

eCode Security Application



Versatile security placed on smart card or SIM

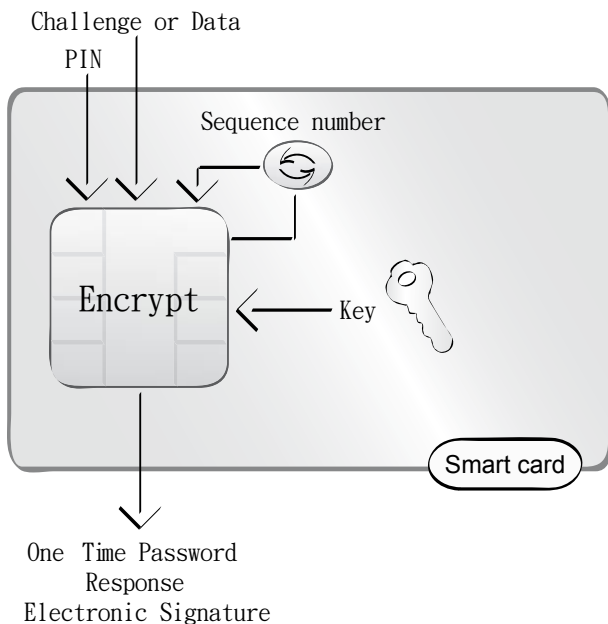
Remote authentication based on smart cards, particularly EMV cards, is a convenient and cost efficient choice for card issuers to secure online banking and shopping transactions. Todos eCode security application is placed on a smart card, or GSM SIM card, and is used to generate One Time Passwords and Electronic Signatures (Challenge/Response) for remote authentication.

implemented on a wide range of platforms

Todos eCode Security Application has been implemented on a wide range of platforms (both as applications as well as card configurations); EMV cards, Java Card, Native cards, Todos eCode Mobile (SIM Toolkit application or J2ME Midlet).

Todos eCode Security Application can be used together with Todos' range of portable smart card readers: Todos eCode Reader, Todos eCode Signature and Todos eCode Authenticator.

The One Time Passwords, Responses and Electronic Signatures are verified by Todos eCode Central System, a backend system compliant with 3-D Secure CAP (Chip Authentication Programme), MasterCard SecureCode, VISA dynamic passcode authentication, German Sm@rt TAN, Taiwanese FISC II and other standard schemes.



Todos eCode EMV can produce One Time Passwords (with or without PIN) and Challenge/Response (Electronic Signatures)

Technical Specifications

General functionality

- Generation of One Time Passwords (OTP)
- Generation of One Time Passwords with PIN (OTP w/ PIN)
- Generation of Electronic Signatures
- Double Authentication

Authentication methods

EMV cards

- Todos eCode EMV

Non EMV banking cards

- Todos eCode (Native implementation)
- Todos eCode Java Applet

SIM

- SIM Toolkit Application
- J2ME Midlet

Compliance to standards

- EMV '96, EMV 2000
- MasterCard SecureCode - 3-D Secure CAP
- VISA ICC v1.3.2 and v1.4.0
- GSM 11.14 (SIM Toolkit)
- MasterCard Java Card Applets Security Guidelines (Java Applet)
- MIDP 1.0 and 2.0 (Mobile Java Midlet)

Certifications

- MasterCard's CAST Approval "ACN0015" and VISA Type Approved (Java Applet)
- High level risk assessment by TNO