FUJITSU

Data Sheet
Fujitsu PRIMERGY TX120 S3 Server

Datasheet for Red Hat certification

For small environments with high demands

PRIMERGY TX industry standard tower servers: efficient, rock solid, record-breaking performance. PRIMERGY TX servers benefit from over 20 years pioneering work in the field of Green IT. That is how TX servers reach industry leading performance per watt ratios, lowering the environmental impact and running costs. TX servers can easily be managed via the free of charge PRIMERGY ServerView Suite, saving IT admin costs. That's efficient performance. Our made-to-measure service packages take care of your system every step of the way. Rest assured, PRIMERGY TX servers are put through 5000 boot cycles - that's rock solid performance. PRIMERGY TX servers are flexible systems capable of using up to two processors and up to 20 hard disks. Tower to rack mounting kits are available for most TX systems to help you move to a consolidated rack infrastructure. TX servers have a tradition of setting record-breaking performance levels. So, whether you use them as tower or rack servers, for file, print or application purposes, you will benefit from record-breaking performance. PRIMERGY TX: a tower of strength.

PRIMERGY TX120 S3
PRIMERGY TX120 S3: For small environments with high demands. It is the perfect server for environments where space and high server functionality are crucial. The PRIMERGY TX120 S3 an excellent choice for smaller retail premises, branch offices, doctors' or lawyers' practices, financial services or in other contexts where strict legal controls apply. None of these companies can afford to lose their customer records or even just to keep their customers waiting. The unique combination of ultra-compact form factor, Intel® Xeon® processor performance and high

availability features, make it ideal for demanding environments where space is scarce.

Features and Benefits

Main Features	Benefits
■ Its ultra-compact form factor, means that the PRIMERGY TX120 S3 fits everywhere, in either tower or desktop position.	■ Space-saving: ideal for office, retail and smaller environments
■ 2x 1Gigabit LAN as standard and optional 2.5-inch hot-plug hard disks	■ High-availability to keep your business processes going
■ The Intel® Xeon® processor E3 family-based platform and the highly efficient power supply (Platinum) unit give you excellent performance with low energy consumption	■ High performance and energy efficiency
■ The onboard remote management controller (iRMC S3), and the optional front service LAN, makes it easier to service your TX120 S3	■ High manageability and serviceability - saving you time
■ Available with two different base units with either up to 2x 3.5 hard disks or up to 4x 2.5 hard disks	■ Flexibility

Technical details

Mainboard	
Mainboard type	D3049
Processor quantity and type	1 x Intel® Core™ i3 processor / Intel® Pentium® processor / Intel® Xeon® processor E3 series
Processor	Intel® Core™ i3-2100 processor (2C/4T, 3.10 GHz, TLC: 3 MB, Turbo: No, 1333 MHz, 65 W)
	Intel® Core™ i3-2120 processor (2C/4T, 3.30 GHz, TLC: 3 MB, Turbo: No, 1333 MHz, 65 W)
	Intel® Pentium® processor G620 (2C/2T, 2.60 GHz, TLC: 3 MB, Turbo: No, 1066 MHz, 65 W)
	Intel® Xeon® processor E3-1220 (4C/4T, 3.10 GHz, TLC: 8 MB, Turbo: 3.40 GHz, 1333 MHz, 80 W)
	Intel® Xeon® processor E3-1220L (2C/4T, 2.20 GHz, TLC: 3 MB, Turbo: 3.40 GHz, 1333 MHz, 20 W)
	Intel® Xeon® processor E3-1230 (4C/8T, 3.20 GHz, TLC: 8 MB, Turbo: 3.60 GHz, 1333 MHz, 80 W)
	Intel® Xeon® processor E3-1240 (4C/8T, 3.30 GHz, TLC: 8 MB, Turbo: 3.70 GHz, 1333 MHz, 80 W)
	Intel® Xeon® processor E3-1260L (4C/8T, 2.40 GHz, TLC: 8 MB, Turbo: 3.30 GHz, 1333 MHz, 45 W)
Memory slots	4
Memory slot type	DIMM (DDR3) UDIMM
Memory capacity (min. - max.)	2 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 modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM

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 1 (9-pin)	1 x RS-232-C
LAN / Ethernet (RJ-45)	2
Service LAN (RJ45)	1 x dedicated Service LAN port for iRMC S3 (10/100/1000 Mbit/s) Optional front service LAN port (10/100 Mbit/s)

Onboard or integrated Controller	
RAID Controller	4 port SATA with RAID 0/1 for HDDs
SATA Controller	Intel® C202
SATA Controller type notes	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.)
Remote Management Controller	Integrated Remote Management Controller (iRMC S3, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	optional TPM

Slots	
PCI Express 2.0 x1 (mech. x4)	1 x Notched. Low profile
PCI-Express 2.0 x4 (mech. x8)	1 x Low profile. In SAS configuration 1x PCI-Express occupied by modular RAID controller; VMWare requires SAS RAID Controller.

Slots

PCI-Express 2.0 x4 (mech. x16)	1 x Low profile
PCI slots	1 x Low profile (PCI 32-bit / 33 MHz, 5 V)

Drive bays

Hard disk bays	4 x 2.5-inch hot-plug SAS/SATA or 2x 3.5-inch non hot-plug SATA.
Hard disk 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	Power (amber / green)

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® 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® Microsoft® Windows Web Server 2008 R2
	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	http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421
Operating system notes	Support of other Linux derivatives on demand

Server Management

Standard	PDA Prefailure Detection and Anaylsis
	ASR&R Automatic Server Recovery and Restart
	ServerView Suite:
	      SV Installation Manager
	      SV Operation Manager
	      SV RAID Manager
	      SV Update Management
	      SV Power Management
	      SV Agents
	Online update packages for BIOS, firmware drivers and ServerView Agents
	ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris
	Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version)
	ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution
	ServerView Deployment Manager (fully functional 30-day trial version)
	ServerView Remote Management (iRMC)

Option	ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager iRMC Advanced Pack Deployment Solution ServerView Deployment Manager
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)	98 x 399 x 340 mm
Dimension notes	without feet
Weight	up to 10 kg
Weight notes	Actual weight may vary depending on configuration

Dimensions / Weight / Environmental (Base unit specific)

Environmental

Sound pressure (LpAm)	3.5 HD (non hot plug): 22 dB(A) idle mode/ 23 dB(A) operating mode; 2.5 HD (hot plug): 33 dB(A) idle mode/ 35 dB(A) operating mode
Sound power (LWAd; 1B = 10dB)	3.5 HD (non hot plug): 3.7 B idle mode/ 3.7 B operating mode; 2.5 HD (hot plug): 4.9 B idle mode/ 5 B operating mode
Operating ambient temperature	10 - 35C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 Guideline for Data Center (installation locations)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe

Electrical values

Power supply configuration	1x standard power supply
Standard power supply output	250 W
Rated voltage range	100 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	100V-240V/6A-3A
Rated current in basic configuration	100V-240V/0.25A-0.22A
Active power (max. configuration)	147 W
Apparent power (max. configuration)	152 VA
Heat emission	529.2 kJ/h (501.6 BTU/h)

Compliance

Europe	CE Class A * (planned)
USA/Canada	CSAc/us (planned) ULc/us FCC Class A (planned)
Global	CB RoHS (Restriction of hazardous substances) - planned WEEE (Waste electrical and electronical equipment) - planned
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.
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Components

Storage disks	HDD SATA, 3 Gb/s, 1000 GB, 7200 rpm, non-hot-plug, 3.5-inch, business critical
	HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, non-hot-plug, 3.5-inch, business critical
	HDD SATA, 3 Gb/s, 500 GB, 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 SATA, 3 Gb/s, 250 GB, 7200 rpm, non-hot-plug, 3.5-inch, business critical
	HDD SATA, 3 Gb/s, 160 GB, 5400 rpm, hot-plug, 2.5-inch, economic
	HDD SATA, 3 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, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 450 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 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, 146 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
Backup Drives	DDS Gen5 3.5", 36 GB, 3 MB/s, half height, USB 2.0
	DDS Gen6, 80 GB, 6 MB/s, half height, USB 2.0
	RDX Drive, 80 GB, 160 GB, 320 GB, 500 GB , 25 MB/s, half height, USB 2.0
Optical drives	Blu-ray Disc™ Combo Drive, (2x 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
SCSI / SAS Controller	SAS Ctrl. 6 Gb 8 ports ext. PCIe Gen2 x8
RAID Controller	RAID 5/6 Ctrl., HDD SAS 6 Gb, LSI , 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
	Integrated RAID 5/6 Ctrl., HDD SAS 6 Gb, Fujitsu , 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
	Integrated RAID 0/1 Ctrl., SAS/SATA 6 Gb, Fujitsu , 8 ports int. RAID level: 0, 1, 10, no BBU support (based on LSI SAS2008)
	Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 8 ports int. RAID level: 0, 1, 1E, no BBU support (based on LSI 1068e)
	Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 4 ports int. RAID level: 0, 1, 1E, no BBU support (based on LSI 1064e)
LAN Controller	Ethernet Ctrl. 1 x 1 Gb Intel® Gigabit CT Desktop Adapter
	Ethernet Ctrl. 2 x 10 Gb Fujitsu Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+
	Ethernet Ctrl. 2 x 10 Gb Fujitsu Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+ lp
	Ethernet Ctrl. 2 x 1 Gb Fujitsu Eth Ctrl 2x1Gbit PCIe x4 D2735-2 Cu
	Ethernet Ctrl. 4 x 1 Gb Fujitsu Eth Ctrl 4x1Gbit PCIe x4 D2745 Cu

Warranty

Standard Warranty	1 year
Service level	On-site Service (depending on country)

Maintenance and Support Services - the perfect extension

Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

More information

Fujitsu platform solutions

In addition to Fujitsu PRIMERGY TX120 S3, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY TX120 S3, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
http://ts.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 resolve issues of environmental energy efficiency through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/