



PROX'N'ROLL

PC/SC CONTACTLESS SMARTCARD READER



SpringCard Prox'N'Roll is a versatile 13.56MHz contactless reader and encoder for PC.

With an attractive look and a fast USB interface, Prox'N'Roll is robust and affordable, ideal for high volume deployments.

KEY FEATURES

Contactless smartcards are increasingly present in today's end user daily activities, and not limited to corporate offices.

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

A high performance technology: **Prox'N'Roll** supports USB 2.0 full speed (12Mbps), and fastest smartcard baud rate (848kbps).

PC/SC MODE

Prox'N'Roll PC/SC is supported by major operating systems. This standardized smartcard reader API allows developers to work with contactless cards (including Mifare and other wired-logic chips) as easily as if they were classical T=0 or T=1 contact cards.

LEGACY MODE

Once configured for legacy mode, **Prox'N'Roll** is 100% compliant with earlier **SpringCard** products, such as popular the popular CSB4 Mifare reader/writer. A smooth migration is possible without changing anything in existing software.

SUPPORTED CONTACTLESS SMARTCARDS

Prox'N'Roll is compliant with ISO/IEC 15693 and 14443 (A and B) standards. List of supported chips includes:

- 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,
- MultOS or JavaCard T=CL cards,
- Calypso transportation cards,
- NFC mobile phones or other NFC-capable objects (tag emulation mode)

A FEW TYPICAL APPLICATIONS

- Loyalty programs,
- Micro-payment,
- Card issuing desk,
- User identification,
- And more

SPRINGCARD & PRO ACTIVE

Established in 2000, **Pro Active** SAS is an innovative provider of contact/contactless smartcard reader/writer/encoder, and a leader on the contactless-reader market.

All **Pro Active** products are distributed worldwide



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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 kbit/s

Supported cards (partial list) :

- NXP (Philips) ICODE1, ICODE-SLI, etc
- Texas Instrument TagIT
- NXP (Philips) MIFARE Classic & UltraLight
- NXP (Philips) DESFIRE, SmartMX, ProX
- Infineon SLE66 family
- ST MicroElectronics SR, SRI, SRIX families
- HID iClass, Inside PicoTag
- ASK CTS256/CTS512
- Calypso (CD97, CD21, GTML, etc)¹

And virtually any ISO/IEC 14443 A or B compliant smartcard, or ISO/IEC 15693 compliant RFID label

¹ Calypso card operation is subject to an extra license fee. Contact us for information.

Hardware specifications

Status indicator	3 LEDs (red, blue, green) Buzzer (85 dBA approx.)
Color	Blue wheels + black body
Dimensions (LxWxH)	75 x 75 x 25 mm
Housing material	ABS
Weight	≈ 150g
USB cable	≈ 1.80 m

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

USB interface

Standard	USB 2.0 full speed (12Mbps) - also supports 1.1
Power supply	Bus powered (≈200mA under 5V)
User-selectable PC/SC or legacy operating mode	

PC/SC mode

Standard USB CCID profile	
Windows driver	Tested with Windows 2000, XP, Vista
Linux and others	Open source pcsc-lite CCID driver
API and SDK	Full PC/SC – Free SDK available

Legacy mode²

USB virtual serial comm. port API compliant with existing products (CSB4, CSB5, K531, etc)	
Drivers	Windows, Windows CE, Linux
API and SDK	SpringProx API - Free SDK available

² Out of factory configuration is PC/SC. Customer wishing to use the product in legacy mode have to change configuration (detailed procedure on our web site).

ORDER CODES

PART #	Description
PNRU-11	Prox'N'Roll USB - PC/SC mode legacy mode available by software configuration

PRECAUTIONS FOR INSTALLATION

This device is a contactless reader; it uses inductive coupling (magnetic field) to power the cards and communicate with them. Precaution must be taken to keep the reader far from any source of perturbation (e.g. other readers, computers, etc). Installing the reader near a metal surface (aluminium or steel plate, etc) will lead to shorter operating distance and increased power consumption. SpringCard has a long experience installing contactless couplers in various kinds of devices. Do not hesitate to contact us if you need any assistance.

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