FUJITSU

Data Sheet
Fujitsu PRIMERGY BX400 S1 Blade Server

Blade Made Easy

Fujitsu PRIMERGY BX Blade Servers meet all the requirements of medium-sized companies as well as the branches and data centers of large companies, especially with their comprehensive offer of services and solutions. They offer a clever alternative in providing an IT infrastructure with high levels of efficiency, flexibility and business continuity. The PRIMERGY BX system family is designed so that the chassis components can be used throughout the family. This means that changing business requirements can be met quickly and easily. Servers, storage and connection blades can be added without any additional cabling effort or administration software. Its modular design gives the PRIMERGY BX Blade Servers considerable advantages, such as high density as well as reliable and dynamic 24x7 operations. The PRIMERGY BX Blade Servers are the ideal choice for today's and tomorrow's data center solutions where reliability, performance and connectivity are important requirements. They can be used for a wide range of applications, starting with web or terminal servers up to high-performance databases. And as business requirements grow, the PRIMERGY BX Blade Servers can be adapted to meet individual requirements and fulfill such needs in a suitable manner.

PRIMERGY BX400 S1
The Fujitsu PRIMERGY BX400 is a fully-featured blade system built from the ground up to be user-friendly and versatile, helping you meet large-scale computing and storage requirements. It provides an optimum combination of up to eight server or storage blades in a small enclosure, supported by a comprehensive set of solutions and services.

It combines leading-edge technology, such as a fully integrated virtual storage appliance, with the impressive input/output flexibility and bandwidth. Its modular design makes the PRIMERGY BX400 more affordable than other blade servers, while also maximizing the use of limited office space with a compact footprint. Two different system versions of the PRIMERGY BX400 are available to suit different requirements. The rack version can be integrated easily into an industry standard 19-inch racks. Alternatively, the floor-stand version with low noise levels of only 45 decibels can be installed under a desk or in a reception area without distracting employees. In fact, it is one of the quietest blade servers available.
Easy to install, configure and manage, the PRIMERGY BX400 allows companies to spend less time on set-up and management, and focus on the core business processes essential for profitability. Fujitsu's PRIMERGY BX400 offering is enhanced by a comprehensive set of packaged services that support your IT team throughout the implementation process. From training, consulting and integration support and financing to detailed IT optimization, our services help you realize the full potential of your technology and keep your environment up and running.

Features and Benefits

Main Features	Benefits
The box for your solution	
■ The Fujitsu PRIMERGY BX400 provides an optimum combination of up to eight server or storage blades in a small enclosure that is available as 6U rack- and floorstand-version.	■ Modular infrastructure to meet office and datacenter environments, designed to share components throughout the family making it easy to create, customize and grow.
■ It combines leading-edge technology, such as a fully integrated virtual storage appliance, in order to convert it into a small data center in a box.	
Grow The Business	
■ Complementary technology to x86 server virtualization with additional benefits such as improved manageability, availability, and operational efficiency from shared cable infrastructures or virtual input/output (I/O).	■ Its smart design makes the PRIMERGY BX400 more flexible than other server solutions, offering easy scalability to protect your investments.
■ The PRIMERGY BX400 can be equipped with the latest blade technology and offers high levels of I/O flexibility and a bandwidth.	
■ Thanks to its highly efficient components, advanced cooling technology, and potent power management tools, the BX400 also reduces cooling and air conditioning costs.	
Simplify The Business	
■ With ServerView you manage your servers and enclosures locally and remotely and take complete control regardless of the state of the server operating system.	■ Simplified lifecycle management cuts server administration time by up to 60 percent, saving you even more effort and money.
■ Additional software components help to reduce the complexity in mixed physical and virtual environments and its internal and external connections.	
Creates Value For The Business	
■ Modular upgrade options for server- or storage blades provide the flexibility to integrate new technologies into existing environments.	■ The consolidated design makes the PRIMERGY BX400 more affordable than traditional rack or tower servers, storage and networking solutions offering lower total operational costs.
■ Additional server blades or components can be easily added or replaced without the re-cabling that usually requires multiple man-hours or complicated processes.	
■ Fujitsu's PRIMERGY BX400 offering is enhanced by a comprehensive set of packaged services that support your IT team throughout the implementation process.	

Technical details

Enclosure	
System unit type	6 U chassis for 19-inch rack, or floorstand version
Front bays	8 half height bays for server or storage blades
Midplane	High speed midplane with 3 fabrics
Rear bays	4 x for Connection Blades 4 x for PSU/fan modules
Management Blades	1x hot-plug management blade as standard, redundant management blades as option
Fan configuration	Up to 3 hot plug, redundant rear fan units (2 fans per unit)
Power supply configuration	Up to 4x hot-plug power supply modules (1x as standard)

Operating panel	
Operating buttons	On/off switch ID button
Status LEDs	Power (amber / green) System status (orange / yellow) Identification (blue)
Service display	ServerView Local Service Display for Blade (LSB)
ODD	1 - assigned to server blade by MMB control
USB ports	2 - assigned to server blade by MMB control

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

Dimensions / Weight	
Floor-stand (W x D x H)	366 x 819 x 578 mm
Rack (W x D x H)	445 x 785 x 267 mm
Mounting Depth Rack	818 mm
Height Unit Rack	6 U
19" rackmount	Yes
Weight	Rack: up to 98 kg / Floorstand: up to 112.5 kg
Weight notes	Fully assembled Actual weight may vary depending on configuration
Rack integration kit	Included in Rack System

Electrical values	
Max. input of single power supply	1200 W / 1785 W (100 V - 240 V)
Power supply configuration note	max. 4 PSU in n, n+1 or n+n redundancy configuration.
Power supply efficiency	92% (at 50% PSU load, CSCI "gold")
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Rated current max.	45 A / 22.5 A (100 V - 240 V)
Electrical value notes	Active power max. value depends on system configuration. For details see Power Configuration Tool. Power plug: non industrial type a connector (100V) e.g. NEMA 5-15P or 5-20P / industrial type b connector (230V) e.g. IEC60309

Environmental	
Operating ambient temperature	5 - 35°C
Operating environment	FTS 04230 Guideline for Data Center (installation locations)

Environmental

Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	up to 60.5dB(A) (operating), 45dB(A) operating in Low Noise mode
Sound power (LWAd; 1B = 10dB)	71dB (operating), 62dB (operating in Low Noise mode)

Compliance

Germany	GS
Europe	CE Class A *
USA/Canada	ULc/us FCC Class A
Global	CB RoHS WEEE
Japan	VCCI Class A + JIS 61000-3-2
Australia/New Zealand	C-Tick
Taiwan	BSMI
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.
Compliance link	http://sp.ts.fujitsu.com/sites/certificates/

Server and Storage Blades pluggable into system unit front side

Product Model name	Product Type	Processor quantity support	Max. number per BX400	Memory slots total	Supported capacity RAM (max.)
PRIMERGY BX920 S2	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.aspx?id=cfd1622e-9fae-419b-ad1c-91f78c9f93e7	1 - 2	8	9	288 GB
PRIMERGY BX922 S2	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.aspx?id=cb2281f2-b794-422b-aa87-a62dfeb7914c	1 - 2	8	12	192 GB
PRIMERGY BX924 S2	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.aspx?id=43070323-fed9-4cfb-83f5-f791be68994a	2	8	18	384 GB
PRIMERGY SX910 S1	Storage Blade Tape http://docs.ts.fujitsu.com/dl.aspx?id=cc5ba5c8-2c98-4647-b585-db5890f9243c		4		
PRIMERGY SX940 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx?id=cabbdb01-8a40-44dd-af4d-50bc074c0ec8		4		
PRIMERGY SX960 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx?id=489d2a0c-81f1-4d3e-aaa3-df55ac446930		2		
PRIMERGY SX980 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx?id=b4de3482-a07c-4cda-8f9c-de4e3869291b		3		

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per BX400
Eth Switch/IBP 1Gb 36/12	36 x 1 Gb Eth	8 x 1 Gb (RJ45), 4 x 1 Gb (SFP)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 1Gb 36/8+2	36 x 1 Gb Eth	8 x 1 Gb (RJ45) , 2 x 10 Gb (SFP+)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 10Gb 18/8	18 x 10 Gb Eth	8 x 10 Gb (SFP+)	4 (CB Slot 1/2 3/4)
FC Switch 8Gb Brocade 26 Port Enterprise	18 x 8 Gb FC	8 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
FC Switch 8Gb Brocade 14 Port	18 x 8 Gb FC	8 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
FC Switch 8Gb Brocade 26 Port	18 x 8 Gb FC	8 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
IB Switch 40Gb 18/18	18 x 40 Gb IB	18 x 40 Gb (QSFP)	1 (CB Slot 3/4)
FC Pass Thru 8Gb 18/18	18 x 8 Gb FC	18 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per BX400
Eth Pass Thru 10Gb 18/18	18 x 1/10 Gb Eth	18 x 1/10 Gb (SFP/SFP+/Twinax)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 1Gb 18/6	18 x 1 Gb Eth	6 x 1 Gb (RJ45)	4 (CB Slot 1/2 3/4)
SAS Switch 6Gb 18/6	18 x 6 Gb SAS	6 x 6 Gb SAS	1 (CB Slot 3)

Warranty

Standard Warranty	3 years
Service level	On-site Service (depending on country)

Maintenance and Support Services - the perfect extension

Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Spare Parts availability	5 years
Service Weblink	http://www.fujitsu.com/fts/services

More information

Fujitsu platform solutions

In addition to Fujitsu PRIMERGY BX400 S1, 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/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY BX400 S1, 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 resolve issues of environmental energy efficiency through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/

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