Tech Industry Leaders Form the Ambient IoT Alliance, Dedicated to Developing and Promoting a Global IoT Ecosystem

Alliance commits to facilitating a global ecosystem based on next-generation, battery-free ambient IoT standards for Wi-Fi, Bluetooth, and 5G.

Founding members include Atmosic, Infineon Technologies AG, Intel, PepsiCo, Qualcomm, VusionGroup, and Wiliot.

New York, New York, February 19, 2025 – The ambient Internet of Things (IoT) has emerged as a profoundly transformative technology. Leading industry companies have joined together to form the Ambient IoT Alliance (AIoTA), a global, cross-industry coalition working to promote and scale the future ambient IoT ecosystem.

The Alliance's mission is to promote and support the development of an open, harmonized, and aligned multi-standard ecosystem. Founding members include *Atmosic, Infineon Technologies AG, Intel, PepsiCo, Qualcomm, VusionGroup, and Wiliot*, all of which are invested in the advancement of ambient IoT solutions, best practices, interoperability, and other alliance efforts.

"Ambient IoT is well aligned with Infineon's strategic focus on IoT and Energy leadership and our motto of driving digitalization and decarbonization," said Dr. Kamesh Medapalli, Senior Vice President, Connected Secure Systems, Infineon Technologies. "We are proud to shape new industry standards like ambient IoT to foster innovation to connect billions of cost-optimized IoT devices securely, while helping to save our precious planet."

Ambient IoT Links the Physical and Digital Worlds

Ambient IoT represents an evolution of IoT in which more and more everyday battery-less things will be interconnected and integrated into the world around us. Ambient IoT-enabled devices can detect location, temperature, humidity, and more, and communicate with the wireless infrastructure. A nearby mobile device — as well as wireless access points, domestic appliances, or other standard gateways — can receive the data generated by ambient IoT-enabled devices (if using a compatible standard).

Ambient IoT opens up the ability to leverage those IoT devices with standard wireless radios that now surround us in smart appliances, mobile devices, and wireless access points. This transition enables a large-scale deployment of supply chains, retail channels, and healthcare delivery services using ambient IoT technologies, that will have profound benefits for society.

The vast data generated by ambient IoT will also enable advanced artificial intelligence (AI) applications.

Ambient IoT and artificial intelligence are symbiotic technologies, each unlocking the promise of the other. The simultaneous rise of ambient IoT and AI will give businesses and consumers unprecedented understanding of the world around them. Alliance members are focused on the next generation of ambient IoT standards for battery-free, low-cost technologies to connect products and assets, which can also improve AI services in the cloud.

For ambient IoT users, the business benefits are massive. Ambient IoT represents the next great data platform for leveraging AI and realizing the tremendous ROI promised by AI solutions. It forms the basis of more efficient supply chains, eliminating operational cost and waste while opening the door to new, enriched customer experiences.

Working Together to Further the Power of Ambient IoT

The AIoTA is an open industry group bringing together companies that produce or utilize IoT tags, devices, networking middleware, applications, and cloud services.

"As pioneers of ambient IoT solutions, it has been gratifying to work with other companies that share a common vision," said Wiliot CTO Alon Yehezkely. "Members of the Ambient IoT Alliance believe in the transformative potential of ambient IoT, bringing their unique perspective and technology expertise."

The AIoTA foresees rapid ecosystem growth as businesses, telcos, technology vendors, and standards bodies join to define ambient IoT technologies within global communication standards, currently under development by the IEEE (Wi-Fi), Bluetooth SIG, and 3GPP (5G Advanced).

"Ambient IoT is the key to sustainable IoT adoption," said Atmosic Co-Founder David Su. "It allows us to rearchitect wireless tracking solutions to either use very little power or harvested energy, so everything can remain connected continuously and companies can operate at maximum efficiency."

As ambient IoT becomes accepted and pervades all industries, the insight derived from advanced analytics will continue to change how businesses operate. In the meantime, for ambient IoT to reach its full potential and transform the world, it takes an alliance of companies with products and technologies that work together.

About the Ambient IoT Alliance

The Ambient IoT Alliance (AIoTA) is a cross-industry group dedicated to facilitating and supporting development of an open, harmonized, multi-standard ecosystem for ambient IoT manufacturers, suppliers, integrators, operators, users, and customers. It is not intended to replace standardization activities in other organizations, but may contribute documentation, support, use cases, and more while at the same time advocating, promoting, and increasing awareness of ambient IoT standards, solutions, and interoperability. Founding members include *Atmosic, Infineon Technologies AG, Intel, PepsiCo, Qualcomm, VusionGroup, and Wiliot*.

Visit www.ambient-iot.org to learn more.

About Ambient IoT

Ambient Internet of Things (IoT) refers to a class of IoT devices primarily powered by harvesting ambient energy from radio waves, light, motion, heat, or any other viable ambient energy source. Ambient IoT is an evolution of legacy IoT and RFID technologies that promises lower costs and high scalability through support by global telecommunications standards, including Bluetooth, 5G Advanced, and 802.11bp.