Data Sheet
FUJITSU Server PRIMEQUEST 2800E Mission Critical

No Time for Downtime

Combining the power of Intel® Xeon® Processor E7 product family, the standard specifications of Microsoft Windows and Linux operating systems and the wealth of market solutions with innovative fault immune system architecture for highest availability and business continuity, FUJITSU Server PRIMEQUEST systems provide a new operational efficiency for business and mission-critical computing with truly open standards and to deliver highest performance. FUJITSU Server PRIMEQUEST systems combine the efficiency of an x86-architecture with the reliability levels rivaling that of a UNIX/mainframe architecture. This makes it ideal for processing big data, in-memory solutions such as SAP HANA® and business intelligence applications.

PRIMEQUEST 2800E Mission Critical

Fujitsu's PRIMEQUEST 2800E unite the economic and flexibility benefits of x86 industry standards with mission-critical uptime features. Customers will thus immediately benefit from a radically optimized cost effectiveness against comparable UNIX-based enterprise platforms, while preserving all the attributes so that the system always remains active. Featuring eight of the Intel® Xeon® processor E7-8800 v2 product family which deliver up to 120 cores and 12TB memory, the PRIMEQUEST provides unprecedented performance and memory capacity for demanding corporate databases, mission-critical applications and in-memory solutions. Mission critical features also enable outstanding platform reliability with innnovative error prevention and self-healing capabilities, such as Reserved System Board, Flexible I/O as well as logic physical partitioning (PPAR). Moreover, unique features, such as Dynamic Reconfiguration enable the efficient use of available resources while simplifying resource management without any need for a restart.

Features & Benefits

Main Features	Benefits
Operational efficiency	
■ Combines x86 industry standard with mission-critical features ■ Eliminate costs related to the UNIX world ■ New levels of energy efficiency	■ Unity of x86 efficiency and flexibility with mission-critical availability ■ Lower license fees and software maintenance costs for Oracle databases
Mission critical uptime leads to highest availability values in the x86 industry standard	
■ Different partitioning available: From software partitioning to completely isolated physical partitioning (PPAR) ■ Up to four physical partitions (PPAR): Failures of one partition do not influence other partitions ■ Active reserved system board for fast automatic recovery of services, in many cases without downtime ■ Flexible I/O ensures availability of PCIe devices ■ Almost everything is redundant ■ Online maintenance	■ Flexible platform to best meet individual requirements ■ Business continuity ensured even if there is a failure in one of the partitions ■ Its built-in error prevention/correction and self-healing capabilities result in outstanding platform reliability ■ All serviceable system modules can be accessed from the front or rear of the system without any cabling hassle. Moreover, Dynamic Reconfiguration enables online maintenance without the need for restarts or planned downtimes
Dynamic platform for demanding applications	
■ 8x Intel® Xeon® processor E7-8800 v2 product family with up to 120 cores ■ 192 DIMM slots enable a configuration of up to 12TB memory ■ ´Glue-less' design, no external QPI cables ■ Many I/O expansion options for up to 56 PCIe slots ■ Dynamic Reconfiguration enables changes in the configuration of resources and system boards without stopping the application	■ Unprecedented performance and memory capacity for demanding corporate databases, in-memory solutions and mission-critical applications ■ I/O throughput ensured ■ Efficient usage of available resources and simplified resource management without any need for restarts

Technical details

Mainboard type	up to 4 x Systemboard
Chipset	Intel® C104 Scalable Memory Buffer (Advanced) Intel® C602 J
Processor quantity and type	1 - 8 x Intel® Xeon® processor E7-8800 v2 product family
Memory slots	192 Max. 12 TB
Memory slot type	DIMM (DDR3) LV
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 4 System Boards, each equipped with 2 Memory Mezzanine cards. 12TB will be available whit release of 64GB LRDIMM modules.
Memory modules notes	Memory modules will be delivered in set´s of 2 DIMMs per order code
Interfaces	
USB 2.0 ports	1
Graphics (15-pin)	1 x VGA per partition
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
Remote management controller	PQ2000 Management Board (MMB)
Service Processor	
General	Management Board (MMB), located on the rear side of the system. 2nd MMB as option
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
Redundancy	Up to two MMB unit can be installed in one chassis. 2nd MMB for redundancy is optional. 2nd MMB is not supported at Business model (2800B).

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. 24 x 2.5-inch			
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
Mission-Critical	Reserved SB, flex IO, Dynamic Reconfiguration, red. MMB, hot-plug PCIe
Operating Systems and Virtualization Software	
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
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	
Standard	ServerView Suite - Maintain 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 ServerView Suite - Integrate Integration packs for Microsoft System Center, VMware vCenter, VMware vRealize, Nagios, and HP SIM Deployment tools and others ServerView Suite - Deploy SV Installation Manager ServerView Suite - Control 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 150 kg
Weight notes	Fully assembled Actual weight may vary depending on configuration
Environment	
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

Electrical values	
Active power (max. configuration)	5,684 W
Heat emission (max. configuration)	20462.4 kJ/h (19394.6 BTU/h)

Compliance	
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronical 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

	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 controller	Fibre Channel Host Bus Adapter 2 x 16 Gbit/s Emulex LPe16002B LC-style
	Converged Network Adapter 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ (Emulex)
Communication, Network	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 SFP+ (Fujitsu)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 SFP+ (Fujitsu)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.1 x8 RJ45 (Intel®)
Communication, Network	Ethernet Ctrl. 2 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®)
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe 2.1 x4 RJ45 (Intel®)
Communication, Network	Ethernet Ctrl. 4 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	
Warranty period	3 years (depending on country)
Warranty type	Onsite Service
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM

Product Support Services - the perfect extension

Service Lifecycle	5 years after end of product life
Service Weblink	www.fujitsu.com/support

More information

Fujitsu products, solutions & services

In addition to FUJITSU Server PRIMEQUEST 2800E Mission Critical , 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 Server PRIMEQUEST 2800E Mission 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-2800e/index.html

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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