Data Sheet

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SIEMENS

PRIMERGY TX200 S2

Dual Xeon Server - Cost-efficient expansion options and failsafe operation

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 TX200 S2

Flexible expansion options are the key to placing new or larger workloads on your server. This applies not only to physical capacity, such as the number of disk drives, advanced data protection schemes, or I/O connectivity; in particular, consideration of the transition to 64-bit computing is a must in today's technology purchase decisions.

The PRIMERGY TX200 S2 is a perfect match for these requirements, providing you with a cost-efficient standard. TX200 is a failsafe operation platform for your application stacks, with standards such as disk mirroring, hot-plug disks, Chipkill™ and hot-spare memory, and the "cool-safe" innovative air flow system design that supports next-generation processor technology. Your business can rely on this solution!

In addition, further options – such as extended RAID functions, clustering options and redundancy for power supplies and fans – tailor these standards to your individual safety needs.

Key Features	Benefits
▪ New Intel Xeon EM64T offer extended 64-bit address space and therefore more direct useable memory.	▪ With Intel Xeon EM64Technology the processor gives the company a way to ease into 64-bit computing, as soon as the individual need of the application comes up.
▪ Onboard 2-channel Ultra320 SCSI controller with embedded **IME** RAID 1 functionality and low-cost ZCR RAID 0, 1, 10, 5, 50 option ▪ Hot spare memory, hot-spare tape option	▪ Enhanced data reliability and without extra cost, business continuity right from the entry-class server, more value for money as well as added data safety.
▪ Hot-plug functionality is available as option for the most important system components: Up to 9x (6 + 3) hot-plug HDD infrastructure Hot-plug PSU (optional) Hot-plug System fans (optional)	▪ Tailor made availability, offers the security level which is recommended by your individual application demands

Type	Dual Processor Tower Server
System board	D 1919
Chip set	Intel® E7320
Processors	Intel® Xeon™ (1 - 2)
Frequencies (GHz)	2.80, 3.00, 3.20, 3.40
Front-Side-Bus	800 MHz
Second-Level-Cache	1 Mbyte ECC
Memory	512 Mbyte up to max. 12 Gbyte

2-way interleaved, registered ECC PC2700 DDR1 SDRAM; 3 banks with 2 slots each for modules 256 Mbyte, 512 Mbyte, 1 and 2 (as soon as 2 GB single rank modules available) Gbyte; memory scrubbing, Chipkill™* and hot-spare memory support; ** Chipkill™ only with modules > 256 MB

Flash-EPROM
Local BIOS update with floppy disk; Remote BIOS-Update via LAN with Global Flash and service partition / RomPilot, or through chipDISK / RTDS via modem

Interfaces	
Serial	1x RS-232-C (9-pin) (usable for BMC or OS or shared)
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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	1x RJ45

Front Panel	
On/off switch; NMI-, reset button; LEDs for system status (amber), identification (blue), hard disks access (green), power (amber/green); (back: system status, identification)	

Onboard controller **	
IDE (ATA100)	2-channel Fast-IDE controller for 1 device + RemoteView Diagnosis
SCSI (LSI53C1030)	2-channel Ultra320 SCSI with RAID 1 (**I**ntegrated **M**irroring **E**nhanced also for odd number of HD´s for Windows and Linux)
RAID option (PCI card, ZCR)	RAID level 0, 1, 10, 5, 50 extension for onboard SCSI/RAID controller
LAN (BroadCom5721)	1x 10/100/1000 Mbit/s Ethernet
Graphics	ATI Rage XL 8 MB
Server management	Baseboard Management Controller (BMC), IPMI 1.5 compatible

Hard disk drives	36, 73, 146, 300 Gbyte, U320 SCSI
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	

I/O Slots (Standard)
2x PCI-X 64-bit / 66 MHz, 1xlong, 1xshort 3.3V (ZCR supp.); 2x PCI-X 64-bit / 100 MHz, long, 3.3V; (1x with max. 133 MHz (IOOP™), if only 1 slot is in use) 1x PCI 32-bit / 33 MHz, long, 5V (RSB support)

Drive bays	
for hard disks	6x 3.5/1-inch, hot-plug, slide-in chassis
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 5.25/0,5-inch for opt. CD, DVD; CD-/DVD-RW 1x 3.5/1-inch occupied with FD drive
for optional accessible drive	1x 3.5/2-inch for hot-plug tape drive, requires 2 hard disk bays

System fans (hot-plug)
Standard / redundant (option): (2 + 2) fans + 1 fan per CPU

Electrical values
1x standard or 2x optional redundant hot-plug power supplies

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 AC outlet with standard PSU: 2 A
Rated current in basic configuration	100 V - 240 V / 4.4 A - 1.5 A
Active power	798 W
Apparent power	809 VA
Heat emission	2873 kJ/h (2723 btu/h)

Temperature/Noise/Dimension/Weight	
Ambient temperature	10°C - 35°C (EN60721-3-3 class 3K2)
Sound pressure L_{pAm}	44 <= 52 dB (A) (ISO9296)
Sound power L_{WAd}	6.2 <= 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	25 - 40 kg (configuration dependent)

Compliance with Norm and Standards	
Product safety	
Global	IEC 60950-1
Europe	EN 60950-1
USA	UL 60950 3rd. Ed.
Canada	CAN/CSA-C22.2 No. 60950 3rd. Ed.
Electro magnetic compatibility	
Europe	EN 55 022 class A, EN 55024, EN 61000-3-3
Taiwan / Japan	CNS 13438 class A; VCCI class A
Australia / New Zealand	AS / NZS 3548 class A
USA / Canada	FCC class A
Declaration of conformity	
Europe (CE)	89/336/EEC(EMV);73/23 EEC(LVD)
North America	FCC class A

Approvals	
Product safety	
Global	CB
Europe	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 operating systems
Microsoft: Windows 2003 IA32 Standard, Enterprise Edition; Microsoft Windows 2003 Web Edition Microsoft Small Business Server 2003 Stand./Premium Edition* Microsoft: Windows 2000 Advanced Server; Server Novell: NetWare 6.5 SCO: UnixWare 7.1.4 SUSE: Enterprise Server 8 for x86 and 9 x86 / EM64T SUSE: Linux 9.1 for X86 Red Hat: Enterprise Linux 2.1; 3 for X86
* No application support ** For supported controllers (onboard and PCI cards for SCSI, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.

Server Management (see separate data sheets)	
Standard:	PRIMERGY ServerView Suite; PDA, ASR&R
Optional:	RemoteView with IDE chipDISK and RemoteView Service Board