



## **Product Brief**

## OPTIGA™ Trust B SLE95250

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 safe-guard the value of their brands and their investments into product technology.

#### **Basic authentication solution**

OPTIGA™ Trust B 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 cost efficient asymmetric cryptography, the OPTIGA™ Trust B can easily identify unauthorized batteries, accessories, replacement parts or disposables and trigger an appropriate measure. In addition, the life span counter recognizes unauthorized re-use or re-provisioning of original parts.

#### Fast and easy integration

Building on Infineon's proven embedded security portfolio, OPTIGA™ Trust B is a turnkey solution that includes host-side software and a single-wire host interface to minimize integration efforts. The size-optimized new TSNP-6 package offers a very small footprint of only 1.1 x 1.5 mm. OPTIGA™ Trust B thus fits into every device, no matter how small, from ear-plugs of flip covers to industrial machines and robots.

## Key features

- Strong cost efficient asymmetric cryptography with ECC 131-bit key length
- > OPTIGA™ Digital Certificate (ODC) with device personalization (unique key pair per chip)
- Turnkey solution including host-side software for easy integration
- > 512 bit user NVM
- > Easy-to-implement single-wire host interface
- Size-optimized TSNP-6-9 package (1.1 x 1.5 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

- > Battery authentication
- > IoT edge devices
- > Consumer accessories
- > IP & PCB design protection
- › Original replacement parts
- > Medical & diagnostic equipment

# OPTIGA™ Trust B SLE95250

Authentication solution for improved security and reduced system costs



#### Improved security

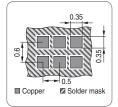
- With cost optimized asymmetric elliptic curve authentication principle
- > With uniqueness provided by chip individual key part



Lean and easy connectivity with single wire interface



Optimized system cost with 1 chip solution



Extra small foot print with TSNP-6-9 package



Easy integration due to full turn key solution

#### **OPTIGA™** Trust family of products

OPTIGA™ Trust B is part of Infineon's OPTIGA™ Trust family, which offers a full range of embedded security products to meet all device authentication needs. Other members of the OPTIGA™ Trust family are:

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

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

Published by Infineon Technologies AG 81726 Munich, Germany

© 2017 Infineon Technologies AG. All Rights Reserved.

#### Please note

THIS DOCUMENT IS FOR INFORMATION PURPOSES ONLY AND ANY INFORMATION GIVEN HEREIN SHALL IN NO EVENT BE REGARDED AS A WARRANTY, GUARANTEE OR DESCRIPTION OF ANY FUNCTIONALITY, CONDITIONS AND/OR QUALITY OF OUR PRODUCTS OR ANY SUITABILITY FOR A PARTICULAR PURPOSE. WITH REGARD TO THE TECHNICAL SPECIFICATIONS OF OUR PRODUCTS, WE KINDLY ASK YOU TO REFER TO THE RELEVANT PRODUCT DATA SHEETS PROVIDED BY US. OUR CUSTOMERS AND THE TECHNICAL DEPARTMENTS ARE REQUIRED TO EVALUATE THE SUITABILITY OF OUR PRODUCTS FOR THE INTENDED APPLICATION.

WE RESERVE THE RIGHT TO CHANGE THIS DOCUMENT AND/OR THE INFORMATION GIVEN HEREIN AT ANY TIME.

#### Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

## Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.