Semiconductor Manufacturing Equipment Market Report by Equipment Type (Front-End, Back-End), Front-End Equipment (Lithography, Deposition, Cleaning, Wafer Surface Conditioning, and Others), Back-End Equipment (Testing, Assembly and Packaging, Dicing, Bonding, Metrology, and Others), Fab Facility (Automation, Chemical Control, Gas Control, and Others), Product Type (Memory, Logic Components, Microprocessor, Analog Components, Optoelectronic Components, Discrete Components, and Others), Dimension (2D, 2.5D, 3D), Supply Chain Participant (IDM Firms, OSAT Companies, Foundries), and Region 2024-2032

https://marketpublishers.com/r/S42FB3325A81EN.html
Date: January 2024
Pages: 141
Price: US$ 3,899.00 (Single User License)
ID: S42FB3325A81EN

Abstracts

The global semiconductor manufacturing equipment market size reached US$ 99.0 Billion in 2023. Looking forward, IMARC Group expects the market to reach US$ 211.1 Billion by 2032, exhibiting a growth rate (CAGR) of 8.5% during 2024-2032. The market is driven by technological advancements, rising demand for electric vehicles and renewable energy, global supply chain shifts, the expansion of advanced packaging technologies, and increased investment in research and development.

Semiconductor Manufacturing Equipment Market Trends:
Technological Advancements in Semiconductor Manufacturing:

As the demand for smaller, more efficient, and powerful electronic devices grows, manufacturers are compelled to invest in advanced equipment capable of producing intricate semiconductor components. This shift is fueled by the increasing adoption of Internet of Things (IoT) devices, AI, and 5G technology, which require sophisticated semiconductor chips. Additionally, developments in photolithography, etching, ion implantation, and deposition techniques have made semiconductor manufacturing more precise and cost-effective, encouraging further investment in the sector. This trend is crucial for industries such as consumer electronics, automotive, and healthcare, which are increasingly reliant on advanced semiconductor technology, thus propelling the growth of the semiconductor manufacturing equipment market.

Rising Demand for Electric Vehicles (EVs) and Renewable Energy Systems:

EVs rely heavily on power semiconductors for efficient power management and battery performance. As global efforts to reduce carbon emissions intensify, there is a growing shift towards electric vehicles, which necessitates high-quality semiconductors. Similarly, renewable energy systems such as solar panels and wind turbines require semiconductor components for power conversion and storage. This rising demand for semiconductors in the green energy sector has led to increased investment in semiconductor manufacturing equipment, as manufacturers aim to meet the growing needs for high-performance, reliable, and energy-efficient semiconductors.

Global Supply Chain Reconfiguration and Regional Market Growth:

The reconfiguration of global supply chains in response to geopolitical tensions and trade disputes has emerged as a significant driver for the semiconductor manufacturing equipment market. Countries are increasingly focusing on developing self-reliant semiconductor supply chains to ensure national security and economic stability. This shift has led to increased investment in local semiconductor manufacturing capabilities, particularly in regions such as Europe and Southeast Asia. Additionally, governments are offering incentives and subsidies to support the development of domestic semiconductor industries. This trend towards regionalization and diversification of semiconductor manufacturing is driving demand for a wide range of manufacturing equipment, thereby fueling market growth.

Semiconductor Manufacturing Equipment Industry Segmentation:
IMARC Group provides an analysis of the key trends in each segment of the market, along with forecasts at the global, regional, and country levels for 2024-2032. Our report has categorized the market based on equipment type, front-end equipment, back-end

equipment, fab facility, product type, dimension, and supply chain participant.

Breakup by Equipment Type:

Front-End
Back-End

Front End accounts for the majority of the market share

The report has provided a detailed breakup and analysis of the market based on the equipment type. This includes front-end and back-end. According to the report, front end represented the largest segment.

Breakup by Front-End Equipment:

Lithography
Deposition
Cleaning
Wafer Surface Conditioning
Others

Lithography holds the largest share in the industry

A detailed breakup and analysis of the market based on the front-end equipment have also been provided in the report. This includes lithography, deposition, cleaning, wafer surface conditioning, and others. According to the report, lithography accounted for the largest market share.

Breakup by Back-End Equipment:

Testing
Assembly and Packaging
Dicing
Bonding
Metrology
Others

Testing represents the leading market segment

The report has provided a detailed breakup and analysis of the market based on the back-end equipment. This includes testing, assembly and packaging, dicing, bonding, metrology, and others. According to the report, testing represented the largest segment.

Breakup by Fab Facility:

Automation
Chemical Control
Gas Control
Others

Automation exhibits a clear dominance in the market

A detailed breakup and analysis of the market based on the fab facility have also been provided in the report. This includes automation, chemical control, gas control, and others. According to the report, automation accounted for the largest market share.

Breakup by Product Type:

Memory
Logic Components
Microprocessor
Analog Components
Optoelectronic Components
Discrete Components
Others

Memory dominates the market

The report has provided a detailed breakup and analysis of the market based on the product type. This includes memory, logic components, microprocessor, analog components, optoelectronic components, discrete components, others. According to the report, memory represented the largest segment.

Breakup by Dimension:

2D
2.5D
3D

2.5D is the predominant market segment

A detailed breakup and analysis of the market based on the dimension have also been provided in the report. This includes 2D, 2.5D, and 3D. According to the report, 2.5D accounted for the largest market share.

Breakup by Supply Chain Participant:

IDM Firms
OSAT Companies
Foundries

IDM firms is the predominant market segment

A detailed breakup and analysis of the market based on the supply chain participant have also been provided in the report. This includes IDM firms, OSAT companies, and foundries. According to the report, IDM firms accounted for the largest market share.

Breakup by Region:
Asia Pacific
Taiwan
China
South Korea
Japan
Singapore
India
Others
North America
United States
Canada
Europe
Germany
United Kingdom
France
Italy
Russia
Spain
Others

+44 20 8123 2220
info@marketpublishers.com

Latin America
Mexico
Brazil
Others
Middle East and Africa

Asia Pacific leads the market, accounting for the largest semiconductor manufacturing equipment market share

The market research report has also provided a comprehensive analysis of all the major regional markets, which include Asia Pacific (Taiwan, China, Japan, India, South Korea, Singapore and others), North America (the United States and Canada), Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and others), Latin America (Brazil, Mexico, and others), and Middle East and Africa. According to the report, Asia Pacific accounted for the largest market share.

The market research report has provided a comprehensive analysis of the competitive landscape. Detailed profiles of all major companies have also been provided. Some of the key players in the market include:

Advantest Corporation
Applied Materials Inc.
ASML Holdings N.V.
KLA Corporation
Lam Research Corporation
Onto Innovation Inc.
Plasma-Therm LLC
SCREEN Holdings Co. Ltd.
Teradyne Inc.
Tokyo Electron Limited
Toshiba Corporation

Key Questions Answered in This Report

1. What was the size of the global semiconductor manufacturing equipment market in 2023?
2. What is the expected growth rate of the global semiconductor manufacturing equipment market during 2024-2032?
3. What are the key factors driving the global semiconductor manufacturing equipment

market?
4. What has been the impact of COVID-19 on the global semiconductor manufacturing equipment market?
5. What is the breakup of the global semiconductor manufacturing equipment market based on the equipment type?
6. What is the breakup of the global semiconductor manufacturing equipment market based on the front-end equipment?
7. What is the breakup of the global semiconductor manufacturing equipment market based on the back-end equipment?
8. What is the breakup of the global semiconductor manufacturing equipment market based on the fab facility?
9. What is the breakup of the global semiconductor manufacturing equipment market based on the product type?
10. What is the breakup of the global semiconductor manufacturing equipment market based on the dimension?
11. What is the breakup of the global semiconductor manufacturing equipment market based on the supply chain participant?
12. What are the key regions in the global semiconductor manufacturing equipment market?
13. Who are the key players/companies in the global semiconductor manufacturing equipment market?

+44 20 8123 2220
info@marketpublishers.com

Contents

7 FRONT-END EQUIPMENT MARKET BREAKUP BY TYPE

8 BACK-END EQUIPMENT MARKET BREAKUP BY TYPE

+44 20 8123 2220
info@marketpublishers.com

18 COMPETITIVE LANDSCAPE

List Of Tables

LIST OF TABLES

List Of Figures

LIST OF FIGURES

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Semiconductor Manufacturing Equipment Market Report by Equipment Type (Front-End, Back-End), Front-End Equipment (Lithography, Deposition, Cleaning, Wafer Surface Conditioning, and Others), Back-End Equipment (Testing, Assembly and Packaging, Dicing, Bonding, Metrology, and Others), Fab Facility (Automation, Chemical Control, Gas Control, and Others), Product Type (Memory, Logic Components, Microprocessor, Analog Components, Optoelectronic Components, Discrete Components, and Others), Dimension (2D, 2.5D, 3D), Supply Chain Participant (IDM Firms, OSAT Companies, Foundries), and Region 2024-2032

Product link: https://marketpublishers.com/r/S42FB3325A81EN.html

Price: US$ 3,899.00 (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/S42FB3325A81EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _______________________________________

+44 20 8123 2220
info@marketpublishers.com

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970