

Product Brief

MTCOS ID 2.5 native OS on Infineon's SLE 78

High performance platform for electronic ID

Infineon offers the latest version of a native Operating System (OS) to realize various electronic ID documents easily adaptable according to your needs!

MTCOS ID 2.5 is a flexible and high performance native operating system, running on Infineon's SLE 78 with Integrity Guard the industry's most advanced security controller. SLE 78 is certified CC EAL6+ high.

MTCOS ID 2.5 is designed to serve electronic ID projects in a secure way. Its flexible file system can easily be adapted to meet specific project needs and the sophisticated life cycle model allows for secure support of distinct supply chains.

MTCOS ID 2.5 supports important international standards for secure ID cards. Examples are the ISO/IEC 7816 file system and command set, the ICAO Doc 9303 data structures with different authentication protocols, or the ISO/IEC 18013 standards for driver's licenses.

MTCOS ID 2.5 provides the state-of-the-art of cryptography and supports a variety of electronic ID applications such as:

- > **Electronic passports** or other ICAO-compliant travel documents
- > **National IDs** – ICAO-compliant documents
- > **Health care cards** supporting modern health IT infrastructures
- > **Driving licenses** – EU and internationally accepted format
- > **Residence permits** – ICAO compliant

The whole solution combining MTCOS ID 2.5 on Infineon's security controller SLE 78 is certified CC EAL5+ high.

Key features

Available applications

- > Electronic passport
- > National ID
- > Health care card
- > Driving license
- > Residence permit
- > Customized applications

Security protocols

- > BAC, SAC, EAC, AA

Cryptography

- > RSA up to 4096 bits
- > ECC up to 521 bit
- > 3DES and AES up to 256 bit
- > SHA2 up to 512 bit

Supported international standards

- > ICAO Doc 9303
- > ISO/IEC 18013

Communication interfaces

- > ISO/IEC 7816 up to 312 kbps
- > ISO/IEC 14443 Type A/B up to 848 kbps
- > ISO/IEC 14443 VHBR up to 6.8 Mbps

Certification

- > CC EAL5+ high

Electronic ID applications available with MTCOS ID 2.5 native OS on SLE 78

The new MTCOS ID 2.5 corresponds to the latest state-of-the-art to meet the requirements of evolving regulations and standards as well as to counter the continuously increasing potential of attackers.

This native operating system implementation is designed for the SLE 78 security controller in order to exploit the hardware performance at its best.

The contactless interface complies with the latest ISO 14443 standards offering VHBR (Very High Bit Rates).

MTCOS ID 2.5 provides security-evaluated state-of-the-art cryptography and supports a variety of security sensitive ID applications such as:

Electronic driver's license

MTCOS ID 2.5 secures the storage and the access of personal data with the security protocols: BAP, EAP, AA, EAC and SAC.

Electronic passport

MTCOS ID 2.5 fully supports the International Civil Aviation Organization (ICAO 9303) standards. This also can be used as a basis for biometric residence permit cards.

Product	User memory [Kb]	Features	Ordering code
SLN 52GCA160AK_M4.8	160	Contact based preloaded National eID based on eMRTD	SP001689868
SLN 52GLA160HK_MCC8	160	Contactless preloaded SAC/BAC/AA/EAC ePassport with VHBR	SP001689934
SLN 52GDA160HK_M8.8	160	Dual interface preloaded SAC/BAC/AA/EAC National eID based on eMRTD applet with VHBR	SP001689886

Infineon Technologies AG

Infineon is an innovative and long-standing supplier of hardware-based secure ID solutions, and has led the chip card controller market for 15 consecutive years. More than 150 reference projects across all government ID applications, covering 75 percent of the world's population, trust Infineon's solutions.

MaskTech GmbH

MaskTech is the leading independent provider of high security operating systems and related embedded applications. The company's solutions are used in more than 65 countries secure travel and ID documents as well as strong authentication solutions worldwide.



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