Technical Datasheet

QSFP28-BIDI-100G-C

NVIDIA Mellanox® Compatible 100GBase-SR QSFP BiDi Transceiver

Hot Pluggable, Duplex LC, 850nm/900nm, up to 100m, Commercial Temperature

FEATURES

- Compliant to 100GbE electrical specification 802.3bm (Annex 83E CAUI-4) with No Host FEC
- 100G Link Distances up to 100m
- QSFP28 MSA Specification Compliant, including new functions per SFF-8636
- Class 1 Eye Safety
- Pull Tab: Ease of Transceiver Insertion and Extraction
- +10ºC to +70ºC case temperature operating range
- Dual Wavelength VCSEL Bi-Directional Optical Interface, PAM4 2x50Gbps 850nm/900nm
- Proven High Reliability 850 nm and 900nm technology: VCSEL transmitter and PIN detector
- Hot Pluggable QSFP28 Transceiver for Ease of Installation and Servicing

APPLICATIONS

- 100 Gigabit Ethernet interconnects
- Datacom/Telecom switch & router connections
- Data aggregation and backplane applications
- Proprietary protocol and density applications

DESCRIPTION

The QSFP28-BIDI-100G-C is a Four-Channel, Pluggable, Multi-mode, Fibre-Optic QSFP28 transceiver for 100 Gigabit Ethernet Applications. This transceiver is a high-performance module for short-range data communication and interconnect applications.

It integrates four host electrical data lanes in each direction at 25Gbps into two optical lanes at 50Gbps giving an aggregated bandwidth of 100Gbps. It allows optical communication up to 100m over a 2-Fibre duplex LC optical multi-mode OM4 cable. The pull tab facilitates the insertion and extraction of these transceivers in high density environment. Each electrical lane operates at 25.78125 Gbps and conforms to the 100GE CAUI4 interface with host FEC turned off.

These modules are designed to operate over multimode fibre systems using nominal wavelengths of 850nm and 900nm. The electrical interface uses a 38 contact QSFP28 edge type connector.

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Key Product Parameters

Parameter	Value	Units	Notes
Signal Rate per lane	25.78125	Gbps	802.3bm (Annex 83E CAUI-4) compliant with no Host FEC
Power Supply Voltage	3.3	V	Typical
Power Consumptions	3.5	W	Maximum
Link Length	70	m	50um OM3 MM Fibre
	100	m	50um OM4 MM Fibre
	150	m	50um OM5 MM Fibre
Operating Temperature Range	10 – 70	☐C	
Management and Diagnostic Interface	Two-Wire Serial		Per SFF-8419 Specifications
Transceiver Eye Safety	Class 1		
Electrical Connector	38 contact connectors		Per SFF-8636 Specifications