

Sun Fire™ V890 Server



Extensive Compute, I/O and Storage Capacity Delivered in a Highly Integrated Package for Fast Deployment and Low Total Footprint

Key feature highlights

- 64-bit Chip Multithreading (CMT) UltraSPARC® IV technology, with over 2x the throughput of previous generations
- Scales up to 8 x 1.35-GHz UltraSPARC IV CPUs with 16 MB L2 cache per processor
- Up to 16 simultaneous compute threads with up to 64 GB memory
- Solaris™ 8, Solaris 9, and Solaris 10 Operating System
- Robust capabilities in the Solaris 10 OS such as Predictive Self-Healing to increase reliability, Solaris Containers for increased utilization, and dTrace to optimize application performance
- Industry leading price/performance and benchmarks
- 9.6-GB/second Sun™ Fireplane interconnect
- N+1 hot-swap power supplies/hot-pluggable disks
- Sun Systems Controller for remote system administration
- Automatic System Recovery to maximize uptime
- Integrated Fibre Channel disk subsystem, multipathing-ready, supporting up to 12 FC-AL disks
- 9 PCI slots help ensure a highly scalable, well-balanced system
- 17-RU tower/deskside, rackmountable
- Three-year warranty as standard

Where Enterprise Computing Meets Entry-Level Pricing

More users and services are dramatically increasing the demands placed on today's IT infrastructures and systems. Sun meets this challenge with the Sun Fire™ V890 server. The Sun Fire V890 server features the new UltraSPARC IV 64-bit processor with Chip Multithreading (CMT) processor technology, as well as Solaris Operating System, the industry's most robust, secure, and popular UNIX® operating system.

With up to eight UltraSPARC IV CMT processors executing 16 concurrent threads, and up to 64 GB of memory, the Sun Fire V890 server delivers over 2x the performance of the previous generation system in the same footprint for your most demanding departmental and enterprise applications. The Sun Fire V890 platform is an ideal system for an extensive range of applications, including Application Serving, Business Processing, Database, Collaboration, High-Performance Technical Computing (HPTC), and Application Development.

With a potential of nearly two terabytes of internal storage and standard networking support, the Sun Fire V890 server is designed to complement IT operations at prices below traditional data center servers. The 9.6-GB/sec. system bus, integrated I/O adapters, and nine PCI slots help ensure a highly scalable, well-balanced system for Application Serving, I/O-intensive, and compute-intensive workloads. Extensive RAS ensures application availability.

What's more, Sun's commitment to binary compatibility means that your existing Solaris applications continue to run with no disruption to your existing software model. The Sun Fire V890 server combines the latest CMT technology with unparalleled levels of investment protection in a powerful, affordable platform.



Sun Fire V890 Specifications

Processor Options

Processor	Up to eight 1.2GHz/1.35GHz UltraSPARC IV
Architecture	Superscalar SPARC® V9
Processor modules	One to four dual-processor/memory modules
Cache (L1)	64-KB data and 32-KB instruction per pipeline
Secondary (L2)	16 MB external (8 MB per pipeline)

Main memory

A system maximum of 64 GB when configured with eight processors

Standard/Integrated Interfaces

Network	1-Gb Ethernet and 10/100Base-T Ethernet
I/O	FC-AL disk controller
Serial	Two EIA-232D or EIA-423 serial ports (DB25) via splitter cable
Expansion capability	Nine full-sized, hot-plug PCI slots compliant with PCI specification Revision 2.1 (2 @ 66 MHz, 64 bits wide, 3.3 volts; 7 @ 33 MHz, 64 bits wide, 5 volts)
USB	Two (compliant with USB Revision 1.0)

Mass Storage and Media

Internal tape	Optional 12-GB DDS-3 or 20-GB DDS-4 SCSI drive(s) via X6758A adapter and X912A cable options
Internal disk	Up to 12 3.5" x 1.0" 10K-RPM FC-AL disks (73-GB or 146-GB capacity) providing a maximum total capacity of 1.75 TB
External disk	Sun StorEdge™ A1000 Sun StorEdge A5100/A5200 Sun StorEdge D1000 Sun StorEdge D2 Sun StorEdge Multipacks (SCSI and FC) Sun StorEdge S1 Sun StorEdge T3 (for Enterprise and Workgroup) Sun StorEdge Unipack Sun StorEdge 3120 Sun StorEdge 3310 SCSI RAID/ JBOD Sun StorEdge 3510 FC RAID/ JBOD Sun StorEdge 3910/3960 Sun StorEdge 6910/6920/6960 series Sun StorEdge 9910/9960/9970/9980

External tape	Sun StorEdge DDS-4 unipack tape drive Sun StorEdge DAT 72 desktop tape drive Sun StorEdge LTO-2 desktop tape drive Sun StorEdge SDLT 320 desktop tape drive Sun StorEdge L7 tape autoloader Sun StorEdge L8 tape autoloader Sun StorEdge L20 tape library Sun StorEdge L25 tape library Sun StorEdge L40 tape library Sun StorEdge L60 tape library Sun StorEdge L100 tape library Sun StorEdge L180 tape library Sun StorEdge L700 tape library Sun StorEdge L5500 tape library Sun StorEdge L6000 tape library
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Software

Operating system	Solaris 8 02/04, Solaris 9 04/04, and Solaris 10
Enterprise infrastructure software	Sun Java™ Enterprise System

Power Supplies

	Two required, three for redundancy, each with independent power cord
Maximum AC input	3200 W per system
Maximum DC output	2509 W per system

Environment

AC power	200–240 VAC, 47–63 Hz, 2078 VA
Operating temperature	5° C to 35° C (41° F to 95° F), 20% to 80% relative humidity, noncondensing, 27° C max. wet bulb
Nonoperating temperature	-20° C to 60° C (-4° F to 140° F), 95% at 40° C relative humidity, noncondensing

Regulations (meets or exceeds the following requirements)

Safety	UL/CSA-60950-1, EN60950-1, IEC60950 CB Scheme with all country deviations, IEC825-1, 2, and CFR21 part 1040
Ergonomics	EK1-ITB-2000
RFI/EMC	EN55022/CISPR22 Class A, FCC CFR47 Part 15 Class A, EN61000-3-2, EN61000-3-3
Immunity	EN55024/CISPR24
Telecommunications	EN300-386
X-ray (for Monitors)	DHHS 21 Subchapter J; PTB German X-ray Decree

Regulatory Markings	CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, MIC, UL/CUL, TUV-GS, TUV/S-mark
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Key RAS Features

- Hot-pluggable disk drives and PCI cards
- N+1 power supply redundancy
- Hot-swappable power supplies
- Redundant, hot-swappable fan trays
- Environmental monitoring and fault protection
- Automatic System Recovery (ASR)
- Remote Lights Out Management capability
- Support for disk and network multipathing with automatic failover capability
- Dual-loop enabled FC-AL mass storage system
- Error correction and parity checking for improved data integrity

Upgrades

The Sun Upgrade Advantage Program (UAP) offers trade-in value for qualified Sun and competitive servers toward the purchase of replacement Sun Fire V890 server(s). 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 system components, including CPU/memory boards and I/O.

Dimensions and Weight

Height	714 mm (28.1 in.) with casters 700 mm (27.6 in.) without casters (rackmounting does not require the removal of casters)
Width	480 mm (18.9 in.)
Depth	836 mm (32.9 in.)
Weight	88.1 kg (194.0 lb.) (min.) 130.9 kg (288.0 lb.) (fully configured)

Warranty

Hardware support	3 years
Software install	90 days
Call response	8 hours
Delivery	Next business day, on-site

Get the details. See how the Sun Fire V890 server improves performance while reducing cost and complexity. Contact your Sun Representative at 1-800-555-9SUN, or visit sun.com/v890.

