

AFBR-79Q4Z

10G QSFP Short Wavelength Transceiver
Pluggable, Parallel-Fiber-Optics Modules



Product Brief



Description

The AFBR-79Q4Z Four-Channel, Pluggable, Parallel-Fiber-Optics Transceiver is a high performance fiber optics module for short-range parallel multi-lane data communication and interconnect applications. This 4-channel device is capable of 10 Gbps per channel, 40 Gbps aggregate operation. The module is designed to operate over multimode fiber systems using a nominal wavelength of 850 nm. The electrical interface uses a 38 contact edge type connector. The optical interface uses a MTP® (MPO) 1x12 ribbon cable connector. The module incorporates high performance, highly reliable, short wavelength optical devices coupled with proven circuit technology to provide long life and consistent service.

Part Number Ordering Information

QDR 10G Infiniband	AFBR-79Q4Z
QDR 10G Infiniband	AFBR-79Q4Z-D
With Full Digital Diagnostic Monitoring	
DDR 5G Infiniband	AFBR-79Q5Z
DDR 5G Infiniband	AFBR-79Q5Z-D
With Full Digital Diagnostic Monitoring	

Features

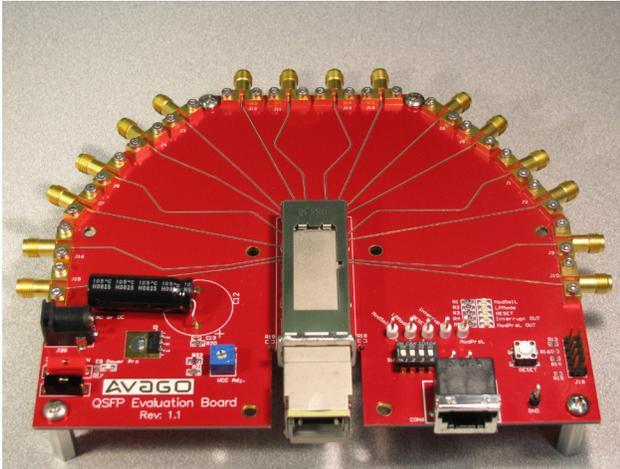
- High Channel Capacity: 40 Gbps per module
- High port density: 21mm horizontal port pitch
- Proven High Reliability 850nm VCSEL technology
- Hot pluggable transceiver for servicing and ease of installation
- Low power consumption: 1.5 watts typical per module
- Compliant to industry-standard, pluggable, QSFP Multi-Source Agreement
- Up to 100m links at 10G/channel using OM3 multimode fiber
- Operates up to 10 Gbps with 8b/10b compatible coded data
- Backwards compatible to 5Gbps DDR IB and 2.5 Gbps SDR IB
- Two Wire Serial (TWS) interface with maskable interrupts for expanded functionality
- 0 to 70 C case temperature operating range

Applications

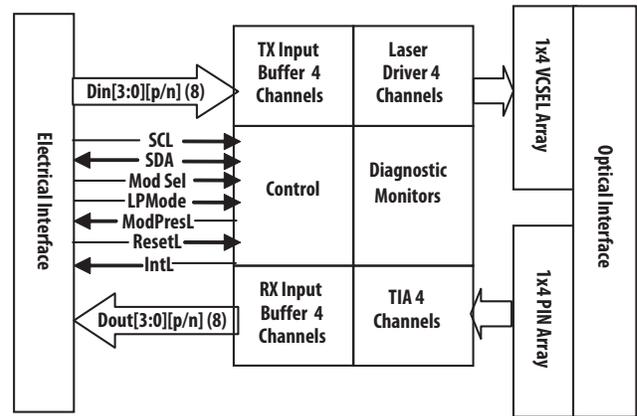
- High Performance and High Productivity computer interconnects
- InfiniBand QDR (4x10G), DDR (4x 5G), and SDR (4x 2.5G) interconnects
- High bandwidth backplane extension
- Datacom switch and router backplane connections
- Telecom switch and router backplane connections
- Reach extensions for various protocols including PCI Express, HyperTransport and Serial RapidIO

Evaluation Kit

This Evaluation kit provides the designer with a convenient way to evaluate Avago Technologies AFBR-79Q4Z QSFP Transceiver module. The designer can evaluate the management Interface, as well as the electrical and optical performance of the QSFP transceiver module.



Transceiver Block Diagram



Part Number Ordering Information

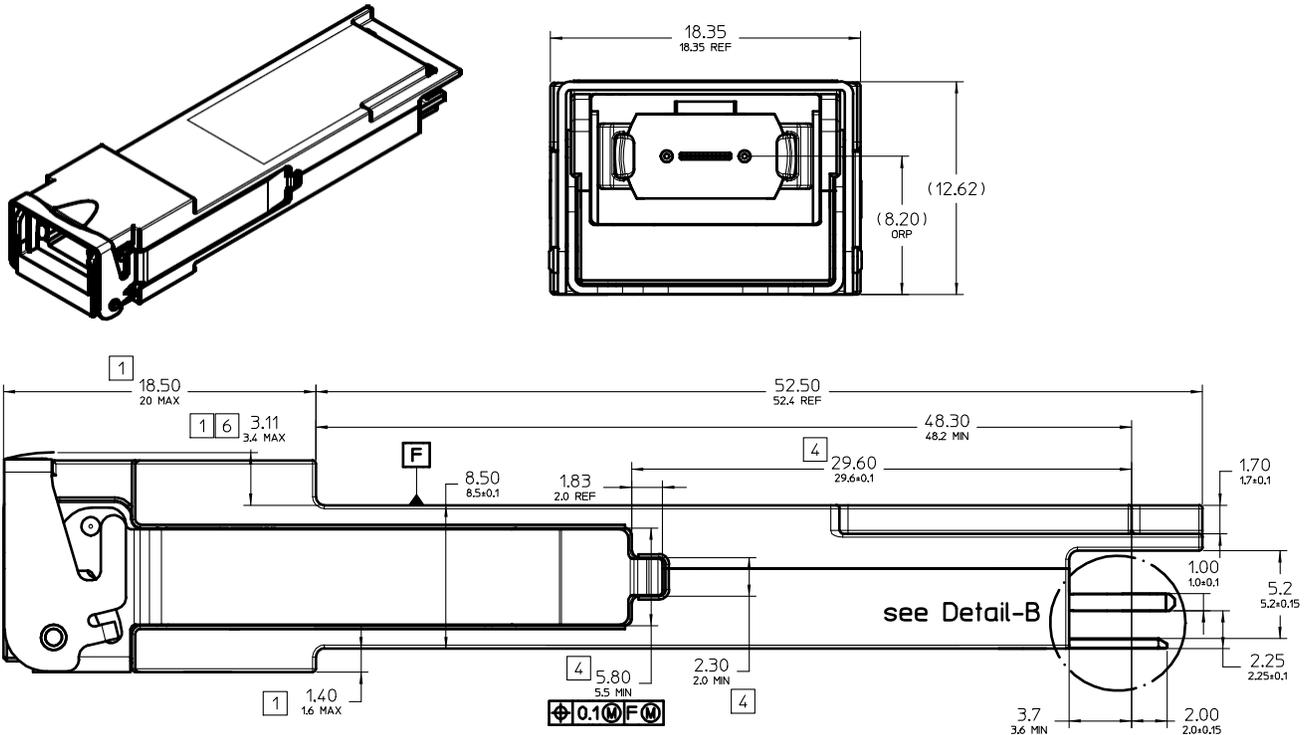
Evaluation Board AFBR-09Q1*

Evaluation Kit AFBR-09Q2**

* Includes GUI and User Guide

** Includes GUI, User Guide, i-Port and Power Supply

Mechanical Dimensions



For product information and a complete list of distributors, please go to our web site: www.avagotech.com

Avago, Avago Technologies, and the A logo are trademarks of Avago Technologies in the United States and other countries. Data subject to change. Copyright © 2005-2009 Avago Technologies. All rights reserved. AV02-1839EN - March 24, 2009

AVAGO
TECHNOLOGIES