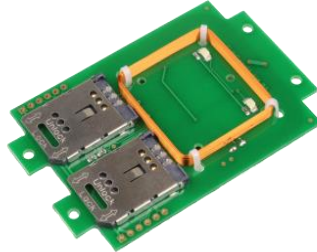


TWN4 MIFARE NFC

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



TWN4 OEM PCB
Bottom View



TWN4 OEM PCB
Top View



Desktop 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/B including layer 4 (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC).

The new generation is a direct enhancement to the successful TWN3 family as it comes in the same mechanical dimensions (OEM PCB and Desktop Housing). Desktop supports host communication via USB or RS232.

Special Features:

- Powerful SDK for writing Apps which are executed directly on the reader
- Infield Upgradeable
- Direct chip-commands support
- Power down mode for lowest power consumption
- Two onboard SAM sockets (Secure Access Module)¹⁾
- CCID and PC/SC 2.0¹⁾
- Additional interfaces for OEM PCB version
 - I²C, SPI²⁾, Clock/Data³⁾, Wiegand³⁾, CAN²⁾³⁾
 - Dedicated expansion bus for connection of LCD, mass storage, etc.
 - 8 GPIOs



Worldwide certifications for worldwide sales:

WEEE, RoHS, R&TTE, CE (Europe),

FCC (USA), IC (Canada), ACA (Australia / New Zealand), VCCI (Japan), KCC (Korea), ANATEL (Brasil), CFT (Mexico)

Technical Data ⁴⁾			
Frequency	125kHz, 134.2kHz (LF) / 13.56MHz (HF)		
Housing	Material ABS UL94-V0, colour black or white		
Dimensions (L x W x H)	Desktop Reader: 88mm x 56mm x 18mm / 3.5inch x 2.2inch x 0.7inch OEM Board: 76mm x 49mm x 14mm / 3.0inch x 1.9inch x 0.6inch		
Power Supply	4.3V..5.5V via USB or RS232; RS232 requires 5V external power supply; via connector CNB 3.3V +/- 5%		
Current Consumption	RF field off: 20mA / Cyclic Operation: 2mA ²⁾ / Power down Mode: 10µA ²⁾ RF field on: 120mA 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 transponder)		
HOST Interface	USB, RS232, serial 5V CMOS TTL, I ² C, SPI ²⁾ , Clock/Data ³⁾ , Wiegand ³⁾ , CAN ²⁾³⁾		
OS Support	Windows XP, Vista, 7 (32-/64-bit), 8, Linux		
Transmission Speed	Host: USB: Full speed (12Mbit) – RS232: up to 115.200baud	Air: up to 848kbit/s	
Modes of Operation	<ul style="list-style-type: none"> USB key board 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, 4200⁵⁾, AWID, CASI-RUSCO, HITAG 1⁶⁾, HITAG 2⁶⁾, HITAG S⁶⁾, Keri, Miro, Pyramid, TIRIS/HDX, UNIQUE, FDX-B, Q5, TITAN (4x50), T55x7, ZOODIAC <u>Optionally, in consideration: 4305, Cardax, IDTECK</u> 13.56MHz / ISO14443A: MIFARE Classic 1k & 4k, Mini, DESFire EV1, Plus S&X⁷⁾, Pro X⁷⁾, SmartMX⁷⁾, Ultralight, Ultralight C, SLE44R35, SLE66Rxx (my-d move)⁷⁾, LEGIC Advant⁵⁾, PayPass⁷⁾ 13.56MHz / ISO14443B: Calypso⁷⁾, CEPAS⁷⁾, HID iCLASS⁵⁾, Moneo⁷⁾, PicoPass⁷⁾, SRI512, SRT512, SRI4K, SRIX4K 13.56MHz / ISO15693: EM4x33⁷⁾, EM4x35⁷⁾, HID iCLASS⁵⁾, ICODE SLI, LEGIC Advant⁵⁾, M24LR16/64, Tag-it, SRF55Vxx (my-d vicinity)⁷⁾, PicoPass⁷⁾ 13.56MHz / ISO18092 / NFC: NFCIP-1: Active and passive communication mode, Peer-to-Peer, NFC Forum Tag Type 1-4, Sony FeliCa⁶⁾ <p>Version P Standard + Cotag, G-Prox⁸⁾, HID Prox, Honeywell NexWatch, Indala, ioProx</p> <p>Version PI Version P + HID iCLASS (CSN and Facility Code)</p>		
Certifications	CE, R&TTE, RoHS-II compliant, FCC, IC, ACA, VCCI, SRRC ²⁾ , KCC, CFT, ANATEL		
MTBF	500.000 hours		
Weight	Approx. 20 g (without housing)		
Order Code	Standard	Version P	Version PI
OEM Board	ART14187	ART14763	ART14764
USB black / white	ART14188 / ART14189	ART14765 / ART14767	ART14766 / ART14768
RS232 black / white	ART14190 / ART14191	ART14769 / ART14771	ART14770 / ART14772

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

Accessories			
Order Code	Snap-in holder ART13512 black,  ART15344 white	Bracket Holder ART15203 black,  ART15235 white	ART11493 USB cable 200cm/78.74inch ART13488 USB cable 45cm/17.72inch ART13829 USB cable 120cm/47.24inch
Order Code	ART14712 Power Supply (EU) ART14714 Power Supply (AU)	ART14713 Power Supply (US) ART14715 Power Supply (UK)	ART14269 USB cable mini 12cm/4.72inch ART12240 RS232 cable 200cm/78.74inch

Drawing/Pin Out
Refer to document DS_TWN4 Reader Family Pinouts

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