Thu, 22 May 2025
Weekly Newsletter

DVN
Interior

NEWSLETTER #262

Editorial

AI In HMI For Safety And Better UX

AUDI Q6 E-TRON (AUDI IMAGE)

Artificial intelligence (AI) is all the buzz these days, and it’s something consumers consider — pro and con — when buying a car. AI car technology is advancing at a blistering pace. So, in this week's newsletter, we examine AI in cars and their infotainment systems. It has at least the theoretical potential to make car travel less stressful, safer, and more entertaining. Some of the technological advances are positively eye-popping, and AI is probably capable of things we have yet to realize.

ChatGPT's initial dominance has been shaken by the arrival of Deep Seek in China, and others like Mistral in France are coming along, too. For now, it’s no longer whether a new car model has AI features, but how many and how much (and how well it works as promised). AI can help to make an HMI simulate an intelligent conversation partner and assistant. Through voice commands, the driver gets actively engaged in dialog with the vehicle, and gets actions based on context.

Friendly reminder, for those planning to be in the Shanghai - Hangzhou area two weeks from now, come attend the DVN-EAC cooperative event, on 4 - 6 June. **Find the details here**.

Looking forward to seeing you there!

Sincerely yours,

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

AI Chatbot for Contextual HMI Interaction

VW IMAGE, AS PRESENTED AT CES 2025

Last week we reported that BMW has entered a pact with DeepSeek for China-market New Class vehicles, part of their effort to meet the wants and needs of Chinese customers with a high degree of product localization.

For the Chinese version of the Panoramic iDrive, BMW has specifically tailored their Operating System X to local preferences Chinese in cooperation with local technology partners, including Alibaba and Huawei. The system offers a wide range of digital functions, including the AI-supported BMW Intelligent Personal Assistant.

Why an AI Chatbot?

AI, for the purposes we consider in the automotive interior realm, is the ability of a machine to *imitate* human abilities such as logical thinking, learning, planning, and creativity. So, AI enables technical systems to simulate humanlike perception, reaction, and interaction of and with their environment. Moreover, by analyzing the consequences of previous actions, AI systems can adapt their actions and refine their simulations, eventually operating more or less autonomously.

An AI chatbot helps to add AI functions to an in-car personal assistant. This digital assistant can execute voice commands, actively engage in dialog with vehicle occupants, and analyze situations based on context.

Car manufacturers have now integrated AI chat features into their vehicles, the idea being to improve the driving experience through advanced voice assistants and interactive capabilities.

Automakers and Voice Assistants

CONTINENTAL ELEKTROBIT INTEGRATION OF ALEXA (CONTINENTAL IMAGE)

Automakers face an uphill battle to regain control over their in-car infotainment systems as Apple and Google expand their dominance with AI voice assistants. These assistants, powered by the vast amounts of personal data these companies already collect, are poised to become even more essential for drivers, leaving automakers at a disadvantage in competing for consumer attention.

Apple's Siri and Google Assistant, integrated via mirroring services like CarPlay and Android Auto, are becoming more sophisticated, using AI to understand driver commands, deliver natural speech responses, and seamlessly connect with broader ecosystems such as smart homes. With access to consumer data like location, calendars, and browsing history, Apple and Google can offer deeply personalized and powerful user experiences that automakers struggle to match.

According to Alex Oyler, director at SBD Automotive, automakers lack the necessary data to build comparable systems, limiting their ability to provide a competitive user experience. While manufacturers have been working to develop their own visual interfaces for infotainment centers, voice assistants represent a new space where big tech's advantage is even more apparent.

To bridge the gap, many automakers have outsourced the development of voice assistant technology to third-party providers like SoundHound AI, Cerence, and Amazon.

Here are some notable examples, including China where software-defined functions are more of a major purchasing criterion more than in any other market:

Deep Seek


CHANGAN CS75 (CHANGAN IMAGE)

DeepSeek was founded in China in July 2023, and their R1 large language model provides responses comparable to other LLMs such as OpenAI's GPT-4o and o1. DeepSeek is making significant strides in the automotive industry, particularly in car cockpits.

They've raised hackles in Silicon Valley and the U.S. government. Some say a ban is coming soon, which would bar any EV using DeepSeek from the U.S. market (where Chinese cars are largely kept out by tariffs and non-tariff trade barriers such as the American vehicle safety standards, which diverge significantly from the rest-of-world UN Regulations). For brands like Dongfeng, which doesn't have much of a presence outside of China anyway, this isn't such a big deal. But for brand like Geely, which owns Volvo and Polestar, there likely will need to be some serious separation to avoid problem from the Trump Administration. So far, Geely has kept most Volvo and Polestar software development away from the rest of the Geely group.

Zeekr

ZEEKR IMAGE

Zeekr integrates DeepSeek R1 Into their virtual voice assistant, AI Eva, to sharpen its ability to interpret vague or unclear user inputs, making it more intuitive and responsive.

Dongfeng

Dongfeng sub-brand M-Hero will put DeepSeek R1 in their cockpit infotainment systems. The M-917 off-road SUV was expected to receive this update over the air last month. The M-Hero Zhiyin "Courage" SUV has been undergoing 'knowledge distillation training' since 14 February, to increase the smart cockpit's capabilities.

Dongfeng Nissan

DONGFENG NISSAN N7 (DONGFENG NISSAN IMAGE)

Dongfeng Nissan's upcoming N7 has become China's first joint-venture-owned vehicle model to integrate the DeepSeek-R1 AI system.

The N7 is expected to hit the market any moment now. As the first electric sedan built on Dongfeng Nissan's NEV-dedicated platform, the model has drawn significant attention since its global debut at Auto Guangzhou last year.

DeepSeek-R1 AI enables the N7 to provide more precise intent recognition and smoother, more natural human-machine interaction. There's also the Qualcomm Snapdragon 8295P processor and an end-to-end advanced intelligent driving system developed by Momenta. This system supports highway NOA (navigate on autopilot), urban memory NOA, and full-scenario intelligent parking.

Voyah

VOYAH COURAGE (VOYAH IMAGE)

Dongfeng's Voyah brand says their Courage EV crossover and Dream MPV will be the first mass-produced vehicles to have the AI tool integrated into their software. DeepSeek will first be ported to the Courage via an OTA update, will integrate into Voyah's existing smart cockpit software and will improve the 'AI responsiveness, accuracy and expandability' of the stuff that's already there. It also will enable Voyah to rapidly improve their software and cater better to its vehicles' users.

SAIC-GM

SAIC-GM IMAGE

SAIC General Motors has announced integration of the DeepSeek-R1 AI model into the automaker's smart cockpits. New vehicle models under the Cadillac and Buick brands will soon feature this technology.

SAIC-GM say they have established an 'integrated edge-cloud AI model hub' that supports the integration of multiple advanced AI models. This AI hub enables the collaborative evolution of dual AI models, combining DeepSeek's complex reasoning capabilities with the creative generation abilities of ERNIE Bot. This deep integration enhances the hub's ability to understand complex user commands and offers interactive features such as content retrieval and generative content creation, improving the user interaction experience.

SAIC-GM says their smart cockpits will 'transcend traditional boundaries of perception, reasoning, thinking, and interaction'.

BYD God's Eye

BYD IMAGE

BYD has presented a system for autonomous driving based on DeepSeek. Their 'God's Eye' assistance system will control all BYD models in future. The largest Chinese EV maker, BYD wants to offer semi-autonomous driving as standard in all models. Even the cheapest models are to be equipped with an advanced basic version.

The brain of BYD's DiPilot system is DeepSeek version R1, which was originally developed for speech processing and has been adapted to the requirements of real-time driving. In contrast to conventional rule-based control software, R1 uses neural networks to interpret the environment and recognize and classify objects in different weather and lighting conditions. It can support decision-making and help predict possible maneuvers such as lane changes or braking. DeepSeek can thus recognize dangers in road traffic and make a risk assessment in a fraction of a second.

Baidu Apollo

BAIDU IMAGE

Baidu's Apollo smart cockpit large model and mobility agent have now integrated with DeepSeek. This combination creates a next-generation intelligent mobility hub, offering professional, convenient, and efficient mobility experiences by improving complex information processing, deep user understanding, and decision-making execution.

The Apollo smart cockpit model leverages visual, vehicle, environmental, weather, and user preference data to provide personalized interactions as soon as the user enters the vehicle. It can generate customized greetings, recommend preferred music, and automatically adjust settings such as air conditioning, seating, ambient lighting, and driving modes. Additionally, with internet access, it can accurately respond to time-sensitive needs and offer creative features like AI-powered painting and casual conversation, delivering a highly interactive in-car assistant experience.

Baidu successfully integrated their large model system into models such as the Cadillac Lyriq, Buick GL8, and Geely Galaxy L6 in 2024.

Other Chinese brands, including Geely, Zeekr, GAC, Baojun, IM Motors, Changan, and Leapmotor have also announced deep integration of the DeepSeek AI model into smart cockpit systems.

Europe

MERCEDES ADDS CHATGPT (RUSHLANE IMAGE)

Mercedes-Benz has integrated ChatGPT into their vehicles, to augment the capabilities of the “Hey Mercedes” voice assistant. This integration allows for more natural and expansive conversations, handling a broader range of topics and providing more natural language interactions.

Volkswagen announced ChatGPT in their vehicles at CES 2025. This integration aims to provide more interactive and responsive AI interactions within the car. The voice assistant is activated by saying "Hello IDA" or pressing the button on the steering wheel. 'IDA' automatically prioritizes whether a vehicle function should be executed, a destination searched, or the temperature adjusted.

VOLVO IMAGE

Volvo says their 2025 Volvo EX90 electric SUV will feature L^3 autonomy, which includes advanced AI capabilities for understanding and generating text, like how a human would respond to questions and organize information.

Audi has integrated ChatGPT into their EVs, enabling the car to understand the full context of questions, find answers on the web, and assist in planning trips with human-sounding sentences.

Stellantis

STELLANTIS DIGITAL COCKPIT (STELLANTIS IMAGE)

Stellantis and Mistral AI are strengthening their strategic partnership to integrate AI across various sectors, from vehicle engineering to enhancing in-car experiences. The collaboration leverages Mistral's LLM expertise and AI-driven automation, enabling Stellantis to improve data analysis, streamline development and enhance customer interactions.

A key outcome of the partnership is developing an advanced AI-powered in-car assistant designed to provide real-time, conversational support for drivers. The initiative has been built on over a year of joint AI projects to increase customer satisfaction, optimize product development and improve manufacturing efficiency.

Mistral is a French AI startup, headquartered in Paris. They specialize in open-weight large language models.

Conclusion

All these integrations highlight the growing trend of AI chat features in new vehicles, aimed at providing a more interactive, safe, and convenient driving experience.

Be assured, dear reader: this newsletter has *not* been written or edited using any AI tools; you are getting 100 per cent genuine, actual, real human intellect in your DVN content. ?

Interior News

DVN Field Trip: Yanfeng XiM 25 Cabin Demonstratror – DVN Visit

INTERIOR NEWS

DVN CEO PAUL-HENRI MATHA, NEAR; YANFENG CTO PATRICK NEBOUT (YF IMAGES)

In parallel to Auto Shanghai, DVN visited the Yanfeng R&D center in Shanghai, where this China-based tier-1 supplier was showcasing their new XiM25 interior concept.

Yanfeng has introduced a new design theme, 'Fluid Space' to cater to the needs and wants of Generation Z, creating a futuristic mobile space, for in-car activities such as camping, napping, watching movies, and gaming.

The XiM25 smart cabin demonstrator features innovative technologies including:

- **Wide Panoramic 3D HUD**

Creatively combining ultra-clear floating image tech with interior optical surfaces, the ultra-wide display spanning the two A-pillars is back-projected onto a more comfortable viewing position, optimizing the immersive visual interaction experience of the virtual and real worlds.

- **Ultralow-Latency E-Mirror**

The hardware's tightly-coupled system architecture achieves ultralow end-to-end latency, while the image enhancement algorithm ensures clear visibility in challenging conditions such as darkness, strong light, or rain and snow.

- **Slim Natural Wind Electric Air Vent**

Yanfeng's exclusive 'Wave' air vent simulates natural wind, with its special blade structure and inexpensive motors.

- **ClickRim Modular Steering Wheel**

This modular steering wheel features a unique automatic wrapping concept, combining hands-off detection and heating function. The new steering wheel process supports a wide range of wrapping material options while improving the efficiency of product assembly.

- **EcoSkin Lux Translucent Interior Surface**

It uses recyclable thermoplastic elastomer (TPE) materials, applicable to most visible areas of the interior. It features a realistic texture and customizable multi-color schemes, providing a sophisticated look. By combining a mini-LED direct display with large-area decorative panels, this translucent surface and flexible display technology can produce clear display effects and dynamic lighting on complex curves.

- **SafeUnit Seat-Integrated Safety Tech**

Current restraint systems are designed for upright seating positions, which are not effective when occupants are not upright. Yanfeng has introduced seat-integrated safety solutions to protect occupants in various forward-facing positions during accidents. These solutions include innovative components like the pre-crash system, seat-integrated seat belt, seat cushion airbag, and headset airbag — all designed to protect occupants in various forward-facing positions, from the standard seated position to a wide-angle reclining position, in the event of a frontal, side-end, small-offset collision, and rollover accident.

- **Side-Rotating Adaptive Zero-Gravity Seat**

Thanks to the innovative seat movement mechanism and silent brushless motors, the seat rotates 90°sideways and slides over long distances. Additionally, the seat can adapt to the occupant's posture for optimal comfort, with a new bump-massage feature providing a more relaxing experience.

- **Fully Reclining Innovative Rear Seat**

Whether partially or fully reclined, paired with an adjusted floating leg rest, passengers can enjoy a home-like experience within the cabin. When fully extended, the rear seat transforms into an oversized bed nearly 2 meters long, offering an unprecedented in-car resting experience.

Ford Software Will Be 'Redefined, Zonal'

INTERIOR NEWS

FORD IMAGE

Despite the broader industry shift toward fully software-defined vehicles, Fordis ending development of their FNV4 SDV platform after four years' work.

The California-based team, led by Doug Field, was originally tasked with developing FNV4 for Ford's next-generation vehicles. Field says the platform is now being integrated into Ford’s current unified vehicle architecture, to be shared across all models, electric and combustion-powered. The benefits initially intended only for EVs will now also come in combustion-engine vehicles as well.

Zonal architecture is particularly appealing to many automakers due to its ease of implementation and management for both the maker and their suppliers. A single system that manages everything, from the powertrain to safety features and component control, is more attractive than the domain-based architecture currently in use.

The fully networked FNV4 software system was originally designed to improve quality, reduce costs, and enable features like over-the-air updates and paid software upgrades. However, developing software for combustion-powered and hybrid vehicles is significantly more complex than for EVs. A global rollout of FNV4 across all vehicle types would have made it difficult to apply the latest software innovations to traditional engines.

FORD IMAGE

These changes also stem from Ford’s traditionally supplier-based system — a model shared by most established automakers. Unlike EV startups, which develop their software in-house from the ground up, Ford’s software is created by multiple suppliers who often don’t communicate directly with one another.

Even though the software is owned by Ford, developers still have to go through suppliers to request changes to the control software for individual components. This results in project delays and rising costs, contributing to financial losses in Ford’s software divisions—something the company is now aiming to reduce or avoid.

Simoldes, Elix Collaborate on Recycled Materials

INTERIOR NEWS

SIMOLDES PLASTICS IMAGE

Simoldes Plastics and Elix Polymers have collaborated on the Simoldes Boost project, which aims to use recycled materials for premium vehicle interior applications.

Simoldes is a Portuguese mold and part maker headquartered in Oliveira de Azeméis, Portugal. They say they're Europe's largest mold maker, and their Mold Division supplies plastic injection molds for the whole automotive industry.

The goal of the Simoldes Boost project is to increase the use of renewable materials by 40 per cent during the development phase, focusing on materials with mechanical recycled content and encouraging all suppliers to participate and develop their sustainability programs.

Elix Polymers' E-Loop products have been selected because they are produced from mechanically recycled content. The Elix E-Loop product family includes ABS and PC/ABS blends with mechanical recycled content, and products with certified raw materials that have circular and bio-based feedstocks certified with ISCC+ using the mass balance model.

A technical validation process was completed with PC/ABS E-Loop 5120MR, which contains 30 per cent post-consumer recycled material from water bottle waste. The technical validation process included mechanical, thermal, processability, odor and emission performance testing. The material proved to have properties equivalent to traditional prime materials, with a carbon foot print down to 40 per cent smaller. The researchers concluded that materials should not be over-engineered.

In one study, upper interior pillars with airbags were formed. Using a lower injection process, and supported by high-quality injection molds from Simoldes Tools, this produced a textile-covered part that fulfilled testing requirements. Visible decorative parts for door panels with class A surfaces were also part of the evaluation program.

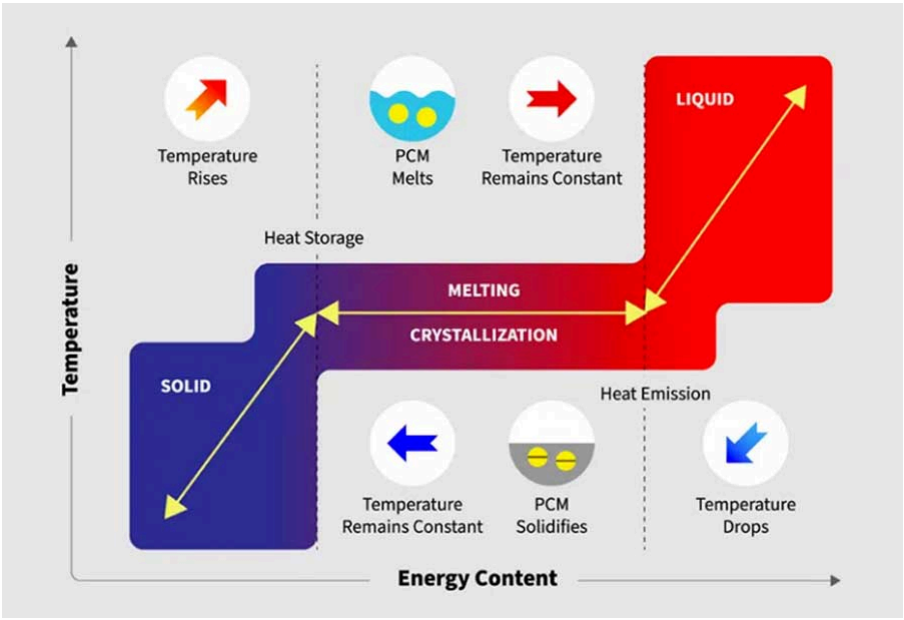
Outlast Phase-Change Material Tech for Cabin Comfort

INTERIOR NEWS

OUTLAST IMAGE

During summer, cars parked under direct sunlight — or even just driving in it — require significant energy to the air conditioning system to reach a comfortable cabin temperature. This leads to increased fuel consumption, higher costs, and more pollution. In winter, heating the cabin also takes time, often requiring several minutes to reach comfort levels. To avoid excessive strain on the battery and to extend its lifespan, improving energy efficiency is essential.

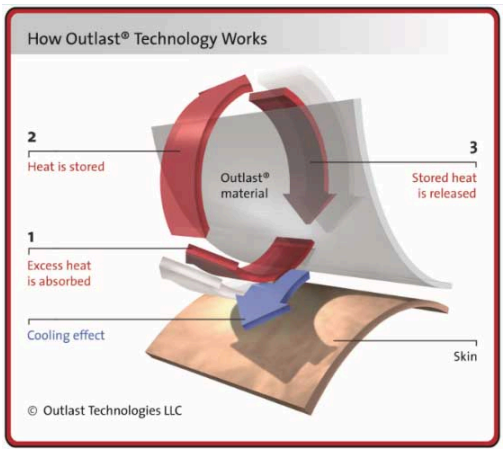
One promising new solution for managing seat temperature and enhancing thermal comfort is the use of microcapsules containing phase-change materials (PCMs). These are textiles which store and release thermal energy during phase transitions (solid ↔ liquid) at a nearly constant temperature.



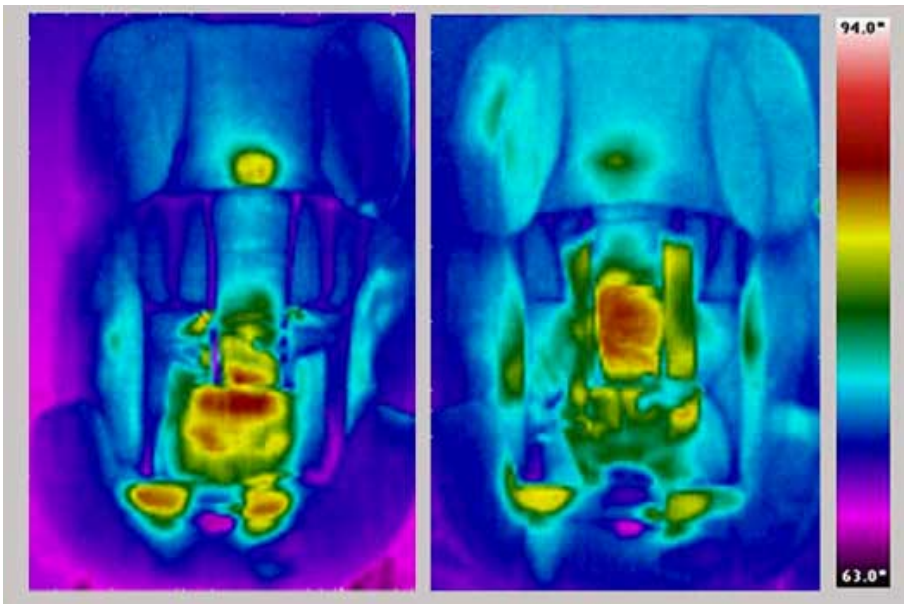
PHASE-CHANGE MATERIAL PHYSICS (FREE IMAGE)

They are used for thermal energy storage to regulate temperature fluctuations without consuming power, so as to maintain a stable body temperature, and they can be either used to heat or to cool. They are available as fibers, yarns, or fabric, and can be easily integrated into clothing, bedding and automotive seat textiles.

Outlast, a specialist in proactive heat management for textile materials, is based in Heidenheim, Germany. They use a technology originally developed by NASA, which make use of natural wax, that liquefies under the influence of heat and solidifies when it gets cold. It goes through a phase change from solid to liquid or liquid to solid.



Microencapsulated natural wax can be applied to almost any textile material, using procedures developed by Outlast. These capsules can capture and store body heat, forming a natural heat buffer. And if the body temperature falls again, for example with freezing temperatures in the car, the wax in the temperature regulating material clothing releases the stored heat again. Despite fluctuating external temperatures, the user can thus always enjoy a balanced climate.



OUTLAST HEAT MANAGEMENT IN A CHILD SEAT (OUTLAST IMAGE)

A further development of the Outlast temperature regulation technology is the supplier's Xelerate and Fresh2Skin products. In Xelerate, the wax used in the materials is abetted by heat-spreaders, which enlarge the area of heat absorption, allowing the material to absorb thermal energy faster and more effectively.

And Fresh2Skin uses menthol: cold receptors in the skin react to it, and the Outlast temperature regulation provides temperature and moisture management. More comfort and less sweating during long rides!

Glass Innovations for Interior Climate Comfort

INTERIOR NEWS

PILKINGTON IMAGE

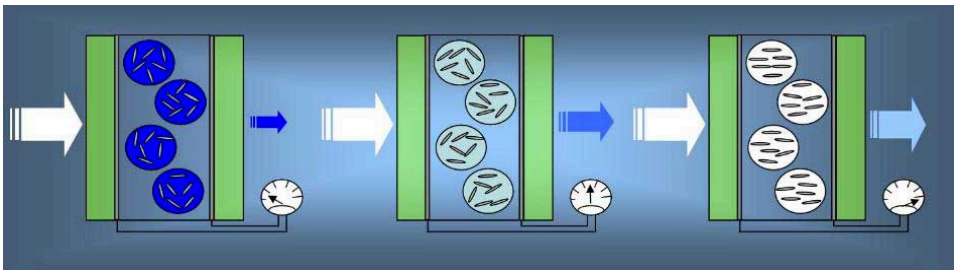
Solar-control glass has been a useful but expensive option in cars, usually available in luxury vehicles more than in less-expensive car segments. But the electrification trend is going to dramatically increase the use of solar glass.

It helps reduce cabin heat build-up, and minimizes the degrading effects of the sun's radiation on interior trims and fabrics. In EVs and hybrids, it reduces the HVAC workload and extends battery range and efficiency.

Most commonly, glass is treated with IR-reflective coatings or embedded with UV-blocking interlayers like PVB (polyvinyl butyrate). These techniques can reduce solar cabin heat gain by up to 60 per cent,depending on the glazing, and keep the interior cooler when parked, minimizing the need for pre-conditioning.

Pilkington, a major glass supplier, offers both options; their Optikool and EZ-Kool are green, optimized solar-absorbing glasses, reducing the heat entering through a vehicle's glazed area by around 20 per cent when compared to standard tinted glass.

And their Sundym is a neutralized green material for door windows, offering a reduction of solar loading by 45 per cent when compared to that at the front of the car. Pilkington Galaxsee is a grey privacy glass which reduces heat by 65 per cent when compared to that at the front of the car.



PILKINGTON SUNDYM HEAT-REDUCTION PROCESS

Pilkington's Siglasol automotive glazing also reflects the sun's heat. It is constructed from an infrared reflecting film laminated between two pieces of glass.

Similar solutions are offered by other glass suppliers like AGC automotive, Saint-Gobain, and Fuyao Glass.

Another solution, with limited use so far relative to coated glass, is photovoltaic (PV) glass, which integrates transparent or semi-transparent solar cells (amorphous silicon or copper indium gallium selenide) into the glass, converting sunlight directly into electrical energy. The extra source of energy can be used to power low-energy systems like ventilation fans, infotainment, or sensors, charge the 12V auxiliary battery or , in advanced setups, assist with main battery charging.

The recent advancements in solar cell development might soon transform PV glass into a mainstream feature, improving comfort and efficiency of future E-mobility.

New In-Cabin Technology for 2026 Porsches

INTERIOR NEWS

PORSCHE IMAGE

Starting in June, Porsche will revise the digital user experience for the 2026 model year of the 911, Taycan, Panamera, and Cayenne models with updates to the Porsche Communication Management (PCM) system, to provide better performance and access to the Porsche App Center.

Alexa, in addition to the Porsche Voice Pilot, can also be used as a digital assistant while driving.The service can be used, for example, to control smart home functions such as automatic garage doors or home lighting. Other typical functions of Alexa include researching information, creating and editing to-do lists and shopping lists, playing podcasts and music, or checking the latest news and weather reports. It can also be used to control media and supported third-party apps. Alexa is activated via the voice command "Alexa" or via an individually configured button, or icon switch tile in the PCM.

For sound experience, cars equipped with premium and high-end audio systems from brand partners Bose and Burmester feature the Dolby Atmos immersive sound technology, which creates a spatial sound experience for the occupants. Individual audio tracks and sounds can be placed anywhere around the listener and reproduced with unparalleled clarity, depth and precision. Passengers can feel almost as if they are sitting in the middle of an orchestra – or even that they themselves are the protagonist of an audio play. The prerequisite for this experience is an audio source that supports Dolby Atmos. Corresponding apps are available in the App Center. The vast majority of the world's biggest music artists have already released their work in Dolby Atmos.

The Porsche App Center now offers direct access to a wide range of apps from various categories, similar to popular smartphone and tablet app stores. Originally introduced with the Macan Electric, this functionality has been extended to other model lines.

Starting with the 2026 model year, the Porsche Connect package will be supplied as standard for 10 years.

The Design Lounge

Renault Emblème Demonstrator With Forvia Sustainable Tech

THE DESIGN LOUNGE

RENAULT EMBLÈME PHOTOS ©YANN LEFEBVRE / DPP

“The ambition of the Renault Emblème project was to achieve maximum decarbonization by designing a car that is attractive, efficient, family-friendly, comfortable, high tech and versatile in use,” said Fabrice Cambolive, CEO of the Renault brand. “More than a concept car, it’s a demo car on the road that’s a pleasure to look at, to be in and to drive – a real invitation to travel!”

A lifecycle analysis found that the car emits 5 metric tons of CO_2e during its lifecycle – almost 90 per cent less than the Megane E-Tech electric.

The car achieved a 70-per-cent reduction in the carbon footprint to produce all parts, half the materials used to build the car were recycled, and virtually all the materials used are recyclable at the end of their service life.

Forvia was directly involved with multiple components, dashboard, door panels and central console, and the supplier has pulled all the decarbonization levers: the use of green energy in its factories, optimized and lightweight designs and architectures, virtuous production and assembly processes facilitating modularity and recycling, as well as the integration of new sustainable materials developed by Materi'Act, combining recycled and bio-sourced content with low carbon impact.

Most of the assemblies are based on screws and clips, for example, rather than welding or glue: the door panels, for example, to facilitate disassembly, modernization and recycling at the end of life. In addition, no paint has been applied to the parts, as aesthetic and bio-sourced materials have been favored, eliminating the chemical emissions associated with traditional methods.

An innovative injection process also makes it possible to reduce the amount of material used, producing lighter parts and thus reducing the ecological footprint.

The contact zones on the door panels and central console have been upholstered in skins made from pineapple fibers – a lighter and more sustainable alternative to animal leather. The dashboard has been upholstered in linen.

Finally, the adoption of the 'shy tech' trend in the interior of the vehicle represents a step forward in sustainable design. The discreet under-skin buttons, replacing traditional controls, not only offer a cleaner and more minimalist design, but also contribute to the overall lightness of the vehicle.

VW ID.Aura for China: Interior Peek

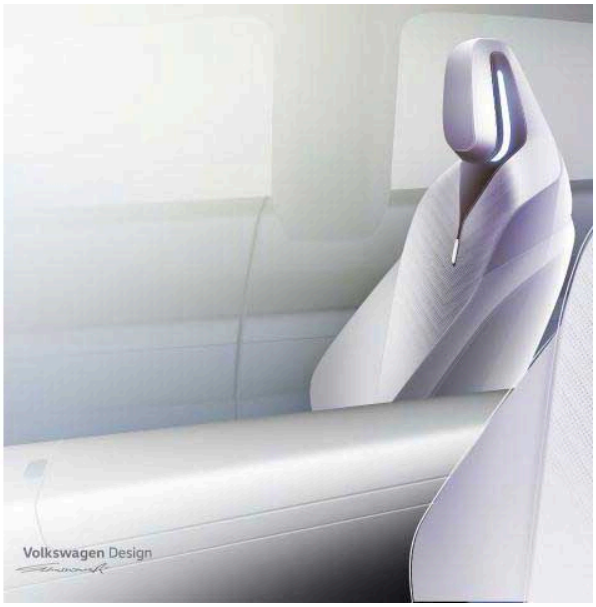
THE DESIGN LOUNGE

VW IMAGE

We bring you more info information today on the ID.Aura, thanks to a pictures package released by VW.

The ID.Aura concept showcased Volkswagen's vision for future mobility. Developed In and for China, it combines progressive design, advanced technologies, and intelligent connectivity — perfectly tailored for a new generation of customers. showcasing a progressive and elegant A-notchback silhouette with a confident stance and refined aerodynamic surfaces.

The FAW-Volkswagen ID.Aura is the first concept car based on the CMP platform with zonal electronic architecture, designed by Volkswagen specifically for the Chinese market. Thanks to its high computing power based on AI, the highly automated driving system used on the platform sets the bar high for intelligent and natural driving behavior.



The interior embodies clarity, elegance, and a new level of digital harmony. From the illuminated headrests to the seamless control interfaces—every detail reflects Volkswagen's vision for tomorrow's mobility.

It focuses on minimalist aesthetics, practicality, and features the new CEA E/E architecture enabling L^{2++} ADAS and an AI virtual assistant with a customizable OS.

A smartphone-like UI/UX concept is integrated into the vehicle's center console. The AI-powered humanoid assistant enables seamless control of vehicle functions and infotainment.

Thoughtful design, ambient lighting, and intuitive technology create a unique atmosphere for every moment. Seats and headrests include lighting as a signature, on top of the backrest, and around the headrests.

From initial sketches and digital prototypes to full-scale clay modeling, this project showcases the technical precision and creative passion driving the future of mobility.

News Mobility

Autonomous Trucks Are On The Road

NEWS MOBILITY

MAN DIGITAL COCKPIT WITH 'SMARTSELECT' OPERATION, A NEW ELECTRIC PLATFORM, AND LATEST ADAS (MAN IMAGE)

Twelve project partners from industry, science, software development and infrastructure have successfully completed the “Atlas-L4” research and development project. The targeted L^4 automated truck for lift-to-lift transport was brought onto the highways in the three and a half years of the project. "The development and integration of the redundant components required for safe operation, such as steering, brakes and the on-board electrical system, as well as the creation of a validation concept required interdisciplinary expertise and close teamwork. As a consortium, we have proven ourselves with this project: Autonomously driving trucks are feasible!" says Dr. Frederik Zohm, Executive Board Member for Research and Development at MAN Truck & Bus.

In the "Automated transport between logistics centers on level 4 expressways" project launched in 2022, the automation software in the vehicle was continuously updated and tested directly in practice. The partners were able to tick off all the targets: The components relevant to safety for the level 4 architecture were set up, as was a validation concept. At the same time, the Control Center for technical supervision was put into operation. Risk analyses and safety considerations for level 4 were carried out, including cyber security and the definition of functional safety measures such as redundancies and degradation concepts for the autonomous driving system. The pioneering work can be used as a basis for future industrial developments.

General News

Dirac, MediaTek in Car Audio Partnership

GENERAL NEWS

DIRAC IMAGE

Swedish audio tech companyDirachas teamed up withMediaTek**,** a semiconductor manufacturer, to elevate the in-car audio experience. This collaboration brings Dirac's cutting-edge digital audio solutions directly into MediaTek's automotive infotainment platforms, allowing automakers to deliver high-quality, immersive sound—without the need for costly hardware upgrades.

Diracis working with automotive brands like Volvo, Polestar, Genesis, Nio, and BYD, among many others**.** In recent years, Dirac has accelerated its growth in the automotive sector through partnerships with semiconductor and framework providers such as NXP, Analog Devices, QNX, Black Sesame Technologies, and now MediaTek.

MediaTekis a global innovator in SoC (System-on-Chip) design, providing high-performance, energy-efficient semiconductors for the automotive, mobile, home entertainment, and IoT sectors**.** Its automotive chipsets offer reliable processing, advanced AI capabilities, deep system integration, and industry-leading connectivity—while also meeting the strict reliability standards required by automakers.

One of the key benefits of the partnership is software-driven audio optimization. Dirac's proprietary algorithms enhance sound quality by correcting speaker and cabin acoustic imperfections in real time. MediaTek's automotive SoC platforms now come with built-in support for Dirac's tuning technology, providing a seamless, ready-to-deploy audio enhancement solution for vehicle manufacturers.

The solution is also highly scalable. Automakers can implement Dirac's technology across a wide range of vehicle segments—from entry-level to premium—while using the same hardware configuration.

Importantly, this collaboration will also lead to lower development costs and faster time to market, eliminating the need for extensive manual tuning or expensive speaker systems.

This partnership underscores the automotive industry's shift toward SDV experiences. As electric and connected vehicles become more widespread, software-based technologies like Dirac's offer automakers a powerful way to differentiate their products through premium digital features—without driving up production costs.