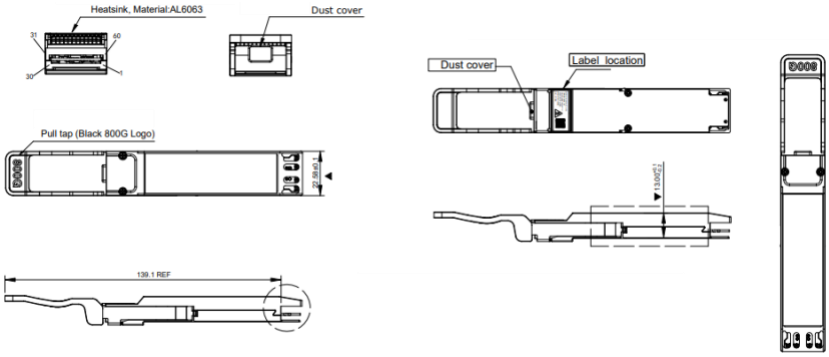
AEC eLBM SPECIFICATION

PLUG & PLAY Loopback AEC

Active loopback test functionality for 800G based OSFP hosts

800G OSFP

Credo's ZeroFlap Family HiWire Loopback Active Electrical Cable
Credo's CAC8X1A-C1-HW Loopback AEC is design to provide an active loopback test functionality for 800G (8x100G) based OSFP hosts. The module also includes the ability to control a power and thermal load of up to 28W, and well as provide several PRBS, FEC parato, eye height and other loopback functions.



Applications

- 800G (8x100G) loop back configuration controllable on a lane by lane basis
- PRBS Generation and evaluation on a lane by lane basis
- Eye Height measurement with PRBS or mission mode traffic
- CMIS 5.0 Compliant
- Single 3.3V power supply
- Up to 25W resistive thermal load that is software controlled via the CMIS port
- Typ. 7W power dissipation with8 lanes of loopback enabled
- Thin fin design to allow 2.2-2.6 CFM airflow per port
- Hot pluggable
- RoHS2 compliant
- I2C management interface
- Operating case temperature range: 0 to +70ºC

Supported Standards and Interfaces

- Common Management Interface Specification (CMIS) v5.0

Key Features

Parameter	Value
Module Form Factor	OSFP
Number of Data Lanes	8 TX and 8 RX per module (PAM4)
Maximum Aggregate Data Rate	800Gbps
Nominal Data Rate per Lane	112 Gbps (PAM4)
Electrical Interface and Pin-out	60-pin edge connector
Pin Description	Per OSFP Hardware Specification
Management Interface	I^2C, serial, timing per Common Management Interface Specification 4.0 for 8X/16X Pluggable Transceivers
Power supply (DC)	3.3V

Product Selections

Part Number	Configuration
CAC8X1A-C1-HW	800G OSFP Loopback AEC

About Credo

Credo's mission is to advance high-speed connectivity solutions that deliver optimized performance, reliability, energy efficiency, and security for the next generation of AI driven applications, cloud computing, and hyperscale networks. Optimized for both optical and electrical applications, our solutions support port speeds up to 1.6Tb. At the core of our technology is our proprietary Serializer/Deserializer (SerDes) IP. Our diverse solutions portfolio includes system-level products such as Active Electrical Cables (AECs), a range of Integrated Circuits, including Retimers, Optical DSPs, SerDes chipsets, and SerDes IP Licensing.

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