

# Data Sheet

## Fujitsu PRIMERGY RX2520 M5 Rack Server

Scalable rack server for essential business apps

Fujitsu offers a fantastic blend of systems, solutions and expertise to guarantee maximum productivity, efficiency and flexibility, delivering confidence and reliability. Fujitsu PRIMERGY servers deliver workload-optimized x86 industry standard systems for any workload and business demand. Since there is no single server solution to meet all these needs, Fujitsu offers a broad server portfolio consisting of expandable tower servers, versatile rack-mount servers, density-optimized multi-node servers as well as GPU servers purpose-built for the demands of AI and VDI. While all these systems are designed to handle multiple workloads, each server is optimized for specific use cases. Whatever the size of your business – large enterprise with multiple sites, or a small or medium-sized company with limited space and budget – with the right choice of server, your IT can become the business enabler you have always wanted it to be.

### PRIMERGY RX2520 M5

The Fujitsu PRIMERGY RX2520 M5 is an efficient and scalable platform for essential business applications. As a dual-socket rack server it features the latest Intel® Xeon® Scalable Family processors with max. 20 cores fueled by up to 768 GB RAM. The system can also be equipped with the new 2nd generation processors of the Intel® Xeon® Scalable Family (CLX-R) delivering industry-leading frequencies. The PRIMERGY RX2520 delivers an especially well balanced price / performance ratio making it ideal for baseline datacenter workloads i.e. for collaboration platforms or storage-hungry applications. Its compact PRIMERGY 2U modular chassis provides storage demanding applications and services a powerful environment of up to twelve 3.5-inch or up to twenty-four 2.5-inch storage drives. Furthermore, the RX2520 M5 is prepared for individual future demands by offering further various modular options and upgrade kits for

LAN, RAID and storage. Power supply units with 96% efficiency and the enhanced iRMC S5 remote management will result in lower operational costs.



# Features & Benefits

Main Features	Benefits
<p><b>NEW 2ND GEN INTEL® XEON® SCALABLE PROCESSORS</b></p> <ul style="list-style-type: none"> <li>■ New Intel Xeon Scalable processor SKUs deliver additional customer value with increased performance and industry leading frequency (up to 3.9 GHz base and up to 44% more processor cache).</li> </ul> <p><b>FLEXIBLE AND SCALABLE PLATFORM</b></p> <ul style="list-style-type: none"> <li>■ Huge numbers of storage drives in various base units with up to 12x 3.5-inch or 24x 2.5-inch storage drives are available. M.2 device support, the modular concept for the base unit as well as a choice for optional LAN controller, RAID controller and power supplies as well as built-in backup devices such as LTO drives are configurable for this server.</li> </ul> <p><b>PROTECT YOUR COMPANY WITH SECURE SERVERS</b></p> <ul style="list-style-type: none"> <li>■ PRIMERGY servers are equipped with beneficial features to protect against, detect and recover from security breaches (UEFI Secure Boot, TPM 2.0, signed firmware updates, agent-free device management, secure authorization and authentication, alerting and logging, secure Out of Band Management with iRMC S5, ...).</li> </ul> <p><b>INFRASTRUCTURE MANAGEMENT</b></p> <ul style="list-style-type: none"> <li>■ ISM is available with two licensing options: (1) ISM Advanced is the fully featured licensed version of ISM that provides comprehensive infrastructure management capabilities across datacenter. (2) ISM Essential provides a quick start to infrastructure management with essential monitoring and update functions.</li> </ul>	<ul style="list-style-type: none"> <li>■ These new platforms leverage high-performance compute cores, built-in acceleration, advanced security and the Intel hardware and software portfolio to propel network, cloud and enterprise customers into the data-centric future.</li> <li>■ The server is a scalable platform to best meet increasing individual demand optimized to suit serverized storage scenarios or storage demanding applications. Due to upgrade kits and the modular platform, just grow over time within the same system and utilize to the best over the entire lifecycle.</li> <li>■ PRIMERGY servers come with a wide variety of such robust security features and combine these capabilities with the best quality and efficiency, and more agility in daily operations helps to turn IT into a business advantage faster.</li> <li>■ Converged data center management that provides organizations centralized control over the entire infrastructure that includes servers, storage, networking, cloud management software as well as power and cooling using a single user interface.</li> </ul>

# Technical details

## PRIMERGY RX2520 M5

Base unit	PRIMERGY RX2520 M5 SFF	PRIMERGY RX2520 M5 SFF	PRIMERGY RX2520 M5 SFF	PRIMERGY RX2520 M5 LFF	PRIMERGY RX2520 M5 LFF
Housing types	Rack	Rack	Rack	Rack	Rack
Storage drive architecture	8x 2.5-inch SAS/SATA/PCIe	16x 2.5-inch SAS/SATA/PCIe	24x 2.5-inch SAS/SATA/PCIe	4x 3.5-inch SAS/SATA	12x 3.5-inch SAS/SATA
Power supply	Hot-plug	Hot-plug	Hot-plug	Hot-plug	Hot-plug
Product Type	Dual Socket Rack Server	Dual Socket Rack Server	Dual Socket Rack Server	Dual Socket Rack Server	Dual Socket Rack Server

## Mainboard

Mainboard type	D3386-B				
Chipset	Intel® C624				
Processor quantity and type	1 - 2 x Intel® Xeon® Bronze 3xxx processor / Intel® Xeon® Silver 4xxx processor / Intel® Xeon® Gold 5xxx processor				
Mainboard type					
Processor quantity and type	1 - 2	1 - 2	1 - 2	1 - 2	1 - 2
Processor notes	configurable with up to max. 105W and 14 cores				
Memory slots	12 (6 DIMMs per CPU, 6 channels with 1 DIMM per channel)				
Memory slot type	DIMM (DDR4)				
Memory capacity (min. - max.)	8 GB - 768 GB				
Memory protection	Advanced ECC Memory Scrubbing SDDC				
Memory notes	Memory Mirroring Mode with identical modules in both channel pairs of a bank (4 or 6 modules per bank) per CPU. Rank Sparing Mode with minimum of 2 modules single ranked (1R) or dual ranked (2R) or 1 module quad ranked (4R) per CPU.				

## Interfaces

USB 2.x ports	1 x USB 2.0 internal for backup devices
USB 3.x ports	7 x USB 3.0 (2x front, 4x rear, 1x internal type A)
Graphics (15-pin)	1 x VGA rear
Serial 1 (9-pin)	1 x serial RS-232-C, optional
LAN / Ethernet	2 x Gbit/s Ethernet (RJ45 based on Intel® X722)
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	All hardware storage controller options are described under Components
SATA Controller	Intel® C624, 1 x SATA channel for ODD
LAN Controller	2 x 1 Gbit/s onboard PXE-Boot via LAN from PXE server, iSCSI boot (also diskless)
Remote management controller	IPMI 2.0 compatible Integrated Remote Management Controller (iRMC S5, 512 MB attached memory incl. graphics controller)
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)

## Slots

PCI-Express 4.0 x16	1 x (190 mm) low profile
PCI-Express 3.0 x8	3 x Low profile
PCI-Express 3.0 x16	3 x Low profile
Slot Notes	Important: The number of PCIe slots depends on the number of CPUs: 3x PCIe x8 Gen 3 with CPU1 1x PCIe x16 Gen 3 with CPU1 2x PCIe x16 Gen 3 with CPU2

**Drive bays**

Storage drive bays	2.5-inch base units (max. 24 x 2.5) or 3.5-inch base units (max. 12 x 3.5)
Accessible drive bays	1 x 5.25/0.5-inch for ODD 1 x 5.25/1.6-inch for backup devices
Notes accessible drives	All possible options described in relevant system configurator.

**Drive bays (Base unit specific)**

Storage drive bays	12 x 2.5-inch hot-plug SAS/SATA	16 x 2.5-inch hot-plug SAS/SATA	24 x 2.5-inch hot-plug SAS/SATA	4 x 3.5-inch hot-plug SAS/SATA	12 x 3.5-inch hot-plug SAS/SATA
Storage drive bay configuration		SAS expander not required with PRAID EP5xxi	not expandable, incl. SAS expander	optionally expandable to 8x 3.5" with SAS expander	not expandable, incl. SAS expander
Accessible drive bays	1 x 5.25/1.6-inch for 1 x backup drive or 1 x ODD	1 x 5.25/1.6-inch for 1 x backup drive or 1 x ODD		1 x 5.25/1.6-inch for 1 x backup drive or 1 x ODD	
Optional accessible drives	1x optical drive, 1x backup drive	1x optical drive, 1x backup drive		1x optical disk drive	

**Fan Configuration**

Number of fans	4
Fan configuration	redundant, non hot-plug
Fan notes	expandable with up to 3 double-fan modules; depending on configuration

**Operating panel**

Operating buttons	On/off switch Reset button NMI button ID button
Status LEDs	System status (orange / yellow) Identification (blue) Hard disks access (green) Power (amber / green) At system rear side: System status (orange / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)

**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 Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support Remote iSCSI boot support Cryptographically Signed BIOS Firmware Update HTTP and HTTPS Boot PCIe Bifurcation configurable
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**Operating Systems and Virtualization Software**

Operating system release link	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473">http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473</a>
Operating system notes	Support of other Linux derivatives on demand  Use of certified or supported operating systems and virtualization software is subject to proactive acceptance of the respective License Agreements/ EULAs/ Subscription and support terms of the Software manufacturer as applicable for the relevant Software whether preinstalled or optional. The software may only be available bundled with a software support subscription which – depending on the Software - may be subject to separate remuneration.

**Infrastructure and Server Management**

DC Infrastructure Management	Infrastructure Manager (ISM) Essential Edition Advanced Edition
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## Infrastructure and Server Management

Server Management	Infrastructure Manager (ISM) Essential Edition Advanced Edition ServerView Suite
Management notes	For further information regarding ISM and ServerView Suite see dedicated data sheets.
Manageability link	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=9e92297a-16fb-4c69-8559-e38e7b42fee6">http://docs.ts.fujitsu.com/dl.aspx?id=9e92297a-16fb-4c69-8559-e38e7b42fee6</a>

## Dimensions / Weight

Rack (W x D x H)	482.6 mm (Bezel) / 444.8 mm (Body) x 750 x 86.6 mm
Mounting Depth Rack	725.6 mm
Height Unit Rack	2 U
19" rackmount	Yes
Weight	up to 25 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

## Environment

Operating ambient temperature	5 - 45 °C (41 - 113 °F)
Operating temperature note	Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. Please use the Fujitsu WebArchitect ( <a href="http://www.fujitsu.com/configurator/public">www.fujitsu.com/configurator/public</a> ) to get detailed information on the corresponding configurations.
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment link	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe">http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe</a>
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	Minimum noise : 34 dB(A) (idle) / 34 dB(A) (operating) Typical noise : 36 dB(A) (idle) / 36 dB(A) (operating)
Sound power (LWA; 1B = 10dB)	Minimum noise : 5.76 B (idle) / 5.76 B (operating) Typical noise : 6.1 B (idle) / 6.1 B (operating)
Noise notes	Noise emissions depends on operation modes, system configuration and ambient temperature.

## Electrical values

Power supply configuration	1x non hot-plug power supply or 2x hot-plug power supply for redundancy
Hot-plug power supply redundancy	Optional
Active power (max. configuration)	643 W
Apparent power (max. configuration)	600 VA
Heat emission (max. configuration)	2314.8 kJ/h (2194.0 BTU/h)
Rated current max.	5.5 A (100 V) / 2.5 A (240 V)
Active power note	To estimate the power consumption of different configurations use the Fujitsu Product Configurator: <a href="http://www.fujitsu.com/configurator/public">www.fujitsu.com/configurator/public</a>
Power supply	450W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 92% (equivalent to Gold efficiency) –48V DC 800W hot-plug, 96% (Titanium efficiency), 200-240V, 50 / 60Hz
Power supply notes	Power Safeguard adapts system performance in case the power requirements exceeds supply limits. !96% Titanium Power supply unit is only released for 200-240V

## Compliance

Product	PRIMERGY RX2520 M5
Model	PR300D
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronic equipment)
Germany	GS
Europe	CE
USA/Canada	CSAc/us FCC Class A ICES-003 / NMB-003 Class A

Compliance	
Japan	VCCI:V3 Class A + JIS 61000-3-2
Russia	EAC
South Korea	KC
China	CCC (planned)
Australia/New Zealand	RCM
Taiwan	BSMI
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>
Compliance notes	<p>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.</p> <p>* Warning:</p> <p>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.</p>

## Components

Warranty	
Warranty period	3 years
Warranty type	Onsite warranty
Warranty Terms & Conditions	<a href="http://www.fujitsu.com/support">www.fujitsu.com/support</a>
<b>Product Support - the perfect extension</b>	
Support Pack Options	<p>Globally available in major metropolitan areas:</p> <p>9x5, Next Business Day Onsite Response Time</p> <p>9x5, 4h Onsite Response Time (depending on country)</p> <p>24x7, 4h Onsite Response Time (depending on country)</p>
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	at least 5 years after shipment, for details see <a href="https://support.ts.fujitsu.com/">https://support.ts.fujitsu.com/</a>
Service Weblink	<a href="http://www.fujitsu.com/emeia/products/product-support-services/">http://www.fujitsu.com/emeia/products/product-support-services/</a>

# More information

## Fujitsu products, solutions & services

In addition to Fujitsu PRIMERGY RX2520 M5, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Built 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 offerings. This allows customers to select 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/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about Fujitsu PRIMERGY RX2520 M5, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/primergy](http://www.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 contribute to the creation of a sustainable environment for future generations through IT.

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



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## Disclaimer

Please note that the data sheet reflects the technical specification with the maximum selection of components for the named system and not the detailed scope of delivery. The scope of delivery is defined by the selection of components at the time of ordering. The product was developed for normal business use.

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