Product Brief

OPTIGA™ Trust E SLS 32AIA

Easy and cost-effective security solution for high-value goods

As embedded systems are increasingly gaining the attention of attackers, Infineon is stepping up to the growing security challenge with its OPTIGA™ Trust E SLS 32AIA as a turnkey authentication solution for industrial automation systems, smart homes, consumer devices and medical devices. This advanced security controller comes with full system integration support for easy and cost cost-effective security deployment for your assets.

Broad range of use cases and functionalities
Integrated in your specific system architecture, OPTIGA™ Trust E supports the protection of services, business models and user experience. Based on its one-way authentication mechanism, it uniquely identifies objects and protects PKI networks. Furthermore, OPTIGA™ Trust E offers protection of quality and safety of your products.
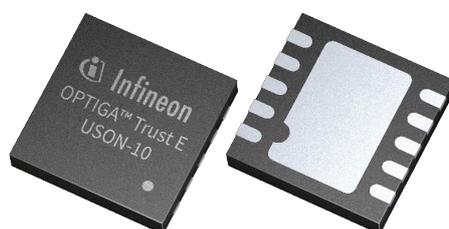
Enhanced security
OPTIGA™ Trust E comes with an advanced security controller built on elliptic curve cryptography (ECC) with 256 bit and SHA-256. This new security technology greatly enhances your overall system security. Additionally, OPTIGA™ Trust E solution features key management, certificate generation and validation, as well as PKI support.

Fast and easy integration
This turnkey solution with full system integration and preprogrammed keys and certificates reduces your efforts for design, integration and deployment to a minimum. OPTIGA™ Trust E comes with OS, embedded applications 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 provides an ideal platform for all your embedded projects.

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

Key features

› Advanced security controller
› Turnkey solution
› Full system integration support
› I²C interface
› Up to 3 KBytes user memory
› ECC 256 bit, SHA-256
› Compliant with new USB Type-C standard
› 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 cases
› Protection of company image
› Safeguarding of quality and safety

Applications

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

www.infineon.com/optiga-trust

OPTIGA™ Trust E SLS 32AIA

Easy and cost-effective security solution for high-value goods

	Easy integration	› Turnkey solution for fast and easy system integration (chip + OS + app + complete host-side integration support) › Industry standard I²C interface › Small outline with USON-10 package (3 x 3 mm) › Industrial temperature range support: -40 °C to +85 °C
	Cost-effective deployment	› All keys and certificates already programmed in security-certified production site at Infineon › Unique key pair preprogrammed per chip
	Enhanced security for high-value goods	› High-end security controller › Advanced asymmetric cryptography (ECC 256) in a single-chip solution

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 20th 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 product family

The OPTIGA™ Trust E 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 SLS 10ERE, a product for device authentication and brand protection
› 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 includes the OPTIGA™ TPM (Trusted Platform Module) lineup for embedded applications that require TCG (Trusted Computing Group) compliance

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.