

# Data Sheet

## FUJITSU Server PRIMERGY CX2550 M4 Multi-node Server

Cloud/HPC optimized server node for PRIMERGY CX400 M4

FUJITSU Server PRIMERGY will give you the servers you need to power any workload and changing business requirements. As business processes expand so does the need for applications. Each has its own resource footprint, so you need a way to optimize your computing to better serve your users. PRIMERGY systems will help you match your computing capabilities to your business priorities with our complete portfolio of expandable PRIMERGY tower servers for remote and branch offices, versatile rack-mount servers as well as hyper-converged scale-out servers. They convince by business proven quality with a wide range of innovations, highest efficiency cutting operational cost and complexity, provide more agility in daily operations, and integrate seamlessly to let help you concentrate on core business functions.

The PRIMERGY CX multi-node systems are the ideal basis for cloud, hyper-converged and high performance computing solutions. They provide data centers as well as branch offices with massive computing power while at the same time delivering best economics for server density, energy consumption, heat optimization and lower overall operating costs.

### PRIMERGY CX2550 M4

The FUJITSU Server PRIMERGY CX2550 M4 is a compact server node enabling highest computing density with up to four independent servers in just 2U (PRIMERGY CX400 M4). As a dual socket server node it features the latest Intel® Xeon® Processor Scalable Family and 16 DIMM slots (up to 2,048 GB DDR4 memory). With its two-storage-drive configuration, the CX2550 M4 is well-suited for mainstream enterprise workloads, cloud and high performance computing scenarios. The server node is prepared for individual future demands by offering further various modular options. In addition to the basic onboard LAN, the node provides additional 2x PCIe Gen3 x16 slots as well

as an optional CPU direct high-speed interconnect (Intel® Omni-Path Architecture) offering low communication latency, low power consumption and a high throughput. The PRIMERGY CX400 M4 enclosure allows nodes and components to share power, cooling and management. It houses hot-plug, redundant power supply units, hot-plug, redundant fan modules and can be equipped with up to 8 storage drives.



# Features & Benefits

Main Features	Benefits
<p><b>Maximize Efficiency</b></p> <ul style="list-style-type: none"> <li>Four PRIMERGY CX2550 M4 server nodes, each with latest Intel® Xeon® Processor Scalable Family, can be smartly packaged into a condensed 2U rack enclosure.</li> <li>Half-width, two-socket server node for PRIMERGY CX400 M4 chassis enabling highest computing density.</li> <li>Intel® Xeon® Processor Scalable Family with up to 28 cores relying on Intel® UltraPath Interconnect for an increased data rate between the CPUs.</li> <li>Up to 2,048 GB DDR4 memory with 2,666 MHz (16 DIMM slots).</li> </ul> <p><b>Shared infrastructure &amp; easy serviceability</b></p> <ul style="list-style-type: none"> <li>Server nodes share central cooling, hot-plug and redundant power supply units as well as storage drives within the 2U PRIMERGY CX400 M4 chassis.</li> </ul> <p><b>Enhanced Features for enhanced computing</b></p> <ul style="list-style-type: none"> <li>Intel® Omni-Path Architecture (Intel® OPA) support.</li> <li>Basic onboard LAN and additional 2x PCIe Gen3 x16 slots for extended requirements.</li> <li>Optional liquid cooling solution helps to further reduce data center cooling costs and density.</li> </ul> <p><b>Simplify Complexity</b></p> <ul style="list-style-type: none"> <li>Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control.</li> <li>BIOS, firmware and selected software are updated free of charge.</li> <li>iRMC S5 comes with new interactive web UI and conforms to Redfish providing unified API support for heterogeneous environment.</li> </ul>	<ul style="list-style-type: none"> <li>Well suited for mainstream enterprise workloads, cloud and high performance computing scenarios.</li> <li>Ready for the future and data growth scenarios with the performance of two processors – marking the standard of tomorrow with an increase in computing power.</li> <li>Increased multi-tenancy and VM density for cloud application performance and parallelizable workloads.</li> <li>High bandwidth connections for networking and memory performance.</li> <li>Decreased energy consumption and lower investments.</li> <li>Each single server can be serviced without affecting the other nodes in the chassis. Redundancy for shared components provides maximum reliability.</li> <li>Wide range of connectivity options guarantees the highest flexibility to integrate the server into existing infrastructures – now and in future without overhauling the existing infrastructure.</li> <li>Helps to reduce data center cooling costs by over 50% and allows for 2.5-5x higher density to realise even ambitious projects.</li> <li>Enable faster IT service by automating and simplifying infrastructure operations across compute, storage and networking with ServerView Infrastructure Software Manager.</li> <li>The comprehensive tools of the Fujitsu ServerView Suite ease the administrator's life.</li> <li>Providing increased security and server administrator productivity, iRMC S5 simplifies server management.</li> </ul>

# Technical details

## PRIMERGY CX2550 M4

Base unit	PRIMERGY CX2550 M4 air cooling	PRIMERGY CX2550 M4 liquid cooling
Housing types	Air-cooled node	Liquid-cooled node
Product Type	Dual Socket 1U Server Node	Dual Socket 1U Server Node

## Mainboard

Processor quantity and type	1 - 2 x Intel® Xeon® Processor Scalable Family	
Mainboard type	D 3853	D 3853
Chipset	Intel® C621	Intel® C621
Memory slots	16 (8 DIMMs per CPU, 6 channels with 2 slots per channel)	
Memory capacity (min. - max.)	8 GB - 2048 GB	
Memory protection	Advanced ECC SDDC	
Memory notes	Performance Mode with identical modules in all six channels (6 modules per bank).	
Memory capacity (min. - max.)	8 GB - 2048 GB	
Upgrade notes	4x in PRIMERGY CX400 M4	

## Interfaces

USB 3.0 ports	2 x USB 3.0 (rear) with high density connector	
Graphics (15-pin)	1 x VGA (1x rear) with high density connector	
LAN / Ethernet (RJ-45)	2 / 1x Gbit/s Ethernet + 1x service LAN Onboard	
Management LAN (RJ45)	Management LAN traffic can be switched to shared onboard Gbit LAN port	

## Onboard or integrated Controller

RAID controller	8 Port RAID 0/1 or RAID 5/6 controller as option	
SATA Controller	Intel® C621	
LAN Controller	Intel® i210 onboard 10/100/1000 Mbit/s Ethernet	
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 (Base unit specific)

PCI-Express 3.0 x16	2 x low profile PCIe 3.0 x16 slots (via riser card)	1 x for low profile
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## Drive bays

Storage drive bays	up to 2x 2.5-inch (in the PRIMERGY CX400 M4 chassis)	
Storage drive bay configuration	up to 2x 2.5" SATA device can be installed in CX400 M4 and 2x M.2 device can be installed in CX2550 M4 node	

## General system information

Fan configuration	Redundant and hot-plug fans part of CX400 M4 chassis	
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## Operating panel

Operating buttons	On/off switch ID button	
Status LEDs	Power (green) System status (orange) LAN speed (green / yellow) LAN connection (green) Identification (blue)	

**BIOS**

<b>BIOS features</b>	<ul style="list-style-type: none"> <li>UEFI compliant</li> <li>Legacy BIOS compatibility customer configuration option</li> <li>IPMI support</li> <li>BIOS settings save and restore</li> <li>Remote iSCSI boot support</li> <li>Remote PXE boot support</li> </ul>
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**Operating Systems and Virtualization Software****Operating system notes**

<b>Operating system release link</b>	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473">http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473</a>
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**Server Management and Infrastructure Management**

<b>Standard</b>	<ul style="list-style-type: none"> <li>ServerView Suite (Control) <ul style="list-style-type: none"> <li>ServerView Operations Manager (incl. PDA and ASR &amp; R)</li> <li>ServerView Agents and CIM provider</li> <li>ServerView Agentless Management</li> <li>ServerView System Monitor</li> <li>SVOM- Event Manager</li> <li>ServerView RAID Manager</li> <li>SVOM- Threshold Manager</li> <li>Power Management (iRMC)</li> <li>Power Monitor (monitoring the Power Consumption)</li> <li>Storage Management (server) with SVOM/SV-RAID</li> </ul> </li> <li>ServerView Suite (Maintain) <ul style="list-style-type: none"> <li>iRMC S5 (Remote Management)</li> <li>Performance management (SVOM)</li> <li>Asset Management</li> <li>Primecollect</li> <li>Customer Self Service</li> <li>Online Diagnostics</li> </ul> </li> <li>ServerView Suite (Integrate) <ul style="list-style-type: none"> <li>ServerView Integration packs for MS System Center, VMware vCenter, VMware vRealize, Nagios, and HP SIM</li> </ul> </li> </ul>
<b>Option</b>	<ul style="list-style-type: none"> <li>Infrastructure Manager (ISM) <ul style="list-style-type: none"> <li>Automate device configuration</li> <li>Mass OS installation</li> <li>Node Management</li> <li>Health status Monitoring and Control</li> <li>Capacity/Threshold Management</li> <li>Power Management</li> <li>Converged Management</li> <li>Auto Discovery</li> <li>Virtual-I/O Management</li> <li>Network topology Management</li> <li>Remote Management</li> <li>Update Management</li> <li>Logging and Auditing</li> <li>Integrate in to <ul style="list-style-type: none"> <li>Enterprise Management</li> <li>Vendor specific Management</li> <li>Monitor 3rd party platforms</li> </ul> </li> </ul> </li> <li>ServerView Suite (Maintain) <ul style="list-style-type: none"> <li>ServerView eLCM</li> <li>iRMC Advanced Pack incl. Advanced Video Redirection (AVR), video capturing and Virtual Media</li> </ul> </li> </ul>

**Dimensions**

<b>Dimensions (W x D x H)</b>	174.3 x 580 x 40.5 mm
<b>Weight</b>	4.5 kg
<b>Node size</b>	1 U half wide

**Environment**

<b>Operating ambient temperature</b>	5 - 35 °C
<b>Operating relative humidity</b>	10 - 85 % (non condensing)

<b>Environment</b>	
Temperature and humidity notes	Air cooling can support up to 165W CPU
Maximum altitude	3,000 m
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment link	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe">http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe</a>
<b>Compliance</b>	
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronic equipment) IEC 60950
Europe	CE Class A * EN 60950 - 1 EN 50371 EN 55022 EN 61000-3-3 EN 55024
USA/Canada	UL/CSA ICES-003 / NMB-003 Class A
Japan	VCCI Class A
Taiwan	CNS 13436 CNS 13438 class A
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>
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

<b>Hard disk drives</b>	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
<b>Solid-State-Drive</b>	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, 800 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 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, 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, 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, 1.6 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SATA, 6 Gb/s, 1.2 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD M.2 SATA, 6 Gb/s, 256 GB, non hot plug, enterprise, 0.13 DWPD (Drive Writes Per Day for 5 years)
	SSD M.2 SATA, 6 Gb/s, 128 GB, non hot plug, enterprise, 0.13 DWPD (Drive Writes Per Day for 5 years)
<b>RAID Controller</b>	Fujitsu PRAID EP540e LP, RAID 5/6 Ctrl., SAS/SATA 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 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 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

<b>Communication, Network</b>	Converged Network Adapter 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ ( Emulex )
	Ethernet Ctrl. 1 x 100 Gbit/s PCIe 3.0 x16 QSFP28 ( Cavium )
	Ethernet Ctrl. 1 x 100 Gbit/s PCIe 3.0 x16 QSFP28 ( Mellanox )
	Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 ( Intel® )
	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 10Gbit/s Eth (RJ45) ( Emulex )
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ ( Emulex )
	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. 2 x 40 Gbit/s PCIe 3.0 x16 QSFP ( Mellanox )
	Ethernet Ctrl. 4 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 ( Intel® )
	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 1 x 56 Gbit/s PCIe 3.0 x8 QSFP for the US market max. one IB HCA 56Gb 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 )
	InfiniBand HCA 2 x 56 Gbit/s PCIe 3.0 x8 QSFP for the US market max. one IB HCA 56Gb controller can be installed ( Mellanox )
	MPO x 40 Gbit/s ( )
	Omni Path 1 x PCIe 3.0 x16 ( Intel® )

**Warranty**

<b>Warranty period</b>	3 years
<b>Warranty type</b>	Onsite warranty
<b>Product Related Services - the perfect extension</b>	
<b>Recommended Service</b>	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
<b>Service Lifecycle</b>	5 years after end of product life
<b>Service Weblink</b>	<a href="http://www.fujitsu.com/fts/services/support">http://www.fujitsu.com/fts/services/support</a>

# More information

## Fujitsu products, solutions & services

In addition to FUJITSU Server PRIMERGY CX2550 M4, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Build 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 offering. This allows customers to leverage 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/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about FUJITSU Server PRIMERGY CX2550 M4, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<http://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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