TWN3 MIFARE NFC

13.56MHz Contactless Reader/Writer

The TWN3 MIFARE NFC transponder reader is designed for easy integration into various applications.

The device supports either USB or RS232 communication just in dependence on the connection cable and is available as ready-to-connect desktop reader in a slim line black or white housing or as a OEM board (PCB) without housing for direct integration into embedded applications.

Readers can be programmed with a script language for autonomous execution of even complex commands like login procedures, increment/decrement functions and many more.

The Secure Access Module (SAM) is supported for enhanced security and cryptographic performance. This enables the application to perform secure transactions, e.g. payment terminals etc.

Additional features for OEM PCB version:

- 5 V serial TTL interface
- 2 General Purpose Outputs

Technical Data

Housing	Material ABS UL94-V0, colour black or white
Frequency	13.56 MHz
Dimensions	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	5V ± 10% via communication cable (USB); serial version requires external power supply
Supply Current	65mA typ. (USB, normal operation); 120mA peak
Temperature Range	Storage: -45°C up to +85°C (-49°F up to 185°F)
	Operating: -25°C up to +80°C (-13°F up to 176°F)
Antenna	PCB Aircoil
R/W Distance	up to 100 mm / 4 inch (depending on transponder)
Host Interfaces	USB, RS232. The OEM board supports both and an additional serial TTL interface via a separate connector
OS Support	Windows XP, Vista, 7(32/64 bit), 8, 8.1 and Linux
Communication Parameters	USB: Full speed (12 MBit)
	RS232: Baudrate: 1200, 2400, 4800, 9600, 19200, 38400, 57600
	Parity: none, even, odd
Modes of Operation	USB keyboard emulation
	USB virtual COM port (bi-directional communication)
	Direct access to built-in RFID module (transparent mode)
Special Features	Powerful scripting language
Supported Transponders	• ISO14443A: MIFARE Classic 1k & 4k, MIFARE Classic 1k & 4k EV1[4], Mini, DESFire EV1[3], Plus S&X, Pro X, SmartMX, Ultralight, Ultralight EV1[4], Ultralight C, NTAG2xx[4]
	• SLE44R35, SLE66Rxx (my-d move), LEGIC Advant[1], PayPass[2]
	• ISO14443B: Calypso[2], CEPAS[2], Moneo[2], PicoPass[2], SRI512, SRT512, SRI4K, SRIX4K
	• ISO18092 / NFC: NFC Forum Tag Type 1-4
	• Sony FeliCa[1]
Certifications	CE, Australia, EAC, FCC, IC, RoHS-II compliant
Weight	Approximately 15g (without housing)
Order Code	OEM board Desktop reader: T3DO-F
	USB black: T3DT-FB2BEL
	USB white: T3DT-FB2WEL
	Serial black:T3DT-FR2BEL
	Serial white: T3DT-FR2WEL

[1] UID only   [2] UID only - read/write on request   [3] AES only   [4] r/w, enhanced security features planned

Accessories

Order Code	Snap-in holder HKSI-B - black, HKSI-W - white	Bracket Holder HKBR-B - black, HKBR-W - white	CAB-U2 - USB cable 200cm / 78.74inch CAB-U4 - USB cable 45cm / 17.72inch CAB-U7 - USB cable 120cm / 47.24inch
Order Code	PWA-EU - Power Supply (EU) PWA-AUS - Power Supply (AU)	PWA-US - Power Supply (US) PWA-UK - Power Supply (UK)	CAB-M1 - USB cable mini 12cm / 4.72inch CAB-R2 - RS232 cable 200cm / 78.74inch

Drawing/Pin Out

Refer to document DS_TWN3 Pinout & Cables