



Sun Fire™ X4140 Server

Industry-leading performance,
expandability, and power efficiency



Highlights

- The highest performance and up to twice the memory capacity and networking connectivity of any system in its class
- Designed for the third-generation AMD Opteron™ processors, delivering blazing speed for High Performance Computing (HPC)/grid computing and Web infrastructure, as well as research, manufacturing, and business environments
- The highest density in terms of CPU, memory, I/O, and disk capacities — plus virtualization capability — empowers businesses to save on equipment and real estate expenses
- Integrated Lights Out Manager (ILOM) makes system-wide management incredibly simple from any location worldwide
- Runs the Solaris™, Red Hat Enterprise Linux, SUSE Linux, Windows, and VMware operating systems
- Optional HPC services and training to optimize your server implementation
- Saves on power costs with features such as AMD Dual Dynamic Power Management™ and AMD PowerNow!™ — and more power-efficient components



Sun is helping today's enterprises meet the challenges of escalating datacenter requirements, power costs, real estate needs, and the pressure to bring products to market faster. The Sun Fire™ X4140 server integrates industry-leading AMD Opteron processors, massive storage and memory capacity, and superior networking connectivity to provide the fastest, most scalable x64 system in its class.

Flexible architecture designed for longevity

With a host of flexible options, and superior performance and hardware expandability, the Sun Fire X4140 server offers a solution designed to effectively manage constantly increasing datacenter costs and requirements, while providing the power and capacity to fuel a new generation of business growth. The server's massive hard drive and memory capacity, leading-edge AMD Opteron processors, and superior expandability make it an ideal workhorse for Web infrastructure, HPC/grid computing, virtualization, and disk-intensive applications, as well as for any large-scale manufacturing, research, science, or business environment.

The system also includes a host of advanced features and capabilities designed to reduce administration, service, and support

complexity. For example, Sun's Integrated Lights Out Manager enables remote control from virtually anywhere in the world; in addition, easily accessible hot-swappable redundant cooling fans, power supplies, and disks make servicing simple. And the advanced management tools streamline command of massive grid deployments, improve the ratio of systems to administrators, and lower operational costs.

Sun offers a suite of services to optimize your Sun Fire X4140 server implementation. SunSpectrumSM Support focuses on delivering proven expertise and responsive, consistent service quality to help you achieve high availability within your IT infrastructures. Sun can also help you architect, deploy, and manage your IT initiatives for faster time to deployment with reduced risk.

Sun Fire X4140 Server Specifications

Architecture

Processor

- One or two Dual-Core or Quad-Core AMD Opteron processors

Cache

- 2x 1 MB L2 for dual-core processor
- 4x 512 KB L2 and 2 MB L3 for quad-core processor

Main memory

- 16 DDR2 DIMM slots (eight DIMM slots per CPU socket); system supports from 2 GB (2x 1 GB) to 64 GB (16x 4 GB) of memory

Mass storage and media

- Hot-swappable 2.5-in. internal disk; up to eight SAS disk drives with add-on SAS host bus adapter (HBA)
- One EIDE DVD \pm RW drive

RAID configuration

- Add-on RAID 0, 1, 1E, 5, 5EE, 6, 10, 50, 60 with SAS RAID HBA

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 connector
- USB: Five USB 2.0 ports (two front, two rear, one internal)
- Expansion slots: Three internal MD2 low-profile 64-bit PCI Express slots (1x 16-lane, 2x 8-lane)

Software

Operating systems

- Solaris 10 Operating System
- Red Hat Enterprise Linux 4
- Red Hat Enterprise Linux 5
- SUSE Linux Enterprise Server 10 (64-bit)
- VMware ESX 3.0.2 (dual-core only)
- Windows 2003 Standard and Enterprise versions (32-bit and 64-bit)¹

Languages

- C/C++, FORTRAN
- 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

- CLI (in-band and out-of-band), IPMI 2.0 (in-band and out-of-band), SNMP (out-of-band only)
- Integrated Lights Out Manager (iLOM) with dedicated 10/100 Base-T Ethernet port

Environment

AC power

- 100–120 V/200–240 V AC (50/60 Hz)

Operating temperature/humidity (single nonrack system)

- 5° C to 35° C (41° F to 95° F), 10–90% relative humidity, noncondensing

Nonoperating temperature/humidity (single, nonrack system)

- -40° C to 65° C (-40° F to 149° F), up to 93% relative humidity, noncondensing

Operating altitude (single nonrack system)

- Up to 3,000m, 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: At max. ambient, 6.6 B
- LpAm bystander: At max. ambient, 51 dB

Optional

- Rackmount slide rail kit
- Toolless rackmount slide rail kit
- Cable management arm

Learn More

For more information on the Sun Fire X4140 server, go to: sun.com/x4140.

Try risk-free for 60 days: Apply for a free trial at sun.com/tryandbuy.

Power

- Dual-redundant, hot-swappable power supply
- UL maximum input power: 8.2 A RMS at 100 V AC
- Power supply output rating: 650 W

Regulations (meets or exceeds)

- Safety: IEC 60950, UL/CSA 60950, EN 60950, CB Scheme with all country differences
- RFI/EMI: FCC CFR 47 Part 15 Class A, EN 55022 Class A, EN 61000-3-2, EN 61000-3-3, EN 300-386
- Immunity: EN55024, EN300-386

Certifications

- Safety: UL/cUL, UL DEMKO, CE, BSMI, CCC, GOST-R, S-Mark
- EMC: CE, FCC, VCCI, ICES, C-Tick, MIC, CCC, GOST-R, BSMI Class A
- Other: Complies with WEEE Directive (2002/96/EC) and RoHS Directive (2002/95/EC)

Dimensions and weight

Height	44mm (1.746 in.)
Width	426mm (16.75 in.)
Depth	714mm (28.125 in.)
Weight	16.55 kg (36.49 lbs.) min. 18.55 kg (40.90 lbs.) max.

Warranty

- Three years, next business day



¹ Supported editions include Windows Server 2003 SP1, R2, SP2, R2 with SP2.

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