Thu, 28 November 2024
Weekly Newsletter

DVN
Interior

NEWSLETTER #238

Editorial

Electronica '24: Electronics Everywhere In Interior

SAMSUNG DIGITAL COCKPIT 2021 (SAMSUNG IMAGE)

Electronic is everywhere in the vehicle, and its development continues. Especially inside the car! Electronica in Munich is one of the biggest gatherings of this industry; DVN Interior was there, and that is the topic of this week's in-depth coverage.

HMI, infotainment, sensing, interior lighting, 'smart' surfaces and textiles—these are a few examples of interior functions which have been electronicized. Not just for the sake of having electronics, or for reliability or to facilitate maintenance, but also to support safety, comfort, and convenience, and overall for UX. That's what is valued as a car-selling proposition; it's what creates value for the industry and value chain.

Don't forget to confirm before the end of the year your participation in next year's DVN Interior Workshop, in Köln, Germany on 8-9 April, 2025. Save the Date! The theme will be **Progress in Interior UX & Sustainability**. We are looking forward to your lecture and exhibit contributions! Happy Thanksgiving,

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

DVN-Interior @ Electronica 2024

Electronica, held this year from 12-15 November in Munich, celebrated its 60th anniversary as a leading trade fair for the global electronics industry. 3,480 exhibitors presented their innovations across the entire spectrum of electronics to about 80,000 visitors in 18 exhibition halls at the International Congress Center Messe München. Exhibitors travelled from 59 countries and regions; 76 per cent of them came from abroad. About 400 exhibitors presented automotive and display technologies.

MUNICH FAIR AND DVN IMAGES

The event emphasized 'AI', sustainability, the future of mobility, and automotive advancements, with a significant focus on the future of vehicle interiors. The development of young talent sparked lively discussions at the exhibition stands and throughout the extensive supporting program. The equally successful SEMICON Europa took place concurrently in two halls. It brought together industry leaders from across the supply chain to provide insights into the advances that are driving sustainable growth in the semiconductor sector.

The day before the show started, an automotive conference was held with four great keynotes. The first was given by Google's Michael Kollig, who extolled his company's notion of the power of generative 'AI'. He showed a video with a woman walking around an office with a smartphone with a running video function; she asked the AI all kinds of things, and the AI answered immediately—a lot of "what is this" questions, including a screenshot of C++ code on a PC, which the AI interpreted, a handwritten schematic on the whiteboard which the AI improved, and "where are my glasses?"—they'd been visible for a short time at the beginning, and of course the AI in the video 'knew' where they were. The other three keynotes by Infineon, Wolfspeed, and Hitachi were also of a high standard.

CTO PANEL DISCUSSION: 'MOBILITY TECHNOLOGY ROADMAP'. PANEL: MARELLI'S J. FETZER, VISHAY'S ROY SOSHANI, SCHEFFLER'S S. REBHAN, NXP'S LARS REGER, WITH MODERATOR PETER GRESCH

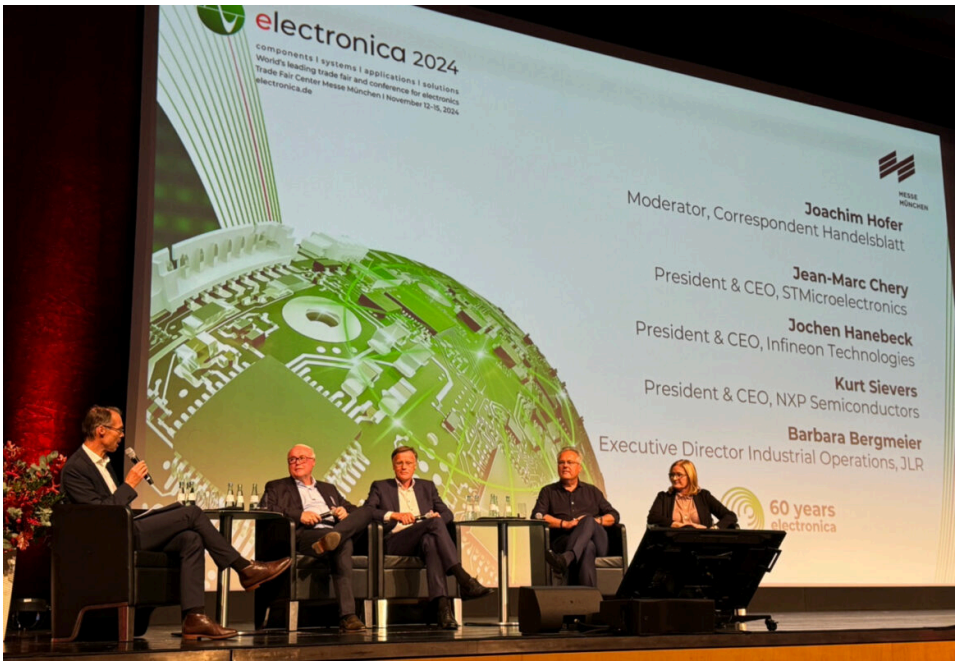
Samsung Semiconductor Europe COO and SVP Jens Kahrweg spoke on auto interior and cockpit trends and how to overcome challenges with semiconductor solutions. Kahrweg has been instrumental in the success of his company's System LSI business, which designs core semiconductors. His key topics included the role of generative AI in cockpit innovation and how memory, computing power, sensors (including UWB for health monitoring), and display technologies are addressing these trends.

Yangfeng's Christophe Pincemin spoke about interior lighting trends in China and Europe. Pincemin started his career in the automotive industry 26 years ago after studying materials engineering. After management positions around the world at Mecaplast, Novares, and Antolin, he joined Yanfeng in 2020, where he is now Executive Director of Smart Surfaces and Lighting. In his presentation, he said global trends and customer demands influence our daily work in developing our products and improving the overall customer experience.

AMS Osram's Mobility and Illumination Product Marketing Director Stephan Eicher's talk was entitled, "How Cutting-Edge LED Technology Enables Trends in Interior Lighting". He explained that lighting plays an increasingly important role in the user experience and is now seen as a key differentiating feature and design element. So, it makes sense that new applications for interior lighting are constantly being explored.

ST Micro's Alfonso Furio presented on CAN FD Light, which is a network protocol for controlling modern vehicle lighting. Lighting is rapidly and continuously evolving to improve safety and driving comfort. At the same time, it is a key element of vehicle design for automaker branding. This is happening in parallel with the rethinking of the entire E/E architecture, opening the door to optimized communication protocols such as CAN FD.

Electronica Opening Ceremony



The official opening event of Electronica was on Monday evening; 450 guests were invited for a grand opening with official honors, a CEO panel discussion, and an opening party. The semiconductor industry CEO panel discussion was chaired by Handelsblatt journalist Joachim Hofer, who is well-known in Germany. He asked tough and politically-charged questions which the panel of CEOs at first refused, then answered with more and more details as they warmed to the subject.

Some statements from the discussion:

- Every government supports its national semiconductor industry, but no country can ever be independent on its own.
- Predictability of government decisions, including taxation, is essential for planning our business.
- The AI boom will lead to a hardware boom, including sensors. AI will help avoid unplanned factory downtime.
- EU AI regulations are never fast enough to keep up with technology development. This takes time and we in Europe will not have access to the latest AI models.
- CO_2 reduction is good and necessary but should please proceed along the Pareto line.
- There is no way to work without China. Their talent pool is bigger, and their energy costs are lower.
- We will have another semiconductor crisis because of the tactical behavior of some in the supply chain.

Trends in Automotive Interior Technologies:

Ambient Lighting and 'Smart' Controls

Ambient lighting systems featured prominently, with exhibitors presenting technologies enabling customizable, dynamic lighting for vehicles. Smart controls, including touchless and voice-activated systems, highlighted the ongoing shift towards intuitive, user-centered interfaces. These innovations promise safer, more engaging driving environments.

Displays

Transparent display are coming, with potential applications on side windows and windshield. Foldable displays are coming, too. Both of these could shove aside the Tesla-type tablet design currently dominating center stack displays.

Sustainable Design Approaches

Exhibitors showcased sustainable materials for interiors, including recycled plastics and energy-efficient components. This aligns with the automotive industry's push toward carbon-neutral manufacturing and eco-friendly vehicles.

'AI', Connectivity and Personalization

IoT-enabled systems were another highlight, offering personalized cabin experiences by syncing with user preferences. Technologies such as over-the-air updates for software-driven features and 'AI'-assisted learning systems demonstrated how interiors are becoming adaptive to individual needs

Electrification

Advanced systems to support EV infrastructure and interior integration dominated the innovation landscape.

Safety and Comfort

Emphasis was placed on features like dynamic lighting systems, proximity sensors, and acoustic solutions to improve user experience.

Acoustics

Directional speakers allow sound to be directed specifically to the driver or passenger for personalized experiences. Active noise cancellation is essential for reducing external noise, especially in electric vehicles with no engine and drivetrain noises.

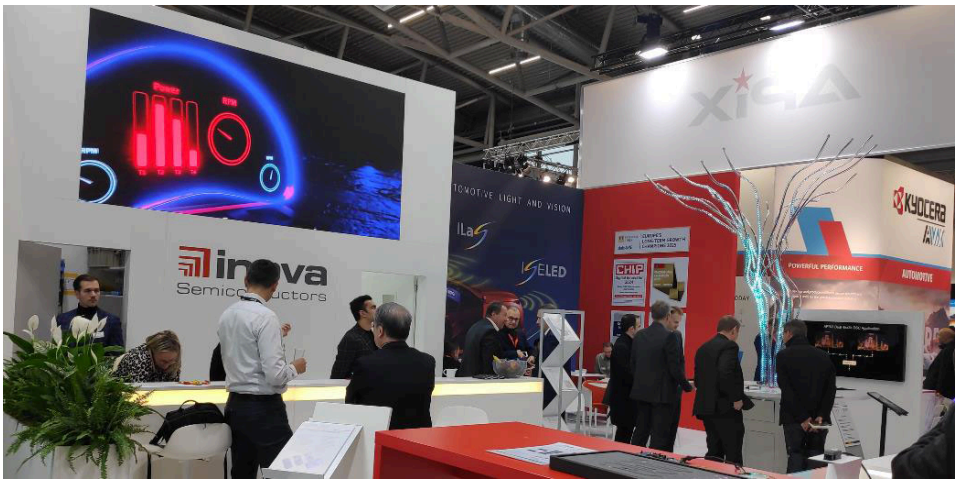
Exemplary Exhibitors in the field of Automotive Interiors:

AMS Osram

DVN IMAGE

AMS Osram demonstrated their contributions to automotive lighting and sensor systems, focusing on safety and user experience. One such innovation is their Eviyos LED system, designed for high-resolution projection of safety symbols directly onto roads to improve nighttime visibility and communication between vehicles and pedestrians. Additionally, their Osire RGB LEDs, capable of synchronized dynamic ambient lighting, and proximity sensors for touchless control interfaces, are driving advancements in interactive interior designs.

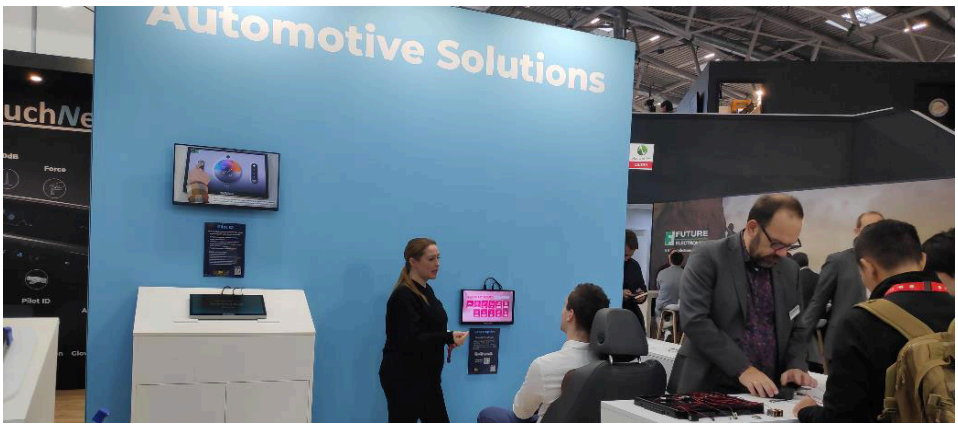
Inova



DVN IMAGE

Inova showcased their APIX (Automotive Pixel Link) technology, which supports high-resolution video transmission over longer distances within vehicles. The APIX3, in particular, ensures seamless integration of displays, making it suitable for infotainment and ADAS. This technology contributes to the development of immersive and efficient automotive cockpits. For dynamic ambient lighting, Inova presented their ILAS system for the control of 'smart' ISELED LEDs.

Grewus



DVN IMAGE

Grewus focused on haptic components. Their haptic actuators aim to provide tactile feedback for interactive displays. These improve user interaction with infotainment systems, aligning with the demand for immersive in-cabin experiences. They presented a seat with multiple actuators for an intuitive information and signaling to the driver regarding driving situations and their behavior.

The Grewus display also included sound design for safety features, such as warning systems and improved voice command recognition, ensuring seamless integration of acoustics.

TouchNetix

DVN IMAGE

TouchNetix presented their automotive touchscreen and haptic technologies; their Axiom platform highlighted intuitive user interfaces and tactile feedback systems tailored for in-car display safety and usability. The touch controllers demonstrated advanced noise immunity and multi-touch capabilities.

Kurz / PolyIC

SP3 COLLEAGUES VISITED WITH DVN AT THE KURZ BOOTH (DVN IMAGE)

Leonhard Kurz introduced a novel coating technology that mimics the premium aesthetic of glass for plastic displays, offering deep black tones and sharp contrast. This improves aesthetics and functionality, integrating seamlessly with in-mold decoration (IMD) technology for touch-sensitive controls.

Kurz collaborated with Swarovski to create the 'Crystal Steering Wheel', which combines elegance with functionality. Integrated touch sensors allow crystal elements to control vehicle functions while maintaining a luxurious design. Additionally, Kurz's partnership with AMS Osram enabled innovative ambient lighting designs by embedding mini-LEDs into IMD panels, achieving hidden-until-lit effects.

Samsung

DVN IMAGE

Samsung's contributions spanned multiple domains, including:

Memory solutions: automotive-grade LPDDR5X memory and detachable AutoSSD for 'server on wheels' innovations, crucial for ADAS and 'AI'-driven cockpit systems.

Sensor solutions: ISOCELL sensors with advanced HDR and LED flicker mitigation for improved autonomous driving safety.

Display innovations: foldable OLED panels and panoramic 34-inch automotive displays with 6K resolution, tailored for immersive and ergonomic cockpits.

Adient

ADIENT SHOW SPACE (ADIENT IMAGE)

Adient's booth highlighted advancements in seating technologies, particularly those integrating smart sensors and comfort-enhancing features. The emphasis was on sustainable materials and modular designs.

Ansys

Ansys focused on simulation tools for optimizing electric vehicle performance and autonomous driving systems. Their software solutions support the development of zonal E/E architectures and safety-critical applications.

ASAP Engineering

ASAP displayed their expertise in developing modular systems for the automotive sector, including adaptive lighting and sensor solutions for 'smart' interiors. Their showcased innovations also included prototypes for driver interaction systems.

Rebo Lighting & Electronics

Specializing in high-precision electronic components, Chongqing Rebo revealed their latest advancements in connectivity and robust electronic modules designed for harsh automotive environments. Their focus was on IoT-enabled solutions that enhance vehicle-system communication. See **our previous coverage**.

Coindu

Coindu's innovations in textile and leather components are aimed at improving tactile comfort and aesthetics while adhering to environmental sustainability goals.

Elmos Semiconductor

Highlights included ICs for advanced motor control in e-mobility applications, enabling intelligent management of actuators, pumps, and valves to enhance efficiency and safety in electric vehicles. Their innovations in ambient lighting systems, touchless gesture recognition, and lidar concepts were particularly relevant for the future of automotive systems.

Global R&D SMP

Highlighted collaborative projects in developing integrated platforms for automotive and industrial applications. Their contributions included embedded systems that support 'AI'-driven automotive interiors, aiming for better safety and user experience.

Grupo Antolin

Antolin unveiled a collaboration with E Ink, presenting dynamic surfaces using e-paper technology. This enables customizable interior designs that improve user experience while improving energy efficiency through 'smart', low-power transitions. See **our previous coverage**.

Melexis

MELEXIS IMAGE

Melexis presented their integrated sensor solutions for HMI applications, including touchless gesture controls and climate control systems.

Mitsui Chemicals

Mitsui emphasized material technologies for sustainable development. They introduced innovative chemical solutions targeting circular economies, such as materials optimized for lightweight automotive components and durable coatings. Their focus included green technologies, recycling methods and reduced environmental footprints, along with materials for better vehicle comfort and energy efficiency.

Panasonic Automotive

DVN IMAGE

Panasonic showed their advanced in-car entertainment and connectivity solutions, including OLED displays and integrated lighting systems that cater to the evolving demand for personalized interior environments.

Seoul Semiconductor

Seoul Semi focused on high-efficiency LEDs and modules for automotive interior lighting, emphasizing energy savings and long lifespans. Their solutions cater to adaptive and ambient lighting systems for greater driver comfort.

Seoyoneh-EWHA

Seoyoneh-EWHA ranks 82nd among global automotive suppliers (per Automotive News). They presented solutions in precision engineering and component manufacture for automotive interiors. Their highlights included new electronic interface systems tailored for seamless integration with modern vehicle designs, reliability and compactness.

SMR (Samvardhana Motherson Reflectec)

SMR MIRROR

SMR demonstrated their latest 'smart' mirrors with integrated displays, lighting features, and driver-assistance technologies. These products address the growing trend of advanced functionality.

Toyota Boshoku

TB focused on sustainable and modular interior components, including climate-responsive materials and innovative storage solutions for better use of space inside vehicles.

Valeo

Valeo presented advancements in ambient lighting and climate comfort systems, integrating sensors and software for better in-cabin experience.

Conclusion

The show emphasized the convergence of functionality, design, and sustainability with significant focus on automotive interiors. With contributions from companies like Samsung, AMS Osram, Inova, Leonhard Kurz, Grewus, Valeo, and many more, the future of vehicle interiors is set to be more interactive, aesthetically refined, and environmentally conscious. These innovations highlighted the pivotal role of electronics in shaping modern mobility solutions.

Interior News

Karli Consortium for HMI, and Automated Driving

INTERIOR NEWS

KARLI / TMD IMAGE

From July 2021 to September 2024, the Karli consortium developed key technologies for the introduction of automated vehicles. The goal was 'AI'-supported, adaptive, responsive and level-compliant interaction between vehicle and driver. The project partners were Continental, Ford, Audi, Invensity, Semvox, TWT, Studiokurbos, Fraunhofer IAO, Fraunhofer IOSB, Allround Team, Stuttgart Media University and Stuttgart University IAT.

They worked on three key issues:

- How does interaction between driver and vehicle succeed with the necessary role changes at different levels of automation?
- How can HMI and thus the perception of 'AI' in the vehicle be optimized?
- How can 'AI' detect and prevent motion sickness during non-driving activities?

The interaction between driver and vehicle was developed under the leadership of the supplier Continental. The physical basis for the interaction consists of the steering wheel, cluster display, central display, an LED light strip, loudspeakers and a vibrotactile driver's seat. The driver's behavior is monitored by a camera, while the vehicle's surroundings are monitored by a standard set of sensors.

If a mismatch between driver behavior and the surrounding situation is detected, the 'AI' uses the appropriate information channel to encourage the driver to behave in accordance with the level. The basis is a specially developed HMI agent that uses driver data, the complexity of the specific driving situation and the current degree of automation to make decisions.

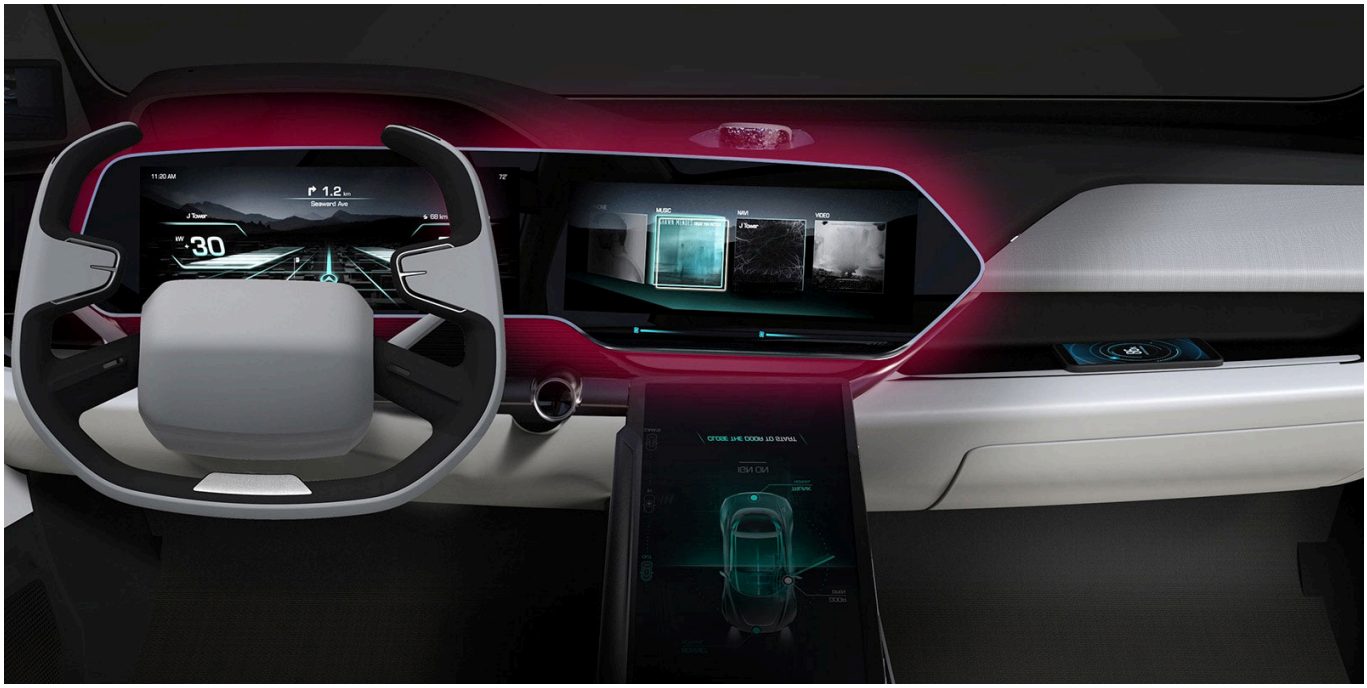
The HMI agent uses the driver and environmental data as well as the current level of automation to calculate a level-compliant driver behavior and the optimal warning or handover processes for the situation. To do this,

an HMI library provides the agent with a structure and logic as well as a set of warning signals that it can select. Time-critical interaction depending on the environmental situation has also been implemented. A warning cascade is also defined for each information element, which gradually escalates the urgency of the signals.

Finally, Continental evaluated the 'AI'-supported interaction on 60 test subjects in public road traffic. Among the conclusions: "This form of interaction is clearly understandable and increases safety and comfort during automated driving," said Christoph Wannemacher from Continental Automotive Technologies, who headed the consortium.

LG Virtual Assistant to Help Tired Drivers

INTERIOR NEWS



LG IMAGE

LG Electronics has unveiled the third edition of their Mobility Labworks Series Digital Cockpit concept.

Designed to be a modular system automakers can easily implement in future vehicles, the concept consists of future displays, a look at next-generation human-machine-interface and the inclusion of advanced 'AI' for safer driving and increased convenience.

The LG Vision Display concept has a 12.3" transparent OLED screen that offers key data, such as navigation, current speed and points of interest.

Like many of LG's other innovations in its latest series, it is designed for high levels of autonomous driving and also features a 14.2", roll-in-and-out plastic OLED (P-OLED) display embedded in the center console. This can be retracted when not in use, to keep a clean interior aesthetic.
LG also showcases a touch-sensitive curved OLED display integrated into the steering wheel.

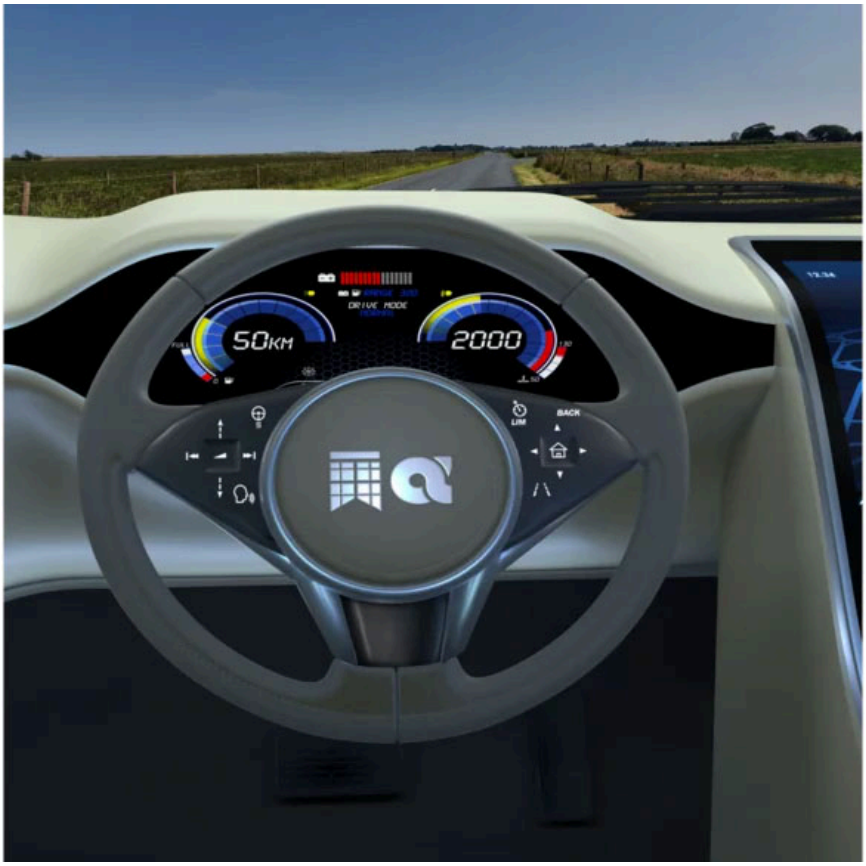
This takes care of driving settings and allows the driver to easily manage navigation and climate control when piloting the car; it doubles as a multimedia hub for when the car is driving itself.

LG has incorporated what they call an 'AI'-based virtual assistant, which can detect if a driver is getting tired and will suggest entering autonomous modes. It can navigate to a nearby coffee shop for a rest, as well as order and pay for that coffee via the screen's built-in fingerprint recognition sensor.

Then there's LG's Connectivity & Content Solution for Seamless Entertainment and Smart Mobility. This effectively transforms the rear passenger seats into an interactive entertainment hub, highlighting the company’s webOS platform via a plethora of screens. It features a large display console that’s attached to an armrest, as well as an entire unit that wraps over the heads of passengers and places another high-definition screen in front of their eyes. Users navigate content and control volume using hand gestures.

MacDermid Alpha Premium Touch Susrface Films

INTERIOR NEWS



DVN Interior recently introduced MacDermid Alpha Electronics Solutions, specialists in integrated technologies and materials for the electronics and automotive industries, in terms of their presence at the Stuttgart Auto Interior Expo.

Now, we look in more detail at their XtraForm 3D Matt, a low-gloss, deep-formable, hardcoated polycarbonate film that meets automotive designer needs. In response to the growing demand for interactive touch surfaces throughout vehicle interiors, XtraForm 3D Matt enables accurate and confident smart surface interaction for the user. This hardcoated matt surface also provides improved interaction for slide controls, such as those for HVAC and interior lighting.

MacDermid Alpha Electronics Solutions is a division of Element Solutions Inc, a supplier of fully integrated materials. Their focus is to pioneer chemistry and advanced materials that break technology barriers with sustainable chemistries and improve processes.

For shaping intricate curves and withstanding daily wear and tear, XtraForm 3D Matt delivers unmatched performance and durability, meeting stringent automotive standards for reliability and longevity. The matt surface feels luxurious to touch and blends with other softer interior materials.

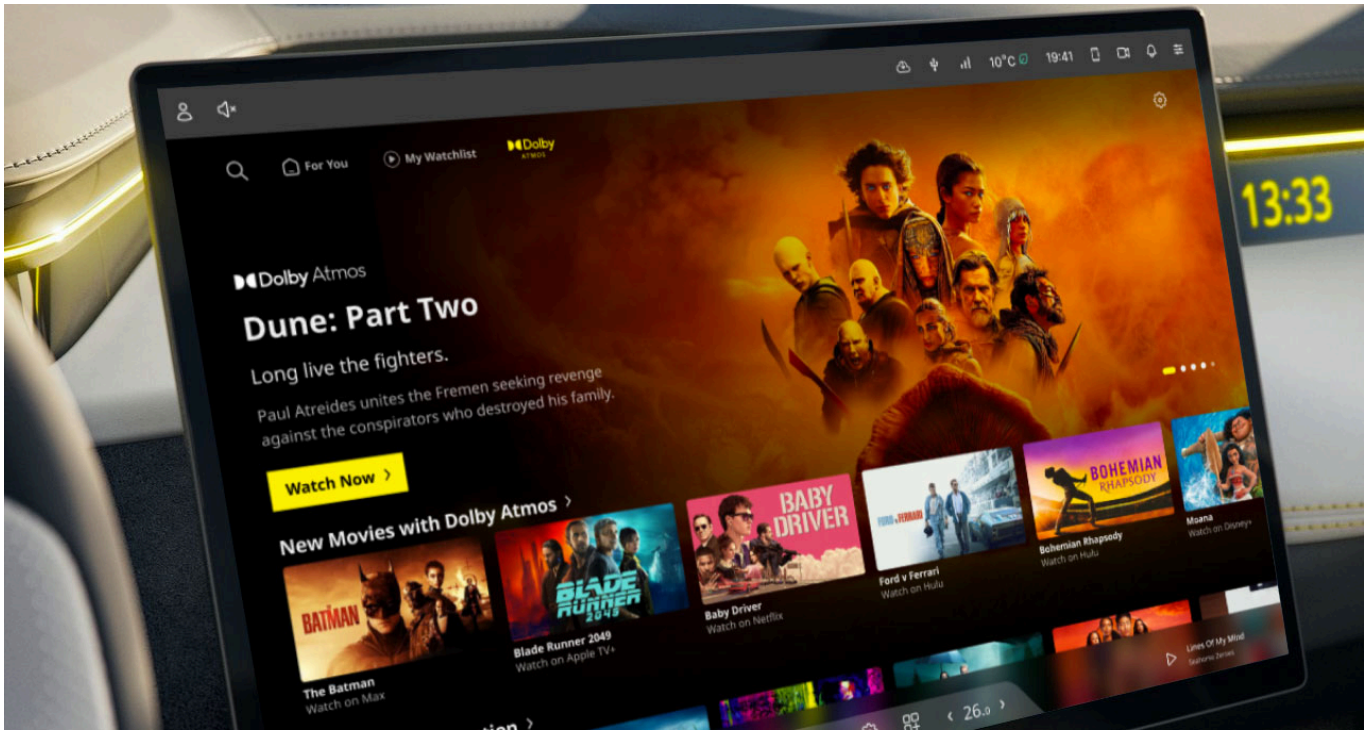
Visually, the first surface of XtraForm 3D Matt is inherently anti-glare which reduces distractions, while the second surface can be decorated in any color or pattern that the designer requires. This latest film also fully supports secret-til-lit and other smart surface features common to the XtraForm film insert molding (FIM) process. Unlike traditional gloss piano black finishes, XtraForm 3D Matt provides a consistent matt appearance of luxury and modernity.

Beyond the initial benefits, the surface is inherently resistant to fingerprints, and easy to clean. This ensures that interior surfaces do not mark easily and remain smudge-free even after repeated use, contributing to a premium interior experience.

XtraForm 3D Matt is now available for integration into a wide range of automotive interior functional and trim components, including dashboards, door panels, steering wheels, and center consoles. Thicker gauge XtraForm Matt is also available for larger parts including full-width 'smart' surfaces.

3SS 3Ready Wins Infotainment Solution of the Year

INTERIOR NEWS



3 SCREEN SOLUTIONS (3SS)

3 Screen Solutions (3SS) has won the Automotive Infotainment Solution of the Year award in the fifth annual AutoTech Breakthrough awards program.

3Ready Automotive from 3SS is a technology and content platform offered as entertainment-as-a-service (EaaS) to power car displays and deliver entertainment rich in content, apps and services.

The 3Ready Automotive ecosystem enables automakers to provide video entertainment that blends into their HMI with a customized look and feel. By providing an array of appealing entertainment direct to customers, with an intuitive interface and navigation, the system drives interaction and engagement and reduces discovery time.

Drivers and passengers benefit from multiple user functions, all configurable to meet automakers' operational and commercial requirements. OEMs can also manage, style, curate, and target the content remotely, and across their entire fleet, so that their marketing, brand and customer relationship teams can engage with customers in real time, with no need for software updates. Teams can deliver targeted content, currently trending video content, social media, promotions and live events and conferences.

3Ready Automotive has an abundant and growing array of popular entertainment available. In addition, content onboarding is accelerated so carmakers can launch faster, benefitting from 3SS' relationships with content providers.

Panasonic Joins Basemark AR Ecosystem

INTERIOR NEWS

BASEMARK IMAGE

Basemark, a Finnish provider of automotive augmented reality (AR) software, says Panasonic Automotive Systems Europe has joined Basemark's Rocksolid Ecosystem partner program. Both companies view AR as a key facilitator for advancing driving safety and comfort.

Panasonic Automotive Systems Europe, as a tier-1 supplier, develops and makes augmented-reality head-up displays (ARHUDs). With a long history and expertise with cockpit solutions, Panasonic Automotive Systems has made a significant mark in the industry and collaborates closely with major automakers.

By joining the Rocksolid Ecosystem, Panasonic Automotive Systems Europe becomes part of an expanding community to bring the AR experience of the Panasonic HUDs to an immersive next level.

Market demand for ARHUDs is increasing, as they provide drivers with real-time, critical information directly in their line of sight. This reduces the cognitive load of the driver and makes navigation and hazard avoidance more intuitive. By combining Panasonic Automotive Systems' hardware expertise with Basemark’s AR software, design and development of state-of-the-art ARHUDs will be faster and easier.

"We are thrilled partnering with Basemark to complement each other's strengths in delivering a superior user experience," said Panasonic Automotive Systems Europe CTO Hassan Haidar. "By combining our hardware and optical expertise with their innovative software, we can offer products that redefine the visual experience and deliver safer and easier to use solutions for our customers".

And Basemark founder and CEO Tero Sarkkinen said, "We are very excited to welcome Panasonic Automotive Systems Europe to our Rocksolid Ecosystem program. Our teams are already collaborating on new concepts, and we look forward to seeing the fruits of this cooperation".

Infiniti QX80 Autograph Lounge Concept at SEMA

INTERIOR NEWS

INFINITY IMAGE

Infiniti unveiled their QX80 Autograph Lounge at the SEMA show in Las Vegas. The transformation into a 'tailgate destination' starts with entertainment in the vehicle's cargo area, including an integrated TV screen and a custom-developed Klipsch sound system to mesh with the available 14- and 24-speaker Klipsch Premium Audio system in the new 2025 QX80.

The SUV's cockpit has dual 14.3" displays above a 9-inch screen. Second-row passengers get their own touchscreen as well as a high-tech biometric cooling system, which uses an infrared sensor to help keep them comfortable.

Also present in the cargo area is a custom slide-out drawer system for tailgate essentials. The enclosure is finished in burgundy leather, with metal speaker grilles matching the look of the Klipsch speakers throughout the vehicle's cabin.

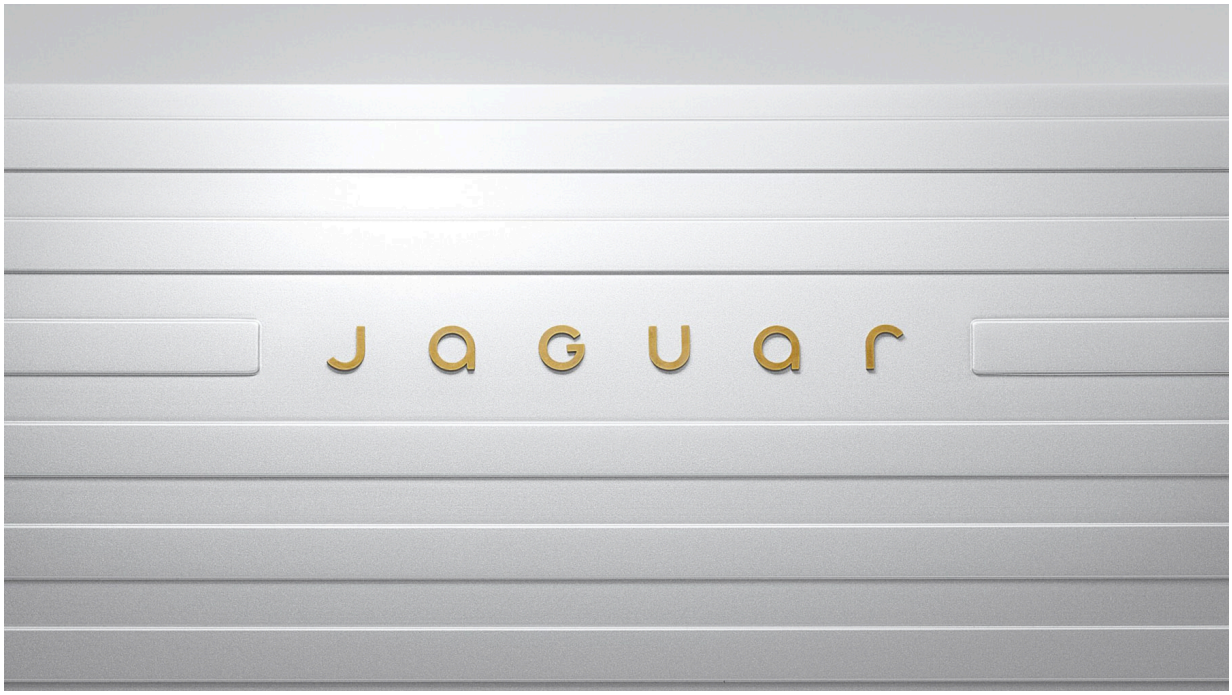
The exterior features 24-inch performance wheels, which debuted with the QX Monograph concept and feature floating center caps. The electronic air suspension has a lowering kit for a better stance and to complement the bespoke wheels.

The 2025 QX80 is on sale now, with a starting price in the US of about $82,000.

The Design Lounge

Jaguar's New Logo, Branding, Concept

THE DESIGN LOUNGE



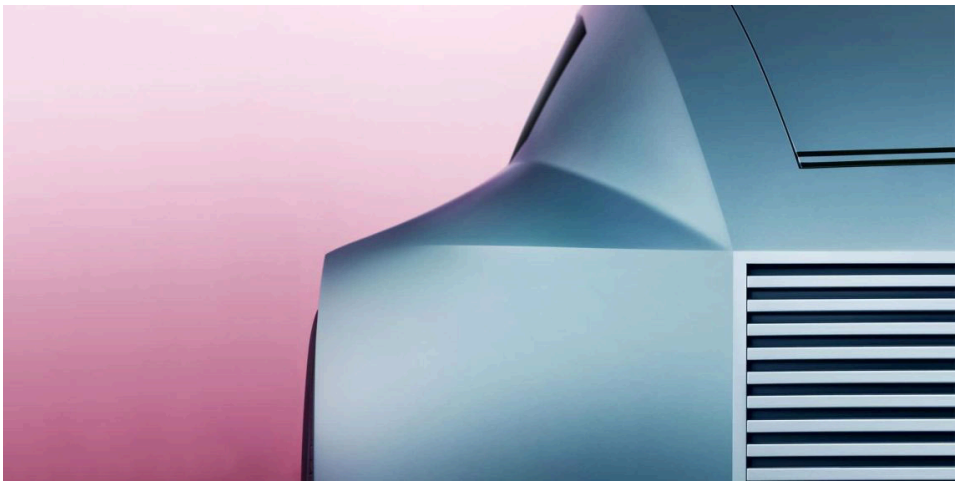
JAGUAR IMAGES

Jaguar, the iconic British luxury car brand and part of of Tata Motors' JLR business group, has taken a bold step into a new era with the introduction of its revamped logo and branding. This move aligns with the company’s transformation into an all-electric car manufacturer, underscoring their commitment to innovation and modernity.

J As part of their rebranding, Jaguar has introduced bold slogans like 'delete ordinary', 'live vivid', and 'copy nothing'. These taglines encapsulate the brand’s commitment to breaking away from tradition and embracing bold, innovative design that challenges the status quo, as part of the transition to an all-electric luxury car lineup by 2026.

Emphasizing 'Exuberant Modernism', the rebrand features a bespoke font, a redesigned 'Leaper' emblem, and a philosophy rooted in originality and boldness.

To support this transformation, the company ceased sales of new cars in the UK over a year ago, creating what they called a "fire break" between their existing combustion-engine model range and the upcoming electric Jaguars. According to Managing Director Rawdon Glover, this decision was intended to allow the brand to fully reinvent itself.



The first of Jaguar’s three new EVs will be a four-door GT built in Solihull, England, offering an impressive 430-mile range and rapid charging capabilities that can add 200 miles in just 15 minutes.

An upcoming concept, which will debut during 2024 Miami Art Week starting on 2 December, will preview the grand tourer, and will be the first real taste of Jaguar's transformation that was first announced as far back as 2021.

Jaguar’s refreshed logotype is spelled out as **jaguar**. The company says this blend of upper- and lower-case letters is meant to create a sense of "visual harmony". The distinctive gold type accentuates the 3-syllable British pronunciation ("Jag-you-are"), and marks the first major redesign of the logotype in over 90 years.

JAGUAR'S FAMOUS LEAPING CAT SYMBOL HAS BEEN REDESIGNED (JAGUAR IMAGE)

Alongside the wordmark, the iconic 'Leaper' cat emblem has also been reworked. Now embossed on brass, the dynamic lines of the leaping cat symbolize the brand’s essence of 'Exuberant Modernism'. And there's a new monogram featuring the letters **J** and **R**.

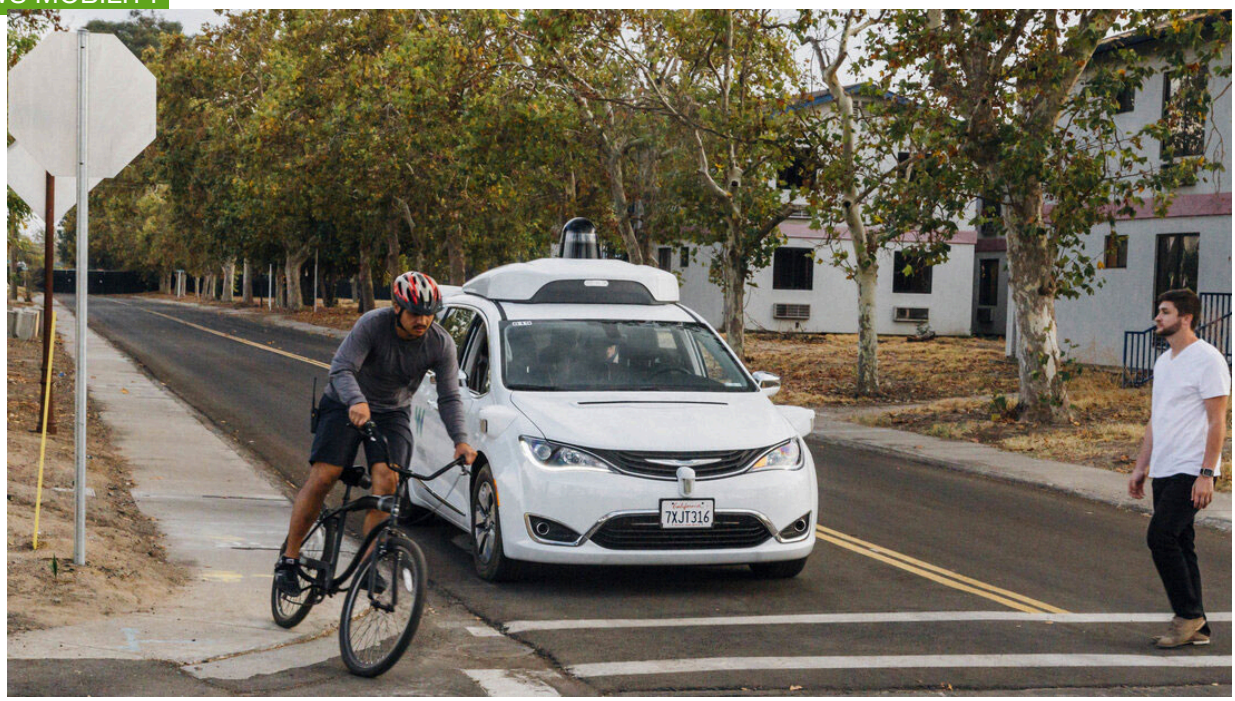
As Jaguar gears up for their all-electric relaunch, the company is excited about the rapid expansion of global charging infrastructure. During the lifecycle of the new Jaguar GT, the number of fast chargers is expected to grow from four million to fifteen million, enabling customers to confidently embrace the electric future.

Jaguar’s rebranding marks a pivotal moment in the company’s transition to an all-electric luxury carmaker. With a fresh design philosophy, state-of-the-art technology, and a firm commitment to sustainability, Jaguar is paving the way for a future where the brand continues to be as iconic and exciting as ever.

News Mobility

Waymo Study Looks at Reducing VRU Crashes

NEWS MOBILITY



WAYMO IMAGES

Waymo has published a new study examining hundreds of crashes involving vulnerable road users—pedestrians and cyclists, for example—which the self-driving company is calling the largest dataset of its kind in the US.

Roughly 40,000 people in the US are killed each year in vehicle crashes. But while cars have become very good at protecting their occupants, vulnerable road users (VRUs) are much more exposed—and on the North American regulatory island, there are no pedestrian-protection requirements for vehicle design and configuration like the ones in the UN Regulations used elsewhere. Waymo safety researcher John Scanlon says the goal of the study was to shine a light on this area of traffic research in the hopes that the results could help make Waymo's driverless technology safer.

The new research comes amid a deadly period for pedestrians and cyclists in the US, where reports of injuries and fatalities remain alarmingly high. 7,522 pedestrians were killed by cars in 2022, and more than 67,000 pedestrians were injured nationwide, according to the NHTSA. The problem isn't unique to the United States; it is visible to one degree or another everywhere in the world with roads designed for cars carrying more pedestrian and cyclists.

On the surface, the results seem pretty obvious. Pedestrians and cyclists were more likely to be injured when they 'surprise' drivers, such as by crossing the street against the traffic light. Also, "geometric occlusions" like trees, bushes, buildings, or other vehicles led to a higher risk of injury. And the vehicle's trajectory, the direction it is traveling or turning, played a significant role. The study found that "An accurate, in-depth understanding of the unique safety risks presented to these groups is critical".

Waymo partnered with VUFO, a traffic research group based in Germany, to develop models for injury risk assessment. They leveraged anonymized data from the German In-Depth Accident Study, which includes information on thousands of VRU crashes over more than two decades and represents what is said to be the most relevant data available in the world today for estimating injury risk for VRUs.

Scanlon said that by better understanding these types of collisions, AV operators can recreate them both in simulation and real-world testing, which could lead to safer decisions: "This analysis can serve as a starting point for pinpointing baseline driving risk associated with VRU collisions in dense-urban areas, which will, in turn, enable AV performance testing and evaluation".

General News

Autoneum Buys Big Stake in Jiangsu Huanyu

GENERAL NEWS

Swiss automotive supplier Autoneum has agreed to buy a 70-per-cent stake in Jiangsu Huanyu Group, a Chinese automotive supplier specialized in acoustic and thermal management.

Autoneum specializes in acoustic and thermal management solutions for vehicles. They develop and produce multifunctional, lightweight components for optimum noise and heat protection. Their products and technologies make vehicles quieter, safer, and lighter, which helps to reduce fuel consumption and emissions.

Jiangsu Huanyu Group, established in 2001, operates 14 production facilities and employs approximately 1,100 people. They supply lightweight components for both light and commercial vehicles in China. Their product portfolio includes vehicle interior components such as carpets, headliners, and insulation for various vehicle parts. In 2023, Jiangsu Huanyu Group generated revenue of around USD $147m.

Autoneum expects the deal to increase their presence in China's automotive market, and also to support Autoneum’s strategic initiative to expand its truck business in China.

Autoneum CEO Eelco Spoelder said, "Jiangsu Huanyu Group has broad customer access to the largest local vehicle manufacturers in China. With its plants in the key automotive hubs in China, the company is an excellent strategic addition to Autoneum and brings us a significant step closer to our medium-term target of generating 20 per cent of Group revenue in Asia. The acquisition of the majority stake in Jiangsu Huanyu Group will strengthen our position in China, the world’s largest and fastest-growing market, both in the light and commercial vehicle business.

“This step not only gives us access to an established customer base in China, but also allows us to further expand our presence and gain strong influence in the booming automotive hubs of Anhui and Shaanxi".

Audi's New China-Only Models

GENERAL NEWS

AUDI IMAGE

Audi and their local Chinese partners showcased three stretched model for the Chinese market at this year's Auto Guangzhou in southern China.

"L" vehicles have an extended wheelbase and are focused on rear interior comfort. They offer increased legroom for rear passengers and more comfortable seats, potentially with features such as power-operated adjustments.

The Audi Q6L e-tron was presented at the FAW stand shortly before its market launch as the first locally produced vehicle based on the Premium Platform Electric (PPE). The A5L, successor to the A4L, was also on display.

At the SAIC stand, visitors witnessed the recently presented a audi E concept and the brand audi, written in capital letters (new logo for China). This model embodies intelligent and connected electric vehicles that are being jointly developed by Audi and SAIC specifically for China. Audi is positioning itself in China with its two-partner strategy. Collaborating with the local car manufacturers FAW and SAIC, Audi is developing vehicles specifically for the Chinese market.

The Q6L e-tron will be produced starting at the end of December by the Audi FAW NEV Company founded by Audi and FAW. For that purpose, the joint venture has built a new production site in Changchun.

The Q6L e-tron differs from the international model made in Ingolstadt not only with its longer wheelbase, but also with numerous design features and market-specific innovations geared towards the Chinese market. And the interior of the Q6L e-tron, which was shown for the first time at the fair, impressed with a digital experience also developed especially for China. Overall, the interior is more comprehensively tailored to the needs of Chinese customers than ever before.

The FAW stand also presented the successor to the A4L with a new model designation. As a combustion vehicle, the A5L is based on the Premium Platform Combustion (PPC). Its extended wheelbase creates a significantly greater feeling of spaciousness while keeping the signature dynamic proportions. Individual designs at the front and rear, such as the illuminated rings, ensure an unmistakable appearance. As with the Q6L e-tron, the interior of the A5L features impressive market-specific options such as illuminated door mirrors and high-tech solutions, for example in the display and operating concept.