# The Global Market for Advanced Semiconductor Packaging 2024-2035

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## Abstracts

The global landscape of semiconductor manufacturing is rapidly evolving, with advanced packaging emerging as a critical component of manufacturing and design. It affects power, performance, and cost on a macro level, and the basic functionality of all chips on a micro level. Advanced packaging allows for the creation of faster, cost-effective systems by integrating various chips, a technique that's increasingly essential given the physical limitations of traditional chip miniaturization. It is reshaping the industry, enabling the integration of diverse chip types and enhancing processing speeds.

The U.S. government recognizes the importance of advanced packaging and has introduced a $3 billion National Advanced Packaging Manufacturing Program aimed at establishing high-volume packaging facilities by the end of the decade. The focus on packaging complements the existing efforts under the CHIPS and Science Act, emphasizing the interconnectedness of chipmaking and packaging.

The Global Market for Advanced Semiconductor Packaging 2024-2035 provides a comprehensive analysis of the global advanced semiconductor packaging technologies market from 2020-2035. It encompasses packaging approaches like wafer-level packaging, 2.5D/3D integration, chiplets, fan-out, and flip chip, analyzing market values in the billions (USD) by type, region, and end-use application.

Trends analyzed include heterogeneous integration, interconnects, thermal solutions, miniaturization, supply chain maturity, simulation/data analytics. Leading companies profiled include TSMC, Samsung, Intel, JCET, Amkor. Applications covered include AI, mobile, automotive, aerospace, IoT, communications (5G/6G), high performance computing, medical, and consumer electronics.

Regional markets explored include North America, Asia Pacific, Europe, China, Japan, and RoW. The report also assesses drivers like ML/AI, data centers, EV/ADAS; challenges like costs, complexity, reliability; emerging approaches like system-in-package, monolithic 3D ICs, advanced substrates, novel materials. Overall an in-depth benchmark analysis of the opportunities within the advancing semiconductor packaging industry.

Report contents include:

- Market size and forecasts
- Key technology trends
- Growth drivers and challenges
- Competitive landscape analysis
- Future packaging trends outlook
- In-depth analysis of wafer level packaging (WLP)
- System-in-Package (SiP) and heterogeneous integration
- Monolithic 3D ICs overview
- Advanced semiconductor packaging applications across key markets: AI, mobile, automotive, aerospace, IoT, communications, HPC, medical, consumer electronics
- Regional market breakdown
- Assessment of key industry challenges: complexity, costs, supply chain maturity, standards
- Company profiles: Strategies and technologies of 90 key players. Companies profiled include 3DSEMI, Amkor, Chipbond, ChipMOS, Intel Corporation, Leader-Tech Semiconductor, Powertech, Samsung Electronics, Silicon Box, SJ Semiconductor Corp., SK hynix, SPIL, Tongfu, Taiwan Semiconductor

Manufacturing Company (TSMC) and Yuehai Integrated (Full list of companies profiled in table of contents).

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10.7 Amkor Technology
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10.11 Ardentec Corporation
10.12 ARM
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10.21 Cambricon Technologies Co.,
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10.26 CEA-Leti
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10.49 Hangke Chuangxing (Aero Inno-Star)
10.50 Hanmi Semiconductor
10.51 HiSilicon
10.52 HLMC (Shanghai Huali Microelectronics Corporation)
10.53 Huatian Huichuang Technology (Xi'an) Co., Ltd.

10.54 Huawei
10.55 Ibiden
10.56 IBM
10.57 ICLeague Technology Co Ltd
10.58 IMEC
10.59 Infineon Technologies AG
10.60 Integra
10.61 Inari Amertron Berhad
10.62 Intel Corporation
10.63 JCET Group
10.64 Jiangsu IC Assembly & Test (ICAT)
10.65 Jingdu Semiconductor
10.66 Keyang Semiconductor (KYS)
10.67 King Yuan Electronics Co., Ltd.
10.68 Kioxia
10.69 KyLitho
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