

Fiber Channel Card Design Parameter Table



Article Overview

Fiber Channel cards are designed according to ANSI standards, supporting multiple speeds, SFP types, and PCIe interfaces, with configuration parameters defined for interoperability and performance.

Key Design Parameters

Parameter	Description	Notes / Recommendations	Standards Compliance
ANSI X3T11	Fibre Channel	Ensures interoperability with storage arrays and SAN devices; FCSI Profiles guide implementation	Supported
Speeds	2 Gbps, 4 Gbps, 8 Gbps, 10 Gbps, 16 Gbps, 25 Gbps, 32 Gbps	Speed support depends on card model and SFP type; e.g., Cisco MDS 9700 supports 32/16/8/4 Gbps on 32-Gbps SFPs	SFP / Transceiver
Types	SFP, SFP+, SFP28, QSFP28	Single-mode fiber (SMF/OS2) for long distances, multimode fiber (MMF/OM3/OM4) for short distances; DAC for ≤ 7 m, AOC for 3–30 m	PCIe Interface
PCIe Interface	PCIe 3.0 $\times 4$, $\times 8$; PCIe 4.0 $\times 4$, $\times 8$; PCIe 5.0	Bandwidth must match card speed; 10G NICs usually fine with PCIe 3.0 $\times 4$, 100G NICs require PCIe 3.0 $\times 8$ or PCIe 4.0 $\times 4$	Fiber Channel Classes
Classes	Class 2, Class 3	Defines flow control and delivery guarantees; supported by most enterprise cards	Error Handling
Error Handling	Forward Error Correction (FEC), BB_credits	FEC allows error correction without retransmission; BB_credits manage buffer-to-buffer flow control	Form Factor
Form Factor	Full-height, low-profile	Depends on server chassis and cooling requirements	Power & Cooling
Power & Cooling	Dual-port cards may require enhanced airflow	High-performance cards can run hot; heatsinks and airflow are critical	Configuration Parameters
Configuration Parameters	Port speed, rate mode, auto-negotiation	Changing speed or rate mode may disrupt traffic; auto parameter enables autosensing	Interoperability
Interoperability	FCSI Profiles, ANSI standards	Profiles specify selected ph...	

Article Content

Fibre Channel

The Fibre Channel physical layer is based on serial connections that use fiber optics to copper between corresponding pluggable

Fibre Channel network protocols

Parameters are shown in the table below in the form of their hexadecimal 8-bit values. This is clearer than their full 10-bit (Dxx.x)

2500 Series PCIe-to-8Gbps Fibre Channel Adapters Data Sheet

Overview the 2500 Series adapters are designed to meet the business requirements of the enterprise data center by enabling the

Fundamentals of Fibre Channel

Fibre Channel is data center storage protocol of choice for the next decade Orders of magnitude performance improvement, low

FIBRE CHANNEL

ABOUT THE FCIA The Fibre Channel Industry Association (FCIA) is a non-profit international organization whose sole purpose is to

GlobalPlatform Card Specification v2

GlobalPlatform defines a flexible and powerful specification for Card Issuers to create single- and multi-Application chip card systems

Design a Reliable and Highly Available Fibre Channel SAN

What You Will Learn This document explains how to design highly available Fibre Channel networks. Such a design requires

Fiber Channel Card

The fiber channel card enables a direct fiber channel connection to an external storage array. This card is available as a factory

Fibre Channel Overview

Fibre Channel attempts to combine the best of these two methods of communication into a new I/O interface that meets the needs of

Fibre Channel

The Fibre Channel Industry Association's roadmap has helped the industry see the future of Fibre Channel for over 15 years. Fibre

Marvell QLogic Fibre Channel Adapters

It is the user's own responsibility to design or build products with this information. Marvell products are not authorized for use as

FCIA OFFICIAL SPEEDMAPV23

Fibre Channel over Ethernet tunnels FC through Ethernet. 10GFCoE was not available until after FC-BB-5, the FCoE protocol

Fiber Channel Transceiver Modules Datasheet | FS

This transceiver is compliant with SFF-8636 standards. Digital diagnostics functions are available via a 2-wire common management

Fibre Channel Connectivity

The fiber optic cabling infrastructure is the same for Ethernet and Fibre Channel, but significant differences do exist. Fibre Channel

Fibre Channel Option Card: User's Guide

This User's Guide provides step-by-step installation instructions and information required for ongoing use and maintenance of the

ETERNUS AF, ETERNUS DX Configuration Guide -Server Connection

Use template instance management tables provided in "Appendix Various Management Tables (Template)" of the "Configuration

pdfs-compArch/Fibre Channel Reference Card.pdf at master

Technically-oriented PDF Collection (Papers, Specs, Decks, Manuals, etc) - pdfs-compArch/Fibre Channel Reference Card.pdf at

Optical fiber tables and chromatic dispersion specs

In this table, 802.3 has analyzed available information on connector loss, optical return loss and PMD in order to define optical

Optical fiber tables and chromatic dispersion specs

Optical fiber tables Optical fiber and cable characteristics Lists the specification for the optical fiber cables that are used in the

User's Guide Fibre Channel Adapter (2700 Series)

For information on setting Fibre Channel Adapter parameters using the noninteractive mode of QConvergeConsole CLI, refer to the

Fibre Channel Technology for Storage Area Networks

Fibre Channel (FC) is a high speed serial interface for connecting computers and storage systems. FC is a mature technology having

Configuring Fibre Channel Interfaces

Table 1-5 lists the default settings for native Fibre Channel interface parameters.

Table 1-5 lists the default settings for virtual Fibre

Fibre Channel

Fibre Channel typically runs on optical fiber cables within and between data centers, but can also run on copper cabling.

Fibre Channel Modules with a Difference

Fibre Channel Modules Fibre Channel Cards with a Difference AIM's Fibre Channel test, simulation and analysis modules use our

Fibre Channel Specifications

The Fibre Channel Association has a complete list of the FCSI Fibre Channel profiles. You can find those via the FCA Fibre Channel

Contact Us

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