springcard®

K632-TTL

OEM CONTACTLESS READER/WRITER MODULE WITH ANTENNA AND **TTL** INTERFACE

Ready-to-use ISO/IEC 14443-A/B and ISO/IEC 15693 reader / writer with antenna and RX/TX at TTL level that can be embedded in virtually any kind of appliance

KEY FEATURES

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

Thanks to its asynchronous serial communication interface, K632-TTL is really easy to operate from any microcontroller or host computer.
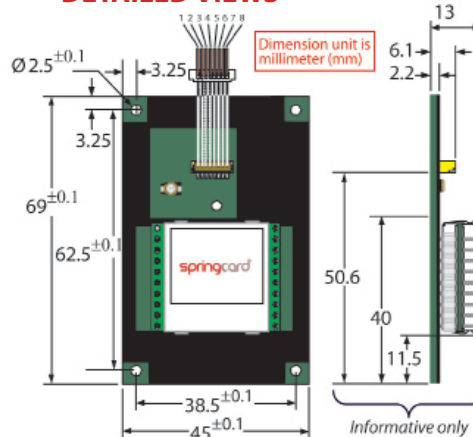
K531-TTL has many features that make it the only product on the market to provide such flexibility at low cost.

- Metallic bonnets to protect from radiations
- Ferrite on antenna to protect other components from radiations
- Embedded T=CL protocol, ISO/IEC 14443-A/B (from layer 1 to 4) and ISO/IEC 15693 compliance. Able to read/write all files/sectors of Mifare, DESFire,...
- High level function set
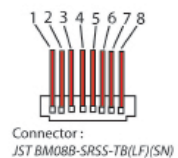- High speed communication

A FEW TYPICAL APPLICATIONS

- vending machine,
- card printer,
- access control gate
- enrollment station,
- and more

DETAILED VIEWS

Informative only

Pinout

EN : 1   5 : VCC (5V)
FLASH : 2   6 : RX
Ground : 3   7 : TX
RESET : 4   8 : Ground

Connector :
JST BM08B-SRSS-TB(LF)(SN)

	PIN Assignements	Notes
1	/EN - Not used	Must be left unconnected
2	/FLASH - 5V : normal operation 0V : firmware upgrade	Can be left unconnected
3	Ground	
4	/RESET - 5V : normal operation 0V : module reset	Can be left unconntected
5	VCC (5V)	
6	RX (TTL)	Host to module
7	TX (TTL)	Module to host
8	Ground	

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

K632 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	typical 5 cm - up to 8cm depending on card and antenna
Card baud rate	106, 212, 424 or 848 kbit/s depending on antenna

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

Serial Interface	
RX/TX pins (CMOS/TTL)	asynchronous serial communication 8 data bits, 1 stop, no flow control 9600, 38400 or 115200bps
Power supply	5 V DC, ±10% Device must be powered by a SELV (Safety Extra Low Voltage), limited power source, in accordance with EN60950-1 : 2006
Consumption	200mA typical
Connector	JST: BM08B-SRSS-TB(LF)(SN) Corresponding female connector (not provided) : JST: SHR-08V -S -B
Maximum wire lenght	1m

Hardware specifications	
Dimensions (LxWxH)	45 x 69 x 15 mm
Weight	≈ 14g
Housing	Metalic bonnets on K632 Ferrite shield on antenna
Connector	JST: BM08B-SRSS-TB(LF)(SN) Corresponding female connector (not provided) : JST: SHR-08V -S -B

Environment and safety	
Operating temperature	-20→+70°C
Storage temperature	-40 →+85°C
MTBF	500 000 hours
CE mark	EN50082 / EN55022 class B[1]
FCC	Part 15
Flammability	UL94V0
Other standards	RoHS

⚠Once mounted in the final product, the board shall not be open to operator

[1]Safety: EN60950-1 : 2006

ORDER CODES

PART #	Description
K632-TTL	ISO 14443-A/B and ISO 15693 OEM module with antenna and TTL interface

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