FUJITSU

Data Sheet
Fujitsu PRIMERGY RX4770 M2 Server

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

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
Rapidly analyze large data sets to gain real-time insights	
■ PRIMERGY RX4770 M2 increases the system performance over the previous generation using latest Intel® Xeon® E7 v3 product family with up to 72 cores	■ The new generation of quad-socket PRIMERGY servers accelerates decision-making capabilities and thus shortens the time to business results
■ 20 percent higher maximum core count and 20 percent more L3 cache (45 MB instead of 37.5 MB)	■ New, faster memory technology over the preceding generation allows to implement large scale in-memory computing and virtualization scenarios
■ Enormous memory capacity with up to 6TB (96 DIMM slots) on 8 configurable memory boards	■ Increased performance providing faster access to more data
■ 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	
Enhanced business-critical x86 RAS features	
■ Built-in redundancy and hot-pluggable components, Advanced ECC and Memory Scrubbing	■ Business-critical RAS features lowering the risk for unplanned IT downtimes
■ 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	■ Enhanced set of features adds even more reliability, availability, and serviceability that customers need for running their business-critical applications
Improved efficiency for business-critical services	
■ The PRIMERGY RX4770 M2 provides savings in operational expenses with scale-up consolidation efficiencies	■ Saves time and conserves valuable IT resources by simplifying remote management
■ Comprehensive management covering the entire lifecycle of servers with a single integrated view of the IT infrastructure via Fujitsu Software ServerView Suite	■ Integrated Remote Management Controller (iRMC S4) enables extensive monitoring and management of servers regardless of their system status – even at decentralized locations.
■ Local Service Display (LSD) and integrated, new Remote Management Controller (iRMC S4) as standard	■ 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
■ New power supply units with 80Plus Platinum (94 percent) energy-efficiency	■ Continuous reduction of power and cooling costs

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 mimimum 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

Operating panel

Operating buttons	On/off switch NMI button Reset button ID button
Status LEDs	Power (green) System status (green / orange) CSS (orange) Hard disks access (green) At system rear side: Identification (blue)
Service display	ServerView Local Service Display (LSD)

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

Operating Systems and Virtualization Software

Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Support of other Linux derivatives on demand

Server Management

Option	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-IO Manager (VIOM)

Server Management notes	Regarding dependencies for ServerView Suite software products see dedicated product data sheets.

Dimensions / Weight

Rack (W x D x H)	482.6 mm (Bezel) / 445mm (Body) x 765 x 176 mm
Mounting Depth Rack	728 mm
Height Unit Rack	4 U
19" rackmount	Yes
Mounting Cable depth rack	100 mm (1,000 mm Rack recommended)
Weight	max. 46 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

Environment

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	http://docs.ts.fujitsu.com/dl.aspx?id=589915e9-1bf8-40f7-8ba4-7cac9371f2f0
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 <23ºC Noise emissions depends on operation modes, system configuration and ambient temperature.

Electrical values

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: http://configurator.ts.fujitsu.com/public/
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

Compliance

Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronical equipment)
Europe	CE
USA/Canada	CSAc/us FCC Class A
Japan	VCCI
Taiwan	BSMI
Compliance link	https://sp.ts.fujitsu.com/sites/certificates
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

Warranty

Warranty period	3 years
Warranty type	Onsite warranty

Product Support Services - the perfect extension

Support Pack Options	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)
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEIA please contact your local Fujitsu partner.
Service Lifecycle	5 years
Spare Parts availability	
Service Weblink	http://ts.fujitsu.com/Supportservice

More information

Fujitsu platform solutions

In addition to Fujitsu 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.

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/products/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY RX4770 M2, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
http://www.fujitsu.com/fts/products/computing/servers/primergy/rack/rx4770m2/

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