

Sun Fire™ V890 Server



Delivering enterprise-class performance and scalability with relentless availability at an entry-level server price

Key feature highlights

- 64-bit Chip Multithreading (CMT) UltraSPARC® IV technology
- Scales up to 8 x 1.2-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
- 9.6-GB/second Sun™ Fireplane interconnect
- N+1 hot-swap power supplies/ hot-pluggable disks
- Sun™ Remote System Control for secure server management
- Automatic System Recovery to maximize uptime
- Integrated Fibre Channel disk subsystem, multipathing-ready, supporting up to 12 FC-AL disks
- Nine PCI slots help ensure a highly scalable, well-balanced system
- 17-RU tower/deskside, rackmountable
- Solaris 10 N1™ Grid Containers for robust software partitioning
- 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 extreme levels of throughput 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.

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

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| Processor | Up to eight 1.2-GHz 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

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| 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

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| 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 |
|---------------|--|

Software

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|---------------------------------------|---|
| Operating system | Solaris 8 02/04, Solaris 9 04/04, and Solaris 10 |
| Enterprise infrastructure software | Sun Java™ Enterprise System 2004Q2* |

Power Supplies

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| 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

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| 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)

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| 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 |

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| Regulatory Markings | CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, MIC, UL/CUL, TUV-GS, TUV/S-mark |
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Dimensions and Weight

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|--------|---|
| Height | 714 mm (28.1 in.) with casters 700 mm (27.6 in.) without casters (rack-mounting 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) |

Upgrades

Upgrades are available for SPARC server and Sun Enterprise™ systems. Contact your local Sun sales representative for details.

Warranty

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

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

* 90-day evaluation

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

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