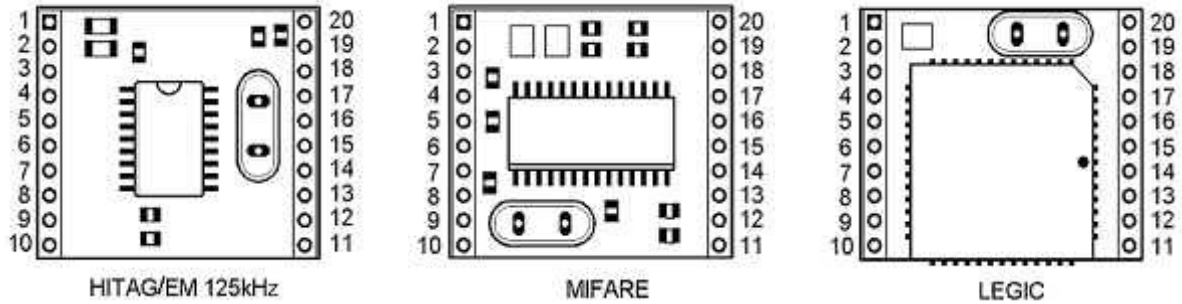


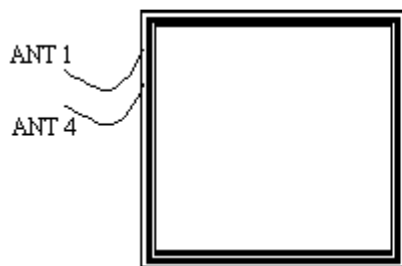
Dimensions

Module



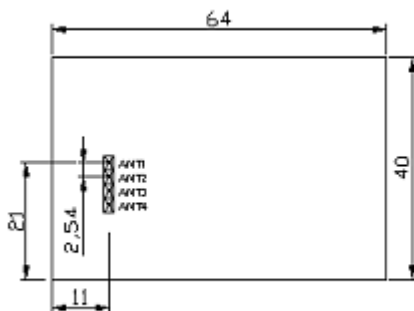
Antenna

Wired 125 kHz antenna



Wired antenna is connected between pins 1 & 2 on the module, either directly on the pins or on the soldering pad next to the pins.

Etched pcb 13,56 MHz antenna



PIN connections

PIN	MIFARE 13,56MHz	LEGIC 13,56MHz	HITAG/EM 125kHz	Antenna pcb
1	REC_ANT	NC	REC_ANT	ANT4
2	TX1_ANT	TX_ANT	TX1_ANT	ANT1
3	UB +5V	UB +5V	UB +5V	
4	GND_ANT	GND_ANT	GND_ANT	ANT2
5	TX2_ANT	GND	TX2_ANT	ANT3
6	GND	GND	GND	
7	TEST_PIN_OUT	TEST_PIN_OUT	TEST_PIN_OUT	

8	TEST_PIN_IN	TEST_PIN_IN	TEST_PIN_IN
9	SDA DIGITAL I/O 5	SDA DIGITAL I/O 5	SDA DIGITAL I/O 5
10	SCL DIGITAL I/O 6	SCL DIGITAL I/O 6	SCL DIGITAL I/O 6
11	RX, DATA, D1	RX, DATA, D1	RX, DATA, D1
12	TX, CLOCK, D0	TX, CLOCK, D0	TX, CLOCK, D0
13	Card Load, Direction	Card Load, Direction	Card Load, Direction
14	DIGITAL I/O 1	DIGITAL I/O 1	DIGITAL I/O 1
15	/RESET	/RESET	/RESET
16	DIGITAL I/O 2	DIGITAL I/O 2	DIGITAL I/O 2
17	DIGITAL I/O 3	DIGITAL I/O 3	DIGITAL I/O 3
18	DIGITAL I/O 4	DIGITAL I/O 4	DIGITAL I/O 4
19	GND	GND	GND
20	UB +5V	UB +5V	UB +5V

NOTE

The function of the I/O pins depends on the firmware in the reader module. For customer-specific requirements, please forward your needs for further study.

Also the function of the data output pins (pin 11, 12 and 13) depends on the firmware. Please check the module version for correct information on this. Note that the output signals are always on TTL level. Eventual buffer circuits or level transformers must be connected externally.

For Clock/Data :

pin 11 = Clock

pin 12 = Data

pin 13 = Card Load Signal (low for +/- 0.5 s for every newly detected tag)

For Wiegand :

pin 11 = Data0

pin 12 = Data1

pin 13 = Card Load Signal (low for +/- 0.5 s for every newly detected tag)

For RS232(RS485) :

pin 11 = TX

pin 12 = RX

pin 13 = Direction (controls DE signal for RS485 drivers)