

Photonic Integrated Circuit Market Revenues to Reach USD 41.87 Billion by 2028 - Market Size, Share, Forecasts, & Trends Analysis Report by Mordor Intelligence

According to a new market research report titled "[Photonic Integrated Circuit Market Report \(2023-2028\)](#)," the market is estimated at USD 13.43 billion in 2023. It is expected to register a CAGR of 25.53% during the forecast period.

Photonic integrated circuits refer to multiple photonic components integrated on a single chip. These include waveguides, lasers, detectors, and modulators. Photonic ICs are extremely fast, have high power efficiency, and can accommodate better bandwidth than traditional ICs.

Report Summary:

Report Attribute	Details
Market Size (2023)	USD 13.43 billion
Market Size (2028)	USD 41.87 billion
CAGR (2023-2028)	25.53%
Study Period	2018-2028
Fastest Growing Market	Asia-Pacific
Largest Market	Asia-Pacific
Forecast Units	Value (USD billion)
Report Scope	Market Dynamics, Revenue Forecast and Segmentation, Competitive Landscape and Recent Developments, Market Growth, Future Opportunities, and Trends
Key Market Drivers	Better benefits than traditional ICs.
	The demand for low-cost photonic hardware.

Which are the Top Companies in the Photonic Integrated Circuit Market?

The photonic integrated circuit market is moderately competitive and includes several prominent market players. Few players among them currently dominate the market. However, by innovating new products and making advancements in technologies, many companies are increasing their market presence in terms of securing new contracts and tapping new markets.

Significant players in the photonic integrated circuit market are,

- NeoPhotonics Corporation
- POET Technologies
- II-VI Incorporated
- Infinera Corporation
- Intel Corporation
- Cisco Systems Inc.

- Source Photonics Inc.
- Lumentum Holdings
- Caliopa (Huawei Technologies Co. Ltd)
- Effect Photonics
- Colorchip Ltd

Other Reports That Might Be of Your Interest:

- [Americas Dynamic Random Access Memory \(DRAM\) Market Report](#) - The Americas' dynamic random access memory (DRAM) market is expected to register a CAGR of 3.49% during the forecast period (2023-2028).
- [Asia-Pacific Dynamic Random Access Memory \(DRAM\) Market Report](#) - The Asia-Pacific dynamic random access memory (DRAM) market is expected to register a CAGR of 3.58% during the forecast period (2023-2028).

Key Highlights from the Global Photonic Integrated Circuit Market Report:

Telecommunications and Data Center Applications Driving the Market

- PICs that are hybrid in nature have a wide range of applications in telecommunications and data centers. The demand for high data transfer is the biggest factor driving the increasing adoption of hybrid PICs in telecom and data center markets.
- The growing demand for more bandwidth and the adoption of cloud services by SMEs, primarily after the COVID-19 pandemic, has boosted the demand for data centers massively. The trend of increasing switch and transceiver data rates is driving the adoption of PICs.

Growing Demand for PICs in North America

- In North America, the huge number of data centers and fiber optic communication WAN applications drive the demand for PIC-based products. The photonic integrated circuit industry in the region is growing due to the huge need for high-speed data transfer, which increases data traffic in cloud computing, and the rapid development of IoT.
- Due to the increasing requirement for data rates and bandwidth, companies are shifting toward PICs. PICs that function with light and photons rather than electricity and electrons are expected to offer efficiency and more bandwidth, making them ideal for future applications.

What are the Latest Developments in the Photonic Integrated Circuit Market?

- In May 2023, ANELLO Photonics partnered with NVIDIA Inception to empower startups offering advanced technologies. The company focuses on establishing low-noise and low-drift optical gyroscope smart sensors using ANELLO's PIC technology.
- In August 2022, DustPhotonics partnered with MaxLinear to launch a silicon photonic chipset integrated with lasers driven directly from a DSP without using any external driver chip for better system performance.

Mordor Intelligence has Segmented the Photonic Integrated Circuit Market Based on Type of Raw Material, Integration Process, Application, and Geography:

- By Type of Raw Material (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - III-V Material
 - Lithium Niobate
 - Silica-on-silicon
 - Other Raw Materials
- By Integration Process (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - Hybrid
 - Monolithic
- By Application (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - Telecommunications
 - Biomedical
 - Data Centers
 - Other Applications (Optical Sensors (LiDAR), Metrology)
- By Geography (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - North America
 - Europe
 - Asia-Pacific
 - Rest of the World

In a nutshell, the Mordor Intelligence market research report is a must-read for start-ups, industry players, investors, researchers, consultants, business strategists, and all those who are looking to understand this industry. Get a glance at the [Photonic Integrated Circuit Market Report \(2023-2028\)](#).

Mordor Intelligence constantly tracks industry trends. Some relevant market reports from the analysts that might be of interest to you:

- [China Dynamic Random Access Memory \(DRAM\) Market Report](#) - The Chinese dynamic random access memory (DRAM) market is expected to register a CAGR of 3.95% during the forecast period (2023-2028).
- [Europe Dynamic Random Access Memory \(DRAM\) Market Report](#) - The European dynamic random access memory (DRAM) market is expected to register a CAGR of 2.42% during the forecast period (2023-2028).
- [Amsterdam Data Center Market Report](#) - The Amsterdam data center market is expected to register a CAGR of 3.14% during the forecast period (2023-2028).

About Mordor Intelligence:

[Mordor Intelligence](#) is a market intelligence and advisory firm. At Mordor Intelligence, we believe in predicting butterfly effects that have the potential to change or significantly impact market dynamics.

Our market research reports are comprehensive and provide exclusive data, facts and figures, trends, and the competitive landscape of the industry.