LUXSHARE TECH
立讯技术

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 seperately, which the loopback provides 8x28Gbps(NRZ) or 8x56Gbps(PAM4) RX and TX lanes, I2C module manage ment 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
- Data communication interface: The Loopback Module supports the same 12C interface as optical module
- LED indicator: A dual-color LED shows low/high power mode satus and 12C enable/disable status
- Power control: Power dissipation could be controlled by 12C artificially, Range 0-6W(Q), resolution is 0.2W
- Temperature monitor: 2 sensors on PCBA, another two closed to shell. Temp data could be read by 12C
- 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
- Votage monitoring: Vcc could be detected. Range 0~3600mV, Resolution
- Device information read /write access right: System ID, Revision, Module dynamic info. Password entry etc
- Low sped signal : Modsel, Reset, Lpmode, Modprsl, IntL, SCL&SDA etc
- Visual software interface: Intelligent user interface available

PRODUCT APPLICATIONS

Server test
Network Storage
test
HPC test
Router/Switch test

INDUSTRY STANDARDS

SFF 8636
SFF 8679
IEEE802.3bj

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	Super QSFP Loopback-5dB

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