

# SiC Power Semiconductor Market: Trends, Opportunities and Competitive Analysis [2023-2028]

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## Abstracts

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### SiC Power Semiconductor Market Trends and Forecast

The future of the global SiC power semiconductor market looks promising with opportunities in the automotive, utilities & energy, industrial, transportation, IT & telecommunication, consumer electronics, aerospace & defense, and commercial industries. The global SiC power semiconductor market is expected to reach an estimated \$0.9 billion with a CAGR of 22.0% from 2023 to 2028. The major drivers for this market are the rising demand for wireless communications and consumer electronics and increasing penetration of SiC devices in power device and automotive applications.

### SiC Power Semiconductor Market by Type, Wafer Size, Application, and End Use Industry

A more than 150-page report is developed to help in your business decisions. Sample figures with some insights are shown below.

### SiC Power Semiconductor Market by Segments

### SiC Power Semiconductor Market by Segment

The study includes a forecast for the global SiC power semiconductor market by type, wafer size, application, end use industry, and region, as follows:

SiC Power Semiconductor Market by Type [Value (\$B) Shipment Analysis from 2017 to 2028]:

MOSFETS

Hybrid Modules

Schottky Barrier Diodes (SBDS)

IGBT

Bipolar Junction Transistor (BJT)

Pin Diode

Junction FET (JFET)

SiC Power Semiconductor Market by Wafer Size [Value (\$B) Shipment Analysis from 2017 to 2028]:

6 Inch

4 Inch

2 Inch

Above 6 Inch

SiC Power Semiconductor Market by Application [Value (\$B) Shipment Analysis from 2017 to 2028]:

Electric Vehicles (EV)

Photovoltaics

Power supplies

Industrial motor drives

EV charging infrastructure

RF Devices

SiC Power Semiconductor Market by End Use Industry [Value (\$B) Shipment Analysis from 2017 to 2028]:

Automotive

Utilities and energy

Industrial

Transportation

IT and telecommunication

Consumer electronics

Aerospace and defense

Commercial

SiC Power Semiconductor Market by Region [Value (\$B) Shipment Analysis from 2017 to 2028]:

North America

Europe

Asia Pacific

The Rest of the World

List of SiC Power Semiconductor Companies

Companies in the market compete on the basis of product quality offered. Major players in this market focus on expanding their manufacturing facilities, R&D investments, infrastructural development, and leverage integration opportunities across the value

chain. With these strategies SiC power semiconductor companies cater increasing demand, ensure competitive effectiveness, develop innovative products & technologies, reduce production costs, and expand their customer base. Some of the SiC power semiconductor companies profiled in this report include.

WOLFSPEED, INC.

STMicroelectronics

ROHM CO., LTD.

Fuji Electric Co., Ltd.

Mitsubishi Electric

Texas Instruments

Infineon Technologies

Semikron Danfoss

Renesas Electronics

Microchip Technology

### SiC Power Semiconductor Market Insights

Lucintel forecast that 4-inch SiC power semiconductors will remain the largest wafer size segment over the forecast period due to growing in different products, such as high-power devices, optoelectronics, high-frequency power devices, and high-temperature devices.

Within this market, automotive segment is anticipated to witness the highest growth due to rising demand for electric vehicles on road and increasing application of silicon carbide semiconductor in automotive powertrain application.

Asia Pacific is expected to witness the highest growth during the forecast period due to high production of electronic components and devices along with increasing demand for power supply equipment in China and India.

## Features of the SiC Power Semiconductor Market

**Market Size Estimates:** SiC power semiconductor market size estimation in terms of value (\$B)

**Trend and Forecast Analysis:** Market trends (2017-2022) and forecast (2023-2028) by various segments and regions.

**Segmentation Analysis:** SiC power semiconductor market size by various segments, such as by type, wafer size, application, end use industry, and region

**Regional Analysis:** SiC power semiconductor market breakdown by North America, Europe, Asia Pacific, and the Rest of the World.

**Growth Opportunities:** Analysis on growth opportunities in different by type, wafer size, application, end use industry, and regions for the SiC power semiconductor market.

**Strategic Analysis:** This includes M&A, new product development, and competitive landscape for the SiC power semiconductor market.

Analysis of competitive intensity of the industry based on Porter's Five Forces model.

## FAQ

**Q1. What is the SiC power semiconductor market size?**

**Answer:** The global SiC power semiconductor market is expected to reach an estimated \$0.9 billion by 2028.

**Q2. What is the growth forecast for SiC power semiconductor market?**

**Answer:** The global SiC power semiconductor market is expected to grow with a CAGR of 22.0% from 2023 to 2028.

**Q3. What are the major drivers influencing the growth of the SiC power semiconductor market?**

**Answer:** The major drivers for this market are the rising demand for wireless

communications and consumer electronics and increasing penetration of SiC devices in power device and automotive applications.

Q4. What are the major segments for SiC power semiconductor market?

Answer: The future of the SiC power semiconductor market looks promising with opportunities in the automotive, utilities & energy, industrial, transportation, IT & telecommunication, consumer electronics, aerospace & defense, and commercial end use industries.

Q5. Who are the key SiC power semiconductor companies?

Answer: Some of the key SiC power semiconductor companies are as follows:

WOLFSPEED, INC.

STMicroelectronics

ROHM CO., LTD.

Fuji Electric Co., Ltd.

Mitsubishi Electric

Texas Instruments

Infineon Technologies

Semikron Danfoss

Renesas Electronics

Microchip Technology

Q6. Which SiC power semiconductor segment will be the largest in future?

Answer: Lucintel forecast that 4-inch SiC power semiconductors will remain the largest wafer size segment over the forecast period due to growing in different products, such as high-power devices, optoelectronics, high-frequency power devices, and high-

temperature devices.

Q7. In SiC power semiconductor market, which region is expected to be the largest in next 5 years?

Answer: Asia Pacific is expected to witness the highest growth during the forecast period due to high production of electronic components and devices along with increasing demand for power supply equipment in China and India.

Q8. Do we receive customization in this report?

Answer: Yes, Lucintel provides 10% Customization Without any Additional Cost.

This report answers following 11 key questions

Q.1. What are some of the most promising, high-growth opportunities for the global SiC power semiconductor market by type ((MOSFETs, hybrid modules, schottky barrier diodes (SBDs), IGBT, Bipolar Junction Transistor (BJT), Pin Diode, and Junction FET (JFET)), wafer size (6-inch, 4-inch, 2-inch, and above 6-inch), application (electric vehicles, photovoltaics, power supplies, industrial motor drives, EV charging infrastructure, and RF devices), end use industry (automotive, utilities & energy, industrial, transportation, IT & telecommunication, consumer electronics, aerospace & defense, and commercial), and region (North America, Europe, Asia Pacific, and the Rest of the World)?

Q.2. Which segments will grow at a faster pace and why?

Q.3. Which region will grow at a faster pace and why?

Q.4. What are the key factors affecting market dynamics? What are the key challenges and business risks in this market?

Q.5. What are the business risks and competitive threats in this market?

Q.6. What are the emerging trends in this market and the reasons behind them?

Q.7. What are some of the changing demands of customers in the market?

Q.8. What are the new developments in the market? Which companies are leading these developments?

Q.9. Who are the major players in this market? What strategic initiatives are key players pursuing for business growth?

Q.10. What are some of the competing products in this market and how big of a threat do they pose for loss of market share by material or product substitution?

Q.11. What M&A activity did occur in the last five years and how did they impact the industry?

For any questions related to SiC power semiconductor market or related to SiC power semiconductor companies, semiconductor wafer polishing and grinding equipment market size, semiconductor wafer polishing and grinding equipment market share, semiconductor wafer polishing and grinding equipment analysis, write Lucintel analyst at email: [helpdesk@lucintel.com](mailto:helpdesk@lucintel.com) we will be glad to get back to you soon.



## Contents

### 1. EXECUTIVE SUMMARY

### 2. GLOBAL SiC POWER SEMICONDUCTOR MARKET: MARKET DYNAMICS

2.1: Introduction, Background, and Classifications

2.2: Supply Chain

2.3: Industry Drivers and Challenges

### 3. MARKET TRENDS AND FORECAST ANALYSIS FROM 2017 TO 2028

3.1: Macroeconomic Trends (2017-2022) and Forecast (2023-2028)

3.2: Global SiC Power Semiconductor Market Trends (2017-2022) and Forecast (2023-2028)

3.3: Global SiC Power Semiconductor Market by Type

3.3.1: MOSFETS

3.3.2: Hybrid Modules

3.3.3: Schottky Barrier Diodes (SBDS)

3.3.4: IGBT

3.3.5: Bipolar Junction Transistor (BJT)

3.3.6: Pin Diode

3.4: Global SiC Power Semiconductor Market by Wafer Size

3.4.1 6: Inch

3.4.2 4: Inch

3.5: Global SiC Power Semiconductor Market by Application

3.5.1 Electric Vehicles (EV)

3.5.2 Photovoltaics

3.5.3 Power supplies

3.5.4 Industrial motor drives

3.5.5 EV charging infrastructure

3.5.6 RF Devices

3.6: Global SiC Power Semiconductor Market by End Use Industry

3.6.1 Automotive

3.6.2 Utilities and energy

3.6.3 Industrial

3.6.4 Transportation

3.6.5 IT and telecommunication

3.6.6 Consumer electronics

3.6.7 Aerospace and defense

3.6.8 Commercial

## **4. MARKET TRENDS AND FORECAST ANALYSIS BY REGION FROM 2017 TO 2028**

4.1: SiC Power Semiconductor Market by Region

4.2: North American SiC Power Semiconductor Market

4.2.1: North American SiC Power Semiconductor Market by Wafer Size: 6-Inch, 4-Inch, 2-Inch, and Above 6-Inch

4.2.2: North American SiC Power Semiconductor Market by End Use Industry: Automotive, Utilities & Energy, Industrial, Transportation, IT & Telecommunication, Consumer Electronics, Aerospace & Defense, and Commercial

4.3: European SiC Power Semiconductor Market

4.3.1: European SiC Power Semiconductor Market by Wafer Size: 6-Inch, 4-Inch, 2-Inch, and Above 6-Inch

4.3.2: European SiC Power Semiconductor Market by End Use Industry: Automotive, Utilities & Energy, Industrial, Transportation, IT & Telecommunication, Consumer Electronics, Aerospace & Defense, and Commercial

4.4: APAC SiC Power Semiconductor Market

4.4.1: APAC SiC Power Semiconductor Market by Wafer Size: 6-Inch, 4-Inch, 2-Inch, and Above 6-Inch

4.4.2: APAC SiC Power Semiconductor Market by End Use Industry: Automotive, Utilities & Energy, Industrial, Transportation, IT & Telecommunication, Consumer Electronics, Aerospace & Defense, and Commercial

4.5: ROW SiC Power Semiconductor Market

4.5.1: ROW SiC Power Semiconductor Market by Wafer Size: 6-Inch, 4-Inch, 2-Inch, and Above 6-Inch

4.5.2: ROW SiC Power Semiconductor Market by End Use Industry: Automotive, Utilities & Energy, Industrial, Transportation, IT & Telecommunication, Consumer Electronics, Aerospace & Defense, and Commercial

## **5. COMPETITOR ANALYSIS**

5.1: Product Portfolio Analysis

5.2: Operational Integration

5.3: Porter's Five Forces Analysis

## **6. GROWTH OPPORTUNITIES AND STRATEGIC ANALYSIS**

## 6.1: Growth Opportunity Analysis

6.1.1: Growth Opportunities for the SiC Power Semiconductor Market by Type

6.1.2: Growth Opportunities for the SiC Power Semiconductor Market by Wafer Size

6.1.3: Growth Opportunities for the SiC Power Semiconductor Market by Application

6.1.4: Growth Opportunities for the SiC Power Semiconductor Market by End Use

### Industry

6.1.5: Growth Opportunities for the SiC Power Semiconductor Market Region

## 6.2: Emerging Trends in the Global SiC Power Semiconductor Market

## 6.3: Strategic Analysis

6.3.1: New Product Development

6.3.2: Capacity Expansion of the Global SiC Power Semiconductor Market

6.3.3: Mergers, Acquisitions, and Joint Ventures in the Global SiC Power

### Semiconductor Market

6.3.4: Certification and Licensing

## 7. COMPANY PROFILES OF LEADING PLAYERS

7.1: WOLFSPEED, INC.,

7.2: STMicroelectronics,

7.3: ROHM CO., LTD.,

7.4: Fuji Electric Co., Ltd.,

7.5: Mitsubishi Electric Corporation,

7.6: Texas Instruments Incorporated,

7.7: Infineon Technologies AG,

7.8: Semikron Danfoss

7.9: Renesas Electronics Corporation

7.10: Microchip Technology Inc.

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