Data Sheet
FUJITSU Server PRIMERGY RX2540 M5 Rack Server

The data center standard without compromise

Fujitsu offers a fantastic blend of systems, solutions and expertise to guarantee maximum productivity, efficiency and flexibility, delivering confidence and reliability. FUJITSU Server PRIMERGY systems deliver workload-optimized x86 industry standard servers for any workload and business demand. Since there is no single server solution to meet all these needs, Fujitsu offers a broad server portfolio consisting of expandable tower servers, versatile rack-mount servers, density-optimized multi-node servers as well as GPU servers purpose-built for the demands of AI and VDI. While all these systems are designed to handle multiple workloads, each server is optimized for specific use cases. Whatever the size of your business – large enterprise with multiple sites, or a small or medium-sized company with limited space and budget – with the right choice of server, your IT can become the business enabler you have always wanted it to be.

PRIMERGY RX2540 M5

The FUJITSU Server PRIMERGY RX2540 M5 sets higher standards for usability, scalability and cost efficiency. It is a 2U dual-socket rack server ideal for running enterprise applications, collaboration and messaging workloads as well as traditional databases. In addition, it substantially simplifies carrying out infrastructure-related tasks such as server virtualization and consolidation. As one of the key innovations, versatile performance is guaranteed by a new generation of processors. The PRIMERGY RX2540 M5 can be equipped with two of the Intel® Xeon® Processor Scalable Family CPUs with up to 28 cores each. The system can also be equipped with the new 2nd generation processors of the Intel® Xeon® Scalable Family (CLX-R) delivering industry-leading frequencies. Along with new DDR4 memory technology with up to 3TB and optionally up to 12x Intel® Optane™ DC Persistent Memory NV-DIMM modules it boosts application performance so that it copes with the increasing data growth and to shorten time to business results. The modular design of the server offers excellent expandability with up to 28 disk drives, high storage density, up to 8 PCIe Gen 3 I/O expansion slots. A variety of onboard DynamicLoM options, plus its dual-port embedded LAN meet future requirements, cost-optimized. The PRIMERGY RX2540 M5 comes with two redundant hot-plug power supply units, offering up to 96% energy efficiency. The Cool-safe® Advanced Thermal Design allows operation in ambient temperatures of up to 45 °C/104 °F. Having both these features helps to reduce operational expenses.

Features & Benefits

Main Features	Benefits
INNOVATION MEETS PERFORMANCE	
■ Wide choice of different types of Intel® Xeon® Scalable processors as well as new 2nd generation Intel® Xeon® Scalable processors. Each processor offers up to 28 cores, up to 56 threads, 12 memory channels enabling a significantly higher performance and efficiency. They rely on Intel® UltraPath Interconnect for an increased data rate between the CPUs. Intel® Optane™ DC persistent memory is an innovative memory technology that delivers a unique combination of affordable large capacity and persistence (non-volatility). It revolutionizes the data center memory-storage hierarchy of the past and brings massive data sets closer to the CPU for faster time to insight. In total, up to 7,680 GB main memory in a mixed mode (non-volatile memory + DDR4 @ 2,933 MT/s) are available. What's more is the support for up to 2x GPGPUs for fast processing.	■ Ready for data growth scenarios with the performance of the 2nd generation Intel® Xeon® Scalable processors deliver additional customer value and industry leading frequency (up to 3.9 GHz base and up to 44% more processor cache) for the most demanding workloads.
ENHANCED FEATURES FOR ENHANCED COMPUTING	
■ The RX2540 M5 comes with onboard LAN for basic LAN, DynamicLoM via OCP slot for extended requirements. A mix&match storage drive bay configuration offers the choice of either up to 8x 3.5-inch HDD/SSD + 1x ODD, 12x 3.5-inch or up to 24x 2.5-inch, up to 8x PCIe 2.5-inch SSD + an additional rear option of 4x 2.5-inch drives, complemented by internal M.2 devices for hypervisor installations. Our power supply units with up to 96% energy efficiency and Fujitsu's Cool-safe® Advanced Thermal Design for higher ambient temperatures in the data center are available for this server.	■ The right Ethernet connection for all: Basic via onboard LAN, extended with DynamicLoM via OCP guarantees the highest flexibility to integrate the server into existing infrastructures – now and in future without overhauling the existing infrastructure. Flexible expandability and diverse options for storage devices permits for the integration of existing and new SSD and HDD as needed.
INFRASTRUCTURE MANAGEMENT	
■ ISM is available with two licensing options: (1) ISM Advanced is the fully featured licensed version of ISM that provides comprehensive infrastructure management capabilities across datacenter. (2) ISM Essential provides a quick start to infrastructure management with essential monitoring and update functions.	■ Converged data center management that provides organizations centralized control over the entire infrastructure that includes servers, storage, networking, cloud management software as well as power and cooling using a single user interface.
REVOLUTIONIZING MEMORY AND STORAGE	
■ Intel® Optane™ persistent memory modules are DDR4 socket compatible and can co-exist with conventional DDR4 DRAM DIMMs on the same platform. They are available in capacities of 128 GB, 256 GB and 512 GB.	■ Optimize, store, and move larger, more complicated data sets with Intel® Optane™ technology. This revolutionary innovation bridges critical gaps in the storage and memory hierarchy delivering persistent memory, large memory pools, fast caching and fast storage.
PROTECT YOUR COMPANY WITH SECURE SERVERS	
■ PRIMERGY servers are equipped with beneficial features to protect against, detect and recover from security breaches (UEFI Secure Boot, TPM 2.0, signed firmware updates, agent-free device management, secure authorization and authentication, alerting and logging, secure Out of Band Management with iRMC S5, …).	■ PRIMERGY servers come with a wide variety of such robust security features and combine these capabilities with the best quality and efficiency, and more agility in daily operations helps to turn IT into a business advantage faster.

Technical details

PRIMERGY RX2540 M5					
Base unit	PRIMERGY RX2540 M5 LFF	PRIMERGY RX2540 M5 LFF	PRIMERGY RX2540 M5 SFF	PRIMERGY RX2540 M5 SFF	PRIMERGY RX2540 M5 SFF
Housing types	Rack	Rack	Rack	Rack	Rack
Storage drive architecture	4x 3.5-inch SAS/SATA	max. 12x 3.5-inch SAS/SATA/PCIe	16x 2.5-inch SAS/SATA/PCIe	8x 2.5-inch SAS/SATA/PCIe	24x 2.5-inch SAS/SATA
Power supply	Hot-plug	Hot-plug	Hot-plug	Hot-plug	Hot-plug
Product Type	Dual Socket Rack Server	Dual Socket Rack Server	Dual Socket Rack Server	Dual Socket Rack Server	Dual Socket Rack Server
Mainboard					
Mainboard type	D3384-B				
Chipset	Intel® C624				
Processor quantity and type	1 - 2 x Intel® Xeon® Bronze 3xxx processor / Intel® Xeon® Silver 4xxx processor / Intel® Xeon® Gold 5xxx processor / Intel® Xeon® Gold 6xxx processor / Intel® Xeon® Platinum 8xxx processor				
Intel® Xeon® Bronze Processor	Intel® Xeon® Bronze 3204 (6C, 1.90 GHz, TLC: 8.25 MB, Turbo: 1.90 GHz, 9.6 GT/s, Mem bus: 2,133 MHz, 85 W, AVX Base 1.50 GHz, AVX Turbo 1.50 GHz)				
	Intel® Xeon® Bronze 3206R (8C, 1.90 GHz, TLC: 11 MB, Turbo: 1.90 GHz, 9.6 GT/s, Mem bus: 2,133 MHz, 85 W, AVX Base 1.80 GHz, AVX Turbo 1.80 GHz)				
Intel® Xeon® Silver Processor	Intel® Xeon® Silver 4208 (8C, 2.10 GHz, TLC: 11 MB, Turbo: 2.50 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 85 W, AVX Base 1.60 GHz, AVX Turbo 2.00 GHz)				
	Intel® Xeon® Silver 4210 (10C, 2.20 GHz, TLC: 13.75 MB, Turbo: 2.70 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 85 W, AVX Base 1.90 GHz, AVX Turbo 2.30 GHz)				
	Intel® Xeon® Silver 4210R (10C, 2.40 GHz, TLC: 13.75 MB, Turbo: 2.90 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 100 W, AVX Base 1.90 GHz, AVX Turbo 2.40 GHz)				
	Intel® Xeon® Silver 4214 (12C, 2.20 GHz, TLC: 16.5 MB, Turbo: 2.70 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 85 W, AVX Base 1.80 GHz, AVX Turbo 2.40 GHz)				
	Intel® Xeon® Silver 4214R (12C, 2.40 GHz, TLC: 16.5 MB, Turbo: 3.00 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 100 W, AVX Base 2.10 GHz, AVX Turbo 2.70 GHz)				
	Intel® Xeon® Silver 4214Y (12C, 2.20 GHz, TLC: 16.5 MB, Turbo: 2.70 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 85 W, AVX Base 1.80 GHz, AVX Turbo 2.40 GHz)				
	Intel® Xeon® Silver 4215 (8C, 2.50 GHz, TLC: 11 MB, Turbo: 3.00 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 85 W, AVX Base 2.00 GHz, AVX Turbo 2.60 GHz)				
	Intel® Xeon® Silver 4215R (8C, 3.20 GHz, TLC: 11 MB, Turbo: 3.60 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 130 W, AVX Base 2.00 GHz, AVX Turbo 2.60 GHz)				
	Intel® Xeon® Silver 4216 (16C, 2.10 GHz, TLC: 22 MB, Turbo: 2.70 GHz, 9.6 GT/s, Mem bus: 2,400 MHz, 100 W, AVX Base 1.40 GHz, AVX Turbo 2.30 GHz)				

Intel® Xeon® Gold Processor	Intel® Xeon® Gold processor 5215 (10C, 2.50 GHz, up to 3.0 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5215L (10C, 2.50 GHz, up to 3.0 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5217 (8C, 3.00 GHz, up to 3.4 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5218 (16C, 2.30 GHz, up to 2.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5218B (16C, 2.30 GHz, up to 2.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5218R (20C, 2.10 GHz, up to 2.9 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5220 (18C, 2.20 GHz, up to 2.7 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5220R (24C, 2.20 GHz, up to 2.9 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5220S (18C, 2.70 GHz, up to 2.7 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 5222 (4C, 3.80 GHz, up to 3.9 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6208U (16C, 2.90 GHz, up to 3.6 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6209U (20C, 2.10 GHz, up to 2.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6210U (20C, 2.50 GHz, up to 3.2 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6212U (24C, 2.40 GHz, up to 3.1 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6222V (20C, 1.80 GHz, up to 2.4 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6226 (12C, 2.70 GHz, up to 3.5 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6226R (16C, 2.90 GHz, up to 3.6 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6230 (20C, 2.10 GHz, up to 2.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6230R (26C, 2.10 GHz, up to 3.0 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6230T (20C, 2.10 GHz, up to 2.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6234 (8C, 3.30 GHz, up to 4.0 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6238 (22C, 2.10 GHz, up to 2.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6238L (22C, 2.10 GHz, up to 3.7 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6238R (28C, 2.20 GHz, up to 3.0 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6238T (22C/44T, 1.90 GHz, up to 2.7 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6240 (18C, 2.60 GHz, up to 3.3 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6240L (18C, 2.60 GHz, up to 3.3 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6240R (24C, 2.40 GHz, up to 3.2 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6240Y (18C, 2.60 GHz, up to 3.3 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6242 (16C, 2.80 GHz, up to 3.5 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6242R (20C, 3.10 GHz, up to 3.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6244 (8C, 3.60 GHz, up to 4.3 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6246 (12C, 3.30 GHz, up to 4.1 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6246R (16C, 3.40 GHz, up to 4.0 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6248 (20C, 2.50 GHz, up to 3.2 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6248R (24C, 3.00 GHz, up to 3.6 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6250 (8C, 3.90 GHz, up to 4.5 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6252 (24C, 2.10 GHz, up to 2.8 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6254 (18C, 3.10 GHz, up to 3.9 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6256 (12C, 3.60 GHz, up to 4.3 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6258R (28C, 2.70 GHz, up to 3.4 GHz, 10.4 GT/s)
	Intel® Xeon® Gold processor 6262V (24C, 1.90 GHz, up to 2.5 GHz, 10.4 GT/s)

Intel® Xeon® Platinum Processor	Intel® Xeon® Platinum 8260 (24C, 2.40 GHz, TLC: 35.75 MB, Turbo: 3.10 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.90 GHz, AVX Turbo 2.60 GHz)
	Intel® Xeon® Platinum 8260L (24C, 2.40 GHz, TLC: 35.75 MB, Turbo: 3.10 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.90 GHz, AVX Turbo 2.60 GHz)
	Intel® Xeon® Platinum 8260Y (24C, 2.40 GHz, TLC: 35.75 MB, Turbo: 3.10 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.80 GHz, AVX Turbo 2.50 GHz)
	Intel® Xeon® Platinum 8268 (24C, 2.90 GHz, TLC: 35.75 MB, Turbo: 3.50 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.40 GHz, AVX Turbo 3.00 GHz)
	Intel® Xeon® Platinum 8270 (26C, 2.70 GHz, TLC: 35.75 MB, Turbo: 3.40 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 2.90 GHz)
	Intel® Xeon® Platinum 8276 (28C, 2.20 GHz, TLC: 38.5 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.70 GHz, AVX Turbo 2.60 GHz)
	Intel® Xeon® Platinum 8276L (28C, 2.20 GHz, TLC: 38.5 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.70 GHz, AVX Turbo 2.60 GHz)
	Intel® Xeon® Platinum 8280 (28C, 2.70 GHz, TLC: 38.5 MB, Turbo: 3.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 2.90 GHz)
	Intel® Xeon® Platinum 8280L (28C, 2.70 GHz, TLC: 38.5 MB, Turbo: 3.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 2.90 GHz)
Memory slots	24 (12 DIMMs per CPU, 6 channels with 2 slots per channel)
Memory slot type	DIMM (DDR4 / DDR-T for non-volatile memory modules)
Memory capacity (min. - max.)	8 GB - 7.5 TB
Memory protection	Advanced ECC Memory Scrubbing SDDC Rank sparing memory support Memory Mirroring support
Memory notes	Max. 6 slots populated with DCPMM modules per CPU, please see relevant system configurator for details. Memory Mirroring Mode with identical modules in both channel pairs of a bank (4 or 6 modules per bank) per CPU. Rank Sparing Mode with minimum of 2 modules single ranked (1R) or dual ranked (2R) or 1 module quad ranked (4R) per CPU.
Standard memory modules	8 GB (1 module(s) 8 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 1Rx8
	16 GB (1 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx8
	16 GB (1 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 1Rx4
	32 GB (1 module(s) 32 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx4
	64 GB (1 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx4
	128 GB (1 module(s) 128 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4
	64 GB (1 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4
Standard memory modules (for use in combination with non-volatile memory modules)	96 GB (6 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 1Rx4
	64 GB (4 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 1Rx4
	128 GB (8 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 1Rx4
	192 GB (6 module(s) 32 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx4
	128 GB (4 module(s) 32 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx4
	256 GB (8 module(s) 32 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx4
	768 GB (6 module(s) 128 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4
	384 GB (6 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4
	256 GB (4 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4
	512 GB (8 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4

Non-volatile memory modules	128 GB (1 module(s) 128 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 1Rx4
	256 GB (2 module(s) 128 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 1Rx4
	512 GB (2 module(s) 256 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 2Rx4
	512 GB (4 module(s) 128 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 1Rx4
	1024 GB (4 module(s) 256 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 2Rx4
	2048 GB (4 module(s) 512 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 4Rx4
	768 GB (6 module(s) 128 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 1Rx4
	1536 GB (6 module(s) 256 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 2Rx4
	3072 GB (6 module(s) 512 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 4Rx4

Interfaces	
USB 3.x ports	5 x USB 3.0 (2x front, 2x rear, 1x internal) - for base units with max. drives count: 1x USB 2.0 front only
Graphics (15-pin)	2 x VGA (thereof 1x front optional)
Serial 1 (9-pin)	1 x serial RS-232-C optional, usable for iRMC or system or shared
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S5 (10/100/1000 Mbit/s) Management LAN traffic can be switched to shared onboard LAN controller port, speed and connector is related to installed interface card.

Onboard or integrated Controller	
RAID controller	All hardware storage controller options are described under Components For dedicated base units front AND rear storage drives may be connected to a single controller. Please see SystemArchitect for configuration options and restrictions.
SATA Controller	Intel® C624, 1 x SATA channel for ODD
LAN Controller	Intel® C624 2 x 1 Gbit/s onboard Optional DynamicLoM OCP adaptors: 4 x 1 Gbit/s Ethernet (RJ45) 2 x 10 Gbit/s Ethernet (RJ45) 2 x 10 Gbit/s SFP+ 4 x 10 Gbit/s SFP+ All supported features are described in relevant system configurator.
Remote management controller	Integrated Remote Management Controller (iRMC S5, 512 MB attached memory incl. graphics controller) IPMI 2.0 compatible
GPU / coprocessor	GFX/GPU support for dedicated base units. Please see relevant SystemArchitect for details and restrictions.
Onboard controller notes	Onboard 8x S-ATA 6Gbit/s RAID Controller (RAID 0,1) for up to 8x S-ATA drives available.
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)

Slots	
PCI-Express 3.0 x8	3 x Low profile (2nd processor required for slot 4)
PCI-Express 3.0 x16	3 x Low profile (2nd processor required for slot 5 and 6)
Slot Notes	One PCIe Gen3 x8 slot may be occupied with a Modular RAID controller if configured. Important: 3 PCIe slots are supported with the first processor. 6 PCIe slots are supported with two processors. PCIe riser card options can expand number of slots by two (max. 8 in total) and support max. 4 full height slots. Possible slot length described in relevant system configurator.

Drive bays	
Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA
Accessible drive bays	1 x 5.25/0.4-inch for CD-RW/DVD
Notes accessible drives	All possible options described in relevant system configurator.
Optional hard disk bays	4x 2.5-inch hot-plug SAS/SATA rear option

Drive bays (Base unit specific)					
Storage drive bays	4 x 3.5-inch hot-plug SAS/SATA	12 x 3.5-inch hot-plug SAS/SATA	16 x 2.5-inch hot-plug SAS/SATA	8 x 2.5-inch hot-plug SAS/SATA	24 x 2.5-inch hot-plug SAS/SATA
Accessible drive bays	1 x 5.25/0.4-inch for CD-RW/DVD		1 x 5.25/0.4-inch for CD-RW/DVD	1 x 5.25/0.4-inch for CD-RW/DVD	
Optional accessible drives	ODD 5.25" possible	ODD 5.25" NOT possible	ODD 5.25" possible	ODD 5.25" possible	ODD 5.25" NOT possible

General system information	
Number of fans	6

General system information	
Fan configuration	redundant / hot-plug
Fan notes	3x2 redundant
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	UEFI compliant Legacy BIOS compatibility customer configuration option Secure boot support ROM based setup utility GPT support for boot drives larger than 2.2 TB Memory Redundancy support (Mirroring, Sparing) IPMI support 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 IPv4/IPv6 remote PXE & iSCSI boot support Cryptographically Signed BIOS Firmware Update HTTP and HTTPS Boot PCIe Bifurcation configurable
Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Windows Server 2019 Datacenter
	Windows Server 2019 Standard
	Windows Server 2019 Essentials
	Windows Server Datacenter, version 1809
	Windows Server Standard, version 1809
	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
	VMware vSphere™ 7.0
	VMware vSphere™ 6.7
	VMware vSphere™ 6.5
	SUSE® Linux Enterprise Server 12
	Red Hat® Enterprise Linux 8
	Red Hat® Enterprise Linux 7
	Oracle® Linux 7
	Oracle® VM 3
	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

Infrastructure and Server Management	
DC Infrastructure Management	Infrastructure Manager (ISM) Essential Advanced
Server Management	Infrastructure Manager (ISM) Essential Advanced ServerView Suite
Management notes	For further information regarding ISM and ServerView Suite see dedicated data sheets.
Manageability link	http://docs.ts.fujitsu.com/dl.aspx?id=9e92297a-16fb-4c69-8559-e38e7b42fee6
Dimensions / Weight	
Rack (W x D x H)	482.4 mm (Bezel) / 445 mm (Body) x 770 x 86.6 mm
Mounting Depth Rack	740 mm
Height Unit Rack	2 U
19" rackmount	Yes
Mounting Cable depth rack	200 mm (1,000 mm Rack recommended)
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 - 45 °C (41 - 113 °F)
Operating temperature note	Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. Please use the Fujitsu WebArchitect (www.fujitsu.com/configurator/public) to get detailed information on the corresponding configurations. Ambient temperature limitation may differ for liquid cooled models. Please refer to the SystemArchitect for detailed information.
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)	Typical noise : 43 dB(A) (idle) / 43 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	Typical noise : 6.1 B (idle) / 6.0 B (operating)
Noise notes	Noise emissions depends on operation modes, system configuration and ambient temperature. Typical hardware configuration which is the base for measurement according to ISO 7779: 2x PSU 450W. 2x CPU Xeon 85W, 4x RAM 16GB, 2x HDD 500GB SATA, 6x LAN 1 Gbit/s
Electrical values	
Power supply configuration	1 x hot-plug power supply or 2x hot-plug power supply for redundancy
Hot-plug power supply redundancy	Optional
Active power (max. configuration)	715 W
Apparent power (max. configuration)	753 VA
Heat emission (max. configuration)	2574.0 kJ/h (2439.7 BTU/h)
Rated current max.	7.68 A (100 V) / 2.98 A (240 V)
Active power note	To estimate the power consumption of different configurations use the Fujitsu Product Configurator: www.fujitsu.com/configurator/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 1200W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz; 110V range: 1000W, less than 110V: 900W 800W hot-plug, 92% (equivalent to Gold efficiency) –48V DC 1300W hot plug, 94% (equivalent to Platinum efficiency) 380V DC
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	
Product	PRIMERGY RX2540 M5
Model	PR300D

Compliance	
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronical equipment)
Germany	GS
Europe	CE
USA/Canada	CSAc/us FCC Class A ICES-003 / NMB-003 Class A
Japan	VCCI:V3 Class A + JIS 61000-3-2
Russia	EAC
South Korea	KC
China	CCC
Australia/New Zealand	RCM
Taiwan	BSMI
India	BIS R41004006
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	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
	LTO7HH Ultrium, 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	Blu-ray Disc™ Triple Writer, (6x BD-RW, 8x DVD, 24x CD), ultraslim, SATA I
	DVD Super Multi ultra slim , (8x DVD; 24x CD), ultraslim, SATA I
Hard disk drives	HDD SATA, 6 Gb/s, 16 TB, 7,200 rpm, 512e, hot-plug, 3.5-inch, business critical
Solid-State-Drive	SSD SAS, 12 Gb/s, 400 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 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 CP403i SAS Ctrl. 12 Gbit/s 8 ports int. PCIe 3.0 x8
	Fujitsu PSAS CP400i SAS Ctrl. 12 Gbit/s 8 ports int. PCIe 3.0 x8
	Broadcom® PSAS CP503i LP SAS Ctrl. 12 Gbit/s 8 ports int. PCIe 3.0 x8

RAID Controller	pre-configured RAID6 Array, RAID level: ,
	pre-configured RAID6+HS Array, RAID level: ,
	pre-configured RAID5 Array, RAID level: ,
	pre-configured RAID5+HS Array, RAID level: ,
	pre-configured RAID1 Array, RAID level: ,
	pre-configured RAID1 Array for M.2 in PDUAL, RAID level: ,
	pre-configured RAID1+HS Array, RAID level: ,
	pre-configured RAID1+0 Array, RAID level: ,
	pre-configured RAID1+0+HS Array, RAID level: ,
	pre-configured RAID0 Array, RAID level: ,
	Fujitsu PRAID EP580i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 Gbit/s 16 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 8 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP540i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 Gbit/s 16 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 4 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP540e LP, RAID 5/6 Ctrl., SAS 12 Gbit/s, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 4 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP540e FH, RAID 5/6 Ctrl., SAS 12 Gbit/s, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 4 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP520i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP420i, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID EP420i for SafeStore, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID EP400i, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU based on LSI SAS3108
	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 32 Gbit/s Cavium QLE2740 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 32 Gbit/s Cavium QLE2742 MMF LC-style
	Fibre Channel Host Bus Adapter 1 x 32 Gbit/s Emulex LPe32000-M6-F MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 32 Gbit/s Emulex LPe32002-M6-F MMF LC-style
	Fibre Channel Host Bus Adapter 1 x 16 Gbit/s Qlogic QLE2690 LC-style
	Fibre Channel Host Bus Adapter 2 x 16 Gbit/s Qlogic QLE2692 LC-style
	Fibre Channel Host Bus Adapter 1 x 16 Gbit/s Emulex LPe31000-M6-F MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 16 Gbit/s Emulex LPe31002-M6-F MMF LC-style

Communication, Network	Converged Network Adapter 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Cavium)
	Ethernet Ctrl. 1 x 100 Gbit/s PCIe 3.0 x16 QSFP28 (Cavium)
	Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Cavium)
	Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 SFP+ (Cavium)
	Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Cavium)
	Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Mellanox)
	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 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Cavium)
	Ethernet Ctrl. 4 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Intel®)
	Ethernet Ctrl. 4 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 SFP+ (Cavium)
	Ethernet Ctrl. 4 x 10 Gbit/s PCIe 3.0 x8 SFP+ (Intel®)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®)
	InfiniBand HCA 1 x 100 Gbit/s PCIe 3.0 x16 QSFP for the US market max. one IB HCA 100Gb controller can be installed (Mellanox)
	InfiniBand HCA 2 x 100 Gbit/s PCIe 3.0 x16 QSFP for the US market max. one IB HCA 100Gb controller can be installed (Mellanox)
	Interface modul for Dynamic LoM 2 x 10 Gbit/s RJ45 (Intel®)
	Interface modul for Dynamic LoM 2 x 10 Gbit/s SFP+ (Intel®)
	Interface modul for Dynamic LoM 4 x 10 Gbit/s SFP+ (Intel®)
	Interface modul for Dynamic LoM 4 x 1 Gbit/s RJ45 (Intel®)
	Omni Path 1 x PCIe 3.0 x16 (Intel®)
Graphics add on cards	NVIDIA® Tesla® T4 LP, 2560 cores, PCIe 3.0 x16, -
	NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3 x miniDP
Rack infrastructure	Rackmount kit full extraction (820mm), tool less mounting, length variable 559-914mm
	Rack Mount Kit
	Cable Arm 2U for PRIMECENTER- and 3rd-party racks
Warranty	
Warranty period	3 years
Warranty type	Onsite warranty
Warranty Terms & Conditions	www.fujitsu.com/support
Product Support 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
Service Weblink	http://www.fujitsu.com/emeia/products/product-support-services/

More information

Fujitsu products, solutions & services

In addition to FUJITSU Server PRIMERGY RX2540 M5, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Built 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 offerings. This allows customers to select 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/products/computing/

Software
www.fujitsu.com/software/

More information

Learn more about FUJITSU Server PRIMERGY RX2540 M5, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/primergy

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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