

# New Co-packaged Photonics for Field Operations



## Overview

This paper explores the evolution of CPO performance from various perspectives, including fan-out wafer level packaging (FOWLP), through-silicon via (TSV)-based packaging, through-glass via (TGV)-based packaging, femtosecond laser direct writing waveguides, ion-exchange glass. This paper explores the evolution of CPO performance from various perspectives, including fan-out wafer level packaging (FOWLP), through-silicon via (TSV)-based packaging, through-glass via (TGV)-based packaging, femtosecond laser direct writing waveguides, ion-exchange glass. Co-packaged optics (CPO) technology offers a promising solution by integrating photonic integrated circuits (PICs) directly within or close to electronic integrated circuit (EIC) packages. The shift toward quantum-safe communications is not optional—it. 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.



## Article Content

Apr 22, 2026

Heterogeneous Integration Technology Drives the Evolution of Co ...

As the TGV process matures and its cost continues to decline, it is expected to become the mainstream CPO packaging path, propelling silicon photonics technology from integration to a ...

May 18, 2026

Marvell Announces Breakthrough Co-Packaged Optics ...

Marvell CPO leverages multiple generations of silicon photonics technology, which has been shipping for over eight years with more than 10 ...

Aug 15, 2025

C2PO: Coherent Co-packaged Optics using offset-QAM-16 for ...

We simulate and evaluate the performance of our proposed MRM-based coherent CPO (C2PO) transmitters using a foundry-provided commercial silicon photonics process, demonstrating ...

Apr 08, 2026

Silicon photonics and co-packaged optics at the heart of next ...

With AI reshaping data infrastructure, silicon photonics and co-packaged optics represent critical enablers of tomorrow's data center. Yole Group's 2025 reports provide detailed market ...

Dec 01, 2025

Co-Packaged Optics — a deep dive | APNIC Blog

OFC 2025 made one thing clear: The transition to Co-Packaged Optics (CPO) switches in data centres is inevitable, driven primarily by the power savings they offer.

Nov 23, 2025

How Industry Collaboration Fosters NVIDIA Co ...

NVIDIA is developing a co-packaged optics (CPO) platform that integrates optical and electrical components to improve data-center connectivity, ...

Jun 06, 2026

Coherent Demonstrates Multiple Technologies for Co-packaged ...

These demonstrations highlight Coherent's ability to support multiple optical architectures for co-packaged optics, leveraging its expertise across key photonics technologies including indium ...

Nov 13, 2025

#### Optics for co-packaged applications | Ciena

By minimizing the length of ASIC-to-optics interconnects, co-packaged and near-package optical (CPO/NPO) implementations significantly reduce power consumption, allowing this critical resource ...

Jun 14, 2026

#### Marvell Announces Breakthrough Co-Packaged Optics Architecture for ...

Marvell CPO leverages multiple generations of silicon photonics technology, which has been shipping for over eight years with more than 10 billion device hours of field operation.

Aug 19, 2025

#### How Industry Collaboration Fosters NVIDIA Co-Packaged Optics

NVIDIA is developing a co-packaged optics (CPO) platform that integrates optical and electrical components to improve data-center connectivity, in collaboration with industry partners like ...

Apr 18, 2026

#### Co-Packaged Optics (CPO): Evaluating Different Packaging ...

The rise of co-packaged optics (CPO) is transforming modern data centers and high-performance networks by addressing critical challenges such as bandwidth density, energy ...

May 18, 2026

#### GlobalFoundries accelerates adoption of co-packaged optics for ...

“With over a decade of innovation and manufacturing expertise in silicon photonics technology at our disposal, GF stands ready to unlock the future of high-bandwidth, energy-efficient ...

## Contact Us

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

Website: <https://ntmmgroup.co.za>

Email: [sales@ntmmgroup.co.za](mailto:sales@ntmmgroup.co.za)

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town,  
7441, South Africa

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

