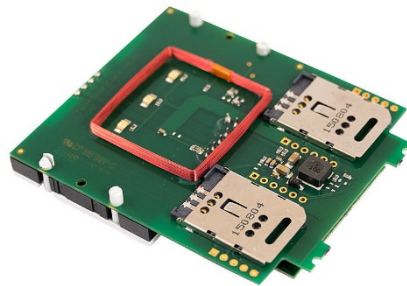


TWN4 MULTITECH SMARTCARD LEGIC M

PROGRAMMABLE RFID/CONTACT READER & WRITER FOR LF/HF/NFC & ISO/IEC 7816 CARDS



TWN4 MultiTech SmartCard LEGIC M

ELATEC TWN4 MultiTech SmartCard LEGIC M is a combination of TWN4 MultiTech LEGIC M (RFID) with an integrated contact card reader/writer (ISO 7816). It allows users to read and write almost any 125 kHz and 13.56 MHz transponders supporting all major technologies from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, etc. and many ISO standards such as ISO 14443A/B (T=CL), ISO 15693 and ISO 18092 / ECMA-340 (NFC). The integrated chip card reader is designed for easy integration into various applications.

The readers can be programmed with a script language for autonomous execution of even complex commands like login procedures, increment/decrement functions and many more. The reader supports host communication via USB or RS-232.

Special features:

- + Powerful SDK for writing apps which are executed directly on the reader
- + Firmware update in the field possible
- + On-board 18 kB flash storage, e.g. for storing user accessible non-volatile data
- + Direct chip-commands support
- + CCID and PC/SC 2.01
- + Two on-board SAM sockets (Secure Access Module), extendable by 2 SAM sockets
- + 2 GPIOs
- + Supports quick (re)configuration over network and over wireless interface with TWN4 CONFIG Card
- + TWN4 Upgrade Card for P option available on request
- + 3D construction data (STEP) available on request



Elevator



EV Chargers



Access



Shop POS



Fitness
Equipment



Ticket POS



PC Log-on



Document
Management



Driver ID



Vending



Parking



Gaming



Locker Locks



Time
Attendance



Industrial
PC

TECHNICAL DATA

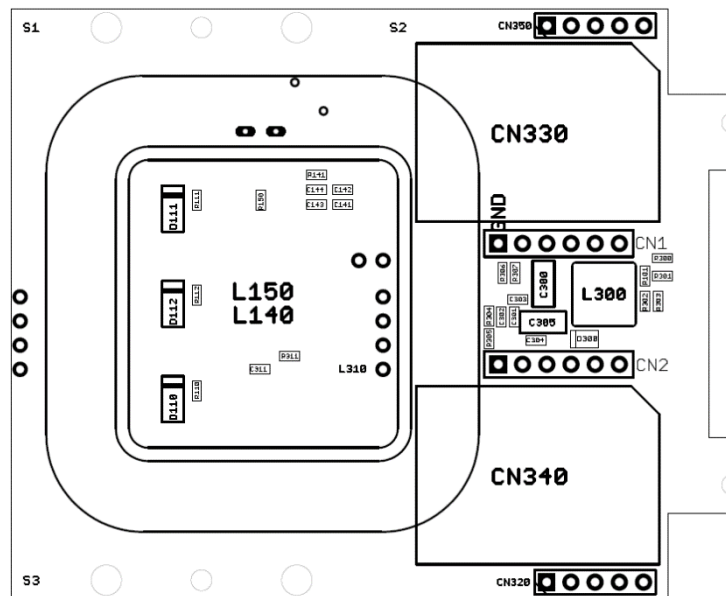
FREQUENCY	125 kHz (LF) / 13.56 MHz (HF)
ANTENNA(S)	Integrated
DIMENSIONS (L X W X H)	76 mm x 62 mm x 11 mm / 3.0 inch x 2.4 inch x 0.4 inch
POWER SUPPLY	4.3 V - 5.5 V via USB Limited power source according to the safety norms listed in the respective declaration of conformity, short-circuit current < 8 A
TEMPERATURE RANGE	Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) Storage: -40 °C up to +85 °C (-40 °F up to +185 °F)
RELATIVE HUMIDITY	5% to 95% non-condensing
READ- / WRITE DISTANCE	Up to 100 mm / 4 inch, depending on environment and transponder
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01
MTBF	500,000 hours / Min. 100,000 card insertion cycles
WEIGHT	Approx. 35 g / 1.23 oz
SMARTCARD STANDARDS	ISO/IEC 7816 Part 1-4, Class A/B/C (5V, 3V, 1.8V), T=0, T=1
SMARTCARD CLOCK FREQUENCY	5 MHz up to 15 MHz
SUPPORTED SMARTCARDS	5V, 3V and 1.8V, ISO/IEC 7816 Class A/B/C
POWER TO SMARTCARD	60 mA in Class A; 55 mA in Class B; 35 mA in Class C
SMARTCARD DETECTION	Card present switch / Automatic power on/off / Short-circuit protection
SMARTCARD CARD SIZE	2xID-000 (SAM) ID-1
SMARTCARD CONTACT TYPE	8 pin Sliding Contact Socket, C4/C8 support ID-1
SUPPORTED TRANSPONDERS (STANDARD) 13.56 MHZ	<u>ISO14443A:</u> LEGIC Advant, MIFARE Classic EV1 ¹⁾ , MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2 ²⁾ , MIFARE DESFire Light ³⁾ , MIFARE Plus S, X, MIFARE Pro X ⁴⁾ , MIFARE Smart MX ⁴⁾ , MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1 ¹⁾ , NTAG2xx, SLE44R35 ⁴⁾ , SLE66Rxx (my-d move) ⁴⁾ <u>ISO18092 ECMA-340:</u> NFC Forum Tag 1-5 ⁵⁾ , Sony FeliCa ⁶⁾ , NFC Active and passive communication mode, Passive peer-to-peer mode - initiator, NFC Tag 2, 3, 4 <u>ISO14443B:</u> Calypso ⁴⁾ , CEPAS ⁴⁾ , HID iCLASS ⁷⁾ , Moneo ⁴⁾ , Pico Pass ⁷⁾ <u>ISO15693:</u> EM4x33 ⁴⁾ , EM4x35 ⁴⁾ , HID iCLASS ⁷⁾ , HID iCLASS SE/SR ⁷⁾ , ICODE SLI, LEGIC Advant, M24LR16/64, SRF55Vxx (my-d vicinity) ⁴⁾ , Tag-it, PicoPass ⁷⁾ <u>LEGIC Prime:</u> LEGIC Prime
SUPPORTED TRANSPONDERS (STANDARD) 125 KHZ ⁸⁾	AWID, Cardax, CASI-RUSCO, Deister ⁹⁾ , EM4100, 4102, 4200 ¹⁰⁾ , EM4050, 4150, 4450, 4550, EM4305 ¹¹⁾ , FDX-B ¹²⁾ , EM4105 ¹²⁾ , UltraProx ¹²⁾ , HITAG 1 ¹³⁾ , HITAG 2 ¹³⁾ , HITAG S ¹³⁾ , ICT ³⁾ , IDTECK, Isonas, Keri, Miro, Nedap ⁹⁾ , PAC ³⁾ , Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX ¹²⁾ , TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (OPTION P)	All Standard Transponders, Cotag, G-Prox ⁹⁾ , HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
OS SUPPORT	Windows Embedded CE ³⁾ , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android ³⁾ , iOS ³⁾ , MAC OS X ³⁾
PERIPHERAL INTERFACES	USB, RS-232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I ² C, 2 GPIOs, Clock/Data, Wiegand
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232: up to 115,200 baud, Air: up to 848 kbit/s
CERTIFICATION NAME	TWN4 MultiTech SmartCard LEGIC M
CERTIFICATION(S)	CE/RED, REACH and RoHS-III compliant
ORDER CODE(S)	T4SO-B: OEM Board T4SO-B-P: OEM Board Option P

¹⁾r/w enhanced security features on request ²⁾EV2/EV3 supported as part of the EV1 downward compatibility ³⁾On request ⁴⁾r/w in direct chip command mode
⁵⁾NFC Forum Tag 1 not supported ⁶⁾UID + r/w public area ⁷⁾UID only ⁸⁾125 kHz technology requires a Russian local test and import license from the ministry of Trade and Industry (MINPROMTORC). This license has to be in place before Elatec can accept any order to be shipped to Russia ⁹⁾Hash value only ¹⁰⁾Only emulation of 4100, 4102 ¹¹⁾From FW V4.05 ¹²⁾134.2 kHz only ¹³⁾Without encryption

ACCESSORIES

CABLES	CAB-B2	USB cable type A 200 cm / 78.74 inch
	CAB-B3	USB cable type A 12 cm / 4.72 inch
	CAB-B4	USB cable type A 45 cm / 17.72 inch
	CAB-B7	USB cable type A 120 cm / 47.24 inch
	CAB-M1	USB cable mini 12 cm / 4.72 inch
	CAB-M2	USB cable mini 25 cm / 9.84 inch
	CAB-R2	RS-232 cable 200 cm / 78.74 inch

DRAWING



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