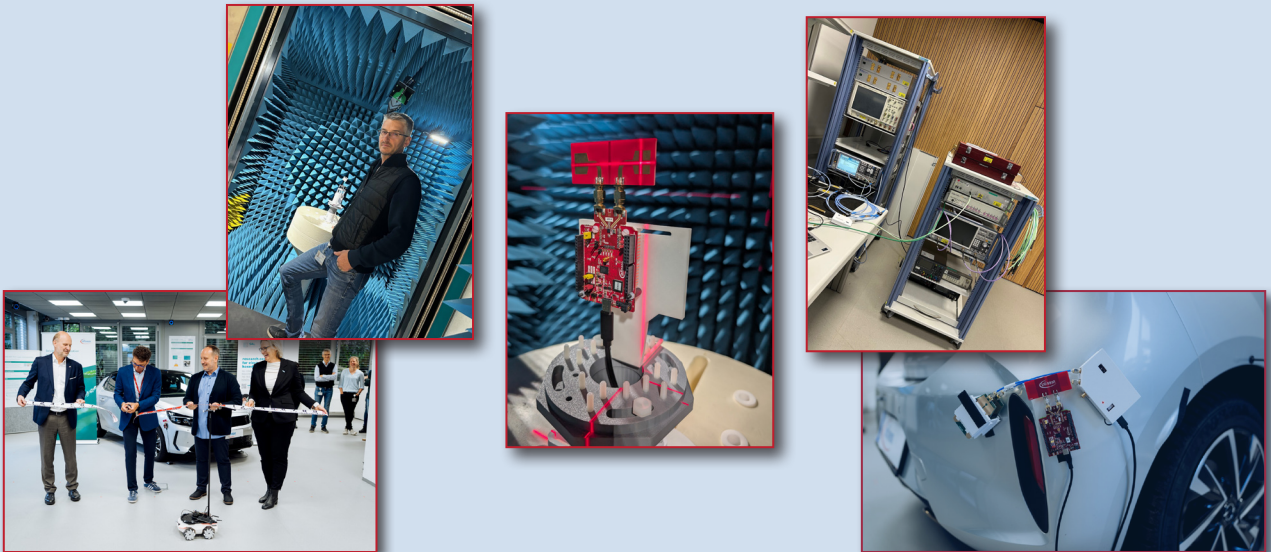


# FAB S and LAB S

## Infinion CSS: New UWB Lab Drives Intelligence at the Edge



Infinion Technologies is a global semiconductor company focused on making life easier, safer and greener, as well as shaping worldwide digital transformation. Infinion has four divisions, including Automotive, Green Industrial Power, Power and Sensory Systems and Connected Secure Systems (CSS). The CSS division focuses on providing holistic solutions to deliver low-power computing, smart connectivity and built-in security.

One of the emerging enabling technologies for this mission is ultra-wideband (UWB). Infinion CSS recently made several strategic moves to support the development and testing of UWB. These steps were the acquisition of the Swiss company 3db Access, participation in and driving of the worldwide UWB standards, strategic development setup in the organization and the setup of a dedicated UWB application lab. 3db Access was a pioneer of UWB highly integrated transceivers with a focus on secured and low-power UWB ranging for car access systems, and Infinion acquired them in 2023 to learn from and build upon their expertise. The acquisition was driven by Infinion's recognition of the growing importance of UWB technology, which offers precise localization, sensing, secured communication and high speed data transfer, making it an attractive technology for applications that require high accuracy and reliability. The creation of the Infinion UWB Application Lab is the result of close collaboration between experts from Infinion and Silicon Austria Labs (SAL). By pooling expertise and working together, the teams fostered knowledge sharing and joint innovation, turning the vision of the lab into reality.

Infinion plans to leverage UWB technology to advance solutions in several key industries, including automotive and mobility, IoT and smart devices, tap-free payment and

public transportation and industrial applications. UWB will power and ease secured keyless car access in combination with near-field communication and Bluetooth Low Energy (BLE) smartphones, wearables and key fobs, as well as address new applications such as child presence detection. UWB-enabled keyless access will also find its way into homes, powering smart door locks and doorbells. Additionally, UWB will support untracked (indoor) navigation for malls, car parks or events and provide spatial awareness for smart home automation. It will add convenience to several payment-related use cases, such as public transport and retail, without compromising security. Finally, UWB will enable precise localization for robotics, asset tracking, logistics and warehouse management.

The new Infinion UWB Application Lab, located in Graz, Austria, is equipped with state-of-the-art infrastructure and tools, including motion-capture systems, an antenna chamber, autonomous robots and wireless control technologies, designed to enable flexible testing and ensure precise and reproducible test environments. The UWB lab supports the Infinion vision of driving decarbonization and digitalization together with customers and the ecosystem. It helps to explore and optimize the UWB technology for its target applications, in combination with other technologies and in different form factors. It is an important milestone to move from product offering to system understanding to accelerate development and shorten time-to-market.

Infinion continues to serve the industry through state-of-the-art design, test and commercialization. Infinion, through its new UWB Application Lab, is dedicated to advancing UWB technology to further the automotive, IoT, public transportation and industrial applications industries.

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