

# Automotive Semiconductor Market Size, Share & Trends Analysis Report By Component (Processor, Sensor, Memory), By Vehicle Type (Passenger Vehicle, LCV, HCV), By Application, By Region, And Segment Forecasts, 2021 - 2028

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# **Abstracts**

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Automotive Semiconductor Market Growth & Trends

The global automotive semiconductor market size is expected to reach USD 63.92 billion by 2028, according to a new report by Grand View Research, Inc. The market is expected to expand at a CAGR of 6.2% from 2021 to 2028. The growing focus on vehicle safety systems and a significant increase in the adoption of engine control units (ECUs) in modern automobiles are anticipated to drive the demand for automotive semiconductors. Moreover, emerging technologies such as 5G and IoT are expected to play an instrumental role in increasing the demand for automotive semiconductors. Additionally, electric vehicles and all levels of assisted driving technologies are expected to create considerable growth opportunities over the next eight years.

Electrification in the automotive industry is growing rapidly owing to the rising need to reduce carbon emissions. Having realized the importance of electric vehicle business opportunities, several manufacturers are increasingly investing in smart technologies, electronics, and safety systems. Such components of electric vehicles comprise semiconductors equipped with advanced technologies to improve the functionalities of smart electronics. For instance, the application of shock sensors, MEMS accelerometers, MEMS gyroscopes, inertial sensors, tilt sensors, and MEMS microphones for roll over detection, electronic braking, dynamic head lighting, inertial



navigation, and airbag safety systems. Hence, as the demand for hybrid and electric vehicles increases, the need for semiconductors is anticipated to increase over the forecast period.

The outbreak of the COVID-19 pandemic hampered the overall business scenario in 2020, and the economy is expected to continue experiencing its aftermath over the next few years. The market witnessed a negative impact as major automotive fabricating units were shut and their production was completely halted in response to lockdown measures across the world. Additionally, the pandemic caused an unrealistic disturbance in the production and supply chain network. This influenced R&D and capital investments. The market experienced a substantial decline, of nearly -7.0%, in 2020. However, the impact of the pandemic started reducing with the reduction in positive cases and the launch of vaccination campaigns across several countries. As a result, governments across the globe eased the lockdowns and restrictions, thereby leading to a restart in manufacturing operations in the automotive semiconductor industry.

Safety guidelines and regulations imposed by governments are expected to play a key role in driving the demand for semiconductors in North American and European markets. For instance, a special focus on accident avoidance through ADAS is expected to help drive market growth in countries across these regions. The Asia Pacific region, led by China, is projected to emerge as the fastest-growing market owing to rapid EV adoption and strong government support.

Automotive Semiconductor Market Report Highlights

In 2020, the others component segment, which includes analog ICs and logic ICs, accounted for the highest share as logic ICs are widely used in navigation and infotainment systems

In terms of vehicle type, passenger vehicle emerged as the dominant segment in 2020 and is anticipated to retain its dominance over the forecast period

The telematics and infotainment segment is projected to expand at the highest CAGR of more than 9.0% over the forecast period and is anticipated to hold a dominant share by the end of the forecast period

The Asia Pacific market emerged as the dominant region in 2020 and is projected to register the highest CAGR over the forecast period







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