



Sun StorEdge™ 3120 SCSI Array Release Notes

Sun Microsystems, Inc.
www.sun.com

Part No. 816-7955-16
July 2009, Revision A

Submit comments about this document at: <http://www.sun.com/hwdocs/feedback>

Copyright © 2002–2009 Dot Hill Systems Corporation and others, 2200 Faraday Avenue, Suite 100, Carlsbad, California 92008, USA. All rights reserved.

Sun Microsystems, Inc. and Dot Hill Systems Corporation may have intellectual property rights relating to technology embodied in this product or document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at <http://www.sun.com/patents> and one or more additional patents or pending patent applications in the U.S. and other countries.

This product or document is distributed under licenses restricting its use, copying distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any.

Third-party software is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and in other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, Sun StorEdge, AnswerBook2, docs.sun.com, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and in other countries.

U.S. Government Rights—Commercial use. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

DOCUMENTATION IS PROVIDED “AS IS” AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright © 2002–2009 Dot Hill Systems Corporation et d’autres, 2200 Faraday Avenue, Suite 100, Carlsbad, Californie 92008, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. et Dot Hill Systems Corporation peuvent avoir les droits de propriété intellectuels relatants à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et sans la limitation, ces droits de propriété intellectuels peuvent inclure un ou plus des brevets américains énumérés à <http://www.sun.com/patents> et un ou les brevets plus supplémentaires ou les applications de brevet en attente dans les Etats-Unis et dans les autres pays.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l’utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l’autorisation préalable et écrite de Sun et de ses bailleurs de licence, s’il y en a.

Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l’Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d’autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, Sun StorEdge, AnswerBook2, docs.sun.com, et Solaris sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc. aux Etats-Unis et dans d’autres pays.

LA DOCUMENTATION EST FOURNIE “EN L’ÉTAT” ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISÉE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L’APTITUDE A UNE UTILISATION PARTICULIERE OU A L’ABSENCE DE CONTREFAÇON.



Adobe PostScript

Contents

New Features in This Release	1
Release Documentation	2
Service Contact Information	2
Supported Operating Systems and Software	3
Java Runtime Environment Requirements	3
Supported Connection Methods and Host Adapters	4
Supported Sun Platforms and Connection Methods	6
Supported Cabinets	10
Supported Disk Drives	11
Supported Cables	12
Network Connectivity Standard Practices	13
Bootability	13
Required Patches	14
Installing Required Solaris Patches	14
▼ To Download and Install the Solaris Recommended Patch Cluster	14
Using the Sun StorEdge 3000 Family Software	15
Downloading and Installing Software Applications	16
▼ To Download the Software	16
▼ To Install or Upgrade the Software	17

Downloading Disk Drive Firmware 20

Downloading the SAF-TE Firmware Patch 20

- ▼ To Determine Your Current SAF-TE Firmware Version 21
- ▼ To Download and Install the Firmware Patch 21

Sun StorEdge 3120 SCSI Array Release Notes

This document contains important information about the Sun StorEdge™ 3120 SCSI array that was not available at the time the product documentation was published. Read this document so that you are aware of issues or requirements that can impact the installation and operation of the Sun StorEdge 3120 SCSI array.

See [“To Install or Upgrade the Software” on page 17](#) for information about downloading and installing the software package.

New Features in This Release

This release provides an upgrade to SAF-TE firmware version 1190.

See [“Downloading the SAF-TE Firmware Patch” on page 20](#) for complete instructions for downloading the patch, the README file, and other supplemental information.

A CD containing the Sun StorEdge Command-Line Interface (CLI), Sun StorEdge Configuration Service, Sun StorEdge Diagnostic Reporter software, installation and configuration documents, and Sun StorEdge 3000 family documentation is no longer automatically included with Sun StorEdge 3120 SCSI array configurations. This policy ensures availability of the most current information and reduces impact on the environment.

The contents of this CD are available through the Sun Download Center located at the following URL:

<http://www.sun.com/software/download/>

Note – For those requiring a CD, it is available without charge as an x-option, part number NCSS9-230-W9NR.

Release Documentation

These release notes supplement the documents shown in [TABLE 1](#).

TABLE 1 Sun StorEdge 3120 SCSI Array Documentation

Title	Part Number
<i>Sun StorEdge 3000 Family Installation, Operation, and Service Manual</i>	816-7956
<i>Sun StorEdge 3000 Family Rack Installation Guide for 1U Arrays</i>	819-4027
<i>Sun StorEdge 3000 Family FRU Installation Guide</i>	816-7326
<i>Sun StorEdge 3000 Family 2.5 Software Installation Guide</i>	817-3764
<i>Sun StorEdge 3000 Family Configuration Service 2.5 User's Guide</i>	817-3337
<i>Sun StorEdge 3000 Family Diagnostic Reporter 2.5 User's Guide</i>	817-3338
<i>Sun StorEdge 3000 Family CLI 2.5 User's Guide</i>	817-4951
<i>Sun StorEdge 3000 Family Safety, Regulatory, and Compliance Manual</i>	816-7930

You can download the documents listed in the preceding table from the following location:

- http://www.sun.com/products-n-solutions/hardware/docs/Network_Storage_Solutions/Workgroup/3120

Service Contact Information

If you need help installing or using this product, call 1-800-USA-4SUN, or go to:

<http://www.sun.com/service/contacting>

Supported Operating Systems and Software

The following are the supported operating systems:

- Solaris 9 and 10 operating systems and later, SPARC Platform Edition
- Solaris 9 operating system x86 Platform Edition (9 04/04), Solaris 10 x86 Platform Edition, and Solaris 10 x64 Platform Edition and later
- Windows 2000 Server x86, WHQL
- Windows 2003 Server x86, WHQL
- Red Hat AS 3.0 and 4.0
- Red Hat Enterprise Linux (RHEL) 3.0 x86; 3.0 x64; 4.0 x64
- Novell Netware 5.1, 6.0, and 6.5
- SUSE Linux Enterprise Server 9.0, (32-bit and 64-bit)

The supported software includes:

- Sun StorEdge 3000 Family Configuration Service 2.x
- Sun StorEdge 3000 Family Diagnostic Reporter 2.x
- Sun StorEdge 3000 Family CLI 2.x
- Sun Cluster™ 3.0 and 3.1 software
- Solaris Volume Manager (for the Solaris 9 operating system and above)
- Veritas Volume Manager 3.5, 4.0, and 5.0
- Sun StorEdge Performance Suite (with Sun StorEdge QFS software)
- Sun StorEdge Utilization Suite (with Sun StorEdge SAM-FS software)
- The Sun Storage Automated Diagnostic Environment 2.4

Java Runtime Environment Requirements

Before you install Sun StorEdge Configuration Service, Sun StorEdge Diagnostic Reporter, or the Sun StorEdge CLI, make sure that your system meets the Java Runtime Environment (JRE) prerequisites shown in the Sun StorEdge 3000 Family Software Installation Guide instructions for your operating system. In general, you can use Sun JRE version 1.2.2 through 1.5 for all platforms. IBM AIX and SUSE Linux can also use IBM JRE version 1.2 through 1.4.

Supported Connection Methods and Host Adapters

The Sun StorEdge 3120 SCSI array can be connected to a host in one of the following ways:

- By means of a supported host adapter
- By means of a single-ended SCSI controller embedded in a supported host

TABLE 2 lists the supported host adapters and connections.

TABLE 2 Supported Host Adapters and Connections

Operating System	Host Adapter	Part Number
Solaris operating system	An on-board SCSI port attachment (on the host system)	N/A
Solaris operating system	Sun StorEdge PCI Dual Ultra3 SCSI host adapter	(X)6758A
Solaris operating system	Dual Ultra2 SCSI and dual FastEthernet PCI adapter	(X)2222A
Solaris operating system	Dual Ultra2 SCSI and dual Gigabit Ethernet PCI adapter	(X)4422A (X)4422A-2
Solaris operating system	SunSwift adapter (Sun FastEthernet 10/100BaseT F/W UltraSCSI SBus adapter 1.0) ²	(X)1018A
Solaris operating system	Ultra320 SCSI Dual Channel PCI-X adapter	SG-(X)PCI2SCSI-LM320 SG(X)PCI2SCSILM320-Z
Solaris operating system	Ultra320 SCSI Single Channel PCI-X adapter	SG-(X)PCI1SCSI-LM320 SG(X)PCI1SCSILM320-Z
Solaris 10, x64 x86 Red Hat Enterprise Linux (RHEL) 3.0 x64; 3.0 x86; 4.0 x64 SuSE SLES 9 x64 Windows Server 2000 2003 x86, WHQL Windows XP Pro. x86, WHQL	Ultra320 SCSI Dual Channel PCI-E x4 adapter	SG-(X)PCIE2SCSIU320Z

TABLE 2 Supported Host Adapters and Connections

Operating System	Host Adapter	Part Number
Solaris 9 4/04 x86, Solaris 9 9/04 x86, and Solaris 10 x86 (Sun Fire V20z and V40z servers only)	Ultra320 SCSI Dual Channel PCI-X adapter	X9265A LSI22320-R ¹
Red Hat AS 3.0 and 4.0 (Sun Fire V20z and V40z servers only)	Ultra320 SCSI Dual Channel PCI-X adapter	SG-(X)PCI2SCSI-LM320 SG(X)PCI2SCSILM320-Z
Windows 2000/2003 and Linux operating systems	Ultra320 SCSI Dual Channel PCI-X adapter	X9265A LSI22320-R ¹

¹ The LSI22320-R HBA is not available from Sun.

² To ensure cable and onboard HBA compatibility, please review the HBA Sunswift manual for applicable restrictions.



Caution – If you are using the Solaris 9 operating system and if you are using the Sun StorEdge PCI Dual Ultra3 SCSI host adapter (X)6758A, you must download and install the adapter’s driver on the host where the adapter is installed. (See the *Sun StorEdge PCI Dual Ultra3 SCSI Host Adapter Release Notes*, part number 816-2157 for the download procedure.) Without the driver, any array connected to the adapter is not visible to the host, since this driver is not included on the Solaris operating system.

Supported Sun Platforms and Connection Methods

TABLE 3 and TABLE 4 show the connection methods supported for each supported Sun system. A “No” in any of the columns indicates that the HBA or on-board SCSI port is not supported on the platform.

TABLE 3 Supported Sun SPARC-Based Systems and Connection Methods

	(X)6758A Host Adapter	On-Board SCSI Port	(X)2222A & (X)4422A (-2) HBAs	(X)1018A SBus Adapter	SG- (X)PCIE2SCSI U320Z	SG- (X)PCI2SCSI- LM320 SG (X)PCI2SCSILM 320-Z	SG- (X)PCI1SCSI- LM320 SG (X)PCI1SCSILM 320-Z
Ultra™ 25 workstation	No	No	Yes	No	No	Yes	No
Ultra 30 workstation	No	No	Yes	No	No	No	No
Ultra 40 workstation	No	No	No	No	No	Yes	Yes
Ultra 45 workstation	No	No	Yes	No	Yes	Yes	No
Ultra 60 workstation	Yes	Yes	Yes	No	No	Yes	No
Ultra 80 workstation	Yes	Yes	Yes	No	No	Yes	No
Sun Blade™ 100 workstation	No	No	Yes	No	No	No	No
Sun Blade 150 workstation	No	No	Yes	No	No	Yes	No
Sun Blade 1000 workstation	Yes	Yes	Yes	No	No	Yes	No
Sun Blade 1500 workstation	Yes	Yes	Yes	No	No	Yes	No
Sun Blade 2000 workstation	Yes	Yes	Yes	No	No	Yes	No
Sun Blade 2500 workstation	Yes	Yes	Yes	No	No	Yes	No
Sun Blade 8000	No	No	No	No	No	No	No
Sun Java W1100z workstation	No	No	No	No	No	Yes	Yes
Sun Java W2100z workstation	No	No	No	No	No	Yes	Yes

TABLE 3 Supported Sun SPARC-Based Systems and Connection Methods *(Continued)*

	(X)6758A Host Adapter	On-Board SCSI Port	(X)2222A & (X)4422A (-2) HBAs	(X)1018A SBUS Adapter	SG- (X)PCI-E2SCSI U320Z	SG- (X)PCI2SCSI- LM320 SG (X)PCI2SCSILM 320-Z	SG- (X)PCI1SCSI- LM320 SG (X)PCI1SCSILM 320-Z
Netra™ 20 server	Yes	Yes	Yes	No	No	Yes	No
Netra t1 100	No	Yes	No	No	No	Yes	No
Netra t1 105	No	Yes	No	No	No	Yes	No
Netra 120 server	Yes	Yes	Yes	No	No	Yes	No
Netra T1 AC200	No	Yes	Yes	No	No	No	No
Netra T1 DC200	No	Yes	Yes	No	No	No	No
Netra 240 server	No	No	Yes	No	No	Yes	No
Netra 440 server	No	No	Yes	No	No	Yes	No
Netra 1280 server	Yes	Yes	Yes	No	No	Yes	No
Netra t 1120 server	Yes	Yes	Yes	No	No	Yes	No
Netra t 1125 server	Yes	Yes	Yes	No	No	Yes	No
Netra t 1400 server	Yes	Yes	Yes	No	No	Yes	No
Netra t 1405 server	Yes	Yes	Yes	No	No	Yes	No
Sun Enterprise™ 220R server	Yes	Yes	Yes	No	No	Yes	No
Sun Enterprise 250 server	Yes	Yes	Yes	No	No	Yes	No
Sun Enterprise 420R server	Yes	Yes	Yes	No	No	Yes	No
Sun Enterprise 450 server	Yes	Yes	Yes	No	No	Yes	No
Sun Enterprise 3500 server	No	Yes	No	Yes	No	No	No
Sun Enterprise 4500 server	No	Yes	No	Yes	No	No	No
Sun Enterprise 5500 server	No	Yes	No	Yes	No	No	No
Sun Enterprise 6500 server	No	Yes	No	Yes	No	No	No
Sun Enterprise 10000 server	No	No	Yes/No ¹	Yes	No	No	No

TABLE 3 Supported Sun SPARC-Based Systems and Connection Methods (Continued)

	(X)6758A Host Adapter	On-Board SCSI Port	(X)2222A & (X)4422A (-2) HBAs	(X)1018A SBus Adapter	SG- (X)PCIE2SCSI U320Z	SG- (X)PCI2SCSI- LM320 SG (X)PCI2SCSILM 320-Z	SG- (X)PCI1SCSI- LM320 SG (X)PCI1SCSILM 320-Z
Sun Fire™ V20z server	No	No	Yes	No	No	Yes	Yes
Sun Fire V40z server	No	No	Yes	No	No	Yes	Yes
Sun Fire V60z server	No	No	No	No	No	Yes	Yes
Sun Fire V65z server	No	No	No	No	No	Yes	Yes
Sun Fire V120 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V125 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V210 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V215 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V240 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V245 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V250 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire 280R server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V440 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V445 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire V480 server	Yes	No	Yes	No	No	Yes	No
Sun Fire V490 server	Yes	No	Yes	No	No	Yes	No
Sun Fire V880 server	Yes	No	Yes	No	No	Yes	No
Sun Fire V890 server	Yes	No	Yes	No	No	Yes	No
Sun Fire V1280 server	Yes	Yes	Yes	No	No	Yes	No
Sun Fire X2100 server	No	No	No	No	Yes	No	No
Sun Fire X2100 M2 server	No	No	No	No	Yes	No	No
Sun Fire X2200 M2 server	No	No	No	No	Yes	No	No
Sun Fire X4100 server	No	No	No	No	No	No	Yes
Sun Fire X4100 M2 server	No	No	No	No	Yes	No	No
Sun Fire X4200 server	No	No	No	No	No	No	Yes

TABLE 3 Supported Sun SPARC-Based Systems and Connection Methods (Continued)

	(X)6758A Host Adapter	On-Board SCSI Port	(X)2222A & (X)4422A (-2) HBAs	(X)1018A SBus Adapter	SG- (X)PCIE2SCSI U320Z	SG- (X)PCI2SCSI- LM320 SG (X)PCI2SCSILM 320-Z	SG- (X)PCI1SCSI- LM320 SG (X)PCI1SCSILM 320-Z
Sun Fire X4200 M2 server	No	No	No	No	Yes	No	No
Sun Fire X4600 server	No	No	No	No	Yes	No	No
Sun Fire 4800 server	Yes	No	Yes	No	No	Yes	No
Sun Fire 4810 server	Yes	No	Yes	No	No	Yes	No
Sun Fire 6800 server	Yes	No	Yes	No	No	Yes	No
Sun Fire 12K server	Yes	No	Yes	No	No	Yes	No
Sun Fire 15K server	Yes	No	Yes	No	No	Yes	No
Sun Fire E20K server	Yes	No	Yes	No	No	Yes	No
Sun Fire E25K server	Yes	No	Yes	No	No	Yes	No
Sun Fire E2900 server	No	No	Yes	No	No	Yes	No
Sun Fire E4900 server	Yes	No	Yes	No	No	Yes	No
Sun Fire E6900 server	No	No	Yes	No	No	Yes	No
Sun Fire T1000 server	No	No	No	No	Yes	No	No
Sun Fire T2000 server	No	No	No	No	Yes	No	Yes

1 HBA (x)2222A is supported. HBA (x)4422A is not supported.

TABLE 4 Supported Sun x86-Based Systems and Connection Methods

	On-board ¹	X9265A LSI22320-R ²	SG-(X)PCI2SCSI-LM320 SG(X)PCI2SCSILM320-Z
Sun Fire V60x server	No	No	No
Sun Fire V65x server	No	No	No
Sun Fire V20z server	No	Yes	Yes
Sun Fire V40z server	No	Yes	Yes

1 At this time, on-board HBAs with the Sun Fire V60x and V65x servers are not supported due to incompatibility with the SCSI chip and LSI repeater in the Sun StorEdge 3120 SCSI array.

2 As of this publication date, the X9265A/LSI22320-R HBA has not been fully qualified with Sun StorEdge 3120 SCSI arrays attached to the Sun Fire V60x and V65x servers.

Supported Cabinets

TABLE 5 provides the supported cabinets with their associated rackmount kits and other required kits. See the *Sun StorEdge 3000 Family Rack Installation Guide for 1U Arrays* for rack installation instructions.

TABLE 5 Supported Cabinets and Associated Rackmount Kits

Cabinet Name	Cabinet Part Number(s)	Required Kit(s)	Required Kit Part Number	Maximum Number of Arrays Supported per Cabinet
Sun StorEdge 72-inch Expansion Cabinet	SG-(X)ARY030A	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	16
Sun Fire Cabinet	SF-(X)CAB, SFE-(X)CAB	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	10
Sun Rack 900-38 Cabinet	SR9-(X)KM038A-IP	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	24
Sun Rack 1000-42 Cabinet	SRK-(X)AZ042A-IP	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	24
Sun Rack 1000-38 Cabinet	SRK-(X)RS038A-IP	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	24
Sun Fire 6800 System	F6800-1	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	7
Sun Fire E6900 System	E6900-BASE	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	5
Standard EIA Cabinets	Not Applicable	Rackmount Kit	(X)TA-3000-1URK-19U(Z)	Varies
Telco flushmount racks	Not Applicable	Rackmount Kit	(X)TA-3000-1URK-19F(Z)	Varies
Telco center-of-gravity racks	Not Applicable	Rackmount Kit	(X)TA-3000-1URK-19C(Z)	Varies

Note – For more information about using Sun StorEdge arrays with the Sun Rack 900 and 1000 cabinets, refer to the Sun Rack Cabinet Family Products web page at <http://www.sun.com/servers/rack/index.html>

Supported Disk Drives

TABLE 6 provides the description, part number, and FRU ID number for the disk drives supported with the Sun StorEdge 3120 SCSI array.

TABLE 6 Supported Disk Drives

Description	Part Number
73 GB 10,000 RPM	(X)TA-SC1NC-73G10K
36 GB 15,000 RPM	(X)TA-SC1NC-36G15K
73 GB 15,000 RPM	(X)TA-SC1NC-73G15K
146 GB 10,000 RPM	(X)TA-SC1NC-146G10K
146 GB 15,000 RPM	(X)TA-SC1NC-146G15K
300 GB 15,000 RPM	(X)TA-SC1NC-300G15K (U320 SCSI LVD in Sun StorageTek 3000 carrier, RoHS-5)
300 GB 10,000 RPM	(X)TA-SC1NC-300G10K

Note – In an array shipped with less than 4 drives, each empty slot in the array contains an air management sled to correctly handle the air flow and heat. Each drive slot requires either a disk drive or an air management sled.



Caution – If you replace a disk drive, the replacement disk drive must have the same or greater capacity than the disk drive that is being replaced. You can mix capacity in the same enclosure, but not spindle speed (RPM). For example, you can use 73-Gbyte and 146-Gbyte drives with no performance problems if both are 10K RPM drives. Violating this configuration guideline leads to poor performance. If you are adding a new disk drive, these same configuration guidelines apply.

Supported Cables

[TABLE 7](#) lists the supported SCSI cables. Cables may be ordered using the marketing part numbers in [TABLE 7](#).

Note – The manufacturing part numbers supplied in the third column of [TABLE 7](#) can be checked against the manufacturing part numbers stamped on other cables that you might have in stock to confirm that they are supported.

TABLE 7 Supported Cables

Cable Type and Length	Marketing Part Number	RoHS Compliant	Manufacturer Part Number
VHDCI/VHDCI 0.8 m, 68-pin	(X)1136A-Z	RoHS-6	530-3629-01
	(X)1136A	No	530-2982-02
VHDCI/VHDCI, 1.2 m, 68-pin	(X)1137A	No	530-2983-02
VHDCI/VHDCI 2 m, 68-pin	(X)1138A-Z	RoHS-6	530-3630-01
	(X)1138A	No	530-2538-02
VHDCI/VHDCI 4 m, 68-pin	(X)3830B-Z	RoHS-6	530-3631-01
	(X)3830B	No	530-2984-02
VHDCI/VHDCI 10 m, 68-pin	(X)3831B-Z	RoHS-6	530-3632-01
	(X)3831B	No	530-2985-02
HD-68/VHDCI, 0.8 m, 68-pin	(X)1132A-Z	RoHS-6	530-3624-01
	(X)1132A	No	530-2452-03
HD-68/VHDCI, 1.2 m, 68-pin	(X)1135A	No	530-3323-01
HD-68/VHDCI, 2 m, 68-pin	(X)3832A-Z	RoHS-6	530-3625-01
	(X)3832A	No	530-2453-03
HD-68/VHDCI, 4 m, 68-pin	(X)3830A-Z	RoHS-6	530-3626-01
	(X)3830A	No	530-2454-03
HD-68/VHDCI, 10 m, 68-pin	(X)3831A-Z	RoHS-6	530-3627-01
	(X)3831A	No	530-2455-03

Note – When you attach the provided SCSI bus cables to the Sun StorEdge 3120 SCSI array, it is important to tighten the cable jack screws with six full clockwise turns prior to powering up the array, to ensure proper operation.

Network Connectivity Standard Practices

It is extremely important for the proper operation and reliability of the equipment that all network connectivity adhere to Ethernet and facility wiring standards IEEE 802.3 and EIA/TIA 568B. Make sure that the cabling and patch cords for your facilities are up to these specifications, and protect the cables from excessive stress and damage. The best practice, and the one that is recommended by all facilities wiring standards, is to test your structured cable system end-to-end with a quality cable test set. Adherence to these practices will help eliminate almost all connectivity issues.

Other related standards are ISO/IEC IS 11801 (International), Cenelec EN 50173 (Europe), CSA T529 (Canada), and SAA/SNZ HB27:1996 (Australia and New Zealand).

Bootability

For embedded controllers and (X)4422A HBAs, booting from the array requires no special procedures.

To boot a host through a Sun StorEdge PCI Dual Ultra3 SCSI host bus adapter, follow the procedures in the “Enabling a Host to Boot Through the Host Adapter” chapter in the *Sun StorEdge PCI Dual Ultra3 SCSI Host Adapter Installation Guide*, part number 816-2156.

An online copy of the installation guide is available from the following web site:

http://www.sun.com/products-n-solutions/hardware/docs/Network_Storage_Solutions/Adapters/index.html

For a current list of patches for this host bus adapter, including driver patches, refer to:

<http://www.sun.com/sunsolve/>

Search for “Sun StorEdge PCI Dual Ultra3 SCSI Host Adapter” in the “Search SunSolve” search area.

Note – Bootability is not supported for this HBA on servers running the Solaris 10 operating system.

Required Patches

The Solaris 9 or Solaris 10 Recommended Patch Cluster is required to use Sun StorEdge Configuration Service and Diagnostic Reporter software. Make sure the Solaris Recommended Patch Cluster is installed on a Solaris host before connecting the host to the array.

If a Sun StorEdge PCI Dual Ultra3 SCSI Host Adapter, X6758A, is used to connect the Sun StorEdge 3120 array, the bus driver must also be updated. The updated bus driver is available in the following patches, or later versions:

- Solaris 9 Operating System: 112706-05
- Solaris 10 Operating System: 119555-03

Installing Required Solaris Patches

Make sure the Solaris Recommended Patch Cluster is installed on a Solaris host before connecting the host to the array.

▼ To Download and Install the Solaris Recommended Patch Cluster

1. Log in to the host that you want to connect to the array.
2. Go to <http://www.sun.com/sunsolve/>
3. Under Resources, click Patches and Updates.
4. Under Recommended and Security Patches, click Recommended Patch Clusters.
5. Find your version of Solaris 9 or Solaris 10 in the Recommended Solaris Patch Clusters list, make sure the Readme checkbox is checked, and then click Go.
6. Print or save the README file from the browser window.
7. Click the browser's Back icon to return to the previous page.
8. Select the format you want in the row that begins with Solaris 9 or Solaris 10 in the Recommended Solaris Patch Clusters list, click either Download HTTP or Download FTP, and then click Go.

9. In the File Download dialog box, click Save.
10. In the Save As dialog box, type a destination directory for the patch cluster, and then click Save.
11. Follow the procedure in the INSTALL INSTRUCTIONS section in the README file to install the patches.

Using the Sun StorEdge 3000 Family Software

Sun StorEdge Configuration Service software supports Sun StorEdge 3120 SCSI JBOD arrays. For an overview of the features available for JBODs, refer to the *Sun StorEdge 3000 Family Installation, Operation, and Service Manual* for the array. For detailed coverage, refer to the *Sun StorEdge 3000 Family Configuration Service User's Guide*.

The Sun StorEdge CLI supports JBOD arrays, and is limited to the following CLI commands:

- about
- exit
- help
- quit
- select
- set led
- show access-mode
- show configuration
- show enclosure-status
- show frus
- show inquiry-data (shortcuts include show inquiry and inquiry)
- show led-status
- show safte-devices
- version
- -disk option (used with a command to specify a JBOD device)

Refer to the *Sun StorEdge 3000 Family CLI 2.5 User's Guide* for detailed command information.

Downloading and Installing Software Applications

Use a recent version such as 2.x of the Sun StorEdge Configuration Service agent, Sun StorEdge Configuration Service console, Sun StorEdge Diagnostic Reporter, and Sun StorEdge Command-Line Interface (CLI) utility to download the firmware for your controller. If you are not using a recent version of this software, download and install it, using the following instructions, before downloading the controller firmware.

Note – Because the communication protocol changes from version to version, you must install the SUNWSSCS package on all systems that manage the storage when upgrading.

Note – If different versions of the agent and console co-exist, Sun StorEdge Configuration Service is not able to discover previously configured arrays.

Sun StorEdge Configuration Service software supports Sun StorEdge 3120 SCSI JBOD arrays. For an overview of the features available for JBODs, refer to the *Sun StorEdge 3000 Family Installation, Operation, and Service Manual* for the array. For detailed coverage, refer to the *Sun StorEdge 3000 Family Configuration Service 2.5 User's Guide*.

▼ To Download the Software

To download the software from the Sun Download Center web site, perform the following steps.

1. Go to:

<http://www.sun.com/software/download/>

2. Under System Administration > Storage Management, click the Sun StorEdge 3000 Family Storage Products - Related Software link, and click the Download button.

The Sun Download Center page is displayed.

3. If not previously registered, register.

a. Click the Register Now link at the bottom of the left column.

The filenames for software versions 1.x are listed in [TABLE 8](#).

TABLE 8 Software Filenames

Application	Filename
Configuration Service Agent	SUNWscsd
Configuration Service Console	SUNWscsu
Diagnostic Reporter Agent	SUNWscsa
Diagnostic Reporter Config Tool	SUNWscui
CLI	SUNWsccli

3. To install the version 2.5 software package, type:

```
# pkgadd -d . SUNWscscs
```

The Solaris installation package, `SUNWscscs`, includes the following components:

- Sun StorEdge Configuration Service agent
- Sun StorEdge Configuration Service console
- Sun StorEdge Diagnostic Reporter agent (daemon)
- Sun StorEdge Diagnostic Reporter Config Tool (UI)
- Sun StorEdge CLI

4. Provide appropriate responses to each of the installation prompts.

- a. If asked if you want to restore the agent configuration, type `y`. (If you type `n`, you will need to re-enable the managing servers.)**

```
The previous configuration was saved. Do you want to restore the
configuration [y,n,?,q]: y
```

- b. To continue with the installation, type `y` and press Return.**

```
Do you want to continue with the installation [y,n,?] y
```

After the package is installed, the following message is displayed, indicating it was installed successfully.

```
Installation of <SUNWsscs> was successful.
```

The Sun StorEdge Configuration Service components are installed in the following directories:

- /opt/SUNWsscs/ssagent
- /opt/SUNWsscs/sscsconsole

The Sun StorEdge Diagnostic Reporter components are installed in the following directories:

- /opt/SUNWsscs/ssdiagreporterd
- /opt/SUNWsscs/ssdiagreporterui

The CLI is installed in /opt/SUNWsscs/sbin/sccli.

5. If you are using Sun StorEdge Configuration Service and Diagnostic Reporter to manage and monitor the storage, the following additional steps are required.
 - a. You must set passwords for all Sun StorEdge Configuration Service users.

Note – User passwords are deleted when Sun StorEdge Configuration Service is uninstalled. Even if you had a previously saved configuration, you still have to reenter the `ssmon`, `ssadmin`, and `ssconfig` passwords.

- b. Before starting the Sun StorEdge Configuration Service console, you must run the following command to specify the web browser to access online help.

```
/opt/SUNWsscs/sscsconsole/config_sscon
```

- c. The Sun StorEdge Configuration Service agent and the Sun StorEdge Diagnostic Reporter agent (daemon) have been installed but are not configured to start at boot time by default. To enable the Sun StorEdge Configuration Service agent to start automatically when the system boots, and to start it now, type:

```
/etc/init.d/ssagent enable start
```

- d. To enable the Sun StorEdge Diagnostic Reporter to start automatically when the system boots, and to start it now, type:

```
/etc/init.d/ssdgrptd enable start
```

6. Edit `/kernel/drv/sd.conf` if LUNs other than LUN 0 are mapped from the array to the host and an onboard HBA for Sun hosts or third-party HBAs are used for connecting the device.

Add lines for LUNs as appropriate for your configuration. LUNs can be numbered from 0-31. Generally, do not add more LUN definitions than you actually plan to have, since doing so increases the time needed to scan each SCSI bus. For information about modifying the `sd.conf` file, refer to the *Sun StorEdge 3000 Family Installation, Operation, and Service Manual* for your SCSI array.

7. If the `sd.conf` file has been edited, perform a reconfiguration reboot.

If the `sd.conf` file has not been edited, you do not have to perform a reconfiguration reboot and the agent starts automatically.

Downloading Disk Drive Firmware

To download disk drive firmware, use the appropriate Sun disk drive firmware patch and instructions. Do not use the Sun StorEdge CLI or Sun StorEdge Configuration Service to download disk drive firmware.

Note – Disk drive firmware is provided through Sun disk firmware patches, which include the required download utility. Sun disk firmware patches are separate from Sun StorEdge 3000 family firmware patches.

Downloading the SAF-TE Firmware Patch

Firmware patch 113728-04 containing SAF-TE firmware version 1190 with bug fixes is available on SunSolve, and can be installed using the Sun StorEdge CLI. To download the firmware patch, see [“To Download and Install the Firmware Patch” on page 21](#).

TABLE 9 SAF-TE Firmware

Product	Firmware Type	Version	Filename
3120	SAF-TE	1190	saftefw_3120_1190.bin

▼ To Determine Your Current SAF-TE Firmware Version

To determine your current SAF-TE firmware version, use the CLI and enter the `show safte-devices` command. The SAF-TE version is displayed in the `Rev` column.

▼ To Download and Install the Firmware Patch

1. Go to <http://sunsolve.sun.com/sunsolve/>
2. Under **Support**, click **Patches and Updates**.
3. Use **Patch Finder** to locate patch ID 113728-04 by entering the patch ID into the search field and clicking the **Find Patch** button.
4. Select the link for the format that you want, either **HTTP** or **FTP** next to **Download Patch**, or **HTTPS** or **FTP** next to **Download Signed Patch**.
5. In the dialog box that is displayed, indicate the destination directory for the patch and proceed to download the file to that location.
6. Follow the **README.113728-04** instructions contained in the zip file to install the patch.

