

# Global Phase Shift Masks (PSM) Supply, Demand and Key Producers, 2026-2032

<https://marketpublishers.com/r/G35C4A00C869EN.html>

Date: June 2026

Pages: 107

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

ID: G35C4A00C869EN

## Abstracts

The global Phase Shift Masks (PSM) market size is expected to reach \$ 1892 million by 2032, rising at a market growth of 6.6% CAGR during the forecast period (2026-2032).

Phase shift masks are high-end mask products used in advanced lithography. Their core function is not merely to block light, but to intentionally modify the phase and intensity distribution of transmitted or reflected light by introducing localized differences in refractive index, transmittance, or structural features on the mask, thereby improving patterning resolution, edge contrast, and depth of focus and addressing the narrowing process window and rising yield-control difficulty in advanced semiconductor and high-definition display manufacturing. In semiconductor applications, Photronics applies embedded attenuated phase-shift masks at 248 nm and 193 nm wavelengths and uses a 6% transmission MoSiON absorber to generate a 180-degree phase shift, supported by dry etch, defect repair, and AIMS verification for advanced processes. In display applications, SK-Electronics and Photronics both combine phase-shift technology with half-tone, multi-tone, or double-layer masks to reduce the number of exposures, shorten panel manufacturing flows, improve display quality, and support large glass substrates and high-generation production lines. At the same time, HOYA and S&S Tech provide blank masks suited to phase-shift masks and high-NA EUV, meaning that upstream blank materials and downstream finished photomasks together form the supply structure of this segment. Typical customers include wafer fabs, IDMs, mask shops, panel manufacturers, and certain electronic device makers. Delivery formats include not only one-time custom mask supply, but also supporting services such as cleaning, recertification, and data-linked order collaboration. In essence, the PSM industry is a specialized photomask segment jointly driven by high-precision materials, microfabrication, phase-control design, defect management, and coordinated customer delivery.

The essence of the phase shift mask industry is that it turns optical phase control capability into a manufacturable, scalable, and verifiable high-precision product on top of the traditional photomask platform. Its competitiveness therefore does not come only from pattern writing accuracy, but from the combination of materials systems, phase-structure design, etch and cleaning processes, defect repair, metrology verification, and collaborative customer development. Photronics states that embedded attenuated phase-shift masks are already used at 248 nm and 193 nm wavelengths and employ a 6% transmission MoSiON absorber to generate a 180-degree phase shift, thereby improving resolution and depth of focus. SK-Electronics shows from the display side that phase-shift technology not only improves resolution, but can also reduce exposure counts and optimize panel processing through multi-tone and half-tone concepts. Looking further upstream, the phase-shifting blank masks provided by HOYA and S&S Tech indicate that the real barrier in this industry is not a single product point, but a continuous technology chain extending from blank materials to finished masks. Accordingly, PSM is not merely an upgraded version of an ordinary mask, but a systematic product in the advanced lithography era that connects materials, fabrication, metrology, and application validation, and its value is likely to continue expanding as linewidths shrink, display complexity rises, and new process technologies are introduced.

From an industry-structure perspective, phase shift masks are a highly concentrated niche with high qualification thresholds and strong customer lock-in. Japanese companies such as DNP, TOPPAN, HOYA, and SK-Electronics have long cultivated photomasks and related materials, building deep capabilities from precision processing to customer collaboration. DNP explicitly states that it supplies world-class products supporting semiconductor manufacturing, while TOPPAN continues to develop phase shift masks and photomasks for next-generation exposure technologies. At the same time, Photronics in the United States represents a more service-oriented merchant model that goes beyond mask delivery to include recertification, cleaning, data standardization, and online collaborative ordering, making it easier for customers to maintain lead time and yield through multi-site manufacturing and complex process introductions. Companies in Mainland China remain more focused on acceleration and local substitution, with the China Resources Microelectronics system having already disclosed an advanced mask line and incorporated PSM, OPC, and dry-etch capabilities into its manufacturing roadmap. This suggests that future competition will not be driven primarily by the price of a single mask, but rather by who can more reliably provide advanced blanks, sophisticated structures, fast delivery, and sustained support.

Looking ahead, the outlook for phase shift masks remains structurally positive. First, the advance of semiconductor process technology is far from over. HOYA clearly notes continuing demand for mask blanks suited to phase-shifting masks and high-NA EUV lithography, while TOPPAN is advancing EUV photomask solutions that reduce peripheral reflection and improve dimensional stability. Second, the display market is not a mature stagnant market. HOYA explicitly states that Chinese manufacturers are leading growth in FPD-related demand, that smartphones remain the largest application, and that automotive and wearable devices are expanding their share. Third, policy frameworks are creating additional room for localization and supply-chain buildout. The U.S. CHIPS program provides large-scale semiconductor manufacturing incentives, the European Chips Act is designed to reinforce the local ecosystem and reduce external dependencies, and Chinese local industrial policy explicitly supports photomasks as a key category of advanced semiconductor manufacturing materials. Taken together, as long as global fab expansion continues, advanced logic and high-performance computing keep moving forward, and higher-generation displays and new terminal devices remain on an upgrade path, both PSM and upstream blank masks are well positioned to benefit. The industry's prosperity is therefore more likely to be expressed through structural upgrading than through pure volume expansion alone.

This report studies the global Phase Shift Masks (PSM) production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Phase Shift Masks (PSM) 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 Phase Shift Masks (PSM) that contribute to its increasing demand across many markets.

#### Highlights and key features of the study

Global Phase Shift Masks (PSM) total production and demand, 2021-2032, (Million Pcs)

Global Phase Shift Masks (PSM) total production value, 2021-2032, (USD Million)

Global Phase Shift Masks (PSM) production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Million Pcs), (based on production site)

Global Phase Shift Masks (PSM) consumption by region & country, CAGR, 2021-2032 & (Million Pcs)

U.S. VS China: Phase Shift Masks (PSM) domestic production, consumption, key domestic manufacturers and share

Global Phase Shift Masks (PSM) production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Million Pcs)

Global Phase Shift Masks (PSM) production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Million Pcs)

Global Phase Shift Masks (PSM) production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Million Pcs)

This report profiles key players in the global Phase Shift Masks (PSM) 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 Photronics, DNP, Toppan, HOYA, China Resources Microelectronics, SK-Electronics Co., Ltd., S&S Tech Corporation, 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 Phase Shift Masks (PSM) market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Million Pcs) and average price (US\$/Pcs) by manufacturer, by Type, 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 Phase Shift Masks (PSM) Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

#### Global Phase Shift Masks (PSM) Market, Segmentation by Type:

Halftone Mask (Attenuated PSM)

Levenson Mask (Alternating PSM)

RimPSM

Sub ResolutionPSM

Self-alignmentPSM

Chrome-lessPSM /All -transparent PSM

Complex PSM

#### Global Phase Shift Masks (PSM) Market, Segmentation by Product Level:

Phase-Shift Blank Mask

Finished Phase-Shift Photomask

#### Global Phase Shift Masks (PSM) Market, Segmentation by Phase-Shift Method:

Attenuated Phase-Shift Mask

Alternating Phase-Shift Mask

Other Phase-Shift Structures

#### Global Phase Shift Masks (PSM) Market, Segmentation by Application:

Semiconductor Integrated Circuit Manufacturing

Flat Panel Display Manufacturing

Power and Discrete Device Manufacturing

MEMS and Sensor Manufacturing

Optoelectronic and Compound Semiconductor Manufacturing

Research and Process Development

#### Companies Profiled:

Photronics

DNP

Toppan

HOYA

China Resources Microelectronics

SK-Electronics Co., Ltd.

S&S Tech Corporation

#### Key Questions Answered:

1. How big is the global Phase Shift Masks (PSM) market?
2. What is the demand of the global Phase Shift Masks (PSM) market?
3. What is the year over year growth of the global Phase Shift Masks (PSM) market?
4. What is the production and production value of the global Phase Shift Masks (PSM) market?
5. Who are the key producers in the global Phase Shift Masks (PSM) market?
6. What are the growth factors driving the market demand?

## Contents

### 1 SUPPLY SUMMARY

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

### 2 DEMAND SUMMARY

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

### 3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

- 3.1 World Phase Shift Masks (PSM) Production Value by Manufacturer (2021-2026)
- 3.2 World Phase Shift Masks (PSM) Production by Manufacturer (2021-2026)
- 3.3 World Phase Shift Masks (PSM) Average Price by Manufacturer (2021-2026)
- 3.4 Phase Shift Masks (PSM) Company Evaluation Quadrant
- 3.5 Industry Rank and Concentration Rate (CR)
  - 3.5.1 Global Phase Shift Masks (PSM) Industry Rank of Major Manufacturers
  - 3.5.2 Global Concentration Ratios (CR4) for Phase Shift Masks (PSM) in 2025
  - 3.5.3 Global Concentration Ratios (CR8) for Phase Shift Masks (PSM) in 2025
- 3.6 Phase Shift Masks (PSM) Market: Overall Company Footprint Analysis
  - 3.6.1 Phase Shift Masks (PSM) Market: Region Footprint
  - 3.6.2 Phase Shift Masks (PSM) Market: Company Product Type Footprint
  - 3.6.3 Phase Shift Masks (PSM) 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: Phase Shift Masks (PSM) Production Value Comparison
  - 4.1.1 United States VS China: Phase Shift Masks (PSM) Production Value Comparison (2021 & 2025 & 2032)
  - 4.1.2 United States VS China: Phase Shift Masks (PSM) Production Value Market Share Comparison (2021 & 2025 & 2032)
- 4.2 United States VS China: Phase Shift Masks (PSM) Production Comparison
  - 4.2.1 United States VS China: Phase Shift Masks (PSM) Production Comparison (2021 & 2025 & 2032)
  - 4.2.2 United States VS China: Phase Shift Masks (PSM) Production Market Share Comparison (2021 & 2025 & 2032)
- 4.3 United States VS China: Phase Shift Masks (PSM) Consumption Comparison
  - 4.3.1 United States VS China: Phase Shift Masks (PSM) Consumption Comparison (2021 & 2025 & 2032)
  - 4.3.2 United States VS China: Phase Shift Masks (PSM) Consumption Market Share Comparison (2021 & 2025 & 2032)
- 4.4 United States Based Phase Shift Masks (PSM) Manufacturers and Market Share, 2021-2026

4.4.1 United States Based Phase Shift Masks (PSM) Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers Phase Shift Masks (PSM) Production Value (2021-2026)

4.4.3 United States Based Manufacturers Phase Shift Masks (PSM) Production (2021-2026)

4.5 China Based Phase Shift Masks (PSM) Manufacturers and Market Share

4.5.1 China Based Phase Shift Masks (PSM) Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers Phase Shift Masks (PSM) Production Value (2021-2026)

4.5.3 China Based Manufacturers Phase Shift Masks (PSM) Production (2021-2026)

4.6 Rest of World Based Phase Shift Masks (PSM) Manufacturers and Market Share, 2021-2026

4.6.1 Rest of World Based Phase Shift Masks (PSM) Manufacturers, Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers Phase Shift Masks (PSM) Production Value (2021-2026)

4.6.3 Rest of World Based Manufacturers Phase Shift Masks (PSM) Production (2021-2026)

## **5 MARKET ANALYSIS BY TYPE**

5.1 World Phase Shift Masks (PSM) Market Size Overview by Type: 2021 VS 2025 VS 2032

5.2 Segment Introduction by Type

5.2.1 Halftone Mask (Attenuated PSM)

5.2.2 Levenson Mask (Alternating PSM)

5.2.3 RimPSM

5.2.4 Sub ResolutionPSM

5.2.5 Self-alignmentPSM

5.2.6 Chrome-lessPSM /All -transparent PSM

5.2.7 Complex PSM

5.3 Market Segment by Type

5.3.1 World Phase Shift Masks (PSM) Production by Type (2021-2032)

5.3.2 World Phase Shift Masks (PSM) Production Value by Type (2021-2032)

5.3.3 World Phase Shift Masks (PSM) Average Price by Type (2021-2032)

## **6 MARKET ANALYSIS BY PRODUCT LEVEL**

6.1 World Phase Shift Masks (PSM) Market Size Overview by Product Level: 2021 VS 2025 VS 2032

6.2 Segment Introduction by Product Level

6.2.1 Phase-Shift Blank Mask

6.2.2 Finished Phase-Shift Photomask

6.3 Market Segment by Product Level

6.3.1 World Phase Shift Masks (PSM) Production by Product Level (2021-2032)

6.3.2 World Phase Shift Masks (PSM) Production Value by Product Level (2021-2032)

6.3.3 World Phase Shift Masks (PSM) Average Price by Product Level (2021-2032)

## **7 MARKET ANALYSIS BY PHASE-SHIFT METHOD**

7.1 World Phase Shift Masks (PSM) Market Size Overview by Phase-Shift Method: 2021 VS 2025 VS 2032

7.2 Segment Introduction by Phase-Shift Method

7.2.1 Attenuated Phase-Shift Mask

7.2.2 Alternating Phase-Shift Mask

7.2.3 Other Phase-Shift Structures

7.3 Market Segment by Phase-Shift Method

7.3.1 World Phase Shift Masks (PSM) Production by Phase-Shift Method (2021-2032)

7.3.2 World Phase Shift Masks (PSM) Production Value by Phase-Shift Method (2021-2032)

7.3.3 World Phase Shift Masks (PSM) Average Price by Phase-Shift Method (2021-2032)

## **8 MARKET ANALYSIS BY APPLICATION**

8.1 World Phase Shift Masks (PSM) Market Size Overview by Application: 2021 VS 2025 VS 2032

8.2 Segment Introduction by Application

8.2.1 Semiconductor Integrated Circuit Manufacturing

8.2.2 Flat Panel Display Manufacturing

8.2.3 Power and Discrete Device Manufacturing

8.2.4 MEMS and Sensor Manufacturing

8.2.5 Optoelectronic and Compound Semiconductor Manufacturing

8.2.6 Research and Process Development

8.3 Market Segment by Application

8.3.1 World Phase Shift Masks (PSM) Production by Application (2021-2032)

8.3.2 World Phase Shift Masks (PSM) Production Value by Application (2021-2032)

8.3.3 World Phase Shift Masks (PSM) Average Price by Application (2021-2032)

## **9 COMPANY PROFILES**

### **9.1 Photronics**

#### **9.1.1 Photronics Details**

#### **9.1.2 Photronics Major Business**

#### **9.1.3 Photronics Phase Shift Masks (PSM) Product and Services**

#### **9.1.4 Photronics Phase Shift Masks (PSM) Production, Price, Value, Gross Margin and Market Share (2021-2026)**

#### **9.1.5 Photronics Recent Developments/Updates**

#### **9.1.6 Photronics Competitive Strengths & Weaknesses**

### **9.2 DNP**

#### **9.2.1 DNP Details**

#### **9.2.2 DNP Major Business**

#### **9.2.3 DNP Phase Shift Masks (PSM) Product and Services**

#### **9.2.4 DNP Phase Shift Masks (PSM) Production, Price, Value, Gross Margin and Market Share (2021-2026)**

#### **9.2.5 DNP Recent Developments/Updates**

#### **9.2.6 DNP Competitive Strengths & Weaknesses**

### **9.3 Toppan**

#### **9.3.1 Toppan Details**

#### **9.3.2 Toppan Major Business**

#### **9.3.3 Toppan Phase Shift Masks (PSM) Product and Services**

#### **9.3.4 Toppan Phase Shift Masks (PSM) Production, Price, Value, Gross Margin and Market Share (2021-2026)**

#### **9.3.5 Toppan Recent Developments/Updates**

#### **9.3.6 Toppan Competitive Strengths & Weaknesses**

### **9.4 HOYA**

#### **9.4.1 HOYA Details**

#### **9.4.2 HOYA Major Business**

#### **9.4.3 HOYA Phase Shift Masks (PSM) Product and Services**

#### **9.4.4 HOYA Phase Shift Masks (PSM) Production, Price, Value, Gross Margin and Market Share (2021-2026)**

#### **9.4.5 HOYA Recent Developments/Updates**

#### **9.4.6 HOYA Competitive Strengths & Weaknesses**

### **9.5 China Resources Microelectronics**

#### **9.5.1 China Resources Microelectronics Details**

9.5.2 China Resources Microelectronics Major Business

9.5.3 China Resources Microelectronics Phase Shift Masks (PSM) Product and Services

9.5.4 China Resources Microelectronics Phase Shift Masks (PSM) Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.5.5 China Resources Microelectronics Recent Developments/Updates

9.5.6 China Resources Microelectronics Competitive Strengths & Weaknesses

9.6 SK-Electronics Co., Ltd.

9.6.1 SK-Electronics Co., Ltd. Details

9.6.2 SK-Electronics Co., Ltd. Major Business

9.6.3 SK-Electronics Co., Ltd. Phase Shift Masks (PSM) Product and Services

9.6.4 SK-Electronics Co., Ltd. Phase Shift Masks (PSM) Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.6.5 SK-Electronics Co., Ltd. Recent Developments/Updates

9.6.6 SK-Electronics Co., Ltd. Competitive Strengths & Weaknesses

9.7 S&S Tech Corporation

9.7.1 S&S Tech Corporation Details

9.7.2 S&S Tech Corporation Major Business

9.7.3 S&S Tech Corporation Phase Shift Masks (PSM) Product and Services

9.7.4 S&S Tech Corporation Phase Shift Masks (PSM) Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.7.5 S&S Tech Corporation Recent Developments/Updates

9.7.6 S&S Tech Corporation Competitive Strengths & Weaknesses

## **10 INDUSTRY CHAIN ANALYSIS**

10.1 Phase Shift Masks (PSM) Industry Chain

10.2 Phase Shift Masks (PSM) Upstream Analysis

10.2.1 Phase Shift Masks (PSM) Core Raw Materials

10.2.2 Main Manufacturers of Phase Shift Masks (PSM) Core Raw Materials

10.3 Midstream Analysis

10.4 Downstream Analysis

10.5 Phase Shift Masks (PSM) Production Mode

10.6 Phase Shift Masks (PSM) Procurement Model

10.7 Phase Shift Masks (PSM) Industry Sales Model and Sales Channels

10.7.1 Phase Shift Masks (PSM) Sales Model

10.7.2 Phase Shift Masks (PSM) 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 Phase Shift Masks (PSM) Production Value by Region (2021, 2025 and 2032) & (USD Million)

Table 2. World Phase Shift Masks (PSM) Production Value by Region (2021-2026) & (USD Million)

Table 3. World Phase Shift Masks (PSM) Production Value by Region (2027-2032) & (USD Million)

Table 4. World Phase Shift Masks (PSM) Production Value Market Share by Region (2021-2026)

Table 5. World Phase Shift Masks (PSM) Production Value Market Share by Region (2027-2032)

Table 6. World Phase Shift Masks (PSM) Production by Region (2021-2026) & (Million Pcs)

Table 7. World Phase Shift Masks (PSM) Production by Region (2027-2032) & (Million Pcs)

Table 8. World Phase Shift Masks (PSM) Production Market Share by Region (2021-2026)

Table 9. World Phase Shift Masks (PSM) Production Market Share by Region (2027-2032)

Table 10. World Phase Shift Masks (PSM) Average Price by Region (2021-2026) & (US\$/Pcs)

Table 11. World Phase Shift Masks (PSM) Average Price by Region (2027-2032) & (US\$/Pcs)

Table 12. Phase Shift Masks (PSM) Major Market Trends

Table 13. World Phase Shift Masks (PSM) Consumption Growth Rate Forecast by Region (2021 & 2025 & 2032) & (Million Pcs)

Table 14. World Phase Shift Masks (PSM) Consumption by Region (2021-2026) & (Million Pcs)

Table 15. World Phase Shift Masks (PSM) Consumption Forecast by Region (2027-2032) & (Million Pcs)

Table 16. World Phase Shift Masks (PSM) Production Value by Manufacturer (2021-2026) & (USD Million)

Table 17. Production Value Market Share of Key Phase Shift Masks (PSM) Producers in 2025

Table 18. World Phase Shift Masks (PSM) Production by Manufacturer (2021-2026) & (Million Pcs)

Table 19. Production Market Share of Key Phase Shift Masks (PSM) Producers in 2025

Table 20. World Phase Shift Masks (PSM) Average Price by Manufacturer (2021-2026) & (US\$/Pcs)

Table 21. Global Phase Shift Masks (PSM) Company Evaluation Quadrant

Table 22. World Phase Shift Masks (PSM) Industry Rank of Major Manufacturers, Based on Production Value in 2025

Table 23. Head Office and Phase Shift Masks (PSM) Production Site of Key Manufacturer

Table 24. Phase Shift Masks (PSM) Market: Company Product Type Footprint

Table 25. Phase Shift Masks (PSM) Market: Company Product Application Footprint

Table 26. Phase Shift Masks (PSM) Competitive Factors

Table 27. Phase Shift Masks (PSM) New Entrant and Capacity Expansion Plans

Table 28. Phase Shift Masks (PSM) Mergers & Acquisitions Activity

Table 29. United States VS China Phase Shift Masks (PSM) Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)

Table 30. United States VS China Phase Shift Masks (PSM) Production Comparison, (2021 & 2025 & 2032) & (Million Pcs)

Table 31. United States VS China Phase Shift Masks (PSM) Consumption Comparison, (2021 & 2025 & 2032) & (Million Pcs)

Table 32. United States Based Phase Shift Masks (PSM) Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers Phase Shift Masks (PSM) Production Value, (2021-2026) & (USD Million)

Table 34. United States Based Manufacturers Phase Shift Masks (PSM) Production Value Market Share (2021-2026)

Table 35. United States Based Manufacturers Phase Shift Masks (PSM) Production (2021-2026) & (Million Pcs)

Table 36. United States Based Manufacturers Phase Shift Masks (PSM) Production Market Share (2021-2026)

Table 37. China Based Phase Shift Masks (PSM) Manufacturers, Headquarters and Production Site (Province, Country)

Table 38. China Based Manufacturers Phase Shift Masks (PSM) Production Value, (2021-2026) & (USD Million)

Table 39. China Based Manufacturers Phase Shift Masks (PSM) Production Value Market Share (2021-2026)

Table 40. China Based Manufacturers Phase Shift Masks (PSM) Production, (2021-2026) & (Million Pcs)

Table 41. China Based Manufacturers Phase Shift Masks (PSM) Production Market Share (2021-2026)

Table 42. Rest of World Based Phase Shift Masks (PSM) Manufacturers, Headquarters and Production Site (State, Country)

Table 43. Rest of World Based Manufacturers Phase Shift Masks (PSM) Production Value, (2021-2026) & (USD Million)

Table 44. Rest of World Based Manufacturers Phase Shift Masks (PSM) Production Value Market Share (2021-2026)

Table 45. Rest of World Based Manufacturers Phase Shift Masks (PSM) Production, (2021-2026) & (Million Pcs)

Table 46. Rest of World Based Manufacturers Phase Shift Masks (PSM) Production Market Share (2021-2026)

Table 47. World Phase Shift Masks (PSM) Production Value by Type, (USD Million), 2021 & 2025 & 2032

Table 48. World Phase Shift Masks (PSM) Production by Type (2021-2026) & (Million Pcs)

Table 49. World Phase Shift Masks (PSM) Production by Type (2027-2032) & (Million Pcs)

Table 50. World Phase Shift Masks (PSM) Production Value by Type (2021-2026) & (USD Million)

Table 51. World Phase Shift Masks (PSM) Production Value by Type (2027-2032) & (USD Million)

Table 52. World Phase Shift Masks (PSM) Average Price by Type (2021-2026) & (US\$/Pcs)

Table 53. World Phase Shift Masks (PSM) Average Price by Type (2027-2032) & (US\$/Pcs)

Table 54. World Phase Shift Masks (PSM) Production Value by Product Level, (USD Million), 2021 & 2025 & 2032

Table 55. World Phase Shift Masks (PSM) Production by Product Level (2021-2026) & (Million Pcs)

Table 56. World Phase Shift Masks (PSM) Production by Product Level (2027-2032) & (Million Pcs)

Table 57. World Phase Shift Masks (PSM) Production Value by Product Level (2021-2026) & (USD Million)

Table 58. World Phase Shift Masks (PSM) Production Value by Product Level (2027-2032) & (USD Million)

Table 59. World Phase Shift Masks (PSM) Average Price by Product Level (2021-2026) & (US\$/Pcs)

Table 60. World Phase Shift Masks (PSM) Average Price by Product Level (2027-2032) & (US\$/Pcs)

Table 61. World Phase Shift Masks (PSM) Production Value by Phase-Shift Method,

(USD Million), 2021 & 2025 & 2032

Table 62. World Phase Shift Masks (PSM) Production by Phase-Shift Method (2021-2026) & (Million Pcs)

Table 63. World Phase Shift Masks (PSM) Production by Phase-Shift Method (2027-2032) & (Million Pcs)

Table 64. World Phase Shift Masks (PSM) Production Value by Phase-Shift Method (2021-2026) & (USD Million)

Table 65. World Phase Shift Masks (PSM) Production Value by Phase-Shift Method (2027-2032) & (USD Million)

Table 66. World Phase Shift Masks (PSM) Average Price by Phase-Shift Method (2021-2026) & (US\$/Pcs)

Table 67. World Phase Shift Masks (PSM) Average Price by Phase-Shift Method (2027-2032) & (US\$/Pcs)

Table 68. World Phase Shift Masks (PSM) Production Value by Application, (USD Million), 2021 & 2025 & 2032

Table 69. World Phase Shift Masks (PSM) Production by Application (2021-2026) & (Million Pcs)

Table 70. World Phase Shift Masks (PSM) Production by Application (2027-2032) & (Million Pcs)

Table 71. World Phase Shift Masks (PSM) Production Value by Application (2021-2026) & (USD Million)

Table 72. World Phase Shift Masks (PSM) Production Value by Application (2027-2032) & (USD Million)

Table 73. World Phase Shift Masks (PSM) Average Price by Application (2021-2026) & (US\$/Pcs)

Table 74. World Phase Shift Masks (PSM) Average Price by Application (2027-2032) & (US\$/Pcs)

Table 75. Photronics Basic Information, Manufacturing Base and Competitors

Table 76. Photronics Major Business

Table 77. Photronics Phase Shift Masks (PSM) Product and Services

Table 78. Photronics Phase Shift Masks (PSM) Production (Million Pcs), Price (US\$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 79. Photronics Recent Developments/Updates

Table 80. Photronics Competitive Strengths & Weaknesses

Table 81. DNP Basic Information, Manufacturing Base and Competitors

Table 82. DNP Major Business

Table 83. DNP Phase Shift Masks (PSM) Product and Services

Table 84. DNP Phase Shift Masks (PSM) Production (Million Pcs), Price (US\$/Pcs),

Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 85. DNP Recent Developments/Updates

Table 86. DNP Competitive Strengths & Weaknesses

Table 87. Toppan Basic Information, Manufacturing Base and Competitors

Table 88. Toppan Major Business

Table 89. Toppan Phase Shift Masks (PSM) Product and Services

Table 90. Toppan Phase Shift Masks (PSM) Production (Million Pcs), Price (US\$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 91. Toppan Recent Developments/Updates

Table 92. Toppan Competitive Strengths & Weaknesses

Table 93. HOYA Basic Information, Manufacturing Base and Competitors

Table 94. HOYA Major Business

Table 95. HOYA Phase Shift Masks (PSM) Product and Services

Table 96. HOYA Phase Shift Masks (PSM) Production (Million Pcs), Price (US\$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 97. HOYA Recent Developments/Updates

Table 98. HOYA Competitive Strengths & Weaknesses

Table 99. China Resources Microelectronics Basic Information, Manufacturing Base and Competitors

Table 100. China Resources Microelectronics Major Business

Table 101. China Resources Microelectronics Phase Shift Masks (PSM) Product and Services

Table 102. China Resources Microelectronics Phase Shift Masks (PSM) Production (Million Pcs), Price (US\$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 103. China Resources Microelectronics Recent Developments/Updates

Table 104. China Resources Microelectronics Competitive Strengths & Weaknesses

Table 105. SK-Electronics Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 106. SK-Electronics Co., Ltd. Major Business

Table 107. SK-Electronics Co., Ltd. Phase Shift Masks (PSM) Product and Services

Table 108. SK-Electronics Co., Ltd. Phase Shift Masks (PSM) Production (Million Pcs), Price (US\$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 109. SK-Electronics Co., Ltd. Recent Developments/Updates

Table 110. SK-Electronics Co., Ltd. Competitive Strengths & Weaknesses

Table 111. S&S Tech Corporation Basic Information, Manufacturing Base and Competitors

Table 112. S&S Tech Corporation Major Business

Table 113. S&S Tech Corporation Phase Shift Masks (PSM) Product and Services

Table 114. S&S Tech Corporation Phase Shift Masks (PSM) Production (Million Pcs), Price (US\$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 115. S&S Tech Corporation Recent Developments/Updates

Table 116. S&S Tech Corporation Competitive Strengths & Weaknesses

Table 117. Global Key Players of Phase Shift Masks (PSM) Upstream (Raw Materials)

Table 118. Global Phase Shift Masks (PSM) Typical Customers

Table 119. Phase Shift Masks (PSM) Typical Distributors

## List Of Figures

### LIST OF FIGURES

Figure 1. Phase Shift Masks (PSM) Picture

Figure 2. World Phase Shift Masks (PSM) Production Value: 2021 & 2025 & 2032, (USD Million)

Figure 3. World Phase Shift Masks (PSM) Production Value and Forecast (2021-2032) & (USD Million)

Figure 4. World Phase Shift Masks (PSM) Production (2021-2032) & (Million Pcs)

Figure 5. World Phase Shift Masks (PSM) Average Price (2021-2032) & (US\$/Pcs)

Figure 6. World Phase Shift Masks (PSM) Production Value Market Share by Region (2021-2032)

Figure 7. World Phase Shift Masks (PSM) Production Market Share by Region (2021-2032)

Figure 8. North America Phase Shift Masks (PSM) Production (2021-2032) & (Million Pcs)

Figure 9. Europe Phase Shift Masks (PSM) Production (2021-2032) & (Million Pcs)

Figure 10. China Phase Shift Masks (PSM) Production (2021-2032) & (Million Pcs)

Figure 11. Japan Phase Shift Masks (PSM) Production (2021-2032) & (Million Pcs)

Figure 12. South Korea Phase Shift Masks (PSM) Production (2021-2032) & (Million Pcs)

Figure 13. China Taiwan Phase Shift Masks (PSM) Production (2021-2032) & (Million Pcs)

Figure 14. Phase Shift Masks (PSM) Market Drivers

Figure 15. Factors Affecting Demand

Figure 16. World Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 17. World Phase Shift Masks (PSM) Consumption Market Share by Region (2021-2032)

Figure 18. United States Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 19. China Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 20. Europe Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 21. Japan Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 22. South Korea Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 23. ASEAN Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 24. India Phase Shift Masks (PSM) Consumption (2021-2032) & (Million Pcs)

Figure 25. Producer Shipments of Phase Shift Masks (PSM) by Manufacturer Revenue

(\$MM) and Market Share (%): 2025

Figure 26. Global Four-firm Concentration Ratios (CR4) for Phase Shift Masks (PSM) Markets in 2025

Figure 27. Global Four-firm Concentration Ratios (CR8) for Phase Shift Masks (PSM) Markets in 2025

Figure 28. United States VS China: Phase Shift Masks (PSM) Production Value Market Share Comparison (2021 & 2025 & 2032)

Figure 29. United States VS China: Phase Shift Masks (PSM) Production Market Share Comparison (2021 & 2025 & 2032)

Figure 30. United States VS China: Phase Shift Masks (PSM) Consumption Market Share Comparison (2021 & 2025 & 2032)

Figure 31. United States Based Manufacturers Phase Shift Masks (PSM) Production Market Share 2025

Figure 32. China Based Manufacturers Phase Shift Masks (PSM) Production Market Share 2025

Figure 33. Rest of World Based Manufacturers Phase Shift Masks (PSM) Production Market Share 2025

Figure 34. World Phase Shift Masks (PSM) Production Value by Type, (USD Million), 2021 & 2025 & 2032

Figure 35. World Phase Shift Masks (PSM) Production Value Market Share by Type in 2025

Figure 36. Halftone Mask (Attenuated PSM)

Figure 37. Levenson Mask (Alternating PSM)

Figure 38. RimPSM

Figure 39. Sub ResolutionPSM

Figure 40. Self-alignmentPSM

Figure 41. Chrome-lessPSM /All -transparent PSM

Figure 42. Complex PSM

Figure 43. Complex PSM

Figure 44. World Phase Shift Masks (PSM) Production Market Share by Type (2021-2032)

Figure 45. World Phase Shift Masks (PSM) Production Value Market Share by Type (2021-2032)

Figure 46. World Phase Shift Masks (PSM) Average Price by Type (2021-2032) & (US\$/Pcs)

Figure 47. World Phase Shift Masks (PSM) Production Value by Product Level, (USD Million), 2021 & 2025 & 2032

Figure 48. World Phase Shift Masks (PSM) Production Value Market Share by Product Level in 2025

Figure 49. Phase-Shift Blank Mask

Figure 50. Finished Phase-Shift Photomask

Figure 51. World Phase Shift Masks (PSM) Production Market Share by Product Level (2021-2032)

Figure 52. World Phase Shift Masks (PSM) Production Value Market Share by Product Level (2021-2032)

Figure 53. World Phase Shift Masks (PSM) Average Price by Product Level (2021-2032) & (US\$/Pcs)

Figure 54. World Phase Shift Masks (PSM) Production Value by Phase-Shift Method, (USD Million), 2021 & 2025 & 2032

Figure 55. World Phase Shift Masks (PSM) Production Value Market Share by Phase-Shift Method in 2025

Figure 56. Attenuated Phase-Shift Mask

Figure 57. Alternating Phase-Shift Mask

Figure 58. Other Phase-Shift Structures

Figure 59. World Phase Shift Masks (PSM) Production Market Share by Phase-Shift Method (2021-2032)

Figure 60. World Phase Shift Masks (PSM) Production Value Market Share by Phase-Shift Method (2021-2032)

Figure 61. World Phase Shift Masks (PSM) Average Price by Phase-Shift Method (2021-2032) & (US\$/Pcs)

Figure 62. World Phase Shift Masks (PSM) Production Value by Application, (USD Million), 2021 & 2025 & 2032

Figure 63. World Phase Shift Masks (PSM) Production Value Market Share by Application in 2025

Figure 64. Semiconductor Integrated Circuit Manufacturing

Figure 65. Flat Panel Display Manufacturing

Figure 66. Power and Discrete Device Manufacturing

Figure 67. MEMS and Sensor Manufacturing

Figure 68. Optoelectronic and Compound Semiconductor Manufacturing

Figure 69. Research and Process Development

Figure 70. World Phase Shift Masks (PSM) Production Market Share by Application (2021-2032)

Figure 71. World Phase Shift Masks (PSM) Production Value Market Share by Application (2021-2032)

Figure 72. World Phase Shift Masks (PSM) Average Price by Application (2021-2032) & (US\$/Pcs)

Figure 73. Phase Shift Masks (PSM) Industry Chain

Figure 74. Phase Shift Masks (PSM) Procurement Model

Figure 75. Phase Shift Masks (PSM) Sales Model

Figure 76. Phase Shift Masks (PSM) Sales Channels, Direct Sales, and Distribution

Figure 77. Methodology

Figure 78. Research Process and Data Source

## I would like to order

Product name: Global Phase Shift Masks (PSM) Supply, Demand and Key Producers, 2026-2032

Product link: <https://marketpublishers.com/r/G35C4A00C869EN.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/G35C4A00C869EN.html>