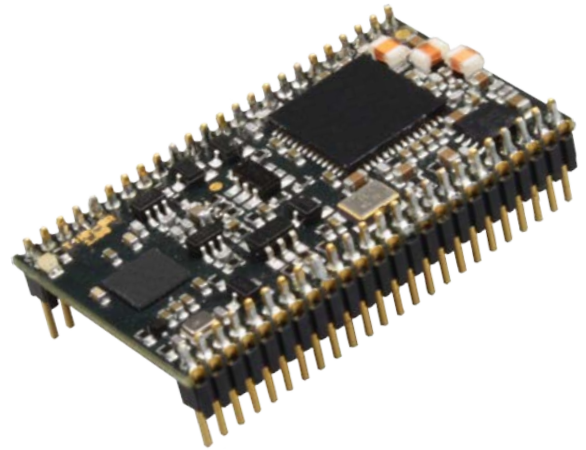


TWN4 MULTITECH NANO LEGIC 42

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



Version C0
(SMT)



Version C1
(THT)

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 MultiTech Nano LEGIC 42 is designed for integration into machines or any other device to be used with external antenna (125/134.2kHz, 13.56MHz or both). 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⁾
- CCID and PC/SC 2.01¹⁾
- Interfaces:
 - USB, Serial (logical level 3.3V, CMOS 5V tolerant), I²C, SPI²⁾, Clock/Data³⁾, Wiegand³⁾, CAN²⁾³⁾, 1-Wire²⁾
- 3D Model (STEP) on request

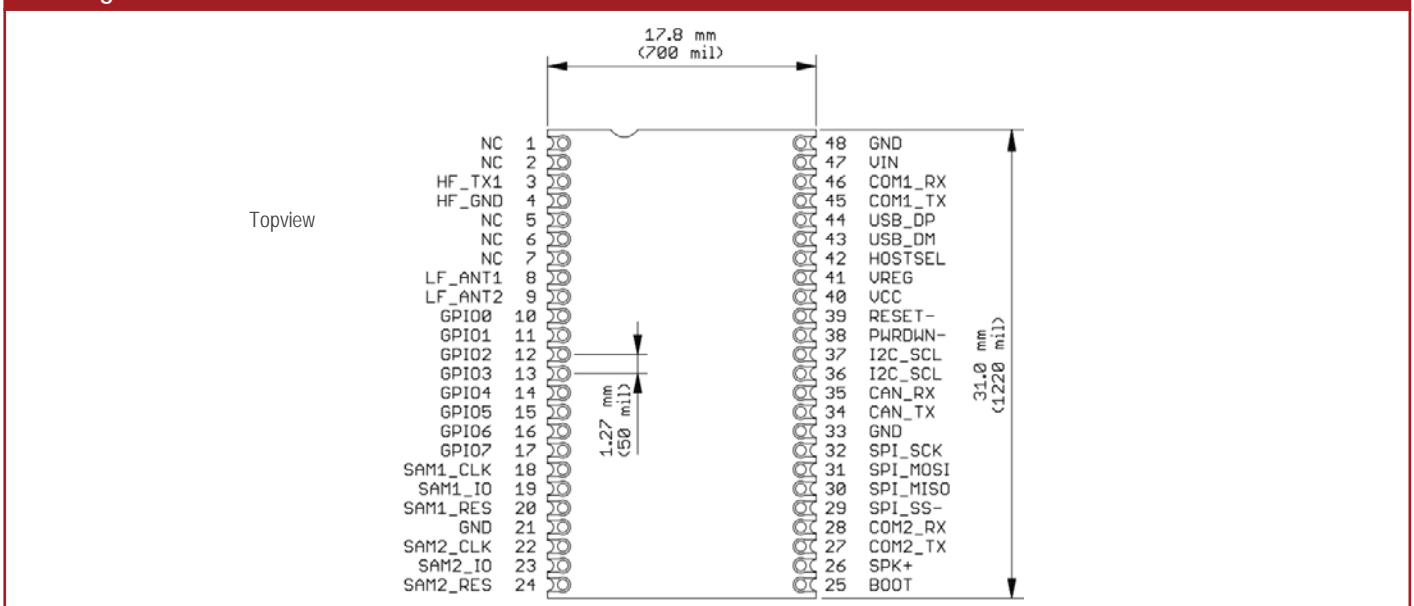
Technical Data⁴⁾

| | | |
|------------------------|--|--------------------------------|
| Frequency | 125kHz, 134.2kHz (LF) / 13.56MHz (HF) | |
| Antenna | 50 Ohm external antennas for 13.56MHz – 490µH ±5% for 125kHz/134.2kHz | |
| Dimensions (LxWxH) | 31mm x 17.8mm x 2.5mm / 1.22inch x 0.7inch x 0.12inch | |
| Power Supply | 3.3V +/-5% (direct supply) or 4.3-5.5V (use of on-board voltage regulator) | |
| Current Consumption | Depending on antenna: RF field on: 120mA typ. / Sleep: 500µA typ. / Cyclic Operation: TBD | |
| Temperature Range | Operating: -40°C up to +80°C (-40°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, 2 x serial (logic level 3.3V, CMOS 5V tolerant), I2C, SPI ²⁾ , Clock/Data ³⁾ , Wiegand ³⁾ , 1-Wire ²⁾ CAN, RS232/422/485 require adapter board | |
| 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) | AIR: up to 848Kbit/s |
| Modes of Operation | USB key board emulation – USB virtual COM port – Transparent – CCID mode / PC/SC 2.01 | |
| Relative Humidity | 5% to 95% non-condensing | |
| Supported Transponders | Standard <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⁾ Version P Standard+Cogtag, 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 Codes | C0 Standard: T4NM-B5C0 Version P: T4NM-B5C0-P | C1 T4NM-B5C1 T4NM-B5C1-P |
| | Development Kit TWN4 MultiTech-P Nano LEGIC 42 T4NK-B-P | |



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 ⁹⁾r/w enhanced security features on request ¹⁰⁾Only emulation of 4100,4102 ¹¹⁾Without crypto

Drawings



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