

Photonic Integrated Circuits: Global Markets with Special Focus on Silicon Photonics

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Abstracts

Report Scope

The report analyzes the photonic integrated circuits (PICs) market across components, integration types, raw materials, and applications, offering insights into key trends and market drivers. The study focuses on components such as transceivers, lasers, modulators, detectors, multiplexers/demultiplexers (MUX/DEMUX), and optical amplifiers, assessing their adoption across diverse applications that include optical communication, sensing, biophotonics, and optical signal processing.

The report provides a comprehensive regional analysis covering North America, Europe, Asia-Pacific, and the Rest of the World (RoW), including Latin America, the Middle East, and Africa. It evaluates the market dynamics, including drivers, challenges, and emerging trends, while highlighting innovations in material design and performance enhancement. The study concludes with an analysis of major market competitors and their offerings. The base year for the study is 2023, with projections for the years 2024 through 2029, including the compound annual growth rate (CAGR) for the forecast period.

Report Includes

59 data tables and 40 additional tables

In-depth analyses of the global market trends for photonic integrated circuits (PICs), with market revenue data for 2023, estimates for 2024, forecast for 2026 and 2028, and projected CAGRs through 2029

Estimates of the size and growth forecasts of the global PICs market, and a corresponding market share analysis by component, integration type, raw material type, application, and region

Facts and figures pertaining to the market dynamics, technical advances, regulatory landscape, and the impact of macroeconomic factors

Insights derived from the Porter's Five Forces model, as well as global supply chain and PESTLE analyses

Review of emerging trends and new developments with special focus on silicon photonics technology

Evaluation of recent patent activity and key granted and published patents

Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, and the ESG scores and practices of leading companies

Analysis of the industry structure, including companies' market shares and rankings, strategic alliances, M&A activity and a venture funding outlook

Profiles of leading companies, including Infinera Corp., Intel Corp., Cisco Systems Inc., Coherent Corp., and Ciena Corp.

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AYAR LABS

BROADEX TECHNOLOGIES

CIENA CORP.

CISCO SYSTEMS INC.

COHERENT CORP.

EFFECT PHOTONICS

EMCORE CORP.

INFINERA CORP.

INTEL CORP.

LUMENTUM OPERATIONS LLC.

POET TECHNOLOGIES INC.

POLARITON TECHNOLOGIES AG

SCINTIL PHOTONICS

SOURCE PHOTONICS

SUMITOMO ELECTRIC INDUSTRIES LTD.

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