

Product Release Notification

PRN # 12A-2025

December 16th, 2025

New Product Details

Ezurio Part Number	Description	Suggested Initial Stocking Package
453-00224-K2	Development Kit, BL54L15μ (Nordic nRF54L15), RF Trace Pin – 2 ANT Channel Sounding	10

Description of New Product

Ezurio partnered with **Metirionic**, specialists in advanced signal processing algorithms, optimization, and engineering services to create a cutting-edge Bluetooth® Channel Sounding solution, pre-tuned and paired with Metirionic’s Advanced Ranging Stack (**MARS**) for the ultimate accuracy and reliability.

Bluetooth **Channel Sounding** is a feature introduced by the Bluetooth Special Interest Group (SIG) to enable precise distance and location measurements between Bluetooth devices. Instead of relying on signal strength (RSSI) —which can be inaccurate—channel sounding uses advanced physical-layer measurements, such as phase (**PBR**), frequency characteristics, and reflection time (**RTT**) of multiple transmitted tones to calculate the distance between devices. This allows Bluetooth systems to achieve much more accurate positioning, supporting new applications in asset tracking, access control, and spatial awareness.

MARS significantly improves the signal processing of PBR and RTT channel sounding methods, using the full Channel Impulse Response (CIR). It provides **high accuracy** with **minimal hardware** and the **lowest power consumption**, even in challenging and reflective environments.

Using a **two-antenna solution** instead of a single antenna can significantly improve Bluetooth Channel Sounding performance. The diversity offered by multiple antennas further helps reduce the impact of signal fading and multipath reflections. This results in more precise ranging, improved direction finding, and overall stronger system performance compared with a single-antenna design. Our dual-antenna solution with MARS provides up to **2x the accuracy** of alternative single-antenna solutions.

Datasheet and Product Image

Product brief and image can be directly downloaded from this link: <https://www.ezurio.com/partner-portal?product=21054>

Pricing and Export Classifications:

Pricing for the DVK is provided in the supporting Distribution & Catalog pricelists provided alongside this PRN. The pricelists also include all ECCN and HTS codes required.

New Product Availability

Ezurio is taking orders now for this SKU and can ship parts immediately from our Cedarburg, USA facility.

Contact Information

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