

Level 3 Autonomous Vehicle Market by Region (Asia Pacific, North America, Europe) - Global Forecast to 2035

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Abstracts

The level 3 autonomous vehicles market is projected to grow from 291 thousand units in 2025 to 8.7 million units by 2035 at a CAGR of 40.5%.

Level 3 autonomy is an essential milestone in the overall roadmap for autonomous vehicles. While level 1 and 2 autonomous features have become prevalent in most countries worldwide, level 3 autonomy is picking up relatively slowly. Level 1 & 2 autonomy is primarily driven by the regulatory norms requiring advanced active and passive safety systems in the vehicles complemented by advancements in sensing hardware and software algorithms. On the other hand, level 3 autonomy faces challenges from robust and reliable autonomous suites and the regulatory side, which is reluctant to deploy level 3 autonomous vehicles on public roads. The reason for this gap is the need for exceptional reliability from the vehicle systems (steering, braking, and vehicle electrical system) and uncertainty on the liability of any mishap, potentially scrapping the entire idea of autonomous and automated driving.

“Consumer confidence across China and the Middle East to open opportunities for OEMs planning to launch level 3 autonomous vehicles”

Chinese consumers are generally open about adopting advanced vehicle features, including driving technologies. Consumers in China have recently shown a rising interest in Level 2+ and Level 3 features. However, safety concerns are still a major challenge. Recent reports from Chinese automotive media state that while interest in level 3 features is strong—especially among younger, tech-savvy buyers—most mainstream consumers remain cautious. For example, in surveys of budget EV buyers (~100,000 RMB class), safety consistently ranked as the most considerable hesitation.

The most notable strategy of Chinese OEMs like BYD, Xpeng, and NIO is bundling advanced level 2+/level 3 autonomy as standard or low-cost features to stay competitive. This strategy reflects a market where consumers increasingly expect smart-driving features as a baseline—rather than paying a premium. Chinese consumers are open to level 3 tech, especially in higher-end EVs, but demand strong safety training, demos, and regulatory clarity.

“Prioritizing scalable & modular E/E architecture development to emerge as the key to faster shift to autonomous vehicles”

Recent years have witnessed rapid attention toward software-defined vehicles, which essentially are based on next-gen E/E architecture that forms the basis of a flexible and more powerful foundation for autonomous vehicles. Higher autonomy levels require seamless sensors, computing chips, and connectivity integration for better reliability. Thus, developing scalable and modular E/E architecture (such as zonal) becomes the first step for higher autonomy levels. Level 2 autonomy can be deployed upon conventional architectures as they do not have primary requirements around OTA updates, scalability, and feature enhancement. With level 3 autonomous vehicles being the foundation of truly autonomous vehicles, investing in next-gen architecture is the most crucial step towards autonomous mobility and additional revenues. This can be achieved through partnerships with Tier I & tech companies or in-house development. While Tesla is more focused on in-house development of OS and E/E architecture, OEMs such as Volkswagen, Mercedes-Benz, and others are taking a hybrid approach with a major focus on in-house development and also through partnership with Tier I/tech companies.

“Asia Pacific is projected to demonstrate the fastest growth in the level 3 autonomous vehicles market during the forecast period.”

North America (California & Nevada) and Europe (particularly Germany) are leading the level 3 autonomous vehicles market as these are the only markets with level 3 driving deployment and approval. While Japan also allows using level 3 autonomous vehicles on public roads, it has limited use due to Honda’s production of only 100 vehicles. Mercedes-Benz and BMW are leading the market by launching their level 3 autonomous models. This is expected to be followed by OEMs such as Zeekr, Xpeng, BYD, Volkswagen, and Hyundai, with their aggressive efforts for level 3 autonomous vehicle development. This growth is expected to kickstart in the next 2-3 years as Chinese OEMs such as Zeekr, Xpeng, and others plan to launch level 3 autonomous vehicles. It

should be noted that Chinese OEMs are focused on gaining mass volume in domestic and international markets. BYD primarily leads this trend by launching its God's Eye self-driving system. Thus, as the level 3 autonomous vehicle reaches the final development stage, rapid growth can be expected in the country for these vehicles.

In-depth interviews were conducted with CEOs, marketing directors, other innovation and technology directors, and executives from various key organizations operating in this market. Given below is the breakup of interviews:

By Company Type: Tier I – 24%, Tier II – 67%, and Tier III – 9%

By Designation: C-Level – 33%, Managers – 52%, and Executives – 15%

By Region: North America – 26%, Europe – 30%, Asia Pacific - 35%, and ROW – 9%

Mercedes-Benz, BMW, and Honda currently dominate the level 3 autonomous market. Other major players expected to lead the market are Volkswagen, Stellantis, and Hyundai. Chinese OEMs such as BYD, Xpeng, and Zeekr are aggressively working on level 3 autonomous vehicle development, focusing on mass market share gain.

Research Coverage:

The report covers the level 3 autonomous vehicles market in terms of Region (North America, Europe, and Asia Pacific). It also covers the competitive assessment of the major OEMs operating in level 3 autonomous vehicles and other market ecosystem players such as Tier I and tech companies.

This report study includes an in-depth comparative analysis of the current offerings, their comparison with other players, focus areas, and plans.

Key Benefits of Buying the Report:

The report will help market leaders/new entrants understand the ongoing developments in level 3 autonomous vehicles.

This report will help stakeholders understand the current offerings and anticipated future plans of the OEMs & Tier I companies, along with separate

analyses for global and Chinese players.

The report will also help stakeholders understand the market pulse and provide information on key market drivers, challenges, and technology analysis.

The report will also help stakeholders understand the current and future penetration trends of the level 3 autonomous vehicles.

The report provides insight into the following points:

Analysis of key drivers (Need for improving sensing technologies, focus on positive consumer perception and government safety regulations on safety features mandate, and need for identifying strong potential from subscription packages revenues) and challenges (regulatory skepticism in select markets, lack of clarity on accident/mishap liability, issues with infrastructure readiness)

Technology Analysis: Detailed insights into ongoing and upcoming technologies and research & development activities in the level 3 autonomous vehicles market

Competitive Assessment: In-depth assessment of OEM offerings, plans, and strategic developments, analysis for Tier I companies operating in the level 3 autonomous vehicles market

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