SUN FIRE X4470 M2 SERVER



Oracle's Sun Fire X4470 M2 server is the ideal virtualization platform for consolidating Web application servers and collaboration tools, enterprise performance management applications, and batch processing. It is the industry's leading compact and expandable enterprise-class, four-socket, x86-based server, delivering best-in-class performance with world-record processor speed, expandability, density, and power efficiency in a 3 rack unit (RU) form factor.

FEATURES

- Compact 3 RU enterprise-class server
- Powered by up to four Intel Xeon processor
 E7-4800 product family CPUs
- Up to 64 DIMMs with a maximum memory of 1 TB
- Six 2.5" disk drive bays for HDDs or SSDs
- Up to four 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

CUSTOMER BENEFITS

- Minimize real estate costs with the leading compact system design
- Boost application performance and reduce power consumption with Oracle's Sun FlashFire technology
- Take advantage of consistent system manageability through Oracle ILOM, which is included in every system



The Sun Fire X4470 M2 server is the densest four-socket server in its class.

Product Overview

The Sun Fire X4470 M2 server, powered by up to four Intel Xeon processor E7-4800 product family CPUs and with up to 1 TB of memory and up to 3.6 TB of internal storage, it is the best platform for enterprise consolidation and virtualization for business applications. It is the industry's leading compact and expandable enterprise-class 4-socket x86 server with a best-in-class performance, power efficiency, density, and a highly expandable design. It delivers outstanding virtualization capacity to increase server utilization and reduce the data center footprint through a 3 RU enclosure.

Following the previous generation server, the Sun Fire X4470 M2 continues to offer two flash integration options for application and database acceleration: Sun Flash Acceleration F20 PCIe cards and Solid State Drives (SSDs). These flash options deliver the I/O performance of up to 400 Hard Disk Drives (HDDs) turbo charging applications while eliminating bottlenecks and reducing power consumption. When compared with the previous generation system, the Sun Fire X4470 M2 Server doubles the memory to 1 TB and doubles the storage capacity to 3.6 TB, enhancing the system's virtualization capabilities. In addition, an increase of 25% in processor cores and threads produces better performance at the same maximum CPU Thermal Design Power (TDP), making this server the densest and fastest performing in its class.

System management is simplified with Oracle Integrated Lights Out Manager (ILOM), which comes standard in every Sun Fire X4470 M2 server. Oracle 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 X4470 M2 Server Specifications

Architecture

Processor

• Two or four Intel Xeon processor E7-4800 product family CPUs

Main Memory

- Up to 64 DIMMs (16 DIMMs per processor)
- 4GB, 8GB or 16GB DDR3 ECC Registered DIMMs
- · Two memory riser cards required per processor
- · Maximum memory capacity of 1 TB

Interfaces

Standard I/O

- Four 10/100/1000Base-T on-board Ethernet ports
- One dedicated 10/100Base-T Ethernet management port
- One TIA/EIA-232-F asynchronous RJ-45 serial port
- Five USB 2.0 ports (two front, two rear, one internal)
- Ten PCI Express (PCIe) slots: two (2) x16-lane slots; four (4) x8-lane slots; two (2) x4-lane slots or eight (8) x8-lane slots and two (2) x4-lane slots
- Two VGA 8 MB Ports; 1024 x 768 @ 60Hz (front and rear)
- Front-accessible DVD+/-RW Drive Slot

Internal Storage

- Six 2.5" SAS-2/SATA-2 front-accessible, hot-swappable disk bays
- All bays can be populated with SAS-2 HDDs or SATA-2 SSDs
- Optional RAID levels: 0, 1, 1E, 10, 5, 5EE, 6 with optional Battery Backed Write Cache (BBWC) via optional HBA PCIe card
- Up to four optional Sun Flash Accelerator F20 PCIe cards

Graphics

- VGA 2D graphics controller embedded, which support resolutions up to 1600x1200x16bits@60Hz (1024x678 when viewed remotely via Oracle ILOM RKVMS)
- Rear and front HD15 VGA port

Remote Management

- Oracle Integrated Lights Out Manager (ILOM)
- One dedicated 10/100base-T Ethernet management port
- In-band, out-of-band, and sideband network management access via any one of the four main Ethernet ports of the server
- One RJ-45 serial management port
- · Features and facilities
- DTMF-style command-line interface
- Support for access via SSH 2.0, HTTPS, RADIUS, LDAP, and Microsoft Active Directory
- Browser-based GUI for control of the system through a graphical interface
- IPMI 2.0, SNMP v1, v2c, and v3
- Remote management with full keyboard, video, mouse, storage (KVMS) redirection and remote media capability (floppy, DVD, CD, and more)
- · Ability to monitor and report system and component status on all FRUs



Software

Operating Systems

- · Oracle Solaris
- · Oracle Linux
- Red Hat Enterprise Linux
- SuSE Linux Enterprise Server
- · Microsoft Windows Server

For more information on software go to:

http://wikis.sun.com/display/SystemsComm/Sun+Fire+X4470+M2+Server

Virtualization

- · Oracle VM
- VMware

Environment

- Operating temperature: 5° C to 35° C (41° F to 95° F) at sea level; 5° C to 31° C (41° F to 88° F) at altitude
- Nonoperating temperature: -40°C to 68°C (-40°F to 154°F)
- Operating relative humidity: 10%-90% relative humidity, noncondensing
- Nonoperating relative humidity: 93% relative humidity, noncondensing,
- Acoustic noise: LwAd: 8.9 B (idle and operating, room temp.), 8.9 B (max. ambient);
 LpAm: 75 dBA (bystander position, max. ambient)

Power

• AC power: 100-127 VAC (for two CPUs) or 200-240 VAC (2 or 4 CPUs)

Regulations

- Safety: IEC 60950, UL/CSA 60950, EN60950, 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: EN 55024, EN 300 386

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: 129.85 mm (5.1 in.)
- Width: 436.5 mm (17.2 in.)
- Depth: 732 mm (28.8 in.)
- Weight: 38.5 kg (85 lb.) max.

Mounting Option

- Toolless rackmounting slide rail kit
- Cable management arm



RELATED PRODUCTS AND SERVICES

The Sun Fire X4470 M2 server powered by up to four Intel Xeon processor E7-4800 product family CPUs and with up to 1 TB of memory and up to 3.6 TB of internal storage is the best platform for enterprise consolidation and virtualization for business applications.

RELATED PRODUCTS

- Sun Fire X4270 M2 server
- Sun Fire X4800 M2 server

RELATED SERVICES

The following services are available from Oracle Support Services:

- · Support, installation
- · Eco-optimization services

Warranty

The Sun Fire X4470 M2 server comes with a one-year warranty. For more information, visit oracle.com/sun/warranty for Oracle's global warranty support.

Services

Visit 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 X4470 M2 server, please visit oracle.com/sun or call +1.800.786.0404 to speak to an Oracle representative.



Oracle is committed to developing practices and products that help protect the environment

Copyright © 2011, Oracle and/or its affiliates. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. UNIX is a registered trademark licensed through X/Open Company, Ltd. 0110

