# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



### HFBR-0542Z Evaluation Kit DC to 5MBd 850nm VCSEL Evaluation Kit



## **User Guide**

#### Introduction

HFBR-0542Z evaluation kit is used to evaluate Avago fiber optic device HFBR-1712TZ and HFBR-2412TZ. The evaluation kit is equipped with necessary documents and accessories to ease product evaluation and verification.

#### **Evaluation Kit**

HFBR-0542Z contains:

- 1. Evaluation board
- 2. HFBR-1712TZ and HFBR-2412TZ unit
- 3. HFBR-1412Z/2412Z datasheet
- 4. HFBR-1712TZ datasheet
- 5. User guide document

#### **Evaluation Board**

The basic evaluation board that you receive from Avago incorporates transmitter driver IC SN75451BD, some passive components, and SMA connectors for the TX input (TXD) and RX output (RXD) port connection. This basic evaluation board allows you to connect waveform/pattern generator to the TXD with TTL input signal. Receiver's output signal can be monitored from the RXD or RXout with oscilloscope by using high impedance setting.

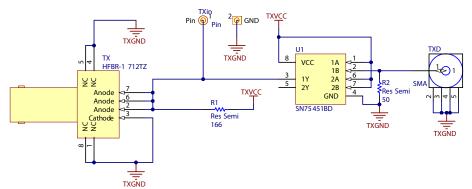
#### **Initial Setup**

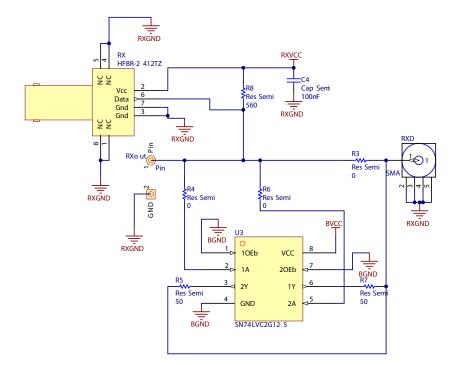
- 1. Connect 5V supply voltage to TXVCC and RXVCC
- 2. Connect 0V to TXGND and RXGND
- 3. Connect TXD to pattern generator output
- 4. Connect RXout to Oscilloscope with high impedance probe

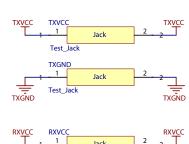
#### **Bit Error Rate Test Setup**

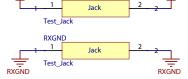
Though the transmitter driver IC's input and receiver's output is based on TTL logic (high impedance), the board can be modified to connect 500hm load instrument by doing the following steps:

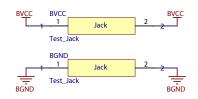
- 1. Put R2 (50 ohm resistor).
- 2. Remove R3 (0 ohm resistor).
- 3. Put R4 (0 ohm resistor) and R7 (50 ohm resistor).
- 4. Put U3 (SN74LVC2G125).
- 5. Connect BVCC (5V) and BGND (0V).











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 © 2005-2010 Avago Technologies. All rights reserved. AV02-2722EN - November 4, 2010

