

Product Brief

MTCOS ID on SLE 78

Flexible platform for government ID projects

MTCOS ID is a universal ID application platform based on the SLE 78 controller family from Infineon with the award winning Integrity Guard digital hardware security. Together with MTCOS professional operating system, this platform delivers highest performance, security and flexibility ready for smooth integration into a wide range of governmental infrastructure.

Application fields

MTCOS ID supports all major governmental applications such as national eID, electronic driver's licenses, eHealth and electronic social security. It perfectly adapts to the specifics of a broad range of projects.

The personalization process and available protocols offer support from eHealth and eSignature cards to eCar-registration as well as national eID projects. eDriving-license configurations are provided in compliance with to ISO/IEC 18013 and special algorithms for card to card and terminal authentication allow for additional implementation options.

Certified, long-lasting security

MTCOS ID is based on Infineon SLE 78 security controllers with Integrity Guard – the new standard for long lasting secure eGovernment. These CC EAL 5+ certified controllers feature an unrivalled full encryption of the data path. Even within the CPU, data is only processed in encrypted form. Digital error detection over the complete data path is completed by two CPUs that continuously monitor each other's flawless operation.

The operating system is certified CC EAL 4+ in the BAC, EAC and SAC ePassport configurations. It comes with a four step irreversible life cycle model, which gives maximum flexibility in document management, enabling different actors to initialize and personalize the document. Secure transactions are used in the personalization process, reducing the restrictions for the personalization facilities.

Key features

Communication

- › ISO/IEC 7816 contact based
- › ISO/IEC 14443 type A
- › ISO/IEC 14443 type B

Compliance

- › BSI TR-03110, 03105-2/3.1/3.2
- › ISO 18013 part 4

Protocols

- › BAP/EAP configurations 1 to 4
- › BAC/AA/EAC/PACE
- › CEN TC 224 14890 signature and SM
- › PIN/PUK authentication
- › Optional match-on-card

Cryptography

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

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Broad portfolio for government solutions

MTCOS ID is part of a family of products, that use MTCOS on Infineon chip card controllers and that will be supported in the future in new technologies. Available in different configurations and hardware, the family provides tailored solutions for government projects ranging from basic configurations up to highest feature requirements in various settings.

Different memory configurations from 36 KB up to 160 KB are at hands to store the required amount of personal data. On request, project specific adaptations are possible to cover specific requirements – ready for personalization to decrease handling and personalization costs.

Easy deployment & smooth integration

MTCOS ID is supported by tools for demo personalization, script execution and file system creation as well as libraries for easy integration in personalization environments. Integration into backend processes is easily possible through third party middleware that supports MTCOS. On top of the dual interface capability, both standardized contactless communication types (ISO/IEC 14443 type A and type B) are available, allowing integration with readers from all vendors.

MTCOS ID is available in all Infineon standard packages for government ID projects (dual interface, contact less and contact based) that have proven their reliability in governmental projects around the world.

Product configurations

Product	E ² PROM [KB] ¹⁾	Interfaces	Protocols/authentication
SLN 52GDAxxxBM	up to 128	CL type A and type B, CB T = 1	eDL: BAP/AA/EAP
SLN 52GCAxxxBM	up to 128	CB T = 1	
SLN 52GDAxxxDM	up to 128	CL type A and type B, CB T = 1	National eID: PIN/PUK Card2Card Card to terminal SSCD Optional MoC CEN TC 224 14890 BAC/AA/EAC/PACE
SLN 52GCAxxxDM	up to 128	CB T = 1	

1) E²PROM available in 36 KB, 80 KB & 128 KB

Infineon and MaskTech

MTCOS ID combines the strengths of two of the most prominent platforms in the government ID market worldwide: Infineon is an innovative and long-standing supplier of hardware-based secure ID solutions, leading the chip card controller market for more than 15 consecutive years. Speaking of governmental ID programs nowadays, Infineon is the only IC company that shipped controllers to the ePassport projects of the world's five biggest countries. In Europe, the leading region for new governmental applications, 75 percent of the national eID projects rely on chips from Infineon.

In addition, many high economic growth countries such as Brazil, Turkey, India, Indonesia & China trust in Infineon secure controllers for their new eID documents. In the field of healthcare, 60 percent of the smart health cards worldwide use Infineon chips.

MaskTech is an independent German embedded software supplier specialized in government applications. MaskTech has sold more than 100 Million licenses of its Common Criteria certified MTCOS operating system that are used in more than 50 countries worldwide.

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