

# Global Single-crystal Diamond Wafers Supply, Demand and Key Producers, 2026-2032

<https://marketpublishers.com/r/G9BA3C99B260EN.html>

Date: April 2026

Pages: 108

Price: US\$ 4,480.00 (Single User License)

ID: G9BA3C99B260EN

## Abstracts

The global Single-crystal Diamond Wafers market size is expected to reach \$ 47.71 million by 2032, rising at a market growth of 31.0% CAGR during the forecast period (2026-2032).

Single-crystal diamond (SCD) wafers/substrates are freestanding, device-processable diamond substrates that maintain single crystallinity across the usable area (commonly specified by orientation such as (100)/(111), off-axis, and defect metrics), and are delivered with semiconductor-grade geometry and surface quality (thickness/flatness/polish, controlled damage layer) plus controlled impurity/defect content to meet ?electronic-grade? or ?quantum-grade? performance targets. In industry positioning, electronic-grade SCD is explicitly linked to next-generation semiconductors, radiation/particle detectors, and quantum applications, while doped/epi-ready SCD substrates enable vertical device structures; this definition excludes polycrystalline CVD heat spreaders and non-wafer ?plates? that lack wafer/substrate specifications.

Single-crystal diamond wafers enable critical advances in both RF power technology used for 5G communications and satellites; as well as in the power electronics used in electric vehicles. Heat dissipation has emerged as the key limiting factor in making power electronics and RF power applications ever more efficient in everything from satellites, 5G base stations, electric cars, renewable energy generation and transmission, LIDARs, etc. Using modern wafer bonding technologies, single-crystal diamond (SCD) wafers can be produced combining the ultimate thermal substrate (that is, diamond) with any proven semiconductor such as Si, SiC, GaN, etc.

The single-crystal diamond (SCD) wafers are still early-commercial: supply is

constrained by (a) the challenge of scaling single-crystal growth to wafer size with acceptable defect density and stress control, and (b) the cost/throughput limits of diamond precision processing (flatness, subsurface damage control, polishing) and subsequent qualification in semiconductor manufacturing. The industry's technology trajectory is nevertheless clear: (1) wafer size scaling is progressing from inch-class demonstrations toward more manufacturable formats (2-inch class being repeatedly highlighted as an industrial stepping stone; 100 mm monolithic wafer announcements have become an important proof point), (2) process route convergence is moving from mosaic as a bridging solution toward higher-yield wafer-scale growth and singulation/processing, and (3) application pull is shifting from R&D-heavy quantum/detector uses toward higher-volume thermal/bondable integration and power/RF platforms, which typically demand tighter wafer-level specifications, repeatability, and a more standardized supply chain. Over 2025-2032, expect competition to focus on three levers: scalable wafer growth (homo/heteroepitaxy), wafer fabrication methods that reduce kerf loss and improve reuse economics, and device-ready surface/wafer specifications (bondability, orientation, uniformity) that shorten customer qualification cycles in packaging and high-power electronics.

The global key companies in the Single-crystal Diamond Wafers market include Orbray, Diamond Foundry Inc, Element Six (E6), EDP Corporation, Advent Diamond, Coherent, Compound Semiconductor (Xiamen) Technology and Great Lakes Crystal Technologies (GLCT), etc. In 2025, the three largest players accounted for approximately 72% of revenue. The single-crystal diamond (SCD) wafers are still early-commercial, and more and more companies are entering this field. Potential entrants include Diamfab, WD Advanced Materials (WDAM), HiQuTe Diamond, Applied Diamond Inc, Chongqing Origin Stone Element Science and Technology Development and Ningbo Crysdiam Technology, etc.

This report studies the global Single-crystal Diamond Wafers production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Single-crystal Diamond Wafers and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Single-crystal Diamond Wafers that contribute to its increasing demand across many markets.

### **Highlights and key features of the study**

Global Single-crystal Diamond Wafers total production and demand, 2021-2032,

(Pieces)

Global Single-crystal Diamond Wafers total production value, 2021-2032, (USD Million)

Global Single-crystal Diamond Wafers production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Pieces), (based on production site)

Global Single-crystal Diamond Wafers consumption by region & country, CAGR, 2021-2032 & (Pieces)

U.S. VS China: Single-crystal Diamond Wafers domestic production, consumption, key domestic manufacturers and share

Global Single-crystal Diamond Wafers production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Pieces)

Global Single-crystal Diamond Wafers production by Size, production, value, CAGR, 2021-2032, (USD Million) & (Pieces)

Global Single-crystal Diamond Wafers production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Pieces)

This report profiles key players in the global Single-crystal Diamond Wafers market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Orbray, Element Six (E6), Diamond Foundry (DF), Advent Diamond, Compound Semiconductor (Xiamen) Technology, Coherent, EDP Corporation, Great Lakes Crystal Technologies (GLCT), etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Single-crystal Diamond Wafers market

### **Detailed Segmentation:**

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Pieces) and average price (US\$/Piece) by manufacturer, by Size, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Single-crystal Diamond Wafers Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

#### Global Single-crystal Diamond Wafers Market, Segmentation by Size:

2-inch (50 mm)

3-inch (75 mm)

4-inch (100 mm)

Below 2-inch

#### Global Single-crystal Diamond Wafers Market, Segmentation by Process:

Heteroepitaxial HPHT

Homoepitaxy HPHT

Others

#### Global Single-crystal Diamond Wafers Market, Segmentation by Grade:

Quantum-grade Diamond Wafer

Electronic/Power-grade Wafer

Thermal/Bonding-grade Wafer

Detector-grade Wafer

### Global Single-crystal Diamond Wafers Market, Segmentation by Application:

RF Power, 5G & Satellites

Power Electronics

Cloud & AI Compute

Quantum Technologies

Others

### Companies Profiled:

Orbray

Element Six (E6)

Diamond Foundry (DF)

Advent Diamond

Compound Semiconductor (Xiamen) Technology

Coherent

EDP Corporation

Great Lakes Crystal Technologies (GLCT)

**Key Questions Answered:**

1. How big is the global Single-crystal Diamond Wafers market?
2. What is the demand of the global Single-crystal Diamond Wafers market?
3. What is the year over year growth of the global Single-crystal Diamond Wafers market?
4. What is the production and production value of the global Single-crystal Diamond Wafers market?
5. Who are the key producers in the global Single-crystal Diamond Wafers market?
6. What are the growth factors driving the market demand?

## Contents

### 1 SUPPLY SUMMARY

- 1.1 Single-crystal Diamond Wafers Introduction
- 1.2 World Single-crystal Diamond Wafers Supply & Forecast
  - 1.2.1 World Single-crystal Diamond Wafers Production Value (2021 & 2025 & 2032)
  - 1.2.2 World Single-crystal Diamond Wafers Production (2021-2032)
  - 1.2.3 World Single-crystal Diamond Wafers Pricing Trends (2021-2032)
- 1.3 World Single-crystal Diamond Wafers Production by Region (Based on Production Site)
  - 1.3.1 World Single-crystal Diamond Wafers Production Value by Region (2021-2032)
  - 1.3.2 World Single-crystal Diamond Wafers Production by Region (2021-2032)
  - 1.3.3 World Single-crystal Diamond Wafers Average Price by Region (2021-2032)
  - 1.3.4 North America Single-crystal Diamond Wafers Production (2021-2032)
  - 1.3.5 Japan Single-crystal Diamond Wafers Production (2021-2032)
  - 1.3.6 Europe Single-crystal Diamond Wafers Production (2021-2032)
  - 1.3.7 China Single-crystal Diamond Wafers Production (2021-2032)
- 1.4 Market Drivers, Restraints and Trends
  - 1.4.1 Single-crystal Diamond Wafers Market Drivers
  - 1.4.2 Factors Affecting Demand
  - 1.4.3 Single-crystal Diamond Wafers Major Market Trends

### 2 DEMAND SUMMARY

- 2.1 World Single-crystal Diamond Wafers Demand (2021-2032)
- 2.2 World Single-crystal Diamond Wafers Consumption by Region
  - 2.2.1 World Single-crystal Diamond Wafers Consumption by Region (2021-2026)
  - 2.2.2 World Single-crystal Diamond Wafers Consumption Forecast by Region (2027-2032)
- 2.3 United States Single-crystal Diamond Wafers Consumption (2021-2032)
- 2.4 China Single-crystal Diamond Wafers Consumption (2021-2032)
- 2.5 Europe Single-crystal Diamond Wafers Consumption (2021-2032)
- 2.6 Japan Single-crystal Diamond Wafers Consumption (2021-2032)
- 2.7 South Korea Single-crystal Diamond Wafers Consumption (2021-2032)
- 2.8 ASEAN Single-crystal Diamond Wafers Consumption (2021-2032)
- 2.9 India Single-crystal Diamond Wafers Consumption (2021-2032)

### 3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

- 3.1 World Single-crystal Diamond Wafers Production Value by Manufacturer (2021-2026)
- 3.2 World Single-crystal Diamond Wafers Production by Manufacturer (2021-2026)
- 3.3 World Single-crystal Diamond Wafers Average Price by Manufacturer (2021-2026)
- 3.4 Single-crystal Diamond Wafers Company Evaluation Quadrant
- 3.5 Industry Rank and Concentration Rate (CR)
  - 3.5.1 Global Single-crystal Diamond Wafers Industry Rank of Major Manufacturers
  - 3.5.2 Global Concentration Ratios (CR4) for Single-crystal Diamond Wafers in 2025
  - 3.5.3 Global Concentration Ratios (CR8) for Single-crystal Diamond Wafers in 2025
- 3.6 Single-crystal Diamond Wafers Market: Overall Company Footprint Analysis
  - 3.6.1 Single-crystal Diamond Wafers Market: Region Footprint
  - 3.6.2 Single-crystal Diamond Wafers Market: Company Product Type Footprint
  - 3.6.3 Single-crystal Diamond Wafers Market: Company Product Application Footprint
- 3.7 Competitive Environment
  - 3.7.1 Historical Structure of the Industry
  - 3.7.2 Barriers of Market Entry
  - 3.7.3 Factors of Competition
- 3.8 New Entrant and Capacity Expansion Plans
- 3.9 Mergers, Acquisition, Agreements, and Collaborations

## **4 UNITED STATES VS CHINA VS REST OF THE WORLD**

- 4.1 United States VS China: Single-crystal Diamond Wafers Production Value Comparison
  - 4.1.1 United States VS China: Single-crystal Diamond Wafers Production Value Comparison (2021 & 2025 & 2032)
  - 4.1.2 United States VS China: Single-crystal Diamond Wafers Production Value Market Share Comparison (2021 & 2025 & 2032)
- 4.2 United States VS China: Single-crystal Diamond Wafers Production Comparison
  - 4.2.1 United States VS China: Single-crystal Diamond Wafers Production Comparison (2021 & 2025 & 2032)
  - 4.2.2 United States VS China: Single-crystal Diamond Wafers Production Market Share Comparison (2021 & 2025 & 2032)
- 4.3 United States VS China: Single-crystal Diamond Wafers Consumption Comparison
  - 4.3.1 United States VS China: Single-crystal Diamond Wafers Consumption Comparison (2021 & 2025 & 2032)
  - 4.3.2 United States VS China: Single-crystal Diamond Wafers Consumption Market Share Comparison (2021 & 2025 & 2032)

#### 4.4 United States Based Single-crystal Diamond Wafers Manufacturers and Market Share, 2021-2026

4.4.1 United States Based Single-crystal Diamond Wafers Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers Single-crystal Diamond Wafers Production Value (2021-2026)

4.4.3 United States Based Manufacturers Single-crystal Diamond Wafers Production (2021-2026)

#### 4.5 China Based Single-crystal Diamond Wafers Manufacturers and Market Share

4.5.1 China Based Single-crystal Diamond Wafers Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers Single-crystal Diamond Wafers Production Value (2021-2026)

4.5.3 China Based Manufacturers Single-crystal Diamond Wafers Production (2021-2026)

#### 4.6 Rest of World Based Single-crystal Diamond Wafers Manufacturers and Market Share, 2021-2026

4.6.1 Rest of World Based Single-crystal Diamond Wafers Manufacturers, Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers Single-crystal Diamond Wafers Production Value (2021-2026)

4.6.3 Rest of World Based Manufacturers Single-crystal Diamond Wafers Production (2021-2026)

## 5 MARKET ANALYSIS BY SIZE

### 5.1 World Single-crystal Diamond Wafers Market Size Overview by Size: 2021 VS 2025 VS 2032

#### 5.2 Segment Introduction by Size

5.2.1 2-inch (50 mm)

5.2.2 3-inch (75 mm)

5.2.3 4-inch (100 mm)

5.2.4 Below 2-inch

#### 5.3 Market Segment by Size

5.3.1 World Single-crystal Diamond Wafers Production by Size (2021-2032)

5.3.2 World Single-crystal Diamond Wafers Production Value by Size (2021-2032)

5.3.3 World Single-crystal Diamond Wafers Average Price by Size (2021-2032)

## 6 MARKET ANALYSIS BY PROCESS

6.1 World Single-crystal Diamond Wafers Market Size Overview by Process: 2021 VS 2025 VS 2032

6.2 Segment Introduction by Process

6.2.1 Heteroepitaxial HPHT

6.2.2 Homoepitaxy HPHT

6.2.3 Others

6.3 Market Segment by Process

6.3.1 World Single-crystal Diamond Wafers Production by Process (2021-2032)

6.3.2 World Single-crystal Diamond Wafers Production Value by Process (2021-2032)

6.3.3 World Single-crystal Diamond Wafers Average Price by Process (2021-2032)

## **7 MARKET ANALYSIS BY GRADE**

7.1 World Single-crystal Diamond Wafers Market Size Overview by Grade: 2021 VS 2025 VS 2032

7.2 Segment Introduction by Grade

7.2.1 Quantum-grade Diamond Wafer

7.2.2 Electronic/Power-grade Wafer

7.2.3 Thermal/Bonding-grade Wafer

7.2.4 Detector-grade Wafer

7.3 Market Segment by Grade

7.3.1 World Single-crystal Diamond Wafers Production by Grade (2021-2032)

7.3.2 World Single-crystal Diamond Wafers Production Value by Grade (2021-2032)

7.3.3 World Single-crystal Diamond Wafers Average Price by Grade (2021-2032)

## **8 MARKET ANALYSIS BY APPLICATION**

8.1 World Single-crystal Diamond Wafers Market Size Overview by Application: 2021 VS 2025 VS 2032

8.2 Segment Introduction by Application

8.2.1 RF Power, 5G & Satellites

8.2.2 Power Electronics

8.2.3 Cloud & AI Compute

8.2.4 Quantum Technologies

8.2.5 Others

8.3 Market Segment by Application

8.3.1 World Single-crystal Diamond Wafers Production by Application (2021-2032)

8.3.2 World Single-crystal Diamond Wafers Production Value by Application

(2021-2032)

8.3.3 World Single-crystal Diamond Wafers Average Price by Application (2021-2032)

## **9 COMPANY PROFILES**

### 9.1 Orbray

9.1.1 Orbray Details

9.1.2 Orbray Major Business

9.1.3 Orbray Single-crystal Diamond Wafers Product and Services

9.1.4 Orbray Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.1.5 Orbray Recent Developments/Updates

9.1.6 Orbray Competitive Strengths & Weaknesses

### 9.2 Element Six (E6)

9.2.1 Element Six (E6) Details

9.2.2 Element Six (E6) Major Business

9.2.3 Element Six (E6) Single-crystal Diamond Wafers Product and Services

9.2.4 Element Six (E6) Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.2.5 Element Six (E6) Recent Developments/Updates

9.2.6 Element Six (E6) Competitive Strengths & Weaknesses

### 9.3 Diamond Foundry (DF)

9.3.1 Diamond Foundry (DF) Details

9.3.2 Diamond Foundry (DF) Major Business

9.3.3 Diamond Foundry (DF) Single-crystal Diamond Wafers Product and Services

9.3.4 Diamond Foundry (DF) Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.3.5 Diamond Foundry (DF) Recent Developments/Updates

9.3.6 Diamond Foundry (DF) Competitive Strengths & Weaknesses

### 9.4 Advent Diamond

9.4.1 Advent Diamond Details

9.4.2 Advent Diamond Major Business

9.4.3 Advent Diamond Single-crystal Diamond Wafers Product and Services

9.4.4 Advent Diamond Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.4.5 Advent Diamond Recent Developments/Updates

9.4.6 Advent Diamond Competitive Strengths & Weaknesses

### 9.5 Compound Semiconductor (Xiamen) Technology

9.5.1 Compound Semiconductor (Xiamen) Technology Details

- 9.5.2 Compound Semiconductor (Xiamen) Technology Major Business
- 9.5.3 Compound Semiconductor (Xiamen) Technology Single-crystal Diamond Wafers Product and Services
- 9.5.4 Compound Semiconductor (Xiamen) Technology Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)
- 9.5.5 Compound Semiconductor (Xiamen) Technology Recent Developments/Updates
- 9.5.6 Compound Semiconductor (Xiamen) Technology Competitive Strengths & Weaknesses
- 9.6 Coherent
  - 9.6.1 Coherent Details
  - 9.6.2 Coherent Major Business
  - 9.6.3 Coherent Single-crystal Diamond Wafers Product and Services
  - 9.6.4 Coherent Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 9.6.5 Coherent Recent Developments/Updates
  - 9.6.6 Coherent Competitive Strengths & Weaknesses
- 9.7 EDP Corporation
  - 9.7.1 EDP Corporation Details
  - 9.7.2 EDP Corporation Major Business
  - 9.7.3 EDP Corporation Single-crystal Diamond Wafers Product and Services
  - 9.7.4 EDP Corporation Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 9.7.5 EDP Corporation Recent Developments/Updates
  - 9.7.6 EDP Corporation Competitive Strengths & Weaknesses
- 9.8 Great Lakes Crystal Technologies (GLCT)
  - 9.8.1 Great Lakes Crystal Technologies (GLCT) Details
  - 9.8.2 Great Lakes Crystal Technologies (GLCT) Major Business
  - 9.8.3 Great Lakes Crystal Technologies (GLCT) Single-crystal Diamond Wafers Product and Services
  - 9.8.4 Great Lakes Crystal Technologies (GLCT) Single-crystal Diamond Wafers Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 9.8.5 Great Lakes Crystal Technologies (GLCT) Recent Developments/Updates
  - 9.8.6 Great Lakes Crystal Technologies (GLCT) Competitive Strengths & Weaknesses

## **10 INDUSTRY CHAIN ANALYSIS**

- 10.1 Single-crystal Diamond Wafers Industry Chain
- 10.2 Single-crystal Diamond Wafers Upstream Analysis
  - 10.2.1 Single-crystal Diamond Wafers Core Raw Materials

- 10.2.2 Main Manufacturers of Single-crystal Diamond Wafers Core Raw Materials
- 10.3 Midstream Analysis
- 10.4 Downstream Analysis
- 10.5 Single-crystal Diamond Wafers Production Mode
- 10.6 Single-crystal Diamond Wafers Procurement Model
- 10.7 Single-crystal Diamond Wafers Industry Sales Model and Sales Channels
  - 10.7.1 Single-crystal Diamond Wafers Sales Model
  - 10.7.2 Single-crystal Diamond Wafers Typical Distributors

## **11 RESEARCH FINDINGS AND CONCLUSION**

## **12 APPENDIX**

- 12.1 Methodology
- 12.2 Research Process and Data Source
- 12.3 Disclaimer

## List Of Tables

### LIST OF TABLES

Table 1. World Single-crystal Diamond Wafers Production Value by Region (2021, 2025 and 2032) & (USD Million)

Table 2. World Single-crystal Diamond Wafers Production Value by Region (2021-2026) & (USD Million)

Table 3. World Single-crystal Diamond Wafers Production Value by Region (2027-2032) & (USD Million)

Table 4. World Single-crystal Diamond Wafers Production Value Market Share by Region (2021-2026)

Table 5. World Single-crystal Diamond Wafers Production Value Market Share by Region (2027-2032)

Table 6. World Single-crystal Diamond Wafers Production by Region (2021-2026) & (Pieces)

Table 7. World Single-crystal Diamond Wafers Production by Region (2027-2032) & (Pieces)

Table 8. World Single-crystal Diamond Wafers Production Market Share by Region (2021-2026)

Table 9. World Single-crystal Diamond Wafers Production Market Share by Region (2027-2032)

Table 10. World Single-crystal Diamond Wafers Average Price by Region (2021-2026) & (US\$/Piece)

Table 11. World Single-crystal Diamond Wafers Average Price by Region (2027-2032) & (US\$/Piece)

Table 12. Single-crystal Diamond Wafers Major Market Trends

Table 13. World Single-crystal Diamond Wafers Consumption Growth Rate Forecast by Region (2021 & 2025 & 2032) & (Pieces)

Table 14. World Single-crystal Diamond Wafers Consumption by Region (2021-2026) & (Pieces)

Table 15. World Single-crystal Diamond Wafers Consumption Forecast by Region (2027-2032) & (Pieces)

Table 16. World Single-crystal Diamond Wafers Production Value by Manufacturer (2021-2026) & (USD Million)

Table 17. Production Value Market Share of Key Single-crystal Diamond Wafers Producers in 2025

Table 18. World Single-crystal Diamond Wafers Production by Manufacturer (2021-2026) & (Pieces)

Table 19. Production Market Share of Key Single-crystal Diamond Wafers Producers in 2025

Table 20. World Single-crystal Diamond Wafers Average Price by Manufacturer (2021-2026) & (US\$/Piece)

Table 21. Global Single-crystal Diamond Wafers Company Evaluation Quadrant

Table 22. World Single-crystal Diamond Wafers Industry Rank of Major Manufacturers, Based on Production Value in 2025

Table 23. Head Office and Single-crystal Diamond Wafers Production Site of Key Manufacturer

Table 24. Single-crystal Diamond Wafers Market: Company Product Type Footprint

Table 25. Single-crystal Diamond Wafers Market: Company Product Application Footprint

Table 26. Single-crystal Diamond Wafers Competitive Factors

Table 27. Single-crystal Diamond Wafers New Entrant and Capacity Expansion Plans

Table 28. Single-crystal Diamond Wafers Mergers & Acquisitions Activity

Table 29. United States VS China Single-crystal Diamond Wafers Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)

Table 30. United States VS China Single-crystal Diamond Wafers Production Comparison, (2021 & 2025 & 2032) & (Pieces)

Table 31. United States VS China Single-crystal Diamond Wafers Consumption Comparison, (2021 & 2025 & 2032) & (Pieces)

Table 32. United States Based Single-crystal Diamond Wafers Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers Single-crystal Diamond Wafers Production Value, (2021-2026) & (USD Million)

Table 34. United States Based Manufacturers Single-crystal Diamond Wafers Production Value Market Share (2021-2026)

Table 35. United States Based Manufacturers Single-crystal Diamond Wafers Production (2021-2026) & (Pieces)

Table 36. United States Based Manufacturers Single-crystal Diamond Wafers Production Market Share (2021-2026)

Table 37. China Based Single-crystal Diamond Wafers Manufacturers, Headquarters and Production Site (Province, Country)

Table 38. China Based Manufacturers Single-crystal Diamond Wafers Production Value, (2021-2026) & (USD Million)

Table 39. China Based Manufacturers Single-crystal Diamond Wafers Production Value Market Share (2021-2026)

Table 40. China Based Manufacturers Single-crystal Diamond Wafers Production, (2021-2026) & (Pieces)

Table 41. China Based Manufacturers Single-crystal Diamond Wafers Production Market Share (2021-2026)

Table 42. Rest of World Based Single-crystal Diamond Wafers Manufacturers, Headquarters and Production Site (State, Country)

Table 43. Rest of World Based Manufacturers Single-crystal Diamond Wafers Production Value, (2021-2026) & (USD Million)

Table 44. Rest of World Based Manufacturers Single-crystal Diamond Wafers Production Value Market Share (2021-2026)

Table 45. Rest of World Based Manufacturers Single-crystal Diamond Wafers Production, (2021-2026) & (Pieces)

Table 46. Rest of World Based Manufacturers Single-crystal Diamond Wafers Production Market Share (2021-2026)

Table 47. World Single-crystal Diamond Wafers Production Value by Size, (USD Million), 2021 & 2025 & 2032

Table 48. World Single-crystal Diamond Wafers Production by Size (2021-2026) & (Pieces)

Table 49. World Single-crystal Diamond Wafers Production by Size (2027-2032) & (Pieces)

Table 50. World Single-crystal Diamond Wafers Production Value by Size (2021-2026) & (USD Million)

Table 51. World Single-crystal Diamond Wafers Production Value by Size (2027-2032) & (USD Million)

Table 52. World Single-crystal Diamond Wafers Average Price by Size (2021-2026) & (US\$/Piece)

Table 53. World Single-crystal Diamond Wafers Average Price by Size (2027-2032) & (US\$/Piece)

Table 54. World Single-crystal Diamond Wafers Production Value by Process, (USD Million), 2021 & 2025 & 2032

Table 55. World Single-crystal Diamond Wafers Production by Process (2021-2026) & (Pieces)

Table 56. World Single-crystal Diamond Wafers Production by Process (2027-2032) & (Pieces)

Table 57. World Single-crystal Diamond Wafers Production Value by Process (2021-2026) & (USD Million)

Table 58. World Single-crystal Diamond Wafers Production Value by Process (2027-2032) & (USD Million)

Table 59. World Single-crystal Diamond Wafers Average Price by Process (2021-2026) & (US\$/Piece)

Table 60. World Single-crystal Diamond Wafers Average Price by Process (2027-2032)

& (US\$/Piece)

Table 61. World Single-crystal Diamond Wafers Production Value by Grade, (USD Million), 2021 & 2025 & 2032

Table 62. World Single-crystal Diamond Wafers Production by Grade (2021-2026) & (Pieces)

Table 63. World Single-crystal Diamond Wafers Production by Grade (2027-2032) & (Pieces)

Table 64. World Single-crystal Diamond Wafers Production Value by Grade (2021-2026) & (USD Million)

Table 65. World Single-crystal Diamond Wafers Production Value by Grade (2027-2032) & (USD Million)

Table 66. World Single-crystal Diamond Wafers Average Price by Grade (2021-2026) & (US\$/Piece)

Table 67. World Single-crystal Diamond Wafers Average Price by Grade (2027-2032) & (US\$/Piece)

Table 68. World Single-crystal Diamond Wafers Production Value by Application, (USD Million), 2021 & 2025 & 2032

Table 69. World Single-crystal Diamond Wafers Production by Application (2021-2026) & (Pieces)

Table 70. World Single-crystal Diamond Wafers Production by Application (2027-2032) & (Pieces)

Table 71. World Single-crystal Diamond Wafers Production Value by Application (2021-2026) & (USD Million)

Table 72. World Single-crystal Diamond Wafers Production Value by Application (2027-2032) & (USD Million)

Table 73. World Single-crystal Diamond Wafers Average Price by Application (2021-2026) & (US\$/Piece)

Table 74. World Single-crystal Diamond Wafers Average Price by Application (2027-2032) & (US\$/Piece)

Table 75. Orbray Basic Information, Manufacturing Base and Competitors

Table 76. Orbray Major Business

Table 77. Orbray Single-crystal Diamond Wafers Product and Services

Table 78. Orbray Single-crystal Diamond Wafers Production (Pieces), Price (US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 79. Orbray Recent Developments/Updates

Table 80. Orbray Competitive Strengths & Weaknesses

Table 81. Element Six (E6) Basic Information, Manufacturing Base and Competitors

Table 82. Element Six (E6) Major Business

Table 83. Element Six (E6) Single-crystal Diamond Wafers Product and Services

Table 84. Element Six (E6) Single-crystal Diamond Wafers Production (Pieces), Price (US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 85. Element Six (E6) Recent Developments/Updates

Table 86. Element Six (E6) Competitive Strengths & Weaknesses

Table 87. Diamond Foundry (DF) Basic Information, Manufacturing Base and Competitors

Table 88. Diamond Foundry (DF) Major Business

Table 89. Diamond Foundry (DF) Single-crystal Diamond Wafers Product and Services

Table 90. Diamond Foundry (DF) Single-crystal Diamond Wafers Production (Pieces), Price (US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 91. Diamond Foundry (DF) Recent Developments/Updates

Table 92. Diamond Foundry (DF) Competitive Strengths & Weaknesses

Table 93. Advent Diamond Basic Information, Manufacturing Base and Competitors

Table 94. Advent Diamond Major Business

Table 95. Advent Diamond Single-crystal Diamond Wafers Product and Services

Table 96. Advent Diamond Single-crystal Diamond Wafers Production (Pieces), Price (US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 97. Advent Diamond Recent Developments/Updates

Table 98. Advent Diamond Competitive Strengths & Weaknesses

Table 99. Compound Semiconductor (Xiamen) Technology Basic Information, Manufacturing Base and Competitors

Table 100. Compound Semiconductor (Xiamen) Technology Major Business

Table 101. Compound Semiconductor (Xiamen) Technology Single-crystal Diamond Wafers Product and Services

Table 102. Compound Semiconductor (Xiamen) Technology Single-crystal Diamond Wafers Production (Pieces), Price (US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 103. Compound Semiconductor (Xiamen) Technology Recent Developments/Updates

Table 104. Compound Semiconductor (Xiamen) Technology Competitive Strengths & Weaknesses

Table 105. Coherent Basic Information, Manufacturing Base and Competitors

Table 106. Coherent Major Business

Table 107. Coherent Single-crystal Diamond Wafers Product and Services

Table 108. Coherent Single-crystal Diamond Wafers Production (Pieces), Price

(US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 109. Coherent Recent Developments/Updates

Table 110. Coherent Competitive Strengths & Weaknesses

Table 111. EDP Corporation Basic Information, Manufacturing Base and Competitors

Table 112. EDP Corporation Major Business

Table 113. EDP Corporation Single-crystal Diamond Wafers Product and Services

Table 114. EDP Corporation Single-crystal Diamond Wafers Production (Pieces), Price (US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 115. EDP Corporation Recent Developments/Updates

Table 116. EDP Corporation Competitive Strengths & Weaknesses

Table 117. Great Lakes Crystal Technologies (GLCT) Basic Information, Manufacturing Base and Competitors

Table 118. Great Lakes Crystal Technologies (GLCT) Major Business

Table 119. Great Lakes Crystal Technologies (GLCT) Single-crystal Diamond Wafers Product and Services

Table 120. Great Lakes Crystal Technologies (GLCT) Single-crystal Diamond Wafers Production (Pieces), Price (US\$/Piece), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 121. Great Lakes Crystal Technologies (GLCT) Recent Developments/Updates

Table 122. Great Lakes Crystal Technologies (GLCT) Competitive Strengths & Weaknesses

Table 123. Global Key Players of Single-crystal Diamond Wafers Upstream (Raw Materials)

Table 124. Global Single-crystal Diamond Wafers Typical Customers

Table 125. Single-crystal Diamond Wafers Typical Distributors

## List Of Figures

### LIST OF FIGURES

Figure 1. Single-crystal Diamond Wafers Picture

Figure 2. World Single-crystal Diamond Wafers Production Value: 2021 & 2025 & 2032, (USD Million)

Figure 3. World Single-crystal Diamond Wafers Production Value and Forecast (2021-2032) & (USD Million)

Figure 4. World Single-crystal Diamond Wafers Production (2021-2032) & (Pieces)

Figure 5. World Single-crystal Diamond Wafers Average Price (2021-2032) & (US\$/Piece)

Figure 6. World Single-crystal Diamond Wafers Production Value Market Share by Region (2021-2032)

Figure 7. World Single-crystal Diamond Wafers Production Market Share by Region (2021-2032)

Figure 8. North America Single-crystal Diamond Wafers Production (2021-2032) & (Pieces)

Figure 9. Japan Single-crystal Diamond Wafers Production (2021-2032) & (Pieces)

Figure 10. Europe Single-crystal Diamond Wafers Production (2021-2032) & (Pieces)

Figure 11. China Single-crystal Diamond Wafers Production (2021-2032) & (Pieces)

Figure 12. Single-crystal Diamond Wafers Market Drivers

Figure 13. Factors Affecting Demand

Figure 14. World Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 15. World Single-crystal Diamond Wafers Consumption Market Share by Region (2021-2032)

Figure 16. United States Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 17. China Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 18. Europe Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 19. Japan Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 20. South Korea Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 21. ASEAN Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 22. India Single-crystal Diamond Wafers Consumption (2021-2032) & (Pieces)

Figure 23. Producer Shipments of Single-crystal Diamond Wafers by Manufacturer Revenue (\$MM) and Market Share (%): 2025

Figure 24. Global Four-firm Concentration Ratios (CR4) for Single-crystal Diamond Wafers Markets in 2025

Figure 25. Global Four-firm Concentration Ratios (CR8) for Single-crystal Diamond Wafers Markets in 2025

Figure 26. United States VS China: Single-crystal Diamond Wafers Production Value Market Share Comparison (2021 & 2025 & 2032)

Figure 27. United States VS China: Single-crystal Diamond Wafers Production Market Share Comparison (2021 & 2025 & 2032)

Figure 28. United States VS China: Single-crystal Diamond Wafers Consumption Market Share Comparison (2021 & 2025 & 2032)

Figure 29. United States Based Manufacturers Single-crystal Diamond Wafers Production Market Share 2025

Figure 30. China Based Manufacturers Single-crystal Diamond Wafers Production Market Share 2025

Figure 31. Rest of World Based Manufacturers Single-crystal Diamond Wafers Production Market Share 2025

Figure 32. World Single-crystal Diamond Wafers Production Value by Size, (USD Million), 2021 & 2025 & 2032

Figure 33. World Single-crystal Diamond Wafers Production Value Market Share by Size in 2025

Figure 34. 2-inch (50 mm)

Figure 35. 3-inch (75 mm)

Figure 36. 4-inch (100 mm)

Figure 37. Below 2-inch

Figure 38. World Single-crystal Diamond Wafers Production Market Share by Size (2021-2032)

Figure 39. World Single-crystal Diamond Wafers Production Value Market Share by Size (2021-2032)

Figure 40. World Single-crystal Diamond Wafers Average Price by Size (2021-2032) & (US\$/Piece)

Figure 41. World Single-crystal Diamond Wafers Production Value by Process, (USD Million), 2021 & 2025 & 2032

Figure 42. World Single-crystal Diamond Wafers Production Value Market Share by Process in 2025

Figure 43. Heteroepitaxial HPHT

Figure 44. Homoepitaxy HPHT

Figure 45. Others

Figure 46. World Single-crystal Diamond Wafers Production Market Share by Process (2021-2032)

Figure 47. World Single-crystal Diamond Wafers Production Value Market Share by Process (2021-2032)

Figure 48. World Single-crystal Diamond Wafers Average Price by Process (2021-2032) & (US\$/Piece)

Figure 49. World Single-crystal Diamond Wafers Production Value by Grade, (USD Million), 2021 & 2025 & 2032

Figure 50. World Single-crystal Diamond Wafers Production Value Market Share by Grade in 2025

Figure 51. Quantum-grade Diamond Wafer

Figure 52. Electronic/Power-grade Wafer

Figure 53. Thermal/Bonding-grade Wafer

Figure 54. Detector-grade Wafer

Figure 55. World Single-crystal Diamond Wafers Production Market Share by Grade (2021-2032)

Figure 56. World Single-crystal Diamond Wafers Production Value Market Share by Grade (2021-2032)

Figure 57. World Single-crystal Diamond Wafers Average Price by Grade (2021-2032) & (US\$/Piece)

Figure 58. World Single-crystal Diamond Wafers Production Value by Application, (USD Million), 2021 & 2025 & 2032

Figure 59. World Single-crystal Diamond Wafers Production Value Market Share by Application in 2025

Figure 60. RF Power, 5G & Satellites

Figure 61. Power Electronics

Figure 62. Cloud & AI Compute

Figure 63. Quantum Technologies

Figure 64. Others

Figure 65. World Single-crystal Diamond Wafers Production Market Share by Application (2021-2032)

Figure 66. World Single-crystal Diamond Wafers Production Value Market Share by Application (2021-2032)

Figure 67. World Single-crystal Diamond Wafers Average Price by Application (2021-2032) & (US\$/Piece)

Figure 68. Single-crystal Diamond Wafers Industry Chain

Figure 69. Single-crystal Diamond Wafers Procurement Model

Figure 70. Single-crystal Diamond Wafers Sales Model

Figure 71. Single-crystal Diamond Wafers Sales Channels, Direct Sales, and Distribution

Figure 72. Methodology

Figure 73. Research Process and Data Source

## I would like to order

Product name: Global Single-crystal Diamond Wafers Supply, Demand and Key Producers, 2026-2032

Product link: <https://marketpublishers.com/r/G9BA3C99B260EN.html>

Price: US\$ 4,480.00 (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/G9BA3C99B260EN.html>