

Data Sheet

Fujitsu PRIMERGY RX2520 M1 Server

Scalable rack server for essential business apps

PRIMERGY RX2520 M1

The Fujitsu PRIMERGY RX2520 M1 is an efficient and scalable platform for essential business applications. As a dual socket rack server it features the latest Intel® Xeon® processor E5-2400 v2 product family with up to 192 GB RAM. The PRIMERGY RX2520 delivers an especially well balanced price / performance ratio. Its compact PRIMERGY 2U modular chassis provides storage demanding applications and services a powerful environment of up to twelve 3.5-inch or sixteen 2.5-inch storage drives. Furthermore, the RX2520 is prepared for future demands by offering further modular options and upgrade kits for LAN, RAID and storage. Power supply units with 96 % efficiency and the enhanced iRMC S4 management will result in lower operational costs.



Features & Benefits

Main Features	Benefits
<p>Well-balanced price / performance ratio</p> <ul style="list-style-type: none">■ Intel® Xeon® E5-2400 v2 product family with up to 10 cores■ Up to 192 GB RAM (12 DIMM slots) and up to 6 PCIe slots, 768 GB RAM on special release <p>Flexible and scalable platform</p> <ul style="list-style-type: none">■ Huge number of storage drives of up to twelve 3.5-inch or sixteen 2.5-inch storage drives, prepared for 12Gits / SAS 3■ Modular concept for the base unit as well as a choice for LAN controller, RAID controller and power supplies■ Upgrade kits for hard disk drives and backup devices (3.5-inch and 5.25-inch) <p>Cost efficient operations</p> <ul style="list-style-type: none">■ Simplified power management with different pre-defined power profiles■ 2 hot-plug PSU with 96% efficiency (80Plus titanium)■ Fujitsu ServerView Suite offers tools for installation and deployment, permanent status monitoring and control. A wide range of integration packs allow a seamless and easy integration in widely used enterprise management systems	<ul style="list-style-type: none">■ Provides a well-balanced price / performance ratio for essential business applications or small virtualization environments■ Scalable platform to best meet future demand■ High storage capacity for storage demanding applications and scale-out scenarios■ Individual and cost-saving configuration of the server according to the need of today with upgrade options to meet the demand of tomorrow■ Upgrade kits save budget as the system can be upgraded when the company grows and thus protect the investment■ Simplified and comprehensive power management that results with the high efficient power supplies in significant savings■ Fujitsu ServerView Suite provides all the functions for fail-safe, flexible and automated 24x7 server operations and improves end-user productivity via intelligent and innovative system management solutions.

Technical details

PRIMERGY RX2520 M1

Base unit	PRIMERGY RX2520 M1 LFF	PRIMERGY RX2520 M1 LFF	PRIMERGY RX2520 M1 SFF
Housing types	Rack	Rack	Rack
Storage drive architecture	max. 8x 3.5-inch SAS/SATA	max. 12x 3.5-inch SAS/SATA/PCIe	max. 16x 2.5-inch SAS/SATA
Power supply	Hot-plug	Hot-plug	Hot-plug
Product Type	Dual Socket Rack Server	Dual Socket Rack Server	Dual Socket Rack Server

Mainboard

Mainboard type	D3169
Chipset	Intel® C600 (Patsburg A)
Processor quantity and type	1 - 2 x Intel® Xeon® processor E5-2400 v2 product family
Memory slots	12 (6 DIMMs per CPU, 3 channels with 2 slots per channel)
Memory slot type	DIMM (DDR3)
Memory capacity (min. - max.)	2 GB - 192 GB
Memory protection	Advanced ECC Memory Scrubbing SDDC
Memory notes	Supports DDR3 800 / 1066 / 1333 / 1600 RDIMM max. 6 memory modules/CPU with single or dual-rank RDIMM or single, dual-rank or quad-rank Load-Reduced (LR) DIMM. Performance Mode with identical modules in all three channels (2 modules per bank). Support of 32GB and 64GB LR-DIMMs on project release only.

Interfaces

USB 2.0 ports	9 x USB 2.0 (2x front for 2.5" and 1x front for 3.5" chassis, 4x rear, 2x internal for backup devices, 1x UFM internal boot device)
Graphics (15-pin)	2 x VGA (thereof 1x front optional)
Serial 1 (9-pin)	1 x serial RS-232-C, usable for iRMC or system or shared
LAN / Ethernet	2 x Gbit/s Ethernet (RJ45) with upgrade options for additional 2x1 Gbit/s (RJ45), 4x 1 Gbit/s (RJ45) or 2x 10 Gbit/s (SFP+)
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S4 (10/100/1000 Mbit/s) Management LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller

RAID controller	4 port for internal 3 Gbit/s SATA and 3 Gbit/s SAS (as upgrade option with SAS enabling key) for HDDs with RAID 0/1/10 (Intel C600) All hardware storage controller options are described under Components
SATA Controller	Intel® C600, 1 x SATA channel for ODD
LAN Controller	Intel® Ethernet Controller I210 2 x 1 Gbit/s Ethernet Controller (10/100/1000 Mbit/s) PXE-Boot via LAN from PXE server, iSCSI boot (also diskless)
Remote management controller	IPMI 2.0 compatible Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller)
Trusted Platform Module (TPM)	Infineon / TPM 1.2 module; TCG compliant (option)

Slots

PCI-Express 3.0 x8	6 x Low profile
PCI-Express 2.0 x4 (mech. x8)	1 x Low profile
Slot Notes	Important: The number of PCIe slots depends on the number of CPUs: 5x PCIe x8 Gen 3 (2x CPU1; 3x CPU2; mechanical x8) 1x PCIe x4 Gen 2 (PCH; mechanical x8) Internal Slots: 1x PCIe x8 Gen 3 (CPU1; mechanical x8)

Drive bays			
Storage drive bays	2.5-inch base unit (max. 16 x 2.5) or 3.5-inch base unit (max. 12 x 3.5)		
Accessible drive bays	1 x 5.25/0.5-inch for ODD 1 x 5.25/0.5-inch for Local Service Display 1 x 3.5/1.6-inch for backup devices 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	Max 8 x 3.5-inch	Max 12 x 3.5-inch	Max 16 x 2.5-inch
Optional accessible drives	1 x ODD	-	up to 1 x ODD and/or backup device
Fan Configuration			
Number of fans	2		
Fan configuration	hot-plug / optional redundant		
Fan notes	2 +1 redundant option, additional fan for 2nd CPU		
Number of fans			
Fan 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)		
Service display	Optional: 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

Certified or supported operating systems and virtualization software	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
	Hyper-V Server 2012 R2
	Windows Server 2012 R2 Datacenter
	Windows Server 2012 R2 Standard
	Windows Server 2012 R2 Essentials
	Windows Storage Server 2012 R2 Standard
	Hyper-V Server 2012
	Windows Server 2012 Datacenter
	Windows Server 2012 Standard
	Windows Server 2012 Essentials
	Windows Storage Server 2012 Standard
	Windows Server 2008 R2 Datacenter
	Windows Server 2008 R2 Enterprise
	Windows Server 2008 R2 Standard
	Windows Server 2008 Datacenter
	Windows Server 2008 Enterprise
	Windows Server 2008 Standard
	Windows Web Server 2008
	VMware vSphere™ 6.5
	VMware vSphere™ 6.0
	VMware vSphere™ 5.5
	VMware vSphere™ 5.1 Embedded
	VMware vSphere™ 5.1
	SUSE® Linux Enterprise Server 12
	SUSE® Linux Enterprise Server 11
	Red Hat® Enterprise Linux 7
	Red Hat® Enterprise Linux 6
	Red Hat® Enterprise Linux 5
Red Hat® Enterprise Linux 5 with XEN	
Citrix® XenServer®	
Oracle® Linux 6	
Univention Corporate Server 4	
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

Standard	<ul style="list-style-type: none"> ServerView Suite - Deploy <ul style="list-style-type: none"> Installation Manager Scripting Toolkit ServerView Suite - Control <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Integration packs for Microsoft System Center, VMware vCenter, VMware vRealize, Nagios, and HP SIM Deployment tools and others
Option	<ul style="list-style-type: none"> ServerView embedded Lifecycle Management (eLCM) <ul style="list-style-type: none"> Lifecycle management ServerView Suite - Maintain <ul style="list-style-type: none"> iRMC Advanced Pack incl. Advanced Video Redirection (AVR), video capturing and Virtual Media ServerView Suite - Dynamize <ul style="list-style-type: none"> Virtual-IO Manager (VIOM) Infrastructure Manager (ISM) <ul style="list-style-type: none"> Automate device config Mass OS Installation Node Management Health Status Monitoring Capacity Management Power Management Converged View Network & Virtual IO Management Update Management Integrate IT
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 770 x 86.9 mm
Mounting Depth Rack	735 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 - 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)	Minimum noise : 34 dB(A) (idle) / 34 dB(A) (operating) Typical noise : 36 dB(A) (idle) / 36 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	Minimum noise : 5.76 B (idle) / 5.76 B (operating) Typical noise : 6.1 B (idle) / 6.1 B (operating)

Environment	
Noise notes	Noise emissions depends on operation modes, system configuration and ambient temperature.
Electrical values	
Power supply configuration	1x 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 Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
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, 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	
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
Japan	VCCI:V3 Class A + JIS 61000-3-2
China	CCC (depending on configuration)
Australia/New Zealand	C-Tick
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

Backup Drives	LTO5HH Ultrium, 1,500 GB, 140 MB/s, half height, SAS 6Gb/s LTO6HH Ultrium, 2,500 GB, 160 MB/s, half height, SAS 6Gb/s LTO7HH Ultrium, 2,500 GB, 300 MB/s, half height, SAS 6Gb/s RDX Drive, 320 GB, 500 GB, 1 TB , 25 MB/s, half height, USB 3.0
Optical drives	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
Hard disk drives	HDD SATA, 6 Gb/s, 10 TB, 7,200 rpm, 512e, hot-plug, 3.5-inch, business critical HDD SATA, 6 Gb/s, 8 TB, 7,200 rpm, 512e, hot-plug, 3.5-inch, business critical HDD SATA, 6 Gb/s, 6 TB, 7,200 rpm, 512e, hot-plug, 3.5-inch, business critical HDD SATA, 6 Gb/s, 4 TB, 7,200 rpm, 512n, hot-plug, 3.5-inch, business critical HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, 512n, hot-plug, 3.5-inch, business critical HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, 512n, hot-plug, 3.5-inch, business critical

Hard disk drives	HDD SAS, 12 Gb/s, 900 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, 512n, hot-plug, 3.5-inch, enterprise
	HDD SAS, 12 Gb/s, 300 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 300 GB, 10,000 rpm, 512n, hot-plug, 3.5-inch, enterprise
	HDD SAS, 12 Gb/s, 10 TB, 7,200 rpm, 512e, hot-plug, 3.5-inch, business critical
	HDD SAS, 12 Gb/s, 8 TB, 7,200 rpm, 512e, hot-plug, 3.5-inch, business critical
	HDD SAS, 12 Gb/s, 2 TB, 7,200 rpm, 512e, hot-plug, 2.5-inch, business critical
	HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 3.5-inch, enterprise
	HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, 512n, hot-plug, 3.5-inch, enterprise
	HDD SAS, 12 Gb/s, 1 TB, 7,200 rpm, 512e, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 4 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical	
Solid-State-Drive	SSD SATA, 6 Gb/s, 960 GB, Read-Intensive, hot-plug, 3.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 960 GB, Mixed-use, hot-plug, 3.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 960 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 480 GB, Read-Intensive, hot-plug, 3.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 480 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3.6 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 240 GB, Read-Intensive, hot-plug, 3.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 240 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3.6 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 120 GB, Mixed-use, hot-plug, 3.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 120 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 1.92 TB, Mixed-use, hot-plug, 3.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 1.92 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
SSD SATA, 6 Gb/s, 1.6 TB, Read-Intensive, hot-plug, 3.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)	
SCSI / SAS Controller	LSI PSAS CP400e LP SAS Ctrl. 12 Gbit/s 8 ports ext. PCIe 3.0 x8
	Fujitsu PSAS CP400i SAS Ctrl. 12 Gbit/s 8 ports int. PCIe 3.0 x8
RAID Controller	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 5/6 512MB (D2616), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache
	Fujitsu RAID Ctrl SAS 6G 1GB (D3116C), RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)
	Fujitsu PRAID CP400i, RAID Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 1E, 10, 5, 50, No FBU support
Fibre Channel controller	Fibre Channel Host Bus Adapter 1 x 8 Gbit/s Qlogic QLE2560 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 8 Gbit/s Qlogic QLE2562 MMF LC-style
	Fibre Channel Host Bus Adapter 1 x 8 Gbit/s Emulex LPe1250 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 8 Gbit/s Emulex LPe12002 MMF LC-style
Communication, Network	Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 SFP+ (Fujitsu)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.1 x8 RJ45 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ (Intel®)
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®)
Rack infrastructure	Rackmount kit full extraction (820mm), tool less mounting, length variable 559-914mm
	Cable Management for 19-inch DataCenter / PRIMECENTER Racks
	Cable Arm 2U for PRIMECENTER- and 3rd-party racks

Warranty

Warranty period 3 years

Warranty type Onsite warranty

Product Related 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 EMEA please contact your local Fujitsu partner.

Service Lifecycle 5 years after end of product life

Spare Parts availability 5 years

Service Weblink <http://ts.fujitsu.com/Supportservice>

More information

Fujitsu platform solutions

In addition to Fujitsu PRIMERGY RX2520 M1, 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 RX2520 M1, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/global/products/computing/servers/primergy/rack/rx2520m1/index.html

Fujitsu green policy innovation

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