

Data Sheet

FUJITSU Server PRIMERGY TX150 S8 Mono-Socket Intel® Xeon® processor server

Datasheet for Red Hat certification

The one-processor tower server - maximized!

FUJITSU Server PRIMERGY systems provide the most powerful and flexible data center solutions for companies of all sizes, across all industries and for any type of workload. This includes expandable PRIMERGY tower servers for remote and branch offices, versatile rack-mount servers, compact and scalable blade systems, as well as density-optimized scale-out servers. They convince by business proven quality with a wide range of innovations, highest efficiency cutting operational cost and complexity, and provide more agility in daily operations in order to turn IT faster into a business advantage.

Perfect for small and medium businesses as well as branch offices, FUJITSU Server PRIMERGY TX tower systems are robust and cost-efficient servers by providing rock solid reliability. Additionally they are characterized by simple IT operations, low power consumption and quiet operation so that they can be handled by non-technically trained staff and can be used in standard office environments. By the way: Almost all PRIMERGY TX servers can be rack-mounted to offer best flexibility.

PRIMERGY TX150 S8

The PRIMERGY TX150 S8 stands for reliable and expandable server performance for SMEs, branch offices and virtualized environments. New to the PRIMERGY TX150 platform: The Intel® Xeon® E5 processor family provides a maximum of expandability in an one-socket server. Future demand is perfectly covered by 5 PCIe Gen2/3 expansion slots, up to 96 GB of memory and up to 16 hard disk drives. At the same time the optional redundant power supply units and fans ensure stable and reliable computing. And of course: Fujitsu's patented Cool-safe™ concept together with processors of the Intel® Xeon® E5-1400 and E5-2400 family guarantee best energy efficient performance.



reddot design award
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Features & Benefits

Main Features	Benefits
Performance meets energy efficiency <ul style="list-style-type: none">■ By combining the latest Intel® mono/dual-processor platform and SAS 2.0 hard disks with Fujitsu's engineering, you get best performance with low energy consumption	<ul style="list-style-type: none">■ High performance and energy efficiency
High availability <ul style="list-style-type: none">■ Hot plug hard disks: choose between max. 8x 3.5-inch or max. 16x 2.5-inch. Power supply units: choose between standard or redundant	<ul style="list-style-type: none">■ High availability options to suit your business
Expandability <ul style="list-style-type: none">■ Up to 96 GB of memory and 6 expansion slots	<ul style="list-style-type: none">■ High expandability - the TX150 S8 grows with your business
Investment protection <ul style="list-style-type: none">■ The PRIMERGY TX150 S8 can be integrated into a rack infrastructure with the tower to rack conversion kit	<ul style="list-style-type: none">■ High versatility - increases your investment's lifetime
Service made easy <ul style="list-style-type: none">■ The green touch points, the system ID card and the customer self-service module make servicing the TX150 S8 easier	<ul style="list-style-type: none">■ High serviceability - saves your time

Technical details

PRIMERGY TX150 S8

Base unit	PRIMERGY TX150 S8 LFF	PRIMERGY TX150 S8 SFF
Housing types	Tower	Tower
Storage drive architecture	3.5-inch	2.5-inch
Power supply	Hot-plug	Hot-plug

Mainboard

Mainboard type	D 3079
Chipset	Intel® C602
Processor quantity and type	1 x Intel® Pentium® processor / Intel® Xeon® processor E5-1400 product family / Intel® Xeon® processor E5-2400 product family

Processor

Intel® Pentium® processor 1403 (2C/2T, 2.60 GHz, TLC: 5 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,066 MHz, 80 W)
Intel® Xeon® processor E5-1410 (4C/8T, 2.80 GHz, TLC: 10 MB, Turbo: Yes, 6.4 GT/s, Mem bus: 1,333 MHz, 80 W)
Intel® Xeon® processor E5-2403 (4C/4T, 1.80 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,066 MHz, 80 W)
Intel® Xeon® processor E5-2407 (4C/4T, 2.20 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,066 MHz, 80 W)
Intel® Xeon® processor E5-2420 (6C/12T, 1.90 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 95 W)
Intel® Xeon® processor E5-2430 (6C/12T, 2.20 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 95 W)
Intel® Xeon® processor E5-2430L (6C/12T, 2.00 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 60 W)
Intel® Xeon® processor E5-2440 (6C/12T, 2.40 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 95 W)
Intel® Xeon® processor E5-2450 (8C/16T, 2.10 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 95 W)

Memory slots	6 (6 DIMMs, 3 channels with 2 slots per channel)
Memory slot type	DIMM (DDR3)
Memory capacity (min. - max.)	2 GB - 96 GB
Memory protection	Advanced ECC Memory Scrubbing SDDC (Chipkill™) Hot-spare memory support Memory Mirroring support

Memory notes max. 96 GB registered; min. 2 GB unbuffered; Memory Mirroring with identical modules in both channel pairs of a bank (2 modules per bank). Rank sparing with identical modules within the same channel. Performance Mode with identical modules in all channels of each bank per CPU.

Memory options	4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, single rank 8 GB (1 module(s) 8 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank 16 GB (1 module(s) 16 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank
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Memory options	2 GB (1 module(s) 2 GB) DDR3 LV, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM, single rank 4 GB (1 module(s) 4 GB) DDR3 LV, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank
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Interfaces

USB 2.0 ports	9 x USB 2.0 (2x front, 4x rear, 3x internal for backup, UFM and internal USB)
Graphics (15-pin)	1 x VGA
Serial 1 (9-pin)	1 x serial RS-232-C, usable for iRMC or system or shared
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S3 (10/100/1000 Mbit/s) Management LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller

RAID controller	additional RAID controller options are described under Components RAID controller
SATA Controller	Intel® C602, 2 ports used for accessible drives 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux;
SATA controller type notes	On board SATA controller supports RAID levels 0, 1, 10
Remote Management Controller	Integrated Remote Management Controller (iRMC S3, 32 MB attached memory incl. graphics controller) IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)

Slots

PCI-Express 3.0 x4 (mech. x8)	2 x Full height 280 mm max. length
PCI-Express 3.0 x16	1 x Full height 280mm max. length
PCI-Express 2.0 x1 (mech. x16)	1 x Full height 170 mm max. length
PCI-Express 2.0 x4 (mech. x8)	1 x Full height 230 mm max length; preferred RAID slot
PCI-slots	1 x PCI 32/33 MHz, 1x long, 5V
Slot Notes	in SAS configuration 1x PCI-Express occupied by modular RAID controller.

Drive bays

Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA
Notes accessible drives	all possible options described in relevant system configurator

Drive bays (Base unit specific)

Storage drive bays	Max 8 (4 + 4) x 3.5-inch	Max 16 (8+ 8) x 2.5-inch
Accessible drive bays	3 x 5.25/1.6-inch for 4 x 3.5-inch HDD/SSD, or 2 x 3.5-inch HDD/SSD + 1 x backup drive + local service display 1 x 5.25/0.5-inch for slimline ODD	3 x 5.25/1.6-inch for 8 x 2.5-inch HDD/SSD + backup drive/ ODD, or 8 x 2.5-inch HDD/SSD + slim ODD + local service display

Number of fans	4
Fan configuration	3 + 1 redundant
Fan notes	Redundant fan configuration is only available in combination with redundant PSU
Number of fans	4
Fan configuration	3+1 redundant
Fan notes	redundant / non hot-plug

Operating panel

Operating buttons	On/off switch NMI button Reset button
Status LEDs	System status (orange / yellow) Identification (blue) Hard disks access (green) Power (amber / green) CPU status Fan status Hard disk error Temperature CSS (yellow) Memory status PSU status (green/ amber) At system rear side: System status (orange / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)

Service display	Optional: ServerView Local Service Display (LSD)
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BIOS

BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support Remote iSCSI boot support
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Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server 2012 Microsoft® Windows Server® 2012 Datacenter Microsoft® Windows Server® 2012 Standard Microsoft® Windows Server® 2012 Essentials Microsoft® Windows Server® 2012 Foundation Microsoft® Windows Storage Server 2012 Standard Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows Server® 2008 R2 Datacenter Microsoft® Windows Server® 2008 R2 Enterprise Microsoft® Windows Server® 2008 R2 Standard Microsoft® Windows® Web Server 2008 R2 Microsoft® Windows® Small Business Server 2011 Premium Add-On Microsoft® Windows® Small Business Server Standard 2011 Microsoft® Windows® Server 2008 Datacenter Microsoft® Windows® Server 2008 Enterprise Microsoft® Windows® Server 2008 Standard VMware vSphere™ 5.0 Embedded VMware vSphere™ 5.0 VMware vSphere™ 4.1 VMware vSphere™ 4.1 Embedded VMware vSphere™ 4.1 Installable VMware vSphere™ 4.0 VMware vSphere™ 4.0 Embedded VMware vSphere™ 4.0 Installable SUSE® Linux Enterprise Server 11 SUSE® Linux Enterprise Server 10 SUSE® Linux Enterprise Server 10 with XEN Red Hat® Enterprise Linux 7 Red Hat® Enterprise Linux 6 Red Hat® Enterprise Linux 5 Red Hat® Enterprise Linux 5 with XEN Citrix® XenServer®
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Support of other Linux derivatives on demand

Server Management

Standard	<ul style="list-style-type: none"> ServerView Suite - Deploy <ul style="list-style-type: none"> SV Installation Manager SV Scripting Toolkit ServerView Suite - Control <ul style="list-style-type: none"> Operations Manager incl. PDA and ASR & R (Prefailure and Analysis; Automatic Server Recovery and Restart) Agents and CIM Providers System Monitor RAID Manager Capacity Management Power Management Storage Support ServerView Suite - Maintain <ul style="list-style-type: none"> Remote Management (iRMC) Update Management (BIOS, Firmware, Windows Drives and SV Agents) Performance Measurement Asset Management Online Diagnostics ServerView Suite - Integrate <ul style="list-style-type: none"> Integration packs e.g. for Microsoft System Center, VMware vCenter, Nagios, HP SIM and others Deployment Solutions and others
Option	<ul style="list-style-type: none"> ServerView Suite - Maintain <ul style="list-style-type: none"> iRMC Advanced Pack incl. Advanced Video Redirection (AVR), video capturing and Virtual Media ServerView Suite - Dynamize <ul style="list-style-type: none"> Virtual-IO Manager (VIOM) Resource Orchestrator Virtual Edition (ROR VE) Resource Orchestrator Cloud Edition (ROR CE) ServerView Suite - Integrate <ul style="list-style-type: none"> Integration pack for Fujitsu ManageNow® solution

Dimensions / Weight

Floor-stand (W x D x H)	177 x 651 x 456 mm
Rack (W x D x H)	483 x 611 x 177 mm
Dimension notes	Floorstand Width 177 mm without tilt protection (420 mm with tilt protection); depth measured includes handles on redundant PSU. Rack depth includes handles of redundant PSU, excludes rack handles / front.
Height Unit Rack	4 U
Weight	16 - 29 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

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

Operating ambient temperature	10 - 35 °C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	22 dB(A) idle mode/ 22 dB(A) operation mode with low noise mode; 30 dB(A) idle mode/ 30 dB(A) operation mode with SAS HDDs;36 dB(A) idle mode/ 36 dB(A) operation mode with HDD extension boxes;
Sound power (LWAd; 1B = 10dB)	4,0 B idle / 4,0 B operation mode with low noise mode; 4,8 idle mode/ 4,8 operation mode with SAS HDDs;5,4 B idle mode/ 5,4 B operation mode with HDD extension boxes;
Noise notes	Noise emissions and operation modes depend on system configuration.

Electrical values

Power supply configuration	Base unit specific: 1x standard power supply or 1x hot-plug power supply or 2x hot plug power supplies for redundancy
Standard power supply output	500 W (90 % efficiency, 80 PLUS gold)
Hot-plug power supply output	450 W (94 % efficiency, 80 PLUS platinum)
Hot-plug power supply redundancy	Yes

Electrical values

Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Rated current max.	2.4
Rated current in basic configuration	pending
Active power (min. configuration)	65 W
Active power (max. configuration)	278 W
Apparent power (max. configuration)	296 VA
Heat emission	1000.8 kJ/h (948.6 BTU/h)
Leakage Current	leakage current
Power Supply Notes	power supply notes

Compliance

Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment)
Germany	TÜV GS
Europe	CE Class A * CE label according to EU directives: Low-Voltage Directive 2006/95/EC, Electromagnetic Compatibility 2004/108/EC EN 300386 EN 50371 EN 55022 EN 55024 EN 60950 - 1 EN 61000-3-2 JEIDA EN 61000-3-3
USA/Canada	CSAc/us ULc/us FCC Class A
Japan	VCCI Class A + JIS 61000-3-2
Russia	GOST-R
China	CCC (planned)
Australia/New Zealand	C-Tick (AS / NZS CISPR 22 Class A)
Taiwan	BSMI Class A (CNS 13438, CNS 14336) CNS 13436
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates

Compliance notes

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. Additional compliance with: Kenya:KEBS; Kuwait: KUCAS; Nigeria:SONCap; South Africa:SABS; Belarus: STB; Kazakhstan: GOST-K; Ukraine: SEMPRO
* Warning:
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.

Components

Storage drives

SSD SATA, 6 Gb/s, 400 GB, MLC, hot-plug, 2.5-inch, enterprise

SSD SATA, 6 Gb/s, 200 GB, MLC, hot-plug, 2.5-inch, enterprise

SSD SATA, 6 Gb/s, 100 GB, MLC, hot-plug, 2.5-inch, enterprise

SSD SAS, 6 Gb/s, 400 GB, SLC, hot-plug, 2.5-inch, enterprise

SSD SAS, 6 Gb/s, 400 GB, MLC, hot-plug, 2.5-inch, enterprise

SSD SAS, 6 Gb/s, 200 GB, SLC, hot-plug, 2.5-inch, enterprise

SSD SAS, 6 Gb/s, 100 GB, SLC, hot-plug, 2.5-inch, enterprise

SSD SAS, 6 Gb/s, 100 GB, MLC, hot-plug, 2.5-inch, enterprise

HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 3.5-inch, economic

HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 3.5-inch, business critical

HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical

HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, hot-plug, 3.5-inch, economic

HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical

HDD SATA, 6 Gb/s, 3 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical

HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical

HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical

HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical

HDD SAS, 6 Gb/s, 900 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise

HDD SAS, 6 Gb/s, 600 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise

HDD SAS, 6 Gb/s, 600 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise

HDD SAS, 6 Gb/s, 450 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise

HDD SAS, 6 Gb/s, 450 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise

HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise

HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise

HDD SAS, 6 Gb/s, 300 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise

HDD SAS, 6 Gb/s, 146 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise

Backup Drives

LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 6Gb/s

Optical drives

Blu-ray Disc™ Triple Writer, (6x BD-ROM; 8x DVD; 24x CD), slimline, SATA I

DVD-ROM, (16xDVD; 48xCD), half height, SATA I

DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I

DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I

SCSI / SAS Controller

SAS Ctrl. 6 Gbit/s 8 ports ext. PCIe 2.0 x8

RAID Controller

RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 5/6 512MB (D2616), 8 ports int.

RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, Optional BBU for selected systems (based on LSI SAS2108)

RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 1GB (D3116), 8 ports int.

RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)

RAID 0/1 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 0/1 (D2607), 8 ports int.

RAID level: 0, 1, 10, No BBU support

Communication, Network

Ethernet Ctrl. 1 x 1 Gbit/s PCIe 1.1 x1 (Intel®)

Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 (Fujitsu)

Ethernet Ctrl. 2 x 1 Gbit/s PCIe x4 (Fujitsu)

Ethernet Ctrl. 4 x 1 Gbit/s PCIe x4 (Fujitsu)

Rack infrastructure

Rack Mount Kit

Cable Management for 19-inch DataCenter / PRIMECENTER Racks

Cable Arm 2U for PRIMECENTER- and 3rd-party racks

Warranty

Standard Warranty

1 year

Warranty

Service level	Onsite Service
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM
Maintenance and Support Services - the perfect extension	
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY TX150 S8, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY TX150 S8, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts

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 contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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2014-06-23 CE-EN

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