

Global Silicon Germanium Material Market Size study, byType (Source Materials, Substrate Materials, Epitaxial Wafers), by Application (Mobile Phones, Laptops, CATVs, Network Devices, Sensor Devices, Medical Instruments, Lighting Devices, Laser Devices), by End-Use Industry (Consumer Electronics, Aerospace & Defense, Automotive Industry, Communication Industry, Medical & Healthcare, Instrumentation Industry) and Regional Forecasts 2022-2028

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Abstracts

Global Silicon Germanium Material Market is valued at approximately XX in 2021 and is anticipated to grow with a healthy growth rate of more than xx% over the forecast period 2022-2028. Silicon germanium is a silicon-germanium alloy with a specified silicon-germanium molecular ratio. It is largely employed as a semiconductor material for advanced bipolar complementary metal-oxide-semiconductor (BiCMOS) technologies, such as constructing strained silicon metal-oxide-semiconductor transistors and silicon germanium heterojunction transistors. Because of its advantageous electrical, physical, optical, and thermoelectric qualities, silicon germanium materials are in high demand across the semiconductor, electric, and electronic sectors. These materials are finding a wide range of applications in a variety of products, including heat-to-power transmission devices, fibre optic devices, consumer electronic devices, and others, which is boosting global market sales. New silicon germanium material uses are being explored across the consumer electronics and industrial sectors as a result of ongoing semiconductor industry breakthroughs. According to a survey by the India Brand Equity Foundation,

almost 173 million units of smartphones were sold across India in 2021, representing a 14 percent increase over sales in 2020. Furthermore, increasing global adoption of mobile technologies such as smartphones, tablets, laptops, and other devices is expected to provide highly profitable growth prospects in the global silicon germanium material market. Furthermore, the high cost of electronic products such as laptops, computers, televisions, tablets, and other similar gadgets is deterring sales, lowering demand for silicon germanium material across the consumer electronics industry.

The key regions considered for the global Silicon Germanium Material market study include Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America is expected to hold a large share of the global silicon germanium material market. A rapid increase in electric vehicle sales is being seen across North America as a result of severe carbon pollution rules, rising fuel prices, and the launch of advanced electric vehicles with unique features. Asia Pacific is forecast to register the fastest growth in the global silicon germanium material market. Due to rising disposable income and a growing tech-savvy population in Asia Pacific, internet and smartphone penetration is increasing significantly, resulting in considerable demand for associated components such as semiconductors.

Major market players included in this report are:

Hitachi Ltd.

Analog Devices

IBM Corporation

NXP Semiconductors NV

AIXTRON

Applied Materials

Texas Instruments Inc.

Tower Semiconductor Ltd.

MACOM

Atmel Corporation

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 eight years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within each of the regions and countries involved in the study. Furthermore, the report also caters the detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, the report shall also incorporate available opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key

players. The detailed segments and sub-segment of the market are explained below:

Type:

Source Materials

Substrate Materials

Epitaxial Wafers

By Application:

Mobile Phones

Laptops

CATVs

Network Devices

Sensor Devices

Medical Instruments

Lighting Devices

Laser Devices

By End-Use Industry:

Consumer Electronics

Aerospace & Defense

Automotive Industry

Communication Industry

Medical & Healthcare

Instrumentation Industry

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

Furthermore, years considered for the study are as follows:

Historical year – 2018, 2019, 2020
Base year – 2021
Forecast period – 2022 to 2028

Target Audience of the Global Silicon Germanium Material Market in Market Study:

Key Consulting Companies & Advisors
Large, medium-sized, and small enterprises
Venture capitalists
Value-Added Resellers (VARs)
Third-party knowledge providers
Investment bankers
Investors

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