

Data Sheet

FUJITSU Server PRIMEQUEST 2800B2 Business Critical

Grow your business with vast performance and business-critical reliability on x86

PRIMEQUEST 2800B2 Business Critical

FUJITSU Server PRIMEQUEST 2800B2 is an 8-socket rack server equipped with the latest Intel® Xeon® E7-8800 v3 processor family. Providing up to 144 cores and enormous as well as super fast 12TB DDR4 main memory, populated over 192 DIMM slots, this system offers highest performance. In combination with many PCIe 3.0 expansion options, the PRIMEQUEST 2800B2 offers performance and scalability with no compromise. Fortified with advanced RAS that enables actions in advance to avoid errors, this 10U rack server is the right choice for demanding databases, in-memory solutions and business-critical applications.



Features & Benefits

| Main Features | Benefits |
|---|---|
| <p>Scalable platform for transaction demanding workloads and consolidation</p> <ul style="list-style-type: none"> ■ 8x Intel Xeon processor E7-8800 v3 product family with up to 144 cores ■ Huge memory capacity of 12TB over 192 DIMMs ■ 16 PCIe 3.0 expansion options ■ Economic scaling from 2 to 8 sockets <p>Smart architecture with advanced RAS for Business Critical Workloads</p> <ul style="list-style-type: none"> ■ ‘Glue-less’ design, no external QPI cables ■ Dual power feed option for two redundant phases ■ Advanced memory protection and intra-socket mirroring ■ System health check and failure prevention (MCA) <p>Cost efficient operations</p> <ul style="list-style-type: none"> ■ Simplified power management with different pre-defined power profiles ■ Fujitsu ServerView Suite offers tools for installation and deployment, permanent status monitoring and control. A wide range of integration packs allow a seamless and easy integration in widely used enterprise management systems | <ul style="list-style-type: none"> ■ Unprecedented performance and memory capacity for demanding corporate databases, in-memory solutions and business-critical applications ■ Fast I/O throughput ensured ■ This system is designed to enable simplify scale-up as required components are “inside” the system thanks to the “glueless” system design ■ Advanced RAS features have been built into to enable advanced actions for error circumvention, assisted by the enterprise x86 operating systems to increase the system availability ■ No external QPI cables ensure a high level of serviceability ■ Simplified and comprehensive power management that results with the high efficient power supplies in significant savings ■ Fujitsu ServerView Suite provides all the functions for fail-safe, flexible and automated 24x7 server operations and improves end-user productivity via intelligent and innovative system management solutions. |

Technical details

PRIMEQUEST 2800B2 Business Critical

| | |
|-------------------------------|---|
| Mainboard type | up to 4 x Systemboard |
| Processor quantity and type | 2, 4, 6, 8 x Intel® Xeon® processor E7-8800 v3 product family |
| Memory slots | 192 Max. 12 TB |
| Memory slot type | DIMM (DDR4) |
| Memory capacity (min. - max.) | 16 GB - 12 TB |
| Memory protection | ECC Memory Mirroring support Advanced ECC DDDC (Double Device Data Correction) |
| Memory notes | Up to 192 DIMM slots per server within 4SB, each equipped with 2 Memory Mezzanine cards. 12TB will be available |
| Memory modules notes | Memory modules will be delivered in set's of 2 DIMMs per order code |

Interfaces

| | |
|-----------------------|--|
| Graphics (15-pin) | 4 x VGA (1x per SB) |
| Management LAN (RJ45) | Dedicated Service LAN port for MMB (10/100 Mbit/s) |

Onboard or integrated Controller

| | | |
|------------------------------|--|-----------------|
| RAID controller | RAID 0/1 or RAID 5/6 controller integrated in System board and/or Disk Unit (option) Options are described under Components RAID controller | |
| LAN Controller | LAN controllers are integrated in optional I/O units, details are described under I/O options TCP/IP acceleration, PXE boot via LAN from PXE server, iSCSI boot (also diskless) via onboard LAN | |
| Remote management controller | PQ2000 Management Board (MMB) | |
| Fast IDE/Ultra DMA-100 | | |
| LAN Controller | Intel® I350-AM2 | Intel® X540-AT2 |

Service Processor

| | |
|------------|--|
| General | Management Board (MMB), located on the rear side of the system. |
| Interfaces | For Maintenance: - Local: 10/100M RJ45 for local maintenance. - Remote: 10/100M RJ45 for REMCS, AIS-Connect, ACA and ServiceLink connection (Remote monitoring service). For Management - 0/1 10M/100M/1G RJ45 |

I/O options

| Type | LAN ports | based on | number of PCIe slots | Max. number |
|------|-----------|----------|----------------------|-------------|
|------|-----------|----------|----------------------|-------------|

Drive bays

| | |
|---------------------------------|--|
| Storage drive bays | 2.5-inch hot-plug SAS |
| Storage drive bay configuration | Max. 8 x 2.5-inch with max. 2 x Disk Units |

General system information

| | |
|-------------------|--|
| Number of fans | 6 |
| Fan configuration | hot plug |
| Fan notes | PSU cooling fan will be used as chassis cooling facility |

Operating panel

| | |
|-------------|---|
| Status LEDs | System status (orange / yellow) Power (amber / green) Identification (blue) |
|-------------|---|

RAS Features

| | |
|----------|--|
| Standard | SDDC, ECC, redundant fans and power supply |
| Advanced | Intra-socket memory mirroring, MCA, DDDC |

Operating Systems and Virtualization Software

| | |
|-------------------------------|---|
| Operating system release link | http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfb3230473 |
| Operating system notes | Not all OSes, OS versions and server functions will be released at server release. For details refer to link below. |

Server Management

| | |
|------------------------------|---|
| DC Infrastructure Management | <p>ServerView Suite - Maintain</p> <ul style="list-style-type: none"> Remote Management (iRMC in combination with Intel® Node Manager) Update Management (BIOS, Firmware, Windows Drivers, Agents and CIM Providers) Performance Measurement Asset Management Online Diagnostics <p>ServerView Suite - Integrate</p> <ul style="list-style-type: none"> Integration packs for Microsoft System Center, VMware vCenter, VMware vRealize, Nagios, and HP SIM <p>Deployment tools and others</p> <p>ServerView Suite - Deploy</p> <ul style="list-style-type: none"> SV Installation Manager <p>ServerView Suite - Control</p> <ul style="list-style-type: none"> Operations Manager incl. PDA and ASR & R Agents and CIM Providers / Agentless Service System Monitor RAID Manager Capacity Management Power Management Storage Support |
|------------------------------|---|

Dimensions / Weight

| | |
|------------------|--|
| Rack (W x D x H) | 445 x 782 x 438 mm |
| Height Unit Rack | 10 U |
| 19" rackmount | Yes |
| Weight | Up to 143 kg |
| Weight notes | Fully assembled Actual weight may vary depending on configuration |

Environment

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|-------------------------------|---|
| Operating ambient temperature | 5 - 35 °C |
| Operating relative humidity | 20 - 80 % |
| Maximum altitude | 3.000 m |
| 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) | 60dB, 74dB(80 Plus Platinum) |
| Sound power (LWAd; 1B = 10dB) | 7.8B, 9.2B(80 Plus Platinum) |

Electrical values

| | |
|--------------------------------------|---|
| Power supply configuration | Up to 6 hot plug power supplies. Base unit equipped with 0 power supplies, redundancy as option. |
| Max. input of single power supply | 3200 W (240 V) |
| Power supply efficiency | 94 % (80 PLUS platinum) 89 % |
| Hot-plug power supply redundancy | Yes |
| Rated voltage range | 200 V - 240 V |
| Rated frequency range | 47 Hz - 63 Hz |
| Rated current max. | 65A / 29A (100 V / 240 V) |
| Rated current in basic configuration | 7,2A |
| Active power (max. configuration) | 5,227 W |
| Heat emission (max. configuration) | 18817.2 kJ/h (17835.3 BTU/h) |

Compliance

| | |
|---------|------------|
| Product | PRIMEQUEST |
| Model | 2800B2 |

| Compliance | |
|------------------|---|
| Global | CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronic equipment) - planned |
| Europe | CE Class A * |
| Japan | VCCI |
| 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. |

Components

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|--|--|
| | PCIe-SSD AIC, 800 GB, MLC, HHHL, Flash drive, 10 DWPD (drive writes per day) |
| | PCIe-SSD AIC, 2 TB, MLC, HHHL, Flash drive, 10 DWPD (drive writes per day) |
| | PCIe-SSD AIC, 1.6 TB, MLC, HHHL, Flash drive, 10 DWPD (drive writes per day) |
| | SAS Ctrl., SAS/SATA 12 Gbit/s, RAID level: , |
| RAID Controller | RAID Ctrl FBU option with 25cm cable, RAID level: , Fujitsu PRAID EP420e LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108 Fujitsu PRAID EP420e FH, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108 |
| | Fibre Channel Host Bus Adapter 1 x 8 Gbit/s Emulex LPe1250 MMF LC-style Fibre Channel Host Bus Adapter 2 x 8 Gbit/s Emulex LPe12002 MMF LC-style |
| Fibre Channel controller | Fibre Channel Host Bus Adapter 1 x 16 Gbit/s Emulex LPe16000B LC-style Fibre Channel Host Bus Adapter 2 x 16 Gbit/s Emulex LPe16002B LC-style Fibre Channel Host Bus Adapter 1 x 16 Gbit/s Qlogic QLE2670 LC-style Fibre Channel Host Bus Adapter 2 x 16 Gbit/s Qlogic QLE2672 LC-style |
| | Converged Network Adapter 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ (Emulex) Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 SFP+ (Fujitsu) |
| Communication, Network | Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.1 x8 RJ45 (Intel®) Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.1 x8 RJ45 (Intel®) Ethernet Ctrl. 2 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®) Ethernet Ctrl. 4 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®) InfiniBand HCA 1 x 56 Gbit/s PCIe 3.0 x8 QSFP for the US market max. one IB HCA 56Gb controller can be installed (Mellanox) |
| Communication, Network | InfiniBand HCA 2 x 56 Gbit/s PCIe 3.0 x8 QSFP for the US market max. one IB HCA 56Gb controller can be installed (Mellanox) |
| Warranty | |
| Product Support Services - the perfect extension | |
| Spare Parts availability | 5 years |

More information

In addition to Fujitsu PRIMEQUEST 2800B2 Business Critical, 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/products/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMEQUEST 2800B2 Business Critical, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://www.fujitsu.com/fts/products/computing/servers/mission-critical/primequest-2800b2/index.html>

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