+357 96 030922
info@marketpublishers.com

Integrated Circuit (IC) Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Product Type (Logic, Memory, Micro, and Analog), By Type (Digital IC, Analog IC, Mixed-Signal IC), By Application (Standard PCs, Cellphones/Tablets, Internet of Things (IoT), Servers, TVs/Set Top Box, Gaming Consoles, and Others), By Industry Vertical (Consumer Electronics, Automotive, IT & Telecommunications, Manufacturing and Automation, Healthcare, Aerospace & Defense, Others), By Region & Competition, 2021-2031F

https://marketpublishers.com/r/I4432C378156EN.html
Date: May 2026
Pages: 188
Price: US$ 4,500.00 (Single User License)
ID: I4432C378156EN

Abstracts

The Global Integrated Circuit (IC) Market is projected to expand significantly, rising from USD 653.17 Billion in 2025 to USD 1337.61 Billion by 2031, reflecting a Compound Annual Growth Rate (CAGR) of 12.69%. Integrated Circuits, which are compact semiconductor wafers containing complex arrangements of electronic components like transistors and capacitors, serve critical processing and memory roles. This market expansion is primarily underpinned by the surging computational requirements of artificial intelligence infrastructure and the widespread electrification of the worldwide automotive sector. Additionally, the ongoing rollout of high-speed 5G telecommunications networks establishes a solid foundation for industry growth, ensuring sustained demand regardless of transient technological adjustments.

Despite this potential, the industry confronts major obstacles arising from geopolitical trade tensions, which jeopardize global supply chain integrity and limit access to

essential manufacturing materials. These regulatory complications create uncertainty that can impede cross-border cooperation and production scalability, ultimately leading to higher costs for manufacturers. According to the Semiconductor Industry Association, global semiconductor industry sales reached $627.6 billion for the year 2024, as reported in 2025, emphasizing the market's immense economic magnitude even in the face of these persisting operational challenges.

Market Driver

The accelerating demand for Artificial Intelligence and Machine Learning hardware is fundamentally transforming the integrated circuit sector, propelled by the intense computational needs of training Large Language Models (LLMs) and generative AI applications. This movement has triggered a swift architectural transition toward high-performance computing elements, particularly Graphics Processing Units (GPUs) and specialized accelerators designed for massive parallel processing tasks. Consequently, foundries are experiencing a surge in orders for advanced node manufacturing to bolster hyperscale data center infrastructure. As noted by TSMC in its 'Third Quarter 2024 Earnings Release' from October 2024, revenue derived from server AI processors is anticipated to more than triple in 2024 over the prior year, comprising a mid-teens percentage of total revenue, which underscores the industry's shift from consumer-focused logic to enterprise-grade AI silicon.

Concurrently, the increasing semiconductor content within Electric and Autonomous Vehicles serves as a crucial stabilizer and a source of long-term expansion for the market. As the automotive sector moves from internal combustion engines to electrified powertrains, the demand for power management ICs—especially those leveraging Silicon Carbide (SiC) and Gallium Nitride (GaN)—has risen sharply to guarantee energy efficiency and battery performance. Furthermore, the adoption of Advanced Driver Assistance Systems (ADAS) requires a greater density of sensors and microcontrollers per vehicle. According to Infineon Technologies' 'Annual Report 2024' released in November 2024, the automotive segment generated €8.42 billion, accounting for 56% of the group's total revenue. Highlighting this broad momentum, SEMI's 'World Fab Forecast' from June 2024 indicates that global semiconductor manufacturing capacity is projected to rise by 6% in 2024 to satisfy these expanding sector requirements.

Market Challenge

Geopolitical trade tensions present a severe restriction on the Global Integrated Circuit Market by undermining the efficiency of international supply chains. As governments implement more stringent export controls and trade barriers, manufacturers face substantial difficulties in securing necessary raw materials and production inputs. This fragmentation compels industry participants to pursue alternative, frequently more costly sourcing methods, disrupting the smooth transfer of components essential for high-volume fabrication. The ensuing uncertainty obstructs firms' ability to strategize for long-term capacity growth and limits their agility in responding to shifting market needs.

Furthermore, these regulatory intricacies increase operational expenditures as companies navigate a progressively fractured logistics framework. The industry relies on massive capital investment, which is directly jeopardized by these trade restrictions. According to SEMI, global sales of total semiconductor manufacturing equipment are projected to reach $125.5 billion in 2025. Any disruption in the trade of this vital equipment caused by geopolitical friction inevitably retards production capabilities and constrains the overall growth trajectory of the market.

Market Trends

The incorporation of High-Bandwidth Memory (HBM) directly into Logic Packages is developing as a crucial architectural advancement, solving the "memory wall" issue that limits advanced processor performance. As logic circuits accelerate, the bandwidth and latency of conventional external memory interconnects fall short, requiring the stacking of DRAM dies directly onto the processor’s interposer utilizing Through-Silicon Vias (TSV). This trend is essential for optimizing the efficiency of AI accelerators that demand rapid access to immense datasets held in memory. The market significance of this technical transition is reflected in the financial performance of major memory suppliers; according to SK Hynix's 'Third Quarter 2024 Earnings Results' from October 2024, sales of its HBM products rose by over 70% quarter-over-quarter, confirming the sector's strong dependence on this integrated packaging technology.

At the same time, the emergence of On-Device Edge AI Processing Capabilities in Consumer Electronics is shifting computational workloads from cloud servers to end-user devices. This movement fuels the creation of specialized Neural Processing Units (NPUs) within mobile and PC System-on-Chips (SoCs), enabling the privacy-focused, low-latency operation of generative AI models directly on smartphones and laptops. This transition is reinvigorating the consumer logic market by encouraging upgrades to premium silicon tiers capable of managing these demanding local inference tasks. Evidencing this demand for AI-ready endpoints, Qualcomm reported in its 'Fourth Quarter and Fiscal 2024 Results' in November 2024 that handset revenues increased 12% year-over-year to $6.1 billion, driven by the robust adoption of their newest AIoptimized mobile platforms.

Key Market Players

- Intel Corporation
- Samsung Electronics Co., Ltd.
- Taiwan Semiconductor Manufacturing Company Limited
- Qualcomm Incorporated
- Nvidia Corporation
- Broadcom Inc.
- MediaTek Inc.
- Infineon Technologies AG
- Renesas Electronics Corporation
- STMicroelectronics N.V.

Report Scope

In this report, the Global Integrated Circuit (IC) Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

- Integrated Circuit (IC) Market, By Product Type
  - Logic
  - Memory
  - Micro

+357 96 030922
info@marketpublishers.com

- Analog

Integrated Circuit (IC) Market, By Type

- Digital IC
- Analog IC
- Mixed-Signal IC

Integrated Circuit (IC) Market, By Application

- Standard PCs
- Cellphones/Tablets
- Internet of Things (IoT)
- Servers
- TVs/Set Top Box
- Gaming Consoles
- Others

Integrated Circuit (IC) Market, By Industry Vertical

- Consumer Electronics
- Automotive
- IT & Telecommunications
- Manufacturing and Automation
- Healthcare
- Aerospace & Defense

+357 96 030922
info@marketpublishers.com

Others

Integrated Circuit (IC) Market, By Region

North America

United States

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia Pacific

China

India

Japan

Australia

South Korea

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Integrated Circuit (IC) Market.

Available Customizations:

Global Integrated Circuit (IC) Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

Contents

7. EUROPE INTEGRATED CIRCUIT (IC) MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Integrated Circuit (IC) Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Product Type (Logic, Memory, Micro, and Analog), By Type (Digital IC, Analog IC, Mixed-Signal IC), By Application (Standard PCs, Cellphones/Tablets, Internet of Things (IoT), Servers, TVs/Set Top Box, Gaming Consoles, and Others), By Industry Vertical (Consumer Electronics, Automotive, IT & Telecommunications, Manufacturing and Automation, Healthcare, Aerospace & Defense, Others), By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/I4432C378156EN.html

Price: US$ 4,500.00 (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 https://marketpublishers.com/r/I4432C378156EN.html