

PRIMERGY Tower Servers
PRIMERGY Blade Servers
PRIMERGY Rack Servers
PRIMERGY Storage Subsystems

In the Lead With More Reliability

PRIMERGY Servers



We make sure

FUJITSU COMPUTERS
SIEMENS



The Perfect Match of Proven Technology and Innovation

Without reliable information technology, no enterprise can perform well. Servers that combine maximum reliability, availability and security, with a good price-performance ratio, are in high demand.

Purchasing servers is no longer just a matter of selecting the right processor clock speed. In times of tight budgets, optimal price-performance is a top priority. Systems must be reliable and scalable, in addition to supporting flexible IT infrastructures. At the same time, however, they should also offer a very high degree of standardization.

PRIMERGY® servers from Fujitsu Siemens Computers live up to these expectations. They are all based on Intel® architectures and offer considerable bandwidth for almost any application.

In addition, the continuous development of the servers and integration of the latest technologies also ensure high investment protection. New concepts, such as blade servers, satisfy even the highest customer demands. These servers offer maximum performance in a minimum amount of space, which significantly reduces rent costs and results in a more flexible layout for data centers, particularly for companies with extensive IT equipment. PRIMERGY servers are thus sustainable platforms for the future.

We make sure

As the leading European IT company, we carry a very special responsibility. The quality, reliability and endurance of our IT products and services is the key to our customers' productivity and success. With a portfolio of exceptional depth, our offering extends from handhelds through desktops to enterprise-class infrastructure solutions. We have set our strategic focus on next-generation Mobility and Business Critical Computing products, services and solutions to meet the evolving needs of our information society.

High-Performance Server Family for all Requirements



PRIMERGY servers offer all the advantages of Intel standards and contribute to lower IT costs, thanks to their outstanding price-performance ratio.

When building IT infrastructures, the following three key questions usually arise:

- How can sufficient computing power be guaranteed to manage peak loads?
- How can 24x7 availability be achieved to meet the demands of business processes?
- What is the most efficient way of managing the infrastructure?

The PRIMERGY product family extends from single-processor systems to 16-way servers, thereby offering the appropriate computing power for any application area. Our systems have set numerous performance benchmark records. Thus, PRIMERGY servers provide convincing answers to all of the above questions, and at the same time achieve two important goals: the reduction of IT costs thanks to an excellent price-performance ratio, and lower-cost operations due to highly efficient server management.

PRIMERGY servers are based on latest Intel Pentium®, Xeon™ and Itanium®2 processor technologies. These processor technologies are highly reliable, easily customized to meet individual requirements, and ensure continuous system availability. In addition, they offer broad performance bandwidths since processor resources and their corresponding applications are used more efficiently. This guarantees efficient and reliable server operations with continuous availability.

Certified Quality for Outstanding Reliability

Quality is essential to ensure reliability. Therefore, our labs test and certify PRIMERGY servers in accordance with strict and standardized procedures.

Servers are only as robust as their individual components. For that reason, we rely on detailed testing and inspection procedures in developing and selecting hardware components. Fujitsu Siemens Computers has established its own worldwide network of labs and competence centers that can perform these tests on a project basis as needed.

The same applies to the implementation of operating systems and applications designed by SAP, Oracle, Microsoft, Red Hat, SUSE Linux and other software manufacturers. Our certification processes ensure that software configurations of any scale run optimally on PRIMERGY servers. We qualify and certify our PRIMERGY servers for corresponding cluster products and for almost all standard operating systems.

If an enterprise wants to provide software via the Internet, to offer terminal services, or to integrate many business partners, a large number of systems is required. Such server farms may comprise hundreds of servers. Thus our labs also test the scalability of complete configurations so that we can deliver the best infrastructure for nearly any kind of application.

We have established joint service centers with individual manufacturers to ensure comprehensive customer support.



TRIOLE—the strategy for optimizing your IT
TRIOLE is the first step along the road to a completely Dynamic Data Center. It is based on the idea of pooling hardware resources, such as servers and storage systems, and using them as needed. This linking of availability with requirements proceeds according to predefined rules. This is made possible by the use of the most advanced virtualization, automation and integration technologies, which raise the efficiency, adaptability and reliability of the IT.

> www.fujitsu-siemens.com/triole

Around-the-Clock Availability for Business Processes

PRIMERGY servers prevent possible failures from the outset. IT infrastructures therefore remain continuously available.

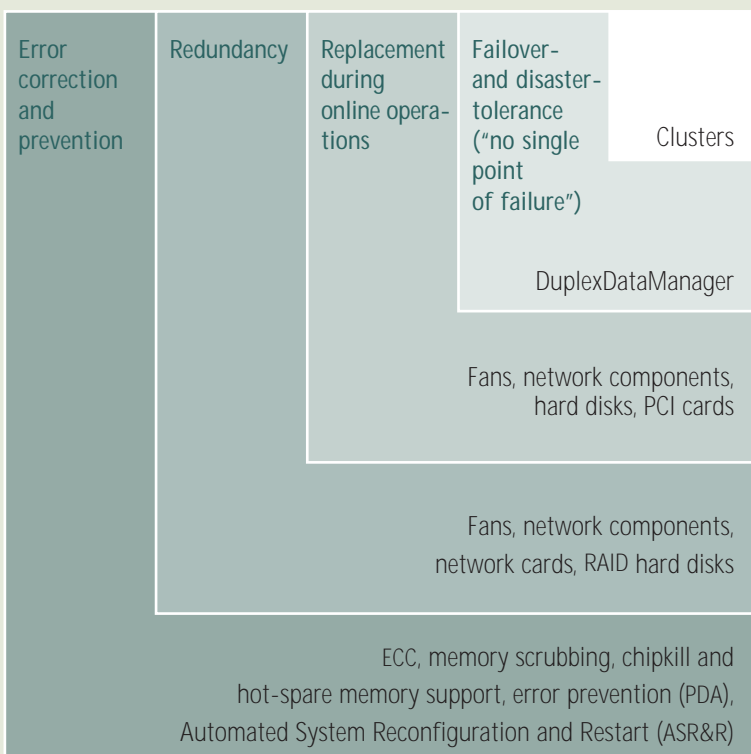
Enterprises must be able to place absolute trust in their IT systems. Fujitsu Siemens Computers has therefore designed its PRIMERGY servers to provide maximum reliability. In the unlikely event that an unexpected failure occurs, however, security functions quickly detect and correct errors and help prevent them from spreading.

A diagnostic function, for example, notifies the system administrator of any pending problems. Error Correction Code (ECC), the memory scrubbing function and the chipkill controller protect primary and cache memory. In addition, the hot-spare memory function and the PRIMERGY DuplexDataManager ensure that memory banks and disk subsystems are backed up or can be replaced online in the event of a malfunction. This also applies to defective components, such as hard disks, fans, network modules and even PCI controllers.

Mission-critical elements are configured redundantly, so the back-up component can be activated in the event of a failure. Intelligent RAID (Redundant Array of Inexpensive Disks) functions ensure that data within a hard disk configuration remains available even if a hard disk fails.

PRIMERGY servers can also be combined to form high-availability configurations to guarantee uninterrupted operations.

Components for permanent availability



More Efficiency Through Intelligent Server Management

PRIMERGY servers are easy to manage. This reduces operating costs and the IT department workload. Employees then have the free time required to work on new concepts and develop IT environments.

The PRIMERGY ServerView® Suite is the innovative solution for comprehensive server management with coordinated tools that support easy maintenance and administration.

Deployment with ServerStart® detects, installs and configures new hardware components automatically, be it in single instances or in groups. RemoteDeploy provides fast mass installation for server farms. This reduces installation work and saves time and money. Servers become virtual and continuously available resources.

Control is provided by ServerView®. This tool detects errors early and thereby ensures the operational readiness of any IT infrastructure. Customized warning management promptly notifies support staff in the event of a malfunction. With the assistance of Asset Management, upgrades and new installations are easily detected, archived and analyzed. Integration in enterprise-wide management solutions, such as Unicenter from Computer Associates, is an easy and convenient process.



LocalView® displays important system messages directly on the server. PRIMERGY rack servers, installed in 19-inch racks, are equipped with lights-on-locator LEDs on the front and back panels. Displays located close to electronic component groups indicate any faulty components.

RemoteView® makes maintenance effective: software and hardware allow for the remote monitoring and maintenance of servers, even if they are not in operation. This feature can often help prevent the need for costly on-site technical support.

Higher IT Efficiency Throughout the Lifecycle

As a full-scale provider, we offer a complete product portfolio—from entry servers for medium-sized enterprises to high-availability systems for data centers. As tower or rack systems, they serve as platforms for almost any application area.

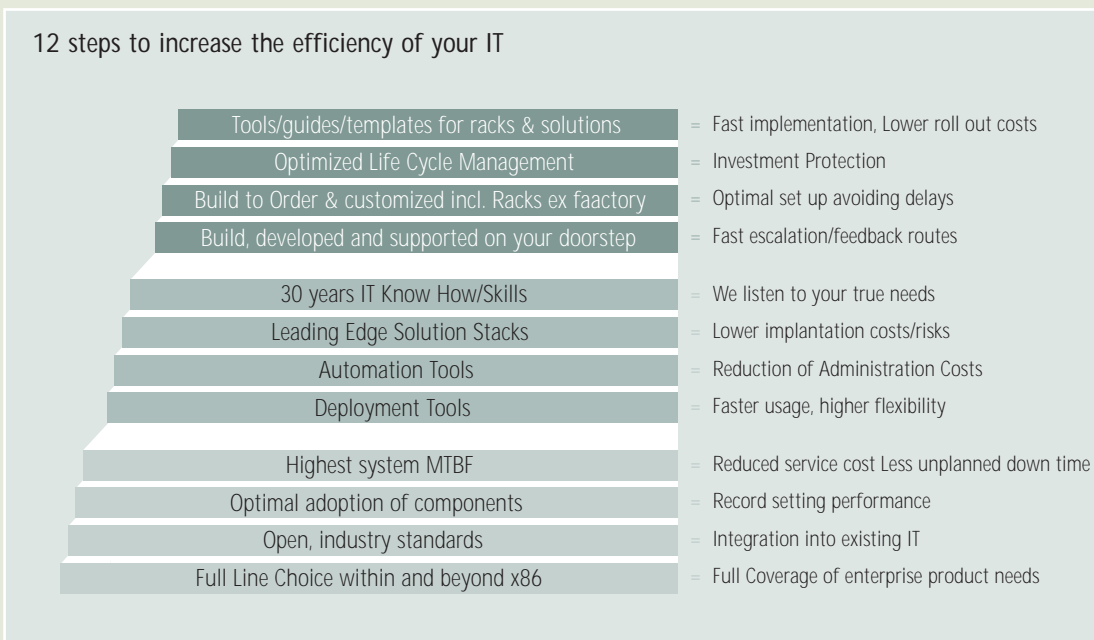
The server family is also supplemented by storage concepts so that customers can select end-to-end solutions from a single source. PRIMERGY high-availability solutions enable disaster-tolerant configurations without a single point of failure.

In addition, almost all PRIMERGY servers have two-way interleaved Double Data Rate (DDR) SDRAM for high data throughput to improve system speed.

Since configurations for various application scenarios are tested and documented on a regular basis, customers can put complete infrastructures into operation much quicker.

PRIMERGY servers are qualified and certified for almost all applications and current operating systems. Our server management solutions also allow for comprehensive control and easy maintenance of all PRIMERGY servers.

The continuous development of the servers and integration of the latest technologies also ensure high investment protection. New concepts, such as blade servers, also meet the exacting demands of our customers and demonstrate that PRIMERGY servers are a sustainable platform for the future.



Blade Servers Offer Scalable Computing Power in a Small Space

PRIMERGY blade servers improve rack architectures. They offer a high level of computing power in a small space, with low energy and administration costs. This increases the efficiency of a data center.

Fujitsu Siemens Computers has launched a new, modular generation of Intel-based PRIMERGY servers with the Dual Xeon or Quad Xeon MP blade server systems. The computing performance is completely separated from the storage system and can be enhanced with hot-swap cards.

In addition to the BX300 with its single Pentium M processor, the PRIMERGY blade server family also includes the BX600, which is designed for use as a database and application server in mid-tier architectures. Fujitsu Siemens Computers offers a new, modular generation of Intel-based PRIMERGY servers with the Dual Xeon and Quad Xeon MP blade server systems. With up to five Quad blades and up to ten Dual blades, the BX600 is one of the most compact blade servers on the market. In addition, the combination of Quad and Dual server blades within the same frame offers a very high level of flexibility in all data center environments.

The new PRIMERGY blade servers are flexible and scalable. Efficient remote management as well as remote administration concepts also reduce the scope of installation and service. For example, optional deployment software can enable automated multi-server installation.

As cost-effective and compact server platforms, PRIMERGY blade servers are especially designed for the requirements of data centers and service providers. They are highly resilient and thus ideally suited for network infrastructures like Web or caching servers, as well as for communications, front-end or mid-tier applications.

Together with its partners, Fujitsu Siemens Computers offers complete blade server solutions, for applications such as load balancing, workload and power management.



Flexible Solutions for Any Business Requirements



Whether the objective is to provide data or applications on individual servers, or to equip an entire data center, the PRIMERGY server family from Fujitsu Siemens Computers offers the right system to match various requirements.

Stand-alone operation

PRIMERGY tower servers are all-around platforms designed for stand-alone operation. They are available in four variants, ranging from single-processor systems with four hard disks to four-way systems with up to 12 internal hard disks. Integrated remote maintenance helps reduce costs because full-time, on-site IT staff is not required.

Implementation in data centers

PRIMERGY rack or blade servers are multilevel, modular server architectures developed for utilization in data centers. They feature high computing power, flexibility and reliability. The easy

addition of more processors, operating systems, controllers or servers enables the architecture to be scaled to individual needs. For example, setting up a server farm for Web and terminal services would require relatively little space in a 19-inch rack. When space is a real issue, the flat server blades take up less room than rack servers. Up to 20 server blades with single or dual-processors can share a common infrastructure and only occupy three height units in the rack. With the new generation of PRIMECENTER 19-inch racks, many servers can be installed and cabled quickly, efficiently and in a maintenance-friendly manner. Additional network components can be housed next to the servers.

The new PRIMECENTER LC (Liquid Cooling) is an encapsulated system with its own liquid cooling circuit—Cool-safe™ for servers—and doesn't put additional heat into your data center. It enables the population of servers at dusty or damp locations and it reduces the ambient noise level. When existing servers and storage systems are consolidated in a 46 U PRIMECENTER LC rack* it helps free up to 20 kilowatts of cooling capacity of your data center.

Perfect storage solutions

Fujitsu Siemens Computers offers a series of storage subsystems for the PRIMERGY product family that incorporate up to 14 hard disks. If even more storage capacity is needed, or various types of server platforms are added to the configuration, Fujitsu Siemens Computers offers the FibreCAT and Symmetrix systems from EMC. They are tested and certified for operation with PRIMERGY servers.

*40 U mounting space available

Tower Servers



> More information: www.fujitsu-siemens.com/primergy

Rack Servers



Standard
Mono

Subentry
Mono/Dual

Entry
2-way

Midrange
4-way

High-End
4-way

High-End
8/16-way

Storage Subsystems



Blade Servers

BX300

BX600

Due to high standardization, Intel-based PRIMERGY servers guarantee an excellent price-performance ratio. Thanks to its wide range, the product family offers the right system to match any requirement.

The Benefits of PRIMERGY Server Products at a Glance:

- Reliability for business-critical processes
- High investment protection thanks to a scalable architecture, large performance reserves and superior application compatibility
- Comprehensive qualification and certification of components, hardware, and operating systems
- A complete portfolio ranging from mono-processor servers to 16-way systems
- Top performance and high availability
- Complete solutions including storage sub-systems and 19-inch rack technologies
- Best-in-class servers and IT management for enhanced operational readiness with high availability

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© Fujitsu Siemens Computers 2005
Produced by: BurdaYukom Publishing
Printed in Germany.
Order no. 10042-3-0305-EN

Publisher:

Fujitsu Siemens Computers
Domagkstr. 28
D-80807 Munich, Germany

Contact:

www.fujitsu-siemens.com/contact

Credits:

Das Fotoarchiv; LOOK; Corbis

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