

## PRIMERGY TX150 S4

### Mono socket Dual-Core Tower Server

#### Low computing complexity with great data safety

Issue December 21, 2005

PRIMERGY TX150 S4

Pages 2

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 TX150 S4

TX150 S4 is the first PRIMERGY Tower Server with Intel® Pentium® D (Dual-Core) processor, delivering an extra powerful gear when your applications need it. Accomplish more while running multiple applications, while downloading mass of data.

Superb power reserves through newest Intel® Pentium® D processor, each core up to 3.0 GHz, 1 MB SLC, 800 MHz FSB and Intel® E7230 chipset supporting EM64Technology. This tower server combines low complexity with great data safety. The simplicity of hot-plug disks makes replacement easy without requiring that the server be powered down. Due to with standard BMC (Baseboard-Management-Controller), an enhanced system management, based of IPMI 1.5 technology and redundant power supply, will improve the stand-alone operation additionally.

The choice between SATA and SCSI technology means no compromises in data security. Data safety is secured with hard disk mirroring (onboard RAID 1 with SCSI, onboard RAID 0, 1, 10 with SATA), and duplicated data means security against physical data loss.



Key Features	Benefits
<ul style="list-style-type: none"> <li>■ ECC, mirror (RAID 1 for SCSI, RAID 0, 1, 10 for SATA) disks are integrated (onboard functionality)</li> </ul>	<ul style="list-style-type: none"> <li>■ Duplicated data means security against physical data loss</li> </ul>
<ul style="list-style-type: none"> <li>■ Hot-plug functionality is available as option for the most important system components: Hot-plug HDD infrastructure (standard) Hot-plug redundant PSU (optional)</li> </ul>	<ul style="list-style-type: none"> <li>■ Tailor made availability, offers the security level which is recommended by your individual application demands</li> </ul>
<ul style="list-style-type: none"> <li>■ Dual-Core processor, provides two execution cores (each 1 MB Cache) in one physical processor</li> </ul>	<ul style="list-style-type: none"> <li>■ Allowing the platform to do more in less time, IT departments can consolidate applications and more effectively employ the server</li> </ul>
<ul style="list-style-type: none"> <li>■ Pentium 4 or Celeron processors and SATA II (300 MB/s) technology offer high flexibility for different applications</li> </ul>	<ul style="list-style-type: none"> <li>■ You will get a server flexible to configure and perfectly matching your budget and application requirements</li> </ul>

<b>Type</b>	Mono-Socket Tower Server
<b>System board</b>	D2239
Chip set	Intel® E7230
Processors	Intel® Celeron D, Pentium® 4, Pentium® D
Frequencies (GHz)	346 (3.06), 630 (3.0), 650 (3.40) GHz 820 (2.8), 830 (3.0) GHz
Front-Side-Bus	533 MHz, 800 MHz, 800 MHz
Second-Level-Cache	256 KB, 2 MB, 2x1 MB ECC
<b>Memory</b>	512 Mbyte - 8 Gbyte ECC PC2-4200 DDR2 SDRAM; 4 slots; (512 Mbyte, 1 Gbyte, 2 Gbyte) Mix and match possible; with dual channel operation better performance (2 capacity equal modules necessary). Single channel (1 module) configuration possible.
<b>Flash-EPROM</b>	
Local BIOS update via bootable USB device or opt. floppy disk; Remote BIOS update via LAN (Global Flash tool) and via optional RemoteView Service Board (RSB S2 LP).	
<b>Interfaces</b>	
Serial	1 x serial RS-232-C (9-pin) or BMC 1 x serial RS-232-C (9-pin)
Centronics (parallel)	1 x 25-pin, EPP/ECP compatible
Keyboard, Mouse	2 x PS/2
USB	1 x front, 2 x back
Graphics	1 x VGA (15-pin)
LAN	1 x RJ45
<b>Onboard controller **</b>	
IDE	1 x ATA100 (1 channel for 2 drives DVD / DVD-RW)
SCSI variant (LSI 53C1020A)	1-channel Ultra320 SCSI for internal HDD's and internal backup devices with RAID 1 (Integrated Mirroring Enhanced also for odd numbered HD's for Windows and Linux)
Intel® ICH7R Chip-Satz	RAID 0, 1, 10 (LSI) (for up to 4 x easy change SATA HDD)
LAN (Broadcom BCM5721)	Ethernet 10/100/1000 Mbit/s (PCE-Boot via LAN from PXE server)
Graphics	ATI Rage XL
Server management	Baseboard Management Controller (BMC), IPMI 1.5 compatible
<b>PCI Controller **</b>	
RAID Controller	ZCR (Zero Channel Controller) or 2 channel RAID
<b>Hard disk drives</b>	36, 73, 146, 300 Gbyte SCSI (Hot-plug) or 80, 160, 250 Gbyte SATA (hot-plug)
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
<b>I/O Slots:</b>	
2 x PCI-X 64-bit / 66 MHz, long; (3,3 V); 3 x PCI 32-bit / 33MHz, (2 x short , 1 x long (5V)); 2 x PCI-Express, 1 x PCIe x1; 1 x PCIe x8 (x4 wired)	
<b>Drive bays</b>	
for hard disks <b>SCSI variant</b>	4 x 3.5/1-inch, for hot-plug SCSI (in slide-in chassis) Optional: 3 x 3.5/1-inch hard disk extension unit, occupies 2x 5.25/1.6-inch bays for accessible drives
<b>SATA II variant</b>	4 x 3.5/1-inch for hot-plug SATA (in slide-in chassis)
for accessible drives	3x 5.25/1.6-inch, one bay is occupied by DVD or DVD-RW
for floppy disk drive	1x 3.5/1-inch, occupied by FDD (optional)

<b>Electrical values</b>	
1x standard or 2x optional redundant hot-plug power supplies	
Output power	400 W / 1 + 1 x 400 W each
Rated voltage range	100 - 240 V
Rated frequency	50-60 Hz
Max. rated current	100 V - 240 V / 6 A – 3 A
AC output	- / -
Rated current in basic configuration	100 V - 240 V / 1.9 - 0.8 A
Active power	274 W
Apparent power	300 VA
Heat emission	983 kJ/h (932 btu/h)
<b>Temperature/Noise/Dimension/Weight</b>	
Ambient temperature	10°C - 35°C (DIN EN 60721)
Declared noise in according with ISO 9296	idle / operating
Sound pressure L <sub>pAm</sub>	33 db(A) / 35 db(A)
Sound power L <sub>WAd</sub>	5,1 B / 5,4 B (1 BEL = 10 db)
Dimension of floor-stand (HxWxD)	444 * 205 * 605 mm, incl. all plastics
Weight	approximately 28 kg
<b>Compliance with Norm and Standards</b>	
<b>Product safety</b>	
Global	IEC 60950
Europe	EN 60950
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, EN61000-3-2 / -3
USA / Canada	FCC class A
<b>Declaration of conformity</b>	
Europe (CE)	89/336/EEC; 73/23 EEC
North America	FCC class A
<b>Approvals</b>	
<b>Product safety</b>	
Global	CB
Europe	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 Enterprise; Standard; Web Edition Microsoft: Windows 2003 Enterprise; Standard x64 Edition Microsoft: Windows SBS* 2003 Standard Microsoft: Windows 2000 Advanced Server; Server Novell: Netware 6.5 (only for SCSI variant) SCO: Open Server 5.0.7; Unixware 7.1.4 (only SCSI) SUSE: x86 SLES 9; SUSE EM64T SLES 9 Red Hat: x86 EL 3.0 / EL 4.0 Red Hat: EM64T EL 4.0	
* No application support ** 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, RemoteView Service Board 2 (RSB 2)