# TWN3 LEGIC NFC

# PROGRAMMABLE RFID READER/WRITER FOR HF/NFC



TWN3 LEGIC NFC PCB top view



Desktop version (inlay customizable)

The TWN3 LEGIC 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.

### Additional features for PCB version:

- + 5 V serial TTL interface
- + 2 GPOs

































# TECHNICAL DATA

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FREQUENCY	13.56 MHz (HF)		
ANTENNA	PCB aircoil; Integrated		
HOUSING	Material: ABS UL94-V0, color: black or white		
DIMENSIONS (L X W X H)	Desktop Reader: 88 mm x 56 mm x 18 mm / 3.5 inch x 2.2 inch x 0.7 inch		
	OEM Board: 76 mm x 49 mm x 14 mm / 3.0 inch x 1.9 inch x 0.6 inch		
POWER SUPPLY	$5.5 \text{ V} \pm 10\%$ via communication cable (USB); serial version requires external power supply		
CURRENT CONSUMPTION	140 mA typically (USB, normal operation); 200 mA peak		
TEMPERATURE RANGE	Desktop, Operating: -25 °C up to +70 °C (-13 °F up to +158 °F)		
	Desktop, Storage: -45 °C up to +75 °C (-49 °F up to +167 °F)		
	PCB, Operating: -25 °C up to +80 °C (-13 °F up to +176 °F)		
	PCB, Storage: -45 °C up to +85 °C (-49 °F up to +185 °F)		
RELATIVE HUMIDITY	5% to 95% non-condensing		
READ- / WRITE DISTANCE	Up to 100 mm / 4 inch, depending on environment and transponder		
INTERFACES	USB, RS-232, 5 V serial TTL interface, 2 GPOs		
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s),		
	RS-232: Baudrate: 1200, 2400, 4800, 9600, 19200, 38400, 57600		
	Parity: none, even, odd		
	USB keyboard emulation		
OPERATING MODES	USB virtual COM port (bi-directional communication)		
	Direct access to built-in RFID module (transparent mode)		
MTBF	500,000 hours		
WEIGHT	Approx. 15 g (without housing)		
SUPPORTED TRANSPONDERS (STANDARD)	<u>ISO14443A+B</u> :		
	LEGIC Advant, MIFARE Classic EV14), MIFARE Classic3), MIFARE Mini1), MIFARE		
	DESFire EV13), MIFARE Plus S, X3), MIFARE Pro X3), MIFARE Smart MX3), MIFARE		
	Ultralight <sup>3)</sup> , MIFARE Ultralight C <sup>3)</sup> , MIFARE Ultralight EV1 <sup>4)</sup> , NTAG2xx <sup>4)</sup> , PayPass <sup>1)</sup> ,		
	SLE44R35 <sup>1)</sup> , SLE66Rxx (my-d move) <sup>3)</sup> , HID iCLASS <sup>1)</sup> , PicoPass <sup>1)</sup>		
	<u>ISO18092 ECMA-340</u> :		
	Sony FeliCa <sup>1)</sup> , passive Peer-to-Peer mode - initiator, NFC Tag 2, 3, 4 <sup>3)</sup>		
	<u>ISO15693</u> :		
	EM4x35 <sup>3</sup> ), HID iCLASS <sup>1</sup> ), HID iCLASS SE/SR <sup>1</sup> ), ICODE SLI <sup>3</sup> ), LEGIC Advant, SRF55Vxx		
	(my-d vicinity) <sup>3)</sup> , Tag-it <sup>3)</sup> , PicoPass <sup>1)</sup>		
	LEGIC Prime:		
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OS SUPPORT	Windows XP, Vista, 7(32/64 bit), 8, 8.1 and Linux		
CERTIFICATION(S)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	SRRC, Taiwan		
ORDER CODE(S)	T3DO-B: OEM Board		
	T3DT-BB2BEL: USB Black		
	T3DT-BB2WEL: USB White		
	T3DT-BR2BEL: Serial Black		
	T3DT-BR2WEL: Serial White		
CERTIFICATION(S)  ORDER CODE(S)	RoHS-II compliant, CE/RED, FCC, IC, ACA, ANATEL, CFT, India, Malaysia, Singapore, SRRC, Taiwan  T3DO-B: OEM Board T3DT-BB2BEL: USB Black T3DT-BB2WEL: USB White T3DT-BR2BEL: Serial Black		

## ACCESSORIES

HOLDER(S)	HKSI-B:	Snap-In Holder black
	HKSI-W:	Snap-In Holder white
	HKBR-B:	Bracket Holder black
	HKBR-W:	Bracket Holder white

CAB-B2: USB cable type A 200 cm / 78.74 inch
CAB-B4: USB cable type A 45 cm / 17.72 inch
CAB-B7: USB cable type A 120 cm / 47.24 inch
CAB-M1: USB cable mini 12 cm / 4.72 inch
CAB-R2: RS232 cable 200 cm / 78.74 inch

### DRAWINGS / PIN OUT

Refer to document DS\_TWN3 Pinout & Cables

