

Sun Fire X2270 M2

Frequently Asked Questions

Overview

Oracle's Sun Fire X2270 M2 Server is a 2 socket, 1 rack unit (RU) entry level x86 server based on industry standard Intel Xeon processor 5600 Series. It is the first and only server in its class that supports Sun Flash Modules in its system design for application acceleration and energy efficiency.

Delivering excellent performance and power efficiency, Oracle's rack-optimized Sun Fire X2270 M2 Server is the most effective path to cloud and technical computing.

Ideal Cloud Computing Engine

Platform-as-a-Service (PaaS) providers make application development tools and interfaces available to developers to test and deploy their software via the cloud. Application response times are paramount to these developers. These enterprise cloud computing data centers must be able to dynamically provision additional compute resources as the need arises. These data centers utilize stream-lined, high performance and energy efficient servers that are quick to deploy and easy to manage. In addition, multiple servers are leveraged for high availability, removing the need for hardware redundancy in these servers.

The Sun Fire X2270 M2 Server is an excellent fit for enterprise cloud computing data centers with its leading performance, world class power efficiency and advanced manageability. The Sun Fire X2270 M2 Server also includes advanced manageability capabilities that enable the system to be plugged into or removed from the data center quickly and easily.

Leading x86 rack server for Technical Computing

Technical computing applications are computationally intensive problems that once required costly supercomputers. Most organizations today address their needs with a large number of rack servers. As these rack deployments grow,

compute performance can no longer be the sole consideration. Space and power requirement must also be considered.

The Sun Fire X2270 M2 is the ideal server for technical computing applications such as Oracle Reveleus and other Engineering Design Simulation and Modeling workloads. It provides maximum performance in a dense space and power envelope, allowing compute capacity to be added without increasing power consumption and footprint.

Customer Benefits

Leading Performance

The Sun Fire X2270 M2 Server, supporting up to two Intel Xeon Processor 5600 Series, has 50% more processor cores compared with the Sun Fire X2270 Server.

Although processors have continuously increased in performance, the traditional disk drives with its spinning components have not kept up. The flash storage options supported on the Sun Fire X2270 M2 Server contain no mechanical moving parts and help to eliminate the I/O bottleneck. The flash storage options turbo-charge the server, enabling applications to run more rapidly and efficiently, resulting in faster response and greater productivity.

World Class Power Efficiency

The Sun Fire X2270 M2 Server features two flash storage options to help boost application performance while consuming less energy. These two options, Sun Flash Module and Solid State Drive (SSD) deliver the I/O performance of up to 100 hard disk drives (HDDs) while consuming up to 80% less power. With the Sun Flash Module, On Demand applications such as Oracle Beehive On Demand and Oracle On Demand for Siebel CRM would benefit greatly.

In addition to record breaking performance, the Sun Fire X2270 M2 Server delivers world class power efficiency. Compared with the previous generation server, the Sun Fire

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X2270 M2 Server with Sun Flash Modules delivers up to 70% higher performance per watt.¹ As a result, an enterprise customer can place 28% more² Sun Fire X2270 M2 Servers within the same power envelope.

Advanced Manageability

The Sun Fire X2270 M2 Server comes standard with the Oracle Integrated Lights Out Manager (ILOM) which provides a consistent management interface across Oracle's entire x86 product line. Oracle ILOM helps to simplify data center management, system configuration, and life cycle management as well as software provisioning and updates that can be done locally or remotely while maximizing availability. This is a powerful and fully featured Service Processor that also has power management and power capping capabilities to help reduce energy costs.

In conjunction with the Oracle ILOM, the Oracle Enterprise Manager Ops Center is a highly scalable management system that provides life cycle management and process automation capabilities to help simplify consolidated platform management, compliance reporting and system provisioning tasks for the data center.

¹ Sun Fire X2270 M2 with 2x Sun Flash Modules comparison with Sun Fire X2270 with 4x Hard DiskDrives.

² 41 Sun Fire X2270 M2 systems with 2x Sun Flash Modules can fit into the same rack and 10 kW power envelope as 32 Sun Fire X2270 systems with 4x HDDs, while delivering 70% higher performance.

Frequently Asked Questions

What is the Sun Fire X2270 M2 Server?

The Sun Fire X2270 M2 is the next generation 2-socket 1 rack unit (RU) entry level server based on the Intel Xeon Processor 5600 series. It is the only server in its class that supports Sun Flash Modules that deliver up to 80 times the I/O performance of hard disk drives while consuming 80% less energy.

How does the Sun Fire X2270 M2 Server compare with the Sun Fire X2270 Server?

Compared to the previous generation system, the Sun Fire X2270 M2 supports the new Intel Xeon Processor 5600 Series with 50% more processor cores. It features two flash storage options – Sun Flash Modules and Solid State Drives (SSD) – to eliminate I/O bottleneck for application acceleration. The server comes standard with the Oracle Integrated Lights Out Manager (ILOM) which provides a consistent management interface across Oracle's entire x86 product line.

What kind of application and workload is the Sun Fire X2270 M2 Server best suited to run?

Delivering excellent performance and power efficiency in a 1RU enclosure, the Sun Fire X2270 M2 Server is ideally suited for the access layer of the cloud and technical computing applications.

What flash storage options are available on the Sun Fire X2270 M2 Server?

The Sun Fire X2270 M2 Server supports on-board Sun Flash Module and Solid State Drive options. These flash storage options turbo-charge the server to run I/O intensive applications more rapidly and efficiently while consuming vastly less power.

What are the memory, storage and expansion options supported on the Sun Fire X2270 M2 Server?

The Sun Fire X2270 M2 Server supports up to twelve DDR3 memory DIMMs (that can be populated by 8GB and 4GB DIMM options), two Sun Flash Modules, four hard disk drives or solid state drives, and one low-profile PCI Express slot.

More information can be found at:

<http://wikis.sun.com/x/KB4eD>

What are the operating systems that have been certified to run on the Sun Fire X2270 M2?

The Sun Fire X2270 M2 is certified to run Oracle Enterprise Linux, Oracle VM, Oracle Solaris, Red Hat Enterprise Linux, SuSE Linux Enterprise Server, VMware and Windows. The list of supported Operating Systems can be found at:

<http://wikis.sun.com/x/KB4eD>

What software is pre-installed on the Sun Fire X2270 M2?

The customer has the option to request Oracle Solaris operating system be pre-installed on the server in the factory.

What are the system management options available for the Sun Fire X2270 M2?

The Sun Fire X2270 M2 comes standard with the Oracle Integrated Lights Out Manager (ILOM) which provides a consistent management interface across Oracle's entire x86 product line. ILOM helps to simplify data center management, system configuration, and life cycle management as well as software provisioning and updates done locally or remotely. This is a powerful and fully featured Service Processor that also has power management and power capping capability to help reduce energy cost. Its extensive manageability and monitoring capabilities can be found here:

<http://wikis.sun.com/x/KB4eD>

The Oracle Enterprise Manager Ops Center is the newest addition to the Oracle Enterprise Manager product family. More information can be found at:

<http://www.oracle.com/us/products/enterprise-manager/opscenter/index.html>

Is there a choice in system configurations?

Yes, the Sun Fire X2270 M2 can be fully customized to the configuration specified by the customer through our factory's ATO (Assemble to Order) process.

What high availability features are available in the Sun Fire X2270 M2?

The Sun Fire X2270 M2 offers hot swappable and redundant RAID-enabled disks.

Where can I find more information about the Sun Fire X2270 M2?

You can contact your Oracle sales representative directly or call 1-800-Oracle1. For more information about the Sun Fire X2270 M2 on the web, go to:

<http://www.oracle.com/us/products/servers-storage/servers/x86/sun-fire-x2270-m2-070114.html>

The data sheet for the Sun Fire X2270 M2 can be found at:

<http://www.oracle.com/us/products/servers-storage/servers/x86/sun-fire-x2270-m2-ds-070252.pdf>

Pricing for the Sun Fire X2270 M2 can be found at:

<https://shop.sun.com/store/product/0d75d3cd-f94c-11de-a671-080020a9ed93>

What are the power and cooling requirements for the Sun Fire X2270 M2 Server?

The Sun Fire X2270 M2 Server's online power calculator provides an estimate on the idle and operating power level of the server. The power calculator can be found at

http://www.sun.com/calc/servers/x64/x2270/index_m2.html



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