

# Lenovo System 3650 M5 server (546262G)

Intel Xeon E5-2670 v3 (2.3GHz), 16GB (1866MHz) DDR4, USB 3.0, Matrox G200eR2 16MB, Gigabit Ethernet, 750W, 19kg

## Price details:

Price excl. VAT: 4,732.90 €

Eco fees: 0.08 €

VAT 21 %: 993.93 €

## Product details:

Product code: 546262G

EAN: 5051045209359

Manufacturer: Lenovo

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# 5,726.91 €

\* VAT included

## Lenovo OneLink Technology.

Get more from your power cable! OneLink technology is a unique interface that simplifies connectivity through a single cable to the ThinkPad OneLink Dock. The OneLink dock provides dedicated video, USB 3.0 ports, Gigabit Ethernet, and audio—all while charging your notebook.

## Award-Winning Keyboard

Full-sized and spill-resistant, the legendary ThinkPad ergonomic keyboard is renowned for its full array of keys, excellent feel, and TrackPoint pointing device. It's optimized for Windows 8.1 with convenient multimedia buttons, function-lock capability, and immediate access to view apps. Plus, a larger TrackPad with buttons, which can be configured multiple ways through Settings. Available optional backlight makes working in dark environments effortless.

## Long Battery Life

All-day computing with up to 9 hours unplugged lets you get a full day of work in on a single charge.

## Fast Data Transfer

Move data quickly between the E550 and other devices with SuperSpeed USB 3.0, which enables up to 10 times faster file transfer, allowing for lightning-fast copying of large media files, as well as seamless connections between audio- and video-related peripherals.

## Integrated HD Webcam & Mic

Never miss a thing in web conferences: a low-light sensitive 720p HD webcam with wide-angle viewing and face-tracking, along with dual noise-cancelling microphones deliver crystal-clear private and conference mode VOIP meetings. Plus, convenient multimedia keys provide quick and easy access to microphone, speaker, and camera controls.

## 3D Camera (Optional)

With a camera that can see as well as take pictures, control your devices and interact in new ways with gaming, collaboration, and content creation. The combination of a full 1080p color camera and a depth sensor enables real-time, natural interaction. (Note: Related software and application support is required.)

## Stereo Speakers With Dolby Advanced Audio

A suite of audio technology from Dolby delivers a crisp, clear cinematic surround sound for music, movies, games, and more. Hear every detail clearly and experience the full impact of your entertainment anywhere.

## JBL Stereo Speakers (optional)

Founded by James B. Lansing in the 1920s, JBL has been a pioneering force in audio engineering and sound technology worldwide for nearly a century. Tackle enterprise workloads with power, efficiency, and reliability;

- Choose from flexible storage configurations for workload-optimized performance;
- Reduce unplanned downtime and minimize costs;
- Gain superior performance with Intel Xeon E5-2600 v3 processors (up to 36 cores per server), end-to-end 12 Gbps RAID support-devices and infrastructure-up to four RAID adapters, and up to two 300 W GPUs;
- Run up to 131 percent greater java workload performance, up to 61 percent greater virtualization performance, and up to 59 percent greater database performance per system than the previous generation;
- Reduce data-center costs with smart energy-efficient features, including unique 40° C operating temperature, 80 PLUS

Titanium power supplies, active/standby power supply modes, dual fan zone design, and TruDDR4 Memory;

- Run more virtual machines and workloads with up to 50 percent more cores and cache and 2x more memory capacity per system than previous generation;
- Simplify server management and administration with Lenovo XClarity.

With the powerful, versatile 2U dual-socket System x3650 M5 rack server, you can run even more workloads, 24/7, and gain faster business insights. Integrated with up to two Intel Xeon processors E5-2600 v3 series and faster TruDDR4 Memory, the x3650 M5 fast forwards your business. You can select from an impressive array of storage configurations (up to 26 drive bays) that optimize diverse workloads from cloud to big data. Select systems featuring built-in JBL speakers deliver exquisite stereo performance that brings your movies and music to life.

#### Lenovo Cloud Storage

Protect your critical data, while also making access to information and file-sharing quick and convenient. Automatically back-up and synchronize data across the organization, while enabling access from multiple devices. Data is encrypted on transfer for an extra level of security.

#### Main specifications:

##### Processor

|   |                       |
|---|-----------------------|
| Processor frequency:                            | 2.3 GHz               |
| Processor family:                               | Intel Xeon E5 v3      |
| Processor model:                                | E5-2670V3             |
| Processor cores:                                | 12                    |
| Number of processors installed:                 | 1                     |
| Processor cache type:                           | Smart Cache           |
| Processor cache:                                | 30 MB                 |
| System bus rate:                                | 9.6 GT/s              |
| Maximum number of SMP processors:               | 2                     |
| Compatible processor series:                    | Xeon                  |
| Processor socket:                               | LGA 2011-v3           |
| Processor boost frequency:                      | 3.1 GHz               |
| Processor lithography:                          | 22 nm                 |
| Processor threads:                              | 24                    |
| Processor operating modes:                      | 64-bit                |
| Stepping:                                       | M1                    |
| FSB Parity:                                     | N                     |
| Bus type:                                       | QPI                   |
| Number of QPI links:                            | 2                     |
| Processor codename:                             | Haswell               |
| Tcase:  | 84.5 °C               |
| Maximum internal memory supported by processor: | 768 GB                |
| Memory types supported by processor:            | DDR4-SDRAM            |
| Memory clock speeds supported by processor:     | 1600,1866,2133 MHz    |
| Memory bandwidth supported by processor (max):  | 60 GB/s               |
| Memory channels supported by processor:         | Quad                  |
| ECC supported by processor:                     | Y                     |
| Execute Disable Bit:                            | Y                     |
| Idle States:                                    | Y                     |
| Thermal Monitoring Technologies:                | Y                     |
| Maximum number of PCI Express lanes:            | 40                    |
| PCI Express configurations:                     | x4, x8, x16           |
| Processor package size:                         | 52.5 mm               |
| Supported instruction sets:                     | AVX 2.0               |
| Scalability:                                    | 2S                    |
| Physical Address Extension (PAE):               | 46 bit                |
| Embedded options available:                     | N                     |
| Thermal Design Power (TDP):                     | 120 W                 |
| Processor series:                               | Intel Xeon E5-2600 v3 |
| Conflict Free processor:                        | N                     |

##### Memory

|                          |            |
|--------------------------|------------|
| Internal memory:         | 16 GB      |
| Internal memory type:    | DDR4-SDRAM |
| Maximum internal memory: | 1500 GB    |
| Memory clock speed:      | 1866 MHz   |

|   |                            |
|---|----------------------------|
| ECC:  | Y                          |
| <b>Storage</b>  |                            |
| Hard drive size:  | 2.5 "                      |
| Hard drive interface:                                     | Serial Attached SCSI (SAS) |
| RAID support:   | Y                          |
| Maximum storage capacity:                                 | 32 TB                      |
| RAID levels:  | 1,10                       |
| Hot-Plug support:   | Y                          |
| S.M.A.R.T. support:                                       | Y                          |
| Embedded USB (eUSB) SSD option:                           | Y                          |
| Supported hard disk drive sizes:                          | 2.5 "                      |
| Number of SSDs supported:                                 | 18                         |
| Supported storage drive interfaces:                       | SAS                        |
| <b>Graphics</b>   |                            |
| Maximum graphics adapter memory:                          | 16 MB                      |
| On-board graphics adapter:                                | Y                          |
| <b>Networking</b>   |                            |
| Ethernet LAN:   | Y                          |
| Wake-on-LAN ready:  | Y                          |
| LAN controller:   | Broadcom BCM5719           |
| Cabling technology:                                       | 10/100/1000Base-T(X)       |
| Ethernet interface type:                                  | Gigabit Ethernet           |
| <b>Ports &amp; interfaces</b>                             |                            |
| USB 2.0 ports quantity:                                   | 4                          |
| VGA (D-Sub) ports quantity:                               | 1                          |
| Ethernet LAN (RJ-45) ports:                               | 4                          |
| Serial ports quantity:                                    | 1                          |
| USB 3.0 (3.1 Gen 1) Type-A ports quantity:                | 3                          |
| <b>Expansion slots</b>                                    |                            |
| PCI Express x8 slots:                                     | 6                          |
| PCI Express x16 slots:                                    | 3                          |
| PCI Express slots version:                                | 3.0                        |
| <b>Design</b>   |                            |
| Chassis type:   | Rack (2U)                  |
| Optical drive type:                                       | N                          |
| Rack mounting:  | Y                          |
| Redundant fans support:                                   | Y                          |
| Rack rails:   | Y                          |
| <b>Performance</b>  |                            |
| Operating system installed:                               | N                          |
| BIOS type:  | UEFI                       |
| Trusted Platform Module (TPM):                            | Y                          |
| On-site support:  | Y                          |
| Trusted Platform Module (TPM) version:                    | 2.0                        |
| <b>Processor special features</b>                         |                            |
| Intelligent Platform Management Interface (IPMI) support: |                            |
| CPU configuration (max):                                  | 2                          |
| Intel Rapid Storage Technology:                           | N                          |
| Enhanced Intel SpeedStep Technology:                      | Y                          |
| Intel® Identity Protection Technology (Intel® IPT):       |                            |
| Intel® Wireless Display (Intel® WiDi):                    | N                          |
| Intel Virtualization Technology for Directed I/O (VT-d):  | Y                          |
| Intel® Anti-Theft Technology (Intel® AT):                 | N                          |
| Intel® Hyper Threading Technology (Intel® HT Technology): |                            |
| Intel® My WiFi Technology (Intel® MWT):                   | N                          |
| Intel® Turbo Boost Technology:                            | 2.0                        |
| Intel® vPro® Technology:                                  | Y                          |
| Intel® Quick Sync Video Technology:                       | N                          |
| Intel® InTru® 3D Technology:                              | N                          |
| Intel® Clear Video HD Technology (Intel® CVT HD):         |                            |
| Intel® Insider®:  | N                          |
| Intel Flex Memory Access:                                 | N                          |
| Intel® Smart Cache:                                       | Y                          |

|  |       |
|--|-------|
| Intel® AES New Instructions (Intel® AES-NI):                                   | Y     |
| Intel Trusted Execution Technology:  | Y     |
| Intel Enhanced Halt State:   | Y     |
| Intel VT-x with Extended Page Tables (EPT):                                    | Y     |
| Intel Demand Based Switching:  | Y     |
| Intel® Secure Key:   | Y     |
| Intel TSX-NI:  | N     |
| Intel® OS Guard:   | Y     |
| Intel Clear Video Technology:  | N     |
| Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID): | N     |
| Intel 64:  | Y     |
| Intel Identity Protection Technology version:                                  | 0.00  |
| Intel Secure Key Technology version:   | 1.00  |
| Intel Virtualization Technology (VT-x):  | Y     |
| Intel TSX-NI version:  | 0.00  |
| Intel Dual Display Capable Technology:   | N     |
| Intel FDI Technology:  | N     |
| Intel Fast Memory Access:  | N     |
| Processor ARK ID:  | 81709 |

#### Power

|   |       |
|---|-------|
| Redundant power supply (RPS) support:         | Y     |
| Power supply:                                 | 750 W |
| Number of redundant power supplies supported: | 2     |
| Number of redundant power supplies installed: | 1     |
| Number of main power supplies:                | 2     |

#### Operational conditions

|                                    |            |
|------------------------------------|------------|
| Operating temperature (T-T):       | 5 - 40 °C  |
| Storage temperature (T-T):         | 5 - 45 °C  |
| Operating relative humidity (H-H): | 8 - 85 %   |
| Storage relative humidity (H-H):   | 8 - 85 %   |
| Operating altitude:                | 0 - 3050 m |

#### Weight & dimensions

|         |          |
|---------|----------|
| Width:  | 445.6 mm |
| Depth:  | 800 mm   |
| Height: | 86.5 mm  |
| Weight: | 19000 g  |

#### Other features

|                          |         |
|--------------------------|---------|
| Graphics adapter:        | G200eR2 |
| Graphics adapter family: | Matrox  |