What makes CIPURSE™ special?

Bernardo Knoblich, Head of Production Line Transport Ticketing at Infineon Technologies, about Infineon CIPURSE™ products.

1. Why should I select CIPURSE™?

CIPURSE™ provides a single, uniform platform for tickets, cards and mobile solutions. Any ISO 14443 system can be easily upgraded towards CIPURSE™ and once the infrastructure is ready, that system can then easily handle new form factors (from smartphones through wearables to multi-application cards). Moreover, CIPURSE™ delivers state-of-the-art security based on AES-128, thus eliminating the fraud problems that compromise so many existing proprietary systems. In addition, independent certification is available to support interoperability and ensure the best performance by reducing the bill of material for operators.

2. Are there implemented projects?

CIPURSE™ products from Infineon are used in a wide variety of applications. In the Russian cities of Izhevsk and Angarsk and in seven other metropolitan regions, around two million commuters benefit from easy-to-use and secure ticketing solutions built on CIPURSE™ chips from Infineon. In Europe, CIPURSE™ is being used for the "T-Mobilitat" project in Barcelona. This smart city solution connects the public transit system with privately run services and integrates amenities like bike sharing and multi-story car-parks. In the US too, an increasing number of CIPURSE-based projects are being rolled out. For example, HMS Ferries uses an account-based system for its ferry services in the state of Washington. This allows customers to buy QR code tickets on their smartphone, online or directly at the ferry terminal. Even in Brazil, CIPURSE-based cards are used to pay for taxi fares or bus rides, and in Colombia you can also "catch a bus ride" with CIPURSE™. But there are other applications for CIPURSE™ apart from public transport. Think, for example, of security-critical access control systems for office buildings. The Korean airport operator is in the process of CIPURSE-enabling its staff ID cards. And it goes without saying that we also use the CIPURSE™ technology for our ID cards at Infineon's office buildings.

3. Will CIPURSE™ replace existing project?

Service providers and transport operators want to give their customers as many options as possible when it comes to choosing an electronic method of payment. Some consumers prefer a smart card while others like to pay with their smartphone. Then there are tourists who are content with a conventional paper-based day pass. CIPURSE™ enables solutions that transform everything from pieces of paper to cards, smartphones, wristbands and tags into electronic tickets. Infineon continues to offer the widest range of CIPURSE™ products: We have chips for paper or plastic tickets, for smart cards and ticket validators, but also for smartphones and wearables such as wristbands or fitness trackers.

4. Is CIPURSE™ ready for mobile?

There are a few different ways to integrate CIPURSE into a smartphone. You can use traditional SIM cards, embedded SIMs (eSIMs) or Secure Elements embedded into smartphones. It is also possible to use HCE (Host Card Emulation) with CIPURSE as the security layer. CIPURSE certification is available regardless of the form factor. The OSPT Alliance's certificate and the "CIPURSE™ certified" seal confirm that the product complies with the CIPURSE™ standard.