**CREDO**
*we connect.*

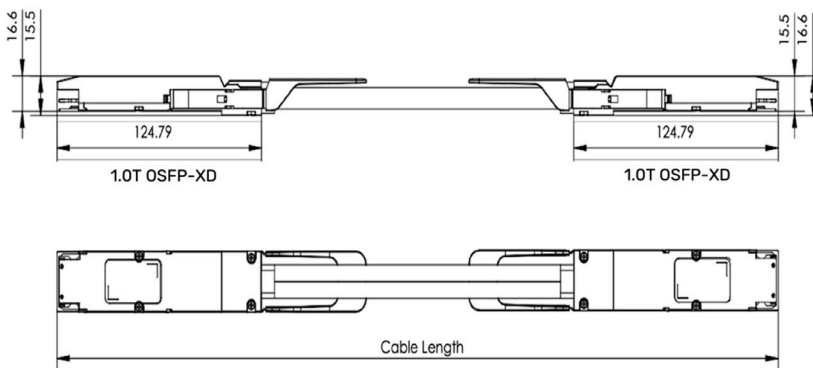# Plug & Play AEC
# 1.0T OSFP-XD PCIe CXL AEC

## For In-Rack and Rack-to Rack PCIe Applications

**Credo's PCIe 6.x/CXL 3.x Active Electrical Cable (AEC)**
Credo's OSFP-XD PCIe AECs offer a highly flexible solution for high-speed connectivity, PCIe 6.x and CXL 3.x standards. With a remarkable reach up to 7m and lossless end-to-end x16 Gen6 PCIe connectivity, our AECs enable transfer rates of up to 1Tb/sec. Ideal for connecting GPUs, CPUs, and storage devices in dense AI deployments, Credo's fully tested AECs will provide robust and reliable performance.

Extending reach up to 3X of passive CDFP cables, Credo's PCIe 6.x/CXL 3.x AEC will enable in-rack and rack-to-rack connectivity while simplifying rack cable management with thinner gauge copper and a bend radius of 3X OD.



## Features

The following are the key features of the HiWire SPAN AEC:

- 32AWG 2x6.8mm PET mesh
- 1.0Tb data rate
- Single 3.3V power supply
- Typical 13W power dissipation each end
- BER < $10^{-12}$ (pre FEC)
- Hot pluggable
- Propagates PCIe sideband signals and BMC $I^2C$ Bus
- RoHS2 compliant
- Support for all clocking modes (Common clock, SRIS/SNIS, Intel low-latency mode)
- 1m-7m, 3x OD bend radius
- Compliant with PCI-SIG OST cabling pinout standard
- Operating case temperature range: 0 to +70°C

## Supported Standards and Interfaces

- OSFP-XD MSA v1.1 Type 1
- PCIe 6.x/CXL 3.x

## Key Features

| Parameter | Value |
|---|---|
| Module Form Factor | OSFP-XD |
| Number of Data Lanes | 16 TX and 16 RX per module (PAM4) |
| Maximum Aggregate Data Rate | 1000Gbps, bidirectional |
| Nominal Data Rate per Lane | 64 Gbps (PAM4) |
| Electrical Interface and Pin-out | 120-pin edge connector |
| Pin Description | Per OSFP-XD MSA v1.1 Type 1 |
| Management Interface | I$^2$C |
| Length of Copper AEC | 1.0m – 7.0m |
| BER (Pre-FEC)* | Typical <$10^{-12}$ |

* Tested with QPRBS31 pattern

## Product Selections

| Part Number | Length | Cable Type |
|---|---|---|
| CXLAxxxx1T1T-A0-HW | 1.0m-7.0m | 32P |

## 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.

For more information please visit **www.credosemi.com**
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