

Global Silicon Aspherical Micro Lens Array (MLA) Market 2026 by Manufacturers, Regions, Type and Application, Forecast to 2032

<https://marketpublishers.com/r/GC482D676227EN.html>

Date: June 2026

Pages: 103

Price: US\$ 3,480.00 (Single User License)

ID: GC482D676227EN

Abstracts

According to our (Global Info Research) latest study, the global Silicon Aspherical Micro Lens Array (MLA) market size was valued at US\$ 18.50 million in 2025 and is forecast to a readjusted size of US\$ 41.94 million by 2032 with a CAGR of 12.6% during review period.

Silicon Aspherical Micro Lens Array (MLA) is a semiconductor-based micro-optical component manufactured from single-crystal silicon wafers and designed with aspherical micro-lens geometries for high-precision beam shaping, infrared optical control, aberration correction, and wafer-level optical integration in advanced photonic systems. Compared with conventional spherical MLA structures, it provides improved optical focusing accuracy, lower aberration, better infrared beam control, and stronger compatibility with compact semiconductor-integrated optical modules. Its advantages include high structural precision, strong thermal stability, excellent batch consistency, semiconductor process compatibility, reduced optical distortion, and reliable performance in high-integration optical systems. In 2025, production was 310,000 units and the average price was USD 58 per unit. The industry's capacity utilization rate in 2025 was about 80% and the average gross margin was around 45%. Upstream, the key raw materials include single-crystal silicon wafers and photoresist, with representative suppliers such as Shin-Etsu Chemical, SUMCO, GlobalWafers, Siltronic, JSR, Tokyo Ohka Kogyo, and Merck providing wafer substrates and lithography materials. The midstream segment focuses on aspherical optical structure design, wafer-level lithography, precision etching, micro-lens profile formation, coating, alignment, optical testing, and reliability validation, which determine infrared optical efficiency, dimensional accuracy, aberration correction capability, coupling performance, and mass-production consistency. Downstream, Silicon Aspherical Micro Lens Array (MLA) is

mainly used in automotive, medical, and optical communication modules, with representative customers including Hesai Technology, RoboSense, Innovusion, Luminar Technologies, Valeo, GE HealthCare, Philips Healthcare, Medtronic, Coherent, Lumentum, Broadcom, and Cisco.

Silicon Aspherical Micro Lens Array (MLA) will gain more use in automotive LiDAR, medical optics, and optical communication modules where infrared beam control, aberration correction, and compact wafer-level integration are critical. In LiDAR and optical communication systems, its aspherical silicon structure can improve focusing accuracy, coupling efficiency, and signal transmission quality while supporting smaller module design. Future development will be driven by advanced driver assistance, robotic perception, minimally invasive medical imaging, and high-speed optical interconnects, with product upgrades focusing on infrared performance, profile accuracy, process compatibility, and batch consistency.

This report is a detailed and comprehensive analysis for global Silicon Aspherical Micro Lens Array (MLA) market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2025, are provided.

Key Features:

Global Silicon Aspherical Micro Lens Array (MLA) market size and forecasts, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2021-2032

Global Silicon Aspherical Micro Lens Array (MLA) market size and forecasts by region and country, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2021-2032

Global Silicon Aspherical Micro Lens Array (MLA) market size and forecasts, by Type and by Application, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2021-2032

Global Silicon Aspherical Micro Lens Array (MLA) market shares of main players, shipments in revenue (\$ Million), sales quantity (K Units), and ASP (US\$/Unit),

2021-2026

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries

To assess the growth potential for Silicon Aspherical Micro Lens Array (MLA)

To forecast future growth in each product and end-use market

To assess competitive factors affecting the marketplace

This report profiles key players in the global Silicon Aspherical Micro Lens Array (MLA) market based on the following parameters - company overview, sales quantity, revenue, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Wafer Level Optronics (China), AGC (Japan), Focuslight (China), BrightView Technologies (USA), Jenoptik (Germany), NALUX (Japan), Suzhou Suna Opto (China), Zhejiang Lante Optics (China), UROPTICS (China), etc.

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

Market Segmentation

Silicon Aspherical Micro Lens Array (MLA) market is split by Type and by Application. For the period 2021-2032, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type

Concentrating Type

Homogenizing Type

Others

Market segment by Array Geometry

Square

Hexagonal

Others

Market segment by Pitch

Pitch

Contents

1 MARKET OVERVIEW

1.1 Product Overview and Scope

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Type: 2021 Versus 2025 Versus 2032

1.3.2 Concentrating Type

1.3.3 Homogenizing Type

1.3.4 Others

1.4 Market Analysis by Array Geometry

1.4.1 Overview: Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Array Geometry: 2021 Versus 2025 Versus 2032

1.4.2 Square

1.4.3 Hexagonal

1.4.4 Others

1.5 Market Analysis by Pitch

1.5.1 Overview: Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Pitch: 2021 Versus 2025 Versus 2032

1.5.2 Pitch

List Of Tables

LIST OF TABLES

Table 1. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Type, (USD Million), 2021 & 2025 & 2032

Table 2. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Array Geometry, (USD Million), 2021 & 2025 & 2032

Table 3. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Pitch, (USD Million), 2021 & 2025 & 2032

Table 4. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Application, (USD Million), 2021 & 2025 & 2032

Table 5. Wafer Level Optronics (China) Basic Information, Manufacturing Base and Competitors

Table 6. Wafer Level Optronics (China) Major Business

Table 7. Wafer Level Optronics (China) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 8. Wafer Level Optronics (China) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 9. Wafer Level Optronics (China) Recent Developments/Updates

Table 10. AGC (Japan) Basic Information, Manufacturing Base and Competitors

Table 11. AGC (Japan) Major Business

Table 12. AGC (Japan) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 13. AGC (Japan) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 14. AGC (Japan) Recent Developments/Updates

Table 15. Focuslight (China) Basic Information, Manufacturing Base and Competitors

Table 16. Focuslight (China) Major Business

Table 17. Focuslight (China) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 18. Focuslight (China) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 19. Focuslight (China) Recent Developments/Updates

Table 20. BrightView Technologies (USA) Basic Information, Manufacturing Base and Competitors

Table 21. BrightView Technologies (USA) Major Business

Table 22. BrightView Technologies (USA) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 23. BrightView Technologies (USA) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 24. BrightView Technologies (USA) Recent Developments/Updates

Table 25. Jenoptik (Germany) Basic Information, Manufacturing Base and Competitors

Table 26. Jenoptik (Germany) Major Business

Table 27. Jenoptik (Germany) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 28. Jenoptik (Germany) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 29. Jenoptik (Germany) Recent Developments/Updates

Table 30. NALUX (Japan) Basic Information, Manufacturing Base and Competitors

Table 31. NALUX (Japan) Major Business

Table 32. NALUX (Japan) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 33. NALUX (Japan) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 34. NALUX (Japan) Recent Developments/Updates

Table 35. Suzhou Suna Opto (China) Basic Information, Manufacturing Base and Competitors

Table 36. Suzhou Suna Opto (China) Major Business

Table 37. Suzhou Suna Opto (China) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 38. Suzhou Suna Opto (China) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 39. Suzhou Suna Opto (China) Recent Developments/Updates

Table 40. Zhejiang Lante Optics (China) Basic Information, Manufacturing Base and Competitors

Table 41. Zhejiang Lante Optics (China) Major Business

Table 42. Zhejiang Lante Optics (China) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 43. Zhejiang Lante Optics (China) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross

Margin and Market Share (2021-2026)

Table 44. Zhejiang Lante Optics (China) Recent Developments/Updates

Table 45. UROPTICS (China) Basic Information, Manufacturing Base and Competitors

Table 46. UROPTICS (China) Major Business

Table 47. UROPTICS (China) Silicon Aspherical Micro Lens Array (MLA) Product and Services

Table 48. UROPTICS (China) Silicon Aspherical Micro Lens Array (MLA) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 49. UROPTICS (China) Recent Developments/Updates

Table 50. Global Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Manufacturer (2021-2026) & (K Units)

Table 51. Global Silicon Aspherical Micro Lens Array (MLA) Revenue by Manufacturer (2021-2026) & (USD Million)

Table 52. Global Silicon Aspherical Micro Lens Array (MLA) Average Price by Manufacturer (2021-2026) & (US\$/Unit)

Table 53. Market Position of Manufacturers in Silicon Aspherical Micro Lens Array (MLA), (Tier 1, Tier 2, and Tier 3), Based on Revenue in 2025

Table 54. Head Office and Silicon Aspherical Micro Lens Array (MLA) Production Site of Key Manufacturer

Table 55. Silicon Aspherical Micro Lens Array (MLA) Market: Company Product Type Footprint

Table 56. Silicon Aspherical Micro Lens Array (MLA) Market: Company Product Application Footprint

Table 57. Silicon Aspherical Micro Lens Array (MLA) New Market Entrants and Barriers to Market Entry

Table 58. Silicon Aspherical Micro Lens Array (MLA) Mergers, Acquisition, Agreements, and Collaborations

Table 59. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Region (2021-2025-2032) & (USD Million) & CAGR

Table 60. Global Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Region (2021-2026) & (K Units)

Table 61. Global Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Region (2027-2032) & (K Units)

Table 62. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Region (2021-2026) & (USD Million)

Table 63. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Region (2027-2032) & (USD Million)

Table 64. Global Silicon Aspherical Micro Lens Array (MLA) Average Price by Region

(2021-2026) & (US\$/Unit)

Table 65. Global Silicon Aspherical Micro Lens Array (MLA) Average Price by Region (2027-2032) & (US\$/Unit)

Table 66. Global Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2021-2026) & (K Units)

Table 67. Global Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2027-2032) & (K Units)

Table 68. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Type (2021-2026) & (USD Million)

Table 69. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Type (2027-2032) & (USD Million)

Table 70. Global Silicon Aspherical Micro Lens Array (MLA) Average Price by Type (2021-2026) & (US\$/Unit)

Table 71. Global Silicon Aspherical Micro Lens Array (MLA) Average Price by Type (2027-2032) & (US\$/Unit)

Table 72. Global Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2021-2026) & (K Units)

Table 73. Global Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2027-2032) & (K Units)

Table 74. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Application (2021-2026) & (USD Million)

Table 75. Global Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Application (2027-2032) & (USD Million)

Table 76. Global Silicon Aspherical Micro Lens Array (MLA) Average Price by Application (2021-2026) & (US\$/Unit)

Table 77. Global Silicon Aspherical Micro Lens Array (MLA) Average Price by Application (2027-2032) & (US\$/Unit)

Table 78. North America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2021-2026) & (K Units)

Table 79. North America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2027-2032) & (K Units)

Table 80. North America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2021-2026) & (K Units)

Table 81. North America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2027-2032) & (K Units)

Table 82. North America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2021-2026) & (K Units)

Table 83. North America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2027-2032) & (K Units)

Table 84. North America Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2021-2026) & (USD Million)

Table 85. North America Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2027-2032) & (USD Million)

Table 86. Europe Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2021-2026) & (K Units)

Table 87. Europe Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2027-2032) & (K Units)

Table 88. Europe Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2021-2026) & (K Units)

Table 89. Europe Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2027-2032) & (K Units)

Table 90. Europe Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2021-2026) & (K Units)

Table 91. Europe Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2027-2032) & (K Units)

Table 92. Europe Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2021-2026) & (USD Million)

Table 93. Europe Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2027-2032) & (USD Million)

Table 94. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2021-2026) & (K Units)

Table 95. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2027-2032) & (K Units)

Table 96. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2021-2026) & (K Units)

Table 97. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2027-2032) & (K Units)

Table 98. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Region (2021-2026) & (K Units)

Table 99. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Region (2027-2032) & (K Units)

Table 100. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Region (2021-2026) & (USD Million)

Table 101. Asia-Pacific Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Region (2027-2032) & (USD Million)

Table 102. South America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2021-2026) & (K Units)

Table 103. South America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by

Type (2027-2032) & (K Units)

Table 104. South America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2021-2026) & (K Units)

Table 105. South America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2027-2032) & (K Units)

Table 106. South America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2021-2026) & (K Units)

Table 107. South America Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2027-2032) & (K Units)

Table 108. South America Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2021-2026) & (USD Million)

Table 109. South America Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2027-2032) & (USD Million)

Table 110. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2021-2026) & (K Units)

Table 111. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Type (2027-2032) & (K Units)

Table 112. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2021-2026) & (K Units)

Table 113. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Application (2027-2032) & (K Units)

Table 114. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2021-2026) & (K Units)

Table 115. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Sales Quantity by Country (2027-2032) & (K Units)

Table 116. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2021-2026) & (USD Million)

Table 117. Middle East & Africa Silicon Aspherical Micro Lens Array (MLA) Consumption Value by Country (2027-2032) & (USD Million)

Table 118. Silicon Aspherical Micro Lens Array (MLA) Raw Material

Table 119. Key Manufacturers of Silicon Aspherical Micro Lens Array (MLA) Raw Materials

Table 120. Silicon Aspherical Micro Lens Array (MLA) Typical Distributors

Table 121. Silicon Aspherical Micro Lens Array (MLA) Typical Customers

List Of Figures

LIST OF FIGURES

Figure 1. Silicon Aspherical Micro Lens Array (MLA) Picture

Figure 2. Global Silicon Aspherical Micro Lens Array (MLA) Revenue by Type, (USD Million), 2021 & 2025 & 2032

Figure 3. Global Silicon Aspherical Micro Lens Array (MLA) Revenue Market Share by Type in 2025

Figure 4. Concentrating Type Examples

Figure 5. Homogenizing Type Examples

Figure 6. Others Examples

Figure 7. Global Silicon Aspherical Micro Lens Array (MLA) Revenue by Array Geometry, (USD Million), 2021 & 2025 & 2032

Figure 8. Global Silicon Aspherical Micro Lens Array (MLA) Revenue Market Share by Array Geometry in 2025

Figure 9. Square Examples

Figure 10. Hexagonal Examples

Figure 11. Others Examples

Figure 12. Global Silicon Aspherical Micro Lens Array (MLA) Revenue by Pitch, (USD Million), 2021 & 2025 & 2032

Figure 13. Global Silicon Aspherical Micro Lens Array (MLA) Revenue Market Share by Pitch in 2025

Figure 14. Pitch

I would like to order

Product name: Global Silicon Aspherical Micro Lens Array (MLA) Market 2026 by Manufacturers, Regions, Type and Application, Forecast to 2032

Product link: <https://marketpublishers.com/r/GC482D676227EN.html>

Price: US\$ 3,480.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GC482D676227EN.html>