AFBR-89CDDZ

QSFP28 Pluggable, Parallel Fiber-Optics Module
100 Gigabit Ethernet Applications
850nm SR4, MMF, MPO Connector

Product Brief



Description

The Avago Technologies AFBR-89CDDZ is a Four-Channel, Pluggable, Multi-mode, Fiber-Optic QSFP28 transceiver for 100 Gigabit Ethernet Applications. This transceiver is a high performance module for short-range multi-lane data communication and interconnect applications. It integrates four data lanes in each direction with each lane operating at 25.78125 Gbps, giving an aggregated bandwidth of 103.125 Gbps. It allows optical interoperability up to 100m over an 8-fiber (or 12-fiber) MPO optical multimode OM4 cable. The push-pull tab facilitates the insertion and extraction of these transceivers in high density environment. Each electrical lane operates at 25.78125 Gbps and conforms to the 100GE CAUI4 interface with 802.3 Clause 91 RS-FEC.

Per channel transmitter and receiver retimers, configured for 4x25G operation, can be bypassed to enable alternative data rate transmission.

These modules are designed to operate over multimode fiber systems using a nominal wavelength of 850nm. The electrical interface uses a 38 contact QSFP28 edge type connector. The optical interface uses a conventional 8-fiber (or 12-fiber) MPO connector. This module incorporates Avago Technologies proven integrated circuit and VCSEL technology to provide reliable long life, high performance, and consistent service.

Part Number Ordering Options

100 Gigabit Ethernet	AFBR-89CDDZ
Evaluation Board*	AFBR-89EVB
Evaluation Kit**	AFBR-89EVK

* Includes GUI and User Guide
** Includes GUI, User Guide, I2C controller and Power Supply Cable

Features

- Compliant to 100GbE electrical and optical specifications 802.3bm (Annex 83E CAUI-4 with Clause 91 RS-FEC, Clause 95 100GBASE-SR4)
- 100GbE Link Distances 100m OM4, 70m OM3
- QSFP28 MSA Specification Compliant, including new functions per SFF-8636 Rev 2.4
- Class 1 Eye Safety
- Push-pull tab: ease of transceiver insertion and extraction
- Operates at 25.78125 Gbps or 10.3125 Gbps per channel with 64b/66b coded data
- 0 to +70°C case temperature operating range
- Proven High Reliability 850 nm technology: Avago VCSEL transmitter and Avago PIN detector
- Hot pluggable QSFP28 transceiver for ease of installation and servicing
- Two Wire Serial (TWS) interface with Digital Monitoring and maskable interrupts for expanded functionality

Applications

- 100 Gigabit Ethernet interconnects
- Datacom/Telecom switch & router connections
- Data aggregation and backplane applications
- Proprietary protocol and density applications

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

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