

# Wide Bandgap Semiconductor Market: Trends, Opportunities and Competitive Analysis [2023-2028]

<https://marketpublishers.com/r/W77FA94B9156EN.html>

Date: April 2023

Pages: 150

Price: US\$ 4,850.00 (Single User License)

ID: W77FA94B9156EN

## Abstracts

2 – 3 business days by ordering today

### Wide Bandgap Semiconductor Market Trends and Forecast

The future of the global wide bandgap semiconductor market looks promising with opportunities in the automotive & transportation, consumer electronics, aerospace & defense, IT & telecom, and energy & utility industries. The global wide bandgap semiconductor market is expected to reach an estimated \$1.8 billion by 2028 with a CAGR of 18.1% from 2023 to 2028. The major drivers for this market are growing demand for enhanced power efficiency in electrical and electronic gadgets along with rise in demand for batteries with extended battery life.

### Wide Bandgap Semiconductor Market by Material Type, 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.

### Wide Bandgap Semiconductor Market by Segments

### Wide Bandgap Semiconductor Market by Segment

The study includes a forecast for the global wide bandgap semiconductor market by material type, application, end use industry, and region, as follows:

### Wide Bandgap Semiconductor Market by Material Type [Value (\$B) Shipment Analysis

from 2017 to 2028]:

Silicon Carbide (SiC)

Gallium Nitride (GaN)

Diamond

Others

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

Hybrid / Electric Vehicles

PV Inverters

Railway Traction

Wind Turbines

Power Supplies

Motor Drives

Servers

Others

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

Automotive & Transportation

Consumer Electronics

Aerospace & Defense

IT & Telecom

Energy & Utility

Others

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

North America

Europe

Asia Pacific

The Rest of the World

List of Wide Bandgap 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 wide bandgap semiconductor companies cater increasing demand, ensure competitive effectiveness, develop innovative products & technologies, reduce production costs, and expand their customer base. Some of the wide bandgap semiconductor companies profiled in this report include.

Fujitsu Limited

Mersen S.A.

Everlight Electronics Co

Toshiba Corporation

Efficient Power Conversion Corporation

Avogy, Inc.

Renesas Electronics Corporation

GaN Systems Inc.

NXP Semiconductors N.V.

## Wide Bandgap Semiconductor Market Insights

Lucintel forecast that silicon carbide will remain the largest material type segment over the forecast period as it ensures enhanced thermal conductivity and thermal stability across diverse wide bandgap semiconductor applications.

Within this market, consumer electronics segment is projected to record the highest growth due to increase in number of communication networks and services, which will drive the demand for telecommunication equipment and electric vehicles.

North American is expected to witness the highest growth during the forecast period due to increased adoption of smart devices and rapidly growing automobile industry in this region.

## Features of the Wide Bandgap Semiconductor Market

**Market Size Estimates:** Wide bandgap 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:** Wide bandgap semiconductor market size by various segments, such as by material type, application, end use industry, and region.

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

**Growth Opportunities:** Analysis on growth opportunities in different by material type, application, end use industry, and regions for the wide bandgap semiconductor market.

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

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

## FAQ

Q1. What is the wide bandgap semiconductor market size?

Answer: The global wide bandgap semiconductor market is expected to reach an estimated \$1.8 billion by 2028.

Q2. What is the growth forecast for wide bandgap semiconductor market?

Answer: The global wide bandgap semiconductor market is expected to grow with a CAGR of 18.1% from 2023 to 2028.

Q3. What are the major drivers influencing the growth of the wide bandgap semiconductor market?

Answer: The major drivers for this market are growing demand for enhanced power efficiency in electrical and electronic gadgets along with rise in demand for batteries with extended battery life.

Q4. What are the major segments for wide bandgap semiconductor market?

Answer: The future of the wide bandgap semiconductor market looks promising with opportunities in the automotive & transportation, consumer electronics, aerospace & defense, IT & telecom, and energy & utility industries.

Q5. Who are the key wide bandgap semiconductor companies?

Answer: Some of the key wide bandgap semiconductor companies are as follows:

Fujitsu Limited

Mersen S.A.

Everlight Electronics Co

Toshiba Corporation

Efficient Power Conversion Corporation

Avogy, Inc.

Renesas Electronics Corporation

GaN Systems Inc.

NXP Semiconductors N.V.

Q6. Which wide bandgap semiconductor segment will be the largest in future?

Answer: Lucintel forecast that silicon carbide will remain the largest material type segment over the forecast period as it ensures enhanced thermal conductivity and thermal stability across diverse wide bandgap semiconductor applications.

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

Answer: North American is expected to witness the highest growth during the forecast period due to increased adoption of smart devices and rapidly growing automobile industry in this region.

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 wide bandgap semiconductor market by material type (silicon carbide (SiC), gallium nitride (GaN), diamond, and others), application (hybrid/electric vehicles, PV inverters, railway tractions, wind turbines, power supplies, motor drives, servers, and others), end use industry (automotive & transportation, consumer electronics, aerospace & defense, IT & telecom, energy & utility, and others), 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 wide bandgap semiconductor market or related to wide bandgap semiconductor companies, wide bandgap semiconductor market size, wide bandgap semiconductor market share, wide bandgap semiconductor 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 WIDE BANDGAP 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 Wide Bandgap Semiconductor Market Trends (2017-2022) and Forecast (2023-2028)

3.3: Global Wide Bandgap Semiconductor Market by Material Type

3.3.1: Silicon Carbide (SiC)

3.3.2: Gallium Nitride (GaN)

3.3.3: Diamond

3.3.4: Others

3.4: Global Wide Bandgap Semiconductor Market by Application

3.4.1: Hybrid / Electric Vehicles

3.4.2: PV Inverters

3.4.3: Railway Tractions

3.4.4: Wind Turbines

3.4.5: Power Supplies

3.4.6: Motor Drives

3.4.7: Servers

3.4.8: Others

3.5: Global Wide Bandgap Semiconductor Market by End Use Industry

3.5.1: Automotive & Transportation

3.5.2: Consumer Electronics

3.5.3: Aerospace & Defense

3.5.4: IT & Telecom

3.5.5: Energy & Utility

3.5.6: Others

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



- 4.1: Wide Bandgap Semiconductor Market by Region
- 4.2: North American Wide Bandgap Semiconductor Market
  - 4.2.1: North American Wide Bandgap Semiconductor Market by Material Type: Silicon Carbide (SiC), Gallium Nitride (GaN), Diamond, and Others
  - 4.2.2: North American Wide Bandgap Semiconductor Market by End Use Industry: Automotive & Transportation, Consumer Electronics, Aerospace & Defense, IT & Telecom, Energy & Utility, and Others
- 4.3: European Wide Bandgap Semiconductor Market
  - 4.3.1: European Wide Bandgap Semiconductor Market by Material Type: Silicon Carbide (SiC), Gallium Nitride (GaN), Diamond, and Others
  - 4.3.2: European Wide Bandgap Semiconductor Market by End Use Industry: Automotive & Transportation, Consumer Electronics, Aerospace & Defense, IT & Telecom, Energy & Utility, and Others
- 4.4: APAC Wide Bandgap Semiconductor Market
  - 4.4.1: APAC Wide Bandgap Semiconductor Market by Material Type: Silicon Carbide (SiC), Gallium Nitride (GaN), Diamond, and Others
  - 4.4.2: APAC Wide Bandgap Semiconductor Market by End Use Industry: Automotive & Transportation, Consumer Electronics, Aerospace & Defense, IT & Telecom, Energy & Utility, and Others
- 4.5: ROW Wide Bandgap Semiconductor Market
  - 4.5.1: ROW Wide Bandgap Semiconductor Market by Material Type: Silicon Carbide (SiC), Gallium Nitride (GaN), Diamond, and Others
  - 4.5.2: ROW Wide Bandgap Semiconductor Market by End Use Industry: Automotive & Transportation, Consumer Electronics, Aerospace & Defense, IT & Telecom, Energy & Utility, and Others

## **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 Wide Bandgap Semiconductor Market by Material Type
  - 6.1.2: Growth Opportunities for the Wide Bandgap Semiconductor Market by

## Application

6.1.3: Growth Opportunities for the Wide Bandgap Semiconductor Market by End Use Industry

6.1.4: Growth Opportunities for the Wide Bandgap Semiconductor Market Region

6.2: Emerging Trends in the Global Wide Bandgap Semiconductor Market

6.3: Strategic Analysis

6.3.1: New Product Development

6.3.2: Capacity Expansion of the Global Wide Bandgap Semiconductor Market

6.3.3: Mergers, Acquisitions, and Joint Ventures in the Global Wide Bandgap Semiconductor Market

6.3.4: Certification and Licensing

## **7. COMPANY PROFILES OF LEADING PLAYERS**

7.1: Fujitsu Limited

7.2: Mersen S.A.

7.3: Everlight Electronics Co

7.4: Toshiba Corporation

7.5: Efficient Power Conversion Corporation

7.6: Avogy, Inc.

7.7: Renesas Electronics Corporation

7.8: GaN Systems Inc.

7.9: NXP Semiconductors N.V.

## I would like to order

Product name: Wide Bandgap Semiconductor Market: Trends, Opportunities and Competitive Analysis [2023-2028]

Product link: <https://marketpublishers.com/r/W77FA94B9156EN.html>

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/W77FA94B9156EN.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

