Sun Fire™ X4200 Server

Fast, Reliable, and 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
- Sun Fire X4000 family of servers raise the bar for industry-standard servers
  - Enterprise RAS features for maximum uptime
  - Four integrated Gigabit Ethernet ports for maximum network expandability
- More energy efficient than Xeon servers
  - Significant power and cooling savings
- Runs virtually any operating system including the Solaris OS, Linux, and Windows — all supported by Sun
- I/O expandability for connectivity to multiple devices leading to higher throughput
- Application Consolidation Platform
  - Runs Solaris Containers and VMWare
  - Supports Sun Cluster
  - Expandable I/O
- Simplified lights out systems management with no hidden costs

Sun is enhancing its leadership position in x64 (x86-64 bit) computing with the Sun Fire X4200 server: A fast, reliable, and expandable one- to four-way x64 server that runs Solaris™ OS, Linux, and Windows operating systems.

The Sun Fire X4200 server is a key component in standardizing your infrastructure, helping to lower total cost of ownership (TCO), simplify data center management, and achieve industry- leading performance. Powered by up to two single- and dual-core AMD Opteron™ processors, Sun Fire X4200 server has ample I/O expandability for connectivity with storage, networking, and clustering solutions. It comes preinstalled with 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 Management (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, the Sun Fire X4200 server's architecture simplifies installation, deployment, and maintenance.

The Sun Fire X4200 server runs 32-bit and 64-bit applications and delivers 100 percent industry-standard x64 computing. With expandable I/O features, the Sun Fire X4200 server is 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, the Sun Fire X4200 server supports Sun Cluster technology. In addition, the Sun Fire X4200 server runs Solaris Containers and VMWare to safely consolidate and protect multiple applications running on a single server.

The Sun Fire X4200 server is qualified to work with Sun's comprehensive portfolio of software, storage, and network switches. Sun's customer-ready program also offers a variety of services , including integration and testing: Customers can order racks of pre-configured 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, 1 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 8 GB per CPU

System architecture

8.0 GB/sec. HyperTransport link—each processor controls two pairs of DIMM slots, 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

- Solaris 10 Operating System on x64, 64-bit
- Red Hat Enterprise Linux 3.0, 32-bit/64-bit
- Red Hat Enterprise Linux 4.0, 64-bit
- SUSE LINUX 9 Professional 64-bit
- Windows Server 2003, Enterprise Edition, 32-bit/64-bit
- Windows Server 2003, Standard Edition, 32-bit/64-bit ition, 32-bit/64-bit

Sun Java™ Enterprise System 3

- Solaris 10 Operating System on x64
- Standard Linux distributions

Languages

- C/C++, FORTRAN (Solaris OS on x64) planned for Q3FY04
- Java programming language
- All other standard Sun-supported languages

Networking

ONC™, ONC+, NFS, WebNFS, TCP/IP, SunLink™, OSI, MHS, IPX™/SPX, SMB technologies, and XML

Management

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

Mass storage and media

Hot-swappable, 2.5-inch SAS internal disk and up to four HDDs with DVD-ROM

- Internal DVD-ROM: One EIDE DVD-ROM

Environment

AC power

90–264 V AC (47–63 Hz)

Operating temperature (single, non-rack system)

5° C. to 35° C. (41° F. to 95° F.), 10% to 90% relative humidity, non-condensing, 27° C. max. wet bulb

Non-operating temperature (single, non-rack system)

40° C. to 65° C. (-40° F. to 149v F.), up to 93% relative humidity, non-condensing, 38° C. max. wet bulb

Operating altitude (single, non-rack system)

Up to 3000m, maximum ambient temperature is derated by 1° C. per 500m above 500m

Non-operating altitude (single, non-rack system)

Up to 12000m

Acoustic noise (single, non-rack system)

Less than 83 dB sound power in ambient temperature of up to 24 C.

Power

- Dual redundant, hot-swappable power supply
- Maximum AC output: 550 W

Regulations (meets or exceeds the following requirements)

- Safety: 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: v1.31

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, BSMI, C-Tick, MIC, CCC, GOST
- Other: Labeled per WEEE (Waste Electrical and Electronic Equipment) Directive

Dimensions and weight

- Height: 87.6mm (3.45 in.)
- Width: 425.5mm (16.75 in.)
- Depth: 641mm (25.24 in.)
- Weight (with packaging): 16 kg (35 lb.) max.

Mounting option

19-inch rackmount kit

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