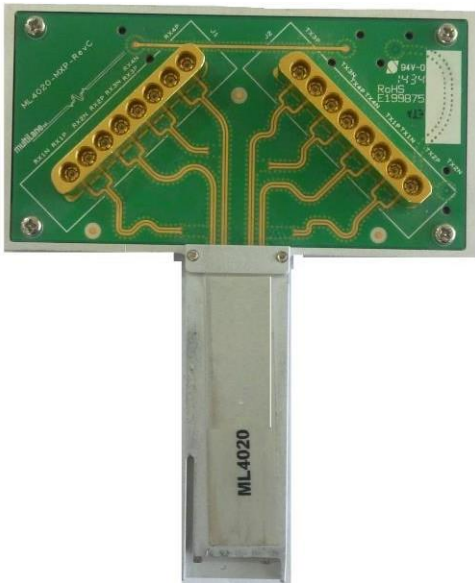


# QSFP28 HCB ML4020

Break-Out module  
(4x28G) Interconnects



## Key Features

- High Performance signal integrity traces
- QSFP28 MSA Form Factor
- Low Insertion Loss Rogers 3003 based material
- Production friendly form factor
- Supports 4x28G TX & RX Lanes
- High speed signals accessible through 2 Huber+Suhner MXP Connector rows
- All TX channels comes with matching trace length
- All RX channels comes with matching trace length
- Trace length 3544 mils
- Finish 200micro inches NI and 5 micro inches gold

## Ordering information

ML4020-MXP

ML4020-MSMPM

SMPM- type A cables

## Superior Integrity and Performance

### Summary

**QSFP28 Host** (Quad Small Form Factor 28) Break-Out Module **ML4020**, is designed to provide an efficient and easy method to test and characterize line cards with 4x28G QSFP28 ports.

The **ML4020** simply plugs into a QSFP28 slot and provides access to RX and TX ports through high performance signal integrity breakout path.

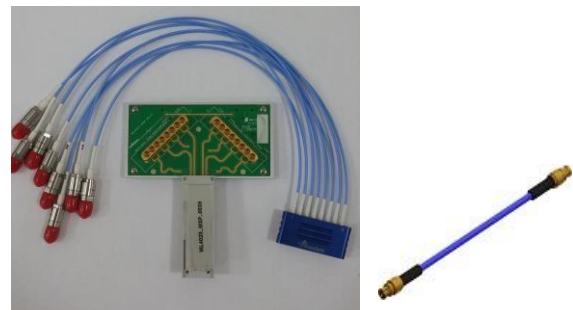
It comes with:

\*2 Huber Suhner MXP 1x8 coaxial PCB connectors (1x8A\_81\_MXP-S50-0-1/111\_N)

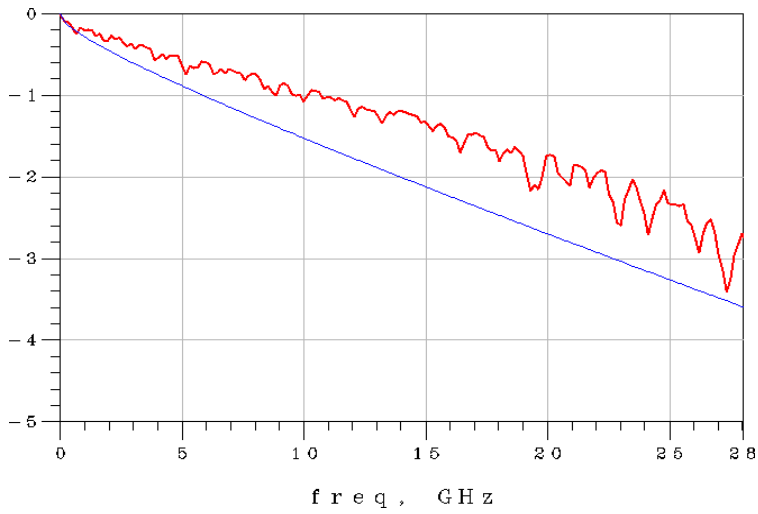


Or

\*2 ML 40Gbps multi-SMPM-type A connectors



**Compliant with CEI-28G-VSR HCB characteristics**



**Applications**

- System Characterization
- Signal Integrity analysis
- QSFP28 Line Card and Port Characterization
- Ethernet IEEE 802.3 (Gigabit, 10 Gigabit and 40 Gigabit Ethernet)

# QSFP28 HCB

## ML4020-N

Break-Out module  
(4x28G) Interconnects



### Key Features

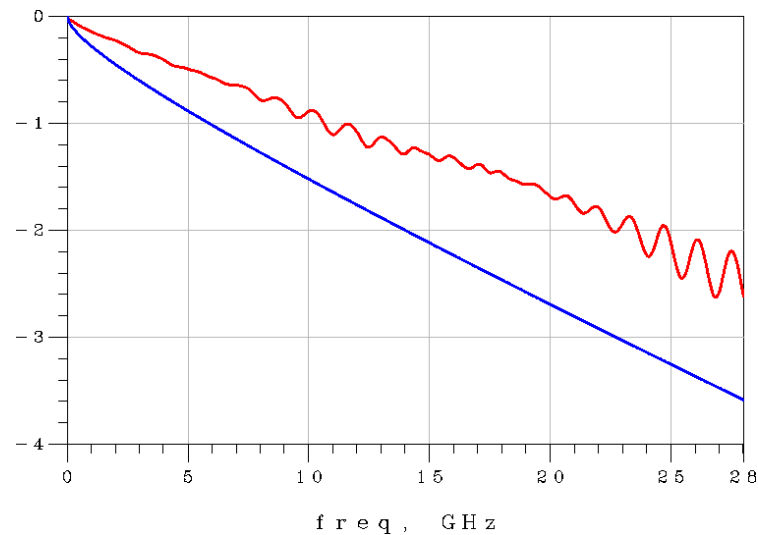
- High Performance signal integrity traces
- QSFP28 MSA Form Factor
- Low Insertion Loss Rogers 3003 based material
- Production friendly form factor
- Supports 4x28G TX & RX Lanes
- High speed signals accessible through 2 Huber+Suhner MXP Connector rows
- Max Trace length 3869 mils
- Finish 200micro inches NI and 5 micro inches gold

### Ordering information

ML4020-N-MXP

ML4020-N-MSMPM- type A  
SMPM cables

Compliant with CEI-28G-VSR HCB characteristics



### Applications

- System Characterization
- Signal Integrity analysis
- QSFP28 Line Card and Port Characterization
- Ethernet IEEE 802.3 (Gigabit, 10 Gigabit and 40 Gigabit Ethernet)

**North America**

48521 Warm Springs Blvd. Suite 310  
Fremont, CA 94539  
USA  
+1 510 573 6388

**Worldwide**

Houmal Technology Park  
Askarieh Main Road  
Houmal, Lebanon  
+961 5 941 668

**Asia**

14F-5/ Rm.5, 14F., No 295  
Sec.2, Guangfu Rd. East Dist.,  
Hsinchu City 300, Taiwan (R.O.C)  
+886 3 5744 591