

Sun Blade™ X6240 Server Module

The two-socket system ideal for virtualization and large workloads



Highlights

- Highest-performing Six-Core AMD Opteron processor technology with 6 MB L3 cache per processor for the most demanding workloads
- Up to 128 GB of memory per blade and 8 GB DIMMs, enabling large memory configurations ideal for virtualization and the most demanding workloads
- Provides simplified service and installation with Sun's modular design
- Enables operating system flexibility, running the Solaris™ 10 OS, Linux, Windows, or VMware
- Ensures improved power efficiency and performance with split-plane Dual Dynamic Power Management
- Instantly speed up I/O intensive application performance with Flash technology
- Supports over 1 TB of hot swappable storage for applications requiring access to large amounts of local storage



The two-socket, enterprise-class Sun Blade™ X6240 server module is designed to minimize power and cooling costs while offering balanced performance in your datacenter. Leveraging the compute power of Six-Core AMD Opteron processors, four high-performance SAS disks or solid-state drives (SSD), and industry-leading I/O throughput capabilities, the system is highly scalable for future growth. Supported in the Sun Blade 6000 and Sun Blade 6048 modular systems chassis, the Sun Blade X6240 server module is also extremely flexible—a powerful, two-socket workhorse, ideal for running a broad spectrum of applications in a wide variety of configurations.

The Sun Blade X6240 server module speeds consolidation initiatives while making them more cost effective. Perfect for workloads from the Web to the edge and application tiers, the system leverages Six-Core AMD Opteron processor technology to enable it to run database and horizontal workloads that historically have been excluded from two-socket blade servers. Its large memory configurations and flexible I/O, and the latest in AMD Opteron processor technology (with 6 MB L3 cache per processor), are well suited to applications demanding top execution in floating-point calculations and maximal memory performance. And the highly efficient design of the Sun Blade X6240 server module enables it to reduce space, power, and cooling demands on your datacenter infrastructure—further reducing your TCO and minimizing your carbon footprint. The system delivers industry-leading performance, bringing Sun's cost-effective innovation and

expertise to your datacenter. The Sun Blade X6240 server module's flexibility also plays a key part in protecting your IT investment while reducing costs. With streamlined and transparent management, the system minimizes complexity and eases integration with legacy resources, while at the same time offering hot-pluggable, hotswappable components for superior RAS.

Virtualization and eco-efficiency services are available to optimize Sun Blade X6240 server module capabilities by helping you conserve datacenter space, reduce power and cooling costs, improve service levels, and increase server utilization.

Sun Blade X6240 Server Module Specifications

Architecture

Processor choice

- Two Six-Core AMD Opteron Processors: 75W, 512 KB dedicated Level 2 Cache per processor core, 6 MB shared Level 3 Cache per processor
- Two enhanced Quad-Core AMD Opteron processors, 55 W or 75 W: 512 KB dedicated L2 cache per processor core, 6 MB shared L3 cache per processor

Main Memory

- One of industry-leading 16 DIMM slots per two-socket blade
- Up to 128 GB of main memory using power efficient 8 GB DIMMs
- Supports cost-efficient 2 GB or 4 GB DDR2 667 MHz PC2-5300 ECC Registered DIMMs

Interfaces

Network

- Two 10/100/1000 Base-T Ethernet ports using Intel 82575EB Gigabit Ethernet (GbE) Controllers
- One dedicated 10/100 Base-T Ethernet port for the management network

Storage

- Eight 3 Gb/sec SAS interfaces
 - Four SAS interfaces, one to each of the 2.5 in. SFF (small form factor) drive bays
 - Four SAS interfaces to the midplane, two to each Network ExpressModule (NEM) slot
- IDE CompactFlash (CF) Module Interface (Type I)
- Over 1 TB of hot-swappable storage

Graphics

Embedded graphics using the AST2000 video controller with 128 MB of shared SDRAM

Midplane I/O

- Four (x8) PCIe busses, two to the NEM slots, two to the PCIe ExpressModule (EM) slots
- Four 3 Gb/sec SAS interfaces, two to each NEM slot

- Two 10/100/1000 Base-T Ethernet interfaces using Intel 82575EB GbE Controller, one interface to each NEM
- 10/100 Ethernet management port to the Chassis Monitoring Module (CMM)

Front panel I/O

- Available via dongle cable:
 - VGA graphics (DB-15 connector)
 - Serial console to server module on-board Integrated Lights Out Manager (ILOM)
 - Dual USB ports for keyboard, mouse, or storage
- Four SFF drive bays:
 - Supporting SAS SFF disks and SATA solid-state drives (SSD)

Software

Operating System

- Solaris™ 10 Operating System
- Red Hat Enterprise Linux
- SUSE Linux Enterprise Server
- VMware ESX
- Windows Server 2003 (32-bit/64-bit)
- Windows Server 2008 (32-bit/64-bit)

Networking

ONC™, ONC+™, NFS, WebNFS™, TCP/IP, SunLink™, OSI, MHS, IPX™/SPX, SMB technologies, and XML

Management

On-board lights-out management via embedded service processor, providing:

- DMTF-style command line
- Support for SSH 2.0, HTTPS, RADIUS, LDAP, and MS Active Directory
- Browser-based GUI
- IPMI 2.0; SNMP v1, v2c, v3
- Local and remote KVM (keyboard, video, mouse) and media (CD, floppy)
- Optional Sun xVM Ops Center – 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 and the Solaris OS

Learn More

To learn more about the Sun Blade X6240 server module, go to sun.com/x6240

I/O modules

Supported I/O module form factors

- PCIe ExpressModule (EM)
- Network ExpressModule (NEM)
- Up to two industry-standard (PCI-SIG) form factor, hot-pluggable PCIe EMs per server module
- Up to two hot-pluggable NEMs per Sun Blade 6000 modular system
- Up to eight hot-pluggable NEMs per Sun Blade 6048 modular system
- For information on I/O module choices, please see sun.com/servers/blades/iomodels

Dimensions and weight

Height: 44.45 mm (1.75 in.)

Width: 327.15 mm (12.88 in.)

Depth: 496.82 mm (19.56 in.)

Weight: 6.23 kg (13.75 lbs.)

7.90 kg (17.41 lbs.)



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