



**Press Release**

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## **Marelli at CES 2024 Technology Preview: Software-Defined Interior**

*The software-defined interior experience is built on Marelli's zonal architecture where fixed, analog interfaces are replaced by displays where content can evolve over time*

Marelli, a leading mobility technology supplier to the automotive sector, will feature its **Software-Defined Interior** experience at **CES 2024**. Built on the company's centralized architecture, the experience is an evolution of the company's digital cockpit. It comprises a Central Computing Unit powered by the latest generation Snapdragon® Cockpit Platform and supports up to four Zone Control Units (ZCUs). The interior incorporates digital displays in place of analog interfaces, with content that can be personalized by the vehicle owner, leveraging artificial intelligence (AI). Marelli will showcase its latest technologies, under the theme "**Design-Led Innovation**," in Las Vegas, NV, January 9-11, 2024, at the Wynn Hotel, Latour Ballroom 5-6.

Marelli's **Software-Defined Interior** supports several next-generation display technologies, including the next-generation HorizonView, Marelli's award-winning pillar-to-pillar display that boasts improved brightness and contrast compared to the previous generation, and a 12" hidden display that seamlessly blends into the cabin.

Marelli's **Software-Defined Interior** includes one of the first automotive applications of an organic light-emitting diode (OLED) display, a movable display developed by Marelli with the support of BOE, a global leader in display technologies, and of its subsidiary BOE Varitronix Limited. This product represents another step forward in the long-standing collaboration between the two companies and lays the groundwork for further joint innovations.

A holographic display hosts Marelli's Virtual Assistant, an advanced human-machine interface that acts as an in-vehicle co-pilot, creating a unique driving experience and transforming the interaction between the car and its occupants.

The interior leverages Marelli's persona solution for a tailor-made user experience. The driver can easily create a persona profile to define car settings – including seat position, temperature, ambient lighting, music preferences, and ground illumination; the persona profile is stored in the cloud and seamlessly transitions across different vehicles, ensuring a consistent personalized experience regardless of the vehicle.

Marelli's **Software-Defined Interior** also features Marelli's context-aware mobility experience (CAMEX) solution, powered by AI, which enables an unparalleled interaction with the vehicle through the analysis



of the entire environment, both within and around the car. Leveraging Eyeris' world leading in-cabin monocular 3D sensing AI, including depth-aware driver monitoring system (DMS) and occupant monitoring system (OMS), CAMEX analyzes users' face, body and hands in three-dimensional space to understand complex behaviors and discern subtle moods, adapting vehicle settings and functionalities accordingly, as well as prompting interactions with the Virtual Assistant. The vehicle's external environment also assumes an active role in shaping the driving experience, opening a world of possibilities, from adjusting the A/C to cool down the driver according to their taste on a warm summer day, to suggesting a detour for a pit stop at their favorite restaurant.

Marelli's ambient lighting solution offers high flexibility and multiple combinations of colors, intensity levels, and cabin areas to adapt to user preferences, also in combination with decorative and smart surfaces. Particularly in combination with Marelli's CAMEX, this becomes a powerful feature for occupant-vehicle interactions.

The interior seamlessly integrates Marelli's **software-defined audio** platform, powered by the company's centralized architecture. This innovative approach decouples the audio amplifier into the ZCU's enabling a more flexible and efficient audio system. With the ability to drive up to 16 speakers, the system delivers exceptional sound quality and supports a wide range of audio customization options. Users will be able to personalize their listening experience by selecting from a variety of specialized audio "flavors" developed by industry-leading audio companies.

Marelli's new **sound zoning** will allow the driver to transform the car into their own personal conference room. An optimized background noise cancellation system will effectively isolate the speaker's voice from any background noise, including music being played, allowing for clear and uninterrupted on-speaker calls even with passengers not participating in the call.

The customization of the user journey continues in the cloud, with Sibros' Deep Logger service and Big Data analytics. Vehicle technical data is extracted and analyzed, enabling services such as predictive maintenance, early issue detection or remote troubleshooting. Users can also trust that their vehicle software will always be up-to-date thanks to Sibros' Deep Updater which provides automatic and vehicle wide over-the-air updates.

### **About Marelli**

Marelli is a leading 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 50,000 employees worldwide, the Marelli footprint includes 170 facilities and R&D centers across Asia, the Americas, Europe, and Africa.