

# Data Sheet

## Fujitsu Server PRIMERGY CX600 M1 Compact and Easy

Your platform for highly parallel computing

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### PRIMERGY CX600 M1

The FUJITSU Server PRIMERGY CX600 M1 is the perfect choice for highly parallel applications in the area of High Performance Computing for scientific research, product development and business intelligence. Thanks to its Intel® Xeon Phi™ Processors with up to 72 cores this modular server is ideal for workloads benefitting from highest thread parallelism, large vectors, and additional memory bandwidth. In comparison with standard rack servers the PRIMERGY CX600 M1 offers an extreme high density with eight nodes per 2U chassis and six times the compute performance per height unit. Still it is 100% compliant to conventional data center environments offering easy rack-wide team play with already existing infrastructures.



# Features & Benefits

Main Features	Benefits
<p><b>Maximum compute density</b></p> <ul style="list-style-type: none"> <li>■ A fully configured PRIMERGY CX600 M1 hosts eight PRIMERGY CX1640 M1 server nodes in a condensed 2U rack enclosure.</li> </ul> <p><b>Specialized for parallel workloads</b></p> <ul style="list-style-type: none"> <li>■ Each processor of the Intel® Xeon Phi™ 7200 product family features up to 72 cores, 16 GB high-bandwidth on-package MCDRAM memory and an optionally integrated fabric.</li> <li>■ 6 DIMMs per server node with up to 384 GB DDR4 memory and up to 2,400 MHz DRAM bandwidth.</li> </ul> <p><b>Traditional air cooling or optional liquid cooling</b></p> <ul style="list-style-type: none"> <li>■ The PRIMERGY CX600 M1 complies to conventional datacenter front-to-back airflow and cooling and standard 19" industry rack infrastructure and applications.</li> <li>■ The optional direct-to-chip hot water (45 °C / 113 °F) based Cool-Central® Liquid Cooling captures up to 75 % of the servers heat.</li> </ul> <p><b>Shared infrastructure &amp; easy serviceability</b></p> <ul style="list-style-type: none"> <li>■ Server nodes share central cooling fans and hot-plug power supplies in the 2U PRIMERGY CX600 M1 chassis.</li> <li>■ Hot-plug for server nodes, power supplies and disk drives enable enhanced availability and easy serviceability.</li> </ul>	<ul style="list-style-type: none"> <li>■ 9x the performance per U in comparison with standard rack servers for extremely high density.</li> <li>■ Significant performance boost for parallel-processing versus traditional Intel Xeon platforms.</li> <li>■ Easy rack-wide team play with already existing data center infrastructure lowers overall investment.</li> <li>■ Helps to reduce data center cooling costs by over 50 % and allows for 2.5-5x higher data center density.</li> <li>■ Decreased energy consumption, lower investment, yet still redundant operation. Lower energy budgets for a comparable performance as with standard rack servers.</li> <li>■ Each single server can be serviced without affecting the other nodes in the chassis. Redundancy for shared components provides uniform higher availability.</li> </ul>

# Technical details

## PRIMERGY CX600 M1

Base unit	Chassis for PRIMERGY CX1640 M1
Product Type	Multi-Node Server Chassis
<b>Enclosure</b>	
System unit type	2U chassis for 19-inch rack
Front bays	4x bays for half-wide server trays CX1640 M1
Rear bays	4x bays for half-wide server trays CX1640 M1
Fan configuration	5 non hot-plug fans
Power supply configuration	4x hot-plug power supply units (2x front, 2x rear)
<b>Operating panel</b>	
Operating buttons	On/off switch
Status LEDs	Identification (blue) Power (green)
<b>Dimensions / Weight</b>	
Rack (W x D x H)	444 x 820.0 x 87.5 mm
Height Unit Rack	2 U
19" rackmount	Yes
Weight	Approximately 40 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Included in Rack System
<b>Electrical values</b>	
Max. input of single power supply	1200 W (94% efficiency)
Power supply configuration note	4x PSU in 3 + 1 redundancy configuration.
Power supply efficiency	94 % (80 PLUS platinum)
Rated voltage range	100 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	35.7A with three PSU (11.9A per PSU)
Electrical value notes	Active power max. value depends on system configuration. For details see System Architect.
<b>Environment</b>	
Operating ambient temperature	5 - 40 °C (41 - 104 °F)
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	According to ISO9296
Sound pressure (LpAm)	<68 dB(A) (standby) / <57 dB(A) (operation)
Sound power (LWAd; 1B = 10dB)	< 8.6 B (standby) / < 7.5 B (operation)
<b>Compliance</b>	
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) - planned WEEE (Waste electrical and electronic equipment) - planned
Germany	GS
Europe	CE Class A *
USA/Canada	ULc/us
Japan	VCCI:V3 Class A + JIS 61000-3-2

**Compliance**

Taiwan	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.

**Server Nodes**

Product Model name	PRIMERGY CX1640 M1
Product Type	Mono Socket 1U half-wide Server Node
Processor quantity support	1
Number of nodes	max. 8x in CX600 M1
Memory slots total	6
Supported capacity RAM (max.)	384 GB
Number of Storage Drives (max.)	Air cooling: 1x DOM SATA, or 1x 2.5" non hot-plug HDD, or 2x 2.5" non hot-plug SSD Liquid cooling: 1x DOM SATA only

**Warranty**

Warranty period	3 years
Warranty type	Onsite warranty
<b>Product Support Services - the perfect extension</b>	
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years
Spare Parts availability	
Service Weblink	<a href="http://ts.fujitsu.com/Supportservice">http://ts.fujitsu.com/Supportservice</a>

## More information

### Fujitsu platform solutions

In addition to Fujitsu PRIMERGY CX600 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

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#### Software

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### More information

Learn more about Fujitsu PRIMERGY CX600 M1, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.

<http://www.fujitsu.com/fts/products/computing/servers/primergy/scale-out/cx600m1/>

### Fujitsu green policy innovation

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