



Advanced Card Systems Ltd.
Card & Reader Technologies



ACR100 SIMFlash

PC-Linked Reader with Mass Storage

A Product Presentation



Rundown



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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)



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.

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



GSM Management



Online Transactions



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

Thank You!!!

