

Advanced Packaging Market by Type (Flip Chip CSP, Flip-Chip Ball Grid Array, Wafer Level CSP, 2.5D/3D, Fan-Out WLP, and Others), and End Use (Consumer Electronics, Automotive, Industrial, Healthcare, Aerospace & Defense, and Others): Global Opportunity Analysis and Industry Forecast, 2020–2027

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# **Abstracts**

Advanced packaging is a supporting case that prevents physical damage and corrosion to silicon wafers, logic units and memory, during the final stage of semiconductor manufacturing process. Advanced packaging allows the chip to be connected to a circuit board. In addition, advanced packaging involves grouping of a variety of distinct techniques which includes 2.5D, 3D-IC, fan-out-wafer-level packaging and system-in-package.

Different integrated circuits (ICs) have different packaging requirements, which provides growth opportunities for advanced packaging over traditional packaging process. In addition, advanced packaging is expected to offer higher abilities than conventional packaging solutions, which is expected to offer lucrative opportunities for advanced packaging market trends in the coming years.

With rapid growth in advanced packaging market, specifically fan out wafer level packaging, along with increase in demand for smartphone and devices and Internet of Things (IoT), advanced packaging suppliers are developing process and ways to reduce the overall cost of advanced packaging and provide maximum operational efficiency. During the recent times, advanced packaging is mainly used for high-end products and for applications related to niche-market such as wafer and die production due to its high.



cost in its operation.

Advanced packaging technology is expected to increase the value of a semiconductor product by adding functionality in its operation, increasing and maintaining the performance, while lowering the overall cost of packaging. The adoption of advanced packaging is also creating demand for high performance chips for various consumer electronic products. This augments the demand for 3D and 2.5D packaging chips, used in smartphones and other mobile devices.

Increase in demand for miniaturization of devices among various industry verticals and improved system performances and optimization of advanced packaging are significant factors that assist in the market growth globally. However, high cost associated with advanced packaging hampers its adoption to a certain level and majorly restrains the market growth. Furthermore, emerging trends toward fan-out wafer level packaging is expected to offer lucrative opportunities for the growth of the advanced packaging market globally.

The global advanced packaging market is analyzed by type, end use, and region. By type, the market is classified into flip chip CSP, flip-chip ball grid array, wafer level CSP, 2.5D/3D, fan-out WLP, and others. On the basis of end use, the market is divided into consumer electronics, automotive, industrial, healthcare, aerospace & defense, and others. By region, it is analyzed across North America, Europe, Asia-Pacific, and LAMEA along with their prominent countries.

The key players profiled in the report include Amkor Technology, Intel Corporation, Qualcomm Technologies Inc., Taiwan Semiconductor Manufacturing Company, IBM, Microchip Technology, Renesas Electronics Corporation, Texas Instruments, and Analog Devices. These key players have adopted strategies, such as product portfolio expansion, mergers & acquisitions, agreements, geographical expansion, and collaborations, to enhance their market penetration.

#### ADVANCED PACKAGING MARKET SEGMENTATION

Ву Туре

Flip Chip CSP

Flip-Chip Ball Grid Array



Wafer Level CSP

2.5D/3D

Fan Out WLP

Others

Thin Quad Flat Packages

Flip-Chip Package-in-Package

Embedded Die

Others

By End Use

**Consumer Electronics** 

Automotive

Industrial

Healthcare

Aerospace & Defense

Others

Oil & Gas

Paper & Pulp

Others

By Region

Advanced Packaging Market by Type (Flip Chip CSP, Flip-Chip Ball Grid Array, Wafer Level CSP, 2.5D/3D, Fan-Out...



#### North America

U.S.

Canada

Mexico

#### Europe

UK

Germany

France

Rest of Europe

Asia-Pacific

China

#### India

Japan

South Korea

**Rest of Asia-Pacific** 

#### LAMEA

Latin America

Middle East

Africa



Key Companies

Amkor Technology

Intel Corporation

Qualcomm Technologies Inc.

Taiwan Semiconductor Manufacturing Company

IBM

Microchip Technology

Renesas Electronics Corporation

**Texas Instruments** 

Analog Devices



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