

Sun Fire™ 12K Server

Rock-solid availability and Hot-swappable components make this server the integral building block for your Business-Ready Infrastructure.



Making the Net Work and Increasing Your ROI

The Sun Fire 12K is a massively scalable server for mainframe rehosting, server consolidation and technical computing. This high-end data center server with Sun's 5th generation Dynamic System Domains, runs the robust Solaris™ 8 (10/01 or later) Operating Environment. It reliably supports thousands of mission-critical applications - all binary compatible throughout the entire Sun Fire server family. The Sun Fire 12K has built-in hardware redundancy and has the flexibility to support multiple configurations as your business needs change.

Protect investments with hot-swappable, interchangeable Uniboard CPU/Memory boards

Provisions your Enterprise-class Data Center with up to 52 CPUs and 288 GB memory with end-to-end data integrity

Maximizes uptime with up to 9 Dynamic System Domains, reconfigurable while applications are running

Provides highly-available operation via Dynamic Reconfiguration, on-line upgrades, hot CPU upgrades and concurrent maintenance.



Sun Fire™ 12K Server

Specifications

Purchase these products from the Sun™ Store, sun.com/store, or contact your Sun Sales Rep or an authorized Sun reseller near you.

Processor

Number	4 to 52
Architecture	UltraSPARC™ III Cu Superscalar SPARC™ V9, ECC Protected
Cache per Processor	Level 1: Parity protected 32 KB instruction and 64 KB data on chip (single-bit errors are corrected) Level 2: ECC protected 8 MB external cache
System Interconnect	150 MHz Sun Fireplane redundant data, address, and response crossbar interconnect

System

Uniboards	Up to 9 Uniboard CPU/Memory Boards, with 4 processors and up to 32 GB memory; max 288 GB memory per system. (Also, Uniboards with 2 CPUs and 4GB memory.)
I/O	Up to 36 I/O hot-swappable PCI slots; 18 slots are 66 MHz, 18 slots are 33 MHz; supports 10/100BaseT ethernet, gigabit ethernet, UltraSCSI (LVD & HVD), ATM, FC-AL, & HiPPI

Performance

Overall System Bandwidth	Up to 86.4 GB/sec aggregate, up to 57.6 GB/sec peak; up to 21.6 GB/sec sustained
Overall I/O Bandwidth	Up to 10.8 GB/sec sustained

Availability

Standard	Hot CPU upgrades Online upgrades Journaling file system Redundant network connections Redundant storage connections Hardened operating system kernel Hardened I/O drivers
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RAS Features

Standard	Dynamic Reconfiguration/Automated DR, Concurrent DR, Initiate DR from domain, as well as from SC
Dynamic System Domains	Up to 9 Domains allow secure, fault-isolated, dynamic partitioning of resources within a single server

Security

Domain Management	Dedicated network connections (SC to 9 Domains) inside Sun Fireplane Interconnect
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Resource Management

Standard	Sun's 5 th -generation Dynamic System Domains, Solaris Resource Manager™ and Bandwidth Manager™
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Software

Operating System	Solaris 8 Operating Environment (10/01 or later)
Languages	C, C++, Pascal, FORTRAN, Java
Networking	ONC™/NFS™, TCP/IP, SunNet™ OSI, X.25 Start, DCE, Netware
System Management	Sun™ MC 3.0; SMS 1.1 (or later)
Network Management	VERITAS Volume Manager 3.1.1, VERITAS File System 3.4, Sun Cluster 3.0

Storage

Standard	120+ Terabytes direct connect storage – fibre channel & UltraSCSI; Sun StorEdge™ 9900, 6900, 3900, T3, A5200, S1, D1000, and tape devices
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Environment

AC Power	200-240 single phase VAC, 47-63 Hz, with six 30 Amp circuits redundant with another six on a separate power grid
Optimum	22° C (72° F) at 45% non-condensing humidity
Range	10° C to 35° C (50° F to 90° F) at 20% to 80% non-condensing humidity
Altitude	Up to 3,048 meters/10,000 feet

Regulations

Safety	Meets or exceeds UL 1950, CUL CAN/CSA 22:2 M950, TUV EN60950
RFI/EMIFCC Immunity	Meets or exceeds Class A, EN50021-1 Class A, EN50082-1

Dimensions and Weight

Height	191 cm (74.75 in.)
Width	85 cm (33.25 in.)
Depth	166 cm (65 in.)
Weight	987 kg (2,141 lb.) fully configured

Upgrades

Sun Enterprise/Sun Fire	Trade-in allowances are available for Sun Enterprise™ 4x00, 5x00, 6x00, and 10000 systems, along with the Sun Fire 6800 server. The Sun Fire 12K can be upgraded to a Sun Fire 15K.
Older Sun systems	Older Sun servers are eligible under Sun's Server Consolidation Program.
Other vendors' systems	Trade-in programs for other vendors' servers are also available.



Sun Fire 15K



Sun Fire 6800



Sun StorEdge 9960

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We make the net work.