

# Data Sheet

## Fujitsu Server PRIMERGY TX1320 M1 Tower Server

For small environments with high demands

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 TX1320 M1

The FUJITSU Server PRIMERGY TX1320 M1 is the perfect server for environments where space, full server functionality and silent operation are crucial. The ultra-compact tower server is an excellent choice for retail premises, branch offices, or in other contexts where strict legal controls apply, e.g. medical, legal or financial services. With full server management capabilities the system can easily be integrated into existing IT infrastructures or administered from afar. Despite its size the PRIMERGY TX1320 M1 features Intel® Xeon® processor E3 family performance, up to four storage drives and supports an optional backup device. This unique combination makes it ideal for demanding environments where space is scarce.



# Features & Benefits

Main Features	Benefits
<b>Cost effective performance</b> <ul style="list-style-type: none"> <li>■ Intel® Xeon® processor E3 v3 family with up to 4 cores</li> <li>■ Up to 32 GB ECC memory (4 DIMMs) and 4 PCIe slots</li> </ul>	<ul style="list-style-type: none"> <li>■ Provides more than enough performance for small and medium-sized businesses and branch offices</li> <li>■ Ideal for all classic server tasks, such as file, print, web or office applications</li> </ul>
<b>Support for special solutions</b> <ul style="list-style-type: none"> <li>■ Ultra-small form factor fits everywhere – in either tower or desktop position</li> <li>■ Low noise emissions through optimized air flow and Fujitsu's Cool-safe® technology</li> </ul>	<ul style="list-style-type: none"> <li>■ Space-saving: ideal for small offices, at point of sales or in racks for telephone systems</li> <li>■ Silent operation for use in offices or showrooms</li> <li>■ So small and silent that it might even be placed on the desk</li> </ul>
<b>Full server management features &amp; easy accessibility</b> <ul style="list-style-type: none"> <li>■ Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control</li> <li>■ Screwless chassis, hot-plug 2.5-inch and "Easy Rails" for 3.5-inch storage disks</li> </ul>	<ul style="list-style-type: none"> <li>■ Small server but full server management features: The comprehensive tools of the Fujitsu ServerView Suite eases the administrators life</li> <li>■ Easy, fast and comfortable access to the interior of the server, the hard disks and the PCI slots</li> </ul>

# Technical details

## PRIMERGY TX1320 M1

Base unit	PRIMERGY TX1320 M1 SFF	PRIMERGY TX1320 M1 LFF
Housing types	Ultra-compact form-factor	Ultra-compact form-factor
Storage drive architecture	2.5-inch	2x 3.5-inch SATA (non hot-plug)

## Mainboard

Mainboard type	D3239
Chipset	Intel® C224
Processor quantity and type	1 x Intel® Pentium® processor / Intel® Core™ i3 processor / Intel® Xeon® processor E3-1200 v3 product family-based platform

Processor	Intel® Celeron® processor G1820 (2C/2T, 2.70 GHz, TLC: 2 MB, Turbo: No, Mem bus: 1,333 MHz, 54 W)
	Intel® Core™ i3-4330 processor (2C/4T, 3.50 GHz, TLC: 4 MB, Turbo: No, Mem bus: 1,600 MHz, 54 W)
	Intel® Pentium® processor G3420 (2C/2T, 3.20 GHz, TLC: 3 MB, Turbo: No, Mem bus: 1,600 MHz, 54 W)
	Intel® Xeon® processor E3-1220v3 (4C/4T, 3.10 GHz, TLC: 8 MB, Turbo: 3.30 GHz, Mem bus: 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1231v3 (4C/8T, 3.40 GHz, TLC: 8 MB, Turbo: 3.60 GHz, Mem bus: 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1240Lv3 (4C/8T, 2.00 GHz, TLC: 8 MB, Turbo: 2.80 GHz, Mem bus: 1,600 MHz, 25 W)
	Intel® Xeon® processor E3-1241v3 (4C/8T, 3.50 GHz, TLC: 8 MB, Turbo: 3.70 GHz, Mem bus: 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1271v3 (4C/8T, 3.60 GHz, TLC: 8 MB, Turbo: 3.80 GHz, Mem bus: 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1275Lv3 (4C/8T, 2.70 GHz, TLC: 8 MB, Turbo: 3.30 GHz, Mem bus: 1,600 MHz, 45 W)
	Intel® Xeon® processor E3-1281v3 (4C/8T, 3.70 GHz, TLC: 8 MB, Turbo: 3.90 GHz, Mem bus: 1,600 MHz, 82 W)

Memory slots	4
Memory slot type	DIMM (DDR3) UDIMM
Memory capacity (min. - max.)	4 GB - 32 GB
Memory protection	ECC
Memory notes	Mix and match possible; with dual channel operation better performance (2 modules with equal capacity necessary). Single channel (1 module) configuration possible.

Memory options	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM, single rank 8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank
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Memory modules notes	1333MHz or 1600 MHz memory modules
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## Interfaces

USB 2.0 ports	7 (4x external rear, 2x external front, 1x internal for UFM, no USB wakeup supported)
USB 3.0 ports	3 (2x external rear, 1x internal)
Graphics (15-pin)	1 analog graphics interface derived from iRMC (up to 1600x1200 or 1920x1080 at 16bpp)
Serial 1 (9-pin)	1
LAN / Ethernet	2 x1 Gb/s Ethernet; RJ45
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S4 (10/100/1000 Mbit/s) Management 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® C224, 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	4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux
LAN Controller	Intel® i217 + Intel® i210 onboard. 2 x 10/100/1000 Mbit/s Ethernet. Intel® i217LM: 2xTX/2xRX, iSCSI remote boot support, APM wake up. Intel® i210, 4xTX/4xRX, iSCSI and PXE 2.0-remote Boot via LAN, WoL. Service LAN: Realtek RTL8211E
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 / TPM 1.2 module; TCG compliant (option)

**Slots**

PCI-Express 3.0 x8	2 x Low profile
PCI-Express 2.0 x1 (mech. x4)	1 x Low profile
PCI-Express 2.0 x4 (mech. x8)	1 x Low profile
Slot Notes	In SAS configuration 1x PCI-Express occupied by modular RAID controller. <b>In configurations with Intel® Core™ i3 or Intel® Pentium® processors slots are operated with PCI-Express 2.0.</b>

**Drive bays**

Storage drive bays	max 6 (4+2) x 2.5-inch hot-plug SAS/SATA or 2x 3.5-inch non hot-plug SATA.
Storage drive bay configuration	Not upgradeable in the field.
Accessible drive bays	1 x 3.5/1.6-inch for backup devices 1 x 5.25/0.5-inch for CD-RW/DVD
Optional hard disk bays	None
Number of fans	3
Fan notes	Processor fan, rear fan, drive fan

**Operating panel**

Operating buttons	On/off switch
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)

**Operating Systems and Virtualization Software**

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server 2012 R2
	Microsoft® Windows Server® 2012 R2 Datacenter
	Microsoft® Windows Server® 2012 R2 Standard
	Microsoft® Windows Server® 2012 R2 Essentials
	Microsoft® Windows Server® 2012 R2 Foundation
	Microsoft® Windows Storage Server 2012 R2 Standard
	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
	VMware vSphere™ 6.0
	VMware vSphere™ 5.5
	VMware vSphere™ 5.1 Embedded
	VMware vSphere™ 5.1
	SUSE® Linux Enterprise Server 12
	SUSE® Linux Enterprise Server 11
	Red Hat® Enterprise Linux 7
	Red Hat® Enterprise Linux 6
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

## Server Management

<b>Standard</b>	ServerView Suite - Deploy SV Installation Manager SV Scripting Toolkit ServerView Suite - Control 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 Remote Management (iRMC in combination with Intel® Node Manager) Update Management (BIOS, Firmware, Windows Drives and SV Agents) Performance Measurement Asset Management Online Diagnostics ServerView Suite - Integrate Integration packs e.g. for Microsoft System Center, VMware vCenter, Nagios, HP SIM and others Deployment Solutions and others
<b>Option</b>	ServerView Suite - Maintain iRMC Advanced Pack incl. Advanced Video Redirection (AVR), video capturing and Virtual Media ServerView Suite - Integrate Integration pack for Fujitsu ManageNow® solution
<b>Server Management notes</b>	Regarding dependencies for ServerView Suite software products see dedicated product data sheets.
<b>Dimensions / Weight</b>	
<b>Floor-stand (W x D x H)</b>	98 x 399 x 340 mm
<b>Dimension notes</b>	without feet
<b>Weight</b>	up to 10 kg
<b>Weight notes</b>	Actual weight may vary depending on configuration
<b>Environment</b>	
<b>Operating ambient temperature</b>	10 - 35 °C
<b>Operating relative humidity</b>	10 - 85 % (non condensing)
<b>Operating environment</b>	FTS 04230 – Guideline for Data Center (installation specification)
<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>
<b>Sound pressure (LpAm)</b>	SATA: 22 dB(A) idle mode / 23 dB(A) operating mode; SAS: 33 dB(A) idle mode / 35 dB(A) operating mode
<b>Sound power (LWAd; 1B = 10dB)</b>	SATA: 3.7 B idle mode / 3.7 B operating mode; SAS: 4.9 B idle mode/ 5 B operating mode
<b>Noise notes</b>	Noise emissions depends on operation modes, system configuration and ambient temperature.
<b>Electrical values</b>	
<b>Power supply configuration</b>	1x standard power supply
<b>Active power (max. configuration)</b>	147 W
<b>Apparent power (max. configuration)</b>	152 VA
<b>Heat emission</b>	529.2 kJ/h (501.6 BTU/h)
<b>Rated current max.</b>	6A (100 V) / 3A (240 V)
<b>Active power note</b>	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>
<b>Power supply</b>	250W standard, 94% (Platinum efficiency), 100-240V, 50 / 60Hz
<b>Compliance</b>	
<b>Global</b>	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronic equipment)
<b>Europe</b>	CE
<b>USA/Canada</b>	CSA us ULc/us FCC Class A

<b>Compliance</b>	
South Korea	KC
China	CCC
Compliance link	<a href="http://globalsp.ts.fujitsu.com/sites/certificates">http://globalsp.ts.fujitsu.com/sites/certificates</a>
Compliance notes	<p>Above mentioned compliances are planned but not available at preliminary stage.</p> <p>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.</p> <p>* Warning:</p> <p>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.</p>

## Components

<b>Backup Drives</b>	RDX Drive, 320 GB, 500 GB, 1 TB , 25 MB/s, half height, USB 3.0
<b>Optical drives</b>	Blu-ray Disc™ Triple Writer, (6x BD-ROM; 8x DVD; 24x CD), slimline, SATA I DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
<b>Hard disk drives</b>	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, non hot plug, 3.5-inch, economic HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, non 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, non 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, non hot plug, 3.5-inch, business critical HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, non hot plug, 3.5-inch, business critical HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, non 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, 12 Gb/s, 900 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 300 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise 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, 2.5-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, 2.5-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, 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 HDD SAS, 6 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise

<b>Solid-State-Drive</b>	SSD SATA, 6 Gb/s, 800 GB, Read-Intensive Endurance, hot-plug, 2.5-inch, enterprise, 0.3 DWPDP (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 480 GB, Read-Intensive Endurance, hot-plug, 2.5-inch, enterprise, 0.3 DWPDP (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 240 GB, Read-Intensive Endurance, hot-plug, 2.5-inch, enterprise, 0.3 DWPDP (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 200 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 120 GB, Read-Intensive Endurance, hot-plug, 2.5-inch, enterprise, 0.3 DWPDP (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 100 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
<b>RAID Controller</b>	DOM SATA, 6 Gb/s, 128 GB, non hot plug, enterprise, 345TBW (Seq. write)
	DOM SATA, 6 Gb/s, 64 GB, non hot plug, enterprise, 172TBW (Seq. write)
	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
	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)
<b>Communication, Network</b>	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
	Ethernet Ctrl. 1 x 1 Gbit/s PCIe 1.1 x1 RJ45 ( Intel® )
	Ethernet Ctrl. 1 x 1 Gbit/s PCIe 2.1 x1 RJ45 ( Intel® )
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 SFP+ ( Fujitsu )
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.1 x8 RJ45 ( Intel® )
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe 2.1 x4 RJ45 ( Intel® )
<b>Graphics add on cards</b>	Ethernet Ctrl. 4 x 1 Gbit/s PCIe 2.1 x4 RJ45 ( Intel® )
<b>Warranty</b>	
Warranty period	1 year
Warranty type	Onsite Service (depending on country)
Warranty Terms & Conditions	<a href="http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM">http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM</a>
<b>Product Support Services - the perfect extension</b>	
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 Service with 4h Onsite Response Time
Service Lifecycle	5 years after end of product life
Service Weblink	<a href="http://www.fujitsu.com/fts/products/product-support-services/">http://www.fujitsu.com/fts/products/product-support-services/</a>

# More information

## Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY TX1320 M1, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Built 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 offerings. This allows customers to select 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/products/computing/](http://www.fujitsu.com/global/products/computing/)

### Software

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## More information

Learn more about Fujitsu PRIMERGY TX1320 M1, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<http://www.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 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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