NANO MODULE MIFARE

13.56MHz Contactless Reader/Writer

Elatec's Nano Module MIFARE is designed for integration into machines, handheld computer or any other device. The focus has especially been set on size, price and flexibility.

Thanks to its compact dimensions, integration directly on a PC board is possible.

Unique features are: 4 user configurable ports (to be configured as input or output), beeper support and different sleep modes for lowest power consumption. The simple ASCII or binary protocol enables quick software development cycles. All host communication is done via serial TTL interface.
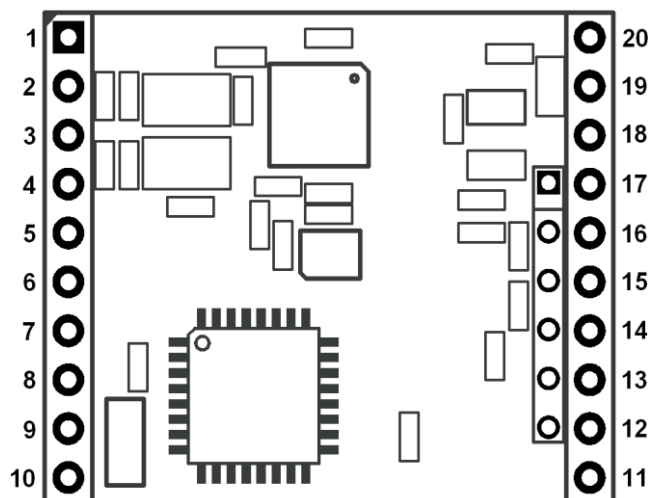
Technical Data	
Housing	without
Frequency	13.56 MHz
Dimensions (L x W x H)	30.48mm x 25.40mm x 4mm / 1.20inch x 1.00inch x 0.14inch
Power Supply	3.15 – 5.5 V DC
Current Consumption	Power down: < 300µA
	RF field off: 2mA
	RF field on: typically 80mA, depending on antenna
Temperature Range	Operating: -25°C up to +80°C (-13°F up to +176°F)
	Storage: -40°C up to +85°C (-40°F up to +185°F)
Relative Humidity	5% to 95% non-condensing
Antenna	To be connected externally
Read- / Write Distance	Proximity, depending on antenna and tag
Supported Transponders	• ISO14443A • MIFARE: Classic 1k & 4k, Classic 1k & 4k EV1[4], DESFire EV1[1], Mini, Plus S[2],X[2] , Pro X[1], SmartMX[1], PayPass[1], Ultralight, Ultralight EV1[4], Ultralight C[3] • LEGIC Advant(ISO14443A)[1] • SLE44R35 • SLE66Rxx (my-d move) • NTAG2xx[4]
Certification	RoHS-II compliant
Weight	Approx. 3g
Order Code	T3NM-M

[1] UID Only   [2] Support of security level 1   [3] Without crypto   [4] r/w, enhanced security features planned

Schematically picture (component side)

Pin spacing 2,54mm

Pinning

Pin	Name	Description
1	AntRX	Antenna receiver input
2	AntTX1	Antenna transmitter output 1
3, 20	VCC	3.3 - 5V
4, 6, 19	GND	Ground
5	AntTX2	Antenna transmitter output 2
7, 8, 9, 10	NC	Not connected
11	RXD	TTL receiver input
12	TXD	TTL transmitter output
13	GPIO0	General purpose input/output 0
14	GPIO1/ Beeper	General purpose input/output 1, connection port for beeper
15	Reset	Asynchronous reset
16	Enable	Hardware power up/down
17	GPIO2	General purpose input/output 2
18	GPIO3	General purpose input/output 3