

Model: PARKS RED 21 Server PARKING SERVER

Server za instalaciju parking sistema predstavlja osnovnu komponentu za efikasno i pouzdano upravljanje parking prostorima. Dizajniran je da podrži složene aplikacije za kontrolu pristupa, naplatu parkinga, praćenje zauzetosti prostora i integraciju sa drugim infrastrukturnim sistemima. Kvalitetan hardver i softver omogućavaju brz i stabilan rad, čak i u uslovima intenzivne upotrebe. Ovaj server je optimizovan za kontinuirani rad 24/7, sa naprednim funkcijama za zaštitu podataka, mrežnu sigurnost i prilagodljivost budućim potrebama.



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 widelyused 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 SFF
Housing types	Rack	Rack
Storage drive architecture	max. 8x 3.5-inch SAS/SATA	max. 16x 2.5-inch SAS/SATA
Power supply	Hot-plug	Hot-plug

Mainboard

Mainboard type	D3169
Chipset	Intel® C600 (Intel® Patsburg A)
Processor quantity and type	1 - 2 x Intel® Xeon® processor E5-2400 v2 product family

Processor

Intel® Xeon® processor E5-2403v2 (4C/4T, 1.80 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,333 MHz, 80 W)
Intel® Xeon® processor E5-2407v2 (4C/4T, 2.40 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,333 MHz, 80 W)
Intel® Xeon® processor E5-2420v2 (6C/12T, 2.20 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 80 W)
Intel® Xeon® processor E5-2430Lv2 (6C/12T, 2.40 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 60 W)
Intel® Xeon® processor E5-2430v2 (6C/12T, 2.50 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 80 W)
Intel® Xeon® processor E5-2440v2 (8 Cores / 16 Threads, 1.90 GHz, TLC: 20 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 95 W)
Intel® Xeon® processor E5-2450Lv2 (10C/20T, 1.70 GHz, TLC: 25 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 60 W)
Intel® Xeon® processor E5-2450v2 (8C/16T, 2.50 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 95 W)
Intel® Xeon® processor E5-2470v2 (10C/20T, 2.40 GHz, TLC: 25 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 95 W)

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 (Chipkill™)

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 special release.
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Memory options	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, 1,600 MHz, PC3-12800, DIMM, single rank 16 GB (1 module(s) 16 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank
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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)
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) 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 I210, 2 x 1Gbit/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 / separate module; TCG V1.2 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 16 x 2.5-inch
Optional accessible drives	ODD 5.25" possible	LTO 5.25" or DAT/RDX 3.5" possible

General system information

Number of fans	2
Fan configuration	hot-plug / optional redundant
Fan notes	2 +1 redundant option, additional fan for 2nd CPU

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)

Server Management

Standard	<ul style="list-style-type: none"> ServerView Suite - Deploy <ul style="list-style-type: none"> SV Installation Manager SV Scripting Toolkit ServerView Suite - Control <ul style="list-style-type: none"> Operations Manager incl. PDA and ASR & R (Prefailure and Analysis; Automatic Server Recovery and Restart) Agents and CIM Providers System Monitor RAID Manager Capacity Management Power Management Storage Support ServerView Suite - Maintain <ul style="list-style-type: none"> Remote Management (iRMC) Update Management (BIOS, Firmware, Windows Drives and SV Agents) Performance Measurement Asset Management Online Diagnostics ServerView Suite - Integrate <ul style="list-style-type: none"> Integration packs e.g. for Microsoft System Center, VMware vCenter, Nagios, HP SIM and others
Option	<ul style="list-style-type: none"> 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) Resource Orchestrator Virtual Edition (ROR VE) Resource Orchestrator Cloud Edition (ROR CE) ServerView Suite - Integrate <ul style="list-style-type: none"> Integration pack for Fujitsu ManageNow® solution

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

Environmental

Operating ambient temperature	5 - 40 °C
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=e4813edf-4a27-461a-8184-983092c12dbe
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)
Noise notes	Noise emissions and operation modes depend on system configuration. Availability of the low noise mode depends on system configuration. To order an eligible system use the checkbox "Enabling low noise mode" in System Architect.

Electrical values

Power supply configuration	1-2x 450W/800W hot-plug power supply
Max. output of single power supply	450/800 W (94% or 96% efficiency)