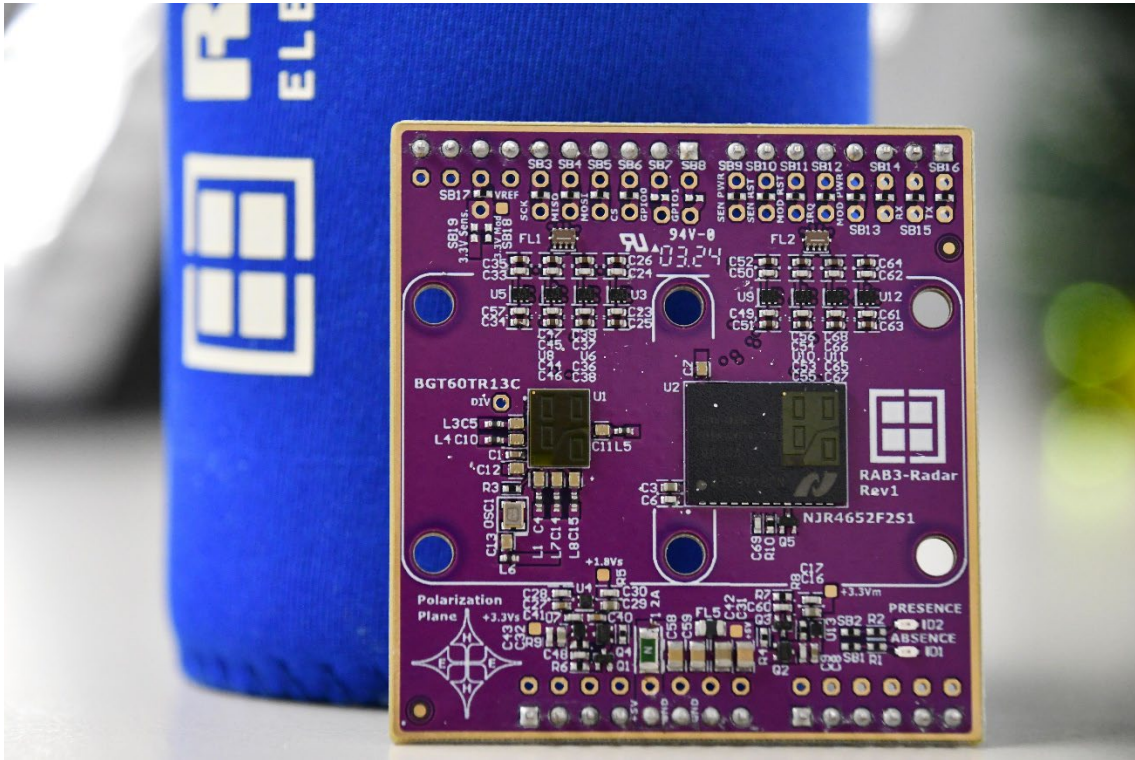


PRESS RELEASE

New Adapter Board RAB3 from Rutronik System Solutions for radar-based applications in distance measurement and people detection



Innovative hardware tool allows cost-effective verification of radar-based applications.

Ispringen, May 14, 2024 – Reliable solutions for distance measurement as well as people and surface detection play a key role in IoT applications. Here, there is a strong demand for smaller and lower power radars. With the RAB3, the experts from Rutronik System Solutions are expanding their board family with an Adapter Board to test the use of a fully integrated module as well as the possibility of a discrete development. By accelerating the pre-development phase and reducing costs, the RAB3 helps to bring radar-based applications to market faster.

IoT control applications have become a trend and with it the demand for sensing devices to collect information. Here radar sensing is highly robust and stable with respect to external conditions such as temperature changes and ambient light. "Furthermore, radar detects motion, but does not use the actual images, thus providing a real privacy benefit. With our RAB3, you benefit from a development environment to test compact and lower power radar applications," notes Stephan Menze, Head of Global Innovation Management at Rutronik.

State-of-the-art components for the best result

The RAB3 features high-performance components. The Nisshinbo 60 GHz Smart Sensor Micro-Module offers a non-contact and highly accurate measurement solution. Radar sensing at 60 GHz is a non-contact and highly accurate measurement solution. This is beneficial for realizing applications for distance measurement or people counting with the distance, angle, and state detection sensor using 60 GHz band millimeter wave. With the Infineon XENSIV™ 60 GHz Radar Sensor, a discrete radar IC

complements the latest radar technology provided with the RAB3 to work on your application. Thanks to its small form factor and low power consumption, this 60GHz radar sensor comes with one transmitting and three receiving antennas. The L-shaped antenna can be used for array, horizontal, and vertical angular measurement. This enables advanced radar sensing.

The modular concept enables a wide range of development projects

Thanks to the Arduino interface, the RAB3 is easy to combine with all other Base Boards and Adapter Boards from Rutronik System Solutions. The modular concept opens up various development approaches that you can implement quickly, cost-effectively, and simply, but in a technically sophisticated way. By combining the RAB3 with the Base Board RDK3, it is possible to implement both detection without privacy issues and also in badly lit and dark surroundings and localized use via Bluetooth® Low Energy, which is sufficient for some applications such as people detection and presence detection in factories, conference and exhibitions halls, shopping malls or similar. It is also possible, for example, to connect it to the Text To Speech Adapter Board, which is based on Epson core hardware and software. This second Adapter Board makes it then possible to use the voice output to communicate that a maximum of people are in a room or hall. With the Text To Speech Adapter Board up to twelve languages can be realized as voice output.

Get to know the RAB3 at the Rutronik Booth 659 (Hall 7) at PCIM Europe 2024 in Nuremberg.

Further information about the Adapter Board RAB3 and the application example from Rutronik System Solutions is available at www.rutronik.com.

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ABOUT RUTRONIK

Rutronik Elektronische Bauelemente GmbH was founded in 1973 and for more than five decades the independent family-owned company based in Ispringen (Germany) stands for sustainable growth with a focus on high-growth future markets. In the fiscal year 2023, its around 1,900 employees generated sales of 1.24 billion euros, serving more than 40,000 customers.

With more than 80 offices worldwide and logistics centers in Austin (Texas), Shanghai, Singapore, and Hong Kong, Rutronik ensures comprehensive customer support in Europe, Asia, and North America. The company focuses on high-growth future markets that will shape the world of electronics tomorrow. These are Advanced Materials, Advanced Measurement, Processing & Analytics, Advanced Robotics, Automation, Biotechnology, Energy & Power, Future Mobility, IIoT & Internet of Everything, Industry 4.0, Medical & Healthcare, and Transportation, Logistics & Supply Chain.

To serve customers in these future markets, the RUTRONIK AUTOMOTIVE, RUTRONIK EMBEDDED, RUTRONIK IT ELECTRONICS, RUTRONIK POWER, RUTRONIK SMART, and RUTRONIK SYSTEM SOLUTIONS initiatives bundle expertise, specific product portfolios, and consultancy support. In this regard, Rutronik relies on customized solutions that are tailored to the respective needs. The services range from competent technical support in product development and Design-Ins, through the diverse product portfolio of leading manufacturers, to the company's software and hardware solutions with partly patented Rutronik IP.

Customized logistics systems, reliable supply chain management, and logistics centers worldwide ensure on-time delivery. The Rutronik24 e-commerce platform completes Rutronik's range of services.

Further information is available at www.rutronik.com. The new [corporate film](#) also provides exclusive insights into the history and development of Rutronik.

