SOLUTION BRIEF

Infineon eID-OS native solution for TEGRION™ SLC26

Cost-effective and simple solution for a state-of-the-art electronic ID

Infineon eID-OS is a native government ID solution based on our TEGRION™ SLC26 security controller. It combines hardware, software, and packaging, resulting in high security, low cost of ownership, as well as easy rollout and maintenance in the project country.

Application Fields
Infineon eID-OS supports all basic governmental applications such as:

- ePassport (ePP)
- national electronic ID (NeID)
- electronic driver license (eDL)
- eHealthcard (eHC)

It is a perfect fit for a broad range of standard ID document projects.

TEGRION™ SLC26
Infineon eID-OS is based on our 28 nm TEGRION™ SLC 26 security controller.

Designed to be the best fit for an extensive range of use cases for secured and connected systems, TEGRION™ security controllers are outstanding in security, efficiency, performance and ease of implementation at the same time.

TEGRION™ is based upon Infineon's revolutionary security architecture Integrity Guard, shifting the boundaries of hardware security and offer easy implementation, a rapid design-in and time to market, while being ready to support an extended product lifetime.

TEGRION™ security controllers combine a 32-bit high performance CPU based on Arm® v8-M with latest gen crypto accelerators, power-optimized 28 nm technology and smart digital security technologies.

Key features

Communication
- ISO/IEC 14443 type A
- ISO/IEC 14443 type B
- Extended APDUs
- Command Chaining
- VHBR

Compliance targets
- ICAO 9303 8th Edition
- ISO 18013
- EN419212/EN14890
- BSI EACv2
- HW: CC EAL6+, OS: CC EAL5+
- Qualification renforcée

Protocol
- BAP/EAP configurations 1 to 4
- BAC/AA/EAC/PACE/CA
- PIN/PUK authentication

Cryptography
- RSA up to 4096
- Elliptic curves up to 512 bits
- TDES and AES up to 256 bits
- SHA1 and SHA2 up to 512 bits

Hardware

TEGRION™ SLC26
- 28 nm technology
- 32-bit CPU based on Arm® v8-M
- Integrity Guard 32
- 100KB or 135KB free user memory



www.infineon.com/eID-OS

Ready-to-use, fast and highly secured

Very fast **transaction times (<0.5s)** & short **personalization times (<4s)** result in shorter queues at borders and municipalities.

Wide range of certifications available, no additional efforts by the customer.

Complete **solution 'out of the box'**.

Simplified personalization & administration

Small desktop or home personalization machine for QSCD remote administration.

Secured chain of trust is provided by our solution for secured initialization, covered by the certification.

Automatic data size detection allows **easy adoption of existing data structures**.

Low cost of ownership

Improved look & feel of data pages. **Save money & carbon emissions**: less poly-carbonate (PC) needed in manufacturing process.

Better yield, less reliability risks, simplified manufacturing flow due to S-COMCL solderless antenna connection.

Small desktop personilization allows **infrastructure cost savings**: Product does not need **physical security** around it for **remote administration**.

The following variants are available (additional combinations are possible on request):

Sales Code	Approx. Memory	Description
SLN26GLA100AB	100KB	eMRTD, contactless
SLN26GDA100BB	100KB	eDL, dual interface
SLN26GDA100DB	100KB	ePKI, dual interface
SLN26GDA135KB	135KB	eMRTD+ePKI, dual interface
SLN26GDA135XB	135KB	ISO FS, dual interface

Published by
Infineon Technologies AG
Am Campeon 1-15, 85579 Neubiberg
Germany

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Public

Date: 11/2024

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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.

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