TWN4 MULTITECH SMARTCARD LEGIC 42
PROGRAMMABLE RFID/CONTACT READER & WRITER FOR LF/HF/NFC & ISO/IEC7816 CARDS

TWN4 MultiTech SmartCard LEGIC 42
(inlay customizable)

Elatec's TWN4 MultiTech SmartCard LEGIC 42 is a combination of the TWN4 MultiTech LEGIC 42 (RFID) with an integrated contact card reader/writer (ISO7816). It allows users to read and write almost any 125 kHz, 134.2 kHz and 13.56 MHz transponder supporting all major technologies from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, etc. and many ISO standards such as ISO14443A/B (T=CL), ISO15693, and ISO18092 / 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
+ onboard 18 kB flash storage, e.g. for storing user accessible non-volatile data
+ direct chip-commands support
+ CCID and PC/SC 2.01
+ two onboard SAM sockets (Secure Access Module), extendable by 2 SAM sockets
+ 2 GPIOs
+ supports quick centralized (re)configuration over network and over wireless interface with TWN4 CONFIG Card
+ 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/134.2 kHz (LF) / 13.56 MHz (HF)
ANTENNA	Integrated
HOUSING	Material: ABS UL94-V0, color: black or white
DIMENSIONS (L X W X H)	Desktop Reader: 88 mm x 68 mm x 19 mm / 3.46 inch x 2.68 inch x 0.75 inch OEM Board: 76 mm x 62 mm x 11 mm / 3 inch x 2.44 inch x 0.43 inch
POWER SUPPLY	4.3 V - 5.5 V via USB
TEMPERATURE RANGE	Desktop, Operating: -25 °C up to +70 °C (-13 °F up to +158 °F) Desktop, Storage: -45 °C up to +75 °C (-49 °F up to +167 °F) PCB, Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) PCB, Storage: -45 °C up to +85 °C (-49 °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
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232 up to 115.200 baud; Air: up to 848 kbit/s
MODES OF OPERATION	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 (without housing) / Approx. 140g (with housing and USB Cable)
SMARTCARD STANDARDS	ISO/IEC7816 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/IEC7816 Class A/B/C
POWER TO SMARTCARD	60mA in Class A; 55mA in Class B; 35mA 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)	ISO14443A: LEGIC Advant[1], MIFARE Classic 1k & 4k EV1[2], MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2[2], MIFARE Plus S, X, MIFARE Pro X[3], MIFARE Smart MX[3], MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, PayPass[3], SLE44R35, SLE66Rxx (my-d move)[3] ISO14443B: Calypso[3], Calypso Innovatron protocol[3], CEPAS[3], HID iCLASS[1], Moneo[3], Pico Pass[1] ISO18092 ECMA-340: Sony FeliCa[5], passive Peer-to-Peer mode - initiator, NFC Tag 2, 3, 4 ISO15693: EM4x33[3], EM4x35[3], HID iCLASS[1], HID iCLASS SE/SR[1], ICODE SLI, LEGIC Advant, M24LR16/64, SRF55Vxx (my-d vicinity)[3], Tag-it, PicoPass[1] LEGIC Prime: LEGIC Prime 125 kHz, 134.2 kHz: AWID, Cardax, CASI-RUSCO, Deister[6], EM4100, 4102, 4200[7], EM4050, 4150, 4450, 4550, EM4305[8], FDX-B, EM4105, HITAG 1[9], HITAG 2[9], HITAG S[9], ICT[8], IDTECK, Isonas[8], Keri, Miro, Nedap[6], PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (VERSION P)	All Standard Transponder, G-Prox[6], HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
PERIPHERAL INTERFACES	USB, RS232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I²C, 2 GPIOs, Clock/Data, Wiegand, 1-Wire[8]

OS SUPPORT	Windows XP, Vista, Embedded CE[8)], 7 (32-/64-bit), 8, 8.1, 10, Linux, Android[8)], iOS[8)], MAC OS X[8)]	
CERTIFICATIONS	ROHS-II compliant, CE, FCC, RED	
ORDER CODE(S)	T4SO-B	OEM Board
	T4SD-FB2BE1	USB Black
	T4SD-BB2WE1	USB White
	T4SO-B-P	OEM Board Version P
	T4SD-BB2BE1-P	USB Version P Black
	T4SD-BB2WE1-P	USB Version P White

[1)]UID only [2)]r/w enhanced security features on request [3)]r/w in direct chip command mode [4)]NFC Forum Tag 1 not supported [5)]UID + r/w public area [6)]Hash value only [7)]Only emulation of 4100, 4102 [8)]On request [9)]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: RS232 cable 200 cm / 78.74 inch

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