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Weekly Newsletter

DVN-I
Automotive Interior

NEWSLETTER #170

Editorial

Interior Lighting: Ams Osram Interview

AMS OSRAM IMAGE

The interior lighting of today and tomorrow transforms vehicles into fascinating and versatile mobility tools. It is more than just for decoration or to make the cabin nicer, though there's that. It really heralds a new driving experience, changing the complete perception, reinventing luxury. And it affects our mood, comfort, concentration, and our safety.

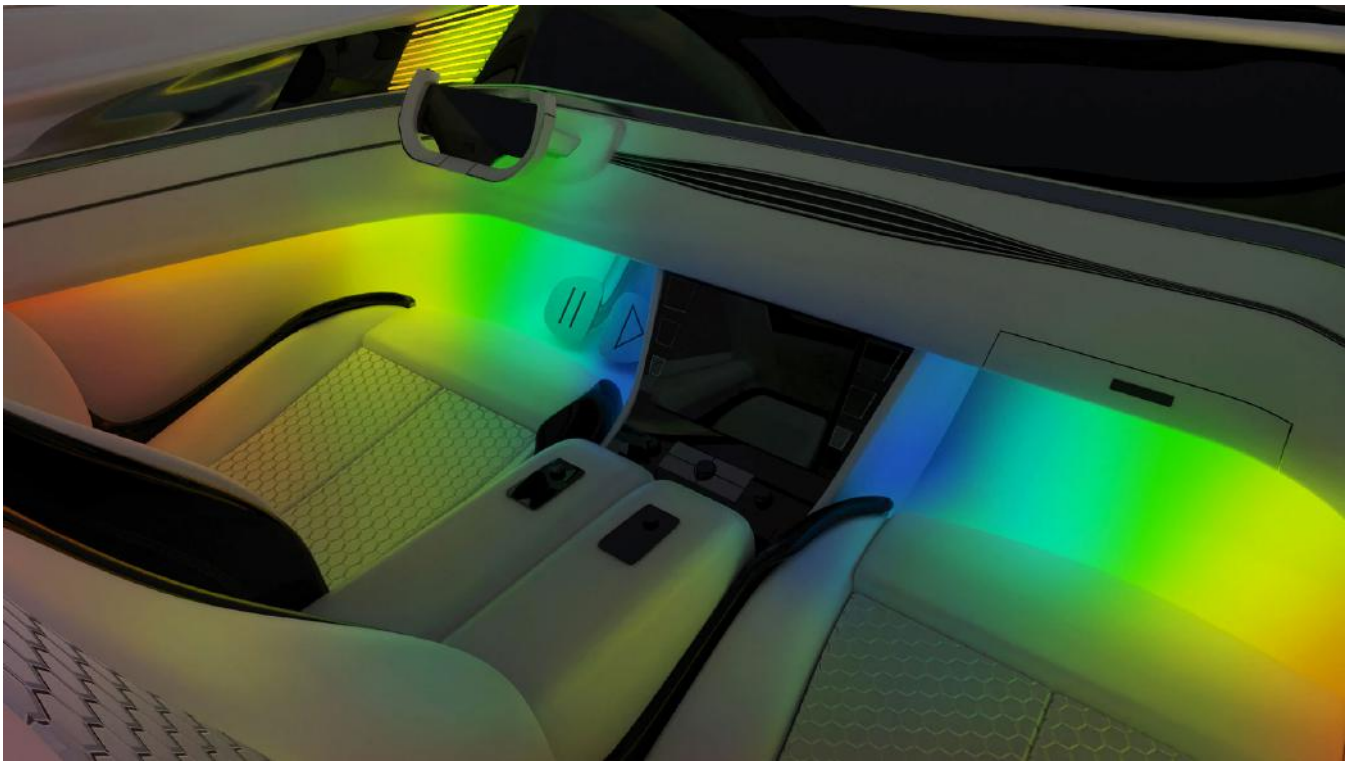
DVN Interior met recently with ams Osram in Regensburg, Germany, and in today's issue of your DVN-Interior Newsletter you can read all about it in depth—including our exclusive DVN-I interview with that company's automotive interior lighting senior director Thomas Schreiber, and system solution engineering director Michael Brandl. They bring a lot of information, especially on how LEDs are becoming intelligent, with products such as RGBi combining light, electronics, and software.

It's just about perfect to get you fired up to attend the DVN Interior Deep Dive in San Francisco the end of next month, on 29-30 August. It's happening in parallel conjunction with the DVN Lighting Workshop; DVN-Interior attendees have privileged access to attend the interior lighting session, with an outstanding docket of tier-1 presentations including Forvia, Valeo, and Yanfeng. Don’t miss this double event! **Registration** is open, but hurry fast; spaces are filling up quickly.

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

ams Osram Interview on Interior Lighting



AMS OSRAM IMAGE

With a headquarters in Austria and another in Germany, ams Osram is a renowned global leader in optical solutions. In 2022 alone, they recorded revenues of €4,819m. Osram has been driving innovation in vehicle interior lighting since 1974, when they introduced the first colored LED for dashboards. Over the years, they've continually strengthened their position with groundbreaking advancements such as white LEDs, OLEDs, thin-film technology, and laser light sources. In 2020, AMS, a company based in Austria, bought Osram Licht AG, resulting in ams Osram.

Our DVN-I interview and cleanroom tour was held at the ams Osram plant in Regensburg, Germany. AMS Osram was represented by automotive interior lighting senior director Thomas Schreiber (photo, right) and system solution engineering director Michael Brandl (Left). DVN-I's Philippe Aumont (center) reports this interview.

AMS OSRAM IMAGE

DVN Interior: Can you tell us a bit about the history of Osram, and how it became AMS Osram?

ams Osram: From the early beginnings as a semiconductor company under Siemens Semiconductors to its transformation into Osram, the journey finally led to AMS Osram. With 40 years of experience in the LED industry, AMS Osram has always been dedicated to serving the automotive sector, supplying LED technology to pioneering companies in the industry. Today, AMS Osram is recognized as experts in both interior and exterior automotive lighting.

DVN-I: What is the mission/vision of ams Osram?

ams Osram: ams Osram is a global player in optical solutions. We offer a unique product and technology portfolio for sensing, illumination, and visualization: from prime-quality light emitters and optical components to micro-modules, light sensors, ICs and related software. Our vision is to create the uncontested leader in optical solutions through bold investments in disruptive innovation and continuous transformation delivering best-in-class profitability and growth.

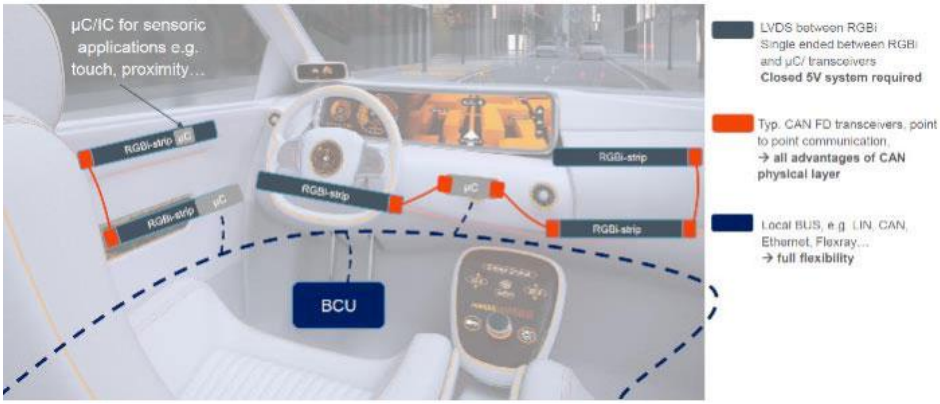
AMS OSRAM IMAGE

DVN-I: What are your application domains, and how important is automotive in your portfolio?

ams Osram: We have a balanced portfolio. ams Osram is active in automotive as well as in other sectors: consumer, industrial and healthcare. We are active providing many technologies for automotive and we are honored to focus on LED today. We were always at the forefront of LED from the very beginning. For Automotive, we started in the interior, enabling a lot of new applications there. Then, for exterior lighting, we went from the rear lights to the front lights. It took time to convert to LED, but now it is standard. Nowadays interior is getting more and more interesting again as the electrification of vehicles creates new design needs there. Interior is one of the focus areas today for our company.

DVN-I: What are your main applications in automotive lighting in general, and particularly in automotive interior?

ams Osram: We divide our automotive lighting applications in exterior and interior ones. Main applications in exterior are headlamps and signaling. For interior we focus on illumination for switches, display and projection—and what will become the major topic for our session here, is ambient lighting.



LIGHT SYSTEM ARCHITECTURE FOR SMART LED RGBI CHAIN (AMS OSRAM IMAGE)

DVN-I: What are your main technologies? What sets them apart?

ams Osram: As you know we now have all in-house: our own LED chip technology, packaging and IC competency. The combination of these three key competencies is now enabling us to look beyond normal LED applications, specifically to dynamic ones. The LED RGB solution is a very good example for using this know-how in a dedicated product. We were able to combine all three key LED technologies in one product: light emitter, and Integrated Circuit embedded in one package.

Beyond having these technologies, you need to understand the suitable integration into one product. You need to have a deep understanding of your customers' needs and specifically their requirements. Integration must offer advantages to the customer.

DVN-I: How do you quantify the efficiency of a lighting system?

ams Osram: Efficiency is basically how much electrical watts go in, versus how many optical lumens go out.

When it comes to measuring the efficiency of a lighting system, we take a holistic approach. While considering the efficacy of the LED to be essential, true efficiency can only be assessed at the system level of a car. Here the critical factor is kWh/100km. We can contribute for example by providing solutions which allow to safe space and weight. By collaborating closely with application owners, OEMs, and Tier 1s, we ensure that the products are precisely customized to fit each unique application. This commitment to meeting customer demands has led to a diverse range of products and derivatives, allowing us to optimally serve our clients.

DVN-I: What are your main markets, customers for automotive LED?

ams Osram: We are fortunate to work with almost every OEM and Tier 1 on this planet. Our direct customers are the Tier 1s. However, it is important to keep the dialogue with the OEMs open to create an understanding of the application, and to validate innovation in their applications.

DVN-I: What do you consider as your competitive advantage?

ams Osram: In addition to our in-house competencies of having our own LED chip technology, packaging and IC competency, another advantage is our deep relationships with our customers. A good example is our RGBi with OSP. Customers want to have full access to the protocol. We listened to their wish to implement an open system protocol, which is available to everyone. There is no royalty or license fee.

DVN-I: What is your perspective on automotive interiors? and how do you foresee interior lighting market growth?

ams Osram: Connectivity and automation are enabling new usage models for occupants inside the car. The main driver here is what is called the 'third living space', meaning feeling like at home in the vehicle. LEDs are used to create ambient lighting to feel comfortable and to get interactive responses and warnings through light. All this supports an increasing number of LEDs in the interior. So, if you have more LEDs inside, the system calibration gets more complex, e.g. color homogeneity all around the car. That's where our RGBi solution with an Open System Protocol helps a lot for an easy integration. In summary, it means interior market opportunities.

DVN-I: You have sensing technology, adapting light to context, can you tell us more?

ams Osram: Next step of dynamic light applications in the interior may be offering an easy interaction between the application and the user, thus allowing a context related interaction. This requires sensors to be integrated into the application. Our Open System protocol enables such an integration. We are already working on products to support this easy integration.

DVN-I: How does the consumer experience of interior lighting at car influence the purchasing decision?

ams Osram: There's also a trend to having more daytime visibility for all visual effects, in any conditions. Looking at automotive shows around the world, we see that the number and size of displays is already a decision factor for purchasing a car. We assume the whole appearance of the interior. And in that respect specifically the dynamic light applications in the interior will become another decision factor.

DISPLAY BACKLIGHTING (AMS OSRAM IMAGE)

DVN-I: What is the future of Interior Lighting?

ams Osram: Interior lighting has a bright future. We see many customers are investing in this area. That is one of the reasons why we have developed the new RGBi with the OSP supporting it.

DVN-I: What about the truck market?

ams Osram: The products we have developed for cars can be used in other automotive form factors like trucks.

DVN-I: How are you leveraging sensing, to enter into smart surfaces, in-cabin sensing, etc.?

ams Osram: Smart surfaces are using sensing and light. We offer both. As we focus our discussion on light, an intelligent RGBi LED would serve a smart surface very well, and the OSP also enables it.

DVN-I: Electronics and software are key in future vehicle. How are you developing this expertise, and what are the new domains you're embracing.

ams Osram: We have our internal software and electronics competency. They need to ensure that our product fits to the customer application demands. Specifically, we need to ensure our product can be integrated into the vehicle architecture, enabling features like connectivity, OTA and Software Defined Vehicle (SDV).

DVN-I: What is unique in your electronic solutions? Can you tell us more about the Open System Protocol you presented at the DVN Workshop in Köln?

ams Osram: With our capabilities in sensing and in lighting, we are now able to adapt light via the interaction between what we sense (the context) and the light we provide. OSP allows us to add any other sensors or nodes into the loop, with no additional wiring, or new infrastructure required.

DVN-I: What do think about the future of in-car projection, and what would be the technology behind?

ams Osram: Ambient and surface project systems are complementary systems. The focus needs to be more on the overall harmony, so that the user will not feel like he is operating two independent systems. Surface projection can be done on certain materials, others are more suitable for RGB(i) backlighting. Both technologies will co-exist and we support both directions. Our latest new RGBi product facilitates the ambient solution for which we see a big market demand at the moment.

FUNCTIONAL LIGHTING (AMS OSRAM IMAGES)

DVN-I: With an open architecture, any customer could choose whatever source, what does this mean for you?

ams Osram: If you are a single player, a single source, you'll not be a successful player in automotive in the long term. So our motivation for developing an open protocol is to be a partner to our customers, we also invite others to follow. This will enable us to be successful as a community; as this ensures sustainability for our customers and our company in the long run.

Working with partners is our priority and essential in this business. Open System Protocol (OSP) is a good example of how AMS Osram is doing it. We are working in close cooperation with various semiconductor manufactures to proof the open usage of our new protocol OSP. Microchip Technology is one of our first and longest partners on this project. In addition to its microcontroller competency, Microchip offers deep experience interfacing vehicle networks like LIN, CAN-FD, PCIe, and Ethernet.

DVN-I: Got any other thoughts you'd like to share?

ams Osram: As an industry we are on an exciting journey to new interior lighting, we have a new era with the OSP. The lighting community is small and that's great to make the network live and running.

Interior News

Marelli's 'Miragic' Display is Black When Not In Use

INTERIOR NEWS

MARELLI IMAGES

Marelli have introduced their new Miragic, a display for the cars of the future that well and truly disappears when not in use—an example of 'shy tech' which hides all the way away except when it is actually in use..

Marelli recently presented a disappearing display seamlessly integrated in the car's cabin style, blending discreetly with various materials and surfaces. It offers a sleek and polished look while ensuring a unique customer experience. It provides equal or better visibility than traditional displays, enhancing safety by limiting distractions for the driver.

Moreover, Marelli stated that Miragic simplifies parts integration and assembly operations, while also leading to reduced weight.

Interior Features Make Problems: J.D. Power

INTERIOR NEWS

JD POWER IMAGE

New-car owners have a lot more complaints than in years past about everything from the latest in-car tech to door handles, according to the latest Initial Quality Survey (IQS) released recently from J.D. Power, complementing another JDP survey we previously **reported on**.

The number of complaints reported by new owners and lessees in the first 90 days of ownership has increased to 192 problems per 100 vehicles. That's an increase of 12 problems from last year, and 30 over the past two years, which marks a record increase in the 37 years of the IQS' existence.

Features, controls, and displays recorded the largest increase in complaints, followed by infotainment.

The 2022 IQS found already that dropped connections with Apple CarPlay were the number one problem. This year, one of the biggest increases in reported problems was with wireless smartphone charging.

HIDE-AWAY AUTOMATIC DOOR HANDLES ARE PROBLEMATIC AND UNWANTED, PER JD POWER (TESLA SHOWN; TESLA IMAGE)

Convenience features should be functional, solve problems, and create surprise and delight, so it's especially bitter when they actually create or aggravate problems and make a nuisance of themselves.

Other problems include cupholders that "don't serve their purpose" and flush door handles that don't seem to serve a purpose to owners. This is especially true on EVs, where designers often make them flush with the body or add buttons and other pop-out features to improve aerodynamics (or perhaps just to create or follow a fad?).

Other frequently reported problems include battery and charging, automatic emergency braking, active lane control, and blind-spot monitors.

A higher number in the IQS, which means more reported problems, doesn't necessarily mean the car is worse; newer cars have newer technologies which exert learning curves that can look and feel like problems to an end-user who hasn't learned how the tech works and may not be operating it correctly.

The incursion of the electronics world into the automotive realm has forced some uncomfortable realizations: types and severities of problems that are no big deal in regular consumer electronics are flatly unacceptable in automotive ones. There's a lot of learning and adaptation happening on the production side, too.

Dropping Buttons Was a Mistake: VW CEO

INTERIOR NEWS

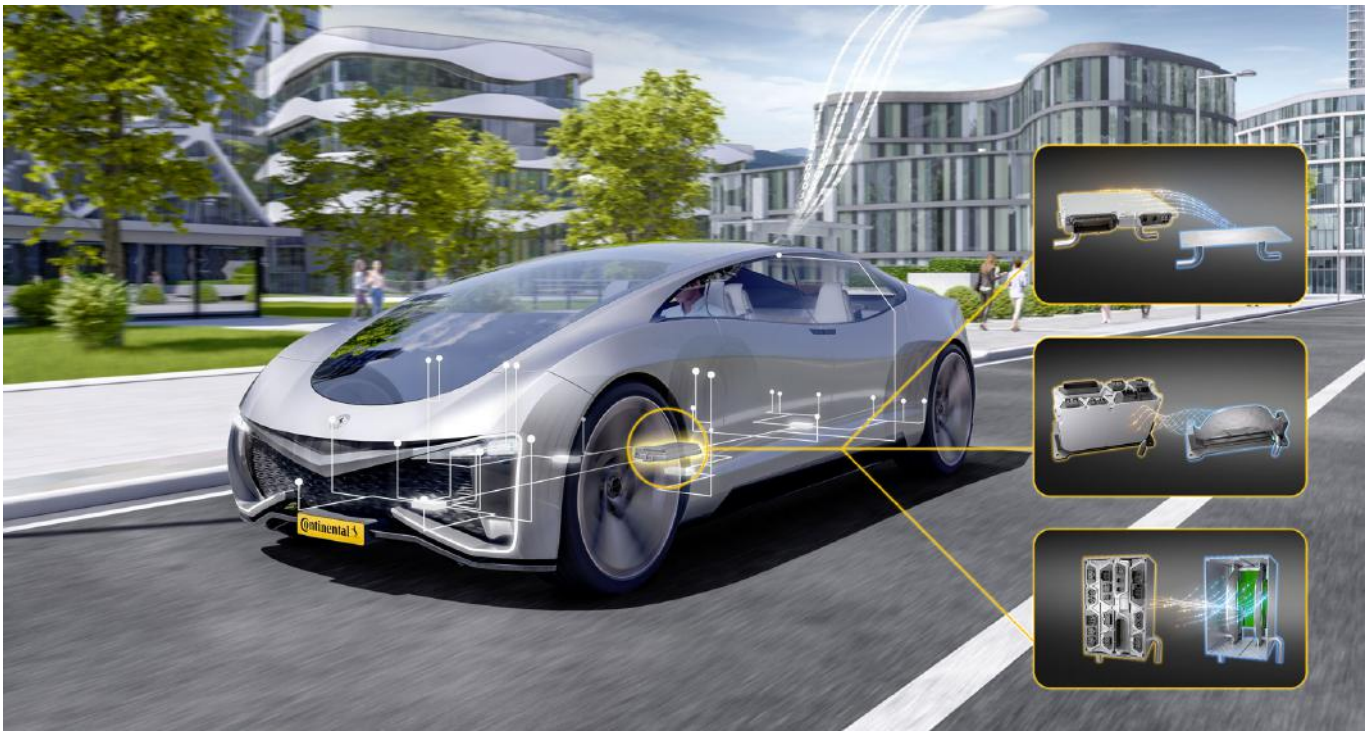
VW IMAGE

The current Volkswagen GTI may be a better-performing car than its predecessor, but for a lot of people that does not really matter. They will not even consider the new GTI, or any other model which almost entirely lacks physical controls. And to operate the radio or HVAC at night requires using slide controls that aren't backlighted. Extending the previous news from JD Power, the good news is, Volkswagen seems to have at least partly learned the error of its ways.

Speaking with Autocar, Volkswagen CEO Thomas Schäfer said the new Tiguan gets a few more physical controls than some of the other vehicles in the lineup because customers really do not like haptic inputs. He then went so far as to say that his predecessor Herbert Diess's decision to go that route "definitely did a lot of damage" to the brand. Schäfer's views seem well-grounded in consensus: touchscreen control of all and everything **really isn't** the right way to do it; the future is most likely in-between full touch screens and the good old buttons and switches.

Continental's Plug-Play Solution for Vehicle Computers

INTERIOR NEWS



CONTINENTAL IMAGE

Continental has presented a plug-and-play concept for the integration of high-performance computers (HPC) in vehicle architectures. The modular and highly scalable solution also offers a flexible cooling concept.

In order for future vehicles with automated driving functions to be able to process ever higher volumes of data and enable the growing number of software functions—for automated driving or infotainment, among others—modular and powerful high-performance computers will be needed. These HPCs must be integrated into the E/E architecture of a vehicle in a scalable and flexible manner. Continental's hardware architecture allows individual computer modules to be exchanged even if the vehicle is already on the market. The HPC modules can be combined into different configurations so that the computing power can be scaled at any time to meet demand.

Due to the high computing power of the HPCs, a thermal power loss in the range of 1KW can be achieved, depending on the application. For the plug-and-play solution, Continental relies on a novel cooling concept that significantly simplifies replacement. This system consists of a new type of cooler in the form of flexible cooling pads that hug the HPC modules to be cooled all by themselves thanks to fluid pressure. "We are focusing on a flexible and scalable concept for cross-domain HPCs including an innovative cooling solution for all vehicle classes. Our plug & play solution requires less installation space and reduces the complexity of the vehicle architecture as well as the wiring harness," says Jean-Francois Tarabbia, head of the Architecture and Networking business unit at Continental.

Xpeng: Access Twine for Car to Provide In-Vehicle Infotainment

INTERIOR NEWS

XPENG IMAGE

Chinese EV maker Xpeng has selected the Access Twine for Car (Twine4Car) in-vehicle infotainment (IVI) solution to provide an array of applications, games and streaming services for its new portfolio of EVs. The first vehicle to benefit from the technology will be the P7, scheduled to reach customers beginning this summer.

In the future, Xpeng owners and users will be able to upgrade their vehicles to include the Access Twine4Car IVI via an over-the-air (OTA) software update.

The Twine4Car Platform has been developed specifically for the automotive sector and lets automakers provide branded in-car entertainment services. The Twine4Car app store includes many well-known social and productivity apps which can be used by the driver or passengers when a vehicle is parked or charging.

As part of the agreement, Access will deliver a new game portal to Xpeng vehicles which includes console-class games with the latest high-compression streaming technology. This enables users to play streamed games even when using a low-speed connection.

“We want to provide our drivers in Europe with a new level of sophistication and ease by using a more thoughtful approach to mobility,” said peng's VP of international markets, Eric Xu "We selected Access Twine4Car as our in-vehicle infotainment provider to create a mobility experience that’s more intuitive and enjoyable—our vehicles are designed to move people emotionally as well as physically.”

"And Access Europe CEO Masahiro Aono said, "Whether its drivers wanting to stream their favorite songs and podcasts, or passengers looking to watch their favorite videos and access their favorite social media platforms, we look forward to enabling connected infotainment experiences that match the beauty and quality of Xpeng’s new electric vehicles".

The Design Lounge

July 14th Design Review

THE DESIGN LOUNGE

COFFEE CORNER
DVN
Interior

WIKIMEDIA COMMONS IMAGES IN THIS ARTICLE

By Athanassios Tubidis

The July 14th parade in the center of Paris might soon be the only time and place that Parisians could see off-road vehicles in a city context. Beyond normal SUV silhouettes, this very day, the off-road vehicle-segment and proportions go on steroids in a massive moving display.

In my scale model collection, among rally cars and hot rods, cafe racers and GPs, Europe's 'roaring' 1920s and of course favorite America's 1950s, there are some unique vehicle silhouettes that coexisted in a parallel setting: the popular Willys MB series, the 'sober' M2 halftrack, the 'standard' Dodge WC52 in several versions including an ambulance WC54, the 'characterial' Ford CMP quad, the monolithic Mark IV, and a few more. These are not just part of my collection but part of my recollection and visual memory when it comes to design. Besides the historical tribute of the Bastille Day, it is as if they come to life in their most updated version. In one of world's greatest avenues, during one of world's greatest parades, unlike the background music-play, in my eyes, this is a visual symphony of vehicle silhouettes, stance, proportions, features, lines, details, surface treatments, all with sound and motion in real scale. Wow!

Of course, tactical vehicles are commonly known for their immense aesthetic deficit, however for a car body expert isn't quite like that. Admittedly, they might have a few wheels too many or some proportions out-of-wack, but this is 'the extreme measure' that nowadays we rarely experience in design studios. With all creation platforms becoming ever more digital and unified, thus optimized, the exposure to real functioning objects, in-context, comes only at the end of the process. Very few times we have the chance to see real,

moving, non-refined, vehicles of exaggerated or peculiar proportions and compare ourselves physically to them; which is basically what automotive design is all about.

While they look raw, unsophisticated, and naïve, in design terms, this is exactly where—unbeknownst to their creators—some of the purest design cues emerge. Incidents of lines and volumes could give birth to new vehicle morphologies that may influence the industry.

Unlike low spoilers, side skirts and aerodynamic features, in this case, the front and side, lower-body-panels, get eventually completely inversed to meet the requirements. Windshield surfaces match the hood in a quite modern, one-box, wedge body section (ie VBCI), or with a subtle brake in the case of VBL Panhard, almost replicating an ideal 'fast & elongated' shooting-brake profile. To the extreme contrary an intentional split between hood and windshield surfaces, is dominant in the case of VAB RECO. Amphibious vehicles always looked ugly and strange due to their ground clearance and thus the compromise of 'stance' (we usually see them on ground and not so often in the water). VAB RECO is something between a boat and a car, getting their best out of each other. This is where bow and ramp-angle surfaces merge. In addition, both envelopes match vehicle-body at belt-line height, giving one of the most futuristic body-stance in a front 3/4er view. Wheelbase versus overhangs ratio can vary from almost nonexistent, for instance the PVP, all the way to the MFRD, where front overhang becomes entirely the cabin itself. Beyond any designer's wildest dreams, EFA is a fusion between a car and a bridge (!) while SOUVIM's wheelbase is longer than the body, the ratio between, length, height, width, and H-point, makes it the most extremely proportioned vehicle ever. To the opposite, Lider Fardier's LUV is focusing to something much more important for the years to come, weight reduction vs efficiency. In the case of VAC-articulated-vehicle or the unmanned packbot 510, automotive design typology and glossary are seriously challenged and need to be reinterpreted.

When out of pure utility, design envelopes are unconditionally implemented, this is where functional brutality meets design naivety, in a profound sense of exaggeration in mass and proportions. While watching this unique rolling motor show, benchmarking design features and details, vehicles appear like design-projects at a raw stage, unsophisticated and yet pure to the purpose and function. They look like basic volumes ready to be sculpted while in motion. Looking at them, being the same color as clay, it is tempting to take my metal sweeps and start scraping and shaping them to the right lines, optimize proportions, correct ratios and finally treat features and details accordingly…

VBCI

VBL Panhard

VAB RECO

PVP

MFRD

EFA

SOUVIM

Lider Fardier LUV

VAC-articulated-vehicle

packbot 510

News Mobility

No-Human Robotaxis to Run in Key Chinese Cities

NEWS MOBILITY

BAIDU IMAGE

Shanghai’s Pudong district issued its first licenses for the commercialization of unmanned autonomous driving. China stepped up its use of autonomous driving technology with taxis now allowed to operate in designated areas of Shanghai and Beijing without a safety supervisor on board.

At a special event at the sixth World Artificial Intelligence Conference (WAIC) this month, the local government in Shanghai’s Pudong district issued its first batches of licenses for the commercialization of unmanned autonomous driving.

Companies including Baidu's Apollo, AutoX, and Pony.ai were among the first to obtain permits to conduct commercial road tests using driverless intelligent connected taxis. These companies are now allowed to offer robotaxi services on specified open roads in the Pudong without a safety supervisor on board.

The Beijing High-Level Autonomous Driving Demonstration Zone local office also plans to expand the designated area to 500 sq km.

These developments are seen as major steps towards the commercialization of intelligent, autonomous public transport. They follow extensive manned trials conducted in real conditions in key cities across China over the last several years. In the last four months Beijing has operated a total of 116 unmanned self-driving taxis on a trial basis, completing 1.5m test trips covering 2m km.

Volkswagen Has Another Go at Robotaxis

NEWS MOBILITY

VW IMAGE

Volkswagen's ID.Buzz is becoming a robotic cab: starting immediately, that's the model that will roll fully automatically through Austin, the capital of Texas. Ten of them, at first, and if the test goes smoothly, commercial operation is planned from 2026.

The technology for autonomous driving at Level 4—a human driver is no longer necessary—is being developed jointly with Intel subsidiary MobilEye. Volkswagen CEO Oliver Blume is thus closing a strategic gap. Austin alone will not be enough. At least four US cities are to be added in the next three years. Volkswagen is thus indirectly competing in the USA—via partners—against the industry pioneers Waymo and the General Motors subsidiary Cruise. The two providers already operate a robotaxi service in San Francisco, as well as in Phoenix.

"Moving into this next phase will help us test, validate and refine the technology," expects Christian Senger, responsible for autonomous driving at VW's commercial vehicle division. In the U.S., Volkswagen America has established a subsidiary called VW ADMT for this purpose, with locations in Silicon Valley and Austin.

Senger is convinced that he can catch up with providers like Waymo and Cruise. Volkswagen is still two years away from that at best. As a high-volume vehicle manufacturer, it simply has an advantage when it comes to producing robotaxis and getting them on the road.

General News

Zeekr Design and Development in Sweden

GENERAL NEWS

Zeekr is a premium EV brand founded by Geely in 2021. It's opening sales in Europe, starting in Sweden and the Netherlands. The cars are built on the maker's Sustainable Experience Architecture (SEA) platform created to meet evolving users requirements by integrating hardware, software, and ecosystems leading to the creation of a new mobility lifestyle.

The Zeekr name is put together from **Ze**ro **E**volving **E**lectric Era **Kr**ypton (Krypton is a rare gas that emits light when electrified). The brand's global design center is in Gothenburg, Sweden, led by Stefan Sielaff, late of Audi, VW, and Bentley. In this inspirational high-tech environment, creative minds from all over the world meet to design the Zeekr models of the future.

Geely's European R&D Center was established in 2013 in the Lindholmen area of Gothenburg, with the mission of creating a revolutionary vehicle architecture, CMA, designed with full scalability to accommodate a wide range of drive systems and technology solutions. The CMA platform has since been used in over 2 million vehicles globally.

Geely Holding today owns a number of brands: Geely Auto, Lynk & Co, Zeekr, Geometry, Volvo Cars, Polestar, Lotus, LEVC (London Electric Vehicle Company), Farizon Auto, Radar Auto, and Cao Cao Mobility.

ZEEKR 001 (ZEEKR IMAGE)

ZEEKR X (ZEEKR IMAGE)

The following vehicles are part of the portfolio: Zeekr 001's sedan and Zeekr X SUV

The Zeekr X cockpit offers cutting-edge technology, just like the larger 001 model, delivering a truly immersive user experience.

The 8.8" HD instrument cluster and 'floating' 14.6" HD touchscreen are matched to a 24.3" augmented reality head-up display (AR-HUD). The AR-HUD can project graphics onto the windscreen which overlay objects in the view ahead.

Another innovation is the 360° HD panoramic imaging system. Using wide angle cameras, the system can display a highly detailed image of the vehicle's surroundings on the touchscreen. In busy, complex urban driving environments, it accurately predicts how far away objects and pedestrians are, enabling it to quickly alert the driver to potential hazards. The car has a unique 4-seat configuration.

AlixPartners: OEMs Should Worry About China's Edge in Tech

GENERAL NEWS

BYTON IMAGE

AlixPartners, a Management Consulting Firm, says US automakers should focus more on ADAS technology than ride and handling.

Have we reached an era in the U.S. in which consumers are going to begin making car-buying decisions specifically around advanced driver assistance systems over price, styling, ride, handling, power, and telematics user interface?

AlixPartners, presenting its annual Global Automotive Outlook report, suggests legacy automakers should pay close attention to trends in China not only for reading that market but also as a foreshadowing of where the U.S. market is headed.

"While the industry has been focusing on Tesla, now is the time to prepare for future disruptive competition from Chinese brands," says Mark Wakefield, global co-Leader, Automotive and Industrial Practice.

As evidence, say Wakefield and the firm's Shanghai-based business lead, Stephen Dyer, Chinese brands will likely outsell foreign brands in China this year for the first time in decades, before Western brands became the force they have been in China since the 1970s. AlixPartners also forecasts that Chinese brands will have 65 per cent of their home market by 2030.

AlixPartners says Chinese brands such as BYD, Zeekr and Xpeng have been climbing in sales and market share at home because they are doing a better job than Western automakers in delivering new tech features to upwardly mobile tech-oriented Chinese consumers with updates coming at a faster pace. The highest-ranked foreign brand for "tech features" is BMW, placing second after Zeekr (see recent launch in this edition) and ahead of BYD and Xpeng.

Chinese brands are providing higher ADAS content than non-China brands in the same price segments. In the entry-level price segment in China, 57 per cent of Chinese brands come with ADAS features, while just 15% of competing non-Chinese brands offer similar tech. Chinese brands beat non-Chinese brands on ADAS features in every segment until they achieve parity in the luxury category.

No Chinese automakers are actively selling in the U.S. yet. BYD, for one, has made noises about entering the U.S. market for more than 15 years, but so far its presence in the country is limited to buses, trucks and forklifts.

It remains to be seen if Chinese automakers will ever be able to crack the U.S. market and make inroads as they have in Europe.

Now, products showcased at auto shows from Chinese companies have caught up in build quality and modern design aesthetics.

China is finding success, however, with its electric vehicles in Europe with improved safety and quality ratings and lower prices. They are especially making progress with corporate and rental fleets. German car-rental agency Sixt, for example, recently ordered 100,000 BYD EVs for its European fleets. Chinese automaker Aiways targets selling 30,000 EVs in Europe in 2023, up from about 5,000 in 2022. The sales are adding up.