

Global Silicon Photonics Market Size study & Forecast, by Component (Optical Waveguides, Optical Modulators, Photodetectors, Wavelength-Division Multiplexing (WDM) Filters, Laser) by Product (Transceivers, Active Optical Cables, Optical Multiplexers, Optical Attenuators, Others), by Application (IT & Telecommunications, Consumer Electronics, Healthcare & Life Sciences, Commercial, Defense and Security, Others (Media & Advertising)), and Regional Analysis, 2022-2029

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Abstracts

Global Silicon Photonics Market is valued at 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. A material substrate from which photonic integrated circuits (PICs) can be created, is silicon photonics (SiPh). Since silicon is already used as the substrate for the majority of integrated circuits, silicon photonic devices can be produced using currently used semiconductor fabrication techniques. This makes it possible to produce hybrid devices in which the optical and electronic components are combined onto a single microchip. Thus, the use of silicon photonics in consumer electronics is rising the demand for the market is excelling over the forecasted period. Along with this, growing popularity of 5G transmission is rising the revenue for the market over the calculated period.

According to Invest India, electronic systems manufacturing industry in India is growing rapidly the global share of India in consumer electronics manufacturing industry in 2012

was 1.3 percent and this number has increased to 3.6 percent in 2019. Along with this, according to Japan Electronics and Information Technology Industries Association, the production of consumer electronic equipment is increasing in Japan, in August 2021 the production of consumer electronic equipment was USD 215 million and this number has increased to USD 248 million in October 2021. Moreover, use of silicon photonics with lidar is creating lucrative growth opportunities in the market over the forecasted period. However, lack of raw materials in the market stifles market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Silicon Photonics Market study include Asia Pacific, North America, Europe, Latin America, and Rest of the World. In terms of revenue, the North American regional market would control the sector in 2021. Due to outstanding qualities, such as low power consumption, high efficiency, and small size, silicon photonics products are being adopted more frequently, which is responsible for this increase. The highest CAGR is anticipated for the Asia Pacific area between 2022 and 2029. The Asia Pacific region has seen widespread acceptance as a result of substantial expansion in the data centres, long haul & transport networks, and consumer electronics makers, among these regions.

Major market players included in this report are:

Intel Corporation

IBM Corporation

OneChip Photonics Inc.

Cisco Systems, Inc.

Mellanox Technologies, Inc.

Luxtera, Inc.

Oracle Corporation

Hamamatsu Photonics K.K.

NeoPhotonics Corporation

Skorpios Technologies

Recent Developments in the Market:

In January 2022, OpenLight a market leader in silicon photonics launched silicon photonics with integrated laser technology. Thus, the product offering in the market is increasing which is driving the growth of the market over the forecasted period.

In June 2022, through a newly formed firm, Synopsys and Juniper Networks are aiming to capture the silicon photonics market by allowing third parties to utilise Tower Semiconductor's production capabilities to create devices with integrated on-chip lasers.

Global Silicon Photonics 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 Component, Product, 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 Component offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Component:

Optical Waveguides

Optical Modulators

Photodetectors

Wavelength-Division Multiplexing (WDM) Filters

Laser

By Product:

Transceivers

Active Optical Cables

Optical Multiplexers

Optical Attenuators

Others

By Application:

IT & Telecommunications

Consumer Electronics

Healthcare & Life Sciences

Commercial
Defense and Security
Others (Media & Advertising)

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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