multiLane

QSFP-DD to QSFP-DD Diagnostic Adapter ML4066-QDD

Marketing Datasheet

Ordering Information

ML4066-QDD

Key Features

- All high speed signals are connected from the QSFP-DD Plug to the front QSFP-DD host connector with superior SI traces
- Low insertion loss PCB traces
- Power pins are accessible via pin headers and can be jumped to connect them to the plugged QSFP-DD transceiver
- All low speed management signals are accessible via pin headers, and can be jumped to connect them to the plugged QSFP-DD transceiver
- I2C SCL and SDA signals accessible via pin headers or can be jumped to connect them to the plugged QSFP-DD 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
- Push button for Reset Signal
- Interface to connect SFF Analyzer board

ML4066-QDD Pin headers

	Host Side	Module Side
1	VCC	VCC
2	VCC1	VCC1
3	VCC-TX	VCC-TX
4	VCC-RX	VCC-RX
5	MODSEL_L	MODSEL
6	RESET_L	RESET_L
7	SCL	SCL
8	SDA	SDA
9	MODPRS_L	MODPRS_L
10	INT_L	INT_L
11	LPMODE	LPMODE
12	GND	GND

COMMUNICATION TEST & MEASUREMENT SOLUTIONS

SFF Analyzer (Optional)

- 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

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)