

DATA SHEET

PRIMERGY BX900 S1 - The Dynamic Cube

Issue: November 2009

The PRIMERGY BX Blade Servers are the ideal choice for the data center solutions of today and tomorrow. Our blade servers provide maximum performance and maximum redundancy, but with only minimum space requirements, low power consumption and a reduction in the time and effort required for cabling. The PRIMERGY BX system family is designed to share components between chassis thus enabling quick and easy reactions to changing business requirements. Storage and server blades can be added without any extra effort, as would be needed when cabling or adding management software. You can use the same applications, rely on the same server and storage components and establish connections to the same networks. The PRIMERGY BX Blade Servers are flexible and have complete control via a central administration instance that is redundant in design; they minimize administrative time and effort, freeing you of time-consuming administration tasks. Our build-to-order process ensures that only completely installed and previously tested solutions are supplied, which have been precisely adapted to individual requirements and which will grow with future business requirements.

PRIMERGY BX900 S1

The PRIMERGY BX900 – the Dynamic Cube – is a complete dynamic server infrastructure in a single chassis. The Blade Server can be dynamically adapted to different IT requirements, thereby reducing costs while increasing your IT agility. The PRIMERGY BX900 can accommodate up to 18 serverblades in a 10U chassis, providing class-leading density for multiple application services in a compact form-factor. Using Cool Safe™, our trademarked cooling concept, combined with high-efficiency power supplies and the embedded ServerView Power Manager software, it delivers truly dynamic power and cooling capabilities that save you money. Equipped with the latest Intel Xeon 5500 processor blades, large memory capacities, and state-of-the-art I/O performance, the PRIMERGY BX900 is optimized for any application virtualization scenario, and with the ability to flexibly stack up to four BX900 chassis in a common management and I/O administrative domain, provides investment protection as your business grows.



MAIN FEATURES	BENEFITS
Dynamic Power & Cooling: Using our Cool-safe™ cooling concept, combined with over 90% efficient power supplies and the embedded ServerView Power Management software, it ensures real dynamic power & cooling.	Save money on your energy bill
Dynamic Virtualization: Equipped with the Intel® Xeon® 5500 series processor (Nehalem-EP), very large memory capacities and state of the art I/O performance, the PRIMERGY BX900 is optimized for any virtualization scenario.	Run more Virtual Machines than ever with zero hassle increasing your IT performance.
Dynamic High Availability: Due to its fully redundant design (MMB's, NIC's, Fans, PSU's) and in combination with ServerView Resource Coordinator VE, the PRIMERGY BX900 can completely protect itself against any possible failure and has the fastest automatic recovery.	The best uptime and highest server protection.
Dynamic Scalability: With space for up to 18 Server Blades, 8 Connection Blades, 6 power supply units and 2 management boards in a 10U high chassis, the PRIMERGY BX900 has the highest density. Combined with its stackability the system allows the most flexible scaling.	Complete investment protection and flexible growth scenarios.



Technical details

PRIMERGY BX900 S1

Housing type	Rack
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Enclosure

System unit type	10 U chassis for 19-inch Rack
Front bays	18 half height or 9 full height bays for Server 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	1 x hot-plug Management Blade as standard, redundant Management Blade as option
Fan configuration	Two fan units per PSU module (2 fans per fan unit)
Power supply configuration	Up to 6x hot-plug power supply modules, 3x as standard (4th to 6th power supply module are necessary for redundancy, depending on system configuration)

Operating panel

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

Management Blade

Management Blade type	BX900 MMB S1
LAN / Ethernet (RJ-45)	2 x 1Gb Ethernet
Serial 1 (9-pin)	1 x RS-232-C
USB ports	2 x (at rear side of the system)

Dimensions / Weight

Dimension (W x D x H)	445 x 778 x 438 mm
Height Unit Rack	10 U
19" rackmount	Yes
Weight	Up to 191 kg
Weight notes	Fully assembled Weight may vary depending on actual configuration

Dimensions / Weight

Rack integration kit	Included
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Electrical values

Max. output of power supply	1165 W / 2685 W (100 - 240V)
Rated voltage range	100 - 240 V
Rated frequency range	50 - 60 Hz
Rated current max.	65A / 29A (100 - 240V)

Electrical value notes Active power max. value depends on system configuration.
For details see Power Configuration Tool.

3 power supply cables (16A IEC320 C19 -> 16A IEC C20) are part of the standard delivery

Environmental

Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	up to 64 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	8.6 B (operating)
Operating ambient temperature	5 - 35°C
Operating relative humidity	10 - 85 % (non condensing)

Compliance

Germany	GS
Europe	CE
USA/Canada	ULc/us FCC Class A
Global	CB RoHS WEEE
Japan	VCCI class A
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	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Server and Storage Blades pluggable into system unit front side

Product Model name	Product Type	Processor quantity support	Max. number per system unit	Permalink to data sheet
PRIMERGY BX920 S1	Dual Socket Server Blade (Intel)	1 - 2	18	http://docs.ts.fujitsu.com/dl.aspx?id=92c6a7c8-5e0c-4668-9921-386af3df92db
PRIMERGY SX940 S1	Storage Blade Disk		6	http://docs.ts.fujitsu.com/dl.aspx?id=cabbdb01-8a40-44dd-af4d-50bc074c0ec8
PRIMERGY SX910 S1	Storage Blade Tape		6	http://docs.ts.fujitsu.com/dl.aspx?id=cc5ba5c8-2c98-4647-b585-db5890f9243c

Connection Blades (CB) pluggable into system unit rear side

Connection Blade type	Down-link ports	Up-link ports	Max. number per system unit	Permalink to data sheet
Eth Switch/IBP 1Gb 36/12	36 x 1 Gb Eth	8 x RJ45, 4 x SFP	6 (CB Slot 1/2 3/4 5/6)	http://docs.ts.fujitsu.com/dl.aspx?id=698e96b8-f040-4cd5-93ca-c37d97d07868
Eth Switch/IBP 1Gb 36/8+2	36 x 1 Gb Eth	8 x 1GbE , 2 x 10GbE	6 (CB Slot 1/2 3/4 5/6)	http://docs.ts.fujitsu.com/dl.aspx?id=4f316397-847e-4908-ad4f-38376cb1e6b8

Connection Blades (CB) pluggable into system unit rear side

Connection Blade type	Down-link ports	Up-link ports	Max. number per system unit	Permalink to data sheet
FC Switch 8Gb Brocade 14 Port	18 x 8 Gb FC	8 x 2Gb / 4Gb / 8Gb FC	4 (CB Slot 3/4 5/6)	http://docs.ts.fujitsu.com/dl.aspx?id=a499f935-abd8-47e3-b836-f16da5d81c70
FC Switch 8Gb Brocade 26 Port	18 x 8 Gb FC	8 x 2Gb / 4Gb / 8Gb FC	4 (CB Slot 3/4 5/6)	http://docs.ts.fujitsu.com/dl.aspx?id=a499f935-abd8-47e3-b836-f16da5d81c70
FC Switch 8Gb Brocade 26 Port Enterprise	18 x 8 Gb FC	8 x 2Gb / 4Gb / 8Gb FC	4 (CB Slot 3/4 5/6)	http://docs.ts.fujitsu.com/dl.aspx?id=a499f935-abd8-47e3-b836-f16da5d81c70
IB Switch 40Gb 18/18	18 x 40 Gb IB	18 x 40 Gb IB	3 (CB Slot 3/4 5/6 7/8)	http://docs.ts.fujitsu.com/dl.aspx?id=2f383313-f3a9-4791-b30b-dcb2f8add4de

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
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:

<http://ts.fujitsu.com/aboutus>

Take back and Recycling information:

<http://ts.fujitsu.com/recycling>

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