

Data Sheet

Fujitsu PRIMERGY RX200 S7 Dual socket 1 U rack server

Datasheet for Red Hat certification

Maximum productivity in a 1U housing

PRIMERGY RX200 S7

The Fujitsu PRIMERGY RX200 S7 is a rack server that provides high performance, expandability and energy efficiency in 1U space saving housing. Thus, the PRIMERGY RX200 S7 is ideal for virtualization and cloud, small databases as well as for high performance computing thanks to the top performance of the new Intel® Xeon® E5 product family. Moreover, the RX200 S7 delivers a great expandability, by supporting up to 768 GB of memory, eight hard disk drives and cost-saving Modular LAN options to ensure future requirements are met and budgets are saved. Thanks to the highly efficient power supply units with an efficiency rate of 94% and the new power management this will result in lower operational costs.



Features & Benefits

Main Features	Benefits
<p>Meet today's demand and be prepared for future requirements</p> <ul style="list-style-type: none">■ Intel Xeon E5-2600 product family with up to 8 core processors and Turbo Boost 2.0	<ul style="list-style-type: none">■ Increased performance of up to 80% compared to the previous generation■ Optimized for business applications, cloud and virtualization
<p>Lifecycle investment protection</p> <ul style="list-style-type: none">■ Expanded scalability of up to 24 DIMMs with 768 GB memory, up to 8 hard disk drives and 4 PCIe slots Gen3■ New 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 CPU available	<ul style="list-style-type: none">■ Maximum productivity and scalability in space saving 1U housing to meet future demand■ Individual and cost-saving configuration of the server according to the need of today with upgrade option 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
<p>Cost efficient operations</p> <ul style="list-style-type: none">■ Simplified power management with profiles for 'minimum power' and 'low-noise'■ 2 hot-plug PSU with 94% efficiency■ 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">■ Simplified and comprehensive powermanagement 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 RX200 S7

Base unit	PRIMERGY RX200 S7	
Housing types	Rack	Rack
Storage drive architecture	4x 2.5-inch SAS/SATA	8x 2.5-inch SAS/SATA
Power supply	Hot-plug	Hot-plug

Mainboard

Mainboard type	D3032
Chipset	Intel® C600 (Intel® Patsburg A)
Processor quantity and type	1 - 2 x Intel® Xeon® processor E5-2600 product family

Processor

Intel® Xeon® processor E5-2603 (4C/4T, 1.80 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,066 MHz, 80 W)	
Intel® Xeon® processor E5-2609 (4C/4T, 2.40 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,066 MHz, 80 W)	
Intel® Xeon® processor E5-2620 (6C/12T, 2.00 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 95 W)	
Intel® Xeon® processor E5-2630 (6C/12T, 2.30 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 95 W)	
Intel® Xeon® processor E5-2630L (6C/12T, 2.00 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 60 W)	
Intel® Xeon® processor E5-2637 (2C/4T, 3.00 GHz, TLC: 5 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 80 W)	
Intel® Xeon® processor E5-2640 (6C/12T, 2.50 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,333 MHz, 95 W)	
Intel® Xeon® processor E5-2643 (4C/8T, 3.30 GHz, TLC: 10 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 130 W)	
Intel® Xeon® processor E5-2650 (8C/16T, 2.00 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 95 W)	
Intel® Xeon® processor E5-2650L (8C/16T, 1.80 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 70 W)	
Intel® Xeon® processor E5-2660 (8C/16T, 2.20 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 95 W)	
Intel® Xeon® processor E5-2665 (8C/16T, 2.40 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 115 W)	
Intel® Xeon® processor E5-2667 (6C/12T, 2.90 GHz, TLC: 15 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 130 W)	
Intel® Xeon® processor E5-2670 (8C/16T, 2.60 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 115 W)	
Intel® Xeon® processor E5-2680 (8C/16T, 2.70 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 130 W)	
Intel® Xeon® processor E5-2690 (8C/16T, 2.90 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 135 W)	
Memory slots	24 (12 DIMMs per CPU, 4 channels with 3 slots per channel)
Memory slot type	DIMM (DDR3)
Memory capacity (min. - max.)	2 GB - 768 GB
Memory protection	Advanced ECC Memory Scrubbing SDDC (Chipkill™) Hot-spare memory support Rank sparing memory support Memory Mirroring support (as soon as released)

Memory notes	Max. 8 memory modules/CPU with UDIMM (low voltage or standard) OR quad-rank RDIMM; max. 12 memory modules/CPU with single or dual-rank RDIMM or single, dual-rank or quad-rank Load-Reduced (LR) DIMM. Memory Mirroring with identical modules in both channel pairs of a bank (4 modules per bank), Rank sparing or Performance Mode with identical modules in all four channels (4 modules per bank).	
Memory options	4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1,333 MHz, PC3-10600, DIMM, single rank 4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank 4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, single rank 8 GB (1 module(s) 8 GB) DDR3 LV, registered, ECC, 1,333 MHz, PC3-10600, DIMM, dual rank 8 GB (1 module(s) 8 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank 16 GB (1 module(s) 16 GB) DDR3 LR LV, registered, ECC, 1,333 MHz, PC3-10600, LRDIMM, quad rank 16 GB (1 module(s) 16 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank 32 GB (1 module(s) 32 GB) DDR3 LR LV, registered, ECC, 1,333 MHz, PC3-10600, LRDIMM, quad rank	
Memory options	2 GB (1 module(s) 2 GB) DDR3 LV, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM, single rank 4 GB (1 module(s) 4 GB) DDR3 LV, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank	
Upgrade notes	A BIOS update can be necessary for a memory and processor upgrade.	
Interfaces		
USB 2.0 ports	6 x USB 2.0 (2x front, 3x rear, 1x uSSD)	
Graphics (15-pin)	2 x VGA (thereof 1x front optional)	
LAN / Ethernet	2 x Gbit/s Ethernet (RJ45) plus 2x1 Gbit/s as default Modular integrated on-board LAN with upgrade options to 4x 1 Gbit/s (RJ45) or 2x 10 Gbit/s (SFP+)	
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S3 (10/100/1000 Mbit/s) Management LAN traffic can be switched to shared onboard Gbit LAN port or optional Modular LAN 2x10 Gbit controller Front Service LAN port as option	
Onboard or integrated Controller		
RAID controller	4 port for internal 3G SATA and SAS (as upgrade option with SAS enabling key) for HDDs with RAID 0/1/10 (Intel C600) additional RAID controller options are described under Components RAID controller	
SATA Controller	Intel® C600, 1 x SATA channel for ODD	
LAN Controller	Intel® Ethernet Controller I350, 2 x 10/100/1000 Mbit/s Ethernet (I/O acceleration), In addition 2x1 Gbit/s as default Modular integrated on-board LAN with upgrade options to 4x 1 Gbit/s or 2x 10 Gbit/s PXE-Boot via LAN from PXE server, iSCSI boot (also diskless)	
Remote Management Controller	Integrated Remote Management Controller (iRMC S3, 32 MB attached memory incl. graphics controller) IPMI 2.0 compatible	
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)	
Slots		
PCI-Express 3.0 x8	3 x Low profile	
PCI-Express 3.0 x16	1 x Low profile	
Slot Notes	One PCIe Gen3 x8 slot may be occupied with a Modular integrated on-board LAN controller if configured. One PCIe Gen3 x8 slot may be occupied with a Modular RAID controller if configured	
Drive bays (Base unit specific)		
Storage drive bays	4 x 2.5-inch base unit or 8 x 2.5-inch base unit	
Accessible drive bays	1 x 5.25/0.5-inch for CD-RW/DVD	
Notes accessible drives	All possible options described in relevant system configurator.	
Drive bays (Base unit specific)		
Storage drive bays	4 x 2.5-inch hot-plug SAS/SATA	8 x 2.5-inch hot-plug SAS/SATA
General system information		
Number of fans	6	
Fan configuration	redundant / hot-plug	
Fan notes	4 + 2 double-fans for 2 CPU 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 Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support Remote iSCSI boot support
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Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows Server® 2008 R2 Datacenter Microsoft® Windows Server® 2008 R2 Enterprise Microsoft® Windows Server® 2008 R2 Standard Microsoft® Windows® Web Server 2008 R2 Microsoft® Windows HPC Server® 2008 R2 Suite Microsoft® Windows® Small Business Server 2011 Premium Add-On Microsoft® Windows® Small Business Server Standard 2011 Microsoft® Windows® Server 2008 Datacenter Microsoft® Windows® Server 2008 Enterprise Microsoft® Windows® Server 2008 Standard Microsoft® Windows® Web Server 2008 VMware vSphere™ 5.0 Embedded VMware vSphere™ 5.0 VMware vSphere™ 4.1 VMware vSphere™ 4.1 Embedded VMware vSphere™ 4.1 Installable SUSE® Linux Enterprise Server 11 SUSE® Linux Enterprise Server 10 SUSE® Linux Enterprise Server 10 with XEN Red Hat® Enterprise Linux 7 Red Hat® Enterprise Linux 6 Red Hat® Enterprise Linux 5 Red Hat® Enterprise Linux 5 with XEN Citrix® XenServer®
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Operating system release link

Operating system notes	Support of other Linux derivatives on demand
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Server Management

Dimensions / Weight

Rack (W x D x H)	482 mm (Bezel) / 431mm (Body) x 762 mm x 43 mm
Mounting Depth Rack	718 mm
Height Unit Rack	1 U
19" rackmount	Yes
Mounting Cable depth rack	200 mm (1,000 mm Rack recommended)
Weight	up to 18 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

Environmental

Operating ambient temperature	10 - 35 °C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	Performance mode: 34 dB(A) min, 50 dB(A) max (idle) / 35 dB(A) min, 60 dB(A) max (operating)
Sound power (LWAd; 1B = 10dB)	Performance mode: 5.1 B min , 6.7 B max (idle) / 5.1 B min, 7.6 B max (operating)

Electrical values

Power supply configuration	1-2x 450W/800W hot-plug power supply
Max. output of single power supply	450/800 W (94% efficiency)
Power supply efficiency	94 % (80 PLUS platinum)
Hot-plug power supply output	450/800 W (94% efficiency)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	8.0 A (100 V) / 4.0 A (240 V)
Rated current in basic configuration	1.5 A (100 V) / 0.6 A (240 V)
Active power (max. configuration)	627 W
Apparent power (max. configuration)	646 VA
Heat emission	2257.2 kJ/h (2139.4 BTU/h)
Power Supply Notes	Power Safeguard adapts system performance in case the wattage exceeds supply limits.

Compliance

Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment)
Germany	GS
Europe	CE Class A *
USA/Canada	CSAc/us ULc/us ICES-003 Class A FCC Class A
Japan	VCCI Class A + JIS 61000-3-2
China	CCC (depending on configuration)
Taiwan	CNS 13438 class A
Compliance link	http://globalsp.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

Storage drives	SSD SATA, 3 Gb/s, 32 GB, SLC, hot-plug, 2.5-inch, enterprise SSD SAS, 6 Gb/s, 400 GB, SLC, hot-plug, 2.5-inch, enterprise SSD SAS, 6 Gb/s, 200 GB, SLC, hot-plug, 2.5-inch, enterprise SSD SAS, 6 Gb/s, 100 GB, SLC, hot-plug, 2.5-inch, enterprise HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, 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 SAS, 6 Gb/s, 900 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 6 Gb/s, 600 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 6 Gb/s, 450 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 6 Gb/s, 300 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 6 Gb/s, 146 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 6 Gb/s, 73 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise
Optical drives	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
SCSI / SAS Controller	SAS Ctrl. 6 Gbit/s 8 ports ext. PCIe 2.0 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, Optional BBU for selected systems (based on LSI SAS2108) RAID 0/1 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 0/1 (D2607), 8 ports int. RAID level: 0, 1, 10, No BBU 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	Converged Network Adapter 2 x 10 Gbit/s PCIe 2.0 x8 (Emulex) Ethernet Ctrl. 1 x 1 Gbit/s PCIe 1.1 x1 (Intel®) Ethernet Ctrl. 1 x 1 Gbit/s PCIe x4 (Intel®) Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 (Fujitsu) Ethernet Ctrl. 2 x 1 Gbit/s PCIe x4 (Fujitsu) Ethernet Ctrl. 4 x 1 Gbit/s PCIe x4 (Fujitsu) InfiniBand HCA 1 x 40 Gbit/s PCIe 2.0 x8 (Mellanox) InfiniBand HCA 2 x 40 Gbit/s PCIe 2.0 x8 (Mellanox)
Rack infrastructure	Rackmount kit full extraction (820mm), tool less mounting, length variable 559-914mm Cable Management 1U for PRIMECENTER- and 3rd-party racks
Warranty	
Standard Warranty	3 years
Service level	Onsite Service
Maintenance and Support Services - the perfect extension	
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

More information

Fujitsu platform solutions

In addition to Fujitsu PRIMERGY RX200 S7, 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/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY RX200 S7, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. <http://www.fujitsu.com/PRIMERGY>

Fujitsu green policy innovation



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