Data Sheet
FUJITSU Server PRIMERGY CX2550 M1 Dual Socket Server Node

Standard server node for PRIMERGY CX400 M1 multi-node server system

PRIMERGY CX2550 M1
The PRIMERGY CX2550 M1 is a compact server node enabling highest computing density with four independent servers in 2U. It is ideal for high performance computing, hosting, and hyper-converged stacks as well as in dedicated Big Data environments.
Combined in a PRIMERGY CX400 M1 multi-node system the servers provide an aggregated scale-out performance of a total of 8 CPUs of the latest Intel® Xeon® processor E5-2600 v3 product family, 64 DDR4 memory DIMMs and up to 24 storage drives in a condensed 2 U rack enclosure. With a huge performance potential, high energy efficiency and at the same time attractive investment costs the PRIMERGY CX2550 M1 provides great versatility to match even ambitious workloads.
# Features & Benefits

<table>
<thead>
<tr>
<th>Main Features</th>
<th>Benefits</th>
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<tbody>
<tr>
<td><strong>High-end HPC server nodes</strong></td>
<td>50% less rack space used as compared to equivalent standard rack servers. Higher server density results in more performance per rack unit.</td>
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<td>▪ Four PRIMERGY CX2550 M1 server nodes, each with two processors, 16 DDR4 memory DIMMs, and up to six local storage drives can be smartly packaged into a condensed 2U rack enclosure.</td>
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<td><strong>Latest technology</strong></td>
<td>Boost your general computing performance by up to 38% compared to the previous generation.</td>
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<td>▪ Up to two Intel® Xeon® processor E5-2600 v3 product family with up to 18 cores and 45 MB cache, advanced Turbo Boost 2.0 technology, Hyper Threading, two accelerated QPI links and internal Memory Management Unit.</td>
<td>The new DDR4 memory technology provides higher performance with lower power requirements.</td>
</tr>
<tr>
<td>▪ 16 DIMMs per server node with up to 1,024 GB DDR4 memory and up to 2,133 MHz DRAM bandwidth.</td>
<td>Each additional degree in the data center means approximately 5-6 percent less energy costs for air-conditioning.</td>
</tr>
<tr>
<td>▪ Cool-safe® Advanced Thermal Design enables operation in a higher ambient temperature.</td>
<td></td>
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<td><strong>Shared infrastructure &amp; easy serviceability</strong></td>
<td>Decreased energy consumption, lower investment, yet still redundant operation. Lower energy budgets for a comparable performance as with standard rack servers.</td>
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<tr>
<td>▪ Server nodes share central cooling fans and hot-plug power supplies in the 2U PRIMERGY CX400 M1 chassis.</td>
<td>Each single server can be serviced without affecting the other nodes in the chassis. Redundancy for shared components provides uniform higher availability.</td>
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<td>▪ Hot-plug for server nodes, power supplies and disk drives enable enhanced availability and easy serviceability.</td>
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<td><strong>Optional liquid cooling solution</strong></td>
<td>Helps to reduce data center cooling costs by over 50% and leads to less power draw of servers</td>
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<tr>
<td>▪ The optional direct-to-chip hot water (40 °C / 105 °F) based Cool-Central® Liquid Cooling captures between 60-80% of the servers heat</td>
<td>Allows for 2.5-5x higher data center density to realise even ambitious projects</td>
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<td>▪ Removes heat directly from CPUs and memory modules within the server, eliminating the need to cool these components</td>
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### Technical details

**PRIMERGY CX2550 M1**

**Mainboard**
- **Mainboard type**: D 3343
- **Chipset**: Intel® C610
- **Processor quantity and type**: 2 x Intel® Xeon® processor E5-2600 v3 product family
- **Memory slots**: 16 / 4 channels per CPU with 8 DIMMs per CPU = 16 DIMMs in total
- **Memory capacity (min. - max.)**: 16 GB - 1024 GB
- **Memory protection**: Advanced ECC SDDC
- **Memory notes**: Supports R-DIMM, LR-DIMM
- **Upgrade notes**: 4x in CX400 M1

**Interfaces**
- **USB 3.0 ports**: 2 x USB 3.0 (rear)
- **Graphics (15-pin)**: 1 x VGA (1x rear)
- **LAN / Ethernet (RJ-45)**: 3 / 2x 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**: RAID 0/1 for internal drives
- **SATA Controller**: Intel® C610, for up to 6 x 2.5 inch SATA or SSD SW Raid 0/1
- **LAN Controller**: 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration)
- **Remote management controller**: Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller) IPMI 2.0 compatible

**Slots**
- **PCI-Express 3.0 x16**: 2 x (for low profile)

**Drive bays**
- **Storage drive bays**: 6x 2.5-inch
- **Storage drive bay configuration**: depending on hardware configuration

**Fan Configuration**
- **Number of fans**: 0
- **Fan configuration**: Centralized non hot plug fans part of CX400 Chassis

**Operating panel**
- **Operating buttons**: On/off switch
- **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
- Secure boot support
- ROM based setup utility
- GPT support for boot drives larger than 2.2 TB
- 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

Operating Systems and Virtualization Software

Operating system notes

Dimensions

Weight
- 5 kg

Node size
- 1U half wide (W175.5 x D520 x H40.8 mm)

Environment

Operating ambient temperature
- 5 - 40 °C (41 - 104 °F)

Operating relative humidity
- 10 - 85 % (non condensing)

Temperature and humidity notes
- Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. For detailed information see relevant system configurator.

Maximum altitude
- 3,000 m

Operating environment
- FTS 04230 – Guideline for Data Center (installation specification)

Operating environment link

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
### Warranty

<table>
<thead>
<tr>
<th>Warranty</th>
<th>3 years</th>
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<tbody>
<tr>
<td><strong>Warranty type</strong></td>
<td>Onsite warranty</td>
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<tr>
<td><strong>Product Related Services - the perfect extension</strong></td>
<td></td>
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<tr>
<th>Recommended Service</th>
<th>X - 24x7, Onsite Response Time: 4h - For locations outside of EMEIA please contact your local Fujitsu partner.</th>
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<tbody>
<tr>
<td><strong>Service Weblink</strong></td>
<td><a href="http://its.fujitsu.com/Supportservice">http://its.fujitsu.com/Supportservice</a></td>
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Fujitsu platform solutions
In addition to Fujitsu PRIMERGY CX2550 M1, 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 M1, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
http://www.fujitsu.com/PRIMERGY

Fujitsu green policy innovation

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