

ActiveSecurity MyEID Cards



Introduction

Our modern society relies more and more on electronic means in identifying users, or protecting sensitive information. We need more security, but at the same time, costs have to be reduced. Aventura ActiveSecurity MyEID smart cards are the answer to this challenge.

ActiveSecurity MyEID™ Cards

Aventura's MyEID smart card supports Public Key Infrastructure, and it is based on global standards like ISO7816 and PKCS#15. It can be used for various tasks requiring strong cryptography, e. g. logging securely to Windows and VPN, encrypting e-mail, authentication, and electronic signatures. MyEID cards are implemented using the latest JavaCard™ technology, which enables upgrading of the functionality by adding or removing software modules, called applets. Java™ is an open technology, supported by many of the leading smart card suppliers. Customer specific applets can be developed by Aventura or by third parties.

The MyEID card is also available as a Dual Interface version, compatible with T=CL protocol, and also emulating various Mifare™ RFID technologies.

MyEID Applet

MyEID cards come with the MyEID applet, developed by Aventura. It makes the cards suitable for tasks related to secure authentication and encryption.

The MyEID applet implements all the basic functionality of a Public Key Infrastructure (PKI) token specified in the most common international PKI standards, such as ISO 7816-15. In addition, it is possible to create a custom file structure for generic applications. The key features of MyEID card are RSA and Elliptic Curve Cryptography, symmetric encryption with AES and 3DES, advanced file system and command interface. Drivers for MyEID can be downloaded on Aventura's website. A User's Guide is available on request. MyEID contains PIV emulation. When activated, the card appears as a PIV card. MyEID native interface and the PIV interface share the same data and file structure.

Certified for Windows

MyEID card and MyEID Minidriver have been certified by Microsoft as compatible with Windows 10.



Card body

MyEID cards are available in two form factors: standard and SIM sized. The card material is PVC, making it suitable for visual personalisation using thermal transfer or dye sublimation printers. Other materials are available on request. Customer specific layouts can be delivered in offset and silk screen printing. Optional features include magnetic stripe, signature panel, holograms, security printing, etc.

Additional tools and services

Aventra has developed an extensive portfolio of software products to facilitate the use and maintenance of the MyEID card, including:

- MyEID Minidriver: a Microsoft Certified Windows Smart Card Minidriver
- MyEID Minidriver Utility: a tool for initialising and managing MyEID cards
- MyEID Editor, a versatile card manipulation tool for advanced users
- Active Process Manager, a fully configurable PKI enabled card issuing software
- ActiveCMS, a web based IAM and card management system with a configurable work flow

Separate brochures are available on most of the products above. PKCS#11 interface is available with the open source OpenSC toolkit/middleware.

Aventra can also offer professional personalisation and lettershop services. MyEID cards can be personalised both visually and electrically according to customer specifications.



Technical details

Common features

- 512 - 4096 bit RSA cryptographic operations with on card key generation
- 192 - 521 bit ECC operations with on card key generation
- Secure random number generator (FIPS 140-2)
- DES, 3DES, AES128, AES256 symmetric encryption algorithms
- SHA-256, SHA-1 and MD5 one way hash algorithms

Supported standards and specifications

- ISO/IEC 7816-1 to 7816-9, 7816-15
- PKCS#7, #11, #12, and #15
- partially PIV compatible
- FINEID S4-1 and S4-2
- Smart Card Minidriver Specification v7.07

Other features

- 80K EEPROM memory (Other sizes on request)
- Dual Interface version supports ISO/IEC 14443 T=CL and Mifare™ Flex

Platforms

- NXP JCOP 3, SmartMX2 P60 Family, JavaCard 3.0.4
- Infineon SLJ 52GCA128CR or SLJ 52GDL080CL, JavaCard™ 3.0.4

Wireless technology (optional)

- ISO 14443 A + B (Mifare® Classic, Mifare® DESFire, Sony Felica)
- ISO 15693, I.Code, Legic
- EM41xx, EM4550, Hitag
- More options upon request

Compatible 3rd party software

- Fujitsu mPollux DigiSign™
- Cross-platform smart card library OpenSC (<https://github.com/OpenSC/OpenSC/wiki>)
- Citrix™
- Cisco VPN Client
- Large number of software products that support Microsoft™ CryptoAPI, Microsoft Cryptography API: Next Generation (CNG) or PKCS#11 Token Interface.

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