

# SUN FIRE X4170 M2 SERVER



*Packing the optimal balance of compute power, memory capacity, and I/O capability into a compact and energy efficient 1 rack unit (RU) enclosure, Oracle's Sun Fire X4170 M2 server is the most versatile IT infrastructure building block. This server is ideal for middleware workloads, enterprise systems administration needs, such as identity management, network management, and systems management, and as a platform for application development.*

## FEATURES

- Compact 1 RU enterprise-class server
- Powered by high performing Intel Xeon Processor 5600 Series
- Eighteen DIMM slots for a max memory of 144 GB
- Eight 2.5" disk drive bays for HDDs, SSDs
- Supports two Oracle Sun Flash Accelerator F20 PCIe Cards.
- Hot swappable disks, cooling fans and power supply units
- Supports a wide range of enterprise class server operating systems

## BENEFITS

- One server for all of your IT infrastructure workload needs
- Boost application performance and reduce power consumption with Sun FlashFire technology
- Save on power with energy efficient components
- Consistent system manageability with Oracle ILOM included in every system



**The Sun Fire X4170 M2 server is the most versatile IT infrastructure building block**

## Product Overview

The Sun Fire X4170 M2 server utilizes the Intel Xeon Processor 5600 Series and offers unparalleled performance balanced with compute, memory and I/O capabilities that are accelerated with two flash options, making it the most versatile building block for a number of IT applications. It is ideal for running middleware applications such as WebLogic, systems administration applications such as Oracle Enterprise Manager and Oracle Identity Manager, and software development applications such as Oracle Solaris Studio.

The two new flash integration options include Solid State Drives (SSDs), and Sun Flash Accelerator PCIe cards, which can deliver I/O performance improvements equivalent to four hundred 15k RPM HDDs. They can also reduce power consumption by as much as eighty percent. In addition, storage connectivity bandwidth is doubled from the previous generation server with the upgrade to SAS-2 interfaces. The combination of these features with high efficiency power supplies and new algorithms for power capping make this server the best performing and most efficient of its kind.

System management is simplified with Oracle Integrated Lights Out Manager (ILOM) that comes standard in every Sun Fire X4170 M2 server. ILOM centralizes system management locally or remotely to ease system configuration, software provisioning and updates, providing a consistent interface across the entire x86 product line.

**Sun Fire X4170 M2 Server Specifications**

<b>Architecture</b>	
Processor	<ul style="list-style-type: none"> <li>One or two Intel Xeon Processor 5600 Series</li> </ul>
Cache	<ul style="list-style-type: none"> <li>Level 1: 32 KB instruction and 32KB data</li> <li>Level 2: 256 KB unified</li> <li>Level 3: 12 MB shared inclusive</li> </ul>
Main Memory	<ul style="list-style-type: none"> <li>Eighteen DDR3 DIMM slots (nine DIMM slots per CPU socket)</li> <li>4 GB and 8 GB Low voltage DIMMs for a maximum of 144 GB per system</li> </ul>
<b>Interfaces</b>	
Standard I/O	<ul style="list-style-type: none"> <li>Four 10/100/1000 Base-T Ethernet ports</li> <li>USB: Five 2.0 USB ports (two front, two rear, one internal)</li> <li>Expansion bus: Three PCIe 2.0 slots : One x16-lane electrical/mechanical, two x8-lane electrical/mechanical</li> </ul>
Storage	<ul style="list-style-type: none"> <li>Eight 2.5" SAS-2/SATA-2 front accessible disk bays</li> <li>All bays can be populated with either HDDs or SSDs</li> <li>Optional RAID levels: 0, 1, 1E, 5, 5EE, 6, 10 with optional Battery Backup Write Cache (BBWC) via optional HBA PCIe Card</li> <li>Optional Sun Flash Accelerator F20 PCIe Card</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>VGA 2D graphics controller embedded</li> <li>Supports resolutions up to 1600x1200x16 bits @60 Hz (1024x768 when viewed remotely via ILOM RKVMS)</li> <li>Rear HD15 VGA port</li> </ul>
Remote Management	<p>Oracle Integrated Lights Out Manager (ILOM)</p> <ul style="list-style-type: none"> <li>One dedicated 10/100Base-T Ethernet network management port</li> <li>In-Band, Out-of-band and Sideband Network Management access via any one of the four main Ethernet ports of the server</li> <li>One RJ-45 serial management port</li> </ul> <p>Features and Facilities</p> <ul style="list-style-type: none"> <li>DMTF-style Command-Line Interface</li> <li>Support for access via SSH 2.0, HTTPS, RADIUS, LDAP, and Microsoft Active Directory</li> <li>Browser-based GUI for control of the system through a graphical interface</li> <li>IPMI 2.0; SNMP v1, v2c, and v3</li> <li>Remote management with full keyboard, video, mouse, storage (KVMS) redirection and remote media capability (floppy, DVD, CD, and more)</li> <li>Monitor and report system and component status on all FRUs</li> </ul>

Software
<b>Operating Systems</b> <ul style="list-style-type: none"> <li>• Oracle Linux</li> <li>• Oracle Solaris (Pre-installed)</li> <li>• Red Hat Enterprise Linux</li> <li>• SuSE Linux Enterprise Server</li> <li>• Microsoft Windows Server</li> </ul> <p>For more information on software go to:  <a href="http://wikis.sun.com/display/SystemsComm/Sun+Fire+X4170+M2+Server">http://wikis.sun.com/display/SystemsComm/Sun+Fire+X4170+M2+Server</a></p>
<b>Virtualization</b> <ul style="list-style-type: none"> <li>• Oracle VM (Pre-Installed)</li> <li>• VMware</li> </ul>
Environment
<ul style="list-style-type: none"> <li>• Operating temperature: 5° C to 35° C (41° F to 95° F)</li> <li>• Non-operating temperature: -40° C to 70° C (-40° F to 158° F)</li> <li>• Operating relative humidity: 10% to 90%, non-condensing</li> <li>• Non-operating relative humidity: Up to 93%, non-condensing</li> <li>• Operating altitude: Up to 3,000 m, maximum ambient temperature is derated by 1° C per 300 m above 900 m</li> <li>• Non-operating altitude: Up to 12,000 m</li> <li>• Acoustic noise: 7.6 B operating, 7.6 B idling; 63.1 dBA operating, 60.5 dBA idling</li> </ul>
Power
<ul style="list-style-type: none"> <li>• Dual-redundant, hot-swappable power supply</li> <li>• Maximum output power: 760 W</li> <li>• Maximum AC input current at 100 V AC and 760 W output: 9.0 A</li> <li>• Specified power supply efficiency at 760 W (100%) load: 87%</li> </ul>

Regulations
<ul style="list-style-type: none"> <li>• Safety: UL 60950-1 2nd Ed, EN60950-1:2006 2nd Ed, CB Scheme with all country differences</li> <li>• RFI/EMI: FCC CFR 47 Part 15 Subpart B Class A, EN 55022:2006+A1:2007 Class A, EN 61000-3-2:2006, EN 61000-3-3:1995+A1:2001+A2:2002, ETSI EN 300 386 V1.4.1 (2008)</li> <li>• Immunity: EN 55024:1998+A1:2001+A2:2003</li> </ul>
Certifications
<ul style="list-style-type: none"> <li>• Safety: UL/cUL, CE, BSMI, GOST R, S-Mark, CSA C22.2 No. 60950-1-07 2nd Ed.</li> <li>• EMC: CE, FCC, VCCI, ICES, C-Tick, KCC, GOST R, BSMI Class A</li> <li>• Other: Complies with WEEE Directive (2002/96/EC) and RoHS Directive (2002/95/EC)</li> </ul>
Dimensions and Weight
<ul style="list-style-type: none"> <li>• Height: 43.43 mm (1.71 in.)</li> <li>• Width: 425.45 mm (16.75 in.)</li> <li>• Depth: 685.8 mm (27.0 in.)</li> <li>• Weight: 16.36 kg (36 lb.)</li> </ul>
Mounting Option
<ul style="list-style-type: none"> <li>• Rack mounting slide rail kit</li> <li>• Cable management arm</li> </ul>

**RELATED PRODUCTS AND SERVICES**

The Sun Fire X4170 M2 server is the most versatile server of its kind packing high performance combined with memory capacity and I/O capabilities into a 1 RU enclosure. Combined with Sun FlashFire technology and new high availability features this server can manage any of your IT infrastructure workloads.

**RELATED PRODUCTS**

- Sun Fire X2270 M2 server
- Sun Fire X4270 M2 server
- Sun Blade X6270 M2 server module

**RELATED SERVICES**

The following services are available from Oracle Support Services:

- Support, installation
- Eco-optimization services

**Warranty**

The Sun Fire X4170 M2 server comes with a one-year warranty. For more information visit [oracle.com/sun/warranty](http://oracle.com/sun/warranty) for Oracle's global warranty support.

**Services**

Visit [oracle.com/sun/services](http://oracle.com/sun/services) for information on Oracle's service program offerings for Sun products.

**Contact Us**

For more information about Oracle's Sun Fire X4170 M2 server, please visit [oracle.com](http://oracle.com) or call +1.800.786.0404 to speak to an Oracle representative.



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