Advanced Card Systems Ltd.
Card & Reader Technologies

ACR100 SIMFlash

PC-Linked Reader with Mass Storage

A Product Presentation

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Rundown

1. Product Overview
2. Product Feature
3. Product Value
4. Product Application
5. Q & A

Product Overview

ACR100 SIMFlash – CCID & HID versions

Belongs to the PC-Linked Readers with Mass Storage Family – a line that features plug-in (SIM-sized) smart card readers with customizable memory sizes & partitions

Token-sized, USB plug-and-play SIM card reader with built-in NAND flash for secure zero-footprint applications and e-transactions (e.g. secure e-taxation involving digital signature)

Product Features

What are the Key Features of ACR100?

Plug & Play
CCID/HID compliance reduces driver installation issues

Built-in 1GB Flash Drive
Other memory sizes (from 128 MB to 4GB) are available upon request

Certifications/Compliance
ISO 7816, PC/SC, CCID, HID, MS WHQL, CE, FCC & RoHS

Supported Card Types
- Plug-in (SIM-sized) smart cards
- ISO 7816 Class A, B & C cards
- MCU cards with T=0, T=1 protocols
- Most memory cards (for CCID version only)
- Spec. 11.11-compliant GSM cards

Disk Partitioning Options
Various options for partitioning the flash drive into up to 3 areas

ACR100 SIMFlash – CCID & HID versions

Plug & Play

- USB CCID (Chip/Smart Card Interface Devices) Specification – defines communication protocol between smart card readers & PCs, leading to a simplified plug & play experience

- CCID is default in Windows Vista, and is automatically installed in Windows 2K/XP via Windows Update during 1st-time plug-in

ACR100 SIMFlash – CCID & HID versions

Plug & Play (cont'd)

- HID (Human Interface Device) – Type of computer peripheral that directly communicates with humans, either by taking input from or delivering output to them

- USB HID Class – Describes HIDs such as computer mice & keyboards
  - Brings the same plug & play convenience as when you use a mouse or keyboard that don't require any special driver for Win 2K and later OSes

ACR100 SIMFlash – CCID & HID versions

SIM Card Reader

- Accepts most common cards in telecom (GSM, CDMA, etc.), banks, governments, schools & others
- Supports ISO 7816-A,B,C cards, all MCU cards (T=0, T=1), Spec 11.11-compliant cards and common memory cards (*for CCID version only*)
- PC/SC-compliant

ACR100 SIMFlash – CCID & HID versions

SIM Card Reader (cont'd)

- Secure & reliable firmware written by smart card experts
- Comprehensive, easy-to-understand API guide & sample codes provided
- USB 1.1 Full-Speed interface
- Supports digital signature (PKI) applications (*ACS can provide SIM cards for such applications*)

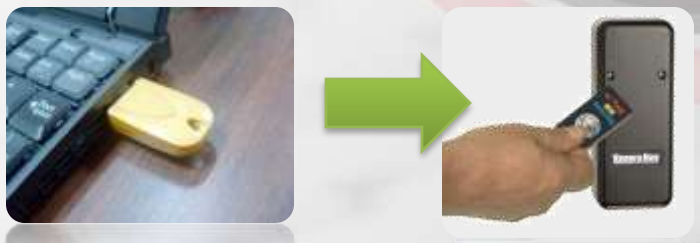
ACR100 SIMFlash – CCID & HID versions

NAND Flash

- Various options for flash memory partitioning
- Max. of 3 memory areas (Private/public, CD-ROM/auto-run & hidden)
- Can interact with SIM card to provide a higher level of application security (Smart card + PIN)
- USB 2.0 Hi-Speed interface
- Built-in 1GB flash drive (Other memory sizes from 128MB to 4GB are available upon request)
- Read = 9 Mbps; Write = 3 Mbps (Faster speeds available upon request)

Optional Product Features (Upon Request)

ACR100 SIMFlash – CCID & HID versions



- Support for combi SIM card (which has a single chip with both contact and contactless interfaces)
  - Embedded antenna coil enables combi card's contactless portion to communicate with contactless card readers

e.g. Add value to your card online by plugging device to the PC & buy through pay-by-tap in retail shops supporting contactless payments.

Optional Product Features (Upon Request)

ACR100 SIMFlash – CCID & HID versions

- Internal MIFARE contactless card to make token function as a hybrid card (which has two chips, one with a contact interface & the other with a contactless interface, that aren't interconnected)
  - Internal MIFARE can be paired with any SIM card instantly
  - Token can also be a stand-alone MIFARE card (without SIM card in place), becoming a hybrid card only when needed

e.g. Use token for both e-banking and gate access: SIM card for e-Banking & internal MIFARE physical/network access

Product Value

What are the Key Benefits of ACR100?

High Security
2-way authentication (smart card + PIN)

- Supports digital signature (PKI) applications
- Access restriction in flash drive via private and/or hidden partition(s)
- With all applications & transactions performed within the device, no user footprint is left on the computer

Autorun Program Capability
Flash partitioning allows enterprise applications (via CD-ROM partition) to be directly run from the token

Convenience
CCID/HID plug & play feature

- Transaction histories/records can be automatically saved in the flash drive for user's reference
- Disk partitioning options for handy data management

What are the Key Benefits of ACR100?

1 Device for Single Application Implemented in Both Contact & Contactless modes

Can support combi SIM card (which has 1 chip with both contact & contactless interfaces)

e.g. Add value to your card online via plugging device to the PC & buy via pay-by-tap in retail shops

1 Device for Separate Applications

- Can have an internal MIFARE contactless card, transforming the token into a hybrid card (which has individual chips for contact & contactless interfaces).
- MIFARE card can be paired with any SIM card instantly or can be stand-alone (without SIM card in place), becoming a hybrid card only when necessary

e.g. E-banking via SIM card and gate access via MIFARE card

Product Application

In what areas can we apply ACR100?

Secure Data Storage

Computer/Network Access

Digital Signature

Applications via Public Network (Cafeteria, Library, etc.)

GSM Management

Online Transactions

Thank You!!!

More information on:

http://www.acs.com.hk/acr100.php