

# SFP-SFP Diagnostic Adapter ML4066-SFP Marketing Datasheet

## **Ordering Information**

ML4066-SFP

### **Key Features**

- All high speed signals are connected from the SFP Plug to the front SFP host connector with superior SI traces
- Low insertion loss PCB traces
- Uses RO4350 PCB material
- Power pins are accessible via pin headers and can be jumped to connect them to the plugged SFP transceiver
- All low speed management signals are accessible via pin headers, and can be jumped to connect them to the plugged SFP transceiver
- I2C SCL and SDA signals accessible via pin headers or can be jumped to connect them to the plugged SFP transceiver
- Ability to drive I2C from external pin headers, or connect I2C packet analyzer
- Ability to drive 3.3V from external source for power supply margining
- Ability to break 3.3V power from Host to module allowing voltage and current measurement
- Interface to connect SFF Analyzer board

### ML4066-SFP Pin headers

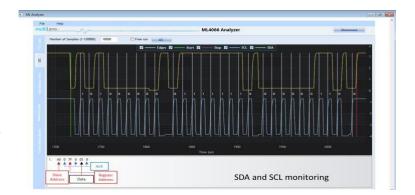
|    | Host Side  | Module Side |
|----|------------|-------------|
| 1  | VCC-RX     | VCC-RX      |
| 2  | VCC-TX     | VCC-TX      |
| 3  | TX_FAULT   | TX_FAULT    |
| 4  | SDA        | SDA         |
| 5  | SCL        | SCL         |
| 6  | RS0        | RS0         |
| 7  | RS1        | RS1         |
| 8  | MOD_ABS    | MOD_ABS     |
| 9  | RX_LOS     | RX_LOS      |
| 10 | TX_DISABLE | TX_DISABLE  |
| 11 | GND        | GND         |
| 12 | GND        | GND         |



# **SFF Analyzer (Optional)**



- Memory map can be loaded to replicate optical module's identification registers
- Ability to control/monitor all low speed signals
- Hot pluggable
- AC coupled high speed interface



### **Key Features**

- USB Interface
- Windows based GUI and API Library
- Detection and measurement of host pull up + pull down resistors on low speedsignals
- Host VCC rails sampling measurement
- VCC spectral noise analysis
- I2C Analyzer:
- Bus Speed
- ACK/ NACK Detection
- Clock Stretching Analysis
- Time Event Logging
- Functional tests:
- Control signals
- Configuration registers
- Ability to emulate optical module by loading identification registers with custom data
- Built with advanced PCB Material (Rogers/ Megtron)
- I2C Terminated by microcontroller, I2C slave compliant with MSA
- Implements MSA Memory map and programmable new pages