



## Product Brief

# OPTIGA™ Trust SLS 10ERE

## Your Authentication Solution for Improved Security and Lower System Costs

Infineon Technologies' SLS 10ERE as part of the OPTIGA™ Trust family is an authentication product that offers a robust cryptographic solution, designed to assist system manufacturers to prove the authenticity, integrity, and safety of their original products.

As a turn-key solution it provides enhanced protection against aftermarket replacements and helps to maintain authenticity to your solution. With its innovative asymmetric cryptography approach, it significantly reduces system costs while increasing the overall security of the solution.

The SLS 10ERE is designed for embedded systems which use its security and highly reliable authentication features. It protects the systems from unauthorized accessories, replacement parts or disposables. Unauthorized accessories are easily identified and, appropriate next actions can be triggered. In addition, unauthorized re-use or re-provisioning of original parts is recognized using its data authentication feature.

### Main Features

- Strong asymmetric cryptography with ECC 163bit key length
- Turn-key solution including host side software for easy integration
- 3.5kbit 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 3mm)

### Application Use Cases

- Printer Cartridges
- Accessories
  - Earphones, speakers, docking stations, game controllers, chargers
- Peripherals (adaptors, etc.)
- Original replacement parts
- Diagnostic & medical supply equipment

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## Improved security

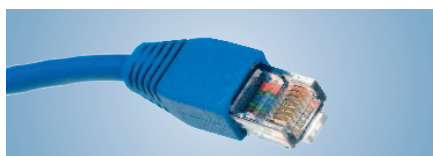
- With state of the art asymmetric elliptic curve authentication principle
- With uniqueness provided by chip individual key pair



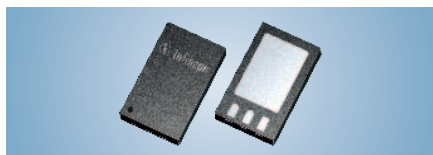
## Optimized system costs with 1 chip solution



## Easy integration due to full turn key solution



## Lean and easy connectivity with Single Wire Interface



## Smallest foot print using USON-3 package

### Embedded security systems' partner of choice

Infineon is an innovative and long-standing supplier of hardware-based security solutions. Leading the security IC and security system market for more than 15 consecutive years, embedded security suppliers can trust on a stable and innovative supplier.

Infineon is the leading manufacturer of TPM (Trusted Platform Module) for the past 10 years. This experience, know-how and market experience greatly support the fulfillment of requirements in the embedded security market and position Infineon as the global leader for security products and solutions.

With a global support network and multiple production sites, Infineon effectively serves projects around the world. Infineon is the preferred supplier for many embedded security solutions. Our continued investments in R&D propel innovation and maintain Infineon's leadership in the market.

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#### Attention please!

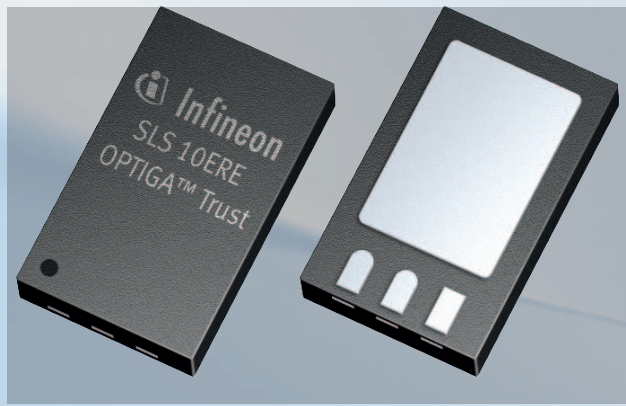
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## SLS 10ERE – Part of OPTIGA™ Trust Family

### Turn-key Solution for Authentication

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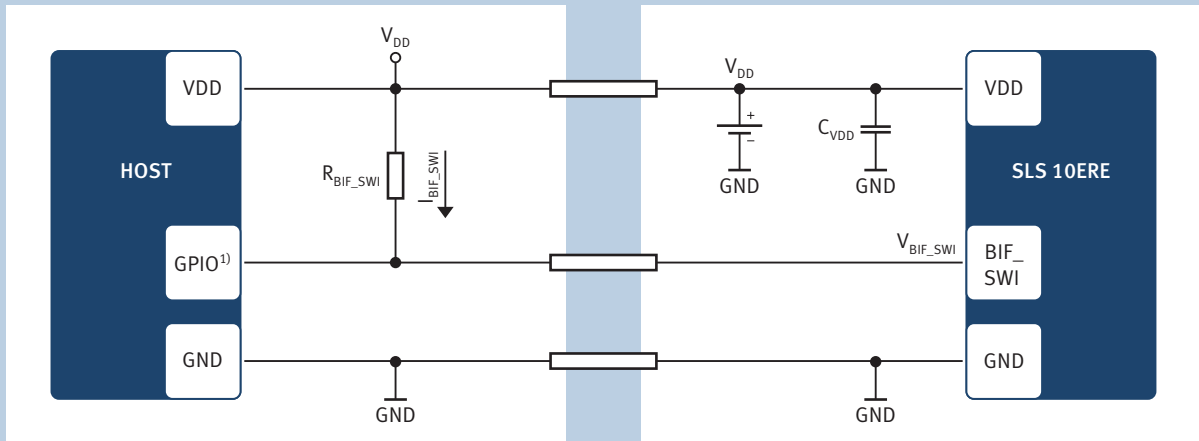
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## Turn-key Solution for Authentication

### Block Diagram



1) GPIO configured as open drain output with drive capability of > 1mA

### Product Summary

Product	User NVM	Cryptography	Interface	Turn-key	Delivery Format
SLS 10ERE	3.5kbit	ECC 163bit key length	BIF SWI, 500kbit/s	Yes, including host side software	Wafer, USON-3

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