

Global Photonic Integrated Circuit Market Size study & Forecast, by Type of Raw Material (III-V Material, Lithium Niobate, Silica-on-silicon, Other Raw Materials) by Integration Process (Hybrid, Monolithic), by Application (Telecommunications, Biomedical, Data Centers, Other Applications (Optical Sensors (LiDAR), Metrology)) and Regional Analysis, 2022-2029

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Abstracts

Global Photonic Integrated Circuit Market is valued approximately USD XX billion in 2021 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2022-2029. Photonic Integrated Circuit (PIC) refers to a microscale device that integrates multiple optical components, such as lasers, detectors, modulators, and waveguides, onto a single chip. These components are used to generate, manipulate, and detect light signals in optical communication systems. The major driving factor for the Global Photonic Integrated Circuit Market is growing demand for high-speed data communication, rising investment in the development of PICs, and growing deployment of 5G networks. Moreover, high government support and increasing demand for LiDAR technology is creating lucrative growth opportunity for the market over the forecast period 2022-2029.

LiDAR is a technology that uses laser light to measure distances and is used in a variety of applications, including self-driving cars, robotics, and aerial mapping. PICs are used in the development of LiDAR systems, making them an attractive option for companies involved in these industries. Thus, companies are witnessing rise in sales of the technology which is driving the growth for the market over the forecast period.

Velodyne LiDAR, a leading manufacturer of LiDAR sensors, reported record revenue of \$101 million in Q3 2020, a 37% increase over the same period in the previous year. The company attributed the growth to increased demand for LiDAR technology in autonomous vehicles, robotics, and mapping applications. Similarly, Quanergy Systems, another LiDAR sensor manufacturer, reported a 16% increase in revenue in Q2 2020 compared to the previous quarter, citing growing demand for its LiDAR technology in industrial automation, security, and smart city applications. However, the high cost of Photonic Integrated Circuit stifles market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Photonic Integrated Circuit Market study includes Asia Pacific, North America, Europe, Latin America, and Rest of the World. The North American market for PIC is expected to hold significant share in the coming years, driven by the increasing demand for high-speed data communication and the adoption of 5G technology. The United States is the largest market in the region, with several companies involved in the development and production of PIC devices. The Asia Pacific market for PIC is expected to grow at a rapid pace in the coming years, driven by the increasing demand for high-speed data communication and the deployment of 5G networks. China, Japan, South Korea, and Taiwan are the major markets in the region.

Major market player included in this report are:

Infinera Corporation
NeoPhotonics Corporation
Huawei Technologies Co. Ltd.
Intel Corporation
Cisco Systems, Inc.
Broadcom Inc.
Lumentum Holdings Inc
Finisar Corporation
II-VI Incorporated
POET Technologies Inc

Recent Developments in the Market:

ColorChip Group and Skorprios Technologies Inc. announced a strategic partnership in March 2022 to develop and use Skorprios' disruptive optical technology to produce optical modules at new prices. ColorChip Group is a manufacturer of optical sub-systems and components for the Datacom and Telecom markets.

Global Photonic Integrated Circuit Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered Type of Raw Material, Integration Process, Application, Region
Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World
Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and Type of Raw Material offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Type of Raw Material:

III-V Material

Lithium Niobate

Silica-on-silicon

Other Raw Materials

By Integration Process:

Hybrid

Monolithic

By Application:

Telecommunications

Biomedical

Data Centers

Other Applications (Optical Sensors (LiDAR), Metrology)

By Region:

North America

U.S.

Canada

Europe
UK
Germany
France
Spain
Italy
ROE
Asia Pacific
China
India
Japan
Australia
South Korea
RoAPAC
Latin America
Brazil
Mexico
Rest of the World

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