



# ThinkAgile MX630 V3 1U Integrated System and Certified Node (Intel Xeon SP Gen 4)

## **Product Guide**

The Lenovo ThinkAgile MX630 V3 1U Integrated System and Certified Node are 2-socket 1U systems that are designed for deploying highly available, highly scalable hyper-converged infrastructure (HCI) and software-defined storage (SDS) from Microsoft on Lenovo enterprise platforms that feature the 5th Generation Intel Xeon Scalable processors (formerly codenamed "Emerald Rapids) and 4th Generation Intel Xeon Scalable processors (formerly codenamed "Sapphire Rapids). The MX630 V3 systems delivers fully validated and integrated Lenovo hardware and firmware that is certified for Microsoft Azure Stack HCI solutions.

The MX630 V3 systems are available either as an Integrated System or Certified Node:

MX Integrated Systems deliver fully validated and integrated Lenovo hardware and firmware, certified and preloaded with licensed Microsoft Azure software. They also include ThinkAgile Premier support with one single point of contact for support of the hardware and software.

MX Certified Nodes deliver fully validated Lenovo hardware and firmware, certified and can be preloaded with Microsoft Azure software. Certified Nodes do not include licenses to Microsoft Azure software and enhanced software support.



Figure 1. Lenovo ThinkAgile MX630 V3 1U Integrated System and Certified Node with 2.5-inch drive bays

## Did you know?

The ThinkAgile MX630 V3 1U Integrated System and Certified Node are built on industry-leading Lenovo ThinkSystem servers that feature enterprise-class reliability, management, and security. They deliver fully validated and integrated hardware and firmware that is certified for Microsoft Azure Stack HCI solutions.

The MX630 V3 systems Integrated Systems offer ThinkAgile Premier Single Point of Support for quick 24/7 problem reporting and resolution.

## **Key features**

Combining performance and flexibility, the MX630 V3 systems systems are a great choice for enterprises of all sizes. The systems offer a broad selection of processors, memory and drives, and offers high performance features that industries such as finance, healthcare and telco need. Outstanding reliability, availability, and serviceability (RAS) and high-efficiency design can improve your business environment and can help save operational costs.

ThinkAgile MX Series platforms offer the choice of Azure Stack HCI Integrated System (Appliance) or Azure Stack HCI Certified Node. These validated platforms help modernize on-premises infrastructure with pre-tested, pre-configured, and easy-to-order configurations, with seamless Azure integration. As a direct and indirect Microsoft Cloud Solution Provider, Lenovo offers cloud services and subscriptions through the Lenovo Cloud Marketplace, which enable HCI use cases with the ThinkAgile MX platforms.

- The integrated systems include the Azure Stack HCI operating system, which is delivered as an Azure subscription service via the Microsoft CSP program. It also includes ThinkAgile Premier support with one single point of contact for support of the hardware and warm-case transfer for software. Deployment and Update features in Windows Admin Center and tight integration with Lenovo XClarity make cluster management, hardware and software update management & enforcing site-wide policies easy for administrators. Azure hybrid by design, native integration with Azure services makes it easy for customers to adopt a hybrid cloud strategy for their workloads and use cases.
- The certified nodes deliver fully validated and integrated Lenovo hardware and firmware that is certified for Microsoft Azure Stack HCl solutions. These HCl Certified Nodes have the option of Windows Server 2019 Datacenter Edition for HCl functionality, and guest licenses are included.

#### **Integrated System features**

The ThinkAgile MX Integrated System offers the following key features:

- Quick and convenient path to implement a hyperconverged solution powered by the new Azure Stack HCI OS with Hyper-V virtualization, Microsoft Storage Spaces Direct (S2D), Software Defined Storage (SDS), and Software Defined Networking (SDN) network virtualization.
- Streamlined management of Azure Stack HCl with unified single-pane-of-glass for creating and managing VMs, S2D volumes, and virtual networks through Windows Admin Center.
- Consistent, low latency performance with hypervisor-embedded architecture, built-in read and write cache, and support for NVMe PCIe drives.
- Provides per-VM storage performance management with policy-driven Quality of Service (QoS) and continuous built-in monitoring and alerting with cluster-wide performance and capacity metrics.
- Can sustain drive, server, or component failures with built-in resiliency for continuous availability.
- GPU support to enable AI training, inferencing and data visualization scenarios, HPC workloads, virtual desktops and graphics intensive applications.
- Built on proven and reliable Lenovo ThinkSystem servers that provide compute power and space efficiency for a variety of edge workloads and applications.
- Provides comprehensive hardware management with advanced systems management capabilities with XClarity
- Delivers fully validated and integrated hardware and firmware that is certified for Microsoft Azure Stack HCl solutions.
- Ready for out-of-box deployment with the mandatory Azure Stack HCI OS preloaded, with the
  option to purchase a Windows Server 2019 Datacenter or Windows Server 2022 Datacenter license
  if unlimited guest OS VMs are desired.
- Includes Lenovo ThinkAgile Premier Single Point of Support for quick 24/7 problem reporting and resolution.

Optional Lenovo deployment services to get customers up and running quickly.

#### **Certified Node features**

The ThinkAgile MX Certified Node offers the following key features:

- Quick and convenient path to implement a hyperconverged solution powered by Windows Server 2019 Datacenter or Windows Server 2022 Datacenter with Hyper-V virtualization, Microsoft Storage Spaces Direct (S2D), Software Defined Storage (SDS), and Software Defined Networking (SDN) network virtualization.
- Streamlined management of Azure Stack HCl with unified single-pane-of-glass for creating and managing VMs, S2D volumes, and virtual networks through Windows Admin Center.
- Consistent, low latency performance with hypervisor-embedded architecture, built-in read and write cache, and support for NVMe PCIe drives.
- Provides per-VM storage performance management with policy-driven Quality of Service (QoS) and continuous built-in monitoring and alerting with cluster-wide performance and capacity metrics.
- Can sustain drive, server, or component failures with built-in resiliency for continuous availability.
- GPU support to enable AI training, inferencing and data visualization scenarios, HPC workloads, virtual desktops and graphics intensive applications.
- Built on proven and reliable Lenovo ThinkSystem servers that provide compute power and space efficiency for a variety of edge workloads and applications.
- Provides comprehensive hardware management with advanced systems management capabilities.
- Delivers fully validated and integrated hardware and firmware that is certified for Microsoft Azure Stack HCl solutions.
- Ready for out-of-box deployment with the optional Windows Server 2019 Datacenter, Windows Server 2022 Datacenter, or Azure Stack HCI OS preload.
- Provide flexibility in using the existing Microsoft Windows Server 2019 or 2022 enterprise license
  agreements or purchasing new software licenses from Microsoft or Lenovo.
- Optional Lenovo deployment services to get customers up and running guickly.

#### **Hardware features**

The ThinkAgile MX630 V3 1U Integrated System and Certified Node systems are based on the SR630 V3 and have the following hardware features:

#### Scalability and performance

The MX630 V3 systems offer numerous features to boost performance, improve scalability and reduce costs:

- Supports one or two fifth-generation Intel Xeon Processor Scalable processors
  - Up to 64 cores and 128 threads
  - Core speeds of up to 3.9 GHz
  - TDP ratings of up to 350 W
- Supports one or two fourth-generation Intel Xeon Processor Scalable processors
  - Up to 60 cores and 120 threads
  - Core speeds of up to 3.7 GHz
  - TDP ratings of up to 350 W
- Support for DDR5 memory DIMMs to maximize the performance of the memory subsystem:
  - Up to 32 DDR5 memory DIMMs, 16 DIMMs per processor
  - 8 memory channels per processor (2 DIMMs per channel)
  - Supports 1 DIMM per channel operating at 5600 MHz (5th Gen processors) or 4800 MHz (4th

- Gen processors)
- Supports 2 DIMMs per channel operating at 4800 MHz (5th Gen processors) or 4400 MHz (4th Gen processors)
- Using 256GB 3DS RDIMMs, the server supports up to 8TB 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 4x 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 SATA drives using the onboard SATA controller (no additional adapter needed), enabling lower cost, high capacity storage solution.
- Supports 12x SAS drives using a variety of 12Gb RAID controllers and SAS 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 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 PCle 5.0 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 5.0 I/O expansion capabilities that doubles the theoretical maximum bandwidth of PCIe 4.0 (32GT/s in each direction for PCIe Gen 5, compared to 16 GT/s with PCIe Gen 4 and 8 GT/s with PCIe Gen 3). A PCIe 5.0 x16 slot provides 128 GB/s bandwidth, enough to support a dual-port 200GbE network connection.
- The server offers up to three PCle 5.0 slots, all with rear access, plus a slot dedicated to the OCP adapter.

#### Availability and serviceability

The MX630 V3 systems 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. Note: ADDDC in not supported with 9x4 RDIMMs.
- The server offers hot-swap drives, providing greater system uptime.
- Available internal 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.
- A pair of rear-accessible 7mm hot-swap boot drives can be accessed without removing the cover or powering down the server.
- The server has up to two hot-swap redundant power supplies and up to six 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, flash storage adapters), fans, power supplies, server ambient and subcomponent temperatures. Alerts can be surfaced through the XClarity Controller 2 to managers such as Lenovo XClarity Administrator and Microsoft System Center. 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 2 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 2 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 or one-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 MX630 V3 systems:

- The server includes an XClarity Controller 2 (XCC2) to monitor server availability. Optional upgrade
  to XCC Platinum to provide remote control (keyboard video mouse) functions, support for the
  mounting of remote media files (ISO and IMG image files), boot capture, power capping and new
  XCC2 Platinum features. New XCC2 Platinum features include System Guard, new security modes
  including a CNSA-compliant mode, FIPS 140-3 and NIST 800-193 support, and a new Neighbor
  Group feature.
- 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, 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 MX630 V3 systems 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.
- Carbon offset is available at click of button. You can project the carbon emissions per device for an average lifecycle (up to 5 years). That information is available here
- · 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 MX630 V3 1U Integrated System and Certified Node are based on the ThinkSystem SR630 V3 server.

The following figure shows the front of the MX630 V3 systems with 2.5-inch drives.

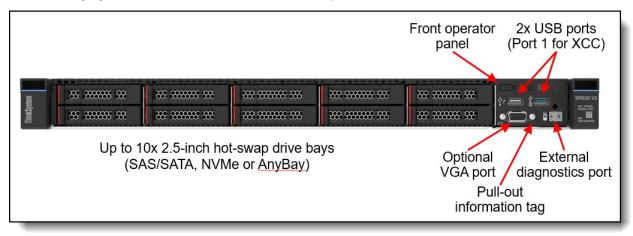


Figure 2. Front view of the MX630 V3 systems with 2.5-inch drives

The following figure shows the front of the MX630 V3 systems with 3.5-inch drives.

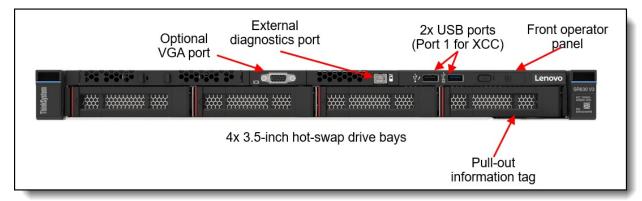


Figure 3. Front view of the MX630 V3 systems with 3.5-inch drives

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).

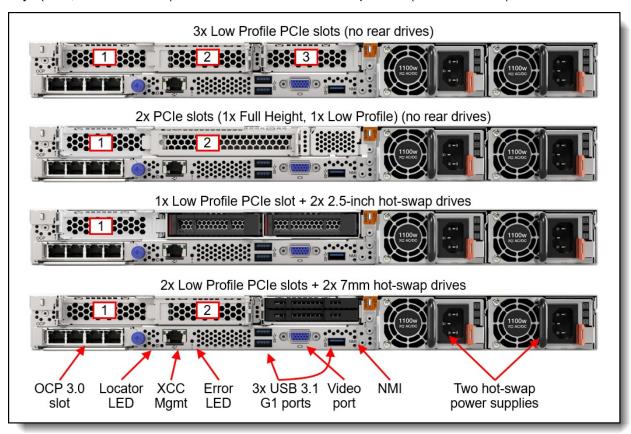


Figure 4. Rear views of the MX630 V3 systems

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

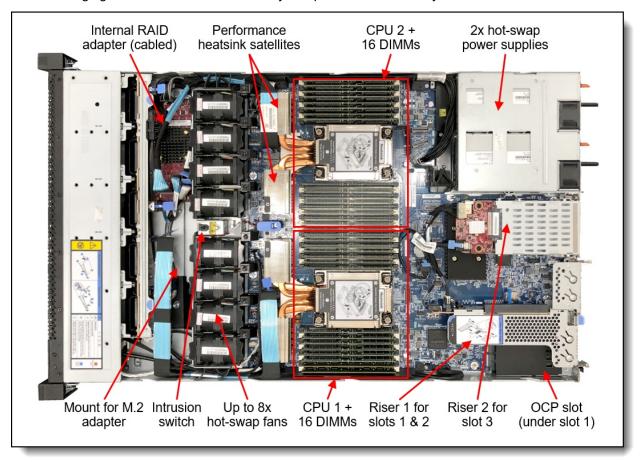


Figure 5. Internal view of the MX630 V3 systems

# **Standard specifications**

The ThinkAgile MX630 V3 1U Integrated System and Certified Node are based on the ThinkSystem SR630 V3 server.

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

Table 1. Comparison of features

	MX630 V3 Integrated System	MX630 V3 Certified Node	
MX offering type	Integrated System	Certified Node	
Target workloads	Entry/SMB, General Compute,	Entry/SMB, General Compute,	
Base MTM	7D6UCTO1WW	7D6UCTO2WW	
Form Factor	1U	1U	
Base platform	SR630 V3	SR630 V3	
CPU	1x or 2x Intel Xeon SP Gen 5 (Emerald Rapids) or Gen 4 (Sapphire Rapids)	1x or 2x Intel Xeon SP Gen 5 (Emerald Rapids) or Gen 4 (Sapphire Rapids)	
Memory	32x DDR 5 5600 MHz (8TB maximum)	32x DDR 5 5600 MHz (8TB maximum)	
Drive Bays	<ul> <li>Front bay choices:</li> <li>10x 2.5" AnyBay</li> <li>4x 3.5" SAS/SATA</li> <li>Rear bay choices</li> <li>2x 2.5" SAS/SATA or NVME (Optional)</li> </ul>	<ul> <li>Front bay choices:</li> <li>10x 2.5" AnyBay</li> <li>4x 3.5" SAS/SATA</li> <li>Rear bay choices</li> <li>2x 2.5" SAS/SATA or NVME</li> <li>(Optional)</li> </ul>	
Drive Configuration	All Flash or Hybrid	All Flash or Hybrid	
НВА	<ul><li>440-8i HBA</li><li>440-16i HBA</li></ul>	<ul><li>440-8i HBA</li><li>440-16i HBA</li></ul>	
Boot drives	<ul><li>2x M.2 non-hot-swap SATA</li><li>2x 7mm hot-swap drives</li></ul>	<ul><li>2x M.2 non-hot-swap SATA</li><li>2x 7mm hot-swap drives</li></ul>	
OCP networking	1x OCP 3.0 adapter: 1Gb, 10Gb, 25Gb	1x OCP 3.0 adapter: 1Gb, 10Gb, 25Gb	
PCIe networking	Up to 3x adapters: 1Gb, 10Gb, 25Gb, 100Gb	Up to 3x adapters: 1Gb, 10Gb, 25Gb, 100Gb	
GPUs	Supports up to 2x single-wide GPUs	Supports up to 2x single-wide GPUs	
Hypervisor	<ul> <li>Azure Stack HCI OS preloaded</li> <li>Windows Server 2019 Datacenter optional</li> <li>Windows Server 2022 Datacenter optional</li> </ul>	<ul> <li>Windows Server 2019 Datacenter optional</li> <li>Windows Server 2022 Datacenter optional</li> <li>Azure Stack HCI OS optional</li> </ul>	

The following table lists the standard specifications.

Table 2. Standard specifications

Components	Specification
Machine types	7D6U - 3 year warranty
Form factor	1U rack.
Processor	Supports one or two 5th generation Intel Xeon Scalable processor (formerly codenamed "Emerald Rapids") or 4th-generation Intel Xeon Scalable processor (formerly codenamed "Sapphire Rapids"). Supports up to 64 cores per 5th generation processor and up to 60 cores per 4th generation processor, core speeds of up to 3.9 GHz, and TDP ratings of up to 350 W.

Components	Specification
Chipset	Intel C741 "Emmitsburg" chipset, part of the platform codenamed "Eagle Stream"
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 TruDDR5 RDIMMs, 9x4 RDIMMs, and 3DS RDIMMs are supported. DIMM slots are shared between standard system memory and persistent memory. DIMMs operate at up to 5600 MHz at 1 DPC and up to 4400 MHz at 2 DPC.
Memory maximum	With RDIMMs: Up to 8TB by using 32x 256GB 3DS RDIMMs
Memory protection	ECC, SDDC (for x4-based memory DIMMs), ADDDC (for x4-based memory DIMMs excluding 9x4 RDIMMs, requires Platinum or Gold processors), and memory mirroring.
Drive bays	Front drive bays:
	10x 2.5-inch AnyBay
	• 4x 3.5-inch SAS/SATA
	Rear drive bays:
	2x 2.5-inch SAS/SATA
	• 2x 2.5-inch NVMe
	OS boot support:
	<ul> <li>Internal M.2 module supporting up to two M.2 SATA drives</li> </ul>
	Rear accessible 2x 7mm hot-swap drives, SATA or NVMe
Storage controller	Onboard NVMe ports (RAID not supported)
	12 Gb SAS/SATA non-RAID:
	<ul><li>430-8i HBA</li><li>430-16i HBA</li></ul>
Network interfaces	Dedicated OCP 3.0 SFF slot with PCIe 5.0 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 2 (XCC2) management processor for Wake-on-LAN and NC-SI support.
PCI Expansion slots	Up to 3x PCle slots (2x PCle 5.0, 1x PCle 4.0), 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 PCle x16 low-profile slots
	<ul> <li>1x PCle x16 full-height half-length slot + 1x PCle x16 low-profile slot</li> </ul>
	<ul> <li>1x PCle x16 low-profile slot (also supports 2x rear 2.5-inch drive bays)</li> </ul>
	<ul> <li>2x PCle x16 low-profile slot (also supports 2x rear 7mm 2.5-inch drive bays)</li> </ul>
GPU support	Supports up to 2x single-wide GPUs

Components	Specification	
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: 2x USB 3.1 G1 (5 Gb/s) ports and 1x USB 2.0 port, 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). Optional second RJ-45 1GbE systems management port for XCC remote management (installed in OCP adapter slot).	
	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. 750 W, 1100 W and 1800 W AC options, supporting 220 V AC. 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	Embedded graphics with 16 MB memory with 2D hardware accelerator, integrated into the XClarity Controller 2 management 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 2 (XCC2) embedded management based on the ASPEED  AST2600 baseboard management controller (BMC), XClarity Administrator centralized infrastructure delivery, XClarity Integrator plugins, and XClarity Energy Manager centralized server power management. Optional XCC Platinum to enable remote control functions and other features.	
Security features	Chassis intrusion switch, Power-on password, administrator's password, Root of Trust module supporting TPM 2.0 and Platform Firmware Resiliency (PFR). Optional lockable front security bezel.	
Software	Integrated System: Azure Stack HCI preloaded	
	<ul> <li>Certified Nodes: Windows Server 2019 Datacenter, Windows Server 2022 Datacenter, Azure Stack HCI OS (all optional)</li> </ul>	
Hardware warranty	<ul> <li>Integrated System: Three-, four-, or five-year customer-replaceable unit and onsite limited hardware warranty with ThinkAgile Premier Support and selectable service levels: 9x5 next business day (NBD) parts delivered, 9x5 NBD onsite response, 24x7 coverage with 2-hour or 4-hour onsite response, or 6-hour or 24-hour committed repair (select areas). Also available are YourDrive YourData, Premier Support, and Enterprise Software Support.</li> </ul>	
	<ul> <li>Certified Node: Three, four, or five-year customer-replaceable unit and onsite limited warranty with selectable service levels: 9x5 coverage with next business day (NBD) parts delivered (base warranty), 9x5 coverage with NBD onsite response (Foundation Service), 24x7 coverage with 4-hour onsite response or 24-hour committed repair (select areas) (Essential Service), or 24x7 coverage with 2-hour onsite response or 6-hour committed repair (select areas) (Advanced Service). Also available are 1-year and 2-year post-warranty extensions, YourDrive YourData, and Enterprise Software Support.</li> </ul>	
Software maintenance	Three-, four-, or five-year software support and subscription (matches the duration of the selected warranty period).	
Dimensions	Width: 440 mm (17.3 in.), height: 43 mm (1.7 in.), depth: 773 mm (30.4 in.).	

Components	Specification
Weight	Maximum weight: 20.2 kg (44.5 lb)

#### **Models**

Factory-integrated models of the appliances and certified nodes are configured by using the Lenovo Data Center Solution Configurator (DCSC), http://dcsc.lenovo.com

During the configuration process, you are selecting the base Configure-to-Order (CTO) model first, and then you are selecting components (processors, memory, drives, network adapters, and software) for that model.

The following table lists the base CTO models.

Table 3. Base CTO models

Base model	Description		
7D6UCTO1WW	ThinkAgile MX630 V3 Integrated System		
7D6UCTO2WW	ThinkAgile MX630 V3 Certified Node		

## Comparison with the ThinkSystem SR630 V3

The ThinkAgile MX630 V3 1U Integrated System and Certified Node are based on the ThinkSystem SR630 V3 server, however there are key differences:

- No persistent memory support
- No onboard SATA controller support
- No RAID adapter support for data drives
- No VROC RAID support for boot drives
- No SED drive support
- Fibre Channel support for data migration only
- · No InfiniBand support

For details about the ThinkSystem SR630 V3, see the SR630 V3 product guide:

https://lenovopress.com/lp1600-thinksystem-sr630-v3-server

Only certain network adapters have been certified for particular network traffic types in the Azure Stack HCI operating system. For details regarding which available network adapters can be used for each network traffic type, see Lenovo Certified Configurations for Azure Stack HCI – V2 Servers: https://lenovopress.com/lp1520

To verify what specific hardware components are supported with the MX630 V3 systems, see the DCSC configurator:

https://dcsc.lenovo.com

#### **Processors**

The MX630 V3 systems supports processors in either the 5th Gen Intel Xeon Scalable Processor family or the 4th Gen Intel Xeon Scalable Processor family.

Topics in this section:

- 5th Gen Intel Xeon Scalable processors
- 4th Gen Intel Xeon Scalable processors

## 5th Gen Intel Xeon Scalable processors

The MX630 V3 systems support the following processors.

For details about these options, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#processors

Table 4. Processors

		Maximum	Maximum supported		
Feature	Description	MX630 V3 IS	MX630 V3 CN		
BYVP	Intel Xeon Silver 4514Y 16C 150W 2.0GHz Processor	2	2		
BYW6	Intel Xeon Silver 4516Y+ 24C 185W 2.2GHz Processor	2	2		
BYVU	Intel Xeon Gold 5512U 28C 185W 2.1GHz Processor	1	1		
BYVW	Intel Xeon Gold 5515+ 8C 165W 3.2GHz Processor	2	2		
BYW7	Intel Xeon Gold 5520+ 28C 205W 2.2GHz Processor	2	2		
BYVX	Intel Xeon Gold 6526Y 16C 195W 2.8GHz Processor	2	2		
BYWK	Intel Xeon Gold 6530 32C 270W 2.1GHz Processor	2	2		
BYW0	Intel Xeon Gold 6534 8C 195W 3.9GHz Processor	2	2		
BYVQ	Intel Xeon Gold 6538N 32C 205W 2.1GHz Processor	2	2		
BYW8	Intel Xeon Gold 6538Y+ 32C 225W 2.2GHz Processor	2	2		
BYVY	Intel Xeon Gold 6542Y 24C 250W 2.9GHz Processor	2	2		
BYW1	Intel Xeon Gold 6544Y 16C 270W 3.6GHz Processor	2	2		
BYVR	Intel Xeon Gold 6548N 32C 250W 2.8GHz Processor	2	2		
BYVZ	Intel Xeon Gold 6548Y+ 32C 250W 2.5GHz Processor	2	2		
BYW9	Intel Xeon Gold 6554S 36C 270W 2.2GHz Processor	2	2		
BYW5	Intel Xeon Platinum 8558 48C 330W 2.1GHz Processor	2	2		
BYWA	Intel Xeon Platinum 8558P 48C 350W 2.7GHz Processor	2	2		
BYWE	Intel Xeon Platinum 8558U 48C 300W 2.0GHz Processor	1	1		
BYW2	Intel Xeon Platinum 8562Y+ 32C 300W 2.8GHz Processor	2	2		
BYWF	Intel Xeon Platinum 8568Y+ 48C 350W 2.3GHz Processor	2	2		
BYWG	Intel Xeon Platinum 8570 56C 350W 2.1GHz Processor	2	2		
BYWD	Intel Xeon Platinum 8571N 52C 300W 2.4GHz Processor	1	1		
BYWH	Intel Xeon Platinum 8580 60C 350W 2.0GHz Processor	2	2		
BYWC	Intel Xeon Platinum 8581V 60C 270W 2.0GHz Processor	1	1		
BYWJ	Intel Xeon Platinum 8592+ 64C 350W 1.9GHz Processor	2	2		
BYWB	Intel Xeon Platinum 8592V 64C 330W 2.0GHz Processor	2	2		

## 4th Gen Intel Xeon Scalable processors

The MX630 V3 systems support the following processors.

For details about these options, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#processors

Table 5. Processors

		Maximum	Maximum supported		
Feature	Description	MX630 V3 IS	MX630 V3 CN		
BQ68	Intel Xeon Bronze 3408U 8C 125W 1.8GHz Processor	2	2		
BQ64	Intel Xeon Silver 4410T 10C 150W 2.7GHz Processor	2	2		
BQ67	Intel Xeon Silver 4410Y 12C 150W 2.0GHz Processor	2	2		
BQ69	Intel Xeon Silver 4416+ 20C 165W 2.0GHz Processor	2	2		
BQ63	Intel Xeon Gold 5415+ 8C 150W 2.9GHz Processor	2	2		
BQ6L	Intel Xeon Gold 5416S 16C 150W 2.0GHz Processor	2	2		
BQ6H	Intel Xeon Gold 5418N 24C 165W 1.8GHz Processor	2	2		
BQ66	Intel Xeon Gold 5418Y 24C 185W 2.0GHz Processor	2	2		
BQ65	Intel Xeon Gold 5420+ 28C 205W 2.0GHz Processor	2	2		
BPPD	Intel Xeon Gold 6414U 32C 250W 2.0GHz Processor	1	1		
BQ6C	Intel Xeon Gold 6416H 18C 165W 2.2GHz Processor	2	2		
BQ6B	Intel Xeon Gold 6418H 24C 185W 2.1GHz Processor	2	2		
BPQF	Intel Xeon Gold 6426Y 16C 185W 2.5GHz Processor	2	2		
BQ6F	Intel Xeon Gold 6428N 32C 185W 1.8GHz Processor	2	2		
BPPC	Intel Xeon Gold 6430 32C 270W 2.1GHz Processor	2	2		
BPQC	Intel Xeon Gold 6434 8C 195W 3.7GHz Processor	2	2		
BQ6E	Intel Xeon Gold 6434H 8C 195W 3.7GHz Processor	2	2		
BQ6K	Intel Xeon Gold 6438M 32C 205W 2.2GHz Processor	2	2		
BQ6D	Intel Xeon Gold 6438N 32C 205W 2.0GHz Processor	2	2		
BQ62	Intel Xeon Gold 6438Y+ 32C 205W 2.0GHz Processor	2	2		
BPQE	Intel Xeon Gold 6442Y 24C 225W 2.6GHz Processor	2	2		
BPQB	Intel Xeon Gold 6444Y 16C 270W 3.6GHz Processor	2	2		
BQ6A	Intel Xeon Gold 6448H 32C 250W 2.4GHz Processor	2	2		
BPQD	Intel Xeon Gold 6448Y 32C 225W 2.1GHz Processor	2	2		
BPPM	Intel Xeon Gold 6454S 32C 270W 2.2GHz Processor	2	2		
BPQG	Intel Xeon Gold 6458Q 32C 350W 3.1GHz Processor	2	2		
BPPH	Intel Xeon Platinum 8444H 16C 270W 2.9GHz Processor	2	2		
BPPG	Intel Xeon Platinum 8450H 28C 250W 2.0GHz Processor	2	2		
BPPB	Intel Xeon Platinum 8452Y 36C 300W 2.0GHz Processor	2	2		
BPPF	Intel Xeon Platinum 8454H 32C 270W 2.1GHz Processor	2	2		
BPPT	Intel Xeon Platinum 8458P 44C 350W 2.7GHz Processor	2	2		
BPPN	Intel Xeon Platinum 8460H 40C 330W 2.2GHz Processor	2	2		
BPPQ	Intel Xeon Platinum 8460Y+ 40C 300W 2.0GHz Processor	2	2		
BPQA	Intel Xeon Platinum 8462Y+ 32C 300W 2.8GHz Processor	2	2		
BPPU	Intel Xeon Platinum 8468 48C 350W 2.1GHz Processor	2	2		
BPPE	Intel Xeon Platinum 8468H 48C 330W 2.1GHz Processor	2	2		
BPPP	Intel Xeon Platinum 8468V 48C 330W 2.4GHz Processor	2	2		
BN0N	Intel Xeon Platinum 8470 52C 350W 2.0GHz Processor	2	2		
BPPJ	Intel Xeon Platinum 8470N 52C 300W 1.7GHz Processor	2	2		

		Maximum supported	
Feature	Description	MX630 V3 IS	MX630 V3 CN
BN0P	Intel Xeon Platinum 8470Q 52C 350W 2.1GHz Processor	2	2
BN0M	Intel Xeon Platinum 8480+ 56C 350W 2.0GHz Processor	2	2
BPPS	Intel Xeon Platinum 8490H 60C 350W 1.9GHz Processor	2	2

# **Memory**

# **5th Generation Memory options**

The MX630 V3 systems support the following memory options.

For details about these options, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#memory-options

Table 6. Emerald Rapids Memory

Part			Maximum	Maximum supported	
number	Feature	Description	MX630 V3 IS	MX630 V3 CN	
RDIMMs - 56	00 MHz		-		
4X77A88049	BWHW	ThinkSystem 32GB TruDDR5 5600MHz (1Rx4) 10x4 RDIMM	32	32	
4X77A88639	BX8Y	ThinkSystem 48GB TruDDR5 5600MHz (1Rx4) 10x4 RDIMM	32	32	
4X77A88052	BWHS	ThinkSystem 64GB TruDDR5 5600MHz (2Rx4) 10x4 RDIMM	32	32	
4X77A88058	BWHV	ThinkSystem 96GB TruDDR5 5600MHz (2Rx4) RDIMM	32	32	
4X77A88087	BWJE	ThinkSystem 16GB TruDDR5 5600MHz (1Rx8) RDIMM	32	32	
4X77A88056	BWSL	ThinkSystem 24GB TruDDR5 5600MHz (1Rx8) RDIMM	32	32	
4X77A88051	BWJC	ThinkSystem 32GB TruDDR5 5600MHz (2Rx8) RDIMM	32	32	
4X77A88057	BWJD	ThinkSystem 48GB TruDDR5 5600MHz (2Rx8) RDIMM	32	32	
4X77A90991	BZ4U	ThinkSystem 32GB TruDDR5 Performance+ 5600MHz (2Rx8) RDIMM	32	32	
4X77A90992	BZ4V	ThinkSystem 64GB TruDDR5 Performance+ 5600MHz (2Rx4) 10x4 RDIMM	32	32	
3DS RDIMMs	- 5600 MH	z			
4X77A88054	BWHU	ThinkSystem 128GB TruDDR5 5600MHz (4Rx4) 3DS RDIMM	32	32	

## 4th Generation Memory options

The MX630 V3 systems support the following memory options.

For details about these options, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#memory-options

Table 7. Sapphire Rapids Memory

Part			Maximum	supported
number	Feature	Description	MX630 V3 IS	MX630 V3 CN
RDIMMs				
4X77A77483	BNW5	ThinkSystem 32GB TruDDR5 4800MHz (1Rx4) 9x4 RDIMM	32	32
4X77A77033	BKTN	ThinkSystem 64GB TruDDR5 4800MHz (2Rx4) 9x4 RDIMM	32	32
4X77A77029	BKTL	ThinkSystem 16GB TruDDR5 4800MHz (1Rx8) RDIMM	32	32
4X77A77031	BKTM	ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMM	32	32
4X77A77030	BNF6	ThinkSystem 32GB TruDDR5 4800MHz (1Rx4) 10x4 RDIMM	32	32
4X77A77032	BNF9	ThinkSystem 64GB TruDDR5 4800MHz (2Rx4) 10x4 RDIMM	32	32
3DS RDIMMs	;			
4X77A77034	BNFC	ThinkSystem 128GB TruDDR5 4800MHz (4Rx4) 3DS RDIMM	32	32
4X77A77035	BNF8	ThinkSystem 256GB TruDDR5 4800MHz (8Rx4) 3DS RDIMM	32	32

## Internal storage

Internal storage configurations of the MX630 V3 systems are as follows.

In this section:

- MX630 V3 IS and CN Hybrid
- MX630 V3 IS and CN All Flash
- Backplanes
- Boot drive enablement

#### MX630 V3 IS and CN Hybrid

Drive bay configurations are as follows:

- · Front drive bays choice of:
  - 4x 3.5-inch SAS/SATA hot-swap drive bays
- · Rear drive bays choice of:
  - 2x 2.5-inch (Optional)

For OS boot functionality, the server supports either:

- One or two M.2 SATA drives, installed in an M.2 adapter internal to the server.
- One or two 7mm hot-swap SATA or NVMe drives, accessible from the rear of the server. Not supported with configurations with 3.5-inch front drives

Configuration rules are as follows:

- · All Hybrid storage configurations are two-tier, cache tier and capacity tier
- Drive type choices are as follows:
  - HDDs for capacity
  - SAS/SATA or NVMe SSDs for cache
- For cache drives, a minimum of 2 and maximum of 4 drives is required
- For configurations with 3.5-inch front drives, capacity drives are installed in the front bay and cache drives are installed in rear 2.5-inch bays
- The total cache storage must be a minimum of 10% of the total capacity storage

## MX630 V3 IS and CN All Flash

Drive bay configurations are as follows:

- Front drive bays choice of:
  - 10x 2.5-inch AnyBay hot-swap drive bays
- Rear drive bays choice of:
  - 2x 2.5-inch (Optional)

For OS boot functionality, the server supports either:

- One or two M.2 SATA drives, installed in an M.2 adapter internal to the server.
- One or two 7mm hot-swap SATA or NVMe drives, accessible from the rear of the server

Configuration rules are as follows:

- All-flash configurations can be single-tier or two-tier storage:
  - To select a single-tier configuration in DCSC, select the drive you wish to use (from either the capacity or cache lists) and ensure that all other drive selections are set to None
  - To select a two-tier configuration in DCSC, select a quantity of cache drives and a quantity of capacity drives

- Drive choices for a single-tier configuration are as follows:
  - Drives can be either SAS SSDs, SATA SDDs or NVMe SSDs (includes EDSFF)
  - All drives must be the same feature code
  - A minimum of 4 drives is required
- Drive choices for a two-tier configuration are as follows:
  - The following combinations are supported:
    - SAS SSD for cache and SAS/SATA SSD for capacity
    - NVMe SSD for both cache & capacity
    - NVMe SSD for cache and SAS/SATA SSD for capacity
  - All cache drives must be the same feature code and all capacity drives must be the same feature code
  - A minimum of 2 cache drives and a minimum of 4 capacity drives is required
  - The total cache storage must be a minimum of 10% of the total capacity storage

## **Backplanes**

The choice of backplanes supported is listed in the following table.

For details about these options, including configuration rules, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#internal-storage

Table 8. Drive backplanes

Part	Maximum supp			supported
number	Feature	Description	MX630 V3 IS	MX630 V3 CN
Front 2.5-	inch drive	backplanes	•	
None	BB3T	ThinkSystem 1U 10x2.5" AnyBay Backplane	1	1
None	BLKC	ThinkSystem 1U 10x2.5" AnyBay Gen5 Backplane	1	1
None	BRQX	ThinkSystem 1U 2.5" 10 NVMe Gen5 Backplane	1	1
None	BCQQ	ThinkSystem 1U 10x2.5" NVMe Backplane	1	1
Front EDS	SFF drive b	ackplane		
None	B981	ThinkSystem 1U 16xEDSFF Backplane	1	1
Front 3.5-	inch drive	backplanes		
None	B8L3	ThinkSystem 1U/2U 4x3.5" SAS/SATA Backplane	1	1
Rear - 2.5	-inch drive	backplanes		
None	BDY6	ThinkSystem 1U 2x2.5" NVMe Rear Backplane	1	1
None	B8MY	ThinkSystem 1U 2x2.5" SAS/SATA Rear Backplane	1	1
Backplan	e - 7mm dr	ives		
None	BU0N	ThinkSystem 7mm SATA/NVMe 2-Bay Rear Enablement Kit v2	1	1
None	BS9U	7mm NVMe Array 1 RAID 1	1	1

#### **Boot drive enablement**

For OS boot functions, the systems also support one or two 7mm hot-swap drives at the rear of the server, 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.

For details about these options, including configuration rules, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#internal-storage

Configuration Note: For ThinkSystem M.2 SATA/x4 NVMe 2-Bay Enablement Kit (4Y37A79663):

• For SATA RAID use ThinkSystem M.2 SATA/x4 NVMe 2-Bay Enablement Kit and ThinkSystem RAID 5350-8i for M.2 SATA Boot Enablement

Table 9. Boot drive enablement

Part			Maximum	supported
number	Feature	Description	MX630 V3 IS	MX630 V3 CN
M.2 enablem	ent kits		-	
4Y37A79663	BM8X	ThinkSystem M.2 SATA/x4 NVMe 2-Bay Adapter	1	1
4Y37A09750	B8P9	ThinkSystem M.2 NVMe 2-Bay RAID Adapter	1	1
Controllers f	or RAID su	pport of M.2 Drives	-	
None	BVL1	ThinkSystem RAID 5350-8i for M.2 SATA Boot Enablement	1	1
4Y37A90063	BYFF	ThinkSystem M.2 RAID B540i-2i SATA/NVMe Adapter	1	1
7mm enabler	nent kits			
None	BU0N	ThinkSystem 7mm SATA/NVMe 2-Bay Rear Enablement Kit v2	1	1
Controllers f	or RAID su	pport of 7mm drives		
None	BVL4	ThinkSystem Raid 540-8i for 7MM NVMe boot Enablement	1	1

## **Controllers for internal storage**

The MX630 V3 systems support the following internal storage controllers.

For details about these options, see the SR630 V3 product guide:

https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#controllers-for-internal-storage

Table 10. Controllers for internal storage

			Maximum supported		
Part number	Feature	Description	MX630 V3 IS	MX630 V3 CN	
SAS/SATA HBA - PCIe 3.0					
4Y37A72481	BJHJ	ThinkSystem 4350-16i SAS/SATA 12Gb HBA	1	1	
4Y37A72480	ВЈНН	ThinkSystem 4350-8i SAS/SATA 12Gb HBA	1	1	
SAS/SATA H	BA - PCle 4	1.0			
4Y37A78602	BM50	ThinkSystem 440-16i SAS/SATA PCIe Gen4 12Gb HBA	1	1	
4Y37A78601	BM51	ThinkSystem 440-8i SAS/SATA PCIe Gen4 12Gb HBA	1	1	
NVMe adapte	rs				
4C57A65446	B98C	ThinkSystem 4-Port PCIe Gen4 NVMe Retimer Adapter	1	1	

# Internal drive options

This section lists the supported drives:

- Boot drives
- Internal drives for MX630 V3 Integrated System
- Internal drives for MX630 V3 Certified Node

#### **Boot drives**

The MX630 V3 systems systems support the following drive for boot functions.

Table 11. Boot drives

			Maximum	supported
Part number	Feature	Description	MX630 V3 IS	MX630 V3 CN
M.2 SATA dri	ves			
4XB7A82287	BQ1Y	ThinkSystem M.2 5400 PRO 480GB Read Intensive SATA 6Gb NHS SSD	2	2
4XB7A82288	BQ20	ThinkSystem M.2 5400 PRO 960GB Read Intensive SATA 6Gb NHS SSD	2	2
M.2 NVME dr	ives			
4XB7A90102	ВХМН	ThinkSystem M.2 PM9A3 960GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD	2	2
7mm NVME o	Irives			
4XB7A82853	BPZ4	ThinkSystem 7mm U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD	2	2
4XB7A82855	BPZ5	ThinkSystem 7mm U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	2	2
4XB7A82856	BPZ6	ThinkSystem 7mm U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	2	2
4XB7A90096	BXMN	ThinkSystem 7mm U.2 PM9A3 960GB Read Intensive NVMe PCle 4.0 x4 HS SSD	2	2
4XB7A90097	BXMM	ThinkSystem 7mm U.2 PM9A3 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	2	2
4XB7A90098	BXML	ThinkSystem 7mm U.2 PM9A3 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	2	2

## Internal drives for MX630 V3 Integrated System

The following table lists the drives support in the MX630 V3 Integrated System. The drives are classified as either Cache drives, Capacity drives, or both. The quantities listed in the table are the maximum supported for each drive option. For cache drives, a minimum of 2 and maximum of 4 drives is required.

Table 12. Drives supported in the MX630 V3 Integrated System

			All Flash Storage		Hybrid Storage	
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
2.5-inch hot-s	swap 12 Gb	SAS HDDs				
7XB7A00025	AULZ	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	No	No	No	12
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
7XB7A00022	AULW	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	No	No	12

				Flash orage	Hybrid Storage	
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	No	No	12
2.5-inch hot-s	swap 24 Gl	SAS SDDs			•	
4XB7A80318	BNWC	ThinkSystem 2.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80319	BNWE	ThinkSystem 2.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80320	BNWF	ThinkSystem 2.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80321	BP3E	ThinkSystem 2.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80322	BP3J	ThinkSystem 2.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80323	BP3D	ThinkSystem 2.5" PM1653 30.72TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80340	BNW8	ThinkSystem 2.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	12	12	12	No
4XB7A80341	BNW9	ThinkSystem 2.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	12	12	12	No
4XB7A80342	BNW6	ThinkSystem 2.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	12	12	12	No
4XB7A80343	ВР3К	ThinkSystem 2.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	12	12	12	No
2.5-inch hot-s	swap 6 Gb	SAS SSDs				
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A82289	BQ21	ThinkSystem 2.5" 5400 MAX 480GB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82290	BQ24	ThinkSystem 2.5" 5400 MAX 960GB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82291	BQ22	ThinkSystem 2.5" 5400 MAX 1.92TB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82292	BQ23	ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82259	BQ1P	ThinkSystem 2.5" 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A82260	BQ1R	ThinkSystem 2.5" 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	No	No	No	12

				Flash orage	Hybrid	d Storage
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
4XB7A82261	BQ1X	ThinkSystem 2.5" 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A82262	BQ1S	ThinkSystem 2.5" 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A82263	BQ1T	ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A72439	BM8A	ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A72441	BM88	ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A87525	BWKM	ThinkSystem 2.5" PM893a 960GB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A87526	BWKL	ThinkSystem 2.5" PM893a 1.92TB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A87527	BWKK	ThinkSystem 2.5" PM893a 3.84TB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A17102	ВА7Н	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
2.5-inch hot-s	swap PCle	4.0 NVMe SSDs				
4XB7A17159	BKKZ	ThinkSystem 2.5" U.2 P5800X 800GB Write Intensive NVMe PCle 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
4XB7A17129	BNEG	ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	12	12	No
4XB7A17130	BNEH	ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	12	12	No
4XB7A17133	BNEZ	ThinkSystem 2.5" U.2 P5620 6.4TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	12	12	No
4XB7A17136	BA4V	ThinkSystem 2.5" U.2 P5620 12.8TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	12	12	No
4XB7A79639	BNF1	ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	No	12	No
4XB7A13967	BNEJ	ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	No	12	No
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	No	12	No

				Flash orage	Hybrid Storage	
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	12	No	12	No
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB 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
4XB7A13943	BNEF	ThinkSystem 2.5" U.2 P5520 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
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No
3.5-inch hot-s	swap 12 GI	o 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-s	swap 6 Gb	SAS HDDs				
7XB7A00050	AUUD	ThinkSystem 3.5" 2TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	No	No	4
7XB7A00051	AUU8	ThinkSystem 3.5" 4TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	No	No	4
7XB7A00052	AUUA	ThinkSystem 3.5" 6TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
7XB7A00053	AUU9	ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
7XB7A00054	AUUB	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4

			All Flash Storage		Hybrid Storage	
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
7XB7A00068	B118	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
4XB7A13907	B497	ThinkSystem 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
4XB7A13914	B7F0	ThinkSystem 3.5" 16TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
3.5-inch hot-s	swap 24 Gb	SAS SDDs				
3.5-inch hot-s	swap PCle	4.0 NVMe SSDs				

## Internal drives for MX630 V3 Certified Node

The following table lists the drives support in the MX630 V3 Certified Node. The drives are classified as either Cache drives, Capacity drives, or both. The quantities listed in the table are the maximum supported for each drive option. For cache drives, a minimum of 2 and maximum of 4 drives is required.

Table 13. Drives supported in the MX630 V3 Certified Node

				Flash orage	Hybric	l Storage
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
2.5-inch hot-s	swap 12 Gk	SAS HDDs				
7XB7A00025	AULZ	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	No	No	No	12
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
7XB7A00022	AULW	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	No	No	12
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	No	No	12
2.5-inch hot-s	swap 24 Gb	SAS SDDs	•		•	
4XB7A80318	BNWC	ThinkSystem 2.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80319	BNWE	ThinkSystem 2.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80320	BNWF	ThinkSystem 2.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80321	BP3E	ThinkSystem 2.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80322	BP3J	ThinkSystem 2.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80323	BP3D	ThinkSystem 2.5" PM1653 30.72TB Read Intensive SAS 24Gb HS SSD	No	12	No	No
4XB7A80340	BNW8	ThinkSystem 2.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	12	12	12	No

				Flash orage	Hybric	l Storage
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
4XB7A80341	BNW9	ThinkSystem 2.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	12	12	12	No
4XB7A80342	BNW6	ThinkSystem 2.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	12	12	12	No
4XB7A80343	врзк	ThinkSystem 2.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	12	12	12	No
2.5-inch hot-s	swap 6 Gb	SAS SSDs				
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	12	No	No
4XB7A82289	BQ21	ThinkSystem 2.5" 5400 MAX 480GB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82290	BQ24	ThinkSystem 2.5" 5400 MAX 960GB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82291	BQ22	ThinkSystem 2.5" 5400 MAX 1.92TB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82292	BQ23	ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD	No	No	No	12
4XB7A82259	BQ1P	ThinkSystem 2.5" 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A82260	BQ1R	ThinkSystem 2.5" 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A82261	BQ1X	ThinkSystem 2.5" 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A82262	BQ1S	ThinkSystem 2.5" 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A82263	BQ1T	ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	No	No	No	12
4XB7A72439	BM8A	ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A72441	BM88	ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A87525	BWKM	ThinkSystem 2.5" PM893a 960GB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A87526	BWKL	ThinkSystem 2.5" PM893a 1.92TB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A87527	BWKK	ThinkSystem 2.5" PM893a 3.84TB Read Intensive SATA 6Gb HS SSD	No	12	No	No
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	12	No	No

				Flash orage	Hybric	l Storage
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
4XB7A17102	ВА7Н	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
2.5-inch hot-s	wap PCle	4.0 NVMe SSDs				
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
4XB7A17129	BNEG	ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	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	No
4XB7A17133	BNEZ	ThinkSystem 2.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	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	No
4XB7A79639	BNF1	ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	No	12	No
4XB7A13967	BNEJ	ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	No	12	No
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	No	12	No
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCle 4.0 x4 HS SSD	12	No	12	No
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB 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
4XB7A13943	BNEF	ThinkSystem 2.5" U.2 P5520 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
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	12	No	No
3.5-inch hot-s	swap 12 Gl	SAS HDDs				

				Flash orage	Hybrid Storage	
Part number	Feature	Description	Cache	Capacity	Cache	Capacity
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-s	wap 6 Gb	SAS HDDs	•			
7XB7A00050	AUUD	ThinkSystem 3.5" 2TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	No	No	4
7XB7A00051	AUU8	ThinkSystem 3.5" 4TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	No	No	4
7XB7A00052	AUUA	ThinkSystem 3.5" 6TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
7XB7A00053	AUU9	ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
7XB7A00054	AUUB	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
7XB7A00068	B118	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
4XB7A13907	B497	ThinkSystem 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
4XB7A13914	B7F0	ThinkSystem 3.5" 16TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	No	No	4
3.5-inch hot-s	swap 24 G	b SAS SDDs	-		-	
3.5-inch hot-s	swap PCle	4.0 NVMe SSDs				

# **Network adapters**

The MX630 V3 systems support the following networking options.

Only certain network adapters have been certified for particular network traffic types in the Azure Stack HCI operating system. For details regarding which available network adapters can be used for each network traffic type, see Lenovo Certified Configurations for Azure Stack HCI – V2 Servers: <a href="https://lenovopress.com/lp1520">https://lenovopress.com/lp1520</a>

For details about the implementation of these networking options, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#i-o-expansion https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#network-adapters

Table 14. OCP network adapters

			Maximum	supported
Part number	Feature	Description	MX630 V3 IS	MX630 V3 CN
10 Gb Ethern	10 Gb Ethernet - 10GBASE-T			
4XC7A08236	B5ST	ThinkSystem Broadcom 57416 10GBASE-T 2-port OCP Ethernet Adapter	1	1
4XC7A08240	B5T4	ThinkSystem Broadcom 57454 10GBASE-T 4-port OCP Ethernet Adapter	1	1
4XC7A08278	BCD5	ThinkSystem Intel X710-T2L 10GBASE-T 2-port OCP Ethernet Adapter	1	1
4XC7A80268	BPPY	ThinkSystem Intel X710-T4L 10GBase-T 4-Port OCP Ethernet Adapter	1	1
25 Gb Ethern	et			
4XC7A08237	BN2T	ThinkSystem Broadcom 57414 10/25GbE SFP28 2-Port OCP Ethernet Adapter	1	1
4XC7A80567	BPPW	ThinkSystem Broadcom 57504 10/25GbE SFP28 4-Port OCP Ethernet Adapter	1	1
4XC7A62582	BE4T	ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port OCP Ethernet Adapter	1	1
4XC7A08294	BCD4	ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port OCP Ethernet Adapter	1	1
4XC7A80269	BP8L	ThinkSystem Intel E810-DA4 10/25GbE SFP28 4-Port OCP Ethernet Adapter	1	1

Table 15. PCIe network adapters

			Maximum supported	
Part number	Feature	Description	MX630 V3 IS	MX630 V3 CN
10GBASE-T	Ethernet		•	
7ZT7A00496	AUKP	ThinkSystem Broadcom 57416 10GBASE-T 2-Port PCIe Ethernet Adapter	5	5
4XC7A08245	B5SU	ThinkSystem Broadcom 57454 10GBASE-T 4-port PCIe Ethernet Adapter	5	5
25 Gb Ethern	et			
4XC7A08295	BCD6	ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	3	3
4XC7A80267	BP8M	ThinkSystem Intel E810-DA4 10/25GbE SFP28 4-Port PCIe Ethernet Adapter	1	1
4XC7A62580	BE4U	ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	3	3
100 Gb Ether	net			
4XC7A08248	B8PP	ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter	3	3

# **GPU** adapters

The MX630 V3 systems support the following GPU options.

For details about these options, see the SR630 V3 product guide: https://lenovopress.com/lp1600-thinksystem-sr630-v3-server#gpu-adapters

Table 16. GPU adapters

Part			Maximum	supported
number	Feature	Description	MX630 V3 IS	MX630 V3 CN
4X67A81547	BP05	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU	3	3
CTO Only	BQZT	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU w/o CEC	3	3

#### **Software**

The MX Integrated Systems include the preloaded Azure Stack HCI operating system only and requires activation via a CSP such as Lenovo Cloud Marketplace, with the option to purchase a Windows Server 2019 Datacenter or Windows Server 2022 Datacenter license if unlimited guest OS VMs are desired.

The MX Certified Nodes can optionally have Windows Server 2019 Datacenter, Windows Server 2022 Datacenter, or Azure Stack HCI OS preinstalled. Customers can use existing Windows Server Datacenter software licenses, or they can purchase new software licenses from Lenovo or Microsoft. If the licenses are purchased from Lenovo, Windows Server can be factory-installed or shipped in the box with the Certified Node for the installation at the customer site.

The following table lists the Windows Server Datacenter software options that are available for selection from Lenovo for Certified Nodes.

Table 17. Windows Server Datacenter software selection options (Certified Nodes only)

Feature code	Description		
Windows Serve	Windows Server 2022 Datacenter (Factory installed)		
BPA7	Windows Server Datacenter 2022 for Microsoft Azure Stack HCI - English (factory installed)		
Windows Serve	r 2022 Datacenter (Not preinstalled)		
BPA3	Windows Server Datacenter 2022 for Microsoft Azure Stack HCI - Multilanguage (not pre-installed)		
BPA4	Windows Server Datacenter 2022 for Microsoft Azure Stack HCI - Simplified Chinese (not pre-installed)		
BPA5	Windows Server Datacenter 2022 for Microsoft Azure Stack HCI - Traditional Chinese (not pre-installed)		
BPA6	Windows Server Datacenter 2022 for Microsoft Azure Stack HCI - Japanese (not pre-installed)		
Windows Serve	r 2019 Datacenter (Factory installed)		
B6P2	Windows Server Datacenter 2019 for Microsoft Azure Stack HCI - English (factory installed)		
Windows Serve	r 2019 Datacenter (Not preinstalled)		
B6NY	Windows Server Datacenter 2019 for Microsoft Azure Stack HCI - Multilanguage (not pre-installed)		
B6P0	Windows Server Datacenter 2019 for Microsoft Azure Stack HCI - Simplified Chinese (not pre-installed)		
B6P1	Windows Server Datacenter 2019 for Microsoft Azure Stack HCI - Traditional Chinese (not pre-installed)		
B6NZ	Windows Server Datacenter 2019 for Microsoft Azure Stack HCI - Japanese (not pre-installed)		

#### Configuration notes:

- The selection of Windows Server software licenses is optional.
- The quantity of core-based licenses should be sufficient to cover all processor cores in the system.
- Current supported version of Azure Stack HCI OS is 23H2

# **Warranty and Support**

The ThinkAgile MX Integrated Systems can be configured with a three-, four, or five-year hardware warranty with 24x7 ThinkAgile Premier Single Point of Support (Lenovo appliance hardware and Microsoft software) and various levels of coverage with a defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions. For more information refer to the Lenovo Support Plan - MX Integrated System support plan, available from <a href="https://support.lenovo.com/us/en/solutions/HT511522">https://support.lenovo.com/us/en/solutions/HT511522</a>.

The ThinkAgile MX Certified Nodes can be configured with a three-, four-, or five-year hardware warranty and various levels of service coverage with a defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions.

The ThinkAgile MX630 V3 1U Integrated System and Certified Node have a 3-year base warranty:

- 7D6U- 1U Appliance 3 year warranty
- 7D6U- 1U Certified Node 3 year warranty

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:

#### Premier Support

Premier Support provides a Lenovo-owned customer experience and delivers direct access to technicians skilled in hardware, software, and advanced troubleshooting, in addition to the following:

- o Direct technician-to-technician access through a dedicated phone line
- 24x7x365 remote support
- · Single point of contact service
- · End to end case management
- Third-party collaborative software support
- Online case tools and live chat support
- On-demand remote system analysis

## Warranty Upgrade (Preconfigured Support)

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

- o 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

## **Deployment services**

The MX systems can optionally include Lenovo deployment services to get customers up and running quickly.

The following Lenovo custom installation services are optional for both MX Premier Solutions and MX Certified Nodes:

- · Unpacking and inspecting the systems
- Mounting the systems (rack cabinet, desktop, stack, bookshelf, wall or ceiling, or rack installation)
- 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 optional for both MX Premier Solutions and MX Certified Nodes:

- Conducting remote preparation and planning
- Verifying firmware versions and performing firmware updates, if needed
- Configuring XCC management settings
- Configuring Storage Spaces Direct
- Configuring Microsoft System Center and discovering hosts and storage (if System Center is used)
- Configuring Lenovo XClarity network settings and performing discovery and inventory (if XClarity is selected)
- Transferring knowledge
- Developing post-installation documentation

The following table lists ThinkAgile Health Check & Deployment offerings are available for ThinkAgile MX 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 Health Check & Deployment offerings

Part number	Description		
Onsite deployn	Onsite deployment services		
5MS7B09464	ThinkAgile MX Onsite Deployment (up to 2 nodes)		
5MS7B09465	ThinkAgile MX Onsite Deployment (additional node)		
Remote deploy	Remote deployment services		
5MS7B09466	ThinkAgile MX Remote Deployment (up to 2 nodes)		
5MS7B09467	ThinkAgile MX Remote Deployment (additional node)		
Remote Health	Remote Health Check		
5MS7B00049	ThinkAgile MX 1X Remote Health Check (per 2-4 node cluster)		
5MS7B00050	ThinkAgile MX 1X Remote Health Check (additional node)		
5MS7B00051	ThinkAgile MX 1X Remote Health Check & Update (per 2-4 node cluster)		
5MS7B00052	ThinkAgile MX 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/

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https://www.lenovo.com/us/en/landingpage/lenovo-financial-services/

## Related publications and links

For more information, see these resources:

- Lenovo ThinkAgile MX Series product page https://www.lenovo.com/us/en/data-center/software-defined-infrastructure/ThinkAgile-MX-Certified-Node/p/WMD00000377
- Microsoft Azure Stack HCI documentation https://docs.microsoft.com/en-us/azure-stack/hci/overview
- Lenovo Data Center Solution Configurator (DCSC): https://dcsc.lenovo.com
- Lenovo ThinkAgile MX for Microsoft Azure Stack HCI Best Recipes https://datacentersupport.lenovo.com/us/en/solutions/ht507406

## Related product families

Product families related to this document are the following:

- 2-Socket Rack Servers
- Hyperconverged Infrastructure
- Hyperconverged Infrastructure
- ThinkAgile MX Series for Microsoft Azure Stack HCI

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