

MOTORING



From left: Huawei showcases models featuring its Harmony Space 6 cockpit at Auto China 2026 in Beijing on April 24. Chery displays its Mornine humanoid robots and vehicle models at Auto China 2026 event. PHOTOS BY LI FUSHENG / CHINA DAILY



New C-NCAP rules to ensure safer EV driving

By CAO YINGYING
caoyingying@chinadaily.com.cn

China has released its most stringent auto safety standard in two decades as the country pushes deeper into the era of automated driving and electrification.

The China New Car Assessment Program 2027 protocol, released last week by the China Automotive Technology and Research Center, is the seventh major revision since the program's launch in 2006, adding multiple test items for battery safety and advanced driver-assistance systems, on top of traditional crash tests.

CATARC said vehicles that meet the current standards, set in 2024, are expected to see their overall scores drop by about 8 percent under the new protocol. Some models are likely to be downgraded by one star or more in its five-star ratings.

Li Wei, vice-president of CATARC, said that new challenges, including human-machine co-driving complexities and mixed-traffic conditions, are fueling the need for stricter safety standards.

A highlight of the 2027 protocol is the introduction of China's first independently developed crash test dummy based on Chinese body measurements.

Previously, more than 90 percent of the high-end dummies were supplied by foreign companies. Those dummies were designed using European and American anthropometric data, which differ from Chinese height, weight and skeletal characteristics.

CATARC said its research team overcame challenges in biomechanics, material equivalence and sensor technology. The new dummy integrates 97 patents and has been used by more than 30 automakers, including FAW, Changan, BYD and Geely, in the development of new models.

Marking the 20th anniversary of C-NCAP in 2026, CATARC said it has conducted nearly 2,000 crash tests on more than 600 popular models from over 120 carmakers across seven upgrade cycles.

With these efforts, CATARC's data show the installation rate of autonomous emergency braking surged from less than 10 percent in 2015 to nearly 75 percent in 2025. The penetration rate of rear-seat belt reminders rose from near zero to 46.4 percent. The installation rate of side-curtain airbags jumped from under 40 percent to more than 80 percent, while child seat anchor points are now present in close to 100 percent of new cars.

Seat-belt reminders and side airbags alone have prevented an estimated 12,200 serious injuries and fatalities over the past decade, according to CATARC.

The evolution of China's car safety protocol has won international plaudits. For instance, a growing number of Chinese brands have achieved five-star ratings in Euro NCAP tests in recent years. Michiel van Ratingen, secretary-general of Euro NCAP, said this shows that Chinese manufacturers have understood the protocols and the thinking behind them.

"C-NCAP quickly adopted the best practices in safety testing and helped the automakers prepare to make sure that when they export vehicles, they meet local requirements," van Ratingen said.

He noted that in the dynamic field of active safety, China has moved ahead of Europe in some areas. Euro NCAP and C-NCAP are cooperating on progressive deformable barrier tests and dummy development.

Van Ratingen also called for the harmonization of test equipment standards to reduce development costs for automakers.

Executives from regional NCAPs also called for deeper collaboration to avoid excessive competition and reduce compliance costs for automakers. Proposals include joint research on crash tools and cross-border public education campaigns.

Auto China 2026 spotlighting AI-driven shift in car industry

Centralized computing, large language models and Level 4 autonomy redefine the market

By LI FUSHENG
lifusheng@chinadaily.com.cn

For years, auto shows have been primarily about new models. At Auto China 2026 in Beijing, it is increasingly about new systems — from AI-driven driving to centralized computing architectures.

This year's show, the largest of its kind, has drawn more than 2,000 companies from 21 countries and regions, with 1,451 vehicles on display. It includes a total of 181 global debuts and 71 concept cars, hitting a new high.

More than 60 percent of global premieres at the show come from Chinese brands, while the number of concept vehicles has reached a record level.

Behind the numbers, however, a deeper transformation is underway, one defined by artificial intelligence, software architecture and system-level innovation.

Chinese automakers, long known for their expansive product lineups, are now using the show floor to highlight technology stacks as much as vehicles.

Large standalone halls occupied by domestic brands — including BYD, Chery and Geely — reflect not only product breadth but also accumulated capabilities in electrification and intelligent systems.

As performance gaps in batteries, motors and electronic control systems narrow, competition is moving toward shaping technological identity and capturing user mindshare, said analysts.

Artificial intelligence has become the focal point of this shift. Geely is highlighting its full-domain AI 2.0 system, while SAIC's Roewe brand is showcasing AI-based in-car applications developed with Volcano Engine.

Huawei's automotive business also made its first appearance as an independent brand cluster, presenting multiple new models alongside its Harmony-based intelligent cockpit ecosystem.

Across the exhibition, intelligent driving, smart cockpits and large language model integration are no longer isolated features, but part of unified system architectures.

One of the most explicit articulations of this transition came from XPeng CEO He Xiaopeng, who outlined the company's strategy centered on "physical AI".

XPeng's latest model, he said, is the first Chinese vehicle designed with full hardware redundancy to meet robotaxi standards and has already obtained road testing permits in Guangzhou, Guangdong province.

The company is currently conducting regular Level 4 pilot operations and plans to begin passenger-carrying tests with safety drivers later this year, targeting fully driverless operation by early 2027.

He also extended the concept of physical AI beyond vehicles. XPeng is developing humanoid robots following a "commercial-first" path, with initial deployment in retail environments. The company aims to sell more than 10,000 units by 2027.

Underlying these initiatives is a broader industry view: hardware iteration is slowing, while software, particularly AI-driven capabilities, is becoming the primary driver of differentiation.

The integration of AI is also reshaping

the underlying computing architecture of vehicles.

At a technology event two days ahead of the show, Horizon Robotics introduced its Starry chip, built on a 5-nanometer automotive-grade process.

With 650 TOPS of computing power, the chip supports both intelligent driving and cockpit AI models on a unified platform.

This shift toward centralized computing, combining previously separate domains, is expected to reduce system complexity, lower costs and shorten development cycles.

According to the company, integrated architectures could cut vehicle-level costs by up to 4,000 yuan (\$585) and reduce development timelines from 18 months to eight months.

More than 10 carmakers and suppliers including BYD, Chery, Volkswagen and Bosch have shown interest in the chip, said the company, indicating growing industry alignment around unified computing platforms.

Horizon Robotics CEO Yu Kai described autonomous driving as "the first large-scale application of physical AI", placing the current technological wave within a broader transition toward intelligent systems interacting with the physical world.

For the first time, core suppliers and automakers have appeared in the same exhibition halls — a structural change that reflects shifting power dynamics across the industry.

Battery makers, chip companies and AI solution providers are no longer operating behind the scenes. Instead, they are presenting integrated system solutions directly to the market.

CATL, for example, built a 1,500-square-meter energy technology zone at the entrance of one hall, showcasing its

next-generation battery concepts, including solid-state and sodium-ion technologies.

Other major suppliers, from Bosch to SenseAuto, are also displaying full-stack solutions rather than individual components.

Global automakers accelerate localization

International carmakers are deepening their engagement with China's AI ecosystem.

Volkswagen Group CEO Oliver Blume said the company is moving beyond electrification and driver assistance toward "agentic AI for all".

"Starting this year, our in-car AI Agent will begin coming to our locally developed cars," he said. "With this step, the Volkswagen Group is the first global automaker to deploy agentic AI across an entire vehicle portfolio in China at scale."

The system, based on a locally trained large language model, is designed to proactively understand user intent and execute complex, multisystem tasks through natural interaction, while keeping data processing within the vehicle.

BMW Group CEO Oliver Zipse emphasized a similar approach to localization.

"In China, we can integrate local partners such as Momena and Alibaba," he said, highlighting the flexibility of software-defined architectures.

Zipse added that artificial intelligence will underpin the future of driving itself. "The vehicle will anticipate your next move — slowing down before a turn or adapting to your habits," he said. "AI and sheer driving pleasure are not contradictory; they are fundamentally connected."

New arrivals showroom

Editor's note: From the preview nights to the show floor, domestic and international automakers have unveiled a host of new models at Auto China 2026, which runs from April 24 to May 3. Below are the top picks from China Daily's motoring editors.



Porsche premieres electric Cayenne Coupe SUV

Porsche held the world premiere of Cayenne Turbo Coupe Electric at Auto China 2026 in Beijing on Friday. The Cayenne Turbo Electric starts at 1,118,000 yuan (\$163,560), while the Cayenne Turbo Coupe Electric starts at 1,158,000 yuan. The Cayenne Electric uses a 113-kilowatt-hour battery, offering a CLTC range of up to 673 kilometers, or 687 km for the Coupe variant. It supports fast charging at up to 310 kW, allowing the battery to charge from 10 percent to 80 percent in about 18 minutes. The Cayenne Electric has a maximum system output of 850 kW and peak torque of up to 1,500 Nm. It can accelerate from zero to 100 km per hour in 2.5 seconds and has a top speed of more than 260 km/h. China-market standard equipment includes Porsche Active Ride suspension, rear-axle steering and a Burmester High-End 3D Surround Sound System.



BMW unveils new i7 with Neue Klasse tech

BMW Group presented its new BMW 7 Series, including the all-electric BMW i7, at Auto China in Beijing. The lineup, which will launch in China in 2027, will integrate Neue Klasse technologies. The new 7 Series has a redesigned front end with split headlights and crystal daytime running lights with 24 crystal elements. Inside, the BMW Panoramic iDrive is paired with a 14.62-inch front passenger entertainment screen and a 31.3-inch rear theater screen. The cabin also includes AI agents and more than 50 China-specific digital functions. The all-electric BMW i7 is equipped with BMW's large cylindrical battery technology and offers a CLTC range of nearly 800 kilometers. BMW said its driver assistance systems have been adapted for the Chinese market, while chassis technologies include adaptive air suspension and four-wheel steering.



Audi's 2nd model E7X to go on sale in first half

Audi, the China-specific EV brand under SAIC-Audi's joint program, unveiled the E7X, its first SUV, at Auto China 2026 in Beijing. The large electric SUV will be built at Audi's intelligent production base in Anting, Shanghai, and is scheduled to go on sale in the first half of 2026. It measures 5,049 mm in length, 1,997 mm in width and 1,710 mm in height, and has a 3,060-mm wheelbase. Built on the Advanced Digitized Platform, the E7X uses a 900-volt architecture and offers 300-kW rear-wheel-drive and 500-kW quattro variants. The quattro version can accelerate from zero to 100 km/h in 3.9 seconds. It has 100-kWh and 109-kWh battery options, with the larger pack offering a CLTC range of more than 750 kilometers. The E7X also features a lidar-based driver assistance system co-developed with Momena, zero-gravity seats and a 21.4-inch rear-seat entertainment screen.



Huawei-Dongfeng brand Epicland debuts with X9

Epicland, the premium NEV brand jointly created by Huawei Qiankun and Dongfeng Motor, debuted its first production model — the X9 SUV — at Auto China 2026 on Friday. The large six-seat SUV measures 5,301 mm in length, 2,015 mm in width and has a wheelbase of 3,120 mm. The model will be available in both extended-range electric and pure electric versions. It will come standard with Huawei's Qiankun ADS 5 driving assistance system and an 896-line lidar, aiming to bring top-tier technology to family users. The model is also among the first models to run Huawei's Harmony Space 6 cockpit system. It boasts up to 10 screens, including a pair of front 17.2-inch butterfly-wing dual displays with 3.4K ultra-high-definition resolution. The brand plans to target 79 key cities with over 300 experience stores, starting with more than 70 user centers and plans to launch five models in three years.



Sedans expand portfolio of BYD's Fangchengbao

BYD's Fangchengbao brand launched a new sedan series called Fangcheng S at Auto China 2026 on Friday, marking the start of its third product line after the Bao and Tai series. The sedan series is expected to hit the market in the third quarter of this year. The new sedan line adopts a strategy of one model with multiple body styles, offering three variants: a notchback sedan called Fangcheng S, a shooting brake called Fangcheng S GT and a larger notchback sedan named Fangcheng SL. All three models will measure more than five meters in length, three meters in wheelbase and two meters in width, with a low, wide stance that the company says evokes a cheetah ready to pounce. Besides its stunning sports car design, the S series will offer impressive chassis performance, handling and cabin ecosystem, according to BYD.



Explorer 01 pickup joins 212 product lineup

Chinese off-road vehicle brand 212 launched its new pickup model, the Explorer 01, at Auto China 2026 on Friday, with a price of 179,900 yuan (\$24,800). The pickup measures 5,469 mm in length, 1,955 mm in width and 1,970 mm in height, with a ground clearance of 254 mm and wading depth of 850 mm. Powered by a 2.3-liter diesel engine, it delivers 140 kW of maximum power and 500 Nm of peak torque. The engine is paired with a standard ZF 8-speed automatic transmission and a BorgWarner transfer case. The brand announced the names of its two platforms: Xiake and Yuanzheng, which respectively mean "knight-errant" and "expedition". The Xiake platform, designed for rugged off-road driving, adopts a front and rear five-link solid axle setup and a body-on-frame construction, supporting petrol, diesel and hybrid powertrains, and can accommodate three-door, five-door and pickup body styles.