

SO-CVR-CFP2-QSFP28

OVERVIEW

The SO-CVR-CFP2-QSFP28 is a QSFP-28 to CFP-2 adapter designed for optical communication applications compliant to Clause 45 and 88 of the IEEE P802.3ba standard. The module converts a QSFP-28 100Gbps transceiver module into a CFP-2 100Gbps transceiver module. By mapping the QSFP-28 2 wire I2C interface into the CFP-2 MDIO management interface, the adapter preserves all digital diagnostics and monitoring functions. The mapping of all QSFP-28 hardware control pins to the corresponding CFP-2 control pins provides real time monitoring and fast recovery. The product is designed with form factor, optical/electrical connection and digital diagnostic interface according to the QSFP+ Multi-Source Agreement (MSA) and is compatible with any MSA QSFP-28s, including PSM4, SR4, CWDM4, LR4 and their variants.

PRODUCT FEATURES

- Hot pluggable QSFP+ MSA form factor
- Compliant with CAUI4/CEI-28G-VSR: 25.78125/27.9525
- Compliant to IEEE 802.3ba Clause 45 and 88
- Built-in Tx and Rx re-timers
- Supporting line rates from 103.125 to 111.81 Gbps
- Operating case temperature: -5~85°C
- Single +3.3V power supply
- Maximum power consumption 5.0W
- 4x28G Electrical serial interface (CEI-28GVSR)
- RoHS 6/6 compliant

APPLICATIONS

- Data center intra- and inter-connection
- LAN networks
- Access, metro and regional carrier Ethernet DWDM networks
- Communication: IP/MPLS routers and Ethernet switches

ORDERING INFORMATION

Part Number	Description
SO-CVR-CFP2-QSFP28	CFP2 to QSFP28 converter module (used together with QSFP28)

Subject to change without notice.

For more information, visit smartoptics.com.

COMPLIANCE

- IEEE 802.3ba Clause 88
- MDIO IEEE 802.3ba Clause 45
- ITU-T G.959.1-2012-02 OTL4.4
- OIF2010.404.08 CEI-28G-VSR
- MSA CFP2 hardware specification Rev. 1.0
- CFP MSA management interface specification V2.2 (R06a)
- Class 1 laser safety
- Telcordia GR-468 compliant testing

COMPATIBILITY

Smartoptics CFP-2 adapter is compatible with all QSFP-28 module compliant with:

- SFF-8661 Rev 2.3 QSFP28 module mechanical
- SFF-8679 Rev 1.7 QSFP28 base electrical
- SFF-8636 Rev 2.6 Common management interface

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min	Max	Unit
Storage temperature	T_s	-40	+85	degC
Operating case temperature	TOP	-5	+85	degC
Power supply voltage	Vcc		3.6	V
Low power mode dissipation	P _{low}		2	W
Inrush current	I _{inrush}		250	mA/usec
Turn-off current	I _{turnoff}	-250		mA/usec
Power supply noise	V _{rip}		2%	DC-1MHz
			3%	1-10MHz

RECOMMENDED OPERATING CONDITIONS

Parameter	Symbol	Min	Typ	Max	Unit
Operating case temperature	T	0		70	degC
Power supply voltage	Vcc	3.2	3.3	3.4	V
Power supply current	I _{cc}			5.625	A

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