



CryptoMate Nano

Cryptographic USB Token



Advanced Card Systems Ltd.
Card & Reader Technologies

Units 2010-2013, 20th Floor
Chevalier Commercial Centre
8 Wang Hoi Road, Kowloon Bay, HK
Tel: +852-27967873 Fax: +852-27961286
info@acs.com.hk www.acs.com.hk

1. Product Overview
2. Product Features
3. Technical Specifications
4. Certifications/Compliance
5. Product Applications
6. Related Product

ACOS5T2-B (64 KB EEPROM)

Cryptographic Token



The CryptoMate Nano is the latest addition to the CryptoMate Token Series.

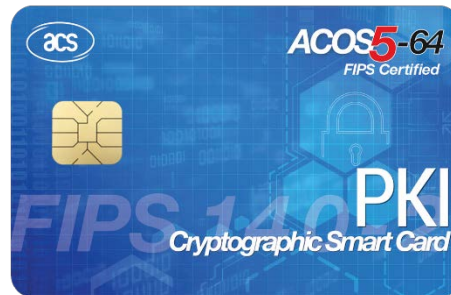
It contains the FIPS 140-2 Level 3–certified ACOS5-64 v3.00 module, making it one of the most secured and portable cryptographic USB tokens in the market.

What is CryptoMate Nano?



Smart Card Reader

+



ACOS5-64 Cryptographic
Smart Card

=



CryptoMate Nano USB Token

Physical Characteristics

Dimension:

29.25 mm (L) × 14.80 mm (W) × 10.28 mm (H)

Weight: 4.61 g



**CryptoMate Nano
USB Token**

Certifications and Compliance

- ISO 7816 Parts 1, 2, 3, 4, 8, and 9
- Common Criteria EAL5+ (Chip Level)
- X.509 V3 Certificate Storage, SSL v3
- FIPS 140-2 (US Federal Information Processing Standards) Level 3–Certified Module

Speed and Memory

- 64 KB EEPROM for Application Data
- High Speed Transmission (9,600 bps – 223,200 bps)
- Configurable ATR (Answer To Reset)
- Anti-tearing Function

Cryptographic Capabilities

- DES/3DES
- AES – 128/192/256
- RSA – up to 4,096 bits
- On-board RSA processor for key generation, signature, and encryption
- Supports SHA-1 and SHA-256

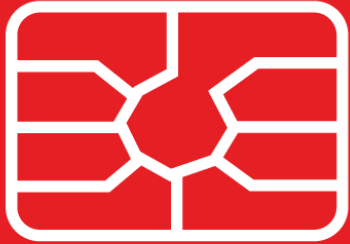
Security Functions

- Provides multi-level secured access hierarchy
- Supports Secure Message and MAC
- Supports Mutual Authentication and Session Key Generation

Category		CryptoMate Nano
Product Code		ACOS5T2-B
Communication Speed		
Contact <i>(Smart Card)</i>	9,600 bps - 223,200 bps	✓
USB Full Speed		✓
User EEPROM Memory		
User Memory		64 KB
Endurance <i>(write/erase cycle)</i>		500,000
ISO Standards		
Contact	ISO 7816 – 1/2/3	✓
	ISO 7816 – 4	✓
	ISO 7816 – 8/9	✓

Category	CryptoMate Nano
Cryptographic Capabilities	
3DES/3K3DES	✓
AES-128/192/256 bits	✓
RSA-512 to 4096 bits (in 256-bit step)	✓
SHA -1/SHA-256	✓
Secure Messaging	✓
Mutual Authentication	✓
Operating Conditions	
Temperature	0 °C – 50 °C
Humidity	Max. 90% (non-condensing)
MTBF	500,00 hrs





Product Applications



Advanced Card Systems Ltd.

Card & Reader Technologies

In what areas can we apply CryptoMate Nano?



e-Government



Digital Signature



Network Security



Encryption



Windows Logon



Email Security

In what areas can we apply CryptoMate Nano?



Company provides the token to its employees



Employees request for a digital certificate via the company website



Employee plugs CryptoMate Nano into the computer



Employee uses his/her digital certificate to sign and encrypt the email



Employee stores the digital certificate in the token



Administrator checks the credentials and provides the employee with the link to download and store the certificate in the token



In what areas can we apply CryptoMate Nano?



Citizens go to Registration Authorities to apply for a Digital Certificate



Certificate Authority provides the citizen with the digital certificate

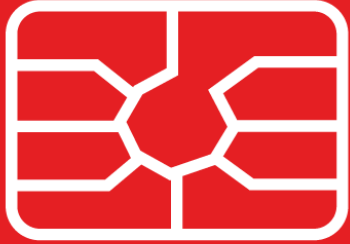


Citizen logs in to a secured website and submits the digitally signed and encrypted document to the government agency



Citizen digitally signs and encrypts his Income Tax Statement using the digital certificate stored in the token





Related Product



Advanced Card Systems Ltd.

Card & Reader Technologies

ACS provides the **ACOS5 Client Kit** to Certificate Authorities and other organizations who employ PKI solutions. It is a secure and easy-to-use software solution, ideal for managing, protecting, and using digital certificates.

ACOS5 and CryptoMate Nano securely stores all sensitive credentials and private keys. They ensure that sensitive pieces of information never leave the smart card and token, providing added security for your digital credentials.

The Client Kit contains two types of packages - Administrator Package and User Package. The Administrator Package is designed for Security Officers or Administrators in preparing the cards/tokens to be distributed for their end-users. The User Package can be distributed to end-users to manage their personal smart card/token with their digital credentials.

CryptoMate Nano supports the following operating systems:

- Windows®
 - Windows 7 and later
- MAC OS®
 - 10.9, and 10.10, 10.11, 10.12
- Linux®
 - Debian-based
 - Debian
 - Ubuntu
 - openSUSE
 - Fedora

CryptoMate Nano supports a number of security infrastructures and applications, including:

- Microsoft CryptoAPI, Microsoft® CNG and PKCS #11 Middleware
- Secure Online Certificate Generation
- Microsoft® Outlook, Windows® Mail, Microsoft® Outlook Express and Mozilla® Thunderbird® mail signing and encryption (S/MIME)
- Mozilla® Firefox®
- Internet Explorer®
- Windows® Smart Card Logon
- Microsoft® Office
- Open Office
- Adobe® Reader®

For more information, please visit the ACS website: www.acs.com.hk



Thank You!

info@acs.com.hk

www.acs.com.hk



<http://twitter.com/SmartCardReader>



<http://www.facebook.com/AdvancedCardSystems>



<http://gplus.to/advancedcardsystems>



<http://www.youtube.com/user/AdvancedCardSystems>



Advanced Card Systems Ltd.

Card & Reader Technologies