

2018-2019 Recap and 2020 Forecast for the Semiconductor Industry

https://marketpublishers.com/r/228A0C769ACDEN.html

Date: May 2020

Pages: 74

Price: US\$ 4,000.00 (Single User License)

ID: 228A0C769ACDEN

Abstracts

Amid COVID-19 outbreak, global semiconductor market growth remained robust in the first quarter of 2020. Therefore, it is anticipated global semiconductor market value will reach USD 417.2 billion in 2020, up 1.2% year-on-year. In the same year, shipment value of the Taiwanese semiconductor industry is forecast to grow 1.7% year-on-year and arrive at NTD2.45 trillion (USD 83.1 billion), higher than the global average. This is attributed mainly to Taiwan's advancements in advanced semiconductor manufacturing processes and the benefits of acquisitions and mergers. This report provides an overview of the development of the global semiconductor market and Taiwanese semiconductor industry - comprising of fabless IC, semiconductor manufacturing, and OSAT (Outsourced Semiconductor Assembly and Test) - between 2018 and April 2020; examines the development of major players and explores key trends and opportunities.



Contents

1. OVERVIEW

- 1.1 Global Semiconductor Development
- 1.2 Taiwanese Semiconductor Development

2 GLOBAL IC DESIGN INDUSTRY DEVELOPMENT

- 2.1 Global Industry Value Witness Growth in 2018
- 2.2. The Fabless IC Design Industry by Region
- 2.2.1 Chinese IC Design Industry's Global Share is Increasing Constantly
- 2.3 Development of Major IC Design Companies
 - 2.3.1 Shipment Value of the Chinese Fabless IC Design Industry Continues to Grow

3. TAIWANESE IC DESIGN INDUSTRY DEVELOPMENT

- 3.1 Shipment Value of the Taiwanese Fabless IC Design Industry
- 3.2 Product Mix Analysis
 - 3.2.1 Fabless ICs for Computing, Communication, and Consumer Applications
 - 3.2.2 Communication ICs Remain Mainstream
- 3.3 Major Taiwan IC Design Companies
- 3.4 Industry Development Trends
 - 3.4.1 Panel Driver and TDDI ICs to Lead the Evolution on Smartphones
 - 3.4.2 New Products and Applications to Drive Future Opportunity

4. OPPORTUNITIES AND CHALLENGES

- 4.1 Impact of the US-China Trade Fight
 - 4.1.1 Fabless IC Design is China's Key Investment Focus
- 4.1.2 US-China Trade War Speeding Up Localization of the Semiconductor Industry in China
- 4.1.3 Uncertainties Lead to New Industry Reorganization
- 4.2 Al Edge Computing Changing the IC Design Industry's Business Model
- 4. Outlook for the Taiwanese IC Design Industry
- 4.1 Taiwan's IC Design Industry Will Slow Down Significantly in 2020

5. MIC PERSPECTIVE



- 5.1 Seeking New Export Opportunities from Trade Fight
- 5.2 Emerging Technologies Make More Applications Possible

6. DEVELOPMENT OF THE GLOBAL SEMICONDUCTOR MANUFACTURING INDUSTRY

- 6.1 Global Foundry Growth Stays Stable
- 6.2 TSMC Continues to be The World's Largest Foundry

7. INDUSTRY DEVELOPMENT TRENDS

- 7.1 EUV Lithography Ready to Extend the Life of Moore's Law
- 7.2 Strategies Focus on Advanced Nanotechnology Processes and Mature Process Applications

8. DEVELOPMENT OF MAJOR PLAYERS

- 8.1 TSMC
- 8.2 Samsung
- 8.3 GlobalFoundries
- 8.4 UMC
- 8.5 SMIC

9. OUTLOOK FOR THE TAIWANESE SEMICONDUCTOR MANUFACTURING INDUSTRY

- 9.1 Momentum from High-speed Computing Applications Continues but from Communications Applications Fall Sharply
- 9.2 COVID Has Short-term Impact While Excessive Inventory to Affect Shipments in 2H 2020
- 9.3 COVID-19 Affects End-consumer Market Demand and Memory Prices are Falling

10. MIC PERSPECTIVE

- 10.1 Inventory Clearance and Economic Uncertainty Affect 2019 Performance
- 10.2 Influence of US-China Trade War on Global Economy Continues

11. DEVELOPMENT OF THE WORLDWIDE OSAT INDUSTRY



- 11.1 Steady Growth in 2018
 - 11.1.1 OSAT Companies' Market Share Struck by Trade War
- 11.1.2 Worldwide OSAT Market Slows Down in 2019 with Shipment Value Similar to 2018
- 11.2 Taiwan Ranked No.1 in 2018 IC Packaging and Testing Shipment Value, Followed by China
- 11.2.1 Top Six OSAT Companies' Spots Remain Unchanged While Gap between Top Three Narrowing
- 11.2.2 Taiwanese IC Packaging and Testing Industry Posts Higher-than-Global-Average Growth at 8.4% in 2018

12. DEVELOPMENT OF LEADING INTERNATIONAL OSAT COMPANIES

- 12.1 Amkor Remain Steady Growth with Continued Focus on Automotive Electronics
- 12.2 JECT's M&A Continues to Deliver Synergy, Boosting High-end Packaging Share
- 12.3 Tianshui Huatian Technology Did Not Live Up to Expectations in 2018
- 12.4 Tongfu Microelectronics Maintains High Growth Fueled by International Customers

13. DEVELOPMENT OF LEADING TAIWANESE OSAT COMPANIES

- 13.1 ASE Benefits from M&A Synergy with Focus on SiP Technology
- 13.1.1 ASE Aggressively Develops SiP to Help Customers Reduce Costs
- 13.2 PTI Strives for Product Diversification by Expanding Non-Memory Business
- 13.3 CoF Packaging Becomes Mainstream, Driving up Chipbond and ChipMOS Revenues

14. OUTLOOK FOR THETAIWANESE OSAT INDUSTRY

- 14.1 Ongoing COVID-19 Affect OSAT Industry
- 14.2 Demand for True Wireless Stereo as Key Growth Factor

15. MIC PERSPECTIVE

- 15.1 A Significant Slowdown in Worldwide IC Packaging and Testing Industry Growth in 2019
- 15.2 SiP and Heterogeneous Integration as Key Driving Force for Growth
- 15.3 Trade Restrictions Put Stability of Supply Chain to Test

APPENDIX



List of Companies



List Of Tables

LIST OF TABLES

Table 1 Global Top 10 IC Design Companies in	Top 10 IC Design Compa	es in	2018
--	------------------------	-------	------

- Table 2 China's Top 10 Fabless IC Design Companies in 2018
- Table 3 Taiwan's Top 10 IC Design Companies by Revenue in 2019
- Table 4 Global Semiconductor Manufacturer Production Value Rankings
- Table 5 Taiwan's Top 10 Foundries by Revenue in 2019
- Table 6 M&A of Leading OSAT Companies, 2014-2019
- Table 7 Taiwan's Top 10 OSAT Companies by Revenue in 2019
- Table 8 Milestones of ASE-SPIL Merger



List Of Figures

LIST OF FIGURES

Figure 1 Global Semiconductor Market Value, 2011-2021

Figure 2 Taiwanese Semiconductor Industry Shipment Value, 2011-2020

Figure 3 Global IC Design Industry Shipment Value, 2013-2019

Figure 4 Global IC Design Industry Market Share by Production Base, 2015 - 2018

Figure 5 Shipment Value of the Taiwan Fabless IC Design Industry, 2013-2019

Figure 6 Taiwan IC Design Industry Shipment Share by Application

Figure 7 Taiwan IC Design Industry Shipment Share by Product Mix

Figure 8 Global Semiconductor Manufacturing Industry Shipment Value, 2015-2019

Figure 9 Shipment Value of the Taiwanese Semiconductor Manufacturing Industry, 2016-2019

Figure 10 Taiwanese Semiconductor Manufacturing Shipment Value Share by Process Technology, 3Q17 - 4Q19

Figure 11 Global Major IC Manufacturers' Development Roadmap

Figure 12 Benchmarking of TSMC, UMC, and SMIC Production Value Share by

Process Technology

Figure 13 GlobalFoundries Process Development Roadmap

Figure 14 SMIC Revenue and Net Profit, 2015-2018

Figure 15 Worldwide OSAT Industry Shipment Value and Growth Rates, 2016-2019

Figure 16 World's Top Ten OSAT Companies by Revenue in 2019

Figure 17 Taiwanese OSAT Industry Shipment Value and Growth Rates, 2016-2019



I would like to order

Product name: 2018-2019 Recap and 2020 Forecast for the Semiconductor Industry

Product link: https://marketpublishers.com/r/228A0C769ACDEN.html

Price: US\$ 4,000.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/228A0C769ACDEN.html

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

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

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