

PRODUCT BRIEF > OPTICAL TRANSCEIVER

800GBASE-FR4 ZeroFlap Transceiver

800Gbps OSFP RHS, FR4, 2km

The Credo ZeroFlap (ZF) 800GBASE-FR4 optical transceiver is specifically designed for use in AI fabrics and data center networks where enhanced reliability and visibility are essential. When used in conjunction with the Credo PILOT software and integrated with the ZeroFlap Host SDK for telemetry harvesting and coordination, the ZeroFlap 800G FR4 optical transceiver forms an integral part of Credo's complete ZeroFlap networking solution.

The ZeroFlap 800G FR4 optical transceiver gives network operators flexibility to deploy optical connections up to 2km using parallel single mode fiber with LC duplex optical connections. Enhanced link telemetry reporting and autonomous link health monitoring provide complete network visibility and offer advanced warning for impending problems. The non-volatile event log embedded in the transceiver is a critical resource for accurately tracing historical network events, enabling efficient cluster maintenance.

The OSFP form factor with flat-top is designed for use with 800G host ports supporting four electrical lanes of 200Gbps following the IEEE 803.3dj. The optical interface employs four optical lanes of 200Gbps using CDWM four wavelengths and is compliant with IEEE 802.3dj. Product application is for network interface cards.

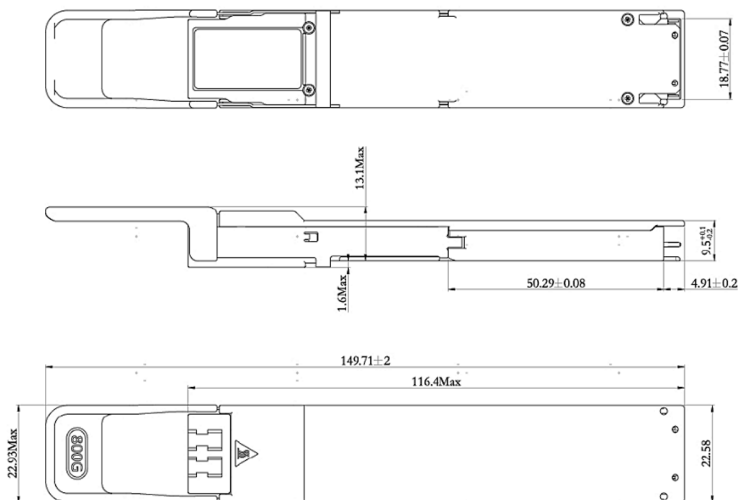


Features

- 800Gbps over parallel SMF
- Up to 2km transmission
- 1310nm wavelength
- LC duplex connectors
- ZeroFlap link telemetry
- Optical link health monitoring
- FEC monitor, MPI detection
- ESD/EOS self-diagnostic
- Non-volatile event logging
- Remote peer communication
- Hitless firmware update
- Hot pluggable
- Operating temp 0-70°C
- RoHS-6 compliant

Supported Standards

- Common Management Interface Specification (CMIS) v5.3
- OSFP MSA Rev 5.2
- IEEE 802.3dj
- OIF CEI-224G-VSR-PAM4



Key Features

Parameter	Value	Comments
Module Form Factor	OSFP Flat-top Riding Heat-sink	OSFP MSA Rev 5.2
Number of Optical Lanes	4 TX and 4 RX (2x CWDM 40)	800GBASE-FR4
Number of Electrical Lanes	4 TX and 4 RX	800GAUI-4, CEI-224G-VSR-PAM4
Maximum Aggregate Data Rate	1700 Gb/s	
Electrical Interface and Pin-out	60-pin Edge Connector	OSFP MSA, Rev 5.2
Optical Interface	Dual LC Duplex	OSFP MSA, Rev 5.2
Fiber Type	Single Mode Fiber	
Maximum Power Consumption	15W	
Management Interface	Serial I ² C	CMIS v5.3, 400 kHz maximum frequency

Product Family

Part Number	Form Factor	Data Rate	Distance (m)	Wavelength (nm)	Voltage (V)	Temp (°C)
CFZHD4S1DLCH-B1-HW	OSFP RHS	800Gbps	2000	1310	3.3	0-70

Regulation and Compliance

Specification	Parameter
EMC — Immunity	• EN 55024 (EU) • IEC EN 61000-4-3 (International)
EMC — Emission	• FCC 47 CFR Part 15, class B (US) • EN 55022 (EU) • EMC Directive 2004/108/EEC (EU)
ESD Threshold	• IEC EN 61000-4-2; ± 8kV contact, ± 15kV air
Product Safety	• UL Recognized Component: UL 60950-1 (2nd Ed.) Information Technology Equipment • CAN/CSA-C22.2 No. 60950-1 (2007) Information Technology Equipment • UL94-V0 flammability • CB Certificate: IEC 60950-1 (2005 +A1:2009) Information Technology Equipment
Optical Safety	• FDA/CDRH certified with accession number, Class 1 laser product
RoHS	• Complies with RoHS II Directive 2011/65/EU

For more information please visit www.credosemi.com
or email sales@credosemi.com