



SoMo650 and Springcard CF reader/writer

Agenda

- Typical applications
- SoMo650 + SpringCard CompactFlash readers overview
- Setup procedure and QuickStart softwares (Demo)
- Case studies



Typical applications



Contactless(RFID) SpringProx-CF

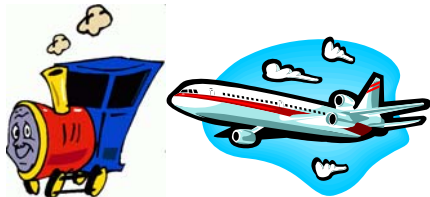
SoMo650

SpringCard CF
readers/writers



**HANDHELD TERMINAL FOR
ANY SMARTCARD SYSTEM**

E-ticketing
Loyalty Programs

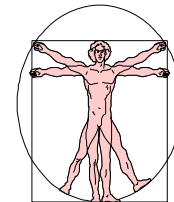


Transportation



Contact SpringCard-CF

Healthcare :
Electronic Medical Record



Authentication
and cryptographic
system/electronic
security



Electronic Purse
Virtual wallet



Membership card



Worker ID card
Student card



Customer
recognition
Loyalty



SoMo650 + SpringCard CF readers ?

OS supported by SpringCard CF readers :

- PocketPC 2002 and 2003
- Windows Mobile 2003, 5.0 and 6.0

3V power supply
provided by SoMo650

Handles **both class A
and AB** smartcards
(3V and 5V)

Contact

Select your library !

- springcard.dll
- SpringCardAPI.dll
- springcard_i2c.dll
- springcard_s9.dll
- springcard_s10.dll

standard serial
communication port



SC-CF05

ID-1 slot



SC-CF06

ID-1 slot

ID-000 slot

standard serial
communication port

Select your library !

- SpringProxAPI.dll
- springprox.dll
- SProxDesfireAPI.dll
- sprox_desfire.dll
- SProxCalypsoAPI.dll
- sprox_calypso.dll



SpringProx-CF

Compact-Flash type I



SpringProx-CFUP

Compact-Flash type II

- SpringProx-CF :
0 to 2cm
- SpringProx-CFUP :
0 to 5 cm

3V power supply
provided by SoMo650

Contactless

SpringCard-CF overview

SpringCard – CF :

- Is a **compact-Flash type I** contact smartcard reader/writer suitable for any PocketPC with standard CF interface
- Is the perfect framework to build any Pocket PC application that embeds smartcard technologies
- Is the only smartcard compact-flash reader on the market
- Is compliant with all microprocessors and memory smartcards, according to Gemcore chipset

Characteristics

- **1 standard ISO ID-1 slot** (« credit card ») handling:
 - ISO 7816 (1, 2, 3 and 4)
 - **T=0, T=1, S=8, S=9, S=10 protocols**
 - Card baud rate up to 115 kbps
- **1 micro SIM/SAM slot*** (ISO ID-000 format) handling :
 - ISO 7816 (3 and 4)
 - T=0 and T=1 protocols
 - Card baud rate up to 115 kbps

GemCore
chipset

** Only on SC-CF06*



ID-1 format



ID-000 format

SC-CF05
ID-1 slot



SC-CF06
ID-1 slot+ ID-000 slot



SpringProx-CF/UP overview

SpringProx – CF/UP :

- Is a **compact-Flash type I/II** contactless reader/writer suitable for any PocketPC with standard CF interface
- Is the perfect framework to build any Pocket PC application that embeds contactless technologies
- Handles any ISO 14443 (type A, B) compliant smartcards!

Supported contactless cards

- NXP (*Philips*) : ICODE1, ICODE-SLI, Mifare Classic and UltraLight, Desfire, ProX, SmartMX
- Texas Instrument : TagIT
- ST MicroElectronics : SR176, SRiX, etc
- ASK CTS256B and CTS512B
- HID iClass and Inside PicoTag (*only serial number*)
- MultOS or JavaCard T=CL cards
- Calypso transportation cards
- NFC mobile phones or other NFC-capable objects (*tag emulation mode*)



SpringProx-CF
Compact-Flash type I



SpringProx-CFUP
Compact-Flash type II

Setup procedure



Procedure

- 1/ Plug the SpringCard-CF or SpringProx – CF/UP into the SoMo650, plug your SoMo650 in your PC
- 2/ Download* and install **ActiveSync** on your PC
- 3/ Download* and install the serial driver patch for the SoMo 650 (through ActiveSync for example)
- 4/ Install in the SoMo650 your application or an application* provided by SpringCard . You need the executable file and the appropriate DLL according to your card type

Your SoMo is ready-to-use.

•Softwares download links :

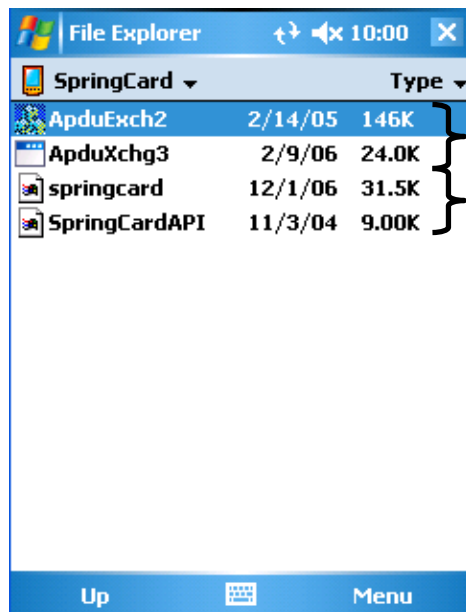
<http://www.springcard.com/download/springcard-cf.html>

<http://www.springcard.com/download/springprox-cf.html>

SpringCard-CF QuickStart

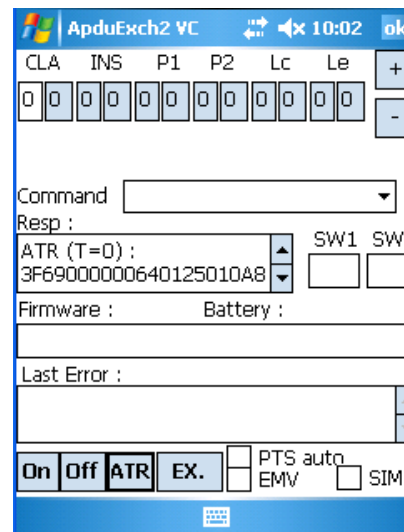


After QuickStart installation, you will find in the folder *Program files\Pro-Active\SpringCard* of the SoMo650 :

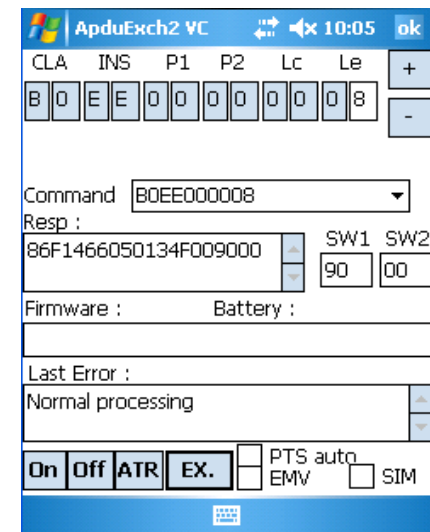


2 applications
2 libraries

Example : ApduExch2



Get ATR



APDU exchange

Our download center

<http://www.springcard.com/download/springcard-cf.html>

Free SDK and QuickStart software !!!

After QuickStart installation, you will find in the folder *Program files\Pro-Active\SpringProx* of the SoMo650 :

The image displays a Windows desktop environment with two primary applications running:

- ShowUID:** This application shows the details of a 'Type A card found'. The displayed information includes:
 - UID: 5C3570DC
 - ATQa and SAK: ATQ=0004 SAK=08
 - Not T=CL
- SproxTest:** This application displays cardholder information:
 - Name: ARTAUD, Claire
 - Date of birth: 00/00/1900
 - User ID: 00000000000000000004
 - A photo of a woman is shown on the right.
- MyCard:** This application shows a 'Read success' message.

The desktop background features the text 'SpringProx SDK sample' and 'ShowUID (VB .NET) 18/04/06 www.pro-active.fr'. The taskbar at the bottom shows the 'ShowUID' and 'MyCard' icons.

<http://www.springcard.com/download/springprox-cf.html>
Free SDK and QuickStart software !!!

Demo time !

SpringProx-CF

QuickStart application example :
MyCard



MyCard Sample A 12:59 ok

springcard

Name :

ARTAUD

Claire

Date of birth :

00/00/1900


User ID :

0000000000000004

SpringProx SDK sample

Read success

A PRO ACTIVE BRAND
Pro Active



Case studies !!



- **Diet program (UK) – member card with weight and program information**
 - 5000 units of SpringCard-CF03
 - Over 2000 managers equipped with 2 PDAs and 80 000 users
 - Periodic meetings : weight and diet recommendations
 - Recommendations uploaded to a data base : user online access

- **Code Rousseau (France) : Motorcycle school – student card with level information**
 - 500 units of SpringCard-CF03
 - Instructor equipped with a PDA
 - At each lesson : instructor writes recommendation and student progress (allows other instructors to pick up the lesson where it previously ended)
 - Synchronization to a data base

- **Activation of VPN routers (USA) – activation card with RSA key computed by the SAM card**
 - 1000 units of SpringCard-CF06
 - Each maintenance staff member equipped with a PDA
 - RSA key generation and storage in the activation card

Case studies !!



- **Thalys International (Belgium) : Railway – loyalty program**
500 units of SpringCard-CF03
- **SNCB (Belgium) : Railway – e-ticketing**
300 units of SpringProx-CF
- **Wayfarer (UK) : Railway – e-ticketing**
50 units of SpringProx-CF
- **Casino (Mexico) – ID of the staff member for a secure account crediting**
30 units of SpringCard-CF03

Typical applications

- Hand terminal for any smartcard system
- Virtual wallet
- Access control tags programming
- Authentication and cryptographic systems
- E-ticketing
- Tracking
- Loyalty
- Access control

Contact us

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