

PRODUCT BRIEF > OPTICAL TRANSCEIVER

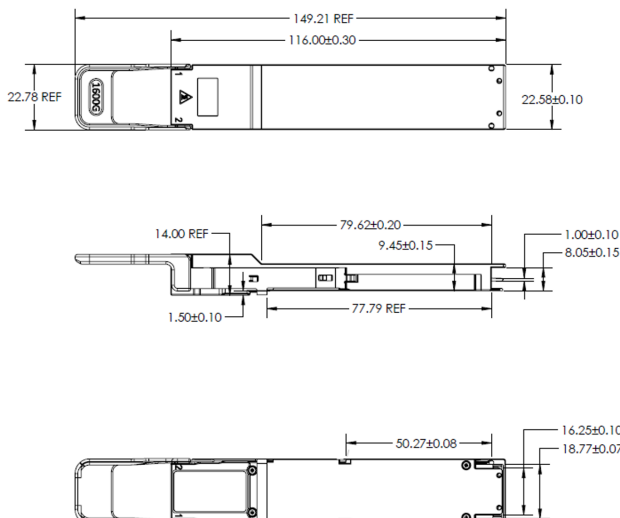
2 x 800GBASE-DR4+ ZeroFlap Transceiver

1.6Tbps OSFP RHS, 2xDR4+, 2km

The Credo ZeroFlap (ZF) 2x800GBASE-DR4 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 1.6T 2xDR4 optical transceiver forms an integral part of the Credo's complete ZeroFlap networking solution.

The ZeroFlap 1.6T 2xDR4+ optical transceiver gives network operators flexibility to deploy optical connections up to 2km using parallel single mode fiber with MPO-12 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 1.6T host ports supporting eight electrical lanes of 200Gbps following the IEEE 803.3dj. The optical interface employs two sets of four optical lanes of 200Gbps using 1310nm wavelength and is compliant with IEEE 802.3dj. Product applications are for network interface card and liquid cooled ethernet switch.



Features

- 2x800Gbps over parallel SMF
- Up to 2km transmission
- 1310nm wavelength
- Dual MPO-12 APC 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	8 TX and 8 RX	2 x 800GBASE-DR4
Number of Electrical Lanes	8 TX and 8 RX	2 x 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 MPO12/APC	OSFP MSA, Rev 5.2
Fiber Type	Parallel Single Mode Fiber	
Maximum Power Consumption	25W	
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)
CFZHD8S2M12H-C1-HW	OSFP RHS	2x800Gbps	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

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