

Global Discrete Semiconductor Market Size study & Forecast, by Type (Diodes, Transistors, Thyristors, Modules), by Application (Networking & Communication, Automotive, Consumer Electronics, Industrial, Others) and Regional Analysis, 2023-2030

<https://marketpublishers.com/r/GC3CE5C563A7EN.html>

Date: July 2023

Pages: 200

Price: US\$ 4,950.00 (Single User License)

ID: GC3CE5C563A7EN

Abstracts

Global Discrete Semiconductor Market is valued approximately USD 49.11 billion in 2022 and is anticipated to grow with a healthy growth rate of more than 8.1% over the forecast period 2023-2030. Discrete semiconductor devices refer to individual semiconductor components designed to perform specific electronic functions. They encompass various components such as IGBTs, MOSFETs, thyristors, diodes, and rectifiers. Power discrete semiconductors, particularly IGBTs and MOSFETs, are commonly used in electronic and electrical equipment for converting alternating current. Market is being driven by various factors, including the rising demand for high-energy and power-efficient devices, the prevalence of wireless and portable electronics, the need for green energy generation, the quick expansion of the automotive industry, the increased use of MOSFETs and IGBTs in electronics and automobiles and the expanding development of ASICs.

Moreover, the growing demand in the automotive industry is anticipated to create the lucrative demand for the market over the forecast period. For instance, in December 2022, STMicroelectronics introduced new silicon-carbide (SiC) high-power modules aiming to enhance the performance and driving range of electric vehicles. These modules, based on SiC MOSFET technology, have been chosen by Hyundai for integration into their E-GMP electric vehicle platform, including models such as the KIA EV6 also In a in August 2022, Renesas Electronics Corporation unveiled a new generation of Si-IGBTs. These advanced IGBTs, known as AE5- generation, are targeted for use in next-generation EV inverters. Renesas plans to commence mass

production of the AE5-generation IGBTs in the first half of 2023 at their manufacturing facility in Naka, Japan. Additionally, technological advancements in manufacturing processes and an upsurge in R&D activities are set to offer new opportunities for the discrete semiconductor market to expand in the forecast period. However, continuously increasing prices of Discrete Semiconductor stifling market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Discrete Semiconductor Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to emerging technologies such as the Internet of Things (IoT), growing number of electronic devices, and rising adoption of electric vehicles in the region. According to the Argonne National Laboratory in 2021, sales of hybrid electric vehicles (HEVs) in the United States reached 97,972 in FY2023, showing a significant 36.4% rise compared to April 2022. Toyota led the way with a 44.3% market share of total HEV sales during this period. Asia Pacific is expected to grow significantly during the forecast period, owing to rising demand for portable and wireless electronic devices and the rapid expansion of the automotive industry, is fueling market growth across the region.

Major market player included in this report are:

Nexperia

Infineon Technologies AG

Diodes Incorporated

Semiconductor Components Industries

ABB India Ltd.

D3 Semiconductor

Toshiba Electronic Devices & Storage Corporation

NXP Semiconductors

Qualcomm Technologies Inc.

STMicroelectronics N.V

Recent Developments in the Market:

In October 2022, Infineon Technologies has introduced the CoolMOS PFD7 high-voltage MOSFET family, aiming to meet the growing market requirements for energy-efficient products and improved form factors. This new series, operating at 950 V, incorporates a fast body diode, enhancing device reliability and reducing the bill of materials. It offers exceptional performance and user-friendly features, setting a new standard in 950 V super junction (SJ) technology.

Global Discrete 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, 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 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 Type:

Diodes

Transistors

Thyristors

Modules

By Application:

Networking & Communication

Automotive

Consumer Electronics

Industrial

Others

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

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

Contents

CHAPTER 1. EXECUTIVE SUMMARY

- 1.1. Market Snapshot
- 1.2. Global & Segmental Market Estimates & Forecasts, 2020-2030 (USD Billion)
 - 1.2.1. Discrete Semiconductor Market, by Region, 2020-2030 (USD Billion)
 - 1.2.2. Discrete Semiconductor Market, by Type, 2020-2030 (USD Billion)
 - 1.2.3. Discrete Semiconductor Market, by Application, 2020-2030 (USD Billion)
- 1.3. Key Trends
- 1.4. Estimation Methodology
- 1.5. Research Assumption

CHAPTER 2. GLOBAL DISCRETE SEMICONDUCTOR MARKET DEFINITION AND SCOPE

- 2.1. Objective of the Study
- 2.2. Market Definition & Scope
 - 2.2.1. Industry Evolution
 - 2.2.2. Scope of the Study
- 2.3. Years Considered for the Study
- 2.4. Currency Conversion Rates

CHAPTER 3. GLOBAL DISCRETE SEMICONDUCTOR MARKET DYNAMICS

- 3.1. Discrete Semiconductor Market Impact Analysis (2020-2030)
 - 3.1.1. Market Drivers
 - 3.1.1.1. Increasing Automotive Segment
 - 3.1.1.2. Growing demand for high-energy and power-efficient devices
 - 3.1.2. Market Challenges
 - 3.1.2.1. Design Complexity of Discrete Semiconductor
 - 3.1.2.2. Continuously increasing prices
 - 3.1.3. Market Opportunities
 - 3.1.3.1. Technological advancements in production techniques
 - 3.1.3.2. Rise in R&D activities

CHAPTER 4. GLOBAL DISCRETE SEMICONDUCTOR MARKET INDUSTRY ANALYSIS

- 4.1. Porter's 5 Force Model
 - 4.1.1. Bargaining Power of Suppliers
 - 4.1.2. Bargaining Power of Buyers
 - 4.1.3. Threat of New Entrants
 - 4.1.4. Threat of Substitutes
 - 4.1.5. Competitive Rivalry
- 4.2. Porter's 5 Force Impact Analysis
- 4.3. PEST Analysis
 - 4.3.1. Political
 - 4.3.2. Economical
 - 4.3.3. Social
 - 4.3.4. Technological
 - 4.3.5. Environmental
 - 4.3.6. Legal
- 4.4. Top investment opportunity
- 4.5. Top winning strategies
- 4.6. COVID-19 Impact Analysis
- 4.7. Disruptive Trends
- 4.8. Industry Expert Perspective
- 4.9. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL DISCRETE SEMICONDUCTOR MARKET, BY TYPE

- 5.1. Market Snapshot
- 5.2. Global Discrete Semiconductor Market by Type, Performance - Potential Analysis
- 5.3. Global Discrete Semiconductor Market Estimates & Forecasts by Type 2020-2030 (USD Billion)
- 5.4. Discrete Semiconductor Market, Sub Segment Analysis
 - 5.4.1. Diodes
 - 5.4.2. Transistors
 - 5.4.3. Thyristors
 - 5.4.4. Modules

CHAPTER 6. GLOBAL DISCRETE SEMICONDUCTOR MARKET, BY APPLICATION

- 6.1. Market Snapshot
- 6.2. Global Discrete Semiconductor Market by Application, Performance - Potential Analysis
- 6.3. Global Discrete Semiconductor Market Estimates & Forecasts by Application

2020-2030 (USD Billion)

6.4. Discrete Semiconductor Market, Sub Segment Analysis

6.4.1. Networking & Communication

6.4.2. Automotive

6.4.3. Consumer Electronics

6.4.4. Industrial

6.4.5. Others

CHAPTER 7. GLOBAL DISCRETE SEMICONDUCTOR MARKET, REGIONAL ANALYSIS

7.1. Top Leading Countries

7.2. Top Emerging Countries

7.3. Discrete Semiconductor Market, Regional Market Snapshot

7.4. North America Discrete Semiconductor Market

7.4.1. U.S. Discrete Semiconductor Market

7.4.1.1. Type breakdown estimates & forecasts, 2020-2030

7.4.1.2. Application breakdown estimates & forecasts, 2020-2030

7.4.2. Canada Discrete Semiconductor Market

7.5. Europe Discrete Semiconductor Market Snapshot

7.5.1. U.K. Discrete Semiconductor Market

7.5.2. Germany Discrete Semiconductor Market

7.5.3. France Discrete Semiconductor Market

7.5.4. Spain Discrete Semiconductor Market

7.5.5. Italy Discrete Semiconductor Market

7.5.6. Rest of Europe Discrete Semiconductor Market

7.6. Asia-Pacific Discrete Semiconductor Market Snapshot

7.6.1. China Discrete Semiconductor Market

7.6.2. India Discrete Semiconductor Market

7.6.3. Japan Discrete Semiconductor Market

7.6.4. Australia Discrete Semiconductor Market

7.6.5. South Korea Discrete Semiconductor Market

7.6.6. Rest of Asia Pacific Discrete Semiconductor Market

7.7. Latin America Discrete Semiconductor Market Snapshot

7.7.1. Brazil Discrete Semiconductor Market

7.7.2. Mexico Discrete Semiconductor Market

7.8. Middle East & Africa Discrete Semiconductor Market

7.8.1. Saudi Arabia Discrete Semiconductor Market

7.8.2. South Africa Discrete Semiconductor Market

7.8.3. Rest of Middle East & Africa Discrete Semiconductor Market

CHAPTER 8. COMPETITIVE INTELLIGENCE

8.1. Key Company SWOT Analysis

8.1.1. Company

8.1.2. Company

8.1.3. Company

8.2. Top Market Strategies

8.3. Company Profiles

8.3.1. Nexperia

8.3.1.1. Key Information

8.3.1.2. Overview

8.3.1.3. Financial (Subject to Data Availability)

8.3.1.4. Product Summary

8.3.1.5. Recent Developments

8.3.2. Infineon Technologies AG

8.3.3. Diodes Incorporated

8.3.4. Semiconductor Components Industries

8.3.5. ABB India Ltd.

8.3.6. D3 Semiconductor

8.3.7. Toshiba Electronic Devices & Storage Corporation

8.3.8. NXP Semiconductors

8.3.9. Qualcomm Technologies Inc.

8.3.10. STMicroelectronics N.V

CHAPTER 9. PROCESS

9.1. Research Process

9.1.1. Data Mining

9.1.2. Analysis

9.1.3. Market Estimation

9.1.4. Validation

9.1.5. Publishing

9.2. Research Attributes

9.3. Research Assumption

List Of Tables

LIST OF TABLES

- TABLE 1. Global Discrete Semiconductor Market, report scope
- TABLE 2. Global Discrete Semiconductor Market estimates & forecasts by Region 2020-2030 (USD Billion)
- TABLE 3. Global Discrete Semiconductor Market estimates & forecasts by Type 2020-2030 (USD Billion)
- TABLE 4. Global Discrete Semiconductor Market estimates & forecasts by Application 2020-2030 (USD Billion)
- TABLE 5. Global Discrete Semiconductor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 6. Global Discrete Semiconductor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 7. Global Discrete Semiconductor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 8. Global Discrete Semiconductor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 9. Global Discrete Semiconductor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 10. Global Discrete Semiconductor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 11. Global Discrete Semiconductor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 12. Global Discrete Semiconductor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 13. Global Discrete Semiconductor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 14. Global Discrete Semiconductor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 15. U.S. Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 16. U.S. Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 17. U.S. Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 18. Canada Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 19. Canada Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 20. Canada Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 21. UK Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 22. UK Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 23. UK Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 24. Germany Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 25. Germany Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 26. Germany Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 27. France Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 28. France Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 29. France Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 30. Italy Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 31. Italy Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 32. Italy Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 33. Spain Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 34. Spain Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 35. Spain Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 36. RoE Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 37. RoE Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 38. RoE Discrete Semiconductor Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 39. China Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 40. China Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 41. China Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 42. India Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 43. India Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 44. India Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 45. Japan Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 46. Japan Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 47. Japan Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 48. South Korea Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 49. South Korea Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 50. South Korea Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 51. Australia Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 52. Australia Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 53. Australia Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 54. RoAPAC Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 55. RoAPAC Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 56. RoAPAC Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 57. Brazil Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 58. Brazil Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 59. Brazil Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 60. Mexico Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 61. Mexico Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 62. Mexico Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 63. RoLA Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 64. RoLA Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 65. RoLA Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 66. Saudi Arabia Discrete Semiconductor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 67. South Africa Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 68. RoMEA Discrete Semiconductor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 69. List of secondary sources, used in the study of global Discrete Semiconductor Market

TABLE 70. List of primary sources, used in the study of global Discrete Semiconductor Market

TABLE 71. Years considered for the study

TABLE 72. Exchange rates considered

List of tables and figures are dummy in nature, final lists may vary in the final deliverable

List Of Figures

LIST OF FIGURES

- FIG 1. Global Discrete Semiconductor Market, research methodology
 - FIG 2. Global Discrete Semiconductor Market, Market estimation techniques
 - FIG 3. Global Market size estimates & forecast methods
 - FIG 4. Global Discrete Semiconductor Market, key trends 2022
 - FIG 5. Global Discrete Semiconductor Market, growth prospects 2023-2030
 - FIG 6. Global Discrete Semiconductor Market, porters 5 force model
 - FIG 7. Global Discrete Semiconductor Market, pest analysis
 - FIG 8. Global Discrete Semiconductor Market, value chain analysis
 - FIG 9. Global Discrete Semiconductor Market by segment, 2020 & 2030 (USD Billion)
 - FIG 10. Global Discrete Semiconductor Market by segment, 2020 & 2030 (USD Billion)
 - FIG 11. Global Discrete Semiconductor Market by segment, 2020 & 2030 (USD Billion)
 - FIG 12. Global Discrete Semiconductor Market by segment, 2020 & 2030 (USD Billion)
 - FIG 13. Global Discrete Semiconductor Market by segment, 2020 & 2030 (USD Billion)
 - FIG 14. Global Discrete Semiconductor Market, regional snapshot 2020 & 2030
 - FIG 15. North America Discrete Semiconductor Market 2020 & 2030 (USD Billion)
 - FIG 16. Europe Discrete Semiconductor Market 2020 & 2030 (USD Billion)
 - FIG 17. Asia pacific Discrete Semiconductor Market 2020 & 2030 (USD Billion)
 - FIG 18. Latin America Discrete Semiconductor Market 2020 & 2030 (USD Billion)
 - FIG 19. Middle East & Africa Discrete Semiconductor Market 2020 & 2030 (USD Billion)
- List of tables and figures are dummy in nature, final lists may vary in the final deliverable

I would like to order

Product name: Global Discrete Semiconductor Market Size study & Forecast, by Type (Diodes, Transistors, Thyristors, Modules), by Application (Networking & Communication, Automotive, Consumer Electronics, Industrial, Others) and Regional Analysis, 2023-2030

Product link: <https://marketpublishers.com/r/GC3CE5C563A7EN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GC3CE5C563A7EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970