

Taiwan Semiconductor Industry 2021 Recap and Forecast for 2022

<https://marketpublishers.com/r/T90835F4F14CEN.html>

Date: March 2022

Pages: 34

Price: US\$ 3,000.00 (Single User License)

ID: T90835F4F14CEN

Abstracts

Despite the continued shortage of components due to the pandemic and the ongoing U.S.-China trade war, shipment value of the Taiwanese semiconductor industry managed to grow 31.8% year-on-year to US\$130.8 billion in 2021, higher than the global average. This report covers three major subsectors of the semiconductor industry, including IC design, semiconductor manufacturing, and OSAT (Outsourced Semiconductor Assembly and Test); looks closely into key development highlights and issues in those three subsectors from the fourth quarter of 2020 to the fourth quarter of 2021; analyzes strategies of several major players in each sector and their development trends such as TSMC, MediaTek, UMC, and ASE.

Contents

1. 4Q 2020 INDUSTRY KEY HIGHLIGHTS³

1.1 IC Design³

1.1.1 Other Chinese Brands Increase Chip Inventories as Huawei Faces Setback, Driving up IC Design Houses' Revenues³

1.1.2 Small IC Design Houses Affected by Crowding Out Effect amid High ICT Chip Demand⁴

1.2 Semiconductor Manufacturing⁴

1.2.1 Production of Mature Nodes Reaches Full Capacity Due to Transfer of Orders Caused by the U.S.-China Trade War⁵

1.2.2 Share of Revenues from Advanced Nodes Rises Dramatically as Mass Production of 5nm Chips Begins

1.3 OSAT

1.3.1 Orders from Other Chinese Brands Push OSAT Companies to Full Capacity

1.3.2 Worsening Material Shortages Affect OSAT Companies' Capacity

2. 1Q 2021 INDUSTRY KEY HIGHLIGHTS

2.1 IC Design

2.1.1 Competition in the Smartphone IC Market Becomes More Intense as Huawei Ban Continues

2.1.2 Chipmakers Raise Prices as Supply-Demand Imbalance Persists

2.2 Semiconductor Manufacturing

2.2.1 Low IC Capacity Results in Crowding Out Effect

2.2.2 Global Governments Stepping in to Boost Capacity for Automotive ICs

2.3 OSAT

2.3.1 Wire Bonding Demand Surges as the Automotive IC Market Recovers

2.3.2 OSAT Companies Continue to Delay Lead-Times Due to Material Shortages

3. 2Q 2021 INDUSTRY KEY HIGHLIGHTS

3.1 IC Design

3.1.1 Robust Demand for Mobile Computing Chips Continues, Leading to Strong Growth for Taiwan's IC Design Industry, Led by MediaTek and Realtek

3.1.2 Driver IC Vendors Contribute Significantly to Shipment Value of Taiwan's IC Industry Thanks to Brisk Market Demand and Price Hikes

3.2 Semiconductor Manufacturing¹⁷

3.2.1 Wafer Foundries Plan Capacity Expansion Aggressively, Especially for Mature 28nm Node

3.2.2 Soaring Memory Demand Worldwide Drives Sustainable Revenue Growth

3.3 OSAT

3.3.1 End Market Demand Pushes OSAT Companies to Full Capacity

3.3.2 OSAT Companies Suffer Short-term Impact from COVID-19 but Annual Revenue Unlikely to be Affected

4. 3Q 2021 KEY INDUSTRY HIGHLIGHTS

4.1 IC Design

4.1.1 Rosy Outlook for Notebook PC Market on Seasonal Demand for Commercial Models and Slowdown in Global Outbreak

4.1.2 Network Communication Chips in Shortest Supply with Lead Times up to 1 Year; RF IC Suppliers Experience Declining Profits

4.2 Semiconductor Manufacturing²⁴

4.2.1 TSMC's Price Hikes Caught World's Attention

4.2.2 Niche-market Applications Drive Memory Vendors' Revenues

4.3 OSAT (Outsourced Semiconductor Assembly & Test)

4.3.1 COVID-19 Outbreaks in Southeast Asia Hit the OSAT Industry Hard

4.3.2 Peak Season Effect Drives Revenue Growth, Yet Some Vendors' Revenues Yet to Meet Expectations

5. INDUSTRY OUTLOOK 2022

5.1 IC Design

5.1.1 Driver IC Suppliers' Shipments to Rise Slightly as Large-size TV Panel Demand Likely to Recover from Rock Bottom

5.1.2 Forecast for Off-season Demand Revised Downward amid Supply Shortages and Tight Production Capacity but to Slowly Recover in 1Q22

5.2 Semiconductor Manufacturing³⁰

5.2.1 Wafer Foundries Aggressively Expand Production Capacity with 28nm Becoming Increasingly Important

5.3 OSAT

5.3.1 Declining End Market Demand and Inventory Adjustment to Affect Revenue Growth

5.3.2 China's Dual Control of Energy Policy Likely to Affect Semiconductor Supply Chains

Appendix

List of Companies

I would like to order

Product name: Taiwan Semiconductor Industry 2021 Recap and Forecast for 2022

Product link: <https://marketpublishers.com/r/T90835F4F14CEN.html>

Price: US\$ 3,000.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/T90835F4F14CEN.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**

Customer 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