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## INDUSTRY OVERVIEW

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*The information and statistics set out in this section and other sections of this document were extracted from the Frost & Sullivan Report, which was commissioned by us, and from various official government publications and other publicly available publications. We engaged Frost & Sullivan to prepare the Frost & Sullivan Report, an independent industry report, in connection with the [REDACTED]. We believe that the sources of this information are appropriate sources for such information and have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. The information from official government sources has not been independently verified by us, the Sole Sponsor, the [REDACTED], the [REDACTED], the [REDACTED], the [REDACTED], the [REDACTED], any of their respective directors and advisors, or any other persons or parties involved in the [REDACTED], and no representation is given as to its accuracy.*

### SOURCE OF INFORMATION

We commissioned Frost & Sullivan to conduct market research on Global and China’s passenger vehicle and smart cockpit solution industries and prepare the Frost & Sullivan Report. Frost & Sullivan is an independent global consulting firm founded in 1961 in New York that offers industry research and market strategies. We have contracted to pay RMB596,000 to Frost & Sullivan for compiling the Frost & Sullivan Report.

In preparing the Frost & Sullivan Report, Frost & Sullivan conducted detailed primary research which involved discussing the status of the industry with certain leading industry participants and conducting interviews with relevant parties. Frost & Sullivan also conducted secondary research which involved reviewing company reports, independent research reports and data based on its own research database. Frost & Sullivan obtained the figures for the estimated total market size from historical data analysis plotted against macroeconomic data as well as considered the above-mentioned industry key drivers. Its market engineering forecasting methodology integrates several forecasting techniques with the market engineering measurement-based system and relies on the expertise of the analyst team in integrating the critical market elements investigated during the research phase of the project. These elements primarily include expert-opinion forecasting methodology, integration of market drivers and restraints, integration with the market challenges, integration of the market engineering measurement trends and integration of econometric variables.

The Frost & Sullivan Report is compiled based on the following assumptions: (i) the social, economic and political environment of the globe and mainland China is likely to remain stable in the forecast period; and (ii) related industry key drivers are likely to drive the market in the forecast period.

### OVERVIEW OF GLOBAL AND CHINA’S PASSENGER VEHICLE INDUSTRY

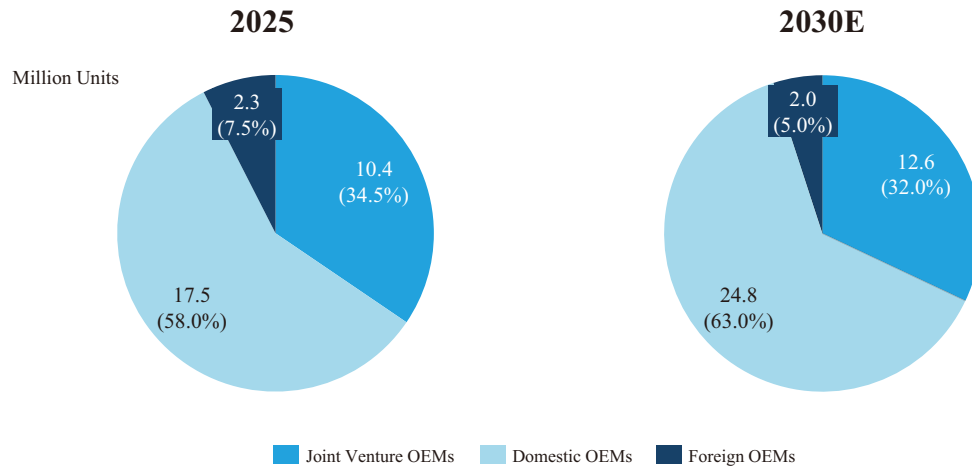
#### Overview of Global and China’s Passenger Vehicle Industry

The global and China’s passenger vehicle markets have maintained a steady growth trajectory. Global passenger vehicle sales volume increased from 62.9 million units in 2021 to 77.0 million units in 2025, and is expected to reach 97.7 million units by 2030, representing a CAGR of 4.9% from 2025 to 2030. China, as the world’s largest passenger vehicle market, has continued to demonstrate strong market resilience and growth potential. The sales volume of passenger vehicles in China grew from 20.9 million units in 2021 to 30.1 million units in 2025, and is projected to reach approximately 39.4 million units by 2030, representing a CAGR of 5.6% from 2025 onward.

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The major participants in China’s passenger vehicle market include domestic original equipment manufacturers (OEM), foreign OEMs, and joint venture OEMs. From 2025 to 2030, the market size of joint venture OEMs is expected to grow continuously, reaching 12.6 million units in 2030, with a CAGR of 4.0% from 2025. This growth is fueled by their ability to combine local market insights with professional expertise in international vehicle market, as well as their expanding product offerings that cater to evolving consumer preferences. Meanwhile, Chinese automotive brands, owned and controlled by domestic OEMs, have emerged as the dominant force in the market, with their market share projected to increase from 58.0% in 2025 to 63.0% in 2030.

**Market Size of Passenger Vehicle Industry by Sales Volume by Type of OEMs (China), 2025 and 2030E**

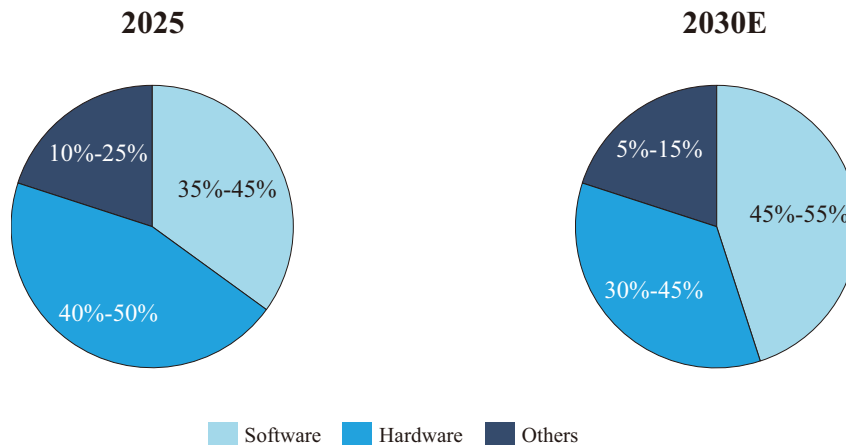


Source: Interviews with Industry Experts, China Association of Automobile Manufacturers, Frost & Sullivan

Against the backdrop of the evolving passenger vehicle market, smart cockpits have become a core component of vehicle intelligence and an important carrier for enhancing product competitiveness. Within the overall smart cockpit solution, software plays a crucial role in enhancing user experience and driving the overall intelligence of vehicles. It integrates multi-modal interactions, data consolidation, intelligent ecosystem development, and others. As the key interface between the user and the vehicles, the smart cockpit software leverages technologies like AI, AR/VR, and connectivity to continually optimize functions and interaction. The importance of software within the overall smart cockpit solution will continue to grow, becoming a key factor in differentiating automotive brands, while also supporting advancements in autonomous driving and smart mobility, guiding the smart cockpit toward higher-value development. In 2025, the software cost accounts for approximately 35%–45% of a completed smart cockpit solution for each vehicle. As technology continues to evolve, smart cockpit solutions are expected to increasingly integrate software-based intelligent functions. By 2030, the percentage of software in the overall smart cockpit solution per vehicle is projected to rise to 45%–55%.

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### Cost Structure of Smart Cockpit per Vehicle in China, 2025 and 2030E



Source: Interviews with Industry Experts, Frost & Sullivan

## OVERVIEW OF GLOBAL AND CHINA'S SMART COCKPIT SOLUTION INDUSTRY

### Definition and Classification of Smart Cockpit Solution

The smart cockpit solution refers to an integrated solution for automotive cockpits equipped with intelligent in-vehicle products and systems. It consists of software and hardware that encompass the main components of the smart cockpit, where the hardware is primarily a system centered on a SoC (System on Chip), and the software includes relevant operating software, system software, and application software, etc.

Classified by products, the smart cockpit solution specifically includes core human-machine interaction (HMI) system, smart cockpit domain control system and others.

- **Core HMI system:** primarily consists of the cockpit infotainment system and the driver information system, which are seamlessly integrated through key interactive interfaces such as central control panels and digital instrument dashboards.
- **Smart cockpit domain control system:** refers to the integration of multiple independent control units on the foundation of the cockpit infotainment system or incorporating more intelligent functions.
- **Others:** mainly include head-up display (HUD), streaming media rearview mirror and other relevant interior accessories.

### Value Chain of Smart Cockpit Solution Industry

Among the smart cockpit solution industry, upstream participants primarily comprise hardware suppliers, such as manufacturers of PCBs, SoCs as well as software suppliers. Midstream participants are dominated by traditional Tier 1 smart cockpit solution providers, internet technology companies and OEMs and their affiliates. Downstream is occupied by domestic, joint venture and overseas OEMs which implement smart cockpit solution into their vehicles and ultimately deliver them to consumers. OEM's demand plays a crucial guiding role in the business of smart cockpit solution providers, influencing their technological development, market positioning, product portfolio, and future business growth. In general, OEM's demand often fluctuates due to seasonal factors, such as annual sales plans,

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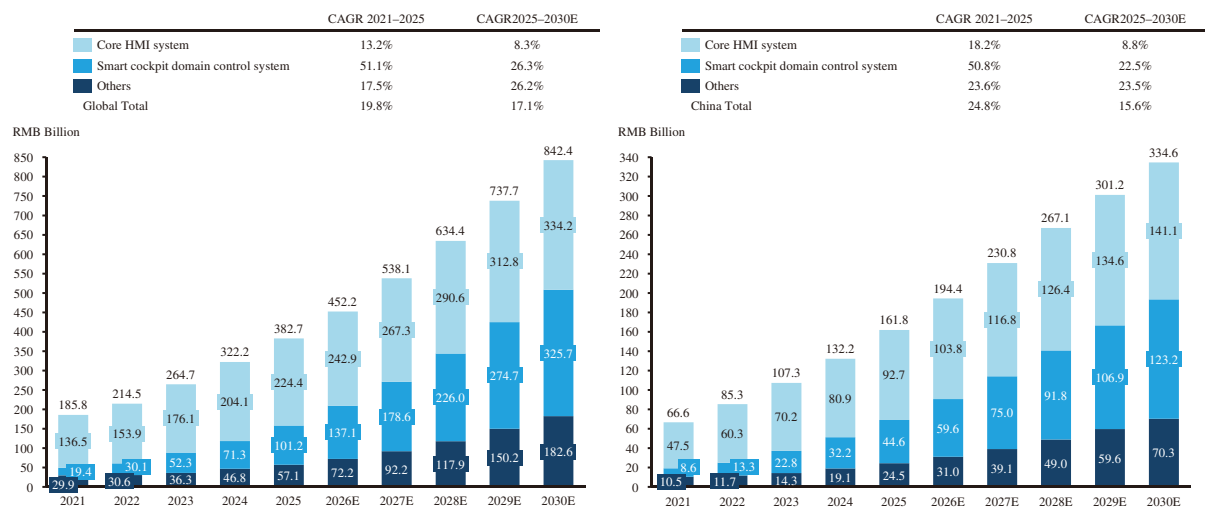
which in turn affects the midstream industry participants. According to Frost & Sullivan, the operating conditions in the smart cockpit solution industry are influenced by seasonal fluctuations in the vehicle market, driven by factors including but not limited to (i) vehicle dealers usually hosting large-scale promotional events at the year-end to meet annual sales targets; (ii) increased travel and consumer spending during major holidays like National Day, Double 11, Black Friday, and Christmas, which boost new vehicle sales; and (iii) the peak season for vehicle shows, which typically occurs in the fourth quarter.

### Market Size of Global and China’s Smart Cockpit Solution Industry

In recent years, the global and China’s smart cockpit solution industries have experienced rapid growth, driven by cutting-edge technologies, a well-established industrial chain, and strong demand from the passenger vehicle market.

The growth of the smart cockpit solution industry is expected to slow down in the period of 2025–2030 compared to 2021–2025, both in China and globally, primarily due to the rapid penetration of core segments during the earlier stage, leading to a high base effect and reduced incremental growth potential. This trend is particularly evident in the smart cockpit domain control system market. In China, the penetration rate of cockpit domain control system increased from 24.0% in 2021 to 61.0% in 2025, and is projected to reach approximately 96.0% by 2030. While the market still holds opportunities for technological upgrades and platform integration, the pace of new deployments is expected to decelerate significantly. Furthermore, global and China’s passenger vehicle sales, as one of the key volume drivers, are projected to grow more moderately in 2025 to 2030 compared to the post-pandemic recovery observed from 2021 to 2025.

**Market Size of Smart Cockpit Solution Industry by Products by Revenue (Global and China), 2021–2030E**



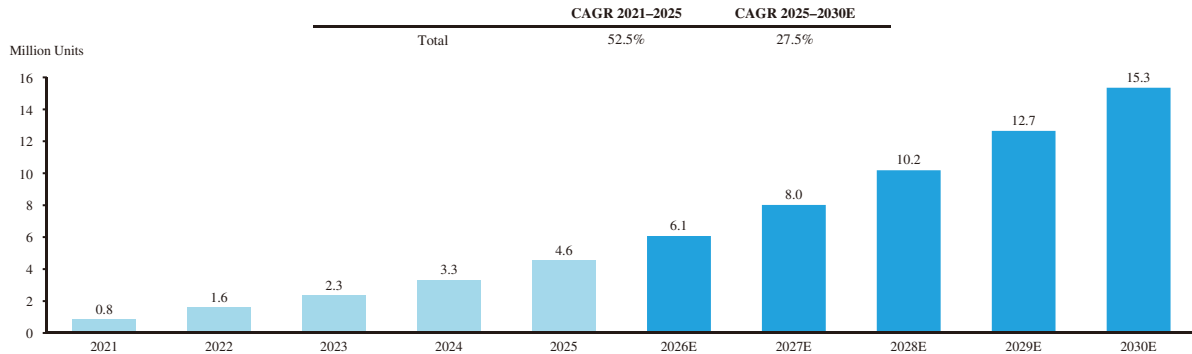
Source: Interviews with Industry Experts, Frost & Sullivan

Smart cockpit solutions are integrated solutions built on the SoC architecture, enabling the coordinated operation of various in-cabin functions. As domestic SoC technologies continue to improve and the demand for supply chain security and technological autonomy continues to increase, domestic SoCs are expected to play an increasingly important role in smart cockpit solutions. In particular, in the integration of cockpit infotainment systems, driver information display systems and cockpit domain control systems, domestic SoCs are expected to provide more cost-effective, secure and locally

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adaptable solutions. With the gradual substitution of imported SoCs by domestic alternatives, continued policy support and increasing demand for intelligent, safe and personalized driving experiences, smart cockpit solutions based on domestic SoCs are expected to achieve rapid penetration. At the same time, as Chinese automobile manufacturers accelerate their overseas expansion, domestic smart cockpit SoCs are expected to follow vehicle exports into overseas markets, which is expected to further broaden their addressable market and enhance the international competitiveness of China’s automotive semiconductor industry.

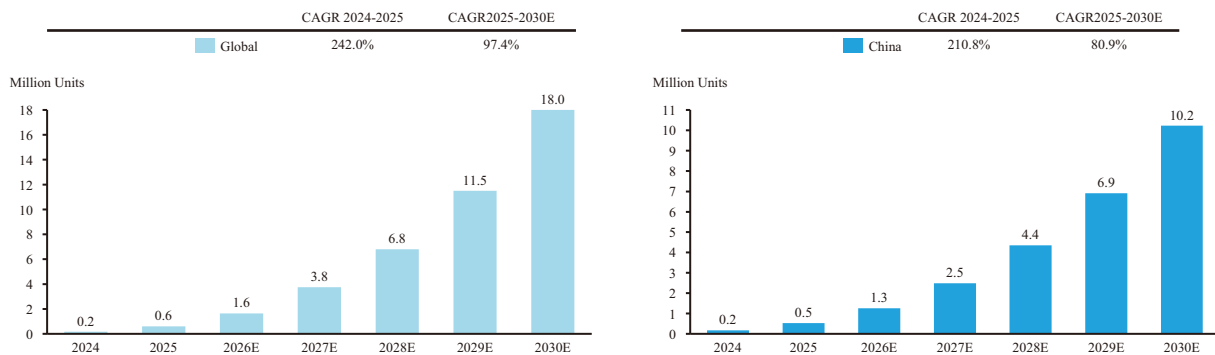
### Market Size of Smart Cockpit Solution Based on Domestic SoCs, by Shipment Volume (China), 2021–2030E



Source: China Association of Automobile Manufacturers (CAAM), China Automobile Dealers Association (CADA), Frost & Sullivan

Integrating parking functionality into the cockpit can eliminate the need for separate parking controllers, reducing hardware costs. From the perspective of user experience and cost optimization, OEMs are likely to integrate basic parking functions into the cockpit for lower and mid-range models. The primary penetration segment for cockpit-parking integration solution will be vehicles priced below RMB200,000, which account for over 50% of the total market.

### Market Size of Passenger Vehicles Equipped with Integrated Cockpit and Parking/Driving Solution, by Sales Volume (Global and China), 2024–2030E



Source: Interviews with Industry Experts, Frost & Sullivan

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### Market Drivers and Trends of Global and China’s Smart Cockpit Solution Industry

#### *Policies and Regulations Facilitating the Development of the Industry*

The development of the smart cockpit solution industry is strongly shaped and supported by both global and China’s policies. In the European Union, the ongoing Connected and Automated Mobility (CAM) strategy emphasizes vehicle electronics, connectivity and data security, establishing a regulatory foundation specifically for in-vehicle integrated and interactive smart cockpit systems. In the United States, the Intelligent Transportation Systems (ITS) Strategic Plan 2020–2025 promotes vehicle connectivity, automation, and smart traffic integration, supporting the digitalization and networking of in-cabin systems and further encourages innovation in smart cockpit technologies. In China, the “New Energy Vehicle Industry Development Plan (2021–2035)” (《新能源汽車產業發展規劃(2021–2035年)》) encourages transforming vehicles into mobile intelligent terminals and digital spaces, highlighting smart cockpit systems as a key area of innovation. Moreover, the “Notice on Conducting Pilot Applications of Smart Connected Vehicles under the ‘Vehicle-Road-Cloud’ Integration Framework (2024)” (《關於開展智能網聯汽車“車路雲一體化”應用試點工作的通知(2024)》) requires nationwide pilots of integrated vehicle-road-cloud systems, laying the groundwork for large-scale deployment of in-cabin intelligence and connected smart cockpit solutions.

#### *Continuous Product and Function Upgrades Driven by Emerging Technologies*

The smart cockpit solution industry is undergoing continuous product and functional upgrades, driven largely by advancements in emerging technologies. Smart cockpit solution providers are integrating vehicle information, entertainment functions, and interior design through smart cockpit domain control systems, enabling systematic and centralized intelligent control. With the acceleration of technological innovation, smart cockpits are evolving toward seamless multi-screen connectivity, multimodal interaction, and more proactive user engagement. The application of AI in voice recognition and interactive systems further enables natural communication between drivers and vehicles, improving accuracy and responsiveness. These systems support adaptive voice assistants, predictive navigation, and mood-based in-cabin atmosphere adjustments tailored to both drivers and passengers.

#### *Increased Penetration of Smart Cockpits Across Various Vehicle Models*

As the production scale of smart cockpits expands and technological advancements drive innovation, the cost efficiencies are achieved through cross-domain functional integration, which consolidates previously separate hardware components and generates savings in specific areas of the system architecture. This progress enables OEMs to integrate a wider array of smart cockpit features across a broader spectrum of vehicle models. The widespread adoption of multifunctional smart cockpit systems not only satisfies growing consumer demand for smarter, more personalized in-vehicle experiences but also accelerates the technological upgrade across the entire automotive market. Features once exclusive to premium models are now increasingly standard in mid to high-end and entry-level vehicles.

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### *Export of Chinese Smart Cockpit Technologies and Products*

The international expansion of Chinese smart cockpit companies is accelerating, driven by technology and cost advantages. Leading domestic OEMs are increasingly entering overseas markets, either independently or through partnerships with international automakers. Collaborating with established OEMs enables Chinese companies to leverage existing brand influence and mature sales networks, ensuring stable component supply while enhancing their brand visibility and credibility in global markets. With highly efficient supply chains and strong R&D capabilities, Chinese smart cockpit solution providers are well-positioned to rapidly respond to evolving international market demands. This agility, combined with their technological leadership, is driving the global adoption of their solution and solidifying their competitive position in the global market.

### *Ecosystem Integration*

The integration of intelligent technologies into vehicles is fundamentally reshaping the relationship between humans and vehicles. Smart cockpit solution providers are no longer limited to delivering software and hardware solution — they are now tasked with creating a “third space” that engages users both emotionally and cognitively. This intelligent space will seamlessly support diverse needs. This transformation will elevate smart cockpit solution from standalone systems into interconnected hubs that bridge vehicles with the wider intelligent urban environment, driving deeper integration across mobility, infrastructure, and digital lifestyles.

### **Entry Barrier Analysis of Smart Cockpit Solution Industry**

The entry barriers of smart cockpit solution industry mainly include technological barriers, market entry and customer resource barriers, supply chain barriers and cost barriers. Technological barriers arise from the high technical threshold of smart cockpit systems, the complexity of software-hardware integration, substantial R&D investment requirements and stringent industry standards for reliability, durability and real-time performance. Market entry and customer resource barriers are also significant, as OEMs generally impose lengthy and rigorous supplier admission procedures and leading providers usually maintain long-term and stable customer relationships. In addition, the complexity of the global automotive supply chain, together with the multiple approval, testing and validation processes required by OEMs, further increases the difficulty for new entrants. Meanwhile, the advanced technologies and functionalities embedded in smart cockpit systems require significant upfront investment, thereby creating notable cost barriers.

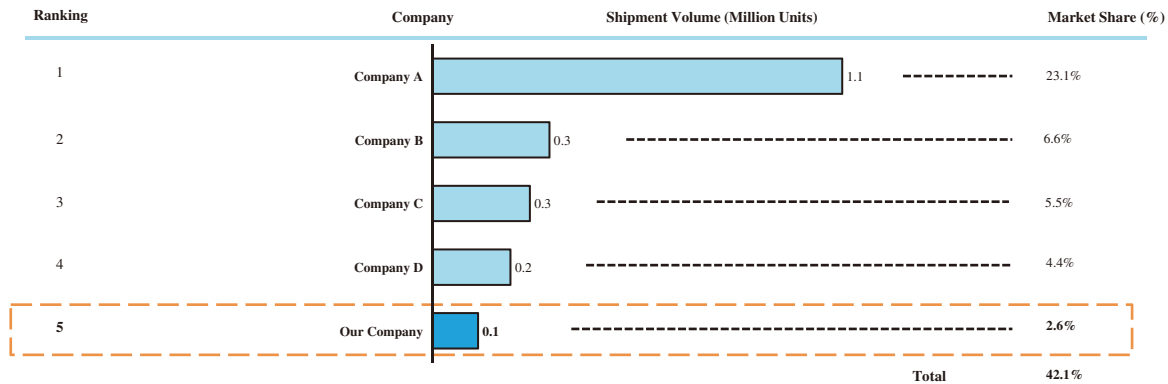
### **Competitive Landscape of Global and China’ Smart Cockpit Solution Industry**

In 2025, the total shipment volume of smart cockpit solutions in China reached 43.3 million units, among which the shipment volume of smart cockpit solutions based on domestic SoCs amounted to 4.6 million units. With 0.1 million units shipped, our Company ranked fifth in the industry, capturing a market share of 2.6%.

From 2022 to 2025, the total shipment volume of smart cockpit solutions in China reached approximately 150.1 million units, among which the shipment volume of smart cockpit solutions based on domestic SoCs amounted to 11.8 million units. With 0.6 million units shipped, our Company ranked fourth in the industry, capturing a market share of 5.2%.

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### Ranking of Top Five Smart Cockpit Solution Based on Domestic SoCs Providers in China, by Shipment Volume, 2025



Source: China Association of Automobile Manufacturers (CAAM), China Automobile Dealers Association (CADA), Frost & Sullivan

Note: The above data will be further updated following the disclosure of the comparable companies' annual reports.

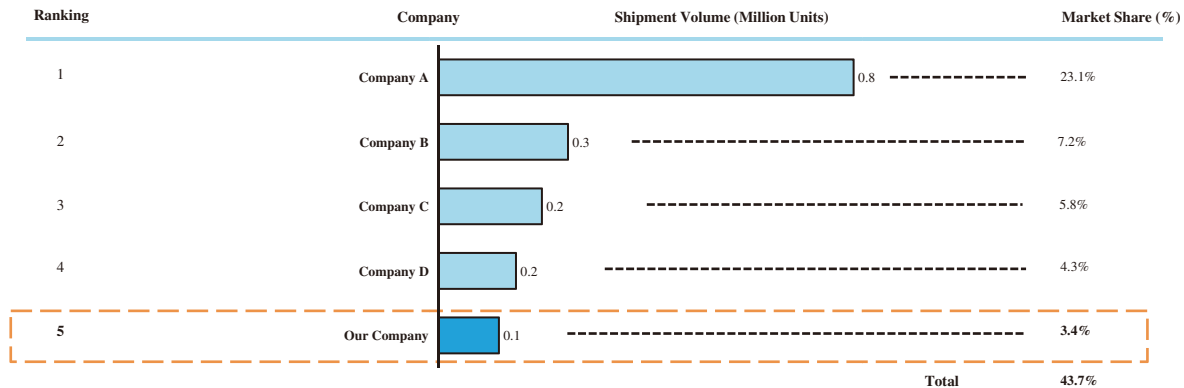
- Company A established in 1986 and headquartered in Huizhou, Guangdong Province, China, is a publicly listed company specializing in intelligent driving, in-vehicle infotainment systems, and new energy vehicle electronics. Its products are primarily used in smart cockpit systems, advanced driver-assistance systems (ADAS), and in-vehicle display and interaction systems. The company provides customized electronic solutions to leading automotive OEMs.
- Company B established in 1992 and headquartered in Ningbo, Zhejiang Province, China, is a publicly listed company specializing in automotive safety, intelligent driving, and electronic control systems. Its product portfolio primarily covers passive safety systems (such as airbags and sensors), smart cockpits, and advanced driver-assistance systems (ADAS). The company serves as a key supplier to numerous well-known global automotive manufacturers.
- Company C established in 1993 and headquartered in Shenzhen, Guangdong Province, China, is a company dedicated to the research, development, and manufacturing of automotive electronic products. Its offerings are primarily used in in-vehicle infotainment systems, intelligent connectivity systems, smart cockpits, and new energy vehicle control systems.
- Company D established in 2017 and headquartered in Wuhan, Hubei Province, China, is an enterprise specializing in core software and hardware solutions for the development of connected, automated, and electrified automotive mobility. Its core products mainly include in-vehicle infotainment systems, digital smart cockpits, vehicle chip module solutions, core operating systems, and integrated software stacks.

In 2025, the total shipment volume of cockpit infotainment system in China reached 28.9 million units, among which the shipment volume of cockpit infotainment system based on domestic SoCs amounted to 3.5 million units. With 0.1 million units shipped, our Company ranked fifth in the industry, capturing a market share of 3.4%.

From 2022 to 2025, the total shipment volume of cockpit infotainment system in China reached 98.7 million units, among which the shipment volume of cockpit infotainment system based on domestic SoCs amounted to 9.1 million units. With 0.6 million units shipped, our Company ranked third in the industry, capturing a market share of 6.8%.

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### Ranking of Top Five Cockpit Infotainment System Based on Domestic SoCs Providers in China, by Shipment Volume, 2025



Source: China Association of Automobile Manufacturers (CAAM), China Automobile Dealers Association (CADA), Frost & Sullivan

Note: The above data will be further updated following the disclosure of the comparable companies’ annual reports.

In 2025, the total sales volume of vehicles installed with integrated cockpit and parking solution in China reached 528.1 thousand units. Vehicles equipped with Our Company’s integrated cockpit and parking solution reached a total sales volume of 176.0 thousand units, capturing a market share of 33.3%. Our integrated cockpit and parking solution service volume ranked first nationwide in 2025.

### Ranking of Top Three Integrated Cockpit and Parking Solution Providers in China, by Sales Volume, 2025

Ranking	Company	2025 Installed Volume (Thousand Units)	Market Share
1	Our Company	176.0	33.3%
2	Company D	143.0	27.1%
3	Company E	40.0	7.6%
Total		359.0	68.0%

Source: Interviews with Industry Experts, Annual Reports and Websites of Listed Companies, Frost & Sullivan

Note: The sales volume is calculated based on the number of insured vehicles equipped with integrated cockpit and parking solution, as sourced from CATARC.

- Company E established in 2014 and headquartered in Wuxi, Jiangsu Province, China, is a technology service provider focused on the development and operation of IoV (Internet of Vehicles) ecosystem platforms. Its core products include smart cockpit domain controllers, serving primarily automotive OEMs, intelligent transportation systems, and the automotive aftermarket.