

# 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
<b>1</b>	VCC-RX	VCC-RX
<b>2</b>	VCC-TX	VCC-TX
<b>3</b>	TX_FAULT	TX_FAULT
<b>4</b>	SDA	SDA
<b>5</b>	SCL	SCL
<b>6</b>	RS0	RS0
<b>7</b>	RS1	RS1
<b>8</b>	MOD_ABS	MOD_ABS
<b>9</b>	RX_LOS	RX_LOS
<b>10</b>	TX_DISABLE	TX_DISABLE
<b>11</b>	GND	GND
<b>12</b>	GND	GND

## SFF Analyzer (Optional)



### 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

- 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



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