[Quick Start Guide]

QUICK START GUIDE

FIBRE CHANNEL HBA INSTALLATION

QLOGIC

Purchasers of OEM products should consult with the OEM for support.

Please feel free to contact your QLogic approved reseller or QLogic Technical Support at any phase of integration for assistance. QLogic Technical Support can be reached by the following methods:

Web   http://support.qlogic.com

North America Contact Information

Email   support@qlogic.com

Phone   (952) 932-4040

Contact information for other regions of the world, along with the QLogic knowledge database containing troubleshooting information for QLogic HBAs, can be accessed from the QLogic support web site at: http://support.qlogic.com.

Quick Start Guide

Installation Instructions

This Quick Start Guide describes how to install and configure your new QLogic host bus adapter (HBA) in four simple steps:

- ❑ Step 1. Verify the package contents.
- ❑ Step 2. Install the HBA hardware.
- ❑ Step 3. Install the HBA driver.
- ❑ Step 4. Install the SANsurfer FC HBA Manager.

⚠ **CAUTION!** Keep the HBA in the antistatic bag until installation. The HBA contains parts that can be damaged by electrostatic discharge (ESD). Before handling the HBA, use standard methods to discharge static electricity. Place the HBA on the bag when examining it. Retain the bag for future use.

Step 1.   Verify the Package Contents

The QLogic HBA is shipped with the following items:

- ❑ QLogic HBA
- ❑ Low-profile bracket (not available in all models)

    For QLE25xx HBA low-profile bracket installation instructions, go to
    http://support.qlogic.com/support/drivers_softrware.aspx.

    In the table at the bottom of the page, in the first column, select **Fibre Channel HBAs**. In the second column, select the appropriate QLE25xx HBA. In the third column, select your operating system. Click the **Go!** button. Installation instructions are in the Documentation section.

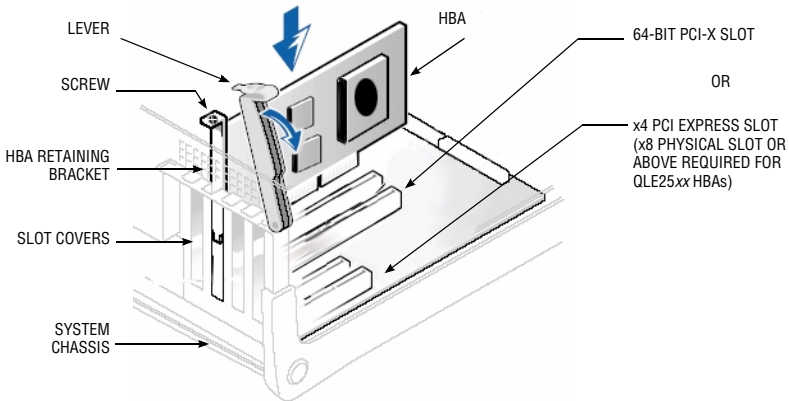- ❑ Quick Start Guide (this document)
- ❑ SANsurfer CD

Step 2.   Install the HBA Hardware

To install the HBA hardware, you need to open the computer and locate the appropriate bus slot. If necessary, consult your computer system manual for instructions to remove the computer cover.

Follow these steps to install the HBA hardware:

1. Power off the computer, then disconnect the power cable.
2. Remove the computer cover and find an appropriate empty bus slot.
3. Pull out the slot cover (if any) by removing the screw or releasing the lever.
4. Grasp the HBA by the top edge and seat it firmly into the appropriate slot.

5. Refasten the HBA's retaining bracket using the existing screw or lever.

6. Close the computer cover.

7. Plug the FC cable into the HBA.

8. Plug in the power cable and turn on the computer.

LEVER

SCREW

HBA RETAINING
BRACKET

SLOT COVERS

SYSTEM
CHASSIS

HBA

64-BIT PCI-X SLOT

OR

x4 PCI EXPRESS SLOT
(x8 PHYSICAL SLOT OR
ABOVE REQUIRED FOR
QLE25*xx* HBAs)

Sample Motherboard and Slots

Step 3.   Install the HBA Driver

After you have completed the hardware installation and turned on the computer, insert the SANsurfer CD into your CD-ROM drive and follow the instructions below.

NOTE: If the auto-run screen does not appear, double-click the **start_here** html file on the CD.

To install the HBA driver from the SANsurfer CD:

1. Click **Windows, Linux, Solaris**, **Netware** or **Mac OS**, as applicable.

2. Click **I Accept** on the License Agreement.

3. Select your specific operating system.

4. Install the driver:

   ❑   For **Windows**, click the **SANsurfer Install Wizard for Windows** link and follow the on-screen directions.

   ❑   For **Linux**, click the **SANsurfer Linux Driver Installer** link and follow the on-screen directions.

   ❑   For **Solaris**/**Netware**/**Mac OS**, select the driver and complete the installation as described in the readme file.

NOTE: For detailed driver installation options, please refer to the specific driver readme file located on the CD or on the QLogic website http://support.qlogic.com/support/drivers_software.aspx.

Step 4. Install the SANsurfer FC HBA Manager

To install the SANsurfer FC HBA Manager from the CD:

1. Select your applicable **operating system**.
2. Click **I Accept** on the License Agreement.
3. Select your **specific operating system**.
4. Select the **SANsurfer FC HBA Manager** install file.
5. Follow the on-screen directions to complete the installation.

Congratulations! You have successfully installed your QLogic HBA!

❑ To obtain the most current drivers, management tools, user instructions, and documentation, please visit the QLogic website at http://support.qlogic.com/support/drivers_software.aspx and download the latest versions.

❑ The following section contains additional information about the QLogic HBA, including the LED scheme, troubleshooting, warranty, technical support and certification information.

HBA LEDs

QLA2310/QLA200 HBA LED Scheme

Green LED	Yellow LED	Activity
❍	❍	Power off
●	●	Power
●	❍	Online
❍	●	Link
❍	Flashing	Loss of synchronization
Green and Yellow LEDs flashing alternately		Firmware error

QLA234x/QLA210/QLE220 HBA LED Scheme

Green LED	Amber LED	Activity
❍	❍	Power off
●	●	Power
●	❍	Online
❍	●	Link
❍	Flashing	Loss of synchronization
Alternate flashing	Alternate flashing	Firmware error
Flashing	❍	Beacon

QLA24xx/QLE24xx/QEM2462 HBA LED Scheme

Yellow LED	Green LED	Amber LED	Activity
❍	❍	❍	Power off
●	●	●	Power on (before firmware init)
Flashing	Flashing	Flashing	Power on (after firmware init)
Yellow, Green, and Amber LEDs flashing alternately			Firmware error
❍	❍	●/Flashing	Online, 1Gbps link / I/O activity
❍	●/Flashing	❍	Online, 2Gbps link / I/O activity
●/Flashing	❍	❍	Online, 4Gbps link / I/O activity
Flashing	❍	Flashing	Beacon

QEM2462 Power and Attention Switch LED Scheme

Green Power	Activity
❍	Power off Insertion or removal of the adapter is permitted.
●	Power Insertion or removal of the adapter is NOT permitted.
Blinking	Hot-plug operation is in progress and insertion or removal of the adapter is NOT permitted.

Yellow Attention	Activity
❍	Normal operation.
●	Operational problem at this slot.
Blinking	Slot is being identified at the user's request.

QLE25xx HBA LED Scheme

Yellow LED (8Gbps)	Green LED (4Gbps)	Amber LED (2Gbps)	Activity
❍	❍	❍	Power off
●	●	●	Power on (before firmware init)
Flashing	Flashing	Flashing	Power on (after firmware init)
Yellow, Green, and Amber LEDs flashing alternately			Firmware error
❍	❍	●/Flashing	Online, 2Gbps link / I/O activity
❍	●/Flashing	❍	Online, 4Gbps link / I/O activity
●/Flashing	❍	❍	Online, 8Gbps link / I/O activity
Flashing	❍	Flashing	Beacon

Warranty

The QLogic HBA comes with a standard three year QLogic warranty, or as specified by other agreements. Please check the QLogic Web site at http://www.qlogic.com/Support/warranty.aspx for warranty details.

Laser Safety

FDA Notice

This product complies with DHHS Rules 21CFR Chapter I,Subchapter J. This product has been designed and manufactured according to IEC60825-1 on the safety label of laser product.

Class 1 Laser Product	Caution—Class 1 laser radiation when open	
Appareil laser de classe 1	Do not view directly with optical instruments	**CLASS I LASER**
Produit der Laser Klasse 1		
Luokan 1 Laserlaite	Attention—Radiation laser de classe 1	
	Ne pas regarder directement avec des instruments optiques	
	Vorsicht—Laserstrahlung der Klasse 1 bei geöffneter Abdeckung	
	Direktes Ansehen mit optischen Instrumenten vermeiden	
	Varoitus—Luokan 1 lasersäteilyä, kun laite on auki	
	Älä katso suoraan laitteeseen käyttämällä optisia instrumentteja	

Agency Certification
QLogic HBAs

The following sections contain a summary of EMC/EMI test specifications performed on the QLogic HBAs to comply with radiated emission, radiated immunity, and product safety standards.

EMI and EMC Requirements

FCC Part 15 compliance: Class A (QLE236*x*, QLA24*xx*, QLA2*xx*, QLE2464, QLE2*xx*, QEM2462, QLE25*xx*), Class B (QLA23*xx*, QLE24*xx*)

FCC compliance information statement: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

ICES-003 compliance: Class A (QLE236*x*, QLA24*xx,* QLA2*xx*, QLE2*xx,* QLE2464, QEM2462, QLE25*xx*), Class B (QLA23*xx*, QLE24*xx*)

- ❏ For QLE236*x*, QLA24*xx*, QLA2*xx*, QLE2*xx*, QLE2464, QEM2462, and QLE25*xx* HBAs: This Class A digital apparatus complies with Canadian ICES-003.Cet appareil numériqué de la classe A est conformé à la norme NMB-003 du Canada.
- ❏ For QLA23*xx* and QLE24*xx* HBAs: This Class B digital apparatus complies with Canadian ICES-003.
  Cet appareil numériqué de la classe B est conformé à la norme NMB-003 du Canada.

CE Mark 89/336/EEC EMC Directive compliance:

EN55022:1998/CISPR22:1997 - Class A (QLE236*x*, QLA2440, QLA246*x*, QLA2*xx*, QLE2*xx*, QLE2464, QEM2462, QLE25*xx*)
Class B (QLA23*xx*, QLE2440, QLE246*x*)

EN55024:1998
Immunity Standards
EN61000-4-2 : ESD
EN61000-4-3 : RF Electro Magnetic Field
EN61000-4-4 : Fast Transient/Burst
EN61000-4-5 : Fast Surge Common/ Differential
EN61000-4-6 : RF Conducted Susceptibility
EN61000-4-8 : Power Frequency Magnetic Filed
EN61000-4-11: Voltage Dips and Interrupt
EN61000-3-2 : Harmonic Current Emission
EN61000-3-3 : Voltage Fluctuation and Flicker

VCCI compliance: Class A (QLE236*x*, QLA2440, QLA246*x*, QLE2*xx*, QLE2464, QEM2462, QLE25*xx*), Class B (QLA23*xx,* QLE2440, QLE246*x*, QLA2*xx*)

AS/NZS CISPR22 compliance: Class A (QLE236*x*, QLA2440, QLA246*x*, QLA2*xx*, QLE2*xx*, QLE2464, QEM2462, QLE25*xx*), Class B (QLA23*xx*, QLE2440, QLE246*x*)

CNS 13438 compliance: Class A (QLE236*x*, QLA2440, QLA246*x*, QLE2464, QEM2462, QLE25*xx*), Class B (QLA23*xx*, QLE2440, QLE246*x*)

❑   For QLE236*x*, QLA2440, QLA246*x*, QLE2464 and QEM2462 HBAs

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take adequate measures.

警告使用者:
這是甲類的資訊產品，在居住的環境中使用時，
可能會造成射頻干擾，在這種情況下，
使用者會被要求採取某些適當的對策。

MIC compliance: Class A (QLA2310F, QLA2340, QLA2342, QLE236*x*, QLA24*xx*, QLE2*xx*, QLE2464, QEM2462, QLE25*xx*)
Class B (QLE24*xx*, QLA2*xx*)

❑   For QLA2310F, QLA2340, QLA2342, QLE236*x*, QLA24*xx*, QLE2*xx*, QLE2464, QEM2462, and QLE25*xx* HBAs: Korea MIC Class A Certified

MIC

Product Name/Model	Fibre Channel HBA
Certification holder	QLogic Corporation
Manufactured date	Refer to date code listed on product
Manufacturer/Country of origin	QLogic Corporation/USA

| A class equipment (Business purpose info/telecommunications equipment) | As this equipment has undergone EMC registration for business purpose, the seller and/or the buyer is asked to beware of this point and in case a wrongful sale or purchase has been made, it is asked that a change to household use be made. |

❑   Korean Language Format— Class A

A급 기기 (업무용 정보통신기기)

이 기기는 업무용으로 전자파적합등록을 한 기기이오니
판매자 또는 사용자는 이 점을 주의하시기 바라며, 만약
잘못판매 또는 구입하였을 때에는 가정용으로 교환하시기
바랍니다.

❑   For QLE24*xx* and QLA2*xx* HBAs: Korea MIC Class B Certified

MIC

Product Name/Model	Fibre Channel HBA
Certification holder	QLogic Corporation
Manufactured date	Refer to date code listed on product
Manufacturer/Country of origin	QLogic Corporation/USA

| B class equipment (Household purpose info/telecommunications equipment) | As this equipment has undergone EMC registration for household purpose, this product can be used in any area including residential area. |

❑   Korean Language Format— Class B

B급 기기 (가정용 정보통신기기)

이 기기는 가정용으로 전자파적합등록을 한 기기로서
주거지역에서는 물론 모든지역에서 사용할 수 있습니다.

Product Safety Compliance

UL, cUL product safety compliance: QLA23*xx*, QLE236*x*, QLA24*xx*, QLE24*xx*, QLA2*xx*, QLE2*xx*, QLE2464, QEM2462, QLE25*xx*

UL60950
CSA C22.2 No.60950
Class 1 Laser Product per DHHS 21CFR (J)

73/23/ECC low voltage directive: QLA23*xx*, QLE236*x*, QLA24*xx*, QLE24*xx*, QLA2*xx*, QLE2*xx*, QEM2462, QLE2464, QLE25*xx*

TUV:
-EN60950-1:2001
-EN60825-1:1994+A1+A2
-EN60825-2:1994+A