

## Lenovo System x3650 M5 server (5462B2G)

System x3650 M5 - Intel Xeon E5-2609 v3 (15M Cache, 1.90 GHz), C612, 8GB DDR4 2133MHz, 2U Rack, 8x3.5" SAS/SATA, 550W, NoOS



### Price details:

Price excl. VAT: 2,273.54 €

Eco fees: 0.07 €

VAT 21 %: 477.46 €

### Product details:

Product code: 5462B2G

EAN: 5051045207492

Manufacturer: Lenovo

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# 2,751.07 €

\* VAT included

### System x3650 M5

- Tackle enterprise workloads with power, efficiency and reliability
- Choose from flexible storage configurations for workload-optimized performance
- Reduce unplanned downtime and minimize costs
- Safeguard enterprise data with built-in System x® Trusted Platform Assurance, plus optional self-encrypting drives and IBM Security Key Lifecycle Manager
- 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 (up to 96 percent efficiency), active/standby power supply modes, dual fan zone design, and TruDDR4 Memory (up to 45 percent lower energy use over DDR3)
- 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

With the powerful, versatile new 2U two-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 E5-2600 v3 series CPUs and industry-leading two-socket storage capacity, 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.

### Main specifications:

#### Processor

|                                 |                  |
|---------------------------------|------------------|
| Processor frequency:            | 1.9 GHz          |
| Processor family:               | Intel Xeon E5 v3 |
| Processor model:                | E5-2609V3        |
| Processor cores:                | 6                |
| Number of processors installed: | 1                |
| Processor cache type:           | Smart Cache      |
| Processor cache:                | 15 MB            |
| System bus rate:                | 6.4 GT/s         |
| Processor manufacturer:         | Intel            |
| Compatible processor series:    | Intel Xeon       |
| Processor socket:               | LGA 2011-v3      |
| Motherboard chipset:            | Intel C612       |
| Processor lithography:          | 22 nm            |
| Processor threads:              | 6                |
| Processor operating modes:      | 64-bit           |
| Stepping:                       | M1               |

|   |                       |
|---|-----------------------|
| FSB Parity:                                     | N                     |
| Bus type:                                       | QPI                   |
| Number of QPI links:                            | 2                     |
| Processor codename:                             | Haswell               |
| Tcase:  | 70.9 °C               |
| Maximum internal memory supported by processor: | 368 GB                |
| Memory types supported by processor:            | DDR4-SDRAM            |
| Memory clock speeds supported by processor:     | 1600,1866,2133 MHz    |
| Memory bandwidth supported by processor (max):  | 51 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):               | Y                     |
| Physical Address Extension (PAE):               | 46 bit                |
| Embedded options available:                     | Y                     |
| Thermal Design Power (TDP):                     | 85 W                  |
| Processor series:                               | Intel Xeon E5-2600 v3 |
| Conflict Free processor:                        | N                     |

#### Memory

|                               |            |
|-------------------------------|------------|
| Internal memory:              | 8 GB       |
| Internal memory type:         | DDR4-SDRAM |
| Maximum internal memory:      | 1536 GB    |
| Memory slots:                 | 24         |
| Memory clock speed:           | 2133 MHz   |
| Memory layout (slots x size): | 1 x 8 GB   |

#### Storage

|                                     |                |
|-------------------------------------|----------------|
| Hard drive size:                    | 3.5 "          |
| RAID support:                       | Y              |
| Maximum storage capacity:           | 87.6 TB        |
| Hot-Plug support:                   | Y              |
| Internal drive bays:                | 8              |
| Supported hard disk drive sizes:    | 3.5 "          |
| Hot-swap:                           | Y              |
| Supported storage drive interfaces: | SAS,Serial ATA |

#### Graphics

|                                  |       |
|----------------------------------|-------|
| Maximum graphics adapter memory: | 16 MB |
| On-board graphics adapter:       | Y     |

#### Networking

|                     |                      |
|---------------------|----------------------|
| Ethernet LAN:       | Y                    |
| Cabling technology: | 10/100/1000Base-T(X) |

#### Ports & interfaces

|  |   |
|--|---|
| USB 2.0 ports quantity:                    | 4 |
| VGA (D-Sub) ports quantity:                | 2 |
| Ethernet LAN (RJ-45) ports:                | 5 |
| USB 3.0 (3.1 Gen 1) Type-A ports quantity: | 3 |

#### Expansion slots

|                                 |     |
|---------------------------------|-----|
| PCI Express x8 (Gen 3.x) slots: | 8   |
| PCI Express slots version:      | 3.0 |

#### Design

|                         |           |
|-------------------------|-----------|
| Chassis type:           | Rack (2U) |
| Rack mounting:          | Y         |
| Redundant fans support: | Y         |
| Rack rails:             | Y         |

#### Performance

|                               |   |
|-------------------------------|---|
| Operating system installed:   | N   |
| Compatible operating systems: | Microsoft Windows Server Red Hat Enterprise Linux SUSE Linux Enterprise Server VMware vSphere |

|  |     |
|--|-----|
| Trusted Platform Module (TPM):         | Y   |
| On-site support:                       | Y   |
| Trusted Platform Module (TPM) version: | 2.0 |
| Integrated BMC with IPMI:              | Y   |

#### Processor special features

|  |       |
|--|-------|
| 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:   | N     |
| 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): |       |
| 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:  | 81897 |

#### Power

|   |       |
|---|-------|
| Redundant power supply (RPS) support:         | Y     |
| Power supply:                                 | 550 W |
| Number of redundant power supplies supported: | 2     |
| Number of main power supplies:                | 1     |

#### 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 |

#### Certificates

|                        |   |
|------------------------|---|
| Energy Star certified: | Y |
|------------------------|---|

#### Weight & dimensions

|         |         |
|---------|---------|
| Width:  | 446 mm  |
| Depth:  | 800 mm  |
| Height: | 87 mm   |
| Weight: | 19000 g |

#### Other features

|   |           |
|---|-----------|
| Graphics adapter:                             | G200eR2   |
| Graphics adapter family:                      | Matrox    |
| Intel® Virtualization Technology (Intel® VT): | VT-d,VT-x |

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