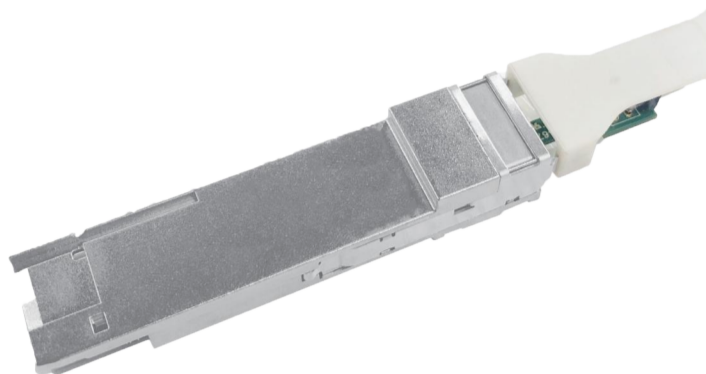


Super QSFP-DD(200G) and Ultra QSFP-DD(400G) Loopback



OVERVIEW

Luxshare-TECH's Super QSFP-DD(200G) and Ultra QSFP-DD(400G) passive electrical loopback module is used for high speed testing application for QSFP-DD host ports. The Super QSFP-DD(200G) and Ultra QSFP-DD(400G) loopback are designed for 200Gbps and 400Gbps Gigabit Ethernet applications separately, which the loopback provides 8x28Gbps(NRZ) or 8x56Gbps(PAM4) RX and TX lanes, I2C module management interface and all the QSFP-DD SFF hardware signals. This Loopback module loops back 8-lane 28Gbps or 56Gbps transmitting data from the Host back to 8-lane 28Gbps or 56Gbps receiving data port to the Host, it provides an efficient way to verify QSFP-DD ports during R&D test, production testing and field testing. Luxshare-TECH Super QSFP-DD(200G) and Ultra QSFP-DD(400G) Loopback provides programmable power dissipation up to 15W~20W allowing the module to emulate all the QSFP-DD 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

- ◆ High speed signals Loopback: TX are electrically looped back to RX per lane with attenuation options at 28Gbps/lane or 56Gbps/lane
- ◆ Data communication interface: The Loopback Module supports the same I2C interface as optical module
- ◆ LED indicator: A dual-color LED shows low/high power mode status and I2C enable/disable status
- ◆ Power control: Power dissipation could be controlled by I2C artificially, Range 0~20W, resolution is 0.2W
- ◆ Temperature monitor: 2 sensors on PCBA, another two closed to shell. Temp data could be read by I2C
- ◆ Cut-off temperature: A Cut-off temperature is pre-defined by register. Avoiding the overheating
- ◆ Insertion counter: Insertion action could be counted and it is nonvolatile
- ◆ Voltage monitoring: Vcc could be detected. Range 0~3600mV, Resolution 0.1mV
- ◆ Device information read/write access right: System ID, Revision, Module dynamic info. Password entry etc
- ◆ Low speed signal: Modsel, Reset, Lpmode, Modprsl, IntL, SCL&SDA etc
- ◆ Visual software interface: Intelligent user interface available

PRODUCT APPLICATIONS

Server test
HPC test
Router/Switch test

INDUSTRY STANDARDS

QSFP-DD MSA
SFF-8636
IEEE802.3cd and IEEE802.3by

Super QSFP-DD(200G) and Ultra QSFP-DD(400G) 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: 100 ohm
Current : 0.5 A/contact
Voltage: 30 V AC/contact

Partial PN Table

Product Numbers	Product Description
LA0DD057-SD-R	QSFP-DD Loopback
LA0DD058-SD-R	QSFP-DD Heater
LA0DD059-SD-R	QSFP-DD Loopback Power 12w

MECHANICAL PERFORMANCE

Rated Durability Cycles 250
Latch Pull Strength 90N MIN
Cable Retention in Plug 90N MIN

ENVIRONMENTAL

Operating Temperature: 0°C to +105°C
RoHS compliant

SPECIFICATION

ES-10-00-0026