

DATASHEET 5.0

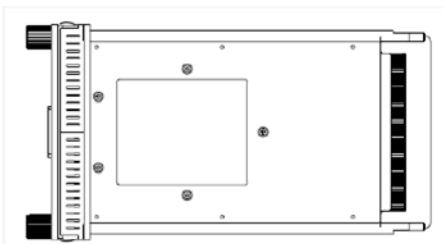
CVR-CFP-QSFP28

CFP to QSFP28 converter module, FEC

OVERVIEW

The CVR-CFP-QSFP28-FEC provides the ability to use a QSFP28 transceiver in a host having an CFP interface. The CVR-CFP-QSFP28-FEC converts between the bidirectional 10x 10G flows in the CFP and the bidirectional 4x 25G flows in the QSFP28 transceiver.

The converter also includes the RS (Reed-Solomon) FEC encode and decode functionality (as defined in IEEE802.3bj) that is required for certain QSFP28 transceiver versions, such as SR4 and CWDM4 optical interfaces. This enables interoperation with QSFP28' based host systems where the FEC encoder/decoder functionality is managed internally.



ORDERING INFORMATION

Part Number	Description
CVR-CFP-QSFP28-FEC	CFP to QSFP28 converter, FEC

TECHNICAL DATA

PARAMETER	VALUE
Technology	Conv CFP – QSFP28
Protocols	Eth: 100GbE
Temperature Range	0°C to +70°C
Power consumption	< 5.5W
FEC scheme	RS (528,514)
MSA Compliance	CFP MSA QSFP28 MSA 8661
Digital Diagnostic Monitoring	Via MDIO i/f

Regulator Compliance	
EMC CE	EN 55022:2010 EN 55024:2010
UL/Safety	UL 60950-1
FCC	47 CFR PART 15 OCT, 2013
RoHS	RoHS 6 EN 60950-1:2006 +A11+A1+A12+A2
	-40°C to 85°C

ORDERING INFORMATION

Ordering Number	DESCRIPTION
16G-ER-BR2	SFP+, 16/8/4 Gbps FC/FICON, 1550nm, SM, DDM, 13dB, 40km

GENERAL DEFINITIONS

Technology	Grey; Transceiver type for non-WDM applications. Electrical or optical. CWDM; Transceiver type for CWDM applications using G.694.2 channel grid. DWDM; Transceiver type for DWDM applications using G.694.1 channel grid. BiDi; Transceiver pair using two different wavelength channels operating on a single-fiber. DAC: Direct Attach Cable. Electrical or optical cable with attached connectors.
Transmission Media	Type of fiber, e.g. Multimode (MM) or Singlemode (SM). Number of and connector type within brackets (e.g. 2x LC, 1x MPO).
Typical reach	Nominal distance performance based on dispersion and power budget properties, i.e. w/o dispersion compensation and optical amplification.
Bit rate range:	Supported bit rate range in Gigabit or Megabit per second (Gbps or Mbps).
Protocols:	Protocols within supported bit rate range.
Nominal wavelength	Typical wavelength from transmitter.
Interface standards	Referenced interface standards e.g. IEEE 802.3 standard for 10GbE services.
Power budget	Min and max power budget between Transmitter and Receiver. Excluding any dispersion penalty.
Dispersion tolerance/penalty	Maximum amount of tolerated dispersion and required reduction of power budget to maintain BER better than $1E^{-12}$. Defined at a specific bit rate.
Temperature range	Max operating case temperature range. Standard temperature range: Typically 0°C to +70°C (32°F to +158°F) Extended temperature range (E-temp): Typically -20°C to +75°C (-4°F to +167°F) Industrial temperature range (I-temp): -40°C to +85°C (-40°F to +185°F)
Power consumption	Worst case power consumption. Will vary over temperature.
Transmitter Output power	Average output power. Provided in min and max values.
Receiver minimum input power	Minimum average input power at specified BER, normally $1E^{-12}$.
Receiver max input power	Maximum average input power giving a BER, normally $1E^{-12}$.
DDM	Digital Diagnostic Monitoring functionality as defined in SFF-8472 MSA.

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