SONY

iSIM Success Story

Sony and G+D Revolutionizes PASSTIME GPS Tracking with First Large-scale Commercial iSIM Deployment

Background

PassTime is a leading provider of GPS tracking products that connect vehicles and protect assets across various sectors of the automotive and tracker industries. Their innovative Encore platform, powered by advanced battery technology, allows for efficient tracking of mobile assets in a compact form factor. With a reputation for cutting-edge features and extended battery life, PassTime was preparing to launch the latest version of their Encore platform.

The Challenge

PassTime wanted to develop its next generation Encore compact GPS locator to be even more energy-efficient with added features and reduced manufacturing complexity for broadening its applicability in other market verticals.

PassTime selected G+D and Sony Semiconductor Israel for the next generation Encore product design. The companies worked closely together to design the new PassTime Encore locator, based on Sony's Altair ALT1250 chipset and G+D's proven SIM operating system.

The chipset selection was crucial for PassTime, as it needed to meet several key requirements. Firstly, it had to be compact in order to enable the production of small, lightweight, and cost-effective devices. Secondly, energy efficiency was essential to ensure optimal performance since the devices were expected to operate in the field for at least four years on the initial battery charge. Additionally, a high level of security was necessary to protect sensitive data. Reliable connectivity was a crucial factor for PassTime. They required a mature core technology with a proven track record of stability and reliability, even in a small form factor.

Solution

Sony partnered with G+D to establish themselves as the sole vendor capable of delivering a cellular IoT chipset that met the solution's requirements for multiyear battery life within the desired chassis size.

The solution met PassTime's requirements with a range of benefits.

Firstly, it optimizes hardware real estate, enabling cost savings through compact designs. This space efficiency not only results in smaller and lighter devices but also ensures cost-effectiveness due to the use of less components. Secondly, its energy efficiency plays a crucial role in enhancing the performance of IoT devices. iSIM improves the overall efficiency of IoT devices, leading to an extended operational lifespan. Additionally, iSIM revolutionizes the manufacturing process, streamlining production for faster and more efficient device creation. This optimization not only benefits manufacturing and operational processes but also enables late-stage SIM personalization, expanding the device's applicability across diverse market verticals.

One of the technology's standout features is its trusted security, achieved through the combination of isolated hardware and G+D's SIM operating system. This synergy establishes a high level of security, fostering trust among major connectivity operators and end users alike. Furthermore, iSIM champions reliability and sustainability by eliminating slots, additional housings, plastic, and associated transport routes. This approach ensures both dependable operation and a reduced environmental footprint.

Ultimately, the integration of iSIM paves the way for extensive cellular IoT deployments, offering seamless out-of-the-box connectivity for end users. Its integrated connectivity heralds a new era of scalable and hassle-free IoT operations, setting a benchmark for connectivity solutions in the industry.

RESULTS

The chipset's ultra-low power consumption allowed the Encore unit to maintain functionality for several years using only a small internal battery, setting a new standard for long-lasting device performance in the asset tracking industry.

Moreover, PassTime leveraged the ALT1250 chipset to improve the platform's overall performance, especially in colder climates. The integration of Altair's chipset ensures reliable and efficient connectivity, making the Encore 4 suitable for a wide range of applications and environments .The integration of integrated SIM (iSIM) signifies a transformative shift in the user experience, this advancement ensures a more cost-effective solution without compromising safety, enhancing affordability for users.

With integrated connectivity, the iSIM enables a seamless out-of-the-box operation for end users. This streamlined connectivity experience eliminates complexities, enabling users to instantly engage with the device without intricate setup processes, augmenting convenience and usability and also having a green product championing environmental benefits.

An important milestone in the industry was achieved through the Encore PassTime Tracker's commercial use of iSIM technology at scale. The simplified and affordable nature of iSIM paved the way for widespread adoption of IoT solutions, contributing to the overall growth of the industry.