FUJITSU

Data Sheet
Fujitsu PRIMERGY CX2550 M4 PRIMERGY Cloud Servers

Cloud/HPC optimized server node for PRIMERGY CX400 M4

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
Maximize Efficiency	
■ Four PRIMERGY CX2550 M4 server nodes, each with latest Intel® Xeon® Processor Scalable Family, can be smartly packaged into a condensed 2U rack enclosure.	■ Well suited for mainstream enterprise workloads, cloud and high performance computing scenarios.
■ Half-width, two-socket server node for PRIMERGY CX400 M4 chassis enabling highest computing density.	■ 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.
■ Intel® Xeon® Processor Scalable Family with up to 28 cores relying on Intel® UltraPath Interconnect for an increased data rate between the CPUs.	■ Increased multi-tenancy and VM density for cloud application performance and parallelizable workloads.
■ Up to 2,048 GB DDR4 memory with 2,666 MHz (16 DIMM slots).	■ High bandwidth connections for networking and memory performance.
Shared infrastructure & easy serviceability	
■ Server nodes share central cooling, hot-plug and redundant power supply units as well as storage drives within the 2U PRIMERGY CX400 M4 chassis.	■ Decreased energy consumption and lower investments.
	■ Each single server can be serviced without affecting the other nodes in the chassis. Redundancy for shared components provides maximum reliability.
Enhanced Features for enhanced computing	
■ Intel® Omni-Path Architecture (Intel® OPA) support.	■ 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.
■ Basic onboard LAN and additional 2x PCIe Gen3 x16 slots for extended requirements.	
■ Optional liquid cooling solution helps to further reduce data center cooling costs and density.	■ Helps to reduce data center cooling costs by over 50% and allows for 2.5-5x higher density to realise even ambitious projects.
Simplify Complexity	
■ Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control.	■ Enable faster IT service by automating and simplifying infrastructure operations across compute, storage and networking with ServerView Infrastructure Software Manager.
■ BIOS, firmware and selected software are updated free of charge.	■ The comprehensive tools of the Fujitsu ServerView Suite ease the administrator's life.
■ iRMC S5 comes with new interactive web UI and conforms to Redfish providing unified API support for heterogeneous environment.	■ Providing increased security and server administrator productivity, iRMC S5 simplifies server management.

Technical details

PRIMERGY CX2550 M4

Mainboard

Processor quantity and type	1 - 2 x Intel® Xeon® Processor Scalable Family
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).
Notes	4x in PRIMERGY CX400 M4

Interfaces

USB 3.x 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

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

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

BIOS features	UEFI compliant Legacy BIOS compatibility customer configuration option IPMI support BIOS settings save and restore Remote iSCSI boot support Remote PXE boot support

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
	Hyper-V Server 2016
	Windows Server 2016 Datacenter
	Windows Server 2016 Standard
	SUSE® Linux Enterprise Server 12
	Red Hat® Enterprise Linux 8
	Red Hat® Enterprise Linux 7
	Red Hat® Enterprise Linux 6
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	

Infrastructure and Server Management

Dimensions

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

Environment

Operating ambient temperature	5 - 35 ℃
Operating relative humidity	10 - 85 % (non condensing)
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	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe

Compliance

Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronical 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	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

Drives	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)
	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
RAID Controller	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 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
	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 (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. 4 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Intel®)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®)
Communication, Network	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)
	Omni Path 1 x PCIe 3.0 x16 (Intel®)

Warranty	
Warranty period	3 years
Warranty type	Onsite warranty

Product Support - the perfect extension

Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	at least 5 years after shipment, for details see https://support.ts.fujitsu.com/
Service Weblink	http://ts.fujitsu.com/Supportservice

More information

Fujitsu platform solutions

In addition to Fujitsu 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.

Dynamic Infrastructures
With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products
www.fujitsu.com/global/products/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY CX2550 M4, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
http://www.fujitsu.com/emeia/products/computing/servers/primergy/scale-out/cx2550m4/

Fujitsu green policy innovation