

# Data Sheet

## Fujitsu PRIMERGY TX150 S7 Mono-Socket Intel® Xeon® processor server

### Datasheet for Red Hat certification

The one-processor tower server - maximized!

PRIMERGY TX industry standard tower servers: efficient, rock solid, record-breaking performance. PRIMERGY TX servers benefit from over 20 years pioneering work in the field of Green IT. That is how TX servers reach industry – leading performance per watt ratios, lowering the environmental impact and running costs. TX servers can easily be managed via the free of charge PRIMERGY ServerView Suite, saving IT admin costs. That's efficient performance. Our made-to-measure service packages take care of your system every step of the way. Rest assured, PRIMERGY TX servers are put through 5000 boot cycles - that's rock solid performance. PRIMERGY TX servers are flexible systems capable of using up to two processors and up to 20 hard disks. Tower to rack mounting kits are available for most TX systems to help you move to a consolidated rack infrastructure. TX servers have a tradition of setting record-breaking performance levels. So, whether you use them as tower or rack servers, for file, print or application purposes, you will benefit from record-breaking performance. PRIMERGY TX: a tower of strength.

attractive price. The PRIMERGY TX150 S7: the one processor tower server – maximized!



### PRIMERGY TX150 S7

The PRIMERGY TX150 S7: the right system for SMEs or non-mission-critical decentralized infrastructures where the main focus is on expandability and availability. The expandability and availability come from the 6 expansion slots (5 of which PCIe Gen 2) and up to 8x 2.5" hot-plug hard disks. Increase the system's availability and energy efficiency through the use of optional redundant power supplies boasting up to 89% energy efficiency. The TX150 S7 also offers up to the latest generation Intel® Xeon® processor 3400 series single processor platform, delivering excellent energy-efficient performance at an



# Features and Benefits

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| Main Features   | Benefits   |
|---|--|
| <ul style="list-style-type: none"><li>■ By combining the latest Intel® mono-processor platform and SAS 2.0 hard disks with Fujitsu's engineering, you can get great performance with low energy consumption.</li><li>■ Hot plug hard disks: choose between max. 4x 3.5 or max. 8x 2.5". Power supply units: choose between standard or redundant.</li><li>■ Up to 32GB of RAM and 6 expansion slots (5 of which second generation PCIe slots)</li><li>■ The PRIMERGY TX150 S7 can be integrated into a rack infrastructure with the tower to rack conversion kit</li><li>■ The green touch points, the system ID card and the customer self-service module make servicing the TX150 S7 easier</li></ul> | <ul style="list-style-type: none"><li>■ High performance and energy efficiency</li><li>■ High availability options to suit your business</li><li>■ High expandability - the TX150 S7 grows with your business.</li><li>■ High versatility - increases your investment's lifetime</li><li>■ High serviceability - saves your time</li></ul> |

# Technical details

|                               |   |
|-------------------------------|---|
| <b>Mainboard</b>              |   |
| Mainboard type                | D 2759  |
| Chipset                       | Intel® 3420   |
| Processor quantity and type   | 1 x Intel® Core™ i3 processor / Intel® Pentium® processor / Intel® Xeon® processor L3400 series / Intel® Xeon® processor X3400 series   |
| <b>Processor</b>              |   |
|                               | Intel® Core™ i3-540 processor<br>(2C/4T, 3.06 GHz, TLC: 4 MB, Turbo: No, 1333 MHz, 73 W)  |
|                               | Intel® Core™ i3-550 processor<br>(2C/4T, 3.20 GHz, TLC: 4 MB, Turbo: No, 1333 MHz, 73 W)  |
|                               | Intel® Pentium® processor G6950<br>(2C, 2.80 GHz, TLC: 3 MB, Turbo: No, 1066 MHz, 73 W)   |
|                               | Intel® Xeon® processor L3406<br>(2C/4T, 2.26 GHz, TLC: 4 MB, Turbo: 2/2, 1066 MHz, 30 W)  |
|                               | Intel® Xeon® processor L3426<br>(4C/8T, 1.86 GHz, TLC: 8 MB, Turbo: 2/2/9/10, 1333 MHz, 45 W)   |
|                               | Intel® Xeon® processor X3430<br>(4C/4T, 2.40 GHz, TLC: 8 MB, Turbo: 1/1/2/3, 1333 MHz, 95 W)  |
|                               | Intel® Xeon® processor X3450<br>(4C/8T, 2.66 GHz, TLC: 8 MB, Turbo: 1/1/4/4, 1333 MHz, 95 W)  |
|                               | Intel® Xeon® processor X3460<br>(4C/8T, 2.80 GHz, TLC: 8 MB, Turbo: 1/1/4/5, 1333 MHz, 95 W)  |
|                               | Intel® Xeon® processor X3470<br>(4C/8T, 2.93 GHz, TLC: 8 MB, Turbo: 2/2/4/5, 1333 MHz, 95 W)  |
|                               | Intel® Xeon® processor X3480<br>(4C/8T, 3.06 GHz, TLC: 8 MB, Turbo: 2/2/4/5, 1333 MHz, 95 W)  |
| Memory slots                  | 6   |
| Memory slot type              | DIMM (DDR3)   |
| Memory capacity (min. - max.) | 1 GB - 32 GB  |
| Memory protection             | ECC   |
| Memory notes                  | For the following modules a maximum of 4 DIMMs can be configured: 4GB (quad-ranked) with 1066MHz, 8GB RDIMM, all UDIMM modules.<br>Maximum configurable memory capacity: UDIMMs (max. 16GB) with all processors; RDIMMs (max. 32 GB) with Xeon CPUs only.<br>The following modules can be configured 6x: 4GB (dual-rank) and 2GB (dual-rank). |
| <b>Memory modules</b>         |   |
|                               | 1 GB (1 module(s) 1 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM  |
|                               | 2 GB (1 module(s) 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM  |
|                               | 2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM  |
|                               | 4 GB (1 module(s) 4 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500, DIMM   |
|                               | 4 GB (1 module(s) 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM  |
|                               | 4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM  |
|                               | 8 GB (1 module(s) 8 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500, DIMM   |
| Memory modules notes          | 1066 MHz and 1333 MHz memory modules cannot be mixed  |
| <b>Interfaces</b>             |   |
| USB ports                     | 10 x USB 2.0 (3x front, 4x rear, 3x internal)   |
| Graphics (15-pin)             | 1 x VGA   |
| Serial 1 (9-pin)              | 1 x serial RS-232-C, usable for iRMC or system or shared  |
| Serial 2 (9-pin)              | 1 x serial RS-232-C (optional)  |
| LAN / Ethernet (RJ-45)        | 1 x Gbit/s Ethernet   |

**Interfaces**

|                           |   |
|---------------------------|---|
| <b>Service LAN (RJ45)</b> | 1 x dedicated service LAN port for iRMC S2 (10/100 Mbit/s)<br>Service LAN traffic can be switched to shared onboard Gbit LAN port |
|---------------------------|---|

**Onboard or integrated Controller**

|                                      |   |
|--------------------------------------|---|
| <b>RAID Controller</b>               | Integrated RAID 0/1 or RAID 5/6 controller for SAS base units (option, occupies one PCIe slot).<br>See under Components RAID controller                       |
| <b>SATA Controller</b>               | Intel® 3420 Ibex Peak PCH Platform Control Hub, 2 ports used for accessible drives<br>4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux; |
| <b>Remote Management Controller</b>  | Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible                                       |
| <b>Trusted Platform Module (TPM)</b> | Infineon / 1.2 (option)   |

**Slots**

|                                      |  |
|--------------------------------------|--|
| <b>PCI Express 2.0 x1 (mech. x4)</b> | 2 x short  |
| <b>PCI-Express 2.0 x4 (mech. x8)</b> | 1 x Low profile ready, full height, long 3,3 V                           |
| <b>PCI-Express 2.0 x8</b>            | 2 x short 3,3V   |
| <b>PCI slots</b>                     | 1 x PCI 32/33 MHz, 1x long, 5V   |
| <b>Slot Notes</b>                    | in SAS configuration 1x PCI-Express occupied by modular RAID controller. |

**Drive bays**

|                                    |  |
|------------------------------------|--|
| <b>Hard disk bay configuration</b> | 4x 3.5-inch, for SAS / SATA or 8x 2.5-inch for SAS/SATA/SSD optional |
| <b>Accessible drive bays</b>       | 3 x 5.25/1.6-inch  |
| <b>Notes accessible drives</b>     | all possible options described in relevant system configurator       |
| <b>Number of fans</b>              | 1  |
| <b>Fan configuration</b>           | 1 standard fan   |

**Operating panel**

|                          |  |
|--------------------------|--|
| <b>Operating buttons</b> | On/off switch<br>NMI button<br>Reset button  |
| <b>Status LEDs</b>       | System status (amber / yellow)<br>Identification (blue)<br>Hard disks access (green)<br>Power (amber / green)<br>At system rear side:<br>System status (amber / yellow)<br>Identification (blue)<br>LAN connection (green)<br>LAN speed (green / yellow) |
| <b>Service display</b>   | Optional:<br>ServerView Local Service Panel (LSP)<br>ServerView Local Service Display (LSD)  |

**BIOS**

|                      |  |
|----------------------|--|
| <b>BIOS features</b> | ROM based setup utility<br>Recovery BIOS<br>BIOS settings save and restore<br>Local BIOS update from USB device<br>Online update tools for main Windows and Linux versions<br>Local and remote update via ServerView Update Manager<br>SMBIOS V2.4<br>Remote PXE boot support<br>Remote iSCSI boot support |
|----------------------|--|

**Operating Systems and Virtualization Software**

|   |   |
|---|---|
| <b>Certified or supported operating systems and virtualization software</b> | Microsoft® Windows Server® 2008 R2 (containing Hyper-V)<br>Microsoft® Windows Server® 2008<br>Novell SUSE Linux Enterprise Server<br>Red Hat Enterprise Linux<br>VMware vSphere 4.1 |
| <b>Operating system release link</b>  | <a href="http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421">http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421</a>                 |

**Server Management**

|                                |  |
|--------------------------------|--|
| <b>Standard</b>                | ASR&R Automatic Server Recovery and Restart<br>PDA Prefailure Detection and Analysis<br>Online update packages for BIOS, firmware drivers and ServerView Agents<br>ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris<br>Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version)<br>ServerView Deployment Manager (fully functional 30-day trial version) |
| <b>Option</b>                  | iRMC S2 Advanced Pack<br>ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager  |
| <b>Server Management notes</b> | Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.  |

**Dimensions / Weight**

|                                |  |
|--------------------------------|--|
| <b>Floor-stand (W x D x H)</b> | 205 x 584 x 444 mm   |
| <b>Rack (W x D x H)</b>        | 482 x 570 x 220 mm   |
| <b>Dimension notes</b>         | Floorstand Width 306 mm with tilt protection; depth measured excludes handles on redundant PSU. Rack depth excludes handles of redundant PSU and rack front. |
| <b>Height Unit Rack</b>        | 5 U  |
| <b>Weight</b>                  | 21-28 kg   |
| <b>Weight notes</b>            | Actual weight may vary depending on configuration  |
| <b>Rack integration kit</b>    | Rack integration kit as option   |

**Dimensions / Weight / Environmental  
(Base unit specific)****Environmental**

|                                      |   |
|--------------------------------------|---|
| <b>Noise emission</b>                | Measured according to ISO 7779 and declared according to ISO 9296                                   |
| <b>Sound pressure (LpAm)</b>         | SATA: 24 dB(A) idle mode/ 25 dB(A) operation mode; SAS: 31 dB(A) idle mode/ 33 dB(A) operation mode |
| <b>Sound power (LWAd; 1B = 10dB)</b> | SATA: 4.2 B idle mode/ 4.2 B operation mode ; SAS: 4.9 B idle mode/ 5.1 B operation mode            |
| <b>Noise notes / description</b>     | May vary according to configuration   |

|                                      |   |
|--------------------------------------|---|
| <b>Operating ambient temperature</b> | 10 - 35°C   |
| <b>Operating environment</b>         | FTS 04230 – Guideline for Data Center (installation locations)  |
| <b>Operating environment Link</b>    | <a href="http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe">http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe</a> |

**Electrical values**

|   |  |
|---|--|
| <b>Power supply configuration</b>           | Base unit specific:<br>1x standard power supply or 1x hot-plug power supply or 2x hot plug power supply for redundancy |
| <b>Standard power supply output</b>         | 350W (85% efficiency)  |
| <b>Hot-plug power supply output</b>         | 450W (89% efficiency)  |
| <b>Hot-plug power supply redundancy</b>     | Yes  |
| <b>Rated voltage range</b>                  | 100 V - 240 V  |
| <b>Rated frequency range</b>                | 47 Hz - 63 Hz  |
| <b>Rated current max.</b>                   | 6A - 3A The rated current in basic configuration values are pending confirmation.                                      |
| <b>Rated current in basic configuration</b> | 1.9 A - 0.8 A  |
| <b>Active power (min. configuration)</b>    | 80 W   |
| <b>Active power (max. configuration)</b>    | 258 W  |
| <b>Apparent power (max. configuration)</b>  | 81 VA - 258 VA (max. active power and max. apparent power values are configuration dependent) VA                       |
| <b>Heat emission</b>                        | 928.8 kJ/h (880.3 BTU/h)   |

**Energy Star® 1.0 certified configurations**

The following products use less energy and reduce greenhouse gas emissions by meeting the strict Energy Star guidelines.

PRIMERGY TX150 S7 E-StarFam1 (Dual-Core CPUs with standard PSU)

PRIMERGY TX150 S7 E-StarFam2 (Quad-Core CPUs with hot plug PSU)

[http://ts.fujitsu.com/products/standard\\_servers/e\\_efficient.html](http://ts.fujitsu.com/products/standard_servers/e_efficient.html)

**Compliance**

|                              |  |
|------------------------------|--|
| <b>Germany</b>               | TÜV GS   |
| <b>Europe</b>                | CE Class A *<br>CE label according to EU directives: Low-Voltage Directive 2006/95/EC, Electromagnetic Compatibility 2004/108/EC<br>EN 300386<br>EN 50371<br>EN 55022<br>EN 55024<br>EN 60950 - 1<br>EN 61000-3-2 JEIDA<br>EN 61000-3-3  |
| <b>USA/Canada</b>            | CSAc/us<br>ULc/us<br>FCC Class A   |
| <b>Global</b>                | CB<br>RoHS (Restriction of hazardous substances)<br>WEEE (Waste electrical and electronic equipment)   |
| <b>Japan</b>                 | VCCI Class A + JIS 61000-3-2   |
| <b>Russia</b>                | GOST-R   |
| <b>China</b>                 | CCC (G 4943/ GB 9245 / GB 17625)   |
| <b>Australia/New Zealand</b> | C-Tick (AS / NZS CISPR 22 Class A)   |
| <b>Taiwan</b>                | BSMI Class A (CNS 13438, CNS 14336)<br>CNS 13436   |
| <b>Compliance notes</b>      | There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.<br>Additional compliance with: Kenya:KEBS; Kuwait: KUCAS; Nigeria:SONCap; South Africa:SABS; Belarus: STB; Kazakhstan: GOST-K; Ukraine: SEMPRO<br>* Warning:<br>This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. |
| <b>Compliance link</b>       | <a href="https://sp.ts.fujitsu.com/sites/certificates/default.aspx">https://sp.ts.fujitsu.com/sites/certificates/default.aspx</a>  |

## Components

**Hard disk drives**

|   |
|---|
| SSD SATA, 3 Gb/s, 64 GB, SLC, hot-plug, 2.5-inch, enterprise              |
| SSD SATA, 3 Gb/s, 32 GB, SLC, hot-plug, 2.5-inch, enterprise              |
| HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical |
| HDD SATA, 3 Gb/s, 320 GB, 5400 rpm, hot-plug, 2.5-inch, economic          |
| HDD SATA, 3 Gb/s, 160 GB, 7200 rpm, hot-plug, 2.5-inch, business critical |
| HDD SATA, 3 Gb/s, 160 GB, 5400 rpm, hot-plug, 2.5-inch, economic          |
| HDD SAS, 6 Gb/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise        |
| HDD SAS, 6 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise        |
| HDD SAS, 6 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise        |
| HDD SAS, 6 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise         |

|   |   |
|---|---|
| <b>Hard disk notes</b>  | One Gigabyte equals one billion bytes, when referring to hard disk drive capacity.<br>Accessible capacity may vary, also depending on used software<br>No mix of SAS and SATA HDDs possible   |
| <b>Tape Drives</b>  | DDS Gen5, 36 GB, 3 MB/s, half height, USB 2.0<br>DDS Gen6, 80 GB, 6 MB/s, half height, USB 2.0<br>LTO2HH Ultrium, 200 GB, 24 MB/s, half height, SAS 3Gb/s<br>LTO3HH Ultrium, 400 GB, 60 MB/s, half height, SAS 3Gb/s<br>LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 3Gb/s<br>RDX Drive, 80 GB, 160 GB, 320 GB, 500 GB, 25 MB/s, half height, USB 2.0   |
| <b>Optical drives</b>   | Blu-ray Disc™ Combo Drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I<br>DVD-ROM, (16xDVD; 48xCD), half height, SATA I<br>DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I<br>DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I   |
| <b>SCSI / SAS Controller</b>                                    | SCSI Ctrl. 320 MB 1ch int/ext PCIe x1<br>SAS Ctrl. 3 Gb 4 ports int. / 4 ports ext. PCIe x4   |
| <b>RAID Controller</b>  | Integrated RAID 5/6 Ctrl., HDD SAS 6 Gb, Fujitsu , 8 ports int.<br>RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)<br>Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 8 ports int.<br>RAID level: 0, 1, 1E, no BBU support (based on LSI 1068e)<br>Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 4 ports int.<br>RAID level: 0, 1, 1E, no BBU support , for internal SAS tapes (based on LSI 1064e) |
| <b>LAN Controller</b>   | Ethernet Ctrl. 1 x 1 Gb Intel® Gigabit CT Desktop Adapter<br>Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PF Server Adapter<br>Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PT Server Adapter<br>Ethernet Ctrl. 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter<br>Ethernet Ctrl. 4 x 1 Gb Intel® PRO/1000 PT Quad Port Server Adapter   |
| <b>Rack infrastructure</b>                                      | Cable Arm 2U for 3rd party racks<br>Cable Management for 19-inch DataCenter / PRIMECENTER Racks<br>Rackmount kit full extraction (760mm), tool less mounting  |
| <b>Warranty</b>   |   |
| <b>Standard Warranty</b>  | 1 year  |
| <b>Service level</b>  | On-site Service (depending on country)  |
| <b>Maintenance and Support Services - the perfect extension</b> |   |
| <b>Recommended Service</b>                                      | 7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.   |
| <b>Spare Parts availability</b>                                 | 5 years   |
| <b>Service Weblink</b>  | <a href="http://ts.fujitsu.com/Supportservice">http://ts.fujitsu.com/Supportservice</a>   |

# More information

## Fujitsu platform solutions

In addition to Fujitsu PRIMERGY TX150 S7, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

### Computing Products

[www.fujitsu.com/global/services/computing/](http://www.fujitsu.com/global/services/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about Fujitsu PRIMERGY TX150 S7, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<http://ts.fujitsu.com/Primergy>

## Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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