TWN4 MULTITECH 3 LF
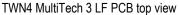
125 KHZ/134.2 KHZ CONTACTLESS READER/WRITER

TWN4 MultiTech 3 LF PCB top view

TWN4 MultiTech 3 LF PCB bottom view

The new TWN4 MultiTech 3 LF integrates RFID (125/134.2 kHz) capabilities into a compact but powerful reader. Its reduced size combined with excellent read/write performance makes it the perfect reader for all applications where small size and full performance matters, e.g. print solutions, healthcare applications, driver identification, POS integration and much more. Furthermore, the TWN4 MultiTech 3 LF provides access to most common host interfaces such as USB, serial (TTL) or I²C which are readily accessible through an on-board connector.

The TWN4 MultiTech 3 LF allows users to read and write almost all common worldwide 125/134.2 kHz tags and/or labels. It supports all major transponders from various suppliers like HID, HITAG, Nexwatch, KERI, Cotag, CASI-RUSCO etc.
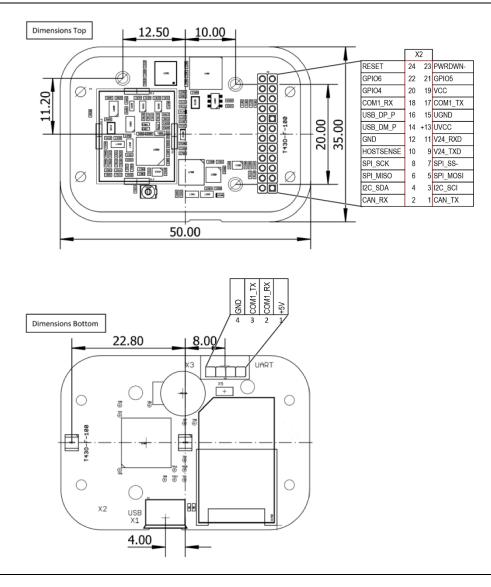
Special features:

+ 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
+ one onboard SAM socket (Secure Access Module)
+ CCID and PC/SC 2.01
+ 3 GPIOs
+ 3D construction data (STEP) available on request
+ supports quick centralized (re)configuration over network and over wireless interface with TWN4 CONFIG Card

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)
ANTENNA	Integrated
DIMENSIONS (L X W X H)	OEM Board (compact reader): 50 mm x 35 mm x 7 mm, maximum diameter < 55 mm.
POWER SUPPLY	4.3 V - 5.5 V via USB; via connector CNB 3.3 V +/- 5%
CURRENT CONSUMPTION	RF field on: 120 mA typically / Sleep: 500 µA typ. / Cyclic Operation: TBD
TEMPERATURE RANGE	Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) 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
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01
MTBF	500,000 hours
WEIGHT	Approx. 9 g
COMPATIBLE PIN HEADER	PTT-112-01-L-D or TMM-112-03-F-D by Samtec
SUPPORTED TRANSPONDERS (STANDARD)	<u>125 kHz, 134.2 kHz</u>: ICT[1], IDTECK, Isonas[1], Keri, Miro, Nedap[2], PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC, Cotag, G-Prox[2]
SUPPORTED TRANSPONDERS (VERSION P)	All Standard Transponders, Cotag, G-Prox[2], HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
OS SUPPORT	Windows XP, Vista, Embedded CE[1], 7 (32-/64-bit), 8, 8.1, 10, Linux, Android[1], iOS[1], MAC OS X[1]
PERIPHERAL INTERFACES	USB, RS232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I²C, SPI, 3 GPIOs, CAN[1], Clock/Data, Wiegand, 1-Wire[1]
CERTIFICATION NAME	TWN4 MultiTech 3 LF
CERTIFICATION(S)	RoHS-II compliant, CE/RED, FCC Single Modular Approval, IC
ORDER CODE(S)	T43O-F4C0 OEM Board T43O-F4C0-P OEM Board Version P

[1]On request [2]Hash value only

CONNECTOR ASSIGNMENT

	X2		
RESET	24	23	PWRDWN-
GPIO6	22	21	GPIO5
GPIO4	20	19	VCC
COM1_RX	18	17	COM1_TX
USB_DP_P	16	15	UGND
USB_DM_P	14	+13	UVCC
GND	12	11	V24_RXD
HOSTSENSE	10	9	V24_TXD
SPI_SCK	8	7	SPI_SS-
SPI_MISO	6	5	SPI_MOSI
I2C_SDA	4	3	I2C_SCI
CAN_RX	2	1	CAN_TX

GND	COM1_TX	COM1_RX	+5V
4	3	2	1

UART

ELATEC
RFID Systems