



## Sun Fire™ E4900 Server

High-performance, high-RAS server for mission-critical environments



### 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 12 CPUs with 24 threads and up to 192 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
- Over 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



The UltraSPARC® IV+ processor-based Sun Fire™ E4900 server delivers all the computational headroom, RAS, security, and manageability features you need for heavily threaded commercial workloads and applications, including business processing, database, IT infrastructure, and compute-intensive scientific engineering.

The Sun Fire E4900 server is part of the the only high-end server family in the industry to share common CPU/memory Uniboards, enabling you to provision extra boards across multiple servers to address peak demands. New UltraSPARC IV+ processors added to existing systems run at full speed side by side with UltraSPARC III and IV processors. Plus, you can add faster CPUs to running systems utilizing Dynamic Reconfiguration technology, reducing downtime. Taken together, these technologies allow your organization to leverage existing investments, and they'll provide exceptional value well into the future.

The system's advanced RAS capabilities, such as full hardware redundancy, Predictive Self-Healing, and the Solaris Security Toolkit, enable you to cut costs and deliver better service-level agreements. Fault-isolated Dynamic System Domains and secure Solaris Containers allow you to consolidate multiple servers and

mission-critical applications onto a single Sun Fire E4900 server, increasing server utilization up to 80 percent. The system also leverages leading Solaris 10 OS capabilities such as Dynamic Tracing to dramatically optimize application performance—up to 30 times in some cases.

Preinstalled Solaris Operating System and Java™ Enterprise System software help your organization quickly and easily deploy the Sun Fire E4900 server. And with the Solaris Application Guarantee, you know that the Solaris applications you already rely on will run on the Sun Fire E4900 server—without modification.

What's more, the Sun Fire E4900 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 E4900 Server Specifications

### Processor

Processor	Up to 12 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 three Uniboard CPU/memory boards, four processors each, up to 64 GB per board
Main memory	Up to 192 GB per domain
I/O	6 PCI-X slots (12 100 MHz and four 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, 33.6 GB/s aggregate bandwidth
System controller	Two per system
Boot device	Sun StorageTek™ D240 media tray, Sun StorageTek S1 array, and Sun StorageTek 3210 array may be used as boot, data-storage, data-load, data-interchange, and data backup devices

### Storage

External compatibility	Direct attach to Sun StorageTek tape libraries and disk arrays, including Sun StorageTek 3000, 6000, and 9000 families
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### Resource Management

Standard	Dynamic System Domains, Solaris Resource Manager, Solaris Bandwidth Manager
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### 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), 16 Amp
Power cords	Three
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 E4900 server combines seamless investment protection with exceptional performance and RAS features. Contact your Sun Representative at 1-800-555-9SUN, or visit

[sun.com/servers/midrange/sunfire\\_e4900/](http://sun.com/servers/midrange/sunfire_e4900/)

### 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](http://sun.com/ibb/enterprise).

### Dimensions and Weight

H:	76.2 cm (30.0 in.)
W:	44.6 cm (17.6 in.)
D:	72.4 cm (28.5 in.)
Weight	131.1 kg (289.0 lb.)
Power cord	4.6 m (15.0 ft.)

### Packaging

Deskside enclosure	Equipped with rollers
Rackmount	Fits into a standard 19-inch enclosure rack. Also equipped with mounting rails for the Sun Fire cabinet

### 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 E4900 solution that gives you the edge. If you opt out of a Sun System Pack at point of sale, once in production, a SunSpectrum<sup>SM</sup> Support Upgrade provides integrated hardware and OS coverage including Sun technical support, expedited hardware service, SunVIP<sup>SM</sup> interop support, and premium online resources including on-demand health checks and OS update services.