# AFBR-800EVK MiniPOD Evaluation Kit and AFBR-800EVB MiniPOD Evaluation Board



For MiniPOD Pluggable Parallel-Fiber-Optics Modules

# **Product Brief**

#### Introduction

The purpose of this evaluation kit is to provide the designer with a convenient way to evaluate the electrical and optical performance of the Avago Technologies' Twelve-Channel MiniPOD transmitter and receiver modules. This user guide offers a description of the AFBR-800EVB evaluation board along with basic operating instructions.

The AFBR-800EVB Evaluation board is to be used in conjunction with the Avago Technologies AFBR-81uVxyZ and AFBR-82uVxyZ family of Tx and Rx MiniPOD modules.

The AFBR-81uVxyZ and AFBR-82uVxyZ are twelve-channel, pluggable, parallel, fiber-optic MiniPOD transmitter and receiver modules, respectively. These high performance modules are intended for short-range multi-lane data communication and interconnect applications. Twelve data lanes transport greater than 120 Gbps aggregate bandwidth. Each lane can operate at 10.3125 Gbps up to 100 m using OM3 fiber. These modules are designed to operate over multimode fiber systems using a nominal wavelength of 850nm. The electrical interface uses a 9x9 Meg-Array connector with 1.27 mm pitch and 4mm contact mate height. The optical interface uses a 12-fiber Prizm™ to MPO/MTP connector (included only in the AFBR-800EVK evaluation kit). These modules incorporate Avago Technologies' proven integrated circuit and VCSEL technology to provide reliable long life, high performance, and consistent operation.

MiniPOD Eval Board (AFBR-800EVB) contents:

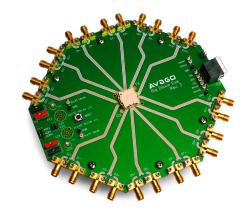
- 1 x Evaluation board
- 2 x pair DC connection wires
- CD-ROM which includes GUI software and User Guide MiniPOD Eval kit (AFBR-800EVK) contents:
- 1 x Evaluation board
- 2 x pair DC connection wires
- MTP Adapter
- Prizm to Male MTP cable(Flat ribbon)
- Prizm to Male MTP cable(Round ribbon)
- CD-ROM which includes GUI software and User Guide
- iPort USB interface (MIIC-204G)

#### **Features**

- The AFBR-800EVB Evaluation Board can be used with the
  - Avago Technologies AFBR-81uVxyZ 12 channel transmitter
  - Avago Technologies AFBR-82uVxyZ 12 channel receiver
- Access to Low speed signals, for example, Int\_L/Reset\_L
- 24 Side mounted SMA connectors to connect to 12 differential TX or RX high speed lanes

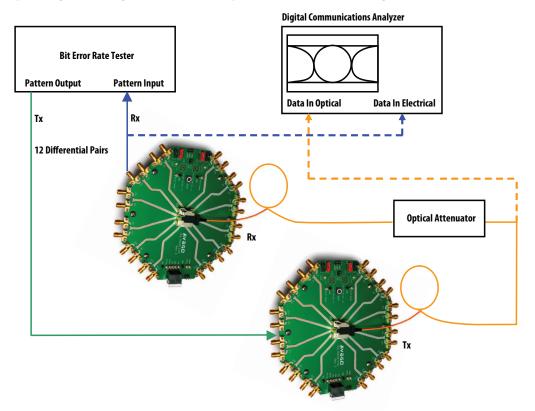


MiniPOD Twelve-Channel Transmitter and Receiver Modules with round cable option



**MiniPOD Twelve-Channel Module Evaluation Board** 

## Operating Block Diagram for MiniPOD Optical and Electrical Testing



### **Avago MiniPOD Viewer Software**

Included with the Avago Evaluation Board is a CD that contains the customer user interface software. This software is PC and Windows compatible and can be used to easily query and manipulate MiniPOD modules. For example, the user can easily see the Real-Time Digital Diagnostic Monitors of the transmitter and receiver modules, and manipulate settings for Equalization, De-Emphasis and Output Amplitude.

#### MiniPOD Graphical user Interface



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

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