## TWN3 MULTI ISO

## 13.56MHz Contactless Reader/Writer



The TWN3 Multi ISO transponder Reader/Writer 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.



| 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     | 110mA typ. (USB, normal operation); 180mA 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   |  |  |  |
| Relative Humidity  | 5% to 95% non-condensing  |  |  |  |
| R/W Distance       | up to 100 mm / 4 inch (depending on transponder)  |  |  |  |
| Host Interfaces    | USB, RS232. The OEM board supports both   |  |  |  |
| OS Support         | Windows XP, Vista, 7(32/64 bit), 8, 8.1 and Linux   |  |  |  |
| Communication      | USB: Full speed (12 MBit)   |  |  |  |
| Parameters         | RS232: Baudrate: 9600, 8N1, Default   |  |  |  |
| 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          | ■ ISO14443A: MIFARE Classic 1k & 4k, MIFARE Classic 1k & 4k EV1 <sup>3)</sup> , Mini, DESFire EV1, Plus S, X, Pro X,                    |  |  |  |
| Transponders       | SmartMX, Ultralight, Ultralight C, Ultralight EV13), LEGIC Advant1), PayPass2), SLE44R35, SLE66Rxx (my-d                                |  |  |  |
|                    | move), NTAG2xx <sup>3)</sup>  |  |  |  |
|                    | ■ ISO14443B: Calypso <sup>2)</sup> , CEPAS <sup>2)</sup> , Moneo <sup>2)</sup> , PicoPass <sup>2)</sup> , SRI512, SRT512, SRI4K, SRIX4K |  |  |  |
|                    | ■ ISO15693: EM4x33, EM4x35, ICODE SLI, Tag-it, SRF55Vxx (my-d vicinity) <sup>2)</sup> , M24LR16/64, MB89R118/119,                       |  |  |  |
|                    | HID iCLASS <sup>1)</sup> , HID iCLASS SE/SR <sup>1)</sup> SO18092 / NFC: NFC Forum Tag Type 1-4   |  |  |  |
|                    |   |  |  |  |
|                    | Sony FeliCa <sup>1)</sup>   |  |  |  |
| Certifications     | CE, Australia, EAC, Egypt, FCC, IC, India, Kenia, South Africa, SRRC, RoHS-II compliant   |  |  |  |
| Weight             | Approximately 15g (without housing)   |  |  |  |
| Order Code         | OEM board Desktop reader: T3DO-U  |  |  |  |
|                    | USB black: T3DT-UB2BEL  |  |  |  |
|                    | USB white: T3DT-UB2WEL  |  |  |  |
|                    | Serial black: T3DT-UR2BEL   |  |  |  |
|                    | Serial white: T3DT-UR2WEL   |  |  |  |

<sup>1)</sup> UID only 2) UID only - read/write on request 3) r/w, enhanced security features planned

| Accessories |                             |                            |   |
|-------------|-----------------------------|----------------------------|---|
| Order Code  | Snap-in holder              | Bracket Holder             | CAB-B2 - USB cable 200cm / 78.74inch    |
|             | HKSI-B - black,             | HKBR-B - black,            | CAB-B4 - USB cable 45cm / 17.72inch     |
|             | HKSI-W - white              | HKBR-W - white             | CAB-B7 - USB cable 120cm / 47.24inch    |
| Order Code  | PWA-EU - Power Supply (EU)  | PWA-US - Power Supply (US) | CAB-M1 - USB cable mini 12cm / 4.72inch |
|             | PWA-AUS - Power Supply (AU) | PWA-UK - Power Supply (UK) | CAB-R2 - RS232 cable 200cm / 78.74inch  |

## **Drawing/Pin Out**

Refer to document DS\_TWN3 Pinout & Cables

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