

Semiconductor Foundry Market to Hit USD 211.34 Billion By 2032 | SNS Insider

The Semiconductor Foundry Market is growing with demand for advanced chip manufacturing, driven by AI, 5G, IoT, and automotive applications.

AUSTIN, TX, UNITED STATES, February 20, 2025 /EINPresswire.com/ -- Market Size & Industry Insights

According to the SNS Insider
Report, "The <u>Semiconductor Foundry</u>
<u>Market</u> size is expected to be valued at
USD 118.60 Billion in 2023 and
expected to reach USD 211.34 Billion

SEMICONDUCTOR FOUNDRY MARKET

MARKET STASTISTICS

MARKET STASTISTICS

AMARKET STASTISTICS

MARKET STASTISTICS

AMARKET STASTISTI

by 2032 with a CAGR of 6.63% over the forecast period 2024-2032."

The market is being driven by growing wafer production volumes across key regions, the evolution in chip design trends, and high fab capacity utilization levels in 2023. In addition to this, the rapid growth of artificial intelligence (AI), 5G networks, and the Internet of Things (IoT) deploying high-performance and energy-efficient chips only boosts the demand for semiconductor foundries. The industry's push toward advanced nodes, including 5nm and lower, has also compelled foundries to further up their production game. The market is also strengthening growth with rising investments in new fabrication plants and supply chain optimization efforts. Supply chain constraints and geopolitical tensions, however, are among the top challenges. With more industries depending on semiconductors than ever, demand for foundries is only expected to escalate, leading to an increase in utilization rate and an expanding capacity.

Get Free Sample PDF of Semiconductor Foundry Market (with Full TOC & Graphs) @ https://www.snsinsider.com/sample-request/2285

SWOT Analysis of Key Players as follows:

- Taiwan Semiconductor Manufacturing Company
- United Microelectronics Corporationn

- Samsung Semiconductor
- Vanguard International Semiconductor Corporation
- Powerchip Semiconductor Manufacturing
- Global Foundries
- Semiconductor Manufacturing International Corporation
- Fujitsu Semiconductor
- Tower Semiconductor
- X-FAB Silicon Foundries

Key Market Segmentation:

By Technology, Technology Dominating and Services Fastest Growing

The Technology segment dominates due to the continuous advancements in process nodes, such as 5nm, 3nm, and upcoming sub-2nm technologies. Leading foundries like TSMC, Samsung, and Intel are heavily investing in cutting-edge lithography, including extreme ultraviolet (EUV) technology, to enhance chip performance and efficiency. The demand for high-performance computing (HPC), AI, and 5G applications is driving the growth of this segment.

The services segment is the fastest-growing over the forecast period 2024-2032, with rising outsourcing trends seeing fabless semiconductor companies leaning on foundries for design, prototyping, and advanced packaging services. As ambitions to continue miniaturization become more complex with challenges such as chiplet integration and 3D stacking, foundries will offer more services to meet changing customer demand. The demand for service segment is the fastest-growing segment with the growing Al-driven chip design and cloud-based Electronic Design Automation (EDA) tools.

Connect with Our Expert for any Queries @ https://www.snsinsider.com/request-analyst/2285

By Foundry Type, pure-play foundry dominating and IDMS Fastest Growing

The pure-play foundry segment dominates, driven by major players such as TSMC, GlobalFoundries, and UMC, which specialize exclusively in contract manufacturing for fabless semiconductor companies. Pure-play foundries benefit from increasing demand for custom chip designs, advanced process nodes, and high-volume production, particularly for AI, 5G, and automotive applications. Their focus on cutting-edge manufacturing and strategic partnerships with leading chip designers ensures their market leadership.

The IDMs (Integrated Device Manufacturers) segment is the fastest-growing over the forecast period 2024-2032, as companies like Intel, Samsung, and Texas Instruments expand their foundry services to compete with pure-play foundries. Rising geopolitical concerns and supply chain disruptions are pushing governments and businesses to invest in domestic semiconductor manufacturing, boosting IDM growth. Additionally, IDMs are increasingly leveraging their in-

house design and manufacturing expertise to offer advanced node capabilities and specialized chips for AI, automotive, and data center applications, accelerating their market expansion.

By Type, 10/7/5 nm Dominating and Fastest Growing

In the semiconductor foundry market, The 10/7/5 nm segment, dominate and are projected to be the fastest-growing over the forecast period of 2024-2032. This leadership is underpinned by a rapidly increasing demand for AI, high-performance computing (HPC), and advanced consumer electronics. As industries demand ever-more powerful and capable chips, foundries are focusing on advanced lithography and process innovations. In fact, market leaders such as TSMC state that they second largest share of their wafer revenue comes from 5nm and 3nm nodes, cementing their lead. As AI-driven workloads, 5G networks, and next-generation smartphones all require better semiconductor performance, a segment consisting of the 10/7/5 nm segment will grow rapidly. Consequently, all foundries are in the process of expanding production capacity, affirming our findings long before that 10/7/5 nm would be the dominant force of semiconductor market growth from 2024 to 2032.

By Industry, Consumer Electronics and Communication Fastest Growing

The consumer electronics segment dominates, due to the rapid proliferation of 5G networks, cloud computing and Al-powered telecom infrastructure. The growing need for high-speed data transfer, sophisticated networking devices, and satellite communications systems is forcing foundries to roll out next-generation RF chips, baseband processors, and photonic semiconductors. The growing implementation of private 5G networks and IoT-centric smart cities is also boosting the use of semiconductors in telecom applications, thereby making communications the fastest-growing sector in the overall semiconductor foundry market.

The communications segment is the fastest-growing, fueled by the rapid expansion of 5G networks, cloud computing, and Al-driven telecommunications infrastructure. Increasing demand for high-speed data transmission, advanced networking equipment, and satellite communication systems is pushing foundries to develop next-generation RF chips, baseband processors, and photonic semiconductors. Additionally, the rise of private 5G networks and IoT-driven smart cities is accelerating semiconductor adoption in telecom applications, making communications the most rapidly expanding industry in the semiconductor foundry market.

Purchase Single User PDF of Semiconductor Foundry Market Forecast Report @ https://www.snsinsider.com/checkout/2285

Asia Pacific Dominates, While North America Emerges as the Fastest-Growing Region in the Semiconductor Foundry Market (2024-2032)

In the semiconductor foundry market, Asia Pacific dominates, driven by major players like TSMC, Samsung, and SMIC, which lead in advanced process nodes such as 10/7/5 nm. The region

benefits from strong government support, robust semiconductor ecosystems, and high demand from AI, HPC, and consumer electronics industries. Taiwan, South Korea, and China are key contributors, with Taiwan alone accounting for a significant share of global foundry capacity.

North America is the fastest-growing region, The U.S. CHIPS Act and strategic expansion by firms like Intel and Global Foundries are boosting foundry development. North American semiconductor production is also getting a lift from growing demand for AI, cloud computing and defense applications. As by 2024, Asia Pacific will retain its market share whereas North America will witness fastest growth until 2032 due to constant technological improvements, changes in geopo litics among 2024–2032.

TABLE OF CONTENT - Key Points

Chapter 1. Introduction

Chapter 2. Executive Summary

Chapter 3. Research Methodology

Chapter 4. Market Dynamics Impact Analysis

Chapter 5. Statistical Insights and Trends Reporting

Chapter 6. Competitive Landscape

Chapter 7. Semiconductor Foundry Market Segmentation, by Offering

Chapter 8. Semiconductor Foundry Market Segmentation, by Foundry Type

Chapter 9. Semiconductor Foundry Market Segmentation, by Type

Chapter 10. Semiconductor Foundry Market Segmentation, by Industry

Chapter 11. Regional Analysis

Chapter 12. Company Profiles

Chapter 13. Use Cases and Best Practices

Chapter 14. Conclusion

Continued...

Make an Inquiry Before Buying @ https://www.snsinsider.com/enquiry/2285

Akash Anand SNS Insider +1 415-230-0044 info@snsinsider.com

This press release can be viewed online at: https://www.einpresswire.com/article/787664398
EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.