

Technical Data Sheet

Microdem3-Man-en-v2 AMP D091019



NETRONIX MicroDem3

Introduction

A MicroDem3 is demonstration module designed for "micro" series readers (i.e. UM-005, MM-U57D, MM-D5, MM-R5 UM-RWDM, Q5M-005, H1M-005-p, MM-005, I1M-005,NANO-U,NANO-M), which feature RS-232 interface with TTL levels.

On PCB of the module there are located a logic state RS-TTL bus converters, which convert them to RS-232 interface states.

Owing to these converters, the reader module can be connected to PC (RS-232) directly. (In case of operation via RS-232, it is possible to test reader by means of free tool "Framer" software.)

On PCB of the module there are designed two antennas:

- 13,56 MHz for MM-005, I1M-005, MM-U57D, MM-D5, NANO-MP
- 125kHz for UM-005, Q5M-005, H1M-005-p, UM-RWDM, NANO-UP

The MicroDem3 demonstration module is equipped with four switches, which allow testing the I/O terminals of the modules and LED's showing states of these terminals. All options and settings can be done by means of jumper switching.

Jumper settings depending on demonstration mode

Selecting RS interface type:

RS232 - CON5 connector RSTTL - CON2 connector

Jumper settings

| | | | | | | | _ |
|--|------------|----------|-------|-----|-----|-----|-----|
| Moduł | J2, J3, J4 | J5 J7 J9 | J6 J8 | J10 | J1 | J12 | Тур |
| | | | | J11 | | | |
| UM-005, UM-RWD-M | OFF | ON | ON | OFF | 1-2 | OFF | M2b |
| MM-005, I1M-005, MM-U57D, MM-D5, MM-R5 | ON | OFF | OFF | OFF | 1-2 | ON | M1 |
| Rest of 125kHz | OFF | ON | OFF | ON | 1-2 | OFF | M2a |
| Rest of 13,56 MHz | ON | OFF | OFF | OFF | 1-2 | OFF | M1 |
| NANO-UP | OFF | ON | OFF | OFF | 1-2 | ON | М3 |
| NANO-MP | OFF | ON | OFF | OFF | 2-3 | ON | М3 |

Selecting external antenna:

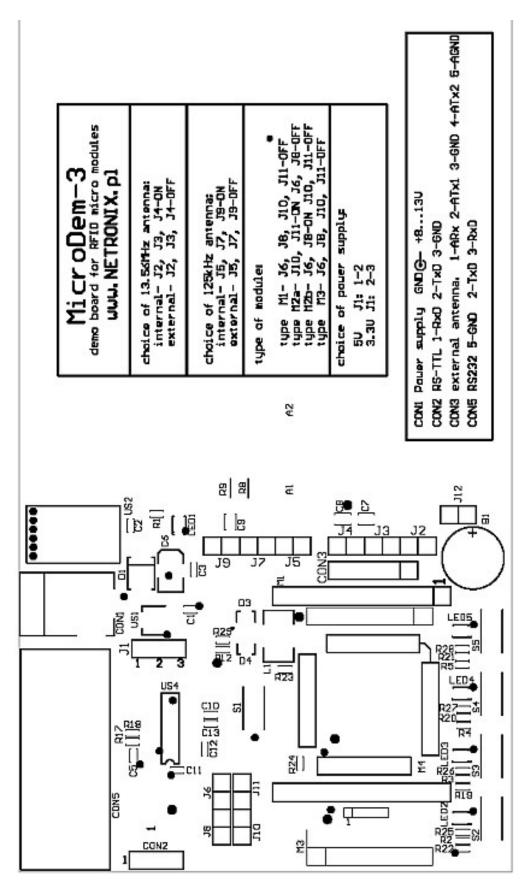
Jumpers: J2,J3,J4,J5,J7,J9 - OFF

Selection: with / without buzzer:

Buzzer enabled: J12-ON Buzzer disabled: J12-OFF

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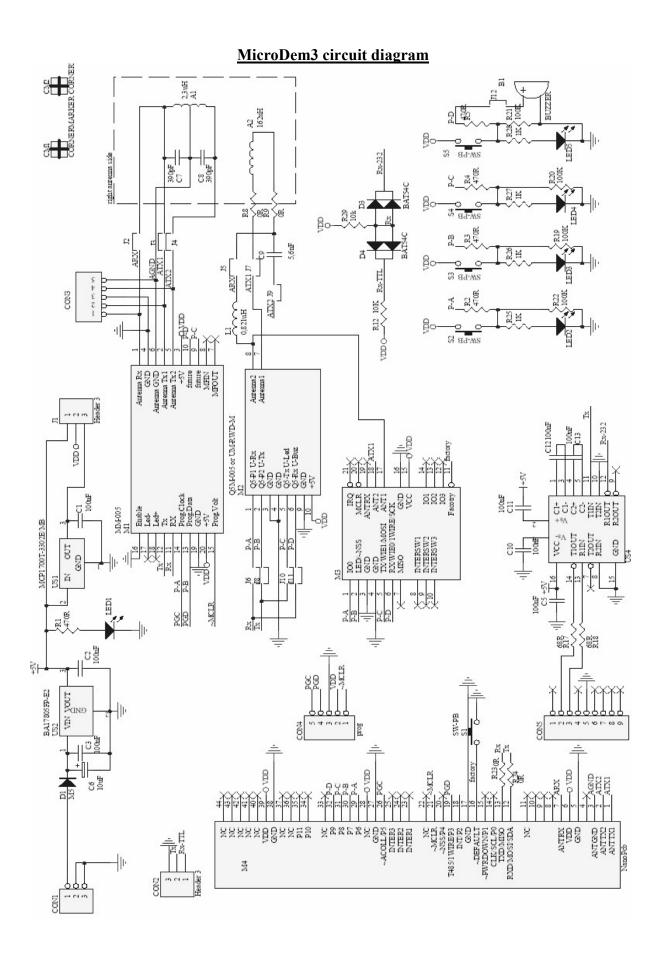
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Picture: PCB - view from component side

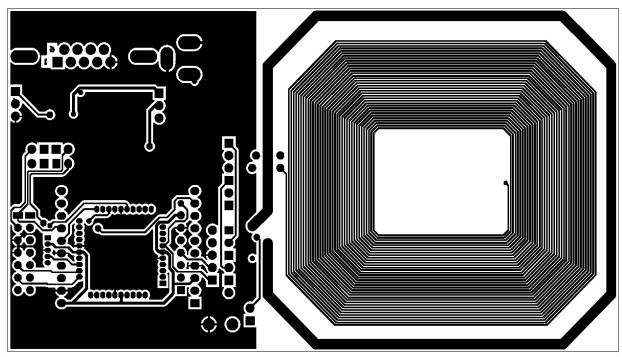
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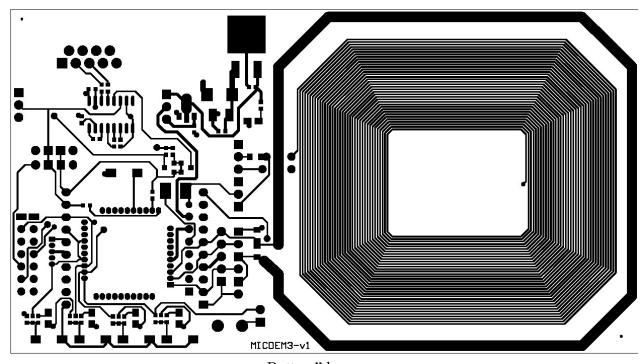


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PCB circuit



"Top" layer



"Bottom" layer

125 kHz antenna parameters:

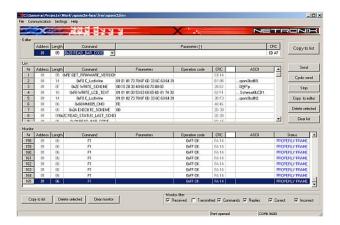
top" layer: 37 turns, "bottom" layer: 37 turns,

external dimensions: 1975 x 1645 mils.

13.56 MHz antenna parameters:

"top" layer: 1 turn, "bottom" layer: 1 turn,

external dimensions: 2900 x 2700 mils.



The MicroDem3 can be tested with some reader modules by means of free tool FRAMER4 software, which makes work with frames easier.

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