# Lenovo ThinkAgile VX2330, VX3330, VX3331 and VX7330-N 1U Appliances and Certified Node (Intel Xeon SP Gen 3)

## Product Guide

The Lenovo ThinkAgile VX2330, VX3330 and VX7330-N Appliances and VX3331 Certified Node are 2-socket 1U systems that feature the 3rd Generation Intel Xeon Scalable processors. With up to 40 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.

Suggested uses: Inference, virtualization, VDI, HPC, Hyperconverged infrastructure


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

## Did you know?

The ThinkAgile VX2330, VX3330 and VX7330-N Appliances and VX3331 Certified Node are built on the Lenovo ThinkSystem SR630 V2 server that features enterprise-class reliability, management, and security.

The VX2330, VX3330 and VX7330 Appliances offer ThinkAgile Advantage Single Point of Support for quick 24/7 problem reporting and resolution.

## Key features

### ThinkAgile features

The ThinkAgile VX2330, VX3330 and VX7330-N Appliances and VX3331 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 vSAN 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 software.
- Appliances include Lenovo ThinkAgile Advantage Single Point of Support for quick 24/7 problem reporting and resolution.
- Offer Lenovo deployment services to get customers up and running quickly.

The VMware software running on ThinkAgile VX2330, VX3330 and VX7330-N Appliances and VX3331 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.

## Hardware features

The VX systems are based on the SR630 V2 and have the following hardware features:

### Scalability and performance

The VX2330, VX3330, VX7330-N and VX3331 offer numerous features to boost performance, improve scalability and reduce costs:

- Supports one or two third-generation Intel Xeon Processor Scalable processors
  - Up to 40 cores and 80 threads
  - Core speeds of up to 3.6 GHz
  - TDP ratings of up to 270W
- Support for up to 32 TruDDR4 memory DIMMs operating at up to 3200 MHz means you have the fastest available memory subsystem.
- Supports configurations of 2 DIMMs per channel to operate at the 3200 MHz rated speed of the memory DIMMs.
- Using 128GB 3DS RDIMMs, the server supports up to 4TB of system memory.
- Supports the new Intel Optane Persistent Memory 200 Series for advanced in-memory database applications, dense-virtualization; up to 16 PMem Modules can be installed in conjunction with regular 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.
- Supports up to 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 and latency.
- Supports 12x SAS or SATA drives using 12Gb SAS/SATA HBAs.
- 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. 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. A simple-swap mechanism with a thumbscrew and pull-tab enables tool-less installation and removal of the adapter. 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.
- The server offers up to three PCIe 4.0 slots, all with rear access, plus a slot dedicated to the OCP adapter.

### Availability and serviceability

The VX2330, VX3330, VX7330-N and VX3331 provide many features to simplify serviceability and increase system uptime:

- The server offers Single Device Data Correction (SDDC, also known as Chipkill), Adaptive Double-Device Data Correction (ADDDC, also known as Redundant Bit Steering or RBS), and memory mirroring for redundancy in the event of a non-correctable memory failure.
- The server offers hot-swap drives for greater system uptime.
- Available M.2 RAID boot adapters support RAID-1 which can enable two SATA or two NVMe M.2 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 light path diagnostics feature 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 and performance 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), 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 or tablet and connected to the server through the service-enabled USB port, enables additional local systems management functions.
- Three-year customer-replaceable unit and onsite limited warranty (varies by geography), 9 x 5 next business day. Optional service upgrades are available.

**Manageability and security**

Systems management features simplify local and remote management of the VX2330, VX3330, VX7330-N and VX3331:

- 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 Secure Boot to ensure only a digitally signed operating system can be used. Supported with HDDs and SSDs, as well as 7mm and M.2 drives.
- Industry-standard Advanced Encryption Standard (AES) NI support for faster, stronger encryption.
- Intel Execute Disable Bit functionality can prevent certain classes of malicious buffer overflow attacks when combined with a supported operating system.
- Intel Trusted Execution Technology provides enhanced security through hardware-based resistance to malicious software attacks, allowing an application to run in its own isolated space, protected from all other software running on a system.
- Additional physical security features are an available chassis intrusion switch and available lockable front bezel.

**Energy efficiency**

The VX2330, VX3330, VX7330-N and VX3331 offer the following energy-efficiency features to save energy, reduce operational costs, and increase energy availability:

- Energy-efficient system board components help lower operational costs.
- High-efficiency power supplies with 80 PLUS Platinum and Titanium certifications
- 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, analysis, and policy-based management to help achieve lower heat output and reduced cooling needs.

## Components and connectors

The ThinkAgile VX2330, VX3330 and VX7330-N Appliances and VX3331 Certified Node are based on the ThinkSystem SR630 V2 server.

The following figure shows the front of the VX3330, VX3331 and VX7330-N with 2.5-inch drives.

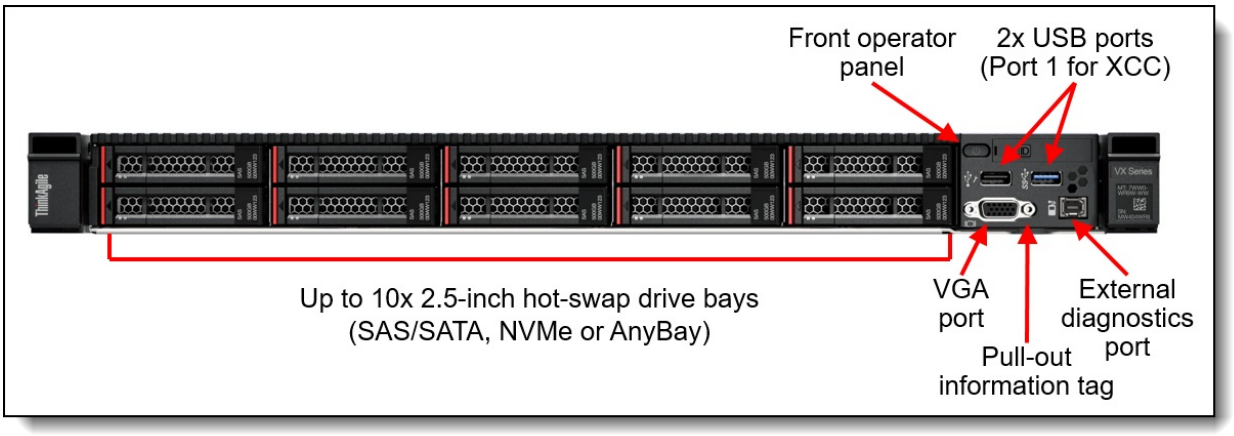


Figure 2. Front view of the ThinkAgile VX3330, VX3331 and VX7330-N with 2.5-inch drives

The following figure shows the front of the VX2330 and VX3331 with 3.5-inch drives.

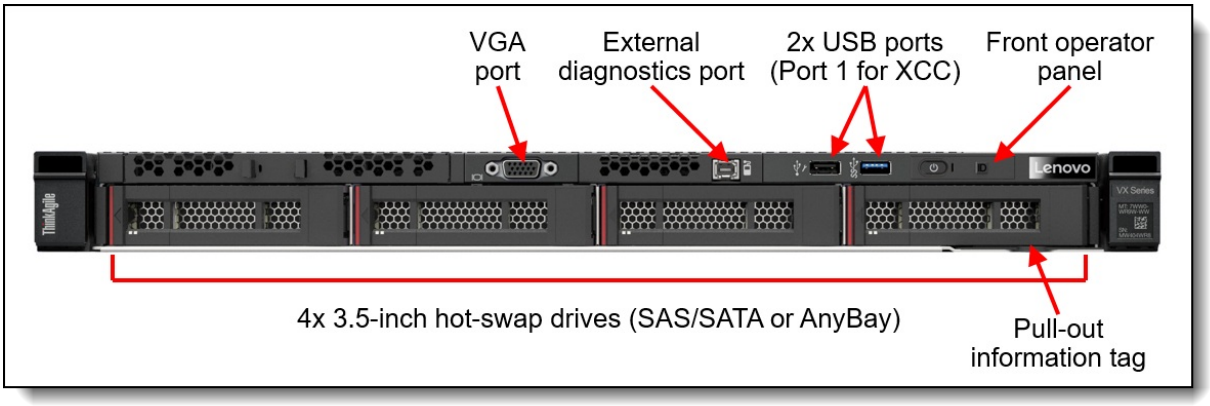


Figure 3. Front view of the ThinkAgile VX2330 and VX3331 with 3.5-inch drives

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).

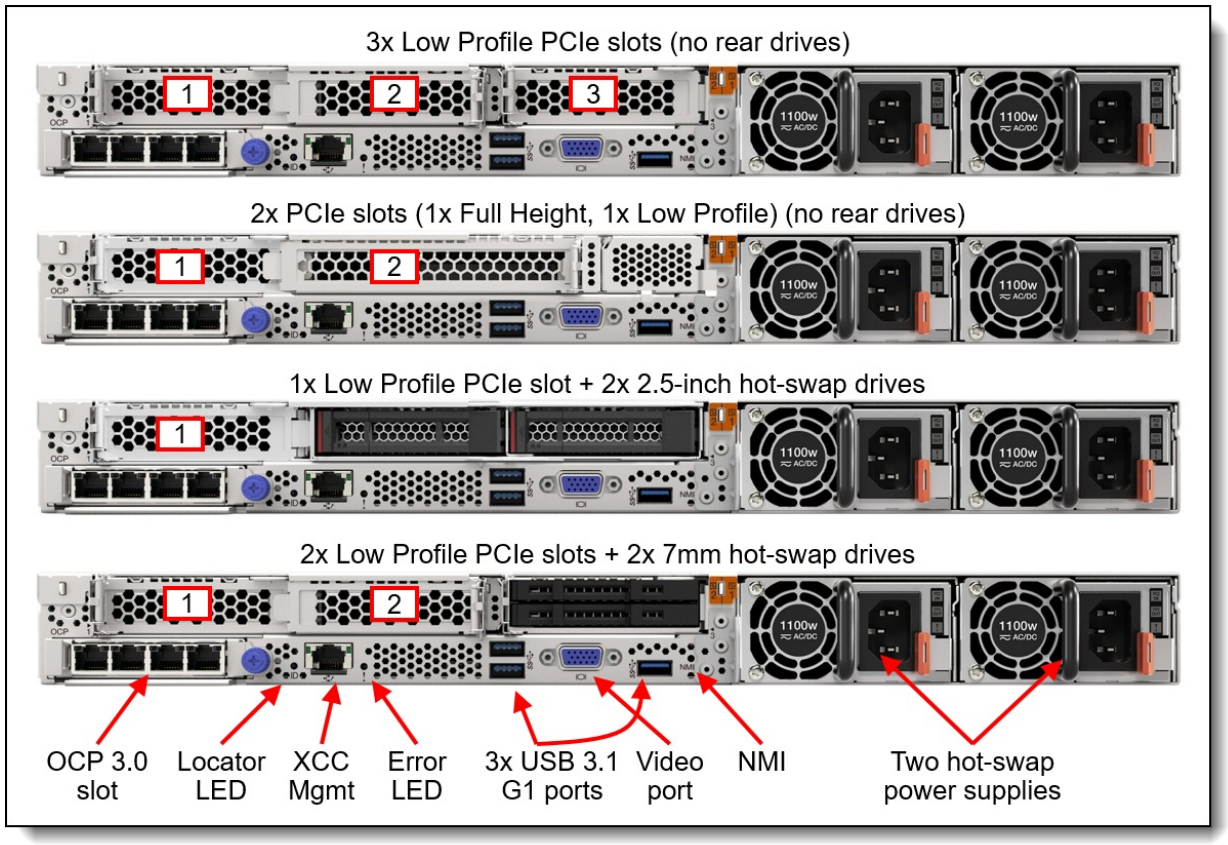


Figure 4. Rear view of the VX systems

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

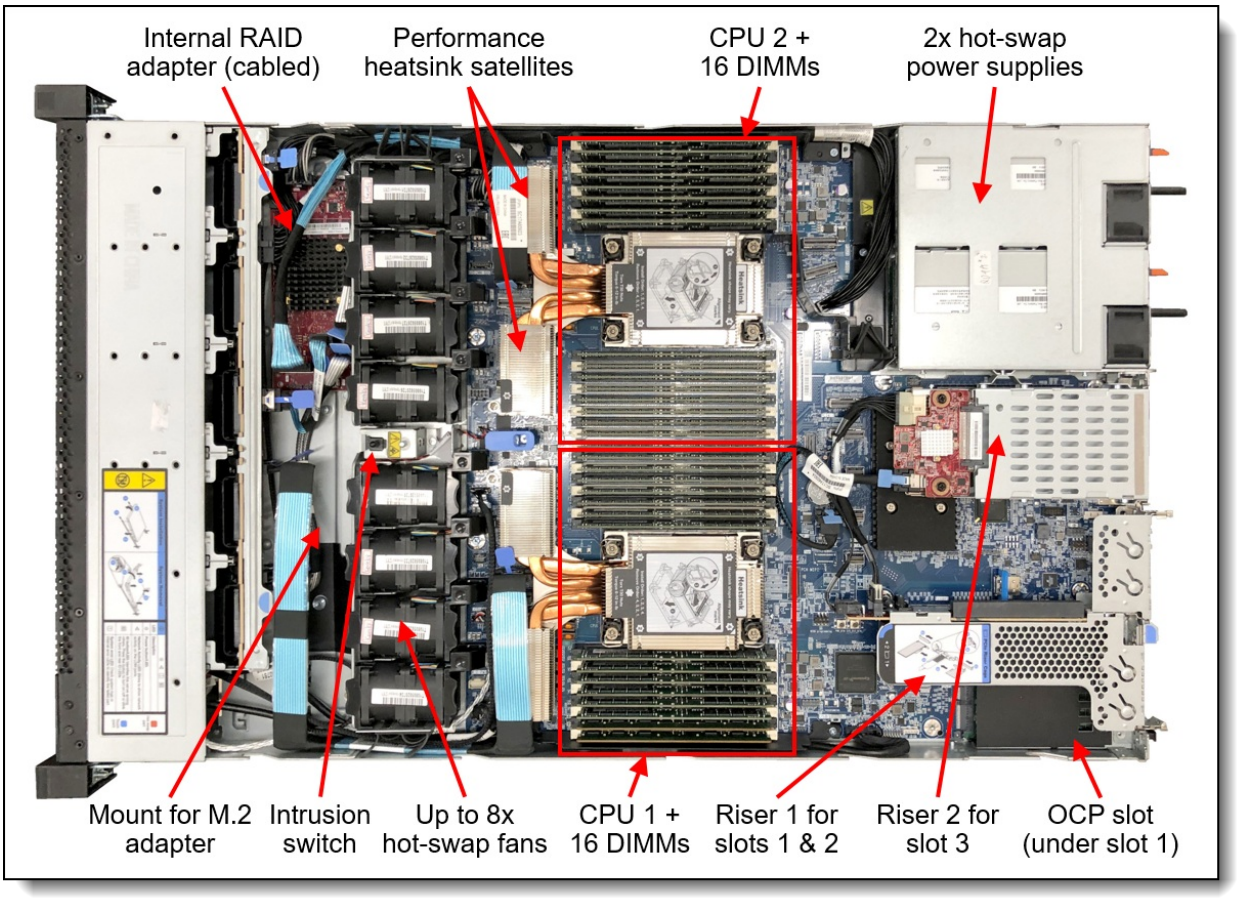


Figure 5. Internal view of the VX systems

## Standard specifications

The ThinkAgile VX2330, VX3330 and VX7330-N Appliances and VX3331 Certified Node are based on the ThinkSystem SR630 V2 server.

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

Table 1. Comparison of features

| | **VX2330** | **VX3330** | **VX7330-N** | **VX3331** |
|---|---|---|---|---|
| VX offering type | Appliance | Appliance | Appliance | Certified Node |
| Target workloads | SMB | Compute heavy | High performance | Compute heavy |
| Base MTM | 7Z62CTO1WW | 7Z62CTO2WW | 7Z62CTO3WW | 7Z62CTO4WW |
| Form Factor | 1U | 1U | 1U | 1U |
| Base platform | SR630 V2 | SR630 V2 | SR630 V2 | SR630 V2 |
| CPU | 1x or 2x Intel Xeon SP Gen 3 | 1x or 2x Intel Xeon SP Gen 3 | 1x or 2x Intel Xeon SP Gen 3 | 1x or 2x Intel Xeon SP Gen 3 |
| 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 | 4x 3.5" SAS/SATA<br>4x 3.5" NVMe | 12x 2.5" SAS/SATA<br>12x 2.5" NVMe | 12x 2.5" NVMe | 12x 2.5" SAS/SATA<br>12x 2.5" NVMe<br>4x 3.5" SAS/SATA |
| Drive configurations | All Flash<br>Hybrid | All Flash<br>Hybrid | All Flash | All Flash<br>Hybrid |
| Disk Groups | 1 | 1 - 4 | 1 - 4 | 1 - 4 |
| HBA | 430-8i HBA | 440-16i HBA Int<br>430-16i HBA | No support* | 440-16i HBA Int<br>430-8i HBA<br>430-16i HBA |
| Boot drives | 2x M.2 SATA<br>2x 7mm SATA or NVMe | 2x M.2 SATA<br>2x 7mm SATA or NVMe | 2x M.2 SATA | 2x M.2 SATA<br>2x 7mm SATA or NVMe |
| OCP networking | 1x OCP 3.0 adapter 10Gb, 25Gb | 1x OCP 3.0 adapter 10Gb, 25Gb | 1x OCP 3.0 adapter 10Gb, 25Gb | 1x OCP 3.0 adapter 10Gb, 25Gb |
| PCIe networking | Up to 2x adapters 10GBASE-T, 10G, 25G, 100G | Up to 2x adapters 10GBASE-T, 10G, 25G, 100G | Up to 3x adapters 10GBASE-T, 10G, 25G, 100G | Up to 3x adapters 10GBASE-T, 10G, 25G, 100G |
| GPUs | No support | No support | No support | 3x SW GPU 75W each |
| Hypervisor | ESXi 7.0 U2 | ESXi 7.0 U2 | ESXi 7.0 U2 | ESXi 7.0 U2 |

* Onboard NVMe ports are used instead of a SAS HBA

The following table lists the standard specifications.

Table 2. Standard specifications

| Components | Specification |
|---|---|
| Machine types | 7Z62 - 3 year warranty |
| Form factor | 1U rack. |
| Processor | One or two third-generation Intel Xeon Scalable processor (formerly codenamed "Ice Lake"). Supports processors up to 40 cores, core speeds of up to 3.6 GHz, and TDP ratings of up to 270W. |
| Chipset | Intel C621A "Lewisburg" chipset, part of the platform codenamed "Whitley" |
| 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. DIMM slots are shared between standard system memory and persistent memory. DIMMs operate at up to 3200 MHz at 2 DPC. |
| Persistent memory | Supports up to 16x Intel Optane Persistent Memory 200 Series modules (8 per processor) installed in the DIMM slots. Persistent memory (Pmem) is installed in combination with system memory DIMMs. |
| Memory maximum | With RDIMMs: Up to 4TB by using 32x 128GB 3DS RDIMMs<br>With Persistent Memory: Up to 6TB by using 16x 128GB 3DS RDIMMs and 16x 256GB Pmem modules |
| Memory protection | ECC, SDDC (for x4-based memory DIMMs), ADDDC (for x4-based memory DIMMs, requires Platinum or Gold processors), and memory mirroring. |
| Drive bays | • VX2330 Appliance<br>  ◦ Front drive bays: 4x 3.5-inch SAS/SATA or AnyBay<br>  ◦ Rear data drives: Not supported<br>  ◦ Rear boot drives: 2x 7mm SAS/SATA or NVMe<br>• VX3330 Appliance<br>  ◦ Front drive bays: Up to 10x 2.5-inch SAS/SATA or NVMe or AnyBay<br>  ◦ Rear data drive bays: 2x 2.5-inch SAS/SATA or NVMe<br>  ◦ Rear boot drives: 2x 7mm SAS/SATA or NVMe<br>• VX7330-N Appliance<br>  ◦ Front drive bays: 10x 2.5-inch NVMe<br>  ◦ Rear data drive bays: 2x 2.5-inch NVMe<br>  ◦ Rear boot drives: None<br>• VX3331 Certified Node<br>  ◦ Front drive bays: Up to 10x 2.5-inch SAS/SATA or NVMe or AnyBay<br>  ◦ Rear data drive bays: 2x 2.5-inch SAS/SATA or NVMe<br>  ◦ Rear boot drives: 2x 7mm SAS/SATA or NVMe<br>• Internal M.2 module supporting up to two M.2 drives, for OS boot and drive storage support<br>**Note**: EDSFF drive bays are currently not supported. |
| Storage controller | • Up to 12x Onboard NVMe ports (includes Intel VROC NVMe RAID, with optional license for non-Intel NVMe SSDs)<br>• NVMe Retimer Adapter (supports Intel VROC NVMe RAID)<br>• 12 Gb SAS/SATA non-RAID: 430-8i and 430-16i HBAs |

| Components | Specification |
|---|---|
| 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.<br><br>Three choices for rear-access slots:<br><br>• 3x PCIe 4.0 x16 low-profile slots<br>• 1x PCIe 4.0 x16 full-height half-length slot + 1x PCIe 4.0 x16 low-profile slot<br>• 1x PCIe 4.0 x16 low-profile slot (also supports 2x rear 2.5-inch drive bays)<br><br>For 2.5-inch front drive configurations, the server supports the installation of a RAID adapter or HBA in a dedicated area that does not consume any of the PCIe slots. |
| GPU support | Supports up to 3x single-wide GPUs |
| 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.<br><br>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).<br><br>Internal: 1x USB 3.1 G1 connector for operating system or 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. |
| Software | Software licenses that can be purchased from Lenovo or provided by the customer:<br><br>• VMware vSAN: Standard, Advanced, Enterprise, Enterprise Plus, ROBO or Desktop<br>• VMware vSphere: Standard, Enterprise Plus or ROBO<br>• HCI Kit: Essentials, Standard, Advanced, Enterprise or ROBO<br>• VMware Horizon: Standard, Advanced or Enterprise<br>• VMware Cloud Foundation (VCF): Basic, Standard, Advanced, Enterprise or for VDI<br>• VMware vCenter Server: Foundation or Standard |
| Hypervisors | VMware ESXi. See Operating system support section for details. |

| Components | Specification |
|---|---|
| Limited warranty | Three-year or one-year (model dependent) 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: 26.3 kg (58 lb) |

## Models

Factory-integrated models of the ThinkAgile VX Series Appliances 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 Appliances. 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 |
|---|---|
| 7Z62CTO1WW | ThinkAgile VX2330 Appliance |
| 7Z62CTO2WW | ThinkAgile VX3330 Appliance |
| 7Z62CTO3WW | ThinkAgile VX7330-N Appliance |
| 7Z62CTO4WW | ThinkAgile VX3331 Certified Node |

## Comparison with the ThinkSystem SR630 V2

The ThinkAgile VX2330, VX3330 and VX7330-N Appliances and VX3331 Certified Node are based on the ThinkSystem SR630 V2 server, however there are key differences:

- No onboard SATA controller support
- No RAID adapter support
- No SATA HDDs
- No EDSFF drives support
- No SED drive support
- No Fibre Channel support
- No InfiniBand support
- Drives are categorized as Cache or Capacity drives and are formed as disk groups (up to 5 disk groups)

For details about the ThinkSystem SR630 V2, see the SR630 V2 product guide:
https://lenovopress.com/lp1391-thinksystem-sr630-v2-server

To verify what specific hardware components are supported with the VX2330, VX3330, VX7330-N and VX3331, see the DCSC configurator:
https://dcsc.lenovo.com

## Processors

The VX2330, VX3330, VX7330-N and VX3331 systems support the following processors. The systems support 1 or 2 processors installed.

For details about these options, including configuration rules, see the SR630 V2 product guide:
https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#processors

Table 4. Processor choices

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| 4XG7A63398 | BB2N | Intel Xeon Silver 4309Y 8C 105W 2.8GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63425 | BB3C | Intel Xeon Silver 4310 12C 120W 2.1GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63416 | BB34 | Intel Xeon Silver 4310T 10C 105W 2.3GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63411 | BB2Z | Intel Xeon Silver 4314 16C 135W 2.4GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63422 | BB39 | Intel Xeon Silver 4316 20C 150W 2.3GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63434 | BB3M | Intel Xeon Gold 5315Y 8C 140W 3.2GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63412 | BB30 | Intel Xeon Gold 5317 12C 150W 3.0GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63427 | BB3E | Intel Xeon Gold 5318N 24C 150W 2.1GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63397 | BB2M | Intel Xeon Gold 5318S 24C 165W 2.1GHz Processor | 2 | 2 | 2 | 2 |

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| 4XG7A63417 | BB35 | Intel Xeon Gold 5318Y 24C 165W 2.1GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63403 | BB2R | Intel Xeon Gold 5320 26C 185W 2.2GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63410 | BB2Y | Intel Xeon Gold 5320T 20C 150W 2.3GHz Processor | 2 | 2 | 2 | 2 |
| Not supported | BB2K | Intel Xeon Gold 6312U 24C 185W 2.4GHz Processor | 1 | 1 | 1 | 1 |
| Not supported | BB38 | Intel Xeon Gold 6314U 32C 205W 2.3GHz Processor | 1 | 1 | 1 | 1 |
| 4XG7A63401 | BB4E | Intel Xeon Gold 6326 16C 185W 2.9GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63430 | BB3H | Intel Xeon Gold 6330 28C 205W 2.0GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63435 | BB3N | Intel Xeon Gold 6330N 28C 165W 2.2GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63426 | BB3D | Intel Xeon Gold 6334 8C 165W 3.6GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63439 | BB3S | Intel Xeon Gold 6336Y 24C 185W 2.4GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63436 | BB3P | Intel Xeon Gold 6338 32C 205W 2.0GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63413 | BB31 | Intel Xeon Gold 6338N 32C 185W 2.2GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63415 | BB33 | Intel Xeon Gold 6338T 24C 165W 2.1GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63574 | BB3B | Intel Xeon Gold 6342 24C 230W 2.8GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63408 | BB2W | Intel Xeon Gold 6346 16C 205W 3.1GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63571 | BB2L | Intel Xeon Gold 6348 28C 235W 2.6GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63406 | BB2U | Intel Xeon Gold 6354 18C 205W 3.0GHz Processor | 2 | 2 | 2 | 2 |
| CTO only | BB3J | Intel Xeon Platinum 8351N 36C 225W 2.4GHz Processor | 1 | 1 | 1 | 1 |
| 4XG7A63437 | BB3Q | Intel Xeon Platinum 8352S 32C 205W 2.2GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63404 | BB2S | Intel Xeon Platinum 8352V 36C 195W 2.1GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63407 | BB2V | Intel Xeon Platinum 8352Y 32C 205W 2.2GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63438 | BB3R | Intel Xeon Platinum 8358 32C 250W 2.6GHz Processor | 2 | 2 | 2 | 2 |

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| 4XG7A63423 | BB3A | Intel Xeon Platinum 8358P 32C 240W 2.6GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63399 | BB2P | Intel Xeon Platinum 8360Y 36C 250W 2.4GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63419 | BB37 | Intel Xeon Platinum 8368 38C 270W 2.4GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63572 | BB3G | Intel Xeon Platinum 8380 40C 270W 2.3GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63653 | BKDC | Intel Xeon Platinum 8362 32C 265W 2.8GHz Processor | 2 | 2 | 2 | 2 |
| 4XG7A63654 | BKDB | Intel Xeon Platinum 8352M 32C 185W 2.3GHz Processor | 2 | 2 | 2 | 2 |

## Memory

The VX2330, VX3330, VX7330-N and VX3331 systems support the following memory options.

For details about these options, including configuration rules, see the SR630 V2 product guide: https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#memory-options

Table 5. Memory options

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| **RDIMMs** | | | | | | |
| 4X77A08632 | B963 | ThinkSystem 16GB TruDDR4 3200 MHz (2Rx8 1.2V) RDIMM | 32 | 32 | 32 | 32 |
| 4X77A08633 | B964 | ThinkSystem 32GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM | 32 | 32 | 32 | 32 |
| 4X77A08634 | B965 | ThinkSystem 32GB TruDDR4 3200 MHz (2Rx8 1.2V) RDIMM | 32 | 32 | 32 | 32 |
| 4X77A08635 | B966 | ThinkSystem 64GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM | 32 | 32 | 32 | 32 |
| **3DS RDIMMs** | | | | | | |
| 4X77A08636 | BA62 | ThinkSystem 128GB TruDDR4 3200 MHz (4Rx4 1.2V) 3DS RDIMM | 32 | 32 | 32 | 32 |

## Persistent Memory

The VX2330, VX3330, VX7330-N and VX3331 systems support the following persistent memory options.

For details about these options, including configuration rules, see the SR630 V2 product guide:
https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#persistent-memory

Table 6. Persistent memory options

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| 4ZC7A08732 | B98B | ThinkSystem 128GB TruDDR4 3200MHz (1.2V) Intel Optane Persistent Memory | 16 | 16 | 16 | 16 |
| 4ZC7A08734 | B98A | ThinkSystem 256GB TruDDR4 3200MHz (1.2V) Intel Optane Persistent Memory | 16 | 16 | 16 | 16 |

## Disk Groups

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

Table 7. Disk Groups

| Drive Selection Rules | VX2330 Appliance | VX3330 Appliance | VX7330-N Appliance | VX3331 Certified Node |
|---|---|---|---|---|
| Model Type | Hybrid (HY)<br>All Flash (AF) | Hybrid (HY)<br>All Flash (AF) | All Flash (AF) | Hybrid (HY)<br>All Flash (AF) |
| Maximum number of drives | 4 | 12 | 12 | 12 |
| Number of Disk Groups | 1 | 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 - 3 | 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) | Not supported | 4, 6, 8 or 10 | 4, 6, 8 or 10 | 4, 6, 8 or 10 |
| 3 Disk Groups (3 Cache Drives) | Not supported | 6 or 9 | 6, 9 | 6 or 9 |
| 4 Disk Groups (4 Cache Drives) | Not supported | 8 | 8 | 8 |

## Internal storage

The VX2330, VX3330, VX7330-N and VX3331 support 4x 3.5-inch or 12x 2.5-inch drive bays, depending on the selected chassis and backplane configuration.

- Front drive bays:
  - 10x 2.5-inch SAS/SATA hot-swap bays
  - 10x 2.5-inch NVMe hot-swap bays
  - 4x 3.5-inch SAS/SATA hot-swap bays
- Rear drive bays
  - 2x 2.5-inch SAS/SATA hot-swap bays
  - 2x 2.5-inch NVMe hot-swap bays
  - 2x 7mm drives for hot-swap boot drives

The server also supports one or two M.2 drives, installed in an M.2 adapter internal to the server, for boot drives. These are an alternative to the 7mm hot-swap drives.

The choice of backplanes supported varies by system, as listed in the following table.

For details about these options, including configuration rules, see the SR630 V2 product guide: https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#internal-storage

Table 8. Drive backplanes

| Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|
| | | VX2330 | VX3330 | VX7330-N | VX3331 |
| **Front 2.5-inch drive backplanes** | | | | | |
| BB3T | ThinkSystem 1U 10x2.5" AnyBay Backplane | No | 1 | No | 1 |
| BCQQ | ThinkSystem 1U 2.5" 10 NVMe Backplane | No | 1 | 1 | 1 |
| B8MX | ThinkSystem 1U 2.5" 6 SAS/SATA 4 AnyBay Backplane | No | 1 | No | 1 |
| BCQN | ThinkSystem 1U 2.5" 6 SAS/SATA 4 NVMe Backplane | No | 1 | No | 1 |
| BCQP | ThinkSystem 1U 2.5" 6 SAS/SATA 2 AnyBay 2 NVMe Backplane | No | 1 | No | 1 |
| B8N0 | ThinkSystem 1U 8x2.5" SAS/SATA Backplane | No | 1 | No | 1 |
| BCGB | ThinkSystem 1U 4x2.5" SAS/SATA Backplane | No | 1 | 1 | 1 |
| **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 |
| **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 | 1 | 1 | 1 |
| **Rear - 7mm drive backplanes** | | | | | |
| BA1R | ThinkSystem 1U 7mm Drive Kit w/ SATA RAID | 1 | 1 | No | 1 |
| B8Q2 | ThinkSystem 1U 7mm Drive Kit w/ NVMe RAID | 1 | 1 | No | 1 |

## Controllers for internal storage

The VX2330, VX3330, VX7330-N and VX3331 support the following storage controller options.

For details about these options, including configuration rules, see the SR630 V2 product guide:
https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#controllers-for-internal-storage

Table 9. Controllers for internal storage

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| **SAS/SATA HBA - PCIe 3.0** | | | | | | |
| 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 |
| **SAS/SATA HBA - PCIe 4.0** | | | | | | |
| 4Y37A78601 | BM51 | ThinkSystem 440-8i SAS/SATA PCIe Gen4 12Gb HBA | 1 | 1 | No | 1 |
| 4Y37A78602 | BM50 | ThinkSystem 440-16i 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 |

## Internal drive options

This section lists the supported drives:



### Boot drives

The VX2330, VX3330, VX7330-N and VX3331 systems support the following drive for boot functions.

Table 10. Boot drives

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330N | VX3331 |
| **7mm 2.5-inch hot-swap 6 Gb SATA SSDs** | | | | | | |
| 4XB7A38181 | B8JQ | ThinkSystem 7mm 5300 240GB Entry SATA 6Gb SSD | 2 | 2 | No | 2 |
| 4XB7A38182 | B8JT | ThinkSystem 7mm 5300 480GB Entry SATA 6Gb SSD | 2 | 2 | No | 2 |
| 4XB7A38183 | B8JS | ThinkSystem 7mm 5300 960GB Entry SATA 6Gb SSD | 2 | 2 | No | 2 |
| 4XB7A38152 | B96Q | ThinkSystem 7mm Intel S4510 240GB Entry SATA 6Gb Hot Swap SSD | 2 | 2 | No | 2 |
| 4XB7A38153 | B96S | ThinkSystem 7mm Intel S4510 480GB Entry SATA 6Gb Hot Swap SSD | 2 | 2 | No | 2 |
| 4XB7A38154 | B96R | ThinkSystem 7mm Intel S4510 960GB Entry SATA 6Gb Hot Swap SSD | 2 | 2 | No | 2 |
| **7mm 2.5-inch hot-swap PCIe 3.0 NVMe SSDs** | | | | | | |
| 4XB7A38216 | BB63 | ThinkSystem 7mm PM983 960GB Entry NVMe PCIe 3.0 x4 Hot Swap SSD | 2 | 2 | No | 2 |
| **7mm 2.5-inch hot-swap PCIe 4.0 NVMe SSDs** | | | | | | |
| 4XB7A82853 | BPZ4 | ThinkSystem 7mm U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD | 2 | 2 | 2 | 2 |
| 4XB7A82855 | BPZ5 | ThinkSystem 7mm U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | 2 | 2 | 2 | 2 |
| 4XB7A82856 | BPZ6 | ThinkSystem 7mm U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | 2 | 2 | 2 | 2 |
| **M.2 SATA drives** | | | | | | |
| 4XB7A17071 | B8HS | ThinkSystem M.2 5300 240GB SATA 6Gbps Non-Hot Swap SSD | 2 | 2 | 2 | 2 |
| 4XB7A17073 | B919 | ThinkSystem M.2 5300 480GB SATA 6Gbps Non-Hot Swap SSD | 2 | 2 | 2 | 2 |
| 4XB7A17074 | B8JJ | ThinkSystem M.2 5300 960GB SATA 6Gbps Non-Hot Swap SSD | 2 | 2 | 2 | 2 |

## Internal drives for VX2330

The following table lists the drives supported in the VX2330. For both All Flash Storage and Hybrid Storage configurations, drives are classified as either Cache drives, Capacity drives, or both.

Table 11. Drives supported in the VX2330

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| **3.5-inch hot-swap 12 Gb SAS HDDs** | | | | | | |
| 7XB7A00042 | AUU5 | ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 4 |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 7XB7A00043 | AUU6 | ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 4 |
| 7XB7A00044 | AUU7 | ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 7XB7A00045 | B0YR | ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 7XB7A00067 | B117 | ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 4XB7A13906 | B496 | ThinkSystem 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 4XB7A13911 | B7EZ | ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| **3.5-inch hot-swap 12 Gb SAS SSDs** | | | | | | |
| 4XB7A70011 | BG03 | ThinkSystem 3.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A70010 | BG02 | ThinkSystem 3.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A70009 | BG01 | ThinkSystem 3.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A70008 | BG00 | ThinkSystem 3.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17066 | B8HT | ThinkSystem 3.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17043 | B8JN | ThinkSystem 3.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17067 | B8JK | ThinkSystem 3.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17068 | B8JG | ThinkSystem 3.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17058 | B91E | ThinkSystem 3.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17059 | BEVK | ThinkSystem 3.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| **3.5-inch hot-swap 6 Gb SATA SSDs** | | | | | | |
| 4XB7A17137 | BA4W | ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A17138 | BA4X | ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17139 | BA4Y | ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17140 | BK7P | ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17097 | B8JF | ThinkSystem 3.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A17098 | B8J0 | ThinkSystem 3.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17099 | B8HR | ThinkSystem 3.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17100 | B8HX | ThinkSystem 3.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A13640 | B49S | ThinkSystem 3.5" S4610 480GB Mixed Use SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A13641 | B49T | ThinkSystem 3.5" S4610 960GB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A13642 | B49U | ThinkSystem 3.5" S4610 1.92TB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A13643 | B49V | ThinkSystem 3.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17119 | BA7L | ThinkSystem 3.5" S4520 480GB Read Intensive SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A17120 | BA7M | ThinkSystem 3.5" S4520 960GB Read Intensive SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17121 | BA7N | ThinkSystem 3.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17122 | BK7F | ThinkSystem 3.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17123 | BK7G | ThinkSystem 3.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17083 | B8JC | ThinkSystem 3.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD | No | 4 | 4 | No |
| 4XB7A17084 | B8HZ | ThinkSystem 3.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17085 | B8HQ | ThinkSystem 3.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17086 | B8J3 | ThinkSystem 3.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD | No | 4 | No | No |
| 4XB7A13626 | B49E | ThinkSystem 3.5" S4510 480GB Read Intensive SATA 6Gb HS SSD | No | 4 | No | No |
| 4XB7A13627 | B49F | ThinkSystem 3.5" S4510 960GB Read Intensive SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A13628 | B49G | ThinkSystem 3.5" S4510 1.92TB Read Intensive SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A13629 | B49H | ThinkSystem 3.5" S4510 3.84TB Read Intensive SATA 6Gb HS SSD | No | 4 | 4 | No |
| **3.5-inch hot-swap PCIe 4.0 NVMe SSDs** | | | | | | |
| 4XB7A17155 | BCFM | ThinkSystem 3.5" U.2 P5600 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | No | No |
| 4XB7A17156 | BCFJ | ThinkSystem 3.5" U.2 P5600 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | No | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A17157 | BCFQ | ThinkSystem 3.5" U.2 P5600 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | No | No |
| 4XB7A64176 | BE04 | ThinkSystem 3.5" Kioxia CM6-V 800GB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD | 4 | 4 | No | No |
| 4XB7A17115 | B96V | ThinkSystem 3.5" Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 4 | 4 | No | No |
| 4XB7A17116 | B96K | ThinkSystem 3.5" Kioxia CM6-V 3.2TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 4 | 4 | No | No |
| 4XB7A17117 | B96W | ThinkSystem 3.5" Kioxia CM6-V 6.4TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 4 | 4 | No | No |

### Internal drives for VX3330

The following table lists the drives supported in the VX3330. 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 VX3330

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| **2.5-inch hot-swap 12 Gb SAS HDDs** | | | | | | |
| 7XB7A00027 | AUM1 | ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD | No | No | No | 12 |
| 7XB7A00028 | AUM2 | ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD | No | No | No | 12 |
| 7XB7A00069 | B0YS | ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD | No | No | No | 12 |
| 7XB7A00023 | AULX | ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD | No | No | No | 12 |
| 7XB7A00034 | AUM6 | ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 12 |
| 7XB7A00035 | AUM7 | ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 12 |
| **2.5-inch hot-swap 12 Gb SAS SSDs** | | | | | | |
| 4XB7A70006 | BG07 | ThinkSystem 2.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A70005 | BG06 | ThinkSystem 2.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A70004 | BG05 | ThinkSystem 2.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A70003 | BG04 | ThinkSystem 2.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17062 | B8HU | ThinkSystem 2.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A17063 | B8J4 | ThinkSystem 2.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17064 | B8JD | ThinkSystem 2.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17065 | B8JA | ThinkSystem 2.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A38175 | B91A | ThinkSystem 2.5" PM1643a 960GB Entry SAS 12Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A38176 | B91B | ThinkSystem 2.5" PM1643a 1.92TB Entry SAS 12Gb Hot Swap SSD | No | 12 | 12 | No |
| 4XB7A17054 | B91C | ThinkSystem 2.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17055 | B91D | ThinkSystem 2.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17056 | BC4R | ThinkSystem 2.5" PM1643a 15.36TB Entry SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| **2.5-inch hot-swap 6 Gb SATA SSDs** | | | | | | |
| 4XB7A17125 | BA7Q | ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17126 | BA4T | ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17127 | BA4U | ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17128 | BK7L | ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17087 | B8J1 | ThinkSystem 2.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A17088 | B8HY | ThinkSystem 2.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17089 | B8J6 | ThinkSystem 2.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17090 | B8JE | ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17091 | B8J7 | ThinkSystem 2.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A13633 | B49L | ThinkSystem 2.5" S4610 240GB Mixed Use SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A13634 | B49M | ThinkSystem 2.5" S4610 480GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A13635 | B49N | ThinkSystem 2.5" S4610 960GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A13636 | B49P | ThinkSystem 2.5" S4610 1.92TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A13637 | B49Q | ThinkSystem 2.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A13638 | BB9R | ThinkSystem 2.5" S4610 7.68TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A72438 | BM8B | ThinkSystem 2.5" PM893 480GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A72439 | BM8A | ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A72440 | BM89 | ThinkSystem 2.5" PM893 1.92TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| 4XB7A72441 | BM88 | ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A72442 | BM87 | ThinkSystem 2.5" PM893 7.68TB Read Intensive SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17101 | BA7G | ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17102 | BA7H | ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17103 | BA7J | ThinkSystem 2.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17104 | BK77 | ThinkSystem 2.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17105 | BK78 | ThinkSystem 2.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17075 | B8HV | ThinkSystem 2.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A17076 | B8JM | ThinkSystem 2.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A17077 | B8HP | ThinkSystem 2.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD | No | 12 | 12 | No |
| 4XB7A17078 | B8J5 | ThinkSystem 2.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17079 | B8JP | ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17080 | B8J2 | ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A10247 | B498 | ThinkSystem 2.5" S4510 240GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A10248 | B499 | ThinkSystem 2.5" S4510 480GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A10249 | B49A | ThinkSystem 2.5" S4510 960GB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| 4XB7A13622 | B49B | ThinkSystem 2.5" S4510 1.92TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| 4XB7A13623 | B49C | ThinkSystem 2.5" S4510 3.84TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A13624 | B96X | ThinkSystem 2.5" S4510 7.68TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| **2.5-inch hot-swap PCIe 4.0 NVMe SSDs** | | | | | | |
| 4XB7A17152 | BCFV | ThinkSystem 2.5" U.2 P5600 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17153 | BCFR | ThinkSystem 2.5" U.2 P5600 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17154 | BCFS | ThinkSystem 2.5" U.2 P5600 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A64175 | BE03 | ThinkSystem U.3 Kioxia CM6-V 800GB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17112 | B96Z | ThinkSystem U.3 Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17113 | B96T | ThinkSystem U.3 Kioxia CM6-V 3.2TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17114 | B96P | ThinkSystem U.3 Kioxia CM6-V 6.4TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17145 | BCFT | ThinkSystem 2.5" U.2 P5500 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A17146 | BCFW | ThinkSystem 2.5" U.2 P5500 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A17147 | BCFU | ThinkSystem 2.5" U.2 P5500 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A38284 | BE2F | ThinkSystem U.2 PM1733 15.36TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | 12 | 12 | No | No |

### Internal drives for VX7330-N

The following table lists the drives supported in the VX7330-N. The VX7330-N is an All-NVMe configuration and does not support Hybrid Storage configurations. Drives are classified as either Cache drives, Capacity drives, or both.

Table 13. Drives supported in the VX7330-N

| Part number | Feature | Description | All Flash Storage | |
|---|---|---|---|---|
| | | | Cache | Capacity |
| **2.5-inch hot-swap PCIe 4.0 NVMe SSDs** | | | | |
| 4XB7A17158 | BKKY | ThinkSystem 2.5" U.2 P5800X 400GB Write Intensive NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A17159 | BKKZ | ThinkSystem 2.5" U.2 P5800X 800GB Write Intensive NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A17160 | BMM8 | ThinkSystem 2.5" U.2 P5800X 1.6TB Write Intensive NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A17152 | BCFV | ThinkSystem 2.5" U.2 P5600 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |

| Part number | Feature | Description | All Flash Storage | |
|---|---|---|---|---|
| | | | Cache | Capacity |
| 4XB7A17129 | BNEG | ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A17153 | BCFR | ThinkSystem 2.5" U.2 P5600 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A17130 | BNEH | ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A17154 | BCFS | ThinkSystem 2.5" U.2 P5600 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A79639 | BNF1 | ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A13967 | BNEJ | ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A13970 | BNEY | ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 |
| 4XB7A64175 | BE03 | ThinkSystem U.3 Kioxia CM6-V 800GB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD | 12 | 12 |
| 4XB7A17112 | B96Z | ThinkSystem U.3 Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 |
| 4XB7A17113 | B96T | ThinkSystem U.3 Kioxia CM6-V 3.2TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 |
| 4XB7A17114 | B96P | ThinkSystem U.3 Kioxia CM6-V 6.4TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 |
| 4XB7A17145 | BCFT | ThinkSystem 2.5" U.2 P5500 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A13941 | BMGD | ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A17146 | BCFW | ThinkSystem 2.5" U.2 P5500 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A13942 | BMGE | ThinkSystem 2.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A17147 | BCFU | ThinkSystem 2.5" U.2 P5500 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A79646 | BNF3 | ThinkSystem 2.5" U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A79647 | BNF2 | ThinkSystem 2.5" U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A79648 | BNF5 | ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 |
| 4XB7A38196 | BC4Y | ThinkSystem U.2 PM1733 1.92TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | No | 12 |
| 4XB7A38197 | BC4Z | ThinkSystem U.2 PM1733 3.84TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | No | 12 |
| 4XB7A38283 | BE2E | ThinkSystem U.2 PM1733 7.68TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | No | 12 |

| Part number | Feature | Description | All Flash Storage | |
|---|---|---|---|---|
| | | | Cache | Capacity |
| 4XB7A38284 | BE2F | ThinkSystem U.2 PM1733 15.36TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | 12 | 12 |

### Internal drives for VX3331

The following table lists the drives supported in the VX3331. For both All Flash Storage and Hybrid Storage configurations, drives are classified as either Cache drives, Capacity drives, or both.

Table 14. Drives supported in the VX3331

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| **2.5-inch hot-swap 12 Gb SAS HDDs** | | | | | | |
| 7XB7A00027 | AUM1 | ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD | No | No | No | 12 |
| 7XB7A00028 | AUM2 | ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD | No | No | No | 12 |
| 7XB7A00069 | B0YS | ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD | No | No | No | 12 |
| 7XB7A00023 | AULX | ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD | No | No | No | 12 |
| 7XB7A00034 | AUM6 | ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 12 |
| 7XB7A00035 | AUM7 | ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 12 |
| **2.5-inch hot-swap 12 Gb SAS SSDs** | | | | | | |
| 4XB7A70006 | BG07 | ThinkSystem 2.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A70005 | BG06 | ThinkSystem 2.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A70004 | BG05 | ThinkSystem 2.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A70003 | BG04 | ThinkSystem 2.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17062 | B8HU | ThinkSystem 2.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17063 | B8J4 | ThinkSystem 2.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17064 | B8JD | ThinkSystem 2.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17065 | B8JA | ThinkSystem 2.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A38175 | B91A | ThinkSystem 2.5" PM1643a 960GB Entry SAS 12Gb Hot Swap SSD | No | 12 | No | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A38176 | B91B | ThinkSystem 2.5" PM1643a 1.92TB Entry SAS 12Gb Hot Swap SSD | No | 12 | 12 | No |
| 4XB7A17054 | B91C | ThinkSystem 2.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17055 | B91D | ThinkSystem 2.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17056 | BC4R | ThinkSystem 2.5" PM1643a 15.36TB Entry SAS 12Gb Hot Swap SSD | 12 | 12 | 12 | No |
| **2.5-inch hot-swap 6 Gb SATA SSDs** | | | | | | |
| 4XB7A17125 | BA7Q | ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17126 | BA4T | ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17127 | BA4U | ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17128 | BK7L | ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17087 | B8J1 | ThinkSystem 2.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A17088 | B8HY | ThinkSystem 2.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17089 | B8J6 | ThinkSystem 2.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17090 | B8JE | ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17091 | B8J7 | ThinkSystem 2.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A13633 | B49L | ThinkSystem 2.5" S4610 240GB Mixed Use SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A13634 | B49M | ThinkSystem 2.5" S4610 480GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A13635 | B49N | ThinkSystem 2.5" S4610 960GB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A13636 | B49P | ThinkSystem 2.5" S4610 1.92TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A13637 | B49Q | ThinkSystem 2.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A13638 | BB9R | ThinkSystem 2.5" S4610 7.68TB Mixed Use SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A72438 | BM8B | ThinkSystem 2.5" PM893 480GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A72439 | BM8A | ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A72440 | BM89 | ThinkSystem 2.5" PM893 1.92TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A72441 | BM88 | ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A72442 | BM87 | ThinkSystem 2.5" PM893 7.68TB Read Intensive SATA 6Gb HS SSD | 12 | 12 | 12 | No |
| 4XB7A17101 | BA7G | ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17102 | BA7H | ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17103 | BA7J | ThinkSystem 2.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17104 | BK77 | ThinkSystem 2.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17105 | BK78 | ThinkSystem 2.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A17075 | B8HV | ThinkSystem 2.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A17076 | B8JM | ThinkSystem 2.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A17077 | B8HP | ThinkSystem 2.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD | No | 12 | 12 | No |
| 4XB7A17078 | B8J5 | ThinkSystem 2.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17079 | B8JP | ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD | 12 | 12 | 12 | No |
| 4XB7A17080 | B8J2 | ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD | No | 12 | No | No |
| 4XB7A10247 | B498 | ThinkSystem 2.5" S4510 240GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A10248 | B499 | ThinkSystem 2.5" S4510 480GB Read Intensive SATA 6Gb HS SSD | No | 12 | No | No |
| 4XB7A10249 | B49A | ThinkSystem 2.5" S4510 960GB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| 4XB7A13622 | B49B | ThinkSystem 2.5" S4510 1.92TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| 4XB7A13623 | B49C | ThinkSystem 2.5" S4510 3.84TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| 4XB7A13624 | B96X | ThinkSystem 2.5" S4510 7.68TB Read Intensive SATA 6Gb HS SSD | No | 12 | 12 | No |
| **2.5-inch hot-swap PCIe 4.0 NVMe SSDs** | | | | | | |
| 4XB7A17158 | BKKY | ThinkSystem 2.5" U.2 P5800X 400GB Write Intensive NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17159 | BKKZ | ThinkSystem 2.5" U.2 P5800X 800GB Write Intensive NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17160 | BMM8 | ThinkSystem 2.5" U.2 P5800X 1.6TB Write Intensive NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A17152 | BCFV | ThinkSystem 2.5" U.2 P5600 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17129 | BNEG | ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17153 | BCFR | ThinkSystem 2.5" U.2 P5600 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17130 | BNEH | ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A17154 | BCFS | ThinkSystem 2.5" U.2 P5600 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A79639 | BNF1 | ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A13967 | BNEJ | ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A13970 | BNEY | ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 12 | 12 | No | No |
| 4XB7A64175 | BE03 | ThinkSystem U.3 Kioxia CM6-V 800GB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17112 | B96Z | ThinkSystem U.3 Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17113 | B96T | ThinkSystem U.3 Kioxia CM6-V 3.2TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17114 | B96P | ThinkSystem U.3 Kioxia CM6-V 6.4TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| 4XB7A17145 | BCFT | ThinkSystem 2.5" U.2 P5500 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A13941 | BMGD | ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A17146 | BCFW | ThinkSystem 2.5" U.2 P5500 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A13942 | BMGE | ThinkSystem 2.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A17147 | BCFU | ThinkSystem 2.5" U.2 P5500 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A79646 | BNF3 | ThinkSystem 2.5" U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A79647 | BNF2 | ThinkSystem 2.5" U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A79648 | BNF5 | ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 12 | No | No |
| 4XB7A38196 | BC4Y | ThinkSystem U.2 PM1733 1.92TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | No | 12 | No | No |
| 4XB7A38197 | BC4Z | ThinkSystem U.2 PM1733 3.84TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | No | 12 | No | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A38283 | BE2E | ThinkSystem U.2 PM1733 7.68TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | No | 12 | No | No |
| 4XB7A38284 | BE2F | ThinkSystem U.2 PM1733 15.36TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD | 12 | 12 | No | No |
| **3.5-inch hot-swap 12 Gb SAS HDDs** | | | | | | |
| 7XB7A00042 | AUU5 | ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 4 |
| 7XB7A00043 | AUU6 | ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD | No | No | No | 4 |
| 7XB7A00044 | AUU7 | ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 7XB7A00045 | B0YR | ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 7XB7A00046 | AUUG | ThinkSystem 3.5" 10TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 7XB7A00067 | B117 | ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 4XB7A13906 | B496 | ThinkSystem 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| 4XB7A13911 | B7EZ | ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD | No | No | No | 4 |
| **3.5-inch hot-swap 12 Gb SAS SSDs** | | | | | | |
| 4XB7A70011 | BG03 | ThinkSystem 3.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A70010 | BG02 | ThinkSystem 3.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A70009 | BG01 | ThinkSystem 3.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A70008 | BG00 | ThinkSystem 3.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17066 | B8HT | ThinkSystem 3.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17043 | B8JN | ThinkSystem 3.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17067 | B8JK | ThinkSystem 3.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17068 | B8JG | ThinkSystem 3.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17058 | B91E | ThinkSystem 3.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17059 | BEVK | ThinkSystem 3.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD | 4 | 4 | 4 | No |
| **3.5-inch hot-swap 6 Gb SATA SSDs** | | | | | | |
| 4XB7A17096 | B8JL | ThinkSystem 3.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD | No | 4 | No | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A17097 | B8JF | ThinkSystem 3.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17098 | B8J0 | ThinkSystem 3.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17099 | B8HR | ThinkSystem 3.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17100 | B8HX | ThinkSystem 3.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A13640 | B49S | ThinkSystem 3.5" S4610 480GB Mixed Use SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A13641 | B49T | ThinkSystem 3.5" S4610 960GB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A13642 | B49U | ThinkSystem 3.5" S4610 1.92TB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A13643 | B49V | ThinkSystem 3.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD | 4 | 4 | 4 | No |
| 4XB7A17081 | B8JB | ThinkSystem 3.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD | No | 4 | No | No |
| 4XB7A17082 | B8J9 | ThinkSystem 3.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD | No | 4 | No | No |
| 4XB7A17083 | B8JC | ThinkSystem 3.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD | No | 4 | 4 | No |
| 4XB7A17084 | B8HZ | ThinkSystem 3.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17085 | B8HQ | ThinkSystem 3.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD | 4 | 4 | 4 | No |
| 4XB7A17086 | B8J3 | ThinkSystem 3.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD | No | 4 | No | No |
| 4XB7A13626 | B49E | ThinkSystem 3.5" S4510 480GB Read Intensive SATA 6Gb HS SSD | No | 4 | No | No |
| 4XB7A13627 | B49F | ThinkSystem 3.5" S4510 960GB Read Intensive SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A13628 | B49G | ThinkSystem 3.5" S4510 1.92TB Read Intensive SATA 6Gb HS SSD | No | 4 | 4 | No |
| 4XB7A13629 | B49H | ThinkSystem 3.5" S4510 3.84TB Read Intensive SATA 6Gb HS SSD | No | 4 | 4 | No |
| **3.5-inch hot-swap PCIe 4.0 NVMe SSDs** | | | | | | |
| 4XB7A17155 | BCFM | ThinkSystem 3.5" U.2 P5600 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | 4 | No |
| 4XB7A17156 | BCFJ | ThinkSystem 3.5" U.2 P5600 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | 4 | No |
| 4XB7A17157 | BCFQ | ThinkSystem 3.5" U.2 P5600 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | 4 | No |
| 4XB7A64176 | BE04 | ThinkSystem 3.5" Kioxia CM6-V 800GB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD | 4 | 4 | No | No |

| Part number | Feature | Description | All Flash Storage | | Hybrid Storage | |
|---|---|---|---|---|---|---|
| | | | Cache | Capacity | Cache | Capacity |
| 4XB7A17115 | B96V | ThinkSystem 3.5" Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 4 | 4 | No | No |
| 4XB7A17116 | B96K | ThinkSystem 3.5" Kioxia CM6-V 3.2TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 4 | 4 | No | No |
| 4XB7A17117 | B96W | ThinkSystem 3.5" Kioxia CM6-V 6.4TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD | 4 | 4 | No | No |
| 4XB7A13632 | BNES | ThinkSystem 3.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 4 | No | No |
| 4XB7A76777 | BNET | ThinkSystem 3.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD | No | 4 | No | No |
| 4XB7A17141 | BNEK | ThinkSystem 3.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | No | No |
| 4XB7A17143 | BNEM | ThinkSystem 3.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD | 4 | 4 | No | No |

## Network adapters

The VX2330, VX3330, VX7330-N and VX3331 systems support the following networking options.

For details about these options, including configuration rules, see the SR630 V2 product guide:
https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#i-o-expansion
https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#network-adapters

Table 15. OCP network adapters

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| **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 |
| **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 GbE** | | | | | | |
| 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 |
| 4XC7A08310 | BB8U | ThinkSystem Marvell QL41132 10GBASE-T 2-port OCP Ethernet Adapter | 1 | 1 | 1 | 1 |
| **25 GbE** | | | | | | |
| 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 |
| 4XC7A08264 | B5SW | ThinkSystem Marvell QL41232 10/25GbE SFP28 2-Port OCP Ethernet Adapter | 1 | 1 | 1 | 1 |
| 4XC7A08246 | B5T2 | ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port OCP Ethernet Adapter | 1 | 1 | 1 | 1 |
| 4XC7A62582 | BE4T | ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port OCP Ethernet Adapter | 1 | 1 | 1 | 1 |

Table 16. PCIe network adapters

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| **Gigabit Ethernet** | | | | | | |
| 7ZT7A00484 | AUZV | ThinkSystem Broadcom 5719 1GbE RJ45 4-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 7ZT7A00482 | AUZX | ThinkSystem Broadcom 5720 1GbE RJ45 2-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| 7ZT7A00533 | AUZZ | ThinkSystem I350-F1 PCIe 1Gb 1-Port SFP Ethernet Adapter | 3 | 3 | 3 | 3 |
| 7ZT7A00534 | AUZY | ThinkSystem I350-T2 PCIe 1Gb 2-Port RJ45 Ethernet Adapter | 3 | 3 | 3 | 3 |
| 7ZT7A00535 | AUZW | ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter | 3 | 3 | 3 | 3 |
| **10GBASE-T Ethernet** | | | | | | |
| 00MM860 | ATPX | Intel X550-T2 Dual Port 10GBase-T Adapter | 3 | 3 | 3 | 3 |
| 7ZT7A00496 | AUKP | ThinkSystem Broadcom 57416 10GBASE-T 2-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A08245 | B5SU | ThinkSystem Broadcom 57454 10GBASE-T 4-port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A08225 | B31G | ThinkSystem QLogic QL41134 PCIe 10Gb 4-Port Base-T Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A79699 | BMXB | ThinkSystem Intel X710-T4L 10GBase-T 4-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| **10 Gb Ethernet SFP+** | | | | | | |
| 7ZT7A00537 | AUKX | ThinkSystem Intel X710-DA2 PCIe 10Gb 2-Port SFP+ Ethernet Adapter | 3 | 3 | 3 | 3 |
| **25 Gb Ethernet** | | | | | | |
| 4XC7A08238 | B5T0 | ThinkSystem Broadcom 57414 10/25GbE SFP28 2-port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A08316 | BD49 | ThinkSystem Broadcom 57454 10/25GbE SFP28 4-port PCIe Ethernet Adapter V2 | 3 | 3 | 3 | 3 |
| 4XC7A08295 | BCD6 | ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A08270 | B652 | ThinkSystem Marvell QL41232 10/25GbE SFP28 2-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A08249 | B653 | ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A62580 | BE4U | ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A62581 | BHE2 | ThinkSystem Solarflare X2522-Plus 10/25GbE SFP28 2-Port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| **100 Gb Ethernet** | | | | | | |
| 4XC7A08297 | B96F | ThinkSystem Broadcom 57508 100GbE QSFP56 2-port PCIe 4 Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4XC7A08248 | B8PP | ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter | 3 | 3 | 3 | 3 |
| 4C57A14177 | B4R9 | ThinkSystem Mellanox ConnectX-6 HDR100/100GbE QSFP56 1-port PCIe VPI Adapter | 3 | 3 | 3 | 3 |

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| 4C57A14178 | B4RA | ThinkSystem Mellanox ConnectX-6 HDR100/100GbE QSFP56 2-port PCIe VPI Adapter | 3 | 3 | 3 | 3 |
| **200 Gb Ethernet** | | | | | | |
| 4C57A15326 | B4RC | ThinkSystem Mellanox ConnectX-6 HDR/200GbE QSFP56 1-port PCIe 4 VPI Adapter | 3 | 3 | 3 | 3 |
| 4C57A14179 | B4RB | ThinkSystem Mellanox HDR/200GbE 2x PCIe Aux Kit | 1 | 1 | 1 | 1 |

## GPU adapters

The VX2330, VX3330, VX7330-N and VX3331 systems support the following GPU options.

For details about these options, including configuration rules, see the SR630 V2 product guide:
https://lenovopress.com/lp1391-thinksystem-sr630-v2-server#gpu-adapters

Table 17. GPU adapters

| Part number | Feature | Description | Maximum supported | | | |
|---|---|---|---|---|---|---|
| | | | VX2330 | VX3330 | VX7330-N | VX3331 |
| 4X67A81547 | BP05 | ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU | 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 |

## Operating system support

The ThinkAgile VX2330 Appliance supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3

The ThinkAgile VX3330 Appliance supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3

The ThinkAgile VX7330-N Appliance supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3

The ThinkAgile VX3331 Certified Node supports the following operating systems:

- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3

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

## Software

VMware vSAN, vSphere, and vCenter Server software are required for ThinkAgile VX Series Appliances (Integrated Systems) and Certified Nodes. For Appliances/Integrated Systems, you are required to purchase VMware vSAN licenses for VX Series from Lenovo. For Certified Nodes, you can purchase the vSAN licenses from Lenovo or from VMware, or you can use your existing licenses. For vSphere and vCenter Server, you can use the existing VMware software licenses and active support contracts, or you can purchase software licenses and support from Lenovo or VMware.

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

- VMware vSAN License and Subscription
- VMware vSphere License and Subscription
- VMware HCI Kit License and Subscription
- VMware Horizon License and Subscription
- VMware Cloud Foundation License and Subscription
- VMware vCenter Server License and Subscription

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

**Configuration notes:**

- The selection of vSAN licenses is required: Standalone licenses, HCI bundle licenses, VDI solution licenses, or VCF licenses.
- VMware software licenses that are available for selection include 1-year, 3-year, or 5-year software support (matches the duration of the selected solution-level warranty period).
- The quantity of processor-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.
- The quantity of CCU-based licenses is specified based on the concurrent user requirements.

## Warranty and Support

The VX2330, VX3330, VX7330-N and VX3331 have a 3-year warranty based on the machine type:

- 7Z62 - 3 year warranty

The ThinkAgile VX Series Appliances can be configured with a three- or five-year hardware warranty with 24x7 ThinkAgile Advantage 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.

The standard warranty terms are customer-replaceable unit (CRU) and onsite (for field-replaceable units FRUs only) with standard call center support during normal business hours and 9x5 Next Business Day Parts Delivered.

Lenovo's additional support services provide a sophisticated, unified support structure for your data center, with an experience consistently ranked number one in customer satisfaction worldwide. Available offerings include:

- **Warranty Upgrade (Preconfigured Support)**

  Services are available to meet the on-site response time targets that match the criticality of your systems.

  - 3, 4, or 5 years of service coverage
  - 1-year or 2-year post-warranty extensions
  - **Foundation Service**: 9x5 service coverage with next business day onsite response. YourDrive YourData is an optional extra (see below).
  - **Essential Service:** 24x7 service coverage with 4-hour onsite response or 24-hour committed repair (available only in select markets). Bundled with YourDrive YourData.
  - **Advanced Service:** 24x7 service coverage with 2-hour onsite response or 6-hour committed repair (available only in select markets). Bundled with YourDrive YourData.

- **Managed Services**

  Lenovo Managed Services provides continuous 24x7 remote monitoring (plus 24x7 call center availability) and proactive management of your data center using state-of-the-art tools, systems, and practices by a team of highly skilled and experienced Lenovo services professionals.

  Quarterly reviews check error logs, verify firmware & OS device driver levels, and software as needed. We'll also maintain records of latest patches, critical updates, and firmware levels, to ensure you systems are providing business value through optimized performance.

- **Technical Account Management (TAM)**

  A Lenovo Technical Account Manager helps you optimize the operation of your data center based on a deep understanding of your business. You gain direct access to your Lenovo TAM, who serves as your single point of contact to expedite service requests, provide status updates, and furnish reports to track incidents over time. In addition, your TAM will help proactively make service recommendations and manage your service relationship with Lenovo to make certain your needs are met.

- **Enterprise Server Software Support**

  Enterprise Software Support is an additional support service providing customers with software support on Microsoft, Red Hat, SUSE, and VMware applications and systems. Around the clock availability for critical problems plus unlimited calls and incidents helps customers address challenges fast, without incremental costs. Support staff can answer troubleshooting and diagnostic questions, address product comparability and interoperability issues, isolate causes of problems, report defects to software vendors, and more.

- **YourDrive YourData**

  Lenovo's YourDrive YourData is a multi-drive retention offering that ensures your data is always under your control, regardless of the number of drives that are installed in your Lenovo server. In the unlikely event of a drive failure, you retain possession of your drive while Lenovo replaces the failed drive part. Your data stays safely on your premises, in your hands. The YourDrive YourData service can be purchased in convenient bundles and is optional with Foundation Service. It is bundled with Essential Service and Advanced Service.

- **Health Check**

  Having a trusted partner who can perform regular and detailed health checks is central to maintaining efficiency and ensuring that your systems and business are always running at their best. Health Check supports Lenovo-branded server, storage, and networking devices, as well as select Lenovo-supported products from other vendors that are sold by Lenovo or a Lenovo-Authorized Reseller.

Examples of region-specific warranty terms are second or longer business day parts delivery or parts-only base warranty.

If warranty terms and conditions include onsite labor for repair or replacement of parts, Lenovo will dispatch a service technician to the customer site to perform the replacement. Onsite labor under base warranty is limited to labor for replacement of parts that have been determined to be field-replaceable units (FRUs). Parts that are determined to be customer-replaceable units (CRUs) do not include onsite labor under base warranty.

If warranty terms include parts-only base warranty, Lenovo is responsible for delivering only replacement parts that are under base warranty (including FRUs) that will be sent to a requested location for self-service. Parts-only service does not include a service technician being dispatched onsite. Parts must be changed at customer's own cost and labor and defective parts must be returned following the instructions supplied with the spare parts.

Lenovo Service offerings are region-specific. Not all preconfigured support and upgrade options are available in every region. For information about Lenovo service upgrade offerings that are available in your region, refer to the following resources:

- Service part numbers in Lenovo Data Center Solution Configurator (DCSC):
  http://dcsc.lenovo.com/#/services
- Lenovo Services Availability Locator
  http://lenovolocator.com/

For service definitions, region-specific details, and service limitations, please refer to the following documents:

- Lenovo Statement of Limited Warranty for Infrastructure Solutions Group (ISG) Servers and System Storage
  http://pcsupport.lenovo.com/us/en/solutions/ht503310
- Lenovo Data Center Services Agreement
  http://support.lenovo.com/us/en/solutions/ht116628

## Software maintenance

The ThinkAgile VX Series Integrated Systems (appliances) include one- (PRC only), three-, or five-year software support and 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. VMware will contact the customer and will own the software-related problem resolution until closure.

For the VMware vSphere, vSAN, and vCenter Server software and subscription licenses purchased from Lenovo together with the ThinkAgile VX Series Integrated Systems, 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.

## 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)

The following Lenovo deployment services are available for the ThinkAgile VX Series Integrated Systems to get customers up and running quickly:

- 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 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 18. 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/

## Regulatory compliance

The server conforms to the following standards:

- Energy Star 3.0
- FCC: Verified to comply with Part 15 of the FCC Rules, Class A
- Canada ICES-003, issue 6, Class A
- UL/IEC 62368-1
- CAN/CSA-C22.2 No. 62368-1
- NOM-019
- Argentina IEC 62368-1
- Japan VCCI, Class A
- Australia/New Zealand AS/NZS CISPR 32, Class A; AS/NZS 60950.1
- IEC 60950-1 & IEC 62368-1 (CB Certificate and CB Test Report)
- China CCC (GB4943.1), GB9254 Class A, GB17625.1
- Taiwan BSMI CNS13438, Class A; CNS14336-1; section 5 of CNS15663
- Korea KN32, Class A; KN35
- Russia, Belorussia and Kazakhstan, EAC: TP TC 004/2011 (for Safety); TP TC 020/2011 (for EMC); TP EAC 037/2016 (for RoHS)
- CE Mark (EN55032 Class A, EN60950-1, EN62368-1, EN55024, EN55035, EN61000-3-2, (EU) 2019/424, EN 50581-1 and EN61000-3-3)
- CISPR 32, Class A
- TUV-GS (EN62368-1, EK1-ITB2000, AfPS GS 01 PAK Par. 3.1)
- India BIS certification

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## 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 SR630 V2 product guide:
  https://lenovopress.com/lp1391-thinksystem-sr630-v2-server
- Interactive 3D Tour of the ThinkSystem SR630 V2:
  https://lenovopress.com/lp1423
- Lenovo Press video walk-through of the ThinkSystem SR630 V2:
  https://lenovopress.com/lp1402

## Related product families

Product families related to this document are the following:

- 2-Socket Rack Servers
- ThinkAgile VX Series for VMware vSAN

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