# FUJITSU

# Data Sheet Fujitsu PRIMERGY TX2550 M5 Tower Server

growth. A high-end Graphics card boosts

performance for VDI, CAD, web requirements.

for offices. The server also delivers world-class

reliability and energy efficiency with up to 96%

higher ambient temperatures is ensured by the

Cool-safe® Advanced Thermal Design, avoiding

Furthermore, the server comes with Fujitsu iRMC

S5 and ISM Essential, which respectively, enhance

admin productivity and provide a quick path to

infrastructure management.

the need for expenditure on special cooling.

efficient, dual power supplies. Operation in

The server is designed for silent operation, ideal

#### Tower powerhouse with the richest feature set

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 for remote and branch offices, versatile rack-mount servers and densityoptimized multi-node servers. 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 TX2550 M5

The Fujitsu Server PRIMERGY TX2550 M5 is a sophisticated dual socket tower server enhanced with the latest technology to deliver the highest levels of workload versatile performance, expandability and cost-effectiveness. This office ready, powerful system comes with the latest Intel® Xeon® Processor Scalable Family CPUs with 26 cores, along with up to 1.5TB of high-speed 2,933 MT/s DDR4 and Intel® Optane<sup>™</sup> DC persistent memory technology making this powerful system ideal for most CPU/memory driven requirements such as demanding business applications (industry specific, analytics apps), business processing (ERP, CRM) and virtualized workloads. The server is designed for huge expandability with up to 32 hard drives, NVMe options, advanced RAID and a range of high-throughput networking cards including DynamicLOM options, making it highly suitable for storage centric requirements such as collaboration/IT infrastructure workloads and even high-data transfer web or big-data configurations. Up to 8 expansion slots are available for future



(intel) OPTANE DC ()







**vm**ware





# Features & Benefits

#### **Main Features**

#### Benefits

- Power packed performance across workloads
- Wide choice of different types of Intel® Xeon® Scalable processors including 2nd generation Intel® Xeon® Scalable processors. The server can field CPUs with up to 26 cores relying on Intel® UltraPath Interconnect for an increased data rate between the CPUs. Up to 1.5TB memory (12 DIMM slots) including a mix of DDR4 @ 2,933 MT/s and Intel® Optane™ DC persistent memory.

#### Highly expandable and flexible design

Significant storage capacity with up to 32x hot plug 2.5"HDD/SSD including up to 8x PCle SSD, or up to 12x hot plug 3.5" HDD/SSD + 2x non-hp 2.5" HDD/SSD and up to 3x 1.6" drive bays for ODD or backup. Advanced RAID controllers (RAID 0, 1, 1E, 10, 5, 50, 6, 60) with up to 8GB cache for enhanced data protection and reliability beyond embedded basic RAID capability. Flexibility in networking capability via Onboard LAN for basic requirements, DynamicLoM via OCP for extended requirements. Range of additional high throughput networking cards (100/40/25/10Gb) also available.

#### Designed to be upgrade ready and efficient

8 Expansion slots (in maximal optional configuration; 7x PCIe and 1xPCI-32). Rack Form factor available from the factory and as an upgrade option. Up to 1x GFX card support (FPGA also on roadmap). Fields power supply units with 96% energy efficiency, plus Fujitsu's Cool-safe® Advanced Thermal Design for higher ambient temperatures in the data center.

Server and infrastructure management at your fingertips

The server also has regular, free updates of BIOS, firmware and selected software. The onboard iRMC S5 comes with interactive web UI and conforms to Redfish providing unified API support for heterogeneous environment. Furthermore, 2x Internal M.2 devices support hypervisor installations or mirroring while TPM2.0 modules enhance security. The new, free, ISM Essential license provides a quick start to infrastructure management with essential monitoring and update functions, while ISM Advanced is the fully featured licensed version of ISM that provides comprehensive infrastructure management capabilities.

- Enhanced Dual-socket compute plus high bandwidth DDR4 and Intel® Optane<sup>™</sup> DC persistent memory - optimal for demanding enterprise and SME requirements. Intel® Optane<sup>™</sup> DC persistent memory is an innovative memory technology which delivers a unique combination of affordable large capacity and non-volatile persistence. 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. As such, the TX2550 M5 is capable of handling a range of diverse tasks: Demanding Industry and Analytics apps, Business processing and enterprise applications as well as virtualized workloads.
- Storage suitable for securely managing extremely large datasets and flexible enough to be matched to a range of storage centric requirements such as IT infrastructure or collaboration workloads. Drives and RAID controllers can be tailored to specific business needs and budgets. Powerful and cost-effective networking options are available depending on your business need and budget. Combination of Basic capabilities via onboard LAN, plus higher performance, optional DynamicLoM via OCP offers excellent flexibility and cost effective growth capability. High throughput cards enable growth for the highest data rate requirements.
- Versatile PCIe slots offer flexible expandability for the integration of existing and new storage controllers, networking cards, Graphics capability. Add capabilities per your business needs. Rack upgrade kit allows you to invest in a system designed for scalability to match your business growth. Graphics card improves performance for Graphics intensive apps; get more from your display infrastructure. High efficiency redundant power supplies deliver energy cost savings and enhanced reliability, while the Cool-safe® Advanced Thermal Design allows you to operate your equipment without having to invest in expensive cooling equipment.
- The onboard iRMC S5, is optimized for both data centers and SMEs who can rely on the latest generation server management. M.2 devices are perfect for hassle-free hypervisor /operating system start-up, while TPM 2.0 provides ease of mind for administrators with the latest hardware and Software driven security features. ISM helps improve data center productivity with converged infrastructure management. Converged data center management 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.

# **Technical details**

#### PRIMERGY TX2550 M5

Mainboard	
Mainboard type	D3386-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
Memory slots	12 (6 DIMMs per CPU, 6 channels with one DIMM per channel)
Memory slot type	DIMM (DDR4 / DDR-T for non-volatile memory modules)
Memory capacity (min max.)	8 GB - 1.5 TB
Memory protection	Advanced ECC SDDC
Memory notes	Possibility to populate 2 slots 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
Interfaces	
USB 2.x ports	1 x USB 2.0 internal for backup devices
USB 3.x ports	7 x USB 3.0 (2x front, 4 x rear, 1x internal (type A)
Graphics (15-pin)	1 x VGA
Serial 1 (9-pin)	1 x optional serial RS-232-C (9 pin)
LAN / Ethernet (RJ-45)	2 x RJ45 (additional 2x RJ45 are optional available)
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 port
Onboard or integrated Controller	
RAID controller	All hardware storage controller options are described under Components
SATA Controller	Intel® C624, 9-port SATA (8 x for internal hard disks, 1 x for accessible drives)
SATA controller type notes	On board SATA controller supports RAID levels 0, 1, 10
LAN Controller	2 x 1 Gbit/s onboard Optional 2x 10Gb T or 2x 10Gb SFP+ interface card onboard with OCP carrier card (OCP carrier card blocks PCIe slo 8).
Remote management controller	IPMI 2.0 compatible Integrated Remote Management Controller (iRMC S5, 512 MB attached memory incl. graphics controller)
Trusted Platform Module (TPM)	optional TPM
Slots	
PCI-Express 3.0 x8	5 x Full height Note: 2 of the slots become available via optional riser card. Refer to configurator for details
PCI-Express 3.0 x16	3 x Full height Note: One x16 PCIe slot is available with the first CPU, can be occupied by the optional Riser card. Second CPU adds two more x16 PCIe slots. Refer to configurator for details.
PCI-slots	1 x PCI 32Bit, available via optional riser card. Refer to configurator for details
Slot Notes	in SAS configuration 1x PCI-Express occupied by modular RAID controller
Drive bays	
Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA
Accessible drive bays	3 x 5.25/1.6-inch
Notes accessible drives	All possible options described in relevant system configurator.
Fan Configuration	· -
Number of fans	3
Fan configuration	3x120mm high power fans (optional non-hot plug redundant or single hot plug red.)
Fan notes	Fans with optimized blades and fan control for silent and safe operation
	· · · · · · · · · · · · · · · · · · ·
Operating panel Operating buttons	On/off switch

Operating panel	
Status LEDs	System status (orange / yellow)
	Identification (blue)
	Hard disks access (green)
	Power (amber / green)
	CPU status
	Fan status
	Hard disk error
	Temperature
	CSS (yellow)
	Memory status
	PSU status (green/ amber)
	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)
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 Linux versions
	Local and remote update via ServerView Update Manager
	SMBIOS V2.4
	Remote PXE boot support
Operating Systems and Virtualization	n Software
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Use of certified or supported operating systems and virtualization software is subject to proactive acceptance of the
operating system notes	respective License Agreements/ EULAs/ Subscription and support terms of the Software manufacturer as applicable
	for the relevant Software whether preinstalled or optional. The software may only be available bundled with a
	software support subscription which – depending on the Software - may be subject to separate remuneration.
Server Management	
DC Infrastructure Management	Infrastructure Manager (ISM)
	Essential Edition
	Advanced Edition
Server Management	Infrastructure Manager (ISM)
	Essential Edition
	Advanced Edition
	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	
Floor-stand (W x D x H)	177 x 777 x 456 mm
Rack (W x D x H)	483 (Bezel); 448 mm (body) x 736 x 177 mm
Dimension notes	Floorstand Width 177 mm without tilt protection (420 mm with tilt protection); depth measured includes handles or
2	redundant PSU. Rack depth includes handles of redundant PSU, excludes rack handles / front
Height Unit Rack	4 U
Weight	Up to 35.5 kg
Weight notes	Actual weight may vary depending on configuration
	Back mount options available from the factory or with retrofit upgrade
Rack integration kit	Rack mount options available from the factory or with retrofit upgrade.
Rack integration kit Environment Operating ambient temperature	Rack mount options available from the factory or with retrofit upgrade.

Environment	
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.
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)	Noise minimum configuration: 24 dB(A) (idle) / 32 dB(A) (operating) Noise typical configuration: 24 dB(A) (idle) / 32 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	Noise minimum configuration: 4.2 B (idle) / 5.0 B (operating) Noise typical configuration: 4.2 B (idle) / 5.0 B (operating)
Noise 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 all components of a server with a given load level.
Electrical values	
Power supply configuration	1x non hot-plug power supply or 2x hot-plug power supply for redundancy
Hot-plug power supply redundancy	Optional
Active power (max. configuration)	748 W
Apparent power (max. configuration)	752 VA
Heat emission (max. configuration)	2692.8 kJ/h (2552.3 BTU/h)
Rated current max.	9 A (100 V) / 3.5 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
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 TX2550 M5
Model	PS2560
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
Japan	VCCI:V3 Class A + JIS 61000-3-2
South Korea	KN32 KN35
China	CCC 200
Australia/New Zealand	C-Tick
Taiwan	BSMI
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 u may be required to take adequate measures.

# Components

Notes	
Compatibility	If and to the extent a list of components or certain compatibilities are specified in the product data sheet, these component lists and compatibility specifications are exhaustive. Using deviating or other system components and applications together with the product may but does not necessarily have to lead to compatibility problems. A final statement and/or commitment on the compatibility of such deviating or other system components and applications can only be provided after a corresponding verification through a dedicated compatibility testing.
Continuity management	The product may in connection with and depending on the specific configuration include elements to support time- and performance-critical applications, however high availability (e.g., 99.9999%) and failsafe performance is not a standalone product feature. If and to the extent the product is to be used in such business-critical environments, it is within the sole responsibility of the user to set up the specific additional technical features (e.g., Storage Cluster), redundancies, and operational conditions as required to ensure such high availability or failsafe performance.
Security	The properties of the product provide a baseline for product security and therefore end-customer IT security. However, these properties are not sufficient on their own to protect the product from all existing threats, such as intrusion attempts, data exfiltration and other forms of cyberattacks. To customize security settings, please use the configuration options as available for the respective product. During operation, the IT security of this product is within the responsibility of the respective administrator/end-user of the product. Please note, that Fujitsu as a manufacturer does not make any policy prescriptions or advocacy statements regarding IT security best practices and/or general product operation.
Warranty	
Warranty period	3 years
Warranty type	Onsite warranty Warranty conditions tbd
Warranty Terms & Conditions Product Support - the perfect extension	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM
Support Pack Options	Globally available in major metropolitan 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 Service with 4h Onsite Response Time

at least 5 years after shipment, for details see https://support.ts.fujitsu.com/

http://www.fujitsu.com/fts/products/product-support-services/

Service Lifecycle

Service Weblink

### More information

#### Fujitsu products, solutions & services

In addition to Fujitsu PRIMERGY TX2550 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 PRIMERGY TX2550 M5, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.

http://www.fujitsu.com/global/products/ computing/servers/primergy/tower/ tx2550m5/index.html

#### 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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#### Disclaimer

Please note that the data sheet reflects the technical specification with the maximum selection of components for the named system and not the detailed scope of delivery. The scope of delivery is defined by the selection of components at the time of ordering. The product was developed for normal business use.

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