PACE AWARD PRESS KIT

Detroit, April 16th, 2025

Marelli wins three 2025 Automotive News PACE Awards

Marelli received remarkable recognition during the **2025 Automotive News PACE Awards** ceremony, held on April 15th in Detroit, MI, USA, by **winning three awards**:

- Firstly, **Marelli and Audi** have been honored with the **Innovation Partnership Award** for their collaboration on the **Digital OLED Taillight** solution, featured on the **2024 Audi Q6 e-tron**.

- **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.

- Marelli received a **2025 Automotive News PACEpilot Award** for its **Fully Active Electromechanical Suspension**. This award honors innovations by automotive suppliers that have not yet been commercialized but have the potential to revolutionize the future of mobility.

Press Release #1

Audi and Marelli Receive Prestigious Innovation Partnership Award at 2025 Automotive News PACE Awards

Marelli and Audi have been honored with the **Innovation Partnership Award** at the **2025 Automotive News PACE Awards,** for their collaboration on the Digital OLED Taillight solution, featured on the 2024 Audi Q6 e-tron. The award was officially presented during a ceremony held on April 15th, in Detroit, Michigan, USA. This celebrates the exceptional partnership of the two companies and their innovative achievements in advancing automotive technology.

The PACE Innovation Partnership Award recognizes carmakers that have made strategic strides in the successful commercialization of innovations developed with suppliers, representing a testament to superior industry partnership and technology excellence. This award underscores the remarkable collaboration between Audi and Marelli, particularly in bringing to market the groundbreaking Digital OLED 2.0 Taillight, which stands as a benchmark for best practices in the global automotive industry, demonstrating how collaborative engagement can lead to pioneering solutions.

The Digital OLED Taillight of the second generation, featured for the first time on the 2024 Audi Q6 e-tron, enables its drivers the freedom to individualize their cars with a choice of up to eight digital light signatures. This is possible via the MMI and, for the first time, via the myAudi app. The digital OLED 2.0 rear lights augment safety functionality and support Audi's design for new communication

methods suitable for vehicle-to-everything (V2X) applications. Proximity indication, a feature familiar to other Audi models, is expanded in the Q6 e-tron to include a communication light. Integrated with the digital OLED rear lights, it warns other road users foresight 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. This feature aids Audi drivers foresighted and all other road users.

"It's a great honor for us to share this award with Audi," stated Frank Huber, President of Marelli's Lighting business. "This recognition reflects Marelli's commitment to co-creating impactful innovations with customers and partners. We are proud of our strong collaboration with Audi, which has enabled us to push the boundaries of lighting technologies together."

The selection process for the PACE Innovation Partnership Award involves an independent panel of judges who conduct a thorough review of all 25 PACE 2025 finalists. Their evaluations focus on identifying partnerships between carmakers and suppliers that exceed typical collaboration standards, highlighting exceptional teamwork that enhances strategic market entry and competitive timing difference in commercializing an innovation.

Press Release #2

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 of 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."

Press Release #3

Marelli Wins 2025 Automotive News PACEpilot Award for its Fully Active Electromechanical Suspension

Marelli received a **2025 Automotive News PACEpilot Award** for its **Fully Active Electromechanical Suspension**, during a ceremony held on April 15th in Detroit, MI, USA. This award honors innovations by automotive suppliers that have not yet been commercialized but have the potential to revolutionize the future of mobility. The technology is based on an electromechanical system that actively manages the vertical dynamics of a vehicle's suspension in a new way, representing a cutting-edge alternative to traditional shock absorber solutions. Benefits include enhanced vehicle safety, improved performance and comfort, and high efficiency.

The system autonomously defines the best behavior of each vehicle's suspension, neutralizing vibration and vehicle body movements. It consists of four electronically controlled actuators which modulate each wheel's suspension and damping parameters in real-time to provide optimal handling and ride comfort balance. Information is processed in only 5 milliseconds to determine, through a smart algorithm, the actions required under different conditions. Thus, the system actively corrects and adapts to road irregularities and driving situations, ensuring stability and comfort, with a smooth "magic carpet" experience. This helps reduce motion sickness, especially during activities like reading or using a laptop, which are expected to become more common with the rise of autonomous driving.

Each of the four actuators is composed of a brushless motor and a high ratio reduction gear, that connects to the suspension arm, with the ability to actively move the suspension. The motors are controlled by dedicated inverters, which receive the stroke target from a central unit hosting the vehicle dynamics software. This advanced software calculates the most suitable target action for each actuator based on the information collected from sensors (accelerometers and stroke sensors) that are mounted on the suspension, as well as from other electronically controlled systems installed in the car.

The system is entirely oil-free and designed for energy harvesting and electric power recovery, achieving up to 80% energy efficiency compared to passive or semi-active systems. Therefore, it can provide all functionality at almost zero "energy cost" for the vehicle. The technology, which is adaptable to various vehicle architectures, has reduced volume and weight, allowing more flexibility for carmakers in design. It also simplifies manufacturing processes, increasing time to market.

"It is with great pleasure and a touch of pride that I accept the highly coveted PACE Pilot award," stated Antonio Ferrara, President of Marelli's Ride Dynamics business. "This award acknowledges our revolutionary fully active electromechanical suspension technology and is a testament to our commitment to leading the rapid evolution of vehicle dynamics. We are proud to be an innovation partner for our customers around the world, thanks to our cutting-edge technological vision, which aims to enhance comfort and safety for high-end, hybrid, electric, and autonomous vehicles."

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.