

PRIMERGY TX300 S4

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

PRIMERGY TX Tower Servers ensure energy efficient, carefree and continuous operation with proven data center technology. Their design for maximum ease of use and ease of management has been honored with industry design awards. The latest processor generation combined with innovative air flow cooling technology ("Cool-safe™") assure a long life and the highest possible performance at work. And as your business grows, so do our PRIMERGY towers, providing plenty of headroom for expansion so that you benefit longer from your investments in PRIMERGY tower servers. For corporate workgroups and remote sites, PRIMERGY TX servers ensure less troubleshooting and lower costs with their complete PRIMERGY ServerView Suite remote management functions – flexible management from anywhere at any time. Since corporate infrastructure is subject to consolidation changes, our universal tower-to-rack conversion kit protects your investment by prolonging the system's lifecycle.

The flexible custom supply model and our build-to-order process mean that only fully built and pre-tested solutions are shipped to customers, who can select from a broad family of tower models to meet their individual needs.

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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 buses. 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.



Benefits

- 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
- Fast communication path through usage of PCI-Express
- Highest flexibility on basis of latest I/O technologies for consolidation of data and applications.
- No-break repair service saves cost, reduces planned and unplanned downtimes
- Comfort and security for continuous operation

Key Features

- 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
- PCI-Express attached onboard 2x Gbit/s Ethernet LAN and modular RAID controller in PCIe slot
- 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
- 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

Type	Dual Socket Tower Server
System board	D 2529
Chip set	Intel® 5000P
Processors	Dual- or Quad-Core Intel® Xeon® (1 - 2)
Frequencies (GHz)	E5205 (1.86) 65W; L5240 (3.00) 50W, X5260 (3.33) 80W DC / L5310 (1.60), L5410 (2.33), L5420 (2.50) 50W QC / E5405 (2,00), E5420 (2.50), E5430 (2.66 GHz), E5440 (2.83), 80W, X5460 (3.16) 120W QC
Front-Side-Bus	1066 (E5205, L5310), 1333 MHz
Second-Level-Cache	2x 4 MB (53xx), 6 MB (52xx), 2x 6 MB (54xx) ECC
Memory	1 Gbyte up to max. 64 GByte (48 GB with standard power supply)
4-way interleaved, FullyBuffered DIMM DDR2 FBD667; ECC; 2 boards (1x standard), 16 slots divided into 2 branches with 2 channels each and 4 slots per channel for PC2-5300F modules with 512, 1, 2 and 4 GB; SDDC (Chipkill), Memory Mirroring and hot-spare option, memory upgrade only per branch with module pairs	
Flash-EPROM	
Local BIOS update with floppy disk; Remote BIOS-Update via LAN with Global Flash and service partition / RomPilot	
Interfaces	
Serial 1	1x RS-232-C (9-pin) (usable for iRMC or system or shared)
Serial 2	1x RS-232-C (9-pin)
Parallel (option)	Centronics, 25-pin, EPP/ECP comp.
Keyboard, Mouse	2x PS/2
USB 2.0	1x front, 2x back; (OHCI, 480 Mbit/s) 2x internal for backup drives + 1x USB stick
Graphics	1x VGA (15-pin)
LAN	2x RJ45, 1x Service10/100 Mbit/s (can be switched on Gbit LAN port)
Front Panel	
On/off switch; NMI-, reset button; LEDs for global error (amber/yellow for Health and CSS), identification (blue), hard disks access (green), power (amber/green); (back: global error, identification, LAN activity, LAN mode)	
Onboard controller **	
SATA ESB2-T	2 x SATA channel for DVD
SAS in internal PCIe slot either LSI 1068 or LSI 1078	8 port SAS for internal HDD's and internal backup devices with RAID 0, 1 (Integrated Mirroring Enhanced also for odd numbered HD's for Windows and Linux) with RAID 0, 1, 10 5, 50, 6, 60 (256 or 512 MB RAID Cache and opt. BBU)
LAN (2x BroadCom5708)	2x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration) (PXE-Boot via LAN from PXE server), iSCSI boot (also diskless) via onboard LAN
Server management	Integrated Remote Management Controller (iRMC S2) incl. graphics controller, IPMI 2.0 compatible
TPM (optional)	Infineon / 1.2
Hard disk drives	36, 73, 146, 300 Gbyte 3.5-inch SAS and/or 250, 500, 750 Gbyte 3.5-inch SATA or 36, 73, 146 Gbyte 2.5-inch SAS optional; 3.5-inch SAS / SATA mix in separate RAID sets, no later conversion 3.5 to 2.5-inch
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
I/O Slots (Standard)	
5x PCIe x8, x4 wired (from 4 PCIe x4 Slots two can be used x8, if neighbour slot is empty)	
1 x PCI-X 64-bit / 133 MHz, 3.3 V	
Drive bays	
for hard disks	6x 3,5/1-inch, for SAS / SATA or 12x 2,5/1-inch for SAS optional

for optional hard disks	2x 3,5/1-inch, Hot-plug SAS/SATA or 8x 2,5/1-inch Hot-plug SAS, (not with standard PSU) occupies two 5.25/1.6-inch bays
for accessible drives	3x 5.25/1.6-inch free, (possible options for LSP or LSD module, DVD etc. see relevant system configurator)
Electrical values	
1x 605W standard power supply plus two 120mm standard fans or 1x 700W hot-plug power supply plus four hot-plug fans (2x system 2x CPU); additional hot-plug units for redundancy option	
Output power	605 W / 700W, 1 + 1 x 700 W each
Rated voltage range	100 - 240 V
Rated frequency	50 - 60 Hz
Max. rated current	100 V - 240 V / 9.0 A - 5.0 A
Rated current in basic configuration	100 V - 240 V / 4.4 A - 1.5 A
Active power	798 W
Apparent power	809 VA
max.heat dissipation	2873 kJ/h (2723 Btu/h)
Temperature/Noise/Dimensions/Weight	
Ambient temperature	10°C - 35°C (DIN IEC 721-3-3) class 3K2 ETSI 300 019-2-3 Class 3.1
Declared noise emission according to ISO 9296	idle* operating* (*ISO 7779) ETSI 300 753 Class 3.1
L _{WAd} (1 B = 10 dB) :	5,7 B*** 5,8 B***
L _{pAm} (bystander position):	39 dB*** 40 dB***
Floor-stand (HxWxD)	473 * 286 * 775 (mm)
Rack (HxWxD)	177 * 483 * 770 (mm); Rack mounting depth 735 mm; 4 HU
Weight	ca. 25 - 40 kg (configuration dependent)
Compliance with Norms and Standards	
Product safety	
Global / Europe	IEC 60950-1 / EN 60950-1
USA	UL 60950-1
Canada	CAN/CSA C22.2 No. 60950-1-3
Electromagnetic compatibility	
Europe	EN 55 022 class A, EN 55024, EN 61000-3-2 / 3-3, ETSI EN300386
Taiwan / Japan	CNS 13438 class A / VCCI class A
Australia / New Zealand	AS / NZS CISPR 22 class A
USA / Canada	FCC class A
Declaration of conformity	
Europe (CE)	2004/108/EC(EMV);2006/95 EC(LVD)
North America	FCC class A
Approvals	
Product safety	
Global / Europe	CB / CE
USA / Canada	CSA _{US} / CSA _C
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.	
Supported server operating systems	
See actual release status operating systems : e.g. Windows Server 2003; Windows Server 2008, Novell SUSE Linux Enterprise Server , Red Hat Enterprise Linux; VMware ESX (Support of Debian, Ubuntu, Mandriva Linux and other Linux derivatives on demand)	
Notes	
** For supported controllers (onboard and PCI cards for SCSI, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator. *** only with standard fans and standard PSU	
Server Management (see separate data sheets)	
Standard	PRIMERGY ServerView Suite; PDA, ASR&R
Optional (excerpt)	ServerView Local Service Panel (LSP) or Local Status Display (LSD), RemoteView, iRMC S2 Advanced Pack