

Global High Reliability Semiconductor Market Size study & Forecast, by Type (Discrete, Analog, Mixed), By Packaging Material (Plastic, Ceramic), by Technology (Surface Mount Technology, Through-Hole Technology), by Application (Automotive, Space, Aerospace, Defense), and Regional Analysis, 2023-2030

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Abstracts

Global High Reliability Semiconductor Market is valued at approximately USD 2.31 billion in 2022 and is anticipated to grow with a healthy growth rate of more than 4% over the forecast period 2023-2030. High Reliability Semiconductors are designed for operating with a high degree of reliability and stability under critical and demanding conditions. The factor that drives the market's growth is the rising demand for high reliability semiconductors as these are used in various industrial applications. These can be used in end-user industries because of their operational efficiency. The other factor that drives the growth of the market is the rising demand for Electric Vehicles and renewable energy technologies as they require highly durable and reliable components of semiconductors. As per Statista, the annual growth rate of revenue in EVs is expected to be around 17% in the forecast period (2023-27) which will increase the demand for semiconductors. However, the fluctuating cost of high reliability semiconductors hinders the growth of the market.

The growth opportunity factor for the market is rising research and development in the automotive sector as there has been an increase in the income of the people and there is also the availability of finance for purchasing vehicles which leads to an increase in demand for the automotive sector. As per Statista, the growth of passenger cars in terms of revenue is expected to grow by 1.72% in the forecast period (2023-27) and it



will increase the demand of the automotive sector and thus the semiconductors market. The other growth opportunity for the market is the rising trend of miniaturization across industries as nowadays everyone prefers small and compatible devices because they are convenient to carry. And these miniature systems are developed by the application of high reliability semiconductors which increase the demand of the market in the coming years.

The key regions considered for the Global High Reliability Semiconductor Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. Asia Pacific dominated the market in 2022 owing to the reasons such as investment in research and development in the region. Other factors for the dominance are cost-effectiveness and technical developments. North America is expected to grow significantly during the forecast period, owing to factors such as there are major key players in the region and moreover, the technological advances and the usage of semiconductors in the major applications of industry drive the growth of the market in the region.

Major market player included in this report are:

Teledyne Technologies Incorporated
Semtech Corporation
KCB Solutions LLC
Digitron Semiconductors
Texas Instruments Inc.
Infineon Technologies AG
Microsemi Corporation
Testime Technology Ltd.
Skyworks Solutions Inc.

Recent Developments in the Market:

Vishay Intertechnology Inc.

In December 2020, an announcement has been made by Texas Instruments Inc. that their products which are highly reliable semiconductors are available online at TI.com. These products can be used in the defense and aerospace sector.

In January 2023, a highly reliable Micross Components Inc. has purchased Infineon Technologies AG's DC-DC converter business, a company which provides highly reliable microelectronic products. This acquisition will help in the expansion of Micross Components Inc.

Global High Reliability Semiconductor 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 – Type, Packaging Material, Technology, Application, 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

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 Type:

Discrete

Analog

Mixed

By Packaging Material:

involved in the study.

Plastic

Ceramic

By Technology:

Surface Mount Technology

Through-Hole Technology

By Application:

Automotive

Space

Aerospace



Defense

By Region:
North America U.S. Canada
Europe UK Germany France Spain Italy ROE
Asia Pacific China India

Latin America

South Korea RoAPAC

Brazil

Japan Australia

Mexico

Middle East & Africa
Saudi Arabia
South Africa
Rest of Middle East & Africa



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