Filo’s Tata Devices Use Bluetooth to Prevent Every Parent’s Worst Nightmare

BGM220 and BGM123 Bluetooth Module

Customer’s Needs

To build a consumer-friendly, low-power alarm system to prevent children from being accidentally left in parked cars, all while adhering to regional safety requirements.

Results

Filo created the Tata Pad and Tata Band a baby car seat alarm that uses Bluetooth to alert parents when they’re walking away from their car with a child inside.

Products

Bluetooth offered Filo the simplicity and low power to meet its development requirements, and its widespread use among consumers created an easy and familiar user experience.

Silicon Labs’ Bluetooth modules are designed for longevity and energy efficiency, featuring best-in-class RF sensitivity and flexibility. Specifically designed to speed up the development of a wide variety of IoT applications across a range of industries so innovators like Filo can get to market quickly, the modules:

- Are optimized for data transfer and exchange over short distances
- Feature easy-to-use developer tools and documentation to overcome unexpected challenges
- Provide access to state-of-the-art security technologies, including Secure Debug, Secure Boot with Root of Trust & Secure Loader
- Are ideal for applications with low power requirements and size constraints
In 2019, Italy became the first country in the European Union to make it mandatory for parents to use technology that prevents children from being left in the backseat of a car. Filo, an IoT start-up in Rome, had been helping users keep tabs on their belongings since launching its original product, the Filo Tag, in 2014. With the passage of the anti-abandonment law, the company saw an opportunity to bring its Bluetooth tracking solution to tackle this very serious challenge. On the strength of the Tag’s success, the company set out on development of the Tata Pad.

The Tata Pad works even if the phone is left in the car because the sensor can tell if the car is moving or not. After 15 minutes of no motion detected, the user receives a phone notification checking in. If this notification is ignored, the system assumes the phone has been left in the car and will notify the emergency contacts.

Bluetooth Low Energy Modules

When it came to choosing a technology, Filo had some key requirements in mind. For the networking protocol, Bluetooth was selected because of its cost efficiency compared to other networking technologies and its wide adoption in consumer applications. When selecting wireless technology, Silicon Labs’ Bluetooth solution emerged as the favorite due to its competitive price and sophisticated security features.

The result of this effort is the only baby car seat alarm with three levels of alerts, making it extremely popular with consumers and guiding Tata’s way to further innovations — including another alert device, the Tata Band, which can be used with any seatbelt in the world and attaches to the car seat’s shoulder strap. The Tata Band also leverages Silicon Labs Bluetooth modules and extends Filo’s impact beyond car seats, which have different standards depending on the country, to safety belts which are more universal.

Interested in learning how our wireless solutions can help your business?

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