

## QSFP28 Passive Loopback Module

# ML4012-28

**QSFP28 Loopback module**  
(4x28G) Interconnects



### Key Features

- Operation up to 28G per lane
- Supports 4x28G
- QSFP28 MSA Form Factor
- Dual LED indicator
- Hot-pluggable MSA footprint
- SFF-8436 Compliant EEPROM
- Low cost MSA Compliant loopback module

**Ordering information** ML4012-28

## Superior Integrity and Performance

### Summary

**QSFP28** Low cost Passive Loopback Module **ML4012-28**, is used for testing QSFP/QSFP28 transceiver ports under board level tests. By substituting a full-featured QSFP/QSFP28 transceiver with the ML4012-28, its electrical loopback provides a cost effective low loss method for QSFP/QSFP28 port testing.

The **ML4012-28** is packaged in a standard MSA housing compatible with all QSFP/QSFP28 ports. Transmit data from the host is electrically routed, (internal to the loopback module), to the receive data outputs and back to the host. It provides an economical way to exercise QSFP/QSFP28 ports during R&D validation, production testing, and field testing.

The **ML4012-28** provides QSFP/QSFP28 various power Classes up to 4.5 W, loading using a customer supplied +4.5V voltage supply

### Benefits

- Economical QSFP/QSFP28 Port Testing
- Custom Memory Maps
- Board Level System Testing
- Power On Validation
- Excellent Signal Integrity

### Applications

- QSFP Port/System testing
- Server blade testing
- ITU-T Recommendation G.957 (STM-1, 4 & 16)...
- Ethernet IEEE 802.3 (Gigabit, 10 Gigabit and 40 Gigabit Ethernet).
- FDR and QDR.