

Gallium Nitride Semiconductor Market - 2024-2032

<https://marketpublishers.com/r/G4F8ABD5F3BCEN.html>

Date: July 2025

Pages: 220

Price: US\$ 2,999.00 (Single User License)

ID: G4F8ABD5F3BCEN

Abstracts

The Gallium Nitride Semiconductor Market was valued at US\$ 832.2 million in 2024 and is anticipated to reach US\$ 3,166.6 million by 2032, at a CAGR of 0.1818 from 2026 to 2032.

The report delivers in-depth insights into key market dynamics, including regional growth trends, market segmentation, CAGR projections, and the revenue performance of leading industry players. It also highlights major growth drivers shaping the market landscape. Designed to provide a clear and comprehensive perspective, the report offers a detailed view of the current market size in terms of both value and volume, along with emerging opportunities and the overall development outlook of the Gallium Nitride Semiconductor Market.

This report delivers a comprehensive overview of the Gallium Nitride Semiconductor Market, with both quantitative and qualitative analyses, to help readers develop growth strategies, assess the competitive landscape, evaluate their position in the current market, and make informed business decisions regarding Gallium Nitride Semiconductor Market. The Gallium Nitride Semiconductor Market size, estimates, and forecasts are provided in terms of output/shipments (K MT) and revenue (US\$ millions), with 2025 as the base year and historical and forecast data for 2024–2032.

Gallium Nitride Semiconductor Market Scope:

By Type

GaN Power Devices

GaN RF Devices

GaN Optoelectronic Devices

GaN Substrates

Others

By Application

Power Electronics

RF Electronics

Optoelectronics

Others

By Technology

Enhancement-Mode GaN (eGaN)

Depletion-Mode GaN (dGaN)

By End-User

Consumer Electronics

Automotive

Telecommunications

Aerospace & Defense

Healthcare

Energy & Utilities

Others

Key Players

Wolfspeed Inc

Infineon Technologies

Qorvo

MACOM Technology Solutions

Texas Instruments

NXP Semiconductors

GaN Systems

Efficient Power Conversion (EPC)

Navitas Semiconductor

STMicroelectronics LIST NOT EXHAUSTIVE

Major Highlights

This report delivers a comprehensive overview of the Gallium Nitride Semiconductor Market, with both quantitative and qualitative analyses, to help readers develop growth strategies, assess the competitive landscape, evaluate their position in the current market, and make informed business decisions regarding Gallium Nitride Semiconductor Market. The Gallium Nitride Semiconductor Market size, estimates, and forecasts are provided in terms of output/shipments (K Sqm) and revenue (US\$ millions), with 2025 as the base year and historical and forecast data for 2024–2032.

This report will assist keyword manufacturers, new entrants, and companies across the industry value chain with information on revenues, production, and average prices for the overall market and its sub-segments, by company, by Type, by Application, and by

region.

Regional Analysis:

North America (U.S., Canada, Mexico)

Europe (U.K., Italy, Germany, Russia, France, Spain, The Netherlands and Rest of Europe)

Asia-Pacific (India, Japan, China, South Korea, Australia, Indonesia Rest of Asia Pacific)

South America (Colombia, Brazil, Argentina, Rest of South America)

Middle East & Africa (Saudi Arabia, U.A.E., South Africa, Rest of Middle East & Africa)

Partner Identification

Increase Your Customer Base by 3X using our Partner Identification tool

Uncover strategic collaboration opportunities with DataM vetted partners aligned to your ecosystem.

Identify high potential M&A targets based on synergies, market positioning and growth trajectory.

Prioritize partners by strategic fit rather than general capability.

Why Choose DataM?

Data-Driven Insights: Dive into detailed analyses with granular insights such as pricing, market shares and value chain evaluations, enriched by interviews with industry leaders and disruptors.

Post-Purchase Support and Expert Analyst Consultations: As a valued client, gain direct access to our expert analysts for personalized advice and strategic

guidance, tailored to your specific needs and challenges.

White Papers and Case Studies: Benefit quarterly from our in-depth studies related to your purchased titles, tailored to refine your operational and marketing strategies for maximum impact.

Annual Updates on Purchased Reports: As an existing customer, enjoy the privilege of annual updates to your reports, ensuring you stay abreast of the latest market insights and technological advancements. Terms and conditions apply.

Specialized Focus on Emerging Markets: DataM differentiates itself by delivering in-depth, specialized insights specifically for emerging markets, rather than offering generalized geographic overviews. This approach equips our clients with a nuanced understanding and actionable intelligence that are essential for navigating and succeeding in high-growth regions.

Value of DataM Reports: Our reports offer specialized insights tailored to the latest trends and specific business inquiries. This personalized approach provides a deeper, strategic perspective, ensuring you receive the precise information necessary to make informed decisions. These insights complement and go beyond what is typically available in generic databases.

Target Audience 2026

Manufacturers/ Buyers

Industry Investors/Investment Bankers

Research Professionals

Emerging Companies

Contents

1. METHODOLOGY AND SCOPE

- 1.1. Research Methodology
- 1.2. Research Objective and Scope of the Report

2. DEFINITION AND OVERVIEW

3. EXECUTIVE SUMMARY

- 3.1. Snippet by Type
- 3.2. Snippet by Application
- 3.3. Snippet by Technology
- 3.4. Snippet by End-User
- 3.5. Snippet by Region

4. DYNAMICS

- 4.1. Impacting Factors
 - 4.1.1. Drivers
 - 4.1.1.1. Surging Investments Powering the Market
 - 4.1.1.2. Increasing Demand for Fast Charging Solutions
 - 4.1.2. Restraints
 - 4.1.2.1. High Investment Costs
 - 4.1.3. Opportunity
 - 4.1.4. Impact Analysis

5. INDUSTRY ANALYSIS

- 5.1. Porter's Five Force Analysis
- 5.2. Supply Chain Analysis
- 5.3. Pricing Analysis
- 5.4. Regulatory Analysis
- 5.5. Sustainable Analysis
- 5.6. DMI Opinion

6. BY TYPE

6.1. Introduction

6.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type

6.1.2. Market Attractiveness Index, By Type

6.2. GaN Power Devices*

6.2.1. Introduction

6.2.2. Market Size Analysis and Y-o-Y Growth Analysis (%)

6.3. GaN RF Devices

6.4. GaN Optoelectronic Devices

6.5. GaN Substrates

6.6. Others

7. BY APPLICATION

7.1. Introduction

7.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By Application

7.1.2. Market Attractiveness Index, By Application

7.2. Power Electronics*

7.2.1. Introduction

7.2.2. Market Size Analysis and Y-o-Y Growth Analysis (%)

7.3. RF Electronics

7.4. Optoelectronics

7.5. Others

8. BY TECHNOLOGY

8.1. Introduction

8.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By Technology

8.1.2. Market Attractiveness Index, By Technology

8.2. Enhancement-Mode GaN (eGaN)*

8.2.1. Introduction

8.2.2. Market Size Analysis and Y-o-Y Growth Analysis (%)

8.3. Depletion-Mode GaN (dGaN)

9. BY END-USER

9.1. Introduction

9.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-User

9.1.2. Market Attractiveness Index, By End-User

9.2. Consumer Electronics*

- 9.2.1. Introduction
- 9.2.2. Market Size Analysis and Y-o-Y Growth Analysis (%)
- 9.3. Automotive
- 9.4. Telecommunications
- 9.5. Aerospace & Defense
- 9.6. Healthcare
- 9.7. Energy & Utilities
- 9.8. Others

10. SUSTAINABILITY ANALYSIS

- 10.1. Environmental Analysis
- 10.2. Economic Analysis
- 10.3. Governance Analysis

11. BY REGION

- 11.1. Introduction
 - 11.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By Region
 - 11.1.2. Market Attractiveness Index, By Region
- 11.2. North America
 - 11.2.1. Introduction
 - 11.2.2. Key Region-Specific Dynamics
 - 11.2.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type
 - 11.2.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Application
 - 11.2.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By Technology
 - 11.2.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-User
 - 11.2.7. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country
 - 11.2.7.1. US
 - 11.2.7.2. Canada
 - 11.2.7.3. Mexico
- 11.3. Europe
 - 11.3.1. Introduction
 - 11.3.2. Key Region-Specific Dynamics
 - 11.3.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type
 - 11.3.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Application
 - 11.3.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By Technology
 - 11.3.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-User
 - 11.3.7. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country

- 11.3.7.1. Germany
- 11.3.7.2. UK
- 11.3.7.3. France
- 11.3.7.4. Italy
- 11.3.7.5. Spain
- 11.3.7.6. Rest of Europe
- 11.4. South America
 - 11.4.1. Introduction
 - 11.4.2. Key Region-Specific Dynamics
 - 11.4.3. Key Region-Specific Dynamics
 - 11.4.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type
 - 11.4.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By Application
 - 11.4.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By Technology
 - 11.4.7. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-User
 - 11.4.8. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country
 - 11.4.8.1. Brazil
 - 11.4.8.2. Argentina
 - 11.4.8.3. Rest of South America
- 11.5. Asia-Pacific
 - 11.5.1. Introduction
 - 11.5.2. Key Region-Specific Dynamics
 - 11.5.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type
 - 11.5.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Application
 - 11.5.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By Technology
 - 11.5.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-User
 - 11.5.7. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country
 - 11.5.7.1. China
 - 11.5.7.2. India
 - 11.5.7.3. Japan
 - 11.5.7.4. Australia
 - 11.5.7.5. Rest of Asia-Pacific
- 11.6. Middle East and Africa
 - 11.6.1. Introduction
 - 11.6.2. Key Region-Specific Dynamics
 - 11.6.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type
 - 11.6.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Application
 - 11.6.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By Technology
 - 11.6.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-User

12. COMPETITIVE LANDSCAPE

- 12.1. Competitive Scenario
- 12.2. Market Positioning/Share Analysis
- 12.3. Mergers and Acquisitions Analysis

13. COMPANY PROFILES

- 13.1. Wolfspeed Inc*
 - 13.1.1. Company Overview
 - 13.1.2. Product Portfolio and Description
 - 13.1.3. Financial Overview
 - 13.1.4. Key Developments
- 13.2. Infineon Technologies
- 13.3. Qorvo
- 13.4. MACOM Technology Solutions
- 13.5. Texas Instruments
- 13.6. NXP Semiconductors
- 13.7. GaN Systems
- 13.8. Efficient Power Conversion (EPC)
- 13.9. Navitas Semiconductor
- 13.10. STMicroelectronics LIST NOT EXHAUSTIVE

14. APPENDIX

- 14.1. About Us and Services
- 14.2. Contact Us

I would like to order

Product name: Gallium Nitride Semiconductor Market - 2024-2032

Product link: <https://marketpublishers.com/r/G4F8ABD5F3BCEN.html>

Price: US\$ 2,999.00 (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/G4F8ABD5F3BCEN.html>