TWN4 MULTITECH CORE LEGIC 42*
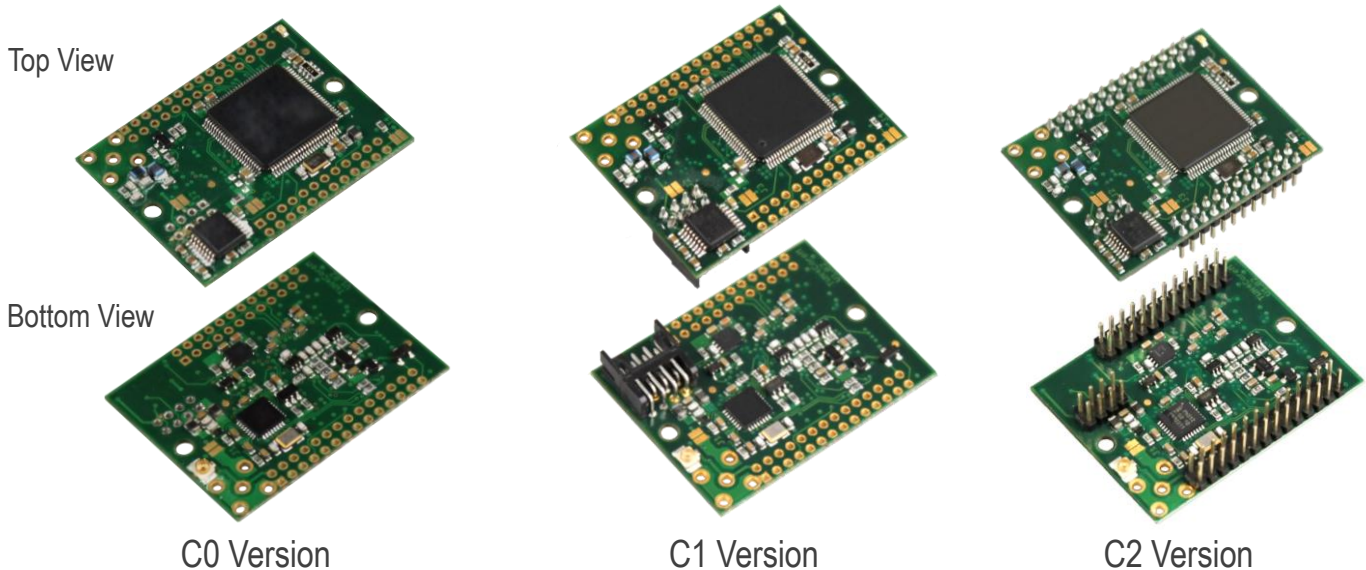
125kHz/134.2kHz & 13.56MHz Contactless Reader/Writer

*previously known as **TWN4 CORE LEGIC NFC**

Top View

Bottom View

C0 Version   C1 Version   C2 Version

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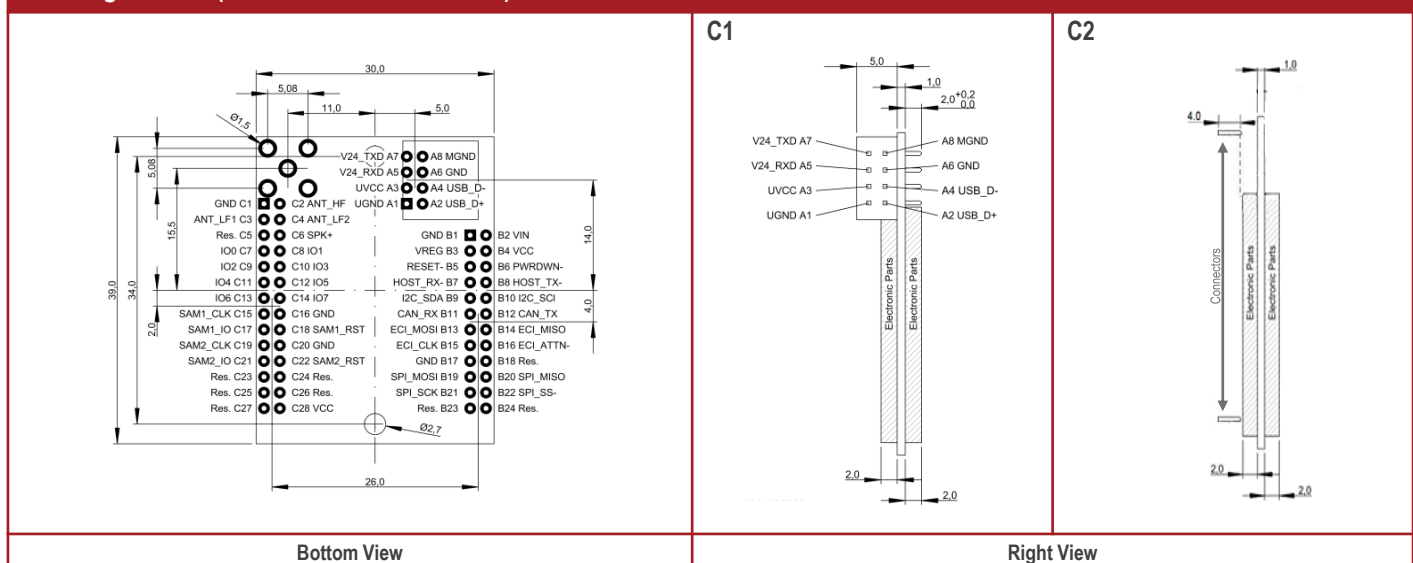The powerful hardware allows the extension of supported transponders to meet your individual request.

Special Features:

- 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[1]
- Interfaces:
  USB, RS232, Serial (logical level 3.3V, CMOS 5V tolerant), I²C, SPI[2], Clock/Data[3], Wiegand[3], CAN[2][3],1-Wire[2]
- Dedicated expansion bus for connection of LCD, mass storage…
- 3D Model (STEP) on request

ELATEC
RFID Systems

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)	C1 Version: 39mm x 30mm x 8mm / 1.54inch x 1.18inch x 0.31inch C2 Version: 39mm x 30mm x 9mm / 1.54inch x 1.18inch x 0.35inch
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), I²C, 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	• USB keyboard emulation – USB virtual COM port – Transparent (direct chip-commands support) • CCID and PC/SC 2.01[1]
Relative Humidity	5% to 95% non-condensing
Supported Transponders	**Standard** • 125kHz / 134.2kHz: 4100, 4102, 4200[10], 4050, 4150, 4450, 4550, AWID, CASI-RUSCO, HITAG 1[11], HITAG 2[11], HITAG S[11], 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 move[7], PayPass, MIFARE Classic EV1[9], MIFARE Ultralight EV1[9], MIFARE Ultralight C, NTAG2xx[9], HID iCLASS[5] • ISO15693: EM4035[7], Tag-it, my-d vicinity[7], ICODE SLI, M24LR16/64, PicoPass[5], HID iCLASS[5] • ISO18092 / NFC: NFCIP-1: NFC Forum Tag Type 2-4, Sony FeliCa[6] **Version P** Standard+Cotag,G-Prox[8], HID(Prox, Prox II,Duo Prox II,ISO Prox II,Micro Prox,ProxKey),Honeywell NexWatch,Indala,ioProx
Certifications	RoHS-II compliant
MTBF	500.000 hours
Weight	Approx. 7g

Order Code		C0	C1	C2
	Standard:	T4CM-BC0	T4CM-BC1	T4CM-BC2
	Version P:	T4CM-B-P	T4CM-B-P	T4CM-BC2

[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 (all measurements in mm)

Bottom View

C1

C2

Right View