



Sun Fire™ X4200 Server Family

Fast, Reliable, Expandable
One- to Four-Way x64 Server



Highlights

- Rack-optimized server providing the highest performance levels in its class: Able to accept the fastest single-core and dual-core AMD Opteron™ processors
- The Sun Fire™ X4200 family of servers raises the bar for industry-standard servers:
 - Enterprise-class RAS features for maximum uptime
 - Four integrated Gigabit Ethernet ports for maximum network expandability
- More energy-efficient than rival servers —significant power and cooling savings
- Runs virtually any operating system including the Solaris™ OS, Linux®, and Windows—all supported by Sun
- PCI-X and PCI-Express I/O expandability for connectivity to multiple devices leading to higher throughput
- Application consolidation platform: Runs Solaris Containers and VMware, supports Sun Cluster
- Provision, monitor, and manage with the recommended N1™ System Manager software
- Try risk-free for 60 days. Sign up for a free trial at sun.com/tryandbuy



Sun is enhancing its leadership position in x64 (x86/64-bit) computing with the Sun Fire X4200 server family which includes the fast, reliable Sun Fire X4200 and X4200 M2 servers that run the Solaris OS, Linux, and Windows operating systems.

Sun Fire X4200 servers are a key component in standardizing your infrastructure, helping to reduce total cost of ownership (TCO), simplifying data center management, and achieving industry-leading performance. The Sun Fire X4200 server line includes the fast, reliable Sun Fire X4200 and Sun Fire X4200 M2 servers, powered by up to two single- and dual-core AMD Opteron processors. The servers have ample I/O expandability for connectivity with storage, networking, and clustering solutions. They come preinstalled with the Solaris Operating System and Sun Java™ Enterprise System software.

Designed from the ground up to facilitate system management, the Sun Fire X4200 server architecture provides Integrated Lights Out Manager (ILOM) and state-of-the-art remote automation that integrates at the data center level. With zero-touch capabilities managed through a variety of interface options, Sun Fire X4200 servers' architecture simplifies installation, deployment, and maintenance.

Sun Fire X4200 servers run 32-bit and 64-bit applications and delivers 100 percent industry-standard x64 computing. With expandable I/O features, Sun Fire X4200 servers are an ideal building block for application consolidation, network services—compute services, or infrastructure services, or as a database, security, or application server. For customers with application consolidation needs, Sun Fire X4200 servers support Sun Cluster technology. In addition, Sun Fire X4200 servers run Solaris Containers and VMware to safely consolidate and protect multiple applications running on a single server.

Sun Fire X4200 servers are qualified to work with Sun's comprehensive portfolio of software, storage, and network switches. The Sun™ Customer Ready Systems (CRS) program offers integration and testing: Customers can order racks of preconfigured servers with storage, switches, and software. Sun's partners can also provide industry-specific expertise and deployment services.

Sun Fire X4200 Server

Architecture	
Processor	Up to two single-core/dual-core AMD Opteron 200 series processors, one MB Level 2 cache per core
Main memory	Four DIMM slots per CPU socket, DDR1/400 ECC registered DIMMs (128-bit plus ECC databus), total eight DIMM slots, up to 16 GB per CPU
System architecture	
	Three 8.0 GB/sec. HyperTransport links per processor with 6.0 GB/sec. access between processor and memory
Standard/integrated interfaces	
Network	Four 10/100/1000Base-T Ethernet ports
Network management	One dedicated 10/100Base-T Ethernet port
Serial	One TIA/EIA-232-F asynchronous RJ45 port
SAS	Four-channel SAS interface, internal access only
USB	Two USB 1.1 ports (front), two USB 1.1 ports (rear)
Expansion bus	Five internal MD2 low-profile 64-bit PCI-X slots (one at 100 MHz, one at 133 MHz, three at 66 MHz)
Software	
Operating systems	<ul style="list-style-type: none"> • Solaris™ 10 Operating System, 64-bit • Red Hat Enterprise Linux 3.0, 32-bit/64-bit • Red Hat Enterprise Linux 4.0, 32-bit/64-bit • SUSE LINUX Enterprise Server 9, 64-bit • Windows Server 2003, Enterprise Edition, 32-bit/64-bit • Windows Server 2003, Standard Edition, 32-bit/64-bit • VMware ESX 2.5.x/3.0.x Sun Java™ Enterprise System 3
Languages	<ul style="list-style-type: none"> • Solaris 10 Operating System • Standard Linux distributions • C/C++, FORTRAN (Solaris OS on x64) • Java™ programming language • All other standard Sun-supported languages
Networking	<ul style="list-style-type: none"> • ONC™, ONC+, NFS, WebNFS™, TCP/IP, SunLink™, OSI, MHS, IPX™/SPX, SMB technologies, and XML
Management	<ul style="list-style-type: none"> • ILOM Service Processor providing: DMTF CLP-based CLI over SSH, Web-based GUI over HTTPS/HTTP, IPMI 2.0, SNMP V1, v2c and v3, remote graphical access over Ethernet and remote storage over Ethernet • N1 System Manager—discovering, grouping, bare metal provisioning, hardware monitoring, OS monitoring
Mass storage and media	
	Hot-swappable, 2.5-inch SAS internal disks, RAID 0, 1 onboard, up to four HDDs with DVD-ROM/CD-RW
Environment	
AC power	90–264 V AC (47–63 Hz)
DC power	-48 V DC or -60 V DC (10.4 A at -48 V DC, 8.3 A at -60 V DC), -48 V DC or -60 V DC (10.4 A at -48 V DC, 8.3 A at -60 V DC)
Operating temperature (single, nonrack system)	<ul style="list-style-type: none"> • 5° C to 35° C (41° F to 95° F) • 10-90 percent relative humidity • Noncondensing, 27° C max. wet bulb
Nonoperating temperature (single, nonrack system)	<ul style="list-style-type: none"> • -40° C to 65° C (-40° F to 149° F) • Up to 93 percent relative humidity • Noncondensing, 38° C max. wet bulb
Operating altitude (single, nonrack system)	Up to 3,048m, maximum ambient temperature is derated by 1° C per 300m above 900m
Nonoperating altitude (single, nonrack system)	Up to 12,000m
Acoustic noise (single, nonrack system)	<ul style="list-style-type: none"> • LwAd (1B = 10dB): 8.0 B at or below 25° C, 8.4 B at max. ambient • LpAm bystander: 64 dB at or below 25° C, 69 dB at max. ambient
Power	
	<ul style="list-style-type: none"> • Dual redundant, hot-swappable power supplies • Maximum DC output: 550 W
Regulations	
Safety	Meets or exceeds the following requirements IEC60950, UL/CSA60950, EN60950, CB scheme with all country differences
RFI/EMI	FCC Class A, Part 15 47 CFR, EN55022, CISPR 22, EN300-386: v1.31, ICES-003
Immunity	EN55024, EN300-386:v1.3.2
Certifications	
Safety	cULus Mark, TUV GS Mark, CE Mark, CCC, GOST R, S-Mark
EMC	CE Mark (93/68/EEC), Emissions and Immunity Class A Emissions Levels: FCC, VCCI, C-Tick, MIC, CCC, GOST R, BSMI
Other	Labeled per WEEE (Waste Electrical and Electronic Equipment) directive
Dimensions and weight	
Height	87.6mm (3.44 in.)
Width	445mm (17.5 in.)
Depth	632mm (24.8 in.)
Weight (with rack kit)	25.5 kg (56.2 lbs.) max.
Mounting option	
	19-inch rackmount kit

Sun Fire X4200 M2 Server

Architecture	
Processor	Up to two Next-Generation AMD Opteron 2000 series processors, one MB Level 2 cache per core
Main memory	Four DIMM slots per CPU socket, DDR2/667 ECC registered DIMMs (128-bit plus ECC databus), total eight DIMM slots, up to 16 GB per CPU
System architecture	
	Three 8.0 GB/sec. Hypertransport links per processor and 10.7 GB/sec. access between each processor and memory
Standard/integrated interfaces	
Network	Four 10/100/1000Base-T Ethernet ports
Network management	One dedicated 10/100Base-T Ethernet port
Serial	One TIA/EIA-232-F asynchronous RJ45 port
SAS	Four-channel SAS interface, internal access only
USB	Two USB 2.0 port (front), two USB 2.0 ports (rear)
Expansion bus	Four internal low-profile 8-lane PCI-E slots and one internal MD2 low-profile 64-bit 133 MHz PCI-X slot
Software	
Operating systems	<ul style="list-style-type: none"> • Solaris 10 Operating System, 64-bit • Red Hat Enterprise Linux 4.0, 64-bit • Windows Server 2003, Enterprise Edition, 32-bit/64-bit • Windows Server 2003, Standard Edition, 32-bit/64-bit
Languages	<ul style="list-style-type: none"> • Solaris 10 Operating System • Standard Linux distributions • C/C++, FORTRAN (Solaris OS on x64) • Java™ programming language • All other standard Sun-supported languages
Networking	<ul style="list-style-type: none"> • ONC™, ONC+, NFS, WebNFS™, TCP/IP, SunLink™, OSI, MHS, IPX™/SPX, SMB technologies, and XML
Management	<ul style="list-style-type: none"> • ILOM Service Processor providing: DMTF CLP-based CLI over SSH, Web-based GUI over HTTPS/HTTP, IPMI 2.0, SNMP V1, v2c and v3, remote graphical access over Ethernet and remote storage over Ethernet • N1 System Manager—discovering, grouping, bare metal provisioning, hardware monitoring, OS monitoring
Mass storage and media	
	Hot-swappable, 2.5-inch SAS internal disks, RAID 0, 1 onboard, up to four HDDs with DVD-ROM/CD-RW
Environment	
AC power	90–264 V AC (47–63 Hz)
DC power	-48 V DC or -60 V DC (10.4 A at -48 V DC, 8.3 A at -60 V DC), -48 V DC or -60 V DC (10.4 A at -48 V DC, 8.3 A at -60 V DC) ¹
Operating temperature (single, nonrack system)	<ul style="list-style-type: none"> • 5° C to 35° C (41° F to 95° F) • 10-90 percent relative humidity • Noncondensing, 27° C max. wet bulb
Nonoperating temperature (single, nonrack system)	<ul style="list-style-type: none"> • -40° C to 65° C (-40° F to 149° F) • Up to 93 percent relative humidity • Noncondensing, 38° C max. wet bulb
Operating altitude (single, nonrack system)	Up to 3,048m, maximum ambient temperature is derated by 1° C per 300m above 900m
Nonoperating altitude (single, nonrack system)	Up to 12,000m
Acoustic noise (single, nonrack system)	<ul style="list-style-type: none"> • LwAd (1B = 10dB): 8.0 B at or below 25° C, 8.4 B at max. ambient • LpAm bystander: 64 dB at or below 25° C, 69 dB at max. ambient
Power	
	<ul style="list-style-type: none"> • Dual redundant, hot-swappable power supplies • Maximum DC output: 550 W
Regulations	
Safety	Meets or exceeds the following requirements IEC60950, UL/CSA60950, EN60950, CB scheme with all country differences
RFI/EMI	FCC Class A, Part 15 47 CFR, EN55022, CISPR 22, EN300-386: v1.31, ICES-003
Immunity	EN55024, EN300-386:v1.3.2
Certifications	
Safety	cULus Mark, TUV GS Mark, CE Mark, CCC, GOST R, S-Mark
EMC	CE Mark (93/68/EEC), Emissions and Immunity Class A Emissions Levels: FCC, VCCI, C-Tick, MIC, CCC, GOST R, BSMI
Other	Labeled per WEEE (Waste Electrical and Electronic Equipment) directive
Dimensions and weight	
Height	87.6mm (3.44 in.)
Width	445mm (17.5 in.)
Depth	632mm (24.8 in.)
Weight (with rack kit)	25.5 kg (56.2 lbs.) max.
Mounting option	
	19-inch rackmount kit

¹ Coming soon.



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Printed in USA 10/06 SunWIN #447333

