Finisar ®

quadwire® FDR

PRODUCT BRIEF

56G FDR PARALLEL ACTIVE OPTICAL CABLE

KEY FEATURES

▶ Parallel 4x14Gb/s bi-directional link

▶ Lightweight

▶ Low power dissipation: <1.5 W per end

▶ Small cable bend radius

▶ Thin cable for large port count architectures and easy installations

▶ Datacenter lengths available up to 100 meters

▶ Standard QSFP+ form factor

▶ Metal enclosure for low EMI

▶ Single 3.3V power supply

▶ Operating case temperature range: 0°C to 70°C

▶ RoHS compliant and Lead-Free

APPLICATIONS

▶ InfiniBand FDR

▶ 16x Fibre Channel
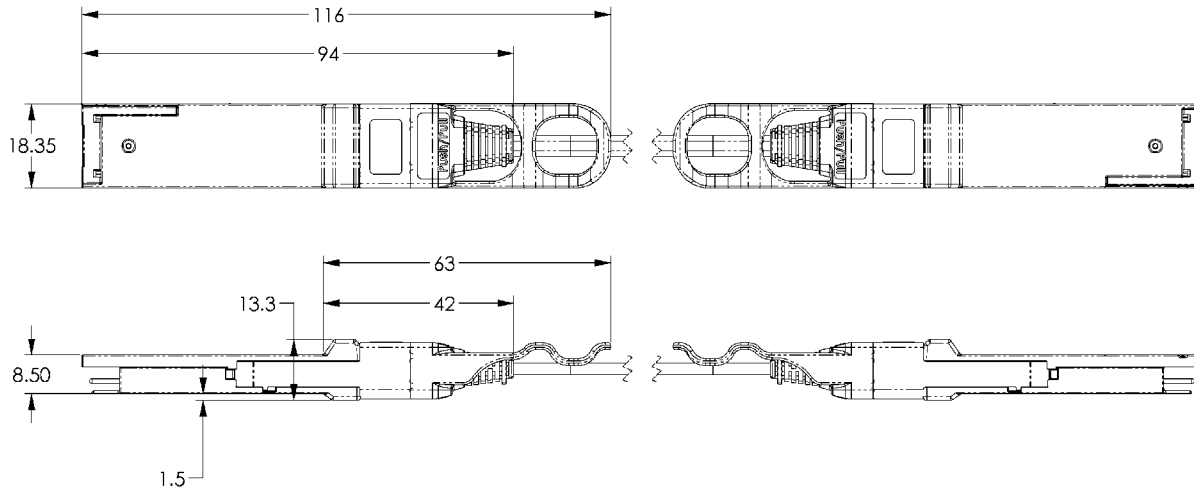
▶ Proprietary high-speed interconnections

OVERVIEW

Quadwire® FDR is a 56Gb/s parallel active optical cable for storage, data, and high-performance computing connectivity. It transmits parallel 4x14Gb/s data over a multimode fiber (MMF) ribbon cable. Based on Finisar's vertically integrated VCSEL array technology and designed with QSFP+ MSA-compliant high-density connectors, these new cables are compact, lightweight, and low power. Quadwire FDR is ideally suited for datacenter reaches up to 100m for InfiniBand 4xFDR and other datacom and high-performance computing applications.

KEY ADVANTAGES

▶ Lowest weight for high port count architectures

▶ High-density 56Gb/s interconnectivity

▶ Small bend radius for easy installation and fiber management

▶ Low power consumption

▶ Based on industry-standard QSFP+ form factor

▶ Utilizes Finisar's vertically integrated and highly reliable VCSEL technology
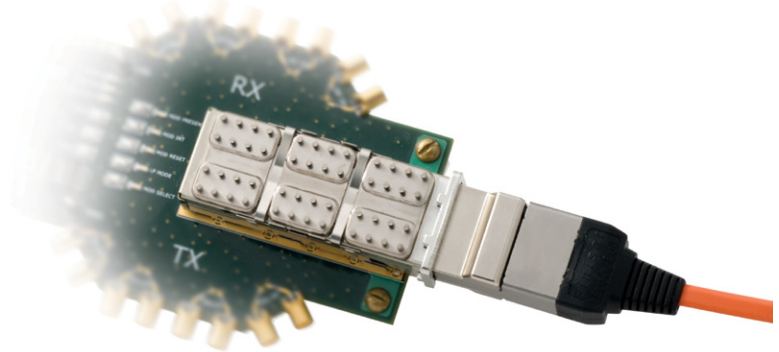
::quadwire® FDR

GENERAL PRODUCT CHARACTERISTICS

Parameter	Value	Unit	Notes
Module Form Factor	QSFP+		
Number of Lanes	4 Tx and 4 Rx		
Maximum Aggregate Data Rate	56.1	Gb/s	
Maximum Data Rate per Lane	14.025	Gb/s	
Standard Cable Lengths	3, 5, 10, 20, 30, 50, 100	meters	Different lengths may be available upon request
Protocols Supported	InfiniBand, 16x Fibre Channel,		
Electrical Interface and Pin-out	38-pin edge connector		Pin-out as defined by the QSFP+ MSA
Standard Optical Cable Types	Multimode fiber cable assembly, riser or plenum rated		Other cable types available upon request
Maximum Power Consumption per End	1.5	Watts	Varies with output voltage swing and pre-emphasis settings
Management Interface	Serial, I2C-based		As defined by the QSFP+ MSA

PRODUCT SELECTION

Part Number: FCBG414QB1Cxx	4x14Gb/s active optical cable, ribbon riser LSZH jacket	
Part Number: FCBN414QB1Cxx	4x14Gb/s active optical cable, round plenum jacket	
xx	03	3 meter cable
	05	5 meter cable
	10	10 meter cable
	20	20 meter cable
	30	30 meter cable
	50	50 meter cable
	X0	100 meter cable