

TWN4 MULTITECH CORE LEGIC 45*

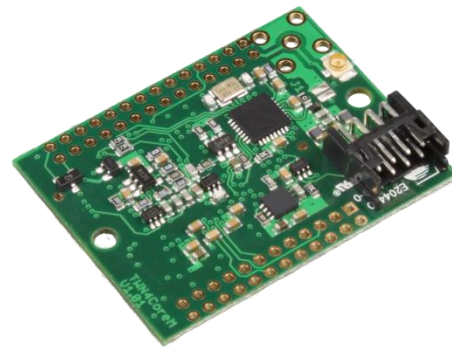
125kHz/134.2kHz & 13.56MHz Contactless Reader/Writer

*previously known as TWN4 CORE LEGIC NFC 4500M



Bottom View

C1 Version



Top View

Elatec's TWN4 Family allows users to read and write to almost any 125kHz / 134.2kHz and 13.56MHz tags and/or labels – it supports all major transponders from various suppliers like ATMEL, EM, ST, MIFARE NXP, TI, HID, LEGIC, etc. and ISO standards like ISO14443A including ISO14443A-4 (T=CL), ISO14443B including ISO14443B-4 (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC).

The TWN4 Core Module LEGIC NFC is designed for integration into machines or any other device to be used with external antenna (125/134.2kHz, 13.56MHz or both). This core module mounted on an antenna carrier board is available in the standard TWN Elatec desktop housing, too.

The powerful hardware allows the extension of supported transponders to meet your individual request.

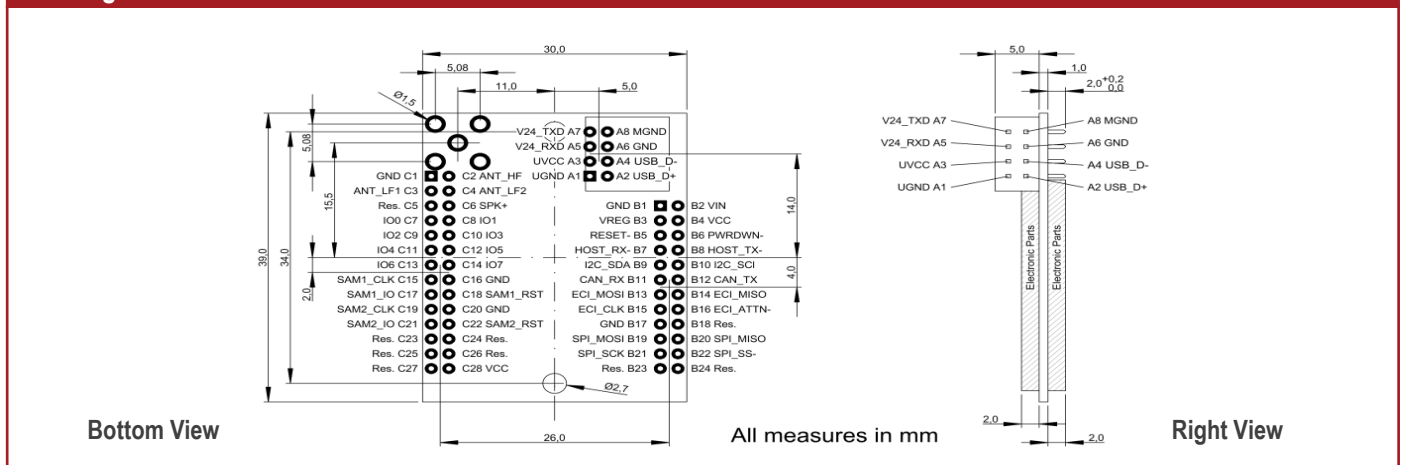
Special Features:

- Segment initialization function
- High-level command library for cash / value handling, e.g. electronic purse
- Powerful SDK for writing Apps which are executed directly on the reader
- Infield Upgradeable
- Direct chip-commands support
- Supports multiple SAMs (Secure Access Modules)¹⁾
- Supports 50 Ohm external antennas via SMA, SMB, SMC, MCX, UMCC/U.FL connectors
- CCID and PC/SC 2.0¹⁾
- Interfaces:
USB, RS232, Serial (logical level 3.3V, CMOS 5V tolerant), I²C, SPI²⁾, Clock/Data³⁾, Wiegand³⁾, CAN²⁾³⁾, 1-Wire²⁾
- Dedicated expansion bus for connection of LCD, mass storage...
- 8 GPIOs
- Step Model Data on request

Technical Data ⁴⁾	
Frequency	125kHz, 134.2kHz (LF) / 13.56MHz (HF)
Antenna	Externally, 50 Ohm for 13.56MHz – 490µH ±5% for 125kHz/134.2kHz
Dimensions (L x W x H)	39mm x 30mm x 8mm / 1.54inch x 1.18inch x 0.31inch
Power Supply	3.3V+/-5% or (by using on-board voltage regulator) 4.3-5.5V
Current Consumption	RF field on: 140mA typically
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)
Read- / Write Distance	Up to 100mm / 4inch, depending on antenna and tag
HOST Interface	USB, RS232, serial (logical level 3.3V, CMOS 5V tolerant), I ² C, SPI ²⁾ , Clock/Data ³⁾ , Wiegand ³⁾ , CAN ²⁾³⁾ , 1-Wire ²⁾
OS Support	Windows XP, Vista, Embedded CE ²⁾ , 7(32-/64-bit), 8, 8.1, 10, Linux, Android, iOS ²⁾ , MAC OS X ²⁾
Transmission Speed	HOST: USB: Full speed (12Mbit) – RS232: up to 115.200baud AIR: up to 424kbit/s
Modes of Operation	<ul style="list-style-type: none"> USB keyboard emulation – USB virtual COM port – Transparent (direct chip-commands support) CCID and PC/SC 2.01¹⁾
Relative Humidity	5% to 95% non-condensing
Supported Transponders	<p>Standard</p> <ul style="list-style-type: none"> 125kHz / 134.2kHz: 4100, 4102, 4200¹⁰⁾, 4050, 4150, 4450, 4550, AWID, CASI-RUSCO, HITAG 1¹¹⁾, HITAG 2¹¹⁾, HITAG S¹¹⁾, Keri, Miro, Pyramid, TIRIS/HDX, UNIQUE, FDX-B, Q5, TITAN, T55x7, ZODIAC Optionally, in consideration: 4305, Cardax, IDTECK 13.56MHz: LEGIC Advant, LEGIC Prime ISO14443 A+B: compatible to part 4, MIFARE DESFire EV1, MIFARE Plus, MIFARE SmartMX, my-d move⁷⁾, PayPass, MIFARE Classic EV1⁹⁾, MIFARE Ultralight EV1⁹⁾, MIFARE Ultralight C, NTAG2xx⁹⁾, HID iCLASS⁵⁾ ISO15693: EM4035⁷⁾, Tag-it, my-d vicinity⁷⁾, ICODE SLI, M24LR16/64, PicoPass⁵⁾, HID iCLASS⁵⁾ ISO18092 / NFC: NFCIP-1: NFC Forum Tag Type 2-4, Sony FeliCa⁶⁾ <p>Version P</p> <p>Standard+Cotag,G-Prox⁸⁾, HID (Prox,Prox II,Duo Prox II,ISO Prox II,Micro Prox,ProxKey),Honeywell NexWatch,Indala,ioProx</p>
Certifications	RoHS-II compliant
MTBF	500.000 hours
Weight	Approx. 7g
Order Code	Standard: T4CM-BC1-5 Version P: T4CM-BC1-5P

¹⁾In Preparation ²⁾On Request Only ³⁾External Interface Required ⁴⁾Target Specification ⁵⁾UID Only ⁶⁾Encryption Not Supported ⁷⁾UID/PUPI Only, Read/Write On Request ⁸⁾Hash Value Only

Drawing/Pin Out



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