

# Sun Fire™ V490 Server

Extreme Optimization, Utilization,  
Reliability, and Investment Protection



## Highlights

- Delivers over 5x the performance of UltraSPARC® III servers and over double the performance of UltraSPARC™ IV servers — in the same footprint
- Scales up to four processors with eight threads and up to 64 GB of 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
- Ideal for consolidating applications using Solaris Containers technology
- Six PCI slots help ensure an expandable system
- Available as a Sun™ System Pack, enabling customers to maximize their IT value while lowering total cost of acquisition and ownership



The Sun Fire™ V490 server, powered by the new UltraSPARC IV+ processor and the Solaris Operating System, offers faster performance in a low-cost, high-density footprint. This server delivers over five times the performance of UltraSPARC III servers, and more than twice the performance of UltraSPARC IV servers — in the same footprint. With up to four UltraSPARC IV+ chip multithreading (CMT) processors executing eight concurrent threads and up to 64 GB of memory in a dense, rack-optimized, 5U, 24-inch-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 lifecycle of your hardware and applications. Sun's commitment to 100-percent application binary compatibility means that there is no disruption to your existing software infrastructure. Plus, a four-socket server supports mixed generations and speeds of UltraSPARC IV+ and IV CPU and 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.

The Sun Fire V490 server is available as a Sun System Pack. This offering combines the server with the right services, enabling customers to yield the most value from their assets. The Sun System Packs provides significant advantages over traditional warranty plans by delivering higher value services such as better service coverage, automatic OS updates, and training credits.

## Sun Fire V490 Server Specifications

### Processor

#### Processor

Combine up to four UltraSPARC IV+ and/or 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: Two MB on-chip
- Level 3: 32 MB external

### Main memory

64 GB of memory maximum 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 (two @ 66 MHz, 64 bits wide, 3.3 volts; four @ 33 MHz, 64 bits wide, five volts)

#### USB

Two (compliant with USB Revision 1.0)

### Mass storage and media

#### Host adapters

Internal IDE (supports DVD and/or DVD R/W drive)

#### Internal disk

Up to 2 3.5 in. x 1.0 in. 15K-RPM FC-AL disks (146-GB capacity), providing a maximum total capacity of 292 GB

#### External disk

- Sun StorageTek™ D240 Media Tray
- Sun StorageTek S1 Array
- Sun StorageTek 3120 SCSI Array
- Sun StorageTek 3310 SCSI RAID/JBOD Array
- Sun StorageTek 3320 SCSI Array
- Sun StorageTek 3510 FC RAID/JBOD Array
- Sun StorageTek 3511 FC Array
- Sun StorageTek 6140 Array
- Sun StorageTek 6920 Array
- Sun StorageTek 9910/9960/9970/9980 Series

#### External tape

- Sun Sun StorageTek DAT 72 Tape, desktop
- Sun StorageTek LTO 2 Tape, desktop
- Sun StorageTek LTO 2V Tape, desktop
- Sun StorageTek LTO 3 Tape, desktop
- Sun StorageTek SDLT 320 Tape, desktop
- Sun StorageTek SDLT 600 Tape, desktop
- Sun StorageTek C2 Autoloader
- Sun StorageTek C4 Tape Library
- Sun StorageTek SL500 Tape Library
- Sun StorageTek SL700/SL1400 Tape Library
- Sun StorageTek SL8500 Tape Library

### Software

Operating system (minimum version)

- The minimum OS version for UltraSPARC IV+ processors is Solaris 9 9/05 and Solaris 10 3/05 HW1 OS
- The minimum OS version for UltraSPARC IV processors is the Solaris 8 2/04, Solaris 9 4/04, and Solaris 10 3/05 OS

Enterprise infrastructure software

Sun Java™ Enterprise System

### Power supplies

Input per power supply/system of 1,600 watts (mfg. rating)

Maximum AC input: 1,847 W per power supply

Maximum DC output: 1,448 W per power supply

### Environmental

#### AC power

200-240 V AC, 47-63 Hz, 2,078 V A

#### Operating

5° C to 35° C (41° F to 95° F), 20-80 percent relative humidity, noncondensing, 27° C max. wet bulb

#### Nonoperating

-20° C to 60° C (-4° F to 140° F), 95 percent relative humidity, noncondensing

### Regulations (meets or exceeds the following requirements)

#### Product safety

UL/CSA-60950-1, EN60950-1, IEC60950-1 CB Scheme with all country deviations, IEC825-1, 2, CFR21 part 1040, CNS14336

<p>RFI/EMC</p> <hr/> <p>EN55022 Class A, 47 CFR 15B Class A, ICES Class A, VCCI Class A, AS/NZ 3548 Class A, CNS 13438 Class A, KSC 5858 Class A, GB 9254 Class A, EN61000-3-2, GB 17625.1, EN61000-3-3</p> <p>Immunity</p> <hr/> <p>EN55024/CISPR24</p> <p>Telecommunications</p> <hr/> <p>EN300-386</p> <p>Regulatory markings</p> <hr/> <p>CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/S-mark</p>	<p><b>Sun Upgrade Advantage Program</b></p> <hr/> <p>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 <a href="http://sun.com/ibb/enterprise">sun.com/ibb/enterprise</a>.</p>	<p>Implementation</p> <hr/> <p>System and software migration, installation and implementation services available</p> <p>Training</p> <hr/> <p>Available at <a href="http://sun.com/training">sun.com/training</a></p>
<p><b>Other</b></p> <hr/> <p>Restriction of Hazardous Substances (RoHS) directive 2002/95/EC; labeled per Waste Electrical and Electronic Equipment (WEEE) Directive</p>	<p><b>Dimensions and weight</b></p> <hr/> <p>Height</p> <hr/> <p>222 mm (8.75 in.)</p> <p>Width</p> <hr/> <p>446 mm (17.5 in.)</p> <p>Depth</p> <hr/> <p>610 mm (24.0 in.)</p> <p>Weight</p> <hr/> <p>35.8 kg (79 lb.) (minimum) 44 kg (97 lb.) (maximum)</p>	
<p><b>Key RAS features</b></p> <hr/> <ul style="list-style-type: none"> <li>• Hot-pluggable disk drives</li> <li>• Redundant, hot-swappable power supplies</li> <li>• Environmental monitoring and fault detection</li> <li>• Automatic System Recovery (ASR) capabilities</li> <li>• Remote Lights Out Management capability</li> <li>• Dual loop-enabled FC-AL subsystem</li> <li>• Support for disk and network multipathing with automatic failover capability</li> <li>• Error correction and parity checking for improved data integrity</li> </ul>	<p><b>Warranty and support services</b></p> <hr/> <p>Hardware warranty</p> <hr/> <p>Three years, next business day, on-site</p> <p>Enhanced support</p> <hr/> <p>SunSpectrum™ Support Upgrades provide integrated hardware and OS coverage including Sun technical support, same-day hardware service and premium online resources. Choose from three options</p>	

**Learn More**

For more information on 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](http://sun.com/v490).