

Sun Fire X4270 M2 Server Frequently Asked Questions

Overview

Companies today are faced with limited budgets, resources and capacity. Global initiatives to go green increase the pressure to operate at the highest efficiencies. Clustered databases and virtualized workloads help to address these limits by taking advantage of systems encompassed by easy deployment, high performance, and continued expandability and efficiency. The Sun Fire X4270 M2 server fits ideally into this scenario, offering superior scalability in compute performance, memory capacity, and I/O bandwidth, and featuring flash storage options for acceleration of I/O intensive applications. This server packs extensive expandability and ultimate storage flexibility into a 2 rack unit (RU) enclosure. The Sun Fire X4270 M2 server is the best server in its class for clustered databases and virtualized workloads.

The new Sun Fire X4270 M2 server, compared to the Sun Fire X4270 and Sun Fire X4275 servers, has fifty percent more processor cores, three times the flash capacity for faster I/O performance and fifty percent more disks. In addition to previously available Solid State Disks (SSD), the new Sun Fire X4270 M2 server supports the Oracle Sun Flash Accelerator F20 PCI Express (PCIe) card. The Sun Fire X4270 M2 server has twice the storage sub-system bandwidth as well as new energy efficient hardware and software to achieve greater power efficiencies.

Customer Benefits

The Sun Fire X4270 M2 server provides the following key customer benefits.

Superior Application and Database Performance

The Sun Fire X4270 M2 server can easily harness the required horsepower to run resource intensive clustered databases through support of up to two of the highest performing Intel Xeon Processor 5600 Series and flash storage options.

- Utilizing flash storage options will turbo-charge the Sun Fire X4270 M2 server, resulting in accelerated application performance and greater reliability. Although processors have continuously increased in performance, the traditional disk drive, with its spinning components, have not kept up. To eliminate this I/O bottleneck, the Sun Fire X4270 M2 server features low latency flash storage options – the Oracle Sun Flash Accelerator F20 PCIe Card, and the Solid State Drive (SSD). The Solid State Drive delivers over one hundred times more I/O performance than hard disk drives. The Oracle Sun Flash Accelerator F20 PCIe card is a high performance and high reliability option that delivers I/O performance equivalent to that of up to four hundred hard disk drives.

Abundant Storage

The new Sun Fire X4270 M2 server has more than twice the internal storage capacity of the previous generation server and thus is able to support large amount of data in minimal space.

- With three times the flash capacity over the previous generation server, the new Sun Fire X4270 M2 server can replace hundreds of direct attached hard disks, resulting in substantial savings in space and energy.

Efficiency Enclosed

The Sun Fire X4270 M2 server saves money on power and cooling. The Intel Xeon Processor 5600 Series includes an energy management feature that reduces power consumption when workloads decrease. The Solid State Drive delivers higher I/O performance than hard disk drives while consuming eighty percent less energy. This server also includes built-in hardware and software power management capabilities, such as power capping from Oracle Integrated Lights Out Manager (ILOM), to further enhance power efficiency.

Best In Class Manageability

The Sun Fire X4270 M2 server includes the Oracle Integrated Lights Out Manager (ILOM) which provides a consistent

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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 capabilities to help reduce energy cost.

- 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.

The Sun Fire X4270 M2 server offers hot swappable and redundant RAID-enabled disks, cooling fans and power supply units. Combining these enterprise class RAS capabilities with the Oracle ILOM, the Sun Fire X4270 M2 server is designed to maximize uptime, simplify system management and reduce administration costs.

Frequently Asked Questions

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What is the Sun Fire X4270 M2 server?

The Sun Fire X4270 M2 server is a two-socket 2 rack unit (RU) enterprise class x86 rackmount server based on the Intel Xeon Processor 5600 Series.

How does the new Sun Fire X4270 M2 server compare with Sun Fire X4270 server?

The new Sun Fire X4270 M2 server has fifty percent more cores (six cores per processor), three times the flash capacity for improved IOPS performance and fifty percent more disks than the Sun Fire X4270 server. In addition to previously available Solid State Disks (SSD), the new Sun Fire X4270 M2 server supports up to five Oracle Sun Flash Accelerator F20 PCIe cards in conjunction with 80 Watt processors, and up to three of these cards in conjunction with processors powered by more than 80 Watts. The new Sun Fire X4270 M2 server has twice the storage subsystem bandwidth with SAS-2 support as well as new energy efficient hardware and software to achieve greater power efficiencies.

What kind of application and workload is the Sun Fire X4270 M2 server best suited to run?

With superior scalability in compute performance, memory capacity, I/O bandwidth and expandability, as well as flexibility in storage configurations, the Sun Fire X4270 M2 server is the ideal server for clustered databases and virtualized workloads.

What flash storage options are available on the Sun Fire X4270 M2 server?

The Sun Fire X4270 M2 server supports Oracle Sun Flash Accelerator F20 PCI Express card and Solid State Drive (SSD) options. These flash storage options all 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 X4270 M2 server?

The Sun Fire X4270 M2 server supports up to eighteen DDR3 memory DIMM slots (which can be populated with 4GB or 8GB DIMMs), six low-profile PCI-Express slots, and twenty-four 2.5-inch or twelve 3.5-inch HDDs or SSDs, with an optional rear disk cage supporting two additional 3.5-inch SATA disk drives.

More information can be found at:

<http://wikis.sun.com/x/ywv5Cw>

What are the operating systems that have been certified to run on the Sun Fire X4270 M2 server?

The Sun Fire X4270 M2 server 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/ywv5Cw>

What software is pre-installed on the Sun Fire X4270 M2 server?

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

What are the system management options available for the Sun Fire X4270 M2 server?

The Sun Fire X4270 M2 server includes 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/ywv5Cw>

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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 X4270 M2 server 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 X4270 M2 server?

This enterprise class x86 server is designed with Reliability, Availability and Serviceability (RAS) in mind. It offers hot swappable and redundant RAID-enabled disks, cooling fans and power supply units. Combining these RAS capabilities with Oracle ILOM, the Sun Fire X4270 M2 server is designed to maximize uptime, simplify system management and reduce administration costs.

Where can I find more information about the Sun Fire X4270 M2 server?

You can contact your Oracle sales representative directly or call 1-800-Oracle1. For more information about the Sun Fire X4270 M2 server on the web, go to:

<http://www.oracle.com/goto/x4270m2>

The data sheet for the Sun Fire X4270 M2 server can be found at: <http://www.oracle.com/us/products/servers-storage/servers/x86/sun-fire-x4270-m2-server-ds-079882.pdf>

Pricing for the Sun Fire X4270 M2 server can be found at:

<http://www.oracle.com/goto/x4270m2>

What are the power requirements for the Sun Fire X4270 M2 server?

The 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.oracle.com/goto/x4270m2>



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