Ultra QSFP-DD SR8 400G Optical Transceiver

OVERVIEW

Luxshare-TECH 400Gbps U-QSFP-DD optical transceiv er can provide new generation performance of QSFP-DD by higher date transfer rate.Luxshare-TECH transceiver is a high-performance optical module for short-reach communication and interconnect applications. The transceiver operates over multimode fiber cable by using a nominal wave length of 850nm VCSEL laser. There are eight channel signal lanes in each direction with 400Gbps aggregate bandwidth. Each electrical lane operates at 26.5625 Gbps / 53.125 Gbps (PAM4 encoded). The electrical interface uses a 76 pins type connector. And all the design is based on the industry standard specifica tions, such as SFF-8679, SFF-8636 and QSFP-DD MSA specification.

FEATURES & BENEFITS

- Hot Pluggable QSFP-DD form factor
- Supports 425Gbps aggregate bit
- Low Power Dissipation, MAX. 12W
- Single MPO-16 receptacle
- Up to 70m transmission with OM3 multimode fiber and 100m transmission with OM4 multimode fiber
- 8x50G PAM4 VCSEL/PIN photo detector
- Operating Case Temperature: 0°C to +70°C

PRODUCT APPLICATIONS

HPC Interconnects
Ethernet for 400GBASE-SR8
Proprietary Interconnections
Trunked AI nodes communication

TECHNICAL INFORMATION

MATERIAL

Nickel plated zinc die cast shells & latching
Mechanism parts
Thermoplastic cable pull tab
Optical plastic lens

ELECTRICAL PERFORMANCE

Power Supply Voltage: 3.3V (3.14 to 3.46V)
Data rate per lane: 53.125Gbps
Power Consumption: 12W(MAX)
Transmitter Type: VCSEL
Receiver Type: PIN

MECHANICAL PERFORMANCE

QSFP-DD Module Insertion: 90N(MAX)
QSFP-DD Module Extraction: 50N(MAX)
QSFP-DD Module Retention: 90N(MIN)
Insertion and removal cycles: 50Cycles

ENVIRONMENTAL

Storage Temperature Range:-40°C to +85°C
Operating Temperature Range:0°C to +70°C
Relative Humidity:0 to 85%

SPECIFICATION

Compliant to QSFP-DD Rev 4.0
Compliant to Class 1M Laser Safety
SFF-8636 Management Interface
SFF-8679: General Electrical
IEEE 802.3cd: Physical Layer Specifications and Manage-ment Parameters
ROHS-6: Environment Safety
ES-12-00-0032

Partial PN Table

PN	Package	Description	Reach	Protocol Support	Data Rate	Temp	Power Consumption	Optical Connector	Transceiver	Receiver	WaveLength	Note
PA0MDMA01-SD-R	Ultra-QSFP-DD	SR8	70m(OM3)/ 100m(OM4)	Ethernet	400Gbps	0-70°C	12w	MPO	VCSEL	PIN	850nm	DSP Version