

# certgate

mobile security now!



Windows



Windows  
Mobile



Linux



BlackBerry



Symbian  
in preparation



Android  
in preparation

## certgate SmartCard microSD BEST SECURITY TOKEN FOR YOUR MOBILE DEVICE



Original size

### Your Advantage

#### certgate SmartCard microSD

- PKI support and two-factor authentication
- Perfect security for desktop and mobile applications using smartcard technology
- Authentication, signing and encryption based on a universal set of keys only stored inside the card
- Protected private key stored on-card
- Usage of low cost mobile devices (PDA, smartphone) with integrated card reader

### certgate SmartCard microSD

The growing demands for mobility require that information and applications on mobile devices are protected using strong forms of security. Financial transactions, secure internet connections to corporate or private data, as well as the data residing on mobile devices must be protected. The security provided by smartcard technology on the mobile device opens new doors to providing the highest levels of confidentiality while maintaining the simplicity for the user.

The **certgate SmartCard microSD** allows full smartcard functionality to be employed through hardware tokens in the form factor of a microSD card, common on most mobile devices. The form factors available include the microSD, as well adapters to support SD or miniSD slots and USB sticks. Signature and encryption functionality of smartcards are now applicable on mobile devices.

The **certgate SmartCard microSD** provides an efficient way to allow mobile data security for Banking, IT and PKI infrastructures on all kinds of portable devices including laptops, PDAs and smartphones. It is a perfect solution for mobile and desktop applications with the highest demands for security. The heart of the **certgate SmartCard microSD** is a tamper-resistant strong encryption (2048 bit) crypto smartcard. It includes areas for the storage of private and public keys.

**certgate SmartCard microSD** may be removed from the office PC and plugged into the laptop, PDA or smartphone without any hassle or threat to security when transferring or synchronizing data between systems. The flash memory and the crypto controller may be addressed independently from the terminal device.

Keys can be generated directly on the **certgate SmartCard microSD**, never have to leave the original system, and thus are not exposed to the risk of interception.

**certgate SmartCard microSD** provides security in all relevant scenarios by meeting the requirements of the user applications: VPN clients, desktop or PDA software for the encryption of sensitive data, FinTS/HBCI banking clients, ect., ensuring data integrity, access security, the certified user authentication, and many more. ■

## Your Benefits

- PKI support and two-factor authentication
- Fits into all of the widespread SD™ card slots used for flash memory
- Perfect security for desktop and mobile applications using smartcard technology
- Easily plugged in and out of devices and can be carried along so that one person can always authenticate, sign and encrypt based on a universal set of keys only stored inside the card
- Protected private key store on-card (it is impossible to read out private keys from the smart card and keys never have to leave the card and thus cannot be intercepted)
- Usage of low cost mobile devices (PDA, smartphone) with integrated card reader
- Can additionally be used like any other flash memory to store (sensitive) data

**certgate provides secure, mobile, flexible and economic solutions for users, increasing:**

- The availability of the services and applications
- The network security
- The cost efficiency

## Characteristics and Functions

- Smartcard usage for WindowsMobile™, BlackBerry™ and PocketLinux applications via device microSD™, miniSD™, or SD™ slot (Symbian and Android in preparation)
- Smartcard usage for Windows™/Linux desktop/notebook applications via a SD™ slot or USB-card reader/-writer or via ActiveSync / Bluetooth / WLAN directly in the mobile device microSD™, miniSD™ or SD™ slot
- Certificate, public and private key (RSA 2048 bit) upload to smartcard (8 general purpose)
- On-card secure key generation (RSA 2048 bit)
- On-card secure signature generation with private key (RSA, PKCS#1.5 padding)
- On-card secure public key encryption / private key decryption (RSA, no padding)
- On-card secure random number generator; user accessible
- Speed: RSA 2048 bit signature: approx. 0.5 sec.; RSA 2048 bit key generation: from 3 sec. up.

## Standards

- SD specification: 1.1 and microSD™ Addendum 1.1
- Smartcard chip: NXP P5CC072 smartcard controller; Common Criteria EAL5+ certificated
- On-card secure random number generator; FIPS PUB 140-2 and BSI AIS 31 compliant
- On-card RSA 2048 bit security algorithms
- Enhanced 80C51 microcontroller (Secure\_MX51/NXP)
- ISO7816 interface for APDU transfer between smartcard and SD controller
- ca. 72 kB EEPROM usable, e.g. for certificate or cardlet storage
- Smartcard operating system: JCOP™ 2.3.1 (Common Criteria EAL4+ certificated), JavaCard™ 2.2.1 and GlobalPlatform™ 2.1.1 compliant
- high resistance against SPA/DPA counter measure attacks; BSI DSZ CC 0227 compliant

**certgate GmbH**  
Merianstrasse 26  
90409 Nuremberg  
Germany

**Fon** +49 (911) 93523-0  
**Fax** +49 (911) 93523-52  
**E-Mail** info@certgate.com  
www.certgate.com