Low Power Asset Tag from onsemi Brings Unmatched Five-Year Battery Life to Industrial Asset Management

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Bluetooth® Low Energy technology enabled design platform offers Quuppa® Real Time Localization Services (RTLS)

PHOENIX--(BUSINESS WIRE)-- **onsemi** (Nasdaq: ON), a leader in intelligent power and sensing technologies, unveiled a new system solution that overcomes the main challenges associated with developing asset tracking tags. Battery life has been a major obstacle to asset tag adoption, particularly within industrial sectors where reducing maintenance efforts and associated costs are a primary concern. The RSL10 Asset Tag offers an unprecedented, industry-leading battery life of up to five years. Until now, the accepted battery life for asset tracking tags or beacons has been just a year or even months.

This game-changing battery life is made possible by the low power consumption of the RSL10 Bluetooth® 5 radio SoC and enhancements at the firmware level. Alongside the RSL10, the platform features a 3-axis accelerometer and environmental sensors (motion, pressure and temperature) to provide valuable data and insights into an asset's environment, condition and orientation. Each sensor is powered through a dedicated MOSFET load switch, controlled by the RSL10. This design enables the overall system power consumption to be controlled on a per-sensor basis, which decreases the total power used. Additional features of the platform include a low-cost antenna, matching circuit optimized for Bluetooth Low Energy transmissions, a multi-purpose dome switch and a 10-pin debugger that can be removed depending on the needs of the application.

The RSL10 was recently selected for use in an indoor localization beacon designed to track and monitor hospital equipment and provide actionable insight to healthcare providers. Blyott, an IoT solution provider, and Tatwah, a market leader in Bluetooth LE tags and beacons, developed the device. Blyott selected Tatwah's RSL10-based beacons because of their small form-factor, ultra-low-power capabilities and the ability of the IP67 tags to meet the stringent sterilization requirements.

"**onsemi** provided us with an ideal hardware platform to develop Bluetooth-based RTLS solutions," said Gery Pollett, CEO and co-founder of Blyott. "The RSL10 allowed us to meet the challenging needs of the healthcare industry. We were particularly impressed by the energy efficiency of the RSL10 radio."

The RSL10 Asset Tag is available with a comprehensive suite of development tools that include multi-protocol wireless support for Bluetooth® Low-Energy connectivity and the Quuppa Intelligent Locating System™ Real Time Localization Services (RTLS)Within the CMSIS-Pack, included with the evaluation board, **onsemi** has developed a custom application that demonstrates the ultra-low-power features and capabilities of the platform in an asset tracking use-case.

"The next generation of RSL10-powered Bluetooth LE tags will allow Quuppa partners to leverage highly accurate, sensor-enriched positioning data with unprecedented battery lifetime. This enables use-cases that haven't been possible before due to the high cost of ownership," said Santtu Pulli, Senior Customer Manager at Quuppa. "Real-time asset visibility and related productivity optimization will become a key competitive advantage for companies in manufacturing, warehousing and logistics domains. This is just the beginning - the possibilities are endless!"

The RSL10 Asset Tag is available now through your local **onsemi** sales support.

Additional Resources & Documents:

Asset Management Solutions
RSL10 Asset Tag User Manual
The Battery Life of Asset Tags - Why Five Months is Too Short (Blog)
Creating Ultra-Low-Power Tags for IoT Asset Management with High-Accuracy Positioning (Blog)
Case Study: RSL10-based Beacon with Indoor Localization Tracks Essential Hospital Equipment
How IoT Asset Management Technologies are Transforming Manufacturing (Video)

About onsemi

onsemi (Nasdaq: ON) is driving disruptive innovations to help build a better future. With a focus on automotive and industrial end-markets, the company is accelerating change in megatrends such as vehicle electrification and safety, sustainable energy grids, industrial automation, and 5G and cloud infrastructure. With a highly differentiated and innovative product portfolio, **onsemi** creates intelligent power and sensing technologies that solve the world's most complex challenges and leads the way in creating a safer, cleaner and smarter world.

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