FUJITSU

Data Sheet
Fujitsu PRIMERGY RX100 S7p Mono socket 1 U rack server

Small in size and low in cost – rich in optional features

The PRIMERGY RX Rack Server family is the perfect platform to form dynamic infrastructures for your business processes today and in the coming decade. You will thus benefit several times over from our recognized experience in optimized data center technology and our innovative strength in developing energy-efficient and cost/performance-optimized rack systems for universal use. PRIMERGY rack servers, built upon industry standards, focus from a functional viewpoint on core features: energy efficiency, reliability, optimized for virtualization, ease of operation and maintenance, flexibility for your future. And thus they notably meet your requirements for outstanding cost efficiency. Optimal operating costs and long-term usability comply with the IT quality required by your customers. Our responsibility goes way beyond the hardware as our tailor-made service packages mean that you can rely on the best support for your IT during its whole lifecycle.

PRIMERGY RX100 S7p
The Fujitsu PRIMERGY RX100 S7 is an entry mono socket Intel® x86 rack server designed to provide a solution for small budgets, yet enabling a rich set of optional expansions to best meet individual demands. Its usage patterns cover infrastructure and communication applications by delivering up to 32GB RAM, up to 3 PCIe slots and up to 4 hard disk drives. Moreover, this 1U server enables individual configuration with a rich set of optional features, such as hot-plug 94% efficient power supply units, redundant fan, RAID controller and the choice of Intel® Xeon® E3, Intel® Core® and Intel® Celeron® processors. By delivering the highest energy efficiency of its class, the RX100 S7 also contributes to the lowest

operational costs. Furthermore, the ServerView™ suite and remote management features (iRMC S3) simplify administration and enables centralized management for de-centralized installations.

intel inside Xeon

Windows Server 2012 Certified

ENERGY STAR

PC PRO RECOMMENDED

Green IT

Features & Benefits

Main Features	Benefits
Small in costs	
■ Most energy efficient rack server of its class	■ Clear reduction in energy costs
■ Fujitsu ServerView™ suite and onboard remote management features (iRMC S3) enable centralized management	■ Comprehensive and simplified management reduce time for standard administration tasks
Cost-optimized foundation	
■ Onboard dual gigabit LAN	■ Cost-optimized foundation for infrastructure and communication applications
■ Up to 32GB RAM, up to 2 PCIe Gen2 and 1 PCIe Gen3 slots and up to 4 hard disk drives	■ Flexible to meet the individual demand
■ Free choice: 2x 3.5 SATA/ SAS HDDs or 4x 2.5 SATA/SAS/SSD HDDs	
Rich set of optional features	
■ Choice of Intel® Xeon® E3, Core™ i3, Celeron® and Pentium® processors	■ Perfectly meet the performance requirements with available budget
■ Modular RAID controllers	■ Match redundancy requirements with available budget
■ Redundant fans	
■ Hot-plug and redundant power supply (PSU) with platinum efficiency (94%)	

Technical details

PRIMERGY RX100 S7p				
Storage drive architecture	3.5-inch SAS/SATA	3.5-inch SAS/SATA	2.5-inch SAS/SATA	2.5-inch SAS/SATA
Power supply	Standard	Hot-plug	Standard	Hot-plug

Mainboard	
Mainboard type	D 3034
Chipset	Intel® C202
Processor quantity and type	1 x Intel® Celeron® processor / Intel® Core™ i3 processor / Intel® Xeon® processor E3 series
Processor	Intel® Celeron® processor G550 (2C/2T, 2.60 GHz, TLC: 2 MB, Turbo: No, 1066 MHz, 65 W)
	Intel® Core™ i3-3220 processor (2C/4T, 3.30 GHz, TLC: 3 MB, Turbo: No, 1600 MHz, 55 W)
	Intel® Pentium® processor G640 (2C/2T, 2.80 GHz, TLC: 3 MB, Turbo: No, 1066 MHz, 65 W)
	Intel® Xeon® processor E3-1220Lv2 (2C/4T, 2.30 GHz, TLC: 3 MB, Turbo: Yes, 1600 MHz, 17 W)
	Intel® Xeon® processor E3-1220v2 (4C/4T, 3.10 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
	Intel® Xeon® processor E3-1230v2 (4C/8T, 3.30 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
	Intel® Xeon® processor E3-1240v2 (4C/8T, 3.40 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
	Intel® Xeon® processor E3-1265Lv2 (4C/8T, 2.50 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 45 W)
	Intel® Xeon® processor E3-1270v2 (4C/8T, 3.50 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
	Intel® Xeon® processor E3-1280v2 (4C/8T, 3.60 GHz, TLC: 8 MB, Turbo: Yes, 1600 MHz, 69 W)
Memory slots	4 (2 banks with 2 DIMMs each)
Memory slot type	DIMM (DDR3) UDIMM
Memory capacity (min. - max.)	2 GB - 32 GB
Memory protection	ECC
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
Memory options	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM

Interfaces	
USB ports	7 x (2x front, 4x back, 1x internal for UFM)
Graphics (15-pin)	1 x VGA (15-pin)
Serial connection	1 x serial RS-232-C, usable for iRMC or system or shared
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet
Service LAN (RJ45)	1 x dedicated management LAN port for iRMC S3 (10/100/1000 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller	
RAID controller	Integrated RAID 0/1 or RAID 5/6 controller (option) additional RAID controller options are described under Components RAID controller
SATA Controller	Intel® C202, 1 port used for accessible drive 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux;

Onboard or integrated Controller	
LAN Controller	Intel® 82574L + Intel® 82579LM onboard, 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration), iSCSI and PXE-Boot via LAN planned to be supported on both LoMs, WoL for Intel® 82574L only
Remote Management Controller	Integrated Remote Management Controller (iRMC S3, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	optional TPM

Onboard or integrated Controller (Base unit specific)		
RAID controller	4 port SATA with RAID 0/1/10 for HDDs	4 port SATA with RAID 0/1/10 for HDDs
SATA Controller	4-port SATA 3GB with RAID 0, 1	4-port SATA 3Gb with RAID 0, 1
SATA controller type notes	for hot-plug SATA hard disks	for hot-plug SATA hard disks

Slots	
PCI-Express 3.0 x16	1 x Low profile max. length 175mm
PCI-Express 2.0 x1 (mech. x4)	1 x Low profile max. length 170mm
PCI-Express 2.0 x4 (mech. x8)	1 x Low profile (for Modular RAID only)
Slot Notes	In configurations with Intel® Core™ i3 or Intel® Pentium® processors slots are operated with PCI-Express 2.0.

Drive bays	
Storage drive bays	4x 2.5-inch hot-plug SAS/SATA or 2x 3.5-inch hot-plug SAS/SATA
Accessible drive bays	1 x 5.25/0.5-inch for CD-RW/DVD 1 x 3.5/0.5-inch for ServerView Local Service Panel or front VGA + front Service LAN

Drive bays (Base unit specific)	
Number of fans	4
Fan notes	4 fans in combination with standard power supply or 5 fans in combination with hot-plug PSU base unit for 1+4 redundancy.

Operating panel	
Operating buttons	On/off switch NMI 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 Panel (LSP)

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 Remote PXE boot support Remote iSCSI boot support

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server 2012
	Microsoft® Windows Server® 2012 Datacenter
	Microsoft® Windows Server® 2012 Standard
	Microsoft® Windows Storage Server 2012 Standard
	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 Server® 2008 R2 Foundation
	Microsoft® Windows® Web Server 2008 R2
	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
	Novell® SUSE Linux Enterprise Server 11
	Novell® SUSE Linux Enterprise Server 10
	Red Hat® Enterprise Linux 6
	Red Hat® Enterprise Linux 5
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	VMware ESX hints: - SATA RAID is not supported - Storing virtual machines locally requires a SAS RAID Controller - Onboard GbE is supported on one of the two ports Support of other Linux derivatives on demand Red Hat® certification starting with version 5.8 / 6.4.

Server Management

Standard	

Option	ServerView Suite - Deploy
	       SV Deployment Manager (full version)
	 ServerView Suite - Maintain
	       iRMC Advanced Pack incl. Advanced Video Redirection (AVR) and Remote Storage
	 ServerView Suite - Dynamize
	       SV Virtual-IO Manager (VIOM)
	       SV Resource Orchestrator Virtual Edition (ROR VE)
	       SV Resource Orchestrator Cloud Edition (ROR CE)
	 ServerView Suite - Integrate
	       SV Integration pack for Fujitsu ManageNow® solution

Server Management notes	Regarding Operating System dependencies for ServerView Suite software Products see dedicated Product Data sheets.

Dimensions / Weight

Rack (W x D x H)	482.6 mm (Bezel) / 431mm (Body) x 572 x 42.5 mm
Mounting Depth Rack	557 mm
Height Unit Rack	1 U
Mounting Cable depth rack	200 mm cable depth
Weight	up to 14 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

Environmental

Operating ambient temperature	15 - 35℃
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation locations)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Sound pressure (LpAm)	24/30 dB(A) (min / max idle), 28.5 / 53.5 db(A) (min / max operating)
Sound power (LWAd; 1B = 10dB)	3.7/4.3 B (min / max idle), 4.2 / 6.8 B (min / max operating)
Noise notes / description	Noise emissions and operation modes depend on system configuration.

Electrical values

Power supply configuration	1x standard power supply or1x hot-plug power supply or 2x hot plug power supplies for redundancy
Standard power supply output	300 W (90% efficiency)
Hot-plug power supply output	450W (94% efficiency)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 V - 127 V / 200 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	6A
Rated current in basic configuration	1.8 A / 0.8 A (100V / 240V)
Active power (max. configuration)	193 W
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/
Apparent power (max. configuration)	195 VA
Heat emission	694.8 kJ/h (658.5 BTU/h)

Compliance

Germany	GS
Europe	CE Class A *
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment) ENERGY STAR®
Japan	VCCI
Russia	GOST
South Korea	KC
China	CCC (AC-Adapter)
Australia/New Zealand	C-Tick
Taiwan	BSMI
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.
Compliance link	http://sp.ts.fujitsu.com/sites/certificates/

Components

Storage disks	SSD SATA, 6 Gb/s, 400 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 200 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 100 GB, MLC, hot-plug, 2.5-inch, enterprise
	HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 250 GB, 7200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 250 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 3 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 2 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 900 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 450 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 450 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 1 TB, 7200 rpm, hot-plug, 2.5-inch, business critical
Optical drives	Blu-ray Disc™ Triple Writer, (6x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
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 (based on LSI SAS2108)
	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 1GB (D3116), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)
	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 (based on LSI SAS2008)
	Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gbit/s, 4 ports int. RAID level: 0, 1, 1E, No BBU support (based on LSI 1064e)
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 x8 (Emulex)
	Ethernet Ctrl. 1 x 1 Gbit/s PCIe x1 (Intel®)
	Ethernet Ctrl. 1 x 1 Gbit/s PCIe x4 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe x8 (Fujitsu)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe x8 (Intel®)
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe x4 (Fujitsu)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe x4 (Fujitsu)
Graphics add on cards (optional)	NVIDIA® Quadro® NVS 300 LP, PCIe x1, 2x DVI/VGA
Rack infrastructure	Rack Mount Kit
	Cable Arm 1U for PRIMECENTER- and 3rd-party racks

Warranty	
Standard Warranty	1 year
Service level	On-site Service (depending on country)
Maintenance and Support Services - the perfect extension	
Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life (new, refurbished or functionally identical parts)
Service Weblink	http://www.fujitsu.com/fts/services

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY RX100 S7p, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build 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 offering. This allows customers to leverage 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/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY RX100 S7p, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts

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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