

# Data Sheet

## Fujitsu PRIMERGY TX140 S1p Mono-Socket Intel® Xeon® processor server

### Expandable SME all-round server

PRIMERGY TX tower servers are ideal for use in SMEs or branch offices. They increase operational efficiency by providing rock solid, record-breaking, energy efficient performance. That performance is built on 20-years of pioneering work in Green IT. As a customer, you benefit from a reduction in your organization's environmental impact and lower running costs. The reliability is proven by testing the machines through 5000 boot cycles – far more than other vendors do. PRIMERGY TX servers are also easy to manage via the PRIMERGY ServerView Suite, reducing IT admin workload and costs. Plus, tower to rack conversion kits are available for most TX systems, ensuring investment protection.

#### PRIMERGY TX140 S1p

PRIMERGY TX140 S1p: the expandable SME all-rounder. It is ideal for SME or branch customers looking for a classic file, print, mail, or database server, with high scalability, and best availability through optional redundant power supplies. As the company evolves, so too does the TX140 S1p. Storing up to 12 TB of data, the TX140 S1p can easily handle large files. At a later stage, the TX140 S1p can be included in a rack cabinet with dedicated storage systems. From here, customers can fully take advantage of the extensive connectivity options, Intel® Xeon® E3 series performance, and high serviceability via the optional front service LAN port. The TX140 S1p: an excellent long-term investment.



# Features & Benefits

Main Features	Benefits
<ul style="list-style-type: none"><li>■ The Intel® Xeon® processor E3 family-based platform and Fujitsu's engineering capabilities give you excellent performance with low energy consumption.</li><li>■ Up to 12 TB of storage possible</li><li>■ 2x 1Gigabit LAN as standard and 3.5-inch (max. 4) or 2.5-inch (max. 8) hot-plug hard disks</li><li>■ Optional tower to rack conversion kit and extensive connectivity options</li><li>■ The onboard remote management controller (iRMC S3), and the optional service LAN, makes it easier to service your TX140 S1p</li><li>■ Halogen-free printed circuit board</li></ul>	<ul style="list-style-type: none"><li>■ High performance and energy efficiency</li><li>■ Whatever you need you can store it: databases, pictures, large files... storage - no problem!</li><li>■ High availability to keep your business going - non-stop!</li><li>■ The TX140 S1p grows as your company grows, making it an excellent long-term investment</li><li>■ High manageability and serviceability - saving you time</li><li>■ For environmentally friendly waste disposal</li></ul>

# Technical details

## PRIMERGY TX140 S1p

Housing types	Tower	Tower	Tower	Tower
Storage drive architecture	3.5-inch	2.5-inch	3.5-inch	2.5-inch
Power supply	Standard	Standard	Hot-plug	Hot-plug

## Mainboard

Mainboard type	D3049
Chipset	Intel® C202
Processor quantity and type	1 x Intel® Pentium® processor / Intel® Core™ i3 processor / Intel® Xeon® processor E3-1200v2 product family

## Processor

Intel® Core™ i3-3220 processor (2C/4T, 3.30 GHz, TLC: 3 MB, Turbo: No, 1600 MHz, 55 W)
Intel® Pentium® processor G640 (2C/2T, 2.80 GHz, TLC: 3 MB, Turbo: No, 1066 MHz, 65 W)
Intel® Pentium® processor G2120 (2C/2T, 3.10 GHz, TLC: 3 MB, Turbo: No, 1600 MHz, 55 W)
Intel® Xeon® processor E3-1220v2 (4C/4T, 3.10 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
Intel® Xeon® processor E3-1230v2 (4C/8T, 3.30 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
Intel® Xeon® processor E3-1240v2 (4C/8T, 3.40 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
Intel® Xeon® processor E3-1265Lv2 (4C/8T, 2.50 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 45 W)
Intel® Xeon® processor E3-1270v2 (4C/8T, 3.50 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
Intel® Xeon® processor E3-1280v2 (4C/8T, 3.60 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)

Memory slots	4
Memory slot type	DIMM (DDR3) UDIMM
Memory capacity (min. - max.)	2 GB - 32 GB
Memory protection	ECC

Memory options	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM

Memory modules notes	1600 MHz memory modules
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## Interfaces

USB ports	10 x USB 2.0 (2x front, 6x rear, 2x internal; the 2 internal ports cannot be used in parallel)
Graphics (15-pin)	1 x VGA
Serial connection	1 x serial RS-232-C, usable for iRMC or system or shared
LAN / Ethernet	2 x Gb/s Ethernet
Service LAN (RJ45)	1 x dedicated management LAN port for iRMC S3 (10/100/1000 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port

## Onboard or integrated Controller

RAID controller	Optionally integrated RAID 0/1 or RAID 5/6 controller for SAS base units (occupies one PCIe slot). additional RAID controller options are described under Components RAID controller
SATA Controller	Intel® C200, 2 ports used for accessible drives 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux;
LAN Controller	Intel® 82574L + Intel® 82579LM onboard, 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration), iSCSI and PXE-Boot via LAN, WoL for Intel® 82574L only.

**Onboard or integrated Controller**

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 / 1.2 (option)

**Slots**

PCI-Express 3.0 x16	1 x
PCI-Express 2.0 x1 (mech. x4)	1 x
PCI-Express 2.0 x4 (mech. x8)	1 x
PCI-slots	1 x PCI 32/33 MHz, 1x long, 5V
Slot Notes	In SAS configuration 1x PCI-Express occupied by modular RAID controller. In configurations with Intel® Core™ i3 or Intel® Pentium® processors slots are operated with PCI-Express 2.0.

**Drive bays**

Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA
Accessible drive bays	3 x 5.25/1.6-inch
Notes accessible drives	all possible options described in relevant system configurator

**Drive bays (Base unit specific)**

Storage drive bays	Max 4 x 3.5-inch	Max 8 x 2.5-inch
Accessible drive bays	3 x 5.25/1.6-inch for 1 x backup drive + 1 x ODD	3 x 5.25/1.6-inch for 1 x backup drive + 1 x ODD

**General system information**

Number of fans	1
Fan configuration	1 standard fan
Fan notes	non 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 (orange / green) At system rear side: System status (orange / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow) CSS (yellow)

**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 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 Server® 2008 R2 Foundation
	Microsoft® Windows® Web Server 2008 R2
	Microsoft® Windows® Small Business Server Essentials 2011
	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
	Microsoft® Windows® Web Server 2008
	Novell® SUSE Linux Enterprise Server 11
	Novell® SUSE Linux Enterprise Server 10
	Red Hat® Enterprise Linux 6
	Red Hat® Enterprise Linux 5
Operating system release link	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473">http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473</a>
Operating system notes	Support of other Linux derivatives on demand Red Hat® certification starting with version 5.8 / 6.4.

## Server Management

Standard	ServerView Suite - Deploy
	SV Installation Manager
	SV Scripting Toolkit
	SV Deployment Manager (30-day trial version)
	ServerView Suite - Control
	SV Operations Manager incl. PDA and ASR & R (Prefailure and Analysis; Automatic Server Recovery and Restart)
	SV Performance Management
	SV Power Management
	SV RAID Manager
	ServerView Suite - Maintain
	SV Remote Management (iRMC)
	SV Update Management (BIOS, Firmware, Windows Drives and SV Agents)
	SV Asset Management
	SV Online Diagnostics
	ServerView Suite - Integrate
	SV Integration packs e.g. for Microsoft System Center, Nagios, HP, SIM, HP NNM, IBM Tivoli, Altiris
	Deployment Solutions and others
Option	ServerView Suite - Deploy
	SV Deployment Manager (full version)
	ServerView Suite - Maintain
	iRMC Advanced Pack incl. Advanced Video Redirection (AVR) and Remote Storage
	ServerView Suite - Dynamize
	SV Virtual-IO Manager (VIOM)
	SV Resource Orchestrator Virtual Edition (ROR VE)
	SV Resource Orchestrator Cloud Edition (ROR CE)
	ServerView Suite - Integrate
	SV Integration pack for Fujitsu ManageNow® solution

**Server Management**

Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.
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**Dimensions / Weight**

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

**Environmental**

Operating ambient temperature	10 - 35 °C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 - Guideline for Data Center (installation locations)
Operating environment Link	<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>
Sound pressure (LpAm)	SATA: 25 dB(A) idle mode/ 25 dB(A) operation mode; SAS: 31 dB(A) idle mode/ 33 dB(A) operation mode
Sound power (LWAd; 1B = 10dB)	SATA: 4.2 B idle mode/ 4.2 B operation mode ; SAS: 4.9 B idle mode/ 5.1 B operation mode
Noise notes	Noise emissions and operation modes depend on system configuration.

**Electrical values**

Power supply configuration	1x standard, 1x hot-plug or 2x redundant hot-plug
Max. output of single power supply	450 W
Standard power supply output	300 W (90% efficiency)
Hot-plug power supply output	450 W (94% efficiency)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	6 A / 3 A (100 V / 240 V)
Active power (max. configuration)	216 W
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: <a href="http://configurator.ts.fujitsu.com/public/">http://configurator.ts.fujitsu.com/public/</a>
Apparent power (max. configuration)	247 VA
Heat emission	777.6 kJ/h (737.0 BTU/h)
Power Supply Notes	The active power and apparent power values may change according to configuration.

**Compliance**

Germany	GS
Europe	CE Class A *
USA/Canada	CSA us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment) ENERGY STAR®
Japan	VCCI
Russia	GOST-R
South Korea	KC
China	CCC
Australia/New Zealand	C-Tick
Taiwan	BSMI

**Compliance****Compliance notes**

\* 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.

**Compliance link**
<http://sp.ts.fujitsu.com/sites/certificates/>

# 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  
 HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, economic  
 HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, business critical  
 HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical  
 HDD SATA, 6 Gb/s, 250 GB, 7200 rpm, hot-plug, 3.5-inch, economic  
 HDD SATA, 6 Gb/s, 250 GB, 7200 rpm, hot-plug, 2.5-inch, business critical  
 HDD SATA, 6 Gb/s, 3 TB, 7200 rpm, hot-plug, 3.5-inch, business critical  
 HDD SATA, 6 Gb/s, 2 TB, 7200 rpm, hot-plug, 3.5-inch, business critical  
 HDD SATA, 6 Gb/s, 1 TB, 7200 rpm, hot-plug, 3.5-inch, business critical  
 HDD SATA, 6 Gb/s, 1 TB, 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 SAS, 6 Gb/s, 900 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise  
 HDD SAS, 6 Gb/s, 600 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise  
 HDD SAS, 6 Gb/s, 600 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise  
 HDD SAS, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical  
 HDD SAS, 6 Gb/s, 450 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise  
 HDD SAS, 6 Gb/s, 450 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise  
 HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise  
 HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise  
 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, 3 TB, 7200 rpm, hot-plug, 3.5-inch, business critical  
 HDD SAS, 6 Gb/s, 1 TB, 7200 rpm, hot-plug, 2.5-inch, business critical

**Backup Drives**

DDS Gen5, 36 GB, 3 MB/s, half height, USB 2.0  
 DDS Gen6, 80 GB, 6 MB/s, half height, USB 2.0  
 LTO3HH Ultrium, 400 GB, 60 MB/s, half height, SAS 3Gb/s  
 LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 6Gb/s  
 LTO5HH Ultrium, 1500 GB, 140 MB/s, half height, SAS 6Gb/s  
 RDX Drive, 160 GB, 320 GB, 500 GB, 1 TB, 25 MB/s, half height, USB 2.0  
 RDX Drive, 320 GB, 500 GB, 1 TB, 25 MB/s, half height, USB 3.0

**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

**SCSI / SAS Controller**

SAS Ctrl. 6 Gbit/s 8 ports ext. PCIe Gen2 x8

<b>RAID Controller</b>	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 (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
	Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gbit/s, 4 ports int. RAID level: 0, 1, 1E, No BBU support (based on LSI 1064e)
<b>Communication, Network</b>	Ethernet Ctrl. 1 x 1 Gbit/s PCIe x1 ( Intel® )
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe x8 ( Fujitsu )
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe x8 ( Intel® )
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe x4 ( Fujitsu )
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe x4 ( Fujitsu )
<b>Graphics add on cards</b>	NVIDIA® Quadro® NVS 300, PCIe x1, 2x DVI/VGA
<b>Warranty</b>	
<b>Standard Warranty</b>	1 year
<b>Service level</b>	Onsite Service (depending on country)
<b>Warranty Terms &amp; Conditions</b>	<a href="http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM">http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM</a>
<b>Maintenance and Support Services - the perfect extension</b>	
<b>Support Pack Options</b>	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time 24x7, 4h Onsite Response Time
<b>Recommended Service</b>	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
<b>Service Lifecycle</b>	5 years after end of product life
<b>Service Weblink</b>	<a href="http://www.fujitsu.com/fts/services">http://www.fujitsu.com/fts/services</a>



# More information

## Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY TX140 S1p, 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/](http://www.fujitsu.com/global/services/computing/)

### Software

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

## More information

Learn more about Fujitsu PRIMERGY TX140 S1p, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/fts](http://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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