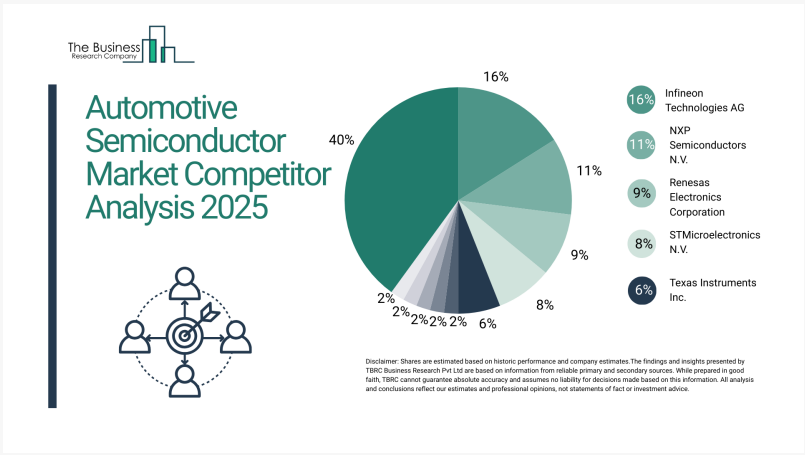
Automotive Semiconductor Market In 2029

The Business Research Company's Automotive Semiconductor Global Market Report 2025 – Market Size, Trends, And Forecast 2025-2034

LONDON, GREATER LONDON, UNITED KINGDOM, December 10, 2025 /EINPresswire.com/ -- Automotive Semiconductor Market to Surpass $107 billion in 2029. In comparison, the Electrical And Electronics Components market, which is considered as its parent market, is expected to be approximately $110.3 billion by 2029, with Automotive Semiconductor to represent around 97% of the parent market. Within the broader Electrical And Electronics industry, which is expected to be $5,240 billion by 2029, the Automotive Semiconductor market is estimated to account for nearly 2% of the total market value.

Which Will Be the Biggest Region in the Automotive Semiconductor Market in 2029

Asia Pacific will be the largest region in the automotive semiconductor market in 2029, valued at $49,123 million. The market is expected to grow from $26,527 million in 2024 at a compound annual growth rate (CAGR) of 13%. The rapid growth can be attributed to the rising consumer demand for smart and digital cockpit solutions and rising demand for connected cars



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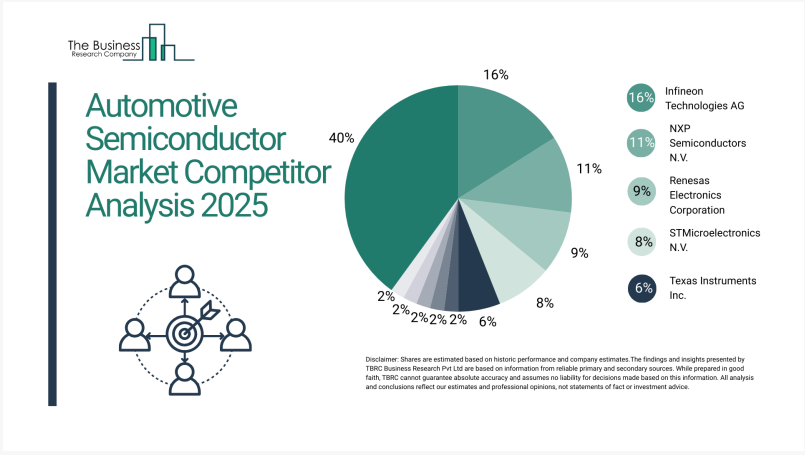

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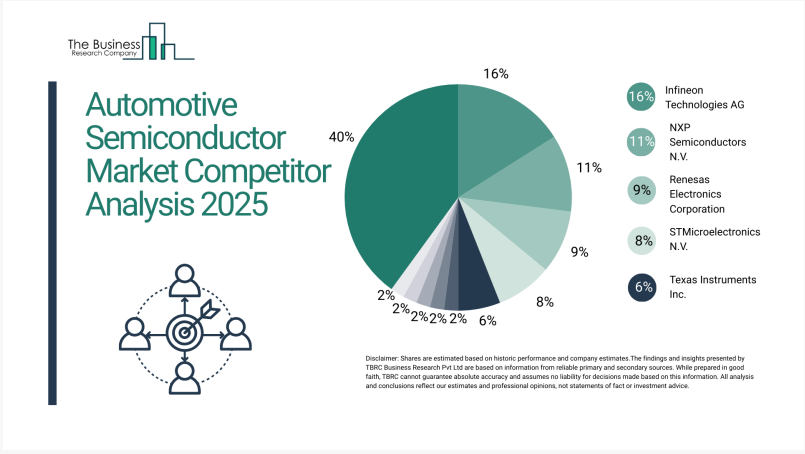

Automotive Semiconductor Market Report

Which Will Be The Largest Country In The Global Automotive Semiconductor Market In 2029?
China will be the largest country in the automotive semiconductor market in 2029, valued at $27,817 million. The market is expected to grow from $14,137 million in 2024 at a compound annual growth rate (CAGR) of 15%. The rapid growth can be attributed to the rising adoption of automation in fleet management and increasing demand for electric vehicles.

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What will be Largest Segment in the Automotive Semiconductor Market in 2029?
The automotive semiconductor market is segmented by component into processor, analog IC, discrete power, sensor, memory, and other components. The processor market will be the largest segment of the automotive semiconductor market segmented by component, accounting for 27% or $28,462 million of the total in 2029. The processor market will be supported by factors such as the growing demand for advanced driver-assistance systems (ADAS), increasing vehicle electrification, the rise of autonomous driving technologies, the need for higher computational power in modern infotainment systems, and stringent regulatory requirements for safety and emissions that drive the adoption of smart vehicle technologies.

The automotive semiconductor market is segmented by vehicle type into passenger vehicle, light commercial vehicle, and medium and heavy commercial vehicle. The passenger vehicle market will be the largest segment of the automotive semiconductor market segmented by vehicle type, accounting for 65% or $69,147 million of the total in 2029. The passenger vehicle market will be supported by factors such as the increasing adoption of advanced driver-assistance systems (ADAS) and autonomous driving features, the growing demand for in-vehicle infotainment and connectivity solutions, the rising penetration of electric and hybrid vehicles requiring efficient power management, stringent government regulations for vehicle safety and emissions, and consumer preferences for enhanced comfort, convenience, and smart automotive technologies.

The automotive semiconductor market is segmented by propulsion type into internal combustion engine, electric, and hybrid. The internal combustion engine market will be the largest segment of the automotive semiconductor market segmented by propulsion type, accounting for 55% or $59,327 million of the total in 2029. The internal combustion engine market will be supported by factors such as the continued global demand for fuel-efficient and low-emission vehicles, the integration of advanced engine management systems to optimize performance, the adoption of semiconductor-based solutions for emission control and regulatory compliance, the need for electronic fuel injection and ignition control technologies, and the incorporation of smart sensors and power electronics to enhance vehicle efficiency and reduce environmental impact.

The automotive semiconductor market is segmented by application into powertrain, safety, body electronics, chassis, and telematics and infotainment. The safety market will be the largest

segment of the automotive semiconductor market segmented by application, accounting for 27% or $28,950 million of the total in 2029. The safety market will be supported by factors such as the increasing adoption of advanced driver-assistance systems (ADAS) and autonomous driving technologies, stringent government regulations and safety standards mandating features like electronic stability control and automatic emergency braking, the growing demand for airbag control units and crash sensors, advancements in vehicle-to-everything (V2X) communication for collision prevention, and consumer preferences for enhanced vehicle safety and accident mitigation systems

What is the expected CAGR for the Automotive Semiconductor Market leading up to 2029?
The expected CAGR for the automotive semiconductor market leading up to 2029 is 12%.

What Will Be The Growth Driving Factors In The Global Automotive Semiconductor Market In The Forecast Period?
The rapid growth of the global automotive semiconductor market leading up to 2029 will be driven by the following key factors that are expected to reshape vehicle architectures, manufacturing processes, supply chains and quality-assurance practices across the automotive industry worldwide.

Rising Number Of Connected Vehicles- The rising number of connected vehicles will become a key driver of growth in the automotive semiconductor market by 2029. Connected vehicles increase demand for advanced automotive semiconductors, as they rely on real-time data processing, communication, and cybersecurity. Features like V2X (Vehicle-to-Everything) communication, infotainment, telematics, and OTA (over-the-air) updates require high-performance chips. As automakers integrate 5G, artificial intelligence, and edge computing to enhance vehicle intelligence and safety, semiconductor usage continues to expand. As a result, the rising number of connected vehicles is anticipated to contributing to a 1.8% annual growth in the market.

Expansion Of Semiconductor Foundries - The expansion of semiconductor foundries will emerge as a major factor driving the expansion of the market by 2029. Increasing semiconductor foundry capacity helps meet the growing demand for automotive chips, reducing supply chain disruptions. As electronic vehicles, advanced driver-assistance system (ADAS), and autonomous vehicles require advanced semiconductors, foundries are investing in new fabrication facilities (fabs) and advanced manufacturing nodes. This expansion enhances chip availability, reduces lead times, and lowers costs, ensuring a stable supply for automakers amid rising semiconductor requirements. Consequently, the expansion of semiconductor foundries is projected to contributing to a 1.5% annual growth in the market.

Rising Consumer Demand For Smart And Digital Cockpit Solutions - The rising consumer demand for smart and digital cockpit solutions will serve as a key growth catalyst for the market by 2029. Modern vehicles feature high-resolution touchscreens, AI-powered voice assistants, augmented reality (AR) dashboards, and personalized infotainment systems, all requiring

powerful processors, memory chips, and GPUs. As automakers integrate 5G connectivity, enhanced user experience, and real-time data processing, semiconductor usage in digital cockpits continues to grow, enhancing safety, convenience, and driver engagement. Therefore, this rising consumer demand for smart and digital cockpit solutions is projected to supporting to a 1.0% annual growth in the market.

Rising Adoption Of Automation In Fleet Management - The rising adoption of automation in fleet management will become a significant driver contributing to the growth of the market by 2029. Fleets are integrating AI-driven telematics, real-time tracking, predictive maintenance, and autonomous driving features, relying on advanced sensors, processors, and communication chips to optimize fuel efficiency, reduce downtime, and enhance safety. As logistics and transportation companies embrace connected and autonomous fleet solutions, semiconductor usage in fleet management continues to grow. Consequently, the rising adoption of automation in fleet management is projected to contributing to a 0.8% annual growth in the market

Access the detailed Automotive Semiconductor Market report here:
https://www.thebusinessresearchcompany.com/report/automotive-semiconductor-global-market-report

What Are The Key Growth Opportunities In The Automotive Semiconductor Market in 2029?
The most significant growth opportunities are anticipated in the the automotive semiconductor for passenger vehicles market, the electric mobility semiconductor market, the automotive safety semiconductor market and the automotive semiconductor processor market. Collectively, these segments are projected to contribute over $78 billion in market value by 2029, driven by increasing adoption of electric vehicles, advancements in autonomous driving technologies, rising demand for enhanced vehicle safety, and innovations in in-vehicle electronics and power management systems. This surge reflects the accelerating integration of semiconductors that enable smarter, safer, and more energy-efficient vehicles, fueling transformative growth within the broader automotive technology industry.

The automotive semiconductor for passenger vehicles market is projected to grow by$29,917 million, the electric mobility semiconductor market by $23,530 million, the automotive safety semiconductor market by $12,809 million and the automotive semiconductor processor market by $11,709 million over the next five years from 2024 to 2029.

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