



FLEXIBLE SECURITY

## SafeSign Identity Client for CrypToken

The most flexible and powerful two-factor authentication solution ever



### CrypToken MX2048-JCOP

The Marx® CrypToken® MX2048-JCOP USB token meets the needs of high volume, cost-sensitive, single- and multi-application markets such as e-business, e-government and e-banking, providing strong authentication to systems and applications and enabling encryption and digital signing of information. It opens up a wealth of opportunities in the protected environment of the smart card chip on board.

CrypTokens save private keys, passwords and digital certificates as securely as in any safe. A user's private keys can be generated directly on the USB token and never leave the token. Usage is exclusively within the token. Despite its small size, it unites the smart card as well as the card reader. You simply take the token with you from one workstation to another. The only prerequisite for use is that the PC has a USB connection. The unique metal designer case is tamper-proof, robust, and perfectly shielded

against external interception, dust and water.

### SafeSign Identity Client

To access the digital certificate, private keys and passwords stored on the CrypToken, Marx advises the use of AET's SafeSign Identity Client (IC) middleware. SafeSign IC enhances the CrypToken by enabling strong, two-factor logon authentication to all applications that support digital

## BENEFITS

### CCID compatible

Ensures maximum compatibility across platforms.

### Smart card logon support

Enables two-factor authentication/ logon to the network, client PC or application, using a CrypToken USB token.

### Application support

Enables the use of the CrypToken by any application supporting digital certificates, such as Microsoft, Adobe, Check Point, Citrix and many more.

### Management Utility

Full function management utility allows PIN/PUK changes, PIN unblock, token initialization and import of certificates.

### Standards based

SafeSign IC supports both Microsoft CryptoAPI and PKCS#11 based applications. Additional standards supported include PC/SC, Java Card, PKCS#12 and PKCS#15.

### Management of certificates and keys

SafeSign IC enables the import of digital certificates and the secure storage of externally generated keys. SafeSign IC also permits applications to initiate the key generation directly on USB tokens. In that case the key will never leave the token and thus is not vulnerable to identity theft.

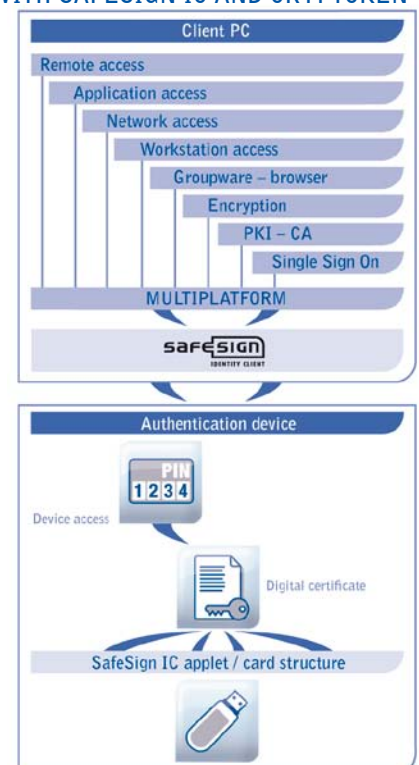
### Cost effective solution

The advantages of a smart card without the costs of a smart card reader.

### Tamper proof and robust

The small metal designer case shields against radiation, external interception, dust and water.

## OVERVIEW: STRONG AUTHENTICATION WITH SAFESIGN IC AND CRYPTOKEN





certificates, ensuring the highest security and mobility, as well as simplifying the authentication process for end users. SafeSign IC enforces two-factor security, requiring the end user to have both the USB token (something you have) and a personal Identity Number (something you know). CryptTokens are physically and logically tamper-resistant, ensuring that the end user's digital credentials can not be copied, modified or shared.

#### Smart card logon

SafeSign IC supports logon to networks and client PC's as well as applications. During the logon process, the end user inserts his/her CryptToken into the USB port. SafeSign IC then prompts the user for his/her Personal Identity Number (PIN). The user's certificate is verified, and if the certificate and the associated user account are valid, the user is authenticated and logged on to a network, client PC or (web)application.

#### Encryption and digital signing

In addition to logging on to applications, SafeSign IC also supports the use of the CryptToken for other functionality. For example, Microsoft Outlook can be configured to use the certificate on the end user's token to digitally sign email messages and en- or decrypt emails including attachments.

#### Phishing prevention

Web applications can be secured by strong certificate-based authentication. The certificate never leaves the token, preventing phishing attacks. This makes the SafeSign IC/CryptToken combination ideal for e-banking.

#### Wide range of devices

SafeSign IC supports a wide range of smart cards and USB tokens from a large variety of vendors. This ensures that you combine the use of CryptTokens with other USB tokens and smart cards using the same client software!



FLEXIBLE SECURITY



### PRODUCT SPECIFICATIONS

#### CryptToken MX2048-JCOP

**Operating system:** Windows 2000/XP/ Vista/7, MAC OS X, Linux

**Smart card chip:** NXP SmartMX

**Internal operating system:** JCOP smart card

**Memory:** 72K EEPROM capacity, write/ erase cycles: >500000, data retention time: > 20 years

**On board security algorithms:** RSA (up to 2048 bit), 3DES, AES, ECC, SHA-1

**Casing:** Metal designer case, LED (duo color green/red), eye for key chain

**Dimensions:** 13 x 8 x 35 mm, weight 9.25 g

**Certifications:** Common Criteria EAL 5+, EMV2000, CE

#### SafeSign Identity Client

**Operating system:** Windows 2000/ XP/Vista/7, Windows Server 2000/2003/2008, MAC OS X, Linux, Sun Solaris, Windows Mobile, BlackBerry

**Supported standards:** Microsoft CryptoAPI, PKCS#1, 7, 8, 11, 12, 15

**Supported applications:** SafeSign IC middleware supports all CSP or PKCS#11 compliant applications like:

- Secure remote access
- VPN
- Groupware
- Browsers
- PKI / CA
- Encryption software
- Email & file signing
- Single Sign On
- User authentication
- Remote application access
- smart card logon & session logon

Jakelijanne Suomessa:



**Secure Link**

**Secure Link Oy**  
Takkatie 14  
00370 Helsinki

Myynti: +358 45 67 44 758  
myynti@securelink.fi  
www.securelink.fi

A.E.T. Europe B.V.  
IJsselburcht 3  
NL-6825 BS Arnhem  
P.O. Box 5486  
NL-6802 EL Arnhem  
The Netherlands

Phone +31 26 365 33 50  
Support +31 26 365 35 43  
Fax +31 26 365 33 51  
Email info@aeteurope.nl

For more information see our SafeSign Identity Client datasheet at [www.aeteurope.com](http://www.aeteurope.com) or contact us

[www.aeteurope.com](http://www.aeteurope.com)