

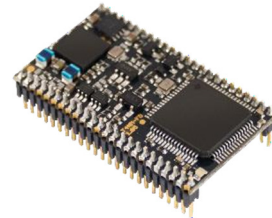
T4 MT2 NANO HF



MINIATURE HF RFID/NFC READER/WRITER FOR EXTERNAL DIRECT MATCHED ANTENNA



Version C0 (SMT)
31 x 17.8 x 2.7 mm



Version C1 (THT)
31 x 17.8 x 8.11 mm

ASE's T4 family of transponder readers and writers allows users to read and write to almost any 13.56 MHz tags and/or labels – it supports all major transponders from various suppliers like EM, Fujitsu, ST, NXP, TI, HID, LEGIC, etc. and ISO standards like ISO14443A/B (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC).

The T4 MultiTech Nano HF is designed for integration into machines or other devices. It can be connected to an external antenna through a printed circuit board.

Special features:

- + compact design (31 x 17.8 x 2.7 mm / 1.22 x 0.7 x 0.12 inch)
- + components mounted only on one side for easy integration on the main application
- + edge plated pads for surface mounting (C0) allows easy and reliable PCB mounting, connector option (C1) also available for THT mounting
- + powerful SDK for writing apps which are executed directly on the reader
- + firmware update in the field possible
- + onboard 18 kB flash storage, e.g. for storing user accessible non-volatile data
- + direct chip-commands support
- + compliance to EMV contactless protocol specification V2.32)
- + supports connection of external ISO7816 compatible SAM cards
- + CCID and PC/SC 2.01
- + 8 GPIOs
- + supports quick centralized (re)configuration over network and over wireless interface with T4 CONFIGCard
- + 3D construction data (STEP) available on request



Elevator



EV Chargers



Access



Shop POS



Fitness
Equipment



Ticket POS



PC Log-on



Document
Management



Driver ID



Vending



Parking



Gaming



Locker Locks



Time
Attendance



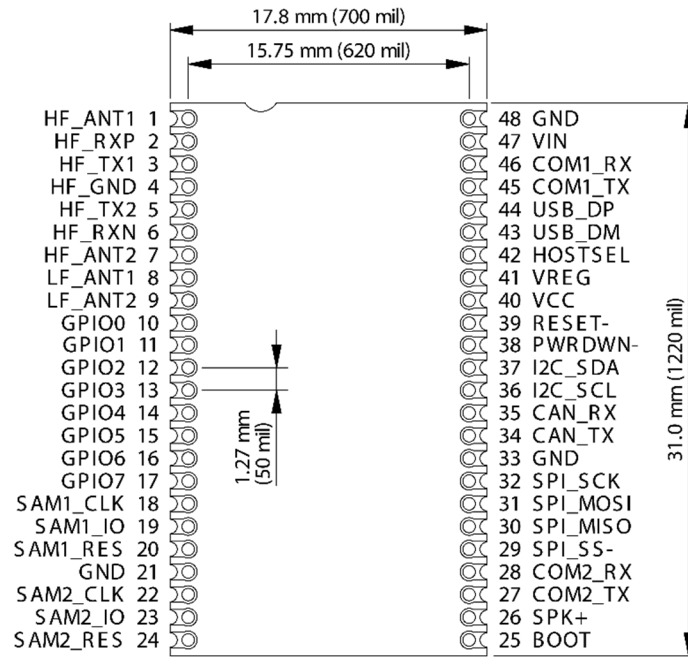
Industrial
PC

TECHNICAL DATA

FREQUENCY	13.56 MHz (HF)								
ANTENNA	Externally, direct matched for 13.56 MHz								
DIMENSIONS (L X W X H)	31 mm x 17.8 mm x 2.7 mm / 1.22 inch x 0.7 inch x 0.12 inch								
POWER SUPPLY	3.3 V +/- 5% (direct supply) or 4.3 V - 5.5 V (use of on-board voltage regulator)								
CURRENT CONSUMPTION	RF field on: 120 mA typically / Sleep: 500 µA typ. / Cyclic Operation: TBD								
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)								
RELATIVE HUMIDITY	5% to 95% non-condensing								
READ- / WRITE DISTANCE	Up to 100 mm / 4 inch, depending on antenna, environment and transponder								
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), Serial TTL: up to 115.200 baud; Air: up to 848 kbit/s								
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01								
MTBF	500,000 hours								
WEIGHT	Approx. 7 g								
SUPPORTED TRANSPONDERS (STANDARD)	<p><u>ISO14443A:</u> LEGIC Advant¹⁾, MIFARE Classic EV1²⁾, MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2²⁾, MIFARE Plus S, X, MIFARE Pro X³⁾, MIFARE Smart MX³⁾, MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, PayPass³⁾, SLE44R35, SLE66Rxx (my-d move)³⁾, Topaz</p> <p><u>ISO14443B:</u> Calypso³⁾, Calypso Innovatron protocol³⁾, CEPAS³⁾, HID iCLASS¹⁾, Moneo³⁾, Pico Pass⁴⁾, SRI4K, SRIX4K, SRI512, SRT512</p> <p><u>ISO18092 ECMA-340:</u> NFC Forum Tag 1-5, NFC Peer-to-Peer, Sony FeliCa⁵⁾, NFC Active and passive communication mode</p> <p><u>ISO15693:</u> EM4x33³⁾, EM4x35³⁾, HID iCLASS¹⁾, HID iCLASS SE/SR¹⁾, ICODE SLI, LEGIC Advant¹⁾, M24LR16/64, MB89R118/119, SRF55Vxx (my-d vicinity)³⁾, Tag-it, PicoPass⁴⁾</p>								
SUPPORTED TRANSPONDERS (VERSION I)	Requires external TWN4 SIO Card, All Standard Transponders, HID iCLASS, HID iCLASS SE/SR/SEOS (CSN and Facility Code/PAC) ⁶⁾ , HID iCLASS Elite & SE Elite								
SUPPORTED TRANSPONDERS (VERSION PI)	HID iCLASS Elite & SE Elite								
PERIPHERAL INTERFACES	USB, 2 x serial (logic level 3.3 V, CMOS 5 V tolerant), I ² C, SPI, 8 GPIOs, CAN ⁷⁾ , Clock/Data, Wiegand, 1-Wire ⁷⁾								
OS SUPPORT	Windows XP, Vista, Embedded CE ⁷⁾ , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android ⁷⁾ , iOS ⁷⁾ , MAC OS X ⁷⁾								
CERTIFICATION(S)	RoHS-II compliant, REACH								
ORDER CODE(S)	<table> <tr> <td>T4NM-FDA0</td> <td>A0 Standard</td> </tr> <tr> <td>T4NM-FDA0-I</td> <td>A0 Version I</td> </tr> <tr> <td>T4NM-FDA1</td> <td>A1 Standard</td> </tr> <tr> <td>T4NM-FDA1-I</td> <td>A1 Version I</td> </tr> </table>	T4NM-FDA0	A0 Standard	T4NM-FDA0-I	A0 Version I	T4NM-FDA1	A1 Standard	T4NM-FDA1-I	A1 Version I
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T4NM-FDA0-I	A0 Version I								
T4NM-FDA1	A1 Standard								
T4NM-FDA1-I	A1 Version I								

¹⁾UID only ²⁾r/w enhanced security features on request ³⁾r/w in direct chip command mode ⁴⁾UID only, read/write on request ⁵⁾UID + r/w public area ⁶⁾UID + PAC (CSN & Facility Code), r/w on request ⁷⁾On request

DRAWING



Top view