

PRIMERGY TX200 S3

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

Issue September 22, 2006

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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. 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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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 S3 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, SDDC and hot-spare memory and the "Cool-safe™" innovative air flow system design. Expandability is covering for heavy workload: up to 16 GB FBD533/667 memory, up to 6 SCSI, SAS or SATA hard disk drives, and sufficient free PCI slots for heavy I/O requirements. 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
■ Intel Dual-Core Xeon 5000 sequence and 2x 2 / 4 MB SLC offer outstanding Dual-Core performance and balanced architecture that incorporates next generation memory and I/O technologies ■ Onboard 8-port SAS controller with low-cost ZCR RAID 0, 1, 10, 5, 50 option, or 2-channel U320 SCSI/RAID PCI controller or (from quarter 03/06) 6-port SATA controller with RAID 0, 1 functionality ■ Hot spare memory ■ Up to 6x hot-plug HDD (SAS, SCSI or SATA) Hot-plug functionality is available as option for the most important system components: hot-plug, redundant PSU and system fans, integrated RSB Advanced Pack with e.g. disable local monitor function (options) ■ PCIe and PCI-X slots, 1x Gbit LAN	■ Higher overall productivity through outstanding Dual-Core performance with faster FSB, larger L2 cache etc and extended 64-bit address space and therefore more direct useable memory and performance ■ Enhanced data reliability, business continuity right from the entry-class server, more value for money as well as added data safety ■ Tailor made availability, offers the security level which is recommended by your individual application demands ■ Fast communication link through onboard PCI-Express interconnect

Type	Dual Socket Tower Server
System board	D 2109
Chip set	Intel® 5000V
Processors	Dual-Core Intel® Xeon® (1 - 2)
Frequencies (GHz)	5050 (3.00) / 5060 (3.20), or 5110 (1.60), 5120 (1.86) / 5130 (2.00), 5140 (2.33)
Front-Side-Bus/Socket	667 / 1066 / 1333 MHz
Second-Level-Cache	2x 2 / 4 Mbyte (5100 series), ECC
Memory	1 GByte bis max. 16 GByte
2-way interleaved, registered ECC PC2-4200F/-5300F FullyBuffered DIMM RAM; 3 banks with 2 slots each for modules 512 MB, 1, 2 and 4 GB; SDDC (Chipkill) and hot-spare memory support	
Flash-EPROM	
Local BIOS update with floppy disk; Remote BIOS-Update via LAN with Global Flash and service partition	
Interfaces	
Serial 1	1x RS-232-C (9-pin) (usable for BMC or system)
Serial 2	1x RS-232-C (9-pol)
Parallel (option)	Centronics, 25-pin, EPP/ECP comp.
Keyboard, Mouse	2x PS/2
USB 2.0	1x front, 2x back (UHCI, 480 Mbit/s) 2x internal for backup drive
Graphics	1x VGA (15-pin)
LAN	1x RJ45, 1x Service-LAN RJ45
Front Panel	
On/off button; NMI-, reset button; front LEDs for hard disks access (green), power (amber/green); back and rear for system status (amber), identification (blue)	
Onboard Controller **	
IDE (ATA100)	1-channel Fast-IDE controller for 1 device
SAS variant (LSI1068)	8-Port SAS controller with RAID 0, 1, 1E (1E requires 3 or more HDD's) (also for SATA HDD's)
RAID option (PCI card, ZCR)	RAID level 0, 1, 10, 5, 50 extension for onboard SAS controller (not for SATA HD)
SATA variant (ESB2 onb.)	6-Port SATA Controller with RAID level 0, 1,10 (RAID 5 in 4. qu. 06)
LAN (Intel® GilGal)	1x 10/100/1000 Mbit/s Ethernet (PCE-Boot via LAN from PXE server)
Server management	Integrated Remote Management Controller (iRMC) incl. graphics controller, IPMI 2.0
PCI controller ** in SCSI base unit	
LSI320/2	2-channel U320 SCSI/RAID controller
Hard disk drives	36, 73, 146 Gbyte SAS (no mix with SATA) 80, 160, 250, 500 Gbyte SATA 36, 73, 146, 300 Gbyte SCSI
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
I/O Slots (Standard)	
1x PCIe x8, long, 1x PCIe x8 (x4 wired), long, 2x PCI-X 64-bit/ 100 MHz, 1x long, 3,3V; (1 for ZCR in SAS variant, 1x occupied in SCSI version) (1x with max. 133 MHz (IOOPTM), if only 1 slot is occupied)(with SAS only 66/100 MHz) 1x PCI 32-bit / 33 MHz, long, 5V	
Drive bays	
for hard disks	6x 3.5/1-inch, hot-plug, slide-in chassis
for optional SCSI hard disks	3x 3.5/1-inch, hot-plug, requires 2 bays for accessible drives
for accessible drives	3x 5,25/1,6-inch free or; 2x 5,25/1,6-inch free 1x 5,25/0,5-inch for CD,DVD; CD-/DVD-RW 1x 3,5/1-inch occupied with FD
System fans	
Standard 2 fans Hot-plug, redundant (option): (2 + 2) fans + 2 fans for CPU's	

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 – 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
Heat emission	2873 kJ/h (2723 btu/h)
Temperature/Noise/Dimension/Weight	
Ambient temperature	10°C - 35°C (EN60721-3-3 class 3K2)
Declared noise emission according to ISO 9296	idle* operating* *(ISO 7779)
L _{WAd} (1 B = 10 dB) :	5.7 B*** 5.8 B***
L _{pAm} (bystander position):	39 dB*** 40 dB***
Floor-stand (HxWxD)	473 x 286 x 775 mm
Rack (HxWxD)	177 x 483 x 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 60950-1
Canada	CAN/CSA C22.2 No. 60950-1-03
Electro magnetic compatibility	
Europe	EN 55022 class A, EN 55024, EN 61000-3-3, EN 61000-3-2
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)	89/336/EEC(EMC);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 Standard, Enterprise IA32 Edition; Microsoft: Windows 2003 Standard, Enterprise x64 Edition; Microsoft Windows 2003 Web Edition Microsoft Small Business Server 2003 Stand./Premium Edition* Microsoft: Windows 2000 Advanced Server; Server SUSE: Enterprise Server 8 for x86, 9 and 10 x86 / EM64T Red Hat: Enterprise Linux 3 and 4 for X86 / EM64T	
* No application support	
** 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:	RemoteView, iRMC Advanced Pack