

# **Global Semiconductor Device Market Size Study & Forecast, by Device Type (Discrete Semiconductors, Optoelectronics, Sensors, Integrated Circuits), By End-user Vertical (Automotive, Communication (Wired and Wireless), Consumer, Industrial, Computing/Data Storage), and Regional Analysis, 2023-2030**

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## **Abstracts**

Global Semiconductor Device Market is valued at approximately USD XX billion in 2022 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2023-2030. A semiconductor device is an electronic component that operates by utilizing the electrical properties of a semiconductor material, such as gallium arsenide, germanium, or silicon. Materials classified as semiconductors are unable to transmit electricity as well as insulators or conductors does. Their conductivity is in the middle of these two ranges. due to their special ability to be precisely controlled, they are essential components of modern electronics. Moreover, the growing demand for consumer electronics, rising deployment of industrial automation solutions and the adoption of IoT technologies, and growing adoption of technologies like IoT and Ai are anticipated to create the lucrative demand for the market during forecast period 2023-2030.

Additionally, the proliferation of smartphones, tablets, laptops, smart TVs, and other consumer electronic devices continues to drive the demand for semiconductor devices such as microprocessors, memory chips, sensors, and display drivers. According to the India Brand Equity Foundation, the manufacturing of electronic hardware in the country surged to USD 60.13 billion in 2018. Projections indicate that by 2024, the demand for electronic hardware in India is anticipated to reach USD 400 billion. Also, The National Investment Promotion and Facilitation Agency of the Indian government further notes

that the domestic market for electronic gadgets is poised to surpass USD 300 billion by 2026. As a result, the growing electronics demand is anticipated to support the market growth. Moreover, the increased deployment of 5G, and rising integration of semiconductor devices in automotive is anticipated to create the lucrative opportunity for the market. However, the supply chain disruptions stifles market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Semiconductor Device Market study include Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to the rising adoption of IoT and AI technologies, increasing demand for electric vehicles (EVs), and evolution of communication technologies such as 5G networks, Wi-Fi 6, and satellite communication drives. According to International Energy Agency (IEA), in 2018, the number of electric cars sold in United States was 0.4 million and the number reached 1.6 million in 2023. As a result, the growing demand for the electric vehicles in the country is anticipated to create the lucrative opportunity for the market during forecast period 2023-2030. Whereas, the Asia Pacific is expected to grow with the fastest growth rate during the forecast period, owing to factors such as the rising demand for electronics, expanding automotive industry, and supportive government support and policies.

Major market players included in this report are:

Intel Corporation

Nvidia Corporation

Kyocera Corporation

Qualcomm Incorporated

STMicroelectronics NV

Micron Technology Inc.

Xilinx Inc.

NXP Semiconductors NV

Toshiba Corporation

Texas Instruments Inc.

#### Recent Developments in the Market:

In September 2022, STMicroelectronics has unveiled its latest innovation, the P6 automotive MCU designed specifically for integration into EV platforms. With a focus on upcoming electrified drivetrains, this cutting-edge MCU is tailored to support domain-oriented architectures and facilitate over-the-air updates. This forward-looking solution sets the stage for the next evolution of electric vehicles, providing robust system integration and adaptability to meet the demands of tomorrow's automotive landscape.

#### Global Semiconductor Device Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

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

Segments Covered - Device Type, End-user Vertical, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

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

#### By Device Type:

Discrete Semiconductors

Optoelectronics

Sensors

Integrated Circuits

#### By End-user Vertical:

Automotive

Communication (Wired and Wireless)

Consumer

Industrial

Computing/Data Storage

#### 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

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Middle East & Africa

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Rest of Middle East & Africa

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