



SILICON PHOTONICS, LINEAR DRIVE PLUGGABLE AND CO-PACKAGED OPTICS

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	Retimed Pluggable	Linear-Drive Pluggable	Linear-Drive CPO
Power	●	●	●
Cost	●	●	●
Latency	●	●	●
Product Maturity	●	●	●
Serviceability	●	●	●
Late Binding Commitment	●	●	●
Link Performance	●	●	●
Link Accountability	●	●	●
Interoperable Ecosystem	●	●	●

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Abstract

This report provides an in-depth analysis of the impact of silicon photonics (SiP) on the market for optical transceivers and related components in 2018-2022. It also presents a forecast for shipments and sales of discrete and integrated products based on InP, GaAs, SiP, LiNbO₃ as well as new thin film materials (TFLN, BTO and polymers) for 2023–2028. The forecast is segmented by main applications, including Ethernet, WDM, Wireless Fronthaul/Backhaul, Fibre Channel, FTTx, Active Optical Cables (AOCs), Linear Drive Pluggables (LPO) and Co-Packaged Optics (CPO). Products are sorted by data rate, reach, and form factor into more than 150 categories. The report also discusses the supply chain for SiP products, including profiles of the leading foundries.

Adoption of LPO/CPO is discussed in detail, including use cases in datacenters, AI Clusters and HPCs.

LightCounting is a market research company focused on the in-depth study of high-speed interconnects for the datacom, telecom, and consumer communications markets. Our research covers the whole supply chain from optical and semiconductor components, to modules, sub-systems and their applications in telecom and datacom systems.

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