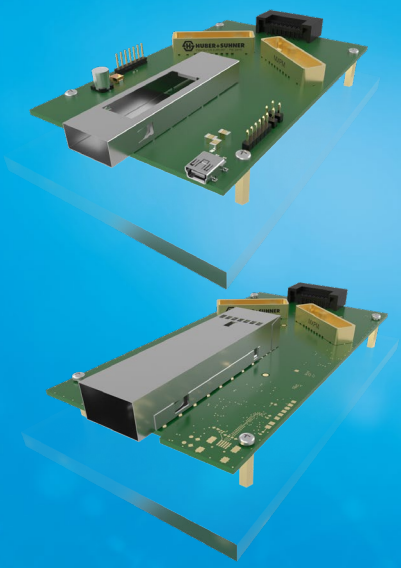
DATASHEET

Innovation for the next generation



ML4062-MCB-112-MXPM70

QSFP-DD800 Module Compliance Board

ML4064-MCB-112-MXPM70

OSFP800 Module Compliance Board

Summary

Increased speeds bring with them new form factors, of which QSFP-DD800 and OSFP800 have emerged as leading standards to drive the development of 800G interconnectivity. The MXPM70 Module Compliance Boards (MCB) include MXPM70 cables which can be fully de-embedded for optimal flexibility in conducting compliance measurements.

The datasheet is a quick overview of the QSFP-DD800 and OSFP800 MCBs which enable the testing of system host ports. It is able to access high-speed host lanes via RF connectors. It can also access and trigger low-speed control signals, all while complying with IEEE/OIF Specifications.

QSFP-DD800

OSFP800

ML4062-MCB-112-MXPM70

Key Features

- MXMPM70 connector based, possibility to de-embed MXPM70 cables from measured data
- Low insertion loss deviation, low crosstalk
- Supports 8x112G interfaces
- Compliant with IEEE 802.3ck
- I2C master driven from both on board microcontroller or external pin headers
- Current sensor
- Matched differential trace length for all 8 channels
- High performance signal integrity traces from MXPM70 connectors to QSFP-DD800 host connector.
- On-board LEDs display MSA output alarm states
- Built with high performance PCB material
- On-board buttons/jumpers for MSA input control signals
- User friendly GUI for I2C R/W commands and loading custom MSA memory maps
- Command Data Block (CDB) option enabled with a purchasable license key.
    - Advanced feature for accelerated module diagnostic functionality
- Four corner testing capability

Figure 1: ML4062-MCB-112-MXPM70

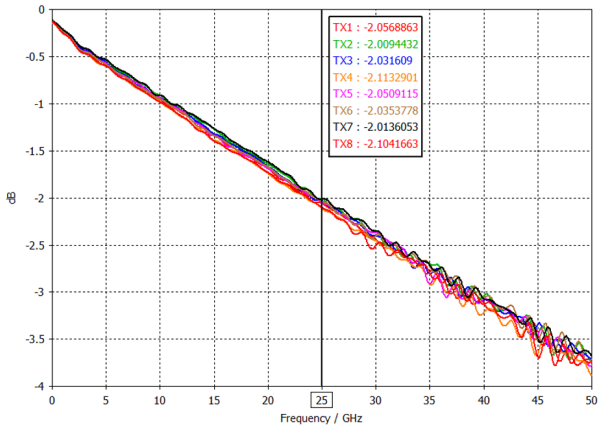


Figure 2: ML4062-MCB-112-MXPM70 Insertion Loss on TX

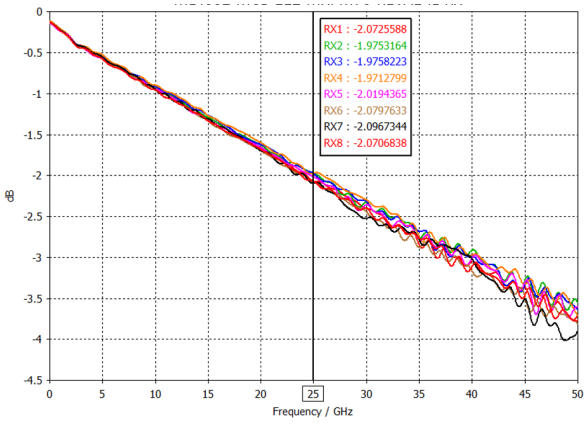


Figure 3: ML4062-MCB-112-MXPM70 Insertion Loss on RX

ML4064-MCB-112-MXPM70

Key Features

- MXMPM70 connector based, possibility to de-embed MXPM70 cables from measured data
- Low insertion loss deviation, low crosstalk
- Supports 8x112G interfaces
- Compliant with IEEE 802.3ck
- I2C master driven from both on board microcontroller or external pin headers
- Current sensor
- Matched differential trace length for all 8 channels
- High performance signal integrity traces from MXPM70 connectors to OSFP800 host connector.
- On-board LEDs display MSA output alarm states
- Built with high performance PCB material
- On-board buttons/jumpers for MSA input control signals
- User friendly GUI for I2C R/W commands and loading custom MSA memory maps
- Command Data Block (CDB) option enabled with a purchasable license key.
    - Advanced feature for accelerated module diagnostic functionality
- Four corner testing capability

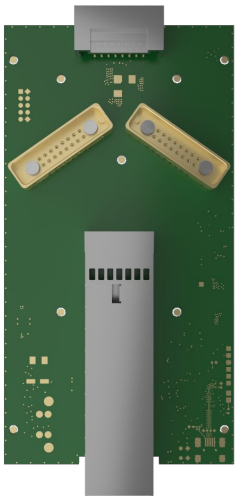


Figure 1: ML4064-MCB-112-MXPM70

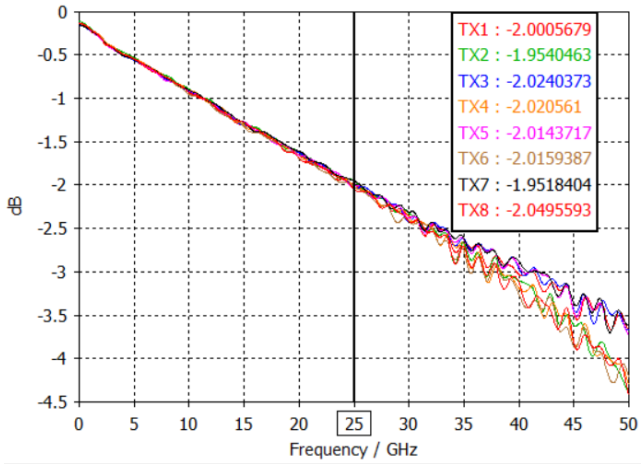


Figure 2: ML4064-MCB-112-MXPM70 Insertion Loss on TX

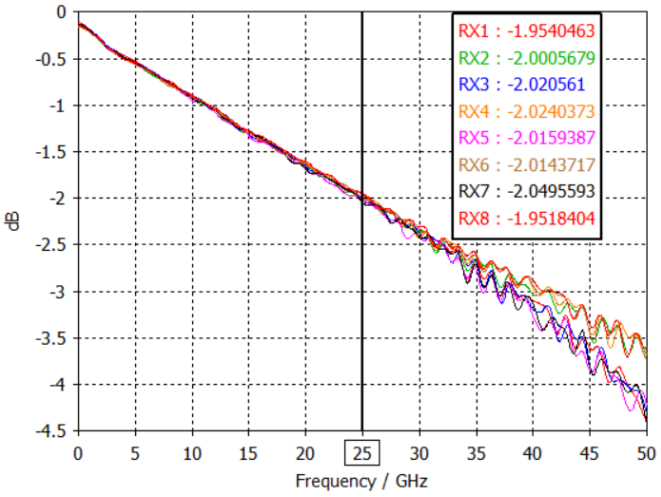


Figure 3: ML4064-MCB-112-MXPM70 Insertion Loss on RX

Ordering Information

Interconnects	Description
ML4062-MCB-112-MXPM70	QSFP-DD800 MCB MXPM70 connector
ML4064-MCB-112-MXPM70	OSFP800 MCB MXPM70 connector

Recommended Accessories

Interconnects	Recommended *Phase matched cable pairs*	Comments
ML4062-MCB-112-MXPM70	MXPM70-3-F OR MXPM70-6-M	Option MXPM70 Cable, 2x8 Huber Suhner MXPM70 Cable Assembly, 3-inch length, 1.85mm Female connector
ML4064-MCB-112-MXPM70		Option MXPM70 Cable, 2x8 Huber Suhner MXPM70 Cable Assembly, 6-inch length, 1.85mm Male connector

multiLane

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