



AEC PCIe SPECIFICATION

Plug & Play Active Electrical Cable

1.0T OSFP-XD PCIe CXL AEC

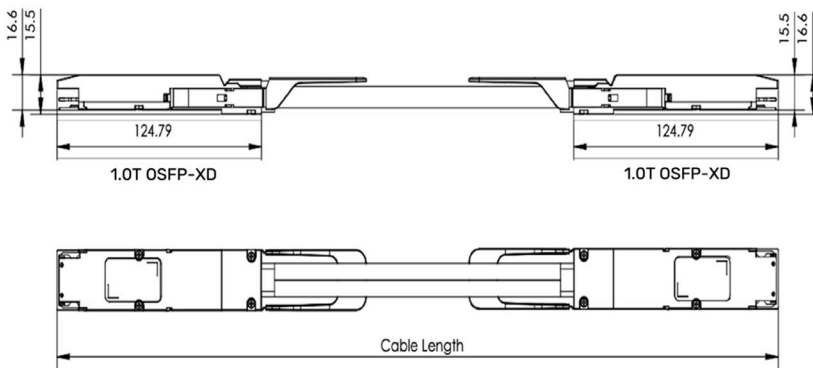


For In-Rack and Rack-to Rack PCIe Applications

Credo's PCIe 6.x/CXL 3.x Active Electrical Cable (AEC)

Credo's OSFP-XD PCIe highly flexible AECs provide extended range up to 7 m with lossless end-to-end x16 Gen6 PCIe connectivity, allowing for transfer rates of up to 1Tb/sec. Whether connecting GPUs, CPUs, or storage devices across dense AI deployments, Credo's fully tested AECs will provide robust and reliable end-to-end Gen6 PCIe cabling solutions.

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

- 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 I²C 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

For more information please visit www.credosemi.com
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