

## 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

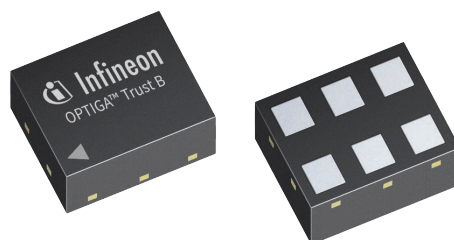
OPTIGA™ Trust B is a robust cryptographic solution for embedded systems requiring easy-to-integrate, reliable authentication features. This security solution is designed to help system and device manufacturers safeguard the authenticity, integrity and safety of their original products. As a turnkey solution, 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




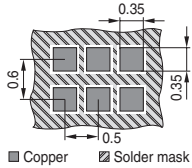
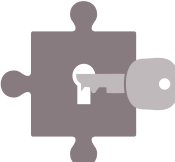
- > Lower system costs due to single-chip solution
- > Increased security with asymmetric cryptography and chip-individual keys
- > Easy integration thanks to full turn-key design

### Applications

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

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	<p><b>Improved security</b></p> <ul style="list-style-type: none"> <li>&gt; With cost optimized asymmetric elliptic curve authentication principle</li> <li>&gt; With uniqueness provided by chip individual key part</li> </ul>		<p><b>Lean and easy connectivity with single wire interface</b></p>
	<p><b>Optimized system cost with 1 chip solution</b></p>		<p><b>Extra small foot print with TSNP-6-9 package</b></p>
	<p><b>Easy integration due to full turn key solution</b></p>		

## 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 32A1A, 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.

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