# InnoPhase IoT sets a new standard in wireless connectivity with Talaria 6 SoCs



As we enter the early days of 2025, the Internet of Things (IoT) sector is already witnessing significant advancements, particularly with the release of InnoPhase IoT's latest innovations. The fabless wireless semiconductor platform company has established a strong reputation for its expertise in low-power wireless connectivity solutions. Over the past year, it has focused on enhancing battery life and developing a range of commercial and industrial products, including AI-driven Wi-Fi camera applications.

InnoPhase IoT's core objective remains clear: to "break the IoT/Wi-Fi power barrier." This ambition has driven the company to consistently innovate. As part of this trajectory, the firm's recent announcement unveiled the Talaria 6 family of System-on-Chips (SoCs), which signify a notable expansion of its Talaria platform.

This new family of SoCs has been designed to meet the evolving demands of the IoT market. Notably, they support multi-protocol wireless connectivity, which includes Wi-Fi 6, Bluetooth 6.0, Thread, and Zigbee. InnoPhase claims that these next-generation chips deliver enhanced security, energy efficiency, edge AI processing capabilities, and advanced connectivity for IoT devices.

Andrew Zignani, Senior Research Director at ABI Research, remarked on the increasing necessity for versatile Wi-Fi SoCs in the realm of consumer, commercial, and industrial IoT applications. He noted that "the diversity... increasingly requires flexible Wi-Fi SoCs that can more effectively address the power, range, latency, reliability, throughput, and security requirements of a growing number of heterogeneous IoT devices." This flexibility provided by the combination of Wi-Fi 6 with Bluetooth and 802.15.4 on a single multi-protocol SoC could pave the way for the development of innovative features and services, whilst also reducing design complexity and time to market.

For those interested in the technical specifics, the Talaria 6 family offers ultra-low power and high-performance Wi-Fi solutions that are optimised for operation in challenging environments. Key features include both single-band (2.4 GHz) and dual-band (2.4/5 GHz) options, which enhance range and connection stability, especially in settings dense with devices.

The chips also integrate Bluetooth LE 6.0 and Bluetooth Classic functionalities, enabling use cases such as localisation and music streaming. Furthermore, a high-performance Cortex-M33 processor supports edge AI applications, including predictive maintenance and sensor analytics—critical in varied industry applications. They have been certified for security at PSA Levels 2 and 3, which seeks to mitigate potential cybersecurity threats.

The Talaria 6 family targets multiple markets, including building automation, industrial IoT, healthcare, and smart home applications. These smart home applications encompass a wide array of devices, such as video cameras, doorbells, locks, and more. InnoPhase IoT's comprehensive offerings reportedly equip developers with the necessary resources, including SDKs and hardware kits, to expedite time-to-market.

Wiren Perera, President and COO of InnoPhase IoT, stated, "InnoPhase IoT has been elevating the IoT user experience by enabling the use of high bandwidth ubiquitous Wi-Fi in untethered, battery-based applications." He further highlighted that the integration of Wi-Fi 6 into their Talaria platform significantly improves throughput, range, and energy efficiency, thereby opening opportunities for new applications with noteworthy use cases.

As the IoT sector continues to converge at events like IoT Evolution Expo 2025, scheduled for February 11-13 in Fort Lauderdale, Florida, the exploration of these advancements will likely catalyse further discussions on the future landscape of IoT technology and its implications for business practices worldwide.

Source: [Noah Wire Services](https://www.noahwire.com)

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