

Sun Fire™ X4100 Server

Fast, Energy-Efficient, and Reliable
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 raises 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
- Simplified remote management with no hidden costs through Sun Integrated Lights Out Manager (ILOM)
- High compute density
 - Four-way server in a one-rack-unit RU footprint
- Provision, monitor, and manage with the recommended Sun N1™ System Manager software



Sun is at the forefront of x64 (x86-64-bit) computing. The Sun Fire™ X4100 server: A fast, reliable, and energy-efficient one- to four-way x64 server that runs Solaris™ OS, Linux, and Windows operating systems.

The Sun Fire X4100 server is a key component in standardizing your infrastructure, helping to lower total cost of ownership (TCO), simplifying data center management, and achieving industry-leading performance. The Sun Fire X4100 server runs 32-bit and 64-bit applications and delivers 100 percent industry-standard x64 computing.

Sun Fire X4100 server is the only 1-RU enterprise x64 server with hot-swap, redundant fans. It also has hot-swap, redundant power supplies and high-performance, hot swap disk drives with on-board RAID that help maximize system uptime. Powered by up to two single- or dual-core AMD Opteron™ processors, the Sun Fire X4100 server comes preinstalled with Solaris Operating System and Sun Java™ Enterprise System software.

Designed from the ground up to facilitate system management, the Sun Fire X4100 server architecture provides Sun 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, the Sun Fire X4100 server's architecture simplifies installation, deployment, and maintenance. The only x64 server in its class with four Gigabit Ethernet ports, the Sun Fire X4100 server provides multiple connectivity for high-speed, high-bandwidth networking.

The Sun Fire X4100 server is qualified to work with Sun's comprehensive portfolio of software, storage and network switches. A variety of service offerings are also available to help meet the needs of enterprise customers. The Sun™ Customer Ready Systems (CRS) program offers integration and testing services: 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 X4100 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 data-bus), total eight DIMM slots, up to eight GB per CPU

System architecture

8.0 GB/sec. HyperTransport link 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: One USB 1.1 port (front), two USB 1.1 ports (rear)
- Expansion bus: Two internal MD2 low-profile 64-bit PCI-X slots (one at 100 MHz, one at 133 MHz)

Software

Operating systems

- Solaris 10 Operating System, 64-bit
- Red Hat Enterprise Linux 3.0, 32-bit/64-bit
- Red Hat Enterprise Linux 4.0, 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

Sun Java Enterprise System 3

- Solaris 10 Operating System
- Standard Linux distributions

Languages

- C/C++, FORTRAN (Solaris OS on x64)
- 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
- Sun 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 on-board, up to two HDDs with DVD-ROM, up to four HDDs without 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 149° F)
- Up to 93% relative humidity
- Non-condensing, 38° C max. wet bulb

Operating altitude (single, non-rack system)

Up to 3,048m, maximum ambient temperature is derated by 1° C per 300m above 900m

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

Up to 12,000m

Acoustic noise (single, non-rack system)

- LwAd (1B = 10dB): 7.8 B at or below 25° C, 8.3 B at max. ambient
- LpAm bystander: 63 dB at or below 25° C, 67 dB at max. ambient

Power

- Dual redundant, hot-swappable power supply
- Maximum DC 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:v1.3.2

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

* = Applicable at GA

Dimensions and weight

- Height: 43mm (1.69 in.)
- Width: 425.5mm (16.75 in.)
- Depth: 632mm (24.88 in.)
- Weight (with packaging): 17.9 kg (39.3 lb.) max.

Mounting option

19-inch rackmount kit