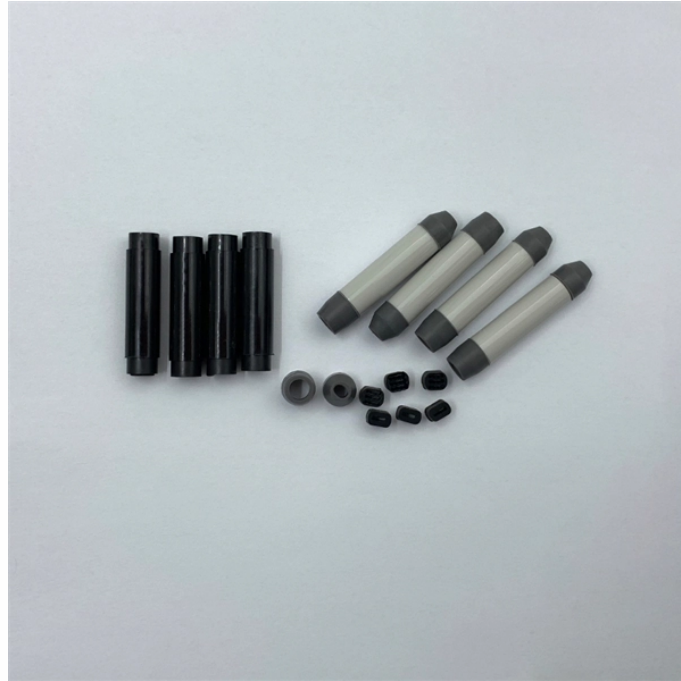


# Co-packaged optical and silicon photonics modules



## Overview

Co-packaged optics (CPO) technology, a key enabler for next-generation data center architectures, promises unprecedented bandwidth density and power efficiency by tightly integrating optical engines with switch silicon. Yole Group unveils its latest photonic market and technology analyses, *Silicon Photonics 2025* and *Co-Packaged Optics for Data Centers 2025*, which explore how AI-driven demand is reshaping connectivity, from transceivers to packaging innovation. 200G/channel will become the new mainstream, enabling. SCALE CPO solution is the industry's first OCI MSA capable platform and built with GF's proven silicon photonics technology MALTA, N., May 4, 2026 - GlobalFoundries (Nasdaq: GFS) (GF) today announced the introduction of its SCALE™ optical module solution for co-packaged optics (CPO). From Jensen Huang showcasing CPO switches at GTC 2025 to a wide range of vendors demonstrating optical engines integrated inside ASIC. The silicon photonics industry is entering a period of rapid growth and diversification, according to Yole Group's new report, *Silicon Photonics 2025 - Focus on SOI, SiN, LNOI & InP Platforms*. As power consumption continues to surge with the rapid expansion of AI data centers, expectations are high that CPO will dramatically.

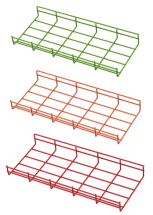
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GF's SCALE CPO solution and silicon photonics technology offer an advanced portfolio of fully-qualified photonic devices, such as 50Gbps and 100Gbps micro-ring modulators, coupled ring ...



With CPO shifting the technology paradigm from individually inserting optical modules to integrating optical functions into semiconductor packages, semiconductor foundries (such as TSMC) and OSAT ...



In addition to the silicon photonics market report, Co-Packaged Optics for Data Centers 2025 examines how packaging innovation is transforming next-generation connectivity. CPO ...



This section mainly discusses 2D/2.5D/3D silicon photonic co-packaging module developed by IMECAS, 2D MCM photonic module package issues, and the challenges of silicon photonic wafer-level ...



While linear-drive pluggable modules remain competitive, CPO is expected to offer unmatched customization and scalability, with large-scale adoption targeted for 2028-2030. With AI ...



The Broadcom Bailly chip integrates 6.4Tbps silicon-photonics-based optical engines inside the ASIC package. These high-density edge-mounted optical engines directly interface with ...



Co-packaged optics-based networking switches with unmatched power efficiency and resiliency. NVIDIA's co-packaged optics (CPO) switches with integrated silicon photonics are the world's most ...



As a result, optical transmission technologies are becoming increasingly important. TrendForce forecasts that co-packaged optics (CPO) will steadily increase their share of optical ...



In this paper, we discuss a packaging technique where 2D structures, on a common silicon photonics interposer/substrate, are interconnected with other silicon devices via a package substrate.

## Contact Us

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