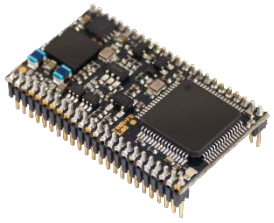
TWN4 MULTITECH NANO LF

MINIATURE LF RFID READER/WRITER FOR EXTERNAL ANTENNA

Version B0 (SMT)
31 x 17.8 x 2.7 mm



Version B1 (THT)
31 x 17.8 x 8.11 mm

Elatec's TWN4 family of transponder readers and writers allows users to read and write to almost any 125 kHz and 134.2 kHz tags and/or labels. It supports all major transponder technologies like HID, HITAG, Nexwatch, KERI, Cotag, CASI-RUSCO etc.

The TWN4 MultiTech Nano LF is designed for integration into machines or other devices. It can be connected to an external antenna through a printed circuit board (125 kHz/134.2 kHz).

Special features:

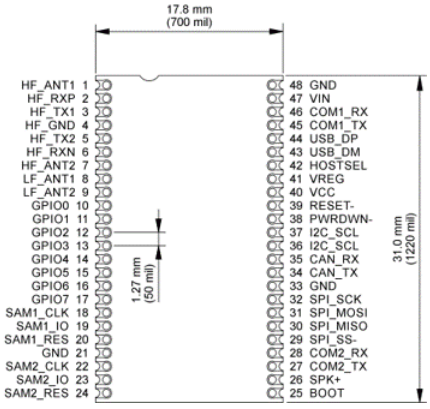
+ compact design (31 x 17.8 x 2.7 mm / 1.22 x 0.7 x 0.12 inch)
+ components mounted only on one side for easy integration on the main application
+ edge plated pads for surface mounting (C0) allows easy and reliable PCB mounting, connector option (C1) also available for THT mounting
+ powerful SDK for 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
+ supports connection of external ISO7816 compatible SAM cards
+ CCID and PC/SC 2.01
+ 8 GPIOs
+ 3D construction data (STEP) available on request

TECHNICAL DATA

FREQUENCY	125 kHz/134.2 kHz (LF)
ANTENNA	490 µH ± 5% for 125 kHz/134.2 kHz
DIMENSIONS (L X W X H)	31 mm x 17.8 mm x 2.7 mm / 1.22 inch x 0.7 inch x 0.12 inch
POWER SUPPLY	3.3 V +/- 5% (direct supply) or 4.3 V - 5.5 V (use of on-board voltage regulator)
CURRENT CONSUMPTION	RF field on: 80 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 antenna, environment and transponder
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), Serial TTL: 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
WEIGHT	Approx. 7 g
SUPPORTED TRANSPONDERS (STANDARD)	125 kHz, 134.2 kHz: AWID, Cardax, CASI-RUSCO, Deister[1)], EM4100, 4102, 4200[2)], EM4050, 4150, 4450, 4550, EM4305[3)], FDX-B, EM4105, HITAG 1[4)], HITAG 2[4)], HITAG S[4)], ICT[3)], IDTECK, Isonas[3)], Keri, Miro, Nedap[1)], PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC, Cotag, G-Prox[1)]
SUPPORTED TRANSPONDERS (VERSION P)	All Standard Transponder, Cotag, G-Prox[1)], HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
PERIPHERAL INTERFACES	USB, 2 x serial (logic level 3.3 V, CMOS 5 V tolerant), I²C, SPI, 8 GPIOs, CAN[3)], Clock/Data, Wiegand, 1-Wire[3)]
OS SUPPORT	Windows XP, Vista, Embedded CE[3)], 7 (32-/64-bit), 8, 8.1, 10, Linux, Android[3)], iOS[3)], MAC OS X[3)]
CERTIFICATIONS	RoHS-II compliant
ORDER CODE(S)	T4NM-FDB0 B0 Standard T4NM-FDB0-P B0 Version P T4NM-FDB1 B1 Standard T4NM-FDB1-P B1 Version P

[1)]Hash value only [2)]Only emulation of 4100, 4102 [3)]On request [4)]Without encryption

DRAWING



Top view

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