

# Data Sheet

## FUJITSU Server PRIMERGY CX400 S2 Multi-Node Server Enclosure

Scale-Out Smart for HPC and Cloud Computing with enhanced energy efficiency

The PRIMERGY CX400 Cloud eXtension servers are Fujitsu's platform for Cloud computing, HPC High Performance Computing, Service Provider and large scale-out computing server farms. They focus on providing large datacenters with massive scale-out x86 server power while at the same time delivering new datacenter economics for server density, energy consumption, heat optimization and lower overall operational costs. The PRIMERGY CX400 server family has everything customers need to achieve a new dimension of cost-effectiveness with a cloud data center. Due to their innovative scale-out design, the PRIMERGY CX400 servers require less space per rack and less energy & heat per server as compared to conventional rack servers. They pay dividends in significantly lowered operating expenses, easier installation and more aggregated computing power in the datacenter at lower all around investment.

### PRIMERGY CX400 S2

The Fujitsu Server PRIMERGY CX400 S2 Multi-Node system addresses enterprise customer needs for improved energy efficiency, higher platform density, better management effectiveness and overall lower investment when realizing their scale-out Cloud Computing, Big Data processing, High Performance Computing or Virtualization strategies. It provides a condensed form factor, enabling to Scale-Out Smart by packaging 4 independent dual socket server nodes and up to 24 local storage drives into a consolidated 2U rack enclosure. Cost-effectiveness is granted by conventional front-to-back cooling, rear-side external connectivity, installation and operation in existing rack and air conditioning infrastructures. Enhanced availability and low servicing efforts are obvious through

hot-plug enabled server nodes, power supply and disk drives. Energy consumption is minimized using shared redundant and highly efficient power supplies, and centrally installed fan units. With two or four half-wide server nodes in a single 2 U enclosure, doubling the density as compared to standard rack servers is achieved.

The PRIMERGY CX400 S2 acts as a replicable Smart Scale-Out building block to realize large scale-out solutions.



# Features & Benefits

Main Features	Benefits
<p><b>New condensed 4in2U server density</b></p> <ul style="list-style-type: none"> <li>■ CX400 S2 features up to 4 half-wide dual socket server nodes plus up to 24 storage drives in a single 2U enclosure.</li> </ul>	<ul style="list-style-type: none"> <li>■ 50% less rack space used as compared to equivalent standard rack servers. Enables to scale-out in fine tuned granularity more smartly. Higher server density results in more performance per rack unit (4 servers, 8 processors, 24 drives and 64 DIMMs in 2U chassis).</li> <li>■ Decreased energy consumption to even better meet power and cooling constraints and green IT mandates. Lower energy budgets for a comparable performance as for standard rack servers.</li> <li>■ Easy rack-wide team play with already existing datacenter infrastructure lowers overall investment.</li> <li>■ Each single server can be serviced without affecting the other nodes in the chassis.</li> <li>■ Flexibility of drive choice, adaptable to any demand, with full 3-year warranty.</li> <li>■ Up to 6 drives may be assigned to a single server node, for strong demands of applications.</li> <li>■ Different types of server nodes allow for best match to particular scale-out solution stacks.</li> <li>■ Latest Intel® Xeon® processor E5-2600 v2 product family CPUs for top performance and lower energy budgets.</li> </ul>
<p><b>Shared power and cooling</b></p> <ul style="list-style-type: none"> <li>■ CX400 S2 features central cooling fans and 2 commonly shared highly efficient hot-plug power supplies.</li> </ul>	
<p><b>Full compliance to conventional datacenter environment</b></p> <ul style="list-style-type: none"> <li>■ CX400 S2 complies to conventional datacenter front-to-back airflow and cooling and standard 19" industry rack infrastructure and applications.</li> </ul>	
<p><b>Easy serviceability</b></p> <ul style="list-style-type: none"> <li>■ Hot-plug for server nodes, power supplies and disk drives enable enhanced availability and easy serviceability.</li> </ul>	
<p><b>Variable local storage</b></p> <ul style="list-style-type: none"> <li>■ Up to 24x 2.5" hot-plug storage drives with optional RAID technology integrate into the CX400 S2 system, with SAS or SATA interfaces for HDDs or SSDs. Alternatively a chassis version with 12x 3.5" hot plug SAS or SATA HDDs for higher total disk capacity can be chosen.</li> </ul>	
<p><b>Choice of server nodes</b></p> <ul style="list-style-type: none"> <li>■ Different dual socket server nodes featuring latest Intel® Xeon® processor E5-2600 v2 product family</li> <li>■ Standard server node, 16 DIMMs (1U)</li> <li>■ Enhanced HPC node with GPGPU/coprocessor option, 16 DIMMs (2U)</li> </ul>	

# Technical details

Housing types	24= 4x 6 2.5-inch	12= 4x 3 or 2x 6 3.5-inch
Storage drive architecture	2.5-inch SAS/SATA/SSD	3.5-inch SATA
<b>Enclosure</b>		
System unit type	2 U chassis for 19-inch rack	
Front bays	Storage drives: 12x 3.5-inch or 24x 2.5-inch (HDD, SSD)	
Rear bays	4 bays for half wide server trays CX2y0 2 x for PSU	
Fan configuration	4 non hot plug fans	
Fan notes	System operation also in degraded mode	
Power supply configuration	2x hot-plug power supply modules	
<b>Operating panel</b>		
Operating buttons	On/off switch ID button	
Status LEDs	Identification (blue) Power (green)	
<b>Dimensions / Weight</b>		
Rack (W x D x H)	447 x 774.7 x 87.3 mm	
Height Unit Rack	2 U	
19" rackmount	Yes	
Weight	up to 38 kg plus 2.5 kg for rack rails	
Weight notes	Fully assembled Actual weight may vary depending on configuration	
Rack integration kit	Included in Rack System	
<b>Electrical values</b>		
Max. input of single power supply	1400 W (92% efficiency); 1200 W (94% efficiency)	
Power supply configuration note	2x PSU in 1+1 redundancy configuration. System performance adjusted, when only one PSU is in operation.	
Power supply efficiency	94 % (80 PLUS platinum) 92 %	
Rated voltage range	1400 W PSU: 200-240 V 1200 W PSU: 100-240 V	
Rated frequency range	50 Hz - 60 Hz	
Rated current max.	8 A	
Electrical value notes	Active power max. value depends on system configuration. For details see System Architect.	
<b>Environmental</b>		
Operating ambient temperature	10 - 35 °C	
Operating temperature note	DIN IEC 721-3-3 class 3K2	
Operating relative humidity	10 - 85 % (non condensing)	
Maximum altitude	3000 m	
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)	
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296	
Sound power (LWAd; 1B = 10dB)	6,9B (idle) / 7,4B (operating)	
<b>Compliance</b>		
Germany	GS	
Europe	CE Class A *	
USA/Canada	ULc/us	

**Compliance**

<b>Global</b>	CB RoHS (Restriction of hazardous substances) - planned WEEE (Waste electrical and electronic equipment) - planned
<b>Japan</b>	VCCI Class A + JIS 61000-3-2
<b>Taiwan</b>	CNS 13438 class A
<b>Compliance notes</b>	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.
<b>Compliance link</b>	<a href="http://globalsp.ts.fujitsu.com/sites/certificates">http://globalsp.ts.fujitsu.com/sites/certificates</a>

**Cloud Server Nodes**

<b>Product Model name</b>	PRIMERGY CX250 S2	PRIMERGY CX270 S2
<b>Product Type</b>	Dual Socket 1U Server Node	Dual Socket 2U Server Node
<b>Processor quantity support</b>	2	2
<b>Number of nodes</b>	4	2
<b>Memory slots total</b>	16	16
<b>Supported capacity RAM (max.)</b>	1024 GB	1024 GB
<b>Number of Storage Drives (max.)</b>	6x 2.5-inch or 3x 3.5-inch in CX400 S2	4x 2.5-inch or 3x 3.5-inch in CX400 S2

**Warranty**

<b>Standard Warranty</b>	3 years
<b>Service level</b>	Onsite Service (depending on country)
<b>Maintenance and Support 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
<b>Service Weblink</b>	<a href="http://www.fujitsu.com/fts/services/support">http://www.fujitsu.com/fts/services/support</a>

## More information

### Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY CX400 S2, 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/services/computing/](http://www.fujitsu.com/global/services/computing/)

### Software

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

### More information

Learn more about Fujitsu PRIMERGY CX400 S2, 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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