

# **Swedish silicon photonics technology 200G**





## Overview

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The 200G/Lane silicon photonic receiver chip at the heart of this collaboration adopts advanced PAM4 modulation technology and a silicon photonic integrated architecture, boasting core advantages such as ultra-low power consumption, ultra-compact size, and high reliability. SEATTLE, WA — September 30, 2025 — NLM Photonics, a leader in hybrid organic electro-optic (OEO) technology, today announced breakthrough validation results from third-party testing of multi-channel silicon-organic hybrid (SOH) photonic integrated circuits (PICs) capable of 1. According to the company, these results represent real-world improvements in 200G performance and pave the way for 400G in. 31 V-mm modulation efficiency and industry-leading 110 GHz bandwidth performance, demonstrating commercial scalability and a path to 400G silicon PICs SEATTLE, WA — September 30, 2025 — NLM Photonics, a leader in hybrid.



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### **NLM proves 200G silicon organic hybrid photonic performance**

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According to the company, these results represent real-world improvements in 200G performance and pave the way for 400G in a commercially available silicon photonics platform.

### **Silicon Photonics Push Beyond 200G: NLM to Unveil Third-Party Test**

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The results confirm that NLM's patented silicon organic hybrid (SOH) photonic integrated circuits (PICs) can be manufactured on commercially available silicon photonics platforms to scale



## **Silicon photonics technology on 200mm CMOS platform for high**

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Silicon photonics is poised to revolutionize many application areas, such as telecommunication, data centers, biosensing, high performance computing, etc. A whole silicon

## **Source Photonics: Leading Global Manufacturer of**

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As a leading global provider of advanced technology solutions for communications and data connectivity, we embrace the need to be nimble. In a rapidly growing

## **NLM Validates Silicon-Organic Hybrid Performance at**

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This testing validates that, using NLM's SOH technology, commercially available silicon photonics platforms can break the 200G barrier,

## **Siluxtek and GlobalFoundries Forge a Deep Strategic Partnership to**

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The 200G/Lane silicon photonic receiver chip at the heart of this collaboration adopts advanced PAM4 modulation technology and a silicon photonic integrated architecture, boasting core advantages such

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Silicon photonics is poised to revolutionize many application areas, such as telecommunication, data centers, biosensing, high performance computing, etc. A whole silicon photonics process flow based



## **POET Technologies Develops Optical Interposer**

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POET Technologies, the designer and developer of the POET Optical Interposer(TM) and Photonic Integrated Circuits (PICs) for the data center,

## **Silicon photonics technology on 200mm CMOS platform**

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Silicon Photonics Process Development Based on A 200-mm CMOS Platform Zhihua Li, Jiang Yan, Bo Tang, Guilei Wang, Lingkuan Meng, Daoqun Liu

## **Silicon photonics process development based on a 200-mm CMOS**

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Reusing the mature CMOS fabrication tools, Si photonics has the potential to creating low-cost photonics for mass-market applications, like the CMOS technology did.

## **Exploring the Dynamics of 200G and 400G Silicon Photonics**

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Silicon photonics modules operating at 200G and 400G speeds are transforming high-speed data transmission. As data centers, telecom providers, and enterprise networks demand

## **Silicon Photonic MZM Architectures for 200G per Lambda IM/DD**

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We review design considerations for silicon photonic single-segment and multi-segment Mach-Zehnder modulators for net 200 Gbit/s/lane intensity modulation direct detection applications. We consider



## **200-mm silicon photonics technology development , (2019) , Li**

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The key challenges and solutions in developing a manufacturable photonic technology were described in this paper. According to the difference of manufacturing process, a series of process modules for

## **NLM Photonics Validates Silicon-Organic Hybrid Performance at 200G**

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Silicon-Organic Hybrid Photonic Integrated Circuits Achieve Record-Breaking 0.31 V-mm Modulation Efficiency and Industry-Leading 110 GHz Bandwidth Performance, Demonstrating

## **Marvell Demonstrates Industry's First 200G 3D**

Marvell 3D Silicon Photonics Engine is designed to enable higher density, lower power optical interconnects for next-generation AI clusters and

## **200-mm silicon photonics technology development**

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Silicon photonics uses mature CMOS industry to design, manufacture and package photonic devices. It can break through the limitation of existing electrical technology in terms of cost,

## **Photonic raises \$130M to advance quantum computing**

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The Canadian company is accelerating the path to fault-tolerant quantum systems with their Entanglement First Architecture that combines



## **Silicon Photonics 200Gbps QSFP56 FR4 Optical Transceiver Data**

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General Description The Intel® Silicon Photonics 200 Gbps QSFP56 FR4 Optical Transceiver is a small form-factor, high speed, and low power consumption product targeted for use in optical interconnects

## **Photonics in Sweden**

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- Photonics is a relatively narrow technology area in Sweden. It is therefore of the utmost importance that companies that work in Swedish photonics collaborate with each other to build up competence

## **Source Photonics Announce the Product Availability**



**of its 200G per**

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West Hills and San Francisco, California, April 1, 2025 - Source Photonics Inc., a leading global provider of innovative and reliable technology solutions for communications and data connectivity for use in

## **Source Photonics Showcases Industry's First-Ever**

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Source Photonics, an expert in module packaging, collaborated with its key technology partner to produce and validate the monolithic integrated multi

## **Marvell Demonstrates Industry's First 200G 3D Silicon**

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Marvell 3D Silicon Photonics (SiPho) Engine is the industry's first highly integrated SiPho engine featuring 32 channels of 200G electrical and



## **200-mm silicon photonics technology development**

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Silicon photonics uses mature CMOS industry to design, manufacture and package photonic devices. It can break through the limitation of existing electrical technology in terms of cost, power consumption

## **SiFotonics**

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SiFotonics has its own silicon photonics chip production line and advanced germanium/silicon epitaxial growth technology. It has accumulated more than 17 years of experience in the design and mass

## **POET creates optical interposer platform for 1.6T transceivers using**

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Additional information about POET's developments in 200G-per-lane 1.6T optical engines are being featured at the European Conference on Optical Communication (ECOC 2023) on

## **Intel® Silicon Photonics 200G FR4 QSFP56 Optical Transceiver**

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Intel® Silicon Photonics 200G FR4 QSFP56 Optical Transceiver quick reference with specifications, features, and technologies.

## **NLM Photonics validates silicon-organic hybrid performance at over**

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NLM Photonics, a developer of hybrid organic electro-optic (OEO) technology, has reported validated results that show that its multi-channel silicon-organic hybrid (SOH) photonic



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This testing validates that, using NLM's SOH technology, commercially available silicon photonics platforms can break the 200G barrier, with a clear path to 400G and beyond.

## **VCSEL Cavity Engineering for High Speed Modulation and Silicon**

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VCSEL Cavity Engineering for High Speed Modulation and Silicon Photonics Integration  
Emanuel P. Haglund Photonics Laboratory Department of Microtechnology and Nanoscience - MC2 Chalmers

### **Contact Us**

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<https://www.entrenamientointeligente.es>