

Discrete Semiconductor Market Revenues to Reach USD 43.12 billion by 2028 - Market Size, Share, Forecasts, & Trends Analysis Report by Mordor Intelligence

According to a new market research report titled “[Discrete Semiconductor Market Report \(2023-2028\)](#),” the market is estimated at USD 43.13 billion in 2023. It is expected to register a CAGR of 0.05% during the forecast period.

The discrete semiconductor market is being driven by the cumulative need to manage power across electronics and miniaturization. Significant characteristics, such as safety, infotainment, navigation, and fuel efficiency in the automotive components, and security, automation, solid-state lighting, transportation, and energy management in industrial components are anticipated to fuel the market studied. Market players are also developing new solutions in the power module segment to expand their presence and increase market share.

Report Summary:

Report Attribute	Details
Market Size (2023)	USD 43.02 billion
Market Size (2028)	USD 43.13 billion
CAGR (2023-2028)	0.05%
Fastest Growing Market	Asia-Pacific
Largest Market	Asia-Pacific
Study Period	2018-2028
Forecast Units	Value (USD billion)
Report Scope	Market Dynamics, Revenue Forecast and Segmentation, Competitive Landscape and Recent Developments, Market Growth, Future Opportunities, and Trends
Key Market Drivers	New solutions being introduced in the power module segment
	Growing need to manage power across electronics and miniaturization.

Who are the Top Companies in the Discrete Semiconductor Market?

With numerous semiconductor manufacturers, the global discrete semiconductor market is highly fragmented. Market players are constantly investing in products and technology to prevent environmental hazards and promote sustainable environmental growth. They are also buying other companies to enhance their market share.

The noteworthy players in the discrete semiconductor industry are:

- ABB Ltd
- On Semiconductor Corporation (Fairchild Semiconductor)

- Infineon Technologies AG
- STMicroelectronics NV
- Toshiba Electronic Devices & Storage Corporation
- NXP Semiconductors NV (To be Acquired by Qualcomm)
- Diodes Incorporated
- Nexperia BV
- D3 Semiconductor LLC
- Eaton Corporation PLC
- Hitachi Ltd
- Mitsubishi Electric Corp.
- Fuji Electric Corp.
- Taiwan Semiconductor Manufacturing Company Ltd
- Vishay Intertechnology Inc.
- Renesas Electronics Corporation
- ROHM Co. Ltd
- Microsemi Corporation (Microchip Technology)
- Qorvo Inc.
- Cree Inc.
- General Electric Company
- Littelfuse Inc.
- United Silicon Carbide Inc.

Other Reports That Might Be of Your Interest:

- [Americas Semiconductor Device Market Report](#) - Americas semiconductor device market is valued at USD 131.54 billion in the current year and is expected to reach a CAGR of 9% during the forecast period to become USD 202.39 billion by the next five years.
- [Europe Semiconductor Device Market Report](#) - Europe's semiconductor device market is valued at USD 50.63 billion in the current year and is expected to reach a CAGR of 6.24% during the forecast period to become USD 68.52 billion by the next five years.

Key Highlights from the Discrete Semiconductor Market Report:

Automotive Segment is Expected to Drive the Market

- Automotive relevance is driving most of the demand for discrete semiconductors, exclusively for power transistors and rectifiers. Conventional cars have been using 12-V battery systems since the 1950s. However, currently, they cannot handle the substantial electronic loads of next-generation vehicles, creating the need for power efficiency.
- Autonomous driving and EVs are demanding higher-performance microcontrollers and microprocessors, with more competent, high-power MOSFETS, for power management and battery monitoring systems.

The Americas Hold a Significant Market Share

- The booming consumer electronics industry in the region is one crucial factor driving the growth of the market. According to the Consumer Technology Association (CTA), the US technology retail revenues are anticipated to reach USD 485 billion in 2023.
- Furthermore, emergent technologies like IoT have created a new wave of innovation in the semiconductor industry. A strengthening number of electronic devices, from laptops to thermostats, are becoming connected each year in the Americas, allowing for more sophisticated communication and coordination between them and their users.

What are the Latest Developments in the Discrete Semiconductor Market?

- In October 2022, Infineon Technologies created CoolMOS PFD7 high-voltage MOSFET family to respond to current market demands for improved form factors and energy-efficient products.
- In January 2022, Vishay Intertechnology Inc. launched two new n-channel TrenchFET MOSFETs: 60 V SiJH600E and 80 V SiJH800E. These enhance power density, efficiency, and board-level reliability in telecom and industrial uses by merging ultra-low on-resistance with a high-temperature operation to +175 °C and high continuous drain current handling.

Mordor Intelligence has Segmented the Discrete Semiconductor Market Based on Construction Type, End-user Vertical, and Geography:

- By Construction Type
 - MOSFET - By Material
 - Si MOSFET
 - SiC MOSFET
 - MOSFET - By End User
 - Consumer Electronics
 - Medical
 - Automotive
 - Computing and Storage
 - Industrial
 - Network and Telecom
 - Other End Users
 - IGBT - Overview and Market Estimates
 - Automotive
 - Energy (Production and Distribution)
 - Transportation
 - Industrial
 - Commercial
 - Bipolar Transistor
 - Thyristor
 - Rectifier
 - Other Types (Junction Gate Field Effect Transistor (JFET), GaN HEMT, Triacs, Varactor Diodes, TVS Diodes, and Zener Diodes)
- By End-user Vertical
 - Automotive
 - Consumer Electronics

- Communication
- Industrial
- Other End-user Verticals
- By Geography
 - Americas
 - Europe
 - Asia-Pacific (China, Japan, Taiwan)
 - Rest of the World

In a nutshell, the Mordor Intelligence market research report is a must-read for start-ups, industry players, investors, researchers, consultants, business strategists, and all those who are looking to understand this industry. Get a glance at the [Discrete Semiconductor Market Report \(2023-2028\)](#).

Mordor Intelligence constantly tracks industry trends. Some relevant market reports from the analysts that might be of interest to you:

- [Europe Semiconductor Diode Market Report](#) - Europe's semiconductor diode market was valued at USD 695.7 million and is expected to register a CAGR of 2.10% during the forecast period to become USD 771.88 million by the next five years.
- [Korean Semiconductor Device Market Report](#) - The Korean semiconductor device market is valued at USD 105.23 billion in the current year and is expected to register a CAGR of 8.05% during the forecast period to become USD 167.45 billion by the next five years.
- [Asia-Pacific Semiconductor Diode Market Report](#) - The Asia-Pacific semiconductor diode market is valued at USD 2.46 billion in the current year. It is expected to grow at a CAGR of 3.10% during the forecast period to register a value of USD 2.87 billion by the next five years.

About Mordor Intelligence:

[Mordor Intelligence](#) is a market intelligence and advisory firm. At Mordor Intelligence, we believe in predicting butterfly effects that have the potential to change or significantly impact market dynamics.

Our market research reports are comprehensive and provide exclusive data, facts and figures, trends, and the industry's competitive landscape.