

## PRIMERGY TX300 S2

### Dual-Core Xeon™ processor server - Peace of mind when it comes to your most important applications

PRIMERGY TX Tower Servers ensure 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 in 2003 and 2004. 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.

#### PRIMERGY TX300 S2

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 Dual-Core CPUs. Continuity is assured with the hot-plug power supply, hot-plug PCI-X, hot-plug redundant fans, RAID 5 embedded and redundant dual LAN features. For your high capacity needs, PRIMERGY TX300 S2 provides 4 banks for memory mirroring with up to 16 GB total RAM, including PCI Express for high-speed disk throughput with integrated RAID 5 controller, and DDR2 SDRAM 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 S2 is the right platform.



Key Features	Benefits
<ul style="list-style-type: none"> <li>Dual socket system with latest Dual Core Xeon™ processor in a design for top performance</li> <li>New 64-bit Intel® Dual Xeon™ EM64T and up to 2 MB SLC offer extended 64-bit address space and therefore more direct useable memory and performance.</li> </ul>	<ul style="list-style-type: none"> <li>High computing power combined with balanced I/O and storage features. Ideal for database computing.</li> <li>Opens ways to Terabytes of data space, for the most demanding database or ERP applications, using suitable operating systems</li> <li>Enhanced server reliability without extra cost, business continuity right from the entry-class server, more value for money as well as secured data safety.</li> </ul>
<p>High Availability build-in for standard, like: RAID 1 Mirroring included as standard, MegaRAID onboard (option) Hot spare memory support for prefailure on-the-fly memory replacement and memory mirroring Hot-plug redundant fans (standard) and power supplies (option) Up to 9x (6+3) hot-plug for disks and PCI-X cards incl. hot-plug tape (option)</p>	
<p>2 x Gbit/s Ethernet LAN and RAID with onboard usage of PCI-Express</p>	<ul style="list-style-type: none"> <li>Top-speed communications and RAID interconnect through usage of PCI-Express onboard</li> </ul>

<b>Type</b>	Dual Socket Tower Server
<b>System board</b>	D 1899 / D 2089 (only for Dual-Core)
Chip set	Intel® E7520
Processors	64-bit Intel® Xeon™ (1 - 2)
Frequencies (GHz)	2.80, 3.00, 3.20, 3.40, 3.60, 3.80 / Dual-Core 2.80
Front-Side-Bus	800 MHz
Second-Level-Cache	2 Mbyte / 2x 2 MB, ECC
<b>Memory</b>	1 Gbyte up to max. 16 Gbyte
2-way interleaved, registered ECC DDR2-400 SDRAM; 4 banks with 2 slots each for PC2-3200 modules with 512, 1 and 2 Gbyte; Memory Scrubbing, Chipkill™, Hot-spare Memory option and Memory Mirroring option	
<b>Flash-EPROM</b>	
Local BIOS update with floppy disk; Remote BIOS-Update via LAN with Global Flash and service partition / RomPilot, or through chipDISK / RTDS via modem	
<b>Interfaces</b>	
Serial	1x RS-232-C (9-pin) (usable for BMC or OS or shared)
Serial	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 (UHCI, 480 Mbit/s)
Graphics	1x VGA (15-pin)
LAN	2x RJ45
<b>Front Panel</b>	
On/off switch; NMI-, reset button; LEDs for system status (amber), identification (blue), hard disks access (green), power (amber/green); (back: system status, identification)	
<b>Onboard controller **</b>	
IDE (ATA100)	for 1 x DVD plus 1 x RemoteView or CD/DVD-RW
SCSI (LSI53C1030)	2-channel Ultra320 SCSI with RAID level 1 (Integrated Mirroring Enhanced also for odd numbered HD's for Windows and Linux)
MegaRaid PCI Express™ ROMB (RAID on Motherboard) (option)	RAID level 0, 1, 10, 5, 50 extension for onboard SCSI/RAID controller with 256 MB, or 128 MB RAID cache with BBU and iButton enable key
LAN (BroadCom5721)	2x 10/100/1000 Mbit/s Ethernet (PCE-Boot via LAN from PXE server)
Graphics	ATI Rage XL 8 MB
Server management	Baseboard Management Controller (BMC), IPMI 1.5 compatible
<b>Hard disk drives</b>	36, 73, 146, 300 Gbyte, U320 SCSI
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
<b>I/O Slots (Standard)</b>	
2x PCI-X 64-bit / 133 MHz, long, 3.3V, hot-plug;; 1x LP ready 3x PCI X 64-bit / 100 MHz, 1x short, 3.3V 1 x long LP ready (with IOPT™ 1 x 133 MHz, if only slot 3 is used)	
<b>Drive bays</b>	
for hard disks	6x 3.5/1-inch, slide-in chassis; over 1 or 2 SCSI channels (option)
for optional hard disks	3x 3.5/1-inch, hot-plug, requires 2 bays for accessible drives
for accessible drives	2x 5.25/1.6-inch free; 1x 3.5/0.5-inch used by FD; 1x 5.25/0.5-inch used by DVD 1x 3.5/0.5-inch for optional LocalView display or blind cover
for optional accessible drive	1x 3.5/2-inch for hot-plug tape drive, requires 2 hard disk bays
<b>System fans (hot-plug)</b>	
Redundant hot-plug fans (2 + 2) as standard + 1 fan per cpu	

<b>Electrical values</b>	
1x Hot-plug power supply unit as standard. Additional hot-plug unit for redundancy option	
Output power	600 W / 1 + 1 x 600 W each
Rated voltage range	100 - 240 V
Rated frequency	50 - 60 Hz
Max. rated current	100 V - 240 V / 9.0 A - 3.5 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)
<b>Temperature/Noise/Dimension/Weight</b>	
Ambient temperature	10°C - 35°C (EN60721-3-3 class 3K2)
Sound pressure L <sub>pAm</sub>	48 <= 52 dB (A) (ISO9296)
Sound power L <sub>WAd</sub>	6.7 <= 6.7 B (ISO9296)
Floor-stand (HxWxD)	473 * 286 * 775 (mm)
Rack (HxWxD)	177 * 483 * 770 (mm); Rack mounting depth 735 mm; 4 U
Weight	ca. 25 - 40 kg (configuration dependent)
<b>Compliance with Norm and Standards</b>	
<b>Product safety</b>	
Global / Europe	IEC 60950-1 / EN 60950-1
USA	UL 60950 3rd. Ed.
Canada	CAN/CSA-C22.2 No. 60950 3rd. Ed.
<b>Electro magnetic compatibility</b>	
Europe	EN 55 022 class A, EN 55024, EN 61000-3-2 / 3-3
Taiwan / Japan	CNS 13438 class A / VCCI class A
Australia / New Zealand	AS / NZS 3548 class A
USA / Canada	FCC class A
<b>Declaration of conformity</b>	
Europe (CE)	89/336/EEC(EMV);73/23 EEC(LVD)
North America	FCC class A
<b>Approvals</b>	
<b>Product safety</b>	
Global / Europe	CB / CE
USA / Canada	CSA <sub>US</sub> / CSA <sub>C</sub>
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.	
<b>Supported operating systems</b>	
Microsoft: Windows 2003 Standard, Enterprise IA32 Edition; Microsoft: Windows 2003 Standard, Enterprise x64 Edition; Microsoft Windows 2003 Web Edition Microsoft: Windows 2000 Advanced Server; Server Novell: NetWare 6.5 VMware: ESX Server 2.5 SCO: UnixWare 7.1.4; Open Server 5.0.7 SUSE: Enterprise Server 8 for x86 and 9 x86 / EM64T SUSE: Linux 9.1, 9.3 for X86 Red Hat: Enterprise Linux 2.1; 3 and 4 for X86 / EM64T	
** For supported controllers (onboard and PCI cards for SCSI, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.	
<b>Server Management</b> (see separate data sheets)	
Standard:	PRIMERGY ServerView Suite; PDA, ASR&R
Optional:	RemoteView with IDE chipDISK and RemoteView Service Board