

## K632

### OEM CONTACTLESS READER/WRITER MODULE



K632 is an ISO/IEC 14443 & 15693 contactless reader/writer module for OEM integration

#### KEY FEATURES

K632 is dedicated to integrators who need to work with any ISO 14443-A/B cards such as Mifare, DESFire, Calypso and more. and/or ISO 15693 cards like Icode, Icode SLI, TagIT and more.

Thanks to its asynchronous serial communication interface, K632 is really easy to operate from any microcontroller or host computer.

The K632 OEM module needs an external antenna to operate. The antenna has to be designed depending on your own application (size requirements, expected operating distance).

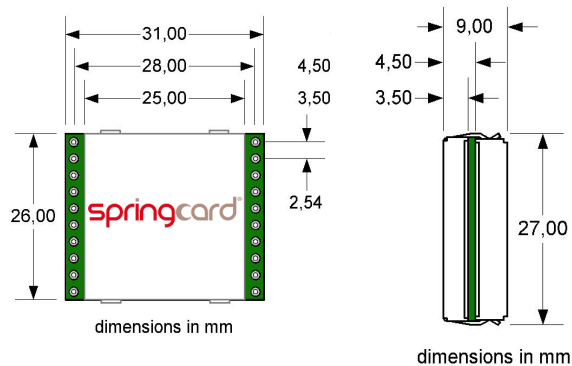
SpringCard also offers a basic antenna suitable for most uses, with various serial interface options.

SpringCard can also develop and embed a dedicated firmware into the K632 in order to gain the highest performances or to free the host from any card-related processing.

#### A FEW TYPICAL APPLICATIONS

- Ticketing, transportation, road toll pricing
- RFID tracking, loyalty
- Private money payment, corporate ID card, citizen card
- Physical access control
- And more

#### DETAILED VIEWS



NC : 1	20 : Vcc
Signal : 2	19 : Gnd
Vcc : 3	18 : Green LED
Gnd : 4	17 : Red LED
NC : 5	16 : Mode
Gnd : 6	15 : /Reset
MfOut : 7	14 : User
MfIn : 8	13 : NC
RFU : 9	12 : TX
/Flash : 10	11 : RX

#### 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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**Pro Active**

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## TECHNICAL SPECIFICATIONS

Contactless smartcard interface	
Standards	ISO/IEC 14443 A and B, T=CL ISO 15693
RFID carrier	13.56 MHz
Operating distance	typical 5 cm - up to 8cm depending on card and antenna
Card baud rate	106 kbit/s (14443) 26 kbit/s (15693)
Supported cards (partial list) : <ul style="list-style-type: none"> <li>▪ NXP (Philips) ICODE1, ICODE-SLI, etc</li> <li>▪ Texas Instrument TagIT</li> <li>▪ NXP (Philips) MIFARE Classic &amp; UltraLight</li> <li>▪ NXP (Philips) DESFIRE, SmartMX, ProX</li> <li>▪ Infineon SLE66 family</li> <li>▪ ST MicroElectronics SR, SRI, SRIX families</li> <li>▪ HID iClass, Inside PicoTag</li> <li>▪ ASK CTS256/CTS512</li> <li>▪ Calypso (CD97, CD21, GTML, etc)<sup>1</sup></li> </ul> And virtually any ISO/IEC 14443 A or B compliant smartcard, or ISO/IEC 15693 compliant RFID label	

Interface	
CMOS/TTL I/Os	2 LEDs outputs 1 USER input/output (reserved for output driver control in RS-485 operation)
CMOS/TTL serial interface	8 data bits, 1 stop, no flow control 9600, 38400 or 115200bps
Power supply	5 V DC
Consumption	90mA average 200mA max during RF operation

Hardware specifications	
Dimensions (LxWxH)	26 x 31 x 09 mm
Weight	≈ 14g

Environment and safety	
Operating temperature	-20 → +80°C
Storage temperature	-40 → +85°C
MTBF	500 000 hours
CE mark	EN50082 / EN55022 class B <sup>1</sup>
FCC	Part 15
Other standards	RoHS

<sup>1</sup>Safety: EN60950: 2001 ; EN 50364 : 2001, EMC:EN 301 489-03 v1.4.1 ; EN 301 489-01 v1.6.1,

## ORDER CODES

PART #	Description
K632-4R4	ISO 14443-A/B & 15693 OEM module

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