MARELLI and OLEDWorks Win 2025 PACE Award
for Breakthrough Digital OLED 2.0 rear lights

Marelli and OLEDWorks have received the 2025 PACE Award, the annual award recognized by "*Automotive News",* for Audi Q6 e-tron rear lights using the digital OLED 2.0 technology. This award honors automotive game-changing innovations developed by suppliers and deployed in a series vehicle. During the award ceremony held on April 15 in Detroit, Michigan, Steve Muench, Head of Marelli's Lighting business North America, and David DeJoy, CEO of OLEDWorks, accepted the award on behalf of the entire team.

Based on Audi's vision, the cutting-edge digital OLED 2.0 taillamp, featured for the first time on the 2024 Audi Q6 e-tron, is the result a successful co-creation between Marelli, the customer Audi and OLEDWorks. The product relies on revolutionary, world-first 60-segment digital OLED light panels connected to domain architecture. Due to the technologies strong contrast, the taillamps are gradually turning into exterior displays, making them an important enabler of communication with the car's surroundings. This, in turn, improves road safety, as impressively demonstrated by the communication light in the digital OLED rear lights. The Q6 e-tron also sets new standards in personalization: With a total of eight optional digital light signatures digital OLED rear lights 2.0, Audi customers can design the look of their Q6 e-tron.

Historically, OLED panels had a maximum of 10 segments per panel and each light component within the vehicle's architecture was controlled by an individual electronic control unit (ECU) physically residing within the component. The new configuration reduces mechanical parts and space requirements, improves energy efficiency through fewer connections. Moreover, it offers flexible styling, as the direct light source control allows the creation of more animations and signatures in an easy, centralized way.

The individual control of each OLED segment is performed via a CAN-FD communication bus that connects the domain controller to the rear lamp gateway, and the communication speed reaches 1Mb/s. It is the first time that this kind of communication protocol has been used in a rear lamp application. The electronic architecture of the system, along with this high data rate of the communication bus, enables refreshing of each image on the OLED panel every 10ms, or 100Hz. This refresh rate is even higher than that of a standard consumer monitor screen which refreshes at 60Hz.

The rear lights of the Audi Q6 e-tron look alive at first glance – this is how customers should imagine the active digital light signature, a world first from the brand with the four rings. It comes as part of the optional package of digital light signatures. The segments function to convey the liveliness and unique personality of the car, with a new image generated every ten milliseconds via Audi's specially developed algorithm. This algorithm lets the active digital light signature demonstrate the car's vibrancy and ability to interact personally by making the Q6 e-tron's "brain activity" visible through constant movement. This is an industry first, enhancing vehicle personalization possibilities, as

drivers can select the digital light signature, they prefer directly on the vehicle's MMI or via the myAudi app.

Moreover, the digital OLED 2.0 taillight introduces the capability to communicate with the surrounding environment (V2X – Vehicle to Everything). Proximity indication, a feature familiar to other Audi models, is expanded in the new Q6 e-tron to include a communication light. Integrated with the digital OLED rear lights, it warns other road users foresighted of accidents and breakdowns by displaying a specific static rear light signature with integrated warning symbols and the regular rear light graphic in critical road situations. The assistance system thus provides proactive support to Audi drivers and all other road users.

"This PACE Award is a fantastic recognition for us as technology leader in lighting as we are proud to digitalize the light. Together with OLEDWorks we have created a unique customer experience with our OLED taillight solutions", said Frank Huber, President of Marelli's Lighting business. *"This innovation sets new standards in road safety and vehicle personalization and I want to express my sincerest appreciation for our teams who achieved this successful co-creation with our customer and partners. A big thank you to everyone involved in bringing this vision to life!"*

"We are honored to receive the 2025 PACE Award in recognition of our collaboration with Audi and Marelli on the groundbreaking Digital OLED 2.0 technology," said David DeJoy, CEO of OLEDWorks. *"This award reflects the dedication of our teams and partners in pushing the boundaries of what OLED lighting can achieve. By delivering unprecedented segmentation, seamless integration, and advanced communication capabilities, we are not only redefining the role of lighting in automotive design but also contributing meaningfully to road safety and vehicle personalization. This milestone underscores our commitment to innovation and the value of strong, forward-thinking partnerships."*

About Marelli
Marelli is a global mobility technology supplier to the automotive sector. With a strong and established track record in innovation and manufacturing excellence, our mission is to transform the future of mobility through working with customers and partners to create a safer, greener, and better-connected world. With around 45,000 employees worldwide, the Marelli footprint includes over 150 sites globally.

About OLEDWorks
OLEDWorks is the global leader in multi-stack OLED technology, offering innovative and energy-efficient OLED lighting and display solutions. Founded in 2010 in Rochester, NY, with high volume manufacturing in Aachen, Germany, OLEDWorks is driving advancements in OLED applications for automotive, defense, medical and more.
For information about OLEDWorks, visit **www.oledworks.com**.