SUN BLADE STORAGE MODULE M2

HIGH PERFORMANCE, SCALABLE IN-CHASSIS STORAGE

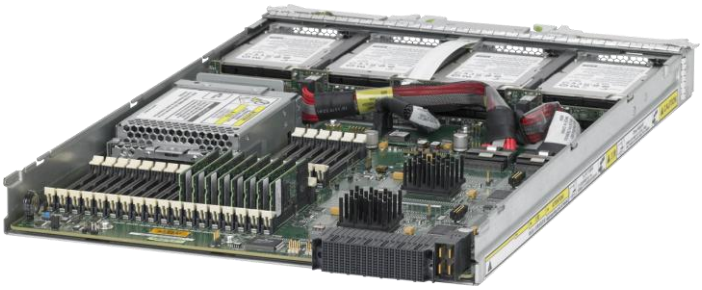
FEATURES

- Up to 4.8TB of storage per M2 Storage Module, and up to 43.2 TB of storage per Sun Blade 6000 chassis
- Centralized blades management of storage, serves and networking with Oracle ILOM
- Sun Blade Zone Manager and Dynamic Zoning

BENEFITS

- Enterprise class storage reliability
- Simplified and advanced management
- Rapid storage scalability
- Convergence of compute, storage and networking management within a single efficient, high performing Sun Blade 6000 chassis

Designed to provide rapid storage capacity to the Sun Blade 6000 server modules, Oracle's Sun Blade Storage Module M2 is a high performance, scalable and reliable in-chassis storage blade that supports multiple zones for ease of management. It uses traditional hard disk drives to provide a storage pool with a capacity of up to 43.2 TB for the Sun Blade 6000 chassis. The resulting blades solutions are the most comprehensive on the market – integrating compute blades, storage blades and critical networking and management components into one streamlined system.



The Sun Blade Storage Module M2 provides rapid storage capacity for Sun Blade server modules

Product Overview

Oracle's Sun Blade Storage Module M2 is a second generation direct attached shared storage blade that incorporates SAS-2 technology to offer better manageability and performance than the previous generation storage module. This storage module features 8 front accessible and hot plug-able drives (up to 4.8 TB) that can be grouped together with the server modules to setup multiple zones. It leverages the highly available power, cooling and I/O infrastructure provided by the Sun Blade 6000 chassis.

Centralized Management and Dynamic Zoning

The Sun Blade Storage Module M2 is managed from a single point using an easy to use, intuitive graphical user interface (GUI) based management tool, the Sun Blade Zone Manager, a feature available in the Oracle Chassis Monitoring Module (CMM) Integrated Lights Out Manager (ILOM) software. For ease of management, the Sun Blade Zone Manager supports dynamic zoning which allows users to quickly and easily group multiple Sun Blade server modules with multiple Sun Blade Storage Modules to setup zones. These zones help reduce the number of devices users have to manage within the Sun Blade 6000 chassis, and provide business and logical views.

Storage Pool for Rapid Scalability

The Sun Blade Storage Module M2 addresses the requirement for rapid storage scalability by providing up to 4.8 TB[1] of storage capacity. Users can install up to nine

1 8x 600GB HDD

storage modules in a Sun Blade 6000 chassis to create a storage pool with an unprecedented capacity of up to 43.2 TB[2] per chassis.

Sun Blade Storage Module M2 Specifications

Architecture
Enclosure
• High-density blade form factor design—up to nine M2 storage modules per Sun Blade 6000 Chassis • Up to eight small form factor (SFF) 2.5" hard disk drives per M2 storage module
Supported Sun Blade Server Modules
• Sun Blade X6270 M2 Server Module • SPARC T3-1B Server • Sun Blade T6320 Server Module • Sun Blade T6340 Server Module
2.5" SFF Hard Disk Drive Support
• SAS-2 interface: 300 GB 10,000 rpm • SAS-2 interface: 600 GB 10,000 rpm
Supported Network Express Module
• Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 Network Express Module • Sun Blade 6000 Ethernet Switched NEM 24p 10GE
Storage I/O and Data Rate
• Two (x2) SAS-2 6.0 Gb/sec interfaces to midplane for routing to Network Express Module slots
Physical Management
• In-band SCSI enclosure service via Chassis Management Module (CMM) • Sun Blade Storage Management System and Sun Blade Zone Manager, invoked from the Oracle ILOM (Integrated Lights-Out Management)
Logical Management
• In-band via onboard SAS controller of the assigned server module
Software
Compatible with the following Operating Systems running on supported Sun Blade Server Modules
• Oracle Linux • Oracle Solaris • Red Hat Enterprise Linux • SUSE Linux Enterprise Server • VMware • Windows Server 2008 Datacenter
Environment
• Cooling: Front to back forced air • Humidity: 10-90% non-condensing • Temperature: 5-45^{0}C operating (-40-70^{0}C storage) • Altitude: 0-10,000 ft (3,048 meters)

2 9x 4.8TB per Sun Blade storage module

Regulations

- EN 60950-1:2006 + A11:2009
- IEC 60950-1:2005, 2nd Edition (Evaluated to all CB countries)
- UL 60950-1, 2nd Edition
- CSA C22.2 No. 60950-1-07
- CE Marked to European Union Low Voltage Directive 2006/95/EC
- CE Declaration of Conformity
- 47 CFR 15B (Code of Federal Regulations, Part 15, Subpart B) Class A
- CE Marked to European Union EMC Directive 2004/108/EC, Class A
- Industry Canada ICES-003 Class A
- AS/NZ 3548 (Australia/New Zealand) Declaration of Conformity
- EN55024:1998 per EMC Directive 2004/108/EC
- IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
- EN 61000-3-2 and EN 61000-3-3, per EMC Directive EEC 2004/108/ECcUR approved to UL 60950-1 and C22.2 No. 60950-1

Certifications

- GOST Certification at system chassis level
- China CCC Mark (Host PSU only, Host Chassis is exempt)
- Argentina S-Mark (Host Chassis exempt to classification)
- VCCI Class A
- CNS 13438 (for Taiwan)
- Korean KCC Certification

Dimensions and Weight

- Height: 44 mm (1.7 in.)
- Width: 327 mm (12.87 in.)
- Depth: 512 mm (20.16 in.)
- Weight: 6.59 kg (14.5 lb.) empty – no disks or memory
- Weight: 7.41 kg (16.3 lb.) fully loaded

RELATED PRODUCTS AND SERVICES

The Sun Blade Storage Module M2 is a high performance, scalable and reliable in-chassis storage blade.

RELATED PRODUCTS

The Sun Blade Storage Module M2 is designed for the Sun Blade 6000 chassis to provide scalable storage to the x86 and SPARC server modules.

RELATED SERVICES

The following services are available from Oracle Support Services:

- Installation
- Maintenance

Warranty

The Sun Blade Storage Module M2 offers a one year warranty. Please visit oracle.com/sun/warranty for Oracle's global warranty support information on Sun products.

Services

Visit 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 Storage Module M2, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

Oracle is committed to developing practices and products that help protect the environment