

# PERFORMANCE, SPEED AND RELIABILITY WITH NO COMPROMISES.

## LENOVO® THINKSERVER™ OPTIONS

### THINKSERVER PROCESSOR OPTIONS FOR INCREASED PRODUCTIVITY AND PERFORMANCE

ThinkServer Processor Options use dual and quad core technology from Intel®, along with the highest performing chipset, to increase the productivity of dual-processor ThinkServer systems. These processor option kits are specially designed to allow dual-processor ThinkServer systems to take full advantage of the chipset's capabilities – effectively doubling your performance with ease.

- 1 Intel® Xeon® processor with dual-core technology
- 5 Intel® Xeon® processors with quad-core technology

### THINKSERVER HDD OPTIONS FOR DATA STORAGE PERFORMANCE AND SCALABILITY

ThinkServer hard drive options are specially designed to provide small business customers with a complete solution that delivers high performance SAS hard drives and large capacity SATA hard drives (with Hot-swap and Simple-swap carriages) to store business critical data. Firmware for these ThinkServer hard drives are specifically designed to allow ThinkServer systems to reach the highest level of speed and capacity while preserving data integrity and system availability.

- 4 high-performance 2.5" and 3.5" SAS drives
- 9 high-capacity 3.5" Hot-swap and Simple-swap SATA drives

### THINKSERVER MEMORY OPTIONS FOR UNPARALLELED RELIABILITY AND SPEED

ThinkServer Memory Options provide incomparable reliability and speed because they are specifically enabled to take advantage of ThinkServer system technologies. PC2-6400 unbuffered DIMMs provide a cost-effective way to easily increase the performance of your single-processor ThinkServer system. PC2-5300 fully buffered DIMMs take advantage of Advanced ECC, Memory Spare and Memory Mirroring technologies to increase the reliability of dual-processor ThinkServer systems. ThinkServer memory is offered in single DIMM packages – providing easy installation and configuration of memory for all small business needs.

- 2 PC2-6400 800MHz unbuffered DIMMs
- 3 PC2-5300 667MHz fully buffered DIMMs

### THINKSERVER READY OPTIONS LEADING TECHNOLOGY FOR A COMPLETE SOLUTION

ThinkServer Ready Options are third party options that are 100% qualified for ThinkServer systems. These options are proven and ready to work in harmony with your ThinkServer system to provide a complete solution. ThinkServer Ready Options cover the entire spectrum of peripherals for ThinkServer systems, including KVM switches, power and UPS strips, iSCSI and fiber channel cards, external storage and tape systems, and rack accessories. For a complete list of ThinkServer Ready Options, please refer to the Server Options Guide ([www.thinkserver.com/options](http://www.thinkserver.com/options))



# THINKSERVER OPTIONS

## ThinkServer Processor Options

P/N	Description	Compatibility	Warranty
45J6221	Intel® Xeon® processor E5405 (2.0GHz) <sup>2</sup>	TD100, RD120	1-year <sup>3</sup>
45J6180	Intel® Xeon® processor E5205 (1.86GHz) <sup>1</sup>	TD100, RD120	1-year <sup>3</sup>
45J6185	Intel® Xeon® processor E5410 (2.33GHz) <sup>2</sup>	TD100, RD120, TD100x	1-year <sup>3</sup>
45J6186	Intel® Xeon® processor E5420 (2.50GHz) <sup>2</sup>	TD100, RD120	1-year <sup>3</sup>
45K1605	Intel® Xeon® processor E5430 (2.66GHz) <sup>2</sup>	TD100, RD120 1-year <sup>3</sup>	1-year <sup>3</sup>
45K1608	Intel® Xeon® processor X5450 (3.00 GHz) <sup>2</sup>	TD100x	1-year <sup>3</sup>

## ThinkServer Memory Options

P/N	Description	Compatibility	Warranty
45J6188	ThinkServer 1GB PC2-6400 DDR2 SDRAM (800MHz)	TS100, RS110	3-year
45J6189	ThinkServer 2GB PC2-6400 DDR2 SDRAM (800MHz)	TS100, RS110	3-year
45J6191	ThinkServer 1GB PC2-5300 DDR2 FBDIMM (667MHz)	TD100, TD100x, RD120	3-year
45J6192	ThinkServer 2GB PC2-5300 DDR2 FBDIMM (667MHz)	TD100, TD100x, RD120	3-year
45J6193	ThinkServer 4GB PC2-5300 DDR2 FBDIMM (667MHz)	TD100, TD100x, RD120	3-year

## ThinkServer Hard Drive Options\*

P/N	Description	Compatibility	Warranty
45J6195	ThinkServer 160GB 3.5" Simple-swap SATA II	TS100, TD100, RS110	1-year <sup>4</sup>
45J6196	ThinkServer 250GB 3.5" Simple-swap SATA II	TS100, TD100, RS110	1-year <sup>4</sup>
45J6197	ThinkServer 500GB 3.5" Simple-swap SATA II	TS100, TD100, RS110	1-year <sup>4</sup>
45J6198	ThinkServer 750GB 3.5" Simple-swap SATA II	TS100, RS110	1-year <sup>4</sup>
45J6200	ThinkServer 160GB 3.5" Hot-swap SATA II	TS100, TD100, TD100x, RS110	3-year
45J6201	ThinkServer 250GB 3.5" Hot-swap SATA II	TS100, TD100, TD100x, RS110	3-year
45J6202	ThinkServer 500GB 3.5" Hot-swap SATA II	TS100, TD100, TD100x, RS110, RD120	3-year
45J6203	ThinkServer 750GB 3.5" Hot-swap SATA II	TS100, TD100, TD100x, RS110, RD120	3-year
45J6204	ThinkServer 1TB 3.5" Hot-swap SATA II	TS100, TD100, TD100x, RS110, RD120	3-year
45J6207	ThinkServer 146GB 10K 2.5" Hot-swap SAS	RS110, RD120	3-year
45J6208	ThinkServer 73GB 15K 2.5" Hot-swap SAS	RS110, RD120	3-year
45J6211	ThinkServer 146GB 15K 3.5" Hot-swap SAS	TD100, TD100x, TS100, RD120	3-year
45J6212	ThinkServer 300GB 15K 3.5" Hot-swap SAS	TD100, TD100x, TS100, RD120	3-year

1. Dual-core processor
2. Quad-core processor
3. If installed in your ThinkServer, it takes the warranty of your ThinkServer (1 or 3-year, depending on the model)
4. If installed in your ThinkServer, it takes the warranty of your ThinkServer (1 or 3-year, depending on the model)

\*Check the backplane type of the server before adding hard drives

# THIRD PARTY THINKSERVER OPTIONS - INSTALLED/BUNDLED

## INSTALLED OPTIONS

### ThinkServer Communications / Networking Options

P/N	Description	Compatibility
39Y9566	IBM Remote Supervisor Adapter II Slimline	All
39Y6136	PRO/1000 PT Quad Port Server Adapter by Intel	TD100, TD100x, RS110, RD120
39Y6126	PRO/1000 PT Dual Port Server Adapter by Intel	All
39Y6066	NetXtreme II 1000 Express G Ethernet Adapter	All
42C1780	NetXtreme II 1000 Express Dual Port Ethernet Adapter	All

### ThinkServer Input / Output HW/ Adapters

P/N	Description	Compatibility
39R6525	QLogic 4GB FC Single-Port PCIe HBA	All
39R6527	QLogic 4GB FC Dual-Port PCIe HBA	All
42C2069	Emulex 4GB FC Single-Port PCI-E HBA	All
42C2071	Emulex 4GB FC Dual-Port PCI-E HBA	All
39Y6146	QLogic iSCSI Single-Port PCIe HBA	All
42C1770	QLogic iSCSI Dual Port PCIe HBA	All

### ThinkServer Storage / Removable Storage

P/N	Description	Compatibility
25R8060	IBM SAS HBA Controller	All
44E8825	IBM ServeRAID-MR10M SAS/SATA Controller w/ remote	All
59Y2082	IBM UltraSlim Multi-Burner	RD120
44E8895	IBM LTO-4 Half High 800GB/1.6TB SATA	All
43W8480	IBM DDS Generation 5 SATA Tape Drive	All
39M5636	IBM DDS Generation 6 USB Tape Drive	All
43V5959	IBM DDS Tape Enablement Kit (3.5")	-

## BUNDLED OPTIONS

### ThinkServer Accessories

P/N	Description	Compatibility
93074XX	IBM S2 Standard 42U Expansion Rack	-
93074RX	IBM S2 Standard 42U Rack	-
93072RX	IBM S2 Standard 25U Rack	-
172317X	IBM 1U 17" Flat Panel Monitor Console Kit w/ Optical Drive Bay	-
173219X	IBM 1U 19" Flat Panel Monitor Console Kit with Multi-Burner Drive	-
39Y8382	5Ux26D Tower to Rack Conversion Kit	TD100, TD100x
42C8923	5Ux20D Tower to Rack Conversion Kit	TS100
17351GX	IBM 2x8 Local Console Manager	All
17353LX	IBM 1x8 Console Switch	TD100, TD100x, RS110, RD120
31R3132	IBM 3m Console Switch Cables	TD100, TD100x, RS110, RD120
25R5559	5 1U Quick Install Filler Panels	-



## THIRD PARTY THINKSERVER OPTIONS - BUNDLED

### ThinkServer Power

P/N	Description	Compatibility
39Y8941	DPI 32ASingle Phase C13 Enterprise PDU w/o line cord	-
39Y7932	4.3m,10A/120V,C13 to IEC 320-C14	-
39Y7937	1.5m,10A/120V,C13 to IEC 320-C14	-
39Y8857	IBM UPS 3U Run Online Battery Pack	TS100, RS110, RD120
40K9620	Eaton UPS 3000 Extended Battery Module (EBM)	RS110
21302RX	IBM UPS 3000 HV without Line Cord	RS110, RD120
21304RX	IBM UPS 10000XHV – Rack	RS110, RD120
2130R4X	IBM UPS 1000THV - 700W, Not Rackable	TS100, TD100, TD100x
2130R6X	IBM UPS 1500THV - 1050W, Not Rackable	TS100, TD100, TD100x

The Third Party Server Options portfolio allows us to present a selection of IBM products, enabling our Business Partners and Customers to order from us whilst leveraging the manufacturers' direct service and support capabilities.

Bundled options are sold as standalone products to our Business Partners, while installed options are available only via special bid and are built into systems

Please note that we do not provide service and warranty directly on any of the OEM branded products within the Third Party Options Portfolio. For further details, contact the relevant manufacturer directly.

 [www.lenovo.com/thinkserver/europe](http://www.lenovo.com/thinkserver/europe)

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