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Fujitsu Enterprise Product & Solution Facts

Fujitsu Enterprise Product Facts

Servers

PRIMERGY, PRIMEQUEST, FUJITSU M10, BS2000 Mainframe

Storage

ETERNUS Business-Centric Storage

Integrated System

PRIMEFLEX for vShape, VMware VSAN, Cluster-in-a-box, Hadoop, SAP HANA, SAP Landscapes, Red Hat OpenStack and HPC

shaping tomorrow with you

FUJITSU

Contents

Business-Centric Data Center

The secret behind your success

We live in a world where people are constantly connected. As individuals we want more intuitive services. Large or growing organizations must adapt to this rising demand and what it means for their ICT. It all depends on what you do with your data center. What if you could turn your data center into a tool that drives your business forward? What if you could transform your data center into a center for innovation? What if you could quickly align your data center to constantly evolving business needs? You know what your enterprise needs for success - a data center that is built for growth, speed and efficiency. Building a truly Business-Centric Data Center is no small task. But where others struggle to adapt to a hyper connected world, you don't have to.

There can be no 'one-size-fits-all' approach to your data center. So we start with your business priorities, then match the right mix of products, services, and solutions. That way you get an end-to-end approach that can deliver what your enterprise demands.

Business-Centric Computing

Ensure your servers serve your business

Despite organizations sharing many of the same external challenges, Fujitsu understands that there can be no one-sizefits-all approach for an IT infrastructure. To be able to respond to such issues, Fujitsu offers one of the broadest portfolios of servers on the market.

In 1994, Fujitsu developed the first x86-based industry-standard servers. Since then we have focused on providing the innovations that customers expect from one of the leading IT infrastructure providers. Fujitsu PRIMERGY servers provide an unparalleled mixture of quality, efficiency, agility as well as integration capabilities. The systems provide your company with the most powerful and flexible data center solutions for companies of all sizes, across all industries and for any type of workload. This includes expandable PRIMERGY tower servers for remote and branch offices, rack-mount servers with leading efficiency and performance, compact and scalable blade systems, as well as density-optimized cloud server infrastructures. Fujitsu PRIMERGY systems deliver more compute and storage capacity, highest performance, right-sized options with flexible choices, and help to reduce your costs of IT service with the entire portfolio of our:

- Versatile PRIMERGY tower and rack servers,
- Modular PRIMERGY blade servers,
- Hyper-converged PRIMERGY scale-out servers,
- Mission-critical PRIMEQUEST and Fujitsu M10 servers for continuity

FUJITSU Server PRIMERGY

The right server for the right workload at the right economics

At a time when the importance of applications and data in supporting your business has never been higher, you need computing power that is fit-for-purpose now and into the future. Fujitsu PRIMERGY systems are designed with this goal in mind, delivering more compute and storage capacity, highest performance, right-sized options with flexible choices, and providing lower energy consumption to lower your costs of IT service. The industry-standard x86 servers provide your company with the most powerful and flexible data center solutions on the market for companies of all sizes, across all industries and for any type of workload.

FUJITSU Server PRIMERGY (TX) Tower Systems

Perfect for small and medium businesses as well as branch offices, FUJITSU Server PRIMERGY TX tower systems are robust and cost-efficient servers by providing rock solid reliability. Additionally they are characterized by simple IT operations, low power consumption and quiet operation so that they can be handled by non-technically trained staff and can be used in standard office environments.

FUJITSU Server PRIMERGY (RX) Rack Systems

FUJITSU Server PRIMERGY RX rack systems are versatile rack-optimized servers providing best-in-class performance and energy efficiency, and thus form the "standard" in each data center. PRIMERGY RX servers deliver more than 20 years of development and production know-how resulting in extremely low failure rates below market average, and lead to continuous operations and outstanding hardware availability.

FUJITSU Server PRIMERGY (BX) Blade Systems

FUJITSU Server PRIMERGY BX blade systems are the perfect platform to build a converged infrastructure designed to reduce IT costs, time and efforts. PRIMERGY Blade Servers utilizes a modular architecture and contain in addition to the compute power, all required infrastructure and network components, storage capacity as well as management modules that helps companies to simplify their infrastructure, achieve significant cost reductions and increase flexibility.

FUJITSU Server PRIMERGY (CX) Multi-Node Systems

The FUJITSU Server PRIMERGY CX scale-out systems are the ideal basis for cloud, hyper-converged and high performance computing solutions. They provide data centers as well as branch offices with massive computing power for virtualized environments, complex calculations as well as consolidation and high-availabilty scenarios.

FUJITSU Data Center Product PRIMECENTER M1 and M2 Racks

The Fujitsu PRIMECENTER racks provides an improved rack structure and rich feature set. PRIMECENTER 19-inch Racks are the basis for rack configurations, such as server, storage systems as well as operating controls, such as consoles, switches, power distribution units (PDUs) and uninterruptible power supplies (UPS).

→ www.fujitsu.com/primergy

Tower Servers
PRIMERGY

Model	PRIMERGY TX1310 M1
Type	Mono socket economy tower
Chipset	Intel® C226
Mainboard type	D3219
Processor type support	1 x Intel® Celeron® processor Intel® Core™ i3 processor Intel® Pentium® processor Intel® Xeon® processor E3-1200v3 product family
Memory	2 GB – 32 GB DIMM (DDR3)
Memory protection	ECC
Accessible drives	DVD-ROM, half height, SATA I DVD Super Multi, half height, SATA I Blu-ray Disc™ Triple Writer, half height, SATA I RDX Drive, 100 MB/s, 320 GB, 500 GB, 1 TB, 2 TB USB 3.0
Slots - PCI-Express 3.0 x8 - PCI-Express 2.0 x1 (mech. x4) - PCI-Express 2.0 x4 (mech. x8)	 - 2 x notched supporting x16 card - 1 x - 1 x
Storage drive bays	4 x 3.5" easy change SATA and 2 x 3.5" (1 bay is occupied by DVD/DVD-RW)
Storage disks	HDD SATA 3.5-inch 250 / 500 GB / 1 / 2 / 3 TB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - LAN note	 - Intel® C226 - 4 port SATA with RAID 0/1/10 for HDDs - 2 x 10/100/1000 Mbit/s Ethernet - PXE-Boot by LAN via PXE-Server, Teaming supported
Trusted Platform Module (TPM)	Infineon / 1.2 (option)
Power supply	250 W standard, 90 % (Gold efficiency), 100-240 V, 50 / 60 Hz
Power supply configuration	1 x standard power supply
Active power max.	209 W
Weight	Up to 14 kg
Floorstand (W x D x H)	175 x 419 x 395 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server 2012 R2 Microsoft® Windows Server 2012 Datacenter, Essentials, Foundation Microsoft® Windows Server 2012 R2 Standard, Datacenter, Essentials, Foundation Microsoft® Windows Storage Server 2012 R2 Standard Microsoft® Windows Storage Server 2012 Standard Microsoft® Windows Server® 2008 R2 Datacenter, Enterprise, Foundation Microsoft® Windows Storage Server 2012 R2 Standard Red Hat® Enterprise Linux 5, 6, 7 SUSE® Linux Enterprise Server 11, 12 Oracle® Linux 6
Special features	The ideal first server for SMBs. Cost effective performance, 24/7 reliability, silent, compact and easy to service. Ideal for all classic server tasks, such as file, print, web or office applications.

Warranty	
Warranty period	1 year
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	24 x 7, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Tower Servers
PRIMERGY

Model	PRIMERGY TX1320 M2
Type	Mono socket tower server
Chipset	Intel® C236
Mainboard type	D3373
Processor type support	Intel® Pentium® processor Intel® Core™ i3 processor Intel® Xeon® processor E3-1200v5 product family
Memory	4 GB – 64 GB, DIMM (DDR4)
Memory protection	ECC
Accessible drives	DVD Super Multi, slimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I RDX Drive, 100 MB/s, 320 GB, 500 GB, 1 TB, 2 TB USB 3.0
Slots - PCI-Express 3.0 x8 - PCI-Express 3.0 x1 (mech. x4) - Slot Notes	 - 2 x Low profile - 1 x Low profile - In SAS configuration 1x PCI-Express occupied by modular RAID controller.
Storage drive bays	Max. 6 (4+2) x 2.5-inch hot-plug SAS/SATA or 2 x 3.5-inch non hot-plug SATA. Not upgradeable in the field. 1 x 3.5 / 1.6-inch for backup devices, 1 x 5.25 / 0.5-inch for CD-RW/DVD
Storage disks	HDD SAS 2.5-inch, 300 / 450 / 600 / 900 GB / 1.2 / 1.8 TB HDD SATA 2.5-inch, 500 GB / 1 / 2 TB, HDD SATA 3.5-inch, 500 GB / 1 TB / 2 TB / 3 TB SSD SATA 2.5-inch, 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / 1.92 TB DOM SATA 32 / 64 / 128 GB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - LAN note	 - Intel® C236, 2 ports used for accessible drives - Optionally integrated RAID 0/1 or RAID 5/6 controller for SAS base units (occupies one PCIe slot). Additional RAID controller options are described under Components RAID controller - 2 x 10/100/1000 Mbit/s Ethernet - iSCSI, PXE-Boot and WoL are supported
Remote Management Controller	Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)
Power supply	250 W standard, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz
Power supply configuration	1 x standard power supply
Active power (max.)	231 W
Weight	Up to 10 kg
Floorstand (W x D x H)	98 x 399 x 340 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server 2012 Microsoft® Hyper-V™ Server 2012 R2 Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows Server® 2012 Standard,Datacenter, Essentials, Foundation Microsoft® Windows Server® 2012 R2 Standard,Datacenter, Essentials, Foundation Microsoft® Windows Storage Server 2012 Standard Microsoft® Windows Storage Server 2012 R2 Standard Microsoft® Windows Server® 2008 R2 Standard, Datacenter, Enterprise, Foundation Microsoft® Windows® Web Server 2008 R2 SUSE® Linux Enterprise Server 11 Red Hat® Enterprise Linux 5, 6, 7
Special features	Ultra-small form factor, best energy efficiency, very silent for use in office environments. Includes hot-plug storage drives and remote management controller (iRMC S4). Ideal for solutions where space is scarce.

Warranty

Warranty period	1 year
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension

Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	24 x 7, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Tower Servers
PRIMERGY

Model	PRIMERGY TX1330 M2
Type	Mono socket tower server
Chipset	Intel® C236
Mainboard type	D 3373
Processor type support	Intel® Core™ i3 processor Intel® Pentium® processor Intel® Xeon® processor E3-1200v5 product family
Memory	4 GB – 64 GB, DIMM (DDR4)
Memory protection	ECC
Accessible drives	DVD-ROM, half height, SATA I DVD Super Multi, half height, SATA I DVD Super Multi, slimline, SATA I DVD Super Multi, ultraslimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I Blu-ray Disc™ Triple Writer, ultraslimline, SATA I LTO4HH Ultrium, 120 MB/s, 800 GB, SAS 6 Gb/s LTO5HH Ultrium, 140 MB/s, 1500 GB, SAS 6 Gb/s LTO4HH Ultrium, 160 MB/s, 2500 GB, SAS 6 Gb/s RDX Drive, 100 MB/s, 320 GB, 500 GB, 1 TB, 2 TB USB 3.0
Slots **- PCI-Express 3.0 x8** **- PCI-Express 3.0 x4** **- PCI-Express 3.0 x1 (mech. x4)** **- Slot Notes**	 - 2 x (up to 240 mm lenght) - 1 x (up to 167 mm lenght) - 1 x (up to 167 mm length) - Optional PCIe to legacy PCI adapter available. In SAS configuration 1x PCI-Express occupied by modular RAID controller.
Storage drive bays	Max. 4 x 3.5-inch or 2.5-inch hot-plug SAS/SATA 3 x 5.25 / 1.6-inch all possible options described in relevant system configurator
Storage disks	HDD SAS 2.5-inch 300 / 450 / 600 / 900 GB / 1.2 / 1.8 TB HDD SATA 2.5-inch 1 / 2 TB HDD SATA 3.5-inch 250 / 500 GB / 1 / 2 / 3 / 4 / 6 TB SSD SATA 2.5-inch 120 / 200 / 240 / 480 / 800 GB DOM SATA 32 / 64 / 128 GB
I/O controller onboard **- SATA Controller** **- RAID Controller** **- LAN Controller** **- LAN note** **- Remote Management Controller**	 - Intel® C236, 2 ports used for accessible drives 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux - Optionally integrated RAID 0/1 or RAID 5/6 controller for SAS base units (occupies one PCIe slot), additional RAID controller options - 2 x 10/100/1000 Mbit/s Ethernet - iSCSI, PXE-Boot and WoL are supported - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)
Power supply	300 W standard, 90 % (Gold efficiency), 100-240 V, 50 / 60 Hz 450 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz
Power supply configuration	1 x standard, 1 x hot-plug or 2 x redundant hot-plug
Active power (max.)	231 W
Weight	Rack: 12.5 kg – 20 kg; Tower: 15 kg – 23 kg
Floorstand (W x D x H)	177 x 560 x 455 mm
Rack (W x D x H)	483 x 495 x 175 mm (4 U)
Mounting Depth	543 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server 2012 Microsoft® Hyper-V Server 2012 R2 Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows Server® 2012 Standard, Datacenter, Essentials, Foundation Microsoft® Windows Server® 2012 R2 Standard, Datacenter, Essentials, Foundation Microsoft® Windows Storage Server 2012 Standard Microsoft® Windows Storage Server 2012 R2 Standard Microsoft® Windows Server® 2008 R2 Standard, Datacneter, Enterprise, Foundation SUSE® Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 6, 7 VMware vSphere™ 5.5, 5.5 Embedded
Special features	Great scalability, very silent for use in office environments, high energy efficiency. Ideal as a file, mail and print server or for groupware solutions.

Warranty	
Warranty period	1 year
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	24 x 7, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Tower Servers
PRIMERGY

Model	PRIMERGY TX2540 M1
Type	Dual socket Intel® Xeon® processor tower server
Chipset	Intel® C602
Mainboard type	D 3099-B
Processor type support	Intel® Xeon® processor E5-2400v2 product family
Memory	4 GB – 192 GB, DIMM (DDR3)
Memory protection	Advanced ECC, SDDC (Chipkill™)
Accessible drives	DVD-ROM, half height, SATA I DVD Super Multi, half height, SATA I DVD Super Multi, slimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I LTO3HH Ultrium, 60 MB/s, 400 GB, SAS 6 Gb/s LTO4HH Ultrium, 120 MB/s, 800 GB, SAS 6 Gb/s LTO5HH Ultrium, 140 MB/s, 1500 GB, SAS 6 Gb/s LTO6HH Ultrium, 160 MB/s, 2500 GB, SAS 6 Gb/s RDX Drive, 100 MB/s, 320 GB, 500 GB, 1 TB, 2 TB USB 3.0
Slots - PCI-Express 3.0 x16 - PCI-Express 3.0 x4 (mech. x8) - PCI-Express 2.0 x4 (mech. x8) - PCI-slots - Slot Notes	 - 2 x Full height 280 mm max. length; second slot: 170 mm length (only available with second CPU) - 2 x Full height 280 mm max. length - 1 x Full height 230 mm max length; preferred RAID slot - 1 x PCI 32 Bit / 33 MHz (support for 3.3 V and 3.3 V / 5 V cards; no support of 5 V only cards) - in SAS configuration 1 x PCI-Express occupied by modular RAID controller
Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA 3 x 5.25 / 1.6-inch All possible options described in relevant system configurator.
Storage disks	HDD SAS 2.5-inch, 146 / 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 TB HDD SAS 3.5-inch, 300 / 450 / 600 GB / 1 / 2 / 3 / 4 TB HDD SATA 2.5-inch, 250 / 500 GB / 1 TB HDD SATA 3.5-inch, 500 GB / 1 / 2 / 3 / 6 TB SSD SATA 2.5-inch, 100 / 120 / 200 / 240 / 400 / 480 / 800 GB SSD SATA 3.5-inch, 100 / 120 / 200 / 240 / 400 / 480 / 800 GB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - LAN note - Remote Management Controller	 - Intel® C602, 6-port SATA (4 x for internal hard disks, 2 x for accessible drives) - additional RAID controller optional - 2 x 10/100/1000 Mbit/s Ethernet - 2 x Intel i210 - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)
Power supply	800 W standard, 90 % (Gold efficiency), 100-240 V, 50 / 60 Hz 450 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz 800 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz 800 W hot-plug, 96 % (Titanium efficiency), 200-240 V, 50 / 60 Hz
Power supply configuration	1 x standard power supply or 1 x hot-plug power supply or 2 x hot plug power supply for redundancy depending on model
Active power (max.)	432 W
Weight	16 to 32 kg
Floorstand (W x D x H)	177 x 651 x 456 mm
Rack (W x D x H)	483 x 611 x 177 mm (4U)
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Windows Server® 2012 Standard, Datacenter, Essentials Microsoft® Windows Server® 2012 R2 Standard, Datacenter, Essentials Microsoft® Windows Storage Server 2012 Standard Microsoft® Hyper-V Server 2012 Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows® Web Server 2008 R2 Microsoft® Windows® Server 2008 Standard, Datacenter, Enterprise Microsoft® Windows® Server 2008 R2 Standard, Datacenter, Enterprise VMware vSphere™ 6.0 VMware vSphere™ 5.5, 5.5, Embedded SUSE® Linux Enterprise Server 10, 10 with XEN, 11, 12 Red Hat® Enterprise Linux 5, 5 with XEN, 6, 7 Univention Corporate Server 3.x Citrix® XenServer®
Special features	Affordable dual processor performance, solid expandability and optional redundancy features, ideal for SMEs and branch offices.

Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Tower Servers
PRIMERGY

Model	PRIMERGY TX2560 M2
Type	Dual-Socket Intel® Xeon® processor tower server
Chipset	Intel® C612
Mainboard type	D3289-B
Processor type support	Intel® Xeon® processor E5-2600 v4 product family
Memory	8 GB – 1536 GB, DIMM (DDR4)
Memory protection	Advanced ECC, Memory Scrubbing, SDDC (Chipkill™), Memory Mirroring support, Rank sparing memory support
Accessible drives	DVD-ROM, half height, SATA I DVD Super Multi, half height, SATA I DVD Super Multi, slimline, SATA I DVD Super Multi ultra slim , ultraslim, SATA I Blu-ray Disc™ Triple Writer, ultraslimline, SATA I LTO4HH Ultrium, 120 MB/s, 800 GB, SAS 6 Gb/s LTO5HH Ultrium, 140 MB/s, 1500 GB, SAS 6 Gb/s LTO6HH Ultrium, 160 MB/s, 2500 GB, SAS 6 Gb/s RDX Drive, 100 MB/s, 320 GB, 500 GB, 1 TB, USB 3.0
Slots	
- PCI-Express 3.0 x16	- 3 x Full height (Slot3 CPU1; Slot8+9 CPU2, 167 mm length; please be aware, optional riser card occupies Slot 3/9
- PCI-Express 3.0 x8	- 5 x Full height (Slot1 CPU1, modular RAID 167 mm, Slot2 CPU1, 167 mm, opt. Slot4 CPU1, opt. riser card, 252 mm; opt. Slot8 CPU2 167 mm, opt. Slot10 CPU2 opt. riser card 252 mm)
- PCI-Express 3.0 x4	- 4 x Full height optional; slot 5+6 (CPU1, riser card); slot 11+12 (CPU2, riser card), 252mm length
- Slot Notes	- Slot 1: PCIe Gen3 x8 slot is dedicated for the modular RAID controller. Up to 5 PCIe Gen3 slots are supported with the first processor, up to 10 PCIe Gen3 slots are supported with two processors. Onboard slots (Slot1, 2, 3 & 7, 8, 9) support card lenght of up to 167mm; Slots on the optional riser cards (4, 5, 6, 10, 11, 12) support card lenght of up to 252mm
Storage drive bays	12 x 3.5-inch hot-plug or 32 x 2.5-inch hot-plug 8 x 2.5 non hot-plug 3x 5.25/1.6-inch
Storage disks	HDD SAS 2.5-inch 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 / 2 TB HDD SAS 3.5-inch 300 / 450 / 600 GB / 1 / 1.2 / 1.8 / 2 / 4 / 6 TB HDD SATA 2.5-inch 250 /500 GB / 1 / 2 TB HDD SATA 3.5-inch 4 / 6 TB PCIe-SSD AIC 1.3 / 2.6 / 5.2 TB PCIe-SSD SFF 2.5-inch 800 GB 1.6 / 2 TB SSD SAS 2.5-inch 200 / 400 / 800 GB / 1.6 TB SSD SATA 2.5-inch 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / 1.2 / 1.92 TB SSD SATA 3.5-inch 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / 1.92 TB DOM SATA 64 / 128 GB
I/O controller onboard	
- SATA Controller	- Intel® C612, 1 x SATA connector for ODD, 1 x SATA connector for SATA DOM
- RAID Controller	- additional RAID controller optional
- LAN Controller	- DynamicLoM based on Emulex XE100 series. DynamicLoM connector cards are optional. - Intel® Ethernet Contr. I210 supported (on project request only)
- Remote Management Controller	- Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)

Power supply	450W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 96% (Titanium efficiency), 200-240V, 50 / 60Hz 1200W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz; 110V range: 1000W, less than 110V: 900W
Power supply configuration	1x hot-plug power supply or 2x hot-plug power supply redundancy
Active power (max.)	748W
Weight	Up to 35 kg
Floorstand (W x D x H)	177 x 777 x 456 mm
Height Unit Rack	4 U
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Windows Server® 2012 Standard, Datacenter Microsoft® Windows Server® 2012 R2 Standard, Datacenter Microsoft® Hyper-V Server 2012 Microsoft® Hyper-V Server 2012 R2 Microsoft® Windows Storage Server 2012 Standard Microsoft® Windows Storage Server 2012 R2 Standard VMware vSphere™ 6.0 VMware vSphere™ 5.5 SUSE® Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 6, 7 Citrix® XenServer®
Special features	No compromise Tower Server offering maximum levels of performance, availability and expandability. Ideal for performance hungry applications, virtualization solutions and storage demanding scenarios..

Warranty

Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension

Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Model	PRIMERGY RX1330 M2
Type	Mono socket Intel® Xeon® processor rack server (1 U)
Chipset	Intel® C236
Mainboard type	D 3375
Processor type support	Intel® Celeron® processor Intel® Pentium® processor Intel® Core™ i3 processor Intel® Xeon® processor E3-1200v5 product family
Memory	2 GB – 64 GB, DIMM (DDR4) UDIMM
Memory protection	ECC
Accessible drives	DVD Super Multi, ultraslim, SATA I
Slots - PCI-Express 3.0 x8 - PCI-Express 2.0 x4 (mech. x8) - Slot Notes	 - 2 x Low profile max. length 175 mm; PCIe slot 1= dedicated Modular RAID slot - 1 x Low profile - Optional support of 1 x full height PCIe Gen3 x8 card, instead of 1 x PCIe Gen2 x4 and 1 x PCIe Gen3 x8
Storage drive bays	4/8 x 2.5-inch hot-plug SAS/SATA or 4 x 3.5-inch hot-plug SAS/SATA or 10 x 2.5-inch hot-plug SAS/SATA 1 x 5.25-inch/0.4-inch for CD-RW/DVD The following limitations applies to 10 x 2.5-inch HDD base unit: No CD-RW/DVD, 1 x USB 2.0 at the front, no front VGA
Storage disks	HDD SAS 2.5-inch 300 / 450 / 600 / 900 GB / 1.2 / 1.8 TB HDD SAS 3.5-inch 300 / 450 / 600 GB / HDD SATA 2.5-inch 250 / 500 GB / 1 / 2 TB HDD SATA 3.5-inch 500 GB / 1 / 2 / 3 / 4 / 6 TB SSD SATA 2.5-inch 120 / 200 / 240 / 400 / 480 / 800 GB SSD SATA 3.5-inch 120 / 200 / 200 / 240 / 400 / 480 / 800 GB DOM SATA 32 / 64 / 128 GB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - LAN note - Remote Management Controller	 - Intel® C236, 1 port used for accessible drive or SATA DOM; 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux - Integrated RAID 0/1 or RAID 5/6 controller (option), additional RAID controller optional 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration) - iSCSI, PXE-Boot and WoL are supported - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)
Power supply	300 W standard, 92 % (Gold efficiency), 100-240 V, 50 / 60 Hz 450 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz
Power supply configuration	1 x standard power supply or 1 x hot-plug power supply or 2 x hot plug power supplies for redundancy depending on model
Active power (max.)	197 W
Weight	Up to 13 kg
Rack (W x D x H)	482.6 mm (Bezel) / 435.4 mm (Body) x 572 x 42.8 mm
Height Unit Rack	1 U
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Windows Server® 2008 R2 Standard, Foundation, Datacenter, Enterprise Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows Server® 2012 Datacenter, Standard, Essentials, Foundation Microsoft® Hyper-V Server 2012 Microsoft® Windows Storage Server 2012 Standard Microsoft® Windows Server® 2012 R2 Datacenter, Standard, Essentials, Foundation Microsoft® Hyper-V Server 2012 R2 Microsoft® Windows Storage Server 2012 R2 Standard Red Hat® Enterprise Linux 6, 7 SUSE® Linux Enterprise Server 11 / 12 VMware vSphere™ 5.5, 6.0
Special features	High density housing, RemoteView/ iRMC advanced pack optional; PDA; ASR&R as standard; dedicated or shared service LAN at buyer's choice; ServerView Power Management standard; hard disks hot-plug.

Warranty	
Warranty period	1 year
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Model	PRIMERGY RX2510 M2
Type	Dual socket Intel® Xeon® processor rack server (1 U)
Chipset	Intel® C612
Mainboard type	D3279-H
Processor type support	Intel® Xeon® processor E5-2600 v4 product family
Memory	8 GB – 384 GB, DIMM (DDR3)
Memory protection	Advanced ECC, Memory Scrubbing, SDDC (Chipkill™)
Accessible drives	DVD Super Multi, slimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I
Slots - PCI-Express 3.0 x8 - PCI-Express 3.0 x16 Slot notes	 - 2 x Low profile - 2 x Low profile (2nd CPU required for slot 4) - Slot 1 (internal): PCIe Gen3 x8 @CPU1 is dedicated for the modular RAID Controller. Slot 2: PCIe Gen3 x8 @CPU1 for low profile cards with up to 167mm length Slot 3: PCIe Gen3 x16 @CPU1 for low profile cards with up to 167mm length Slot 4: PCIe Gen3 x16 @CPU2 for low profile cards with up to 167mm length
Storage drive bays	up to 4x 2.5-inch, 4x 3.5-inch baseunit
Storage disks	HDD SAS 3.5-inch 300 / 450 / 600 GB / 1.2 / 1.8 / 2 / 4 / 8 TB HDD SATA 3.5-inch 500 GB / 1 / 2 / 4 / 6TB SSD SATA 3.5-inch 120 / 240 / 480 / 800 GB DOM SATA 64 / 128 GB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - Remote Management Controller - Onboard controller notes	 - Intel® C612 - additional RAID controller optional - Intel® C612. LAN controller are integrated in optional I/O units, details are described under I/O options. All supported features are described in relevant system configurator. - Integrated Remote Management Controller (iRMC S4, 8 MB attached memory incl. graphics controller), IPMI 2.0, DCMI 1.5, SNMP 2.0, REST API 1.0 compatible - Onboard 4x S-ATA 6Gbit/s RAID Controller (RAID 0,1) for up to 4x S-ATA drives availab
Trusted Platform Module (TPM)	Infineon / TMP1.2 or TPM2.0 module; TCG compliant (option)
Power supply	450W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz
Power supply configuration	1 +1 hot-plug power supply for redundancy
Active power max.	510 W
Weight	up to 16 kg
Rack (W x D x H)	483 mm (Bezel) / 435mm (Body) x 770.7 x 43 mm
Height Unit Rack	1 U
Mounting Depth Rack	748.2 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Windows® Server 2008 Standard, Datacenter, Enterprise Microsoft® Windows® Server 2008 R2 Standard, Datacenter, Enterprise Microsoft® Windows Server® 2012 Standard, Datacenter, Essentials Microsoft® Windows Server® 2012 R2 Standard, Datacenter, Essentials Microsoft® Hyper-V Server 2012 Microsoft® Hyper-V Server 2012 R2 Microsoft® Windows Server® 2008 Web Server Microsoft® Windows Storage Server 2012 Standard Microsoft® Windows Storage Server 2012 R2 Standard VMware vSphere™ 5.1, 5.1 Embedded VMware vSphere™ 5.5, 6.0 Novell® SUSE Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 5, 5 with XEN, 6, 7 Citrix® XenServer® Oracle® Linux 6, 7 Oracle® VM3
Special features	Huge number of storage devices, modular concept for base unit, LAN controller, RAID controller and power supplies, upgrade kits for HDD and backup devices, FUJITSU Software ServerView Suite standard.

Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Model	PRIMERGY RX2520 M1
Type	Dual socket Intel® Xeon® processor rack server (2 U)
Chipset	Intel® C600
Mainboard type	D3169
Processor type support	Intel® Xeon® processor E5-2400 v2 product family
Memory	2 GB – 192 GB, DIMM (DDR3)
Memory protection	Advanced ECC, Memory Scrubbing, SDDC (Chipkill™)
Accessible drives	DVD Super Multi, slimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I LTO3HH Ultrium, 60 MB/s, 400 GB, SAS 3 Gb/s LTO4HH Ultrium, 120 MB/s, 800 GB, SAS 6 Gb/s LTO5HH Ultrium, 140 MB/s, 1500 GB, SAS 6 Gb/s LTO6HH Ultrium, 160 MB/s, 2500 GB, SAS 6 Gb/s RDX Drive, 100 MB/s, 320 GB, 500 GB, 1 TB, 2 TB, USB 3.0
Slots - PCI-Express 3.0 x8 - PCI-Express 2.0 x4 (mech. x8) - Slot Notes	 - 6 x Low profile - 1 x Low profile - Important: The number of PCIe slots depends on the number of CPUs: 5 x PCIe x8 Gen 3 (2 x CPU1; 3 x CPU2; mechanical x8) 1 x PCIe x4 Gen 2 (PCH; mechanical x8) Internal Slots: 1 x PCIe x8 Gen 3 (CPU1; mechanical x8)
Storage drive bays	2.5-inch base unit (max. 16 x 2.5) or 3.5-inch base unit (max. 12 x 3.5) 1 x 5.25 / 0.5-inch for ODD, 1 x 5.25 / 0.5-inch for Local Service Display, 1 x 3.5 / 1.6-inch for backup devices, 1 x 5.25 / 1.6-inch for backup devices All possible options described in relevant system configurator.
Storage disks	HDD SAS 2.5-inch 146 / 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 TB HDD SAS 3.5-inch 300 / 450 / 600 GB / 1 / 2 / 3 / 4 TB HDD SATA 2.5-inch 250 / 500 GB / 1 / 2 TB HDD SATA 3.5-inch 500 GB / 1 / 2 / 3 / 4 / 6TB SSD SATA 2.5-inch 100 / 120 / 200 / 240 / 400 / 480 / 800 GB SSD SATA 3.5-inch 100 / 120 / 200 / 240 / 400 / 480 / 800 GB DOM SATA 32 / 64 / 128 GB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - LAN note - Remote Management Controller	 - Intel® C600, 1 x SATA channel for ODD - 4 port for internal 3Gbit/s SATA and SAS (as upgrade option with SAS enabling key) for HDDs with RAID 0/1/10 (Intel C600), additional RAID controller optional - 2 x 1 Gbit/s Ethernet (10/100/1000 Mbit/s) - PXE-Boot via LAN from PXE server, iSCSI boot (also diskless) - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)
Power supply	450 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz 800 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz 800 W hot-plug, 96 % (Titanium efficiency), 200-240 V, 50 / 60 Hz
Power supply configuration	1 x hot-plug power supply or 2 x hot-plug power supply for redundancy
Active power max.	643 W
Weight	up to 25 kg
Rack (W x D x H)	482.6 mm (Bezel) / 445mm (Body) x 770 x 86.9 mm
Height Unit Rack	2 U
Mounting Depth Rack	735 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Windows® Server 2008 Standard, Datacenter, Enterprise Microsoft® Windows® Server 2008 R2 Standard, Datacenter, Enterprise Microsoft® Windows Server® 2012 Standard, Datacenter, Essentials Microsoft® Windows Server® 2012 R2 Standard, Datacenter, Essentials Microsoft® Hyper-V Server 2012 Microsoft® Hyper-V Server 2012 R2 Microsoft® Windows Server® 2008 Web Server Microsoft® Windows Storage Server 2012 Standard Microsoft® Windows Storage Server 2012 R2 Standard VMware vSphere™ 5.1, 5.1 Embedded VMware vSphere™ 5.5, 6.0 Novell® SUSE Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 5, 5 with XEN, 6, 7 Citrix® XenServer® Oracle® Linux 6, 7 Oracle® VM3
Special features	Huge number of storage devices, modular concept for base unit, LAN controller, RAID controller and power supplies, upgrade kits for HDD and backup devices, FUJITSU Software ServerView Suite standard.

Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Model	PRIMERGY RX2530 M2
Type	Dual socket Intel® Xeon® processor rack server (1 U)
Chipset	Intel® C612
Mainboard type	D 3279-B
Processor type support	Intel® Xeon® processor E5-2600 v4 product family
Memory	8 GB – 1536 GB, DIMM (DDR4)
Memory protection	Advanced ECC, Memory Scrubbing, SDDC (Chipkill™), Rank sparing memory support, Memory Mirroring support
Accessible drives	DVD Super Triple writer, ultraslimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I
Slots - PCI-Express 3.0 x16 - PCI-Express 3.0 x8 - Slot Notes	 - 2 x Low profile (2nd processor required for slot 4); 1x16 if fh slot selected - 2 x Low profile - Slot 1 (internal): PCIe Gen3 x8 @CPU1 is dedicated for the modular RAID Controller. Slot 2: PCIe Gen3 x8 @CPU1 for low profile cards with up to 167mm length Slot 3: PCIe Gen3 x16 @CPU1 for low profile cards with up to 167mm length Slot 4 standard: PCIe Gen3 x16 @CPU2 for low profile cards with up to 167mm length Slot 4 option: PCIe Gen3 x16 @CPU2 for full height cards with up to 167mm length (!in this case, slot 3 is not available)
Storage drive bays	up to 8 x 2.5-inch, 10 x 2.5-inch or 4 x 3.5-inch base unit 1 x 5.25-inch / 0.4-inch for DVD-RW/Blu-ray Not for 10 x 2.5-inch base unit. All possible options described in relevant system configurator.
Storage disks	HDD SAS 2.5-inch 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 / 2 TB HDD SAS 3.5-inch 300 / 450 / 600 GB / 1 / 2 / 3 / 4 / 6TB HDD SATA 2.5-inch 500 GB / 1 TB HDD SATA 3.5-inch 4 / 6 TB SSD SAS 2.5-inch 200 / 400 / 800 GB / 1.6 TB SSD SAS 3.5-inch 200 / 400 / 800 GB / 1.6 TB SSD SATA 2.5-inch 100 / 120 / 200 / 240 / 400 / 480 / 800 / SSD SATA 2.5-inch 960 GB / 1.2 / 1.92 TB SSD SATA 3.5-inch 120 / 200 / 240 / 400 / 480 / 800 / 960 GB PCIe-SSD 2.5-inch 800 GB / 1.6 / 2 TB PCIe-SSD 1.3 / 2.6 / 5.2 TB DOM SATA 64 / 128 GB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - Remote Management Controller - Onboard controller notes	 - Intel® C612, 1 x SATA channel for ODD - additional RAID controller optional - DynamicLoM based on Emulex XE100 series. 2 x 1Gbit/s Dynamic LoM; 4 x 1Gbit/s Dynamic LoM; 2 x 10Gbit/s; 10GBASE-T Dynamic LoM; 2 x 10Gbit/s SFP+ Dynamic LoM. All supported features are described in relevant system configurator. PXE-Boot via LAN from PXE server, iSCSI / FCoE boot (also diskless). Extra LAN controller(PCIe Cards) are listed below. (i210 LAN card via project release possible) - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible - Onboard 8 x S-ATA 6Gbit/s RAID Controller (RAID 0,1) for up to 8 x S-ATA drives available.
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)
Power supply	450W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 96% (Titanium efficiency), 200-240V, 50 / 60Hz
Power supply configuration	1-2 x 450 W / 800 W hot-plug power supply
Active power max.	816 W

Weight	up to 16 kg
Rack (W x D x H)	483 (Bezel) / 435 (Body) x 770.7 x 43 mm
Height Unit Rack	1 U
Mounting Depth Rack	748.2 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Windows Storage Server 2012 Standard Microsoft® Hyper-V Server 2012 Microsoft® Windows Server® 2012 Standard, Datacenter, Essentials Microsoft® Hyper-V Server 2012 R2 Microsoft® Windows Storage Server 2012 R2 Standard Microsoft® Windows Server® 2012 R2 Standard, Datacenter, Essentials VMware vSphere™ 5.5 / 6.0 SUSE® Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 6, 7 Citrix® XenServer® Oracle Linux 6, 7 Oracle® VM 3
Special features	Scalability for huge memory capacity, modular concept for base unit, LAN controller, RAID controller and power supplies, upgrade kits for HDD and CPU available, FUJITSU software ServerView Suite standard.

Warranty

Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension

Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Model	PRIMERGY RX2540 M2
Type	Dual socket Intel® Xeon® processor rack server (2 U)
Chipset	Intel® C612
Mainboard type	D 3289-B
Processor type support	Intel® Xeon® processor E5-2600 v4 product family
Memory	4 GB – 1536 GB, DIMM (DDR4)
Memory protection	Advanced ECC, Memory Scrubbing, SDDC (Chipkill™), Rank sparing memory support, Memory Mirroring support
Accessible drives	DVD Super Multi, ultraslim, SATA I Blu-ray Disc™ Triple Writer, ultraslimline, SATA LTO4HH Ultrium, 120 MB/s, 800 GB, SAS 6 Gb/s LTO5HH Ultrium, 140 MB/s, 1500 GB, SAS 6 Gb/s LTO6HH Ultrium, 160 MB/s, 2500 GB, SAS 6 Gb/s RDX Drive, 100 MB/s, 320 GB, 500 GB, 1 TB, USB 3.0
Slots - PCI-Express 3.0 x16 - PCI-Express 3.0 x8 - Slot Notes	 - 3 x Low profile (2nd processor required for slot 5 and 6) - 3 x Low profile (2nd processor required for slot 4) - First PCIe Gen3 x8 slot may be occupied with a Modular RAID controller if configured. Important: 3 PCIe slots are supported with the first processor. 6 PCIe slots are supported with two processors. PCIe riser card options can expand number of slots by two (max. 8 in total) and support max. 4 full height slots. Possible slot length described in relevant system configurator.
Storage drive bays	max. 16/24 x 2.5-inch or max. 8/12x 3.5-inch 1x 5.25-inch/0.4-inch
Storage disks	HDD SAS 2.5-inch 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 / 2 TB HDD SAS 3.5-inch 300 / 450 / 600 GB / 1 / 2 / 3 / 4 / 6 TB HDD SATA 2.5-inch 500 GB / 1 TB HDD SATA 3.5-inch 4 / 6 TB SSD SAS 2.5-inch 200 / 400 / 800 GB / 1.6 TB SSD SAS 3.5-inch 200 / 400 / 800 GB / 1.6 TB SSD SATA 2.5-inch 100 / 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / SSD SATA 2.5-inch 1.2 / 1.92 TB SSD SATA 3.5-inch 120 / 240 / 400 / 480 / 800 GB / 1.2 / 1.92 TB PCIe-SSD 2.5-inch 800 GB / 1.6 / 2 TB PCIe-SSD 1.3 / 2.6 / 5.2 TB DOM SATA 64 / 128 GB
I/O controller onboard - SATA Controller - RAID Controller - LAN Controller - Remote Management Controller	 - Intel® C612, 1 x SATA channel for ODD - additional RAID controller optional - DynamicLoM based on Emulex XE100 series. All supported features are described in relevant system configurator. PXE-Boot via LAN from PXE server, iSCSI / FCoE boot (also diskless). - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)
Power supply	450W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 96% (Titanium efficiency), 200-240V, 50 / 60Hz 1200W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz; 110V range: 1000W, less than 110V: 900W
Power supply configuration	1 x hot-plug power supply or 2 x hot-plug power supply for redundancy
Active power max.	715 W
Weight	Up to 25 kg
Rack (W x D x H)	482.4 mm (Bezel) / 445 mm (Body) x 770 x 86.6 mm
Height Unit Rack	2 U

Mounting Depth Rack	740 mm
Server Management	more information see chapter PRIMERGY ServerView Suite
Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Windows Storage Server 2012 Standard Microsoft® Hyper-V™ Server 2012 Microsoft® Windows Server® 2012 R2 Standard, Datacenter, Essentials Microsoft® Hyper-V Server 2012 R2 Microsoft® Windows Storage Server 2012 R2 Standard Microsoft® Windows Server® 2012 Standard, Datacenter, Essentials VMware vSphere™ 5.5 / 6.0 SUSE® Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 6, 7 Citrix® XenServer® Oracle® Linux 6 / 7 Oracle® VM 3
Special features	Latest DDR4 technology, great expandability for up to 24x HDDs (avail. 02/2015), DynamicLoM for flexible network, FUJITSU software ServerView Suite standard.
Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)
Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Rack Servers
PRIMERGY

Model	PRIMERGY RX2560 M2
Type	Dual socket Intel® Xeon® processor rack server (4 U)
Chipset	Intel® C612
Mainboard type	D3289-B
Processor type support	Intel® Xeon® processor E5-2600 v4 product family
Memory	8 GB – 1536 GB, DIMM (DDR4)
Memory protection	Advanced ECC, Memory Scrubbing, SDDC (Chipkill™), Rank sparing memory support, Memory Mirroring support
Accessible drives	DVD Super Multi, half height, SATA I DVD Super Multi, slimline, SATA I DVD Super Multi, ultraslim, SATA I Blu-ray Disc™ Triple Writer, ultraslim, SATA I LTO4HH Ultrium, 120 MB/s, 800 GB, SAS 6 Gb/s LTO5HH Ultrium, 140 MB/s, 1500 GB, SAS 6 Gb/s LTO6HH Ultrium, 160 MB/s, 2500 GB, SAS 6 Gb/s RDX Drive, 100 MB/s, 320 GB, 500 GB, 1, 2 TB, USB 3.0
Slots	
- PCI-Express 3.0 x16	- 3 x Full height (Slot3 CPU1, Slot8+9 CPU2 167 mm length, please be aware, optional riser cards occupies Slot 3/9)
- PCI-Express 3.0 x8	- 5 x Full height (Slot 1 CPU1 modular RAID 167 mm, Slot 2 CPU1 167 mm, opt. Slot 4 CPU1 opt. riser card 252 mm, opt. Slot 8 CPU2 167 mm, opt. Slot 10 CPU2 opt. riser card 252 mm)
- PCI-Express 3.0 x4	- 4 x Full height optional (Slot 5+6 CPU1 riser card, Slot 11+12 CPU2 riser card 252 mm length)
- Slot Notes	- Slot 1: PCIe Gen3 x8 slot is dedicated for the modular RAID Controller. Up to 5 PCIe Gen3 slots are supported with the first processor, up to 10 PCIe Gen3 slots are supported with two processors. Onboard slots (Slot 1, 2, 3 & 7, 8, 9) support card lenght of up to 167 mm; Slots on the optional riser cards (4, 5, 6; 10, 11, 12) support card lenght of up to 252 mm.
Storage drive bays	12 x 3.5-inch hot-plug or 32 x 2.5-inch hot-plug
Storage disks	HDD SAS, 2.5-inch 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 / 2 TB HDD SAS, 3.5-inch 300 / 450 / 600 GB / 1 / 1.2 / 1.8 / 4 / 6 TB HDD SATA, 2.5-inch 250 / 500 GB / 1 / 2 TB HDD SATA, 3.5-inch 1 / 4 / 6 TB SSD SAS, 2.5-inch 200 / 400 / 800 GB / 1.6 / 2 TB SSD SATA, 2.5-inch 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / SSD SATA 2.5-inch 1.2 / 1.92 TB SSD SATA, 3.5-inch 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / SSD SATA 3.5-inch 1.92 TB PCIe-SSD 2.5-inch 800 GB / 1.6 / 2 TB PCIe-SSD 1.3 / 2.6 / 5.2 TB DOM SATA 64 / 128 GB
I/O controller onboard	
- SATA Controller	- Intel® C612, 1 x SATA connector for optical drive (ODD), 1 x SATA connector for SATA-DOM
- RAID Controller	- additional RAID controller optional
- LAN note	- DynamicLoM based on Emulex XE100 series. Dynamic LoM connector cards are optional. The Controller Cards offer 2 LEDs 1) activity/connect (green) 2) speed (green/orange). PXE-Boot via LAN from PXE server, iSCSI / FCoE boot (also diskless). Intel® Ethernet Controller I210 supported (on project request only).
- Remote Management Controller	- Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)

Power supply	450W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz 800W hot-plug, 96% (Titanium efficiency), 200-240V, 50 / 60Hz 1200W hot-plug, 94% (Platinum efficiency), 100-240V, 50 / 60Hz; 110V range: 1000W, less than 110V: 900W
Power supply configuration	1 x hot-plug power supply or 2 x hot-plug power supply for redundancy
Active power max.	748 W
Weight	Up to 35 kg
Rack (W x D x H)	482.6 (Bezel) / 448 (Body) x 736 x 177 mm
Height Unit Rack	4 U
Mounting Depth Rack	721 mm
Server Management	more information see chapter PRIMERGY ServerView Suite
Special features	No compromise Rack Server offering maximum levels of performance, availability and expandability. Ideal for performance hungry applications, virtualization solutions and storage demanding scenarios.

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Windows Server® 2012 Standard, Datacenter Microsoft® Windows Storage Server 2012 Standard Microsoft® Hyper-V Server 2012 Microsoft® Windows Server® 2012 R2 Standard, Datacenter Microsoft® Windows® Storage Server 2012 R2 Standard Microsoft® Hyper-V Server 2012 R2 VMware vSphere™ 5.5, 6.0 SUSE® Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 6, 7 Citrix® XenServer®

Warranty

Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension

Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Model	PRIMERGY RX4770 M2
Type	Quad socket Intel® Xeon® processor rack server (4 U)
Chipset	Intel® C114
Mainboard type	D 3342
Processor type support	Intel® Xeon® processor E7-4800v3 product family Intel® Xeon® processor E7-8800v3 product family
Memory	16 GB – 6 TB, DIMM (DDR4)
Memory protection	Advanced ECC / Memory Scrubbing / SDDC (Chipkill™) Memory Mirroring support / Rank sparing memory support
Accessible drives	DVD Super Multi, slimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I
Slots - PCI-Express 3.0 x8 - PCI-Express 3.0 x16 - Slot Notes	 - 9 x Full height ½ length - 2 x Full height ¾ length - One of the nine slots are exclusive for internal RAID Controller as connection to internal HDD/SSD slots
Storage drive bays	12 x 2.5-inch hot-plug 1 x 5.25 / 0.5-inch for DVD-RW/Blu-ray
Storage disks	HDD SAS 2.5-inch, 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 TB SSD SAS 2.5-inch, 200 / 400 / 800 GB / 1.6 TB SSD SATA 2.5-inch, 100 / 120 / 200 / 240 / 400 / 480 / 800 GB PCIe-SSD 800 GB / 1.6 TB PCIe-SSD 1.3 / 2.6 / 5.2 TB
I/O controller onboard - RAID Controller - LAN Controller - LAN note - Remote Management Controller	 - additional RAID controller options - 2 x 10 Gbit/s Ethernet (RJ45) - TCP/IP acceleration, PXE boot via LAN from PXE server - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 module; TCG compliant (option)
Power supply	1200 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz 1600 W hot-plug, 94 % (Platinum efficiency), 200-240 V, 50 / 60 Hz
Power supply configuration	Up to 4 hot-plug power supplies. Base unit equipped with 2 power supplies, 3rd and 4th PSU as option, no Mix
Active power (max.)	1990 W
Weight	Max. 46 kg
Rack (W x D x H)	482.6 mm (Bezel) / 445 mm (Body) x 765 x 176 mm
Height Unit Rack	4 U
Mounting Depth Rack	728 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Windows Server® 2008 R2 Standard, Datacenter, Enterprise Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows Server® 2012 Standard, Datacenter Microsoft® Hyper-V Server 2012 Microsoft® Windows Server® 2012 R2 Standard, Datacenter Microsoft® Hyper-V Server 2012 VMware vSphere™ 5.5, 6.0 SUSE® Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 6, 7 Citrix® XenServer® Oracle® Linux 6, 7 Oracle® VM 3
Special features	Memory mirroring support, memory spairing, socket-overlapping mirroring with hot-plug Memory Boards, ECC and SDDC; hot-plug redundant fan and power supply as standard, LocalView display and integrated Remote Management Controller (iRMC S2) IPMI 2.0 as standard, RemoteView optional. Diagnostic LEDs, PDA, ASR& R, 19-inch Rack housing

Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Rack Servers
PRIMERGY

Model	PRIMERGY RX4770 M3 - Mid 2016
Type	Quad socket Intel® Xeon® processor rack server (4 U)
Chipset	Intel® C114 Scalable Memory Buffer (Advanced) Intel® C602 J
Mainboard type	D 3342
Processor type support	Intel® Xeon® processor E7-8800v4 product family
Memory	16 GB – 6 TB, DIMM (DDR4)
Memory protection	Advanced ECC / Memory Scrubbing / SDDC (Chipkill™) / DDDC (Double Device Data Correction) / Memory Mirroring support / Rank sparing memory support
Accessible drives	DVD Super Multi, slimline, SATA I Blu-ray Disc™ Triple Writer, slimline, SATA I
Slots **- PCI-Express 3.0 x8** **- PCI-Express 3.0 x16** **- Slot Notes**	 - 9 x Full height ½ length - 2 x Full height ¾ length - One of the nine slots are exclusive for internal RAID Controller as connection to internal HDD/SSD slots
Storage drive bays	12 x 2.5-inch hot-plug 1 x 5.25 / 0.5-inch for DVD-RW/Blu-ray
Storage disks	HDD SAS 2.5-inch, 300 / 450 / 500 / 600 / 900 GB / 1 / 1.2 / 1.8 / 2 TB SSD SAS 2.5-inch, 200 / 400 / 800 GB / 1.6 TB SSD SATA 2.5-inch, 100 / 120 / 200 / 240 / 400 / 480 / 800 GB PCIe-SSD 800 GB / 1.6 TB PCIe-SSD 1.3 / 2.6 / 5.2 TB
I/O controller onboard **- RAID Controller** **- LAN Controller** **- LAN note** **- Remote Management Controller**	 - additional RAID controller options - 2 x 10 Gbit/s Ethernet (RJ45) - TCP/IP acceleration, PXE boot via LAN from PXE server - Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / TPM 1.2 module; TCG compliant (option)
Power supply	1200 W hot-plug, 94 % (Platinum efficiency), 100-240 V, 50 / 60 Hz; 110V range: 1000W, less than 110V: 900W 1600 W hot-plug, 94 % (Platinum efficiency), 200-240 V, 50 / 60 Hz
Power supply configuration	Up to 4 hot-plug power supplies. Base unit equipped with 2 power supplies, 3rd and 4th PSU as option, no Mix
Active power (max.)	1990 W
Weight	Max. 46 kg
Rack (W x D x H)	482.6 mm (Bezel) / 445 mm (Body) x 765 x 176 mm
Height Unit Rack	4 U
Mounting Depth Rack	728 mm
Server Management	more information see chapter PRIMERGY ServerView Suite

Operating Systems and Virtualization Software	
Certified or supported operating systems and virtualization software	Microsoft® Windows Server® 2008 R2 Standard, Datacenter, Enterprise Microsoft® Hyper-V™ Server 2008 R2 Microsoft® Windows Server® 2012 Standard, Datacenter Microsoft® Hyper-V Server 2012 Microsoft® Windows Server® 2012 R2 Standard, Datacenter Microsoft® Hyper-V Server 2012 VMware vSphere™ 5.5, 6.0 SUSE® Linux Enterprise Server 11, 12 Red Hat® Enterprise Linux 6, 7 Citrix® XenServer® Oracle® Linux 6, 7 Oracle® VM 3
Special features	Memory mirroring support, memory spairing, socket-overlapping mirroring with hot-plug Memory Boards, ECC and SDDC; hot-plug redundant fan and power supply as standard, LocalView display and integrated Remote Management Controller (iRMC S2) IPMI 2.0 as standard, RemoteView optional. Diagnostic LEDs, PDA, ASR& R, 19-inch Rack housing

Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)

Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Blade Servers
PRIMERGY

Model	PRIMERGY BX400 S1
Characteristics	Affordable and fully-featured blade system built from the ground up to be user-friendly and versatile, saving time and costs for midsized companies.
System unit type	6 U chassis for 19-inch rack, or floorstand version
Dimensions (W x D x H)	366 x 819 x 578 mm (Floorstand) 445 x 785 x 267 mm (Rack)
Weight	Rack: up to 98 kg / Floorstand: up to 112.5 kg
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	1 x hot-plug management blade as standard, redundant management blades as option
Fan configuration	Up to 3 additional hot-plug, redundant fan modules
Power supply configuration	Up to 4 x hot-plug power supply modules (1 x as standard)
Operating panel **- Operating buttons** **- Status LEDs** **- Service display**	 - On/off switch / ID button - Power (amber / green); System status (orange / yellow); Identification (blue) - ServerView Local Service Display for Blade (LSB)
Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)
Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Server and Storage Blades pluggable into system unit front side

Product Model name	Product Type	Processor quantity support	Max. number per system unit	Memory Slots total	Supported capacity RAM
PRIMERGY BX2560 M2	Dual Socket Server Blade (Intel)	1 – 2	8	16	8 GB – 1024 GB, DIMM (DDR4)
PRIMERGY BX2580 M2	Dual Socket Server Blade (Intel)	1 – 2	8	24	8 GB – 1536 GB, DIMM (DDR4)
PRIMERGY SX960 S1	Storage Blade Disk		2		
PRIMERGY SX980 S2	Storage Blade Disk		2		

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per system unit
Ethernet Switch/IBP/ EHM 10/40 Gb 18/8 + 2	18 x 10 Gbit/s Eth	8 x 10 Gbit/s (SFP+) plus 2 x 40 Gbit/s (QSFP+)	4 (CB Slot 1/2 3/4)
Eth FEX 10 Gb 16/8	16 x 10 Gbit/s Eth	8 x 10 Gb (SFP+)	4 (CB Slot 1/2 3/4)
Eth Pass Thru 10 Gb 18/18	18 x 1/10 Gbit/s Eth	18 x 1/10 Gb (SFP/SFP+/Twinax)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 1 Gb 18/6	18 x 1 Gbit/s Eth	6 x 1 Gb (RJ45)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 1 Gb 36/12	36 x 1 Gbit/s Eth	8 x 1 Gb (RJ45), 4 x 1 Gb (SFP)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 1 Gb 36/8+2	36 x 1 Gbit/s Eth	8 x 1 Gb (RJ45), 2 x 10 Gb (SFP+)	4 (CB Slot 1/2 3/4)
FC Pass Thru 8 Gb 18/18	18 x 8 Gbit/s FC	18 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
FC Switch 16 Gb Brocade 18/8	FC Switch 16 Gb Brocade 18/8	8 x 4/8/16 Gb (SFP/ SFP+)	3 (CB Slot 2/3/4)
SAS Switch 6 Gb 18/6	18 x 6 Gbit/s SAS	6 x 6 Gb SAS	2 (CB Slot 3/4)

Blade Servers
PRIMERGY

Model	PRIMERGY BX900 S2
Characteristics	Complete dynamic server infrastructure in a single chassis for enterprise data centers. Next generation blade server ecosystem designed for constantly changing IT environments.
System unit type	10 U chassis for 19-inch rack
Dimensions (W x D x H)	482.6 (Bezel) / 445 (Body) x 778 x 438 mm
Weight	Up to 191 kg
Max. output of single power supply	2880 W / 1360 W (240 V / 100 V)
Front bays	18 half 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	up to 3 additional hot-plug, redundant fan modules
Power supply configuration	Up to 6 x hot-plug power supply module, 3 x as minimum (4th to 6th power supply module neccessary for redundancy, and depending on system configuration)
Operating panel **- Operating buttons** **- Status LEDs** **- Service display**	 - On/off switch / ID button - Power (amber / green); System status (orange); Identification (blue) - ServerView Local Service Display for Blade (LSB)
Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)
Maintenance and Support Services – the perfect extension	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time
Recommended Service	7 x 24, Onsite Response Time: 4 h
Service Lifecycle	5 years after end of product life

Server and Storage Blades pluggable into system unit front side

Product Model name	Product Type	Processor quantity support	Max. number per system unit	Memory Slots total	Supported capacity RAM
PRIMERGY BX2560 M2	Dual Socket Server Blade (Intel)	1 – 2	18	16	8 GB – 1024 GB, DIMM (DDR4)
PRIMERGY BX2580 M2	Dual Socket Server Blade (Intel)	1 – 2	18	12	8 GB – 1536 GB, DIMM (DDR4)
PRIMERGY SX960 S1	Storage Blade Disk		2		
PRIMERGY SX980 S2	Storage Blade Disk		max. 6		

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per system unit
Ethernet Switch/IBP/ EHM 10/40 Gb 18/8 + 2	18 x 10 Gbit/s Eth	8 x 10 Gbit/s (SFP+) plus 2 x 40 Gbit/s (QSFP+)	6 (CB Slot 1/2 3/4 5/6)
Eth FEX 10 Gb 16/8	16 x 10 Gbit/s Eth	8 x 10 Gb (SFP+)	6 (CB Slot 1/2 3/4 5/6)
Eth Pass Thru 10 Gb 18/18	18 x 1/10 Gbit/s Eth	18 x 1/10 GB (SFP/SFP+/Twinax)	6 (CB Slot 1/2 3/4 5/6)
Eth Switch/IBP 1 GB 18/6	18 x 1 Gbit/s Eth	6 x 1 GB (RJ45)	8 (CB Slot 1/2 3/4 5/6 7/8)
Eth Switch/IBP 1 Gb 36/12	36 x 1 Gbit/s Eth	8 x 1 GB (RJ45), 4 x 1 GB (SFP)	8 (CB Slot 1/2 3/4 5/6 7/8)
Eth Switch/IBP 1 Gb 36/8+2	36 x 1 Gbit/s Eth	8 x 1 GB (RJ45), 2 x 10 GB (SFP+)	8 (CB Slot 1/2 3/4 5/6 7/8)
FC Pass Thru 8 Gb 18/18	18 x 8 Gbit/s FC	18 x 4/8 GB (SFP/SFP+)	4 (CB Slot 3/4 5/6)
FC Switch 16 Gb Brocade 18/8	18 x 16 Gbit/s FC	8 x 4/8/16 Gb (SFP/ SFP+)	3 (CB Slot 2/3/4)
IB Switch 56 Gb 18/18	18 x 56 Gbit/s IB	18 x 56 GB (QSFP)	3 (CB Slot 3/4 5/6 7/8)
SAS Switch 6 Gb 18/6	18 x 6 Gbit/s SAS	6 x 6 Gb SAS	2 (CB Slot 3/4)

Multi-Node Scale-out Servers PRIMERGY

Model	PRIMERGY CX400 M1
Characteristics	Rack optimized enclosure for double dense server nodes providing high efficiency and best serviceability for various datacenter (cloud) scenarios.
System unit type	2 U chassis for 19-inch rack
Weight	up to 40 kg
Front bays	Storage drives: 24 x 2.5-inch (HDD, SSD)
Rear bays	4 bays for half wide server trays CX25y0 M2 2 x for PSU
Fan configuration	4 non hot-plug fans
Max. input of single power supply	2400 W (94 % efficiency)
Power supply configuration	2 x hot-plug power supply modules
Operating panel **- Operating buttons** **-Status LEDs**	- On/off switch / ID button - Identification (blue) Power (green)
Warranty	
Warranty period	3 years
Warranty type	On-site Service (depending on country)
Maintenance and Support Services – the perfect extension	
Recommended Service	24 x 7, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life

Server Nodes

Product Model name	Product Type	Processor quantity support	Number of nodes	Memory Slots	Supported capacity RAM (max.)	Number of Storage drives (max.)
PRIMERGY CX2550 M2	Dual Socket 1 U Server Node	2	4	16	1024 GB	6 x 2.5-inch in CX400 M1
PRIMERGY CX2570 M2	Dual Socket 2 U Server Node	2	2	16	1024 GB	6 x 2.5-inch in CX400 M1

Multi-Node Scale-out Servers PRIMERGY

Model	PRIMERGY CX2550 M2	PRIMERGY CX2570 M2
Type	1 U / half wide dual socket server node for PRIMERGY CX400 M1 Multi-Node system	2 U / half wide dual socket server node with GPGPU for PRIMERGY CX400 M1 Multi-Node server system
Chipset	Intel® C610	
Mainboard type	D 3343	
Processor type support	Intel® Xeon® processor E5-2600 v4 product family	
Memory	16 GB – 1024 GB (DDR4)	
Memory protection	Advanced ECC, SDDC (Chipkill™)	
Drive bays	6 x 2.5-inch in CX400 M1 (depending on hardware configuration)	
Storage disks	HDD SATA 2.5-inch, 500 GB / 1 / 2 TB HDD SAS 2.5-inch, 300 / 450 / 600 / 900 GB / 1.2 / 1.8 TB SSD SAS 2.5-inch, 200 / 400 / 800 GB / 1.6 TB SSD SATA 2.5-inch, 100 / 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / 1.2 / 1.6 / 1.92 TB PCIe-SSD 2.5-inch, 800 GB / 1.6 / 2 TB DOM SATA 64 / 128 GB	HDD SATA 2.5-inch, 250 / 500 GB / 1 / 2 TB HDD SAS 2.5-inch, 300 / 450 / 600 / 900 GB / 1.2 / 1.8 TB SSD SATA 2.5-inch, 100 / 120 / 200 / 240 / 400 / 480 / 800 / 960 GB / 1.2 / 1.92 TB PCIe-SSD 2.5-inch, 800 GB / 1.6 / 2 TB DOM SATA 64 / 128 GB
Onboard or integrated controller		
- SATA Controller	- Intel® C610, for up to 6 x 2.5-inch SAS HDD or SAS/SATA SSD SW RAID 0/1	- Intel® C610, for up to 6 x 2.5-inch SAS HDD or SAS/SATA SSD SW RAID 0/1
- RAID Controller	- RAID 0/1 for internal drives	- RAID 0/1 for internal drives
- LAN Controller	-2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration)	- Intel® Ethernet Controller I350. 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration)
- Remote Management Controller	- Integrated RMC (iRMC S4, 256 MB attached memory incl. graphics contoller) IPMI 2.0 compatible	- Integrated RMC (iRMC S4, 256 MB attached memory incl. graphics contoller) IPMI 2.0 compatible
-GPU / Coprocessor / Graphics		- 1 x GPGPU NVIDIA Tesla K20 / K20X / K40 computing processor - 1 x Intel® Xeon Phi™ 3120P / 5110P / 7120P, - 1 x NVIDIA GRID K1 / K2
Special features	The optional Cool-Central® Liquid Cooling Technology allows for 2.5 - 5 x higher data center density and helps to reduce cooling costs by over 50 %.	
Operating system and Virtualization Software		
Certified or supported operating systems and virtualization software	Microsoft® Windows Server® 2012 R2 Standard, Datacenter Microsoft® Hyper-V Server 2012 R2 VMware vSphere™ 5.0, 5.0 Embedded VMware vSphere™ 5.1, 5.1 Embedded SUSE® Linux Enterprise Server 11 Red Hat® Enterprise Linux 6, 7 Citrix® XenServer®	
Warranty		
Warranty period	3 years	
Warranty type	On-site Service (depending on country)	
Maintenance and Support Services – the perfect extension		
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.	

Attached Storage PRIMERGY

Model	PRIMERGY SX05 S1 USB	PRIMERGY SX05 S1 SAS
Type	Server attached rack backup subsystem	
Housing	Rack	
Number of bays	Two 5.25" half height	
Accessible drives	RDX Drive, 25 MB/s, 160/320/500 GB/1 TB USB 2.0	LTO3HH Ultrium, 60 MB/s, 400 GB, SAS 3 GB/s LTO4HH Ultrium, 120 MB/s, 800 GB, SAS 6 GB/s LTO5HH Ultrium, 140 MB/s, 1500 GB, SAS 6 GB/s LTO6HH Ultrium, 160 MB/s, 2500 GB, SAS 6 Gb/s
Dimensions (W x D x H)	428.8 x 641.4 x 43.2 mm	
Height Unit Rack	1 U	
Weight	8.07 kg (depending on configuration without backup drives)	
Special features	The PRIMERGY SX05 USB Storage Subsystems is an innovative, easy-to-use, flexible and economical rack enclosure for backup devices. With its wide range of supported backup devices with USB interfaces, it is best suited to consolidate data backups for rack-based servers in PRIMECENTER M1/M2 and third-party racks.	The PRIMERGY SX05 SAS Storage Subsystems is an innovative, easy-to-use, flexible and economical rack enclosure for backup devices. With its wide range of supported backup devices with SAS interfaces, it is best suited to consolidate data backups for rack-based servers in PRIMECENTER M1/M2 and third-party racks.

Racks PRIMECENTER M1

Model	PRIMECENTER M1 Rack, 42 U
Type	42 U symmetrical design 600 mm with space optimized rack design, symmetrical design 700 mm with standard rack design, asymmetrical design 700 mm for patented cable management
Design doors	One-piece front door and two-piece rear door with high percentage of holes (up to 80 %) for improved server cooling. Ergonomic door handles.
Capacity	42 height units plus up to 6 vertical height units (depth of up to 300 mm incl. cable space). Up to 20 kg load per horizontal, 3.5 kg per vertical height unit, maximum weight up to 1000 kg.
Cable management and service	Optimized cable routing solutions for all M1 Rack types. Two break out entries for external cabling.
Dimensions (W x D x H)	700 x 1050 x 2003 mm 600 x 1050 x 2003 mm
Transport Dimensions (W x D x H)	800 x 1200 x 2150 mm (approx.) 700 x 1200 x 2150 mm (approx.)
Weight empty approx.	112 – 122 kg
Max. pay load / dynamic load	Approx. 880 / 1000 kg
Rack accessories	Optional available: rack mounting kits; cable management solutions; networking components, I/O switches, mounting kits, accessory kits, shelves, electrical connections, monitoring (rack console, KVM switches), uninterruptible power supply (UPS), power distribution units (PDU)
Security functions	Lockable front, rear door and side panels, optional anti-tilt protection.
Shipments	Optionally ex works, fully mounted and tested including cabling. Shipment including 4 heavy-duty castors and 4 adjusting feet on a shock-absorbing pallet.
Special features	The optimized cable management patented by Fujitsu Technology Solutions is a major highlight in the asymmetrical PRIMECENTER M1 rack system. The asymmetrical rack structure with a section for side cable routing reduces the impairment to the air flow behind the rack devices. Guiding of the cables via swivel arms on the systems and within the cable conduit permits perfect routing of the cables, thus permits clean and clear cabling in the entire rack. The offer is supplemented by new symmetrical racks in widths of 600 mm and 700 mm. The symmetrical 700 mm racks also offer as a special feature up to 4 slots on the front for the installation of switches or the switch cabling in the rack. The asymmetric racks provide up to 6 vertical 19-inch slots on left front side and space for the patented sideways Fujitsu cable management in the rear. New rack doors in an attractive design with honeycombshaped perforations also offer (up to 80 % holes) optimal prerequisites for the cooling of high-performance systems. The design of the PRIMECENTER M1 Racks ensures easy service and simple maintenance. Further features are the lockable front-, rear and side panels, the retractable anti-tilt protection and the optional factory installation with cabling and final tests.

Racks
PRIMECENTER M2

Model	PRIMECENTER M2 Rack, 24 U 600 width	PRIMECENTER M2 Rack, 42 U 600 width	PRIMECENTER M2 Rack, 42 U 800 width	PRIMECENTER M2 Rack, 47 U 800 width
Type	24 U symmetrical design 600 mm x 1100 mm	42 U symmetrical design 600 mm x 1200 mm	42 U symmetrical design 800 mm x 1200 mm	47 U symmetrical design 800 mm x 1200 mm
Design doors	One wing front door and twin rear door with high percentage of holes (approx. 83 %) for improved server cooling. Ergonomic door handles	One wing front door and twin rear door with high percentage of holes (approx. 83 %) for improved server cooling. Ergonomic door handles		
Capacity	24 height units with up to 20 kg load per horizontal height unit and maximum weight up to 570 kg.	42 height units with up to 20 kg load per horizontal and maximum weight up to 1000 kg.	42 height units plus 6 vertical height units. Up to 20 kg load per horizontal, 3.5 kg per vertical height unit and maximum weight up to 1000 kg.	47 height units plus 6 vertical height units. Up to 20 kg load per horizontal, 3.5 kg per vertical height unit and maximum weight up to 1000 kg.
Dimensions (W x D x H)	600 x 1100 x 1200 mm	600 x 1200 x 2000 mm	800 x 1200 x 2000 mm	800 x 1200 x 2200 mm
Transport Dimensions (W x D x H)	700 x 1400 x 1610 mm (approx.)	700 x 1400 x 2150 mm (approx.)	900 x 1400 x 2150 mm (approx.)	900 x 1400 x 2360 mm (approx.)
Weight empty approx.	82 kg	120 kg	143 kg	170 kg
Max. pay load / dynamic load	480 kg / 570 kg	840 kg / 1000 kg	840 kg / 1000 kg	840 kg / 1000 kg
Rack accessories	Optional available: rack mounting kits; cable management solutions; networking components, I/O switches, mounting kits, accessory kits, shelves, electrical connections, monitoring (rack console, rack monitoring system, KVM switches), uninterruptible power supply (UPS), power distribution units (PDU)	Optional available: rack mounting kits; cable management solutions; networking components, I/O switches, mounting kits, accessory kits, shelves, electrical connections, monitoring (rack console, rack monitoring system, KVM switches), uninterruptible power supply (UPS), power distribution units (PDU)		
Security functions	Mechanical lockable front and rear door with standard identically locks or possible different lock combinations. Optional anti-tilt protection.	Mechanical lockable front and rear door (optional electrical) with standard identically locks or possible different lock combinations. Optional anti-tilt protection.		
Shipments	Optionally ex works, fully mounted and tested including cabling. Shipment including 4 heavy-duty castors and 4 adjusting feet on a shock-absorbing pallet.	Optionally ex works, fully mounted and tested including cabling. Shipment including 4 heavy-duty castors and 4 adjusting feet on a shock-absorbing pallet.		
Special features	The 24 U PRIMECENTER M2 rack provides an efficient space-saving solution for office environments in a 600 mm wide, 1.100 mm deep and 1.200 mm high housing. High level safety and security is ensured by comprehensive test scenarios in grounding (DIN EN60950) and IP20 (DIN 40 050 and IEC 529), protection against hazardous parts and a mechanical door lock with up to 200 combinations on request. A wide range of accessories is directly available and can be configured via Fujitsu SystemArchitect® or can be retrofitted on demand. Fujitsu introduced an additional security environment for the new M2 Rack named Managed Rack Solution (MRS) which is based on Fujitsu PalmSecure ID Match, a MR1000 electronic door lock and different rack shock and door sensors. This biometric solution is characterized through its more reliable hand vein scan technology in contrast to fingerprint or iris scanner solutions. Another optional but helpful add-on is the tilting protection which prevents the rack from tipping over while heavy servers are pulled out during maintenance. Approximately 83 % perforation ensures an optimized air flow for cooling and high heat dissipation. This - combined with a tool-free design for easy service and simple maintenance plus high scalability serves – is an ideal solution for all types of infrastructures.	The slim 42 U PRIMECENTER M2 rack with a 600 mm wide, 1.200 mm deep and 2.000 mm high housing offers a perfect platform for best space allocation within datacenters. In contrast the wider 42U and 47U models with 800 mm width supply 6 vertical 19-inch slots on the front left and right with enough space for cabling options and switch installations. High level safety and security is ensured by comprehensive test scenarios in grounding (DIN EN60950) and IP20 (DIN 40 050 and IEC 529), protection against hazardous parts and a mechanical door lock with up to 200 combinations on request. The PRIMECENTER M2 42U 1200 x 800 can be also offered as Liquid cooling rack, PRIMECENTER M2 42U 1200 x 800 LC. A wide range of accessories is directly available and can be configured via Fujitsu SystemArchitect® or can be retrofitted on demand. Fujitsu introduced an additional security environment for the new M2 Rack named Managed Rack Solution (MRS) which is based on Fujitsu PalmSecure ID Match, a MR1000 electronic door lock and different rack shock and door sensors. This biometric solution is characterized through its more reliable hand vein scan technology in contrast to fingerprint or iris scanner solutions. Another optional but helpful add-on is the tilting protection which prevents the rack from tipping over while heavy servers are pulled out during maintenance. Approximately 83 % perforation ensures an optimized air flow for cooling and high heat dissipation. This - combined with a tool-free design for easy service and simple maintenance plus high scalability serves – is an ideal solution for all types of infrastructures.		

FUJITSU Server PRIMEQUEST
Critical workload processing revolutionized

Open Systems Environments

Big data, real-time analytics and quick decision-making might be top of the agenda for your business lines. But guaranteeing permanent and instant access to IT resources is a tough challenge for any data center.

Fujitsu PRIMEQUEST servers give you the in-memory computing capacity you need to respond.

With outstanding platform reliability, error prevention and self-healing capabilities, you can support faster and continuous access to everything from ERP systems and internal databases to customer-facing applications.

Combining the power of Intel® Xeon® Processor E7 v3 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.

Business Critical

FUJITSU Server PRIMEQUEST 2800B2 is an 8-socket rack server with the latest Intel® Xeon® E7-8800 v3 processor family; it is easy to scale up to 144 cores and 12TB DDR4 main memory. In conjunction with 16 PCIe 3.0 slots and advanced RAS, it is the right choice for demanding databases, in-memory solutions and business-critical applications.

Mission Critical

FUJITSU Server PRIMEQUEST 2400E2/2800E2 Mission Critical systems unify the economic and flexibility benefits of x86 industry standard servers with mission-critical uptime features. Featuring four/eight of the Intel® Xeon® processor E7-8800 v3 product family provided with up to 72/144 cores and 6TB/12TB DDR4 memory, the PRIMEQUEST 2400E2/2800E2 provide unprecedented performance and memory capacity for demanding solutions. Mission critical features enable for an outstanding platform reliability with innovative error prevention and self-healing capabilities.

→ www.fujitsu.com/fts/products/computing/servers/mission-critical/

Business- / Mission-Critical Servers
PRIMEQUEST



Model	PRIMEQUEST 2800B2	PRIMEQUEST 2400E2	PRIMEQUEST 2800E2
Form Factor	Rack server (10 U)	Rack server (10 U)	Rack server (10 U)
Processor quantity and type	2 – 8 x Intel® Xeon® processor E7-8800v3 product family	1 - 4 Intel® Xeon® processor E7-8800v3 product family	1 - 8 Intel® Xeon® processor E7-8800v3 product family
Memory	Max. 12 TB (up to 192 DIMM slots per server) DIMM (DDR4) LV	Max. 6 TB (up to 96 DIMM slots per server) DIMM (DDR4) LV	Max. 12 TB (up to 192 DIMM slots per server) DIMM (DDR4) LV
Memory protection	ECC, Memory Mirroring support, Advanced ECC, DDDC (Double Device Data Correction), SDDC	ECC, Memory Mirroring support, Advanced ECC, DDDC (Double Device Data Correction), SDDC	
Hard disk bay configuration	Max. 8 x 2.5-inch with max. 2 x disk units	Max. 16 x 2.5-inch	Max. 24 x 2.5-inch
Hard disk drives / Solid state drives	HDD SAS 2.5-inch 300 / 600 / 900 GB / 1.2 / 1.8 TB SSD SAS 2.5-inch 200 / 400 / 800 GB / 1.6 TB PCIe SSD 800 GB / 1.6 / 2 TB	HDD SAS 2.5-inch 300 / 600 / 900 GB / 1.2 / 1.8 TB SSD SAS 2.5-inch 200 / 400 / 800 GB / 1.6 TB PCIe SSD 800 GB / 1.6 / 2 TB	
Interfaces	4 x VGA (1x per SB) RJ45 dedicated Service LAN port for MMB (10/100 Mbit/s)	2 x VGA (1 x per SB) RJ45 dedicated Service LAN port for MMB (10/100 Mbit/s)	1 x VGA; 1 USB 2.0 RJ45 dedicated Service LAN port for MMB (10/100 Mbit/s)
I/O Units	I/O Unit 10 GbE full hight (max. 4 per system unit) I/O Unit 1 GbE low profile (max. 4 per system unit)	I/O Unit 10 GbE full hight (max. 4 per system unit) I/O Unit 1 GbE low profile (max. 4 per system unit)	
Onboard/integrated Controller **- RAID controller** **- Remote Management Controller**	- RAID 0/1 or RAID 5/6 controller integarted in system board and/or disk unit (option), additional RAID optional - PQ2000 Management Board (MMB)	- RAID 0/1 or RAID 5/6 controller integrated in system board and/or Disk Unit (option), additional RAID optional - PQ2000 Management Board (MMB)	
Service processor **- General** **- Interfaces** **- Redundancy**	- MMB, located on the rear side of the system. - 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	- MMB, located on the rear side of the system. Second MMB as option - 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 - Up to two MMB units can be installed in one chassis. Second MMB for redundancy is optional.	
RAS features **- Standard** **- Advanced** **- Mission Critical**	- SDDC, ECC, redundant fans and power supply - Intra-socket memory mirroring, MCA, PCIe live recovery, DDDC	- SDDC, ECC, redundant fans and power supply - Intra-socket memory mirroring, MCA, PCIe live recovery, DDDC - Reserved Systemboard, flex IO, Dynamic Reconfiguration, redundant MMB, hot-plug PCIe	
Operating Systems	Microsoft® Windows Server® 2012 R2 Datacenter / Standard Microsoft® Windows Server® 2012 Datacenter / Standard Microsoft® Hyper-V Server 2012 SUSE® Linux Enterprise Server 11 / 12 Red Hat® Enterprise Linux 6 / 7 VMware vSphere™ 5.5 / 6.0 Oracle® VM 3.0	Microsoft® Windows Server® 2012 R2 Datacenter / Standard Microsoft® Windows Server® 2012 Datacenter / Standard Microsoft® Hyper-V Server 2012 SUSE® Linux Enterprise Server 11 / 12 Red Hat® Enterprise Linux 6 / 7 VMware vSphere™ 5.5 / 6.0 Oracle® VM 3.0	
Server Managment	ServerView Suite – Maintain, Integrate, Deploy, Control	ServerView Suite – Maintain, Integrate, Deploy, Control	
Weight	up to 143 kg	up to 124 kg	up to 150 kg
Rack-mount (WxDxH)	445 x 782 x 438 mm	445 x 782 x 438 mm	
Active power max.	5227 W	3579 W	5354 W
Max. input of single power supply	3200 W (240 V)	3200 W / 1600 W (240 V / 100 V)	3200 W (240 V)
Warranty			
Warranty period	3 years	3 years	
Warranty type	Onsite Service (depending on country)	Onsite Service (depending on country)	
Maintenance and Support Services – the perfect extension			
Recommended Service	5 years after end of product life	5 years after end of product life	
Service Lifecycle	www.fujitsu.com/support	www.fujitsu.com/support	

Business- / Mission-Critical Servers
PRIMEQUEST

Model	PRIMEQUEST 2800B3 - Mid 2016	PRIMEQUEST 2400E3 - Mid 2016	PRIMEQUEST 2800E3 - Mid 2016
Form Factor	Rack server (10 U)	Rack server (10 U)	Rack server (10 U)
Processor quantity and type	2 - 8 x Intel® Xeon® processor E7-8800v4 product family	1 - 4 Intel® Xeon® processor E7-8800v4 product family	1 - 8 Intel® Xeon® processor E7-8800v4 product family
Memory	Max. 24 TB (up to 192 DIMM slots per server) DIMM (DDR4)	Max. 12 TB (up to 96 DIMM slots per server) DIMM (DDR4)	Max. 24 TB (up to 192 DIMM slots per server) DIMM (DDR4)
Memory protection	ECC, Memory Mirroring support, Advanced ECC, DDDC (Double Device Data Correction), SDDC	ECC, Memory Mirroring support, Advanced ECC, DDDC (Double Device Data Correction), SDDC	
Hard disk bay configuration	Max. 8 x 2.5-inch with max. 2 x disk units	Max. 16 x 2.5-inch	Max. 24 x 2.5-inch
Hard disk drives / Solid state drives	HDD SAS 2.5-inch 300 / 600 / 900 GB / 1.2 / 1.8 TB SSD SAS 2.5-inch 200 / 400 / 800 GB / 1.6 TB PCIe SSD 800 GB / 1.6 / 2 TB	HDD SAS 2.5-inch 300 / 600 / 900 GB / 1.2 / 1.8 TB SSD SAS 2.5-inch 200 / 400 / 800 GB / 1.6 TB PCIe SSD 800 GB / 1.6 / 2 TB	
Interfaces	4 x VGA (1x per SB) RJ45 dedicated Service LAN port for MMB (10/100 Mbit/s)	2 x VGA (1 x per SB) RJ45 dedicated Service LAN port for MMB (10/100 Mbit/s)	1 x VGA; 1 USB 2.0 RJ45 dedicated Service LAN port for MMB (10/100 Mbit/s)
I/O Units	I/O Unit 10 GbE full hight (max. 4 per system unit) I/O Unit 1 GbE low profile (max. 4 per system unit)	I/O Unit 10 GbE full hight (max. 4 per system unit) I/O Unit 1 GbE low profile (max. 4 per system unit)	
Onboard/integrated Controller **- RAID controller** - LAN Controller **- Remote Management Controller**	- RAID 0/1 or RAID 5/6 controller integarted in system board and/or disk unit (option), additional RAID optional - LAN controller are integrated in optional I/O units- PQ2000 Intel® I350-AM2; Intel® X540 AT2 - Management Board (MMB)	- RAID 0/1 or RAID 5/6 controller integrated in system board and/or Disk Unit (option), additional RAID optional - LAN controller are integrated in optional I/O units, details are described under I/O units Intel® I350-AM2; Intel® X540 AT2 - PQ2000 Management Board (MMB)	
Service processor **- General** **- Interfaces** **- Redundancy**	-- MMB, located on the rear side of the system. - 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	- MMB, located on the rear side of the system. Second MMB as option - 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 - Up to two MMB units can be installed in one chassis. Second MMB for redundancy is optional.	
RAS features **- Standard** **- Advanced** **- Mission Critical**	- SDDC, ECC, redundant fans and power supply - Intra-socket memory mirroring, MCA, DDDC	- SDDC, ECC, redundant fans and power supply - Intra-socket memory mirroring, MCA, PCIe live recovery, DDDC - Reserved Systemboard, flex IO, Dynamic Reconfiguration, redundant MMB, hot-plug PCIe	
Operating Systems	Microsoft® Windows Server® 2012 R2 Datacenter / Standard Microsoft® Windows Server® 2012 Datacenter / Standard Microsoft® Hyper-V Server 2012 SUSE® Linux Enterprise Server 11 / 12 Red Hat® Enterprise Linux 6 / 7 VMware vSphere™ 5.5 / 6.0 Oracle® VM 3.0	Microsoft® Windows Server® 2012 R2 Datacenter / Standard Microsoft® Windows Server® 2012 Datacenter / Standard Microsoft® Hyper-V Server 2012 SUSE® Linux Enterprise Server 11 / 12 Red Hat® Enterprise Linux 6 / 7 VMware vSphere™ 5.5 / 6.0 Oracle® VM 3.0	
Server Managment	ServerView Suite – Maintain, Integrate, Deploy, Control	ServerView Suite – Maintain, Integrate, Deploy, Control	
Weight	up to 143 kg	up to 124 kg	up to 150 kg
Rack-mount (WxDxH)	445 x 782 x 438 mm	445 x 782 x 438 mm	
Active power max.	5227 W	3579 W	5354 W
Max. input of single power supply	3200 W (240 V)	3200 W / 1600 W (240 V / 100 V)	3200 W (240 V)
Warranty			
Warranty period	3 years	3 years	
Warranty type	Onsite Service (depending on country)	Onsite Service (depending on country)	
Maintenance and Support Services – the perfect extension			
Recommended Service	5 years after end of product life	5 years after end of product life	
Service Lifecycle	www.fujitsu.com/support	www.fujitsu.com/support	

FUJITSU ServerView® Suite

DEPLOY
Fast, easy, reliable

Server Setup and Deployment
- ■ Installation Manager
  Configures Fujitsu PRIMERGY server hardware and installs operating systems and server management software either unattended or menu-driven, locally or remotely.
- ■ Scripting Toolkit
  Collection of utilities and sample scripts for individual script-based Fujitsu PRIMERGY server configuration and installation.

CONTROL
Centralized, easy, efficient

Server Monitoring and Control
- ■ Operations Manager
- ■ Agents / CIM Providers
- ■ System Monitor
- ■ Agentless Service
- ■ Event Manager
- ■ RAID Manager

Capacity Management
- ■ Threshold Manager

Power Management
- ■ Power Monitor
- ■ Power Consumption Management (in iRMC)

Storage Support
- ■ Storage Management
  - Monitoring
  - Events

DYNAMIZE
Simple, sophisticated, efficient

Privat Cloud Infrastructure
- □ Resource Orchestrator Cloud Edition

Consolidated Server Infrastructures
- □ Resource Orchestrator Virtual Edition

I/O Management
- □ Virtual-IO Manager

MAINTAIN
In any state, at any place

Remote Management
- ■ integr. Remote Management Controller (iRMC)
  - □ iRMC Advanced Pack
- ■ Management Blade
- □ Support Gateway / AutoCall

embedded LifeCycle Management
- □ eLCM Activation License

Update Management
- ■ Update Manager (SVUM) Download Manger Respository Manager
- ■ Respository Server
- ■ Update DVD / SVUM Express Content Collecor

Performance Measurement
- ■ Performance Manager

Investigation
- ■ Asset Management
- ■ Archive / Inventory Manager
- ■ PrimeCollect

Inspection
- ■ Online Diagnostics
- ■ Customer Self Service
  - □ Local Service Display

INTEGRATE
Seamless, manage uniformly

Uniformed Management
- □ Fujitsu ManageNow® solutions

Integration Packs
- ■ Microsoft SCOM
- ■ Microsoft SCCM
- ■ Microsoft SC VMM
- ■ Microsoft SC PRO Packs
- ■ VMware vCenter
- ■ VMware vRealize
- ■ Nagios
- ■ Icinga
- ■ HP Systems Insight Manager

■ = Standard □ = Option

Your key to professional server operation: FUJITSU Software ServerView Suite

Free IT staff from routine server management tasks while at the same time increase efficiency and flexibility of your IT. Fujitsu ServerView Suite provides you with a well proven and comprehensive tool set to manage your Fujitsu PRIMERGY server environment throughout its lifecycle – from a single system up to large server pools.

Consolidate and enhance ServerView functions with the embedded Lifecycle Manager for more simplified, highly integrated and automated server management processes. Increase data security with the help of ServerView Agentless Service and use new mobile solutions to get server management information even when you are away from your desk. Integrate your Fujitsu PRIMERGY servers with ServerView Integration Packs easily in mainstream enterprise management solutions like Microsoft System Center, VMware vCenter or Nagios and ensure investment protection while reducing administration efforts.

FUJITSU M10 SPARC Servers

Flexible and scalable UNIX systems that deliver high performance and mission-critical RAS for enterprise-class workloads

Maximum scalability with minimum downtime

With unprecedented levels of change in business environments, organizations are being forced to make more accurate business decisions in a shorter amount of time. Through the integration of disorganized data, organizations are able to make meaningful conclusions more accurately and in a timely fashion, by analyzing data from various perspectives.

However the relevant platforms require the ability for high performance processing of very large data volumes. Companies need cost effective solutions to maximize Return on Investment.

To make the right business decisions, the right choice is the most advanced server, Fujitsu M10. This extremely advanced server is the result of Fujitsu's high end server technologies coupled with Oracle's database technologies.

Fujitsu Technologies Accelerating Server Evolution

Vertical up-scale and horizontal out-scale are traditional techniques used to expand systems. However both approaches have problems in processing large and unprecedented volumes of data:

- Up-scaled systems tend to utilize a big box. As the performance requirements increase, servers must be replaced to meet the increasing demands.
- Out-scaled systems tend to become exponentially more complex as boxes are added to the environment. These environments are extremely difficult to create and the server complexity becomes very difficult to manage.

Using Fujitsu M10 these problems can be avoided.

Real-Time Processing, Real-Time Business Decisions

Fujitsu M10 can process large amounts of data in a short period of time with low access time between memory and CPU, at high speed and using parallel computing. Furthermore, logic often used in applications is incorporated into processor hardware, allowing data processing time to be shortened. This technology is called Software on Chip and includes parallel processing of data through Single Instruction Multiple Data (SIMD), and computing of decimal notational data called Decimal Floating Point Computing.

Dynamic Scaling to grow with your business

Fujitsu M10 helps grow systems one step at a time with up to 1,024 cores. To expand the Fujitsu M10 server:

- You can activate CPU cores in units of two cores by purchasing CPU Core Activation Permits. Inactive cores do not need to be paid for.
- Employing the Building Block Architecture, the Fujitsu M10-4S server scales up to 1,024 cores by simply stacking up to 16 Fujitsu M10-4S chassis.

Mainframe-Class Reliability

Fujitsu M10 uses proven highly reliable technologies in all parts of the server. Comprehensive and exhaustive data protection and redundancy, assures system uptime is 24 hours a day and 365 days a year. Fujitsu M10 is undoubtedly the king of reliability.

* Fujitsu M10 is sold as SPARC M10 by Fujitsu in Japan.

→ www.fujitsu.com/sparc

FUJITSU M10
SPARC Servers

System	FUJITSU M10-1 Server
Form Factor	Rack server (1 U)
Processor quantity	1 x processor
Processor type	SPARC64 X (2.8 GHz, 22 MB L2 cache, 16-core) SPARC64 X+ (3.2 GHz, 22 MB L2 cache , 16-core) SPARC64 X+ (3.7 GHz, 24 MB L2 cache, 8-core)
Memory capacity	Max. 512 GB with 32 GB DIMM
Storage drive bays	8 x 2.5-inch
Hard disk drives	900 GB SAS HDD 600 GB SAS HDD 200 GB SAS SSD 400 GB SAS SSD
PCI slots / I/O slots	3 x PCIe 3.0 (x8) short, low-profile 23 PCIe slots in total with optional PCI expansion unit
Number of I/O expansion unit	Max. 2x I/O expansion unit (max. 11 x PCI-Express 3.0 slots per unit)
I/O ports onboard	4 x Ethernet (10Base-T / 100Base-TX / 1000Base-T) 1 x SAS (Serial attached SCSI) 2 x USB
Power supply configuration	2 x hot-plug power supply (1 + 1 redundant)
Power consumption	Max. 763 W
Input voltage	100 – 120 VAC, 200 – 240 VAC
Dimension (W x D x H)	431 x 721 x 42.5 mm
Weight*	18 kg
Operating System	Oracle Solaris 10 Oracle Solaris 11.1
Redundant components	Memory, HDD/SSD, power supply unit, fan, power system, PCI card
Hot-swap components	HDD/SSD, power supply unit, fan
Virtualization	Built-in, no-cost Oracle VM Server for SPARC and Oracle Solaris Zones provide the flexibility and power of up to 32 virtual systems in a single Fujitsu M10-1 server.

* The weight of cables and optional hardware is not included

System	FUJITSU M10-4 Server
Form Factor	Rack server (4 U)
Processor quantity	Max. 4x processors
Processor type	SPARC64 X (2.8 GHz, 24 MB L2 cache, 16-core) SPARC64 X+ (3.4GHz, 24 MB L2 cache , 16-core) SPARC64 X+ (3.7 GHz, 24 MB L2 cache, 8-core)
Memory capacity	Max. 2 TB with 32 GB DIMM
Storage drive bays	8 x 2.5-inch
Hard disk drives	900 GB SAS HDD 600 GB SAS HDD 200 GB SAS SSD 400 GB SAS SSD
PCI slots / I/O slots	11 x PCI Express 3.0 (x8) 71 PCI Express slots in total incl. PCI Expansion Units
Number of I/O expansion unit	Max. 6 x I/O Expansion Units (Max. 11 x PCI Express 3.0 slots per unit)
I/O ports onboard	4 x Ethernet (10Base-T / 100Base-TX / 1000Base-T) 1 x SAS (Serial attached SCSI) 2 x USB
Power supply configuration	2 x hot-plug power supply (1 + 1 redundant)
Power consumption	Max. 2,765 W
Input voltage	200 – 240 VAC
Dimension (W x D x H)	440 x 746 x 175 mm
Weight*	58 kg
Operating System	Oracle Solaris 10 Oracle Solaris 11.1
Redundant components	Memory, HDD/SSD, power supply unit, fan, power system, PCI card, liquid cooling pump
Hot-swap components	HDD/SSD, power supply unit, fan, PCI card, PCI Expansion Unit
Virtualization	Built-in, no-cost Oracle VM Server for SPARC and Oracle Solaris Zones provide the flexibility and power of up to 32 virtual systems in a single Fujitsu M10-1 server.

* The weight of cables and optional hardware is not included

FUJITSU M10
SPARC Servers

System	FUJITSU M10-4S (Single unit)	FUJITSU M10-4S (4 units)	FUJITSU M10-4S (16 units)
Form Factor	Rack server (4 U)	4 rack servers in 1 rack cabinet	16 rack servers in 2 rack cabinet
Processor quantity	Max. 4 x processors	Max. 16 x processors	Max. 64 x processors
Processor type	SPARC64 X (3.0 GHz, 24 MB L2 cache, 16-core) SPARC64 X+ (3.7 GHz, 24 MB L2 cache, 16-core)	SPARC64 X (3.0 GHz, 24 MB L2 cache, 16-core) SPARC64 X+ (3.7 GHz, 24 MB L2 cache, 16-core)	SPARC64 X (3.0 GHz, 24 MB L2 cache, 16-core) SPARC64 X+ (3.7 GHz, 24 MB L2 cache, 16-core)
Main Memory	Max. 2 TB with 32 GB DIMM	Max. 16 TB with 32 GB DIMM	Max. 32 TB with 32 GB DIMM
Storage drive bays	8 x 2.5-inch	32 x 2.5-inch	128 x 2.5-inch
Hard disk drives	900 GB SAS HDD 600 GB SAS HDD 200 GB SAS SSD 400 GB SAS SSD	900 GB SAS HDD 600 GB SAS HDD 200 GB SAS SSD 400 GB SAS SSD	900 GB SAS HDD 600 GB SAS HDD 200 GB SAS SSD 400 GB SAS SSD
PCI slots / I/O slots	8 x PCIe 3.0 (x8) 58 PCIe slots in total incl. PCI expansion units	32 x PCIe3.0 (x8) 232 PCIe slots in total incl. PCI Expansion units	128 x PCIe 3.0 (x8) 928 PCIe slots in total incl. PCI expansion units
Number of I/O expansion unit	Max. 5 x I/O Expansion Units	Max. 20 x I/O Expansion Units	Max. 80 x I/O Expansion Units
I/O ports onboard	4 x Ethernet (10Base-T / 100Base-TX / 1000Base-T) 1 x SAS (Serial attached SCSI) 2 x USB	32 x Ethernet (10Base-T / 100Base-TX / 1000Base-T) 4 x SAS (Serial attached SCSI) 8 x USB	64 x Ethernet (10Base-T / 100Base-TX / 1000Base-T) 16 x SAS (Serial attached SCSI) 32 x USB
Power supply configuration	2 x hot-plug power supply (1 + 1 redundant)	8 x hot-plug power supply (1 + 1 redundant)	32 x hot-plug power supply (1 + 1 redundant)
Power consumtion	Max. 2,779 W	Max. 11,116 W	Max. 44,464 W
Input voltage	200 – 240 VAC	200 – 240 VAC	200 – 240 VAC
Dimensions (W x D x H)	440 x 810 x 175 mm	700 x 1,050 x 2,000 mm	1400 x 1,050 x 2,000 mm
Weight *	60 kg	400 kg	1,570 kg
Operating System	Oracle Solaris 10 Oracle Solaris 11.1	Oracle Solaris 10 Oracle Solaris 11.1	Oracle Solaris 10 Oracle Solaris 11.1
Redundant components	Memory, HDD/SSD, power supply unit, fan, power system, PCI card, liquid cooling pump	Memory, HDD/SSD, power supply unit, fan, power system, PCI card, liquid cooling pump	Memory, HDD/SSD, power supply unit, fan, power system, PCI card, liquid cooling pump, XSCF
Hot-swap components	HDD/SSD, power supply unit, fan, PCI card, PCI Expansion Unit	HDD/SSD, power supply unit, fan, PCI card, PCI expansion unit	HDD/SSD, power supply unit, fan, PCI card, PCI expansion unit
Virtualization	Built-in, no-cost Physical Partitions, Oracle VM Server for SPARC and Oracle Solaris Zones provide the flexibility and power of up to 32 virtual systems in a single Fujitsu M10-S4	Built-in, no-cost Physical Partitions, Oracle VM Server for SPARC and Oracle Solaris Zones provide the flexibility and power of up to 32 virtual systems in a single Fujitsu M10-S4	Built-in, no-cost Physical Partitions, Oracle VM Server for SPARC and Oracle Solaris Zones provide the flexibility and power of up to 32 virtual systems in a single Fujitsu M10-S4

* The weight of cables and optional hardware is not included

* The weight of cables and optional hardware is not included

BS2000 Portfolio
Flexibility re-defined
Infrastructure for the future

Combining high-end mainframe technology and open world standards

For more than 40 years, BS2000 mainframes have enabled customers to satisfy even the toughest demands when it comes to business-critical applications. That also applies to the new generation of its mainframes, the Fujitsu Server BS2000 SE series. Fujitsu's completely newly developed server infrastructure is a high performance and extremely flexible high-end multi-OS infrastructure. This customer-centric development strategy is unique in the mainframe market and has brought forth a hybrid system that sets completely new standards in terms of openness, integration options and manageability. The new SE servers enable conventional mainframe applications and applications from the so-called open world to be run – depending on requirements – in parallel on different and/or identical hardware technologies with various operating systems.

The new infrastructure is highly scalable (scale-up and scale-out) and allows customers to manage their applications reliably, quickly and efficiently with outstanding availability levels. Each Server family has all the known and proven strengths of the open BS2000 mainframe operating system at its disposal: maximum availability, automated operation, ease of administration, innovative integration. All thus to generate even further value added for the customer.

Enabling high-performance and flexible high-end multi-OS operations

At a glance:

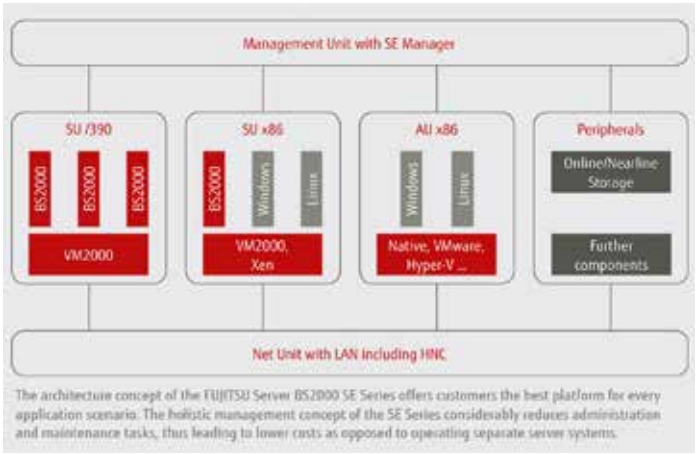
- High data and application availability with simultaneously low operating costs
- New SE Manager enables central, web-based management of the entire SE infrastructure (e.g. servers, platforms, network, disk and tape peripherals)
- New operating system Fujitsu Software BS2000 OSD/BC V10.0 offers a variety of new features for the existing BS2000 server (S and SQ series) and provides optimal SE servers support
- Consequently, customers can realize a variety of usage scenarios with the best possible platform, make far better use of their mainframe investments and are also extremely well prepared for future usage scenarios

The new SE series generation with its newly developed processors provide much greater system performance, extended configuration options, high-level availability and – last but not least – a significant reduction in power consumption.

FUJITSU Server BS2000 SE700
The SE server with top-level performance and flexibility for the simultaneous operation of several operating systems based on /390 architecture and high-end Intel x86 technology.

FUJITSU Server BS2000 SE500
The SE server in the medium-performance range with the same advantages as in the high-end line SE700.

FUJITSU Server BS2000 SE300
The SE server for the entry-level and medium performance range for the simultaneous operation of several operating systems exclusively based on high-end Intel x86 technology, but with the same benefits regarding manageability, integration, flexibility and availability.



The architecture concept of the FUJITSU Server BS2000 SE Series offers customers the best platform for every application scenario. The holistic management concept of the SE Series considerably reduces administration and maintenance tasks, thus leading to lower costs as opposed to operating separate server systems.

→ www.fujitsu.com/fts/products/computing/servers/mainframe/bs2000/

Fujitsu Server BS2000 SE Series Portfolio

Model	BS2000 Server SE300	BS2000 Server SE500	BS2000 Server SE700
Operating System	BS2000 OSD/XC V10.0 (Linux, Windows with SU300 or Application units)	BS2000 OSD/XC V10.0 (Linux, Windows with SU300 or Application units)	BS2000 OSD/XC V10.0 (Linux, Windows with SU300 or Application units)
Server Units	1 SU300 Server Unit (base x86) 0-2 SU300 Server Unit (base x86)	1 SU500 Server Unit (base /390) 0 – 2 SU300 Server Unit (base x/86)	1 SU700 Server Unit (base /390) 0 – 2 SU300 Server Unit (base x/86)
Application Units	0 – 20 High End x86 Servers with Intel® Xeon® E7 v3 processors for Linux and Windows applications	0 – 20 High End x86 Servers with Intel® Xeon® E7 v3 processors for Linux and Windows applications	0 – 20 High End x86 Servers with Intel® Xeon® E7 v3 processors for Linux and Windows applications
Processor Type	SU300: Intel® Xeon® E7 -8857 V2	SU500: CMOS in /390 architecture SU300: Intel® Xeon® E7 -8857 V2	SU700: CMOS in /390 architecture SU300: Intel® Xeon® E7 -8857 V2
Number of BS2000 processors	SU300: 1 – 16 (max. 48)	SU500: 1 – 3 and 1 hot spare CPU SU300: 1 – 16 (max. 32)	SU700: 2 – 15 and 1 hot spare CPU SU300: 1 – 16 (max. 32)
Models	16 models	11 models	11 models
Main Memory	Up to 1.5 TB	SU500: up to 64 GB SU300: up to 1.5 TB	SU700: up to 256 GB SU300: up to 1.5 TB
I/O Interfaces	SU300: up to 10 PCI slots for Fibre Channel with 8/16 Gbit/s, SAS or LAN controllers	SU500: up to 94 Fibre Channels with 8 Gbit/s SU300: up to 10 PCI slots for Fibre channel, SAS or LAN controllers	SU700: up to 126 Fibre channels with 8 Gbit/s SU300: up to 10 PCI slots for Fibre channel, SAS or LAN controllers
Net Unit	1/10 Gbit/s SE Server internal and external LAN connections for Server Units and Application Units	1/10 Gbit/s SE Server internal and external LAN connections for Server Units and Application Units, 1 – 4 High-speed Net Connect (HNC)	1/10 Gbit/s SE Server internal and external LAN connections for Server Units and Application Units, 1 – 4 High-speed Net Connect (HNC)
Management Unit	Administration of all SE Server components incl. peripherals	Administration of all SE Server components incl. peripherals	Administration of all SE Server components incl. peripherals
Rack	1 System Cabinet (0 – 3 extension rack)	1 System Cabinet (0 – 3 extension rack)	1 System Cabinet (0 – 3 extension rack)

Business-Centric Storage
ETERNUS DX
Disk Storage Series

ETERNUS DX – Business-centric Storage

The Fujitsu Storage ETERNUS DX disk storage series is business-centric in many ways. It supports superior storage consolidation with an all-in-one approach that also covers unified connectivity. The ETERNUS DX performance architecture is ideal for applications requiring fast response times – even transactional and analytical tasks can be processed in parallel. The seamless family concept, ranging from entry-level to the high-end segment, includes one single management suite for all systems, enabling customers to balance and prioritize their system resources to satisfy user or application requirements and achieve optimized business continuity. The systems also deliver automated and affordable Quality of Service management. The deep integration into hypervisor technologies makes ETERNUS DX the perfect system for virtualization scenarios, ensuring high VM density and faster ROI. The benefits of ETERNUS DX have an immediate impact on business IT environments.

ETERNUS SF Storage Management Software

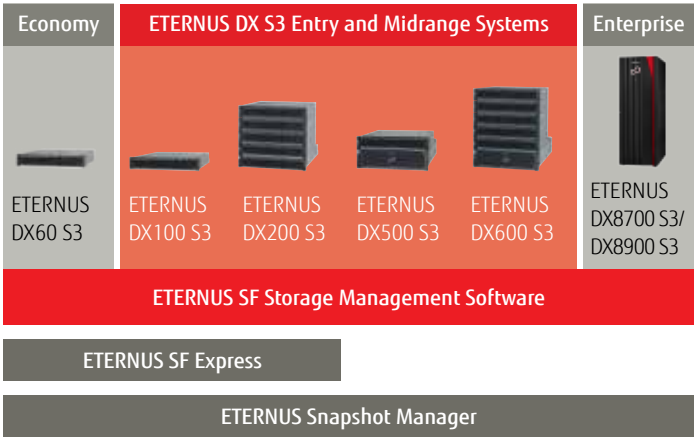
The ETERNUS SF storage management software is the uniform management solution for the entire ETERNUS DX series. All essential operations for storage resource management, monitoring, reporting, tiered storage, performance management, disaster resilience and business continuity are integrated.

ETERNUS SF at a glance:

- Management of all infrastructure devices based on a unified view
- Visualization of the relations between storage, network and physical servers or virtual servers
- Early detection and elimination of performance issues through performance monitoring
- Fault management with support for fault resolution
- Hardware investment optimization through automated storage tiering
- Reduced storage system power consumption
- Central management for local and remote replication
- Automated Quality-of-Service management
- Non-stop availability with Storage Cluster

ETERNUS Snapshot Manager – Efficient Snapshot Management

The ETERNUS Snapshot Manager (ESM) is a feature rich software to manage and catalog application-consistent hardware snapshots of ETERNUS DX arrays without scripting. The software offers granular recovery of data across physical and virtual environments to minimize downtime and enhance business productivity.



→ www.fujitsu.com/storage

Disk Storage Systems
ETERNUS DX

Model	ETERNUS DX60 S3	ETERNUS DX100 S3	ETERNUS DX200 S3
Type	Economy storage system for SMBs	Unified hybrid disk storage system for small and medium-sized businesses	
Maximum capacity	384 TB	1,152 TB	2,112 TB
Controller	1 or 2 controllers	Block: 1 or 2 controllers / Unified: 2 controllers	
Max. cache capacity	4 GB	8 GB (Block) 16 GB (Unified)	16 GB (Block) 48 GB (Unified)
Max. disk drives	96	144	264
Drive type	Nearline SAS, SAS, SSD	Nearline SAS, SAS, SSD	
Interfaces	Fibre Channel (8 Gbit/s, 4 Gbit/s) iSCSI (10 Gbit/s [10GBase-T], 1 Gbit/s) SAS (6 Gbit/s, 3 Gbit/s)	Fibre Channel (16 Gbit/s, 8 Gbit/s, 4 Gbit/s) FCoE (10 Gbit/s) iSCSI (10 Gbit/s, 1 Gbit/s) Ethernet (10 Gbit/s, 1 Gbit/s) SAS (6 Gbit/s, 3 Gbit/s)	
Redundancies	RAID controllers, fans and power supplies (hot swappable)	RAID controllers, fans and power supplies (hot swappable)	
Server platform	Windows Server, Solaris, RedHat Enterprise Linux, SUSE Linux Enterprise Server, Oracle Linux, HP-UX, IBM AIX, VMware vSphere, Citrix XenServer, Oracle VM, FalconStor NSS	Windows Server, Solaris, RedHat Enterprise Linux, SUSE Linux Enterprise Server, Oracle Linux, HP-UX, IBM AIX, VMware vSphere, Citrix XenServer, Oracle VM, FalconStor NSS	
Snapshots / Clones	1024	1024	2048
Remote replication	-	Yes	
19" rackmount	Yes	Yes	
Management protocols	SNMP, SMI-S	SNMP, SMI-S	
Storage management software	ETERNUS SF Express (bundled) ETERNUS SF ETERNUS Snapshot Manager	ETERNUS SF Express (bundled) ETERNUS SF ETERNUS SF MA ETERNUS Snapshot Manager	
Maintenance and Support Services – the perfect extension			
Recommended Service	7 x 24, Onsite Response Time: 4 h	7 x 24, Onsite Response Time: 4 h	
Support Pack Options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time	

Disk Storage Systems
ETERNUS DX

Model	ETERNUS DX500 S3	ETERNUS DX600 S3
Type	Unified hybrid disk storage system for mid-range enterprises	
Maximum capacity	4,224 TB	8,448 TB
Controller	2 controllers	
Max. cache capacity	64 GB (Block) 96 GB (Unified)	128 GB (Block) 192 GB (Unified)
Max. disk drives	528	1,056
Drive type	Nearline SAS, SAS, SSD	
Interfaces	Fibre Channel (16 Gbit/s, 8 Gbit/s, 4 Gbit/s) FCoE (10 Gbit/s) iSCSI (10 Gbit/s, 1 Gbit/s) Ethernet (10 Gbit/s, 1 Gbit/s)	
Redundancies	RAID controllers, fans and power supplies (hot swappable)	
Server platform	Windows Server, Solaris, RedHat Enterprise Linux, SUSE Linux Enterprise Server, Oracle Linux, HP-UX, IBM AIX, VMware vSphere, Citrix XenServer, Oracle VM, FalconStor NSS, BS2000/OSD	
Snapshots/Clones	8,192	
Remote replication	Yes	
19" rackmount	Yes	
Management protocols	SNMP, SMI-S	
Storage management software	ETERNUS SF ETERNUS SF MA ETERNUS Snapshot Manager	
Maintenance and Support Services – the perfect extension		
Recommended Service	7x24, Onsite Response Time: 4 h	
Support Pack Options	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4 h Onsite Response Time 24x7, 4 h Onsite Response Time	

ETERNUS DX8700 S3	ETERNUS DX8900 S3
High End hybrid disk storage system for large enterprises	
6,144 TB	18,432 TB
2 - 8 controllers	2 - 24 controllers
1,024 GB	6,144 GB
1,536	4,608
Nearline SAS, SAS, SSD	
Fibre Channel (16 Gbit/s) iSCSI (10 Gbit/s, 1 Gbit/s) FCoE (10 Gbit/s)	
RAID controllers, fans and power supplies (hot swappable)	
Windows Server, Solaris, RedHat Enterprise Linux, SUSE Linux Enterprise Server, Oracle Linux, HP-UX, IBM AIX, VMware vSphere, Citrix XenServer, Oracle VM, FalconStor NSS, BS2000/OSD	
32,768	
Yes	
Yes	
SNMP, SMI-S	
ETERNUS SF ETERNUS SF MA ETERNUS Snapshot Manager	
7x24, Onsite Response Time: 4 h	
Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4 h Onsite Response Time 24x7, 4 h Onsite Response Time	

All-Flash Array
ETERNUS DX

Model	ETERNUS DX200F
Type	All-flash array
Maximum capacity	38.4 TB
Controller	2
Max. cache capacity	16 GB
Host interfaces	Fibre Channel (16 Gbit/s) iSCSI (10 Gbit/s)
Storage controllers	2
Maximum Cache Memory	16 GB
Maximum IOPS	(depending on use case): Random access performance: 430,000 IOPS (100% Read, 4 KB Blocks)
Nominal Latency	Write 88 µs, Read 180 µs
Storage Management	ETERNUS SF Express (bundled) ETERNUS SF ETERNUS SF MA ETERNUS Snapshot Manager
Suits perfectly for	Database environments Data Warehousing Business Analytics Business Intelligence Trading applications VDI environments

Disk Storage Systems
ETERNUS JX

Model	ETERNUS JX40 S2	ETERNUS JX60
Type	Passive direct server attached drive extension (JBOD)	Passive direct server attached drive extension (JBOD)
Maximum capacity	192 TB with 2.5" disks / 288 TB with 3.5" disks	480 TB
Max. disk drives	2.5": max. 96 SAS disks and SSDs 3.5": max. 48 Nearline SAS disks	3.5": max. 120 Nearline SAS disks
RAID levels	0, 1, 5, 6, 1+0, 5+0, 6+0	0, 1, 1+0, 5, 5+0, 6, 6+0
Host Interfaces	SAS 12 Gbit/s	SAS 6 Gbit/s
Hard disk type	2.5-inch, SAS, 10,000 rpm (1.8 TB / 1.2 TB / 900 GB / 600 GB / 450 GB) 2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB) 2.5-inch, SSD, MLC (1.6 TB / 800 GB / 400 GB) 2.5-inch, Nearline SAS, 7,200 rpm (2 TB / 1 TB) 3.5-inch, Nearline SAS, 7,200 rpm (6 TB / 4 TB / 3 TB / 2 TB)	Nearline SAS, 7.200 rpm, 3.5-inch (4 TB / 3 TB / 2 TB)
Redundancies	Fans and hot swappable power supplies	Fans and hot swappable power supplies
Server platform	Independent – SAS connection is prerequisite	Independent – SAS connection is prerequisite
19" rackmount	Yes	Yes
Dimensions (H x W x D)	3.5 inch / 88 mm (2 U) 19 inch / 483 mm 26 inch / 650 mm (per shelf)	482 x 980 x 176 mm 19 x 38.6 x 6.9 inch
Weight	35 kg (depending on the number of installed disks)	max. 95 kg (209 lb) with hard disk drives
Optional extras	PRIMERGY ServerView® Suite Integration PRIMERGY DuplexDataManager®	PRIMERGY ServerView® Suite Integration PRIMERGY DuplexDataManager®
Maintenance and Support Services – the perfect extension		
Recommended Service	7 x 24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.	
Support pack options	Globally available in major business areas: 9 x 5, Next Business Day Onsite Response Time 9 x 5, 4 h Onsite Response Time 24 x 7, 4 h Onsite Response Time	

Client Storage Solutions
CELVIN





FUJITSU Storage	CELVIN NAS QE805	CELVIN NAS QE705	CELVIN NAS Q802	CELVIN NAS QR905	CELVIN NAS QR805
Type	Hot swappable 4-bay system	Hot swappable 2-bay system	Hot swappable 4-bay system	Hot swappable 6-bay system	Hot swappable 4-bay system
Hard disk capacity	Up to 4 x 2.5-inch or 3.5-inch SATA I/II/ SATA 6 GB/sHDD	Up to 4 x 2.5-inch or 3.5-inch SATA I/II/ SATA 6 GB/sHDD	Up to 4 x 2.5-inch or 3.5-inch SATA I/II/ SATA 6 GB/sHDD	Up to 6 x 2.5-inch or 3.5-inch SATA I/II/ SATA 6GB/s HDD	Up to 4 x 2.5-inch or 3.5-inch SATA I/II/ SATA 6GB/s HDD
Gigabit Ethernet Port	2 x	2 x	2 x	4 x	4 x
SSD caching	-	-	-	yes	yes
Max. Device Capacity	24 TB	12 TB	24 TB	36 TB	24 TB
Memory	512 MB	512 MB	1 GB	2 GB	2 GB
Data Interface	Ethernet / USB 3.0 / eSATA	Ethernet / USB 3.0 / eSATA	Ethernet / USB 2.0 / USB 3.0 / eSATA	Ethernet / USB 2.0 / USB 3.0	Ethernet / USB 2.0 / USB 3.0
LCD-Displays Instant Setup	-	-	-	yes	yes
Virtualization and Clustering	yes	yes	yes	yes	yes
iSCSI Target / Initiator	yes	yes	yes	yes	yes
VMWare / Citrix / HyperV	-	-	yes	yes	yes
Virtualization Station	-	-	-	yes	yes
Thin Provisioning	yes	yes	yes	yes	yes
VPN (SSL) Server / Client	yes	yes	yes	yes	yes
User Authentication Windows Active Directory Service / LDAP Radius Server	yes	yes	yes	yes	yes
Failover / Load Balancing	yes	yes	yes	yes	yes
Raid Level	0/1/5/6/10/JBOD	0/1/JBOD	0/1/5/5+HS/6/10/JBOD	0/1/5/5+HS/6/6+HS/10/ 10+HS/JBOD	0/1/5/5+HS/6/10/JBOD
One-button back up + Client back up software	yes	yes	yes	yes	yes
Remote Replication	yes	yes	yes	yes	yes
LUN Backup / Snapshots (4GB RAM min)	yes	yes	yes	yes	yes
FTP, File Server and WEB Server	yes	yes	yes	yes	yes
Private Cloud	yes	yes	-	yes	yes
Printer Server	yes	yes	yes	yes	yes
SQL Server	yes	yes	yes	yes	yes
Remote Access and System Management	yes	yes	yes	yes	yes
APP-Center for software add-ons	yes	yes	-	yes	yes
Download Station / Multimedia Server	yes	yes	yes	yes	yes
Order code prefix: S26341-F103-...[1]	Order codes depending on configuration	Order codes depending on configuration	Order codes depending on configuration	Order codes depending on configuration	Order codes depending on configuration

Warranty period and Warranty type: 2 years Bring-In / Send-In Service (depending on country)

[1] International power cord versions available

Reliable Tape Solutions
ETERNUS LT Tape Storage Systems

Improving Your Backup – Reviving the Archive

Storage Solutions You can simply Rely on
We offer some of the most powerful tape systems on the market, with the performance and reliability expected of professional, enterprise-class systems. There are solutions for every need – robust libraries for small and medium-sized businesses and high-performance, scalable libraries that offer no-compromise on backup and long-term protection of business data. Each system is engineered for speed, durability and low lifetime costs per gigabyte.

Tape Systems for any Need

The range of our tape systems includes desktop devices for standard requirements and rack-compatible autoloading solutions for handling large backup volumes.

ETERNUS LT
Reliable Tape Solution

The ETERNUS LT tape storage systems are based on the latest LTO technology, which unites large capacities, high speed and very low media costs. They are enabled for encryption offering enhanced security and compliance. The drives are offered with FC and SAS. ETERNUS LT is designed for high investment protection leveraging the existing drives in preparation for an upgrade to a larger system. You can choose from the following systems to individual needs:
The ETERNUS LT20 is a compact and extremely reliable tape library for small businesses and branch offices. It enables a cost-effective introduction to tape automation. The system occupies just one height unit, can accommodate up to eight cartridges and offers one drive with either SAS or FC interface.

The ETERNUS LT40 with two height units and 24 cartridge slots is a very compact tape storage system for small and midrange sized businesses. It can be equipped with maximum two LTO drives.

»Using the ETERNUS LT40 for our backup has also proven to be a real time saver, as this is now all done automatically.«
Karl Sattlecker, Head of IT Organization and Process Management, Hargassner GmbH

The ETERNUS LT60 doubles the ETERNUS LT40. It offers a maximum of 48 cartridge slots and up to four LTO drives on four height units. For both libraries additional slots can be upgraded very easily with a software license key. When using more than one drive they also support partitioning for independent use by two different applications as well as media cloning which is needed for storing data at one or more secure locations.

To enhance the ETERNUS LT tape library offering for midrange customers the ETERNUS LT260 is available. The ETERNUS LT260 LTO based tape library combines flexible scalability, exceptional storage density with excellent automated and remote management capabilities for the highly efficient handling of fast growing backup volumes. It starts from one base module in a 6U chassis and scales up to 6 expansion modules in the maximum configuration. Each module has 80 slots and can be equipped with up to 6 drives for redundancy. ETERNUS LT260 can be split into a maximum of 6 partitions per unit serving different application environments in parallel. A graphical web interface and a high level of automation enables simple and remote operation without on-site experts.

→ www.fujitsu.com/fts/eternus_lt

Key Features	Benefits
Based on latest LTO technology	■ Significant improvements in capacity and performance ■ Standardized and widely used
Remote management utility and user friendly operator panel	■ Easy administration, enables configuration and diagnostic ■ Automatism help to decrease the error rate of backup processes ■ Ethernet network for firmware upgrades, statistics
Half height drives with SAS or Fibre Channel interface	■ Future-proof, fault-tolerant, robust ■ High data throughput ■ Less expensive than full height drives

Tape Storage Systems
ETERNUS LT

Model	LTO Desktop Drive	ETERNUS LT20 S2	ETERNUS LT40 S2	ETERNUS LT60 S2	ETERNUS LT260
Drive Type	LTO-5 Half Height LTO-6 Half Height	LTO-5 / LTO-6 / LTO-7 HH	LTO-5 HH or FH / LTO-6 HH / LTO-7 HH	LTO-5 HH or FH / LTO-6 HH / LTO-7 HH	LTO-5 / LTO-6 / LTO-7 HH
Max. Capacity (native)	LTO-5: 1.5 TB LTO-6: 2.5 TB	12 / 20 / 48 TB	36 / 60 / 144 TB	72 / 120 / 288 TB	840 / 1,400 / 3,360 TB
Max. Cartridges	1	8	24	48	560
Max. Drives	1	1	2	4	42
Interface	SAS	SAS, FC	SAS, FC	SAS, FC	SAS, FC
Description	The LTO Desktop Drive from Fujitsu is an entry-level component into the tape backup. The performance, capacity and reliability of the LTO desktop drive meet current and future requirements. Native encryption and WORM capability offer customers the security features needed for compliance and privacy initiatives. Thanks to backwards compatibility the LTO technology offers a very high investment protection. For customers still using older tape technologies, the new LTO technology will offer a significant return on investment opportunity.	ETERNUS LT20 S2 from Fujitsu is a compact and extremely reliable tape library for small and midsized companies. The library is based on proven LTO technology, which provides large capacity, high speed and very small media costs.	ETERNUS LT40 S2 from Fujitsu is a highly reliable and scalable tape library that is optimized to dramatically reduce the risk of manual errors in remote backups. It is an ultra compact tape library with up to 24 media slots and up to two drives on two height units.	ETERNUS LT60 S2 from Fujitsu is a highly reliable and scalable tape library that is optimized to dramatically reduce the risk of manual errors in remote backups. It is an ultra compact tape library with up to 48 media slots and up to four drives on four height units.	The ETERNUS LT260 LTO based tape library combines flexible scalability, exceptional storage density with excellent automated and remote management capacities for the highly efficient handling of fast growing backup and archive volumes. It starts with one base unit in a 6U chassis and up to 6 expansion modules are addable. Each module offers 80 activated slots and up to 6 drives.
Maintenance and Support Services – the perfect extension					
Recommended Service	7x24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.		7x24, Onsite Response Time: 4 h – For locations outside of EMEA please contact your local Fujitsu partner.		
Support pack options	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4 h Onsite Response Time 24x7, 4 h Onsite Response Time		Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4 h Onsite Response Time 24x7, 4 h Onsite Response Time		

ETERNUS CS
Data Protection Appliances

Fujitsu ETERNUS – Business-Centric Storage

The ETERNUS CS portfolio radically simplify backup and archive infrastructures. ETERNUS CS200c is an all-in-one backup solution including the right-sized hardware, Commvault software and the necessary licenses for the various capacity requirements. ETERNUS CS800 is a one-for-all deduplication appliance working together with all the backup software suites. The unified data protection platform ETERNUS CS8000 enables storage professionals to completely consolidate the backup and archive infrastructure used in data centers. It contributes to massive savings in operational expense as it integrates and automates backup-to-tape and disk processes for open systems and mainframes with one solution.

ETERNUS CS200c

The Fujitsu Storage ETERNUS CS200c Powered by Commvault is an all-in-one backup solution including the right-sized hardware, Commvault software and the necessary licenses for the various capacity requirements. It enables the hassle-free setup of a comprehensive backup and archiving environment and reduces the implementation time by 60%. It perfectly supports data backup for business applications and virtualized environments.

Industry-leading Commvault software is perfectly aligned with Fujitsu system technology in order to deliver the right performance for the selected capacity range. Simple, cost-effective expandability enables future data growth and protects your investment.

ETERNUS CS200c provides comprehensive functionality including backup, archiving, deduplication, disaster recovery, replication, snapshot and cloud support with one solution.

The integrated Commvault software provides a single platform and index for your entire environment, including backup, deduplication, archiving, disaster recovery, replication, snapshot and cloud support to radically simplify data management across its lifecycle.

ETERNUS CS800

FUJITSU Storage ETERNUS CS800 is a turnkey data protection appliance and provides a simple and affordable solution for customers which follow a backup to disk strategy with deduplication. The advanced deduplication technology reduces typical disk capacity requirements for disk to disk backup by up to 95 %.

ETERNUS CS800 provides maximum disk performance and highest scalability. Backup data replication between sites uses global deduplication to dramatically reduce typical network bandwidth needs. ETERNUS CS800 also provides an integrated Copy to Tape option and is ready to be the backup target in cloud hosted disaster recovery sites. ETERNUS CS800 is highly optimzed for major backup software applications and provides additional benefits in combination with Veritas OST.

ETERNUS CS8000

FUJITSU Storage ETERNUS CS8000 is a unified backup and archive platform for the complete consolidation of data protection infrastructures of open systems and mainframes.

Thanks to uniform management of disks, deduplicated disks and tapes flexible service levels regarding capacity, speed and cost can be provided. A modular grid architecture delivers extreme scalability of capacity and performance. Integrated data mirroring and replication features enable comprehensive disaster recovery concepts.

Flexible SAN and Ethernet connectivity as well as VTL, NAS and WORM support allow you to use one system for backup and archiving. And support for the cloud gateway functionality makes ETERNUS CS8000 an ideal and future-proof solution for a unified and optimized data protection infrastructure.

Data Protection Appliances
ETERNUS CS

Model	ETERNUS CS200c S2	
	Entry	Scale
Type	Integrated Backup Appliance	
Capacity	1 – 36 TB	6 - 132 TB
Ethernet Ports	4 x 1 GbE 2 x 10 GbE MMF	
FC Ports	2 x 16 Gbps	
Tapeout	FC 16Gbps, SAS 12Gbps	
Scalability	Appliance-internal & parallel operation of appliances	
Database performance	HDD 15krpm	SSD
Data protection functions	Backup & recovery, application support, archiving, snapshot, replication, deduplication, tape attachment, cloud backup	
Supported environments	Physical, virtual and NAS / NDMP systems	

Model	ETERNUS CS800 S6	
	Entry	Scale
Type	Backup Target	
Capacity	8 - 24 TB, 8 - 120 TB	32 – 352 TB
Ethernet ports	5 x 1 GbE (fixed) 2 x 10 GbE (optional)	3 x 1 GbE (fixed) 8 x 1 GbE (optional)[1)] 4 x 10 GbE (optional)[2)]
Fibre channel ports	2 x 8 GbFC (optional)	4 x 8 GbFC (optional)[3)]
Hot Spare Option	No	Yes
Virtual tape drives	Max. 80	Max. 160
Virtual tape cartridges	Max. 9000 per partition	
NAS supported protocols	NFS / CIFS	
NAS shares	Max. 128	
Partitions	Max. 64	
Tape Drive Emulations (Excerpt)	DLT7000, SDLT320, SDLT600, SLT-S4, LTO-1/2/3/4/5	
Library Emulations (excerpt)	Quantum Scalar 24; Scalar 100/i500/i2000/i6000	
Performance	up to 5.5 TB/h	up to 10.6 TB/h
Included software	Deduplication, Replication, OST, Path-to-Tape	
Dimension (W x D x H)	483 x 770 x 89 up to 978 mm	
Weight	25 up to 375 kg	

[1), 2), 3)]: One of these 3 options has to be selected; Max. 2 of these 3 options can be combined; Combination 1) and 2) not supported

Model	ETERNUS CS8000 V6.1		
	CS8200	CS8400	CS8800
Type	Scale-up System	Scale-out-single-site System	Scale-out-split-site System
Host Connectivity Options	VTL, VTL with Dedup, NAS	VTL, VTL with Dedup, NAS	
RAID capacity	7 TB to 1,392 TB	7 TB to 22,272 TB	7 TB to 22,272 TB
Sustained Performance VTL (max.)	30 TB/h	150 TB/h	
VTL Front-end Ports	4 to 8 FC 16 Gb / FICON 8 Gb	4 to 40 FC 16 Gb / FICON 8 Gb	
Virtual Tape Drives	32 to 64	32 to 1,280	32 to 1,280
Virtual Tape Volumes (max.)	300,000	1,500,000	3,000,000
VTL Back-end Port Options	4 to 8 FC 16 Gb	4 to 40 FC 16 Gb	4 to 40 FC 16 Gb
Physical Tape Volumes (max.)	50,000	50,000	50,000
Deduplication Store Option (raw)	1 to 960 TB	1 to 4,800 TB	1 to 4,800 TB
NAS Front-end Ports	4 to 8 x 1 GbE or 2 to 8 x 10 GbE	4 to 40 x 1 GbE or 2 to 40 x 10 GbE	4 to 40 x 1 GbE or 2 to 40 x 10 GbE
NAS Shares (max.)	2,048	2,048	2,048
Number of Files	2 Billion	2 Billion	2 Billion
NAS Back-end Port Options	- (no HSM)	2 to 8 active FC 16 Gb 2 to 8 passive FC 16 Gb	2 to 8 active FC 16 Gb 2 to 8 passive FC 16 Gb
Physical Tape Drives (max.)	10	112	112
Physical Tape Libraries supported (max.)	10	10	10
Dimension – per rack (W x D x H)	700 x 1050 x 2030 mm 27.6 x 41.3 x 79.9 inch	700 x 1050 x 2030 mm 27.6 x 41.3 x 79.9 inch	700 x 1050 x 2030 mm 27.6 x 41.3 x 79.9 inch

ETERNUS CD10000

The Hyperscale, Software-Defined Storage System for the Cloud

The cloud wave is transforming today's IT at an unpredictable speed. ETERNUS CD10000 is a hyperscale, software-defined storage system designed to manage vast amounts of data. A configuration can start small and grow in line with the business, minimizing the need for upfront investments, re-engineering and disruption to production systems. Keeping pace with changes makes agile storage infrastructure very attractive for OpenStack users, cloud service providers, research institutes, telecommunication and media-broadcasting companies.
ETERNUS CD10000 offers new levels of scalability in capacity and performance by supporting flexible configurations from 4 up to 224 nodes. The architecture allows individual storage nodes to be added, exchanged and upgraded without downtime. This makes the entire system – and its data – immortal. ETERNUS CD10000, powered by Ceph, integrates open source innovation in a complete and fully supported solution from Fujitsu – without implementation and operational risk.

Advantages at a glance

Hyperscale, software-defined storage system
- Open standards at enterprise-class service levels
- Unlimited scalability of capacity and performance
- Zero downtime architecture
- Immortal system
- Extremely low total cost of ownership (TCO)

Hyperscale Storage System ETERNUS CD

Model	ETERNUS CD10000
Type	Hyperscale, software-defined storage
Host connectivity options	Object, Block, File*
Software version	Opensource software: Ceph Enterprise
Hardware platform	Integrated systems based on PRIMERGY and ETERNUS
Storage Management	Fujitsu's GUI Management console
Nodes Types	Various Storage Nodes and Infrastructure component options
Basic Configuration	4x Storage node +1x Management node + Infrastructure included
Max. no of nodes	Upgradable to up to 224 Nodes**
Max. usable capacity	42 PB***
DR capabilities	Split-site and Geo-replication across clusters
Application interfaces	Ceph storage interfaces (Object, S3, Block, File), OpenStack interfaces (Swift, Cinder, Glance)

* offered in a future release
** More nodes on special request
*** Higher capacities on special release

Storage Partners

To complement the Storage portfolio Fujitsu cooperates with many global technology partners.

NetApp

NetApp creates innovative storage and data management solutions that accelerate business breakthroughs and achieve outstanding cost efficiency. Fujitsu and NetApp have a proven track record of providing customers with best in class products, solutions and services. NetApp products have been integrated into Fujitsu's solutions and Fujitsu has also become the biggest reseller partner of NetApp both in EMEA and on global level. As customers' buying patterns have shifted towards vendors with a more holistic and collaborative approach to data center needs, Fujitsu and NetApp have jointly created a set of solutions that provide midsized and enterprise customers with easy-to-use and tightly integrated data management solutions.

Brocade

Fujitsu and Brocade are driving datacenter agility. They provide end-to-end solutions to assist customers evolve their datacenters to support anytime, anywhere, any device application requirements. As leader in Ethernet Fabrics and in Storage Networking, Brocade is the networking provider that transitions organizations smoothly to a world where information and applications reside anywhere. The Brocade switch family stands for high performance SAN concepts and high availability.

Quantum

The partnership between Fujitsu and Quantum has existed since 1983 (at that time with Siemens and Grau Data Storage, later as ADIC). Quantum is Fujitsu's global "Preferred Storage Partner" for tape libraries in the midrange and enterprise segment. Quantum's tape libraries offer intelligent best-in-class backup solutions that are integrated into Fujitsu's product portfolio and constitute an important component of Fujitsu's business-centric data center portfolio. Through an Authorized Service Partner contract with Quantum, the customer can benefit from installation and maintenance all from one source.

Oracle

Fujitsu and Oracle have a multi-decade partnership. Oracle's proven StorageTek tape library solutions help the customer to manage complexity, control costs, and deliver on Warranty type agreements. Through the open architecture and varied connection options can be optimally integrated in backup environments together with Fujitsu's ETERNUS systems.

Veritas

By combining Fujitsu's technology and services innovation and respected brand, with Veritas' heterogeneous and scalable management solutions, this global alliance partnership is uniquely equipped to make every byte of data actionable. Fujitsu and Veritas provide highly integrated datacenter solutions ensuring availability and revealing insights to help businesses streamline their datacenter management, improve IT investments, cut costs and enhance risk management strategies. Their combined solutions are underpinned by supporting reference architectures and customer references. Beyond joint infrastructure solutions, Fujitsu leverages Veritas Information Management's technology to provide business-critical Application and Business Services.

Commvault

Industry leading Commvault software provides a single platform and index, including backup, deduplication, archiving, disaster recovery, replication, snapshot management, and search and eDiscovery to radically simplify data management across its lifecycle. Commvault software enhances FUJITSU Storage ETERNUS and FUJITSU Integrated System PRIMEFLEX in certified and optimized data protection environments for the business-centric data center.

Disk Storage Systems
NetApp FAS

Model	FAS2520 / FAS2552 / FAS2554
Type	Unified, Hybrid, Scale-Out Storage
Max. Capacity	336 TB / 518 TB / 576 TB
Max. Drives	84 / 144 / 144
Max. Flash Pool	4 TB
Max. Flash Cache	n.a.
Protocols	iSCSI, NFS, CIFS
RAID Typ	Standard RAID Levels + RAID DP (RAID6)
Interfaces	Ethernet
Included software	Efficiency: FlexVol®, deduplication, compression and thin provisioning Availability: Multipath I/O, MultiStore® Data protection: RAID-DP, Snapshot, and Open Systems SnapVault Performance: FlexShare®, Storage QoS Management: System Setup, OnCommand System Manager, OnCommand Unified Manager Storage protocols: All supported data protocol licenses included
Extended-Value Software (optional)	OnCommand Balance for NetApp: Advanced analytics for physical and virtual environments A Premium Bundle can be purchased with all FAS2500 systems and includes: SnapRestore®: Software to restore Snapshot copies in seconds SnapMirror®: Simple, efficient, and flexible disaster recovery FlexClone®: Instant virtual copies of databases or virtual machines SnapManager® suite: Application- and virtual machine-aware backup, recovery, and cloning SnapVault: Disk-to-disk backupurs or days

FAS8020	FAS8040	FAS8060	FAS8080 EX
Unified, Hybrid, Scale-Out Storage			
1920	2880	4800	5760
480	720	1200	1440
6	12	18	36
3 TB	4 TB	8 TB	24 TB
-			
Standard RAID Levels + RAID DP (RAID6)			
-			
Efficiency: FlexVol®, deduplication, compression, and thin provisioning Availability: MetroCluster*, multipath I/O, and MultiStore®* Data protection: RAID-DP®, Snapshot™, and Open Systems SnapVault® Performance: FlexCache®, Storage QoS, and FlexShare®* Management: Workflow Automation, System Manager, and Unified Manager			
FlexArray storage virtualization software OnCommand® Balance Storage Protocols (Purchase each storage protocol you require.) A Premium Bundle is available for purchase with FAS8000 systems that includes: SnapRestore®: Restore entire Snapshot copies in seconds SnapMirror®: Simple, flexible disaster recovery FlexClone®: Instant virtual copies of files, LUNs, and volumes SnapManager® Software: Backup/recovery for enterprise applications SnapVault®: Disk-based backup			

Network Components
Brocade

Model	Brocade 300 Switch	Brocade 6505 Switch	Brocade 6510 Switch	Brocade 6520 Switch
Type	Fibre Channel Switch	Fibre Channel	Fibre Channel	
Fibre Channel ports	8 – 24	8 – 24	24 – 48	48 – 96
Speed	1 / 2 / 4 / 8 Gbit/s	1 / 2 / 4 / 8 Gbit/s	2 / 4 / 8 / 10 / 16 Gbit/s	
FC Media (SFP) & distanc	8 Gbit/s, 4 Gbit/s MMF: 100 m (OM3) SMF: 10 – 25 km (8 Gbit/s), 4 – 30 km (4 Gbit/s)	MMF: SFP FC 8 Gbps, SFP FC 10 Gbps, SFP FC 16 Gbps, SMF: SFP FC 8 Gbps 10 km / 25 km SFP FC 16 Gbps 10 km / 24km	MMF: SFP FC 8 Gbps, SFP FC 10 Gbps, SFP FC 16 Gbps, SMF: SFP FC 8 Gbps 10 km / 25 km SFP FC 16 Gbps 10 km / 24 km	
Rack height	1 U	1 U	1 U	2 U
Port types	FL, F, E, M	D, E, EX, F, M	D, E, EX, F, M	
Ethernet-ports	-	for device management only	for device management only	
Available MMF cabling	2 – 15 m rack internal 10 – 100 m external	5 / 10 / 20 m; other lenghts project specific	5 / 10 / 20 m; other lenghts project specific	
Available SMF cabling	10 / 20 m, other lengths available		10/20 m; other lenghts project specific	
Server management	ServerView & 3rd party		ServerView & 3rd party	
Redundant components	None	PSU, FAN	PSU, FAN	
Enterprise Administration software	Brocade Network Advisor (BNA)		Brocade Network Advisor (BNA)	
Target customers/applications	SAN edge, SAN spots	Small & medium-sized fabrics	Enterprise, Core & medium-sized fabrics	

Network Components
Brocade

Model	Brocade DCX Backbone	Brocade 8510 Backbone
Type	Fibre Channel Backbone	Fibre Channel Backbone
Fibre Channel ports	16 – 512	32 – 512
Speed	2 / 4 / 8 / 10 Gbit/s	2 / 4 / 8 / 10 / 16 Gbit/s
FC Media (SFP) & distance	MMF: 150 m (OM3) SMF: 10 – 25 km, longer distances in projects	MMF: 100 m (OM3) SMF: 10, 25 km, longer distances in projects
Rack height	14 U	9 – 14 U
Port types	E, EX, F, FL, M, VE, VEX	D, E, EX, F, M
Ethernet-ports	FCIP 1G/10G with Blade FX8-24 FCoE 10G with Blade FCoE24	FCIP 1G/10G with Blade FX8-24
Available MMF cabling	5 / 10 / 20 m; other lenghts project specific	5 / 10 / 20 m; other lenghts project specific
Available SMF cabling	10 / 20 m; other lenghts project specific	10 / 20 m; other lenghts project specific
Server management	ServerView	ServerView
Redundant components	PSU, FAN, Blade Management, Blade Core Routing	PSU, FAN, Blade Management, Blade Core Routing
Enterprise Administration software	Brocade Network Advisor (BNA)	Brocade Network Advisor (BNA) for SAN
Blade slots	8	4 / 8
Blade options	Blade FC8G (16P, 32P or 48P) Blade FC8G 64P (mSFP) Blade FCIP 4-18i (4G FC & 1G IP); Blade FC 10G Blade FCoE Blade FX8-24 Blade Encryption	Blade FC16G (32P or 48P) Blade FC16G (32P or 48P) 8G limited Blade FC8G 64P (mSFP) 8G limited Blade FX8-24
Target customers / applications	Data centers & large enterprises	Data centers & medium to large enterprises

Model	Brocade ICX 6430	Brocade ICX 6450	Brocade ICX 6610
Type	Ethernet	Ethernet	Ethernet
Number of RJ45 Ports (1 GbE)	24 / 48	24 / 48	24 / 48
Number of SFP / SFP+ Ports (1 or 1/10 GbE)	4	4	8 + 4 QSFP (40 GbE)
Optional feature licenses	-	Premium license (Layer 3 features)	Premium or advanced license (Layer 3 features)
Redundancy	-	-	FAN (opt), PSU (opt)
SFP / SFP+ options	LC (MMF/SMF), Twinax	LC (MMF/SMF), Twinax	LC (MMF/SMF), Twinax
Stacking	Up to 8 switches	HyperEdge, up to 8 switches	HyperEdge, up to 8 switches
Form factor	1 U	1 U	1 U
Deployment Scenarios	Focus on 1 GbE connectivity, optimized price per port ratio	10 GbE connectivity at entry level price	Advanced stacking requirements, 10 GbE connectivity, Layer 3 support requirements

Network Components
Brocade

Model	Brocade VDX 6740 Data Center Switch
Type	Ethernet / Converged Ethernet
Number of RJ45 Ports (1 GbE)	-
Number of SFP / SFP+ Ports (1 or 1/10 GbE)	24/48 – 48/64
Optional feature licenses	FCoE VCS
Redundancy	FAN, PSU
SFP / SFP+ options	LC (MMF/SMF), Twinax, RJ45
Stacking	Via VCS
Form factor	1 U
Deployment Scenarios	Low latency requirements, Virtualization, FCoE

Model	VDX 8770
Type	Ethernet / Converged Ethernet
Number of RJ45 Ports (1 GbE)	192/384
Number of SFP / SFP+ Ports (1 or 1/10 GbE)	192/384
Optional feature licenses	FcoE VCS
Redundancy	FAN, PSU
SFP / SFP+ options	Twinax, RJ45
Stacking	Via VCS
Form factor	8 U / 15 U
Deployment Scenarios	Allow extremely large-scale deployments with the best-possible network utilization

Tape Systems
Scalar

Model	Scalar i500	Scalar i6000
Drive Type	LTO-5 FH, LTO-6 FH, LTO-7 FH	
Max. capacity native	2,454 TB	72,036 TB
Max. number of slots	409	12,006
Max. number of drives	18	192
Tape system interface	SAS, Fibre Channel	Fibre Channel
Special features	Based on the iPlatform™ architecture the library integrates advanced backup functions to increase overall data protection, simplify management, reduce the need for external servers and software, and save users time and money over the life of their backup system. The Scalar i500 offers industry-leading RAS features designed to meet the availability requirements of the most demanding midrange data centers. Hot swap drives are standard on all models. The library's capacity-on-demand scalability provides non-disruptive growth from 41 to 409 tape positions. The single, continuous robotics system guarantees fast, reliable cartridge transfer under the widest possible range of conditions. The iPlatform™ architecture and integral management software make backup easier to manage and give users more control over the process. Its proactive monitoring and remote diagnostics can reduce service calls by 50 % and shorten issue resolution times by 30 %.	The intelligent Scalar® i6000 tape libraries are specifically designed for the archive and long-term data retention needs in an enterprise-level environment. The Scalar i6000 offers many new features such as iLayer software, Extended Data Life Management (EDLM) data integrity feature, Dual Robots, Active Vault and bulk load I/E capabilities. New module hardware design provides higher compactness regarding drive and slot count per module which allows to fulfill demanding performance and capacity requirements on small floor space. Scalar i6000 tape libraries dramatically improve the security and manageability of your enterprise backup, disaster recovery, and archiving processes. Quantum customers experience significant management time savings due to the proactive monitoring and intelligent diagnostic features in iLayer management software, up to 75 % savings compared to other libraries. The utilization of the iLayer software also reduces service calls by 50 % and shortens resolution time by 30 %.

Tape Systems
SL

Model	SL150	SL3000 with LTO	SL3000
Drive Type	LTO-5 HH, LTO-6 HH, LTO-7 HH	LTO-5 FH, LTO-6 FH, LTO-7 FH	T10000
Max. capacity native	1.8 PB	35.5 PB	50.3 PB
Max. number of slots	300	5,925	
Max. number of drives	20	56	
Tape system interface	SAS, Fibre Channel	Fibre Channel	Fibre Channel, FCoE, FICON
Special features	SL150 modular tape library is the first scalable tape library designed for growing small to midsized companies. It delivers an industry-leading combination of ease of use and scalability. Ideal for backup and archival applications, the SL150 modular tape library saves both time and money, setting the new standard for entry tape automation. The SL150 emphasizes simplicity and reduces costs through exceptional scalability, common storage management tools and do-it-yourself installation and upgrades. The easy-to-use remote browser GUI helps streamline library management and allows you to perform library operations, manage library settings, and proactively monitor the library's health. With the SL150, simplicity begins with the library installation and continues throughout the life of the product, even as you expand for data growth. The library can be initialized in a few steps via the local touchscreen operator panel, and upgrades are easy, since they require no tools, complicated cabling, or technical support.	The SL3000 scales from 200 to 5,925 cartridge slots and from one to 56 drives, all in a footprint that grows linearly in a rack environment. The SL3000's Any Cartridge Any Slot and Any Slot Anywhere technologies let you design your storage environment the way you really want it. Which means you can use the drive types that best meet your access and storage needs: the capacity-centric StorageTek T10000 drives,or LTO drives. In addition, the Fibre Channel interface provides enterprise-strength adaptability in mainframe and open systems environments.	

SL8500 with LTO	SL8500
LTO-5 FH, LTO-6 FH, LTO-7 FH	T10000
605.2 PB	857.5 PB
100,880	
640	
Fibre Channel	Fibre Channel, FCoE, FICON
The SL8500 modular library system will attach into mainframe, supercomputer, Unix and Windows environments. The SL8500 library scales from 1000 to over 100,000 cartridges to accommodate years of growth in the storage environment. The SL8500 supports the StorageTek T10000 and LTO tape drives. The library can be upgraded with future drive types and more cartridge slots to increase capacity during operation with no system downtime. High performance robotics enables the SL8500 to keep pace with the unpredictable peak workloads and future demands for higher throughput. Redundant hot swap robotics, power and electronics are available for maximum availability. The SL8500 library provides superior reliability, availability and serviceability through redundancy, hot-swap components and multiple robots.	

Storage Software and Services

Fujitsu offers a complete portfolio of enterprise storage solutions that includes hardware, software, consulting, integration and service. Professional Services from Fujitsu support you in meeting your IT storage requirements. They help you exploit the full solution potential of your storage systems.

Service Packages

Integration concepts for

- storage strategy
- storage solutions
- storage consolidation
- storage disaster recovery
- storage migration

Technical design and standard implementation services for ETERNUS CS, ETERNUS DX and ETERNUS LT, Storage Area Networks and more.

More information:
→ www.fujitsu.com/fts/services

Storage Software

Fujitsu delivers innovative data protection software from leading partners which is optimally integrated and tested with our hardware and solutions. The software portfolio enables you to increase operational efficiencies, lower costs, mitigate risks and improve service quality.

Commvault software:

By leveraging a single unified code base and platform, Commvault software simplifies an IT organizations ability to manage data across its lifecycle with integrated modules for Backup & Recovery, Archive, Replication, Resource Management and Search.

Veritas Backup Exec:

Cost-effective backup and recovery for small and medium businesses that lets you easily protect more data while reducing storage and management costs.

Veritas NetBackup:

Simplifies the protection of your information-driven enterprise by automating advanced technologies and standardizing operations across applications, platforms and virtual environments.

Veritas Enterprise Vault:

The industry's most widely-deployed archiving solution, is a platform that bridges the gap between legal and IT by adding intelligence to the way organizations store, manage and discover information.

More information about our software portfolio is available on:
→ www.fujitsu.com/fts/storage-software

Backup	
A copy of the information	
Necessary for recovery	
Increases availability, since applications can be restored from a certain point in time	
Typically short-term: days or weeks	
Data is regularly (daily, weekly) replaced by the latest version	
Commvault software	Combining professional backup and archiving in one single product
Veritas **NetBackup**	Professional backup for large heterogeneous environments
Veritas **Backup Exec**	Simple and cost-effective backup for SME

Archive	
Primary information	
For information retrieval	
Increases operative efficiency, since fixed or unstructured data can be extracted from operative environment	
Typically long-term: month, years, decades	
Data is preserved for analysis / compliance reasons	
Commvault software	Combining professional backup and archiving in one single product
Veritas **Enterprise Vault**	Professional archiving software

FUJITSU Product Support Services

In addition to its cutting-edge products, Fujitsu offers standardized Product Support Services that are sold at the point of sale or any time during product life cycle.

The Product Support Services ensure system availability and business continuity of the customers´ IT environment. With these offerings we help our customers to save time and money and reduce the burden on internal IT staff. This supports our customers to shift budget spend on operational IT services to strategic initiatives that deliver short-term real business value to their company.

The Product Support Services cover a broad range of products including Fujitsu and Partner branded hardware and software products as well as Fujitsu IT Infrastructures (e.g. Fujitsu Integrated System PRIMEFLEX) based on Fujitsu hardware. Fujitsu delivers these services through certified support engineers in all major countries where global customers need them. The comprehensive Product Support Services portfolio contains offerings to

- assist our customers in the installation of new products
- provide fast and responsive support for individual hardware and software products. Fujitsu has introduced three Warranty period types (up to 24x7, 4 hours onsite response) that are available worldwide.
- complement Fujitsu IT Infrastructures (e.g. Fujitsu Integrated System PRIMEFLEX) through well-adjusted "one stop shop" IT Infrastructure support offerings for the embedded multiple Fujitsu and Partner branded hardware and software components into account.

In addition to standard reactive Warranty types such as onsite response and recovery times, Product Support Services encompass optional HDD retention. Reactive services can be augmented by proactive support services elements (such as System Health Check and Technical Account Management) to even avoid failures and downtimes.

More information about Product Support Services:
http://www.fujitsu.com/fts/products/product-support-services/

FUJITSU Integrated System PRIMEFLEX®

Your Fast Track to Data Center Infrastructures

Building data center infrastructures for a certain use case can be complex, error-prone and time-consuming. Moreover it requires a deep knowledge of all components involved and their dependencies to each other. Therefore, a do-it-yourself approach entails many risks for businesses.

These risks can be avoided by using integrated systems. FUJITSU Integrated System PRIMEFLEX is a pre-defined, pre-integrated and pre-tested combination of servers, storage, network connectivity and software. While management software is mandatory, depending on the use case, software for virtualization, automation and orchestration, as well as databases and applications may be optionally included.

PRIMEFLEX encompasses factory-installed solutions which are ready-to-run and reference architectures which can be easily adjusted to customer-specific requirements. Along with its reference architectures, Fujitsu makes detailed configuration and installation descriptions available as a standard. Due to Fujitsu's staging center capabilities, reference architectures can even be delivered ready-to-run, on demand. Optional deployment and integration services ensure a smooth integration into the on-site environment. To ensure simplified operation and maintenance of PRIMEFLEX solutions, Fujitsu provides support on solution level, and further data center services including managed services and hosting.

With regard to integrated systems, Fujitsu is focused on the following areas:

- Virtualization
- Private cloud infrastructures
- Big Data and Analytics
- High availability and disaster recovery
- SAP environments

→ www.fujitsu.com/primeflex

FUJITSU Integrated System
PRIMEFLEX vShape

Fujitsu PRIMEFLEX vShape® is an IT infrastructure solution that simplifies the transition to virtualization and cloud computing by providing validated reference architectures which scale with your needs – regardless of whether you are running a small, medium or large enterprise. Customers benefit from shorter time-to-production, increased operational efficiency and a single contact for delivery and support. The turnkey solution consists of reliable ETERNUS DX disk storage systems, Brocade switches with converged fabric technology and leading virtualization technology, running on PRIMERGY servers with an excellent price/performance ratio.

PRIMEFLEX vShape has the flexibility to be sized and optimized to accommodate many different usage scenarios. It can scale up for greater performance and capacity or even additional functionality. At the economy-level configurations are available for the parallel operation of 25 to 200 virtual machines (VMs), and at the enterpise-level the configurations scale up to 2,500 VMs.

By leveraging from the capabilities of best-in-class systems, fully based on standard technologies, vShape protects from vendor lock-in. The flexible approach is ideal for customers:

- In branch offices
- With fluctuating infrastructure demands
- Looking to consolidate and optimize applications
- Requiring a solution that is easy to deploy, operate and manage – despite limited IT resources

FUJITSU Integrated System PRIMEFLEX
for VMware VSAN

Your fast track to a hyper-converged IT infrastructure

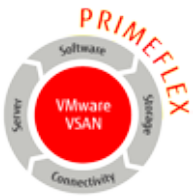
While server and desktop virtualization has greatly improved data center operations throughout the last decade, many organizations are now looking to extend virtualization to further IT resources by adopting a strategy aimed at establishing the Software Defined Data Center (SDDC). To mitigate the risks in deploying the core virtual infrastructure foundation for a SDDC environment, Fujitsu and VMware have been working together to provide an integrated system for setting up a hyper-converged IT infrastructure delivering a next-generation virtualization platform that includes software-defined compute, storage and networking resources: FUJITSU Integrated System PRIMEFLEX for VMware VSAN.

Customer Benefits at a glance:

- Faster time to production for your virtual infrastructure
- Easy to order, deploy and scale
- High virtualization performance and energy efficiency
- Broad choice of deployment options

For a quick setup of an entire VMware Virtual SAN environment Fujitsu provides a broad range of validated server configurations (VSAN Ready Node profiles) with preinstalled software. These configurations allow for further customization to meet the individual needs of your workloads. The underlying hardware platform of PRIMEFLEX for VMware VSAN is based on Fujitsu x86 servers having a long and proven track record reflected in outstanding benchmarks, with top rankings in most VMware VMmark benchmark categories since 2011.

PRIMEFLEX for VMware VSAN gives you the ability to granularly scale-up or scale-out your compute and storage environment for a maximum of 64 hosts and 8.8 petabytes of raw storage for serving up to 6400 VMs.



FUJITSU Integrated System PRIMEFLEX
Cluster-in-a-box

PRIMEFLEX Cluster-in-a-box

Maintaining the continuity of your services is fundamental to staying in business. Your IT supports and drives your business. It enables you to comply with regulations, improves your business processes and allows you o respond faster to new demands. Extended downtime would cause a direct and easurable impact on your business, as well as that of your partners and suppliers. This clearly leads to the need of a high available IT. But building such IT environments is still a complex task. Servers, storage, network and software have to be combined in the right configuration and installation. Instead of inventing the wheel again why not benefit from the knowledge gained in many similar projects? We understand the importance of keeping IT operations running and the need for a simple way to setup the appropriate IT environment.
PRIMEFLEX Cluster-in-a-box offers a hyper-converged and well-balanced combination of server, storage, and networking components in one compact enclosure. With PRIMEFLEX Cluster-in-a-box, customers receive a "small and entire configuration" including Microsoft® Windows Server® 2012 R2 pre-installed and pre-configured as a high availability cluster. Two server nodes (subsequently expandable up to 4 server nodes), shared storage and redundant power supplies are pre-packaged and preconnected within a single box. PRIMEFLEX Cluster-in-a-box is perfectly suited for organizations with experience in administration of Microsoft Windows Server. Just turn it on, spend some minutes with our configuration wizard and your hyper-converged environment is ready to work. Designed for mid-market organizations and branch offices, PRIMEFLEX Cluster-in-a-box offers continuous availability at low costs to protect important data and business-critical services.

To have the best fitting offering for your individual need, there are different configurations available.

PRIMEFLEX Cluster-in-a-box configurations

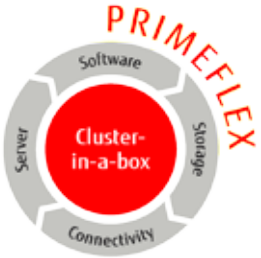
	PRIMERGY CX400-M	PRIMERGY CX400-C
		 Configurable
Base Unit	2x SAS Expander and redundant PSUs and fans	2 x SAS Expander and redundant PSUs and fans
Cluster Nodes	PRIMERGY CX2550 M2 2 x Intel® Xeon® processor E5-2620v4 128 GB DDR4	PRIMERGY CX2550 M2 2 x Intel® Xeon® processor E5-26XXv4 8-512 GB DDR4
Storage (gross capacity)	9.6TB (8 x 1.2TB SAS)	4-18 disks (NL-SAS, HDD SAS, SSD SAS)
Optional Storage Expanision	Two node cluster, expandable up to 4 server nodes external ETERNUS JX	
Windows Server 2012 R2	Datacenter	Standard or Datacenter
Use case	up to 30 virtualized workloads	up to 200 virtualized workloads or physical usage

PRIMEFLEX Cluster-in-a-box, your hyper-converged fast track to continuous operation with the following characteristics:

Your advantages	Our offer
■ Continuous business operations thanks to integrated availability mechanisms with failover clustering and redundant hardware components ■ Easy to buy – single order code (SKU) or simplified configuration ■ The pre-configured and pre-installed solutions are ready to use within some minutes ■ No implementation risk because of thoroughly pre-tested configurations ■ All benefits of server virtualization can be leveraged	FUJITSU Server PRIMERGY CX2550 M2 provide a stable basis for your hyper-converged and highly available infrastructure: ■ Pre-configured Fujitsu Server PRIMERGY systems with suitable disk capacity and appropriate I/O connectivity ■ Pre-installed Microsoft® Windows Server® 2012 R2 Standard or Datacenter as virtualized environment or high availability cluster ■ Configurable solutions available to fit multilevel needs

Our offering based on PRIMERGY CX400 provides in addition to the key features of PRIMEFLEX Cluster-in-a-box:

Main Features	Benefits
Hyper-converged platform	No separate disk storage system and SAN needed
One enclosure for two servers with shared powerand cooling	Up to 80% less space than traditional IT infrastructures, all components are optimized to each other
No sharing of fabrics, I/O or management components	Lowered complexity vs. blade servers
Expandable chassis (up to 4 nodes, up to 18 discs)	Prepared for growth



FUJITSU Integrated System PRIMEFLEX
for Hadoop

FUJITSU Integrated System PRIMEFLEX for Hadoop is a powerful and scalable platform analyzing big data volumes at high velocity.

The Solution

Since introducing Big Data may entail considerable challenges and risks, our Big Data solutions cover the aspects of data, processes and infrastructure. FUJITSU Integrated System PRIMEFLEX for Hadoop combines the advantages of pre-configured and pre-tested hardware based on industry standard components with open source software Hadoop® and Big Data analytics software provided by Datameer®.

Cloudera® Enterprise helps you driving information by leveraging the open source community with the enterprise capabilities you need. Designed specifically for mission-critical environments, Cloudera Enterprise includes Cloudera Data Hub as well as advanced system management and data management tools.

Datameer Software simplifies end-to-end-big data analytics environment into a single application on top of the Hadoop platform. Designed to make big data simple for everyone, Datameer combines self-service data integration, analytics and visualization functionality that provides the fast time to insights.

FUJITSU Integrated System PRIMEFLEX for Hadoop is provided as a ready-to-run Integrated System as well as a Reference Architecture for on premise use cases. Further, PRIMEFLEX for Hadoop is used and proven in Fujitsu's cloud operation where it is the foundation for Big Data Analytics as a Service. In addition, strategic big data consulting, analytics consulting, consulting for Hadoop, integration and maintenance services are completing the approach.

FUJITSU Integrated System PRIMEFLEX
for SAP HANA®

Transform Data into real business value

SAP HANA is an in-memory data platform which allows companies to completely process transactional and analytical data in the main memory of a computer, thus providing organizations with real-time business insight. Consequently SAP HANA enables companies to drive business more intelligently, thanks to innovative applications and faster and well-informed decisions.

As a founding member of the Hasso Plattner Institute Future SOC Lab, Fujitsu has in-depth knowledge of SAP HANA and has driven the development of end-to-end solutions for innovative in-memory technology. Based on this expertize, we enable customers to fully exploit the potential of the SAP HANA platform.

Reliable Fujitsu infrastructure concepts optimized for various SAP HANA use cases allow vast amounts of data (Big Data) to be analyzed in real-time, safely and securely, either on premise or in the cloud. Applications are also accelerated, enhancing business processes and enabling organizations to become true real-time enterprises.

Our PRIMEFLEX for SAP HANA solutions are based on SAP-certified components, such as Fujitsu PRIMERGY and PRIMEQUEST servers rounded off by Fujitsu ETERNUS as the preferred storage option for scale-up and NetApp FAS series for scale out configurations. The offering covers everything, from pre-configured and pre-installed single node systems via VMware virtualized platforms up to individualized concepts based on proven reference architectures and in line with the SAP HANA Tailored Data Center Integration (TDI) approach. And, of course we consider individual growth plans, IT strategies and requirements regarding system availability and make sure that PRIMEFLEX for SAP HANA is seamlessly integrated into the existing IT landscape.

A comprehensive portfolio of supplementary services supports customers in all project phases; from decision-making to ongoing operations. The offering is supported by the remotely accessible Fujitsu SAP HANA Global Demo Center. Our services range from SAP HANA trials and proof-of-concept projects and data migration to financing offers

Customers searching for a uniform and consistent management of the entire SAP software landscape PRIMEFLEX for the SAP HANA infrastructure can benefit from PRIMEFLEX for SAP Landscapes powered by FlexFrame Orchestrator. This unique infrastructure management solution allows SAP solutions to be run easier, faster, better and at lower cost

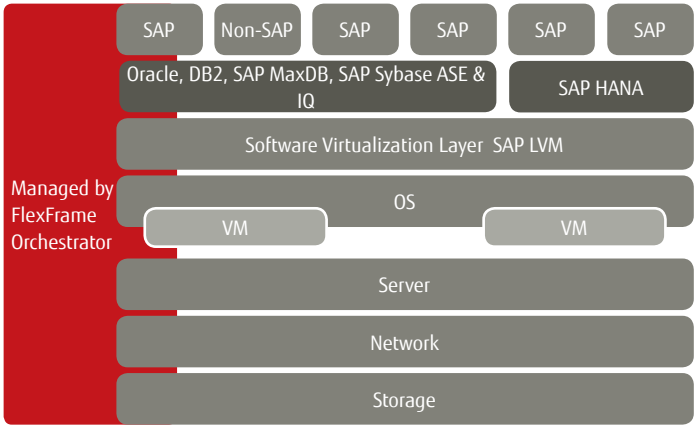
Key Benefits

- Future-proof and cost-efficient environment based on industry standards
- Individual concepts and seamless integration into existing data center environments and strategies
- Customized availability – from integrated high availability to two-site disaster-resilient solutions
- Holistic concepts and optimized server performance for complex database landscapes with SAP HANA, SAP Sybase ASE and SAP Sybase IQ
- Fast track to business value through fast deployment, seamless integration and smooth operation
- Reduced administration effort, better hardware utilization, increased availability, cost reduction and expanded service quality

SAP Global Partner

PRIMEFLEX
Software
Server
Storage
Connectivity
SAP HANA

FUJITSU Integrated System PRIMEFLEX
for SAP Landscapes



Drive SAP® applications and SAP HANA® smarter

SAP applications are crucial for the success of enterprises worldwide. To dynamically respond to changing business needs, new SAP services need to be provisioned rapidly. At the same time IT departments need to cope with additional and sometimes conflicting requirements e.g. introducing SAP innovations, such as SAP HANA and improving the quality of service while reducing capital and operational expenses.

PRIMEFLEX for SAP Landscapes powered by FlexFrame Orchestrator software provides a unified and consistent management concept which enables operating classical and new SAP applications, the entire SAP database portfolio (SAP HANA, SAP Sybase ASE, SAP Sybase IQ, Max DB) and third-party databases easier, faster and more effectively. It simplifies the management of complex SAP environments, optimizes planning, operation and change management and reduces costs by up to 90 % whilst increasing agility by up to 50 %.

How is this possible? PRIMEFLEX for SAP Landscapes masks the growing complexity of SAP environments, regardless of whether they are on-premise, managed, hosted or in the cloud. It makes operations simpler thanks to extensive automation.

To ensure the efficient provisioning of optimal performance all the physical and virtual resources in the environment can be managed with consistency. System resources can thus be allocated dynamically, and workloads can be distributed in a flexible manner. Furthermore, integrated and automatic high availability ensures a high level of reliability. For example, mission-critical applications can be backed up by several failover servers, and less critical services can share one failover server. Disaster recovery installed at two different sites can also be implemented without the need for additional steps or special expertise in cluster implementations.

PRIMEFLEX for SAP Landscapes can be integrated in heterogeneous data center environments without interrupting live operations. It can be delivered as a pre-installed and pre-tested ready-to-run installation on industry-standard Fujitsu PRIMERGY servers and NetApp storage systems from the Fujitsu factory – ensuring highest quality and fast time-to-value.

Fujitsu also offers PRIMEFLEX for SAP Landscapes as an open solution by lifting the restrictions that had previously applied to certain hardware and software components. A certification program ensures that PRIMELFLEX for SAP Landscapes functions smoothly and seamlessly with data center components from third party suppliers, allowing more users to benefit from the offering.

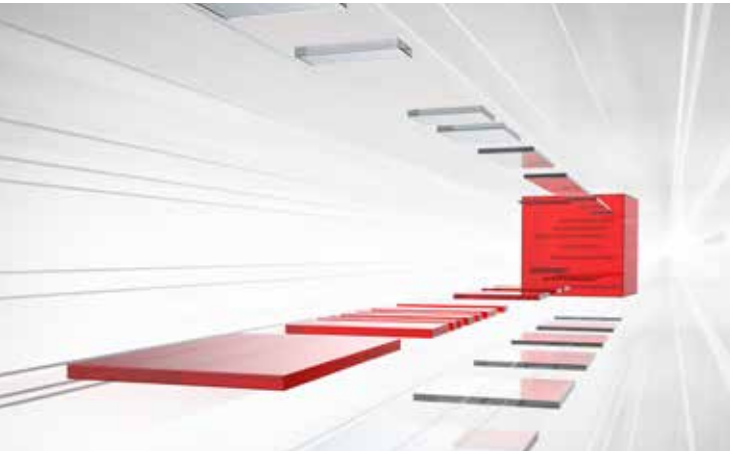
Key Benefits

- Reduces the complexity of SAP infrastructures
- Facilitates fast and secure implementation
- Significantly lowers investment and operation costs
- Combines traditional SAP operations and SAP HANA infrastructures
- Accelerates innovation and change
- Can be integrated in every data center environment

SAP Global Partner

PRIMEFLEX Software Server Storage Connectivity SAP Landscapes

FUJITSU Integrated System PRIMEFLEX
for Red Hat OpenStack



Your reliable path to OpenStack private cloud deployment

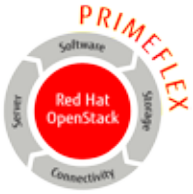
The „digital first" imperative is increasingly a reality in today's businesses seeking to transform business models in order to enable innovation, new revenue streams and better customer experience. Cloud is the ideal underpinning platform that is agile enough to adapt quickly to the challenges of digital business initiatives. And OpenStack is the fastest growing cloud management platform that is cost-effective, open, flexible and massively scalable. Specifically designed to support the elastic nature of a true cloud OpenStack best supports the requirements of next-generation cloud applications.

However, there are various risks that can impact time lines and budgets in the implementation phase of a complex private cloud project. You need to make sure that enough skilled resources are on board for the design, build and deployment phases –and finally you also need to take care of maintenance and ongoing innovation of the complete technology stack.

PRIMEFLEX for Red Hat OpenStack - Your benefits:

Fujitsu and Red Hat support you through every phase in your transformation to a cloud platform that meets the requirements of your digital business initiatives with the following:

- High-performance and energy-efficient Fujitsu hardware stack capable to host demanding workloads
- Market leading Red Hat Enterprise Linux OpenStack Platform ensures stable and secure operation of a production-ready cloud
- Modular building block concept allows you to adapt configurations on your own pace
- An optimized deployment service reduces implementation risk and offers fast time to production and reduces infrastructure-related efforts and cost by up to 40 %



FUJITSU Integrated System PRIMEFLEX
for HPC

PRIMEFLEX for HPC			
Application Appliance		Reference Architectures	
Integration & Support services			
Assembly, Test & Delivery			
User workplace	HPC Gateway		
	Application Catalogue		
System design	Head node	Compute nodes	Graphics
	Interconnect	Storage	Rack & Power
Management software	Batch	Operation	Administration

HPC cluster solutions optimized for your industry

To increase competitiveness more organizations, particularly smaller businesses, are looking for ways to leverage High Performance Computing (HPC). Some may be considering the first use of HPC, while others are extending HPC into new domains or evaluating new methodologies. Central to both is application usability and efficiency.

PRIMEFLEX for HPC supports the R&D community by providing validated integrated cluster solutions. The portfolio comprises appliances optimized for specific industries and ISV applications from e.g. ANSYS, COMSOL and Autodesk, as well as predefined reference architectures adaptable to individual needs.

To ensure an optimal price-performance, all components of PRIMEFLEX for HPC cluster solutions are selected based on thorough benchmark testing. This reduces the time and cost of acquisition, and provides an assured basis for higher efficiency and less risk.

HPC Simplicity and Expertise

The HPC Gateway simplifies all aspects of HPC work management with integrated functions for file management, application execution and result monitoring.

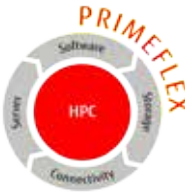
The Application Desktop web interface utilizes a recognizable desktop layout and, ensuring the user experience, is both comfortable and intuitive.

The Application Catalogue is populated with a set of intelligent application processes of common ISV and Open Source Software applications. These validated processes have been developed with robustness, visibility and operability for end-users in mind.
New and occasional users as well as practiced HPC users will find the interface highly effective. Combined with the pre-built packages from the Application Catalogue, they will have at hand the most productive and coherent HPC workplace in the market today.

Your benefits

PRIMEFLEX for HPC provides validated integrated solutions based on predefined and optimized HPC cluster configurations for specific applications.

- No hidden costs
- Users immediately productive
- Architected for applications and workloads
- Certified for application compatibility
- Assured performance with clear modular growth
- HPC simplicity and expert run-time processes
- Complete solution support and services



FUJITSU
Data Center Management and Automation

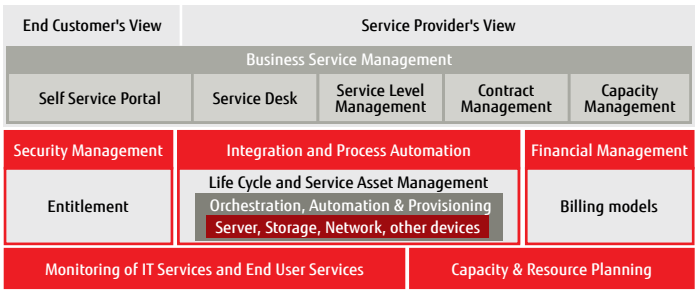
FUJITSU Managed Infrastructure Service Data Center Management and Automation Solutions is a suite of solutions helping medium and large size enterprises to

- Improve operational efficiency
- Improve service levels
- Drive down operational costs
- Accelerate the introduction of new data center services

FUJITSU Data Center Management and Automation Solutions cover IT Operations Management (ITOM) and Data Center Infrastructure Management (DCIM) and are based on FUJITSU solutions, intellectual property and selected partner software structured along the FUJITSU DCMA reference architecture.

The delivery models for FUJITSU Data Center Management and Automation Solutions comprise:

- On-premise (installed at and managed by customers)
- Managed services (managed by Fujitsu)
- Cloud (Software as a Service)



The Fujitsu Offering

FUJITSU Data Center Management and Automation Solutions provide solutions, blueprints, hardware and services to manage and automate entire data centers. Highlights of our solution portfolio:

- Consulting and optimization services for Data Center Management and Automation Solutions
  Our consulting service offers data center process and technical consulting, e.g. strategy workshops, architecture workshops, solution concepts and project management as well as financial services.
- Data Center Efficiency and Reliability Improvements
  collect and analyze information from infrastructure, application performance and other IT management tools in real time. It visualizes services, calculates service quality and pinpoints risks and impacts on quality.
- Energy efficient Data Center Operation
  measure and manage power and cooling in facilities and data centers. It improves the availability of IT systems and services with intelligent energy management.
- Performance and Trend Analysis for IT Infrastructure, Applications and Services
  manage networks, systems, applications and services. It comprises performance monitoring, fault detection and root cause analysis and ensures the proactive and more efficient management of traditional, virtual, cloud, converged and wireless technologies in a single user interface.
- Asset management, commissioning and management of IT infrastructure components
  manage the complete lifecycle of hardware and software assets and drive the deployment of software, updates and patches to physical and virtual systems, e.g. FUJITSU ManageNow® solutions.
- Data center efficiency improvements with process automation
  Fujitsu process automation solutions integrate, control, and automate operational processes across platforms, applications and IT groups to improve business services. One highlight is the **FUJITSU Automated Contingency** Manual which assists emergency managers and ensures fast recovery of business continuity.
  See how it works: https://www.youtube.com/watch?v=Wbgby9_SEWI

Customer benefits

- Processes and automation improve agility, flexibility and speed
- Rapid implementation with preconfigured solutions
- Integration and adoption within heterogeneous data centers

What makes us different?

- Broad offering, independent consulting and a wide and comprehensive solutions portfolio, honored with German Data Center Awards in 2013, 2014 and 2015 for Energy Efficiency in the Data Center, Automated Contingency Manual, Automated Service Delivery Platform
- Support along the complete project chain: consult, design, build, operate and maintain
- Fujitsu blueprints, best practices, how-to concepts ensure rapid implementation of Data Center Management and Automation Solutions

→ www.fujitsu.com/fts/dcma

FUJITSU SURIENT

Transparent and user friendly end-to-end security from the terminal to the data center

The FUJITSU Security Solution SURIENT is a family concept of innovative patented end-to-end IT security offerings. It provides secure application environments based on existing infrastructures and enables – dependent on the specific customer requirements - up to highest degree of security, especially for sensitive data and processes. High user-friendliness, easy and smooth integration in existing data center and high performance levels are characteristics of this security concept covering data centers, data transfer and terminals as well as the sensors which play a central role in the "Internet of Things". The concept comprises various modules. It is possible to adjust the protection levels to the various requirements. The modules can be used individually or in combination. FUJITSU SURIENT family includes following components:

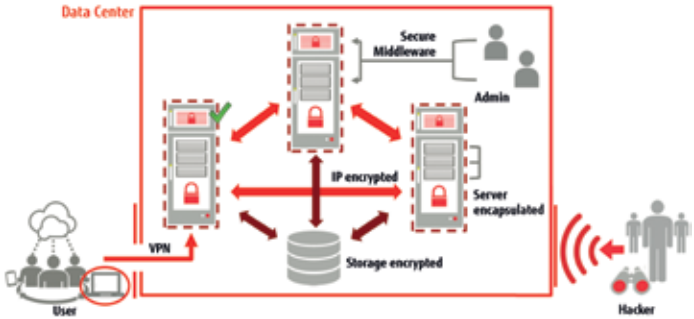
- **SURIENT MRS (Managed Rack Solution)**
  The Managed Rack Solution module protects data center infrastructures from non-authorized access. The Managed Rack Solution is designed for average security requirements. Authentication can be realized via infra-red palm vein scan using PalmSecure but also other biometric authentication systems can be used as well. The rack can thus only be accessed by authorized administrators. Depending on the protection requirements access can also be combined with a "double-check" (4 or more eyes). The door of a security rack can thus only be opened jointly via a defined group of persons.

- **SURIENT SRS (Sealed Rack Solution)**
  The Sealed Rack Solution module protects data center infrastructures from non-authorized access. The Sealed Rack Solution offers even greater protection levels as well as monitoring and audit features according to ISO 27000. Authentication can be realized via infra-red palm vein scan using PalmSecure but other biometric authentication systems can be used. The rack can thus only be accessed by authorized administrators. Depending on the protection requirements access can also be combined with a "double-check" (4 or more eyes). The door of a security rack can thus only be opened jointly via a defined group of persons.

- **SURIENT EBS (Encrypted Boot Solution)**
  The new Encrypted Boot Solution (EBS) is based on technology patented by Fujitsu. The module is used to start IT systems in the data center with encrypted system partitions and without having to enter a password manually. The passwords are created and transferred by the system decentrally and are not even known to the administrators. This provides effective protection against nonauthorized access by employees.

- **SURIENT SCS (Stealth Connect Solution)**
  The Stealth Connect Solution (SCS) ensures that today's external attack methods against servers and services will be unsuccessful. Authorized users can log in via a secure Virtual Private Network (VPN) in the data center. The solution disables the server process VPN port and an attacker does not receive any response to his port scans and is thus not provided with any information about the location of possible attack points. A Zero Day Exploit and Man-inthe- Middle attacks are made extremely difficult as a result of this "digital stealth" function.

- **SURIENT SAS (Sealed Application Solution)**
  The Sealed Application Solution (SAS) module ensures effective protection for applications on terminals, such as PCs, tablets, workstations and notebooks. It is a highly-secure runtime environment which is started parallel to the operating system. The applications and data processing run completely separated from the hardware and operating system in this encapsulated environment . Applications and data can thus be protected against attacks in a very effective manner. The solution is not dependent on any manufacturer and can be used on all standard-based terminal systems; it is suitable for processing sensitive company data and for applications, such as online banking.



Robust biometric authentication technology
for your high-security

The Fujitsu PalmSecure™ technology is a palm vein based strong authentication solution that utilizes industry-leading vascular pattern biometric technology. This innovation offers a highly reliable, contactless biometric authentication solution that is non-intrusive and easy to use.

PalmSecure™ technology has been deployed worldwide in a wide range of vertical markets, including security, financial/banking, healthcare, commercial enterprises and educational facilities. Additional applications include physical access control, logical access control, retail POS systems, ATMs, kiosks, time and attendance management systems, visitor ID management and other industry-specific biometric applications. The Fujitsu PalmSecure™ sensor uses near-infrared light to capture a person's palm vein pattern, generating a unique biometric template that is matched against pre-registered user palm vein patterns. The palm vein device can only recognize the pattern if the blood is actively flowing within the individual's veins, which means that forgery is virtually impossible. This advanced, vascular pattern recognition technology provides highly reliable authentication. The PalmSecure™ technology false accept rate is just 0.00001 percent with an exceptional false reject rate of 0.01 percent, all in a small form factor that generates extremely fast authentication, usually under one second.

FUJITSU PalmSecure bioLock enables the monitoring and controlling of a SAP System by biometric re-authentication with customizable security checkpoints based on manage-ment policies and business rules on a userby-user basis in during SAP operations.

PalmSecure ID Match is a two-factor authentication matching biometric palm vein authentication with ID-Card's or pin codes to grant true identity. This innovative solution is designed for a wide range of scenarios -supported by our Software Development Kit (SDK), which allows fast and easy integration within IAM applications.

PalmSecure truedentity as a client-/server login/SSO solution can be used as an enhancement for human centric authentication management –based on personalized encrypted certificates, superior security for handling electronic identities and secure transfer of data with palm vein authentication. PalmSecure truedentity allows mutual, unambiguous identification of user and service. The unambiguous identity of all persons or machines involved is verified prior to communication based on a two-factor authentication. PalmSecure truedentity is an ideal base for E2E security solutions, e.g. for web services, online banking, social security applications, etc. also supporting basic functions such as Windows LogON / SSO and can be ued in combination with PalmSecure ID Match as an application terminal.

PalmSecure ID Mobile is a convenient method to authenticate, using a smart phone carrying the personal palm vein template inside. For two-factor authentication, the template is automatically transferred for matching with the personal vein pattern to a palm vein reader. Fujitsu Laboratories has successfully slimmed down the sensor to a thick-ness of 5 mm. This enables easy deployment mobile devices, such as the workstation CELSIUS H730 and the LIFEBOOK's U904, U745 and S935 with embedded sensor with Workplace Protect to secure the access.

Features

- Advanced biometric authentication algorithm delivers ultra-low FAR (false accept rate) and FRR (false reject rate)

	Palm Secure	Iris	Back Hand Vein	Finger-print	Finger Vein	Hand Geometry	Facil Recog-nition	Signature	Voice
FRR	0,01 %	0,01 %	0,1 %	0,1 %	0,3 %	0,8 %	2,6 %	1,0 %	3,0 %
FAR	0,00001 %	0,0001 %	0,0001 %	0,001 %	0,001 %	0,07 %	1,3 %	1,0 %	3,0 %

FRR = False Rejection Rate
FAR = False Acceptance Rate

- Advanced biometric authentication algorithm delivers ultra-low FAR (false accept rate) and FRR (false reject rate)
- Contactless palm vein authentication is hygienic and noninvasive – No Residual Trace Technology
- Encrypted repository for template storage & enterprise level event logging capability
- PalmSecure Authentication recognized by leading International Security Bodies, including International Common Criteria and CNIL
- Quick-start deployment across the enterprise raises security and adds value
- Fast and easy registration with virtually no enrollment error.

FUJITSU
Financial Services

Fujitsu Financial Services combines financial and commercial expertise to ensure that your IT environment financing strategy – including hardware, software and services – is underpinned by flexible payment terms that align to your business and financial objectives. With this approach Fujitsu Financial Services helps large and midsize companies, Government and Public Sector organisations to optimize financial and lifecycle aspects of their IT environment.

Our financial services reach beyond simply funding the acquisition of the latest technology, together we will work closely with you to align the costs associated to your IT investment. We engineer bespoke payment solutions based on our flexible and modular portfolio of financing solutions which include pay-as-you-use and pay-as-you-grow. We provide consultation so that you can align your IT spending to your revenue flow or budgets, thus enabling forecasting and budgeting for longer periods. Our services cover the complete lifecycle starting with financial planning, technology replacement, acquisition, financial management and retiring of assets of your IT environment – allowing you to concentrate on your core business.

Advantages of financing at a glance

- Free up capital & credit lines for use in other business-critical areas
- Spread costs over the life of the project while considerably reducing TCO
- Shift fixed costs (CAPEX) into variable costs (OPEX).
- Financing enables faster approval process & improved budget planning than capital expenditures
- Disciplined equipment replacement increases productivity, flexibility, and competitive edge
- Finance payments are treated as an operating expense and are fully tax-deductible
- Off balance-sheet accounting improves liquidity and key financial metrics
- Financing from a single source, independent of your bank.

→ http://www.ts.fujitsu.com/financialservices

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