

# **Analyzing the Global Semiconductors Industry 2019**

https://marketpublishers.com/r/AC197D1054BEN.html

Date: August 2019

Pages: 345

Price: US\$ 1,200.00 (Single User License)

ID: AC197D1054BEN

### **Abstracts**

The year 2019 is a year of contraction for the global semiconductor industry, especially surrounded by intense economic uncertainties stemming from the US-China trade war. However, from 2020, the industry is again poised for strong growth as artificial intelligence (AI) is rapidly adding to global demand.

With technological innovation happening at a breakneck speed worldwide, the semiconductor industry is also no exception to this, and it can look forward to significant growth in the coming years following a rather weak 2019.

In 2018, global semiconductor sales stood at a total of US\$ 481 billion, and over the coming four years, sales are expected to keep growing (albeit at a slower rate) to cross US\$572 billion by the end of 2022. Samsung, a leading player in the global semiconductor industry, has recently undertaken a massive capital spending on its semiconductor division and this is expected to drive overcapacity in the memory segment, likely causing a fall in sales of memory products in 2019. Nevertheless, 2020 will witness a recovery of the sector once again.

The global semiconductor industry is expected to be massively driven by the demand for chips that are related to the booming artificial intelligence sector. Much of this demand is likely to emerge from the industrial and automotive markets, with the automotive market expected to grow the fastest through 2022.

The introduction of the 5G technology and its growth in emerging markets is going to drive the use of semiconductors in the communications market while the continuing growth of video game consoles and handhelds, TVs, and digital set-top boxes will continue to drive the need for semiconductors in the consumer electronics markets. Growth in optoelectronic chips is also expected to remain healthy.



Asia Pacific will continue to lead the global semiconductor market and will remain the most significant contributor to the industry revenues. China is currently the biggest purchaser and importer of chips, and the development of the semiconductor industry is going to remain a huge priority for the Chinese government.

Overall, artificial intelligence is going to emerge as the next new catalyst for at least the coming decade for the global semiconductor market. Connectivity, sensing, and instant computing are going to be responsible for driving a dramatic demand for AI-tailored semiconductors in the coming years, with the Asia Pacific continuing to lead the industry.

Aruvian Research analyzes the global semiconductors industry in its research presentation Analyzing the Global Semiconductors Industry 2019. The report is a comprehensive coverage of the industry, which is analyzed through an industry definition, industry profile, market size, market value, industry segmentation, and other factors that impact the market.

We analyze the industry concentration in our report, along with a geographic concentration. Globalization in the global semiconductors industry is also analyzed.

A segmentation of the market through the major industry products is carried out in the report. We focus on passive electric components as well as other components and devices.

Moving on to the cost analysis of the global semiconductor industry, we analyze the market through an industry profit analysis, the cost of material inputs, capital intensity of the market, revenue volatility and other costs involved in the industry.

A life cycle analysis is also included in the report, along with an analysis of the factors driving growth in the market and challenges facing the industry. We also analyze the global trade in semiconductors and electronic components.

Regulatory framework governing the industry is analyzed along with a look at the industry tariffs and taxes.

A Porter's five forces analysis of the global semiconductor industry is carried out. It uses concepts developed in Industrial Organization (IO) economics to derive five forces that determine the competitive intensity and therefore attractiveness of a market. Porter referred to these forces as the microenvironment, to contrast it with the more general



term macro-environment. They consist of those forces close to a company that affect its ability to serve its customers and make a profit.

Since technological developments have a huge role to play in this industry, we dedicate a section to analyzing the latest technical developments in the global semiconductor industry.

Key semiconductor markets around the world are analyzed through an industry profile, market growth by value analysis, industry segmentation, and an industry forecast. Markets analyzed include China, France, Germany, Italy, Japan, South Korea, Taiwan, United Kingdom and United States.

Future perspective of the industry is analyzed till the year 2022.

Competition in the industry and market share of the leading industry players are analyzed followed by an in-depth analysis of the major players themselves. The leading industry contributors are analyzed through a corporate profile, a business segment analysis, a financial analysis, their industry presence, company strategy and a SWOT analysis.

Players analyzed include the industry stalwarts such as Texas Instruments, Intel Corporation, Samsung Electronics, SK Hynix, STMicroelectronics, Taiwan Semiconductor Manufacturing, amongst many others. In total, we analyze over 30 industry players.

Aruvian Research's analysis of the Global Semiconductor Industry 2019 is a complete strategic and statistical analysis of this fast growing industry.



### **Contents**

#### A. EXECUTIVE SUMMARY

#### **B. INTRODUCTION TO THE INDUSTRY**

- **B.1 Industry Definition**
- **B.2 Industry Profile**
- **B.3 Market Size**
- B.4 Growth by Value
- **B.5 Industry Segmentation**
- **B.6 Industry Concentration**
- **B.7 Geographic Concentration**
- B.8 Globalization in the Global Semiconductors Industry

#### C. PRODUCT SEGMENTATION

- C.1 Overview
- C.2 Passive Electronic Components
- C.3 Other Components and Devices

#### D. INDUSTRY COST ANALYSIS

- D.1 Industry Profit Analysis
- D.2 Cost of Material Inputs
- D.3 Capital Intensity
- D.4 Revenue Volatility
- D.5 Other Costs

#### **E. LIFE CYCLE ANALYSIS**

#### F. REGULATORY FRAMEWORK

- F.1 Regulations
- F.2 Industry Tariffs
- F.3 Industry Taxes

#### G. GLOBAL TRADE IN SEMICONDUCTORS & ELECTRONIC COMPONENTS



#### H. PORTER'S FIVE FORCES STRATEGY ANALYSIS

- H.1 Bargaining Power of Buyers
- H.2 Bargaining Power of Suppliers
- H.3 Competitive Rivalry in the Industry
- H.4 Threat of New Entrants
- H.5 Threat of Substitutes

#### I. FACTORS DRIVING THE INDUSTRY

#### J. CHALLENGES FACING THE INDUSTRY

#### K. TECHNOLOGICAL DEVELOPMENT IN THE INDUSTRY

#### L. COMPETITION IN THE INDUSTRY

- L.1 Industry Competition
- L.2 Global Semiconductor Industry: Market Share Analysis
- L.3 Global Semiconductor Equipment Industry: Market Share Analysis

#### M. ANALYSIS OF KEY MARKETS

- M.1 China
  - M.1.1 Industry Snapshot
  - M.1.2 Market Growth by Value
  - M.1.3 Industry Segmentation
  - M.1.4 Industry Forecast
- M.2 France
  - M.2.1 Industry Snapshot
  - M.2.2 Market Growth by Value
  - M.2.3 Industry Segmentation
  - M.2.4 Industry Forecast
- M.3 Germany
  - M.3.1 Industry Snapshot
  - M.3.2 Market Growth by Value
  - M.3.3 Industry Segmentation
  - M.3.4 Industry Forecast
- M.4 Italy
- M.4.1 Industry Snapshot



- M.4.2 Market Growth by Value
- M.4.3 Industry Segmentation
- M.4.4 Industry Forecast
- M.5 Japan
- M.5.1 Industry Snapshot
- M.5.2 Market Growth by Value
- M.5.3 Industry Segmentation
- M.5.5 Industry Forecast
- M.6 South Korea
  - M.6.1 Industry Snapshot
  - M.6.2 Market Growth by Value
  - M.6.3 Industry Segmentation
  - M.6.4 Industry Forecast
- M.7 Taiwan
  - M.7.1 Industry Snapshot
- M.7.2 Market Growth by Value
- M.7.3 Industry Segmentation
- M.7.4 Industry Forecast
- M.8 United Kingdom
  - M.8.1 Industry Snapshot
  - M.8.2 Market Growth by Value
  - M.8.3 Industry Segmentation
  - M.8.4 Industry Forecast
- M.9 United States
  - M.9.1 Industry Snapshot
  - M.9.2 Market Growth by Value
  - M.9.3 Industry Demand
  - M.9.4 Industry Structure
  - M.9.5 Industry Segmentation
  - M.9.6 Import/Export of Semiconductors in the US
  - M.9.7 Industry Trends
  - M.9.8 Industry Forecast

#### N. GLOBAL SEMICONDUCTORS INDUSTRY: FUTURE PERSPECTIVE

#### O. LEADING INDUSTRY PLAYERS

- O.1 Advanced Micro Devices Inc.
  - O.1.1 Corporate Profile



- O.1.2 Business Segment Analysis
- O.1.3 Financial Analysis
- O.1.4 Industry Presence
- O.1.5 Company Strategy
- O.1.6 SWOT Analysis
- O.2 Amkor Technology Inc.
  - O.2.1 Corporate Profile
  - O.2.2 Business Segment Analysis
  - O.2.3 Financial Analysis
  - O.2.4 Company Strategy
  - O.2.5 SWOT Analysis
- O.3 Analog Devices, Inc.
- O.3.1 Corporate Profile
- O.3.2 Business Segment Analysis
- O.3.3 Financial Analysis
- O.3.4 SWOT Analysis
- O.4 Avago Technologies
  - O.4.1 Corporate Profile
  - O.4.2 Business Segment Analysis
  - O.4.3 Financial Analysis
- O.5 Cypress Semiconductor Corporation
  - O.5.1 Corporate Profile
  - O.5.2 Business Segment Analysis
  - O.5.3 Financial Analysis
  - O.5.4 SWOT Analysis
- O.6 Infineon Technologies AG
  - O.6.1 Corporate Profile
  - O.6.2 Business Segment Analysis
  - O.6.3 Financial Analysis
  - O.6.4 SWOT Analysis
- O.7 Intel Corporation
  - O.7.1 Corporate Profile
  - O.7.2 Business Segment Analysis
  - O.7.3 Financial Analysis
  - O.7.4 Industry Presence
  - O.7.5 Company Strategy
  - O.7.6 SWOT Analysis
- O.8 IXYS Corporation
- O.8.1 Corporate Profile



- O.8.2 Business Segment Analysis
- O.8.3 Financial Analysis
- O.8.4 SWOT Analysis
- O.9 Lam Research Corporation
  - O.9.1 Corporate Profile
  - O.9.2 Business Segment Analysis
  - O.9.3 Financial Analysis
  - O.9.4 SWOT Analysis
- O.10 MediaTek Inc.
  - O.10.1 Corporate Profile
  - O.10.2 Business Segment Analysis
  - O.10.3 Financial Analysis
  - O.10.4 SWOT Analysis
- O.11 Micron Technology, Inc.
  - O.11.1 Corporate Profile
  - O.11.2 Business Segment Analysis
  - O.11.3 Financial Analysis
  - O.11.4 Company Strategy
  - O.11.5 SWOT Analysis
- O.12 Nvidia Corporation
  - O.12.1 Corporate Profile
  - O.12.2 Business Segment Analysis
  - O.12.3 Financial Analysis
  - O.12.4 SWOT Analysis
- O.13 NXP Semiconductors N.V.
  - O.13.1 Corporate Profile
  - O.13.2 Business Segment Analysis
  - O.13.3 Financial Analysis
  - O.13.4 SWOT Analysis
- O.14 Qualcomm Incorporated
  - O.14.1 Corporate Profile
  - O.14.2 Business Segment Analysis
  - O.14.3 Financial Analysis
  - O.14.4 Company Strategy
  - O.14.5 SWOT Analysis
- O.15 Renesas Electronics Corporation
  - O.15.1 Corporate Profile
  - O.15.2 Business Segment Analysis
  - O.15.3 Financial Analysis



- O.15.4 SWOT Analysis
- O.16 Samsung Electronics
  - O.16.1 Corporate Profile
  - O.16.2 Business Segment Analysis
  - O.16.3 Financial Analysis
  - O.16.4 Industry Presence
  - O.16.5 Company Strategy
  - O.16.6 SWOT Analysis
- O.17 SK Hynix Inc.
  - O.17.1 Corporate Profile
  - O.17.2 Business Segment Analysis
  - O.17.3 Financial Analysis
  - O.17.4 Industry Presence
  - O.17.5 SWOT Analysis
- O.18 Sony Corporation
  - O.18.1 Corporate Profile
  - O.18.2 Business Segment Analysis
  - O.18.3 Financial Analysis
  - O.18.4 Company Strategy
  - O.18.5 SWOT Analysis
- O.19 STMicroelectronics N.V.
  - O.19.1 Corporate Profile
  - O.19.2 Business Segment Analysis
  - O.19.3 Financial Analysis
  - O.19.4 Industry Presence
  - O.19.5 SWOT Analysis
- O.20 Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC)
  - O.20.1 Corporate Profile
  - O.20.2 Business Segment Analysis
  - O.20.3 Financial Analysis
  - O.20.4 SWOT Analysis
- O.21 Texas Instruments Incorporated
  - O.21.1 Corporate Profile
  - O.21.2 Business Segment Analysis
  - O.21.3 Financial Analysis
  - O.21.4 Industry Presence
  - O.21.5 Company Strategy
  - O.21.6 SWOT Analysis
- O.22 Toshiba Corporation



- O.22.1 Corporate Profile
- O.22.2 Business Segment Analysis
- O.22.3 Financial Analysis
- O.22.4 Company Strategy
- O.22.5 SWOT Analysis
- O.23 United Microelectronics Corporation
  - O.23.1 Corporate Profile
  - O.23.2 Business Segment Analysis
  - O.23.3 Financial Analysis
  - O.23.4 SWOT Analysis
- O.24 Vishay Intertechnology Inc.
  - O.24.1 Corporate Profile
  - O.24.2 Business Segment Analysis
  - O.24.3 Financial Analysis
  - O.24.4 SWOT Analysis
- O.25 Xilinx Inc.
  - O.25.1 Corporate Profile
  - O.25.2 Business Segment Analysis
  - O.25.3 Financial Analysis
  - O.25.4 Company Strategy
  - O.25.5 SWOT Analysis
- O.26 Applied Micro Circuits Corporation
- O.27 Hisilicon Technologies Co., Ltd.
- O.28 Macronix International Company Ltd
- O.29 ON Semiconductor Corporation
- O.30 Semtech Corporation
- O.31 Skyworks Solutions Inc.

#### P. GLOSSARY OF TERMS



# **List Of Figures**

#### LIST OF FIGURES

- Figure 1: Growth of Global Semiconductors Industry by Value (in USD Billion) 2013-2017
- Figure 2: Global Semiconductor Industry Segmentation (%), 2017
- Figure 3: Share of the Global Semiconductor Industry by Regions (in USD Billion & %), 2017
- Figure 4: Market Segments of the Global Semiconductors & Electronic Components Manufacturing Industry, 2017
- Figure 5: Global Semiconductor Industry Cost Analysis
- Figure 6: Porter's Five Forces Analysis of the Global Semiconductors Industry
- Figure 7: Buyer Power in the Global Semiconductor Industry
- Figure 8: Supplier Power in the Global Semiconductor Industry
- Figure 9: Competitive Rivalry in the Global Semiconductor Industry
- Figure 10: Threat of New Entrants in the Global Semiconductor Industry
- Figure 11: Threat of Substitutes in the Global Semiconductor Industry
- Figure 12: Market Share of Leading Players (%), 2017
- Figure 13: Major Players in the Global Semiconductor Equipment Industry & their Market Share (%), 2017
- Figure 14: Growth of the Semiconductor Industry in China by Value (in USD Billion), 2013-2017
- Figure 15: Segmentation of the Semiconductor Industry in China (%), 2017
- Figure 16: Share of China in the Asia Pacific Semiconductor Industry (%), 2017
- Figure 17: Forecast of the Semiconductor Industry in China (in USD Billion), 2017-2022
- Figure 18: Growth of the Semiconductor Industry in France by Value (in USD Billion), 2013-2017
- Figure 19: Segmentation of the Semiconductor Industry in France (%), 2017
- Figure 20: Share of France in the European Semiconductor Industry (%), 2017
- Figure 21: Forecast of the Semiconductor Industry in France (in USD Billion),
- 2017-2022
- Figure 22: Growth of the Semiconductor Industry in Germany by Value (in USD Billion), 2013-2017
- Figure 23: Segmentation of the Semiconductor Industry in Germany (%), 2017
- Figure 24: Share of Germany in the European Semiconductor Industry (%), 2017
- Figure 25: Forecast of the Semiconductor Industry in Germany (in USD Billion),
- 2017-2022
- Figure 26: Growth of the Semiconductor Industry in Italy by Value (in USD Billion),



#### 2013-2017

- Figure 27: Segmentation of the Semiconductor Industry in Germany (%), 2017
- Figure 28: Share of Italy in the European Semiconductor Industry (%), 2017
- Figure 29: Forecast of the Semiconductor Industry in Italy (in USD Billion), 2017-2022
- Figure 30: Growth of the Semiconductor Industry in Japan by Value (in USD Billion), 2013-2017
- Figure 31: Segmentation of the Semiconductor Industry in Japan (%), 2017
- Figure 32: Share of Japan in the Asia Pacific Semiconductor Industry (%), 2017
- Figure 33: Forecast of the Semiconductor Industry in Japan (in USD Billion), 2017-2022
- Figure 34: Growth of the Semiconductor Industry in South Korea by Value (in USD Billion), 2013-2017
- Figure 35: Segmentation of the Semiconductor Industry in South Korea (%), 2017
- Figure 36: Share of South Korea in the Asia Pacific Semiconductor Industry (%), 2017
- Figure 37: Forecast of the Semiconductor Industry in South Korea (in USD Billion), 2017-2022
- Figure 38: Growth of the Semiconductor Industry in Taiwan by Value (in USD Billion), 2013-2017
- Figure 39: Segmentation of the Semiconductor Industry in Taiwan (%), 2017
- Figure 40: Share of Taiwan in the Asia Pacific Semiconductor Industry (%), 2017
- Figure 41: Forecast of the Semiconductor Industry in Taiwan (in USD Billion), 2017-2022
- Figure 42: Growth of the Semiconductor Industry in United Kingdom by Value (in USD Billion), 2013-2017
- Figure 43: Segmentation of the Semiconductor Industry in the United Kingdom (%), 2017
- Figure 44: Share of United Kingdom in the European Semiconductor Industry (%), 2017
- Figure 45: Forecast of the Semiconductor Industry in the United Kingdom (in USD Billion), 2017-2022
- Figure 46: Growth of the Semiconductor Industry in United States by Value (in USD Billion), 2013-2017
- Figure 47: Demand for Semiconductor in the United States (in USD Million), 2007-2017
- Figure 48: Segmentation of the Semiconductor Industry in the United States (%), 2017
- Figure 49: Share of the United States in the Global Semiconductor Industry (%), 2017
- Figure 50: US Imports of Semiconductor by Countries (in USD Million), 2007-2017
- Figure 51: US Exports of Semiconductors by Countries (in USD Million), 2007-2022
- Figure 52: Forecast of the Semiconductor Industry in the United States (in USD Billion), 2017-2022
- Figure 53: Demand for Semiconductors in the US by Categories (in USD Million), 2007-2022



Figure 54: Shipment of Semiconductors in the US by Product Type (in USD Million), 2007-2022

Figure 55: Growth Forecast of the Global Semiconductor Industry by Value (in USD Billion) 2017-2022



## **List Of Tables**

#### LIST OF TABLES

- Table 1: Growth of Global Semiconductors Industry by Value (in USD Billion) 2013-2017
- Table 2: Segmentation of the Global Semiconductor Industry (in USD Billion & %), 2017
- Table 3: Share of the Global Semiconductor Industry by Regions (in USD Billion & %), 2017
- Table 4: Growth of the Semiconductor Industry in China by Value (in USD Billion), 2013-2017
- Table 5: Segmentation of the Semiconductor Industry in China (in USD Billion & %), 2017
- Table 6: Share of China in the Asia Pacific Semiconductor Industry (in USD Billion & %), 2017
- Table 7: Forecast of the Semiconductor Industry in China (in USD Billion), 2017-2022
- Table 8: Growth of the Semiconductor Industry in France by Value (in USD Billion), 2013-2017
- Table 9: Segmentation of the Semiconductor Industry in France (in USD Billion & %), 2017
- Table 10: Share of France in the European Semiconductor Industry (in USD Billion & %), 2017
- Table 11: Forecast of the Semiconductor Industry in France (in USD Billion), 2017-2022
- Table 12: Growth of the Semiconductor Industry in Germany by Value (in USD Billion), 2013-2017
- Table 13: Segmentation of the Semiconductor Industry in Germany (in USD Billion & %), 2017
- Table 14: Share of Germany in the European Semiconductor Industry (in USD Billion & %), 2017
- Table 15: Forecast of the Semiconductor Industry in Germany (in USD Billion), 2017-2022
- Table 16: Growth of the Semiconductor Industry in Italy by Value (in USD Billion), 2013-2017
- Table 17: Segmentation of the Semiconductor Industry in Italy (in USD Billion & %), 2017
- Table 18: Share of Germany in the European Semiconductor Industry (in USD Billion & %), 2017
- Table 19: Forecast of the Semiconductor Industry in Italy (in USD Billion), 2017-2022
- Table 20: Growth of the Semiconductor Industry in Japan by Value (in USD Billion), 2013-2017



- Table 21: Segmentation of the Semiconductor Industry in Japan (in USD Billion & %), 2017
- Table 22: Share of Japan in the Asia Pacific Semiconductor Industry (in USD Billion & %), 2017
- Table 23: Forecast of the Semiconductor Industry in Japan (in USD Billion), 2017-2022
- Table 24: Growth of the Semiconductor Industry in South Korea by Value (in USD Billion), 2013-2017
- Table 25: Segmentation of the Semiconductor Industry in South Korea (in USD Billion & %), 2017
- Table 26: Share of South Korea in the Asia Pacific Semiconductor Industry (in USD Billion & %), 2017
- Table 27: Forecast of the Semiconductor Industry in South Korea (in USD Billion), 2017-2022
- Table 28: Growth of the Semiconductor Industry in Taiwan by Value (in USD Billion), 2013-2017
- Table 29: Segmentation of the Semiconductor Industry in Taiwan (in USD Billion & %), 2017
- Table 30: Share of Taiwan in the Asia Pacific Semiconductor Industry (in USD Billion & %), 2017
- Table 31: Forecast of the Semiconductor Industry in Taiwan (in USD Billion), 2017-2022
- Table 32: Growth of the Semiconductor Industry in United Kingdom by Value (in USD Billion), 2013-2017
- Table 33: Segmentation of the Semiconductor Industry in the United Kingdom (in USD Billion & %), 2017
- Table 34: Share of United Kingdom in the European Semiconductor Industry (in USD Billion & %), 2017
- Table 35: Forecast of the Semiconductor Industry in the United Kingdom (in USD Billion), 2017-2022
- Table 36: Growth of the Semiconductor Industry in United States by Value (in USD Billion), 2013-2017
- Table 37: Segmentation of the Semiconductor Industry in the United States (in USD Billion & %), 2017
- Table 38: Share of the United States in the Global Semiconductor Industry (in USD Billion & %), 2017
- Table 39: Forecast of the Semiconductor Industry in the United States (in USD Billion), 2017-2022
- Table 40: Growth Forecast of the Global Semiconductor Industry by Value (in USD Billion) 2017-2022



#### I would like to order

Product name: Analyzing the Global Semiconductors Industry 2019
Product link: <a href="https://marketpublishers.com/r/AC197D1054BEN.html">https://marketpublishers.com/r/AC197D1054BEN.html</a>

Price: US\$ 1,200.00 (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 <a href="https://marketpublishers.com/r/AC197D1054BEN.html">https://marketpublishers.com/r/AC197D1054BEN.html</a>

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

| riist name.   |                           |  |
|---------------|---------------------------|--|
| 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 <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

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