

Data Sheet

FUJITSU Server PRIMERGY BX900 S2 Blade System

For data centers with dynamic environments

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, compact and scalable blade systems, 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.

Fujitsu Server PRIMERGY BX blade systems are the perfect platform to build a converged infrastructure designed to reduce IT costs, time and efforts. PRIMERGY Blade Servers utilizes a modular architecture and contain in addition to the compute power, all required infrastructure and network components, storage capacity as well as management modules that helps companies to simplify their infrastructure, achieve significant cost reductions and increase flexibility.

PRIMERGY BX900 S2

The Fujitsu Server PRIMERGY BX900 S2 chassis is the rock-solid foundation for Fujitsu's blade ecosystem, providing a reliable, flexible and efficient platform for building a converged infrastructure. The PRIMERGY BX900 blade server takes advantage of Fujitsu's more than 20 years' experience in the development of x86 servers. The system provides a modular approach to create an IT infrastructure. The chassis includes all needed

infrastructure elements such as power supplies and fans, networking, and management. The Fujitsu blade server is easy to upgrade, maintain and customize. Inside, you can mix and match almost any combination of server, storage and connection blades to run your choice of operating systems and applications. The PRIMERGY BX900 S2 can be equipped with up to 18 of these blades in a 10U chassis. Thus it's the leader in its class for density in a compact form factor. Fujitsu's Cool-safe® cooling concept, combined with efficient power supply units and holistic power management, reduce your costs and ensures a more efficient use of energy and cooling capacity. Centralized management of physical and virtualized environments and comprehensive I/O virtualization capabilities, combined with a fully redundant system design, supports business agility. Furthermore it is possible to interchange the same blades and network options between other Fujitsu blade chassis, e.g. the PRIMERGY BX400, and manage the entire system with the same tools.



Features & Benefits

Main Features	Benefits
<p>Reliable architecture</p> <ul style="list-style-type: none">■ Modular design for computing, storage, switching, power supply and cooling.■ Fully redundant and hot-pluggable components to enable seamless switchover.■ Passive midplane to prevent single point of failures.	<ul style="list-style-type: none">■ The PRIMERGY BX900 S2 provides the server reliability, flexibility, and performance you need to achieve your key business objectives.
<p>Individually adaptable</p> <ul style="list-style-type: none">■ Optimum combination of up to 18 server blades and/or storage blades per enclosure.■ Combines server, storage, and networking as well as infrastructure components into a single chassis in order to convert it into a small data center.	
<p>Flexible scalability</p> <ul style="list-style-type: none">■ Choice of different server blades using latest Intel® Xeon® processors, adaptable memory configurations and a versatile Universal Converged Network Adapter to provide a common infrastructure for LAN and SAN with the ability to partition the bandwidth, making it ideal to suit the needs of individual applications.■ Plus, ServerView Virtual-IO Manager that radically eases data center tasks and greatly simplifies the management in LAN and SAN environments while providing highest flexibility at their deployment and operation.	
<p>Leading energy efficiency</p> <ul style="list-style-type: none">■ PRIMERGY BX900 S2 takes advantage of its world-class design. It contains efficient power supplies with large fan modules and optimized airflow channels to effectively cool the entire chassis while using less power.	
	<ul style="list-style-type: none">■ Modular infrastructure, designed to share components throughout the family making it easy to create, customize and grow.■ Complete investment protection and flexible growth scenarios.
	<ul style="list-style-type: none">■ Its smart design makes the PRIMERGY BX900 S2 more flexible than other server solutions, offering easy scalability to protect your investments.■ Easily deploy more or larger virtual and physical machines than ever before and in this way increase your IT performance and consolidation ratio.
	<ul style="list-style-type: none">■ More efficient use of power and cooling to save energy costs as never before.

Technical details

PRIMERGY BX900 S2

Base unit	PRIMERGY BX900 S2
Housing types	Rack

Enclosure

System unit type	10 U chassis for 19-inch rack
Front bays	18 half height for server and/or storage blades
Midplane	High speed midplane with 4 redundant fabrics
Rear bays	8 x for Connection Blades (2 Connection Blades per fabric) 6 x for PSU modules
Management Blades	1x hot-plug Management Blade as standard, redundant Management Blade as option
Fan configuration	Up to 3 additional hot plug, redundant fan modules
Fan notes	2 fan units per module, 2 x 2 fans per unit; modules either part of PSU modules or independent components
Power supply configuration	Up to 6x hot-plug power supply module, 3x as minimum (4th to 6th power supply module necessary for redundancy, and depending on system configuration)

Operating panel

Operating buttons	On/off switch ID button
Status LEDs	Power (amber / green) System status (orange) Identification (blue)
Service display	ServerView Local Service Display for Blade (LSB)

Management Blade

Type of Unit	BX900 MMB S1
LAN / Ethernet (RJ-45)	2 x 1Gbit/s Ethernet
Management LAN (RJ45)	Dedicated Service LAN port for MMB (1Gb Ethernet)
Serial 1 (9-pin)	1 x RS-232-C
USB 2.0 ports	2 x (at rear side of the system)

Dimensions / Weight

Dimensions (W x D x H)	482.6 mm (Bezel) / 445mm (Body) x 778 x 438
Height Unit Rack	10 U
19" rackmount	Yes
Weight	Up to 191 kg
Weight notes	Fully assembled Actual weight may vary depending on configuration
Rack integration kit	Included

Electrical values

Max. input of single power supply	3200 W / 1600 W (240 V / 100 V)
Max. output of single power supply	2880 W / 1360 W (240 V / 100 V)
Rated voltage range	100 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	65A / 29A (100 V / 240 V)
Active power (max. configuration)	11,200 W
Heat emission (max. configuration)	40320.0 kJ/h (38216.0 BTU/h)
Electrical value notes	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/ Suitable power supply cables have to be ordered separately.

Environment

Operating ambient temperature	5 - 30 °C
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Environment

Operating relative humidity	10 - 85 % (non condensing)
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
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	< 79 dB(A) (operating) < 64 dB(A) (standby)
Sound power (LWAd; 1B = 10dB)	< 8,6 B

Compliance

Global	CB RoHS WEEE
Germany	GS
Europe	CE Class A *
USA/Canada	CSAc/us ULc/us FCC Class A
Japan	VCCI:V3 Class A + JIS 61000-3-2
Australia/New Zealand	C-Tick
Taiwan	BSMI
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.

Server and Storage Blades pluggable into system unit front side

Product Model name	Processor type support	Processor quantity support	Max. number per BX900	Memory slots total	Supported capacity RAM (max.)
PRIMERGY BX2560 M2	Intel® Xeon® processor E5-2600 v4 product family http://docs.ts.fujitsu.com/dl.aspx?id=f804afd7-dcb0-4763-9d75-a7c9c97ef832	1 - 2	18	16	1,024 GB
PRIMERGY BX2580 M2	Intel® Xeon® processor E5-2600 v4 product family http://docs.ts.fujitsu.com/dl.aspx?id=d711b6a2-7466-4b9c-9ea5-7b0daf8b1384	1 - 2	18	24	1,536 GB
PRIMERGY SX960 S1	http://docs.ts.fujitsu.com/dl.aspx?id=a6f875b7-e6f8-474f-95ca-48040820c54c		2		
PRIMERGY SX980 S2	http://docs.ts.fujitsu.com/dl.aspx?id=c7b36166-3908-4d82-b187-3db4c90e4cef		max. 6, (for the US market max. 3x SX980 S2 can be installed)		

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per BX unit
Eth FEX 10Gb 16/8	16 x 10 Gbit/s Eth	8 x 10 Gbit/s (SFP+)	6 (CB Slot 1/2 3/4 5/6)
Eth Switch/IBP/EHM 10/40Gb 18/8 + 2	18 x 1/10 Gbit/s Eth	8 x 10 Gbit/s (SFP+), 2 x 40Gbit/s (QSFP+)	6 (CB Slot 1/2 3/4 5/6)
Eth Switch/IBP/EHM 1Gb 18/6	18 x 1 Gbit/s Eth	6 x 1 Gbit/s (RJ45)	8 (CB Slot 1/2 3/4 5/6 7/8)
Eth Switch/IBP/EHM 1Gb 36/12	36 x 1 Gbit/s Eth	8 x 1 Gbit/s (RJ45), 4 x 1 Gbit/s (SFP)	8 (CB Slot 1/2 3/4 5/6 7/8)
Eth Switch/IBP/EHM 1Gb 36/8+2	36 x 1 Gbit/s Eth	8 x 1 Gbit/s (RJ45) , 2 x 10 Gbit/s (SFP+)	8 (CB Slot 1/2 3/4 5/6 7/8)
FC Pass Thru 8Gb 18/18	18 x 8 Gbit/s FC	18 x 8 Gbit/s (SFP/SFP+)	4 (CB Slot 3/4 5/6)

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per BX unit
FC Switch 16Gb Brocade 14 Port	18 x 8/16 Gbit/s FC	8 x 8/16 Gbit/s (SFP+)	4 (CB Slot 3/4 5/6)
FC Switch 16Gb Brocade 26 Port	18 x 8/16 Gbit/s FC	8 x 8/16 Gbit/s (SFP+)	4 (CB Slot 3/4 5/6)
FC Switch 16Gb Brocade 26 Port Enterprise	18 x 8/16 Gbit/s FC	8 x 8/16 Gbit/s (SFP+)	4 (CB Slot 3/4 5/6)
SAS Switch 6Gb 18/6	18 x 6 Gbit/s SAS	6 x 6 Gbit/s SAS	2 (CB Slots 5+6)

Warranty

Warranty period	3 years
Warranty type	Onsite warranty
Warranty Terms & Conditions	www.fujitsu.com/support

Product Support Services - the perfect extension

Support Pack Options	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time 24x7, 4h Onsite Response Time
Recommended Service	24x7 Onsite Service with 4h Onsite Response Time
Spare Parts availability	5 years
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/products/product-support-services/

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY BX900 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

Built 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 offerings. This allows customers to select 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/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY BX900 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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