

CE Certified Linear Drive Pluggable Optical 100G



Overview

The 100G-DR-LPO specification by the LPO (Linear Pluggable Optics) MSA defines 100 Gb/s/lane 53. 125 GBd PAM4 optical interfaces, optical links using standard single-mode fiber with up to 500 m reach, and host-module electrical interfaces for hosts with DSP based SerDes and RS(544,514) FEC. It. Industry-leading linear drivers for 100G to 1. 6T PAM4 and Coherent-based optical modules provide cutting-edge performance, quality and reliability to enable high-speed data transmission for AI, cloud and long haul/metro applications. End-to-end solution with Marvell's TIA and DSP Enable higher. The Linear Pluggable Optics Multi-Source Agreement (LPO MSA) group has announced the release of its new 100Gbps-per-lane Linear Pluggable Optics (LPO) specification, designed to enable optical interconnects supporting up to 800 Gigabit Ethernet connectivity. This latest specification, 100G-DR-LPO. SMF and MMF interconnect needs at lower power consumption, latency, and total system cost. According to the LPO MSA, an LPO solution offers power savings for optical interconnect by removing the digital signal processing (DSP) function from the pluggable optical module. According to the 2024 Report on U. S Data Center Energy Use, published by the Lawrence Berkeley National Laboratory, data centers account for 4. in 2023, and are projecte to increase to 6.



Article Content

Aug 26, 2025

Linear Pluggable Optics – An Overview

Marvell, Alphawave, and Innolight. These systems, spanning 100G to 200G per lane, highlight advances in analog components and signal integrity without the need for DSPs or CDRs. The LPO MSA aims to

Mar 01, 2026

Linear Drive Pluggable Optics

Linear Drive Pluggable Optics Linear Drive Pluggable Optics (LPOs) have gained tremendous attention during 2023 and this document attempts to de-mystify the terminology. The focus is on 400G and

Feb 16, 2026

MACOM PURE DRIVE™

These high-performance parts have been leveraged in leading module and system level designs and enable highly efficient interconnect spanning both short reach

Jun 03, 2026

MACOM, Broadcom to demo 100G per lane linear drive

Linear drive architectures obviate the need for a DSP in pluggable optical modules, thus lowering power consumption, improving signal latency, and

Jul 05, 2025

Semtech to Demonstrate 100G/Lane Linear Pluggable

800G SR8 LPO (Linear Pluggable Optics) module, featuring Semtech's FiberEdge GN1848 quad VCSEL driver and GN1816 quad TIA, interoperating

Sep 01, 2025

Linear Pluggable Optics Advances with 100G/Lane Spec

The Linear Pluggable Optics Multi-Source Agreement (LPO MSA) group has announced the release of its new 100Gbps-per-lane Linear Pluggable

Nov 21, 2025

FiberEdge® & DirectEdge™ | Signal Integrity

FiberEdge: Industry leading 100G/channel and 200G/channel Physical Media Dependent (PMD) portfolio to drive 800G and 1.6T optical networks DirectEdge:

Mar 21, 2026

Semtech to Demonstrate 100G/Lane Linear Pluggable

CAMARILLO, Calif.- (BUSINESS WIRE)- Semtech Corporation (Nasdaq: SMTC), a high-performance semiconductor, IoT systems and cloud

May 27, 2026

MACOM to demo 100G/lane optical link with linear drive interface at OFC

A linear drive architecture eliminates the digital signal processor (DSP) from pluggable optical modules while lowering power consumption, improving signal latency and reducing cost.

Jan 07, 2026

LPO MSA Specification

It builds on IEEE 802.3 and OIF CEI-112G-LINEAR-PAM4 specifications. It enables Ethernet-like links with 1, 2, 4, or 8 lanes for data centers, using low power, high port density, low cost, and low latency

Dec 21, 2025

MACOM to Demonstrate 100G/Lane High Speed Optical Link with Linear ...

A Linear Drive architecture eliminates the Digital Signal Processor (DSP) from pluggable optical modules while lowering power consumption, improving signal latency and reducing cost.

Dec 12, 2025

Comparisons and Challenges Associated with Linear Interface

Given that timeline of the db task force to D1.0 no later than March-2021 the focus should be developing optical PMDs instead of dabbling in technically very challenging direct drive linear optics.

Nov 04, 2025

LPO MSA releases Linear Pluggable Optical Modules

Linear Drive Pluggable Optics refers to the use of direct-drive linear technology in fiber modules. According to the LPO MSA, an LPO solution offers

May 16, 2026

OFC 2024 200G Lane Linear Optics Workshop Ver2

Comparison to Time-Domain Model E. Chou, et al.*, "100G and 200G per Lane Linear Drive Optics for Data Center Applications", OFC 2024 W4H.3, *authors with Meta

Jun 21, 2026

A Comprehensive Guide to 100G Optical Transceiver

Contact LINK-PP to discover how our 100G optical transceivers can optimize your network's speed, efficiency, and ROI. Final Thoughts From legacy

Jul 20, 2025

Semtech Launches 100G/lane LPO Portfolio

Semtech introduced its new DirectEdge™ portfolio of 100G/channel analog optical components at OFC 2025, targeting low-power Linear Pluggable

Sep 12, 2025

100G and 200G per Lane Linear Drive Optics for Data Center

Abstract: 100G/lane linear-drive pluggable optics demonstrate interoperability with over 3 dB link margin. Simulations suggest that 200G/lane linear drive requires bump-to-bump losses below 22 dB, but

Jul 21, 2025

LPO MSA Membership Group Releases Linear

As a member of the Linear Pluggable Optics Multi-Source Agreement (LPO-MSA) Group we support this week's release of the specification for

Oct 22, 2025

Semtech to Demonstrate 100G/Lane Linear Pluggable Optical Links

Semtech Corporation (Nasdaq: SMTC), a high-performance semiconductor, IoT systems and cloud connectivity service provider, today announced the demonstration of 100G/lane linear

Dec 21, 2025

Linear Driver | Leading High Performance and Low

Industry-leading linear drivers for 100G to 1.6T PAM4 and Coherent-based optical modules provide cutting-edge performance, quality and reliability to enable high

Oct 15, 2025

Eoptolink unveils 800G linear-drive pluggable optical

Eoptolink Technology Inc., Ltd. (SZSE: 300502) used OFC 2023 to launch 800G linear-drive pluggable optical transceivers (LPOs). The use of a

Jan 07, 2026

ICE-X 100G/400G

A suite of flexible intelligent coherent pluggable optics enabling cost- and power-efficient network scalability.

Oct 31, 2025

MACOM Letterhead

Linear Drive architecture eliminates the Digital Signal Processor (DSP) from pluggable optical modules while lowering power consumption, improving signal latency and reducing cost. With

Mar 23, 2026

LPO Transceiver: Embracing the Future of Linear-drive

The Linear-drive Pluggable Optics (LPO) transceiver with linear-drive technology has advantages in power consumption, cost and latency.

Oct 15, 2025

LPO MSA Announces Release of Specification for Linear Pluggable Optical ...

This specification is a significant milestone for both the LPO MSA and networking industry. The 100G-DR-LPO specification has been validated by extensive member interoperability

Nov 30, 2025

Linear Driver | Leading High Performance and Low

Low-power, high-performance linear drivers for PAM4 and Coherent pluggable modules Industry-leading linear drivers for 100G to 1.6T PAM4 and Coherent

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.elagage-lorrain.fr>

Email: sales@elagage-lorrain.fr

Phone: +33 6 47 82 19 35

Address: 15 Rue de la République, 69002 Lyon, France

This document is for informational purposes only. Specifications subject to change without notice.

