

# SUN BLADE X6275 M2 SERVER MODULE

## KEY FEATURES AND BENEFITS

### HIGH-DENSITY CLOUD COMPUTING BLADES

#### FEATURES

- High-density, dual-node, two-socket blade server module based on the Intel Xeon processor 5600-series
- 12 DDR3 DIMM slots per node for 192GB of total memory
- Integrated 10GbE or 1GbE networking
- High IOPS Sun Flash Modules
- Supports a wide range of Enterprise Class Server Operating Systems

#### BENEFITS

- Highest compute density Oracle x86 blade with up to 24 cores delivers fast application response time for cloud apps & middleware
- Industry-standard protocols for full integration with industry management systems
- Power and cooling efficiencies (low-voltage DIMMs, Sun Flash Modules) reduce OpEX costs
- Integrated networking enables rapid deployment and accelerates application response
- Storage acceleration and fast booting with Flash Modules
- Highly-available, hot-swappable power, cooling and I/O infrastructure of the Sun Blade 6000 chassis

*Ideal for cloud computing and virtualized environments, the dual-node Sun Blade X6275 M2 server module is Oracle's highest compute density blade server. Combining the Sun Blade 6000 chassis with hot-swappable Sun Blade X6275 M2 server modules and Oracle VM provides customers with an elastic scalability solution that can be rapidly deployed or expanded to meet the dynamic requirements of private clouds. The diskless Sun Blade X6275 M2 leverages the high availability and shared resource infrastructure of the Sun Blade 6000 chassis while also supporting power and cooling efficient low voltage memory and Sun Flash Modules to reduce operating costs.*



**The Sun Blade X6275 M2 server module is the high-density blade server ideal for cloud-computing and virtualized environments.**

## Overview

The Sun Blade X6275 M2 server module provides up to 24 cores of compute density, improved energy efficiencies, and high-speed 10GbE or 1GbE networking to form an ideal platform capable of supporting demanding, parallel processing workloads while satisfying application response time requirements for cloud, virtualized environments and middleware.

Supported in the Sun Blade 6000 chassis, the Sun Blade X6275 M2 server module provides an IT infrastructure solution with enterprise-class reliability, availability and serviceability by leveraging the chassis based redundant, hot swappable components such as fan modules, high efficiency power supply modules and PCIe ExpressModules. Each server module is equipped with an Oracle Integrated Lights Out Manager (ILOM) service processor that offers industry-standard protocols for standalone system management as well as integration with many industry leading management systems including Oracle Enterprise Manager Ops Center.

Combining the Sun Blade X6275 M2 with the high performance, low latency Sun Blade 6000 Ethernet Switched Network Express Module 24p 10GbE provides customers with the required bandwidth needed to eliminate potential network bottlenecks that can be experienced in virtualized environments. This switched Network Express Module simplifies the IT infrastructure and reduces network costs by eliminating an entire tier of datacenter switching and also reducing cables by 4:1.

### Sun Blade X6275 M2 Server Module Specifications

Models
<ul style="list-style-type: none"> <li>• Sun Blade X6275 M2 10GbE Server Module</li> <li>• Sun Blade X6275 M2 GbE Server Module</li> </ul>
Architecture
Processors (per Compute Node)
<ul style="list-style-type: none"> <li>• Two Intel Xeon processors 5600 series</li> </ul>
Cache
Level 1: 32 KB instruction and 32 KB data L1 cache per core Level 2: 256 KB unified (data and instruction) L2 cache per core Level 3: 12 MB shared inclusive L3 cache per processor
Main Memory (per Compute Node)
<ul style="list-style-type: none"> <li>• Support for Low-Voltage 8 GB and 4 GB DDR3 DIMMs at 1,333 MHz</li> <li>• 12 DIMM slots supporting up to 96 GB of memory per two-socket compute node</li> </ul>
Interfaces (per compute node)
Network
<ul style="list-style-type: none"> <li>• One 10 GbE port using the Mellanox ConnectX-2 controller on the Sun Blade X6275 M2 10GbE Server Module model</li> <li>• One 10/100/1000Base-T Ethernet port using the Intel 82567 GbE Controller on the Sun Blade X6275 M2 GbE Server Module model</li> <li>• One (shared) 10/100Base-T Ethernet port for the management network</li> </ul>
Storage
One 3 Gb/sec SATA interface to a Sun Flash Module
Graphics
Embedded graphics using the AST2100 video controller with 128 MB of memory
Midplane I/O
<ul style="list-style-type: none"> <li>• One (x8) PCIe 2.0 bus to the PCI Express (PCIe) ExpressModule (EM) slot</li> <li>• Sun Blade X6275 M2 10GbE Server Module: One 10 Gigabit Ethernet port to a NEM slot</li> <li>• Sun Blade X6275 M2 GbE Server Module: One 10/100/1000Base-T Ethernet port to a NEM slot</li> <li>• 10/100 Ethernet management port to the Chassis Monitoring Module (CMM)</li> </ul>
Front Panel I/O
Available via dongle cable: <ul style="list-style-type: none"> <li>• VGA graphics (DB-15 connector)</li> <li>• Serial console to server module on-board and Integrated Lights Out Manager (ILOM) (RJ-45 connector)</li> <li>• Dual USB ports for keyboard, mouse, or storage</li> </ul>

Dimensions and Weight	
Height: 327mm (12.87 in.)	
Width: 43mm (1.7 in.)	
Depth: 512mm (20.16 in.)	
Weight: 9.4 kg (approximately 20.61 lbs.) max. (with 24 RDIMMs (8 GB RDIMMs) and four Intel Xeon processors 5600 series)	
Software	
Operating Systems	
<ul style="list-style-type: none"> <li>• Oracle Linux</li> <li>• Oracle VM</li> <li>• Oracle Solaris</li> </ul>	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux</li> <li>• SUSE Linux Enterprise Server</li> <li>• Windows Server 2008</li> </ul>

Management	
<ul style="list-style-type: none"> <li>• Advanced on-board management and monitoring enabled by embedded ILOM service processor providing DMTF-style CLI</li> <li>• Support for 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, 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> <p>Optional Oracle xVM Ops Center software—generation of profiles to ensure compliance and compliance reporting, discovery and registration of datacenter assets, job scheduling to perform network tasks, system provisioning, and updates to Linux</p>	
I/O Modules	
<p>Network Express Modules (NEMs):</p> <ul style="list-style-type: none"> <li>• Up to two (shared) NEMs per Sun Blade 6000 chassis</li> </ul>	<p>Industry-Standard Hot-Swappable ExpressModules (EMs):</p> <ul style="list-style-type: none"> <li>• Supports up two EMs per server module (one per compute node)</li> </ul>

The Sun Blade X6275 M2 server module combines the highest compute density, improved energy efficiencies and integrated 10GbE or 1GbE networking to form a highly scalable, highly available platform for cloud computing and virtualized environments.

#### Related products

The Sun Blade X6275 M2 server module is designed for the Sun Blade 6000 chassis where it can be combined with

- Sun Blade T3-1B
- Sun Blade T6320
- Sun Blade T6340
- Sun Blade X6270 M2

#### Other modules:

- Sun Blade 6000 Ethernet Switched 10GbE NEM 24p for 10GbE switching
- Sun Blade Storage Module M2 for in-chassis storage

#### RELATED SERVICES

The following services are available from Oracle

##### Support Services:

- Installation
- Maintenance

### Warranty

Visit [oracle.com/sun/warranty](http://oracle.com/sun/warranty) for Oracle's global warranty support information on Sun products.

### 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 Blade X6275 M2 server module, please visit [oracle.com/sun](http://oracle.com/sun) or call +1.800.786.0404 to speak to an Oracle representative.



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