NFC'ROLL

Versatile PC/SC NFC device

Reader/Writer, Card emulation, Peer-to-peer

PC/SC NFC DEVICE

NFC'Roll connects to PC through a single USB link and 100% compliant with the PC/SC standard.

NFC'Roll supports any T=CL contactless smartcard (ISO 14443) and is able to read/write any NFC Forum Tag.

EXCLUSIVE NFC FEATURES

Its NFC peer-to-peer capability (ISO 18092), either as Initiator or as Target, is the basis of innovative applications using this exciting new technology.

And, most important, the **H512 series** is the only group of products in its market that implements the card emulation mode into the device itself.

A FEW TYPICAL APPLICATIONS

Along with its attractive look & feel and its USB interface for fast data transfer, **NFC'Roll** is robust and adapts to a variety of situations.

NFC'Roll is the ideal NFC peripheral to integrate into kiosks, vending machines, point-of-sales PC, card printers or issuing devices... It is perfectly adapted to :

- Event, gaming, ticketing,
- Active advertising,
- Loyalty, couponing,
- Peer-to-peer smartphone applications.

ABOUT SPRINGCARD

SpringCard products are designed and manufactured in France, and distributed worldwide.

With 12 years of expertise in smartcards, contactless, RFID and NFC, **SpringCard** is the ideal partner to make your project a success.

Headquarters, Europe
SPRINGCARD

13 voie la Cardon
Parc Gutenberg
91120 Palaiseau
FRANCE

Phone : +33 (0) 164 53 20 10
sales@springcard.com

Americas
SPRINGCARD

6161 El Cajon Blvd
Suite B, PMB 437
San Diego, CA 92115
USA

Phone : +1 (713) 261 6746
sales-usa@springcard.com

www.springcard.com

A Pro Active brand

NFC'ROLL

Versatile PC/SC NFC device

Reader/Writer, Card emulation, Peer-to-peer

TECHNICAL SPECIFICATIONS

Contactless smartcard interface	
Standards	**ISO/IEC 14443** A and B, T=CL **ISO/IEC 15693** and **18000-3**
RFID carrier	13.56 MHz
Operating distance	1 to 5 cm depending on card and on environment
Card baud rate	106, 212, 424 or 848 kbps
NFC Forum Tag read/ write	**ISO/IEC 14443** : 106, 212, 424 or 848 kbit/s **ISO/IEC 15693** : 26 kbit/s
Supported contactless smartcards (partial list)	▪ NXP Mifare Classic, Mifare Plus, Desfire, SmartMX... ▪ NXP (Philips) MIFARE Classic, Plus, UltraLight ▪ NXP (Philips) DESFIRE, SmartMX, ProX ▪ NXP (Philips) ICODE1, ICODE-SLI ▪ Infineon SLE66 family ▪ Innovision Jewel, Topaz ▪ Calypso (CD97, CD21, GTML, etc), Innovatron radio protocol ▪ Texas Instrument TagIT ▪ ST MicroElectronics SR, SRI, SRIX families ▪ ATMEL CryptoRF ▪ HID iClass, Inside PicoTag ▪ ASK CTS256/CTS512 And virtually any **ISO/IEC 14443** A or B compliant smartcard, or **ISO/IEC 15693** compliant RFID label
Card emulation mode	▪ On-board emulation of NFC Forum type 2 Tag and type 4 Tag, 1024kB available for NDEF data ▪ Host-based emulation mode, with T=CL

USB PC /SC mode	
Standard	USB 2.0 full speed interface (12 Mbps) Standard USB CCID profile
Power supply	Powered by USB 5V DC +/- 10%, 150mA typ. , 200mA max
Windows driver	2000/XP/Vista/Seven
Linux, *nix driver	Supported by PCSC-lite open source stack on Linux and other Unix systems
API and SDK	Compliant with PC/SC version 2 specification Comprehensive SDK available free of charge, including those demo software : ▪ NFC peer-to-peer : basic implementation of SNEP (« NFC beam » or « NDEF push ») on top of LLCP, in both initiator and target mode ▪ NFC Forum type 2 and type 4 Tag emulation (URL, Text, SmartPoster, vCard, MIME...) ▪ PC-based card emulation mode (**ISO/IEC 7816-4** cardlet running on PC) ▪ NFC Forum Tags read/write application ▪ and related applications from the PC/SC SDK

Environment and safety	
Operating temperature	- 20→+ 70°C
Storage temperature	- 40 →+ 85°C
MTBF	500 000 hours
CE mark	EN50082 / EN55022 class B
Other standards	RoHS

ORDER CODES

PART #	Description

PRECAUTIONS FOR INSTALLATION

Those devices use inductive coupling (magnetic field) to power the cards and communicate with them. Precaution must be taken to keep them far from any source of perturbation (e.g. other readers, computers…). Installing the device near a metal surface will decrease the operating distance and increase power consumption. **SpringCard** has a long experience. Please contact us if you need any assistance to integrate those devices.

PRO ACTIVE company with a capital of 227 000 €
R.C.S. EVRY B 429 665 482
N.A.F. 722 C
VAT # : FR 27 429 665 482
France