Press Release ***For Immediate Release***

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Vubiq Networks Achieves Groundbreaking Milestone: Empirical Proof of its Revolutionary Chipless RFID Hyperimaging Technology

Industry-first RFID solution uses millimeter wave polarization and phase detection for a ten-fold increase in chipless RFID data tag bit density

IRVINE, CA, October 1, 2024 – Vubiq Networks, Inc., the innovation leader in chipless radio frequency identification (RFID) technology, today announced a pivotal breakthrough by successfully achieving real-world, empirical verification of its patented millimeter wave RFID technology incorporating polarization and phase detection.

The company's chipless RFID technology provides a ten-fold increase in RFID data tag bit density compared to other chipless solutions. While competing resonance-based chipless RFID solutions can only achieve bit densities on the order of 10 bits per square centimeter, Vubiq Networks' unique polarimetric synthetic aperture radar (POLSAR) hyperimaging solution uses polarization and phase detection to achieve bit densities on the order of 100 bits per square centimeter.

"We have now fully validated the technology claims of our extensive RFID hyperimaging patent portfolio," said Mike Pettus, Founder and CTO of Vubiq Networks. "Our groundbreaking technology leverages the power of natural antenna physics on an ultra-small scale to create revolutionary chipless RFID data tags. We've proven that millimeter wave polarization and phase detection can not only retrieve data from chipless RFID tags, but also precisely pinpoint their three-dimensional physical location. This is a game-changer for the RFID market, slashing costs, increasing performance, and delivering features unmatched by existing alternatives."

The RFID pharmaceutical market alone is forecasted to expand from $5.5 billion in 2024 to over $16 billion by 2034. A real-world example of the benefits of RFID is retail giant Walmart, which adopted RFID technology in 2003 and is estimated to save over $8 billion annually in related expenses.

Unmatched precision and cost efficiency in RFID

By utilizing advanced POLSAR hyperimaging technology, Vubiq Networks' novel approach overcomes the biggest obstacle in RFID adoption: the cost of the tags themselves. With the new technology, the cost per tag is reduced to below a penny, with the ability to locally provision RFID tags using a simple ink jet printer. Unlike other RFID systems, Vubiq Networks' solution eliminates tag collision issues, enabling the simultaneous reading and location detection of multiple tags in real time.

Expanded use cases and limitless potential

"Empirical data now demonstrates that our technology can simultaneously locate and identify thousands of tags, even through materials such as pill bottles, envelopes, and cardboard boxes," said John Dilworth, CEO of Vubiq Networks. "This removes the need to unpack and individually scan each item, creating enormous potential for efficiency improvements in industries like logistics, retail, and healthcare."

Looking to the future, Vubiq foresees widespread use of smartphones as handheld readers for this groundbreaking RFID technology. "With the radar capabilities already being explored by tech giants like Apple and Google, smartphones could soon become the default reader for our RFID technology, further amplifying the value of our innovation," added Dilworth.

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About Vubiq Networks

Vubiq Networks, Inc. is a privately held millimeter wave innovation company headquartered in Irvine, California. With over 16 years of experience in telecommunications and extremely high frequency (EHF) applications, the company continues to expand its global reach into cutting-edge markets such as 5G point-to-point connectivity, wireless fabric architecture, chipless RFID data tag hyperimaging, IoT smart sensors, EHF medical applications, and more.

For further information, visit www.vubiqnetworks.com. To read the company's RFID patent portfolio and view an animated demonstration of the groundbreaking technology, visit: www.vubiqnetworks.com/chipless-rfid-tag-hyperimaging.

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