

Quectel and MikroElektronika Announce LC29H Series RTK Click Boards to Achieve cm-accurate Positioning for Mass-market IoT Devices

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BERLIN--(BUSINESS WIRE)-- Quectel Wireless Solutions, a global IoT solutions provider, and MikroElektronika (MIKROE) today announced the release of the LC29H series RTK (real-time kinematic) Click Boards™.

Quectel and MikroElektronika announce LC29H series RTK click boards to achieve cm-accurate positioning for mass-market IoT devices (Photo: Business Wire)

The **LC29H** is a series of dual-band, multi-constellation GNSS modules that support the

concurrent reception of global GNSS constellations including GPS, BDS, GLONASS and Galileo, delivering a substantial reduction in multipath interference within dense urban canyons and a remarkable improvement in positioning accuracy.

The Quectel LC29H series of GNSS modules has been designed to meet consumer mass-market requirements and enables high-precision, small form factor and low-cost devices. The modules are based on the latest L1/L5 receiver and compared to existing L1/L2 receivers, have equivalent accuracy performance but achieve 70% less power consumption and enable solutions to be 50% smaller.

The **GNSS RTK 3 Click™** version features Quectel LC29HEAMD dual band (L1+L5) module. It can provide MSM4 or MSM7 RTK corrections and can be combined with the Quectel YEGM011AA Geodetic Antenna as a base station. It can also be used as a rover and can be combined with the high performance Quectel YB0017AA mobile antenna to provide centimeter-level accuracy. The combination of two boards and associated antennas can be used to facilitate a very cost-effective RTK base and rover pair with out-of-the-box centimeter-level accuracy.

"We're thrilled that MIKROE has picked our new LC29H series for their new GNSS Click boards products," commented Norbert Muhrer, President and CSO, Quectel Wireless Solutions. "MIKROE is known for providing best-in-class click boards, documentation, and development tools, helping engineers and OEMs to evaluate ideas quickly and effortlessly and to be able to get their new innovative products into production quickly."

"MIKROE have collaborated with Quectel developing many peripheral add-on Click boards™ carrying GNSS, LTE, GSM modules. The result of our most recent cooperation is the two mikroBUS™ add-on boards for the development of RTK Rover and Base Station applications," said says Aleksandar Mitrovic, Head of Click Development Team & Click boards™ Product Marketing Manager at MIKROE. "We are very impressed with the quality of communication and level of support during development of these reference designs."

The LC29H Series is engineered to excel with dual-frequency support, culminating in exceptional accuracy. In autonomous mode, it achieves impressive accuracy values of 1 meter, while the RTK-capable variants achieve centimeter-level precision. What's more, the optional Dead Reckoning (DR) function ensures top-tier positioning performance, even in challenging scenarios characterized by weak signals or the absence of GNSS signals.

The LC29H Series incorporates advanced power management capabilities, ushering in an era of low-power GNSS sensing and positioning. This feature makes the module an ideal choice for applications where power efficiency is paramount, especially in battery-powered systems, including robotic lawn mowers, e-scooters, sport trackers, drones or handheld detectors such as metal detectors.

The Quectel LC29H series module and the MikroE GNSS RTK 3 Click will be on the Quectel stand at Intergeo, Hall 1.2, stand A1.012.

About Quectel

Quectel's passion for a smarter world drives us to accelerate IoT innovation. A highly customer-centric organization, we are a global IoT solutions provider backed by outstanding support and services. Our growing global team of 5,900 professionals sets the pace for innovation in **cellular, GNSS, Wi-Fi and Bluetooth** modules as well as **antennas** and services.

With regional offices and support across the globe, our international leadership is devoted to advancing IoT and helping build a smarter world.

For more information, please visit: www.quectel.com, [LinkedIn](#), [Facebook](#), and [X](#).

About MIKROE

MIKROE has more than 20 years of experience in the embedded design and manufacturing of high-quality development tools and over 15 years in development of compilers and IDE toolchains suitable for both beginner and professional. With 90+ employees and an in-house manufacturing facility, MIKROE offers everything required to launch and scale a new product under one roof.

Click boards™ with 1,500 different boards are the largest add-on board portfolio of standardized peripherals in the world and are compatible with more than 500 system boards on the market thanks to the mikroBUS™ socket. Their small form factor and controller independence make them suitable for evaluating specific technology or rapidly prototyping your end applications. Having verified reference designs accelerates proof of concept time and shortens time to market for your final design.

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