



# Sun Fire™ X4100 M2 Server

Fast, energy-efficient, and reliable  
one- to eight-way x64 server



## Highlights

- Rack-optimized, high-performance servers — able to accept the fastest single-core, dual-core, and quad-core AMD Opteron processors
- 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, Windows, and VMware — all supported by Sun
- Simplified remote management with no hidden costs through Integrated Lights Out Manager (ILOM)
- Provision, monitor, and manage with the recommended Sun N1™ System Manager software
- Try risk-free for 60 days. Sign up for a free trial at [sun.com/tryandbuy](http://sun.com/tryandbuy)



Sun is at the forefront of x64 (x86/64-bit) computing with the fast and reliable Sun Fire X4100 M2 server — an energy-efficient one- to eight-way x64 server that runs the Solaris™, Linux, Windows, and VMware operating systems.

The Sun Fire X4100 M2 server is a key component in standardizing your infrastructure, helping to reduce total cost of ownership (TCO), simplifying datacenter management, and achieving industry-leading performance. The server runs 32-bit and 64-bit applications and delivers 100 percent industry-standard x64 computing.

The Sun Fire X4100 M2 server is the only 1 U enterprise x64 server with hot-swappable, redundant fans. It also has hot-swappable, redundant power supplies and high-performance, hot-swappable disk drives with on-board RAID that help maximize system uptime. Powered by up to two single-, dual-, or quad-core AMD Opteron™ processors, the Sun Fire X4100 M2 server comes preinstalled with the Solaris OS and Sun Java™ Enterprise System software.

Designed from the ground up to facilitate system management, the Sun Fire X4100 M2 server architecture provides ILOM and state-of-

the-art remote automation that integrates at the datacenter level. With zero-touch capabilities managed through a variety of interface options, the server's architecture simplifies installation, deployment, and maintenance. The only x64 server in its class with four Gigabit Ethernet ports, the Sun Fire X4100 M2 server provides multiple connectivity for high-speed, high-bandwidth networking. It also comes with PCI-X and PCI Express (PCIe) I/O connectivity options.

The Sun Fire X4100 M2 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 preconfigured servers with software, storage, and switches. Sun's partners can also provide industry-specific expertise and deployment services.

# Sun Fire X4100 M2 Server Specifications

## Architecture

### Processor

Up to two Next-Generation AMD Opteron 2000 Series processors, 1 MB Level 2 cache per core

### Main memory

Four DIMM slots per CPU socket, DDR2/667 ECC Registered DIMMs (128-bit plus ECC data-bus), 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 10/100/1000 Base-T Ethernet ports

### Network management

- One dedicated 10/100 Base-T Ethernet port

### Serial

- One TIA/EIA-232-F asynchronous RJ45 port

### SAS

- Four-channel SAS interface, internal access only

### USB

- One USB 2.0 port (front), two USB 2.0 ports (rear)

### Expansion bus

- Two internal low-profile eight-lane PCIe slots

## Software

### Operating systems

- Solaris 10 OS, 64-bit
- Red Hat Enterprise Linux
- SUSE Linux Enterprise Server, 64-bit
- Windows Server 2003, Standard Edition, 32-bit/64-bit
- Windows Server 2003, Enterprise Edition, 32-bit/64-bit
- VMware ESX Server

### Sun Java™ Enterprise Services

- Solaris 10 OS
- 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-in. SAS internal disks, RAID 0, 1 on-board, up to two HDDs with DVD-ROM/CD-RW

## Environment

### AC power

100–240 V AC (50–60 Hz):

- HE PSU: 7.2 A at 100 V AC, 3.2 A at 200 V AC
- STD PSU: 8.0 A at 100 V AC, 3.4 A at 200 V AC

### DC power

-48 V DC or -60 V DC (12.7 A at -48 V DC or 10.2 A at -60 V DC)

### Operating temperature (single, nonrack system)

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

### Nonoperating temperature (single, nonrack system)

- -40° C to 65° C (-40° F to 149° F)
- Up to 93% 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)

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

## Learn More

To learn more about the Sun Fire X4100 M2 server, go to: [sun.com/x4100](http://sun.com/x4100).

- LpAm bystander: 63 dB at or below 25° C, 67 dB at max. ambient

## Power

- Dual redundant, hot-swappable power supplies
- 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

## Dimensions and weight

Height 43.8mm (1.72 in.)

Width 445mm (17.5 in.)

Depth 632mm (24.8 in.)

Weight

(max. with rack unit) 25.5 kg (56.2 lbs.) max.

## Mounting option

19-inch rackmount kit