DATA SHEET

PRIMERGY TX300 S4

Issue: July 2009

Dual Socket Intel® Xeon® processor server - Peace of mind when it comes to your most important applications

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 locally or remotely via the 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 to 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 TX300 S4

Are you looking for business continuity, especially for your core business applications? Our TX300 servers provide peace of mind when choosing a suitable server platform, because their set of integrated redundancy and hot-plug features assures continuous operation of the platform and thus high application reliability.
It is offering the breakthrough performance features of leading edge Intel® Dual-/Quad-Core Xeon® 5200 and 5400 series CPUs embedded in a powerful design with an 8-port SAS controller and fast PCIe links and PCI-X busses. Continuity is assured with the optional hot-plug power supply, hot-plug redundant fans, modular RAID and redundant dual LAN features. For your high capacity needs, PRIMERGY TX300 S4 provides up to 2 memory boards with 16 DIMM slots for hot-spare or memory mirroring with up to 64 GB PC2-5300F (667 MHz) RAM memory for enhancing data transfer throughput. And the system only needs a few additional options to meet the highest demands, such as clustering or disaster-tolerant setup.
For business-critical remote sites, the PRIMERGY TX300 S4 is the right platform.

MAIN FEATURES	BENEFITS
Intel Dual-/Quad-Core Xeon 5200/5400 together with up to 64 GB PC2-5300F memory offer outstanding Dual-/Quad-Core performance and balanced architecture that incorporates latest memory and I/O technologies	Higher overall productivity through outstanding Dual-/Quad-Core performance with fast FSB, large L2 cache etc. 64-bit computing for demanding applications, with full compatibility for 32-bit legacy applications, ideal for database applications
PCI-Express attached onboard 2x Gbit/s Ethernet LAN and modular RAID controller in PCIe slot	Fast communication path through usage of PCI-Express
Internal max. 6 (8)x 300 GB SAS / 6 (8)x 750 GB SATA 3.5" HDD or up to 12 (20)x 146 GB 2.5" SAS HDD, all hot-plug, 5 free PCIe and 1 PCI-X slots	Highest flexibility on basis of latest I/O technologies for consolidation of data and applications.
Hot-plug, redundant power supply and fans options, Hot-plug hard disks, modular RAID 5 option, ServerView Local Service Panel (LSP) or Local Status Display (LSD) Integrated Remote Management Controller (iRMC), IPMI 2.0	Highest availability rates, comparable with high end UNIX servers. Comfort and security for continuous operation.

Technical details

PRIMERGY TX300 S4

Housing type	Floorstand	Floorstand	Rack	Rack
Power supply	Hotplug	Standard	Hotplug	Standard

Mainboard

Mainboard type	D 2529
Chipset	Intel® 5000P
Processor quantity and type	1 - 2 x Intel® Xeon® processor 5200 / 5300 / 5400 series
Processor options	Intel® Xeon® E5205 (2C, 1.86 GHz, SLC: 6 MB , 1066 MHz, 65 W)
	Intel® Xeon® E5405 (4C, 2.00 GHz, SLC: 2 x 6 MB , 1333 MHz, 80 W)
	Intel® Xeon® E5410 (4C, 2.33 GHz, SLC: 2 x 6 MB , 1333 MHz, 80 W)
	Intel® Xeon® E5420 (4C, 2.50 GHz, SLC: 2 x 6 MB , 1333 MHz, 80 W)
	Intel® Xeon® E5430 (4C, 2.66 GHz, SLC: 2 x 6 MB , 1333 MHz, 80 W)
	Intel® Xeon® E5440 (4C, 2.83 GHz, SLC: 2 x 6 MB , 1333 MHz, 80 W)
	Intel® Xeon® L5240 (2C, 3.00 GHz, SLC: 2 x 6 MB , 1333 MHz, 40 W)
	Intel® Xeon® L5410 (4C, 2.33 GHz, SLC: 2 x 6 MB , 1333 MHz, 50 W)
	Intel® Xeon® L5420 (4C, 2.50 GHz, SLC: 2 x 6 MB , 1333 MHz, 50 W)
	Intel® Xeon® L5430 (4C, 2.66 GHz, SLC: 2 x 6 MB , 1333 MHz, 50 W)
	Intel® Xeon® X5260 (2C, 3.33 GHz, SLC: 6 MB , 1333 MHz, 80 W)
	Intel® Xeon® X5270 (2C, 3.50 GHz, SLC: 2 x 6 MB , 1333 MHz, 80 W)
	Intel® Xeon® X5460 (4C, 3.16 GHz, SLC: 2 x 6 MB , 1333 MHz, 120 W)
	Intel® Xeon® X5470 (4C, 3.33 GHz, SLC: 2 x 6 MB , 1333 MHz, 120 W)
Memory slots	16 (2 Memory boards with 8 slots each, 1 memory board preinstalled)
Memory slot type	PC2-5300F (Fully buffered DIMM DDR2 667 ECC)
Memory capacity (min. - max.)	1 GB - 64 GB
Memory protection	Advanced ECC Memory Scrubbing SDDC (Chipkill™) Hot-spare memory support Memory Mirroring support
Memory notes	Maximum 48 GB with Standard power supply
Memory options	8 GB (2 module(s) with 4 GB) DDR2, fully buffered, 667 MHz, PC2-5300F, DIMM
	4 GB (2 module(s) with 2 GB) DDR2, fully buffered, 667 MHz, PC2-5300F, DIMM
	2 GB (2 module(s) with 1 GB) DDR2, fully buffered, 667 MHz, PC2-5300F, DIMM

Interfaces

USB ports	6 x USB 2.0 (1x front, 2x rear, 3x internal)
Graphics (15-pin)	1 x VGA
Serial 1 (9-pin)	1 x serial RS-232-C, usable for iRMC S2 or system or shared
Serial 2 (9-pin)	1 x serial RS-232-C
Parallel (25-pin)	1 x Centronics 25-pin (option)
Mouse / Keyboard (PS/2)	2
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet
Service LAN (RJ45)	1 x dedicated service LAN port for iRMC S2 (10/100 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller

RAID Controller	Integrated RAID 0/1 or RAID 5/6 controller for SAS base units (occupies one PCIe slot). See under Components RAID controller
SATA Controller	ESB2-T, 2 x SATA channel for DVD
LAN Controller	BCM 5708, 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration), PXE-Boot via LAN from PXE server, iSCSI boot (also diskless) via onboard LAN

Onboard or integrated Controller				
Remote Management Controller	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible			
Trusted Platform Module (TPM)	Infineon / 1.2 (option)			
Slots				
PCI-Express x4 (mech. x8)	6 x full height			
PCI-X	1 x 64-bit / 133 MHz, 3.3 V			
Slot Notes	Two of four PCI-Express x4 slots can be used as x8, if neighbour slot is empty. 1 x PCI-Express x4 occupied by modular RAID controller			
Drive bays				
Hard disk bay configuration	6 x 3.5-inch hot-plug SAS/SATA or 12x 2.5-inch hot-plug SAS			
Accessible drive bays	1 x 5.25/0.5-inch for CD-RW/DVD 1 x 3.5/0.5-inch for ServerView Local Service Panel or Local Service Display or FDD 1 x 3.5/1.6-inch for backup devices (occupies 2x 3.5 or 6x 2.5-inch HDD bay)			
Notes accessible drives	All possible options described in relevant system configurator.			
Optional hard disk bays	2 x 3.5-inch hot-plug SAS/SATA or 8x 2.5-inch hot-plug SAS in HDD box (occupies 2x 5.25-inch bays)			
Optional accessible drives	Hot-plug power supply neccessary with 5.25 hard drive cage. (Not with standard PSU)			
General system information (Base unit specific)				
Number of fans	4	2	4	2
Fan configuration	hot plug, redundancy as option	standard (non hp / non red.)	hot plug, redundancy as option	standard (non hp / non red.)
Operating panel				
Operating buttons	On/off switch NMI button Reset button			
Status LEDs	System status (amber / yellow) Identification (blue) Hard disks access (green) Power (amber / green) At system rear side: System status (amber / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)			
Service display	Optional: ServerView Local Service Panel (LSP) ServerView Local Service Display (LSD)			
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 SMBIOS V2.4 Remote PXE boot support Remote iSCSI boot support			
Supported operating systems				
Supported operating systems	Microsoft® Windows Server® 2008 Microsoft® Windows Server® 2003 Novell SUSE Linux Enterprise Server Red Hat Enterprise Linux VMware Infrastructure Note: Support of other Linux derivatives on demand			
Operating system release link	http://ts.fujitsu.com/software http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421			
Server Management				
Standard	ASR&R PDA			

Server Management				
Option	ServerView Deployment Manager (fully functional unlimited version) ServerView Remote Management ServerView Integration for Tivoli TEC®, Tivoli NetView, HP OpenView NNM and HP OpenView iRMC S2 Advanced Pack			
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.			
Dimensions / Weight				
Weight	up to 40 kg			
Weight notes	Weight may vary depending on actual configuration			
Rack integration kit	Rack integration kit as option			
Dimensions / Weight (Base unit specific)				
Floor-stand (W x D x H)	286 x 775 x 473 mm	286 x 775 x 473 mm	-	-
Rack (W x D x H)	-	-	483 x 770 x 177 mm	483 x 770 x 177 mm
Mounting Depth Rack	-	-	735 mm	735 mm
Height Unit Rack			4 U	4 U
Environmental				
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296			
Sound pressure (LpAm)	39 dB(A) (idle) / 40 dB(A) (operating)			
Sound power (LWAd; 1B = 10dB)	5.7 B (idle) / 5.8 B (operating)			
Operating ambient temperature	10 - 35°C			
Operating relative humidity	10 - 85 % (non condensing)			
Electrical values				
Rated voltage range	100 - 240 V			
Rated frequency range	50 - 60 Hz			
Rated current max.	9.0 A – 5.0 A (100 V / 240 V)			
Rated current in basic configuration	4.4 A - 1.5 A (100 V / 240 V)			
Active power max. (per system unit)	798 W			
Apparent power max. (per system unit)	809 VA			
Heat emission	2872.8 kJ/h (2723.5 BTU)			
Electrical values (Base unit specific)				
Power supply configuration	1x hot-plug power supply, redundancy as option (1 + 1 redundancy)	1x standard power supply	1x hot-plug power supply, redundancy as option (1 + 1 redundancy)	1x standard power supply
Standard power supply output	-	605 W	-	605 W
Hot-plug power supply output	700 W	-	700 W	-
Hot-plug power supply redundancy	Yes	No	Yes	No
Apparent power max. (per system unit)	809 VA	809 VA	809 VA	809 VA
Compliance				
Germany	GS			
Europe	CE			
USA/Canada	CSAc/us ULc/us FCC Class A			
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)			
Japan	VCCI			
Australia/New Zealand	C-Tick			
Taiwan	BSMI			

Compliance	
Compliance notes	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.
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Components

Hard disk drives	SATA, 3 Gb/s, 1000 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 750 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 500 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 250 GB, 7200 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 450 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 300 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 146 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 10000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 36 GB, 15000 rpm, hot plug, 2.5-inch
Hard disk notes	Mix of 3.5-inch SAS and SATA HDD requires separate HDD cages and RAID sets One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. Accessible capacity may vary, also depending on used software
Tape Drives	DDS Gen5, 36 GB , 3 MB/s, half height, USB 2.0
	DDS Gen6, 80 GB , 6 MB/s, half height, SCSI U160
	DDS Gen6, 80 GB , 6 MB/s, half height, USB 2.0
	LTO2HH Ultrium, 200 GB , 24 MB/s, half height, SCSI U160
	LTO3HH Ultrium, 400 GB , 60 MB/s, half height, SCSI U320
	LTO4HH Ultrium, 800 GB , 120 MB/s, half height, SAS 3Gb/s
	RDX Drive, 80 GB, 160 GB, 320 GB , 25 MB/s, half height, USB 2.0
Optical drives	Blu-ray combo drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	Blu-ray combo drive, (6x BD-ROM; 16x DVD; 40x CD), half height, 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
	DVD Super Multi, (8x DVD/DVD+RW, 6x DVD-RW, 5x DVD-RAM; 24x CD/CD-R, 16x CD-RW), slimline, SATA I
SCSI / SAS Controller	SCSI Ctrl 320 MB 1ch int/ext PCIe x1
	SAS Ctrl 3 Gb 4 ports int. / 4 ports ext. PCIe x4
RAID Controller	RAID 5/6 Ctrl, SAS/SATA 3 Gb, LSI MegaRAID SAS8880E, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, no BBU support (based on LSI 1078)
	RAID 5/6 Ctrl, SAS/SATA 3 Gb, LSI MegaRAID SAS8880E, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, inclusive BBU (based on LSI 1078)
	Integrated RAID 5/6 Ctrl, SAS/SATA 3 Gb, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI 1078)
	Integrated RAID 5/6 Ctrl, SAS/SATA 3 Gb, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 256 MB Cache, optional BBU (based on LSI 1078)
	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 port int. RAID level: 0, 1, 1E, no BBU support , for internal SAS tapes (based on LSI 1064e)
Fibre Channel controller	Fibre Channel Ctrl 1 x 4 Gb Emulex LPe1150 MMF LC
	Fibre Channel Ctrl 2 x 4 Gb Emulex LPe11002 MMF LC
	Fibre Channel Ctrl 1 x 4 Gb Qlogic QLE2460 MMF LC
	Fibre Channel Ctrl 2 x 4 Gb Qlogic QLE2462 MMF LC
	Fibre Channel Ctrl 2 x 8 Gb Emulex LPe12002 MMF LC
	Fibre Channel Ctrl 1 x 8 Gb Emulex LPe1250 MMF LC

LAN Controller	Ethernet Ctrl 1 x 1 Gb Intel® Gigabit CT Desktop Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 GT Desktop Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 MT Single Port Server Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PF Server Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PT Server Adapter
	Ethernet Ctrl 2 x 10 Gb Intel® 10 Gigabit XF SR Dual Port Server Adapter
	Ethernet Ctrl 2 x 1 Gb Intel® PRO/1000 GT Dual Port Server Adapter
	Ethernet Ctrl 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter
	Ethernet Ctrl 4 x 1 Gb Intel® PRO/1000 PT Quad Port Server Adapter
Rack infrastructure	Cable Arm 2U for 3rd party racks
	Rackmount kit full extraction (820mm), tool less mounting
	Cable Management for 19-inch DataCenter / PRIMECENTER Racks

Warranty	
Standard Warranty	3 years
Service level	On-site Service
Maintenance and Support Services - the perfect extension	
Recommended Service	7x24, Onsite Response Time: 4h
Service Weblink	http://ts.fujitsu.com/Supportservice

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:
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