

Software-defined Vehicle Market by Offering (Hardware, Software, Services), Vehicle Type (ICE, BEV, HEV/PHEV), Vehicle Autonomy (Level 0, Level 1, Level 2, Level 3, Level 4, Level 5), Application and Region - Global Forecast to 2028

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Abstracts

The software-defined vehicle market is projected to grow from USD 270.9 billion in 2023 to USD 419.7 billion by 2028, registering a CAGR of 9.1% during the forecast period. Some of the major factors driving the growth of the software-defined vehicle market include the introduction of 5G cellular connectivity projects and the enforcement of stringent vehicle safety regulations. However, data security and privacy concerns act as a challenge for the market in the future. The major growth opportunities for the market players are the emergence of ride-hailing and mobility-as-a-service platforms.

'Market for ADAS/HAD will have the highest CAGR during the forecast period.'

The ADAS/HAD segment of the software-defined vehicle market is expected to witness the highest CAGR during the forecast period. The capability to reduce car accidents makes ADAS more critical. Automatic emergency braking, pedestrian detection, surround view, parking assist, driver drowsiness detection, and gaze detection are ADAS applications that assist drivers with safety-critical functionality to reduce car accidents. As ADAS relies on a combination of software, sensors, cameras, radar, lidar, and other technologies to enhance vehicle safety and assist drivers in various driving scenarios, software-defined vehicles are integral to developing and deploying ADAS applications. The increasing development of software-defined vehicle manufacturers, such as Tesla (US) and Volkswagen (Germany), is likely to accelerate the market growth.

'Level 5 expected to register the highest CAGR during the forecast period.'

The software-defined vehicle market's level 5 segment is expected to account for the highest CAGR in the forecast period. Tesla, Ford, Toyota, Uber, and Volvo are among the companies working hard to achieve Level 5 autonomous vehicle operation, with General Motors (US) leading the charge. Technology giants, including Apple Inc. (US), Aurora Innovation Inc. (US), Microsoft (US), and Waymo LLC (US), have collaborated with international automakers to improve and secure the future of autonomous vehicles. The surging demand for connectivity and OTA software updates is projected to drive the software-defined vehicle market growth.

'Asia Pacific to account for the highest market share among other regions during the forecast period.'

Asia Pacific is expected to dominate the software-defined vehicle market during the forecast period. Increased R&D activities in the field of software-defined vehicle intelligence would drive the growth of the software-defined vehicle market in the Asia Pacific. China has expanded significantly in mobile connectivity technology, keeping customer benefits as a priority and accordingly launching connectivity-enabled vehicles. Thus, considering the above-mentioned factors, the Asia Pacific software-defined vehicle market is expected to grow significantly.

In addition, increasing adoption of various connected car services, such as collision warning systems, intelligent parking, remote diagnostics, etc., will create an opportunity for the market. The plans of global automakers to roll out vehicles with 5G are expected to further boost the market in China. For instance, in 2021, General Motors (US) announced its plan to roll out 5G in the Chinese market during its Tech Day media event held in Shanghai.

In determining and verifying the market size for several segments and subsegments gathered through extensive primary interviews, secondary research has been conducted with key industry experts in the software-defined vehicle market.

The break-up of primary participants for the report has been shown below:

By company type: Tier 1 - 38%, Tier 2 - 28%, and Tier 3 - 34%

By designation: C-Level Executives - 40%, Managers - 30%, and Others - 30%

By region: North America - 35%, Europe - 20%, Asia Pacific - 35%, and RoW - 10%

The report profiles key players in the software-defined vehicle market with their respective market ranking analyses. Prominent players profiled in this report include Robert Bosch GmbH (Germany), Nvidia Corporation (US), APTIV (Ireland), Valeo (France), Marelli Holdings Co., Ltd. (Japan), Continental AG (Germany), Volkswagen Group (Germany), Tesla (US), HARMAN International (US), BlackBerry Limited (US), among others.

Research Coverage

This research report categorizes the software-defined vehicle market based on offering, vehicle type, vehicle autonomy, application, and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the software-defined vehicle market and forecasts the same till 2028. The report also consists of leadership mapping and analysis of companies in the software-defined vehicle ecosystem.

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall software-defined vehicle market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the market pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (enforcement of stringent vehicle safety regulations and continued development of connected vehicles), restraints (high initial investments and connected vehicle research costs), opportunities (emergence of ride-hailing and mobility-as-a-service platforms and introduction of 5g cellular connectivity projects), and challenges (data security and privacy concerns) influencing the growth of the software-defined vehicle market

Product Development/Innovation: Detailed insights on upcoming technologies,

research & development activities, and new product & service launches in the software-defined vehicle market

Market Development: Comprehensive information about lucrative markets – the report analyses the software-defined vehicle market across varied regions

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the software-defined vehicle market

Competitive Assessment: In-depth assessment of market shares, growth strategies, and product/service offerings of leading players like Robert Bosch GmbH (Germany), Nvidia Corporation (US), APTIV (Ireland), Valeo (France), Marelli Holdings Co., Ltd. (Japan), among others in the software-defined vehicle market.

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*Details on Business overview, Products/Services/Solutions offered, Recent developments, Deals, MnM view, Key strengths/Right to win, Strategic choices made, and Weaknesses/Competitive threats might not be captured in case of unlisted companies.

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