# FUJITSU

# Data Sheet Fujitsu Server PRIMERGY TX140 S2 Mono-Socket Intel® Xeon® processor server

Expandable all-round server for SMEs

Fujitsu 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 S2

The PRIMERGY TX140 S2 is the ideal robust and cost-efficient server for small and medium-sized businesses (SMB) or branch offices. It offers best Intel® Xeon® E3 performance and solid expandability thanks to hot-plug storage drives. The optionally redundant power supply and a choice of different RAID controllers ensure high availability and peace of mind. Thanks to its compact housing and extremely low operating noise the server is ideally suited for showrooms or offices, for example under the desk. The optional support of legacy PCI adapter cards makes the PRIMERGY TX140 S2 optimally suited for special solutions, such as telephone or security systems. Furthermore, the comprehensive Fujitsu ServerView<sup>®</sup> Suite provides support for administrators during server installation, deployment and administration. The PRIMERGY TX140 S2: an excellent long-term investment.







## Features & Benefits

### Main Features

### Cost-effective performance and availability

- Latest Intel<sup>®</sup> Xeon<sup>®</sup> E3 v3 series technology
- Optionally redundant power supply unit

### **Optimized for SMEs**

- Low noise emissions through optimized air flow and Fujitsu's Cool-Safe<sup>™</sup> technology
- New compact 4 U chassis
- Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control

### Lifecycle investment protection

- Solid scalability of up to 4 DIMMs with 32 GB memory, up to 8 storage drives and 4 PCI slots
- Optional support for legacy PCI cards
- Optional tower to rack conversion kit and extensive connectivity options

### Benefits

- Increased performance of up to 15 % compared to the previous generation
- Optimized for classic server tasks like business applications, file, print or databases
- Redundant power supply units for peace of mind
- Silent operation for use in offices or showrooms

long-term investment

- So small and silent that it might even be placed under desks
  The comprehensive tools of the Fujitsu ServerView Suite eases the administrator's life
- Meet today's demand and be prepared for future requirements
- Support for special solutions like telephone or security systemsThe TX140 S2 grows as your company grows, making it an excellent

### Technical details

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	סככס			
Mainboard type	D3239 Intel® C224			
Chipset		) processor / latal@ CoroTM i2 ar	acassas / latal® Vaaa® asasas	or F2 1200v2 product family
Processor quantity and type		· ·	ocessor / Intel® Xeon® process	SOLES-1200VS PRODUCT IAITIIIS
Processor	Intel <sup>®</sup> Core™ i3-433			
		LC: 4 MB, Turbo: No, 1600 MH	z, 54 W)	
	Intel <sup>®</sup> Pentium <sup>®</sup> pro			
		LC: 3 MB, Turbo: No, 1600 MH	Z, 54 W)	
	Intel <sup>®</sup> Xeon <sup>®</sup> proces			
		LC: 8 MB, Turbo: Yes, 1600 MH	IZ, 80 W)	
	Intel <sup>®</sup> Xeon <sup>®</sup> proces			
		LC: 8 MB, Turbo: Yes, 1600 MH	12, OU W)	
	Intel® Xeon® proces	sor E3-1240v3 LC: 8 MB, Turbo: Yes, 1600 MH	17 80 W)	
	Intel® Xeon® proces		12, 00 WJ	
		LC: 8 MB, Turbo: Yes, 1600 MH	Iz 45 W)	
	Intel <sup>®</sup> Xeon <sup>®</sup> proces		12, 13 11	
		LC: 8 MB, Turbo: Yes, 1600 MH	Iz 80 W)	
	Intel® Xeon® proces		2,00 11	
		LC: 8 MB, Turbo: Yes, 1600 MH	lz, 82 W)	
Memory slots	4			
Memory slot type	DIMM (DDR3) UDIN	1M		
Memory capacity (min max.)	4 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	1333MHz or 1600 M	AHz memory modules		
Interfaces				
USB 2.0 ports	6 (4x external rear,	2x internal for UFM or backur	o device, no USB wakeup supp	orted)
USB 3.0 ports	4 (2x external rear,			
Graphics (15-pin)		•	p to 1600x1200 or 1920x1080	) at 16bpp)
Serial connection		usable for iRMC or system or		
LAN / Ethernet	2 x1 Gb/s Ethernet;	•		
Management LAN (RJ45)		agement LAN port for iRMC S4	(10/100/1000 Mbit/s)	
2 ( <i>i</i> - 1		raffic can be switched to share		
Onboard or integrated Controller				
RAID controller	Optionally integrate	ed RAID 0/1 or RAID 5/6 contro	ller for SAS base units (occupi	es one PCIe slot).
			Inder Components RAID contro	
SATA Controller	Intel® C224, 2 ports	used for accessible drives		
	4 port for internal S	ATA HDDs with RAID 0, 1, 10 f	or Windows and Linux;	
LAN Controller	Intel <sup>®</sup> i217 + Intel <sup>®</sup>	i210 onboard, 2 x 10/100/100	00 Mbit/s Ethernet, Intel® i217	/LM: 2xTX/2xRX, iSCSI remote boo
	support, APM wake			
		<pre>kRX, iSCSI and PXE 2.0-remote</pre>	Boot via LAN, WoL.	
	Service LAN: Realte	k RTI 8211F		

Onboard or integrated Controller				
Remote Management Controller	Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller) IPMI 2.0 compatible			
Trusted Platform Module (TPM)	Infineon / 1.2 (option)			
Slots				
PCI-Express 3.0 x8	2 x (up to 240 mm length)			
PCI-Express 2.0 x1 (mech. x4)	1 x (up to 167 mm lenght)			
PCI-Express 2.0 x4 (mech. x8)	1 x (up to 167 mm length)			
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 con	figurator		
Drive bays (Base unit specific)				
Storage drive bays	Max. 4x 3.5-inch	Max. 8x 2.5-inch		
Accessible drive bays	$3 \times 5.25/1.6$ -inch for $1 \times backup drive + 1 \times ODD$	$3 \times 5.25/1.6$ -inch for $1 \times backup drive + 1 \times ODD$		
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 PXF hoot support			

Remote PXE boot support Remote iSCSI boot support

Operating Systems and Virtualization	Software			
Certified or supported operating	Microsoft® Hyper-V Server 2012			
systems and virtualization software	Microsoft® Windows Server® 2012 Datacenter Microsoft® Windows Server® 2012 Standard			
	Microsoft® Windows Server® 2012 Foundation			
		Microsoft® Windows Storage Server 2012 Standard		
	Microsoft <sup>®</sup> 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® Small Business Server 2011 Premium Add-On			
	Microsoft® Windows® Small Business Server Standard 2011			
	VMware vSphere™ 5.0 Embedded			
	VMware vSphere™ 5.0			
	Novell® SUSE Linux Enterprise Server 11			
	Red Hat® Enterprise Linux 6			
	Red Hat® Enterprise Linux 5			
Operating system selence link				
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	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 - Integrate			
	SV Integration pack for Fujitsu ManageNow® solution			
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated			
	Product Data sheets.			
Dimensions / Weight				
Floor-stand (W x D x H)	177 x 560 x 455 mm			
Rack (W x D x H)	483 x 495 x 175 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.			
Mounting Depth Rack	543 mm			
Height Unit Rack	4 U			

Dimensions / Weight	
Weight	Rack: 12.5kg - 20kg; Tower: 15kg - 23 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit can be ordered 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 specification)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
ound pressure (LpAm)	SATA: 25 dB(A) idle mode/ 25 dB(A) operation mode; SAS: 31 dB(A) idle mode/ 34 dB(A) operation mode
ound power (LWAd; 1B = 10dB)	SATA: 4.2 B idle mode/ 4.2 B operation mode ; SAS: 4.8 B idle mode/ 5.2 B operation mode
loise notes	Noise emissions and operation modes depend on system configuration.
lectrical values	
ower supply configuration	1x standard, 1x hot-plug or 2x redundant hot-plug
Nax. output of single power supply	450 W
tandard power supply output	300 W (90 % efficiency)
lot-plug power supply output	450 W (94 % efficiency, 80 PLUS platinum)
lot-plug power supply redundancy	Yes
ated voltage range	100 V - 240 V
ated frequency range	47 Hz - 63 Hz
lated current max.	6 A / 3 A (100 V / 240 V)
ctive power (min. configuration)	23 W
ctive power (max. configuration)	203 W
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
Apparent power (max. configuration)	247 VA
leat emission	730.8 kJ/h (692.7 BTU/h)
Power Supply Notes	The active power and apparent power values may change according to configuration.
ompliance	
Germany	GS
Еигоре	CE Class A *
JSA/Canada	CSA us
	ULc/us
	FCC Class A
Global	CB
	RoHS (Restriction of hazardous substances)
	WEEE (Waste electrical and electronical equipment)
apan	VCCI GOST-R
Russia South Korea	KC
bouth Korea China	
ustralia/New Zealand	C-Tick
aiwan	BSMI
ompliance notes	* Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the use may be required to take adequate measures.
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
Global	
Compliance link	http://globalsp.ts.fujitsu. http://globalsp.ts.fujitsu. http://globalsp.ts.fujitsu. http://globalsp.ts.fujitsu.
	com/sites/certificates com/sites/certificates 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 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	LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 6Gb/s			
	LTO5HH Ultrium, 1500 GB, 140 MB/s, half height, SAS 6Gb/s			
	LTO6HH Ultrium, 2500 GB, 160 MB/s, half height, SAS 6Gb/s			
	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 int. PCIe Gen2 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 (based on LSI SAS2108)			
	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 1GB (D3116C), 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 x1 ( Intel® )			
	Ethernet Ctrl. 1 x 1 Gbit/s PCIe x4 ( 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 PCle x4 ( Fujitsu )			
	Ethernet Ctrl. 4 x 1 Gbit/s PCle x4 ( Fujitsu )			
Craphics add an and-				
Graphics add on cards	NVIDIA® Quadro® NVS 300, PCIe x1, 2x DVI/VGA			

Warranty		
Standard Warranty	1 year	
Service level	Onsite Service (depending on country)	
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM	
Maintenance and Support Services	the perfect extension	
Support Pack Options	Globally available in major business areas:	
	9x5, Next Business Day Onsite Response Time	
	9x5, 4h Onsite Response Time	
	24x7, 4h Onsite Response Time	
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	

### More information

### Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY TX140 S2, 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 TX140 S2, 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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