

## Product Brief

# OPTIGA™ Trust E – SLS 32A1A

Easy and cost effective security solution for high value goods

As embedded systems are increasingly gaining attention of attackers, Infineon offers the OPTIGA™ Trust E as a turnkey security solution for industrial automation systems, smart homes, consumer devices or medical devices. This high-end security controller comes with full system integration support for easy and cost effective deployment of high-end security for your assets.

### Broad range of use cases and functionalities

Integrated in your specific system architecture, the OPTIGA™ Trust E supports the protection of services, business models and user experience. Based on its 1-way authentication mechanism, it uniquely identifies objects and protects PKI networks. Furthermore the OPTIGA™ Trust E will safeguard quality and safety of your products.

### Enhanced security

The OPTIGA™ Trust E comes with an advanced security controller built on Elliptic Curve Cryptography (ECC) with 256 bit and SHA-256. This new security technology greatly enhances your overall system security. Furthermore the OPTIGA™ Trust E solution features key management, certificate generation and validation as well as PKI support.

### Fast and easy integration

The turnkey set-up with full system integration and all key material preprogrammed reduces your efforts for design, integration and deployment to a minimum. As a turnkey solution, the OPTIGA™ Trust E comes with OS, embedded application and complete host side integration support. The extended temperature range of -40 to +85 °C combined with a standardized I2C interface and small USON-10 footprint will enable all your embedded projects.

As security in embedded systems is THE critical success factor, customers can trust in Infineon's profound security expertise reflected in more than 25 years of leading position and nearly 20 billion security controllers shipped worldwide.

### Key features

- > High-end security controller
- > Turnkey solution
- > Full system integration support
- > I<sup>2</sup>C interface
- > Up to 3 KBytes user memory
- > ECC 256 bit, SHA-256
- > Standard & extended temperature range (-40 °C to +85 °C)
- > USON-10 package (3 x 3 mm)

### Customer values




- > Protection of IP and data
- > Protection of business case
- > Protection of company image
- > Safeguard quality and safety

### Applications

- > Internet of things (IoT)
- > Industrial control and automation
- > Medical devices
- > Consumer electronics
- > Smart home
- > PKI networks

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 <p><b>Easy integration</b></p>	<ul style="list-style-type: none"> <li>&gt; Easy and fast system integration turnkey solution (chip + OS + app + complete host side integration support)</li> <li>&gt; Industry standard I<sup>2</sup>C interface</li> <li>&gt; Small outline of USON-10 package (3 x 3 mm)</li> <li>&gt; Industrial temperature range support: -40 °C to +85 °C</li> </ul>
 <p><b>Cost effective deployment</b></p>	<ul style="list-style-type: none"> <li>&gt; All keys and certificates already programmed in security certified production site at Infineon</li> <li>&gt; Chip individual key pairs preprogrammed</li> </ul>
 <p><b>Enhanced security for high value goods</b></p>	<ul style="list-style-type: none"> <li>&gt; High-end security controller</li> <li>&gt; Advanced asymmetric cryptography (ECC 256) in a single-chip solution</li> </ul>

The OPTIGA™ Trust E security solution from Infineon is the winner of the internationally acclaimed “SESAMES Award” competition in the category “Best IT solution”. Additionally, it was honored with the “Golden SESAMES” - a special category on occasion of the 20<sup>th</sup> anniversary of the awards.



## Product summary

Type	Description	Temperature range [°C]	Package
OPTIGA™ Trust E - SLS 32AIA020A4	Enhanced security solution	-25 ... +85	USON-10-2
OPTIGA™ Trust E - SLS 32AIA020A2	Enhanced security solution	-40 ... +85	USON-10-2
Evaluation kit	Relax kit		Board

## OPTIGA™ Trust family of products

The OPTIGA™ Trust E is part of Infineon’s OPTIGA™ Trust family representing a full range of embedded security products addressing the device authentication market. Available products besides the OPTIGA™ Trust E are

- > the OPTIGA™ Trust B SLE95250, a product for device authentication and brand protection
- > the OPTIGA™ Trust P SLJ 52ACA, a Java Card based programmable solution with extensive use case support

Infineon’s OPTIGA™ family consists of products and solutions for securing embedded systems. All products are based on secured hardware and software. In addition to the OPTIGA™ Trust products, the overall product family also includes the OPTIGA™ TPM line of products (Trusted Platform Module) addressing the embedded market requiring TCG (Trusted Computing Group) compliant products.

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