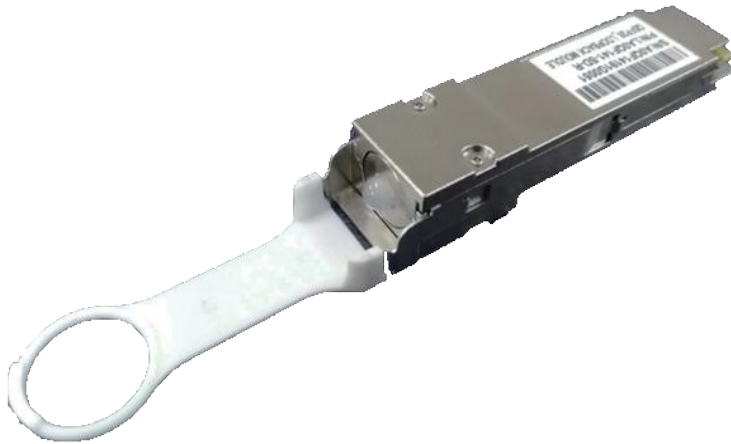# QSFP+ Loopback

OVERVIEW

QSFP+ series passive electrical Loopback module is used for high speed testing application for QSFP+ host ports. The module is designed for 40 Gigabit Ethernet applications and provides 4 RX and 4 TX lanes, I2C module management interface and all the QSFP+ SFF hardware signals. The module loops back 4-lane transmit data from the Host back to 4-lane receive data port to the Host, it provides an efficient way to verify QSFP+ ports during R&D test, manufacturing testing and field testing.

The module provides programmable power dissipation up to 6W allowing the module to emulate most of the QSFP+ series power classes. It also provides a voltage sense, an insertion counter, a power staging, a LED blinking rate, an upper temperature cut-off and 4 temperature sensors.

FEATURES & BENEFITS

◆ 3.3V voltage supply

◆ Supports 40Gbps electrical interface

◆ Loops back TX to RX on all 4 ports

◆ Input / Output differential 100+/-10% ohm

◆ -5 dB attenuation

◆ I2C interface & MSA compatible

◆ 4 independent power heathers, with 0.2W solution up to 6W based on the customized requirement

◆ Hot pluggable module

◆ 2 statues LED indicator

◆ Temperature monitor and alarms warning

◆ Customer memory maps

◆ Voltage monitoring

◆ Low speed signal control

PRODUCT APPLICATIONS

Server test - NIC IO testing

NAS (Network Attached Storage) test

HPC test

Router/Switch test

INDUSTRY STANDARDS

SFF 8636

SFF 8679

IEEE802.3ba

QSFP+ Loopback

TECHNICAL INFORMATION

MATERIAL

Contact gold plated 30u''

Nickel plated zinc die cast shells & latching

Mechanism parts

Thermoplastic cable pull tab

ELECTRICAL PERFORMANCE

Differential impedance: 100ohm

Current : 0.5 A/contact

Voltage: 30 V AC/contact

SPECIFICATION

ES-10-00-0022

MECHANICAL PERFORMANCE

Rated Durability Cycles: 250

Latch Pull Strength: 90N MIN

Cable Retention in Plug: 90N MIN

ENVIRONMENTAL

Storage temperature range: -40℃ to +80℃

Operating Temperature: -20℃ to +80℃

RoHS compliant

Partial PN Table

Product Numbers	Product Description
LA0QF201-SD-R	QSFP+ Loopback -5dB 3.5W