Data Sheet
Fujitsu Server PRIMERGY TX1320 M1 Tower Server

For small environments with high demands

FUJITSU Server PRIMERGY will give you the servers you need to power any workload and changing business requirements. As business processes expand so does the need for applications. Each has its own resource footprint, so you need a way to optimize your computing to better serve your users. PRIMERGY systems will help you match your computing capabilities to your business priorities with our complete portfolio of expandable PRIMERGY tower servers for remote and branch offices, versatile rack-mount servers, compact and scalable blade systems, as well as hyper-converged scale-out servers. They convince by business proven quality with a wide range of innovations, highest efficiency cutting operational cost and complexity, provide more agility in daily operations, and integrate seamlessly to let help you concentrate on core business functions.

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
Cost effective performance	
■ Intel® Xeon® processor E3 v3 family with up to 4 cores ■ Up to 32 GB ECC memory (4 DIMMs) and 4 PCIe slots	■ Provides more than enough performance for small and medium-sized businesses and branch offices ■ Ideal for all classic server tasks, such as file, print, web or office applications
Support for special solutions	
■ Ultra-small form factor fits everywhere – in either tower or desktop position ■ Low noise emissions through optimized air flow and Fujitsu's Cool-safe® technology	■ Space-saving: ideal for small offices, at point of sales or in racks for telephone systems ■ Silent operation for use in offices or showrooms ■ So small and silent that it might even be placed on the desk
Full server management features & easy accessibility	
■ Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control ■ Screwless chassis, hot-plug 2.5-inch and "Easy Rails" for 3.5-inch storage disks	■ Small server but full server management features: The comprehensive tools of the Fujitsu ServerView Suite eases the administrators life ■ Easy, fast and comfortable access to the interior of the server, the hard disks and the PCI slots

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
Memory modules notes	1333MHz or 1600 MHz memory modules

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). All hardware storage controller options are described under Components
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. **In configurations with Intel® Core™ i3 or Intel® Pentium® processors slots are operated with PCI-Express 2.0.**
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
Fan Configuration	
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	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473

Operating Systems and Virtualization Software	
Operating system notes	Support of other Linux derivatives on demand
Server Management	
Standard	ServerView Suite - Deploy Installation Manager Scripting Toolkit ServerView Suite - Control Operations Manager incl. PDA and ASR & R (Prefailure and Analysis; Automatic Server Recovery and Restart) Agents and CIM Providers / Agentless Service 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 Drivers, Agents and CIM Providers) Performance Measurement Asset Management Online Diagnostics ServerView Suite - Integrate Integration packs for Microsoft System Center, VMware vCenter, VMware vRealize, Nagios, and HP SIM Deployment tools and others
Option	ServerView embedded Lifecycle Management Enhanced management functionalities for simplified, highly integrated and automated management processes ServerView Suite - Maintain iRMC Advanced Pack incl. Advanced Video Redirection (AVR), video capturing and Virtual Media
Server Management notes	Regarding dependencies for ServerView Suite software products see dedicated product data sheets.
Dimensions / Weight	
Floor-stand (W x D x H)	98 x 399 x 340 mm
Dimension notes	without feet
Weight	up to 10 kg
Weight notes	Actual weight may vary depending on configuration
Environment	
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
Sound pressure (LpAm)	SATA: 22 dB(A) idle mode / 23 dB(A) operating mode; SAS: 33 dB(A) idle mode / 35 dB(A) operating mode
Sound power (LWAd; 1B = 10dB)	SATA: 3.7 B idle mode / 3.7 B operating mode; SAS: 4.9 B idle mode/ 5 B operating mode
Noise notes	Noise emissions depends on operation modes, system configuration and ambient temperature.
Electrical values	
Power supply configuration	1x standard power supply
Active power (max. configuration)	147 W
Apparent power (max. configuration)	152 VA
Heat emission (max. configuration)	529.2 kJ/h (501.6 BTU/h)
Rated current max.	6A (100 V) / 3A (240 V)
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/
Power supply	250W standard, 94% (Platinum efficiency), 100-240V, 50 / 60Hz
Compliance	
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronical equipment)
Europe	CE

Compliance	
USA/Canada	CSA us ULc/us FCC Class A
South Korea	KC
China	CCC
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
Compliance notes	Above mentioned compliances are planned but not available at preliminary stage. 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. * 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

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

Solid-State-Drive	SSD SATA, 6 Gb/s, 800 GB, Read-Intensive Endurance, hot-plug, 2.5-inch, enterprise, 0.3 DWPD (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 DWPD (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 DWPD (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 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 100 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	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 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
	Fujitsu RAID Ctrl SAS 6G 1GB (D3116C), RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)
	Fujitsu RAID Ctrl SAS 6G 0/1 (D2607), RAID 0/1 Ctrl., SAS/SATA 6 Gbit/s, 8 ports int. RAID level: 0, 1, 10, No BBU support
Communication, Network	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®)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®)
Graphics add on cards	NVIDIA® NVS™315 LP, PCIe x16, 2x DVI/VGA

Warranty	
Warranty period	1 year
Warranty type	Onsite Service (depending on country)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM
Product 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 Service with 4h Onsite Response Time
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/products/product-support-services/

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/

Software
www.fujitsu.com/software/

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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