XG7A63600	BF7H	ThinkSystem AMD EPYC 72F3 8C 180W 3.7GHz Processor	2	2	2	2
4XG7A63588	BF76	ThinkSystem AMD EPYC 7313 16C 155W 3.0GHz Processor	2	2	2	2
CTO only*	BF7B	ThinkSystem AMD EPYC 7313P 16C 155W 3.0GHz Processor	1	1	1	1
4XG7A63597	BF7E	ThinkSystem AMD EPYC 7343 16C 190W 3.2GHz Processor	2	2	2	2
4XG7A63595	BF7D	ThinkSystem AMD EPYC 73F3 16C 240W 3.5GHz Processor	2	2	2	2
4XG7A63590	BF78	ThinkSystem AMD EPYC 7413 24C 180W 2.65GHz Processor	2	2	2	2
4XG7A63584	BF72	ThinkSystem AMD EPYC 7443 24C 200W 2.85GHz Processor	2	2	2	2
CTO only*	BF79	ThinkSystem AMD EPYC 7443P 24C 200W 2.85GHz Processor	1	1	1	1
4XG7A63586	BF74	ThinkSystem AMD EPYC 7453 28C 225W 2.75GHz Processor	2	2	2	2
4XG7A63599	BF7G	ThinkSystem AMD EPYC 74F3 24C 240W 3.2GHz Processor	2	2	2	2
4XG7A63592	BF7A	ThinkSystem AMD EPYC 7513 32C 200W 2.6GHz Processor	2	2	2	2
4XG7A63589	BF77	ThinkSystem AMD EPYC 7543 32C 225W 2.8GHz Processor	2	2	2	2
CTO only*	BF71	ThinkSystem AMD EPYC 7543P 32C 225W 2.8GHz Processor	1	1	1	1
4XG7A63598	BF7F	ThinkSystem AMD EPYC 75F3 32C 280W 2.95GHz Processor	2	2	2	2
4XG7A63619	BGQ5	ThinkSystem AMD EPYC 7643 48C 225W 2.3GHz Processor	2	2	2	2
4XG7A63587	BF75	ThinkSystem AMD EPYC 7663 56C 240W 2.0GHz Processor	2	2	2	2
4XG7A63594	BF7C	ThinkSystem AMD EPYC 7713 64C 225W 2.0GHz Processor	2	2	2	2
CTO only*	BF70	ThinkSystem AMD EPYC 7713P 64C 225W 2.0GHz Processor	1	1	1	1
4XG7A63585	BF73	ThinkSystem AMD EPYC 7763 64C 280W 2.45GHz Processor	2	2	2	2
4XG7A83634	BQP4	ThinkSystem AMD EPYC 7373X 16C 240W 3.05GHz Processor	2	2	2	2

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
4XG7A83633	BQP5	ThinkSystem AMD EPYC 7473X 24C 240W 2.8GHz Processor	2	2	2	2
4XG7A83632	BQP6	ThinkSystem AMD EPYC 7573X 32C 280W 2.8GHz Processor	2	2	2	2
4XG7A83631	BQP7	ThinkSystem AMD EPYC 7773X 64C 280W 2.2GHz Processor	2	2	2	2

Memory options

The VX systems systems support the following memory options.

For details about these options, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server#memory-options

Table 6. Memory

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
RDIMMs (3200 MHz at 1 DPC, 2933 MHz at 2 DPC)						
4ZC7A15121	B5XD	ThinkSystem 16GB TruDDR4 3200MHz (2Rx8 1.2V) RDIMM-A	32	32	32	32
4ZC7A15122	B5XE	ThinkSystem 32GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A	32	32	32	32
4ZC7A15123	B8NU	ThinkSystem 32GB TruDDR4 3200 MHz (2Rx8 1.2V) RDIMM-A	32	32	32	32
4ZC7A15124	B5XC	ThinkSystem 64GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A	32	32	32	32
3DS RDIMMs (2933 MHz at 1 DPC, 2666 MHz at 2 DPC)						
4ZC7A15125	B8NT	ThinkSystem 128GB TruDDR4 3200MHz (4Rx4, 1.2V) 3DS RDIMM-A	32	32	32	32
Performance+ RDIMMs (3200 MHz at 1 DPC and 2 DPC)						
4X77A12188	BCZY	ThinkSystem 32GB TruDDR4 Performance+ 3200 MHz (2Rx8 1.2V) RDIMM-A	32	32	32	32
4X77A12189	BCZZ	ThinkSystem 64GB TruDDR4 Performance+ 3200 MHz (2Rx4 1.2V) RDIMM-A	32	32	32	32

Internal storage

Internal storage configurations of the VX systems are as follows. All drives are hot-swap and are accessible from the front or rear of the system:

- VX2375:
    - Front drive bays: 4x 3.5-inch SAS/SATA or 4x 3.5-inch AnyBay
    - Rear drive bays: None
- VX3375:
    - Front drive bays: 10x 2.5-inch SAS/SATA, AnyBay, or NVMe, or combinations of drive bays
    - Rear drive bays: 2x 2.5-inch SAS/SATA
- VX7375-N
    - Front drive bays: 10x 2.5-inch NVMe or a combination of drive bays types
    - Rear drive bays: 2x 2.5-inch NVMe

- VX3376
    - Front drive bays:
        - 4x 3.5-inch SAS/SATA or 4x 3.5-inch AnyBay
        - 10x 2.5-inch SAS/SATA, AnyBay or combinations of drive bays
    - Rear drive bays: 2x 2.5-inch SAS/SATA or NVMe

Specific choices of drive backplane are listed in the table below.

For details about these options, including configuration rules, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server#internal-storage

Table 7. Drive backplanes

Feature	Description	Maximum supported			
		VX2375	VX3375	VX7375-N	VX3376
Front 3.5-inch drive backplanes					
B8L3	ThinkSystem 1U/2U 4x3.5" SAS/SATA Backplane	1	No	No	1
B8N1	ThinkSystem 1U 4x3.5" AnyBay Backplane	1	No	No	1
Front 2.5-inch drive backplanes					
BCGB	ThinkSystem 1U 4x2.5" SAS/SATA Backplane	No	1	No	1
B8N0	ThinkSystem 1U 8x2.5" SAS/SATA Backplane	No	1	No	1
BHU8	ThinkSystem 1U 2.5" 10 SAS/SATA Backplane	No	1	No	1
B8MX	ThinkSystem 1U 2.5" 6 SAS/SATA 4 AnyBay Backplane	No	1	No	1
BCQP	ThinkSystem 1U 2.5" 6 SAS/SATA 2 AnyBay 2 NVMe Backplane	No	1	No	1
BB3T	ThinkSystem 1U 10x2.5" AnyBay Backplane	No	1	No	1
BCQQ	ThinkSystem 1U 2.5" 10 NVMe Backplane	No	No	1	1
BCQR	ThinkSystem 1U 2.5" 8 AnyBay 2 NVMe Backplane	No	1	No	1
Rear - 2.5-inch drive backplanes					
B8MY	ThinkSystem 1U 2x2.5" SAS/SATA Rear Backplane	No	1	No	1
BDY6	ThinkSystem 1U 2x2.5" NVMe Rear Backplane	No	No	1	1

For OS boot functions, the systems also support one or two 7mm hot-swap drives at the rear, or one or two M.2 drives installed on an adapter internal to the server. The following table lists the supported controllers/enablement kits for M.2 and 7mm boot drives.

Table 8. Boot drive enablement

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
M.2 enablement kits						
4Y37A09739	B5XH	ThinkSystem M.2 SATA 2-Bay RAID Enablement Kit	1	1	1	1
4Y37A09750	B8P9	ThinkSystem M.2 NVMe 2-Bay RAID Enablement Kit	1	1	1	1
4Y37A09738	B5XJ	ThinkSystem M.2 SATA/NVMe 2-Bay Enablement Kit	1	1	1	1
7mm enablement kits						
4XH7A60926	BA1R	ThinkSystem 1U 7mm Drive Kit w/ SATA RAID	1	1	1	1
4XH7A60925	B8Q2	ThinkSystem 1U 7mm Drive Kit w/ NVMe RAID	1	1	1	1

For details about these options, including configuration rules, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server#internal-storage

Disk Groups

The following table lists the supported Disk Groups for each VX system.

Table 9. Disk Groups

Drive Selection Rules	VX2375 Integrated System	VX3375 Integrated System	VX7375-N Integrated System	VX3376 Certified Node
Model type	Hybrid (HY) or All Flash (AF)	Hybrid (HY) or All Flash (AF)	All Flash (AF)	Hybrid (HY) or All Flash (AF)
Maximum number of drives	4	12	12	12
Number of Disk Groups	1 - 2	1 - 4	1 - 4	1 - 4
Number of Cache Drives per Disk Group	1	1	1	1
Number of Capacity Drives per Disk Group	2 - 7	2 - 7	2 - 7	2 - 7
Allowed Capacity Drive Quantities				
1 Disk Group (1 Cache Drive)	2 or 3	2, 3, 4, 5, 6 or 7	2, 3, 4, 5, 6 or 7	2, 3, 4, 5, 6 or 7
2 Disk Groups (2 Cache Drives)	2	4, 6, 8 or 10	4, 6, 8 or 10	4, 6, 8 or 10
3 Disk Groups (3 Cache Drives)	No support	6 or 9	6 or 9	6 or 9
4 Disk Groups (4 Cache Drives)	No support	8	8	8

Controllers for internal storage

The VX systems support the following internal storage controllers.

For details about these options, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server#controllers-for-internal-storage

Table 10. Controllers for internal storage

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
SAS/SATA HBA - PCIe 4.0						
4Y37A78602	BM50	ThinkSystem 440-16i SAS/SATA PCIe Gen4 12Gb HBA	No	1	No	1
4Y37A78601	BM51	ThinkSystem 440-8i SAS/SATA PCIe Gen4 12Gb HBA	1	1	No	1
4Y37A09725	B8P1	ThinkSystem 440-16i SAS/SATA PCIe Gen4 12Gb Internal HBA	No	1	No	1
SAS/SATA HBA - PCIe 3.0						
4Y37A72481	BJHJ	ThinkSystem 4350-16i SAS/SATA 12Gb HBA	No	1	No	1
4Y37A72480	BJHH	ThinkSystem 4350-8i SAS/SATA 12Gb HBA	1	1	No	1
7Y37A01088	AUNL	ThinkSystem 430-8i SAS/SATA 12Gb HBA	1	1	No	1
7Y37A01089	AUNM	ThinkSystem 430-16i SAS/SATA 12Gb HBA	No	1	No	1
NVMe adapters						
4C57A65446	B98C	ThinkSystem 4-Port PCIe Gen4 NVMe Retimer Adapter	No	2	2	2

Internal drive options

This section lists the supported drives:

- Boot drives
- Internal drives for VX2375
- Internal drives for VX3375
- Internal drives for VX7375-N
- Internal drives for VX3376

Configuration Note:

- VMware will no longer support higher capacity drives greater than 8TB

- Express Storage Architecture (ESA) supports a minimum of 4 drives and a maximum of 24 drives. Please reference the vSAN ESA ReadyNode Hardware Guidance for additional requirements.

- VMware vSAN certification for Generic NVMe drives: The drives are listed in the VMware Compatibility Guide (VCG) under the drive vendor company name instead of Lenovo. To check a drive for vSAN certification, search the VCG using the Supplier part number. Part numbers can be found using the Product Guide for the corresponding Drive Family on Lenovo Press https://lenovopress.lenovo.com/servers/options/drives#sort=last_update.

Boot drives

The following table lists the supported 7mm and M.2 drives suitable for OS boot functions.

Table 11. Boot drives

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
7mm 2.5-inch hot-swap 6 Gb SATA SSDs						
4XB7A17106	BK79	ThinkSystem 7mm S4520 240GB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A17107	BK7A	ThinkSystem 7mm S4520 480GB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A17108	BK7B	ThinkSystem 7mm S4520 960GB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A82264	BQ1U	ThinkSystem 7mm 5400 PRO 240GB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A82265	BQ1V	ThinkSystem 7mm 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A82266	BQ1W	ThinkSystem 7mm 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A82267	BR13	ThinkSystem 7mm 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A82268	BR12	ThinkSystem 7mm 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	2	2	2	2
4XB7A82269	BR11	ThinkSystem 7mm 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	2	2	2	2
M.2 SATA drives						
4XB7A17074	B8JJ	ThinkSystem M.2 5300 960GB SATA 6Gbps Non-Hot Swap SSD	2	2	2	2
4XB7A82286	BQ1Z	ThinkSystem M.2 5400 PRO 240GB Read Intensive SATA 6Gb NHS SSD	2	2	2	2
4XB7A82287	BQ1Y	ThinkSystem M.2 5400 PRO 480GB Read Intensive SATA 6Gb NHS SSD	2	2	2	2
4XB7A82288	BQ20	ThinkSystem M.2 5400 PRO 960GB Read Intensive SATA 6Gb NHS SSD	2	2	2	2
4XB7A89422	BYF7	ThinkSystem M.2 ER3 240GB Read Intensive SATA 6Gb NHS SSD	2	2	2	2
4XB7A90049	BYF8	ThinkSystem M.2 ER3 480GB Read Intensive SATA 6Gb NHS SSD	2	2	2	2
4XB7A90230	BYF9	ThinkSystem M.2 ER3 960GB Read Intensive SATA 6Gb NHS SSD	2	2	2	2
M.2 PCIe NVMe drives						
4XB7A13999	BKSR	ThinkSystem M.2 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD	No	2	2	2

Internal drives for VX2375

The following table lists the drives supported in the VX2375. For both All Flash Storage and Hybrid Storage configurations, drives are classified as either Cache drives, Capacity drives, or both.

Table 12. Drives supported in the VX2375

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
3.5-inch hot-swap 12 Gb SAS HDDs							
7XB7A00044	AUU7	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	4
7XB7A00045	B0YR	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	4
7XB7A00042	AUU5	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	4
7XB7A00043	AUU6	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	4
3.5-inch hot-swap 24 Gb SAS SSDs							
4XB7A80324	BNWD	ThinkSystem 3.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80325	BNWG	ThinkSystem 3.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80326	BNWH	ThinkSystem 3.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80327	BP3F	ThinkSystem 3.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80328	BP3H	ThinkSystem 3.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80344	BNW7	ThinkSystem 3.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
4XB7A80345	BNWA	ThinkSystem 3.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
4XB7A80346	BNWB	ThinkSystem 3.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
4XB7A80347	BP3G	ThinkSystem 3.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
3.5-inch hot-swap 12 Gb SAS SSDs							
4XB7A83220	BR0U	ThinkSystem 3.5" Nytro 3750 1.6TB Write Intensive SAS 12Gb HS SSD	No	4	4	4	No
4XB7A83221	BR0T	ThinkSystem 3.5" Nytro 3750 3.2TB Write Intensive SAS 12Gb HS SSD	No	4	4	4	No
3.5-inch hot-swap 6 Gb SATA SSDs							
4XB7A17119	BA7L	ThinkSystem 3.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	No	4	4	No
4XB7A17120	BA7M	ThinkSystem 3.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17121	BA7N	ThinkSystem 3.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17122	BK7F	ThinkSystem 3.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17123	BK7G	ThinkSystem 3.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A17137	BA4W	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17138	BA4X	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17139	BA4Y	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17140	BK7P	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
3.5-inch hot-swap PCIe 4.0 NVMe SSDs							
4XB7A17141	BNEK	ThinkSystem 3.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	4	4	4	No
4XB7A17143	BNEM	ThinkSystem 3.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	4	4	4	No

Internal drives for VX3375

The following table lists the drives supported in the VX3375. For both All Flash Storage and Hybrid Storage configurations, drives are classified as either Cache drives, Capacity drives, or both.

Table 13. Drives supported in the VX3375

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
2.5-inch hot-swap 12 Gb SAS HDDs							
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	12
7XB7A00027	AUM1	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	12
7XB7A00028	AUM2	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	12
7XB7A00069	B0YS	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	12
7XB7A00034	AUM6	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	12
2.5-inch hot-swap 24 Gb SAS SSDs							
4XB7A80318	BNWC	ThinkSystem 2.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80319	BNWE	ThinkSystem 2.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80320	BNWF	ThinkSystem 2.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80321	BP3E	ThinkSystem 2.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80322	BP3J	ThinkSystem 2.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A80340	BNW8	ThinkSystem 2.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No
4XB7A80341	BNW9	ThinkSystem 2.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No
4XB7A80342	BNW6	ThinkSystem 2.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No
4XB7A80343	BP3K	ThinkSystem 2.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No
2.5-inch hot-swap 12 Gb SAS SSDs							
4XB7A83216	BR0Y	ThinkSystem 2.5" Nytro 3750 1.6TB Write Intensive SAS 12Gb HS SSD	No	12	12	12	No
4XB7A83217	BR0X	ThinkSystem 2.5" Nytro 3750 3.2TB Write Intensive SAS 12Gb HS SSD	No	12	12	12	No
2.5-inch hot-swap 6 Gb SATA SSDs							
4XB7A87524	BWKN	ThinkSystem 2.5" PM893a 480GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A87525	BWKM	ThinkSystem 2.5" PM893a 960GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A87526	BWKL	ThinkSystem 2.5" PM893a 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A87527	BWKK	ThinkSystem 2.5" PM893a 3.84TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	No	12	12	No
4XB7A17102	BA7H	ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17103	BA7J	ThinkSystem 2.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17104	BK77	ThinkSystem 2.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17105	BK78	ThinkSystem 2.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A82258	BQ1Q	ThinkSystem 2.5" 5400 PRO 240GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82259	BQ1P	ThinkSystem 2.5" 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82260	BQ1R	ThinkSystem 2.5" 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82261	BQ1X	ThinkSystem 2.5" 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82262	BQ1S	ThinkSystem 2.5" 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82263	BQ1T	ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A89423	BXDY	ThinkSystem 2.5" CM893a 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A82289	BQ21	ThinkSystem 2.5" 5400 MAX 480GB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82290	BQ24	ThinkSystem 2.5" 5400 MAX 960GB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82291	BQ22	ThinkSystem 2.5" 5400 MAX 1.92TB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82292	BQ23	ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
2.5-inch hot-swap PCIe 4.0 NVMe SSDs							
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A13942	BMGE	ThinkSystem 2.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A83097	BQAV	ThinkSystem 2.5" U.3 7450 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A95050	C2BR	ThinkSystem 2.5" U.3 7500 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95053	C2BU	ThinkSystem 2.5" U.3 7500 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95051	C2BS	ThinkSystem 2.5" U.3 7500 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95052	C2BT	ThinkSystem 2.5" U.3 7500 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A17133	BNEZ	ThinkSystem 2.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No
4XB7A17136	BA4V	ThinkSystem 2.5" U.2 P5620 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10	No	No
4XB7A17129	BNEG	ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No
4XB7A17130	BNEH	ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No
4XB7A17158	BKKY	ThinkSystem 2.5" U.2 P5800X 400GB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A17159	BKKZ	ThinkSystem 2.5" U.2 P5800X 800GB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No	No
4XB7A17160	BMM8	ThinkSystem 2.5" U.2 P5800X 1.6TB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No	No
4XB7A79639	BNF1	ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	10	10	No	No
4XB7A13967	BNEJ	ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10	No	No
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10	No	No
4XB7A79646	BNF3	ThinkSystem 2.5" U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A79647	BNF2	ThinkSystem 2.5" U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A79648	BNF5	ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A95055	C2BV	ThinkSystem 2.5" U.3 7500 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	No	No
4XB7A95058	C2BX	ThinkSystem 2.5" U.3 7500 MAX 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95056	C2BW	ThinkSystem 2.5" U.3 7500 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	No	No
4XB7A95057	C2BF	ThinkSystem 2.5" U.3 7500 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	No	No

Internal drives for VX7375-N

The following table lists the drives supported in the VX7375-N.

Table 14. Drives supported in the VX7375-N

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity
2.5-inch hot-swap PCIe 4.0 NVMe SSDs					
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A13942	BMGE	ThinkSystem 2.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A13943	BNEF	ThinkSystem 2.5" U.2 P5520 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A13631	BNEQ	ThinkSystem 2.5" U.2 P5520 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10
4XB7A83097	BQAV	ThinkSystem 2.5" U.3 7450 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity
4XB7A81951	BPKX	ThinkSystem 2.5" U.3 PM1733a 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12
4XB7A81952	BPKY	ThinkSystem 2.5" U.3 PM1733a 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12
4XB7A81953	BPKZ	ThinkSystem 2.5" U.3 PM1733a 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12
4XB7A81954	BPL0	ThinkSystem 2.5" U.3 PM1733a 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12
4XB7A95050	C2BR	ThinkSystem 2.5" U.3 7500 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A95053	C2BU	ThinkSystem 2.5" U.3 7500 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A95051	C2BS	ThinkSystem 2.5" U.3 7500 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A95052	C2BT	ThinkSystem 2.5" U.3 7500 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A17133	BNEZ	ThinkSystem 2.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12
4XB7A17136	BA4V	ThinkSystem 2.5" U.2 P5620 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10
4XB7A17129	BNEG	ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12
4XB7A17130	BNEH	ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12
4XB7A17158	BKKY	ThinkSystem 2.5" U.2 P5800X 400GB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No
4XB7A17159	BKKZ	ThinkSystem 2.5" U.2 P5800X 800GB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No
4XB7A17160	BMM8	ThinkSystem 2.5" U.2 P5800X 1.6TB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No
4XB7A79639	BNF1	ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	10	10
4XB7A13967	BNEJ	ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10
4XB7A79646	BNF3	ThinkSystem 2.5" U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10
4XB7A79647	BNF2	ThinkSystem 2.5" U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10
4XB7A79648	BNF5	ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10
4XB7A95055	C2BV	ThinkSystem 2.5" U.3 7500 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity
4XB7A95058	C2BX	ThinkSystem 2.5" U.3 7500 MAX 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	No	12
4XB7A95056	C2BW	ThinkSystem 2.5" U.3 7500 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12
4XB7A95057	C2BF	ThinkSystem 2.5" U.3 7500 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12

Internal drives for VX3376

The following table lists the drives supported in the VX3376. For both All Flash Storage and Hybrid Storage configurations, drives are classified as either Cache drives, Capacity drives, or both.

Table 15. Drives supported in the VX3376

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
2.5-inch hot-swap 12 Gb SAS HDDs							
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	12
7XB7A00027	AUM1	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	12
7XB7A00028	AUM2	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	12
7XB7A00069	B0YS	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	12
7XB7A00034	AUM6	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	12
2.5-inch hot-swap 24 Gb SAS SSDs							
4XB7A80318	BNWC	ThinkSystem 2.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80319	BNWE	ThinkSystem 2.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80320	BNWF	ThinkSystem 2.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80321	BP3E	ThinkSystem 2.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80322	BP3J	ThinkSystem 2.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	No	No	12	No	No
4XB7A80340	BNW8	ThinkSystem 2.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No
4XB7A80341	BNW9	ThinkSystem 2.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No
4XB7A80342	BNW6	ThinkSystem 2.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No
4XB7A80343	BP3K	ThinkSystem 2.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	No	12	12	12	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
2.5-inch hot-swap 12 Gb SAS SSDs							
4XB7A83216	BR0Y	ThinkSystem 2.5" Nytro 3750 1.6TB Write Intensive SAS 12Gb HS SSD	No	12	12	12	No
4XB7A83217	BR0X	ThinkSystem 2.5" Nytro 3750 3.2TB Write Intensive SAS 12Gb HS SSD	No	12	12	12	No
2.5-inch hot-swap 6 Gb SATA SSDs							
4XB7A87524	BWKN	ThinkSystem 2.5" PM893a 480GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A87525	BWKM	ThinkSystem 2.5" PM893a 960GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A87526	BWKL	ThinkSystem 2.5" PM893a 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A87527	BWKK	ThinkSystem 2.5" PM893a 3.84TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	No	12	12	No
4XB7A17102	BA7H	ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17103	BA7J	ThinkSystem 2.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17104	BK77	ThinkSystem 2.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17105	BK78	ThinkSystem 2.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	12	12	12	No
4XB7A82258	BQ1Q	ThinkSystem 2.5" 5400 PRO 240GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82259	BQ1P	ThinkSystem 2.5" 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82260	BQ1R	ThinkSystem 2.5" 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82261	BQ1X	ThinkSystem 2.5" 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82262	BQ1S	ThinkSystem 2.5" 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82263	BQ1T	ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A89423	BXDY	ThinkSystem 2.5" CM893a 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82289	BQ21	ThinkSystem 2.5" 5400 MAX 480GB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82290	BQ24	ThinkSystem 2.5" 5400 MAX 960GB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82291	BQ22	ThinkSystem 2.5" 5400 MAX 1.92TB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No
4XB7A82292	BQ23	ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD	No	No	12	No	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	12	12	12	No
2.5-inch hot-swap PCIe 4.0 NVMe SSDs							
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A13942	BMGE	ThinkSystem 2.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A13943	BNEF	ThinkSystem 2.5" U.2 P5520 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A13631	BNEQ	ThinkSystem 2.5" U.2 P5520 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A83097	BQAV	ThinkSystem 2.5" U.3 7450 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A81951	BPKX	ThinkSystem 2.5" U.3 PM1733a 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12	No	No
4XB7A81952	BPKY	ThinkSystem 2.5" U.3 PM1733a 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12	No	No
4XB7A81953	BPKZ	ThinkSystem 2.5" U.3 PM1733a 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12	No	No
4XB7A81954	BPL0	ThinkSystem 2.5" U.3 PM1733a 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	12	No	No
4XB7A95050	C2BR	ThinkSystem 2.5" U.3 7500 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95053	C2BU	ThinkSystem 2.5" U.3 7500 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95051	C2BS	ThinkSystem 2.5" U.3 7500 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95052	C2BT	ThinkSystem 2.5" U.3 7500 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A17133	BNEZ	ThinkSystem 2.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No
4XB7A17136	BA4V	ThinkSystem 2.5" U.2 P5620 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10	No	No
4XB7A17129	BNEG	ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A17130	BNEH	ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	12	No
4XB7A17158	BKKY	ThinkSystem 2.5" U.2 P5800X 400GB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No	No
4XB7A17159	BKKZ	ThinkSystem 2.5" U.2 P5800X 800GB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No	No
4XB7A17160	BMM8	ThinkSystem 2.5" U.2 P5800X 1.6TB Write Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No	No
4XB7A79639	BNF1	ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	10	10	No	No
4XB7A13967	BNEJ	ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10	No	No
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	10	10	10	No	No
4XB7A79646	BNF3	ThinkSystem 2.5" U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A79647	BNF2	ThinkSystem 2.5" U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A79648	BNF5	ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	10	No	10	No	No
4XB7A95055	C2BV	ThinkSystem 2.5" U.3 7500 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	No	No
4XB7A95058	C2BX	ThinkSystem 2.5" U.3 7500 MAX 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	No	12	No	No
4XB7A95056	C2BW	ThinkSystem 2.5" U.3 7500 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	No	No
4XB7A95057	C2BF	ThinkSystem 2.5" U.3 7500 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	12	12	No	No
3.5-inch hot-swap 12 Gb SAS HDDs							
7XB7A00044	AUU7	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	4
7XB7A00045	B0YR	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	No	No	No	4
7XB7A00042	AUU5	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	4
7XB7A00043	AUU6	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	No	No	No	4
3.5-inch hot-swap 24 Gb SAS SSDs							
4XB7A80324	BNWD	ThinkSystem 3.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80325	BNWG	ThinkSystem 3.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80326	BNWH	ThinkSystem 3.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80327	BP3F	ThinkSystem 3.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A80328	BP3H	ThinkSystem 3.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	No	No	4	No	No
4XB7A80344	BNW7	ThinkSystem 3.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
4XB7A80345	BNWA	ThinkSystem 3.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
4XB7A80346	BNWB	ThinkSystem 3.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
4XB7A80347	BP3G	ThinkSystem 3.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	No	4	4	4	No
3.5-inch hot-swap 12 Gb SAS SSDs							
4XB7A83220	BR0U	ThinkSystem 3.5" Nytro 3750 1.6TB Write Intensive SAS 12Gb HS SSD	No	4	4	4	No
4XB7A83221	BR0T	ThinkSystem 3.5" Nytro 3750 3.2TB Write Intensive SAS 12Gb HS SSD	No	4	4	4	No
3.5-inch hot-swap 6 Gb SATA SSDs							
4XB7A17119	BA7L	ThinkSystem 3.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	No	4	4	No
4XB7A17120	BA7M	ThinkSystem 3.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17121	BA7N	ThinkSystem 3.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17122	BK7F	ThinkSystem 3.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17123	BK7G	ThinkSystem 3.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17137	BA4W	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17138	BA4X	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17139	BA4Y	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
4XB7A17140	BK7P	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	4	4	4	No
3.5-inch hot-swap PCIe 4.0 NVMe SSDs							
4XB7A76778	BNEU	ThinkSystem 3.5" U.2 P5520 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	4	No	No
4XB7A76779	BNF0	ThinkSystem 3.5" U.2 P5520 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	No	4	No	No
4XB7A17144	BNEN	ThinkSystem 3.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	4	4	No	No
4XB7A17148	BNEP	ThinkSystem 3.5" U.2 P5620 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	4	4	No	No
4XB7A17141	BNEK	ThinkSystem 3.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	4	4	4	No

Part number	Feature	Description	All Flash ESA	All Flash Cache	All Flash Capacity	Hybrid Cache	Hybrid Capacity
4XB7A17143	BNEM	ThinkSystem 3.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	4	4	4	No

Network adapters

The VX systems systems support the following networking options.

For details about these options, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server#i-o-expansion
https://lenovopress.com/lp1280-thinksystem-sr645-server#network-adapters

Table 16. OCP networking options

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
Gigabit						
4XC7A08235	B5T1	ThinkSystem Broadcom 5719 1GbE RJ45 4-port OCP Ethernet Adapter	1	1	1	1
4XC7A08277	B93E	ThinkSystem Intel I350 1GbE RJ45 4-port OCP Ethernet Adapter	1	1	1	1
4XC7A88428	BW97	ThinkSystem Intel I350 1GbE RJ45 4-Port OCP Ethernet Adapter V2	1	1	1	1
Combo Gigabit + 10 GbE						
4XC7A08239	B5SS	ThinkSystem Broadcom 57416 10GBASE-T 2-port + 5720 1GbE 2-port OCP Ethernet Adapter	1	1	1	1
10 Gb Ethernet						
4XC7A08236	B5ST	ThinkSystem Broadcom 57416 10GBASE-T 2-port OCP Ethernet Adapter	1	1	1	1
4XC7A08240	B5T4	ThinkSystem Broadcom 57454 10GBASE-T 4-port OCP Ethernet Adapter	1	1	1	1
4XC7A08278	BCD5	ThinkSystem Intel X710-T2L 10GBASE-T 2-port OCP Ethernet Adapter	1	1	1	1
25 Gb Ethernet						
4XC7A08237	B5SZ	ThinkSystem Broadcom 57414 10/25GbE SFP28 2-port OCP Ethernet Adapter	1	1	1	1
4XC7A08242	B5SV	ThinkSystem Broadcom 57454 10/25GbE SFP28 4-port OCP Ethernet Adapter	1	1	1	1
4XC7A08294	BCD4	ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port OCP Ethernet Adapter	1	1	1	1
4XC7A80269	BP8L	ThinkSystem Intel E810-DA4 10/25GbE SFP28 4-Port OCP Ethernet Adapter	1	1	1	1

Table 17. PCIe networking options

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
Gigabit						
7ZT7A00482	AUZX	ThinkSystem Broadcom 5720 1GbE RJ45 2-Port PCIe Ethernet Adapter	2	3	3	3
7ZT7A00484	AUZV	ThinkSystem Broadcom 5719 1GbE RJ45 4-Port PCIe Ethernet Adapter	2	3	3	3
7ZT7A00534	AUZY	ThinkSystem I350-T2 PCIe 1Gb 2-Port RJ45 Ethernet Adapter	2	3	3	3

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
7ZT7A00535	AUZW	ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter	2	3	3	3
10 Gb Ethernet						
7ZT7A00496	AUKP	ThinkSystem Broadcom 57416 10GBASE-T 2-Port PCIe Ethernet Adapter	2	3	3	3
4XC7A08245	B5SU	ThinkSystem Broadcom 57454 10GBASE-T 4-port PCIe Ethernet Adapter	2	3	3	3
00MM860	ATPX	Intel X550-T2 Dual Port 10GBase-T Adapter	2	3	3	3
7ZT7A00537	AUKX	ThinkSystem Intel X710-DA2 PCIe 10Gb 2-Port SFP+ Ethernet Adapter	2	3	3	3
4XC7A08225	B31G	ThinkSystem QLogic QL41134 PCIe 10Gb 4-Port Base-T Ethernet Adapter	2	3	3	3
25 Gb Ethernet						
4XC7A08238	B5T0	ThinkSystem Broadcom 57414 10/25GbE SFP28 2-port PCIe Ethernet Adapter	2	3	3	3
4XC7A08316	BD49	ThinkSystem Broadcom 57454 10/25GbE SFP28 4-port PCIe Ethernet Adapter V2	1	1	1	1
4XC7A08295	BCD6	ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2	3	3	3
4XC7A08270	B652	ThinkSystem Marvell QL41232 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2	3	3	3
4XC7A08249	B653	ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port PCIe Ethernet Adapter	2	3	3	3
4XC7A62580	BE4U	ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2	3	3	3
4XC7A80267	BP8M	ThinkSystem Intel E810-DA4 10/25GbE SFP28 4-Port PCIe Ethernet Adapter	1	1	1	1
100Gb Ethernet						
4XC7A08297	B96F	ThinkSystem Broadcom 57508 100GbE QSFP56 2-port PCIe 4 Ethernet Adapter	2	3	3	3
4XC7A08248	B8PP	ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter	2	3	3	3
4C57A14177	B4R9	ThinkSystem Mellanox ConnectX-6 HDR100/100GbE QSFP56 1-port PCIe VPI Adapter	2	2	2	2
4C57A14178	B4RA	ThinkSystem Mellanox ConnectX-6 HDR100/100GbE QSFP56 2-port PCIe VPI Adapter	2	2	2	2
200 Gb Ethernet						
4C57A15326	B4RC	ThinkSystem Mellanox ConnectX-6 HDR/200GbE QSFP56 1-port PCIe 4 VPI Adapter	2	2	2	2
4C57A14179	B4RB	ThinkSystem Mellanox HDR/200GbE 2x PCIe Aux Kit	1	1	1	1

GPU adapters

The VX systems systems support the following GPU options.

For details about these options, see the SR645 product guide:
https://lenovopress.com/lp1280-thinksystem-sr645-server#gpu-adapters

Table 18. GPU options

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
4X67A81547	BP05	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU	No	No	No	3
CTO Only	BQZT	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU w/o CEC	No	No	No	3
4X67A14926	B4YB	ThinkSystem NVIDIA T4 16GB PCIe Passive GPU	No	No	No	3
4X67A11584	B31D	ThinkSystem NVIDIA Quadro P620 2GB PCIe Active GPU	No	No	No	3

Fibre Channel host bus adapters

Table 19. Fibre Channel host bust adapter options

Part number	Feature	Description	Maximum supported			
			VX2375	VX3375	VX7375-N	VX3376
32 Gb Fibre Channel HBAs						
4XC7A76498	BJ3G	ThinkSystem Emulex LPe35000 32Gb 1-port PCIe Fibre Channel Adapter v2	3	3	3	3
4XC7A76525	BJ3H	ThinkSystem Emulex LPe35002 32Gb 2-port PCIe Fibre Channel Adapter V2	3	3	3	3
4XC7A08279	BA1G	ThinkSystem QLogic QLE2770 32Gb 1-Port PCIe Fibre Channel Adapter	3	3	3	3
4XC7A08276	BA1F	ThinkSystem QLogic QLE2772 32Gb 2-Port PCIe Fibre Channel Adapter	3	3	3	3
16 Gb Fibre Channel HBAs						
01CV840	ATZV	Emulex 16Gb Gen6 FC Dual-port HBA	3	3	3	3
01CV830	ATZU	Emulex 16Gb Gen6 FC Single-port HBA	3	3	3	3
01CV760	ATZC	QLogic 16Gb Enhanced Gen5 FC Dual-port HBA	3	3	3	3
01CV750	ATZB	QLogic 16Gb Enhanced Gen5 FC Single-port HBA	3	3	3	3

Operating system support

The ThinkAgile VX2375 supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1
- VMware ESXi 8.0 U2
- VMware ESXi 8.0 U3

The ThinkAgile VX3375 supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1
- VMware ESXi 8.0 U2
- VMware ESXi 8.0 U3

The ThinkAgile VX7375-N supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1
- VMware ESXi 8.0 U2
- VMware ESXi 8.0 U3

The ThinkAgile VX3376 supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1
- VMware ESXi 8.0 U2
- VMware ESXi 8.0 U3

Configuration Note:

VMware vSAN certification for Generic NVMe drives: The drives are listed in the VMware Compatibility Guide (VCG) under the drive vendor company name instead of Lenovo. To check a drive for vSAN certification, search the VCG using the Supplier part number. Part numbers can be found using the Product Guide for the corresponding Drive Family on Lenovo Press https://lenovopress.lenovo.com/servers/options/drives#sort=last_update.

For further details, including any restrictions, see the OS Interoperability Guide: https://lenovopress.com/osig#term=vx%2520amd%25201u%25202s&support=all

Software

ThinkAgile VX Series offerings are 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.

Customers who have purchased VMware Licenses directly from Broadcom or an approved distributor have the flexibility to choose "Customer has VMware by Broadcom Software License" in their DCSC configuration.

Lenovo offers the following VMware software license and support options for ThinkAgile VX Series systems:

- Primary Software

    1. VMware Cloud Foundation (VCF)
    2. VMware vSphere Foundation (VVF)

- Add-On Options (requires purchase of a Primary Software version)

    1. VMware vSAN (for capacity over TiB allocation from primary SKU)
    2. VMware Live Recovery
    3. VMware vDefend Firewall Bundle (requires VCF)
    4. VMware vDefend Firewall with Advanced Threat Prevention Bundle (requires VCF)
    5. VMware Avi Load Balancer
    6. VMware Private AI Foundation (requires VCF)

For details and ordering information, see the VMware Software Solution Product Guide:
https://lenovopress.com/lp1265-vmware-software-solution-product-guide

Configuration notes:

- VMware software licenses that are available for selection include 3-year, or 5-year software support (matches the duration of the selected solution-level warranty period).
- The quantity of processor core count-based licenses is derived by the configuration tool based on the number of processors selected.
- The quantity of VM-based licenses is specified based on VM requirements.

Warranty and Support

The VX systems have a 3-year warranty based on the machine type:

- 7D82 - 3 year warranty

The ThinkAgile VX Series Integrated Systems can be configured with a three- or five-year hardware warranty with 24x7 ThinkAgile Premier Single Point of Support (Lenovo server hardware and VMware software; requires an active software support contract purchased either from VMware or 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.

The Lenovo local support centers perform problem determination and resolution for hardware-related issues and escalate to VMware, on behalf of the customer, for software-related problem determination. VMware will contact the customer and will own the software-related problem resolution until closure.

Our global network of regional support centers offers consistent, local-language support enabling you to vary response times and level of service to match the criticality of your support needs:

- **Standard Next Business Day** – Best choice for non-essential systems requiring simple maintenance.
- **Premier Next Business Day** – Best choice for essential systems requiring technical expertise from senior-level Lenovo engineers.
- **Premier 24x7 4-Hour Response** – Best choice for systems where maximum uptime is critical.
- **Premier Enhanced Storage Support 24x7 4-Hour Response** – Best choice for storage systems where maximum uptime is critical.

For more information, consult the brochure Lenovo Operational Support Services for Data Centers Services .

Software maintenance

The ThinkAgile VX Series Integrated Systems (appliances) or Certified Nodes can include three-, or five-year software subscription (matches the duration of the selected warranty period) that entitles customers to submit service requests to troubleshoot VMware software issues and receive code updates, including fixes, patches, and new software releases.

The Lenovo local support centers perform problem determination and resolution for hardware-related issues and escalate to VMware, on behalf of the customer, for software-related problem determination. Lenovo will contact the customer and will own the software-related problem resolution until closure.

For the VMware by Broadcom license purchased from Lenovo together with the ThinkAgile VX Series Certifed Nodes, software support that is provided by VMware includes Production-level support with 24x7 phone and web coverage with the following target response times (priorities are defined by VMware based on the impact on productivity):

- Severity 1 (Critical: Substantial loss or disruption of service, significant risk of data loss): 30 minutes
- Severity 2 (Major: Operations are severely constrained, significant impact): 4 business hours
- Severity 3 (Minor: Non-critical loss of functionality, minimal impact): 8 business hours
- Severity 4 (Cosmetic: General questions): 12 business hours

For the VMware software and subscription licenses provided by the customer, software support that is provided by VMware is based on the support level included with these licenses. VMware by Broadcom will contact the customer and will own the software-related problem resolution until closure.

Deployment services

The following optional Lenovo basic installation services are available for the ThinkAgile VX Series Integrated Systems (appliances):

- Unpacking and inspecting the systems
- Mounting the systems in a rack cabinet
- Connecting the systems to electrical power and network
- Checking and updating firmware to the latest levels
- Verifying operations
- Disposal of the packaging materials (within the customer site)

ThinkAgile VX Integrated Systems include deployment services delivered by Lenovo Professional Services for the ultimate customer experience. However, "Channel Partner Provided" option is also available on DCSC. By choosing this option, Lenovo Customer or Lenovo Business Partner assumes the full responsibility to perform the deployment services for the quoted system. It is strongly recommended that Lenovo Professional Services or approved business partners are used to perform the deployment services.

The following additional Lenovo deployment services are available for the ThinkAgile VX Series with VMware vSphere Foundation solution to get customers up and running quickly. You can use the table below to add these services:

- Conducting remote preparation and planning
- Verifying firmware versions and performing firmware updates, if needed
- Configuring XCC management settings
- Configuring hypervisor settings
- Configuring vSAN
- Configuring VMware vCenter Server and discovering hosts and storage
- Configuring Lenovo XClarity network settings and performing discovery and inventory
- Transferring knowledge
- Developing post-installation documentation

The following Lenovo deployment services are provided with the ThinkAgile VX Series with VMware Cloud Foundation co-engineered solution to get customers up and running quickly:

- Planning and Design
    - Collect technical details for hardware and VMware environment
    - Plan the architecture based on Customer's business and tech requirements
    - Fill the VCF Plan, Prepare Workbook

- Implementation
    - Configure hardware (XCC IP, UEFI), upgrade firmware via OneCLI or BoMC
    - Deploy & Configure ESXi, Cloud Builder & import VCF Workbook, Lenovo xClarity software components
    - Check compliance with VX Best Recipes

- Handover
    - BAU updates based on VCF releases and VX Best Recipes
    - VMware Async Patch Tool (if required)

- Readiness Handover
    - Create handover document and knowledge transfer
    - Includes details for each deployed component

The following table lists ThinkAgile Health Check & Deployment offerings are available for ThinkAgile VX customers. These offerings are performed by Lenovo Professional Services.

- **Onsite Deployment**: Install, configure, and validate solution on-site, and conduct knowledge transfer.

- **Remote Deployment**: Install, configure, and validate solution remotely, and conduct knowledge transfer.

- **Remote Health Check**: Report & remediation of hardware and cluster health issues, including firmware and software updates.

Table 20. ThinkAgile Deployment offerings

Part number	Description
Onsite deployment services	
5MS7B00082	ThinkAgile VX Onsite Deployment (up to 4 nodes)
5MS7B00083	ThinkAgile VX Onsite Deployment (additional node)
Remote deployment services	
5MS7A87711	ThinkAgile VX Remote Deployment (up to 4 nodes)
5MS7A87712	ThinkAgile VX Remote Deployment (additional node)
Remote Health Check	
5MS7B00178	ThinkAgile VX 1X Remote Health Check (up to 4 node cluster)
5MS7B00179	ThinkAgile VX 1X Remote Health Check (additional node)
5MS7B00059	ThinkAgile VX 1X Remote Health Check & Update (up to 4 node cluster)
5MS7B00060	ThinkAgile VX 1X Remote Health Check & Update (additional node)

For more information, refer to the Data Center Implementation Services web page:
https://www.lenovo.com/us/en/data-center/services/implementation-services/

Lenovo TruScale

Lenovo TruScale XaaS is your set of flexible IT services that makes everything easier. Streamline IT procurement, simplify infrastructure and device management, and pay only for what you use – so your business is free to grow and go anywhere.

Lenovo TruScale is the unified solution that gives you simplified access to:

- The industry's broadest portfolio – from pocket to cloud – all delivered as a service
- A single-contract framework for full visibility and accountability
- The global scale to rapidly and securely build teams from anywhere
- Flexible fixed and metered pay-as-you-go models with minimal upfront cost
- The growth-driving combination of hardware, software, infrastructure, and solutions – all from one single provider with one point of accountability.

For information about Lenovo TruScale offerings that are available in your region, contact your local Lenovo sales representative or business partner.

Lenovo Financial Services

Why wait to obtain the technology you need now? No payments for 90 days and predictable, low monthly payments make it easy to budget for your Lenovo solution.

- **Flexible**

  Our in-depth knowledge of the products, services and various market segments allows us to offer greater flexibility in structures, documentation and end of lease options.

- **100% Solution Financing**

  Financing your entire solution including hardware, software, and services, ensures more predictability in your project planning with fixed, manageable payments and low monthly payments.

- **Device as a Service (DaaS)**

  Leverage latest technology to advance your business. Customized solutions aligned to your needs. Flexibility to add equipment to support growth. Protect your technology with Lenovo's Premier Support service.

- **24/7 Asset management**

  Manage your financed solutions with electronic access to your lease documents, payment histories, invoices and asset information.

- **Fair Market Value (FMV) and $1 Purchase Option Leases**

  Maximize your purchasing power with our lowest cost option. An FMV lease offers lower monthly payments than loans or lease-to-own financing. Think of an FMV lease as a rental. You have the flexibility at the end of the lease term to return the equipment, continue leasing it, or purchase it for the fair market value. In a $1 Out Purchase Option lease, you own the equipment. It is a good option when you are confident you will use the equipment for an extended period beyond the finance term. Both lease types have merits depending on your needs. We can help you determine which option will best meet your technological and budgetary goals.

Ask your Lenovo Financial Services representative about this promotion and how to submit a credit application. For the majority of credit applicants, we have enough information to deliver an instant decision and send a notification within minutes.

Seller training courses

The following sales training courses are offered for employees and partners (login required). Courses are listed in date order.

1. **Unlock the full potential of AI in your organization with a private and secure solution that leverages your own data**
2025-06-26 | 61 minutes | Employees and Partners

Join Scott Stricker, World-Wide Leader for Advanced Services within the VMware Cloud Foundation Division and Alex Fanous Advanced Services Architects VMware Cloud Foundation Org at VMware by Broadcom as they lead us in this session. We'll explore the critical need for a private AI solution that enables enterprises to serve AI models with confidence, while maintaining control over their sensitive data and adhering to operational governance & standards. We'll discuss the benefits of a Lenovo-VMware joint solution, including robust lifecycle management, agility, and the ability to deliver AI outcomes that drive business success. We'll also delve into real-world use cases and identify the new personas within our customers' business that will be the consumers of these AI services, and how they can benefit from a private AI foundation. Join us for this technical deep dive into the solution, including a live demonstration, to see how you can harness the power of AI while protecting your organization's most valuable assets and wrangle the cost of today's most expensive workload.

Tags: Artificial Intelligence (AI), Cloud, Software Defined Infrastruture (SDI), ThinkAgile

Published: 2025-06-26
Length: 61 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DVCLD224

2. **ThinkAgile VX in 3 minutes**
2025-06-18 | 5 minutes | Employees and Partners

Learn about ThinkAgile VX in under 3 minutes. The business challenges it solves and how it can increase the size of your sales opportunities.

By the end of this training, you should be able to:

1) Learn how to sell Lenovo ThinkAgile VX
2) Describe what differentiates ThinkAgile VX from other VMware offerings

Tags: Sales, Sales Tools, Technical Sales, ThinkAgile

Published: 2025-06-18
Length: 5 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DVXS101

3. **Lenovo Data Center Product Portfolio**
   2025-06-11 | 20 minutes | Employees and Partners

   This course introduces the Lenovo data center portfolio, and covers servers, storage, storage networking, and software-defined infrastructure products. After completing this course about Lenovo data center products, you will be able to identify product types within each data center family, describe Lenovo innovations that this product family or category uses, and recognize when a specific product should be selected.

   Course objectives:
   1.Identify product types within each data center family
   2.Describe the features of the product family or category
   3.Recognize when a specific product should be selected

   Tags: Advanced DataCenter, DataCenter Products, Server, ThinkAgile, ThinkEdge, ThinkSystem

   Published: 2025-06-11
   Length: 20 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: SXXW1110r8

4. **VTT: Nutanix Integration in XClarity One - SAM - May 2025**
   2025-06-10 | 56 minutes | Employees Only

   Please join this session as our speaker Sorin Tacu, will be sharing us a preview of SAM (Solutions Advanced Manager) - a powerful new tool developed by the ThinkAgile HX team in collaboration with XClarity One. Designed to seamlessly integrate the Nutanix Solution into XClarity One, SAM is set to streamline solution management and drive greater value for our customers. Get a first look at its future capabilities and learn more about it.

   Tags: Nutanix, XClarity

   Published: 2025-06-10
   Length: 56 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo

   Course code: DVSYS217

5. **Partner Technical Webinar - ThinkAgile V4**
   2025-06-09 | 60 minutes | Employees and Partners

   In this 60-minute replay, Pawan Misra, Lenovo SDI Product Manager and Adam Mandelbloom, Lenovo SDI Technical Marketing Manager, reviewed the newly announced ThinkAgile V4 systems for HX, VX and MX.

   Tags: Microsoft, Nutanix, VMware

   Published: 2025-06-09
   Length: 60 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: JUN0625

6. **Family Portfolio: ThinkAgile Systems**
   2025-04-30 | 45 minutes | Employees and Partners

   This course covers the foundational components of the ThinkAgile family, including server configurations, key system differences, and the unique features of the HX, MX, and VX product families.
   By the end of this course, you should be able to:
   •List the ThinkSystem and ThinkEdge servers that the ThinkAgile family is based on
   •Explain the difference between Certified Nodes and Integrated Systems
   •List two features each of the HX, MX, and VX families

   Tags: ThinkAgile, ThinkSystem

   Published: 2025-04-30
   Length: 45 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: SXSW2150r2

7. **Partner Technical Webinar - Storage Announcements**
   2025-04-29 | 60 minutes | Employees and Partners

   In this 60-minute replay, the April 23 Storage Announcement was presented. Adam Mandelbloom, Lenovo Technical Marketing Manager, presented the ThinkAgile announcements. Next, Roger Yarosh, Senior Storage Product Manager, presented the DG and DM announcements.

   Tags: Data Management, ThinkAgile

   Published: 2025-04-29
   Length: 60 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: 042525

8. **Think AI Weekly: Simplifying AI Deployments with ThinkAgile**
   2025-04-11 | 54 minutes | Employees Only

   Please view this session to hear Adam Mandelbloom, Technical Marketing Manager for ISG explain these topics:

   -Overall value proposition of ThinkAgile in AI solutions
   -Use cases for ThinkAgile HX
   -Use cases for ThinkAgile VX and MX

   Tags: Artificial Intelligence (AI), ThinkAgile

   Published: 2025-04-11
   Length: 54 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo

   Course code: DTAIW137

9. **ThinkAgile VX - How to sell**
   2024-12-18 | 15 minutes | Employees and Partners

   This module will introduce you to the ThinkAgile VX product line. It also introduces the latest updates to the VMware software packages available with the ThinkAgile VX product line.

   Course Objectives:
   1. Find out more about the competitive advantage of ThinkAgile VX.
   2. Learn about the hardware and software solutions in the ThinkAgile VX line.
   3. Understand the business needs and how you can sell more.

   Tags: ThinkAgile, VMware

   Published: 2024-12-18
   Length: 15 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: DVXS100

10. **Selling On Prem Value - Private Cloud and Private AI**
    2024-12-13 | 40 minutes | Employees Only

    This course provides Lenovo Sellers with a series of five videos that are designed to help you better articulate our joint value in the Private Cloud and Private AI solution opportunity. After completing this course, Lenovo Sellers should be prepared to elevate customer discussions by transitioning from product features to explaining value-driven benefits, enabling a deeper understanding of the strategic impact for their business.

    Tags: Artificial Intelligence (AI), Industry solutions, Technology solutions, ThinkAgile, VMware

    Published: 2024-12-13
    Length: 40 minutes

    > **Start the training:**
    > Employee link: Grow@Lenovo

    Course code: DVMB101

11. **Partner Technical Webinar - Data Center 101 - Why HCI? Why 3-tier?**
2024-11-14 | 60 minutes | Employees and Partners

October 11, 2024 – In this 60-minute webinar Alex Docherty, Channel Technical Strategist, discussed When to HCI vs 3 Tier.

Tags: ThinkAgile, ThinkSystem

Published: 2024-11-14
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: 101124

12. **ThinkAgile Solutions for AI - Security and Compliance Considerations**
2024-10-01 | 15 minutes | Employees and Partners

This course, tailored specifically for Lenovo and its partner technical sellers, is designed to equip participants with essential knowledge and skills to effectively assess security measures and address compliance considerations for ThinkAgile Solutions for AI.

Upon completion of this training, you will be able to:
• Describee security features of ThinkAgile for AI data protection.
• Explain how to mitigate risk and address compliance considerations in AI deployments.

Last Updated: September 2024

Tags: Artificial Intelligence (AI), High-Performance Computing (HPC), ThinkAgile

Published: 2024-10-01
Length: 15 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DCLDAI203

13. **Integration of ThinkAgile and AI**
    2024-09-11 | 25 minutes | Employees and Partners

    Designed specifically for Lenovo and its partner technical sellers, this course aims to equip you with the knowledge and skills to effectively communicate the integration of ThinkAgile Solutions and AI.

    Upon completion of this training, you will be able to:
    •Highlight the advantages of using ThinkAgile for AI workloads
    •Explore how ThinkAgile platforms are specifically optimized for AI

    Last Updated: September 2024

    Tags: Artificial Intelligence (AI), ThinkAgile

    Published: 2024-09-11
    Length: 25 minutes

    > **Start the training:**
    > Employee link: Grow@Lenovo
    > Partner link: Lenovo 360 Learning Center

    Course code: DCLDAI204

14. **Key Features of Lenovo ThinkAgile Solutions for AI**
    2024-09-10 | 15 minutes | Employees and Partners

    Designed specifically for Lenovo and its partner technical sellers, this course aims to equip you with the knowledge and skills to effectively communicate the key features of ThinkAgile Solutions for AI. By completing this course, you'll be better prepared to understand customer needs and present the most suitable AI solutions, ensuring successful engagements and driving value for your clients.

    In this course, you will learn how to:
    • Present compute capabilities for AI processing
    • Articulate optimized storage solutions with ThinkAgile for high-speed AI performance
    • Identify essential networking considerations for ThinkAgile AI workloads
    • Present ThinkAgile AI Ready solutions

    Last Updated: September 2024

    Tags: Artificial Intelligence (AI), ThinkAgile

    Published: 2024-09-10
    Length: 15 minutes

    > **Start the training:**
    > Employee link: Grow@Lenovo
    > Partner link: Lenovo 360 Learning Center

    Course code: DCLDAI201

15. **ThinkAgile Solutions for AI - Sales Strategies and Messaging**
2024-09-06 | 15 minutes | Employees and Partners

This course is designed exclusively for Lenovo and its partner technical sales teams, with the goal of empowering you with the knowledge and strategies necessary to effectively engage customers in conversations about ThinkAgile Solutions for AI.

In this course, you'll learn how to:
• Identify customer pain points.
• Recommend ThinkAgile Solutions for AI tailored to those needs. And lastly,
• Communicate the benefits of ThinkAgile for AI to key stakeholders.

Last Updated: September 2024

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2024-09-06
Length: 15 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DCLDAI202

16. **Position Lenovo ThinkAgile Solutions for AI**
2024-08-19 | 10 minutes | Employees and Partners

Designed specifically for Lenovo and partner technical sellers, this course aims to equip you with the knowledge and skills necessary to effectively evaluate and position ThinkAgile Solutions for AI to your customers. By completing this course, you will be better prepared to understand customer needs and present the most suitable AI solutions, ensuring successful engagements and driving value for your clients.

In this course, you will learn how to position ThinkAgile Solutions for AI to your customers by:
•Evaluating the key challenges in the enterprise landscape
•Advocating the value proposition of ThinkAgile Hyper-Converged Infrastructure
•Exploring use cases of ThinkAgile in AI environments
•Implementing ThinkAgile-based AI deployments

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2024-08-19
Length: 10 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DCLDAI200

17. **Lenovo VTT Cloud Architecture - Unlock Gen AI with VMware Private AI Foundation with NVIDIA**
2024-07-16 | 60 minutes | Employees Only

In today's rapidly evolving digital landscape, businesses are hungry for the transformative power of Artificial Intelligence (AI). They see AI as the key to streamlining operations and unlocking exciting new opportunities. However, widespread adoption has been hampered by concerns surrounding privacy, the complexity of implementation, and the hefty costs associated with deploying and managing AI solutions at an enterprise level.
Join Chris Gully and Baker Hull, Solutions Architects from VMware by Broadcom, as they discuss how Lenovo, NVIDIA, and VMware By Broadcom are partnering to deliver a private, secure, scalable, and flexible AI infrastructure solution that helps enterprise customers build and deploy AI workloads within their own private cloud infrastructure, ensure the control of sensitive data and compliance with regulatory requirements, ultimately driving faster time to value and achieving their AI objectives.

Tags: Artificial Intelligence (AI), Cloud, Nvidia, ThinkAgile, VMware

Published: 2024-07-16
Length: 60 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD214

18. **ThinkAgile Roadshow for Account Managers**
2024-06-21 | 60 minutes | Employees Only

As customers transition through technology refresh and modernize their IT, learn how to win and position ThinkAgile portfolio. Get an overview of current ThinkAgile momentum and strategy along with best practices in product positioning

Tags: Artificial Intelligence (AI), Cloud, Microsoft, Nutanix, ThinkAgile, VMware

Published: 2024-06-21
Length: 60 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DTAO101

19. **VTT Cloud Architecture - What next with VMware Discussion**
2024-06-13 | 60 minutes | Employees Only

Broadcom's acquisition of VMware has stirred significant interest and concern among customers who rely on VMware for their cloud and on-premises infrastructure needs. This acquisition may prompt customers to explore alternative platforms due to potential changes in service quality, pricing, and product roadmaps. Join John Encizo, Lenovo Field CTO & Principal Technical Consultant for an in-depth look at what it takes to migrate customers to different platforms and considerations for whether they should make the move.

Tags: Cloud, Microsoft, Nutanix, Technical Sales, VMware

Published: 2024-06-13
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DVCLD213

20. **SAP Webinar for Lenovo Sellers: Lenovo Portfolio Update for SAP Landscapes**
2024-06-04 | 60 minutes | Employees Only

Join Mark Kelly, Advisory IT Architect with the Lenovo Global SAP Center of Competence as he discusses:
•Challenges in the SAP environment
•Lenovo On-premise Solutions for SAP
•Lenovo support resources for SAP solutions

Tags: SAP, ThinkAgile, ThinkEdge, ThinkSystem

Published: 2024-06-04
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DSAPF101

21. **VTT Cloud Architecture: NVIDIA Using Cloud for GPUs and AI**
2024-05-22 | 60 minutes | Employees Only

Join JD Dupont, NVIDIA Head of Americas Sales, Lenovo partnership and Veer Mehta, NVIDIA Solution Architect on an interactive discussion about cloud to edge, designing cloud Solutions with NVIDIA GPUs and minimizing private\hybrid cloud OPEX with GPUs. Discover how you can use what is done at big public cloud providers for your customers. We will also walk through use cases and see a demo you can use to help your customers.

Tags: Artificial Intelligence (AI), Cloud, Nvidia, Software Defined Infrastruture (SDI), Technical Sales

Published: 2024-05-22
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DVCLD212

22. **Start the Conversation - Lenovo Cloud Strategy**
    2024-05-20 | 25 minutes | Employees and Partners

    The purpose of this course is to help sellers use the Lenovo cloud strategy as a foundation to start the customer cloud conversation.

    Course Objectives:
    •Understand why customers choose the cloud
    •Describe the Lenovo Cloud Strategy
    •Be able to start the customer cloud conversation

    Tags: Cloud, Technology solutions

    Published: 2024-05-20
    Length: 25 minutes

    Start the training:
    Employee link: Grow@Lenovo
    Partner link: Lenovo 360 Learning Center

    Course code: DCLDS103r3

23. **VTT Cloud and Edge Architecture: Principal Consultant Overview**
    2024-04-10 | 50 minutes | Employees Only

    Join Ruth Miller, Lenovo Principal Consultant, SSG Services for a data-led discussions to examine in detail customer IT environments, highlighting pain points, performance issues, edge and hybrid cloud strategy and carbon reduction capability.
    Examples of workshop deliverables and outcomes will be discussed to illustrate the value of early engagement and discovery.

    Tags: Cloud, Services, Sustainability, Technology solutions, TruScale Infrastructure as a Service

    Published: 2024-04-10
    Length: 50 minutes

    Start the training:
    Employee link: Grow@Lenovo

    Course code: DVCLD211

24. **VTT Data Management How to sell storage - April 2024**
   2024-04-10 | 60 minutes | Employees and Partners

   In this course, you will know:

   - Why do we sell storage?
   - What are the basics you need to get an opportunity rolling?
   - Why Lenovo for Storage?
   - What is happening in the market today?
   - How to determine traction?

   Tags: Data Management, Storage

   Published: 2024-04-10
   Length: 60 minutes

   Start the training:
   Employee link: Grow@Lenovo
   Partner link: Lenovo 360 Learning Center

   Course code: DVDAT209

25. **Technical Overview: ThinkAgile HCI and Cloud Platforms**
   2024-03-07 | 35 minutes | Employees and Partners

   This course is designed to give Lenovo sales and partner representatives a technical overview of
   Lenovo's ThinkAgile hyperconverged infrastructure and cloud platforms. Turnkey cloud platforms along
   with their architectural makeup, and container and data protection solutions are also covered.

   Learning Objectives:

   •Describe Lenovo's ThinkAgile hyperconverged infrastructure and cloud platforms
   •Explain do-it-yourself and turnkey cloud platforms along with their architectural makeup
   •Describe container and data protection solutions

   Tags: Architecture, Engineering & Construction, Cloud, Technical Sales, ThinkAgile

   Published: 2024-03-07
   Length: 35 minutes

   Start the training:
   Employee link: Grow@Lenovo
   Partner link: Lenovo 360 Learning Center

   Course code: DCLDT2001r3

26. **Family Introduction: Converged and Hyperconverged**
2024-01-25 | 15 minutes | Employees and Partners

This course is designed to give Lenovo sales a foundation on the characteristics of the Converged and Hyperconverged family. As an introduction to each family, this course also includes positioning, when to use a family and product, and keywords a client may use when discussing a converged or hyperconverged product.
Objectives:
•Family characteristics
•Priority positioning
•Product usage
•Key words and phrases

Tags: Sales, Storage

Published: 2024-01-25
Length: 15 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: SXSW1101r2

27. **Lenovo Solutions for the Cloud**
2024-01-03 | 30 minutes | Employees and Partners

Understanding your customer's needs around cloud solutions is imperative. This course aims to increase Lenovo and Partner Seller's ability to identify various Lenovo Cloud offerings and services to position related Lenovo Cloud Solutions.

Tags: Cloud, Technology solutions, ThinkAgile, ThinkEdge, ThinkSystem

Published: 2024-01-03
Length: 30 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DCLDO112r2

28. **VTT Cloud Architecture: Google Cloud Platform with Anthos on ThinkAgile VX - October 2023**
2023-10-11 | 54 minutes | Employees and Partners

Join Chandrakandh Mouleeswaran, Lenovo Senior Software Engineer and Cristian Ghetau, Lenovo Software Engineer for a discussion on Google Cloud Platform (GCP) with Anthos solution based on the Lenovo ThinkAgile VX VMware vSAN certified platform. They will cover a technical overview of Google Kubernetes Engine (GKE) On-prem, which is a containerized workload orchestration software. We will cover the functional aspects of Anthos core components including the Kubernetes, Istio service mesh, Anthos config management, Hybrid and multi-cloud management, and Google cloud marketplace. We will also provide an architecture overview and deployment of Anthos on top of Lenovo ThinkAgile VX hyperconverged infrastructure (HCI) platform. Cristian and Chandrakandh will cover customer use cases for Anthos, including Continuous Integration/Continuous Delivery (CI/CD), Micro-services and Service Mesh, Hybrid Cloud and Multi-cloud management, and Anthos Config Management.

Tags: Cloud, Software Defined Infrastruture (SDI), Technology solutions, ThinkAgile, VMware

Published: 2023-10-11
Length: 54 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DVCLD205

29. **VEEAM Solutions Sales Training**
2023-09-27 | 20 minutes | Employees and Partners

In this course you will learn about Hyper-availability for the Always-On Enterprise.

By the end of this training, you should be able to:

Identify and explain the core products and solutions offered by Veeam.
Explain the key benefits and value propositions of integrating Veeam solutions with Lenovo products.

Tags: Sales

Published: 2023-09-27
Length: 20 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DSTOO100

30. **VTT Cloud Architecture - Application Migration September 2023**
2023-09-12 | 35 minutes | Employees Only

This VTT Cloud Architecture training aims to equip participants with the knowledge necessary to help your customers successfully migrate applications to a cloud infrastructure. With the increasing adoption of cloud computing, organizations are looking to harness the benefits of private and hybrid clouds, such as enhanced security, control, and customization. However, migrating applications to cloud requires careful planning, architectural considerations, and a deep understanding of the migration process.
In this training, we will delve into cloud infrastructure and learn about the key components involved in application migration. We will explore various migration strategies, including lift-and-shift, re-platforming, and re-architecting, and understand the factors that influence the selection of an appropriate migration approach. We will also cover best practices for evaluating application readiness, assessing dependencies, identifying potential challenges and risks, and solution design considerations. We will discuss using migration tools, technologies specific to cloud environments and automation techniques for streamlining the migration process, ensuring minimal disruption to business operations.

Tags: Cloud, Software Defined Infrastruture (SDI), Technical Sales, VMware

Published: 2023-09-12
Length: 35 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD204

31. **VTT Cloud Architecture - DevOps Cloud Story August 2023**
2023-08-17 | 60 minutes | Employees Only

Understanding how architecture is deployed to support DevOps environment in the cloud. Tanzu/Containers vs VM's. When it best to use each? Modern Application deployment in containers. In the beginning, public cloud IaaS was delivered exclusively via virtual machines. But today, new virtualization methods are taking hold, including containers and serverless computing. As cloud computing principles become more embedded in application development and infrastructure operations, containers and serverless will become increasingly attractive deployment vehicles for code. From requirements to installation.

Tags: Cloud, Infrastructure as a Service (IaaS), ThinkAgile, VMware

Published: 2023-08-17
Length: 60 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD203

32. **ThinkAgile Accelerating Cloud Agility: Understanding ThinkAgile VX**
2023-07-28 | 50 minutes | Employees and Partners

Brian Faleiro, Lenovo Technical Product Manager, discusses ThinkAgile VX use cases, where the solution can be positioned. He reviews recent technical improvements and discusses deployment and lifecycle management, 'why ThinkAgile VX', what are the requirements that customers are looking for and how we are solving those requirements.

Tags: ThinkAgile

Published: 2023-07-28
Length: 50 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DVXT201

33. **VTT: SAP HANA Transition and Refresh Opportunity - July 2023**
2023-07-14 | 60 minutes | Employees Only

In this session, we cover:
- What Next for SAP Clients?
- Lenovo Opportunity
- Lenovo Portfolio for SAP Solutions
- RISE with SAP

Tags: Data Management, SAP, ThinkAgile, ThinkEdge, ThinkSystem

Published: 2023-07-14
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DVDAT202

34. **ThinkAgile VX Series - Technical Presentation**
2023-07-12 | 60 minutes | Employees and Partners

Join us in this comprehensive course on ThinkAgile VX Series, where you will gain a deep understanding of its technical overview and components. Dive into the world of Data Processing Units (DPUs) and explore their technical aspects, including their role and benefits. Unlock the potential of ThinkAgile VX Series through a detailed exploration of its versatile use cases, ranging from Hybrid Cloud deployment to VDI, Kubernetes, and AI/ML applications. Moreover, you will learn about effective deployment strategies and lifecycle management processes.

By the end of this training, you should be able to:
•Understand the technical overview of ThinkAgile VX Series
•Gain knowledge about DPU (Data Processing Unit) and its technical aspects
•Explore various use cases of ThinkAgile VX Series, including Hybrid Cloud deployment, VDI (Virtual Desktop Infrastructure), Kubernetes, and AI/ML (Artificial Intelligence/Machine Learning)
•Describe deployment strategies and lifecycle management processes for ThinkAgile VX Series

Tags: Cloud, ThinkAgile

Published: 2023-07-12
Length: 60 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DVXSV104

35. **VTT Cloud Architecture - Why Cloud? July 2023**
2023-07-12 | 90 minutes | Employees Only

Theresa Thompson and Luke Huckaba from VMware discuss the VMware and Lenovo Partnership for cloud solutions addresses common IT constraints, such as slow time to value, limited resources and incompatible systems. Cloud is an enabler of digital business. How do we reduce the operational burden of running and maintaining hardware and software for cloud and prepare our customers for workload migrations and which are suitable for a cloud environment. How to align cloud Initiative outcomes with business goals.

Tags: Cloud, Software Defined Infrastruture (SDI), ThinkAgile, VMware

Published: 2023-07-12
Length: 90 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD202

36. **Cloud and HCI or Somewhere in Between**
    2023-07-11 | 40 minutes | Employees and Partners

    Provides a brief overview of Lenovo Portfolio for HCI and Cloud including ThinkAgile HX, VX, MX Certified Nodes and Appliances, Azure, and Engineered Cloud Solutions. Review Scenarios and complete questions "choose your own adventure" to identify and qualify an opportunity as HCI or Cloud and which portfolio solution would be the best option.

    Course objectives:
    •Where in the Sales Cycle we are
    •What is Cloud
    •What is Hyperconverged Infrastructure (HCI)
    •Review Lenovo Offerings in Cloud and HCI
    •Scenarios

    Tags: Cloud

    Published: 2023-07-11
    Length: 40 minutes

    > **Start the training:**
    > Employee link: Grow@Lenovo
    > Partner link: Lenovo 360 Learning Center

    Course code: DCLDS104r2

Related publications and links

For more information, see these resources:

- Lenovo ThinkAgile VX Series
  https://www.lenovo.com/us/en/data-center/software-defined-infrastructure/ThinkAgile-VX-Series/p/WMD00000340
- ThinkAgile VX - Best Recipes
  http://datacentersupport.lenovo.com/us/en/solutions/HT505302
- VMware documentation
  https://docs.vmware.com/
- ThinkSystem SR645 product guide:
  https://lenovopress.com/lp1280-thinksystem-sr645-server
- Interactive 3D Tour of the ThinkSystem SR645:
  https://lenovopress.com/lp1290
- Lenovo Press video walk-through of the ThinkSystem SR645:
  https://lenovopress.com/lp1292

Related product families

Product families related to this document are the following:

- 2-Socket Rack Servers
- Hyperconverged Infrastructure
- ThinkAgile VX Series for VMware

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This document, LP1525, was created or updated on November 12, 2024.

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