



shaping tomorrow with you

Fujitsu Enterprise Servers

FUJITSU Server Enterprise Products



The right combination of systems, solutions and know-how to guarantee maximum productivity, efficiency and flexibility, delivering confidence and reliability.

FUJITSU Server PRIMERGY

Industry's most complete x86-based portfolio for companies of all sizes, across all industries and for any type of workload.



FUJITSU Server PRIMEQUEST

Enhance the economic benefits of x86 industry standards complemented with a fault immune system architecture.



FUJITSU SPARC Servers

Unmatched scalability with up to 64 processors together with highest RAS features and a modular architecture.



Industry's most complete x86-based portfolio



One size does not fit all: To be able to meet the requirements for companies of all sizes, Fujitsu offers industry's most complete portfolio of industry standard x86 servers.



PRIMERGY TX Family

Expandable tower servers ideal for branch offices, remote offices and small businesses



PRIMERGY RX Family

Versatile and scalable rack-optimized servers with leading efficiency and performance



PRIMERGY BX Family

Platform for converged infrastructures engineered to maximize every hour, watt, and dollar



PRIMERGY CX Family

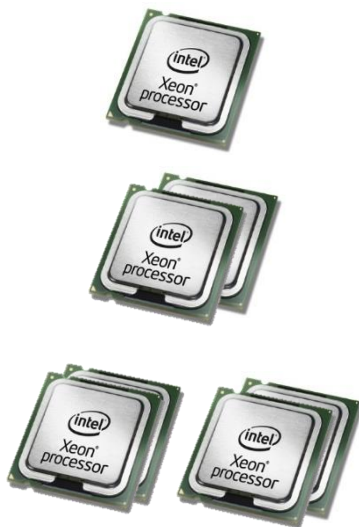
Density optimized cloud server infrastructures for Cloud, HPC and large scale-out computing

How do Customers Choose a Server?

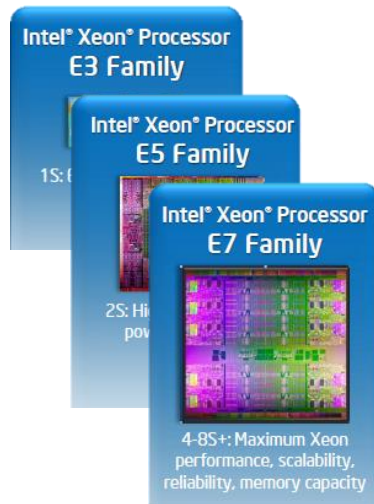
1 Formfactor



2 Number of sockets



3 Platform type



4 Feature set



Fujitsu PRIMERGY New Naming Scheme



An Example: Successor of PRIMERGY RX300 S8

Formfactor

BX: Blade server / Chassis
CX: Cloud server / Chassis
MX: Micro server
RX: Rack server
TX: Tower server
SX: Storage blade

Number of Sockets

1: 1-socket
2: 2-socket
4: 4-socket
8: 8-socket

9: 16-socket
or more

Platform Type

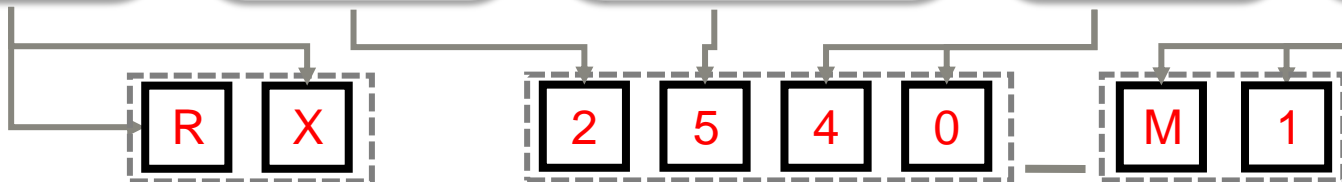
0: placeholder
1: placeholder
2: placeholder
3: Intel E3 family
4: placeholder
5: Intel E5 family
6: placeholder
7: Intel E7 family
9: placeholder

Feature Set

10: Subentry 1
20: Subentry 2
30: Entry 1
40: Entry 2
50: Midrange 1
60: Midrange 2
70: High End 1
80: High End 2
90: Reserved (tbd)

Generation

"M" = Model
+1 in case of
next technology
generation



Bold = used in our portfolio today

Fujitsu Server PRIMERGY Tower Systems



Robust and cost-efficient servers for SMEs and branch offices

- Affordable and expandable tower servers
- Simple operation, low power consumption and quiet operation
- Ideal for branch offices, remote offices and small businesses



Enter the world of tower servers

TX100

TX1310



For small environments with high demands

TX120

TX1320



Expandable all-round server for SMEs

TX140

TX1330



The one-processor tower server - maximized!

TX150



Well-balanced price-performance

TX2540



Reliable performance for your business

TX300

TX2560

Products

Fujitsu Server PRIMERGY Rack Systems



Versatile, scalable servers with top performance

- The datacenter standard
- Versatile and scalable rack-optimized servers
- Leading energy-efficiency and performance



Small in size,
low in cost -
rich in optional
features

RX100

RX1330



Maximum
productivity
in a 1U
housing

RX200

RX2530



Balanced
performance
and scalability

RX2520



The
versatile 2U
powerhouse

RX300

RX2540



Maximum
expandability in
a 2 way server

RX350

RX2560



Economic
scaling to 4
socket
performance

RX500



Balanced scale-
up performance
and high
availability

RX4770

Quad Socket

Products

Fujitsu Server PRIMEQUEST Systems



Scalable platform for business-critical and mission-critical workloads

- New levels of x86 server performance for in-memory computing and resource-intensive applications
- UNIX-matching high-availability features with x86 cost efficiency



Advanced 4-socket enterprise platform with outstanding platform reliability, innovative error prevention and self-healing capabilities

PQ2400E

Quad Socket



Enterprise platform with extra-large memory capacities to handle bigger memory-intensive applications

PQ2800B

Octo Socket



Top-of-the-range model additionally introduce self-healing capabilities and unique error prevention and RAS features

PQ2800E

Products

Fujitsu Server PRIMERGY Blade Systems



Platform to build a converged infrastructure designed to maximize time and efforts

- Datacenter in a box with all infrastructure-, network and management components
- Improved manageability, availability, and operational efficiency from shared cable infrastructure and virtual input/output (I/O)

Server Blades



Affordable blade technology for medium-sized businesses

BX400

Blade Chassis



Dynamic server infrastructure designed for high requirements

BX900



Universal server blade

BX920 S4

BX2560



Maximum scalability for demanding applications

BX924 S4

BX2580



1/10 GbE

10 Gb DCB

56 Gb IB

6 Gb SAS

8 Gb FC

Connection Blades



SX910

SX940

SX960

SX980

Storage Blades

Products

FUJITSU Server PRIMERGY Scale-out Systems



Platform for cloud, HPC, and large scale-out computing

- Density optimized cloud server infrastructures
- More computing power in less space
- Lower costs for energy due to shared power & cooling



Compact server node density with high power efficiency to realize large scale-out solutions for HPC and Cloud Computing at lower overall costs

CX400



Out-of-the-box cluster server enabling small and medium enterprises to provide continuous uptime for their business applications and data

CX420

Chassis



Dual socket server node in a highly condensed half-wide, 1U form factor

CX250

CX2550

Server Nodes



Dual socket server node for ambitious High Performance Computing, Analytics and Visualization solutions

CX270

CX2570

Products

Versatile performance to overcome data growth



Innovation that helps to cope with the dramatic increase of data and digital information:

**New Intel® Xeon®
E5-2600 v3 processor
product family**

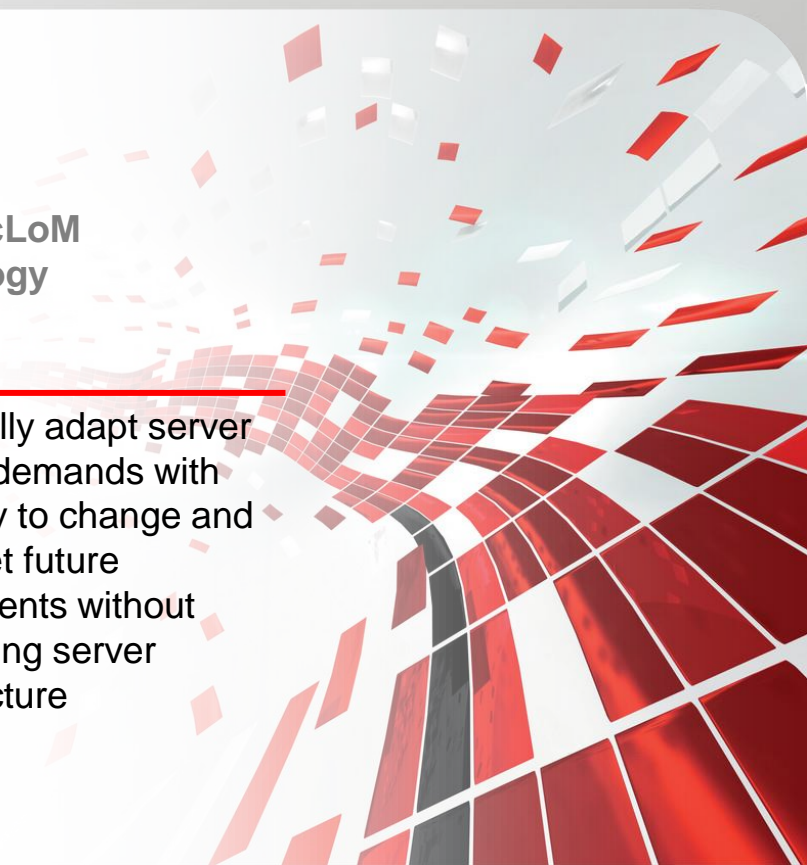
**DDR4 memory
technology**

**DynamicLoM
technology**

Boost your general computing performance by up to 55% compared to the previous generation

Higher performance with lower power requirements to meet diverse enterprise workload demands and avoid bottlenecks

Individually adapt server network demands with the ability to change and thus meet future requirements without overhauling server infrastructure



Intel® Xeon® E5-2600 v3 processors



Best combination of performance, built-in capabilities and cost-effectiveness

1.5 TB RAM with 2,133 MHz speed (DDR4)



Accelerate 'in-memory' solutions

22 nm manufacturing process



Improved energy efficiency

Intel® Xeon® E5 v3 processors with 36 cores and 45 MB cache



Boost your general computing performance up to 38%

Intel® Turbo Boost Technology 2.0

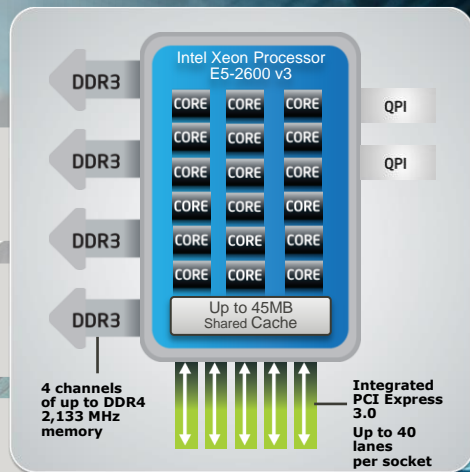


Performance that adapts to spikes in your workload

Intel® Advanced Vector Extensions 2 (AVX2)



Achieve higher throughput in technical computing



DDR4 memory technology

Higher energy efficiency, increased performance

- DDR4 is the latest computing DRAM technology
 - DDR3 investment is ending at 1866 MT/s, while DDR4 speeds start at 2133 MT/s
 - DDR4 provides increased bandwidth at lower power/DIMM, capacities up to 1.5 TB
- DDR4 ecosystem is in place and executing
- Intel® Xeon® processor E5-2600 v3 with DDR4 provides better value
- Price/performance improvements vs. previous generation platforms with DDR3



2002	2004	2007	2014
DDR	DDR2	DDR3	DDR4
2.5 V	1.8 V	1.5 V	1.2 V
266 MT/s	400 MT/s	1066 MT/s	2133 MT/s
128 Mb	256 Mb	1 Gb	4 Gb

- ↓ 20% in voltage
- ↑ 100% in bandwidth
- ↑ 400% in density

Fujitsu DynamicLoM technology



More flexibility, scalable for future needs and lower total-cost-of-ownership

- Flexible external connectivity with different interface cards

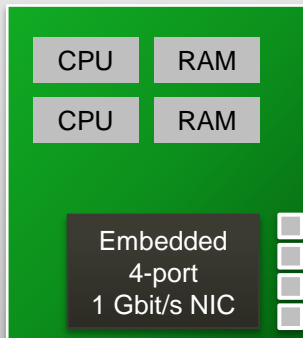
- With release: 2x / 4x 1 Gbit/s and 2x 10 Gbit/s
- Future: 4x 10 Gbit/s and 1x 40 Gbit/s

- Flexible cost structure → pay as you grow

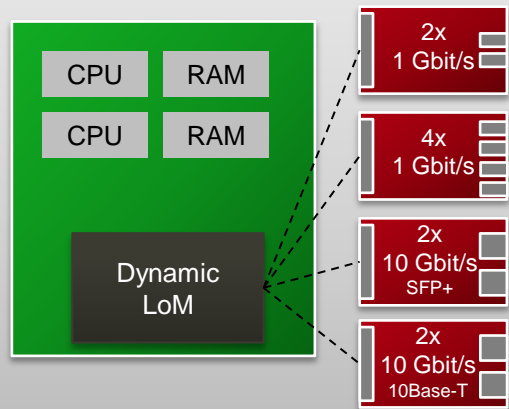
- Market-leading feature set

- Universal Multi-Channel with up to 8 physical functions per port
- Fibre Channel over Ethernet (FCoE), iSCSI, also with full-offload
- RDMA over Converged Ethernet (RoCE) best suited for data center tasks
- Single Root I/O Virtualization (SR-IOV) and support for NVGRE and VXLAN leave precious resources free in virtualized environments

Systemboard with typical LoM



Systemboard with DynamicLoM technology



Cool-safe® Advanced Thermal Design: Extended



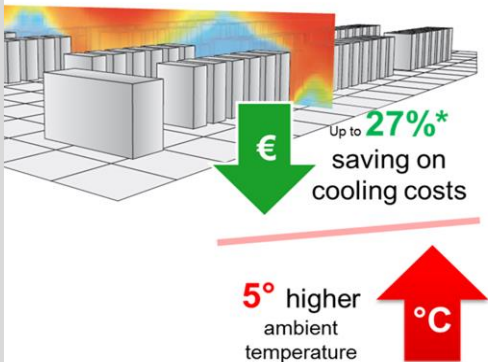
What is it?



Enables to operate servers in an **extended ambient temperature**

- Extended temperature range of 5 – 40 °C
- Released for many PRIMERGY RX & CX servers, ETERNUS storage, network infrastructure
- Very few limitations (e.g. choice of CPU, no tape support)
- No restriction on operation time

Benefits



Cool-safe® Advanced Thermal Design helps to **save cooling costs** and opens new possibilities

- Up to 27% saving on energy costs for cooling
- Reduced infrastructure costs for new data centers
- 'Chiller-less' data center
- For SMEs: Operation in non-air conditioned storage rooms

FUJITSU Integrated System PRIMEFLEX Cluster-in-a-box



Introduction – Why upgrade?

Today Windows Server 2003 has 57% market share, but...

- You are using 11-years-old technology
- Windows Server 2003 and 2003 R2 are out of Mainstream Support since July 2010, only fee-based extended support available until July 2015
- An older version of an Operating system is not that secure like a new one, is more difficult to manage and maintenance can be really expensive
- No patches and security updates – don't risk losing valuable data of your business



Upgrade now!

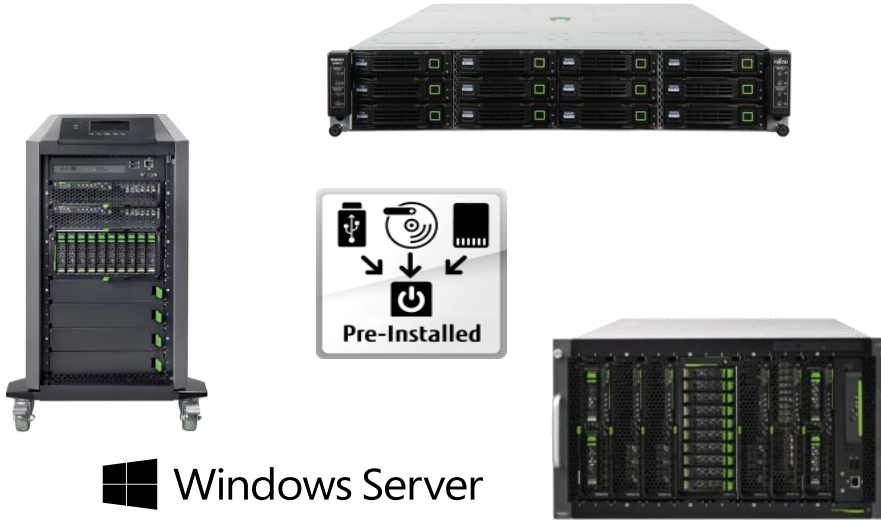


Windows Server 2003 vs. Windows Server 2012 R2*

Features	Windows Server 2003	Windows Server 2012 R2
Hyper V-Replica	✗	✓
Live Migration	✗	✓
Server Manager	✗	✓
Simplified Direct Access	✗	✓
End-Extended Device Support	✗	✓
End-Simplified VDI Configuration and Management	✗	✓
Network Virtualization	✗	✓
PowerShell Templates	✗	✓
BranchCache	✗	✓
De-Duplication	✗	✓
Storage Live Migration	✗	✓
Windows NIC Teaming	✗	✓

* Source: Microsoft; for a complete comparison please follow the [link](#)

The solution: PRIMEFLEX Cluster-in-a-box



 Windows Server



High available solution based on FUJITSU Server PRIMERGY and Microsoft Windows Server

One box as your solution

- Continuous availability at affordable costs to protect important data and business services
- Automatic restart of failed services in a couple of minutes instead of hours and days of manual work
- All-in-one: pre-configured and pre-installed cluster for demanding IT requirements
- Everything redundant using well synchronized components
- Covering either physical or virtualized IT environments

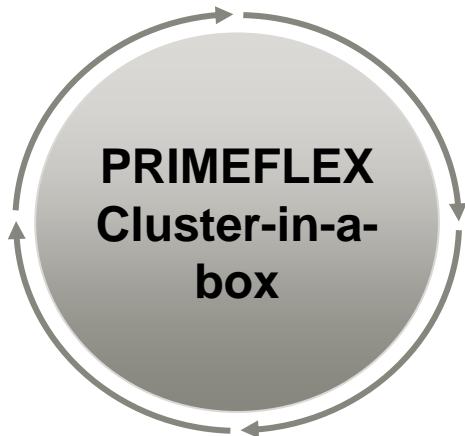
PRIMEFLEX Cluster-in-a-box

What it provides

- Integrated availability mechanisms with failover clustering and redundant hardware components
- Single order code (SKU) or simplified configuring
- Pre-configured, pre-installed configuration
- Pre-tested configuration
- Optional server virtualization with Microsoft Hyper-V

Your benefits

- Business continuity
- Easy buying
- Ready-to-work a few minutes after receipt
- No implementation risk
- Ability to leverage the benefits of virtualization

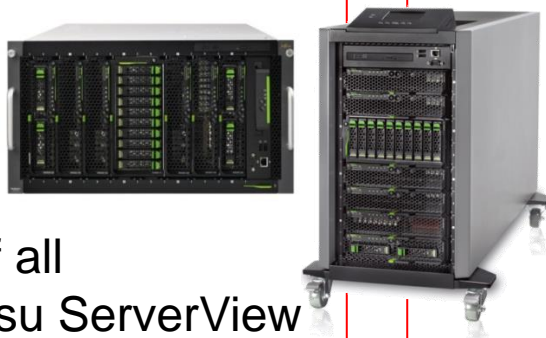


Based on PRIMERGY BX400



What it provides

- Smart enclosure equipped with all necessary components of a datacenter: server, storage and network
- Fully-featured blade system
- Entire management of all components with Fujitsu ServerView
- Purely based on industry standards



Your benefits

- All components are optimized to each other
 - Up to 70% less space than traditional servers
 - Reduced complexity and costs for cabling and deployment of network connections
- Easy scalability of server and storage resources to protect your investments
- Easy management of your IT



Based on PRIMERGY CX420

What it provides

- One enclosure for two servers with shared power and cooling
- Shared storage with up to 12 x 3.5" hot plug SAS drives
- No sharing of fabrics, I/O or management components
- Purely based on industry standards



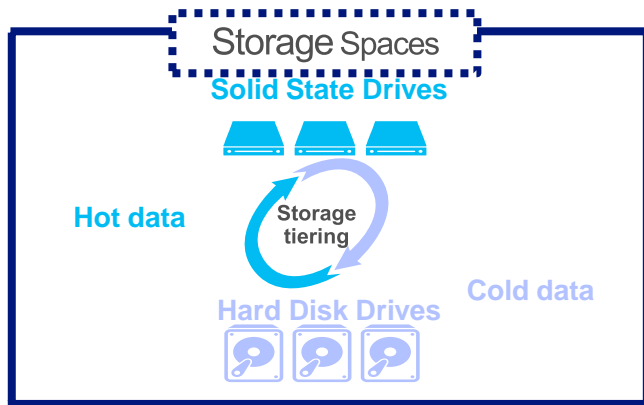
Your benefits

- Up to 50% less space than traditional servers, all components are optimized to each other
- Easy scalability of storage resources
- Lowered complexity vs. blade servers
- Seamless integration



What it provides

■ Hyper-V Network Virtualization

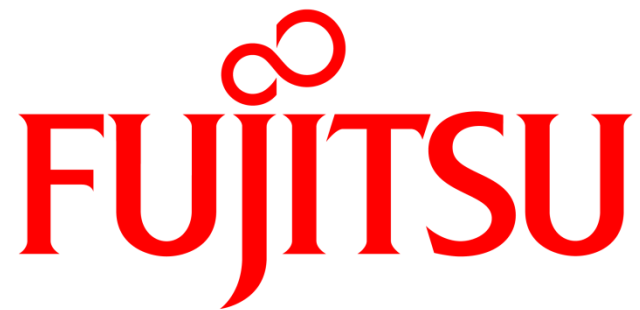


Your benefits

- Data security & compliance, move VMs without reconfiguration
- Cost effective and reliable usage of storage
 - Use solid-state drives (SSD) and hard-disk drives (HDD) in parallel
 - Option to use SSDs as I/O cache for every data access
 - Use SSD and HDD in combination as tiered storage space incl. automated storage tiering



Windows Server



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