Sun Fire™ V490 Server

Sun microsystems

> **Extreme optimization, utilization, reliability, and investment protection in the economies of a rack-optimized footprint.**

The Sun Fire™ V490 server, powered by the new UltraSPARC® IV+ processor and Solaris™ OS, offers faster performance in a low-cost, low-density footprint. This server delivers up to 5 times the performance of UltraSPARC III servers, and nearly double the performance of UltraSPARC IV servers in the same footprint without additional power/cooling requirements. As such, it provides greater value out of existing Sun Fire servers now, and assures long systems life by protecting IT investments over time. With up to four UltraSPARC IV+ Chip Multithreading (CMT) processors executing eight concurrent threads and up to 32 GB of memory in a dense, rack-optimized, 5-RU, 24-in.-deep enclosure, the Sun Fire V490 server delivers compute density with enterprise-class levels of throughput at a low-cost server price.

Because of Sun's industry-leading investment protection technologies, you can save costs over the life cycle of your hardware and applications. Sun's commitment to 100% application binary compatibility means that there is no disruption to your existing software infrastructure, as your Solaris applications just continue to run. Furthermore, for the first time in the industry, a 4-socket server supports mixed generations and speeds of UltraSPARC IV+ and UltraSPARC IV CPU/memory boards in the same system, allowing you to maintain existing investments while seamlessly upgrading your system with faster processors.

Leveraging advanced Solaris 10 OS capabilities such as Solaris Containers, the Sun Fire V490 server is an ideal platform to run multiple applications in an isolated and secure environment for projects such as enterprise messaging consolidation. The Sun Fire V490 server delivers significant productivity gains to address ever-demanding applications such as Application Serving, Business Processing, Database Services, IT Infrastructure, Application Development, Collaboration, and compute-intensive Scientific Engineering.

Key Feature Highlights

- Delivers up to 5 times the performance of UltraSPARC III servers and nearly double the performance of UltraSPARC IV servers in the same footprint.
- Scales up to 4 processors with 8 threads and up to 32GB memory in a 5U rack-optimized package.
- Unique Solaris OS application compatibility guarantee enables seamless migration to newer processor technologies.
- Mix and match UltraSPARC IV+ and IV processors in the same system for in-chassis upgrades to faster processors, preventing forced migrations.
- New RAS and security enhancements improve system uptime.
- Predictive Self-Healing for increased reliability and Sun Systems Controller for remote system administration.
- Dynamic Tracing (dTrace) allows further application performance optimization—up to 300% gains seen by customers.
- Ideal for consolidating applications using Solaris Containers technology.
- 6 PCI slots help ensure an expandable system.
- Standard three-year warranty.

Sun Fire V490 Server Specifications

Processor

Processor	Combine up to four 1.5GHz UltraSPARC IV+ and/or 1.35GHz UltraSPARC IV processors
Architecture	Superscalar SPARC® V9, ECC protected
Processor modules	One or two dual processor/memory modules
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

Main Memory

A system maximum of 32 GB when configured with four processors

Standard/Integrated Interfaces

Network	Two 10/100/1000 Mbps Ethernet
I/O	FC-AL disk controller
Serial	RJ45 serial port
Expansion capability	Six PCI slots compliant with PCI specification Revision 2.1 (2 @ 66 MHz, 64 bits wide, 3.3 volts; 4 @ 33 MHz, 64 bits wide, 5 volts)
USB	Two (compliant with USB Revision 1.0)

Mass Storage and Media

Host adapters	Internal IDE (supports DVD drive)
Internal disk	Up to 2 3.5" x 1.0" 10K-RPM FC-AL disks (146-GB capacity), providing a maximum total capacity of 292 GB
External disk	Sun StorEdge™ A5100/A5200 Sun StorEdge D240 Sun StorEdge S1 Sun StorEdge 3120 Sun StorEdge 3310 SCSI RAID/JBOD Sun StorEdge 3320 Sun StorEdge 3510 FC RAID/JBOD Sun StorEdge 3511 Sun StorEdge 6320 Sun StorEdge 6920 Sun StorEdge 9910/9960/9970/9980

External tape	Sun StorEdge DAT 72 desktop tape drive Sun StorEdge LT0-2 desktop tape drive Sun StorEdge SDLT 320 desktop tape drive Sun StorEdge L8 tape autoloader Sun StorEdge L25 tape library Sun StorEdge L100 tape library Sun StorEdge L180 tape library Sun StorEdge L700 tape library Sun StorEdge L8500 tape library

Software

Operating system (minimum version)	The minimum OS version for 1.5GHz UltraSPARC IV+ processors is Solaris 9 9/05 and Solaris 10 3/05 HW1
	The minimum OS version for 1.35GHz UltraSPARC IV processors is Solaris 8 2/04, Solaris 9 4/04, and Solaris 10 3/05
Enterprise infrastructure software	Sun Java™ Enterprise System

Power Supplies

Input per power supply/system of 1600 watts (mfg. rating)	
Maximum AC input	1847 W per power supply
Maximum DC output	1448 W per power supply

Environmental

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

Key RAS Features

- Hot-pluggable disk drives
- Redundant, hot-swappable power supplies
- Environmental monitoring and fault detection
- Automatic System Recovery (ASR) capabilities
- Remote Lights Out Management capability
- Dual-loop enabled FC-AL subsystem
- Support for disk and network multipathing with automatic failover capability
- 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 V490 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. For more information visit sun.com/ibb/uap/.

Dimensions and Weight

Height	222 mm (8.75 in.)
Width	446 mm (17.5 in.)
Depth	610 mm (24.0 in.)
Weight	35.8 kg (79 lb.) (minimum) 44 kg (97 lb.) (maximum)

Warranty

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

For More Information

Learn how the Sun Fire V490 server combines investment protection with extreme performance in a low-cost, compact footprint. Contact your Sun Representative at 1-800-555-9SUN, or visit sun.com/v490.