

# **Product Brief**

# OPTIGA™ Trust SLS 10ERE

# Authentication solution for improved security and reduced system costs

Counterfeit products can seriously compromise the end-user experience and may harm investments made by system manufacturers and original equipment manufacturers (OEM). Therefore, it is becoming more and more important for manufacturers to safeguard the value of their brands and their investments into product technology.

## **Basic authentication solution**

OPTIGA<sup>™</sup> Trust SLS 10ERE is a robust cryptographic solution for embedded systems requiring easy-to-integrate, reliable authentication features. This security solution is designed to help system and device manufacturers safeguard the authenticity, integrity and safety of their original products. As a turnkey solution, it provides enhanced protection against aftermarket counterfeit replacements, thus helping to maintain OEM authenticity and safeguard the user experience.

## **Enhanced security**

Using strong asymmetric cryptography, the OPTIGA<sup>™</sup> Trust SLS 10ERE can easily identify unauthorized accessories, replacement parts or disposables and trigger an appropriate measure. The data authentication feature also allows to recognize unauthorized re-use or re-provisioning of original parts. In addition, OPTIGA<sup>™</sup> Trust SLS 10ERE significantly reduces system costs as it is a single-chip solution.

## Fast and easy integration

Building on Infineon's proven embedded security portfolio, OPTIGA<sup>™</sup> Trust SLS 10ERE is a turnkey solution that includes host-side software and a single-wire host interface to decrease integration effort. The size-optimized USON-3 package offers a small footprint of only 2 x 3 mm. OPTIGA<sup>™</sup> Trust SLS 10ERE thus fits into almost every device – from earplugs to industrial machines and robots.



# Key features

- Strong asymmetric cryptography with ECC 163-bit key length
- > Turnkey solution including host-side software for easy integration
- > 3.5 kbit user NVM
- > Easy-to-implement single-wire host interface
- > Unique asymmetric key pair per chip
- > Session key feature
- > Size-optimized USON-3 package (2 x 3 mm)

## Customer value

- Lower system costs due to singlechip solution
- Increased security with asymmetric cryptography and chip-individual keys
- > Easy integration thanks to full turnkey design

# Applications

- > IoT edge devices
- > Printer cartridges
- > Consumer accessories
- > Original replacement parts
- > Medical & diagnostic equipment

# OPTIGA™ Trust SLS 10ERE

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<ul> <li>Improved security</li> <li>&gt; With state-of-the-art asymmetric elliptic curve authentication principle</li> <li>&gt; Unique asymmetric key pair per chip</li> </ul>
Optimized system cost with single-chip solution
Easy integration due to full turnkey solution
Lean and easy connectivity with single wire interface
Smallest foot print using USON-3 package

### **OPTIGA™** Trust product family

OPTIGA<sup>™</sup> Trust SLS 10ERE is part of Infineon's OPTIGA<sup>™</sup> Trust family, which offers a full range of embedded security products to meet all device authentication needs. Other members of the OPTIGA<sup>™</sup> Trust family are:

- > OPTIGA<sup>™</sup> Trust P SLJ 52ACA, a Java Card-based programmable solution with extensive use case support
- > OPTIGA<sup>™</sup> Trust E SLS 32AIA, a high-end security solution to protect high-value goods and industrial applications

Infineon's OPTIGA<sup>™</sup> family is geared towards the protection of embedded systems. All products are based on secured hardware and software. In addition to OPTIGA<sup>™</sup> Trust products, the family also includes the OPTIGA<sup>™</sup> TPM (Trusted Platform Module) lineup for embedded applications that require TCG (Trusted Computing Group) compliance.

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