FUJITSU

DATA SHEET

PRIMERGY RX600 S4

4 socket Multi-Core Xeon 7400 series rack server
- Performance, capacity, stability for your critical applications

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 RX600 S4
Very special criteria apply when selecting the hardware platform for those really critical corporate applications:
easy-to-scale performance, high capacity levels to use memory as required, I/O and local memory, as well as high reliability and operational consistency levels typical for data centers, all of which improve the IT production quality on a long-term basis. With up to 256 GB linearly addressable main memory capacity and state-of-the-art Intel Xeon multi-core processors, the 4-socket server RX600 S4 is the perfect platform to operate performance-hungry back-end services, such as large database systems, ERP and CRM applications, e-commerce systems or a corporate messaging platform. Its integrated redundancy functions mean high-availability and constant efficient IT production - the main feature of this server platform. The exceptional extendability of the RX600 enables even more consolidation of servers and applications with state-of-the-art virtualization solutions and an excellent "best-in-class" efficiency.

MAIN FEATURES	BENEFITS
In contrast to the 7300 series, the new Xeon MP 7400 series provides up to 56% increased performance. Up to 256 GB memory for top virtualization and consolidation.	With 64-bit Intel Xeon MP and virtualization technology, the processor offers an easy start into 64-bit computing. Virtualization is a method used to consolidate a large number of small servers onto one larger server, thus simplifying manageability and making more efficient use of system resources
Integrated high-availability as standard: SAS RAID controller with 512 MB RAID cache, opt. BBU, Hot spare memory support and memory mirroring, enhanced ECC and SDDC, Hot-plug redundant fans and power supplies as standard, Up to 8x hot-plug 2.5-inch SAS hard disks, Hot-plug PCIe slots, LocalView display and integrated Remote Management Controller (iRMC S2) IPMI 2.0 as standard	Enhanced server reliability without extra cost, business continuity, more value for money as well as secured data safety.

Technical details

PRIMERGY RX600 S4

Housing type	Rack

Mainboard

Mainboard type	D 2244
Chipset	Intel® 7300
Processor quantity and type	1 - 4 x Intel® Xeon® processor 7200 / 7300 / 7400 series

Processor

Processor	Intel® Xeon® processor X7460 (Turbo: No, 1066 MHz, 130 W)	6C, 2.66 GHz, SLC: 3 x 3 MB, TLC: 16 MB
	Intel® Xeon® processor E7450 90 W)	6C, 2.40 GHz, SLC: 2 x 3 MB, TLC: 12 MB1066 MHz,
	Intel® Xeon® processor E7430 90 W)	4C, 2.13 GHz, SLC: 2 x 3 MB, TLC: 12 MB1066 MHz,
	Intel® Xeon® processor E7310	4C, 1.60 GHz, SLC: 2 x 4 MB, TLC: -1066 MHz, 80 W)
	Intel® Xeon® processor E7220	2C, 2.93 GHz, SLC: 2 x 4 MB, TLC: -1066 MHz, 80 W)

Memory slots	32 (4 memory boards with 8 slots each, 2 memory boards preinstalled)
Memory slot type	PC2-5300F (Fully buffered DIMM DDR2 667 ECC)
Memory capacity (min. - max.)	2 GB - 256 GB
Memory protection	Advanced ECC Hot-spare memory support Memory Scrubbing SDDC (Chipkill™) Memory Mirroring support

Memory options

Memory options	16 GB (2 module(s) 8 GB) DDR2, fully buffered, ECC, 667 MHz, PC2-5300F
	8 GB (2 module(s) 4 GB) DDR2, fully buffered, ECC, 667 MHz, PC2-5300F
	4 GB (2 module(s) 2 GB) DDR2, fully buffered, ECC, 667 MHz, PC2-5300F

Interfaces

USB ports	6 x USB 2.0 (3 x front, 2 x rear, 1 x internal)
Graphics (15-pin)	2 x VGA (1 x front, 1 x rear)
Serial connection	1 x serial RS-232-C (9-pin), usable for iRMC or system or shared
LAN / Ethernet (RJ-45)	4 x Gbit/s Ethernet
Service LAN (RJ45)	1 x dedicated service LAN port for iRMC S2 (10/100 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller

RAID Controller	Integrated RAID 5/6 Controller with 512 MB Cache and optional BBU
SATA Controller	ESB2-E
SATA Controller type notes	1x for DVD drive
LAN Controller	Intel® ESB2E/82575EB , 4 x 10/100/1000 Mbit/s Ethernet (I/O acceleration), VT-c (I/O acceleration und VMDq), PXE boot via LAN of PXE server
Remote Management Controller	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	FTMicro / 1.2

Slots

PCI-Express x8	4 x (1 x half length)
PCI-Express x4 (mech. x8)	4 x (1 x half length, one slot occupied with LSI 1078 RAID Controller)

Drive bays

Hard disk bays	8 x 2.5-inch hot-plug SAS
Accessible drive bays	1 x 5.25/0.5-inch for CD-RW/DVD 1 x 5.25/1.6-inch for backup devices

General system information

Number of fans	8
Fan configuration	hot plug

Operating panel

Operating buttons	On/off switch NMI button Reset button ID button
Status LEDs	System status (amber / yellow) Identification (blue) Hard disks access (green) Power (amber / green) At system rear side: System status (amber / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)
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 Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support

Operating system

Supported operating systems	Microsoft® Windows Server® 2008 Microsoft® Windows Server® 2003 Novell SUSE Linux Enterprise Server Red Hat Enterprise Linux Citrix® XenServer™ VMware Infrastructure VMware vSphere 4.0 Note: Support of other Linux derivatives on demand
Operating system release link	http://ts.fujitsu.com/software http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421

Server Management

Standard	ASR&R Automatic Server Recovery and Restart
	PDA Prefailure Detection and Anaylsis
	ServerView Suite:
	      SV Installation Manager
	      SV Operation Manager
	      SV RAID Manager
	      SV Update Management
	      SV Power Management
	      SV Agents
	Online update packages for BIOS, firmware drivers and ServerView Agents
	ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version)
	ServerView Deployment Manager (fully functional 30-day trial version)

Option	ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager iRMC S2 Advanced Pack
Server Management notes	Regarding operating system dependencies and product details for ServerView Suite software products, see the corresponding product data sheets.

Dimensions / Weight

Rack (W x D x H)	482.6 x 737 x 176 mm
Mounting Depth Rack	700 mm
Height Unit Rack	4 U
19" rackmount	Yes
Mounting Cable depth rack	100 mm (1000 mm Rack recommended)
Weight	up to 40 kg

Dimensions / Weight

Weight notes	Weight may vary depending on actual configuration
Rack integration kit	Rack integration kit as option
Floor-stand (W x D x H)	
Rack (W x D x H)	

Environmental

Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	55 dB(A) (idle) / 55 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	7.0 B (idle) / 7.0 B (operating)
Noise notes / description	at ambient temperature <23ºC
Operating ambient temperature	10 - 35°C
Operating relative humidity	10 - 85 % (non condensing)
Air flow rate	max. 6.5 m³/min

Electrical values

Power supply configuration	Redundant hot-plug power supplies as standard (1+1)
Max. output of power supply	1570 W
Hot-plug power supply redundancy	Yes
Rated voltage range	100 - 240 V
Rated frequency range	50 - 60 Hz
Rated current max.	5.44 A
Active power max. (per system unit)	1150 W
Apparent power max. (per system unit)	1305 VA
Heat emission	4140.0 kJ/h (3924.9 BTU)

Compliance

Germany	GS
Europe	CE
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Japan	VCCI
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.
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Components

Hard disk drives	SAS, 3 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 10000 rpm, hot-plug, 2.5-inch
	SAS, 3 GB/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. Accessible capacity may vary, also depending on used software
Tape Drives	DDS Gen6, 80 GB , 6 MB/s, half height, SCSI U160
	LTO3HH Ultrium, 400 GB , 60 MB/s, half height, SCSI U320
	LTO4HH Ultrium, 800 GB , 120 MB/s, half height, SAS 3Gb/s
Optical drives	Blu-ray combo drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	DVD Super Multi, (8x DVD/DVD+RW, 6x DVD-RW, 5x DVD-RAM; 24x CD/CD-R, 16x CD-RW), slimline, SATA I

SCSI / SAS Controller	SCSI Ctrl 320 MB 1ch int/ext PCIe x1
	SAS Ctrl 3 Gb 4 ports int. / 4 ports ext. PCIe x4
RAID Controller	RAID 5/6 Ctrl, SAS/SATA 3 Gb, LSI MegaRAID SAS8880E, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, no BBU support (based on LSI 1078)
	RAID 5/6 Ctrl, SAS/SATA 3 Gb, LSI MegaRAID SAS8880E, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, inclusive BBU (1078)
	Integrated RAID 0/1 Ctrl, SAS/SATA 3 Gb, 4 port int. RAID level: 0, 1, 1E, no BBU support , for internal SAS tapes (based on LSI 1064e)
Fibre Channel controller	Fibre Channel Ctrl 1 x 4 Gb Emulex LPe1150 MMF LC
	Fibre Channel Ctrl 2 x 4 Gb Emulex LPe11002 MMF LC
	Fibre Channel Ctrl 1 x 4 Gb Qlogic QLE2460 MMF LC
	Fibre Channel Ctrl 2 x 4 Gb Qlogic QLE2462 MMF LC
	Fibre Channel Ctrl 2 x 8 Gb Emulex LPe12002 MMF LC
	Fibre Channel Ctrl 1 x 8 Gb Emulex LPe1250 MMF LC
LAN Controller	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PF Server Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PT Server Adapter
	Ethernet Ctrl 2 x 10 Gb Intel® 10 Gigabit XF SR Dual Port Server Adapter
	Ethernet Ctrl 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter
	Ethernet Ctrl 4 x 1 Gb Intel® PRO/1000 PT Quad Port Server Adapter
Rack infrastructure	Cable Arm 2U for 3rd party racks
	Cable Management for 19-inch DataCenter / PRIMECENTER Racks
	Rackmount kit full extraction (760mm), tool less mounting

Warranty	
Standard Warranty	3 years
Service level	On-site Service (depending on country)
Maintenance and Support Services - the perfect extension	
Recommended Service	7x24, Onsite Response Time: 4h
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:
http://ts.fujitsu.com/aboutus
Take back and Recycling information:
http://ts.fujitsu.com/recycling