



## Lenovo System x3250 M6 (Intel Xeon E3-1200 v5, Core i3, Pentium/Celeron G Series Processors) Product Guide

The Lenovo System x3250 M6 is an affordable, single-socket 1U rack solution for small and medium businesses that need optimized performance and flexibility for future growth, along with enterprise-class reliability, management, and security.

The System x3250 M6 offers a wide range of processors — from Intel Celeron to Intel Xeon E3-1200 v5. With support for a memory capacity of up to 64 GB and internal storage of up to 32 TB, the x3250 M6 is ideal for small- to medium-sized business, workgroups, distributed locations, and webscale workloads.

Flexible and scalable internal storage configurations include up to eight 2.5-inch or four 3.5-inch drives with a wide selection of drive sizes and types. Also, it features integrated 1 Gb Ethernet NICs and additional PCIe expansion slots for advanced RAID protection and network scalability.

The following figure shows the System x3250 M6.



Figure 1. Lenovo System x3250 M6

### Did you know?

The System x3250 M6 offers enterprise-class reliability features such as error correcting code (ECC), hot-swap components, and advanced RAID protection with flexible storage options at an affordable price.

The Integrated Management Module 2.1 built into the System x3250 M6 offers easy-to-use, enterprise-class manageability to monitor server availability and perform remote management.

The System x3250 M6 has a mere 22.7-inch (576 mm) deep chassis, helping customers reduce their business footprint.

The System x3250 M6 leverages System x Trusted Platform Assurance, an exclusive set of System x features and practices (including a Trusted Platform Module) that establishes a solid security foundation for customer workloads.

## Key features

The System x3250 M6 server is a compact, cost-effective, single-processor 1U rack server that has been optimized to provide enterprise-class features to small-to-medium-sized businesses, retail stores, or distributed enterprises.

### Scalability and performance

The System x3250 M6 offers numerous features to boost performance and improve scalability:

- The Intel Xeon processor E3-1200 v5 product family improves productivity by offering 4-core processors with up to 3.7 GHz core speeds and up to 8 MB of cache to provide affordable single-socket system performance.
  - Choice of processors with up to four cores and up to eight threads to enable the effective use of multithreaded applications.
  - Intelligent and adaptive system performance with Intel Turbo Boost Technology 2.0 allows processor cores to run at maximum speeds during peak workloads by temporarily going beyond processor thermal design power (TDP).
  - Intel Hyper-Threading Technology boosts performance for multithreaded applications by enabling simultaneous multithreading within each processor with up to two threads per core.
  - Intel Virtualization Technology integrates hardware-level virtualization hooks that allow operating system vendors to better use the hardware for virtualization workloads.
- Up to four 2133 MHz DDR4 ECC UDIMMs provide speed, availability, and capacity of up to 64 GB.
- Flexible and scalable internal storage configurations provide up to 32 TB of storage capacity in a compact 1U form factor.
- The 12 Gbps SAS internal storage connectivity doubles the data transfer rate compared to 6 Gb SAS solutions to maximize the performance of storage I/O-intensive applications.
- The use of solid-state drives (SSDs) instead of, or along with, traditional spinning hard disk drives (HDDs) can significantly improve I/O performance.
- The server has two integrated Gigabit Ethernet ports and supports optional 10 Gb Ethernet PCIe adapters for high-speed network communications.
- The server offers two PCI Express (PCIe) 3.0 I/O expansion slots that offer increased I/O bandwidth in a dense 1U rack form factor.
- With Intel Integrated I/O Technology, the PCI Express 3.0 controller is integrated into the Intel Xeon processor E3-1200 v5 product family. Such integration reduces I/O latency and increases overall system performance.

### Availability and serviceability

The System x3250 M6 provides many features to simplify serviceability and increase system uptime:

- The server supports UDIMM memory with ECC protection which provides error correction not available in PC-class "servers" that use parity memory. Avoiding system crashes (and data loss) due to soft memory errors means greater system uptime.
- Tool-less cover removal provides easy access to upgrades and serviceable parts, such as memory and adapters.
- A choice of affordable onboard SATA RAID or advanced hardware RAID redundancy, along with hot-swap drives (select models), offers data protection and greater system uptime.
- The server offers redundant hot-swap power supplies (select models) to provide availability for business-critical applications.
- Predictive Failure Analysis (PFA) in the System x3250 M6 detects when system components (processors, memory, and battery) operate outside standard thresholds and generates proactive alerts in advance of possible failure, thereby increasing uptime.

- The use of SSDs can provide better reliability than the use of traditional HDDs, for greater uptime.
- Built-in Integrated Management Module II (IMM2.1) continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failure, to minimize downtime.
- Built-in diagnostics using Dynamic Systems Analysis (DSA) Preboot speed up troubleshooting to reduce service time.

### **Manageability and security**

Powerful systems management features simplify local and remote management of the System x3250 M6:

- The server includes an Integrated Management Module II (IMM2.1) to monitor server availability and perform remote management.
- An integrated industry-standard Unified Extensible Firmware Interface (UEFI) enables improved setup, configuration, and updates, and simplifies error handling.
- Lenovo offers ToolsCenter software tools at no additional cost that can help customers set up, use, and maintain the server.
- Lenovo XClarity Administrator offers comprehensive hardware management tools that can help increase uptime, reduce costs and improve productivity through advanced server management capabilities.
- An integrated Trusted Platform Module (TPM) supports the enablement of advanced cryptographic functionality, such as digital signatures and remote attestation.
- System x Trusted Platform Assurance, an exclusive set of System x security features and practices, establishes a solid security foundation for workloads by delivering firmware that is securely built, tested, digitally signed, and verified prior to execution.

### **Energy efficiency**

The System x3250 M6 offers the following energy-efficiency features to save energy, reduce operational costs, increase energy availability, and contribute to a green environment:

- Energy-efficient planar components help lower operational costs.
- 80 PLUS Gold-certified power supplies enable greater energy savings while providing flexibility to meet your business needs.
- The Lenovo Power Planner tool provides information about the power consumption and electric current calculation for the different configurations of servers and other devices, which helps plan deployment of servers and devices in an efficient way.
- Intel Intelligent Power Capability powers individual processor elements on and off as needed, to reduce power draw.
- Low-voltage Intel Xeon processors draw less energy to satisfy the demands of power and thermally constrained data centers and telecommunication environments.
- 1.2 V DDR4 memory DIMMs offer higher energy savings compared to 1.35 V and 1.5 V DDR3 DIMMs.

## Components and connectors

The following figure shows the front of the System x3250 M6 server with up to eight 2.5-inch drive bays.

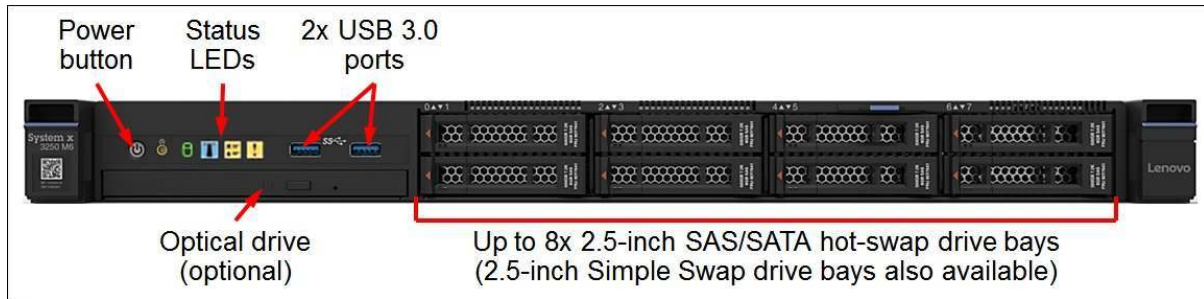


Figure 2. Front view of the System x3250 M6: 8x 2.5-inch drive bays

The following figure shows the front of the System x3250 M6 server with four 3.5-inch drive bays.

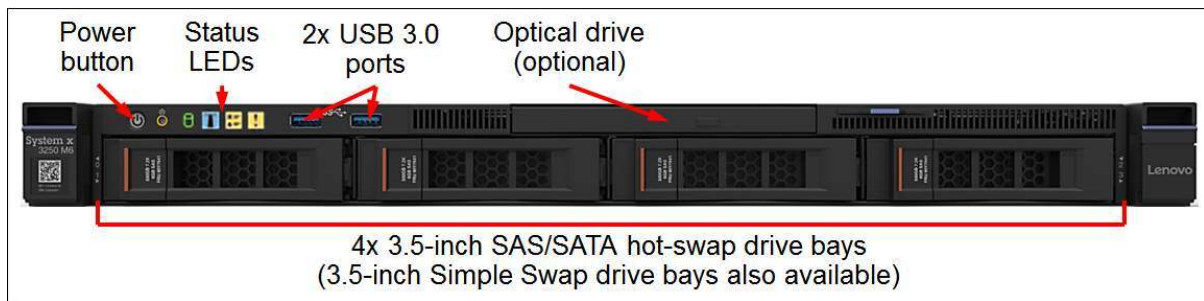


Figure 3. Front view of the System x3250 M6: 4x 3.5-inch drive bays

The following figure shows the rear of the System x3250 M6 server.

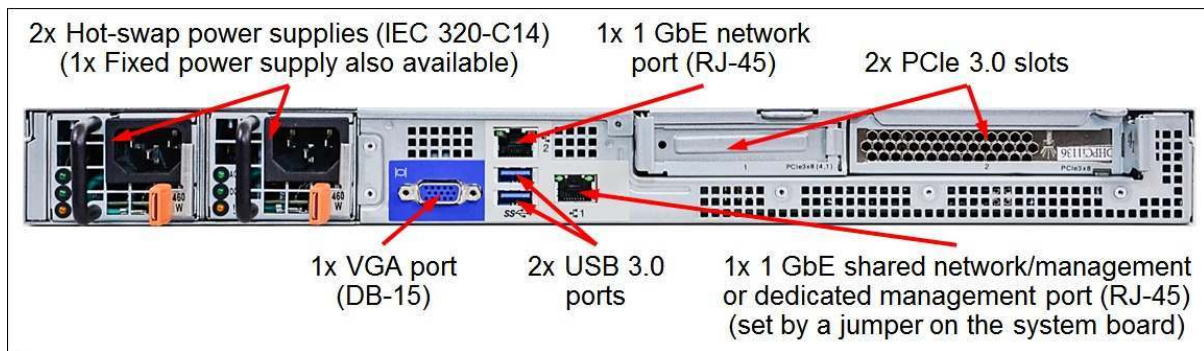


Figure 4. Rear view of the System x3250 M6

The following figure shows the locations of key components inside the System x3250 M6.

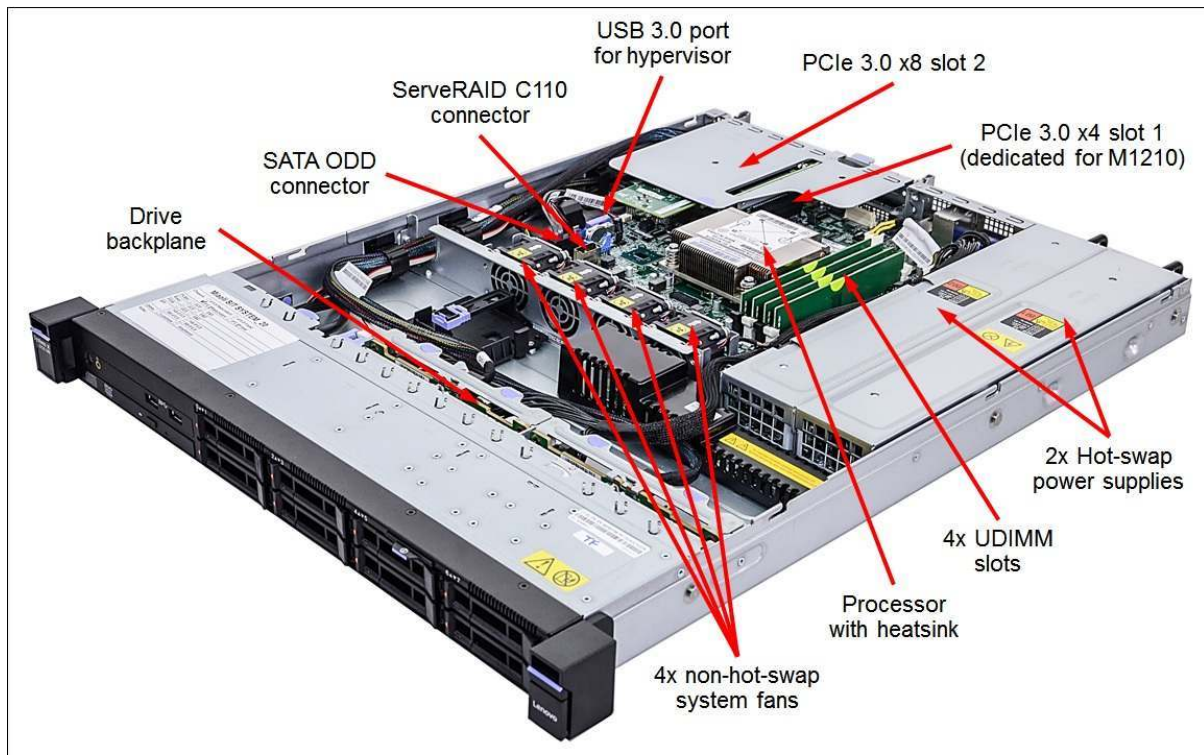


Figure 5. Internal view of the System x3250 M6

## System specifications

The following table lists the system specifications.

Table 1. System specifications

Components	Specification
Form factor	1U rack-mount
Processor	One processor: <ul style="list-style-type: none"> <li>• Intel Xeon processor E3-1200 v5 product family with four cores up to 3.7 GHz, 8 MB cache, and 2133 MHz memory speed; or</li> <li>• Intel Core i3 processor 6100/6300 product families with two cores up to 3.9 GHz, up to 4 MB cache, and 2133 MHz memory speed; or</li> <li>• Intel Pentium processor G4400/G4500 product families with two cores up to 3.6 GHz, 3 MB cache, and 2133 MHz memory speed; or</li> <li>• Intel Celeron Processor G3900 product family with two cores up to 2.9 GHz, 2 MB cache, and 1866 MHz memory speed.</li> </ul>
Chipset	Intel C232.
Memory	Four DIMM sockets. Support for ECC UDIMMs. Memory speeds up to 2133 MHz.
Memory capacity	Up to 64 GB with 4x 16 GB UDIMMs
Memory protection	Error correction code (ECC).

Components	Specification
Drive bays	<ul style="list-style-type: none"> <li>Up to 8x 2.5" SAS/SATA hot-swap drive bays</li> <li>4x 3.5" SAS/SATA hot-swap drive bays</li> <li>Up to 8x 2.5" SATA Simple Swap drive bays</li> <li>4x 3.5" SATA Simple Swap drive bays</li> </ul>
Drive types	<p>2.5-inch drives:</p> <ul style="list-style-type: none"> <li>12 Gb SAS HDDs up to 1.8 TB</li> <li>12 Gb Nearline (NL) SAS HDDs up to 2 TB</li> <li>6 Gb NL SATA HDDs up to 2 TB</li> <li>6 Gb SATA SSDs up to 3.84 TB</li> </ul> <p>3.5-inch drives:</p> <ul style="list-style-type: none"> <li>12 Gb NL SAS HDDs up to 8 TB</li> <li>6 Gb NL SATA HDDs up to 8 TB</li> <li>6 Gb SATA SSDs up to 3.84 TB</li> </ul> <p>Intermix of SAS and SATA HDDs and SSDs is supported within a system, but not within a RAID array.</p>
Internal storage capacity	<ul style="list-style-type: none"> <li>Up to 32 TB with 4x 8 TB 3.5" NL SAS or NL SATA HDDs</li> <li>Up to 30.7 TB with 8x 3.84 TB 2.5" SATA SSDs</li> <li>Up to 16 TB with 8x 2 TB 2.5" NL SAS or NL SATA HDDs</li> <li>Up to 14.4 TB with 8x 1.8 TB 2.5" SAS HDDs</li> </ul>
Storage controller	<ul style="list-style-type: none"> <li>6 Gb SATA RAID: RAID 0, 1, 10, 5 with C110.</li> <li>12 Gb SAS/6 Gb SATA RAID: RAID 0, 1, 10 with M1210, M1215, or M5210. Optional upgrade to RAID 5, 50 is available for M1210, M1215. Optional upgrade to RAID 5, 50 is available for M5210 (zero-cache; 1 GB non-backed cache; 1 GB, 2 GB, or 4 GB flash-backed cache). Optional upgrade to RAID 6, 60 is available for M5210 (requires a cache upgrade). Optional SSD Caching and Performance Accelerator upgrades are available for M5210.</li> <li>12 Gb SAS/6 Gb SATA non-RAID: N2215 HBA.</li> </ul>
Optical drive bays	One. Support for DVD-ROM or Multiburner.
Backup drive bays	None. Support for an external backup unit.
Network interfaces	2x Integrated Gigabit Ethernet 1000BASE-T ports (RJ-45 with the onboard Intel I350-AM2 controller; one port is configured as a dedicated or shared network/systems management port.
I/O expansion slots	Two PCIe slots: <ul style="list-style-type: none"> <li>Slot 1: PCIe 3.0 x8 (x4-wired); custom low profile, dedicated for the M1210 controller.</li> <li>Slot 2: PCIe 3.0 x8 (x8-wired); full-height, half-length.</li> </ul>
Ports	<ul style="list-style-type: none"> <li>Front: 2x USB 3.0 ports.</li> <li>Rear: 2x USB 3.0 and 1x DB-15 VGA ports. Optional 1x DB-9 serial port.</li> <li>Internal: 1x USB 3.0 port (for embedded hypervisor).</li> </ul>
Cooling	Calibrated Vectored Cooling with four non-hot-swap system fans.
Power supply	One 300 W AC (100 - 240 V) fixed power supply (80 PLUS Gold); or up to two redundant hot-swap 460 W AC (100 - 240 V) power supplies (80 PLUS Gold, Energy Star 2.0).
Hot-swap parts	Hard drives (select models) and power supplies (select models).
Systems management	Unified Extensible Firmware Interface (UEFI), Integrated Management Module II (IMM2.1) based on Renesas SH7758, Predictive Failure Analysis, system LEDs, Automatic Server Restart, ToolsCenter, and Lenovo XClarity Administrator. Optional IMM Advanced Upgrade for remote presence (graphics, keyboard and mouse, virtual media).

Components	Specification
Security features	Power-on password, administrator's password, Trusted Platform Module (TPM) 1.2 or 2.0 (configurable UEFI setting). Optional lockable front bezel.
Video	Matrox G200eR2 with 16 MB memory integrated into the IMM2.1. Maximum resolution is 1600x1200 at 75 Hz with 16 M colors.
Operating systems	Microsoft Windows Server 2012, 2012 R2, and 2016; Red Hat Enterprise Linux 6 (x64) and 7, SUSE Linux Enterprise Server 11 (x64) and 12, VMware vSphere (ESXi) 5.5, 6.0, and 6.5.
Warranty	Three-year (Machine Type 3633) or one-year (Machine Type 3943) customer-replaceable unit and onsite limited warranty with 9x5/Next Business Day.
Service and support	Optional service upgrades are available through the Lenovo Services: 4-hour or 2-hour response time, 8 hours fix time, one-year or two-year warranty extension, remote technical support for System x hardware and selected System x and third-party (Microsoft, Linux, VMware) software.
Dimensions	Height: 43 mm (1.7 in), width: 435 mm (17.1 in), depth: 576 mm (22.7 in)
Weight	Minimum: 8.6 kg (19.0 lb), maximum: 13.7 kg (30.1 lb)

## Standard models

The following tables list the standard models of the System x3250 M6.

**Product availability:** Standard models of the System x3250 M6 are not available in North America.

Table 2. Standard models with 3-year warranty (Machine Type 3633)

Model number§	Intel processor#	Memory (UDIMM)	RAID	Drive bays (std / max)	Drives	NIC	I/O slots†	Optical drive	Power supply (std / max)
Models announced April 2016									
3633B2x	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633D2x	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633B4x	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633C4x	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633M2x	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" SS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633H2x	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633F2x	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633L2x	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633G2x	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2

§ x in the Model number represents a country-specific letter (for example, the EMEA model number is 3633B2G). Ask a Lenovo representative for specifics.

# Processor details: Quantity, model, core speed, memory speed, cores/threads, and thermal design power (TDP).

\* An optional 4-to-8 drive bay upgrade kit requires the installation of the M1215, M5210, or N2215 controller and the removal of the existing M1210 controller.

† For models with the C110 or M1210 controller, only one PCIe slot (slot 2) is available for the installation of additional PCIe adapters. For models with the M1215 controller, no slots are available for the installation of additional PCIe adapters.

‡ An optional optical drive requires the ODD Cable Kit (00YE644).

Table 3. Standard models with 1-year warranty (Machine Type 3943)

Model number§	Intel processor#	Memory (UDIMM)	RAID	Drive bays (std / max)	Drives	NIC	I/O slot†	Optical drive	Power supply (std / max)
Models announced April 2016									
3943B2x	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943D2x	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943B4x	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943C4x	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943H2x	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943F2x	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943M2x	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" SS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943L2x	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943G2x	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2

§ x in the Model number represents a country-specific letter (for example, the EMEA model number is 3943B2G). Ask a Lenovo representative for specifics.

# Processor details: Quantity, model, core speed, memory speed, cores/threads, and thermal design power (TDP).

\* An optional 4 to 8 drive bay upgrade kit requires the installation of the M1215, M5210, or N2215 controller and the removal of the existing M1210 controller.

† For models with the C110 or M1210 controller, only one PCIe slot (slot 2) is available for the installation of additional PCIe adapters. For models with the M1215 controller, no slots are available for the installation of additional PCIe adapters.

‡ An optional optical drive requires the ODD Cable Kit (00YE644).

The standard models of the System x3250 M6 that are listed in the Standard models section are shipped with the following items:

- *Electronic Publications Flyer*
- *Rack Installation Guide*
- Rack mount kit

**Note:** Power cables are not included; see Power supplies and cables for ordering information.

## TopSeller models

The following tables list the TopSeller models of the System x3250 M6.

**Note:** TopSeller models are country-specific; that is, each country may define their own server models, and not all server models are available in every country.

Table 4. TopSeller models with 3-year warranty (Machine Type 3633) (F=Flash backup)

Model number	Intel processor#	Memory (UDIMM)	RAID	Drive bays (std / max)	Drives	NIC	I/O slot†	Optical drive	Power supply (std / max)
TopSeller - North America									
3633K2U	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 16GB	C110	4x 2.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1



Model number	Intel processor#	Memory (UDIMM)	RAID	Drive bays (std / max)	Drives	NIC	I/O slots†	Optical drive	Power supply (std / max)
3633K1U	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 16GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
394316A	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 16GB	M5210 2GB (F)	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633K3U	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633K4U	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633K5U	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633K6U	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633K7U	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633K8U	1x E3-1280 v5 3.7GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
TopSeller - Europe, Middle East, Africa (EMEA)									
3633EFG	1x G4400 3.3GHz 2133MHz 2C/2T (54W)	1x 4GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633E1G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633E8G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633EBG	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633E2G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633E5G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633EGG	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633E6G	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633EHG	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633E9G	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633E3G	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633EDG	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633EAG	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633ECG	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633E4G	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3633E7G	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633EEG	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2

Model number	Intel processor#	Memory (UDIMM)	RAID	Drive bays (std / max)	Drives	NIC	I/O slots†	Optical drive	Power supply (std / max)
TopSeller - Japan									
3633EJJ	1x i3-6100 3.7GHz 2133MHz 2C/4T (51W)	1x 4GB	M5210	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633EKJ	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	M5210	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3633EMJ	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 4GB	M5210	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
TopSeller - Australia									
363316D	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
363316F	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1215	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
363316H	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1215	4x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2

# Processor details: Quantity, model, core speed, memory speed, cores/threads, and thermal design power (TDP).

\* An optional 4 to 8 drive bay upgrade kit requires the installation of the M1215, M5210, or N2215 controller and the removal of the existing M1210 controller.

† For models with the C110 or M1210 controller, only one PCIe slot (slot 2) is available for the installation of additional PCIe adapters. For models with the M1215 or M5210 controller, no slots are available for the installation of additional PCIe adapters.

‡ An optional optical drive requires the ODD Cable Kit (00YE644).

Table 5. TopSeller models with 1-year warranty (Machine Type 3943) (F=Flash backup)

Model number§	Intel processor#	Memory (UDIMM)	RAID	Drive bays (std / max)	Drives	NIC	I/O slots†	Optical drive	Power supply (std / max)
TopSeller - North America									
3943K2U	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 16GB	C110	4x 2.5" SS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943K1U	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 16GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
394316A	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 16GB	M5210 2GB (F)	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943K3U	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943K4U	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 16GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
TopSeller - Europe, Middle East, Africa (EMEA)									
3943EFG	1x G4400 3.3GHz 2133MHz 2C/2T (54W)	1x 4GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943E1G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	C110	4x 3.5" SS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943E8G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943EBG	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943E2G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943E5G	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943EGG	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2

Model number§	Intel processor#	Memory (UDIMM)	RAID	Drive bays (std / max)	Drives	NIC	I/O slots†	Optical drive	Power supply (std / max)
3943E6G	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943EHG	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943E9G	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943E3G	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943EDG	1x E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943EAG	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943ECG	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943E4G	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943E7G	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1210	4x 3.5" HS / 4	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
3943EEG	1x E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	1x 8GB	M1215	8x 2.5" HS / 8	Open bay	2x GbE	2	Optional‡	1x 460 W HS / 2
TopSeller - Japan									
3943EJJ	1x i3-6100 3.7GHz 2133MHz 2C/4T (51W)	1x 4GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943EKJ	1x E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	1x 4GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1
3943EMJ	1x E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	1x 4GB	M1210	4x 2.5" HS / 8*	Open bay	2x GbE	2	Optional‡	1x 300 W Fixed / 1

# Processor details: Quantity, model, core speed, memory speed, cores/threads, and thermal design power (TDP).

\* An optional 4 to 8 drive bay upgrade kit requires the installation of the M1215, M5210, or N2215 controller and the removal of the existing M1210 controller.

† For models with the C110 or M1210 controller, only one PCIe slot (slot 2) is available for the installation of additional PCIe adapters. For models with the M1215 controller, no slots are available for the installation of additional PCIe adapters.

‡ An optional optical drive requires the ODD Cable Kit (00YE644).

The TopSeller models of the System x3250 M6 that are listed in the TopSeller models section are shipped with the following items:

- *Electronic Publications* Flyer
- *Rack Installation Guide*
- Rack mount kit
- One 2.8 m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable (models 16A, 16D, 16F, and 16H only)

**Note:** Power cables are not included (except for the models 16A, 16D, 16F, and 16H); see Power supplies and cables for ordering information.

## Processors

The System x3250 M6 server supports one processor. The following table lists the specifications of the processors that are available for the System x3250 M6.

Table 6. Processor specifications (Hyper-Threading [HT], Turbo Boost [TB], Virtualization Technology [VT])

Processor model	Core frequency (Base / TB Max)	Cores / Threads	Cache	Max DDR4 frequency	TDP	HT	TB	VT-x	VT-d
<b>Intel Xeon processors</b>									
E3-1220 v5	3 / 3.5 GHz	4 / 4	8 MB	2133 MHz	80 W	No	Yes	Yes	Yes
E3-1230 v5	3.4 / 3.8 GHz	4 / 8	8 MB	2133 MHz	80 W	Yes	Yes	Yes	Yes
E3-1240 v5	3.5 / 3.9 GHz	4 / 8	8 MB	2133 MHz	80 W	Yes	Yes	Yes	Yes
E3-1240L v5	2.1 / 3.2 GHz	4 / 8	8 MB	2133 MHz	25 W	Yes	Yes	Yes	Yes
E3-1260L v5	2.9 / 3.9 GHz	4 / 8	8 MB	2133 MHz	45 W	Yes	Yes	Yes	Yes
E3-1270 v5	3.6 / 4 GHz	4 / 8	8 MB	2133 MHz	80 W	Yes	Yes	Yes	Yes
E3-1280 v5	3.7 / 4 GHz	4 / 8	8 MB	2133 MHz	80 W	Yes	Yes	Yes	Yes
<b>Intel Core processors</b>									
i3-6100	3.7 GHz	2 / 4	3 MB	2133 MHz	51 W	Yes	No	Yes	Yes
i3-6100T	3.2 GHz	2 / 4	3 MB	2133 MHz	35 W	Yes	No	Yes	Yes
i3-6300	3.8 GHz	2 / 4	4 MB	2133 MHz	51 W	Yes	No	Yes	Yes
i3-6300T	3.3 GHz	2 / 4	4 MB	2133 MHz	35 W	Yes	No	Yes	Yes
i3-6320	3.9 GHz	2 / 4	4 MB	2133 MHz	51 W	Yes	No	Yes	Yes
<b>Intel Pentium processors</b>									
G4400	3.3 GHz	2 / 2	3 MB	2133 MHz	54 W	No	No	Yes	Yes
G4400T	2.9 GHz	2 / 2	3 MB	2133 MHz	35 W	No	No	Yes	Yes
G4500	3.5 GHz	2 / 2	3 MB	2133 MHz	51 W	No	No	Yes	Yes
G4500T	3 GHz	2 / 2	3 MB	2133 MHz	35 W	No	No	Yes	Yes
G4520	3.6 GHz	2 / 2	3 MB	2133 MHz	51 W	No	No	Yes	Yes
<b>Intel Celeron processors</b>									
G3900	2.8 GHz	2 / 2	2 MB	1866 MHz	51 W	No	No	Yes	Yes
G3900T	2.6 GHz	2 / 2	2 MB	1866 MHz	35 W	No	No	Yes	Yes
G3920	2.9 GHz	2 / 2	2 MB	1866 MHz	51 W	No	No	Yes	Yes

System x3250 M6 server models come standard with one processor. The following table lists feature codes for the processors that are available for the System x3250 M6.

Table 7. Processor options

Description	Feature code
<b>Intel Xeon processors</b>	
Intel Xeon Processor E3-1220 v5 3.0GHz 2133MHz 4C/4T (80W)	ATBA
Intel Xeon Processor E3-1230 v5 3.4GHz 2133MHz 4C/8T (80W)	ATB9
Intel Xeon Processor E3-1240 v5 3.5GHz 2133MHz 4C/8T (80W)	ATB8
Intel Xeon Processor E3-1240L v5 2.1GHz 2133MHz 4C/8T (25W)	ATBC
Intel Xeon Processor E3-1260L v5 2.9GHz 2133MHz 4C/8T (45W)	ATBB

Description	Feature code
Intel Xeon Processor E3-1270 v5 3.6GHz 2133MHz 4C/8T (80W)	ATB7
Intel Xeon Processor E3-1280 v5 3.7GHz 2133MHz 4C/8T (80W)	ATB6
Intel Core processors	
Intel Core i3-6100 3.7GHz 2133MHz 2C/4T (51W)	ATBG
Intel Core i3-6100T 3.2GHz 2133MHz 2C/4T (35W)	ATBH
Intel Core i3-6300 3.8GHz 2133MHz 2C/4T (51W)	ATBE
Intel Core i3-6300T 3.3GHz 2133MHz 2C/4T (35W)	ATBF
Intel Core i3-6320 3.9GHz 2133MHz 2C/4T (51W)	ATBD
Intel Pentium processors	
Intel Pentium G4400 3.3GHz 2133MHz 2C/2T (54W)	ATBM
Intel Pentium G4400T 2.9GHz 2133MHz 2C/2T (35W)	ATBN
Intel Pentium G4500 3.5GHz 2133MHz 2C/2T (51W)	ATBK
Intel Pentium G4500T 3.0GHz 2133MHz 2C/2T (35W)	ATBL
Intel Pentium G4520 3.6GHz 2133MHz 2C/2T (51W)	ATBJ
Intel Celeron processors	
Intel Celeron G3900 2.8GHz 2133MHz 2C/2T (51W)	ATBQ
Intel Celeron G3900T 2.6GHz 2133MHz 2C/2T (35W)	ATBR
Intel Celeron G3920 2.9GHz 2133MHz 2C/2T (51W)	ATBP

## Memory

Lenovo DDR4 memory is compatibility tested and tuned for optimal System x performance and reliability. Lenovo DDR4 memory has a unique signature programmed into the DIMM, which enables System x servers to verify whether the memory installed is qualified and supported. From a service and support standpoint, Lenovo memory automatically assumes the system warranty, and Lenovo provides service and support worldwide.

The System x3250 M6 server has four DIMM slots, and it supports DDR4 UDIMMs with ECC memory protection. The processor has two memory channels and supports two DIMMs per channel.

The following rules apply when selecting the memory configuration:

- The server supports memory configurations with 1, 2, 3, or 4 UDIMMs.
- The server supports up to 2133 MHz memory speeds for one DIMM per channel and two DIMMs per channel configurations, provided that the processors support this memory speed (see Processors for details).

The following table summarizes memory speeds and capacities that are supported by the System x3250 M6 server.

Table 8. System x3250 M6 maximum memory speeds and capacities

DIMMs per channel	UDIMM	
	Memory bus speed	Maximum capacity
1 DPC	2133 MHz	32 GB (2x 16 GB)
2 DPC	2133 MHz	64 GB (4x 16 GB)

The following table lists memory options available for the System x3250 M6 server.

Table 9. Memory options

Description	Part number	Feature code	Maximum supported
<b>UDIMMs - 2133 MHz</b>			
4GB (1x4GB, 1Rx8, 1.2V) PC4-17000 DDR4 2133MHz LP ECC UDIMM	46W0809	ATPT	4
8GB (1x8GB, 2Rx8, 1.2V) PC4-17000 DDR4 2133MHz LP ECC UDIMM	46W0813	ATPU	4
16GB (1x16GB, 2Rx8, 1.2V) PC4-17000 DDR4 2133MHz LP ECC UDIMM	46W0817	ATRZ	4

## Internal storage

The System x3250 M6 server supports the following internal drive bay configurations:

1. 4x 2.5-inch SAS/SATA hot-swap drive bay server models that can be upgraded to 8x 2.5-inch SAS/SATA hot-swap drive bays
2. 4x 3.5-inch SAS/SATA hot-swap drive bay server models
3. 4x 2.5-inch SATA Simple Swap drive bay server models that can be upgraded to 8x 2.5-inch SATA Simple Swap drive bays
4. 4x 3.5-inch SATA Simple Swap drive bay server models

The following figure shows these configurations.

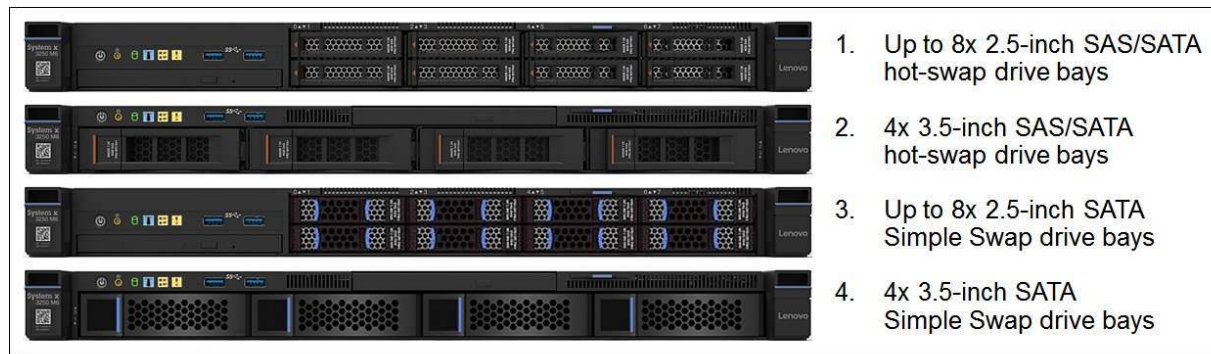


Figure 6. Internal drive configurations

All server models of the System x3250 M6 support an optional optical drive.

The following table shows the internal storage options available for the System x3250 M6 server.

Table 10. Internal storage options

Description	Part number	Feature code	Maximum supported
<b>2.5-inch base drive kits</b>			
2.5" Hot Swap Hardware RAID Kit	None*	ATA0	1
2.5" Simple Swap Hardware RAID Kit	None*	AT9Y	1
2.5" Simple Swap Software RAID Kit	None*	AT9X	1
<b>3.5-inch base drive kits</b>			
3.5" Hot Swap Hardware RAID Kit	None*	AT9W	1
3.5" Simple Swap Hardware RAID Kit	None*	AT9V	1

Description	Part number	Feature code	Maximum supported
3.5" Simple Swap Software RAID Kit	None*	AT9U	1
2.5-inch upgrade drive kits (require the 2.5-inch base drive kit)			
2.5" Hot Swap 4 to 8 Hard Drive Upgrade Kit	00YE607	ATA1	1
2.5" Simple Swap 4 to 8 Hard Drive Upgrade Kit	00YE605	AT9Z	1

\* Available in standard or CTO (configure to order) models, or both.

Base drive kits are always factory installed in either standard or custom (CTO) models. Upgrade drive kits can be factory installed or can be installed as a field upgrade for supported standard or custom models.

The following table lists possible internal storage configurations.

Table 11. Internal storage configurations (FC=Feature Code, PN=Part Number)

Drive bay configuration	Storage controller*	Drive kits required
Hot-swap SAS/SATA drive bays		
4x 2.5-inch SAS/SATA hot-swap	1x M1210; or 1x RAID or HBA (PCIe 3.0 x8)	Factory installed: <ul style="list-style-type: none"> <li>1x 2.5" Hot Swap Hardware RAID Kit (FC ATA0)</li> </ul>
8x 2.5-inch SAS/SATA hot-swap	1x RAID or HBA (PCIe 3.0 x8)	Factory installed: <ul style="list-style-type: none"> <li>1x 2.5" Hot Swap Hardware RAID Kit (FC ATA0); and</li> <li>1x 2.5" Hot Swap 4 to 8 Hard Drive Upgrade Kit (FC ATA1)</li> </ul> Field upgrade for the 4-drive bay model: <ul style="list-style-type: none"> <li>1x 2.5" Hot Swap 4 to 8 Hard Drive Upgrade Kit (PN 00YE607)</li> </ul>
4x 3.5-inch SAS/SATA hot-swap	1x M1210; or 1x RAID or HBA (PCIe 3.0 x8)	Factory installed: <ul style="list-style-type: none"> <li>1x 3.5" Hot Swap Hardware RAID Kit (FC AT9W)</li> </ul>
Simple Swap SATA drive bays		
4x 2.5-inch SATA Simple Swap	1x C110**	Factory installed: <ul style="list-style-type: none"> <li>1x 2.5" Simple Swap Software RAID Kit (FC AT9X)</li> </ul>
	1x M1210; or 1x RAID or HBA (PCIe 3.0 x8)	Factory installed: <ul style="list-style-type: none"> <li>1x 2.5" Simple Swap Hardware RAID Kit (FC AT9Y)</li> </ul>
8x 2.5-inch SATA Simple Swap	1x RAID or HBA (PCIe 3.0 x8)	Factory installed: <ul style="list-style-type: none"> <li>1x 2.5" Simple Swap Hardware RAID Kit (FC AT9Y); and</li> <li>1x 2.5" Simple Swap 4 to 8 Hard Drive Upgrade Kit (FC AT9Z)</li> </ul> Field upgrade for the 4-drive bay model: <ul style="list-style-type: none"> <li>1x 2.5" Simple Swap 4 to 8 Hard Drive Upgrade Kit (PN 00YE605)</li> </ul>
4x 3.5-inch SATA Simple Swap	1x C110**	Factory installed: <ul style="list-style-type: none"> <li>1x 3.5" Simple Swap Software RAID Kit (FC AT9U)</li> </ul>
	1x M1210; or 1x RAID or HBA (PCIe 3.0 x8)	Factory installed: <ul style="list-style-type: none"> <li>1x 3.5" Simple Swap Hardware RAID Kit (FC AT9V)</li> </ul>

\* In the Storage controller column, RAID or HBA (PCIe 3.0 x8) means any supported PCIe 3.0 x8 controller for internal storage: M1215, M5210, or N2215.

\*\* The x3250 M6 server models that use the ServeRAID C110 do not support an upgrade to a hardware RAID controller.

## Controllers for internal storage

The following table lists the storage controllers and the additional options used for the internal storage of the System x3250 M6 server.

Table 12. RAID controllers and HBAs for internal storage

Description	Part number	Feature code	Maximum supported
Onboard 6 Gbps SATA controller			
ServeRAID C110 Software RAID	None#	ATS0	1
12 Gbps SAS/6 Gbps SATA controllers			
ServeRAID M1210 SAS/SATA Controller	00JY194	ATPV	1
ServeRAID M1215 SAS/SATA Controller	46C9114	A45W	1
ServeRAID M5210 SAS/SATA Controller	46C9110	A3YZ	1
N2215 SAS/SATA HBA	47C8675	A3YY	1
Hardware upgrades for the M5210 (per one controller)			
ServeRAID M5200 Series 1GB Cache/RAID 5 Upgrade	47C8656	A3Z0	1
ServeRAID M5200 Series 1GB Flash/RAID 5 Upgrade	47C8660	A3Z1	1
ServeRAID M5200 Series 2GB Flash/RAID 5 Upgrade	47C8664	A3Z2	1
ServeRAID M5200 Series 4GB Flash/RAID 5 Upgrade	47C8668	A3Z3	1
Features on Demand upgrades for the M5210 (system-wide)**			
ServeRAID M5200 Series Zero Cache/RAID 5 Upgrade	47C8708	A3Z6	1
ServeRAID M5200 Series RAID 6 Upgrade	47C8706	A3Z5	1*
ServeRAID M5200 Series Performance Accelerator	47C8710	A3Z7	1*
ServeRAID M5200 Series SSD Caching Enabler	47C8712	A3Z8	1*
Features on Demand upgrades for the M1215 (system-wide)***			
ServeRAID M1200 Zero Cache/RAID 5 Upgrade	00AE930	A5H5	1

# ServeRAID C110 is an onboard hardware-assist, software RAID feature (Intel Rapid Storage Technology Enterprise [RSTe]) integrated into the Intel C232 Platform Controller Hub (PCH).

\* Requires cache memory upgrade (47C8656, 47C8660, 47C8664, or 47C8668).

\*\* One FoD upgrade enables the feature on all ServeRAID M5200 Series adapters (M5210, M5225) installed in the server.

\*\*\* One FoD upgrade enables the feature on all ServeRAID M1200 Series adapters (M1210, M1215) installed in the server.

### Configuration notes:

- The onboard ServeRAID C110 controller does not consume a PCIe slot.
- The ServeRAID M1210 controller is supported only in the dedicated PCIe slot 1.
- Other controllers for internal storage (M1215, M5210, N2215) are supported only in the PCIe slot 2.
- The C110, M1210, M1215, M5210, and N2215 controllers are mutually exclusive, that is, only one of them can be selected in the configuration.
- Models of the System x3250 M6 that use the ServeRAID C110 controller do not support an upgrade to a hardware RAID controller.



The following table summarizes features of supported storage controllers.

Table 13. Storage controller features and specifications summary

Feature	C110	M1210	M1215	M5210	N2215
Part number	None	00JY194	46C9114	46C9110	47C8675
Form factor	Onboard	Custom	PCIe low profile	PCIe low profile	PCIe low profile
Controller chip	Not applicable	LSI SAS3004	LSI SAS3008	LSI SAS3108	LSI SAS3008
Host interface	Not applicable	PCIe 3.0 x4	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8
Port interface	6 Gbps SATA	12 Gbps SAS	12 Gbps SAS	12 Gbps SAS	12 Gbps SAS
Number of ports	4	4	8	8	8
Port connectors	Custom	1x Mini-SAS HD x4 (SFF-8643)	2x Mini-SAS HD x4 (SFF-8643)	2x Mini-SAS HD x4 (SFF-8643)	2x Mini-SAS HD x4 (SFF-8643)
Drive interface	SATA	SAS, SATA	SAS, SATA	SAS, SATA	SAS, SATA
Drive type	HDD, SSD	HDD, SSD	HDD, SSD	HDD, SSD	HDD, SSD
Drive form factor	SFF, LFF	SFF, LFF	SFF, LFF	SFF, LFF	SFF, LFF
Hot-swap drive support	No	Yes	Yes	Yes	Yes
Maximum number of devices	4	4	32 (RAID); 64 (JBOD)	240	1024
RAID levels	0/1/10/5	0/1/10; Optional 5/50 (00AE930)	0/1/10; Optional 5/50 (00AE930)	0/1/10; Optional 5/50 (RAID 5 FoD, 47C8708, or cache upgrades); Optional 6/60 (47C8706)	None
JBOD mode	Yes	Yes	Yes	Yes (without cache)	Yes
Cache	None	None	None	<ul style="list-style-type: none"> <li>• 1 GB no backup (47C8656)</li> <li>• 1 GB flash backup (47C8660)</li> <li>• 2 GB flash backup (47C8664)</li> <li>• 4 GB flash backup (47C8668)</li> </ul>	None
Performance Accelerator (FastPath)	No	No	No	Optional (47C8710)	No
SSD Caching (CacheCade Pro 2.0)	No	No	No	Optional (47C8712)	No

**Important:** ServeRAID C110 is not supported by virtualization hypervisors, including VMware vSphere (ESXi), Linux KVM, Xen, and Microsoft Hyper-V.

For more information, see the list of Product Guides in the RAID adapters category:

<https://lenovopress.com/servers/options/raid>

The following table lists supported combinations of the storage controllers and drive types for the System x3250 M6 drive bay configurations.

Table 14. Storage controllers, drive types, and internal drive bays

Drive bays	Storage Controller	Drive type			
		SAS HDD	NL SAS HDD	NL SATA HDD	SATA SSD
<b>SAS/SATA hot-swap</b>					
4x 2.5-inch SAS/SATA hot-swap	C110	No	No	No	No
	M1210	Yes	Yes	Yes	Yes
	M1215, M5210, N2215	Yes	Yes	Yes	Yes
8x 2.5-inch SAS/SATA hot-swap	C110	No	No	No	No
	M1210	No	No	No	No
	M1215, M5210, N2215	Yes	Yes	Yes	Yes
4x 3.5-inch SAS/SATA hot-swap	C110	No	No	No	No
	M1210	No	Yes	Yes	No
	M1215, M5210, N2215	No	Yes	Yes	No
<b>SATA Simple Swap</b>					
4x 2.5-inch SATA Simple Swap	C110	No	No	Yes	No
	M1210	No	No	Yes	No
	M1215, M5210, N2215	No	No	Yes	No
8x 2.5-inch SATA Simple Swap	C110	No	No	No	No
	M1210	No	No	No	No
	M1215, M5210, N2215	No	No	Yes	No
4x 3.5-inch SATA Simple Swap	C110	No	No	Yes	No
	M1210	No	No	Yes	No
	M1215, M5210, N2215	No	No	Yes	No

## Drives for internal storage

The following tables list currently available drive options for internal storage of the System x3250 M6 server.

Table 15. Internal drive options: 2.5-inch hot-swap drives

Description	Part number	Feature code	Maximum supported
<b>2.5-inch hot-swap HDDs - 12 Gbps SAS</b>			
300GB 10K 12Gbps SAS 2.5" G3HS HDD	00WG685	AT89	8
300GB 15K 12Gbps SAS 2.5" G3HS HDD	00WG660	AT84	8
600GB 10K 12Gbps SAS 2.5" G3HS HDD	00WG690	AT8A	8
600GB 15K 12Gbps SAS 2.5" G3HS HDD	00WG665	AT85	8
900GB 10K 12Gbps SAS 2.5" G3HS HDD	00WG695	AT8B	8
1.2TB 10K 12Gbps SAS 2.5" G3HS HDD	00WG700	AT8C	8
1.8TB 10K 12Gbps SAS 2.5" G3HS 512e HDD	00NA271	ASBM	8

Description	Part number	Feature code	Maximum supported
<b>2.5-inch hot-swap HDDs - 12 Gbps NL SAS</b>			
1TB 7.2K 12Gbps NL SAS 2.5" G3HS HDD	00NA491	AT7Z	8
2TB 7.2K 12Gbps NL SAS 2.5" G3HS HDD	00NA496	AT80	8
<b>2.5-inch hot-swap HDDs - 6 Gbps NL SATA</b>			
1TB 7.2K 6Gbps NL SATA 2.5" G3HS HDD	00AJ141	A4TX	8
2TB 7.2K 6Gbps NL SATA 2.5" G3HS 512e HDD	00NA526	AT81	8
<b>2.5-inch hot-swap SSDs - Enterprise Performance 6 Gbps SATA</b>			
Intel S3710 200GB Enterprise Performance SATA G3HS 2.5" SSD	00YC320	AT9C	8
Intel S3710 400GB Enterprise Performance SATA G3HS 2.5" SSD	00YC325	AT9D	8
Intel S3710 800GB Enterprise Performance SATA G3HS 2.5" SSD	00YC330	AT9E	8
<b>2.5-inch hot-swap SSDs - 5100 Enterprise Mainstream 6 Gbps SATA</b>			
5100 240GB Enterprise Mainstream SATA G3HS 2.5" SSD	01GV843	AXFV	8
5100 480GB Enterprise Mainstream SATA G3HS 2.5" SSD	01GV848	AXFW	8
5100 960GB Enterprise Mainstream SATA G3HS 2.5" SSD	01GV853	AXFX	8
5100 1.92TB Enterprise Mainstream SATA G3HS 2.5" SSD	01GV858	AXFY	8
5100 3.84TB Enterprise Mainstream SATA G3HS 2.5" SSD	01GV863	AXFZ	8
<b>2.5-inch hot-swap SSDs - S3610 Enterprise Mainstream 6 Gbps SATA</b>			
Intel S3610 480GB Enterprise Mainstream SATA G3HS 2.5" SSD	00YK212	AU3C	8
Intel S3610 800GB Enterprise Mainstream SATA G3HS 2.5" SSD	00YK217	AU3D	8
Intel S3610 1.2TB Enterprise Mainstream SATA G3HS 2.5" SSD	00YK222	AU3E	8
Intel S3610 1.6TB Enterprise Mainstream SATA G3HS 2.5" SSD	00YK227	AU3F	8
<b>2.5-inch hot-swap SSDs - 5100 Enterprise Entry 6 Gbps SATA</b>			
5100 480GB Enterprise Entry SATA G3HS 2.5" SSD	01KR496	AXGL	8
5100 960GB Enterprise Entry SATA G3HS 2.5" SSD	01KR501	AXGM	8
5100 1.92TB Enterprise Entry SATA G3HS 2.5" SSD	01KR506	AXGN	8
5100 3.84TB Enterprise Entry SATA G3HS 2.5" SSD	01KR511	AXGP	8
<b>2.5-inch hot-swap SSDs - PM863a Enterprise Entry 6 Gbps SATA</b>			
PM863a 240GB Enterprise Entry SATA G3HS 2.5" SSD	01GR836	AVHP	8
PM863a 480GB Enterprise Entry SATA G3HS 2.5" SSD	01GR841	AVHQ	8
PM863a 960GB Enterprise Entry SATA G3HS 2.5" SSD	01GR846	AVHR	8
<b>2.5-inch hot-swap SSDs - S3520 Enterprise Entry 6 Gbps SATA</b>			
Intel S3520 240GB Enterprise Entry SATA G3HS 2.5" SSD	01GR726	AUEM	8
Intel S3520 480GB Enterprise Entry SATA G3HS 2.5" SSD	01GR731	AUEP	8
Intel S3520 800GB Enterprise Entry SATA G3HS 2.5" SSD	01KR466	AXGB	8
Intel S3520 960GB Enterprise Entry SATA G3HS 2.5" SSD	01GR736	AUER	8
Intel S3520 1.2TB Enterprise Entry SATA G3HS 2.5" SSD	01GR802	AXGD	8
Intel S3520 1.6TB Enterprise Entry SATA G3HS 2.5" SSD	01GR817	AXGF	8

Table 16. Internal drive options: 2.5-inch simple-swap SATA drives

Description	Part number	Feature code	Maximum supported
1TB 7.2K 6Gbps NL SATA 2.5" G3SS HDD	00NA622	ASLD	8
2TB 7.2K 6Gbps NL SATA 2.5" G3SS 512e HDD	00NA536	AT82	8

Table 17. Internal drive options: 3.5-inch hot-swap drives

Description	Part number	Feature code	Maximum supported
<b>3.5-inch hot-swap HDDs - 12 Gbps SAS</b>			
300GB 15K 12Gbps SAS 3.5" G2HS HDD (2.5" HDD in 3.5" tray)	00WG675	AT87	4
600GB 15K 12Gbps SAS 3.5" G2HS HDD (2.5" HDD in 3.5" tray)	00WG680	AT88	4
900GB 15K 12Gbps SAS 3.5" G2HS 512e HDD (2.5" HDD in 3.5" tray)	01GV040	AVL9	4
<b>3.5-inch hot-swap HDDs - 12 Gbps NL SAS</b>			
2TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	00FN188	A5VP	4
4TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	00FN208	A5VQ	4
6TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	00FN228	A5VR	4
8TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	00WH121	ATRS	4
<b>3.5-inch hot-swap HDDs - 6 Gbps NL SATA</b>			
500GB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	81Y9786	A22Y	4
1TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	81Y9790	A22P	4
2TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	81Y9794	A22T	4
2TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	00FN113	A5VD	4
4TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	49Y6002	A3W9	4
4TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	00FN143	A5VH	4
6TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	00FN173	A5VM	4
8TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	00WH126	ATRT	4
<b>3.5-inch hot-swap SSDs (2.5" SSD in 3.5" drive tray) - 5100 Enterprise Mainstream 6 Gbps SATA</b>			
5100 240GB Enterprise Mainstream SATA HS 3.5" SSD	01GV868	AXG0	4
5100 480GB Enterprise Mainstream SATA HS 3.5" SSD	01GV873	AXG1	4
5100 960GB Enterprise Mainstream SATA HS 3.5" SSD	01GV878	AXG2	4
5100 1.92TB Enterprise Mainstream SATA HS 3.5" SSD	01GV883	AXG3	4
5100 3.84TB Enterprise Mainstream SATA HS 3.5" SSD	01GV090	AXG4	4
<b>3.5-inch hot-swap SSDs (2.5" SSD in 3.5" drive tray) - S3610 Enterprise Mainstream 6 Gbps SATA</b>			
Intel S3610 480GB Enterprise Mainstream SATA HS 3.5" SSD	00YK237	AU3H	4
Intel S3610 800GB Enterprise Mainstream SATA HS 3.5" SSD	00YK242	AU3J	4
Intel S3610 1.2TB Enterprise Mainstream SATA HS 3.5" SSD	00YK247	AU3K	4
Intel S3610 1.6TB Enterprise Mainstream SATA HS 3.5" SSD	00YK252	AU3L	4
<b>3.5-inch hot-swap SSDs (2.5" SSD in 3.5" drive tray) - 5100 Enterprise Entry 6 Gbps SATA</b>			
5100 480GB Enterprise Entry SATA HS 3.5" SSD	01KR516	AXGQ	4
5100 960GB Enterprise Entry SATA HS 3.5" SSD	01KR521	AXGR	4
5100 1.92TB Enterprise Entry SATA HS 3.5" SSD	01KR526	AXGS	4

<b>Description</b>	<b>Part number</b>	<b>Feature code</b>	<b>Maximum supported</b>
5100 3.84TB Enterprise Entry SATA HS 3.5" SSD	01KR531	AXGT	4
3.5-inch hot-swap SSDs (2.5" SSD in 3.5" drive tray) - PM863a Enterprise Entry 6 Gbps SATA			
PM863a 240GB Enterprise Entry SATA HS 3.5" SSD	01GR899	AVHS	4
PM863a 480GB Enterprise Entry SATA HS 3.5" SSD	01GR851	AVHT	4
PM863a 960GB Enterprise Entry SATA HS 3.5" SSD	01GR856	AVHU	4
3.5-inch hot-swap SSDs (2.5" SSD in 3.5" drive tray) - S3520 Enterprise Entry 6 Gbps SATA			
Intel S3520 240GB Enterprise Entry SATA HS 3.5" SSD	01GR741	AUF0	4
Intel S3520 480GB Enterprise Entry SATA HS 3.5" SSD	01GR746	AUF1	4
Intel S3520 800GB Enterprise Entry SATA HS 3.5" SSD	01KR471	AXGC	4
Intel S3520 960GB Enterprise Entry SATA HS 3.5" SSD	01GR751	AUF2	4
Intel S3520 1.2TB Enterprise Entry SATA HS 3.5" SSD	01GR807	AXGE	4
Intel S3520 1.6TB Enterprise Entry SATA HS 3.5" SSD	01GR822	AXGG	4

Table 18. Internal drive options: 3.5-inch simple-swap SATA drives

<b>Description</b>	<b>Part number</b>	<b>Feature code</b>	<b>Maximum supported</b>
500GB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	81Y9802	A22U	4
1TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	81Y9806	A22X	4
2TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	81Y9810	A22W	4
2TB 7.2K 6Gbps NL SATA 3.5" G2SS 512e HDD	00FN118	A5VE	4
4TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	49Y6012	A3WA	4
4TB 7.2K 6Gbps NL SATA 3.5" G2SS 512e HDD	00FN148	A5VJ	4

## Optical drives

The System x3250 M6 server supports the optical drive options listed in the following table.

Table 19. Optical drives

Description	Part number	Feature code	Maximum supported
Optical drives			
Ultraslim 9.5mm SATA DVD-ROM	00AM066	A5KG	1
Ultraslim 9.5mm SATA Multi Burner	00AM067	A5KH	1
Optical drive cable (Required)			
x3250 Optical Disc Drive Cable Kit	00YE644	ATAB	1

Ultraslim 9.5mm SATA DVD-ROM (00AM066) supports the following media and speeds for reading:

- CD-ROM 24X
- CD-DA (DAE) 24X
- CD-R 24X
- CD-RW 24X
- DVD-ROM 8X
- DVD-R 8X
- DVD+R 8X
- DVD-R DL 6X
- DVD+R DL 8X
- DVD-RW 8X
- DVD+RW 8X
- DVD-RAM (4.7 GB) 5X

Ultraslim 9.5mm SATA Multi Burner (00AM067) supports the same media and speeds for reading as DVD-ROM (part number 00AM066). This drive also supports the following media and speeds for writing:

- CD-R 24X
- CD-RW 4X
- High-Speed CD-RW 10X
- Ultra Speed CD-RW 24X
- DVD-R 8X
- DVD+R 8X
- DVD-R DL 6X
- DVD+R DL 6X
- DVD-RW 6X
- DVD+RW 8X
- DVD-RAM 5X

## I/O expansion

The System x3250 M6 server has two PCIe slots on the riser card that comes standard with all models. The slot form factors are as follows:

- Slot 1: PCIe 3.0 x8 (x4-wired); dedicated slot for the M1210 adapter
- Slot 2: PCIe 3.0 x8 (x8-wired), full-height, half-length

The locations of the PCIe slots are shown in the following figure.



Figure 7. PCIe slot locations

The Serial Port Upgrade Kit listed in the following table is used for mounting the external DB-9 serial port on the rear of the System x3250 M6. This option includes the bracket and the cable. The serial port is mounted in place of the PCIe slot 1, and the M1210 adapter cannot be used.

Table 20. Serial port

Description	Part number	Feature code	Maximum supported
x3250 Serial Port Upgrade Kit	00YE641	ATA8	1

## Network adapters

The System x3250 M6 supports two integrated Gigabit Ethernet ports. The integrated network interface controller (NIC) has the following features:

- An Intel I350-AM2 chip
- Two Gigabit Ethernet ports (one port is configured as a dedicated or shared management port)
- NIC Teaming (load balancing and failover)
- Ethernet features:
  - Compliant with 1 Gb Ethernet IEEE 802.3, 802.3u, and 802.3ab PHY specifications
  - Integrated PHY for 10/100/1000 Mbps for multispeed, full, and half-duplex auto-negotiation
  - Automatic cross-over detection function (MDI/MDI-X)
  - IEEE 802.3x and 802.3z compliant flow control support with software-controllable Rx thresholds and Tx pause frames
  - IEEE 1588 protocol and 802.1AS time synchronization implementation
  - IEEE802.3az - Energy Efficient Ethernet (EEE)
  - Full wake up support
    - Advanced Power Management (APM) support
    - Advanced Configuration and Power Interface (ACPI) specification v2.0c
    - Magic packet wake-up enable
- I/O Virtualization Features:
  - Eight transmit (Tx) and receive (Rx) queue pairs per port
  - Flexible port partitioning: 16 virtual functions (VF) with two ports (8 VFs per port)
  - Rx/Tx round-robin scheduling
  - Traffic isolation and traffic steering
  - Virtual machine (VM) to VM packet forwarding (packet loopback)
  - MAC and VLAN anti-spoofing
  - Malicious driver detection
  - Storm control
  - Per-pool statistics, off loads, and jumbo support
  - Independent Function Level Reset (FLR) for physical and virtual functions
  - IEEE 802.1q Virtual Local Area Network (VLAN) support with VLAN tag insertion, stripping, and advanced packet filtering for up to 4096 VLAN tags
  - Mirroring rules
  - Support for simple VEPA
  - VF promiscuous modes

- Stateless offload and performance features:
  - TCP/UDP, IPv4 checksum offloads (Rx/ Tx/Large-send); extended Tx descriptors
  - IPv6 support for IP/TCP and IP/UDP receive checksum offload
  - Tx TCP segmentation offload (IPv4, IPv6)
  - Transmit Segmentation Offloading (TSO)
  - Interrupt throttling control
  - Legacy and Message Signal Interrupt (MSI)
  - Message Signal Interrupt Extension (MSI-X)
  - Receive Side Scaling (RSS) for Windows
  - Scalable I/O for Linux environments (IPv4, IPv6, TCP/UDP)
  - Support for packets up to 9.5 KB (jumbo frames)
- Remote boot options
  - Preboot eXecution Environment (PXE) support
  - Intel iSCSI Remote Boot for Windows, Linux, and VMware

The following table lists additional supported network adapters.

Table 21. Network adapters

Description	Part number	Feature code	Maximum supported
<b>10 Gb Ethernet - PCIe Low Profile or Full Height (supported in the PCIe slot 2)</b>			
Emulex VFA5.2 2x10 GbE SFP+ PCIe Adapter	00AG570	AT7S	1*
Intel X710-DA2 2x10GbE SFP+ Adapter	01DA900	AU2Y	1*
Intel X550-T2 Dual Port 10GBase-T Adapter	00MM860	ATPX	1
<b>1 Gb Ethernet - PCIe Low Profile or Full Height (supported in the PCIe slot 2)</b>			
Broadcom NetXtreme I Dual Port GbE Adapter	90Y9370	A2V4	1
Intel I350-T2 2xGbE BaseT Adapter	00AG510	A56L	1
Intel I350-T4 4xGbE BaseT Adapter	00AG520	A56M	1
<b>10 GbE SFP+ transceivers and DAC cables (for 10 GbE SFP+ adapters)</b>			
Lenovo 10GBASE-SR SFP+ Transceiver	46C3447	5053	Port qty**
Brocade 10Gb SFP+ SR Optical Transceiver	49Y4216	0069	Port qty**
QLogic 10Gb SFP+ SR Optical Transceiver	49Y4218	0064	Port qty**
Lenovo 0.5m Passive SFP+ DAC Cable	00D6288	A3RG	Port qty**
Lenovo 1m Passive SFP+ DAC Cable	90Y9427	A1PH	Port qty**
Lenovo 1.5m Passive SFP+ DAC Cable	00AY764	A51N	Port qty**
Lenovo 2m Passive SFP+ DAC Cable	00AY765	A51P	Port qty**
Lenovo 3m Passive SFP+ DAC Cable	90Y9430	A1PJ	Port qty**
Lenovo 5m Passive SFP+ DAC Cable	90Y9433	A1PK	Port qty**
Lenovo 7m Passive SFP+ DAC Cable	00D6151	A3RH	Port qty**

\* SFP+ based adapters require supported transceivers or DAC cables that must be purchased for the adapter (See "10 Gb SFP+ transceivers and DAC cables" in the table above).

\*\* The maximum number of transceivers or cables that are supported per adapter equals the quantity of the adapter ports. All adapter ports must have the same type of transceiver or DAC cable selected.

For more information, see the list of Product Guides in the Ethernet adapters category:

<http://lenovopress.com/servers/options/ethernet>



## SAS adapters for external storage

The following table lists SAS RAID controllers and HBAs for external storage attachments that are supported by the System x3250 M6 server.

Table 22. SAS RAID adapters and HBAs for external storage

Description	Part number	Feature code	Maximum supported
12 Gbps SAS RAID adapter - PCIe Low Profile or Full Height (supported in the PCIe slot 2)			
ServeRAID M5225-2GB SAS/SATA Controller	00AE938	A5ND	1
Feature on Demand (FoD) upgrades for the M5225 (one per server)*			
ServeRAID M5200 Series RAID 6 Upgrade	47C8706	A3Z5	1*
ServeRAID M5200 Series Performance Accelerator	47C8710	A3Z7	1*
ServeRAID M5200 Series SSD Caching Enabler	47C8712	A3Z8	1*
12 Gbps SAS HBAs - PCIe Low Profile or Full Height (supported in the PCIe slot 2)			
N2225 SAS/SATA HBA	00AE912	A5M0	1

\* One FoD upgrade for the M5225 activates the feature on all M5200 series controllers(M5210, M5225) installed in a server.

The following table summarizes features of supported HBAs.

Table 23. SAS RAID controller and HBA features and specifications summary (PN = Part number)

Feature	M5225-2GB	N2225
Part number	00AE938	00AE912
Form factor	Low profile	Low profile
Controller chip	LSI SAS3108	LSI SAS3008
Host interface	PCIe 3.0 x8	PCIe 3.0 x8
Port interface	12 Gbps SAS	12 Gbps SAS
Number of external ports	8	8
External port connectors	2x Mini-SAS HD (SFF-8644)	2x Mini-SAS HD (SFF-8644)
Drive interface	SAS, SATA	SAS, SATA
Drive type	HDD, SED, SSD	HDD, SSD
Maximum number of devices	240	1024
RAID levels	0/1/10/5/50; Optional 6/60 (PN 47C8706)	None
JBOD mode	No	Yes
Cache	2 GB (included)	None
Cache protection	Flash (included)	None
Performance Accelerator (FastPath)	Optional (PN 47C8710)	None
SSD Caching (CacheCade Pro 2.0)	Optional (PN 47C8712)	None

For more information about the ServeRAID M5225-2GB, see the Lenovo Press Product Guide:  
<http://lenovopress.com/tips1258>

For more information about SAS HBAs, see the list of Product Guides in the Host bus adapters category:  
<http://lenovopress.com/servers/options/hba>

## Fibre Channel host bus adapters

The following table lists Fibre Channel HBAs supported by the System x3250 M6 server.

Table 24. Fibre Channel HBAs

Description	Part number	Feature code	Maximum supported
8 Gb Fibre Channel - PCIe Low Profile or Full Height (supported in the PCIe slot 2)			
Emulex 8Gb FC Single-port HBA	42D0485	3580	1
Emulex 8Gb FC Dual-port HBA	42D0494	3581	1
QLogic 8Gb FC Single-port HBA	42D0501	3578	1
QLogic 8Gb FC Dual-port HBA	42D0510	3579	1

For more information, see the list of Product Guides in the Host bus adapters category:

<https://lenovopress.com/servers/options/hba>

## Cooling

The System x3250 M6 server has four non-hot-swap system fans.

The optional thermal kit helps lower fan speeds depending on the environment's temperature to lower acoustic noise and energy use. The following table shows ordering information for the thermal kit option. The kit contains an additional thermal sensor and a sensor cable.

**Note:** The Thermal Kit does not extend the operating temperature range beyond 35 °C (95 °F).

Table 25. Thermal kit

Description	Part number	Feature code	Maximum supported
Operating Temperature Enhancement Kit	00J6351	A3SD	1

## Power supplies and cables

The System x3250 M6 server supports one 300 W AC fixed power supply or up to two 460 W redundant hot-swap power supplies. The power supplies are 80 PLUS Gold certified. Standard and TopSeller models of the System x3250 M6 come with one fixed or hot-swap power supply (model dependent, see Standard models and TopSeller models for details).

The following table lists the hot-swap power supply option for models with one hot-swap power supply. A hot-swap power supply option ships standard with one 2.8m, 10A/100-250V, IEC 320-C13 to C14 rack power cable.

Table 26. Power supplies

Description	Part number	Feature code	Maximum supported
460W Redundant Power Supply	00YD992	ATAD	2

**Important:** It is highly recommended that customers validate the system configuration for specific power requirements by using the latest version of the Lenovo Power Planner, which is available at:

<http://support.lenovo.com/us/en/downloads/ds101155>

Standard and TopSeller models of the System x3250 M6 ship without a power cord (except models 16A, 16D, 16F, and 16H). Country-specific line cords or rack power cables listed in the following table should be ordered together with the server.

Table 27. Power cables

Description	Part number	Feature code
<b>Rack power cables</b>		
1.5m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	39Y7937	6201
2.8m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable	39Y7938	6204
4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	39Y7932	6263
<b>Country-specific line cords</b>		
Argentina 10A/250V C13 to IRAM 2073 2.8m line cord	39Y7930	6222
Australia/NZ 10A/250V C13 to AS/NZ 3112 2.8m line cord	39Y7924	6211
Brazil 10A/125V C13 to NBR 6147 2.8m line cord	39Y7929	6223
China 10A/250V C13 to GB 2099.1 2.8m line cord	39Y7928	6210
Denmark 10A/250V C13 to DK2-5a 2.8m line cord	39Y7918	6213
European 10A/230V C13 to GEE7-VII 2.8m line cord	39Y7917	6212
India 10A/250V C13 to IS 6538 2.8m line cord	39Y7927	6269
Israel 10A/250V C13 to SI 32 2.8m line cord	39Y7920	6218
Italy 10A/250V C13 to CEI 23-16 2.8m line cord	39Y7921	6217
Japan 12A/125V C13 to JIS C-8303 2.8m line cord	46M2593	A1RE
Korea 12A/250V C13 to KETI 2.8m line cord	39Y7925	6219
South Africa 10A/250V C13 to SABS 164 2.8m line cord	39Y7922	6214
Switzerland 10A/250V C13 to SEV 1011-S24507 2.8m line cord	39Y7919	6216
Taiwan 10A/250V C13 to CNS 10917-3 2.8m line cord	00CG265	6317
United Kingdom 10A/250V C13 to BS 1363/A 2.8m line cord	39Y7923	6215
United States 10A/125V C13 to NEMA 5-15P 4.3m line cord	39Y7931	6207

## Integrated virtualization

The System x3250 M6 server supports VMware ESXi installed on a USB memory key. The USB memory key is installed in a USB socket inside the server.

The following table lists virtualization options.

Table 28. Virtualization options

Description	Part number	Feature code	Maximum supported
Blank USB Memory Key 4G SLC for VMware ESXi Downloads	00WH140	ATRM	1

## Operating systems

The System x3250 M6 server supports the following operating systems:

- Microsoft:
  - Microsoft Windows Server 2016
  - Microsoft Windows Server 2012 R2
  - Microsoft Windows Server 2012
- Red Hat:
  - Red Hat Enterprise Linux 7.3
  - Red Hat Enterprise Linux 7.2
  - Red Hat Enterprise Linux 6.8 Server x64 Edition
  - Red Hat Enterprise Linux 6.7 Server x64 Edition
- SUSE:
  - SUSE Linux Enterprise Server 12 SP2
  - SUSE Linux Enterprise Server 12 SP1
  - SUSE Linux Enterprise Server 11 for AMD64/EM64T SP4
- VMware:
  - VMware vSphere 6.5 (ESXi)
  - VMware vSphere 6.0 (ESXi) Update 3
  - VMware vSphere 6.0 (ESXi) Update 1
  - VMware vSphere 5.5 (ESXi) Update 3

**Important:** VMware ESXi and other hypervisor support requires a hardware RAID controller or HBA: M1210, M1215, M5210, or N2215. The onboard ServeRAID C110 controller is not supported by VMware ESXi and other hypervisors.

For the latest information about the specific versions and service levels supported and any other prerequisites, see the Operating System Interoperability Guide:

<http://lenovopress.com/redposig>

## Systems management

The System x3250 M6 supports the following systems management tools:

- Integrated Management Module 2.1
- Lenovo ToolsCenter
- Lenovo XClarity Administrator
- Lenovo XClarity Energy Manager

### Integrated Management Module 2.1

The System x3250 M6 server contains an Integrated Management Module II (IMM2.1), which provides advanced service-processor control, monitoring, and an alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM2.1 lights LEDs to help you diagnose the problem, records the error in the event log, and alerts you to the problem. Optionally, the IMM2.1 also provides a virtual presence capability for remote server management capabilities.

The IMM2.1 provides remote server management through industry-standard interfaces:

- Intelligent Platform Management Interface (IPMI) Version 2.0
- Simple Network Management Protocol (SNMP) Version 3
- Common Information Model (CIM)
- Web browser

The optional Integrated Management Module Advanced Upgrade is required to enable the remote presence and blue-screen capture features. The remote presence feature provides the following functions:

- Remotely viewing video with graphics resolutions up to 1600x1200 at 75 Hz with up to 23 bits per pixel
- Remotely accessing the server using the keyboard and mouse from a remote client
- Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server
- Uploading a diskette image to the IMM memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM2.1 restarts the server when the IMM2.1 detects an operating system hang condition. A system administrator can use the blue-screen capture to help determine the cause of the hang condition. The following table lists the remote management option.

Table 29. Remote management option

Description	Part number	Feature code	Maximum supported
Integrated Management Module Advanced Upgrade	90Y3901	A1ML	1

### Lenovo ToolsCenter

Lenovo offers the following ToolsCenter software tools that can help you set up, use, and maintain the server at no additional cost:

- **Lenovo ToolsCenter Suite**  
The ToolsCenter Suite tool is a consolidation of server management tools that helps simplify the management of System x servers. It provides functions to collect full system health information (including health status), configure system setting, update system firmware and drivers, and FoD mass activation key management for multiple endpoints.
- **Lenovo ServerGuide**  
The ServerGuide tool simplifies the process of configuring RAID and installing supported Microsoft Windows Server operating systems and device drivers on a System x server.
- **Lenovo UpdateXpress System Packs**  
The UpdateXpress System Packs (UXSPs) are integration-tested bundles that enable customers to maintain their server firmware and device drivers up-to-date and help them avoid unnecessary server outages.
- **Lenovo Dynamic System Analysis**  
The Dynamic System Analysis (DSA) pre-boot or standalone diagnostics software speeds up troubleshooting tasks to reduce service time.

For more information and downloads, visit the ToolsCenter web page:

<http://support.lenovo.com/us/en/documents/LNVO-center>

## Lenovo XClarity Administrator

Lenovo XClarity is a centralized systems management solution that helps administrators deliver infrastructure faster. This solution integrates easily with Lenovo x86 servers, Flex System, and RackSwitch switches, providing automated agent-less discovery, monitoring, firmware updates, configuration management, and bare metal deployment of operating systems and hypervisors across multiple systems.

Lenovo XClarity Administrator is an optional software component for the System x3250 M6 which can be downloaded and used at no charge to discover and monitor the x3250 M6 and manage firmware upgrades for them.

If software support is required for Lenovo XClarity Administrator, or Lenovo XClarity Administrator premium features (such as configuration management and operating system deployment) are required, or both, Lenovo XClarity Pro software subscription should be ordered. Lenovo XClarity Pro is licensed on a per managed system basis, that is, each managed Lenovo system requires a license.

The following table lists the geo-specific Lenovo XClarity software license options.

Table 30. Lenovo XClarity software options

Description	Part number (NA, AP, Japan)*	Part number (EMEA, LA)**	Quantity
Lenovo XClarity Pro, per Mngd Server w/1 Yr SW S&S	00MT201	00MT207	1
Lenovo XClarity Pro, per Mngd Server w/3 Yr SW S&S	00MT202	00MT208	1
Lenovo XClarity Pro, per Mngd Server w/5 Yr SW S&S	00MT203	00MT209	1

\* NA = North America; AP = Asia Pacific

\*\* EMEA = Europe, Middle East, Africa; LA = Latin America

Lenovo XClarity Administrator offers the following standard features that are available at no charge:

- Auto-discovery and monitoring of Lenovo x86 servers, RackSwitch switches, and Flex System chassis
- Firmware updates and compliance enforcement
- External alerts and notifications via SNMP traps, syslog remote logging, and e-mail
- Secure connections to managed endpoints
- NIST 800-131A or FIPS 140-2 compliant cryptographic standards between the management solution and managed endpoints
- Integration into existing higher level management systems such as cloud automation and orchestration tools through REST APIs, providing extensive external visibility and control over hardware resources
- An intuitive, easy-to-use GUI
- Scripting with Windows PowerShell, providing command-line visibility and control over hardware resources

Lenovo XClarity Administrator offers the following premium features that require an optional Pro license:

- Pattern-based configuration management that allows to define configurations once and apply repeatedly without errors when deploying new servers or redeploying existing servers without disrupting the fabric
- Bare-metal deployment of operating systems and hypervisors to streamline infrastructure provisioning

In addition, Lenovo XClarity Administrator offers two software plug-in modules (Lenovo XClarity Integrators) at no charge (if software support is required, a Lenovo XClarity Pro software subscription license should be ordered):

- Lenovo XClarity Integrator for Microsoft System Center
- Lenovo XClarity Integrator for VMware vCenter

Lenovo XClarity Integrators allow administrators to manage physical infrastructure from leading external virtualization management software tools from Microsoft and VMware. Lenovo XClarity Integrators offer the following additional features:

- Ability to discover, manage, and monitor Lenovo server hardware from VMware vCenter or Microsoft System Center
- Deployment of firmware updates and configuration patterns to System x M5, M6, and X6 rack servers and Flex System from the virtualization management tool
- Non-disruptive server maintenance in clustered environments that reduces workload downtime by dynamically migrating workloads from affected hosts during rolling server updates or reboots
- Greater service level uptime and assurance in clustered environments during unplanned hardware events by dynamically triggering workload migration from impacted hosts when impending hardware failures are predicted

For more information, refer to the Lenovo XClarity Administrator Product Guide:

<http://lenovopress.com/tips1200>

## Rack installation

The System x3250 M6 server models listed in "Standard models" and "TopSeller models" come with the rail kit. In addition, an optional lockable front bezel listed in the following table can be ordered for the System x3250 M6, if needed.

Table 31. Rack installation options

Description	Part number	Feature code	Maximum supported
Lockable front bezel			
x3250 Security Bezel	00YE642	ATA9	1

## Physical specifications

The System x3250 M6 server has the following dimensions and weight (approximate):

- Height: 43 mm (1.7 in)
- Width: 435 mm (17.1 in)
- Depth: 576 mm (22.7 in)
- Weight:
  - Minimum configuration: 8.6 kg (19.0 lb)
  - Maximum configuration: 13.7 kg (30.1 lb)

## Operating environment

The System x3250 M6 server is supported in the following environment:

- Air temperature:
  - Server on: 10 °C to 35 °C (50 °F to 95 °F)
  - Server off: 10 °C to 43 °C (50 °F to 109 °F)
  - Maximum altitude: 3,000 m (9,842 ft)
  - Shipment: -40 °C to +60 °C (-40 °F to 140 °F) at up to 10,000 m (32,808 ft)
- Humidity:
  - Server on: 8% to 80%, maximum dew point 24 °C
  - Server off: 8% to 85%, maximum dew point 27 °C
  - Shipment: 5% to 100%, maximum dew point 29 °C
- Electrical:
  - Models with 300 W AC fixed power supply:
    - 100 - 127 V AC (nominal); 50 Hz or 60 Hz; 4 A
    - 200 - 240 V AC (nominal); 50 Hz or 60 Hz; 2 A
  - Models with 460 W AC hot-swap power supplies:
    - 100 - 127 V AC (nominal); 50 Hz or 60 Hz; 5.6 A
    - 200 - 240 V AC (nominal); 50 Hz or 60 Hz; 2.8 A
  - Input kilovolt-amperes (kVA) (approximately):
    - Base configuration: 0.22 kVA
    - Maximum configuration: 0.35 kVA
- BTU output:
  - Base configuration: 759 Btu/hr (222 watts)
  - Maximum configuration: 1197 Btu/hr (351 watts)
- Noise level:
  - 5.4 bels (operating)
  - 5.4 bels (idle)

## Warranty

The System x3250 M6 has a one-year (Machine Type 3943) or three-year (Machine Type 3633) customer-replaceable unit (CRU) and onsite (for field-replaceable units [FRUs] only) limited warranty with standard call center support during normal business hours and 9x5 Next Business Day Parts Delivered. Also available are Lenovo Services warranty maintenance upgrades and post-warranty maintenance agreements, with a well-defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions.

Lenovo warranty service upgrade offerings are country-specific; that is, each country might have its own service types, service levels, response times, and terms and conditions. Not all covered types of warranty service upgrades might be available in a particular country or area. For more information about Lenovo warranty service upgrade offerings that are available in your country, refer to the Data Center Advisor and Configurator (formerly known as LESC) website:

<http://lesc.lenovo.com>

The following table explains warranty service definitions in more detail.

Table 32. Warranty service definitions

Term	Description
Onsite Service	If a problem with your product cannot be resolved via telephone, a Service Technician will be dispatched to arrive at your location.



Term	Description
Parts Delivered	If a problem with your product cannot be resolved via telephone and a CRU part is required, Lenovo will send a replacement CRU to arrive at your location. If a problem with your product cannot be resolved via telephone and a FRU part is required, a Service Technician will be dispatched to arrive at your location.
Technician Installed Parts	If a problem with your product cannot be resolved via telephone, a Service Technician will be dispatched to arrive at your location.
Hours of coverage	<ul style="list-style-type: none"> <li>• 9x5: 9 hours per day, 5 days per week, during normal business hours, excluding local public and national holidays</li> <li>• 24x7: 24 hours per day, 7 days per week, 365 days per year.</li> </ul>
Response time target	2 hours, 4 hours, or Next Business Day: The time period from when the telephone based troubleshooting is completed and logged, to the delivery of the CRU or arrival of a Service Technician and part at the Customer's location for repair.
Committed Repair	6 hours, 8 hours, 24 hours: The time period between the service request registration in Lenovo's call management system and the restoration of the product to conformance with its specification by a Service Technician.

The following Lenovo warranty service upgrades are available:

- Warranty and maintenance service upgrades:
  - Three, four, or five years of 9x5 or 24x7 service coverage
  - Parts delivered or technician installed parts from next business day to 4 or 2 hours
  - Committed Service Repair
  - Warranty extension of up to 5 years
  - Post warranty extensions
- Committed Service Repair  
Committed Service Repair (CSR) enhances the level of Warranty Service Upgrade or Post Warranty/Maintenance Service offering associated with the selected systems. Offerings vary and are available in select countries.
  - Priority handling to meet defined time frames to restore the failing machine to good working condition
  - 24x7x6 CSR: Service performed 24 hours per day, 7 days per week, within 6 hours
  - 24x7x8 CSR: Service performed 24 hours per day, 7 days per week, within 8 hours
  - 24x7x24 CSR: Service performed 24 hours per day, 7 days per week, within 24 hours
- YourDrive YourData  
Lenovo's YourDrive YourData service 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 with Lenovo warranty upgrades and extensions.
- Hardware Installation Services  
Lenovo experts can seamlessly manage the physical installation of your server, storage, or networking hardware. Working at a time convenient for you (business hours or off shift), the technician will unpack and inspect the systems on your site, install options, mount in a rack cabinet, connect to power and network, check and update firmware to the latest levels, verify operation, and dispose of the packaging, allowing your team to focus on other priorities. Your new systems will be configured and ready for your software installation.

## Regulatory compliance

The System x3250 M6 server conforms to the following regulations:

- AS/NZS CISPR 22, Class A (Australia/New Zealand)
- BSMI CNS 13438, Class A; CNS 14336 (Taiwan)
- CCC GB 4943.1, GB 17625.1, GB 9254 Class A (China)
- CE Mark (European Union)
- CISPR 22, Class A
- EAC (Russia)
- EN55022, Class A
- EN55024
- EN61000-3-2
- EN61000-3-3
- Energy Star 2.0 (models with hot-swap power supplies)
- FCC Part 15, Class A (United States)
- GS/TUV (Germany)
- ICES-003/NMB-03, Class A (Canada)
- IEC/EN60950-1
- KC Mark (Korea)
- NOM-019 (Mexico)
- Reduction of Hazardous Substances (ROHS)
- TUV S (Argentina)
- UL/CSA IEC 60950-1
- VCCI, Class A (Japan)

## External drive enclosures

The following table lists the 6 Gbps SAS external drive enclosures that are offered by Lenovo that can be used with the System x3250 M6 for storage expansion.

Table 33. E1012 and E1024 external drive enclosure models

Description	Part number
Lenovo Storage E1012 LFF Disk Expansion Single SAS IO Module, Rail Kit, 9x5 NBD	64111B1
Lenovo Storage E1012 LFF Disk Expansion Dual SAS IO Module, Rail Kit, 9x5 NBD	64111B2
Lenovo Storage E1024 SFF Disk Expansion Single SAS IO Module, Rail Kit, 9x5 NBD	64111B3
Lenovo Storage E1024 SFF Disk Expansion Dual SAS IO Module, Rail Kit, 9x5 NBD	64111B4

For details about supported drives, adapters, and cables for the Lenovo Storage E1012 and E1024, see the Lenovo Press Product Guide:

<http://lenovopress.com/lp0043>

The following table lists the relationship models of the 12 Gbps SAS external drive enclosures that are offered by Lenovo that can be used with the System x3250 M6 for storage expansion.

Table 34. D1212 and D1224 relationship models

Description	Part number
LFF models	
D1212 LFF Chassis, Dual 3-port ESMs (US English documentation)	4587A11*
D1212 LFF Chassis, Dual 3-port ESMs (Simplified Chinese documentation)	4587A1C^

Description	Part number
D1212 LFF Chassis, Dual 3-port ESMs (Japanese documentation)	4587A1J**
SFF models	
D1224 SFF Chassis, Dual 3-port ESMs (US English documentation)	4587A31*
D1224 SFF Chassis, Dual 3-port ESMs (Simplified Chinese documentation)	4587A3C^
D1224 SFF Chassis, Dual 3-port ESMs (Japanese documentation)	4587A3J**

\* Available worldwide (except China and Japan)

^ Available only in China

\*\* Available only in Japan

The following table lists the TopSeller models of the 12 Gbps SAS external drive enclosures that are offered by Lenovo that can be used with the System x3250 M6 for storage expansion.

Table 35. D1212 and D1224 TopSeller models

Description	Part number
LFF models - North America (NA) and Europe, Middle East, and Africa (EMEA)	
Lenovo Storage D1212 LFF Dual ESM Disk Expansion Enclosure (US English documentation)	4587E11
LFF models - Brazil and Latin America	
D1212 LFF Chassis, Dual 3-port ESMs, 4x 2TB 3.5" HDDs, 4x 0.5m SAS cables	4587EAU
D1212 LFF Chassis, Dual 3-port ESMs, 4x 4TB 3.5" HDDs, 4x 0.5m SAS cables	4587EBU
D1212 LFF Chassis, Dual 3-port ESMs, 4x 6TB 3.5" HDDs, 4x 0.5m SAS cables	4587ECU
D1212 LFF Chassis, Dual 3-port ESMs, 4x 8TB 3.5" HDDs, 4x 0.5m SAS cables	4587EDU
D1212 LFF Chassis, Dual 3-port ESMs, 8x 2TB 3.5" HDDs, 4x 0.5m SAS cables	4587EEU
D1212 LFF Chassis, Dual 3-port ESMs, 8x 4TB 3.5" HDDs, 4x 0.5m SAS cables	4587EFU
D1212 LFF Chassis, Dual 3-port ESMs, 8x 6TB 3.5" HDDs, 4x 0.5m SAS cables	4587EGU
D1212 LFF Chassis, Dual 3-port ESMs, 8x 8TB 3.5" HDDs, 4x 0.5m SAS cables	4587EHU
D1212 LFF Chassis, Dual 3-port ESMs, 12x 2TB 3.5" HDDs, 4x 0.5m SAS cables	4587EIU
D1212 LFF Chassis, Dual 3-port ESMs, 12x 4TB 3.5" HDDs, 4x 0.5m SAS cables	4587EJU
D1212 LFF Chassis, Dual 3-port ESMs, 12x 6TB 3.5" HDDs, 4x 0.5m SAS cables	4587EKU
D1212 LFF Chassis, Dual 3-port ESMs, 12x 8TB 3.5" HDDs, 4x 0.5m SAS cables	4587ELU
SFF models - North America (NA) and Europe, Middle East, and Africa (EMEA)	
Lenovo Storage D1224 SFF Dual ESM Disk Expansion Enclosure (US English documentation)	4587E31
SFF models - Brazil and Latin America	
D1224 SFF Chassis, Dual 3-port ESMs, 9x 1.2TB 10K HDDs, 4x 0.5m SAS cables	4587E6U
D1224 SFF Chassis, Dual 3-port ESMs, 9x 1.2TB 10K HDDs, 2x 400GB SSDs, 4x 0.5m SAS cables	4587E2U
D1224 SFF Chassis, Dual 3-port ESMs, 9x 1.2TB 10K HDDs, 4x 400GB SSDs, 4x 0.5m SAS cables	4587E4U
D1224 SFF Chassis, Dual 3-port ESMs, 18x 1.2TB 10K HDDs, 1x 0.5m SAS cable	4587E5U
D1224 SFF Chassis, Dual 3-port ESMs, 18x 1.2TB 10K HDDs, 2x 400GB SSDs, 4x 0.5m SAS cables	4587E1U
D1224 SFF Chassis, Dual 3-port ESMs, 18x 1.2TB 10K HDDs, 4x 400GB SSDs, 4x 0.5m SAS cables	4587E3U

For details about supported drives, adapters, and cables for the Lenovo Storage D1212 and D1224, see the Lenovo Press Product Guide:

<http://lenovopress.com/lp0512>

The following table lists the relationship models of the 12 Gbps SAS external high density drive enclosures that are offered by Lenovo that can be used with the System x3250 M6 for storage expansion.

Table 36. D3284 relationship models

Description	Part number
Lenovo Storage D3284 4TB x 84 HD Expansion Enclosure	641311F
Lenovo Storage D3284 6TB x 84 HD Expansion Enclosure	641312F
Lenovo Storage D3284 8TB x 84 HD Expansion Enclosure	641313F
Lenovo Storage D3284 10TB x 84 HD Expansion Enclosure	641314F

The following table lists the TopSeller models of the 12 Gbps SAS external high density drive enclosures that are offered by Lenovo that can be used with the System x3250 M6 for storage expansion..

Table 37. D3284 TopSeller models

Description	Part number
Lenovo Storage D3284 High Density Expansion Enclosure	6413E5F
Lenovo Storage D3284 4TB x 42 HD Expansion Enclosure	6413E1H
Lenovo Storage D3284 4TB x 84 HD Expansion Enclosure	6413E1F
Lenovo Storage D3284 6TB x 42 HD Expansion Enclosure	6413E2H
Lenovo Storage D3284 6TB x 84 HD Expansion Enclosure	6413E2F
Lenovo Storage D3284 8TB x 42 HD Expansion Enclosure	6413E3H
Lenovo Storage D3284 8TB x 84 HD Expansion Enclosure	6413E3F
Lenovo Storage D3284 10TB x 42 HD Expansion Enclosure	6413E4H
Lenovo Storage D3284 10TB x 84 HD Expansion Enclosure	6413E4F

For details about supported drives, adapters, and cables for the Lenovo Storage D3284, see the Lenovo Press Product Guide:

<http://lenovopress.com/lp0513>

## External storage systems

The following table lists the external storage systems that are currently offered by Lenovo that can be used with the System x3250 M6 in storage solutions.

Table 38. External storage systems

Description	Part number
Lenovo Storage DX8200 Series (NAS, iSCSI connectivity; optional FC connectivity)	
Lenovo Storage DX8200D Storage Virtualization Entry, 4TB, 3yr SW S&S	5135A2x*
Lenovo Storage DX8200D Storage Virtualization Entry, 4TB, 4yr SW S&S	5135J2x*
Lenovo Storage DX8200D Storage Virtualization Entry, 4TB, 5yr SW S&S	51351Vx*
Lenovo Storage DX8200D Storage Virtualization Mid, 16TB, 3yr SW S&S	5135B2x*
Lenovo Storage DX8200D Storage Virtualization Mid, 16TB, 4yr SW S&S	5135L2x*
Lenovo Storage DX8200D Storage Virtualization Mid, 16TB, 5yr SW S&S	51352Vx*
Lenovo Storage DX8200D Storage Virtualization High, 64TB, 3yr SW S&S	5135C2x*
Lenovo Storage DX8200D Storage Virtualization High, 64TB, 4yr SW S&S	5135M2x*

Description	Part number
Lenovo Storage DX8200D Storage Virtualization High, 64TB, 5yr SW S&S	51353Vx*
Lenovo Storage DX8200D ServerSAN Entry, 8TB, 3yr SW S&S	5135D2x*
Lenovo Storage DX8200D ServerSAN Entry, 8TB, 4yr SW S&S	5135N2x*
Lenovo Storage DX8200D ServerSAN Entry, 8TB, 5yr SW S&S	51354Vx*
Lenovo Storage DX8200D ServerSAN Mid, 16TB, 3yr SW S&S	5135F2x*
Lenovo Storage DX8200D ServerSAN Mid, 16TB, 4yr SW S&S	5135P2x*
Lenovo Storage DX8200D ServerSAN Mid, 16TB, 5yr SW S&S	51355Vx*
Lenovo Storage DX8200D ServerSAN High, 32TB, 3yr SW S&S	5135G2x*
Lenovo Storage DX8200D ServerSAN High, 32TB, 4yr SW S&S	5135Q2x*
Lenovo Storage DX8200D ServerSAN High, 32TB, 5yr SW S&S	51356Vx*
Lenovo Storage DX8200N with 1x N2226 HBA	5128A1x*
Lenovo Storage DX8200N with 2x N2226 HBAs	5128A2x*
Lenovo Storage S Series (SAS, iSCSI, or FC host connectivity)	
Lenovo Storage S2200 LFF Chassis SAS Single Controller, Rack Kit, 9x5NBD	64112B1
Lenovo Storage S2200 LFF Chassis SAS Dual Controller, Rack Kit, 9x5NBD	64112B2
Lenovo Storage S2200 LFF Chassis FC/iSCSI Single Controller, Rack Kit, 9x5NBD	64114B1
Lenovo Storage S2200 LFF Chassis FC/iSCSI Dual Controller, Rack Kit, 9x5NBD	64114B2
Lenovo Storage S2200 SFF Chassis SAS Single Controller, Rack Kit, 9x5NBD	64112B3
Lenovo Storage S2200 SFF Chassis SAS Dual Controller, Rack Kit, 9x5NBD	64112B4
Lenovo Storage S2200 SFF Chassis FC/iSCSI Single Controller, Rack Kit, 9x5NBD	64114B3
Lenovo Storage S2200 SFF Chassis FC/iSCSI Dual Controller, Rack Kit, 9x5NBD	64114B4
Lenovo Storage S3200 LFF Chassis SAS Single Controller, Rack Kit, 9x5NBD	64113B1
Lenovo Storage S3200 LFF Chassis SAS Dual Controller, Rack Kit, 9x5NBD	64113B2
Lenovo Storage S3200 LFF Chassis FC/iSCSI Single Controller, Rack Kit, 9x5NBD	64116B1
Lenovo Storage S3200 LFF Chassis FC/iSCSI Dual Controller, Rack Kit, 9x5NBD	64116B2
Lenovo Storage S3200 SFF Chassis SAS Single Controller, Rack Kit, 9x5NBD	64113B3
Lenovo Storage S3200 SFF Chassis SAS Dual Controller, Rack Kit, 9x5NBD	64113B4
Lenovo Storage S3200 SFF Chassis FC/iSCSI Single Controller, Rack Kit, 9x5NBD	64116B3
Lenovo Storage S3200 SFF Chassis FC/iSCSI Dual Controller, Rack Kit, 9x5NBD	64116B4
Lenovo Storage V Series (SAS, iSCSI, FC, or FCoE host connectivity)	
Lenovo Storage V3700 V2 LFF Control Enclosure	6535C1D
Lenovo Storage V3700 V2 LFF Control Enclosure (TopSeller)	6535EC1
Lenovo Storage V3700 V2 SFF Control Enclosure	6535C2D
Lenovo Storage V3700 V2 SFF Control Enclosure (TopSeller)	6535EC2
Lenovo Storage V3700 V2 XP LFF Control Enclosure	6535C3D
Lenovo Storage V3700 V2 XP LFF Control Enclosure (TopSeller)	6535EC3
Lenovo Storage V3700 V2 XP SFF Control Enclosure	6535C4D
Lenovo Storage V3700 V2 XP SFF Control Enclosure (TopSeller)	6535EC4
Lenovo Storage V5030 LFF Control Enclosure 3Yr S&S	6536C12
Lenovo Storage V5030 LFF Control Enclosure 5Yr S&S	6536C32
Lenovo Storage V5030 SFF Control Enclosure 3Yr S&S	6536C22

Description	Part number
Lenovo Storage V5030 SFF Control Enclosure 5Yr S&S	6536C42
Lenovo Storage V5030F SFF Control Enclosure 3Yr S&S	6536B1F
Lenovo Storage V5030F SFF Control Enclosure 5Yr S&S	6536B2F
IBM Storwize for Lenovo (SAS [except V7000], iSCSI, FC, or FCoE host connectivity)	
IBM Storwize V3500 3.5-inch Dual Control Storage Controller Unit	6096CU2**
IBM Storwize V3500 2.5-inch Dual Control Storage Controller Unit	6096CU3**
IBM Storwize V3700 3.5-inch Storage Controller Unit	6099L2C
IBM Storwize V3700 2.5-inch Storage Controller Unit	6099S2C
IBM Storwize V7000 2.5-inch Storage Controller Unit, w/3 Yr S&S (Model 524)	6195SC5†
IBM Storwize V7000 2.5-inch Storage Controller Unit, w/3 Yr S&S (LA) (Model 524)	6195SCL‡
IBM Storwize V7000 2.5-inch Storage Controller Unit, w/5 Yr S&S (Model 524)	61951F1†
IBM Storwize V7000 2.5-inch Storage Controller Unit, w/5 Yr S&S (LA) (Model 524)	61951FL‡
IBM Storwize V7000 SFF Control Enclosure, 3YR SWMA (Model HC1 [Gen2+])	6195C32†
IBM Storwize V7000 SFF Control Enclosure, 3YR SWMA, LA (Model HC1 [Gen2+])	6195C3L‡
IBM Storwize V7000 SFF Control Enclosure, 5YR SWMA (Model HC1 [Gen2+])	6195C52†
IBM Storwize V7000 SFF Control Enclosure, 5YR SWMA, LA (Model HC1 [Gen2+])	6195C5L‡

\* x represents a geo-specific letter (for example: U = North America, G = EMEA). Ask a Lenovo representative for specifics.

\*\* Available only in China.

† Available worldwide except Latin America.

‡ Available only in Latin America.

For more information, see the list of Product Guides in the following categories:

- Lenovo NAS storage: <http://lenovopress.com/storage/nas>
- Lenovo S Series and V Series storage: <http://lenovopress.com/storage/san/lenovo>
- IBM Storwize for Lenovo storage: <http://lenovopress.com/storage/san/ibm>

## External backup units

The following table lists the external backup options that are offered by Lenovo that can be used with the System x3250 M6 in backup solutions.

Table 39. External backup unit options

Description	Part number
External RDX USB drives	
RDX External USB 3.0 Dock with 320GB Cartridge	362532Y
RDX External USB 3.0 Dock with 500GB Cartridge	362550Y
RDX External USB 3.0 Dock with 1TB Cartridge	36251TY
External SAS tape backup drives	
IBM TS2250 Tape Drive Model H5S	6160S5E
IBM TS2260 Tape Drive Model H6S	6160S6E
IBM TS2270 Tape Drive Model H7S	6160S7E
External SAS tape backup autoloaders	
IBM TS2900 Tape Autoloader w/LTO5 HH SAS	6171S5R
IBM TS2900 Tape Autoloader w/LTO6 HH SAS	6171S6R
IBM TS2900 Tape Autoloader w/LTO7 HH SAS	6171S7R
External tape backup libraries	
IBM TS3100 Tape Library Model L2U	61732UL
IBM TS3200 Tape Library Model L4U	61734UL
Fibre Channel backup drives for TS3100 and TS3200 Tape Libraries	
6173 LTO Ultrium 5 Fibre Channel Drive	00NA107
6173 LTO Ultrium 5 Half High Fibre Drive Sled	00NA113
6173 LTO Ultrium 6 Fibre Channel Drive	00NA115
6173 LTO Ultrium 6 Half High Fibre Drive Sled	00NA119
6173 LTO Ultrium 7 Fibre Channel Drive	00WF765
6173 LTO Ultrium 7 Half High Fibre Drive Sled	00WF769
SAS backup drives for TS3100 and TS3200 Tape Libraries	
6173 LTO Ultrium 5 SAS Drive Sled	00NA109
6173 LTO Ultrium 5 Half High SAS Drive Sled	00NA111
6173 LTO Ultrium 6 Half High SAS Drive Sled	00NA117
6173 LTO Ultrium 7 Half High SAS Drive Sled	00WF767

For more information, see the list of Product Guides in the Backup units category:  
<http://lenovopress.com/servers/options/backup>

## Ethernet LAN switches

The following table lists the Ethernet LAN switches that are offered by Lenovo that can be used with the System x3250 M6 in network connectivity solutions.

Table 40. Ethernet LAN switches

Description	Part number
<b>1 Gb Ethernet switches</b>	
Juniper EX2300-C PoE Switch	7165H1X
Juniper EX2300-24p PoE Switch	7165H2X
Lenovo RackSwitch G7028 (Rear to Front)	7159BAX
Lenovo RackSwitch G7052 (Rear to Front)	7159CAX
Lenovo RackSwitch G8052 (Rear to Front)	7159G52
<b>10 Gb Ethernet switches</b>	
Lenovo RackSwitch G8124E (Rear to Front)	7159BR6
Lenovo RackSwitch G8264 (Rear to Front)	7159G64
Lenovo RackSwitch G8264CS (Rear to Front)	7159DRX
Lenovo RackSwitch G8272 (Rear to Front)	7159CRW
Lenovo RackSwitch G8296 (Rear to Front)	7159GR6
<b>40 Gb Ethernet switches</b>	
Lenovo RackSwitch G8332 (Rear to Front)	7159BRX

For more information, see the list of Product Guides in the Top-of-rack switches category:  
<http://lenovopress.com/servers/options/switches>

## Fibre Channel SAN switches

The following table lists the Fibre Channel SAN switches that are offered by Lenovo that can be used with the System x3250 M6 in FC SAN storage connectivity solutions.

Table 41. Fibre Channel SAN switches

Description	Part number
<b>8 Gb Fibre Channel</b>	
Lenovo B300, 8 ports activated w/ 8Gb SWL SFPs, 1 PS, Rail Kit	3873AR3
Lenovo B6505, 12 ports activated w/ 8Gb SWL SFPs, 1 PS, Rail Kit	3873AR4
Lenovo B6510, 24 ports activated w/ 8Gb SWL SFPs, 2 PS, Rail Kit	3873BR2
<b>16 Gb Fibre Channel</b>	
Lenovo B6505, 12 ports activated w/ 16Gb SWL SFPs, 1 PS, Rail Kit	3873AR5
Lenovo B6510, 24 ports activated w/ 16Gb SWL SFPs, 2 PS, Rail Kit	3873BR3

For more information, see the list of Product Guides in the Rack SAN Switches category:  
<http://lenovopress.com/storage/switches/rack>



## Rack cabinets

The following table lists the rack cabinets that are offered by Lenovo that can be used in System x3250 M6 solutions.

Table 42. Rack cabinets

Description	Part number
25U S2 Standard Rack (1000 mm deep; 2 sidewall compartments)	93072RX
25U Static S2 Standard Rack (1000 mm deep; 2 sidewall compartments)	93072PX
42U S2 Standard Rack (1000 mm deep; 6 sidewall compartments)	93074RX
42U 1100mm Enterprise V2 Dynamic Rack (6 sidewall compartments)	93634PX
42U 1100mm Enterprise V2 Dynamic Expansion Rack (6 sidewall compartments)	93634EX
42U 1200mm Deep Dynamic Rack (6 sidewall compartments)	93604PX
42U 1200mm Deep Static Rack (6 sidewall compartments)	93614PX
42U Enterprise Rack (1105 mm deep; 4 sidewall compartments)	93084PX
42U Enterprise Expansion Rack (1105 mm deep; 4 sidewall compartments)	93084EX

For more information, see the list of Product Guides in the Rack cabinets category:  
<http://lenovopress.com/servers/options/racks>

## KVM switches and consoles

The following table lists the KVM switches and consoles that are offered by Lenovo that can be used in System x3250 M6 solutions.

Table 43. KVM switch and console options

Description	Part number
Consoles	
1U 18.5" Standard Console (without keyboard)	17238BX
Console keyboards	
Lenovo UltraNav Keyboard USB - US Eng	00MW310
Keyboard w/ Int. Pointing Device USB - Arabic 253 RoHS v2	46W6713
Keyboard w/ Int. Pointing Device USB - Belg/UK 120 RoHS v2	46W6714
Keyboard w/ Int. Pointing Device USB - Chinese/US 467 RoHS v2	46W6715
Keyboard w/ Int. Pointing Device USB - Czech 489 RoHS v2	46W6716
Keyboard w/ Int. Pointing Device USB - Danish 159 RoHS v2	46W6717
Keyboard w/ Int. Pointing Device USB - Dutch 143 RoHS v2	46W6718
Keyboard w/ Int. Pointing Device USB - French 189 RoHS v2	46W6719
Keyboard w/ Int. Pointing Device USB - Fr/Canada 445 RoHS v2	46W6720
Keyboard w/ Int. Pointing Device USB - German 129 RoHS v2	46W6721
Keyboard w/ Int. Pointing Device USB - Greek 219 RoHS v2	46W6722
Keyboard w/ Int. Pointing Device USB - Hebrew 212 RoHS v2	46W6723
Keyboard w/ Int. Pointing Device USB - Hungarian 208 RoHS v2	46W6724
Keyboard w/ Int. Pointing Device USB - Italian 141 RoHS v2	46W6725
Keyboard w/ Int. Pointing Device USB - Japanese 194 RoHS v2	46W6726

<b>Description</b>	<b>Part number</b>
Keyboard w/ Int. Pointing Device USB - Korean 413 RoHS v2	46W6727
Keyboard w/ Int. Pointing Device USB - LA Span 171 RoHS v2	46W6728
Keyboard w/ Int. Pointing Device USB - Norwegian 155 RoHS v2	46W6729
Keyboard w/ Int. Pointing Device USB - Polish 214 RoHS v2	46W6730
Keyboard w/ Int. Pointing Device USB - Portugese 163 RoHS v2	46W6731
Keyboard w/ Int. Pointing Device USB - Russian 441 RoHS v2	46W6732
Keyboard w/ Int. Pointing Device USB - Slovak 245 RoHS v2	46W6733
Keyboard w/ Int. Pointing Device USB - Spanish 172 RoHS v2	46W6734
Keyboard w/ Int. Pointing Device USB - Swed/Finn 153 RoHS v2	46W6735
Keyboard w/ Int. Pointing Device USB - Swiss F/G 150 RoHS v2	46W6736
Keyboard w/ Int. Pointing Device USB - Thai 191 RoHS v2	46W6737
Keyboard w/ Int. Pointing Device USB - Turkish 179 RoHS v2	46W6738
Keyboard w/ Int. Pointing Device USB - UK Eng 166 RoHS v2	46W6739
Keyboard w/ Int. Pointing Device USB - US Euro 103P RoHS v2	46W6740
Keyboard w/ Int. Pointing Device USB - Slovenian 234 RoHS v2	46W6741
<b>Console switches</b>	
Global 4x2x32 Console Manager (GCM32)	1754D2X
Global 2x2x16 Console Manager (GCM16)	1754D1X
Local 2x16 Console Manager (LCM16)	1754A2X
Local 1x8 Console Manager (LCM8)	1754A1X
<b>Console cables</b>	
Single Cable USB Conversion Option (UCO)	43V6147
USB Conversion Option (4 Pack UCO)	39M2895
Virtual Media Conversion Option Gen2 (VCO2)	46M5383
Serial Conversion Option (SCO)	46M5382

For more information, see the list of Product Guides in the KVM Switches and Consoles category:  
<http://lenovopress.com/servers/options/kvm>

## Power distribution units

The following table lists the power distribution units (PDUs) that are offered by Lenovo that can be used in System x3250 M6 solutions.

Table 44. Power distribution units

Description	Part number
<b>0U Basic PDUs</b>	
0U 36 C13/6 C19 24A/200-240V 1 Phase PDU with NEMA L6-30P line cord	00YJ776
0U 36 C13/6 C19 32A/200-240V 1 Phase PDU with IEC60309 332P6 line cord	00YJ777
0U 21 C13/12 C19 32A/200-240V/346-415V 3 Phase PDU with IEC60309 532P6 line cord	00YJ778
0U 21 C13/12 C19 48A/200-240V 3 Phase PDU with IEC60309 460P9 line cord	00YJ779
<b>Switched and Monitored PDUs</b>	
0U 20 C13/4 C19 Switched and Monitored 24A/200-240V/1Ph PDU w/ NEMA L6-30P line cord	00YJ781
0U 20 C13/4 C19 Switched and Monitored 32A/200-240V/1Ph PDU w/ IEC60309 332P6 line cord	00YJ780
0U 18 C13/6 C19 Switched / Monitored 32A/200-240V/346-415V/3Ph PDU w/ IEC60309 532P6 cord	00YJ782
0U 12 C13/12 C19 Switched and Monitored 48A/200-240V/3Ph PDU w/ IEC60309 460P9 line cord	00YJ783
1U 9 C19/3 C13 Switched and Monitored DPI PDU (without line cord)	46M4002
1U 9 C19/3 C13 Switched and Monitored 60A 3Ph PDU with IEC 309 3P+Gnd cord	46M4003
1U 12 C13 Switched and Monitored DPI PDU (without line cord)	46M4004
1U 12 C13 Switched and Monitored 60A 3 Phase PDU with IEC 309 3P+Gnd line cord	46M4005
<b>Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets)</b>	
Ultra Density Enterprise C19/C13 PDU Module (without line cord)	71762NX
Ultra Density Enterprise C19/C13 PDU 60A/208V/3ph with IEC 309 3P+Gnd line cord	71763NU
<b>C13 Enterprise PDUs (12x IEC 320 C13 outlets)</b>	
DPI C13 Enterprise PDU+ (without line cord)	39M2816
DPI Single Phase C13 Enterprise PDU (without line cord)	39Y8941
<b>C19 Enterprise PDUs (6x IEC 320 C19 outlets)</b>	
DPI Single Phase C19 Enterprise PDU (without line cord)	39Y8948
DPI 60A 3 Phase C19 Enterprise PDU with IEC 309 3P+G (208 V) fixed line cord	39Y8923
<b>Front-end PDUs (3x IEC 320 C19 outlets)</b>	
DPI 30amp/125V Front-end PDU with NEMA L5-30P line cord	39Y8938
DPI 30amp/250V Front-end PDU with NEMA L6-30P line cord	39Y8939
DPI 32amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8934
DPI 60amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8940
DPI 63amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8935
<b>Universal PDUs (7x IEC 320 C13 outlets)</b>	
DPI Universal 7 C13 PDU (with 2 m IEC 320-C19 to C20 rack power cord)	00YE443
<b>NEMA PDUs (6x NEMA 5-15R outlets)</b>	
DPI 100-127V PDU with fixed NEMA L5-15P line cord	39Y8905
<b>Line cords for PDUs that ship without a line cord</b>	
DPI 30a Line Cord (NEMA L6-30P)	40K9614
DPI 32a Line Cord (IEC 309 P+N+G)	40K9612

Description	Part number
DPI 32a Line Cord (IEC 309 3P+N+G)	40K9611
DPI 60a Cord (IEC 309 2P+G)	40K9615
DPI 63a Cord (IEC 309 P+N+G)	40K9613
DPI Australian/NZ 3112 Line Cord (32A)	40K9617
DPI Korean 8305 Line Cord (30A)	40K9618

For more information, see the list of Product Guides in the Power infrastructure category:  
<https://lenovopress.com/servers/options/pdu>

## Uninterruptible power supply units

The following table lists the uninterruptible power supply (UPS) units that are offered by Lenovo that can be used in System x3250 M6 solutions.

Table 45. Uninterruptible power supply units

Description	Part number
RT1.5kVA 2U Rack or Tower UPS (100-125VAC)	55941AX
RT1.5kVA 2U Rack or Tower UPS (200-240VAC)	55941KX
RT2.2kVA 2U Rack or Tower UPS (100-125VAC)	55942AX
RT2.2kVA 2U Rack or Tower UPS (200-240VAC)	55942KX
RT3kVA 2U Rack or Tower UPS (100-125VAC)	55943AX
RT3kVA 2U Rack or Tower UPS (200-240VAC)	55943KX
RT5kVA 3U Rack or Tower UPS (200-240VAC)	55945KX
RT6kVA 3U Rack or Tower UPS (200-240VAC)	55946KX
RT8kVA 6U Rack or Tower UPS (200-240VAC)	55948KX
RT11kVA 6U Rack or Tower UPS (200-240VAC)	55949KX
RT8kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC)	55948PX
RT11kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC)	55949PX

For more information, see the list of Product Guides in the Power infrastructure category:  
<http://lenovopress.com/servers/options/ups>

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## Related publications and links

For more information, see these resources:

- Lenovo servers product page  
<http://www.lenovo.com/systems/servers>
- Lenovo DataCenter Advisor and Configurator Tool (DCACT):  
<http://lsc.lenovo.com>
- ServerProven hardware compatibility page for the System x3250 M6  
<http://www.lenovo.com/us/en/serverproven/xseries/3943.shtml>  
<http://www.lenovo.com/us/en/serverproven/xseries/3633.shtml>
- *xREF: System x Reference*  
<http://lenovopress.com/xref>
- System x3250 M6 documentation  
<http://datacentersupport.lenovo.com/us/en/products/servers/system-x/system-x3250-m6/documentation>
- Lenovo Support - System x3250 M6  
<http://datacentersupport.lenovo.com/us/en/products/servers/system-x/system-x3250-m6>

## Related product families

Product families related to this document are the following:

- [1-Socket Rack Servers](#)

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