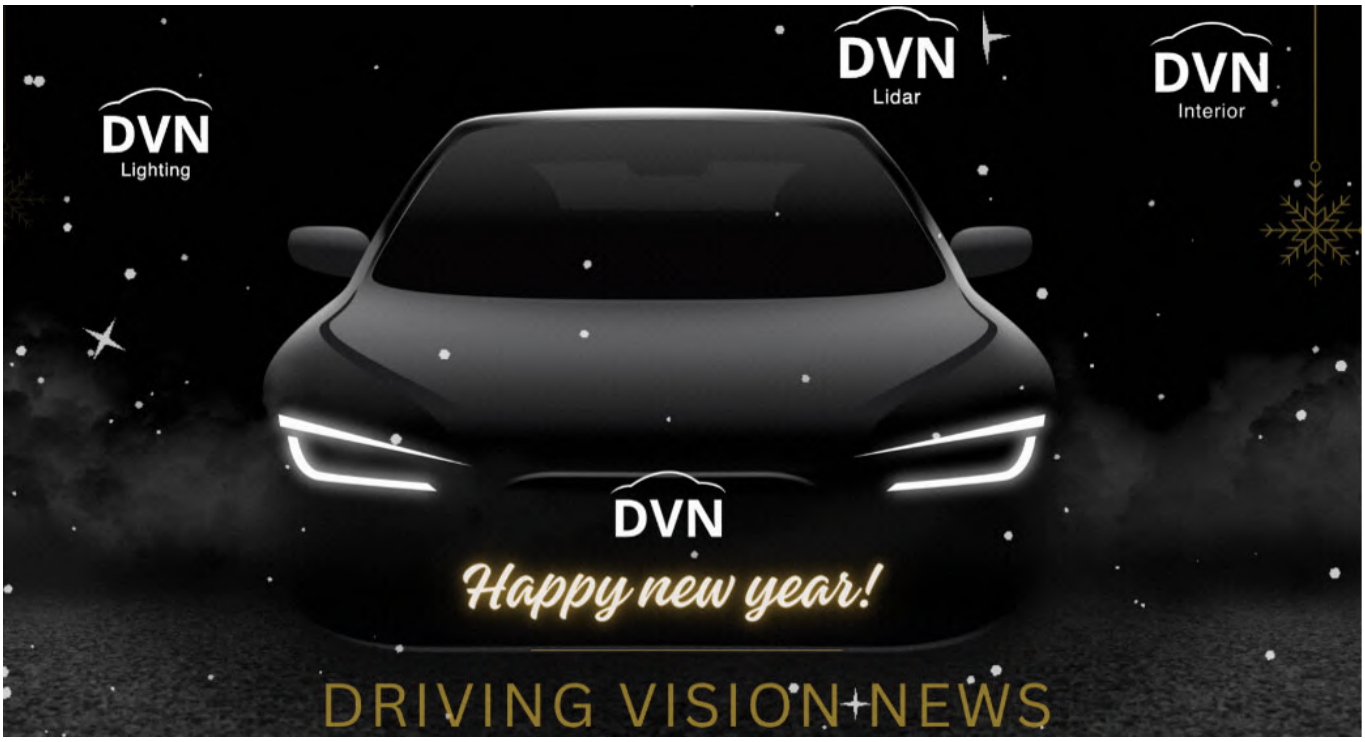
Thu, 4 January 2024
Weekly Newsletter

DVN-I
Automotive Interior

NEWSLETTER #193

Editorial

2024: Another Great Interior Year For Sure!



In 2024, around the time of the 23-24 April Köln Workshop, DVN Interior will celebrate our fifth year of existence, and the 200th edition of your weekly DVN-I Newsletter.

We will continue to bring you weekly innovation- and business-related news, commentary, and analysis. It is all about putting the information in perspective with the right lens and angle to maximize the value and strategic benefit you get from reading and participating with DVN-I.

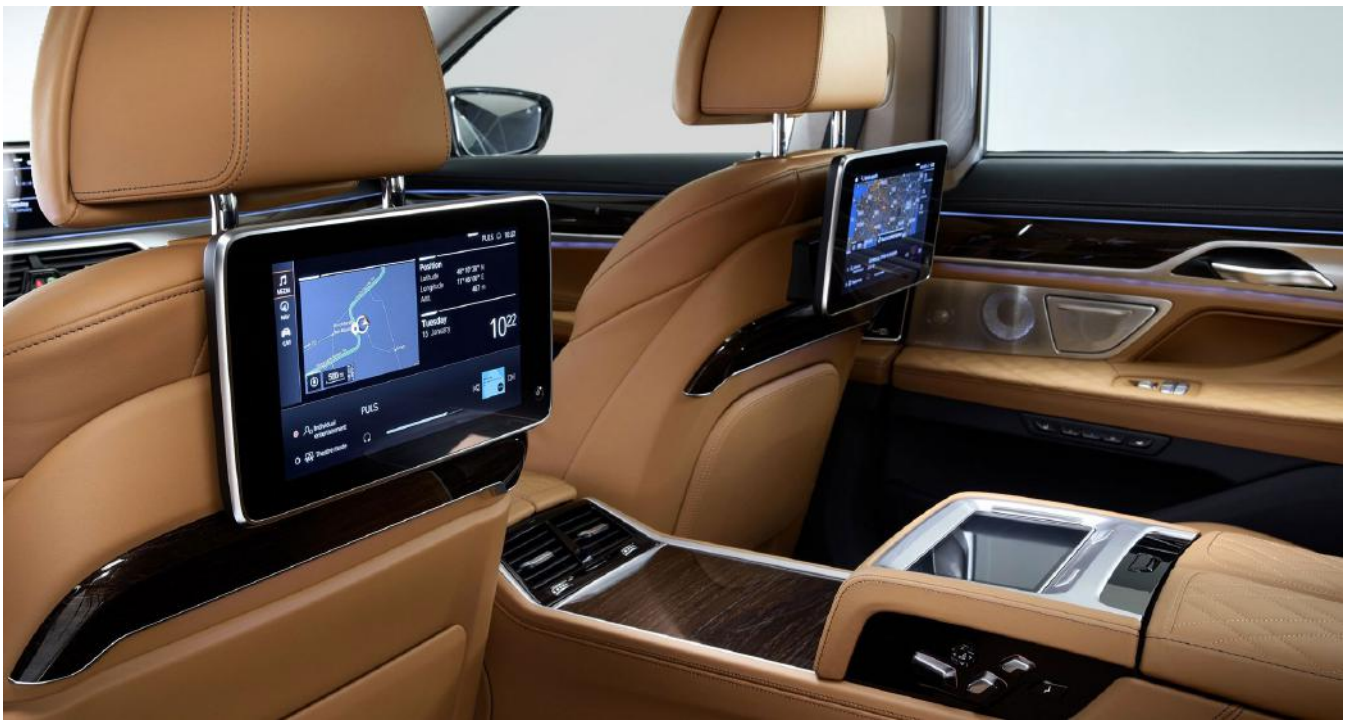
Now the automotive year kicks off with CES in Las Vegas, which starts next week on 8January. DVN will be there, and we will report the most interesting innovations in vehicle interior technology and technique—first with our next two In Depth articles, and then in a complete report to be published by the end of January.

The whole of the DVN team wish you a great 2024, with the personal and professional achievements you deserve. We thank you for your continuing membership; if you're not member yet, **come and join us!**

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

Rear Seat Entertainment Grows Up to Be Like Front



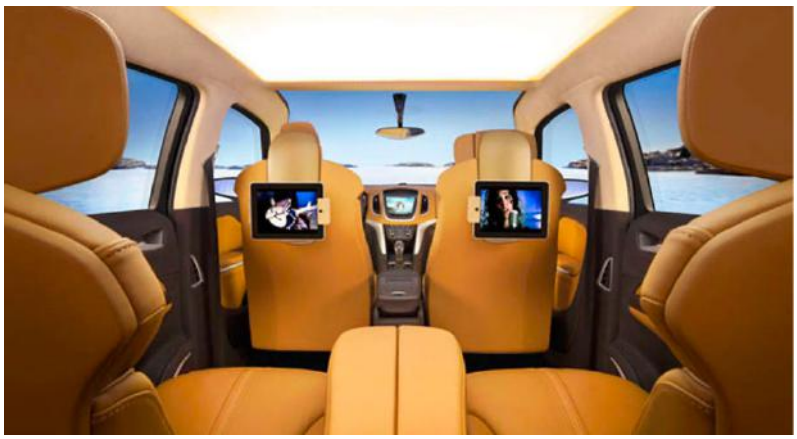
BMW IMAGE

Rear seat entertainment (RSE) systems are designed to keep passengers—especially children—entertained. RSE first started to develop along with the expansion of the minivan market in the mid-late ’90s, as we've **previously reported.**

As connectivity is now full-time available in a vehicle, there’s probably a boost to the RSE market and technology. Just like up front for the driver and front passenger, RSE now includes multimedia content; movies, gaming, and suchlike We can expect that a big part of the market is coming from wearable devices, such as smartphones and tablets. But we can forecast that automakers will do their utmost to keep or transfer these systems into their own ecosystems to grab hold of (or claw back) as much as possible of the value (e.g., revenue streams) they might perceive as having 'lost' to non-carmaker companies.

It is parallel to what is happening in the main entertainment system, where automakers are looking to get rid of Apple Car Play or Android Auto in favor of automaker-developed systems.

RSE can come with one or two monitors, headphones, remote controls, and a DVD or Blu-ray player. Implementations include roof-mounted flip-down monitors, upgraded headrests that put monitors into the seatbacks (like in airplanes), and aftermarket systems that can be easily installed.

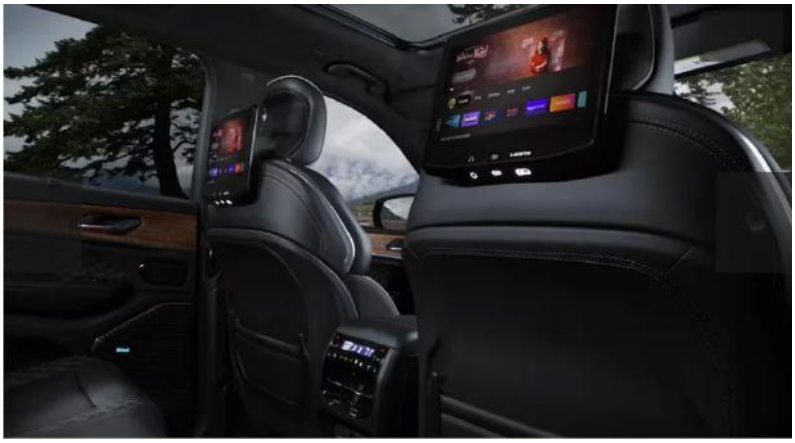


VAUXHALL ZAFIRA 2011 (GM IMAGE)

Let’s have a look at some recent relevant announcements:

Bentley has introduced a new RSE system with two removable touchscreens boasting HDMI ports, USB Type C charging ports, and over-the-air software updates. And Audi has upgraded their A8 sedan with a pair of 10.1-inch HD screens mounted on the backs of the front seats, which sync with smartphones for music or video streaming.

Jeep Grand Cherokee

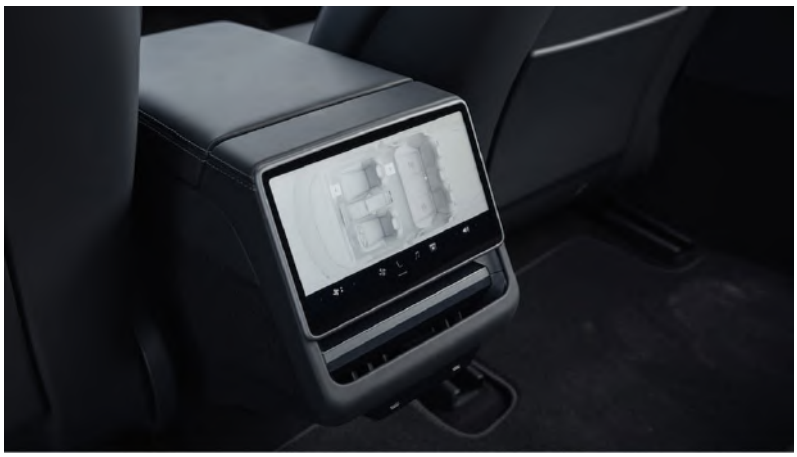


Uconnect® is Stellantis' infotainment software platform, and it undergirds the RSE system available in the Jeep Grand Cherokee, which features large screens with inbuilt entertainment options in addition to readily accessible HDMI inputs. Uconnect includes Alexa, voice recognition, Fire TV, Apple CarPlay and Android Auto, Dual-phone connectivity, Sirius, wifi, and more.

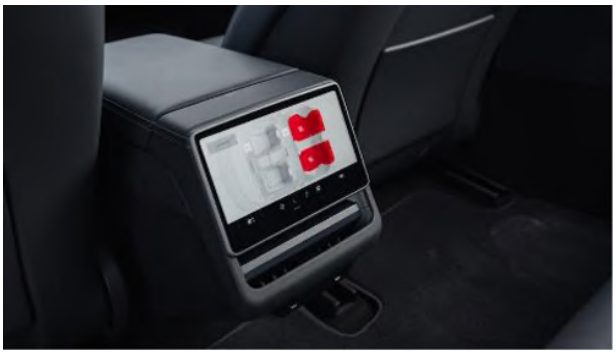
The latest Uconnect 5 introduces a card-based format that allows display screens to be personalized, simplified, and grouped by individual needs. With multiple cards, the user can access the available features and determine how and where they are displayed. Once inside a card, information and icons can be accessed in no more than two button pushes.

Tesla 3

The Tesla Model 3's RSE has been updated for 2024. Located just above the redesigned rear air vents on the back of the central console/tunnel, the screen measures the same 8 inches as the one in the rear cabin of the 2021 Model S and Model X. It offers many of the same non-driving-specific functions available to front-seat occupants through their 15.4-inch screen, accessed in the back via a nonpersistent menu along the bottom of the screen: swipe up from the bottom to make the menu appear when you're in an app, which may have its own menu. Rear passengers control all adjustments and functions through the screen, using the same logic used by front occupants.

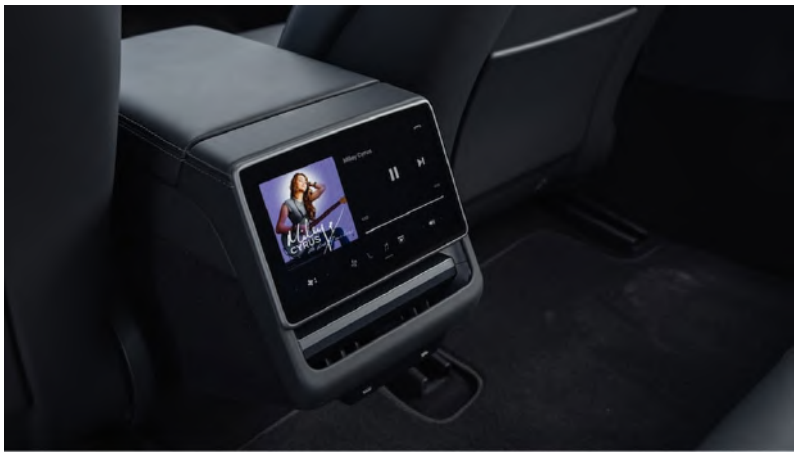


TESLA IMAGES

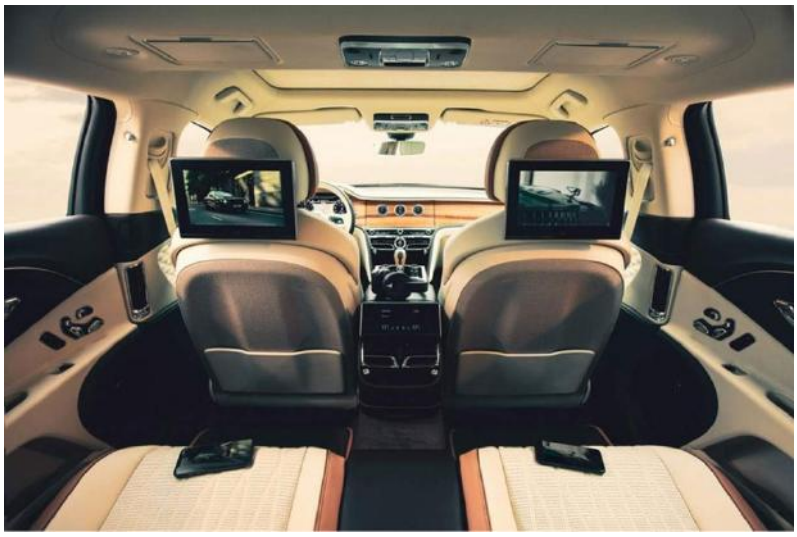


It starts with moving the front passenger seat forward to increase legroom. Then, seat heating control is accessible through this RSE screen, with selection of the level of heating through three steps. You can also turn off the seat heating in one tap to one or, if they're both on, two seats with the button in the upper left. Same for the air vents, which can no longer be moved manually. No, if you want to change the airflow direction, you must use touchscreen. Fan speed, too, is controlled via arrows in the lower left of the main menu bar. There's no rear-seat climate zone, and temperature is controllable only by the front passengers.

Access to the RSE volume is by tapping the speaker icon in the main menu bar. Sound from the rear screen is limited to only the rear speakers. Rear occupants can also pair Bluetooth headphones to keep the audio to themselves. Rear passengers can stream on the move, when fronts can't.



Bentley Flying Spur and Bentayga



BENTLEY IMAGES

Bentley's new RSE system for the Flying Spur and Bentayga has been upgraded to include removable touchscreens and the latest connected technology.

Both touchscreens attach to the back of the front passenger seat headrests via an innovative mount that also supplies power to the system. The screens and arm mounts are removable.

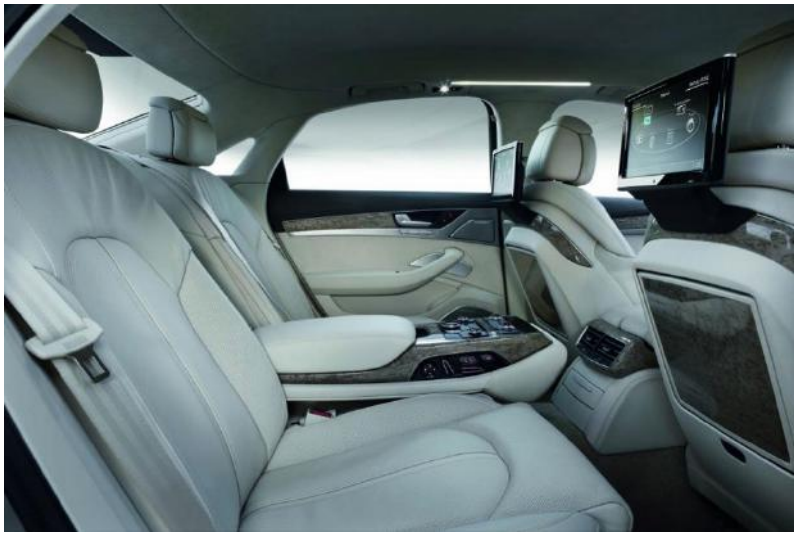
The tablet-style touchscreens feature ultra-crisp graphics with 1920 × 1080 resolution. You can wirelessly stream the audio from either touchscreen via Bluetooth headphones, or the audio can stream directly to the Bentley's Naim audio system.

Bentley's Director of Electrics and Electronics Ivo Muth says, "The new Bentley Rear Entertainment system blends ease of use with exquisite design and functionality. The system delivers digital entertainment services like media and streaming content from nearly all service providers worldwide and turns your car into your own exclusive cinema on the move".

Another feature of Bentley's RSE is the BYOD—bring your own device—connectivity, for wirelessly streaming content from an Android or iOS smartphone, laptop, or separate tablet. And if smart devices and the RSE are connected to the same wifi network, the system can mirror your phone apps like Amazon Prime, Disney+, or Apple TV on the seat-mounted touchscreens.

Netflix comes pre-installed, allowing to stream movies without using or connecting a separate device. Bentley has also included headphone jacks for wired audio and video enjoyment. There are HDMI ports on both removable touchscreens, USB Type C charging ports to power mobile devices, and OTA updates.

Audi A8



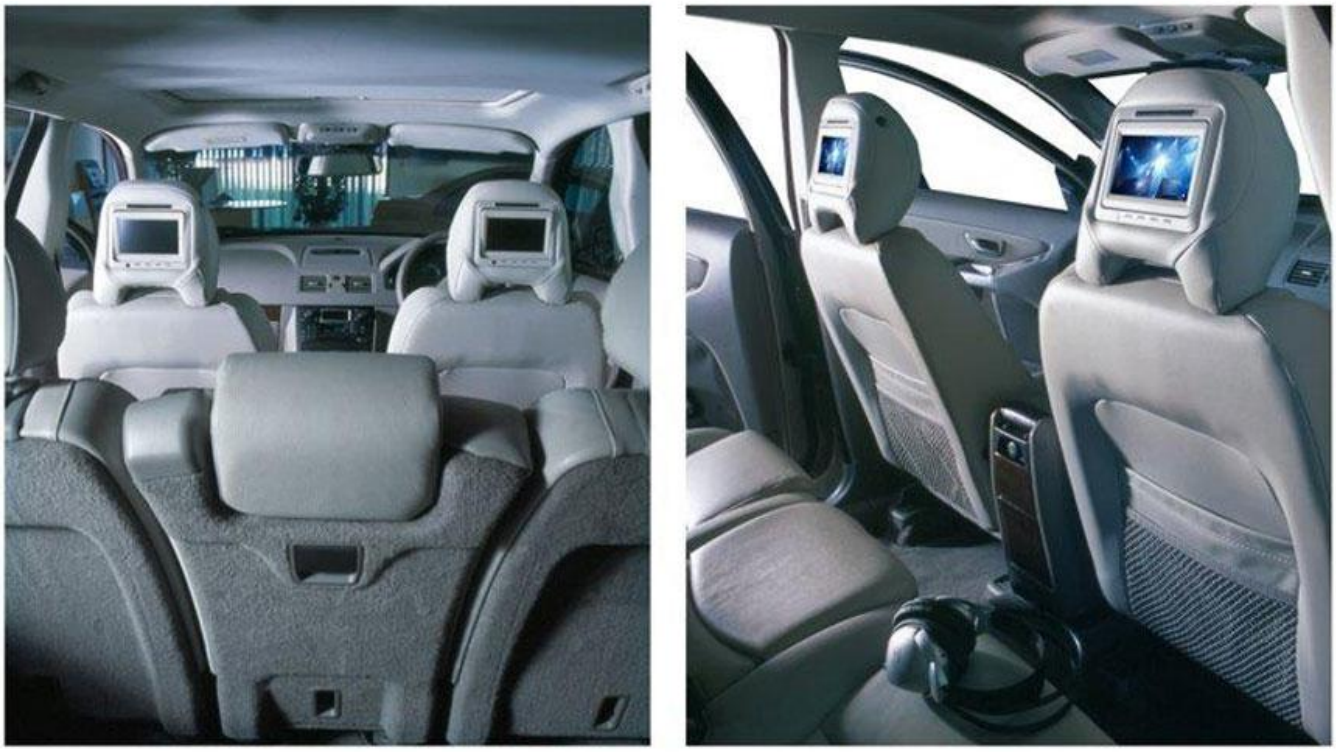
AUDI IMAGES

The new A8 retains the MMI media system, with two large touchscreens and ‘Hey Audi’ voice control. Rear passengers now have a pair of 10.1-inch HD screens, mounted on the backs of the front seats, which sync with smartphones for music or video streaming. Within the long-wheelbase A8 L, you get a heated, massaging footrest, too. The backrests of the driver and front-passenger seats each integrate a high-resolution display measuring 10.2 inches diagonally. They can be tilted 10 degrees and can display different content. A sensor enables their brightness to adjust automatically to the lighting conditions inside the vehicle. They are controlled via a separate MMI controller in the rear center armrest.

The RSE system includes its own single-DVD drive, 20-GB jukebox, two SDHC memory card readers, and its own Audi music interface. The system also has full access to the radio, the optional DVD changer, the

navigation system, and the TV tuner, whose picture can also be seen in the back while underway. Sound is provided either by the vehicle's sound system or two sets of headphones, which are connected via Bluetooth. Wired headphones can also be connected.

Volvo XC90



VOLVO IMAGES

RSE has been upgraded with larger 8-inch monitors and easier installation in the head restraint. The RSE consists of a DVD-player easily accessible in the center console between the front seats, two independent 8" widescreen monitors mounted in the front head restraints, a remote control, and two sets of independent, wireless IR headphones.

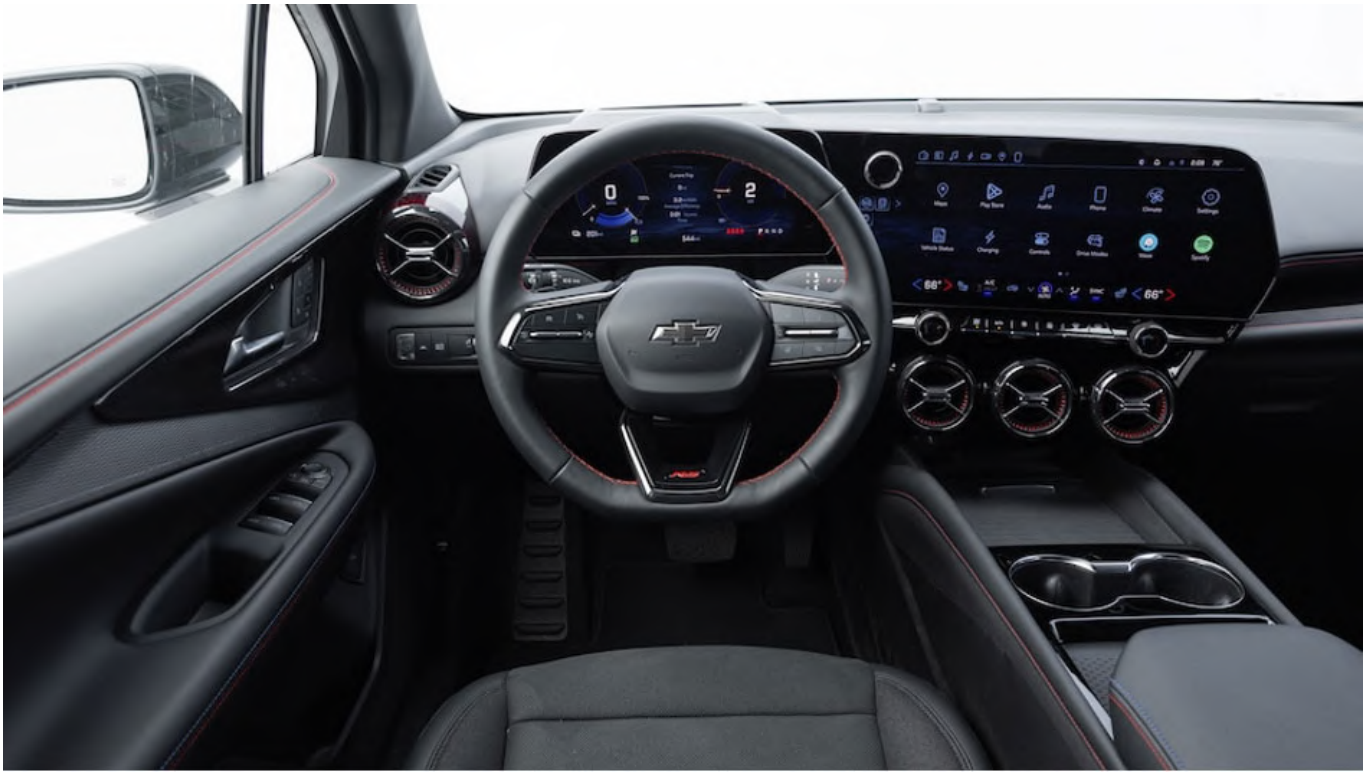
The system's auxiliary input makes it possible to connect auxiliary equipment, such as game console, iPod, MP3 player, video camera, laptop or another portable DVD-player. The two 8" monitors are independent of one another, which makes it possible to watch a movie on one screen while using the other to play video games. This generates individual entertainment in the backseat, without arguments over the choice of entertainment. The functions can be operated using the wireless remote control, just point it at the screen you want to change. You can use the RSE-system's independent wireless IR-headphones to listen to a movie or music. The car's speaker system can also be used by connecting the unit the car's existing audio system.

We have yet to delve into the offerings from Chinese automakers, and there's a lot of delving to do—Chinese consumers have shown a growing interest in advanced in-car entertainment technologies, and OEMs have been responding to this demand by integrating sophisticated RSE systems into their vehicles. Stay tuned!

Interior News

GM Slags CarPlay, Android Auto as Unsafe, Then 'Clarify'

INTERIOR NEWS



CHEVROLET BLAZER (GM IMAGE)

GM announced earlier this year that they'do begin phasing out Apple CarPlay and Android Auto smartphone connectivity on new EV models and, eventually, all GM models. That didn't sit well with the public at large, as most users prefer to use phone-mirroring setups in their cars.

But GM is digging in their heels, insisting company-specific software doesn't cause driver distraction like CarPlay and Android Auto. According to GM, CarPlay and Android Auto cause bad connections, poor rendering, slow responses, and dropped connections, so drivers pick up their phones again, taking their eyes off the road and defeating the purpose of these phone-mirroring programs. GM says if drivers do everything through automaker-specific systems, instead, they'll be less likely to pick up their phones and therefore less distracted and safer behind the wheel.

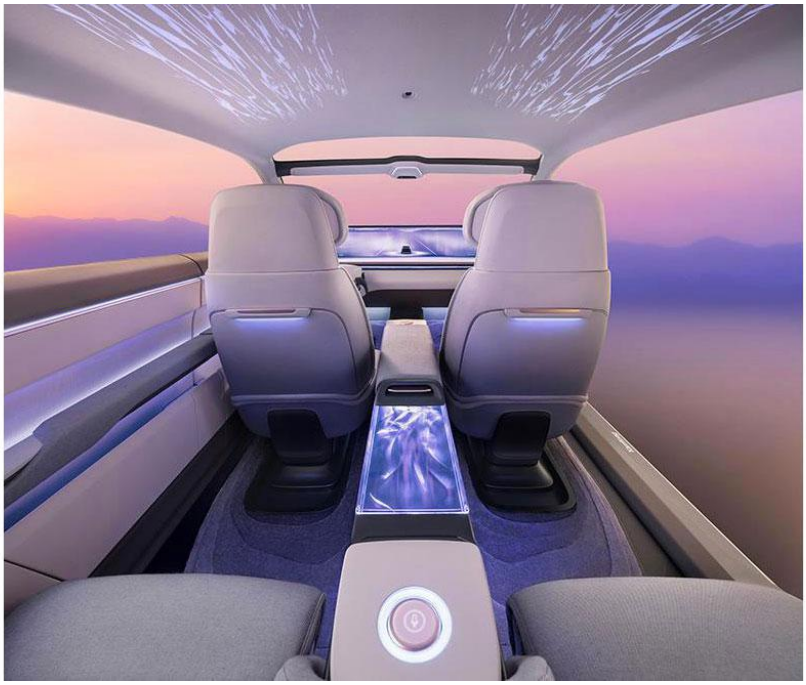
J.D. Power surveys have found that issues with CarPlay and Android Auto are common owner complaints, and that owners blame the automaker, but no data has been shown to confirm GM's claims, and the automaker's explanation for their pivot away from CarPlay and Android Auto seems to have landed as unfavorably with the public as the first announcement—and probably didn't make friends at Apple or Google. GM recently put out a statement: '*We wanted to reach out to clarify that comments about GM's position on phone projection were misrepresented and to reinforce our valued partnerships with Apple and Google and each company's commitment to driver safety. GM's embedded infotainment strategy is driven by the benefits of having a system that allows for greater integration with the larger GM ecosystem and vehicles.*'

GM's 'Ultifi' infotainment software features a suite of fully integrated Google apps like Maps and Assistant, plus service apps like Spotify. The pillar of this strategy is the Google Assistant, because of the quality of its voice activation system.

Of course, the data users generate is considered an important revenue stream; it is packaged and sold to third parties, and automakers also want to keep at least part of that money stream. In addition to prompting users to buy things from GM or GM's partners through car infotainment systems, GM is also looking at subscription services that would be managed through the same interface.

Yanfeng, TactoTek Partner for Advanced Interior Lighting

INTERIOR NEWS



YANFENG IMAGE

Automotive supplier Yanfeng and 'smart surface' experts TactoTek will collaboratively develop highly integrated HMI solutions for automotive interior applications. The goal of their partnership is to combine advanced lighting, user interfaces, and decorative trim with a deeply integrated product approach to enable design flexibility.

Yanfeng has decided to augment their 'Smart Cabin' activities with TactoTek's Injection Molded Structural Electronics (IMSE) technology.

The goal is to enhance the overall user experience by offering advanced lighting features and introducing new functional elements like haptic feedback and display integration.

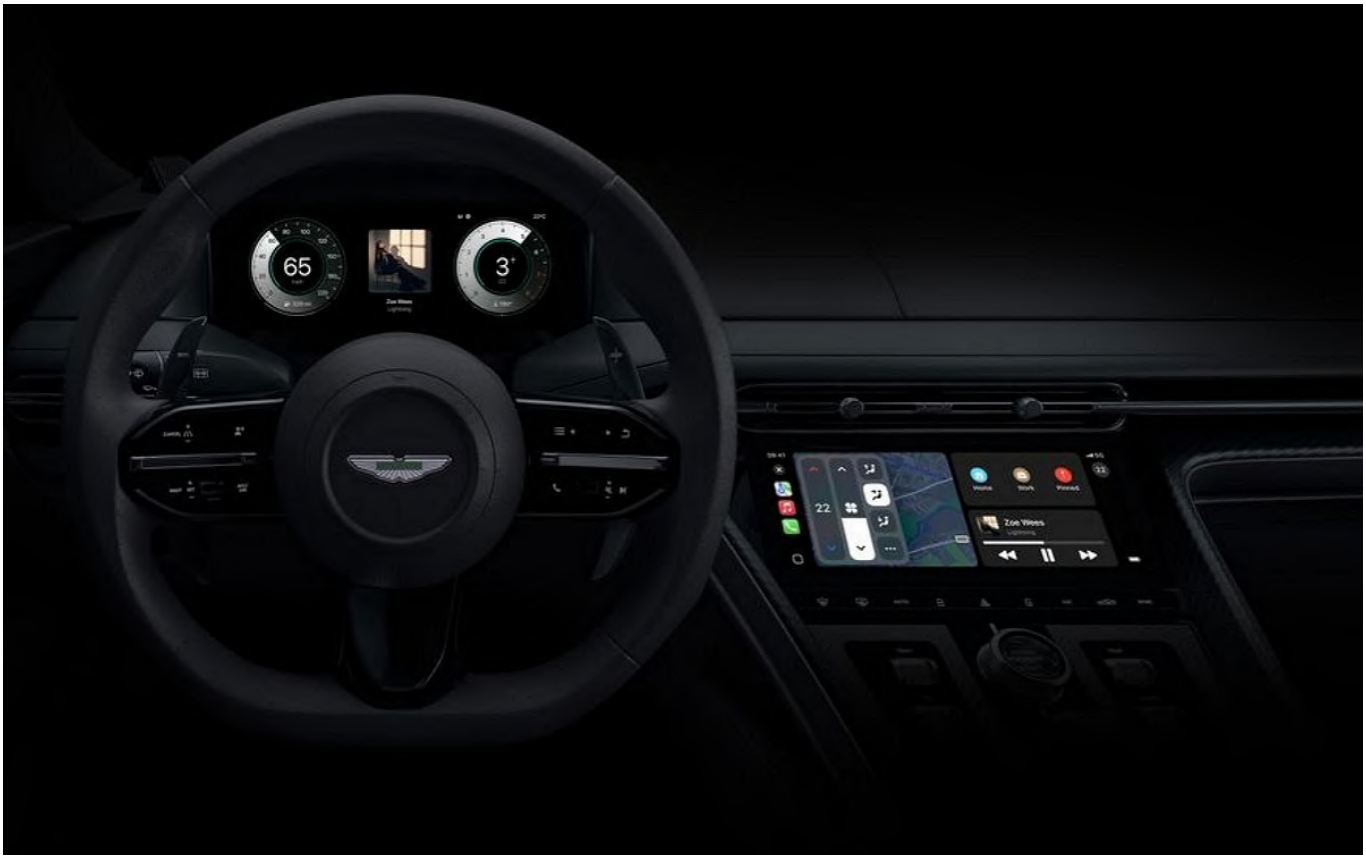
Yanfeng says this will allow them to align with emerging automotive industry trends, including autonomous driving, and address non-driving related tasks.

The companies hope to create, together, a unique in-vehicle user experience by accelerating seamless lighting integration into all surfaces. The IMSE technology offers a fresh unique design and styling principles for slim, compact configurations and unconventional shapes. Yanfeng CTO Patrick Nebout says, "The partnership with TactoTek is a great addition to support our global technology portfolio for future 'Smart Cabin' applications and is designed for long-term engagement. Together we can offer innovative and integrated lighting solutions tailored to our customers' needs in the automotive industry. By combining our expertise, we can accelerate design and development activities, providing advantages for our customers along the entire value chain".

And TactoTek Senior Global Automotive VP Dr. Thomas Vetter says, "Yanfeng's leading role in the industry is crucial to the rapid transformation of the automotive sector. With our IMSE technology platform, we aim for this partnership to seamlessly merge the visual appeal, tactile experience, and functionality of vehicle interiors. Together, we are creating experiences for the end user that go beyond pure functionality – they are emotionally engaging, and define the essence of future mobility".

Apple’s Next CarPlay is Immersive in Porsche, Aston Martin

INTERIOR NEWS



ASTON MARTIN IMAGE

Apple has delivered mockups of their dashboard-spanning UI styled for Porsche and Aston Martin. Instead of simply taking over the infotainment center and small segments of the dashboard area, it's a full overhaul all displays.

The theme is distinct to each automaker, and gives CarPlay access to the vehicle’s features, like radio and temperature settings. In the Porsche setup, there’s a three-dial layout with the speedometer on the left and a wallpaper made to match the houndstooth seat pattern. In the Aston Martin configuration, a central media display is surrounded by the speedometer and tachometer, outlined in the brand’s distinctive green. Driving-specific data is delivered by the car’s sensors, while an iPhone runs the apps. However, Apple says the phone does not store or track vehicle-sourced information.

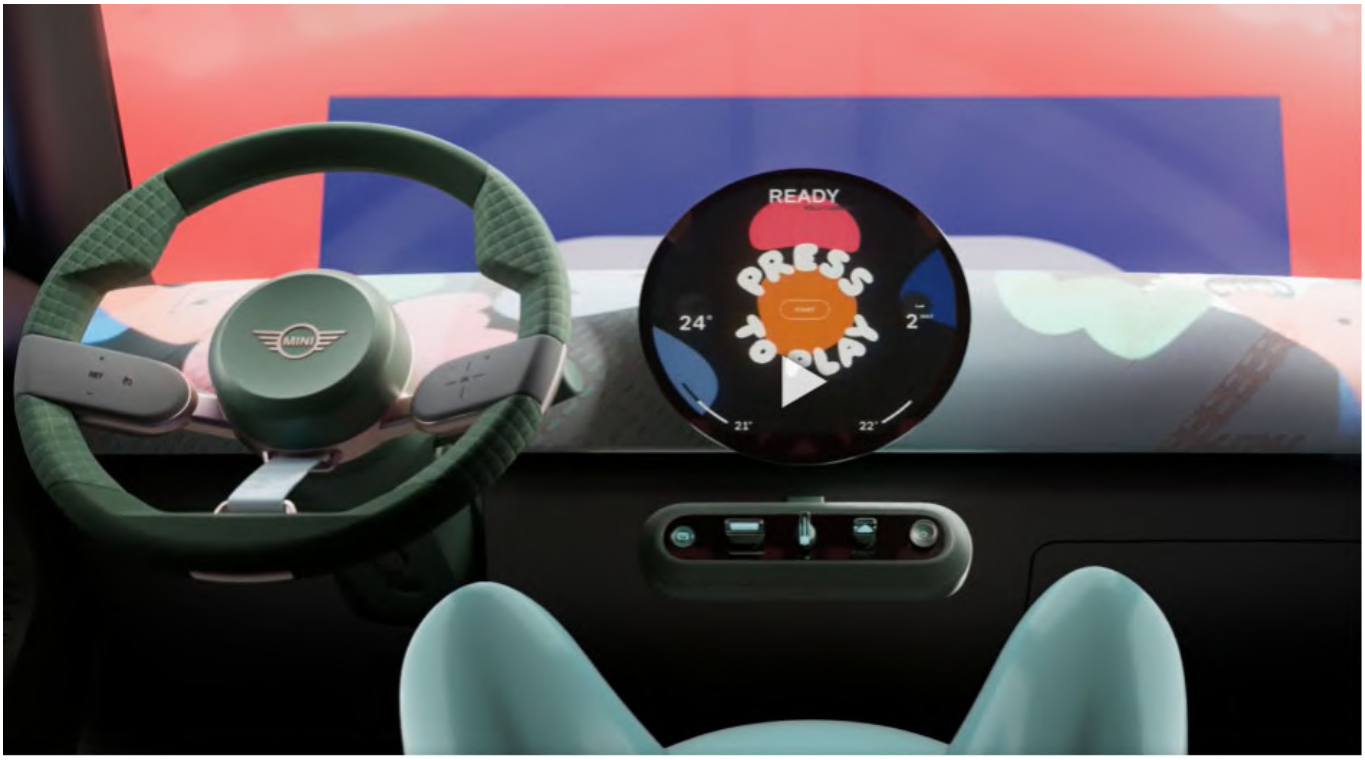
The feature was announced at Apple’s WWDC developer conference in 2022, and at the 2023 edition of that same event they told app developers to prepare for the new system that adds pairing with specific car keys, a simplified connection flow, enhanced Siri, and other changes.

It’s pitched as the 'ultimate iPhone experience' in-car, which goes a step further than overlays like traditional CarPlay, Android Auto, or even built-in Google apps (which will also be supported by Porsche, eventually). It’s also different from Android Auto because it’s still managed by the user's phone.

Aston Martin will support this in the infotainment system launching next year in cars like the DB12 and its convertible version, the DB12 Volante. Porche’s plans are less clear, but a Porsche representative has said their integration will “go one level further” than existing setups with the launch of the all-electric Macan, and there will be more details available once that car is revealed.

Alexa is Mini's Voice Assistant

INTERIOR NEWS



MINI IMAGE

British BMW subsidiary Mini first gave their voice assistant the face of a British bulldog named Spike. With the start of series production of the electric Mini E, a generative AI based on the ChatGPT model will be added.

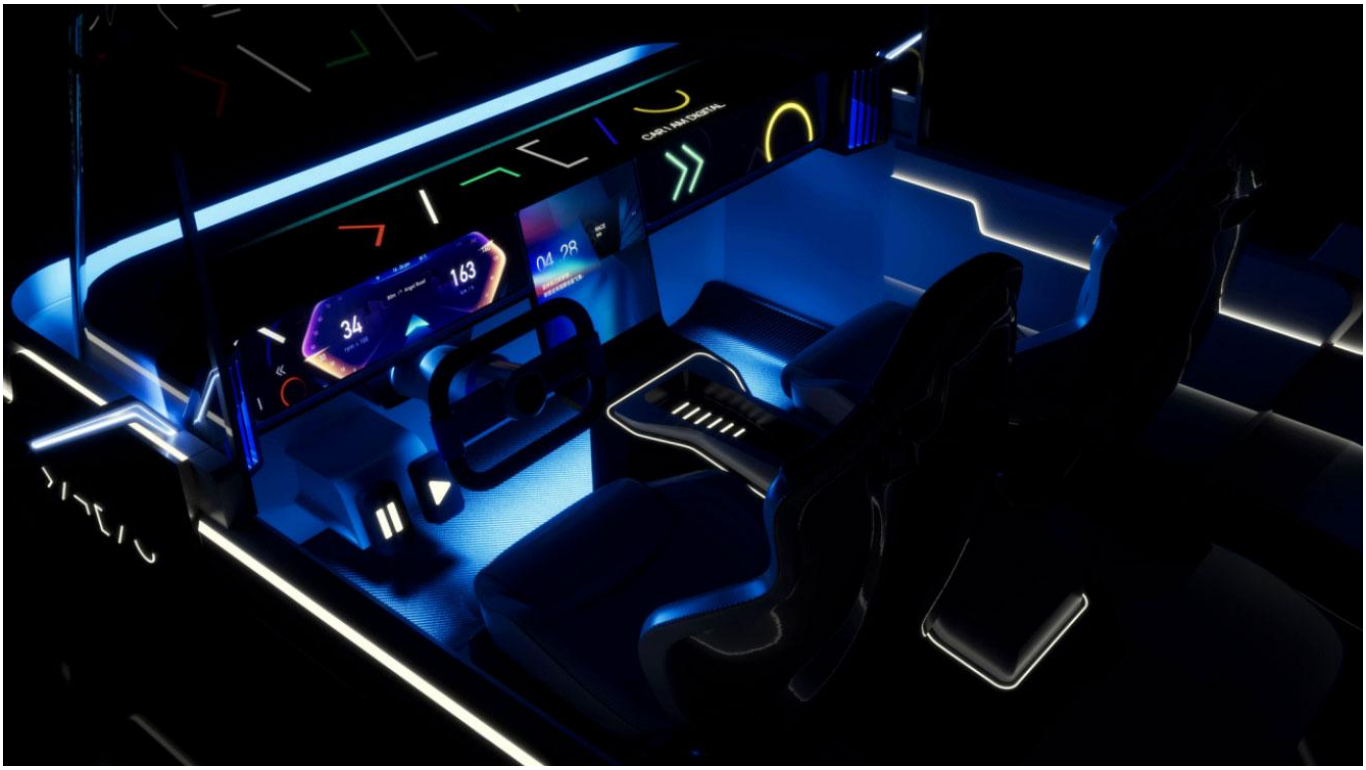
In cooperation with Amazon, the new Mini E will incorporate the tech and shopping voice assistant, which will no longer rely solely on syntactic logic with the help of Amazon's Alexa, but will also work semantically.

This means instead of the driver memorizing commands that the car understands, the car will use AI to reckon out what the user might mean, then answer the question or start the service or function. In the background, the Mini voice assistant is linked to the same software that Amazon uses for their ChatGPT counterpart, Let's Chat. Amazon's generative AI works in a similar way to ChatGPT or Google's AI Bard. Mini uses the Voice Service Device; that is, the software Alexa uses to parse and play back speech. The voice assistant software runs on BMW's servers and can be used without an Alexa account. But with a linked Alexa account, smart home functions can also be controlled directly from the car via the BMW voice assistant.

The main aim of the Alexa integration is that Mini users should be able to talk to their vehicle naturally. Initially, however, the chatbot still needs to be started with the activation word "Alexa". Later, the usual commands such as "Hey Mini" or "Hey Spike!" will also be possible in order to use Alexa services. If desired, the vehicle can then be given an individual name.

Are OLEDs, LCDs and Projectors the In-Car Future?

INTERIOR NEWS



CARIAD IMAGE

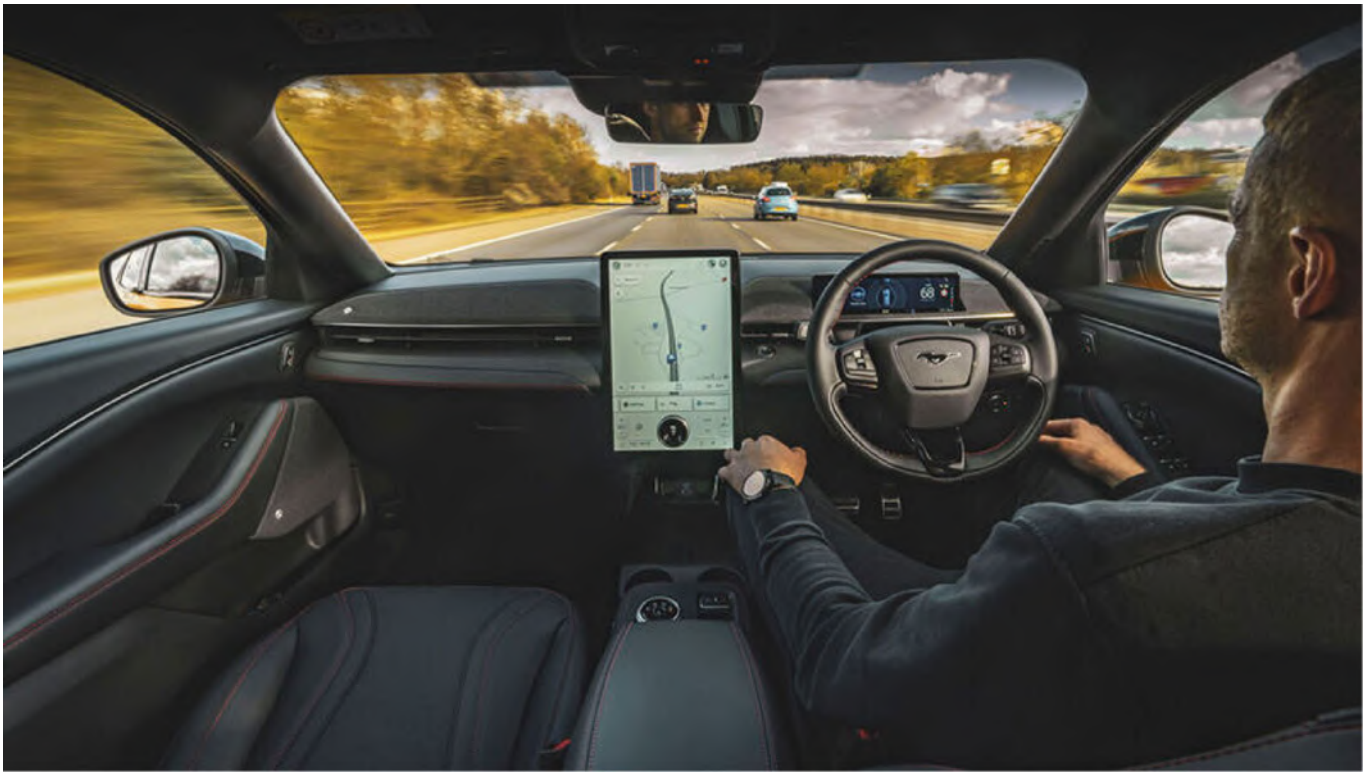
The average number of displays per car has risen from 1.2 ten years ago to 2.2 today, and they're growing in size, too. Naturally, then, the world's display companies are interested in the vehicle sector.

Chinese brand Hisense, a maker of TVs and household appliances, wants to get into the car. At CES this month, they're presenting an ARHUD with a compact three-color laser projector, which as a distinguishing feature also projects videos and information onto the side windows.

LG and Samsung want to install OLED displays extending seamlessly from the driver to the front passenger. So far, there are only a few cars with OLED displays. Their advantages—rich colors, high contrast, and flexibility—are only somewhat relevant in cars, and analysts have questioned what might happen if OLED displays were to fade after a few years. More in demand are the brightest, most durable, and inexpensive displays, which weighs in favor of LCDs with miniLED backlighting. Watch for more coverage of these and other technologies here in your DVN Interior newsletter.

Change Lanes With a Glance; Steer Without Hands

INTERIOR NEWS



FORD IMAGE

In some BMW and Ford models, it's OK for the driver to take their hands right off the steering wheel. In the BMWs, they can also change lanes with a glance.

It's all down to a camera inside the car, monitoring the driver. A BMW representative explains: "When the driver looks in the wing mirror, the vehicle starts to change lanes and automatically takes over the necessary steering movements and speed adjustments up to 130 km/h, provided the driver confirms this and the traffic situation allows it. The purely visual gesture complements the previous [initiation of a lane change by operating] the blinker lever, which is also available as an alternative". The system will be available in the USA, Canada, and Germany.

Ford has received official approval in the UK for a similar assistance function, as an extension of their BlueCruise ADAS package. It's usable when the car is in approved 'Blue Zones' on public highways, with adaptive cruise control activated. The system checks the general conditions; road markings must be sufficiently identifiable and the driver must keep their eyes on the road, for example. If that all checks out, the system switches to autonomous mode, indicated with blue lights in the instrument panel, and suppresses the 'hands-on' warning that would otherwise be generated.

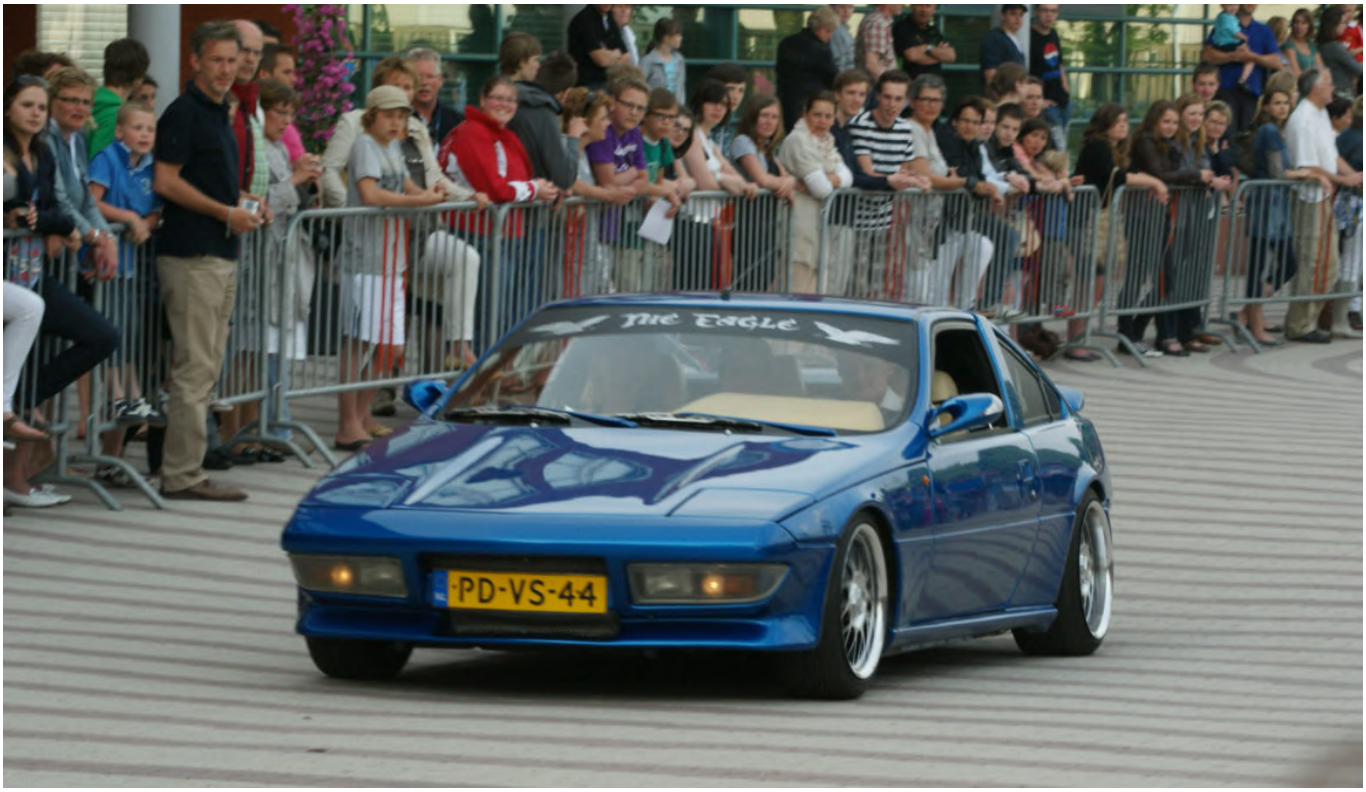
The assistance system uses signals from five radar sensors, a front camera, and an infrared camera directed at the driver below the instrument cluster. That last one recognizes whether the driver is paying attention to the road based on gaze direction—even through sunglasses—and head position.

The Design Lounge

That Old French Magic

THE DESIGN LOUNGE

COFFEE CORNER
DVN
Interior



1982 TALBOT-MATRA MURENA 2.2 (NIELS DE WIT IMAGE AT WIKIMEDIA COMMONS)

Yes, Elon musk has sent a car to the space—a Tesla roadster, with a mannequin dressed in a spacesuit occupying the driver's seat. The car became an artificial satellite of the sun, as well as a possible depiction of the space age for cars. And Musk's Tesla Model 3 in March 2016 broke the first-day-orders record, previously held for 60 years(!) by the Citroën DS introduced at the Paris motor show on 6 October 1955.

It was barely 10 years from the official end of World War II. Right at the center of a ravaged and financially devastated Europe, this futuristic and utterly French design was revealed. Australian car magazine Wheels called it 'just about unlike a car as anything on wheels can be'. The DS seemed to have come to Earth from the sky. That's how many journalists at the time described it; it was unlike anything else on the market. It made all the other cars at the show look old.

Potential buyers on that day discovered surprising features like the one-spoked steering wheel and the hydropneumatic self-levelling independent suspension that would absorb the bumps from France's awfully rough roads of that time, and even raise the car up for more ground clearance. Even off-roaders at the time could not do that. Then there was the power steering and the semi-automatic gearbox, all hydraulically operated, and the lightweight fiberglass roof. The car had a wider track in the front to reduce understeer. And all this while trains still had steam engines. We cannot describe the experience by just listing out each single detail, because none of these alone captures the uniqueness of the final design synthesis, often used as an example when talking about cars of the space age. It was just a wholly different way of making a car, a

different way of driving and experiencing the moving landscape.

The DS was not an isolated example at Citroën. Their H Van series, for instance, was memorable for its industrial design approach, using corrugated metal body panels to reduce weight and cost. The 2CV, minimalist and utilitarian, was cheap to buy and easy to repair and helped motorize a large number of farmers and rural populations. The Ami featured a number of elements present in the larger DS, including the single-spoke steering wheel, while its suspension was borrowed from the 2CV. The seats were easily removable and sales pitches included photographs of the seats used as picnic chairs. And The prestigious SM grand tourer offered luxury and performance the French way, with its unique design and advanced technology.

And Citroën's offerings were not an anomaly, but rather icons of a wider French context. Many other French cars sent a similar message to the future of automotive design. It felt like the idea had spread out to the minds and projects of many designers and engineers in the region. The Renault 4 was another economy car that hit a sweet spot, found many buyers, and is only getting cooler with time. And rally cars are always awesome, but the Alpine A110 is one of the most unique and beautiful ones, ever.

The Matra Murena was a sports coupé which challenged the two-seater archetype by adding a third ‘indiscreet’ seat resulting in one row of three full bucket seats.

If an automaker wanted to enter racing and did not have a proper rear wheel drive machine, they had to build an all-new racecar. The French way was to take an everyday hatchback, the Renault 5, drop a giant turbocharged engine where the rear seats used to be, and win the Monte Carlo Rally the first time out!

The Renault Espace was a celebration of glass; sheetmetal was just there to support the greenhouse enclosing an enormous interior space, and all that within the length of a midsize sedan.

City cars could hardly be represented categorically than by the Renault Twizy: a seat, an electric motor, and—quite logically—scissor doors, all no wider than a Vespa (except it doesn’t fall over like one).

Every one of these fairly screams, ‘you all had it wrong, *this* is how a car is supposed to be!’ Yet while the engineering applications were advanced for their era, the selling points were and still are the driving experience and the design uniqueness. This French particularity looked like disruption of an established industrial process yet simultaneously like a touch of pure genius that links the dreamlike conception straight to the final experience. All the research and work done to bring each of the mentioned models to fruition owes its anchor to one moment in time: when French emperor Napoleon III, in order to catch up to England and the industrial revolution, promoted luxury, thus setting the fundamentals of modern era marketing. Without possessing an industrial setup, he emphasized craftsmanship and sales, creating a great fabrication network of artefacts produced all along and across the empire to be sold as unique and precious objects. This way, he created the idea of the product as a luxury item and a powerful commercial network that would augment the experience of owning the specific product: shopping, followed by its greatest symbols: *‘les grands magasins’*, the major shops. The department stores were born.

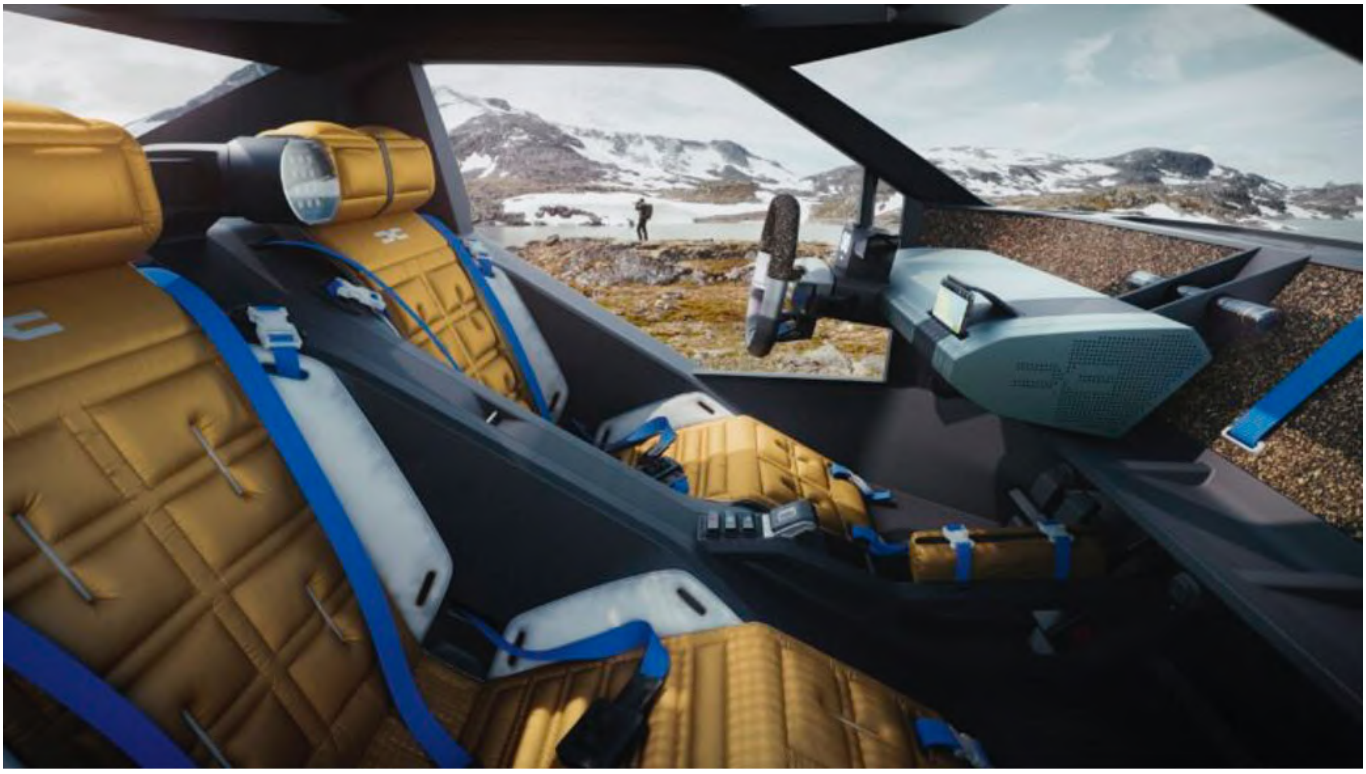
In ‘Mythologies’ published in 1957, French philosopher Roland Barthes wrote about the Citroën DS:

'*The supreme creation of an era conceived with passion by unknown artists that consumed an image if not a usage by a whole population that appreciates them as a purely magical object. One can see through the object the transformation of life into matter, which belongs to the ground of fairytales.*'

The Frenchness of all things is this peculiar practice of involving the dream to the understanding of the real world. Indeed, the French brands looked first towards the stars.

Dacia Manifesto Wins Concept Design Award

THE DESIGN LOUNGE



DACIA IMAGE

The Dacia Manifesto has won the Concept Car Design of the Year award in the Car Design News People Awards, voted for by a global panel of professional car designers.

This year's judging group included the heads of design at Audi, Ford, Lamborghini, Lucid, and Mercedes; judges could not vote for their own designs or for cars from other brands in their group.

According to Dacia, the Manifesto is a super compact and fully open SUV, so passengers can feel at one with nature. This lightweight, silent vehicle prioritizes agility above speed. With this type of vehicle, you can easily deliver supplies to mountain retreats or check on an outdoor facility. The seat covers can be removed to transform into a sleeping bag in one slick move. The rear of the car becomes a table or workbench, too.

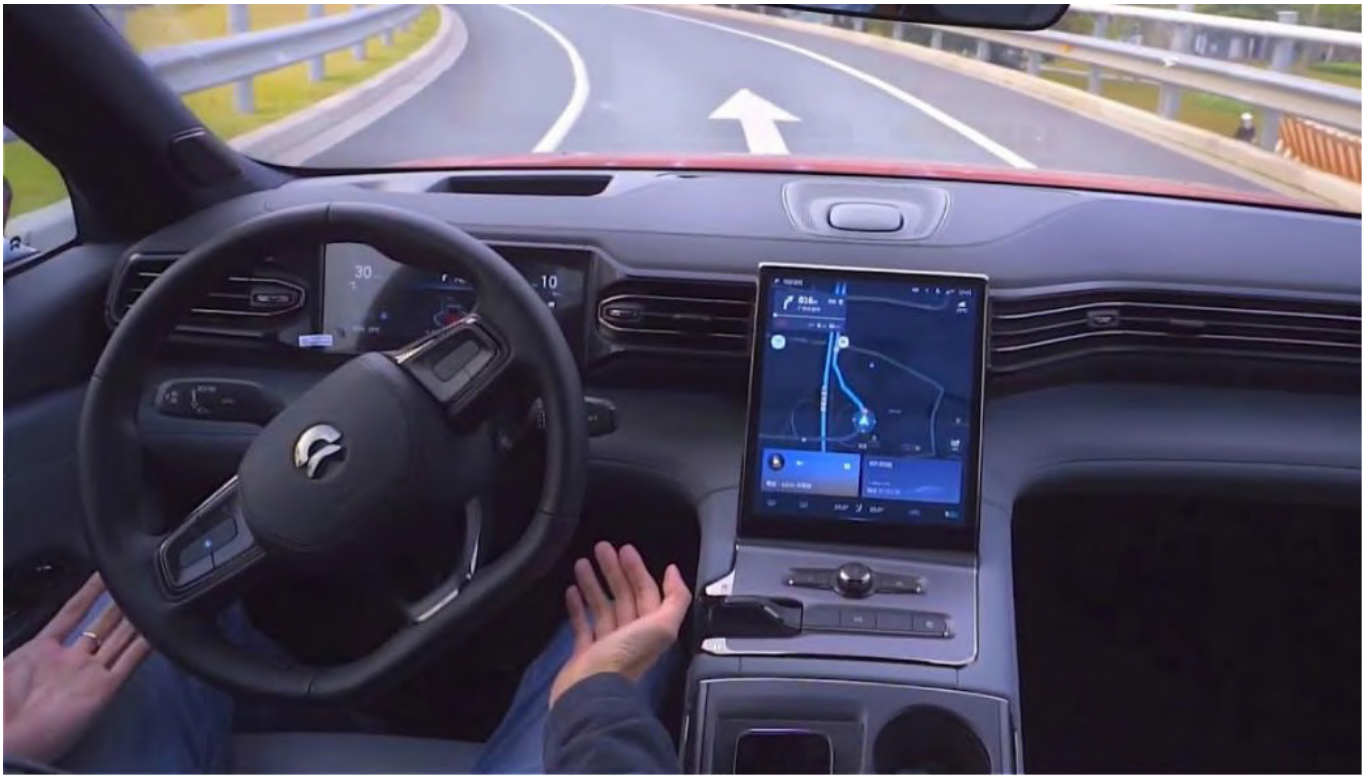
Car Design News Editor James McLachlan says, "In the 10 years of these awards, Dacia has never previously been a contender for any car category, so to win this year's Concept Car Design of the Year award is an incredible achievement and shows just how far its design department has come".

Dacia's design director David Durand, who picked up the award at a ceremony in London, said he was "very honored by the number of people who have appreciated the freshness of this small object, which expresses the values of our brand and shows that Dacia design is evolving. I don't think anyone expected this from Dacia. This recognition from design professionals tells me that we're on the right track".

News Mobility

Nio Uses NXP 4D Radar Technology

NEWS MOBILITY



NIO IMAGE

Chinese automaker Nio will use radar technology from NXP Semiconductors in future models. According to NXP, this involves components for 4D imaging radar systems. The technology is suitable for use on highways and in urban environments. The front radar detects and classifies objects up to 300 meters away from the vehicle.

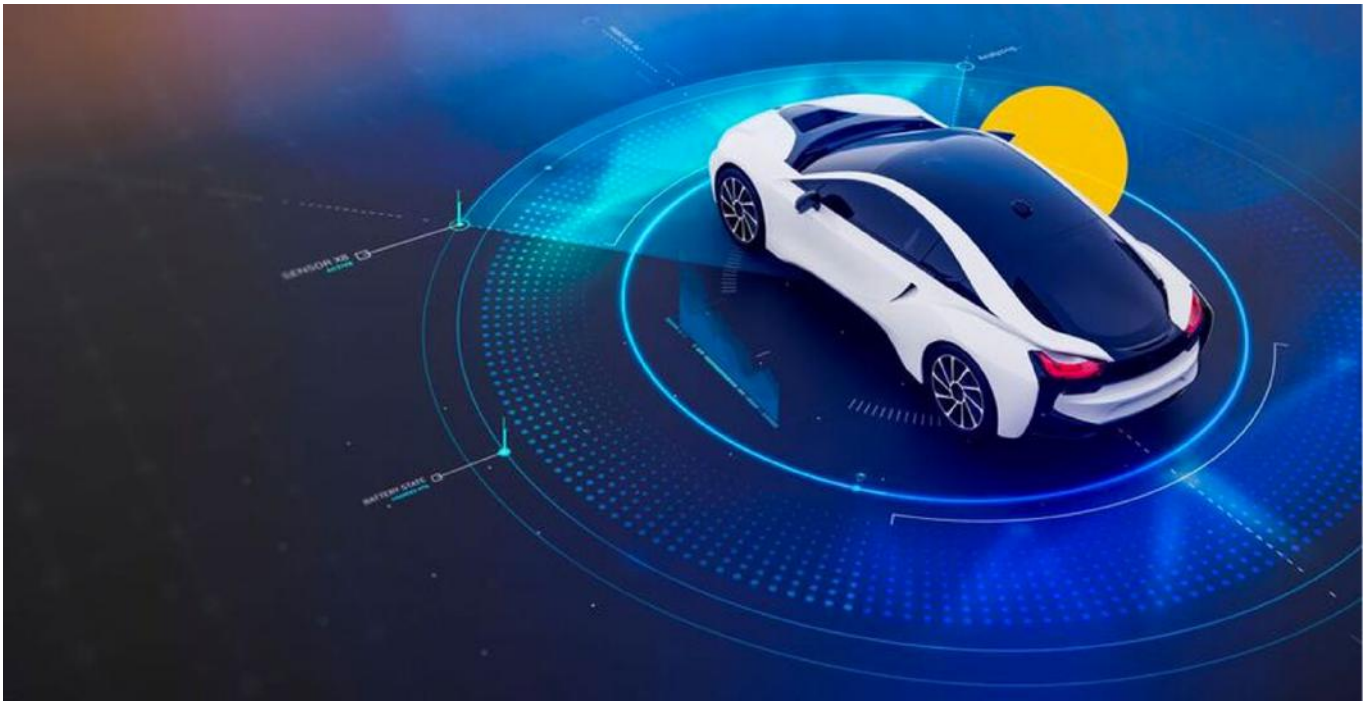
The imaging radar from NXP supplements the performance range of a classic radar—which can reckon out distance and speed—with measurement of direction, angle of incidence, and height. According to NXP, another advantage is that software and hardware designs can be reused for different radar platforms.

The combination of radar processor for signal processing and transceiver chipsets with high-frequency technology enables L^{2+} and higher assistance systems.

4D radar technology could apply to interior safety, as well; it can distinguish between adults, children, and infants to parse the rough shape of the body, and to sense its position, all in a non-photographic method that doesn't invade privacy. The fourth dimension, of course, is time; it'll scan the car several times a second and track changes and movements over time.

Wipro Invests in ADAS Startup Spartan

NEWS MOBILITY



WIPRO IMAGE

Wipro has acquired a stake in Spartan Radar to get access to Spartan's 4D radar technology, which will be used to develop advanced driver assistance systems (ADAS) on the Wipro Cloud Car platform.

The end product will be offered to both car manufacturers and tier-1 suppliers. According to Spartan CEO Nathan Mintz, the aim is to eliminate the weaknesses of radar sensors on the software side. Specifically, Mintz talks about better resolution, greater range and improved AI integration through the use of Spartan software.

In addition, Spartan's products are to be integrated into Wipro's Cloud Car Data Engine and AI Pipeline IP. This means that the ADAS functions are available on demand and can be installed at a later date.

Wipro Engineering Edge CTO Thomas Müller says, "Most vehicles are delivered with preset ADAS functions that cannot be upgraded or retrofitted". According to Müller, the aim is to offer automakers a sensor stack for each individual vehicle that enables every car to offer advanced assistance systems and unconditional autonomous driving. Spartan's technology will be a component of this stack.

General News

Continental Management and Employees to Stay On

GENERAL NEWS

CONTINENTAL IMAGE

Imbalance between the most important divisions is forcing Continental CEO Nikolai Setzer to take structural measures, yet there is growing resistance—from employee representatives and the executive board alike—to the supervisory board chairman's plans to spin off the automotive business.

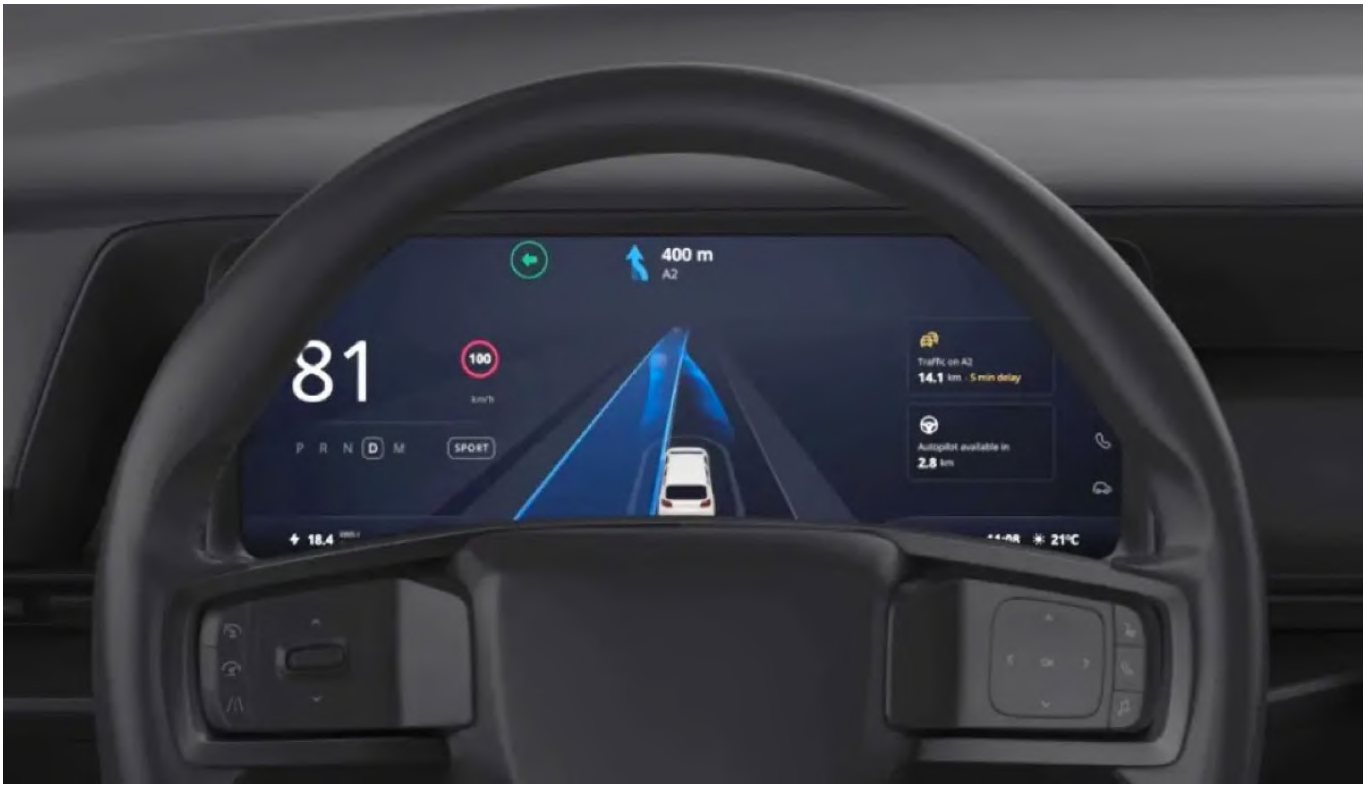
Shareholders expect Continental CEO Nikolai Setzer to finally clarify the future of the company. Setzer will then present his medium-term plans for the company at the annual Capital Markets Day. The central question is the future of the automotive division.

According to Handelsblatt, the management board, employee representatives, and key supervisory board members prefer to 'streamline' the automotive division and keep it a fundamental part of Continental, while opening it to larger partnerships with other companies under Continental Automotive CEO Philipp von Hirschheydt.

Which scenario is ultimately implemented depends on anchor shareholder Schaeffler, which holds 46 per cent of the shares in Continental.

TomTom, Microsoft Team Up for AI

GENERAL NEWS



TOMTOM IMAGE

TomTom has announced what they're calling a "fully integrated, AI-powered conversational automotive assistant" which should start showing up in dashboard infotainment platforms soon. The company claims it will offer better voice interaction and allow users to converse naturally to navigate, find stops along a route, control onboard systems, open windows, and do just about anything else one might do while driving or passenging.

More, TomTom says the voice assistant will integrate into a variety of interfaces offered by major automakers, who will retain ownership of their branding. No firm automaker-supply contracts have been announced yet, but the technology will be integrated into TomTom's Digital Cockpit, an open and modular in-vehicle infotainment platform.

TomTom, best known for GPS platforms, partnered with Microsoft to develop this AI assistant. The technology leverages OpenAI's large language models, in addition to Microsoft products like Azure Cosmos DB (a multi-model database) and Azure Cognitive Services (a set of APIs for AI applications).

This isn't the first time a company has tried to put an LLM in a car. In June 2023, Mercedes announced a three-month beta program that incorporated ChatGPT into some vehicles. That tool, too, used Microsoft's Azure OpenAI service. TomTom is showing off their latest solutions at CES, so stay tuned for more details.