Ultra-compact advanced server to grow your business

PRIMERGY TX1320 M4
The unique ultra-compact FUJITSU Server PRIMERGY TX1320 M4 has advanced technology ideal for most industry verticals, small and medium-sized enterprises (SME), space-constrained environments, retail premises or branch offices. The performance-oriented yet cost-effective mono-socket design supports the latest Intel® Xeon® E-2200/E-2100 product family processors, affordable Intel® Core™ i3 and Pentium® processor options plus up to 128GB RAM at 2,666 MT/s to boost performance for appropriately sized standard business workloads, including virtualized ones (such as: File/Print, Email, ERP/CRM, Messaging, Centralized data storage) and industry specific applications. The new processors with higher core counts, higher speed plus the doubled memory capacity, extend the capability of mono-socket servers to address workloads which hitherto may have required more expensive units. Institutions with special legal requirements such as medical, governmental, legal, or financial offices can benefit from the server’s secure and robust storage and transmission features, which include up to eight high quality 2.5-inch storage devices (including up to four ultra-fast NVMe devices for demanding applications), powerful RAID controllers, versatile and affordable backup and networking options together with TPM 2.0 capability. High efficiency (94%), redundant power supplies and the innovative Fujitsu Battery Backup Unit enhance reliability and protect customer investment. This ultra-compact, silent server with the Advanced Thermal Design Technology is designed for deployment flexibility – it can be deployed in offices, on shelves, industrial areas and even on desks at temperatures from 5 °C to 45 °C. New generation technologies include M.2 modules for efficient OS installation along with Dual microSD capability for VMware ESXi, plus the latest USB 3.1 Gen 2 ports. The TX1320 M4 server also features the iRMC S5, Fujitsu ServerView suite, and the free ISM Essential license. These enable easy, effective management across the server’s deployment, installation and administration. Note: Check the product configurator for the server compatible components currently available at launch.
Features & Benefits

Main Features

- **Ultra-compact server with advanced technology to drive workload performance**
  - Wide choice of the Intel® Xeon® E-2200/E-2100 product family processors and affordable Core™ i3, Pentium® and Celeron® options. Up to 128GB DDR4 ECC memory (4 DIMMs at 2,666 MT/s) is supported for high-speed, reliable performance. Note: Celeron® available only via special release request. The server also features 8 x hot-plug 2.5-inch storage (SAS/SATA) devices (including up to 4x NVMe) plus RDX backup. Powerful SAS 3.0 RAID Controllers with up to 8 GB cache are also available. Redundant (2x1GbE) LAN as standard, plus 25/10 Gb Ethernet controller options round out the networking capabilities.

- **Investment protection and flexibility by design**
  - Future ready with 4x PCIe Gen3 slots, while TPM 2.0 support and Fujitsu’s secure 3-way lock secure the data. The server’s flexible design also boosts user efficiency: it supports 2x M.2 modules: 1x SATA; 1x NVMe/SATA, plus Dual microSD modules, also offers new 3.1 Gen2 USB ports (Total of 2x 3.1 Gen2 plus 2x 3.1 Gen1, 4x 2.0, Internal 2x 3.1 Gen1 ports).

- **Improved economics with energy efficiency and reliability**
  - High efficiency 450W power supplies (94% efficiency) are available with both hot-plug capability and redundancy. Fujitsu Battery Backup Unit, an optional Internal UPS in modular PSU form-factor, 5 years lifetime, fully integrated.

- **Deploy anywhere, manage and service easily**
  - The server has a ultra-small form factor with silent operation. It also fields a comprehensive software management suite with the iRMCS5, the Fujitsu ServerView Suite. Plus, the ISM Essential server management suite is available free of charge. The server is designed for enhanced serviceability with easy, fast and comfortable access to critical components.

Benefits

- With the latest compute and memory technology the server can handle appropriately sized, individual or virtualized standard business workloads (file/print, web, email, messaging, ERP/CRM), or more demanding industry specific applications. The new Intel® Xeon® E-2200 product range’s higher core counts and speeds, plus the doubled memory capacity, extends the growth potential of the mono-socket form factor. The flexible storage lets the server handle low-latency storage applications or offer cost-effective storage with backup capability. With up to 8 storage devices, the server can handle most small office dataset or data consolidation requirements. Dual LAN support offers reliable data connectivity for standard requirements right out of the box, while advanced higher data-rate options can support virtualized environments or centralized data sharing over the network.

- The PCI slots ensure your server grows with your business. You can add advanced Fujitsu RAID controllers for reliable data handling (high grade SAS 3.0 with up to 4/8 GB cache) or networking options (including 10/25Gb Ethernet controllers) for high-speed data transmission. The security features protect valuable enterprise data from unauthorized access - ideal for institutions with legal requirements for high-security data storage. M.2 devices are designed for flexible boot requirements – they offer the option of cost-effective and reliable mirrored SATA modules or deploying high-speed NVMe, while Dual microSD modules offer mirrored support for VMware ESXi. New high data rate USB is suited for the latest generation peripheral devices.

- Good for the environment, and your business economics – the high efficiency, redundant power supplies offer enhanced reliability and lower energy expenditure. A cost optimized alternative to power supply redundancy, the Battery Backup Unit protects your valuable investment by supporting safe power down and expanded time of operation in case of power loss.

- The design fits almost everywhere, saves space - ideal for space constrained environments. Low noise emissions, expanded range of operation (5 °C to 45 °C) with Fujitsu’s Cool-safe® Advanced Thermal Design technology make it ideal for offices, showrooms and even industrial environments – without expensive cooling. The iRMCS5, Fujitsu ServerView suite simplify the IT administrator’s burden, which enable installation and deployment, permanent status monitoring and control. ISM Essential offers converged infrastructure monitoring, server management free of cost. For easy serviceability, the server has a screw-less chassis with hot-plug 2.5-inch devices, hot-plug power supplies and “Easy Rails” for 3.5-inch disks.
Technical details

PRIMERGY TX1320 M4

Mainboard
Mainboard type D3673
Chipset Intel® C246
Processor quantity and type 1 x Intel® Xeon® E-2200 processor family / Intel® Xeon® E-2100 processor family / Intel® Pentium® processor / Intel® Core™ i3 processor

Memory slots 4
Memory slot type DIMM (DDR4)
Memory capacity (min. - max.) 4 GB - 128 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.

Interfaces
USB 2.0 ports 4 (4x external rear)
USB 3.0 ports 4 (2x internal, 2x external front, USB 3.0 is now known as USB 3.1 Gen 1), Server also has 2x external rear USB 3.1 Gen 2 ports
Graphics (15-pin) 1 analog graphics interface derived from iRMC (up to 1600x1200 or 1920x1080 at 16bpp)
Serial 1 (9-pin) 1 serial RS-232-C
LAN / Ethernet 2 x1 Gb/s Ethernet; RJ45
Management LAN (RJ45) 1 x dedicated management LAN port for iRMC S5 (10/100/1000 Mbit/s)
Management LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller
RAID controller Optionally integrated RAID 0/1 or RAID 5/6 controller for SAS base units (occupies one PCIe slot). All hardware storage controller options are described under Components
SATA Controller Intel® C246, 2 ports used for accessible drives
SATA controller type notes 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux
LAN Controller Intel® i210 onboard
LAN controller type notes 2 x 10/100/1000 Mbit/s Ethernet
iSCSI, PXE-Boot and WoL are supported
Remote management controller Integrated Remote Management Controller (iRMC S5)
TPM 2.0 compatible
Trusted Platform Module (TPM) TPM 2.0 module (option)

Slots
PCI-Express 3.0 x4 1 x Low profile notched
PCI-Express 3.0 x8 2 x Low profile notched
PCI-Express x1 1 x Low profile PCI-Express 3.0
Slot Notes In SAS configuration 1x PCI-Express occupied by modular RAID controller.

Drive bays
Storage drive bays 3.5-inch non hot-plug or 2.5-inch hot-plug SAS/SATA or 2.5-inch NVMe drives
Storage drive bay configuration Not upgradeable in the field.
Accessible drive bays 1 x 3.5/1.6-inch for backup devices
1 x 5.25/0.5-inch for CD-RW/DVD

Fan Configuration
Number of fans 3
Fan notes Processor fan, rear fan, drive fan, additional drive fan if 8x HDD extension is used
Operating panel

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

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

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software
- Windows Server 2019 Datacenter
- Windows Server 2019 Standard
- Windows Server 2019 Essentials
- Windows Server Datacenter, version 1809
- Windows Server Standard, version 1809
- Hyper-V Server 2016
- Windows Server 2016 Datacenter
- Windows Server 2016 Standard
- Windows Server 2016 Essentials
- Windows Storage Server 2016 Standard
- Windows Server Datacenter, version 1709
- VMware vSphere™ 7.0
- VMware vSphere™ 6.7
- VMware vSphere™ 6.5
- SUSE® Linux Enterprise Server 12
- Red Hat® Enterprise Linux 8
- Red Hat® Enterprise Linux 7

Operating system release link
- RHEL 7.5 and SLES 15 GA are not supported for the new CPUs including the Intel® Xeon® E-2200 product family

Server Management

Dimensions / Weight
- Floor-stand (W x D x H): 98 x 399 x 340 mm
- Dimension notes: without feet
- Weight: up to 10 kg

Environment

Electrical values
- Power supply configuration: 1 x standard, 1 x hot-plug, 2 x hot-plug redundant, 1 x hot-plug + 1 x Fujitsu FJBU internal battery backup unit (depending on Model)
- Active power (max. configuration): 231 W
- Apparent power (max. configuration): 235 VA
- Heat emission (max. configuration): 831.6 kJ/h (788.2 BTU/h)
- Rated current max.: 5 A (100 V) / 2.5 A (240 V)
- Power supply: 250W standard, 90% (Gold efficiency), 100-240V, 50 / 60Hz
  450W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz

Compliance

Product
- PRIMERGY TX1320 M4
<table>
<thead>
<tr>
<th>Compliance</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Model</td>
<td>PS1320</td>
</tr>
<tr>
<td>Global</td>
<td>CB</td>
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<tr>
<td></td>
<td>RoHS (Substance limitations in accordance with global RoHS regulations)</td>
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<tr>
<td></td>
<td>WEEE (Waste electrical and electronical equipment)</td>
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<tr>
<td>Germany</td>
<td>GS</td>
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<tr>
<td>Europe</td>
<td>CE</td>
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<td>USA/Canada</td>
<td>CSA us</td>
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<td></td>
<td>ULc/us</td>
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<td></td>
<td>FCC Class A</td>
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<tr>
<td>Japan</td>
<td>VCCI Class A</td>
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<tr>
<td>Russia</td>
<td>GOST-R</td>
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<tr>
<td>South Korea</td>
<td>KC</td>
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<tr>
<td>China</td>
<td>CCC</td>
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<tr>
<td>Australia/New Zealand</td>
<td>C-Tick</td>
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<tr>
<td>Taiwan</td>
<td>BSMI</td>
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<tr>
<td>Compliance link</td>
<td><a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a></td>
</tr>
<tr>
<td>Compliance notes</td>
<td>* Warning:</td>
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<tr>
<td></td>
<td>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.</td>
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</table>

## Components

### Backup Drives
- RDX Drive, 320 GB, 500 GB, 1 TB, 25 MB/s, half height, USB 3.0

### Optical drives
- Blu-ray Disc™ Triple Writer, (6x BD-RW, 8x DVD, 24x CD), ultraslim, SATA I
- DVD Super Multi ultra slim, (8x DVD; 24x CD), ultraslim, SATA I
### Drives

<table>
<thead>
<tr>
<th>Type</th>
<th>Capacity</th>
<th>Interface</th>
<th>RPM</th>
<th>Form Factor</th>
<th>Hot-plug</th>
<th>Drive Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSD SATA, 6 Gb/s</td>
<td>960 GB</td>
<td>SATA</td>
<td>7,200</td>
<td>2.5-inch</td>
<td>non hot plug</td>
<td>business critical</td>
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<tr>
<td>SSD SATA, 240 GB</td>
<td>240 GB</td>
<td>SATA</td>
<td>7,200</td>
<td>2.5-inch</td>
<td>non hot plug</td>
<td>business critical</td>
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<tr>
<td>SSD M.2 SATA</td>
<td>480 GB</td>
<td>SATA</td>
<td>7,200</td>
<td>non hot plug</td>
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<td></td>
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<tr>
<td>PCIe-SSD SFF</td>
<td>2 TB</td>
<td>PCIe</td>
<td>7,200</td>
<td>2.5-inch</td>
<td>non hot plug</td>
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<tr>
<td>HDD SATA, 8 TB</td>
<td>8 TB</td>
<td>SAS</td>
<td>7,200</td>
<td>3.5-inch</td>
<td>non hot plug</td>
<td></td>
</tr>
<tr>
<td>HDD SAS, 12 GB</td>
<td>900 GB</td>
<td>SAS</td>
<td>10,000</td>
<td>3.5-inch</td>
<td>hot-plug</td>
<td></td>
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<tr>
<td>HDD SAS, 12 GB</td>
<td>600 GB</td>
<td>SAS</td>
<td>10,000</td>
<td>3.5-inch</td>
<td>hot-plug</td>
<td></td>
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<tr>
<td>HDD SAS, 12 GB</td>
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<td>10,000</td>
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<td>hot-plug</td>
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<tr>
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<td>SAS</td>
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<tr>
<td>HDD SAS, 12 GB</td>
<td>1.2 TB</td>
<td>SAS</td>
<td>10,000</td>
<td>3.5-inch</td>
<td>hot-plug</td>
<td></td>
</tr>
</tbody>
</table>

### SCSI / SAS Controller

- **Fujitsu PSAS CP400i SAS Ctrl.** 12 Gbit/s 8 ports int. PCIe 3.0 x8
- **Broadcom® PSAS CP503i LP SAS Ctrl.** 12 Gbit/s 8 ports int. PCIe 3.0 x8
RAID Controller

- pre-configured RAID6 Array,
- pre-configured RAID6+HS Array,
- pre-configured RAID5 Array,
- pre-configured RAID5+HS Array,
- pre-configured RAID1 Array,
- pre-configured RAID1+HS Array,
- pre-configured RAID1+0 Array,
- pre-configured RAID1+0+HS Array,
- pre-configured RAID0 Array,

Fujitsu PRAID EP580i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 Gbit/s 16 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 8 GB, Optional FBU based on LSI SAS3516

Fujitsu PRAID EP540i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 Gbit/s 16 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 4 GB, Optional FBU based on LSI SAS3516

Fujitsu PRAID EP520i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3516

Fujitsu PRAID EP420i, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108

Fujitsu PRAID EP420i for SafeStore, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108

Fujitsu PRAID CP400i, RAID Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, No FBU support

Broadcom® PRAID CP500i LP, RAID Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, No FBU support

Graphics add on cards

NVIDIA® Quadro® P400, 2 GB, N/A, PCIe x16, 3 x miniDP

Warranty

- Manufacturer warranty period: 1 year
- Warranty type: Onsite Service
- Support Pack Options: Globally available in major metropolitan areas:
  - 9x5, Next Business Day Onsite Response Time
  - 9x5, 4h Onsite Response Time (depending on country)
  - 24x7, 4h Onsite Response Time (depending on country)

Recommended Service: 24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.

Service Weblink: http://ts.fujitsu.com/Supportservice
More information

Fujitsu platform solutions
In addition to Fujitsu PRIMERGY TX1320 M4, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation’s reliability.

Computing Products
www.fujitsu.com/global/products/computing/

Software
www.fujitsu.com/software/

More information
To Learn more about Fujitsu PRIMERGY TX1320 M4, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. http://ts.fujitsu.com/Primergy

Fujitsu green policy innovation

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