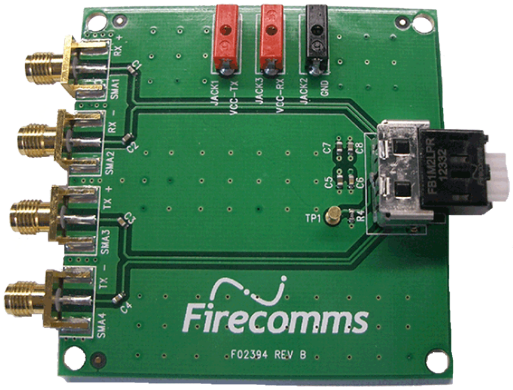
10-250 Mb LC Evaluation Kit

EVAL-FB2M5LVR

EVALUATION KIT

LC Evaluation Kit
User Guide



OVERVIEW

The EVAL-FB2M5LVR Evaluation Kit enables evaluation of the Firecomms LC connector for POF and large core glass fiber (200, 400 um PCS). The kit includes a single piece of the LC connector pre-mounted onto a simple PCB that allows easy application of DC power via standard 2 mm diameter DC jacks. Data input (TX) and data output (RX) are via standard screw terminal SMA connectors.

For particular fiber lengths and assemblies please contact Firecomms Application support.

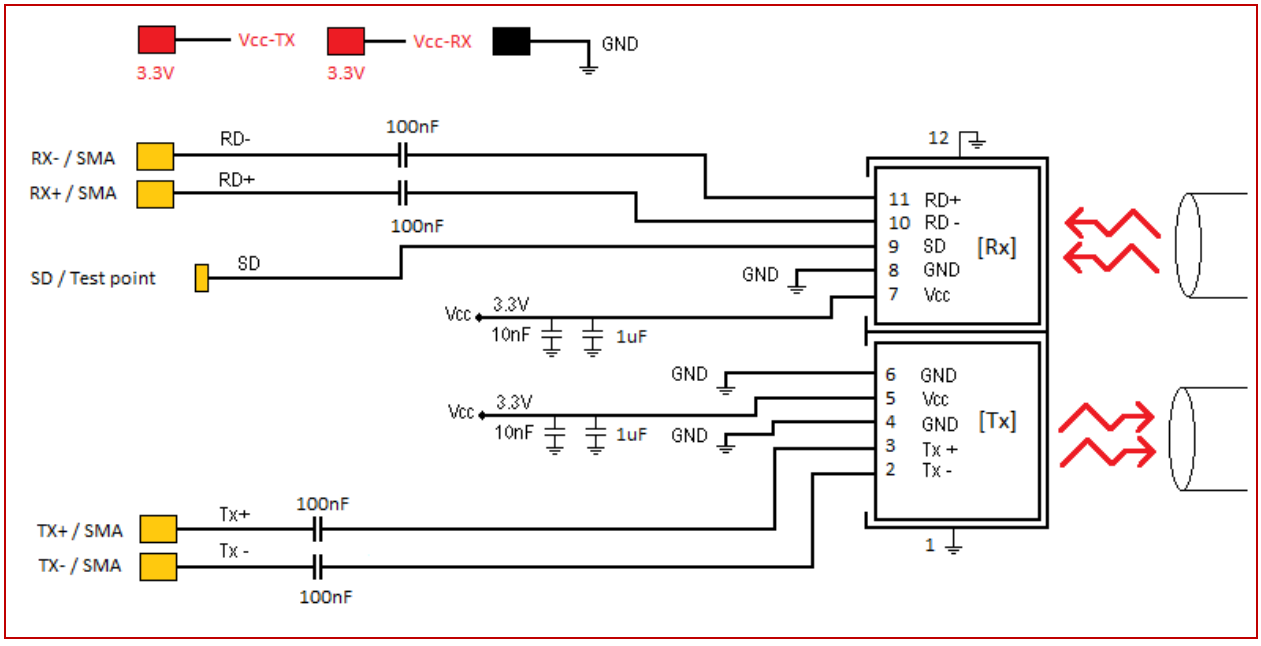


FIGURE 1
Layout of the LC Evaluation PCB.

EVALUATION KIT CONTENTS

The Evaluation Kit contains the following:

1. Evaluation PCB
2. FB2M5LVR mounted onto the test PCB
3. POF cable, loop-back assembly, (1 m, 0.5 NA, 2.2 mm jacket duplex POF) with LC termination connectors
4. Data sheet

INITIAL SETUP

1. Connect GND of a DC power supply to the ground point of the PCB (black terminal).
2. Connect 3.3V to each of the TX and RX VCC jacks (red terminals).
3. Connect an oscilloscope probe (1MΩ) to the Signal Detect (SD) test point.
4. Connect a suitable pattern generator differential data signals via SMA cables to the TX +/- data pins.
5. Connect the RX +/- data pins to a suitable high-speed oscilloscope using 50Ω termination and high-speed coax, SMA terminated cables.
6. For a loop-back cable test, connect the provided LC loop-back cable assembly into the LC connector. This connects the TX back to the RX over 1m of Step-Index POF.

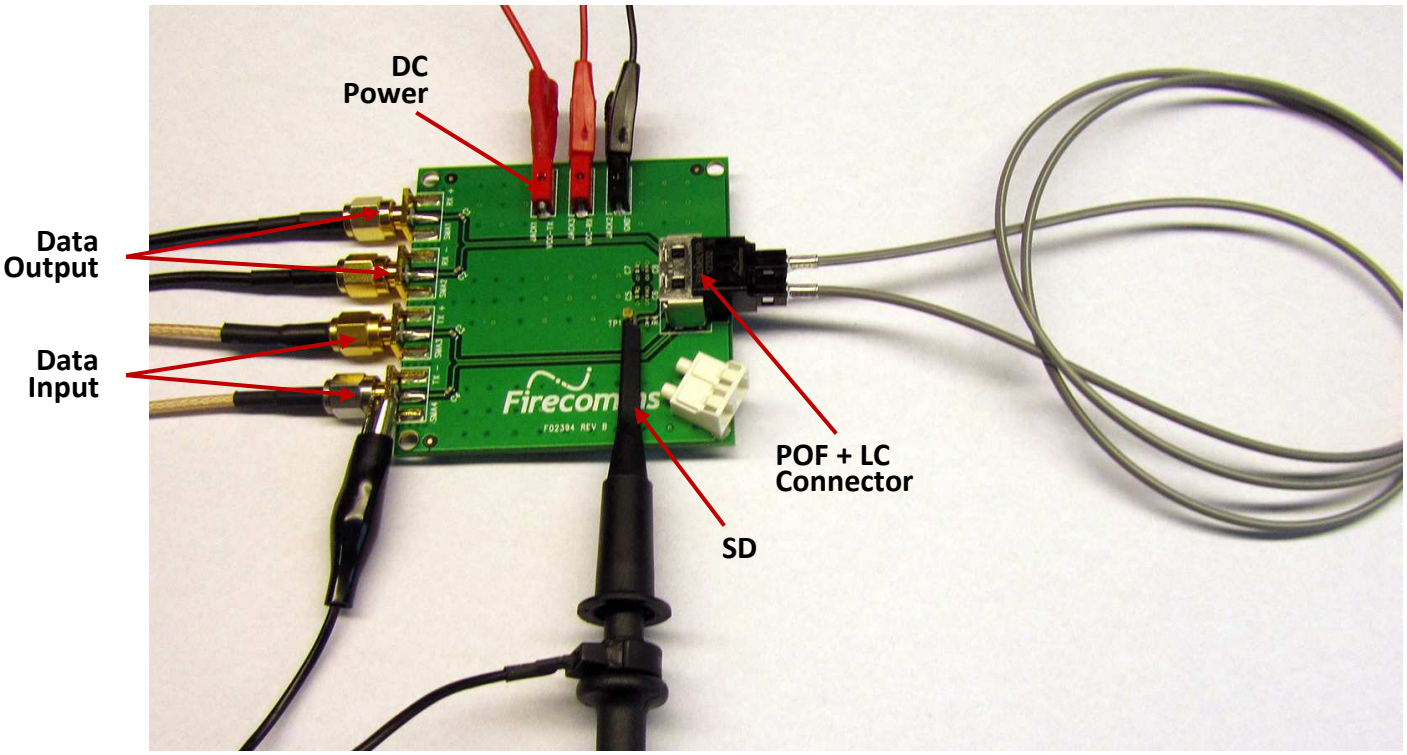


FIGURE 2
Setup of the Evaluation PCB.