PRIMERGY TX industry standard tower servers: efficient, rock solid, record-breaking performance. PRIMERGY TX servers benefit from over 20 years pioneering work in the field of Green IT. That is how TX servers reach industry-leading performance per watt ratios, lowering the environmental impact and running costs. TX servers can easily be managed via the free of charge PRIMERGY ServerView Suite, saving IT admin costs. That is efficient performance. Our made-to-measure service packages take care of your system every step of the way. Rest assured, PRIMERGY TX servers are put through 5000 boot cycles - that’s rock solid performance. PRIMERGY TX servers are flexible systems capable of using up to two processors and up to 20 hard disks. Tower to rack mounting kits are available for most TX systems to help you move to a consolidated rack infrastructure. TX servers have a tradition of setting record-breaking performance levels. So, whether you use them as tower or rack servers, for file, print or application purposes, you will benefit from record-breaking performance. PRIMERGY TX: a tower of strength.

PRIMERGY TX200 S6
The PRIMERGY TX200 S6 is a perfect server for small or decentralized infrastructures in an attractive family design. The PRIMERGY TX200 S6 offers expandability, energy efficiency and dual processor performance. With up to 16 2.5" hard disks, you can save on an external storage unit. The high energy efficiency minimizes costs. Moreover, a maximum of 96GB of RAM, redundancy features, and the performance of up to two Intel® Xeon® processors 5600 series allow you to make a great start into virtualization. The PRIMERGY TX200 S6 also lends itself as a departmental, email or web server. A tower to rack conversion kit protects your investment’s lifetime. This great system strikes the right balance between price and performance.
# FEATURES AND BENEFITS

<table>
<thead>
<tr>
<th>MAIN FEATURES</th>
<th>BENEFITS</th>
</tr>
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<tbody>
<tr>
<td>Intel® Xeon® Processor 5600 Series with up to 6 core operation (up to 12 threads per socket with Hyper Threading), 12 MB shared cache, Internal Memory Management Unit (3 channels of DDR3 memory) and Intel® Turbo Boost Optimization</td>
<td>Higher overall productivity with leading-edge technology and the performance of up to two processors!</td>
</tr>
<tr>
<td>Up to 96GB RAM configurable in independent, mirrored, spare or performance modes</td>
<td>Plenty of memory configurable to suit your every need: file, print, database or virtualization server</td>
</tr>
<tr>
<td>Hot-plug power supply with 92% efficiency (85% efficiency for standard power supply)</td>
<td>Save energy costs and minimize the environmental impact</td>
</tr>
<tr>
<td>Up to 4 (6 optional) 3,5” hard disks or 8 (16 optional) 2,5” SAS or SATA hard disk drives and 6 expansion slots (4 PCIe Gen 2, 1 PCIe, 1 PCI)</td>
<td>Choose among a range of expansion variables to suit your budget and requirements.</td>
</tr>
<tr>
<td>Hot-plug hard disks included as standard, plus optional: hot-plug redundant power supply units or redundant fans or ServerView Local Service Panel (LSP).</td>
<td>Tailor made availability, offering the security level you need.</td>
</tr>
</tbody>
</table>
TECHNICAL DETAILS

MAINBOARD
Mainboard type D 2799
Chipset Intel® 5500
Processor quantity and type 1 - 2 x Intel® Xeon® processor 5600 series

PROCESSOR
Intel® Xeon® processor E5503
(2C/2T, 2.00 GHz, SLC: 4 x 256 KB, TLC: 4 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
Intel® Xeon® processor E5506
(4C/4T, 2.13 GHz, SLC: 4 x 256 KB, TLC: 4 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
Intel® Xeon® processor E5507
(4C/4T, 2.26 GHz, SLC: 4 x 256 KB, TLC: 4 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
Intel® Xeon® processor E5620
(4C/8T, 2.40 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
Intel® Xeon® processor E5630
(4C/8T, 2.53 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
Intel® Xeon® processor E5640
(4C/8T, 2.66 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 40 W)
Intel® Xeon® processor L5609
(4C/4T, 1.86 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 40 W)
Intel® Xeon® processor L5630
(4C/8T, 2.13 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 40 W)
Intel® Xeon® processor L5640
(6C/12T, 2.26 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/3/3/4/4, 6.4 GT/s, Mem bus: 1333 MHz, 60 W)
Intel® Xeon® processor X5650
(6C/12T, 2.66 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
Intel® Xeon® processor X5660
(6C/12T, 2.80 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
Intel® Xeon® processor X5670
(6C/12T, 2.93 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)

Memory slots 12 (6 DIMMs per CPU, 3 channels with 2 slots per channel)
Memory slot type DIMM (DDR3)
Memory capacity (min. - max.) 2 GB - 96 GB
Memory protection Advanced ECC
Memory Scrubbing
SDDC (Chipkill™)
Hot-spare memory support
Memory Mirroring support

Memory notes max. 96 GB registered, min. 2 GB unbuffered;
memory mirroring with 2 identical modules, hot-spare memory with three identical modules per channel

MEMORY MODULES INDEPENDENT MODE
2 GB (1 module(s) 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
2 GB (1 module(s) 2 GB) DDR3 LV, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
4 GB (1 module(s) 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
8 GB (1 module(s) 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
8 GB (1 module(s) 8 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM

MEMORY MODULES MIRRORED MODE
4 GB (2 module(s) 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
8 GB (2 module(s) 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
8 GB (2 module(s) 4 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
16 GB (2 module(s) 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
16 GB (2 module(s) 8 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
MEMORY MODULES SPARE OR PERFORMANCE MODE

- 6 GB (3 module(s) 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
- 12 GB (3 module(s) 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
- 12 GB (3 module(s) 4 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
- 24 GB (3 module(s) 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
- 24 GB (3 module(s) 8 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM

INTERFACES

USB ports
- 10 x USB 2.0 (3x front USB, 4x rear USB 3x internal for backup, USSD and internal USB)

Graphics (15-pin)
- 1 x VGA

Serial 1 (9-pin)
- 1 x serial RS-232-C (9 pin), usable for iRMC S2 or System or common use

Serial 2 (9-pin)
- 1 x serial RS-232-C (9 pin), optional - occupies an unused slot

LAN / Ethernet (RJ-45)
- 1 x Gbit/s Ethernet (Intel Hartwell)

Service LAN (RJ45)
- 1 x dedicated Service LAN port for iRMC (10/100 Mbit/s)
  Service LAN traffic can be switched to shared onboard Gbit LAN port

ONBOARD OR INTEGRATED CONTROLLER

SATA Controller
- ICH10R, 6-port SATA (4x for internal hard disks, 2x for accessible drives)

SATA Controller type notes
- On board SATA controller supports RAID levels 0, 1, 10

Remote Management Controller
- Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible

Trusted Platform Module (TPM)
- Infineon / separate module; TCG V1.2 compliant (option)

SLOTS

PCI-Express 2.0 x4 (mech. x8)
- 2 x full height (1x long, 1x short)

PCI-Express 2.0 x8
- 2 x full height (1x notched, thus usable for x16 cards operating in x8 mode)

PCI-Express x4 (mech. x8)
- 1 x full height

PCI slots
- 1 x

Slot Notes
- PCI slot: 32-bit / 33 MHz, 5 V; in SAS-configurations 1x PCI-Express slot is occupied by the modular RAID-Controller

DRIVE BAYS

Hard disk bay configuration
- 4x 3.5-inch, for SAS / SATA or 8x 2.5-inch for SAS/SATA optional

Accessible drive bays
- 3 x 5.25/1.6-inch

Notes accessible drives
- All possible options described in relevant system configurator.

Optional hard disk bays
- 2 x 3.5-inch hot-plug SAS/SATA or 8x 2.5-inch hot-plug SAS in HDD box (occupies 2x 5.25-inch bays)

FAN CONFIGURATION

Fan configuration
- 2 standard fans or 2 redundant fans (only available in combination with hot plug redundant power supply)

OPERATING PANEL

Operating buttons
- On/off switch
- NMI button
- Reset button

Status LEDs
- System status (amber / yellow)
- Identification (blue)
- Hard disks access (green)
- Power (amber / green)
- At system rear side:
  - System status (amber / yellow)
  - Identification (blue)
  - LAN connection (green)
  - LAN speed (green / yellow)

Service display
- Optional:
  - ServerView Local Service Panel (LSP)

BIOS

BIOS features
- ROM based setup utility
- Recovery BIOS
- BIOS settings save and restore
- Local BIOS update from USB device
- Online update tools for main Windows and Linux versions
- Local and remote update via ServerView Update Manager
- SMBIOS V2.4
- Remote PXE boot support
CERTIFIED OR SUPPORTED OPERATING SYSTEMS

Certified or supported operating systems
Microsoft® Windows Server® 2008 R2 (containing Hyper-V)
Microsoft® Windows Server® 2003 R2
Novell SUSE Linux Enterprise Server
Red Hat Enterprise Linux
VMware Infrastructure
VMware vSphere 4.1
Note: Support of other Linux derivatives on demand

Operating system release link

SERVER MANAGEMENT

Standard
PDA Prefailure Detection and Analysis
ASR&R Automatic Server Recovery and Restart
ServerView Suite:
  SV Installation Manager
  SV Operation Manager
  SV RAID Manager
  SV Update Management
  SV Power Management
  SV Agents
Online update packages for BIOS, firmware drivers and ServerView Agents
ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris
Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version)
ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution
ServerView Deployment Manager (fully functional 30-day trial version)

Option
ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager

iRMC S2 Advanced Pack

Server Management notes
Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.

DIMENSIONS / WEIGHT

Floor-stand (W x D x H) 205 (306) x 584 x 444 mm
Rack (W x D x H) 482 x 570 x 220 mm
Dimension notes Floorstand Width 306 mm with tilt protection; depth measured excludes handles on redundant PSU. Rack depth excludes handles of redundant PSU and rack front.

Mounting Depth Rack 596 mm
Height Unit Rack 5 U
Weight up to 36.8 kg
Weight notes Actual weight may vary depending on configuration

ENVIRONMENTAL

Noise emission Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm) 34 dB(A) (idle) / 36 dB(A) (operating)
Sound power (LWA; 1B = 10dB) 5.2 B (idle) / 5.7 B (operating)
Noise notes / description measured with standard fans and PSU
Operating ambient temperature 10 - 35°C
Operating relative humidity 10 - 85 % (non condensing)
Operating environment FTS 04230 – Guideline for Data Center (installation locations)
Operating environment Link http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12d8e

ELECTRICAL VALUES

Power supply configuration 1x standard, 1x hot-plug or 2x redundant
Max. output of single power supply 685 W
Standard power supply output 700 W
Hot-plug power supply output 800 W
Hot-plug power supply redundancy Yes
Rated voltage range 100 - 240 V
Rated frequency range 47 - 63 Hz
Rated current max. 9.5 - 4.0A
Rated current in basic configuration 1.3 0.6A
ELECTRICAL VALUES

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active power (min. configuration)</td>
<td>111 W</td>
</tr>
<tr>
<td>Active power (max. configuration)</td>
<td>461 W</td>
</tr>
<tr>
<td>Apparent power (max. configuration)</td>
<td>490 VA</td>
</tr>
<tr>
<td>Heat emission</td>
<td>1659.6 kJ/h (1573.0 BTU/h)</td>
</tr>
</tbody>
</table>

Power Supply Notes
In case of using an UPS we recommend to select a 1500VA/1000 W type as a minimum, because high power peaks might be possible when switching over to battery.

COMPLIANCE

Germany
TÜV GS

Europe
CE Class A *

USA/Canada
CSAc/us
ULc/us
FCC Class A

Global
CB
RoHS (Restriction of hazardous substances)
WEEE (Waste electrical and electronical equipment)

Japan
VCCI Class A + JIS 61000-3-2

Australia/New Zealand
C-Tick

Taiwan
BSMI

Compliance notes
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.

* Warning:
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Compliance link

COMPONENTS

HARD DISK DRIVES
- HDD SATA, 3 Gb/s, 750 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
- HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
- HDD SATA, 3 Gb/s, 250 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
- HDD SATA, 3 Gb/s, 2 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
- HDD SATA, 3 Gb/s, 1 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
- HDD SAS, 6 Gb/s, 600 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
- HDD SAS, 6 Gb/s, 450 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
- HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
- HDD SAS, 3 Gb/s, 146 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise

TAPE DRIVES
- DDS Gen5, 36 GB, 3 MB/s, half height, USB 2.0
- DDS Gen6, 80 GB, 6 MB/s, half height, USB 2.0
- LTO2HH Ultrium, 200 GB, 24 MB/s, half height, SAS 3Gb/s
- LTO3HH Ultrium, 400 GB, 60 MB/s, half height, SAS 3Gb/s
- LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 3Gb/s
- RDX Drive, 80 GB, 160 GB, 320 GB, 500 GB, 25 MB/s, half height, USB 2.0

OPTICAL DRIVES
- Blu-ray Disc™ Combo Drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
- DVD-ROM, (16xDVD: 48xCD), half height, SATA I
- DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I
- DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I

SCSI / SAS CONTROLLER
- SCSI Ctrl. 320 MB 1ch int/ext PCIe x1
- SAS Ctrl. 3 Gb 4 ports int. / 4 ports ext. PCIe x4
RAID CONTROLLER

RAID 5/6 Ctrl., HDD SAS 6 Gb, LSI, 8 ports ext.
RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
Integrated RAID 0/1 Ctrl., SAS/SATA 6 Gb, Fujitsu, 8 ports int.
RAID level: 0, 1, 10, no BBU support (based on LSI SAS2008)
Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 8 ports int.
RAID level: 0, 1, 1E, no BBU support (based on LSI 1068e)
Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 4 ports int.
RAID level: 0, 1, 1E, no BBU support, for internal SAS tapes (based on LSI 1064e)

FIBRE CHANNEL CONTROLLER

Fibre Channel Host Bus Adapter 1 x 4 Gb Emulex LPe1150 MMF LC-style
Fibre Channel Host Bus Adapter 2 x 4 Gb Emulex LPe11002 MMF LC-style
Fibre Channel Host Bus Adapter 1 x 4 Gb Qlogic QLE2460 MMF LC-style
Fibre Channel Host Bus Adapter 2 x 4 Gb Qlogic QLE2462 MMF LC-style
Fibre Channel Host Bus Adapter 2 x 8 Gb Emulex LPe12002 MMF LC-style
Fibre Channel Host Bus Adapter 1 x 8 Gb Emulex LPe1250 MMF LC-style

LAN CONTROLLER

Ethernet Ctrl. 1 x 1 Gb Intel® Gigabit CT Desktop Adapter
Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PF Server Adapter
Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PT Server Adapter
Ethernet Ctrl. 2 x 10 Gb Intel® Ethernet Server Adapter X520-DA2
Ethernet Ctrl. 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter

RACK INFRASTRUCTURE

Cable Arm 2U for 3rd party racks
Cable Management for 19-inch DataCenter / PRIMECENTER Racks
Rackmount kit full extraction (760mm), tool less mounting

WARRANTY

Standard Warranty 3 years
Service level On-site Service (depending on country)

MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION

Recommended Service 7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Spare Parts availability 5 years
Service Weblink http://ts.fujitsu.com/Supportservice
FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu PRIMERGY TX200 S6, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu PRIMERGY TX200 S6, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. http://ts.fujitsu.com/Primergy

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT.

Please find further information at http://www.fujitsu.com/global/about/environment/

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