SFP-SFP Diagnostic Adapter
ML4066-SFP

Marketing Datasheet

Ordering Information
ML4066-SFP

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

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

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

SDA and SCL monitoring

Key Features

- USB Interface
- Windows based GUI and API Library
- Detection and measurement of host pull up + pull down resistors on low speed signals
- 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