

### Low Cost Transponder Reader

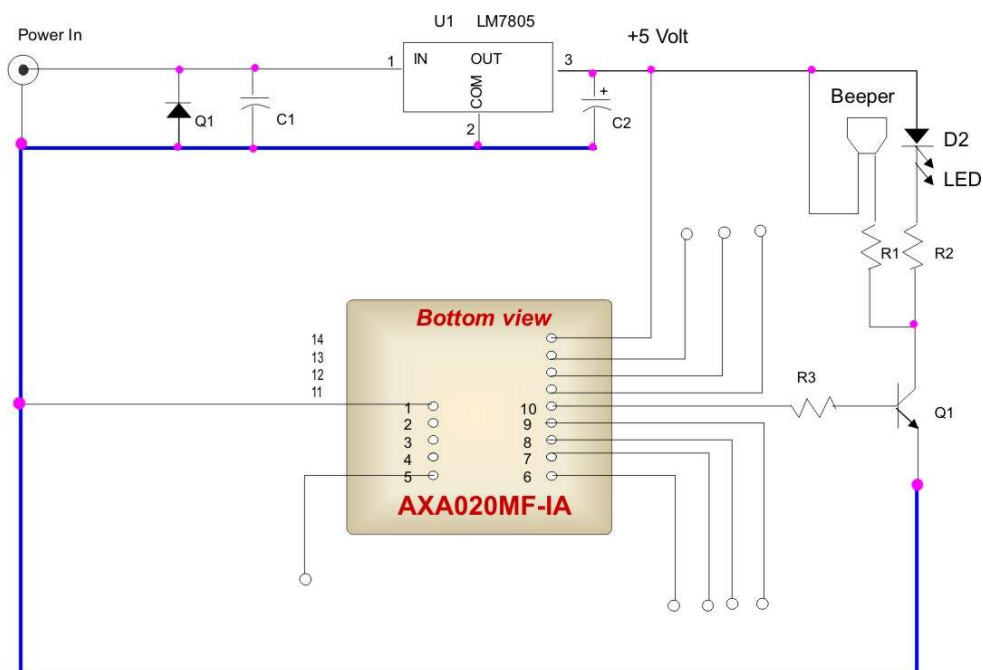


The AXA020MF series contactless card Read/Write module is based on Mifare reader IC. They come with an internal antenna and are suitable for embedded applications and general Electronic Devices. The AXA020MF series is user friendly and can be controlled by command from a UART (serial port). Functions are selected by a Pin jumper allowing full control of all functions.

Parameter	AXA020MF
<b>Read/write distance</b>	Internal antenna 30mm External antenna up to 80mm
<b>Typical dimensions (mm)</b>	37.5 x 40.0 mm
<b>RF-Frequency</b>	13.56 MHz
<b>Supported transponders</b>	ISO/IEC14443 TypeA
<b>Communication Port</b>	(RS232) TTL / 2400-57600BPS N,8,1
<b>Power</b>	5V DC
<b>Current consumption</b>	<60 mA
<b>weight</b>	80g
<b>Operating temperature</b>	-20°C - +75°C
<b>Storage temperature</b>	-40°C - +85°C

## Technical data:

Pin No.	Description	ASCII	Magnet Emulation	Wiegand26
1	Zero Volts and Tuning Capacitor Ground	GND 0V	GND 0V	GND 0V
2	To External antenna TX1	To External antenna TX1	To External antenna TX1	To External antenna TX1
3	To External antenna TX2	To External antenna TX2	To External antenna TX2	To External antenna TX2
4	To External antenna RX1	To External antenna RX1	To External antenna RX1	To External antenna RX1
5	Card Present	No function	Card Present	No function
6	Future	Future	Future	Future
7	Format Selector (+/-)	Strap to GND	Strap to Pin 10	Strap to +5V
8	Data 1	No function	Clock	One Output
9	Data 0	No function	Data	Zero Output
10	LED(LED/BEEPER)	Beeper / LED	Beeper / LED	Beeper / LED
11	No Connection	No Connection	No Connection	No Connection
12	RXD	TTL RXD	No function	No function
13	TXD	TTL TXD	No function	No function
14	DC Voltage Supply	+5V	+5V	+5V



Elatec reserves the right to change any information or data in this document without prior notice. The distribution and the update of this document is not controlled. Elatec declines all responsibility for the use of product with any other specifications but the ones mentioned above. Any additional requirement for a specific customer application has to be validated by the customer himself at his own responsibility. Where application information is given, it is only advisory and does not form part of the specification.

Elatec GmbH, Identification Systems  
 Max-Planck-Str. 16, D-82223 Eichenau, GERMANY  
 Phone: +49 8141 53498-0  
 Fax: +49 8141 53498-29  
[RFID@elatec.de](mailto:RFID@elatec.de)

Elatec Vertriebs GmbH  
 Hans-Pinsel-Str. 10b, D-85540 Haar, GERMANY  
 Phone: +49 89 46 23 070 ;  
 Fax: +49 89 460 24 03  
[info@elatec.de](mailto:info@elatec.de)