



Sun Fire™ E6900 Server

Enterprise powerhouse with mission-critical RAS



Highlights

- Delivers more than 5x the performance of UltraSPARC III and more than twice that of UltraSPARC IV servers—in the same footprint
- Scales up to 24 CPUs with 48 threads and up to 384 GB of memory for heavily threaded commercial applications
- Unique Solaris Application Guarantee enables seamless migration to new processor technologies
- Mix and match UltraSPARC III, IV, and IV+ CPUs in the same system for in-chassis upgrades with no forced migrations
- Uniboard technology common across high-end servers enables quick provisioning of resources
- Delivers more than 30% faster I/O performance using PCI-X technology
- Dynamic Reconfiguration saves customers significant time and money in planned downtime
- Dynamic System Domains and Solaris Containers can increase utilization up to 80%
- Capacity on Demand lets you add and pay for resources as needed
- Available as a Sun™ System Pack, enabling customers to maximize their IT value while lowering total cost of acquisition and ownership

> Powered by up to 24 high-performance UltraSPARC® IV+ processors, the Sun Fire™ E6900 server delivers maximum scalability and productivity to address demanding workloads in the datacenter. It's an ideal solution for business processing, databases, data warehouses, IT infrastructure, application serving, compute-intensive scientific engineering, and more.

The Sun Fire E6900 server is a member of the only high-end server family in the industry to allow sharing of common Uniboards, while Dynamic Reconfiguration enables you to provision extra boards to address peak demands across multiple servers. You can run mixed generations of UltraSPARC III, IV, and IV+ processors seamlessly—even in the same server—which prevents costly migrations, and its five-year lifecycle helps lower total cost of ownership significantly over competitors' offerings. Plus, with Capacity on Demand 2.0, you pay for only the CPU capacity you use.

The Sun Fire E6900 server is designed to deliver on mission-critical SLAs through full hardware redundancy, Predictive Self-Healing, and the Solaris™ Security Toolkit. With multiple fault-isolated Dynamic System Domains and secure Solaris Containers, the Sun Fire E6900 server can increase server utilization up to 80 percent, for unprecedented consolidation capabilities.

The server's balanced system architecture, combined with PCI-X technology and twice the memory capacity of previous systems, delivers real performance and throughput gains. The leading Solaris 10 Operating System's Dynamic Tracing capabilities can boost application performance even further—up to 30 times in some cases.

Preinstalled Solaris Operating System and Sun Java™ Enterprise System software make it easy to deploy the Sun Fire E6900 server, and the Solaris Application Guarantee ensures that the applications you rely on will run unmodified on the system.

What's more, the Sun Fire E6900 server is available as a Sun System Pack, which delivers significant advantages over traditional warranty plans by providing enhanced service coverage, automatic OS updates, training credits, and much more.

Sun Fire E6900 Server Specifications

Processor

Processor	Up to 24 UltraSPARC IV+ and/or UltraSPARC IV processors
Architecture	Superscalar SPARC® V9, ECC protected
Cache per UltraSPARC IV+ processor	Level 1: 64 KB data and 64 KB instruction per pipeline Level 2: 2 MB on-chip Level 3: 32 MB external

System

Processor/memory boards	Up to six Uniboard CPU/memory boards, four processors each, up to 64 GB per board
Main memory	Up to 384 GB per domain
I/O	32 PCI-X slots (24 100 MHz and eight 33 MHz)
System interconnect	9.6 GB/s Sun Fireplane interconnect; system bus with redundant data, address, and response crossbar interconnect
System bandwidth	9.6 GB/s sustained bandwidth, 67.2 GB/s aggregate bandwidth
System controller	Two per system

Storage

Boot device	Sun StorageTek™ D240 media tray, Sun StorageTek S1 array, and the Sun StorageTek 3210 array may be used as boot, data-storage, data-load, data-interchange, and data backup devices
External compatibility	Direct attach to Sun StorageTek tape libraries and disk arrays, including Sun StorageTek 3000, 6000, and 9000 families

Resource Management

Standard	Dynamic System Domains, Solaris Resource Manager, Solaris Bandwidth Manager
----------	---

Software

Operating system	UltraSPARC IV+: Solaris 10 (beginning with 3/05 HW 1) Solaris 9 (beginning with 9/05) UltraSPARC IV: Solaris 10 (beginning with 3/05) Solaris 9 (beginning with 4/04) Solaris 8 (beginning with 2/04)
Enterprise software	Sun Java Enterprise System
Languages	C, C++, Pascal, FORTRAN, Java
Networking	ONC™/NFS™, TCP/IP, SunLink™, OSI, MHS, X.25, DCE, Netware

System monitoring	Sun Management Center
System and network management	Solaris Web Start, Solstice™ AdminSuite™, Solstice Domain Manager™, Solstice Enterprise Manager™, Solstice DiskSuite™, Solstice Backup™, VERITAS File System, VERITAS Volume Manager, Sun Cluster™, Sun HPC ClusterTools™

Environmental

AC power	200–240 VAC (47–63 Hz), 34 Amp
Power cords	Four
Operating	5°C to 35°C (41°F to 95°F), 20% to 80% relative humidity, noncondensing
Nonoperating	-20°C to 60°C (-4°F to 140°F) 5% to 93% relative humidity, noncondensing
Altitude	Up to 3048 m (10,000 ft.); up to 2134 m (7000 ft.) for 1.8 GHz UltraSPARC IV+

Regulations (meets or exceeds the following requirements)

Safety	UL 60950, third-edition USA CAN/CSA-C22.2 No. 60950-00, Canada EN 60950, third-edition, Europe S Mark, Argentina Gost-R, Russia CB Scheme with all national deviations
Emissions	EN55022 Class A, Europe EN6100-3-2/3-3, Europe FCC Class A, USA ICES-003 Class A, Canada VCCI Class A, Japan CNS-13438, (BSMI-Taiwan) AS/NZ 3548 (C-tick), Australia Gost-R, Russia
Immunity	All European requirements EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, and EN300-386
Regulatory markings	CE, FCC, ICES-003, C-tick, VCCI, Gost-R, BSMI, UL/cUL/S Mark, TUV-GS, MIC, RoHS

Key RAS Features

Full hardware redundancy, fault-isolated Dynamic System Domains, Dynamic Reconfiguration, Auto Diagnosis and Recovery, proactive self-diagnostics, online upgrades, concurrent maintenance, end-to-end data integrity including ECC, redundant network connections, redundant storage connections, kernel hot-patching, hardened operating system kernel, live operating system upgrades, journaling file system, hardened I/O drivers, CPU off-lining, memory page retirement, after-kernel hot-patching, and cluster support.

For More Information.

Learn how the Sun Fire E6900 server combines mission-critical reliability with exceptional investment protection and partitioning technologies. Contact your Sun Representative at 1-800-555-9SUN, or visit sun.com/servers/midrange/sunfire_e6900/

Sun Upgrade Advantage Program

The Sun Upgrade Advantage Program (UAP) offers upfront discounts for trade-in of qualified Sun and competitive servers toward the purchase of replacement Sun Fire servers. Whether upgrading one system or consolidating many systems to one, Sun UAP offers the flexibility to trade in and receive credit toward the new Sun system purchased. Upgrades are also available for Sun Fire server boards and I/O assemblies. For more information visit sun.com/ibb/enterprise.

Dimensions and Weight

H:	190.5 cm (75.0 in.)
W:	61.0 cm (24.0 in.)
D:	134.6 cm (53.0 in.)
Weight	544.3 kg (1200.0 lb.)
Power cord	4.6 m (15.0 ft.)

Remote Services

Sun Net Connect

Services

From design and implementation to support and smart sourcing, Sun provides a broad portfolio of IT infrastructure services — all built to help you achieve your objectives. Leverage Sun's relentless innovation and depth of expertise to help you architect and deploy a reliable, high-performance Sun Fire E6900 solution that gives you the edge. If you opt out of a Sun System Pack at point of sale, once in production, a SunSpectrumSM Support Upgrade provides integrated hardware and OS coverage including Sun technical support, expedited hardware service, SunVIPSM interop support, and premium online resources including on-demand health checks and OS update services.