



## Lenovo System x3250 M6 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.

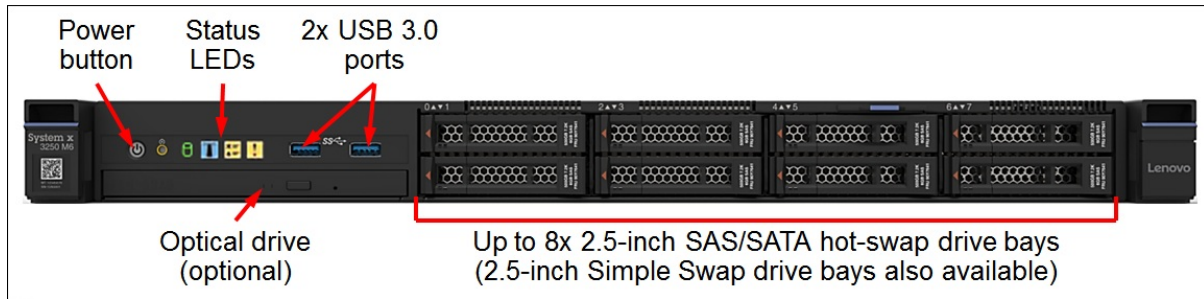


Figure 2. Front view of the System x3250 M6: 8x 2.5-inch drive bays

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

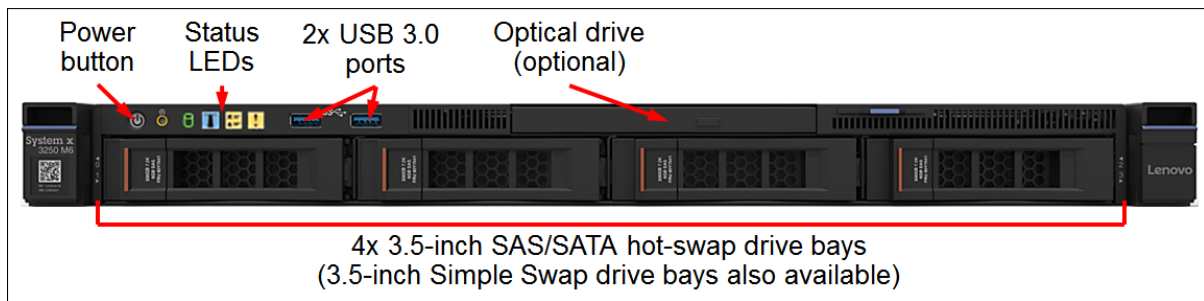


Figure 3. Front view of the System x3250 M6: 4x 3.5-inch drive bays

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

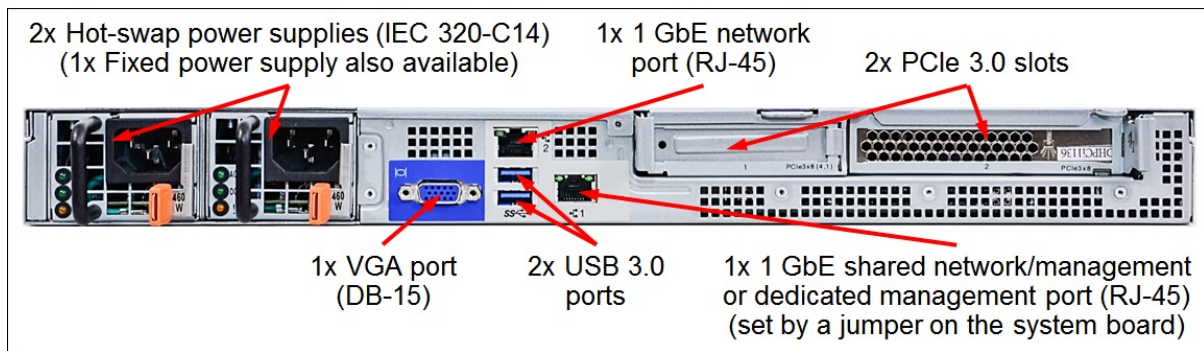


Figure 4. Rear view of the System x3250 M6

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

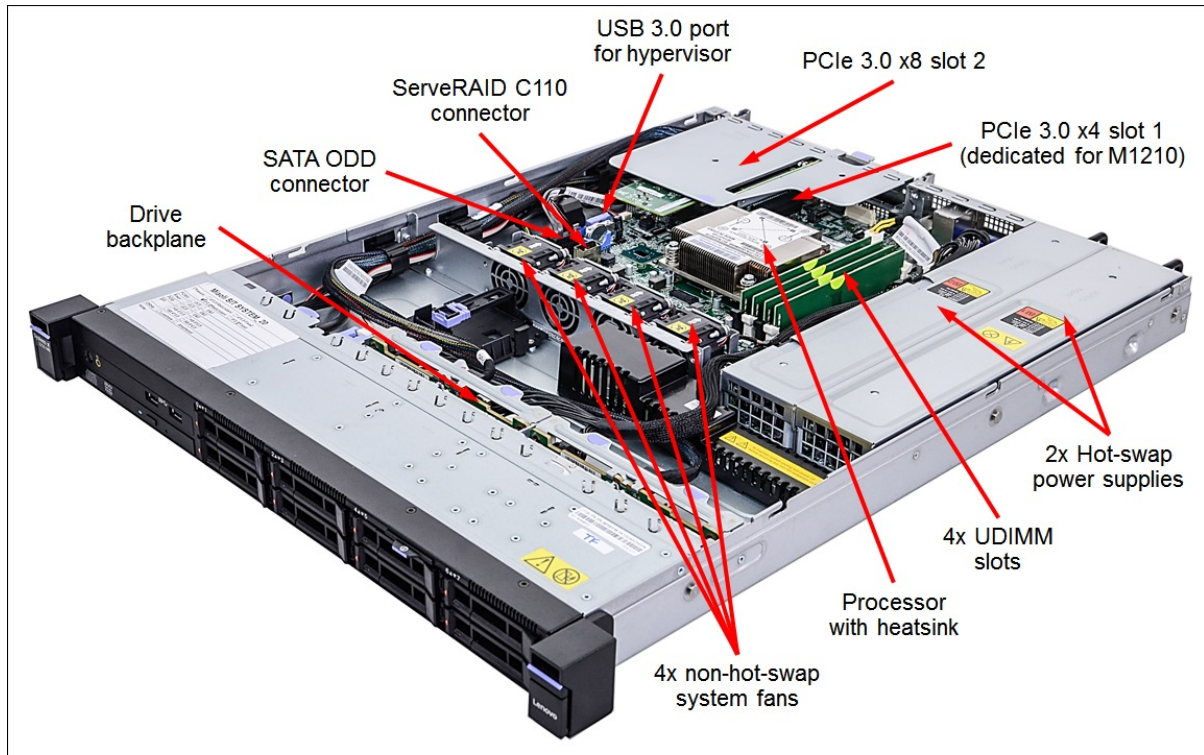


Figure 5. Internal view of the System x3250 M6

## 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 960 GB</li> </ul> <p>3.5-inch drives:</p> <ul style="list-style-type: none"> <li>NL SAS HDDs up to 8 TB</li> <li>NL SATA HDDs up to 8 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 8 TB 3.5" NL SAS or NL SATA HDDs</li> <li>Up to 16 TB with 2 TB 2.5" NL SAS or NL SATA HDDs</li> <li>Up to 14.4 TB with 1.8 TB 2.5" SAS HDDs</li> <li>Up to 7.68 TB with 960 GB 2.5" SATA SSDs</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 management port.  |
| I/O expansion slots       | <p>Two PCIe slots:</p> <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, 1x DB-15 VGA, 1x RJ-45 GbE network, 1x RJ-45 GbE shared network/systems management or dedicated management 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) 2.0 (hardware) / 1.2 (firmware). 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 and 6.0.  |
| 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:

- Statement of Limited Warranty
- Important Notices
- Rack Installation Instructions
- Documentation CD containing *Installation and User's 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 slots† | 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       |
| 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       |

| Model number      | Intel processor#                            | Memory (UDIMM) | RAID  | Drive bays (std / max) | Drives   | NIC    | I/O slots† | Optical drive | Power supply (std / max) |
|-------------------|---|----------------|-------|------------------------|----------|--------|------------|---------------|--------------------------|
| 3633EDG           | 1x E3-1240 v5 3.5GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1215 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3633EAG           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3633ECG           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3633E4G           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3633E7G           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3633EEG           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1215 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| TopSeller - Japan |   |                |       |                        |          |        |            |               |                          |
| 3633EJJ           | 1x i3-6100 3.7GHz<br>2133MHz 2C/4T (51W)    | 1x 4GB         | M5210 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3633EKJ           | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 4GB         | M5210 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3633EMJ           | 1x E3-1230 v5 3.4GHz<br>2133MHz 4C/8T (80W) | 1x 4GB         | M5210 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>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<br>2133MHz 4C/4T (80W) | 1x 16GB        | C110             | 4x 2.5" SS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943K1U  | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 16GB        | C110             | 4x 3.5" SS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 394316A  | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 16GB        | M5210<br>2GB (F) | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943K3U  | 1x E3-1230 v5 3.4GHz<br>2133MHz 4C/8T (80W) | 1x 16GB        | M1215            | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943K4U  | 1x E3-1230 v5 3.4GHz<br>2133MHz 4C/8T (80W) | 1x 16GB        | M1215            | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| TopSeller - Europe, Middle East, Africa (EMEA) |   |                |                  |                        |          |        |            |               |                          |
| 3943EFG  | 1x G4400 3.3GHz<br>2133MHz 2C/2T (54W)      | 1x 4GB         | C110             | 4x 3.5" SS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943E1G  | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 8GB         | C110             | 4x 3.5" SS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943E8G  | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 8GB         | M1210            | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943EBG  | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 8GB         | M1210            | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |

| Model number§     | Intel processor#                            | Memory (UDIMM) | RAID  | Drive bays (std / max) | Drives   | NIC    | I/O slots† | Optical drive | Power supply (std / max) |
|-------------------|---|----------------|-------|------------------------|----------|--------|------------|---------------|--------------------------|
| 3943E2G           | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943E5G           | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943EGG           | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 8GB         | M1215 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943E6G           | 1x E3-1230 v5 3.4GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943EHG           | 1x E3-1230 v5 3.4GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1215 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943E9G           | 1x E3-1240 v5 3.5GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943E3G           | 1x E3-1240 v5 3.5GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943EDG           | 1x E3-1240 v5 3.5GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1215 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943EAG           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943ECG           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943E4G           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943E7G           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1210 | 4x 3.5" HS / 4         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| 3943EEG           | 1x E3-1270 v5 3.6GHz<br>2133MHz 4C/8T (80W) | 1x 8GB         | M1215 | 8x 2.5" HS / 8         | Open bay | 2x GbE | 2          | Optional‡     | 1x 460 W<br>HS / 2       |
| TopSeller - Japan |   |                |       |                        |          |        |            |               |                          |
| 3943EJJ           | 1x i3-6100 3.7GHz<br>2133MHz 2C/4T (51W)    | 1x 4GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943EKJ           | 1x E3-1220 v5 3.0GHz<br>2133MHz 4C/4T (80W) | 1x 4GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>Fixed / 1    |
| 3943EMJ           | 1x E3-1230 v5 3.4GHz<br>2133MHz 4C/8T (80W) | 1x 4GB         | M1210 | 4x 2.5" HS / 8*        | Open bay | 2x GbE | 2          | Optional‡     | 1x 300 W<br>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:

- Statement of Limited Warranty
- Important Notices
- Rack Installation Instructions
- Documentation CD containing *Installation and User's Guide*
- Rack mount kit
- One 2.8 m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable (models 394316A and 363316A only)

**Note:** Power cables are not included (except for the models 394316A and 363316A); 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 |
|---|-------------|--------------|-------------------|
| UDIMMs - 2133 MHz   |             |              |                   |
| 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.

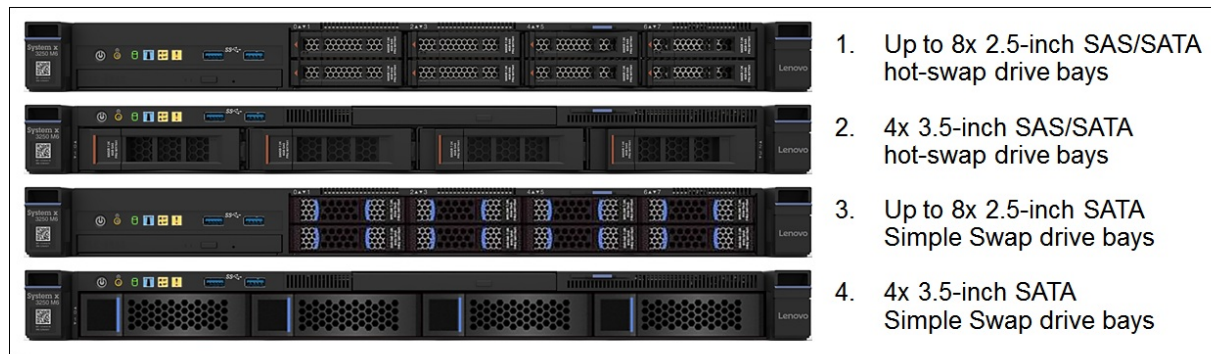


Figure 6. Internal drive configurations

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 |
|------------------------------------|-------------|--------------|-------------------|
| 2.5-inch base drive kits           |             |              |                   |
| 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                 |
| 3.5-inch base drive kits           |             |              |                   |
| 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<br>1x RAID or HBA<br>(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<br>(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<br>1x RAID or HBA<br>(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<br>1x RAID or HBA<br>(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<br>(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<br>1x RAID or HBA<br>(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                 |

# Onboard software RAID controller.

\* 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);<br>64 (JBOD)            | 240   | 1024                         |
| RAID levels                        | 0/1/10/5       | 0/1/10;<br>Optional 5/50 (00AE930) | 0/1/10;<br>Optional 5/50 (00AE930) | 0/1/10; Optional 5/50 (RAID 5 FoD, 47C8708, or cache upgrades);<br>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 - 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 - Enterprise Entry 6 Gbps SATA</b>       |             |              |                   |
| 240GB Enterprise Entry SATA G3HS 2.5" SSD                          | 00YC390     | AT8S         | 8                 |
| 480GB Enterprise Entry SATA G3HS 2.5" SSD                          | 00YC395     | AT8T         | 8                 |
| 960GB Enterprise Entry SATA G3HS 2.5" SSD                          | 00YC400     | AT8U         | 8                 |
| Intel S3510 120GB Enterprise Entry SATA G3HS 2.5" SSD              | 00WG620     | AT93         | 8                 |
| Intel S3510 240GB Enterprise Entry SATA G3HS 2.5" SSD              | 00WG625     | AT94         | 8                 |
| Intel S3510 480GB Enterprise Entry SATA G3HS 2.5" SSD              | 00WG630     | AT95         | 8                 |
| Intel S3510 800GB Enterprise Entry SATA G3HS 2.5" SSD              | 00WG635     | AT96         | 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 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                 |

| Description   | Part number | Feature code | Maximum supported |
|---|-------------|--------------|-------------------|
| 2TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD                         | 00FN113     | A5VD         | 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 - 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                 |

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

| Description                               | Part number | Feature code | Maximum supported |
|---|-------------|--------------|-------------------|
| 500GB 7.2K 6Gbps NL SATA 3.5" G2SS HDD    | 81Y9802     | A22U         | 4                 |
| 2TB 7.2K 6Gbps NL SATA 3.5" G2SS 512e HDD | 00FN118     | A5VE         | 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 |
|---------------------------------------|-------------|--------------|-------------------|
| <b>Optical drives</b>                 |             |              |                   |
| Ultraslim 9.5mm SATA DVD-ROM          | 00AM066     | A5KG         | 1                 |
| Ultraslim 9.5mm SATA Multi Burner     | 00AM067     | A5KH         | 1                 |
| <b>Optical drive cable (Required)</b> |             |              |                   |
| 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;<br>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 the models 394316A and 363316A). 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 7.2
  - Red Hat Enterprise Linux 6.8 Server x64 Edition
  - Red Hat Enterprise Linux 6.7 Server x64 Edition
- SUSE:
  - SUSE Linux Enterprise Server 12 SP1
  - SUSE Linux Enterprise Server 11 for AMD64/EM64T SP4
- VMware:
  - 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 AInput 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) warranty with 24x7 standard call center support and 9x5 Next Business Day onsite coverage. 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. Not all warranty service upgrades are available in every country. For more information about Lenovo warranty service upgrade offerings that are available in your country, visit the Lenovo Services website:

<https://www-304.ibm.com/sales/gss/download/spst/servicepac>

The following table explains warranty service definitions in more detail.

Table 32. Warranty service definitions

| Term            | Description  |
|-----------------|--|
| On-site service | A service technician will arrive at the client's location for equipment service.   |
| 24x7x2 hour     | A service technician is scheduled to arrive at the client's location within two hours after remote problem determination is completed. Lenovo provides service around the clock, every day, including Lenovo holidays. |

| Term                  | Description   |
|-----------------------|---|
| 24x7x4 hour           | A service technician is scheduled to arrive at the client's location within four hours after remote problem determination is completed. Lenovo provides service around the clock, every day, including Lenovo holidays.   |
| 9x5x4 hour            | A service technician is scheduled to arrive at the client's location within four business hours after remote problem determination is completed. Lenovo provides service 8:00 am - 5:00 pm in the client's local time zone, Monday-Friday, excluding Lenovo holidays. For example, if a customer reports an incident at 3:00 pm on Friday, the technician will arrive by 10:00 am the following Monday.   |
| 9x5 next business day | A service technician is scheduled to arrive at the client's location on the business day after remote problem determination is completed. Lenovo provides service 8:00 am - 5:00 pm in the client's local time zone, Monday - Friday, excluding Lenovo holidays. Calls received after 4:00 pm local time require an extra business day for service dispatch. Next business day service is not guaranteed. |
| Committed Repair      | Problems receive priority handling so that repairs are completed within the committed time of 6, 8, or 24 hours. Lenovo provides service 24 hours/day, every day, including Lenovo holidays.  |

The following Lenovo warranty service upgrades are available:

- Warranty and maintenance service upgrades:
  - Up to five years of 9x5 or 24x7 service coverage
  - Onsite response from next business day to 2 or 4 hours
  - Committed repair service
  - Warranty extension of up to 5 years
  - Post warranty extensions
- Committed Repair Service

Committed Repair Services 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
  - Committed repair service levels are measured within the following coverage hours:
    - 24x7x6: Service performed 24 hours per day, 7 days per week, within 6 hours
    - 24x7x8: Service performed 24 hours per day, 7 days per week, within 8 hours
    - 24x7x24: Service performed 24 hours per day, 7 days per week, within 24 hours
- Hard Drive Retention

Lenovo's Hard Drive Retention service is a multi-drive hard drive retention offering that ensures your data is always under your control, regardless of the number of hard drives that are installed in your Lenovo server. In the unlikely event of a hard drive failure, you retain possession of your hard drive while Lenovo replaces the failed drive part. Your data stays safely on your premises, in your hands. The Hard Drive Retention service can be purchased in convenient bundles with our warranty upgrades and extensions.
- Microcode Support

Keeping microcode current helps prevent hardware failures and security exposure. There are two levels of service: analysis of the installed base and analysis and update where required. Offerings vary by country and can be bundled with other warranty upgrades and extensions.
- Remote Technical Support Services (RTS)

RTS provides comprehensive technical call center support for covered servers, storage, operating systems, and applications. Providing a single source for support of hardware and software issues, RTS can reduce problem resolution time, decreasing the cost to address technical problems and increasing uptime. Offerings are available for Windows, Linux, VMware, Microsoft business applications, Lenovo System x storage devices, and IBM OEM storage devices.



## 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 and cables for the Lenovo Storage E1012 and E1024, see the Lenovo Press Product Guide:

<http://lenovopress.com/lp0043>

## 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 34. External storage systems

| Description  | Part number  |
|--|--------------|
| Lenovo Storage N Series (NAS storage)  |              |
| Lenovo Storage N3310   | 70FX / 70FY* |
| Lenovo Storage N4610   | 70G0 / 70G1* |
| 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      |
| Lenovo Storage V5030 SFF Control Enclosure 5Yr S&S                                 | 6536C42      |
| 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**    |

| Description  | Part number |
|--|-------------|
| IBM Storwize V3700 3.5-inch Storage Controller Unit                  | 6099L2C     |
| IBM Storwize V3700 2.5-inch Storage Controller Unit                  | 6099S2C     |
| IBM Storwize V3700 2.5-inch DC Storage Controller Unit               | 6099T2C     |
| IBM Storwize V5000 LFF Control Enclosure, w/3 Yr S&S                 | 6194L2C†    |
| IBM Storwize V5000 LFF Control Enclosure, w/3 Yr S&S (LA)            | 6194L2L‡    |
| IBM Storwize V5000 LFF Control Enclosure, w/5 Yr S&S                 | 61941A1†    |
| IBM Storwize V5000 LFF Control Enclosure, w/5 Yr S&S (LA)            | 61941AL‡    |
| IBM Storwize V5000 SFF Control Enclosure, w/3 Yr S&S                 | 6194S2C†    |
| IBM Storwize V5000 SFF Control Enclosure, w/3 Yr S&S (LA)            | 6194S2L‡    |
| IBM Storwize V5000 SFF Control Enclosure, w/5 Yr S&S                 | 61941C1†    |
| IBM Storwize V5000 SFF Control Enclosure, w/5 Yr S&S (LA)            | 61941CL‡    |
| IBM Storwize V7000 2.5-inch Storage Controller Unit, w/3 Yr S&S      | 6195SC5†    |
| IBM Storwize V7000 2.5-inch Storage Controller Unit, w/3 Yr S&S (LA) | 6195SCL‡    |
| IBM Storwize V7000 2.5-inch Storage Controller Unit, w/5 Yr S&S      | 61951F1†    |
| IBM Storwize V7000 2.5-inch Storage Controller Unit, w/5 Yr S&S (LA) | 61951FL‡    |

\* Machine Type; see the respective Product Guide in the NAS Storage category (<http://lenovopress.com/storage/nas>) for models.

\*\* 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 N Series storage: <http://lenovopress.com/storage/nas>
- Lenovo S Series and V Series storage: <http://lenovopress.com/storage/san/lenovo>
- IBM Storwize 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 35. 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 36. 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 37. 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 38. Rack cabinets

| Description                                     | Part number |
|---|-------------|
| 11U Rack Office Enablement Kit                  | 201886X     |
| 25U S2 Standard Rack                            | 93072RX     |
| 25U Static S2 Standard Rack                     | 93072PX     |
| 42U S2 Standard Rack                            | 93074RX     |
| 42U 1100mm Enterprise V2 Dynamic Rack           | 93634PX     |
| 42U 1100mm Enterprise V2 Dynamic Expansion Rack | 93634EX     |
| 42U 1200mm Deep Dynamic Rack                    | 93604PX     |
| 42U 1200mm Deep Static Rack                     | 93614PX     |
| 42U Enterprise Rack                             | 93084PX     |
| 42U Enterprise Expansion Rack                   | 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 39. KVM switch and console options

| Description   | Part number |
|---|-------------|
| <b>Consoles</b>   |             |
| 1U 18.5" Standard Console (without keyboard)                  | 17238BX     |
| <b>Console keyboards</b>                                      |             |
| 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     |

| <b>Description</b>   | <b>Part number</b> |
|--|--------------------|
| Keyboard w/ Int. Pointing Device USB - Japanese 194 RoHS v2  | 46W6726            |
| 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 40. Power distribution units

| Description   | Part number |
|---|-------------|
| 0U Basic PDUs   |             |
| 0U 12 C19/12 C13 32A 3 Phase PDU with IEC 309 3P+N+Gnd line cord                    | 46M4143     |
| Switched and Monitored PDUs   |             |
| 1U 9 C19/3 C13 Switched and Monitored DPI PDU (without line cord)                   | 46M4002     |
| 1U 9 C19/3 C13 Switched and Monitored 60A 3 Phase PDU with IEC 309 3P+Gnd line 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     |
| 0U 24 C13 Switched and Monitored 30A PDU with NEMA L6-30P line cord                 | 46M4116     |
| 0U 12 C19/12 C13 Switched and Monitored 32A 3 Phase PDU with IEC 309 3P+N+Gnd cord  | 46M4137     |
| 0U 12 C19/12 C13 Switched and Monitored 50A 3 Phase PDU with CS8365L 3P+Gnd cord    | 46M4134     |
| Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets)             |             |
| 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     |
| C13 Enterprise PDUs (12x IEC 320 C13 outlets)                                       |             |
| DPI C13 Enterprise PDU+ (without line cord)   | 39M2816     |
| DPI Single Phase C13 Enterprise PDU (without line cord)                             | 39Y8941     |
| C19 Enterprise PDUs (6x IEC 320 C19 outlets)  |             |
| 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     |
| Front-end PDUs (3x IEC 320 C19 outlets)   |             |
| 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     |
| Universal PDUs (7x IEC 320 C13 outlets)   |             |
| DPI Universal 7 C13 PDU (with 2 m IEC 320-C19 to C20 rack power cord)               | 00YE443     |
| DPI Universal Rack PDU with US LV and HV line cords                                 | 39Y8951     |
| DPI Universal Rack PDU with CEE7-VII Europe line cord                               | 39Y8952     |
| DPI Universal Rack PDU with Denmark line cord                                       | 39Y8953     |
| DPI Universal Rack PDU with Israel line cord  | 39Y8954     |
| DPI Universal Rack PDU with Italy line cord   | 39Y8955     |
| DPI Universal Rack PDU with South Africa line cord                                  | 39Y8956     |
| DPI Universal Rack PDU with UK line cord  | 39Y8957     |
| DPI Universal Rack PDU with AS/NZ line cord   | 39Y8958     |
| DPI Universal Rack PDU with China line cord   | 39Y8959     |



| Description                                       | Part number |
|---|-------------|
| DPI Universal Rack PDU (Argentina)                | 39Y8962     |
| DPI Universal Rack PDU (Brazil)                   | 39Y8960     |
| DPI Universal Rack PDU (India)                    | 39Y8961     |
| NEMA PDUs (6x NEMA 5-15R outlets)                 |             |
| DPI 100-127V PDU with Fixed NEMA L5-15P line cord | 39Y8905     |
| Line cords for PDUs that ship without a line cord |             |
| DPI 32a Line Cord (IEC 309 3P+N+G)                | 40K9611     |
| DPI 32a Line Cord (IEC 309 P+N+G)                 | 40K9612     |
| DPI 63a Cord (IEC 309 P+N+G)                      | 40K9613     |
| DPI 30a Line Cord (NEMA L6-30P)                   | 40K9614     |
| DPI 60a Cord (IEC 309 2P+G)                       | 40K9615     |
| DPI Australian/NZ 3112 Line Cord                  | 40K9617     |

For more information, see the list of Product Guides in the Power infrastructure category:  
<http://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 41. 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 Hardware Configurator:  
<http://lesc.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://support.lenovo.com/us/en/products/Servers/Lenovo-x86-servers/Lenovo-System-x3250-M6?tabName=Documentation>
- Lenovo Support - System x3250 M6  
<http://support.lenovo.com/us/en/products/Servers/Lenovo-x86-servers/Lenovo-System-x3250-M6>

## Related product families

Product families related to this document are the following:

- [1-Socket Rack Servers](#)

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