

DATASHEET 5.0

SO-CSFP-1000BASE-BX20D-43-O2 & -I

CSFP BiDi, 100Mbps/1.25Gbps, TX/RX=1490/1310nm, SM, DDM, 14dB, 20km

OVERVIEW

The SO-CSFP-1000BASE-BX20D-43-O2 is a CSFP (Compact SFP) transceiver where both ports are bi-directional, i.e. providing double capacity as compared to normal BiDi transceivers where one port is not used. This requires that the host equipment support CSFP transceivers.

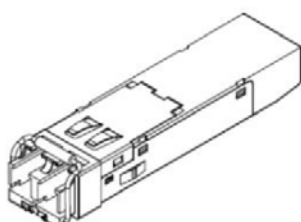
Each port operates directly on a single-fiber without the need for a separate optical filter. Each transceiver function uses a 1490nm transmitter and a receiver operating at 1310nm. The solution requires that the far end host equipment uses bi-directional SFP's that transmit on a 1310nm wavelength and a receiver that accepts a 1490nm wavelength.

The transceiver supports a bit rate range between 100 Mbps and 1.25 Gbps, e.g. 1G Fiberchannel (1G FC) 100M Ethernet (FE) and 1G Ethernet (GbE) services, having an optical performance that provides a bridgeable distance of up to 20km.

The transceiver solution is available in two temperature range options, one being the Industrial temperature range (I-temp) of -40°C to +85°C (-40°F to +185°F). The transceivers provide digital diagnostic functions via a 2-wire serial interface as defined by the SFF-8472 specification.



¹⁾@ 1.25 Gbps



TECHNICAL DATA

Technology	BiDi CSFP
Transmission media	SM (2x LC)
Typical reach	20 km
Nominal wavelengths	1490 nm & 1310 nm
Bit rate range	100 Mbps - 1.25 Gbps
Protocol support	Eth: GbE 100M (FE) FC 1G FC SDH/SONET: STM-1 / OC-3 STM-4 / OC-12
Power budget	0.0 - 14 dB ³⁾
Dispersion penalty	1 dB
Temperature range	-0°C to +70°C -40°C to +85°C (-I)
Power consumption	< 1.0W per ch
Transmitter data:	
Output power	Min: -8.0 dBm Max : -3.0 dBm
Tx wavelength	1490 – 1500 nm
Receiver data:	
Minimum input power	-22.0 dBm ¹⁾
Overload (Max power)	-3.0 dBm
Wavelength range	1260 - 1360 nm
DDM	Yes
MSA compliance	CFP MSA opt 2 SFF 8472
Storage temp.	-40°C to +85°C
Regulatory compliance:	
EMC CE	EN 55022:2010 EN 55024:2010
UL/Safety	UL 60950-1
FCC	47 CFR PART 15 OCT, 2013
RoHS	RoHS 6, 2011/65/EU
TUV	EN 60950-1:2006+A11 +A1+A12 EN 60825-1:2007 EN 60825-2:2004+A1+A2