springcard®

CSB4
DESKTOP CONTACTLESS CARD READER/WRITER

SpringCard CSB4 is an ISO/IEC 14443 (A&B) and Mifare desktop contactless reader/writer. CSB4 is available in USB or serial

KEY FEATURES

SpringCard CSB4 reads and writes any Mifare or ISO/IEC 14443 (1, 2, 3 and 4) contactless card. T=CL protocol embedded in coupler's firmware allows fastest transactions.

CSB4-S is a serial device, easy to operate under any operating system.
CSB4-U comes with an USB driver (« virtual serial port ») for Windows and major OS. CSB-4U is directly powered by the USB interface.

SUPPORTED CONTACTLESS SMARTCARDS

CSB4 is compliant with ISO/IEC 14443 (A and B) standards. List of supported chips includes :

- NXP (Philips) : Mifare Classic and UltraLight, Desfire, ProX, SmartMX,
- ST MicroElectronics : SR176, SRiX...
- ASK CTS256B and CTS512B,
- MultOS or JavaCard T=CL cards,
- Calypso transportation cards,
- NFC mobile phones or other NFC-capable objects (tag emulation mode)

A FEW TYPICAL APPLICATIONS

- Mifare or Desfire read and write : private purse, RFID access control, loyalty card...
- Transportation ticket issuing (train, suburb, bus...)
- Electronical documents (e-passport, driving licence, ID card...)
- Strong authentication
- Digital signature through crypto-enabled T=CL cards...

SPRINGCARD & PRO ACTIVE

Established in 2000, Pro Active is an innovative provider of smartcard-related solutions, and one of the leaders on the contactless-reader market.
SpringCard distributes Pro Active's contact and contactless products worldwide, under a single brand name.

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TECHNICAL SPECIFICATIONS

Contactless smartcard interface	
Standards	ISO/IEC 14443 A and B, T=CL
RFID carrier	13.56 MHz
Operating distance	up to 8 cm depending on card and on environment
Card baud rate	106, 212 or 424 kbit/s

Supported cards (partial list) :
- NXP (Philips) Mifare Classic & UltraLight
- NXP (Philips) Desfire, SmartMX, ProX
- Infineon SLE66 family
- ST MicroElectronics SR, SRI, SRIX families
- ASK CTS256/CTS512
- Calypso (CD97, CD21, GTML…)[1]

And virtually any ISO/IEC 14443 A or B compliant smartcard.

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

CSB4-U (USB interface)	
USB virtual serial comm. port	
Power supply	Bus powered (≈250mA under 5V)
Drivers	Windows, Windows CE, Linux
API	SpringProxAPI compliant with other Springcard contactless products

CSB4-S (Serial interface)	
Standard RS-232 interface (DB9 - RX/TX/GND)	
Power requirement	7.5 to 12V DC, 500mA International power adaptor not provided
API	SpringProxAPI compliant with other Springcard contactless products

Hardware specifications[2]	
Status indicator	3 LEDs (red, yellow, green)
Dimensions (LxWxH)	146 x 92 x 20 mm
Housing material	ABS-94HB (self extinguishing UL94)
Weight	≈ 250g
USB or serial cable	≈ 1,80 m

Environment and safety	
Operating temperature	0 →+70°C
Storage temperature	-40 →+85°C
MTBF	500 000 hours
CE mark	EN50082 / EN55022 class B
Other standards	RoHS

[2] Note that CSB6 board may be sold without housing, for OEM integration

ORDER CODES

PART #	Description
CSB4.3U	USB desktop contactless reader/writer
CSB4.3S	serial desktop contactless reader/writer

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…). Installing the reader near a metal surface (aluminium or steel plate…) will lead to shorter operating distance and increased power consumption.
SpringCard has a long experience installing contactless couplers in various kind of devices. Do not hesitate to contact us if you need any assistance.

www.springcard.com

A PRO ACTIVE BRAND