FUJITSU

Data Sheet Fujitsu Server PRIMERGY TX1320 M2 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.

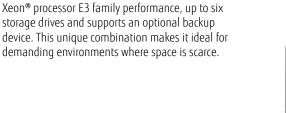
PRIMERGY TX1320 M2

The FUJITSU Server PRIMERGY TX1320 M2 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. 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 M2 features Intel®













Features & Benefits

Main Features

Cost effective performance

- Intel® Xeon® processor E3 v5 family with up to 4 cores
- Up to 64 GB DDR4 ECC memory (4 DIMMs) and 4 PCIe slots
- Low energy consumption full server performance

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 Coolsafe[®] technology

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

Benefits

- Provides more than enough performance for small and mediumsized businesses and branch offices
- Ideal for all classic server tasks, such as file, print, web or office applications
- Good for the energy bill and for the environment
- 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
- 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 M2		
Base unit	PRIMERGY TX1320 M2 SFI	PRIMERGY TX1320 M2 LFF
Housing types	Ultra-compact form-facto	Ultra-compact form-factor
Storage drive archited	ture 2.5-inch	3.5-inch
Mainboard		
Mainboard type	D3373	
Chipset	Intel® C236	
Processor quantity an	d type 1 x Intel® Pentium® proce	essor / Intel® Core™ i3 processor / Intel® Xeon® processor E3-1200 v5 product family
Processor	Intel® Celeron® processor G3900 (2C/2T, 2.	80 GHz, TLC: 2 MB, Turbo: No, 2,133 MHz, 51 W)
	Intel® Core™ i3-6100 processor (2C/4T, 3.7) GHz, TLC: 3 MB, Turbo: No, 2,133 MHz, 51 W)
	Intel [®] Pentium [®] processor G4400 (2C/2T, 3	.30 GHz, TLC: 3 MB, Turbo: No, 2,133 MHz, 54 W)
	Intel [®] Xeon [®] processor E3-1220v5 (4C/4T,	3.00 GHz, TLC: 8 MB, Turbo: 3.50 GHz, 2,133 MHz, 80 W)
	Intel [®] Xeon [®] processor E3-1225v5 (4C/4T,	3.30 GHz, TLC: 8 MB, Turbo: 3.70 GHz, 2,133 MHz, 80 W)
	Intel [®] Xeon [®] processor E3-1230v5 (4C/8T,	3.40 GHz, TLC: 8 MB, Turbo: 3.80 GHz, 2,133 MHz, 80 W)
	Intel [®] Xeon [®] processor E3-1240Lv5 (4C/8T	2.10 GHz, TLC: 8 MB, Turbo: 3.20 GHz, 2,133 MHz, 25 W)
	Intel® Xeon® processor E3-1240v5 (4C/8T,	3.50 GHz, TLC: 8 MB, Turbo: 3.90 GHz, 2,133 MHz, 80 W)
	Intel [®] Xeon [®] processor E3-1260Lv5 (4C/8T	2.90 GHz, TLC: 8 MB, Turbo: 3.90 GHz, 2,133 MHz, 45 W)
	· · · · · · · · · · · · · · · · · · ·	3.60 GHz, TLC: 8 MB, Turbo: 4.00 GHz, 2,133 MHz, 80 W)
	Intel [®] Xeon [®] processor E3-1280v5 (4C/8T,	3.70 GHz, TLC: 8 MB, Turbo: 4.00 GHz, 2,133 MHz, 80 W)
Memory slots	4	
Memory slot type	DIMM (DDR4)	
Memory capacity (min	h max.) 4 GB - 64 GB	
Memory protection	ECC	
Memory notes	Mix and match possible; Single channel (1 module	with dual channel operation better performance (2 modules with equal capacity necessary). c) configuration possible.
Memory options	4 GB (1 module(s) 4 GB)	DDR4, unbuffered, ECC, 2,133 MHz, PC4-2133, DIMM, 1Rx8
	8 GB (1 module(s) 8 GB)	DDR4, unbuffered, ECC, 2,133 MHz, PC4-2133, DIMM, 2Rx8
	16 GB (1 module(s) 16 G	3) DDR4, unbuffered, ECC, 2,133 MHz, PC4-2133, DIMM, 2Rx8
Memory modules not	es 2,133 MHz memory mod	Jles
Interfaces		
USB 2.0 ports	7 (4x external rear, 2x ex	ternal front, 1x internal for UFM, no USB wakeup supported)
USB 3.0 ports	3 (2x external rear, 1x in	ternal)
Graphics (15-pin)	1 analog graphics interfa	ce derived from iRMC (up to 1600x1200 or 1920x1080 at 16bpp)
Serial 1 (9-pin)	1 serial RS-232-C	
LAN / Ethernet	2 x1 Gb/s Ethernet; RJ45	
Management LAN (RJ		nt LAN port for iRMC S4 (10/100/1000 Mbit/s) can be switched to shared onboard Gbit LAN port
Onboard or integrated	Controller	
RAID controller	Optionally integrated RAI	D 0/1 or RAID 5/6 controller for SAS base units (occupies one PCIe slot). roller options are described under Components
SATA Controller	Intel [®] C236, 2 ports used	for accessible drives
SATA controller type n	otes 4 port for internal SATA H	DDs with RAID 0, 1, 10 for Windows and Linux
LAN Controller	Intel® i210 onboard. 2 x	0/100/1000 Mbit/s Ethernet. iSCSI, PXE-Boot and WoL are supported
Remote management		gement Controller (iRMC S4, 256 MB attached memory incl. graphics controller)
Trusted Platform Mod	•	2.0 module; TCG compliant (option)
Slots		
PCI-Express 3.0 x1 (m	ech. x4) 1 x Low profile	
· · · · · ·		

Slots	1 1 61	
PCI-Express 3.0 x4	1 x Low profile	
PCI-Express 3.0 x8	2 x Low profile	
Slot Notes	In SAS configuration 1x PCI-Express occupied t	by modular RAID controller.
Drive bays		
Storage drive bays	3.5-inch non hot-plug or 2.5-inch hot-plug SA	IS/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	
Storage drive bays	Max. 6x $(4x + 2x) \times 2.5$ -inch hot-plug	Max. 2 x 3.5-inch non hot-plug SATA
Fan Configuration		
Number of fans	3	
Fan notes	Processor fan, rear fan, drive fan	
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)	
Operating Systems and Virtualization	Software	
Certified or supported operating	Microsoft [®] Hyper-V Server 2012 R2	
systems and virtualization software	Microsoft [®] Windows Server [®] 2012 R2 Datacen	ter
	Microsoft [®] Windows Server [®] 2012 R2 Standard	1
	Microsoft [®] Windows Server [®] 2012 R2 Essentia	ls
	Microsoft [®] Windows Server [®] 2012 R2 Foundat	ion
	Microsoft® Windows Storage Server 2012 R2 S	tandard
	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 Stan	
	Microsoft [®] Hyper-V™ Server 2008 R2	
	Microsoft [®] Windows Server [®] 2008 R2 Datacen	ter
	Microsoft [®] Windows Server [®] 2008 R2 Enterpris	
	Microsoft [®] Windows Server [®] 2008 R2 Standard	
	Microsoft [®] Windows Server [®] 2008 R2 Foundat	
	VMware vSphere™ 6.0	·
	VMware vSphere™ 5.5	
	SUSE [®] Linux Enterprise Server 12	
	SUSE [®] Linux Enterprise Server 11	
	Red Hat [®] Enterprise Linux 7	
	Red Hat [®] Enterprise Linux 6	
	Oracle® Linux 6	
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd84	6-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Support of other Linux derivatives on demand	

	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	5 - 40 °C (41 - 104 °F)
Operating temperature note	Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. For detailed information see relevant system configurator.
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: 23 dB(A) idle mode / 25 dB(A) operating mode; SAS: 30 dB(A) idle mode / 30 dB(A) operating mode
Sound power (LWAd; 1B = 10dB)	SATA: 3.6 B idle mode / 3.8 B operating mode; SAS: 4.3 B idle mode/ 4.4 B operating mode
Noise notes	Noise emissions depend on operation modes, system configuration and ambient temperature.
Electrical values	
Power supply configuration	1x standard power supply
Active power (max. configuration)	231 W
Apparent power (max. configuration)	235 VA
leat emission (max. configuration)	831.6 kJ/h (788.2 BTU/h)
Rated current max.	5 A (100 V) / 2.5 A (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, 90% (Gold efficiency), 100-240V, 50 / 60Hz
Compliance	
Global	СВ
	RoHS (Substance limitations in accordance with global RoHS regulations)
	WEEE (Waste electrical and electronical equipment)
Germany	GS

Compliance	
Europe	CE
USA/Canada	CSA us
	ULc/us FCC Class A
Japan	VCCI:V3 Class A + JIS 61000-3-2
Russia	GOST-R
South Korea	KC
China	CCC
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
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.

Components

Backup Drives	RDX Drive, 320 GB, 500 GB, 1 TB , 25 MB/s, half height, USB 3.0 DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I	
Optical drives		
Hard disk drives		
	HDD SATA, 6 Gb/s, 7,200 rpm, 512e, non hot plug, 3.5-inch, economic	
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical	
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, 512n, non hot plug, 3.5-inch, business critical	
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, 512e, non hot plug, 3.5-inch, economic	
	HDD SATA, 6 Gb/s, 6 TB, 7,200 rpm, 512e, non hot plug, 3.5-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, 512n, non hot plug, 3.5-inch, business critical	
	HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical	
	HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, 512e, hot-plug, 2.5-inch, business critical	
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical	
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, 512n, non hot plug, 3.5-inch, business critical	
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, 512e, 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, 900 GB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise	
	HDD SAS, 12 Gb/s, 600 GB, 15,000 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, 600 GB , 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED	
	HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise	
	HDD SAS, 12 Gb/s, 450 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise	
	HDD SAS, 12 Gb/s, 300 GB, 15,000 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, 300 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED	
	HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise, SED	
	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, 12 Gb/s, 1.2 TB , 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED	
	HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise	

Solid-State-Drive	SSD SATA, 6 Gb/s, 960 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 480 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 400 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 240 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 200 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 120 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 1.92 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	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	Fujitsu PRAID EP420i for SafeStore, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID EP420i, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID EP400i, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID CP400i, RAID Ctrl., SAS/SATA 12 Gbit/s, 8 ports int.
	RAID level: 0, 1, 1E, 10, 5, 50, No FBU support
Communication, Network	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 10 Gbit/s PCIe 3.0 x8 SFP+ (Emulex)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ (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	
Varranty period	1 year
Varranty type	Onsite Service (depending on country)
Warranty Terms & Conditions Product Support Services - the pe	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM rfect 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 M2, 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 M2, 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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