

# Data Sheet

## FUJITSU Server PRIMERGY RX4770 M2 Rack Server

Platform of choice for business critical backend services with superior levels of performance and reliability – enhanced with the latest processor and memory technology

FUJITSU Server PRIMERGY will give you the servers you need to power any workload and changing business requirements. As business processes expand so does the need for applications. Each has its own resource footprint, so you need a way to optimize your computing to better serve your users. PRIMERGY systems will help you match your computing capabilities to your business priorities with our complete portfolio of expandable PRIMERGY tower servers for remote and branch offices, versatile rack-mount servers, compact and scalable blade systems, as well as hyper-converged scale-out servers. They convince by business proven quality with a wide range of innovations, highest efficiency cutting operational cost and complexity, provide more agility in daily operations, and integrate seamlessly to let help you concentrate on core business functions.

FUJITSU Server PRIMERGY RX rack systems are versatile rack-optimized servers providing best-in-class performance and energy efficiency, and thus form the "standard" in each data center. PRIMERGY RX servers deliver more than 20 years of development and production know-how resulting in extremely low failure rates below market average, and lead to continuous operations and outstanding hardware availability.

### PRIMERGY RX4770 M2

The FUJITSU Server PRIMERGY RX4770 M2 is an industry-standard x86 system with four sockets, providing superior levels of performance, scalability and efficiency. This combination turns the server into the ideal platform for running databases and transactional applications, business intelligence (BI) workloads, back-end and in-memory databases, as well as data-intensive applications. Plus, it substantially simplifies carrying out infrastructure-related tasks like server virtualization and consolidation. Featuring the Intel® Xeon® processor E7 v3 product family

with up to 72 cores pushes this server to a whole new level of compute performance to deliver more efficient business results. Thanks to the highly performant and superfast DDR4 memory technology with up to 6TB memory capacity, the system can handle complex, data-intensive workloads e.g. in-memory databases like SAP HANA® and real-time business analytics even easier than the previous generation. The PRIMERGY RX4770 M2 supports 12 Gbit/s SAS/SATA controller with optional FBU and up to eight 2.5-inch hot-plug storage drives providing faster access to more data and can be expanded to a total of 12x storage drives when including the up to 4x 2.5-inch PCIe SSDs. An onboard dual-channel 10 Gbit/s Ethernet controller, plus eleven PCI-Express Gen3 slots help to increase bandwidth for even faster time to business insights. With built-in redundancy and hot-pluggable components, as well as advanced business-critical RAS features such as Resilient System- and Memory Technologies, the RX4770 M2 provides higher availability and uptime. Virtualization and consolidation of IT resources offers many benefits, but often also leads to increased expenses for server administration. Thus the PRIMERGY RX4770 M2 delivers state-of-the-art management capabilities with the new integrated Remote Management Controller (iRMC S4) offering a variety of user-friendly functions to ensure a faster and more cost-effective infrastructure management, no matter whether the server is located in the server-room next door or in another part of the world.



# Features & Benefits

Main Features	Benefits
<p><b>Rapidly analyze large data sets to gain real-time insights</b></p> <ul style="list-style-type: none"> <li>PRIMERGY RX4770 M2 increases the system performance over the previous generation using latest Intel® Xeon® E7 v3 product family with up to 72 cores</li> <li>20 percent higher maximum core count and 20 percent more L3 cache (45 MB instead of 37.5 MB)</li> <li>Enormous memory capacity with up to 6TB (96 DIMM slots) on 8 configurable memory boards</li> <li>12 Gbit/s SAS/SATA Controller with optional FBU and up to eight 2.5 inch, hot-pluggable SAS/SATA SSDs, SATA HDDs + up to four optional PCIe SSDs</li> </ul> <p><b>Enhanced business-critical x86 RAS features</b></p> <ul style="list-style-type: none"> <li>Built-in redundancy and hot-pluggable components, Advanced ECC and Memory Scrubbing</li> <li>Advanced resilient system and memory technologies that integrate processor, firmware, and software layers to help diagnose fatal errors, contain faults, and automatically recover to keep the server operating</li> </ul> <p><b>Improved efficiency for business-critical services</b></p> <ul style="list-style-type: none"> <li>The PRIMERGY RX4770 M2 provides savings in operational expenses with scale-up consolidation efficiencies</li> <li>Comprehensive management covering the entire lifecycle of servers with a single integrated view of the IT infrastructure via Fujitsu Software ServerView Suite</li> <li>Local Service Display (LSD) and integrated, new Remote Management Controller (iRMC S4) as standard</li> <li>New power supply units with 80Plus Platinum (94 percent) energy-efficiency</li> </ul>	<ul style="list-style-type: none"> <li>The new generation of quad-socket PRIMERGY servers accelerates decision-making capabilities and thus shortens the time to business results</li> <li>New, faster memory technology over the preceding generation allows to implement large scale in-memory computing and virtualization scenarios</li> <li>Increased performance providing faster access to more data</li> </ul> <p>■ Business-critical RAS features lowering the risk for unplanned IT downtimes</p> <p>■ Enhanced set of features adds even more reliability, availability, and serviceability that customers need for running their business-critical applications</p> <p>■ Saves time and conserves valuable IT resources by simplifying remote management</p> <p>■ Integrated Remote Management Controller (iRMC S4) enables extensive monitoring and management of servers regardless of their system status – even at decentralized locations.</p> <p>■ Use the ServerView Local Service Display on the front panel of the server to check the status of the key system components at any time without opening the housing</p> <p>■ Continuous reduction of power and cooling costs</p>

# Technical details

## PRIMERGY RX4770 M2

Base unit	PRIMERGY RX4770 M2
Housing types	Rack
Product Type	Quad Socket Rack Server

## Mainboard

Mainboard type	D 3349
Chipset	Intel® C114 Scalable Memory Buffer (Advanced) Intel® C602 J
Processor quantity and type	2 or 4 x Intel® Xeon® processor E7-4800 v3 product family / Intel® Xeon® processor E7-8800 v3 product family
Processor notes	A minimum of 2 processors must be configured, no mix of different processor types
Memory slots	96 (distributed on 8 memory boards with 12 slots each)
Memory slot type	DIMM (DDR4)
Memory capacity (min. - max.)	16 GB - 6 TB
Memory protection	Advanced ECC Memory Scrubbing SDDC Memory Mirroring support Rank sparing memory support
Memory notes	Memory modules are installed on memory boards (12 DIMM slots per memory board) Two memory boards are preinstalled in base unit, further memory boards as option
Memory modules notes	Memory modules will be delivered in set's of 2 DIMMs per order code. Intel® C114 Scalable Memory Buffer supports max. 1866MHz memory clock speed. Clock speed is also depending on Memory Controller Mode, DIMM Slot occupation and server releases.

## Interfaces

USB 2.0 ports	5 x USB 2.0 external ports (3 x front, 2 x rear, (1 x internal))
Graphics (15-pin)	2 x VGA (1 x front, 1 x rear)
Serial 1 (9-pin)	1 x RS-232-C
LAN / Ethernet	2 x 10 Gbit/s Ethernet (RJ45)
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S4 (10/100/1000 Mbit/s)

## Onboard or integrated Controller

LAN Controller	2 x 10 Gbit/s Ethernet (RJ45) TCP/IP acceleration, PXE boot via LAN from PXE server
Remote management controller	Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller) IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 module; TCG compliant (option)

## Slots

PCI-Express 3.0 x8	9 x Full height 1/2 length
PCI-Express 3.0 x16	2 x Full height 3/4 length
Slot Notes	One of the nine slots are exclusive for internal RAID Controller as connection to internal HDD/SSD slots

## Drive bays

Storage drive bays	12 x 2.5-inch hot-plug
Accessible drive bays	1 x 5.25/0.5-inch for DVD-RW/Blu-ray

## Fan Configuration

Number of fans	8
Fan configuration	hot-plug
Fan notes	7+1 redundant

<b>Operating panel</b>	
<b>Operating buttons</b>	On/off switch NMI button Reset button ID button
<b>Status LEDs</b>	Power (green) System status (green / orange) CSS (orange) Hard disks access (green) At system rear side: Identification (blue)
<b>Service display</b>	ServerView Local Service Display (LSD)
<b>BIOS</b>	
<b>BIOS features</b>	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
<b>Operating Systems and Virtualization Software</b>	
<b>Operating system release link</b>	<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>
<b>Operating system notes</b>	Support of other Linux derivatives on demand
<b>Server Management</b>	
<b>Standard</b>	ServerView Suite - Deploy Installation Manager Scripting Toolkit ServerView Suite - Control Operations Manager incl. PDA and ASR & R Agents and CIM Providers / Agentless Service System Monitor RAID Manager Capacity Management Power Management Storage Support ServerView Suite - Maintain Remote Management (iRMC in combination with Intel® Node Manager) Update Management (BIOS, Firmware, Windows Drivers, Agents and CIM Providers) Performance Measurement Asset Management Online Diagnostics ServerView Suite - Integrate Integration packs for Microsoft System Center, VMware vCenter, VMware vRealize, Nagios, and HP SIM Deployment tools and others
<b>Option</b>	ServerView embedded Lifecycle Management (eLCM) Lifecycle management ServerView Suite - Maintain iRMC Advanced Pack incl. Advanced Video Redirection (AVR), video capturing and Virtual Media ServerView Suite - Dynamize Virtual-I/O Manager (VIOM)
<b>Server Management notes</b>	Regarding dependencies for ServerView Suite software products see dedicated product data sheets.
<b>Dimensions / Weight</b>	
<b>Rack (W x D x H)</b>	482.6 mm (Bezel) / 445mm (Body) x 765 x 176 mm
<b>Mounting Depth Rack</b>	728 mm
<b>Height Unit Rack</b>	4 U
<b>19" rackmount</b>	Yes
<b>Mounting Cable depth rack</b>	100 mm (1,000 mm Rack recommended)

<b>Dimensions / Weight</b>	
Weight	max. 46 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option
<b>Environment</b>	
Operating ambient temperature	5 - 40 °C (41 - 104 °F)
Operating temperature note	Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. For detailed information see relevant system configurator.
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=589915e9-1bf8-40f7-8ba4-7cac9371f2f0">http://docs.ts.fujitsu.com/dl.aspx?id=589915e9-1bf8-40f7-8ba4-7cac9371f2f0</a>
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	52 dB(A) (idle) / 52 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	6.7 B (idle) / 6.7 B (operating)
Noise notes	at ambient temperature <23°C Noise emissions depends on operation modes, system configuration and ambient temperature.
<b>Electrical values</b>	
Power supply configuration	Up to 4 hot-plug power supplies. Base unit equipped with 2 power supplies, 3rd and 4th PSU as option, no Mix
Hot-plug power supply redundancy	Yes
Active power (max. configuration)	1,990 W
Rated power max.	2,820 W
Heat emission (max. configuration)	7164.0 kJ/h (6790.2 BTU/h)
Rated current max.	28.2 A / 11 A
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: <a href="http://configurator.ts.fujitsu.com/public/">http://configurator.ts.fujitsu.com/public/</a>
Power supply	1200W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz; 110V range: 1000W, less than 110V: 900W 1600W hot-plug, 94% (Platinum efficiency), 200-240V, 50 / 60Hz
<b>Compliance</b>	
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronic equipment)
Europe	CE
USA/Canada	CSAC/us FCC Class A
Japan	VCCI
Taiwan	BSMI
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>
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.

## Components

<b>Warranty</b>	
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 Related Services - the perfect extension</b>	

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**Warranty**

<b>Support Pack Options</b>	X - Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time (depending on country) 24x7, 4h Onsite Response Time (depending on country)
<b>Recommended Service</b>	X - 24x7 Onsite Service with 4h Onsite Response Time
<b>Service Lifecycle</b>	5 years after end of product life
<b>Service Weblink</b>	<a href="http://www.fujitsu.com/fts/products/product-support-services/">http://www.fujitsu.com/fts/products/product-support-services/</a>

# More information

## Fujitsu products, solutions & services

In addition to FUJITSU Server PRIMERGY RX4770 M2, 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 Server PRIMERGY RX4770 M2, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<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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2018-01-11 WW-EN

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