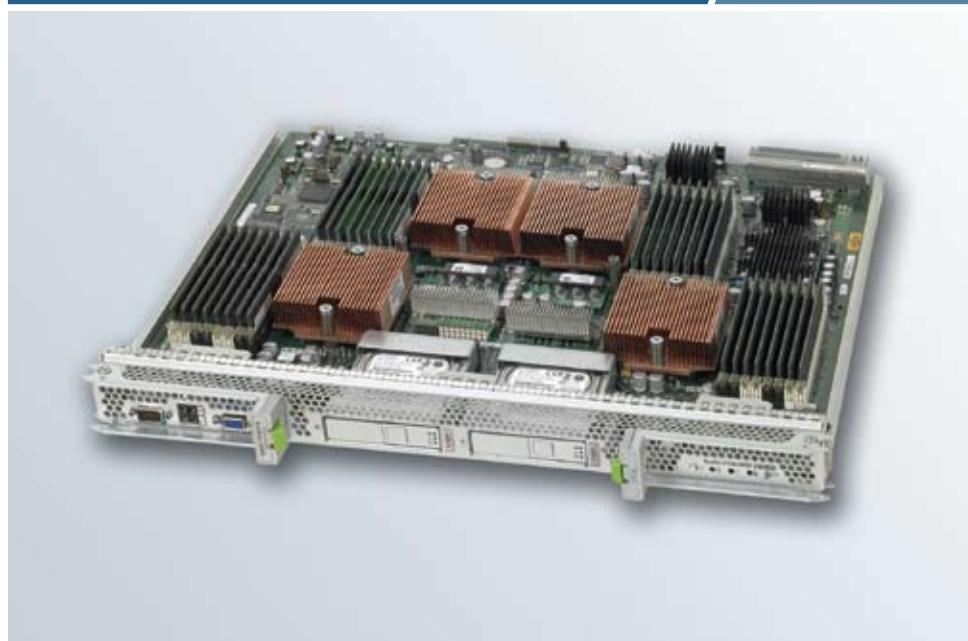




Sun Blade™ X8440 Server Module

The fastest AMD Opteron processor-based performance



Highlights

- Part of the Sun Blade™ 8000 Modular System family, offering up to double the memory (32 DIMM slots) and I/O capacity (192 Gbps) of competing blade and rackmount servers
- Features quad-core processors for the most demanding workloads
- Dual Dynamic Power Management (split-plane), providing improved performance and power management
- Supports large memory configurations at up to half the price
- Operating system flexibility — runs the Solaris™ 10 Operating System, Linux, Windows, or VMware
- Sun Blade transparent management — direct management of each server module, for seamless integration into existing management infrastructures
- Versatile storage — two SAS or SATA hard disk drives — up to 400 GB of hot-swappable storage
- Shared infrastructure designed for superior availability, with no fans or power supplies on the blades



The Sun Blade™ X8440 server module is a four-socket (quad-core or dual-core), enterprise-class datacenter engine that provides major savings with the fastest performance and the largest memory footprint available in a blade server form factor. The Sun Blade X8440 server module was “design optimized” specifically for quad-core computing, with features that include doubled memory capacity with 32 DIMM slots, and increased I/O throughput to 192 Gbps. With this system, it’s possible to consolidate IT infrastructures or Web service farms for as little as half the cost of competing servers. And because these blades scale easily, supporting the broadest range of configurations and applications, they provide flexibility that protects your investments and supports your future business growth.

The Sun Blade X8440 server module is the only four-socket AMD Opteron™ processor-based blade server offering unconstrained I/O capacity and 128 GB of memory. The feature-rich, scalable system offers optimal memory density, with up to 128 GB of RAM per blade, providing an excellent platform for consolidating your datacenter infrastructure onto fewer, more power- and space-efficient blades, which can help significantly reduce costs.

With its abundant 32 DIMM slots, the future-proof Sun Blade X8440 server module can be configured for larger memory footprints

by using smaller and more cost-efficient memory modules. Featuring up to 192 Gbps of I/O bandwidth and 128 GB memory capacity, the server module provides all the balanced system features required for leveraging quad-core processors to run modern server applications, such as virtualization technologies where multiple guest servers are consolidated onto a single server module. The Sun Blade X8440 server module is ready for your most demanding workloads.

Sun Blade X8440 Server Module Specifications

Architecture

Processors

Supports quad-core and dual-core AMD Opteron processors — two- or four-processor models available — 8.0 Gbps HyperTransport™ link with 10.6 Gbps access between processor and memory

Main memory

Eight DIMM slots per populated CPU socket, 32 DIMM slots total — supports 2 GB or 4 GB DDR2/667, PC2-5300 ECC Registered DIMMs — total of 128 GB of RAM per Sun Blade X8440 server module (four CPU sockets populated)

Interfaces

Midplane I/O

- Sun Blade™ 8000 Chassis: six PCIe (8x) links per server module that can connect through the chassis midplane to two unique PCIe ExpressModules (EMs) and four PCIe Network Express Modules (NEMs)
- Sun Blade™ 8000 P Chassis: two PCIe (8x) links per server module connect through the chassis midplane to two PCIe Network Express Modules (NEMs)
- Two 10/100 Ethernet management ports to Chassis Monitoring Modules (CMM)
- Storage: Two SAS/SATA interfaces using an LSI SAS1064E controller; two SAS interfaces, one to each of the SFF (small form factor) SAS/SATA disk drive bays
- RAID: 0, 1 support
- Graphics: Embedded graphics using an ATI ES100 video controller

Software

Operating systems (sun.com/servers/blades/os.jsp):

- Solaris 10 Operating System x64 (64-bit)
- Red Hat Enterprise Linux Advanced Server 4 (32-bit/64-bit) and 5 (64-bit)



- SUSE Linux Enterprise Server 9 (64-bit) and 10 (64-bit)
- Windows Server 2003 Standard and Enterprise Editions (32-bit/64-bit)
- Windows Server 2008 Datacenter (32-bit/64-bit)
- VMware ESX Server 3.x

Networking

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

Management

Per server module (on-board) ILOM service processor providing:

- DMTF CLP-based CLI over SSH
- Web-based GUI over HTTPS/HTTP
- IPMI 2.0; SNMP v1, v2c, and v3
- Remote keyboard, video, mouse, and storage redirect over Ethernet
- Sun xVM Ops Center — datacenter automation tool simplifying datacenter management tasks including:
 - Asset discovery on demand from local or remote locations
 - Operating system provisioning and patching
 - Maintaining up-to-date guest operating systems
 - Monitoring for virtual assets in a network

I/O modules

- PCIe ExpressModules — up to 20 per Sun Blade 8000 Chassis (two per server module)
- Gigabit Ethernet dual-port PCIe ExpressModule — Copper or fiber (Intel® 82571EB GbE Controller-based)
- Gigabit Ethernet multithreaded quad-port (8x) PCIe ExpressModule (Sun)
- Gigabit Ethernet quad-port (4x) PCIe ExpressModule (Intel)
- 10 Gigabit Ethernet dual-port PCIe ExpressModule — Fiber

Learn More

To learn more about the Sun Blade X8440 server module, go to: sun.com/blades

- 4 Gbps Fibre Channel dual-port PCIe ExpressModule (QLogic ISP2432 FC Controller)
- 4 Gbps Fibre Channel dual-port PCIe ExpressModule (based on Emulex Zephyr IOC FC Controller)
- Dual-port 4x InfiniBand PCIe Express Module (Mellanox MT2508 InfiniHost III Ex-based)
- Dual-port 4x DDR InfiniBand PCIe Express Module (Mellanox ConnectX-based)
- PCIe Network Express Modules — up to four per Sun Blade 8000 Chassis or two per Sun Blade 8000 P Chassis
- Gigabit Ethernet 20-port passthru PCIe NEM (Intel® 82571EB GbE Controller-based)
- 4 Gbps Fibre Channel 20-port passthru PCIe NEM (based on Emulex Zephyr IOC FC Controller)
- InfiniBand 4x, DDR, 10-port passthru PCIe NEM

For the latest I/O module information, go to: <http://www.sun.com/servers/blades/iomodules/>.

Dimensions and weight

Height: 42.67mm (1.68 in.)

Width: 499.36mm (19.66 in.)

Depth: 465.58mm (18.33 in.)

Weight: empty, no disks or memory — 9.71 kg (21.4 lbs.); fully configured — 11.34 kg (25.0 lbs.)

Chassis support

10 Sun Blade X8440 server modules per Sun Blade 8000 Chassis; 10 Sun Blade X8440 server modules per Sun Blade 8000 P Chassis