

# Data Sheet FUJITSU Server PRIMERGY RX4770 M6 Rack Server

# Backend Infrastructure Powering Digital Transformation

Fujitsu offers a fantastic blend of systems, solutions and expertise to quarantee 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 Al. 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 RX4770 M6

The FUIITSU Server PRIMERGY RX4770 M6 is a guad-socket x86 system providing superior levels of scalability in a 3U chassis. The PRIMERGY RX4770 M6 accelerates business insights and delivers unprecedented performance for inmemory database, Cloud services and analytics. Powered by the 3rd Generation Intel® Xeon® Scalable Processors with up to 28 cores/CPU and large memory capacity provided by 48 DIMM slots in total supporting 15 TB memory, the server delivers outstanding results for demanding applications. Beside the DDR4 modules with memory speeds up to 3,200 MT/s, it is also possible to combine them with Intel® Optane™ persistent memory 200 series that delivers a unique combination of affordable large capacity and support for data persistence. The RX4770 M6 offers versatile resources that allows to meet changing business demands. Up 24x 2.5" SAS/ SATA/NVMe options provide enough capacity to

handle storage demanding applications. The possibility of using up to two double width, full-length GPU cards helps to accelerate graphicintensive applications and 11 PCI-Express Gen3 slots increases bandwidth and provides sufficient expandability for even faster insights. Even as your workloads and administration tasks become more complex, the Fujitsu Infrastructure Manager (ISM) as well as the integrated Remote Management Controller (iRMC S5) simplifies management of your server and the whole IT infrastructure so you can focus on your business objectives. ISM enables organizations to have centralized control over the entire data center which includes servers, storage, networking as well as cloud management software using a single user interface. Integrated security and proven reliability helps to ensure maximum uptime in your enterprise data center. The PRIMERGY RX4770 M6 is the ideal server for business-critical workloads, large-scale virtualization, back-end and in-memory databases such as SAP HANA and general data-intensive applications where the right performance, reliability and efficiency are essential.















**vm**ware

# Features & Benefits

### Main Features

### POWER YOUR BUSINESS-CRITICAL WORKLOADS

Wide choice of different available types of 3rd Generation Intel® Xeon® Scalable processors. Each processor offers up to 28 cores, 12 memory channels, up to 6 Intel® Ultra Path Interconnect (Intel® UPI) and PCI Express 3 with up to 48 lanes (per socket) enabling a significantly higher performance and efficiency.

### SCALABLE APPLICATION PERFORMANCE

New Intel<sup>®</sup> Optane<sup>™</sup> persistent memory 200 series improves workload performance and power efficiency while reducing data loss and downtime with enhanced error handling. The modules revolutionizes the data center memory-storage hierarchy of the past and bring massive data sets closer to the CPU for faster time to insight. In total, up to 15 TB GB main memory in a mixed mode (non-volatile memory + DDR4 @ 3,200 MT/s) are available.

# FLEXIBLE EXPANDABILITY AND RELIABILITY

■ PRIMERGY RX4770 M6 comes with DynamicLoM via OCP V3 as well as flexible PCIe riser cards with support for up to 11 x PCIe Gen3 slots. Different available base units with 8x 2.5-inch, 16x 2.5-inch or up to 24x 2.5-inch storage drive bays provide massive expandability. In addition, it is possible to equip the system with up to 2 double width full length GPU cards. Built-in redundancy and hot-pluggable components, Advanced ECC, Memory Scrubbing and SDDC ensure reliable and fail-safe operation.

### SECURE AND RELIABLE

PRIMERGY servers are equipped with beneficial features to protect against, detect and recover from security breaches (PFR, 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, ...).

# AGILE INFRASTRUCTURE MANAGEMENT

■ Infrastructure Manager (ISM) provides seamless, holistic management ensuring that IT infrastructures retain the dynamic flexibility required to support ever-changing business demands. Two versions of ISM are available. ISM Advanced is a powerful, fully featured version offering comprehensive infrastructure management capabilities such as support for multiple hardware configurations, physical and virtual network connection indicators and firmware baseline updates. A free entry-level version, ISM Essential, provides essential monitoring and firmware update of all supported devices, including servers, storage and network switches.

### **Benefits**

- PRIMERGY RX4770 M6 server provides 4 processor computing in a 3U form factor, accelerates business insights and delivers maximum performance per node with highest memory bandwidth and IO lanes for your most demanding applications. Moreover, a flexible processor tray allows to start with two CPU's and scale to four processors in the future saving on upfront costs.
- Address large data sets with up to 48 DIMMs (24 of which can be Intel® Optane™ PMem) and up to 15 TB of memory. Intel® Optane™ persistent memory provide fast, high capacity and cost effective memory for memory intensive workloads such as Al and data analytics.
- The flexible drive cage design supports up to 24x 2.5" SAS/ SATA/NVMe storage drives. Sufficient expandability for future requirements is guaranteed by PCIe 3.0 expansion slots for graphical processing units (GPUs) and all kinds of networking cards offering increased I/O bandwidth and to be able to cope with graphic-intensive applications. Choice of DynamicLoM adapters offers range of networking bandwidth (1GbE to 25GbE) to be able to adapt and grow to changing business needs.
- The integrated Platform Firmware Resilience (PFR) feature provides a platform root of trust and thus helps to protect platform firmware, detect corruptions, and restore back to a known-good state.
- Infrastructure Manager (ISM) enables organizations to have centralized control over the entire data center that includes servers, storage, networking, cloud management software as well as power and cooling using a single user interface.

# Technical details

PRIMERGY RX4770 M6				
Base unit	PRIMERGY RX4770 M6	PRIMERGY RX4770 M6	PRIMERGY RX4770 M6	PRIMERGY RX4770 M6
Housing types	Rack	Rack	Rack	Rack
Storage drive architecture	8x 2.5-inch SAS/SATA/PCIe	16x 2.5-inch SAS/SATA/PCIe	24x 2.5-inch SAS/SATA/PCIe	16x 2.5-inch SAS/SATA/PCIe
Power supply	Hot-plug	Hot-plug	Hot-plug	Hot-plug
Product Type	Quad Socket Rack Server	Quad Socket Rack Server	Quad Socket Rack Server	Quad Socket Rack Server
Notes				Platform Firmware Resilience Model
Mainboard				
Mainboard type	D3892			
Chipset	Intel® C621A			
Processor quantity and type	2 or 4 x Intel® Xeon® Gold 5 processors / Intel® Xeon® P	53xxH processors / Intel® Xeon latinum 83xxHL processors	© Gold 63xxH processors / Interpretation	l® Xeon® Platinum 83xxH
Intel® Xeon® Gold Processor	Intel® Xeon® Gold 5318H( AVX Base 2.10 GHz, AVX Tui	18C, 2.50 GHz, TLC: 24.75 MB, rbo 3.20 GHz)	Turbo: 3.30 GHz, 10.4 GT/s, M	em bus: 2,667 MHz, 150 W,
	Intel® Xeon® Gold 5320H( Base 2.00 GHz, AVX Turbo 3	20C, 2.40 GHz, TLC: 27.5 MB, T 3.20 GHz)	Turbo: 3.30 GHz, 10.4 GT/s, Me	m bus: 2,667 MHz, 150 W, A
	Intel® Xeon® Gold 6328H( Base 2.40 GHz, AVX Turbo 3	16C, 2.80 GHz, TLC: 22 MB, Tur 3.70 GHz)	bo: 3.70 GHz, 10.4 GT/s, Mem	bus: 2,933 MHz, 165 W, AV
	Intel® Xeon® Gold 6328HL (16C, 2.80 GHz, TLC: 22 MB, Turbo: 3.70 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, A Base 2.40 GHz, AVX Turbo 3.70 GHz)			
	Intel® Xeon® Gold 6330H (24C, 2.00 GHz, TLC: 33 MB, Turbo: 2.80 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 150 W, AV Base 1.6 GHz, AVX Turbo 2.7 GHz)			
	Intel® Xeon® Gold 6348H( Base 1.90 GHz, AVX Turbo 3	24C, 2.30 GHz, TLC: 33 MB, Tur 3.10 GHz)	bo: 3.10 GHz, 10.4 GT/s, Mem	bus: 2,933 MHz, 165 W, AV
ntel® Xeon® Platinum Processor	Intel® Xeon® Platinum 835 W, AVX Base 2.70 GHz, AVX	4H (18C, 3.10 GHz, TLC: 24.75 Turbo 3.60 GHz)	MB, Turbo: 4.00 GHz, 10.4 GT	/s, Mem bus: 3,200 MHz, 20
	Intel® Xeon® Platinum 835 W, AVX Base 3.60 GHz, AVX	6H (8C, 3.90 GHz, TLC: 35.75 <i>l</i> Turbo 4.10 GHz)	MB, Turbo: 4.30 GHz, 10.4 GT/s	, Mem bus: 3,200 MHz, 190
	Intel® Xeon® Platinum 836 AVX Base 2.60 GHz, AVX Tui	OH (24C, 3.0 GHz, TLC: 33 MB, rbo 3.40 GHz)	Turbo: 3.80 GHz, 10.4 GT/s, M	em bus: 3,200 MHz, 225 W,
	Intel® Xeon® Platinum 836 AVX Base 2.60 GHz, AVX Tui	OHL (24C, 3.0 GHz, TLC: 33 ME rbo 3.40 GHz)	3, Turbo: 3.80 GHz, 10.4 GT/s, <i>N</i>	Mem bus: 3,200 MHz, 225 W
	Intel® Xeon® Platinum 8376H (28C, 2.60 GHz, TLC: 38.5 MB, Turbo: 3.50 GHz, 10.4 GT/s, Mem bus: 3,200 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 3.30 GHz)			
	Intel® Xeon® Platinum 8376HL (28C, 2.60 GHz, TLC: 38.5 MB, Turbo: 3.50 GHz, 10.4 GT/s, Mem bus: 3,200 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 3.30 GHz)			
	Intel® Xeon® Platinum 8380H (28C, 2.90 GHz, TLC: 38.5 MB, Turbo: 3.80 GHz, 10.4 GT/s, Mem bus: 3,200 MHz, 250 W, AVX Base 2.50 GHz, AVX Turbo 3.30 GHz)			
	Intel® Xeon® Platinum 838 W, AVX Base 2.50 GHz, AVX	OHL (28C, 2.90 GHz, TLC: 38.5 Turbo 3.30 GHz)	MB, Turbo: 3.80 GHz, 10.4 GT/	's, Mem bus: 3,200 MHz, 250
Processor notes	A mimimum of 2 processors	s must be configured, no mix o	of different processor types	
Memory slots	48 (12 DIMMs per CPU, 6 ch	nannels with 2 slots per chann	el)	
Memory slot type	DIMM (DDR4 RDIMM, LRDIA	MM and Intel® Optane™ PMem	1)	
Memory capacity (min max.)	16 GB - 15 TB	·		
Memory protection	ECC			
	Memory Scrubbing			
	SDDC	DAM Davica Correction		
	ADDDC (Adaptive Double D Memory Mirroring support	IVAINI DEVICE COHECHOII)		
Memory notes	, , , , , , , , , , , , , , , , , , , ,	n PMem modules per CPU, plea	se see relevant system config	urator for details.
		http://www.fuiitsu	.com/emeia/products/computing	/servers/primerov/rack/rv6770

Standard memory modules		(s) 8 GB) DDR4, registered, EC		
		ıle(s) 128 GB) DDR4, registere	· · · · · · · · · · · · · · · · · · ·	<u> </u>
		e(s) 16 GB) DDR4, registered,		
	16 GB (1 modul	e(s) 16 GB) DDR4, registered,	ECC, 3,200 MT/s, PC4-3200, I	DIMM, 1Rx4
	32 GB (1 modul	e(s) 32 GB) DDR4, registered,	ECC, 3,200 MT/s, PC4-3200, I	DIMM, 2Rx4
	64 GB (1 modul	e(s) 64 GB) DDR4, registered,	ECC, 3,200 MT/s, PC4-3200, I	DIMM, 4Rx4
	64 GB (1 modul	e(s) 64 GB) DDR4, registered,	ECC, 3,200 MT/s, PC4-3200, I	DIMM, 2Rx4
	256 GB (1 modu	ıle(s) 256 GB) DDR4, registere	d, ECC, 3,200 MT/s, PC4-3200	O, DIMM, 8Rx4
	1536 GB (6 mod	dule(s) 256 GB) DDR-T, registe	red, ECC, 3,200 MT/s, NVM, D	CPMM, 2Rx4
	192 GB (6 modu	ıle(s) 32 GB) DDR4, registered	, ECC, 3,200 MT/s, PC4-3200,	DIMM, 2Rx4
	3072 GB (6 mod	dule(s) 512 GB) DDR-T, registe	red, ECC, 3,200 MT/s, NVM, D	CPMM, 4Rx4
	384 GB (6 modu	ıle(s) 64 GB) DDR4, registered	, ECC, 3,200 MT/s, PC4-3200,	DIMM, 4Rx4
		ıle(s) 64 GB) DDR4, registered		
		ıle(s) 128 GB) DDR4, registere		
		ıle(s) 128 GB) DDR-T, registere		
		ıle(s) 128 GB) DDR4, registere		
Interfaces				
USB 3.0 ports	5 x USB 3.0 (2x	front, 2x rear, 1x internal)		
Graphics (15-pin)	2 x VGA (1 x front, 1 x rear)			
Serial 1 (9-pin)	1 x RS-232-C			
Management LAN (RJ45)	1 x dedicated m	anagement LAN port for iRMC	S5 (10/100/1000 Mbit/s)	
Onboard or integrated Controller				
RAID controller	All hardware sto	rage controller options are de	scribed under Components	
SATA Controller	Intel® C621A, 1x SATA channel for ODD, 2x SATA channel for M.2 and 8x SATA channel for HDD/SSD			
.AN Controller	Optional OCP ad 2 x 10 Gbit/s 2 x 10 Gbit/s 4 x 10 Gbit/s 2 x 25 Gbit/s 2x 100 Gbit/s All LAN controlle	Ethernet (RJ45) SFP+ SFP+ QSFP28 GSFP28 ers (for OCP slots and PCIe slot	· .	onents.
Remote management controller	For details, please refer to the relevant system configuration guide.  Integrated Remote Management Controller (iRMC S5, 512 MB attached memory incl. graphics controller)  IPMI 2.0 compatible			
Trusted Platform Module (TPM)	· · · · · · · · · · · · · · · · · · ·	2.0 module; TCG compliant (op	tion)	
ilots				
PCI-Express 3.0 x16	11 x whereas 4x full height and 7x low profile			
Slot Notes	Important note: 7 PCIe slots are supported with the first and second processor. Additional 4 PCIe slots are supported with the third and forth processors.  Slot 1&2: PCIe Gen3 x16 @CPU4 for full height profile cards Slot 3&4: PCIe Gen3 x8 / Slot 5: PCIe Gen3 x16 @CPU1 for low profile cards Slot 7&8: PCIe Gen3 x8 / Slot6&9: PCIe Gen3 x16 @CPU2 for low profile cards Slot 10&11: PCIe Gen3 x16 @CPU3 for full height cards			
PCI-Express 3.0 x4				
PCI-Express 3.0 x8	4 x	4 x	4 x	4 x
PCI-Express 3.0 x16	7 x	7 x	7 x	7 x
Drive bays				
Storage drive bays	2.5-inch hot-plu 2 x M.2 slots	g SAS/SATA/PCIe		
Notes accessible drives	All possible opti	ons described in relevant syste	em configurator.	
	1 x 5.25/9.5mm for DVD-RW/Blu-ray			

Drive bays (Base unit specific)				
Storage drive bays	8 x 2.5-inch hot-plug SAS/ SATA/PCIe	16 x 2.5-inch hot-plug SAS/ SATA/PCle	24 x 2.5-inch hot-plug SAS/ SATA/PCIe	16 x 2.5-inch hot-plug SAS/ SATA/PCIe
General system information				
Number of fans	4			
Fan configuration	hot-plug			
Operating panel				
Operating buttons	On/off switch NMI button Reset button ID button			
Status LEDs	At system front side: Power (DC-On: green / AC-O Global error (orange) Identification (blue) Hard disks access (green) CSS (orange) At system rear side: System status (green) CSS (orange) Identification (blue) Global error (orange) LAN connection (green) LAN speed (green / yellow)	n: white)		
BIOS				
	IPv4/IPv6 remote PXE & iSCS Cryptographically Signed BIO HTTP and HTTPS Boot PCle Bifurcation configurabl	ort (Mirroring) ore I device n Linux versions a ServerView Update Manager ol boot support OS Firmware Update		
Operating Systems and Virtualization Sc	oftware			
Operating system release link	http://docs.ts.fujitsu.com/dl	.aspx?id=d4ebd846-aa0c-478l	b-8f58-4cfbf3230473	
Operating system notes	Support of other Linux deriv	ratives on demand		
Infrastructure and Server Management				
DC Infrastructure Management	Infrastructure Manager (ISN Essential Advanced	1)		
Server Management	Infrastructure Manager (ISM Essential Advanced ServerView Suite	1)		
Management notes	For further information rega	ording ISM and ServerView Suit	e see dedicated data sheets.	
Manageability link		.aspx?id=9e92297a-16fb-4c69		
Dimensions / Weight				
Dimensions / Weight Rack (W x D x H)	482.7 mm (Bezel) / 435 mm	n (Body) x 800 x 129 4 mm		
Dimensions / Weight Rack (W x D x H) Mounting Depth Rack	482.7 mm (Bezel) / 435 mn 830.7 mm	n (Body) x 800 x 129.4 mm		

rackmount Yes  ght max. 40 kg  Actual weight may vary depending on configuration  restand (W x D x H)  es  Platform Firmware Resilience Model  ronment  rating temperature note  Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. For deteinformation see relevant system configurator.  rating environment  FTS 04230 – Guideline for Data Center (installation specification)  rating environment link  http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe  e emission  Measured according to ISO 7779 and declared according to ISO 9296  rid pressure (LpAm)  40.6 dB(A) (idle) / 47.7 dB(A) (operating) typical Values	ailed		
max. 40 kg Actual weight may vary depending on configuration  Rack integration kit Rack integration kit as option  Platform Firmware Resilience Model  ronment  rating temperature note information see relevant system configurator.  rating environment  FTS 04230 – Guideline for Data Center (installation specification)  rating environment link http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe  e emission Measured according to ISO 7779 and declared according to ISO 9296  do pressure (LpAm)  40.6 dB(A) (idle) / 47.7 dB(A) (operating) typical Values	ailed		
Actual weight may vary depending on configuration  Rack integration kit Rack integration kit as option  Platform Firmware Resilience Model  Platform Firmware Resilience Model  Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. For det information see relevant system configurator.  Tating relative humidity  To - 85 % (non condensing)  Tating environment  FTS 04230 – Guideline for Data Center (installation specification)  Tating environment link  http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe  The emission Measured according to ISO 7779 and declared according to ISO 9296  To Home Add Pressure (LpAm)  Actual weight may vary depending on configuration  Rack integration kit as option  Platform Firmware Resilience  Model  To Hot No Cool Below 10 °C) depending on configuration. For determinent  To Above 35 °C or below 10 °C) depending on configuration. For determinent  To Above 35 °C or below 10 °C) depending on configuration. For determinent  To Above 35 °C or below 10 °C) depending on configuration. For determinent  To Above 35 °C or below 10 °C) depending on configuration. For determinent  To Above 35 °C or below 10 °C) depending on configuration. For determinent  To Above 35 °C or below 10 °C) depending on configuration. For determinent  To Above 35 °C or below 10 °C) depending on configuration. For determinent  To Above 36 °C or below 10 °C) depending on configuration. For determinent  To Above 37 °C or below 10 °C) depending on configuration. For determinent  To Above 37 °C or below 10 °C) depending on configuration. For determinent  To Above 38 °C or below 10 °C) depending on configuration. For determinent  To Above 38 °C or below 10 °C) depending on configuration. For determinent  To Above 38 °C or below 10 °C) depending on configuration. For determinent  To Above 38 °C or below 10 °C) depending on configuration. For determinent  To Above 38 °C or	ailed		
Rack integration kit Rack integration kit as option  r-stand (W x D x H)  Platform Firmware Resilience Model  ronment  rating temperature note  Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. For det information see relevant system configurator.  rating relative humidity  10 - 85 % (non condensing)  rating environment  FTS 04230 – Guideline for Data Center (installation specification)  rating environment link  http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe  e emission  Measured according to ISO 7779 and declared according to ISO 9296  rd pressure (LpAm)  40.6 dB(A) (idle) / 47.7 dB(A) (operating) typical Values	ailed		
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nd pressure (LpAm) 40.6 dB(A) (idle) / 47.7 dB(A) (operating) typical Values			
nd power (LWAd; 1B = 10dB) 6.0 B (idle) / 6.6 B (operating) typical Values			
e notes  Noise emissions depends on operation modes, system configuration and ambient temperature.  Operating mode measured based on OLTIS with 50% load. *OLTIS = FUJITSU Load Profile which stresses components of a server with a given load level.	all		
ronmental (Base unit specific)			
rating ambient temperature $5-45^{\circ}\mathrm{C}$ $5-45^{\circ}\mathrm{C}$ $5-45^{\circ}\mathrm{C}$ $5-45^{\circ}\mathrm{C}$			
trical values			
er supply configuration 2 hot-plug power supplies (standard)			
plug power supply redundancy Optional	Optional		
ve power (max. configuration) 2,518 W			
arent power (max. configuration) 2570 VA			
t emission (max. configuration) 9064.8 kJ/h (8591.8 BTU/h)			
d current max. 12.5A (100 V) / 14A (240 V)			
<b>To estimate the power consumption of different configurations use the Fujitsu Product Configurator:</b> www.fujitsu.com/configurator/public			
er supply 1600W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 2200W hot-plug, 94% (Platinum efficiency), 200-240V, 50 / 60Hz			
er supply notes 900W hot-plug 96% (Titanuim efficincy), 200-240V, 50 / 60Hz depends on configuration			
pliance			
uct PRIMERGY RX4770 M6			
el PS4770B			
RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronical equipment)			
<b>pe</b> CE			
/Canada CSAc/us ICES-003 / NMB-003 Class A FCC Class A			
n VCCI:V3 Class A + JIS 61000-3-2			
KN32 KN35			
ralia/New Zealand AS/NZS CISPR32 Class A			
an CNS 13438 class A			
pliance link https://sp.ts.fujitsu.com/sites/certificates			

# Compliance

# **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

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, 2 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, 512e, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, 512e, hot-plug, 2.5-inch, business critical
Hard disk drives	HDD SAS, 12 Gb/s, 900 GB, 15,000 rpm, 512n, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 900 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 900 GB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 600 GB, 15,000 rpm, 512n, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 600 GB , 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED
	HDD SAS, 12 Gb/s, 300 GB, 15,000 rpm, 512n, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 300 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED
	HDD SAS, 12 Gb/s, 300 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 2.4 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise, SED
	HDD SAS, 12 Gb/s, 2.4 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 2 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical
	HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise, SED
	HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise
	HDD SAS, 12 Gb/s, 1.2 TB , 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED
	HDD SAS, 12 Gb/s, 1 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical

Solid-State-Drive	SSD SATA, 6 Gb/s, 960 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 960 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 960 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 480 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 480 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3.6 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 480 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 240 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1.4 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 240 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3.6 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 240 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 1.4 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 7.68 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.5 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 3.84 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1.0 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 3.84 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 3.84 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 1.0 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 1.92 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 1.92 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years)
	SSD SATA, 6 Gb/s, 1.92 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years)
	SSD M.2 SATA, 6 Gb/s, 480 GB, non hot plug, enterprise, 1.5 DWPD (Drive Writes Per Day for 5 years)
	SSD M.2 SATA, 6 Gb/s, 240 GB, non hot plug, enterprise, 1.5 DWPD (Drive Writes Per Day for 5 years)
Solid-State-Drive	SSD SAS, 12 Gb/s, 960 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 800 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years), SED
	SSD SAS, 12 Gb/s, 800 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 800 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 400 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years), SED
	SSD SAS, 12 Gb/s, 400 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 15.36 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 7.68 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 6.4 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 3.84 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 3.2 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 1.92 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 1.6 TB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years), SED
	SSD SAS, 12 Gb/s, 1.6 TB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 1.6 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (Drive Writes Per Day for 5 years)
PCIe SSD & SATA DOM SSD	PCIe-SSD SFF, 750 GB, Write-Intensive, hot-plug, 2.5-inch, Flash drive, 30 DWPD (Drive Writes Per Day for 5 years)
	PCIe-SSD SFF, 6.4 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)
	PCIe-SSD SFF, 4 TB, Read-Intensive, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)
	PCIe-SSD SFF, 3.2 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)
	PCIe-SSD SFF, 2 TB, Read-Intensive, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)
	PCIe-SSD SFF, 1.6 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)
	PCIe-SSD SFF, 1 TB, Read-Intensive, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)
	Dual microSD 64GB Enterprise
SCSI / SAS Controller	Broadcom® PSAS CP503i LP SAS Ctrl. 12 Gbit/s 8 ports int. PCle 3.0 x8
oco., one controller	Broadcom® PSAS CP500e LP SAS Ctrl. 12 Gbit/s 8 ports ext. PCle 3.0 x8
	Broadcom® PSAS CP500e FH SAS Ctrl. 12 Gbit/s 8 ports ext. PCle 3.0 x8

RAID Controller	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-PCle 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
	Broadcom® PRAID CP500i LP, RAID Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, No FBU support
Fibre Channel controller	Fibre Channel Host Bus Adapter 1 x Qlogic QLE2770-FJ-BK LC-style
	Fibre Channel Host Bus Adapter 2 x Qlogic QLE2772-FJ-BK LC-style
	Fibre Channel Host Bus Adapter 1 x 32 Gbit/s Emulex LPE35000-M2-F MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 32 Gbit/s Emulex LPE35002-M2-F MMF 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	Ethernet Ctrl. 2 x 100 Gbit/s OCPV3 QSFP28 ( Mellanox )
	Ethernet Ctrl. 2 x 100 Gbit/s QSFP28 ( Mellanox )
	Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s OCPV3 RJ45 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCle 3.0 x8 RJ45 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s OCPV3 SFP28 ( Mellanox )
	Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s PCle 3.0 x8 SFP28 ( Mellanox )
	Ethernet Ctrl. 2 x 10 Gbit/s OCPV3 SFP+ (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s PCle 3.0 x8 SFP+ (Intel®)
	Ethernet Ctrl. 4 x 10 Gbit/s ; 1 Gbit/s PCle 3.0 x8 RJ45 (Intel®)
	Ethernet Ctrl. 4 x 10 Gbit/s OCPV3 SFP+ ( Intel® )
	Ethernet Ctrl. 4 x 10 Gbit/s PCle 3.0 x8 SFP+ (Intel®)
	Ethernet Ctrl. 4 x 1 Gbit/s OCPV3 RJ45 ( Intel® )
	Ethernet Ctrl. 4 x 1 Gbit/s PCle 2.1 x4 RJ45 ( Intel® )
	InfiniBand HCA 1 $\times$ 100 Gbit/s PCle 3.0 $\times$ 16 QSFP for the US market max. one IB HCA 100Gb controller can be installed (Mellanox)
Graphics add on cards	NVIDIA® Tesla® V100S, 5120 cores , PCIe 3.0 x16, -
	NVIDIA® Tesla® T4 LP, 2560 cores, PCIe 3.0 x16, -
	NVIDIA® Quadro® RTX 4000, 2304 cores, PCIe 3.0 x16, 3 x DisplayPort
	NVIDIA® Quadro® RTX 6000, 4608 cores, PCIe 3.0 x16, 4 x DisplayPort
	NVIDIA® Quadro® RTX 8000, 4608 cores, PCIe 3.0 x16, 4 x DisplayPort
Graphics	NVIDIA® Quadro® P400 , 2 GB, PCle x16, 3 x miniDP
Rack infrastructure	Cable Arm 2U for PRIMECENTER- and 3rd-party racks
	Rackmount kit full extraction (870mm). tool less mounting for general use, length variable 559-890mm. If consider to shipment with Rack and earthquake, suggest to fix RMK with security screw.
Varranty	
Warranty period	3 years
Warranty type	Onsite warranty
Warranty Terms & Conditions Product Support Services - the perfe	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM ect 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)

Warranty	
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEIA 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 RX4770 M6, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

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#### Software

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www.fujitsu.com/primergy

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Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

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