

DATA SHEET

PRIMERGY BX900 S1 - The Dynamic Cube

Issue: June 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

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 |
| Rack integration kit | Included |

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 (LWA; 1B = 10dB) | 8.6 B (operating) |
| Noise notes / description | Sound power / pressure values are under investigation |
| 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 |

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 |
| FC Switch 8Gb Brocade 14 Port | 18 x 8 Gb FC | 8 x 2Gb / 4Gb / 8Gb FC | 4 (CB Slot 3/4 5/6) | |
| 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) | |

Warranty

| | |
|-------------------|-----------------|
| Standard Warranty | 3 years |
| Service level | On-site Service |

Warranty**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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