



# Sun StorageTek™ Enterprise PCI Express 4 Gb FC Single and Dual Port Host Bus Adapters Release Notes

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# Contents

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Features in This Release	2
Supported Operating Systems	2
Solaris 10 Operating Systems	3
System Requirements	3
Minimum OS Levels	3
Host Platform Support	3
Storage System Support	3
Fibre Channel Switch Support	3
Known Issues and Bugs	4
Red Hat Enterprise Linux and SuSE Linux Enterprise Server Systems	5
System Requirements	5
Minimum OS Levels	5
Host Platform Support	5
Storage System Support	6
Fibre Channel Switch Support	6
Known Issues and Bugs	6

Windows Server 2000 and Windows Server 2003 Systems	6
System Requirements	7
Host Platform Support	7
Storage Systems Support	7
Fibre Channel Switch Support	7
Known Issues and Bugs	7
Service Contact Information	7

# Sun StorageTek Enterprise PCI Express 4 Gb FC Single and Dual Port Host Bus Adapters Release Notes

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This document contains the latest supplementary information for the Sun StorageTek™ Enterprise PCI Express 4 Gb Fibre Channel (FC) Single and Dual Port Host Bus Adapter (HBA) (SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4). Use it with the latest version of the *Sun StorageTek Enterprise PCI Express 4Gb Fibre Channel Single and Dual Port HBA Installation Guide* (part number 819-3899-11 or later).

It contains the following sections:

- “Features in This Release” on page 2
- “Solaris 10 Operating Systems” on page 3
- “Red Hat Enterprise Linux and SuSE Linux Enterprise Server Systems” on page 5
- “Windows Server 2000 and Windows Server 2003 Systems” on page 6

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## Features in This Release

This HBA consists of a single-slot PCI Express bus expansion board that connects to one or two FC optical media busses. Each channel of the host adapter can act as either an initiator or target. The two channels operate independently; each supports a separate FC bus operating at 4.25 Gbits/sec. Each channel is also backward-compatible with 2.125 Gbits/sec and 1.0625 Gbits/sec FC busses.

One or two Small-Form Factor (SFF) LC-duplex connectors are used to connect to the external FC busses. The FC bus operates in short-wave, multi-mode. One ISP2432 processor is used to support the two independent FC busses.

## Supported Operating Systems

You can use the Sun StorageTek Enterprise PCI Express 4Gb FC Single and Dual Port HBA with the following operating systems (OSs):

- Solaris 10 OS

To use the adapter with these OSs, you must use the Sun driver as described in “Solaris 10 Operating Systems” on page 3.

- Red Hat Enterprise Linux and SuSE Linux Enterprise Server OSs

To use the adapter with these OSs, you must use the QLogic driver as described in “Red Hat Enterprise Linux and SuSE Linux Enterprise Server Systems” on page 5.

- Windows Server 2000 and Windows Server 2003

To use the adapter with this OS, you must use the QLogic driver as described in “Windows Server 2000 and Windows Server 2003 Systems” on page 6.

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# Solaris 10 Operating Systems

This section contains the following information about using the Sun StorageTek Enterprise PCI Express 4Gb FC Single and Dual Port HBA with the Solaris OS:

- “System Requirements” on page 3

## System Requirements

The following hardware and software are qualified with the Solaris 10 OS.

### Minimum OS Levels

- Solaris 10 SPARC or x64 OS with the Solaris 10 recommended patch cluster

### Host Platform Support

- Sun Fire T2000 server
- Sun Fire X2100 server (x64)

### Storage System Support

- Sun StorEdge™ 3510 and 3511 FC Arrays
- Sun StorEdge™ 6020, 6120, and 6320 Arrays
- Sun StorEdge™ 6130 Array
- Sun StorEdge 6920 system
- Sun StorEdge L25, L100 tape libraries
- Sun StorEdge L500 tape library
- Sun StorEdge L180, L700 tape libraries
- Sun StorEdge L5500, L8500 tape libraries

### Fibre Channel Switch Support

FC switch support is shown in TABLE 1TABLE 1.

**TABLE 1** Fibre Channel Switch Support

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Switch
QLogic SANbox 5200 2 Gb switch
Sun StorEdge Network 2 Gb switch
Sun StorEdge Network 2 Gb Brocade SilkWorm 3200 and 3800 switches
Sun StorEdge Network 2 Gb Brocade SilkWorm 3250 and 3850 switches
Sun StorEdge Network 2 Gb Brocade SilkWorm 3900 switch
Sun StorEdge Network 2 Gb Brocade SilkWorm 12000 and 24000 Core Fabric switches
Sun StorEdge Network 4 Gb Brocade SilkWorm 4100 switch
Sun StorEdge Network 4 Gb Brocade SilkWorm 48000 and 200E
Sun StorEdge Network 2 Gb McDATA Sphereon 4300 switch
Sun StorEdge Network 2 Gb McDATA Sphereon 4500 switch
Sun StorEdge Network 2 Gb McDATA Intrepid 6064 director
Sun StorEdge Network 2 Gb McDATA Intrepid 6140 director

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## Known Issues and Bugs

The following bugs are under investigation at the time of the release:

- **Bug 6306254** — SunVTS qlctest fails with qlctest.get\_port\_info.FATAL message  
**Workaround:** On a dual-port HBA, run qlctest on only one port at a time.
- **Bug 6344143** — SunVTS qlctest: Fails on Online Selftest  
**Workaround:** Disable 'Online Selftest' in qlctest 'Test Parameter Options' menu.

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# Red Hat Enterprise Linux and SuSE Linux Enterprise Server Systems

The Linux Drivers required to run the Sun StorageTek Enterprise PCI Express 4 Gb FC Single and Dual Port HBAs with the Linux OS are available for download at the Sun designated page at:

[http://www.qlogic.com/support/sun\\_page.html](http://www.qlogic.com/support/sun_page.html)

Drivers that support the Linux 2.4 and 2.6 kernels are provided. The Linux 2.4 kernel is used in Red Hat Enterprise Linux (RHEL) 3. The Linux 2.6 kernel is used in RHEL 4 and SLES 9. Consult the Sun hardware platform documentation to verify which Linux releases are supported.

The necessary utilities to perform diagnostics and HBA management are packaged in the Application Kit and are available for download at this Web page. The `SANSurfer` utility performs simple diagnostics, firmware maintenance, general HBA management and configuration functions.

This section contains the following information about using the StorageTek Enterprise PCI Express 4 Gb FC Single and Dual Port HBAs in Red Hat Enterprise Linux and in SuSE Linux Enterprise operating systems:

- “System Requirements” on page 5
- “Known Issues and Bugs” on page 6

## System Requirements

The following hardware and software are qualified with the Red Hat Enterprise Linux and with the SuSE Linux Enterprise server systems:

### Minimum OS Levels

- Red Hat Enterprise Linux (RHEL) 3
- Red Hat Enterprise Linux (RHEL) 4
- SuSE Linux Enterprise Server (SLES) 9

### Host Platform Support

- Sun Fire X2100 server (x64)

## Storage System Support

The storage systems supported for Red Hat Enterprise Linux and SuSE Linux Enterprise Server Systems are the same as those listed for “Solaris 10 Operating Systems” on page 3.

## Fibre Channel Switch Support

FC switch support is shown in TABLE 1. In other words, it is exactly the same for Red Hat Enterprise Linux and SuSE Linux Enterprise Server Systems as it is for the Solaris 10 OS.

## Known Issues and Bugs

The following bugs are under investigation at the time of the release:

- **Bug 6330692** — A system lock up problem occurs when running RHEL3 on a Sun Fire server directly connected to an L100 tape library with three SDLT600 drives.

If the serial port is connected, 10 to 15 seconds after starting a mt test script, the system panics and then reboots. If not, the system hangs and needs to be power-cycled.

**Workaround:** It is recommended that you not access tape using this HBA on Linux 2.4 kernels.

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## Windows Server 2000 and Windows Server 2003 Systems

The host adapter device driver for running the Windows Server 2000 and Windows Server 2003 OS is available for download at the QLogic website:

[http://www.qlogic.com/support/sun\\_page.html](http://www.qlogic.com/support/sun_page.html).

This section contains the following information about using the StorageTek Enterprise PCI Express PCI Express 4 Gb FC Single and Dual Port HBAs in Windows Server 2000 and Windows Server 2003 operating systems:

- “System Requirements” on page 7
- “Known Issues and Bugs” on page 7

# System Requirements

The following hardware and software are qualified with the Windows Server 2000 and Windows Server 2003 OS:

## Host Platform Support

- Sun Fire X2100 server (x64)

## Storage Systems Support

The storage systems supported for the Windows Server 2000 and the Windows Server 2003 operating systems are the same as those listed for “Solaris 10 Operating Systems” on page 3.

## Fibre Channel Switch Support

The FC switches supported for the Windows Server 2000 and Windows Server 2003 operating systems are the same as those listed for the Solaris 10 OS in TABLE 1.

## Known Issues and Bugs

There are no known HBA issues or bugs for the Windows Server 2000 and Windows Server 2003 operating systems at this time.

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# Service Contact Information

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

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