

Report Information

More information from: <https://www.marketresearchfuture.com/reports/3d-semiconductor-packaging-market-7748>

3D Semiconductor Packaging Market Research Report - Global Forecast till 2027

Report / Search Code: MRFR/SEM/6279-CR

Publish Date: April, 2019

Request Sample

Price	1-user PDF : \$ 4950.0	Enterprise PDF : \$ 7250.0
-------	------------------------	----------------------------

Description:

3D Semiconductor Packaging Market Size and Overview

3D Semiconductor Packaging Market is expected to witness a valuation of USD 37,472.7 Million, growing at 16.25% CAGR during the forecast period (2020-2027). The demand for 3D semiconductor packaging is rising continually, mainly due to several functional advantages of 3D semiconductor packaging compared to conventional alternatives. Moreover, the rising preference for power-efficient solutions positively impacts the 3D semiconductor packaging adoption. Highly advanced 3D semiconductor packaging solutions improve the performance of the circuit performance. Besides, the increased use of consumer electronics boosts the adoption of 3D semiconductor packaging. At the same time, the growing trend of miniaturization of electronics creates new avenues for market players. 3D semiconductor packaging is an innovative technology that has several benefits. 3D semiconductor packaging boosts the overall performance of the circuit. Increased focus on achieving power efficiency has shifted the attention towards the uses of 3D technology for semiconductor packaging manufacturing. There are various packaging methods used in 3D semiconductor packaging such as flip-chip, package on package, through silicon via, through glass via, and others.

COVID-19 Analysis

COVID-19 has severely impacted the global 3D semiconductor packaging market, mainly due to slow down in various end-user industries. The global telecom industry has reportedly faced major delays in the fifth-generation mobile service due to the coronavirus outbreak worldwide. Additionally, collective lag in regulatory timelines and issuance of spectrum and auctions have acted as major headwinds for the market growth. Furthermore, the governments of various countries across the globe have postponed their expenditure plans for later. These are all impacting pointers to affect the consumers and business organizations due to limited or unavailability of network services. Additionally, lockdowns and movement restrictions have affected the business operations of equipment manufacturers leading to a shortage of components.

Market Dynamics

- **Market Drivers**

Proliferation of 3D printing technology and additive manufacturing (AM)/ additive layer manufacturing method boost market growth. The rapid industrialization and economic growth worldwide, alongside the vast technological advances in telemetry solutions and semiconductor products, drive the market. Besides, the spurring rise in information and communications industries is creating massive market demand, driving semiconductor production and sale. Semiconductors have transformed the process of energy generation, distribution, and consumption. Additive manufacturing allows the transformation of the supply chain from the production of parts manufactured by subtractive methods to higher performance, innovative designs that enable agile supply chains to adopt Industry 4.0/5.0 principles.

- **Market Restraints**

High cost of 3D printing-enabled manufacturing is a significant restraint. The high cost of 3D printing technology and the demand-supply gap in the raw materials required for the production are the major factors expected to continue hampering the growth of the market.

- **Cumulative Growth Analysis**

Growing Usages of Semiconductor in Power Amplifiers to Support the Market Growth. Semiconductor uses in power amplifiers for transmitting high-speed signals, ultra-high radio frequency, and fast electronic switching applications are rising continually. This, as a result, is expected to support market growth throughout the forecast period.

Market Segment Overview

The market report is segmented on the basis of types, packaging methods, end-users, and regions.

By type, the market is bifurcated into 3D SIP, 3D WLP, 3D SIC, 3D IC, and others.

By packaging method, the market is segmented into package-on-package, through silicon via (TSV), through glass via (TGV), and others.

Based on end-users, the report is segmented into consumer electronics, telecommunication, industrial, automotive, military & aerospace, and others.

By region, the market is segmented into the Americas, Europe, Asia Pacific, Rest-of-the-World (RoW), and other regions.

By Type Insights

By types of 3D semiconductor packaging, 3D SIP is the largest segment, witnessing wide uses in premium-grade products. . In 2017, the 3D SIP segment held around 33.5% market share. The segment is expected to surge further at a 15.0% CAGR during the forecast period.

By Packaging Method Insights

By packaging method, the through silicon via (TSV) is the largest segment, witnessing wide uses of package-on-package, mainly. Due to its high density and short connection, the TSV method is preferred more than package-on-package.

The segment has significantly contributed to the global 3D semiconductor packaging market in terms of revenue. In 2017, the TSV segment was valued at over USD 6,372.0 Million. The segment is anticipated to grow further at an impressive CAGR during the review period.

By End-User Insights

By end-users, the consumer electronics segment accounts for the largest market share, mainly due to the robust growth of the consumer electronics sector over recent years.

The consumer electronics segment is expected to reach a valuation of USD 11,700 million by 2023, registering a 15.99% CAGR during the review period.

Market Segmentation Analysis

By Type Outlook

- 3D SIP
- 3D WLP
- 3D SIC
- 3D IC
- Others

By Packaging Method Outlook

- Package-on-Package
- Through Silicon via (TSV)
- Through Glass via (TGV)

By End-User Outlook

- Consumer Electronics
- Telecommunication
- Industrial
- Automotive
- Military & Aerospace

By Region Outlook

- North America
- Europe

- Asia Pacific
- Rest of the World (RoW)

Regional Analysis

On a geographical level, the Asia Pacific region is likely to remain a highly attractive market for 3D semiconductor packagings during the review period. There is a tremendous opportunity for 3D semiconductor packaging in this region. Factors such as the increasing production of semiconductors and widespread uses of 3D semiconductor packaging drive the regional market growth. Besides, the strong presence of key market players in the region leads to the faster development of 3D semiconductor packaging technologies. State-backed initiatives and investments to increase semiconductor production create the demand for cutting-edge packaging technologies. Also, the strong R&D pipeline for the semiconductor industries in the region fosters market growth. In 2018, China held a significant share in the regional market in terms of revenues, and the trend is estimated to continue over the next few years. The APAC 3D semiconductor packaging market was valued at more than USD 8,000 million in 2018; the market is projected to increase at 18.9% CAGR throughout the forecast period. North America holds the second position in the global 3D semiconductor packaging market. The regional market growth is driven by the strong growth of the electronics industry in countries like the US, Canada, and Mexico. American consumers prefer miniaturized electronic devices that are compact but do not compromise on power. Additionally, the rapid adoption of high-end electronic devices and the rise of machine learning and artificial intelligence (AI) technologies are major factors that are likely to promote the 3D packaging solutions uses for various semiconductor components. The North American 3D semiconductor packaging market reached a valuation of USD 3,888.2 million in 2017 and is likely to register a 14.6% CAGR during the assessment period.

Competitive Landscape

Highly competitive, the global 3D semiconductor packaging market appears fragmented due to the presence of many players. To gain a larger competitive share, players in corporate strategic initiatives such as mergers & acquisitions, expansion, collaboration, and product/ technology launch. They substantially invest in transforming the consumer and business landscape and in driving R&D activities.

List of Key Companies

- Intel Corporation
- Amkor Technology Inc.
- Jiangsu Changjiang Electronics Technology Co. Ltd.
- Samsung Electronics Corporation Ltd.
- STMicroelectronics NV
- Advanced Semiconductor Engineering Inc.
- Xilinx Inc.
- Siliconware Precision Industries Co. Ltd.
- AMS AG
- Taiwan Semiconductor Manufacturing Co. Ltd.

Recent Developments

Nov. 19, 2020 ---- ACM Research, Inc. (ACM –the US), a leading supplier of wafer processing solutions for semiconductors and advanced wafer-level packaging (WLP) applications, launched its new Ultra ECP 3d platform for conformably filled 3D through-silicon via (TSV) applications.

Dec. 18, 2020 ---- ASE Technology Holding Co., Ltd., a leading provider of a range of semiconductors packaging and testing, and electronic manufacturing services, announced that the consensus indicates a potential 14.2% upside. ASE provides its products, technologies, and services in the United States, Taiwan, Asia, and Europe.

Nov. 25, 2020 ---- Taiwan Semiconductor Manufacturing Co. (TSMC), the world's biggest chip-making contract company, announced the development of a new manufacturing technique for chips. The company developed this technology in collaboration with Advanced Micro Devices (AMD) and Google.

In a bid to find innovative packaging solutions for tiny chips, the semiconductor maker has come up with a new solution. TSMC is now using the new 3D technology called SoIC to stack and link a variety of chips, such as processors, memory, and sensors, into one package.

Nov. 03, 2020 ---- CEA-Leti announced a new collaboration with Intel to advance chip design through 3D packaging technologies. The research will focus on the assembly of smaller chiplets, optimizing interconnection technologies between the different elements of microprocessors, and on new bonding and stacking technologies for 3D ICs, especially for making high-performance computing (HPC) applications.

Table of Content:

Contents	
1 Executive Summary	
2 Market Introduction	
2.1 Definition 16	
2.2 Scope Of The Study 16	
2.3 List Of Assumptions 17	
2.4 Market Structure 17	
3 Research Methodology	

3.1 Research Process	19
3.2 Secondary Research	19
3.3 Primary Research	20
3.4 Forecast Model	22
4 Market Dynamics	
4.1 Introduction	24
4.2 Drivers	24
4.2.1 Rising Demand For Miniaturization Of Portable Electronics Devices	24
4.2.2 Increasing Use In The Automotive Industry	25
4.2.3 Driver Impact Analysis	25
4.3 Restraints	26
4.3.1 Concerns Regarding Heat Dissipation	26
4.3.2 Restraint Impact Analysis	26
4.4 Opportunities	26
4.4.1 Proliferation Of IoT And Wireless Devices	26
4.5 Supply Chain Analysis	27
4.6 Porter's Five Forces Model	28
4.6.1 Threat Of New Entrants	29
4.6.2 Bargaining Power Of Suppliers	29
4.6.3 Threat Of Substitutes	29
4.6.4 Bargaining Power Of Buyers	29
4.6.5 Intensity Of Rivalry	29
5 Market Alerts	
5.1 Market Trends	31
5.1.1 Current Development In 3D Substrate Technology	31
5.2 Use Cases	32
5.2.1 3D Packaging Technology For Microelectronics	32
5.2.2 3D Heterogenous Integration Technologies To Support Artificial Intelligence (AI)	33
6 Global 3D Semiconductor Packaging Market, By Type	
6.1 Overview	35
6.1.1 3D SIP (System In Package)	36
6.1.2 3D WLP	36
6.1.3 3D SIC	36
6.1.4 3D IC	36
7 Global 3D Semiconductor Packaging Market, By Packaging Method	
7.1 Overview	38
7.1.1 Package On Package	39
7.1.2 Through Silicon Via (TSV)	39
7.1.3 Through Glass Via (TGV)	39
7.1.4 Others	39
8 Global 3D Semiconductor Packaging Market, By End-User	
8.1 Overview	41
8.1.1 Consumer Electronics	42
8.1.2 Telecommunication`	42
8.1.3 Industrial	42
8.1.4 Automotive	42
8.1.5 Military & Aerospace	42
9 3D Semiconductor Packaging Market, By Region	
9.1 Introduction	44
9.2 North America	45
9.2.1 US	49
9.2.2 Canada	50
9.2.3 Mexico	52
9.3 Europe	54
9.3.1 UK	58
9.3.2 Germany	60
9.3.3 France	62
9.3.4 Rest Of Europe	64
9.4 Asia-Pacific	66
9.4.1 China	70
9.4.2 Japan	72
9.4.3 India	74
9.4.4 South Korea	76
9.4.5 Rest Of Asia-Pacific	78
9.5 Rest Of The World	80
9.5.1 Middle East & Africa	84
9.5.2 Latin America	86
10 Competitive Landscape	
10.1 Overview	89
11 Company Profiles	
11.1 Jiangsu Changjiang Electronics Technology Co., Ltd	92
11.1.1 Company Overviews	92
11.1.2 Financial Overview	92
11.1.3 Products/Solution/Services Offered	93
11.1.4 Key Developments	93
11.2 Intel Corporation	94
11.2.1 Company Overviews	94
11.2.2 Financial Overview	94
11.2.3 Products/Solution/Services Offered	95
11.2.4 Key Developments	95
11.2.5 SWOT Analysis	95
11.2.6 Key Strategy	95
11.3 Siliconware Precision Industries Co., Ltd	96
11.3.1 Company Overviews	96
11.3.2 Financial Overview	96
11.3.3 Products/Solution/Services Offered	97
11.3.4 Key Developments	97
11.4 STMicroelectronics NV	98
11.4.1 Company Overviews	98
11.4.2 Financial Overview	98
11.4.3 Products/Solution/Services Offered	98
11.4.4 Key Developments	99
11.4.5 SWOT Analysis	99

11.4.6 Key Strategy	99
11.5 Xilinx Inc.	100
11.5.1 Company Overviews	100
11.5.2 Financial Overview	100
11.5.3 Products/Solution/Services Offered	101
11.5.4 Key Developments	101
11.5.5 SWOT Analysis	101
11.5.6 Key Strategy	101
11.6 Samsung Electronics Corporation Ltd	102
11.6.1 Company Overview	102
11.6.2 Financial Overview	102
11.6.3 Products/Services Offered	103
11.6.4 Key Developments	103
11.6.5 SWOT Analysis	103
11.6.6 Key Strategy	103
11.7 Taiwan Semiconductor Manufacturing Co. Ltd.	104
11.7.1 Company Overview	104
11.7.2 Financial Overview	104
11.7.3 Products/Services Offered	105
11.7.4 Key Developments	105
11.7.5 SWOT Analysis	105
11.7.6 Key Strategy	105
11.8 Advanced Semiconductor Engineering Inc.	106
11.8.1 Company Overview	106
11.8.2 Financial Overview	106
11.8.3 Products/Services Offered	107
11.8.4 Key Developments	107
11.8.5 SWOT Analysis	107
11.8.6 Key Strategy	107
11.9 Ams AG	108
11.9.1 Company Overview	108
11.9.2 Financial Overview	108
11.9.3 Products/Services Offered	109
11.9.4 Key Developments	109
11.9.5 SWOT Analysis	109
11.9.6 Key Strategy	109
11.10 Amkor Technology Inc.	110
11.10.1 Company Overview	110
11.10.2 Financial Overview	110
11.10.3 Products/Services Offered	111
11.10.4 Key Developments	111
11.10.5 SWOT Analysis	112
11.10.6 Key Strategy	112
12 List Of Tables	
TABLE 1 MARKET SYNOPSIS	14
TABLE 2 LIST OF ASSUMPTIONS	17
TABLE 3 RECENT DEVELOPMENTS:	32
TABLE 4 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	35
TABLE 5 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	38
TABLE 6 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	41
TABLE 7 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY REGION, 2020-2027 (USD MILLION)	44
TABLE 8 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY COUNTRY, 2020-2027 (USD MILLION)	45
TABLE 9 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	46
TABLE 10 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	47
TABLE 11 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	48
TABLE 12 US: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	49
TABLE 13 US: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	49
TABLE 14 US: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	50
TABLE 15 CANADA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	50
TABLE 16 CANADA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	51
TABLE 17 CANADA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	51
TABLE 18 MEXICO: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	52
TABLE 19 MEXICO: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	52
TABLE 20 MEXICO: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	53
TABLE 21 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY COUNTRY, 2020-2027 (USD MILLION)	54
TABLE 22 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	55
TABLE 23 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	56
TABLE 24 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	57
TABLE 25 UK: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	58
TABLE 26 UK: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	58
TABLE 27 UK: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	59
TABLE 28 GERMANY: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	60
TABLE 29 GERMANY: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	61
TABLE 30 GERMANY: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	61
TABLE 31 FRANCE: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	62
TABLE 32 FRANCE: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD	

MILLION)	62
TABLE 33 FRANCE: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	63
TABLE 34 REST OF EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	64
TABLE 35 REST OF EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	64
TABLE 36 REST OF EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	65
TABLE 37 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY COUNTRY, 2020-2027 (USD MILLION)	66
TABLE 38 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	67
TABLE 39 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	68
TABLE 40 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	69
TABLE 41 CHINA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	70
TABLE 42 CHINA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	70
TABLE 43 CHINA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	71
TABLE 44 JAPAN: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	72
TABLE 45 JAPAN: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	72
TABLE 46 JAPAN: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	73
TABLE 47 INDIA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	74
TABLE 48 INDIA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	74
TABLE 49 INDIA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	75
TABLE 50 SOUTH KOREA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	76
TABLE 51 SOUTH KOREA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	76
TABLE 52 SOUTH KOREA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	77
TABLE 53 REST OF ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	78
TABLE 54 REST OF ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	78
TABLE 55 REST OF ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	79
TABLE 56 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET, BY COUNTRY, 2020-2027 (USD MILLION)	80
TABLE 57 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	81
TABLE 58 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	82
TABLE 59 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	83
TABLE 60 MIDDLE EAST & AFRICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	84
TABLE 61 MIDDLE EAST & AFRICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	84
TABLE 62 MIDDLE EAST & AFRICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	85
TABLE 63 LATIN AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020-2027 (USD MILLION)	86
TABLE 64 LATIN AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020-2027 (USD MILLION)	86
TABLE 65 LATIN AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020-2027 (USD MILLION)	87

13 List Of Figures

FIGURE 1 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET: MARKET STRUCTURE	17
FIGURE 2 TOP DOWN & BOTTOM UP APPROACH	22
FIGURE 3 DRIVERS, RESTRAINT, AND OPPORTUNITY ANALYSIS OF GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET	24
FIGURE 4 INDUSTRY SUPPLY CHAIN: SEMICONDUCTOR AND ELECTRONICS	27
FIGURE 5 SUPPLY CHAIN: 3D SEMICONDUCTOR PACKAGING	27
FIGURE 6 PORTER'S FIVE FORCES ANALYSIS OF 3D SEMICONDUCTOR PACKAGING MARKET	28
FIGURE 7 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020 VS 2027 (USD MILLION)	35
FIGURE 8 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020 VS 2027 (USD MILLION)	38
FIGURE 9 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020 VS 2027 (USD MILLION)	41
FIGURE 10 GLOBAL 3D SEMICONDUCTOR PACKAGING MARKET, BY REGION, 2020 VS 2027 (USD MILLION)	44
FIGURE 11 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET SIZE, BY COUNTRY, 2020 VS 2027 (USD MILLION)	45
FIGURE 12 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020 VS 2027 (USD MILLION)	46
FIGURE 13 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020 VS 2027 (USD MILLION)	47
FIGURE 14 NORTH AMERICA: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020 VS 2027 (USD MILLION)	48
FIGURE 15 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET SIZE, BY COUNTRY, 2020 VS 2027 (USD MILLION)	54
FIGURE 16 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020 VS 2027 (USD MILLION)	55
FIGURE 17 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020 VS 2027 (USD MILLION)	56
FIGURE 18 EUROPE: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020 VS 2027 (USD MILLION)	57
FIGURE 19 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET SIZE, BY COUNTRY, 2020 VS 2027	

(USD MILLION) 66
FIGURE 20 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020 VS 2027 (USD MILLION) 67
FIGURE 21 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020 VS 2027 (USD MILLION) 68
FIGURE 22 ASIA-PACIFIC: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020 VS 2027 (USD MILLION) 69
FIGURE 23 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET SIZE, BY COUNTRY, 2020 VS 2027 (USD MILLION) 80
FIGURE 24 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET, BY TYPE, 2020 VS 2027 (USD MILLION) 81
FIGURE 25 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET, BY PACKAGING METHOD, 2020 VS 2027 (USD MILLION) 82
FIGURE 26 REST OF THE WORLD: 3D SEMICONDUCTOR PACKAGING MARKET, BY END-USER, 2020 VS 2027 (USD MILLION) 83
FIGURE 27 COMPETITIVE BENCHMARKING OF MAJOR COMPETITORS 90