Data Sheet
Fujitsu PRIMERGY TX120 S2 Server

Datasheet for Red Hat certification

The leading office server: space saving, energy saving, whisper-quiet.

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’s 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 TX120 S2
The PRIMERGY TX120 S2 carries on the TX120 tradition of space-saving, energy-saving and low noise. It even improves on its innovative predecessor by achieving the same performance but consuming 25% less power. The TX120 S2 key features, make it a perfect fit for use in small offices, retail premises or libraries. Sporting up to 4x 320 GB SATA or 146 GB 15000 rpm SAS hard disk drives, it can easily meet most storage requirements, at the right price. Its up to 16GB of RAM easily enable it to run typical small business applications. On-board iRMC S2 remote management, makes the TX120 S2 a great choice for branch premises connected to a centralized infrastructure. The PRIMERGY TX120 S2: a compact server with great potential!
# Features and Benefits

<table>
<thead>
<tr>
<th>Main Features</th>
<th>Benefits</th>
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</thead>
<tbody>
<tr>
<td>Its ultra-compact form factor, means that the PRIMERGY TX120 S2 fits everywhere, in either tower or desktop position.</td>
<td>Space-saving: ideal for office, retail and smaller environments</td>
</tr>
<tr>
<td>Thanks to the carefully crafted cooling concept, and the very low voltage Intel® Core™2 Duo processors, the TX120 S2 only consumes a min of 44W.</td>
<td>Energy-saving: lowers the total cost of ownership</td>
</tr>
<tr>
<td>The 270db idle mode noise level, makes the TX120 S2 the perfect office server.</td>
<td>Whisper-quiet: for ergonomic working environments</td>
</tr>
<tr>
<td>With a choice of SAS or SATA hot-plug hard disks, or up to 16GB of RAM, the TX120 S2 has the power to cope with most challenges.</td>
<td>A powerful and expandable server</td>
</tr>
<tr>
<td>The iRMC S2 chip onboard makes remote management possible.</td>
<td>Ready for integration into company management networks</td>
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</tbody>
</table>
## Technical details

### Mainboard
- **Mainboard type**: D2785
- **Chipset**: Intel® S100
- **Processor quantity and type**: 1 x Intel® Core™2 Duo series
  - Intel® Core™2 Duo processor P8400 (2C, 2.26 GHz, SLC: 3 MB, TLC: -, Turbo: No, 1066 MHz, 25 W)
  - Intel® Core™2 Duo processor T9400 (2C, 2.53 GHz, SLC: 6 MB, TLC: -, Turbo: No, 1066 MHz, 35 W)
- **Memory slots**: 4 (2 bank with 2 slots each)
- **Memory slot type**: DIMM (DDR2)
- **Memory capacity (min. - max.)**: 1 GB - 16 GB
- **Memory protection**: ECC
- **Memory notes**: Mix and match possible; with dual channel operation better performance (2 modules with equal capacity necessary). Single channel (1 module) configuration possible.
- **Memory modules**
  - 1 GB (1 module(s) 1 GB) DDR2, registered, ECC, 667 MHz, PC2-5300
  - 2 GB (1 module(s) 2 GB) DDR2, registered, ECC, 667 MHz, PC2-5300
  - 4 GB (1 module(s) 4 GB) DDR2, registered, ECC, 667 MHz, PC2-5300

### Interfaces
- **USB ports**: 8 x USB 2.0 (2x front, 5x rear, 1x internal)
- **Graphics (15-pin)**: 1 x VGA
- **Serial 1 (9-pin)**: 1 x RS-232-C
- **LAN / Ethernet (RJ-45)**: 1
- **Service LAN (RJ45)**: 1 x dedicated Service LAN port for iRMC S3 (10/100/1000 Mbit/s)
  Optional front service LAN port (10/100 Mbit/s)

### Onboard or integrated Controller
- **RAID Controller**: 4 port SATA with RAID 0/1 for HDDs
- **SATA Controller**: Intel® ICH9R
- **SATA Controller type notes**: 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux
- **LAN Controller**: Intel® 82567-LMA onboard, 10/100/1000 Mbit/s Ethernet, PXE-Boot via LAN from PXE server
- **Remote Management Controller**: Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible
- **Trusted Platform Module (TPM)**: optional TPM

### Slots
- **PCI-Express x8**: 3 x Low profile (1 slot can be used for modular RAID only)
- **PCI slots**: 1 x Low profile (PCI 32-bit / 33 MHz, 5 V)
- **Slot Notes**: in SAS configuration 1x PCI-Express occupied by modular RAID controller; VMWare requires SAS RAID Controller

### Drive bays
- **Hard disk bays**: 4 x 2.5-inch hot-plug SAS/SATA
- **Accessible drive bays**: 1 x 3.5/1.6-inch for backup devices or HDD option
  1 x 5.25/0.5-inch for CD-RW/DVD
- **Optional hard disk bays**: 2 x 2.5-inch hot-plug SAS/SATA (occupies 3.5/1.6-inch bay)

### Operating panel
- **Operating buttons**: On/off switch
- **Status LEDs**: Power (amber / green)
Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software

- Microsoft® Windows Server® 2008 R2 Foundation
- Microsoft® Windows® Small Business Server 2008 Standard
- Microsoft® Windows® Small Business Server 2008 Premium
- Novell® SUSE Linux Enterprise Server 11
- Novell® SUSE Linux Enterprise Server 10
- Red Hat® Enterprise Linux 6
- Red Hat® Enterprise Linux 5
- Citrix® XenServer®

Operating system release link


Operating system notes

Support of other Linux derivatives on demand
VMware requires SAS RAID Controller.

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)
- ServerView Remote Management (iRMC)

Option

- ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager
- iRMC Advanced Pack
- Deployment Solution ServerView Deployment Manager

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) 99 x 399 x 340 mm

Dimension notes without feet

Weight up to 10 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) 27 dB(A) (idle) / 32 dB(A) (operating)
- Sound power (LWA; 1B = 10dB) 4,3 B (idle) / 4.7 B (operating)
- 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


Electrical values

- Power supply configuration 1x standard power supply
- Standard power supply output 300 W
- Rated voltage range 100 V - 240 V
- Rated frequency range 47 Hz - 63 Hz
- Rated current max. 2.7 A / 1.1A (100 V / 240 V)
- Active power (min. configuration) 44 W
Components

**Hard disk drives**
- SSD SATA, 3 Gb/s, 64 GB, SLC, hot-plug, 2.5-inch, enterprise
- SSD SATA, 3 Gb/s, 32 GB, SLC, hot-plug, 2.5-inch, enterprise
- HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
- HDD SATA, 3 Gb/s, 320 GB, 5400 rpm, hot-plug, 2.5-inch, economic
- HDD SATA, 3 Gb/s, 160 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
- HDD SATA, 3 Gb/s, 160 GB, 5400 rpm, hot-plug, 2.5-inch, economic
- HDD SAS, 6 Gb/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
- HDD SAS, 6 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
- HDD SAS, 6 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
- HDD SAS, 6 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
- HDD SAS, 3 Gb/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
- HDD SAS, 3 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
- HDD SAS, 3 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
- HDD SAS, 3 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise

**Tape Drives**
- DDS Gen5 3.5”, 36 GB, 3 MB/s, half height, USB 2.0
- 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 Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I

**SCSI / SAS Controller**
- SCSI Ctrl. 320 MB 1x int. | 1x ext
- SAS Ctrl. 3 Gb 4 ports int. | 4 ports ext.

**Electrical values**
- Active power (max. configuration): 120 W
- Apparent power (max. configuration): 56-127 VA
- Heat emission: 432.0 kJ/h (409.5 BTU/h)

**Compliance**
- Germany: GS
- Europe: CE Class A *
- USA/Canada: CSA/c/us, UL/c/us, FCC Class A
- Global: CB, RoHS (Restriction of hazardous substances), WEEE (Waste electrical and electronical equipment)

**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**
### RAID Controller

  - 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, 4 ports int.
  - RAID level: 0, 1, 1E, no BBU support (based on LSI 1064e)

### 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 1 Gb Fujitsu Eth Ctrl 2x1Gbit PCIe x4 D2735 Cu

### Warranty

<table>
<thead>
<tr>
<th>Warranty Item</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Standard Warranty</strong></td>
<td>1 year</td>
</tr>
<tr>
<td><strong>Service level</strong></td>
<td>On-site Service (depending on country)</td>
</tr>
<tr>
<td><strong>Maintenance and Support Services - the perfect extension</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Recommended Service</strong></td>
<td>7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.</td>
</tr>
<tr>
<td><strong>Spare Parts availability</strong></td>
<td>5 years</td>
</tr>
<tr>
<td><strong>Service Weblink</strong></td>
<td><a href="http://ts.fujitsu.com/Supportservice">http://ts.fujitsu.com/Supportservice</a></td>
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Fujitsu platform solutions
In addition to Fujitsu PRIMERGY TX120 S2, 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 TX120 S2, 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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