

# Editorial

## CES 2024: Vehicle Tech With AI Everywhere



DVN IMAGE

Looking back over the past years CES started progressively embracing the automotive sector, under the show-names Vehicle Technology and Advanced Mobility. Two years ago, it was all about autonomous vehicles, last year it was more focused on electric vehicles, and this year, with fewer automakers but more suppliers, it was all about technology. Technology we can use, not just dream about; real-world tech on display, actual stuff you can actually buy today for your next actual car. In that respect, AI is playing an important role, to make any product seem more intelligent...to act as though more human, or at least to be a natural extension of human capabilities...for more intuitive use of the product...to be safer (or at least feel safer)...to understand the occupants of an automobile and adjust to their behaviors and feelings...and to provide, with generative AI, information and services around the voyage at hand.

This biggest technology and gadget bazaar in the world included technology in every directions, Vehicle tech and advanced mobility were significant, as well as consumer electronics (the C and E in "CES"), health, home appliances, beauty, and more. Innovations were shown such as Walmart's AI checkout (perhaps this "self-checkout 2.0" will be less universally despised than the present version?), LG's transparent LCD TVs, AI robots to manage smart homes, ChatGPT inescapably everywhere, gaming, human vitals monitored by non-intrusive means, e-bikes, pet trackers (the end of the [Lost Cat poster?](#)), baby monitoring, flying taxis...just to name a few.

In this edition and the one to follow, we bring you reports on what happened at this year's CES, and more. We hope you enjoy reading up on it, and don't forget to make plans for the [23-24 April DVN-Interior Workshop in Köln](#), where many of the exhibitors we met in Las Vegas and report on here will be presenting their innovations.

We're glad you're here with us! Not yet a member? Come [join in](#).

Sincerely yours,

A handwritten signature in blue ink, appearing to be 'C. Befelein'.

Carsten Befelein  
Consultant, DVN-Interior

# In Depth Interior Technology

## CES 2024 Part I: Car Makers



CES IMAGE

At this mammoth technology show, concept cars and concept interiors were a popular form of show-and-tell; automakers and big tier-1s love to make them to put their ideas and technology in context. Here we take a look at automakers' efforts on that front this time around:

### Hyundai

Hyundai's display was light on actual cars; they were mostly focused on presenting concepts and ambitions around sustainable automotive transport.



A transition to hydrogen power relies on two approaches: plastic-to-hydrogen (P2H) and waste-to-hydrogen (W2H), with a green hydrogen process.

P2H feedstock is unrecyclable waste plastics, such as vinyl and contaminated plastics, and P2H can be achieved by combining liquefaction technology developed by Hyundai Engineering and gasification technology from Shell Oil.

W2H converts biogas from organic waste, such as livestock manure and food waste, into hydrogen.

Hyundai also showcases exhibits and videos introducing core SDV (software-defined vehicle) technologies under development by their global software center, 42dot, emphasizing the importance of software and AI in becoming a smart mobility solutions provider.





Their DiCE (Digital Curated Experience) infused with AI is a personal mobility platform that provides curated services through software technology customized to individuals. Through a display surrounded on three sides, an immersive mobile experience is possible. It includes a bio-sensing camera to create an optimized environment and an airbag for safety.

And SPACE (Spatial Curated Experience) is about providing customized spatial experiences by incorporating individual lifestyles into mobility to embrace users across a wide spectrum of needs, along with free mobility.

Then there was their City Pod with hydrogen energy technology, a modular system presenting an efficient and systematic middle- and last-mile logistics vision. Each pod is automatically combined or separated as needed, allowing logistics to be delivered directly to customers not only on the road but also inside buildings.

## **Hyundai Mobis**



DVN IMAGE

Hyundai Mobis, here at car level, presented their Mobion electric SUV concept, which features the Lightning Grille grilleboard and spectacular e-Corner system, enabling all four wheels to turn 90 degrees.

## **Kia**

Kia introduced their modular PBV (Platform Beyond Vehicle) strategy, and teased several concept EVs.



KIA IMAGE

Kia introduced their customizable PBV to provide businesses and individuals with modular, fit-for-purpose EVs. The PV5 concept, for example, is meant to capitalize on the commercial vehicle segment. Combined with Hyundai Motor Group's software-defined-everything (SDx) technology, Kia's PBV EVs can provide a new design exercise in modular, customizable space to fit the needs of more people—whether it be a taxi, mobile boutique, cargo van, or recreational vehicle.



Kia shared that the entire area behind the fixed cab can support interchangeable upper bodies they call 'life modules'. These weldless, top-hat structures come in kit form and can be connected to the base vehicle via a hybrid electromagnetic and mechanical coupling technology. This swappability increases versatility greatly. Options include Basic, Van, High Roof, and Chassis Cab variants, with, in the future, a Robotaxi version developed with Motional.

Kia had a second exhibit at CES Central Plaza, where they showed the EV3 and EV4 concepts in addition to the EV6 GT and EV9 production models.

## **BMW**



AR RIDE: JOINT DEVELOPMENT DEMO WITH XREAL (BMW IMAGE)

BMW's show was dedicated to the digital customer experience, with a new infotainment feature for their current model line, to discover the potential of AR glasses as passengers, and experience the power of BMW's Intelligent Personal Assistant as a vehicle expert enhanced with generative artificial intelligence.



BMW IMAGE

In conjunction with the BMW Digital Premium option, owners of BMWs with Operating System 9 have access to a ConnectedDrive Store extended with third-party apps for music, news, and gaming. With the AirConsole app, BMW and MINI customers can already play single- and multiplayer games in the vehicle today.

In addition to the BMW Theatre Screen with Amazon Fire TV in the rear compartment of the BMW 7 Series, BMW customers now can watch a variety of video content on the central display. BMW developers worked with XPeri to optimize the TiVo Operating System, which has already been successful in the Smart TV sector, for in-vehicle video streaming, integrating the DTS AutoStage Video Service powered by TiVo. The entertainment offerings include both live channels and on-demand media libraries of news, sports, entertainment for children, movies, and TV series.

## **Honda**



SALOON CONCEPT (HONDA IMAGES)

Honda has decided the future of automotive mobility is electric; they declared their goal is to achieve a 100 per cent global ratio of EVs and fuel cell EVs by 2040. To that end, they revealed the first two '0 Series' EV concepts: a sleek, stylish sedan called the Saloon (the British-English term for 'sedan') and the boxy-chic Space Hub. Both concepts offered a glimpse into Honda's ideas for their cars of tomorrow.



SPACE HUB CONCEPT (HONDA IMAGES)

## **Sony Honda Mobility**



SONY, SONY HONDA MOBILITY, AND HONDA LEADERS (DVN IMAGE)



At a big press conference, Sony and Honda described the next steps for Sony Honda Mobility. Sony CEO Kenichiro Yoshida and Honda President Toshihiro Mibe talked about sensing technology for enhancing mobility safety. The 'Safety Cocoon' is a concept to advance vehicle safety by detecting 360 degrees around the vehicle in various daily driving situations, allowing drivers to take early action to evade risk. At the booth, visitors experienced Sony's diverse sensing technologies that support the realization of this concept. By pursuing resolution and sensitivity better than that of humans and their eyes, Sony's sensing technology aims to enhance safety by serving as the eyes of mobility.

There was a Sony Afeela car being driven by a PlayStation PS5 controller—a spectacle explained this way: "Sony Honda Mobility will provide an additional playground where anyone can create and express their own style using Afeela. To do so, we plan to establish diverse development environments to foster a creative community among users and creators, allowing access to vehicle data, driving data and other related information".

The demonstration showed that cars are becoming more defined by software, rather than hardware. With software having deep control of vehicle functions, over-the-air updates can change several characteristics of the drive experience, and can improve vehicles over time.



Sony said the software-defined nature of the car will turn it into a "digital playground" for creators to invent new in-car experiences. They showed an example game that renders a vehicle in a mock world alongside escaped godzilla-like monsters, which you can get points for catching. Why look at boring old, normal old, regular old scenery outside when everything can be turned into a videogame?



## **Mercedes**

The first Mercedes-Benz to showcase MB.OS is the CLA Class concept, first shown in North America at CES this year. It's designed on the new Mercedes-Benz Modular Architecture (MMA).



DVN IMAGES

Mercedes revealed more detail of their new integrated MBUX Virtual Assistant. Using software and generative AI, they called it a 'game changing development' which takes the Hey Mercedes voice assistant 'into a whole new visual dimension' with Unity's high resolution, games, and engine graphics on an in-house operating system. It will arrive with the first MMA-platform model, the next CLA Class. The system can now offer suggestions based on learned behavior and situational context.

More natural dialogue is paired with visual feedback through advanced 3D graphics from the Unity game engine. A 'living' star avatar uses animations to express different moods and states of being. Emotions range from calm to excited and even sensitive. Further animations indicate whether the assistant is speaking, listening, thinking, suggesting, or providing a warning. Movement, brightness, intensity and color interact to communicate intuitively with the driver.

The driver benefits from significantly enhanced situational awareness by being able to see what the car 'sees'. For instance, it shows the type of traffic ahead by indicating another car, van, truck, or a cyclist. It also shows pedestrians close to the roadside and other potential hazards and superimposes route guidance into a realistic representation of the surroundings.

OTA updates will ensure access to the latest content and features tailored to owner wishes and regional preferences.

Another presentation at CES: Mercedes is joining forces with Audible and Amazon Music to refine in-car storytelling. With Dolby Atmos, this collaboration will bring spoken-word audio to new dynamic heights, putting car users at the center of a concert-hall sound experience including audio books and all kinds of other content.



MBUX VIRTUAL ASSISTANT: NATURAL, CONVERSATIONAL INTERACTION (MERCEDES IMAGE)

## **Vinfast**



Underpinned by the message "Venture Beyond", VinFast introduced their new VF Wild EV concept; their VF 3 mini eSUV; their DragonFly electric bike, and other vehicle and technology snackbites. The VF Wild is VinFast's first attempt at a pickup truck. It is 5.3 m long and 2 m wide, with an expanding bed, a panoramic glass roof, and digital side mirrors. It was jointly developed by VinFast and Australian design studio GoMotiv.

## **Pininfarina**



PININFARINA IMAGES

Pininfarina presented their collaboration with AC Future, a living-solutions innovator, to conceptualize and design a mobile living space called eTH (for Electric Transformer House). It aims to blend luxurious amenities, smart technology, and eco-friendly features to embrace the mobility demands of the future.





The cockpit shows a simple, very desklike dashboard with everything routed through a central rotatable touchscreen. A workspace is available for the passenger, and AC Future suggests a self-driving ability by animating a foldaway, lozenge-shaped steering wheel.

In addition to designing the interiors and exterior of the mobile living unit, Pininfarina crafted the brand identity, including the logo and all brand assets.

## **Xiaomi**



XIAOMI IMAGES

The billionaire co-founder of Xiaomi unveiled their first EV, declaring ambitions to become a top global carmaker in 15 to 20 years and compete against Tesla, Porsche, and the rest.

This five-seater SU7 sedan (it's said to stand for Speed Ultra) will be powered by batteries from CATL and BYD, depending on whether it has a single- or dual-motor configuration.

The Communist Party of China has been limiting manufacturing permits to new market entrants, which means Xiaomi will have to partner with state-owned Beijing Automotive to produce cars.

# Interior News

## AUO's In-Car Tech

### INTERIOR NEWS



AUO IMAGES

AUO is a Taiwanese corporation specializing in optoelectronics. It was formed in September 2001 by the merger of Acer Display and Unipac Optoelectronics. AUO showed a range of in-vehicle display HMI solutions and innovative applications, including microLED applications. Their Smart Cockpit 2024 brings an immersive and engaging visual experience, along with innovative applications that transform the usage and design of vehicle interiors, to meet the growing infotainment wants of vehicle occupants.



The Rollable RSE (rear seat entertainment), a CES Innovation Award recipient this year, leverages the flexible and bendable advantages of microLED technology by allowing the display to be rolled up and concealed

within the front seat headrest when not in use.

For new mobility, AUO's Interactive Transparent Window is a car side glass concept with integral high-transparency microLED display to provide entertainment, online video conferencing, and safety warning information through touch technology.



MicroLED display and sensing technologies change the way drivers and passengers interact with the cockpit and the outside world, with intuitive touch experiences. The 'Blended HMI Surface' serving as the central control interface can be concealed under various materials to seamlessly integrate with the cabin's interior design, becoming visible only when operating essential functions.



# VW Puts ChatGPT In Cars

## INTERIOR NEWS



VW IMAGE

VW will initially offer ChatGPT in the ID.7, ID.5, ID.4, ID.3 models, the new Tiguan, the new Passat, and the new Golf. The software, which can form humanlike sentences, will be available within the in-house voice assistant IDA, and the first vehicles with this function were on display at CES.

The voice assistant is activated by saying "Hello IDA" or pressing the button on the steering wheel. The IDA automatically prioritizes whether a vehicle function should be executed, a destination searched, or the temperature adjusted. If the request cannot be answered by the VW system, it is forwarded anonymously to AI and the familiar VW voice responds.

The integration is being implemented with voice software specialist Cerence, whose solution is used in IDA. ChatGPT will be available in several production vehicles from the second quarter of 2024 onwards. The idea is to make communication with the car more natural-seeming, and to allow Volkswagen's voice assistance software to help with more questions beyond the operation of vehicle systems. According to Volkswagen, they will be the first volume manufacturer to install ChatGPT in series production vehicles.

VW presented it in a camouflaged prototype of the updated Golf GTI at CES, which despite the camouflage revealed a revised dashboard with a larger infotainment screen, plus more physical controls.

# Continental-Swarovski Transparent Crystal Display

## INTERIOR NEWS



CONTINENTAL IMAGE

Continental showed their Crystal Center Display, which is fully embedded in a crystal housing. It is a 10-inch display based on microLED technology. It was developed in collaboration with Swarovski Mobility, and recognized with a CES 2024 Innovation award this year. Continental's partnership with Swarovski focused on the volumetric crystal panel, which features distinctive faceting created using special grinding techniques. Swarovski conceived a durable crystal housing that meets the optical and technical challenges of in-vehicle use.

A tinted crystal element allows the driver and passengers to see right through to the center console behind it, creating the illusion that the content being displayed is floating freely in the crystal.



MicroLED displays feature self-illuminating pixels and offer much greater brightness and superior contrast than comparable technologies.

Swarovski Mobility senior B2B VP and MD Peter Widmann called the display "the result of a combination of production and process technologies which together with Continental we implemented into an innovative new design element – one that is as impressive visually as it is technically".

# LG's New Display Concepts

## INTERIOR NEWS



LG IMAGE

LG introduced a range of infotainment screens one of which is a front passenger display designed to be invisible to the driver by dint of viewing angle control technology, to let passengers do things like watching a movie without distracting the driver.

LG's Switchable Privacy Mode is designed to ensure that driver and passenger see different content on the same screen. According to the company, the release of the technology is part of LG's strategy to maintain their status as a leading supplier of infotainment screens for future mobility.

The new OLED displays are meant to play a significant role in the emerging era of autonomous software-defined vehicles, with the proliferation of in-vehicle screens referred to as 'screenification' by LG. These displays feature ultra-HD screens for both the driver and front passenger, as well as fold-down displays for rear passengers.

In addition to the passenger display, LG introduced a new HUD with 3D technology. It has technology including P-OLED, which lets the display follow the dashboard's curvature—a capability stated to be unique in the market.



# Plastic Omnium's Dashboard Projection System

## INTERIOR NEWS



BMW IMAGE

Plastic Omnium won a CES Innovation Award for their dynamic interior dashboard projection system.

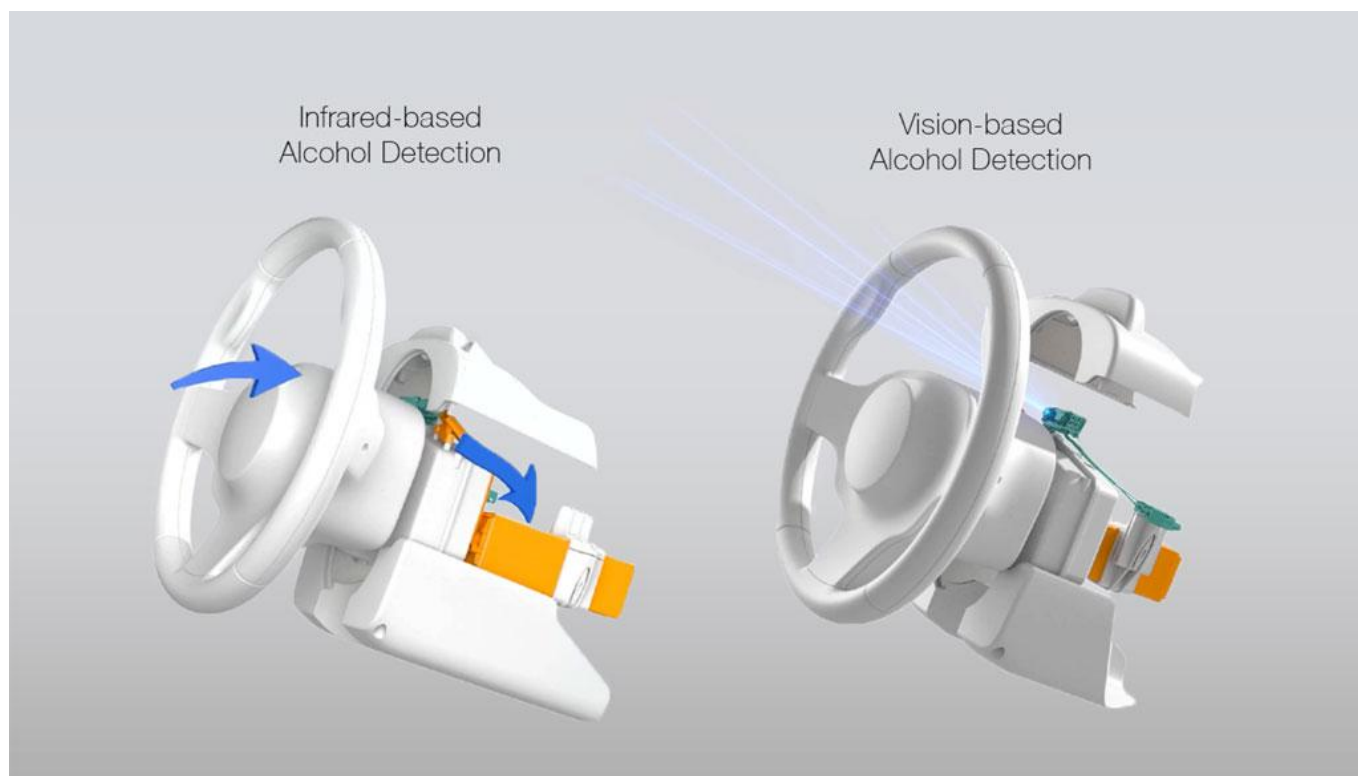
It illuminates the entire dashboard with colors and patterns to match the mood chosen by the driver. Already integrated into the interior of the new BMW Mini Cooper Electric, it creates an immersive driving experience including lights, animations, and projections.

This module comprises several microlens arrays (MLA), integrating different patterns. The light beam is generated by RGB LEDs and sent to the microlenses, which project the desired patterns onto the dashboard. It can be installed behind a central HMI at dashboard level or elsewhere in the interior.

Plastic Omnium CEO Laurent Favre says: "We are proud and delighted to have once again been honored at CES 2024, the most influential tech event in the world! With our dynamic interior dashboard projection system, Plastic Omnium addresses key automotive industry trends in design and digital personalization".

# Magna's Impaired-Driving Prevention Technology

## INTERIOR NEWS



MAGNA IMAGE

Magna introduced a breath and camera-based pre-development technology designed to combat impaired driving, in line with forthcoming regulations.

The affordable system determines if drivers are fit to drive quickly and reliably. It combines key elements of the interior sensing system, which uses cameras to detect driver distraction, drowsiness, and intoxication through pupillary signals, with infrared sensor technology developed by Swedish-based Senseair.

Embedded sensors near the driver measure and quantify the alcohol and CO<sub>2</sub> levels in diluted exhalations from the driver. The technology is intended to passively detect a would-be driver with a blood alcohol concentration above the legal limit.

Magna Electronics President Bill Snider says, "As we continue to support the company's vision of advancing mobility for everyone, our team is focused on delivering active safety innovations that help reduce accidents and fatalities. We are working with our customers and the industry to take a significant step forward in making the roads safer for all who share them".

Drunk driving claimed more than 13,000 lives in 2021, or about one-third of all traffic-related deaths in the U.S., according to NHTSA.

# Hyundai-Kia, Samsung to Connect Vehicles, Smart Homes

## INTERIOR NEWS



HYUNDAI IMAGE

To enhance connectivity between residential and mobility spaces, Hyundai-Kia has signed an agreement with Samsung Electronics for a Car-to-Home and Home-to-Car service partnership.

Under the agreement, Hyundai-Kia's connected car services will be integrated with Samsung's Internet of Things (IoT) platform, SmartThings. This will enable car users to remotely control digital appliances in their home via touch and voice commands through their vehicle's infotainment system, and control various vehicle functions from their home through AI speakers, TVs and smartphone apps.

Customers are urged to use this functionality throughout their daily lives. For example, the user can activate the 'Home Mode' from their car to turn on the registered air conditioner and air purifier in their house or turn on the lights for a comfortable and pleasant living space. Alternatively, before going out, they can initiate the 'Away Mode' to turn off unnecessary lights and start the robot vacuum to create a clean living space to return to, as well as pre-activate the vehicle's air conditioning to a comfortable temperature.

In the case of the Car-to-Home service, users can register and use specific modes for each situation to minimize device operation while driving. Location-based automatic operation and touchscreen and voice commands will enable convenient service to users.

Hyundai and Kia have already been providing Car-to-Home and Home-to-Car services through collaborations with telecommunication companies and construction companies. The Car-to-Home service was previously available for six items (lighting, plugs, gas shut-off valves, ventilation, air conditioning and boilers) and the Home-to-Car service for vehicle air conditioning, remote start and charging management. Both features will be expanded to support connections with a wider range of devices.



# The Design Lounge

## The Design Paradox

THE DESIGN LOUNGE



WIKIMEDIA COMMONS IMAGE

**By Athanassios Tubidis**

There must be an Assassin's creed for electric cars with a Tesla-killer as the main character. Rivian R1T, KIA EV6, Hyundai Ioniq 5, Nio ET7, Lucid Air, Faraday Future 91, Li L9, BYD Seal, Polestar 3, Porsche mission E, Mercedes-Benz EQS, Jaguar I-pace, Audi e-tron are some of the contenders for the main role. When any new all-electric vehicle idea comes out, critics are quick to anoint it with the specific label 'Tesla killer' no matter the car type, range, price or availability.

While 'computers on wheels' is already an outdated expression to describe the new generation of cars, tech giants become evermore conscious on mobility matters. In future electrical architectures, cars are becoming instead, 'servers on wheels' with scalable central computer clusters, embedded artificial intelligence (AI) capabilities, and connected experiences delivered through tech ecosystems. An obvious question comes up: will tech giants move from being technology providers to actual automakers?

We are looking towards CES24 for a better understanding on the raise of the e-machines, because, after all, that's where things are 'moving'. So far, we've seen examples of 'just because you can, doesn't mean you should', while many have proved, instead of killers, to be more like big-foot: non-existent. The Tesla killer has never arrived, however an IT company, last week became officially an automaker. Many of the sector, including Sony and Apple have started working on their car projects, but none of them moved as fast as Xiaomi. The Chinese tech giant (Xiaomi), one of the global smartphone leaders, has unveiled its first electric vehicle, the SU7, announcing its ambitions to become a global carmaker.

The SU7 is piled up with infotainment technology and runs HyperOS, Xiaomi's proprietary operating system, which is announced to be open soon to third parties, leveraging the Xiaomi Car IoT platform. The car has

obviously autonomous driving capabilities thanks to the Xiaomi Pilot platform powered by Nvidia Orin processors. The sensor suite includes a top mounted lidar with a visual range of up to 200 meters and accuracy of 0.1 meter. This is backed up by radar, ultrasonic sensors and cameras, in order to offer a precise image of the surroundings. Xiaomi aims to complete autonomous drive tests in 100 cities across China by the end of 2024.

The SU7 is based on the company's first EV architecture. It features a structural battery pack and apparently everything about it is hyper, because its electric motors are also named hyper-engines. Performance wise, slightly ahead of the Porsche Taycan turbo, the SU7 benefits from using more energy-dense battery cells (101 kw/h capacity). This allows 800km or 500 miles range on one charge. Xiaomi claims that can recharge 220km in 5 min, 390km in 10min and 510km in 15 min. Finally, with a drag coefficient of 0.195, the SU7 became the most aerodynamic production car in the world, with Lucid (0.197) now being second in the list.

While Xiaomi may be criticized for not innovating anything in the EV arena, the Chinese company got at least all the basics right. All hyper! Well, except maybe the design.

Xiaomi may have started as an Apple rip off phone maker, but today it's easy to guess which company it referenced and sure wasn't Apple. Its first model, the SU7 sedan, looks like a more streamlined Tesla Model S with some Porsche Taycan design cues. It is more than obvious that these two models served as design references. However, design ambitions have stopped just there, connecting the dots between the two – a drafting exercise essentially. Chris Bangle himself, who was directly involved in the making, wasn't very talkative about the design. Very unlikely of him.

Navigating the middle ground between visionary futures and practical realities, the resemblance of Xiaomi SU7 with tesla and Porsche is indeed striking but the design criticism doesn't come from the fact that it just resembles something we already know. Criticism is rather generated, according to design professionals, from not following the very definition of design itself which is 'creating from scratch' or 'from a white sheet of paper' or 'something new'. If we were to use AI to compose the best berline of the segment, quite inevitably, Porsche Taycan and tesla S design features would dominate the final composition, a bit like an automation design paradox. The machine will replicate to perfection all we know to the given day and all up to now 'best in class' references. In other words, a very well executed benchmark exercise. And that's where it all ends. But, that is where design starts!

Instead of just another marketing or communication effect in the long list of 'tesla killers' lets put it this way: if Gucci sells luxury and not clothes, Mercedes sells status and not cars, Apple sells exclusivity and not technology, how would we define Xiaomi through its first car, the SU7?

# News Mobility

## Turquoise Light for Autonomous Driving

NEWS MOBILITY



MERCEDES-BENZ IMAGE

Mercedes-Benz has received an exemption for special marker lights for  $L^3$  automated driving in California and Nevada. The turquoise AD marker lights will be integrated in the front and rear lights as well as in both exterior mirrors. They will alert other road users to the activated Drive Pilot system of the EQS and S-Class models. The visible system status will also make it easier for authorities and the police to determine that drivers are permitted to engage in secondary activities during highly automated driving.

The exemption for development vehicles in California is initially limited to two years. In Nevada, use in production vehicles is permitted from model year 2026 and the permit is valid indefinitely until the legal situation permits regular operation. Mercedes management boardmember and development and purchasing CTO Markus Schäfer says his company is "the first car manufacturer in the world to receive approval for the use of this technology in the states of California and Nevada in the USA. The more automated vehicles there are on the roads, the more important communication and interaction between the vehicle and its environment will become".



# ZF Pauses Self-Driving Shuttle Biz

## NEWS MOBILITY



ZF IMAGE

ZF has decided to re-evaluate their self-driving shuttles business, stopping development of their second-generation self-driving shuttle designed for use in mixed traffic in urban environments. Instead, the company says they will switch their strategic focus and investment to providing engineering services to customers and further developing the building blocks needed to advance autonomous driving. The company said there will be no interruption to existing partnerships and projects relating to their first-generation GRT shuttle, designed for use in segregated lanes.

With the market for autonomous shuttles developing more slowly than anticipated, while the persisting multi-crisis and the ongoing transformation towards e-mobility requires a stringent cost focus across the entire industry, the company says they can no longer justify the high up-front investments required to deliver an entire autonomous transportation system.

Having evaluated all options, ZF has concluded that the most promising strategy for the future is to focus on positioning ZF as a premium supplier of autonomous driving technology and engineering services. Today, automated and autonomous functions have found their way into all vehicle categories, where they make a significant contribution to greater safety, efficiency, and comfort. The technical basis for these functions is provided by ZF, which has developed a strong portfolio of advanced sensors, high-performance computers, special software solutions, and intelligent actuators over the past years.

Projects such as RABus for researching automated bus operation in the two German cities of Mannheim and Friedrichshafen is important for the new business model and is also intended to be implemented as planned.

# General News

## Sony Honda Mobility in Pact with Microsoft

GENERAL NEWS



SHM IMAGE

Sony Honda Mobility President and COO Izumi Kawanishi announced a collaboration with Microsoft to create a personal agent for mobility. He said SHM aims to revolutionize how people move, making mobility interactive and expressive, redefining the relationship between people and mobility, enhancing “emotional experience”.

SHM also will work with Microsoft to develop a conversational personal agent, using Microsoft Azure OpenAI Service. Kawanishi said, “AI plays an essential role in achieving our goal to redefining the relationship between people and mobility, enhancing emotional user experience. Microsoft is a key partner to provide conversational personal agent. We are pleased to be working with Microsoft to realize our vision”.

And Microsoft VP of Data, AI, and Digital Applications Product Marketing Jessica Hawk said, “Generative AI is a new canvas that is amplifying human creativity and creating opportunities for creators and designers to completely transform the in-vehicle experience. We are proud of our collaboration with Sony Honda Mobility and excited to see their innovative use of Azure AI technologies and their ability to build with confidence knowing Microsoft Azure is providing a trusted platform as the AI landscape and mobility industry evolves. As these new technologies come forward, safe and responsible AI will continue to be a top priority for both organizations”.



# Trèves Buys Greiner Perfoam Neveon

## GENERAL NEWS



NEVEON BOOTH AT FOAM EXPO (NEVEON IMAGE)

Trèves Group, experts in acoustic and thermal insulation solutions for the automotive industry, headquartered in Issy-les-Moulineaux just outside of Paris, France, has completed the full acquisition of Greiner Perfoam, the manufactured product-OEM automotive business of the Neveon foam division, a leading integrated provider of polyurethane soft and composite foams.

Greiner Perfoam, headquartered in Austria, is a provider of interior trim and powertrain insulation parts for the automotive business, with about 600 employees. The perimeter of this acquisition is composed by Greiner Perfoam in Enns and Linz (Austria), Greiner Perfoam in Tabor and Valašské Meziříčí (Czechia), Greiner Perfoam Automotive Components in Mexico, and the two joint ventures in China, Shenyang, Greiner Automotive Components and Tianjin Greiner Automotive Components.

Trèves Group is a global player in acoustic and thermal insulation solutions for the automotive industry. The Group has more than 4,000 employees in 25 plants in 15 countries. Founded in 1836 by the Trèves