

# Self-driving Cars Market by Component (Radar, LiDAR, Ultrasonic, & Camera Unit), Vehicle (Hatchback, Coupe & Sports Car, Sedan, SUV), Level of Autonomy (L1, L2, L3, L4, L5), Mobility Type, EV and Region - Global Forecast to 2030

<https://marketpublishers.com/r/SDA15931B10EN.html>

Date: January 2022

Pages: 387

Price: US\$ 4,950.00 (Single User License)

ID: SDA15931B10EN

## Abstracts

The global self-driving cars market size is projected to grow from 20.3 million units in 2021 to 62.4 million units by 2030, at a CAGR of 13.3%. Safety features are an important prerequisite for automotive customers across the world. Governments across the world have mandated the incorporation of features such as lane departure warning (LDW) and automatic emergency braking (AEB) paving way for new technologies and self-driving cars. Different types of safety features have, therefore, been developed to assist drivers and lower the number of accidents.

“Growing demand for safety and driving assistance systems likely to drive the growth of the Self-driving Cars market during the forecast period”

The automotive industry is witnessing a rapid evolution of safety features, which is expected to increase exponentially in the coming years to provide a safer and more convenient driving experience. Major OEMs such as Toyota and Honda are launching vehicles with features such as blind spot detection, rear cross traffic, lane keep assist, forward collision warning, and automatic emergency braking as a standard. OEMs such as Cadillac, Tesla, Nissan, Honda and Audi are currently developing L3 driving systems for their upcoming models. The increasing demand for sophisticated cruise control and driving comfort features has also fueled the safety systems market. Transforming a vehicle into a self-driving one could help reduce errors caused by drivers. As per the NHTSA, the total number of fatalities due to road accidents in the US was 38,680 in 2020. Self-driving cars could play a crucial role in reducing this number and lead to a

safe, productive, and efficient driving experience. Active safety systems such as blind spot detection (BSD), automatic emergency braking (AEB), and lane departure warning (LDW) play a major role in automated driving technology today.

Demand for luxury vehicles will further strengthen the demand for self-driving cars during the forecast period. Higher growth rates have been observed in developing countries such as China and India, among others. The standard of living has also improved in developing countries, along with a considerable rise in spending power. German auto brands such as Mercedes-Benz, BMW, and Audi dominate the global luxury car market. The change in consumer preferences has increased the demand for better products, which has positively affected the sales of premium cars across the globe. For instance, major BMW's automotive division recorded growth in 2019, despite the slowdown in the global automotive market. The division registered a growth of 6.8% in 2019 due to increasing deliveries in the luxury cars segment. Its subsidiary, Rolls Royce, sold 5,100 units, an increase of 21.6%, compared to 4,194 units, a year earlier, while the production volume increased by 25.3%. Similarly, the group sold more BMW branded vehicles in 2019 than in 2018. Safety innovations are first introduced in the luxury and premium car segments, and this rise in sales will act as a driver for the Self-driving Cars market.

“Asia Pacific is projected to play a major role in the Self-driving Cars market during the forecast period.”

The Asia Pacific region is expected to be the largest market for self-driving cars during the forecast period. Leading automakers in the region such as Toyota, Honda, and Hyundai, leverage the advantages of safety systems and have made essential safety features a standard across their models. Stringent regulations imposed on vehicles for safety are also influencing the market growth. These regulations are as stringent as the regulations set in North America and Europe. Moreover, improving socio-economic conditions in emerging nations, such as India, Indonesia, and Thailand, has resulted in an increased demand for premium segment passenger cars, which, in turn, increases the demand for advanced driver assistance systems and thereby drives the self-driving cars market in this region. Regulations and guidelines for autonomous and semi-autonomous differ depending on countries and regions.

OEMs such as GM and Ford have stopped production across North America, which has resulted in a decline in production as well as sales. Automotive-related high-tech tests that companies were carrying out in the region have also been suspended. This might not change the direction of the automobile industry in the region toward the adoption of

autonomous driving, connected services, electric driving, and shared mobility, but the adoption rate might slow down. OEMs are likely to boost their investment in R&D in the forthcoming quarters of 2022 and develop new technologies and overcome the semiconductor shortages as they meet the stringent regulatory demands.

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type: OEMs - 30%, Tier 1 – 51%, and Tier 2 - 19%,

By Designation: CXOs - 31%, Directors - 41%, and Others\* - 28%

By Region: North America - 33%, Europe - 38%, Asia Pacific - 24%, and Rest of the World- 5%

\*Others include sales, marketing, and product managers.

The self-driving cars market is dominated by global players such as General Motors (US), Ford (US), Daimler (Germany), Volkswagen (Germany), Toyota (Japan), and Waymo (US).

Research Coverage:

The study covers the Self-driving Cars market across various segments. It aims at estimating the market size and future growth potential of this market across different segments such as component, electric vehicle, level of autonomy, vehicle type, system, mobility type, and region. The study also includes an in-depth competitive analysis of key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and acquisitions.

Key Benefits of Buying the Report:

The report will help leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall Self-driving Cars market.

This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-

market strategies.

The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

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\*Details on Business Overview, Products Offered, Recent Developments, MnM View, Right to win, Strategic choices made, Weaknesses and competitive threats might not be captured in case of unlisted companies.

## **18 APPENDIX**

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18.2 KNOWLEDGE STORE: MARKETSandMARKETS SUBSCRIPTION PORTAL

18.3 AVAILABLE CUSTOMIZATIONS

18.4 RELATED REPORTS

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