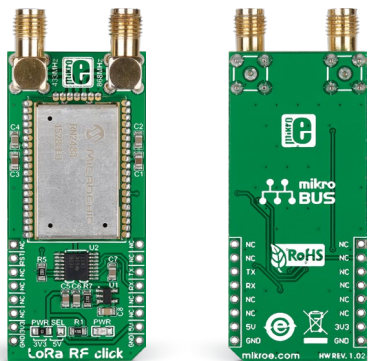




LoRa RF click

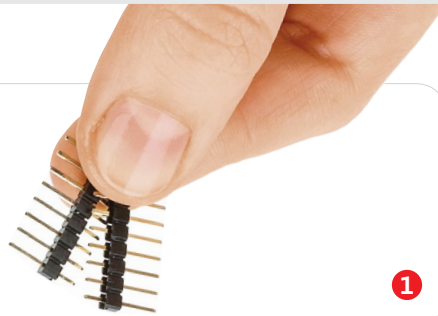


1. Introduction

LoRa RF click carries Microchip's **RN2483** fully certified LoRa Sub-GHz, 433/868 MHz European R&TTE Directive Assessed Radio Modem. Two antenna connectors allow you to choose which of the two frequency bands will be employed. LoRa RF click communicates with the target board MCU through the mikroBUS™ UART interface (CTS, TXD, RXD), with the addition of a Reset pin (RST). The board is designed to use either a 3.3V or a 5V power supply.

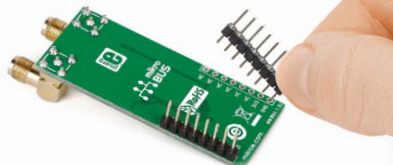
2. Soldering the headers

Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.



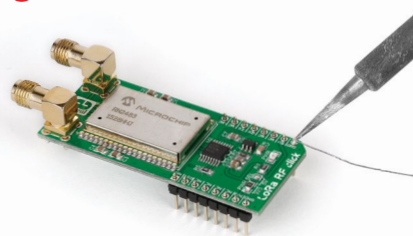
1

2



Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.

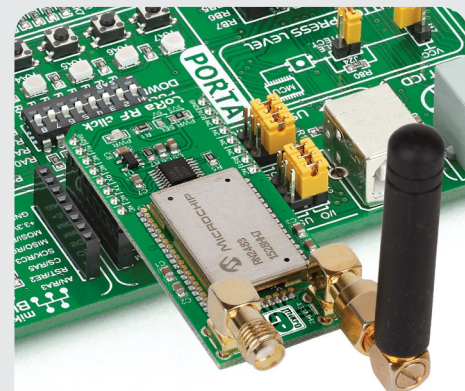
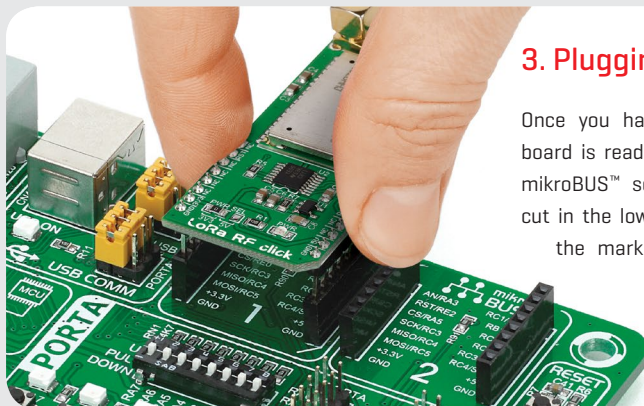
3



Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.

3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into the desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all the pins are aligned correctly, push the board all the way into the socket.



4. Essential features

LoRa wireless technology enables low power consumption and a long range. The RN2483 transceiver module has a specified range of >15km in rural and suburban settings, and >5km coverage in urban areas. A LoRaWAN™ Class A protocol stack is embedded (bidirectional end devices), as well as an ASCII command interface accessible through UART. The high receiver sensitivity can go down to -148 dBm. Applications include Automated Meter Reading, Home and Building Automation, M2M, IoT, Industrial Monitoring and Control.

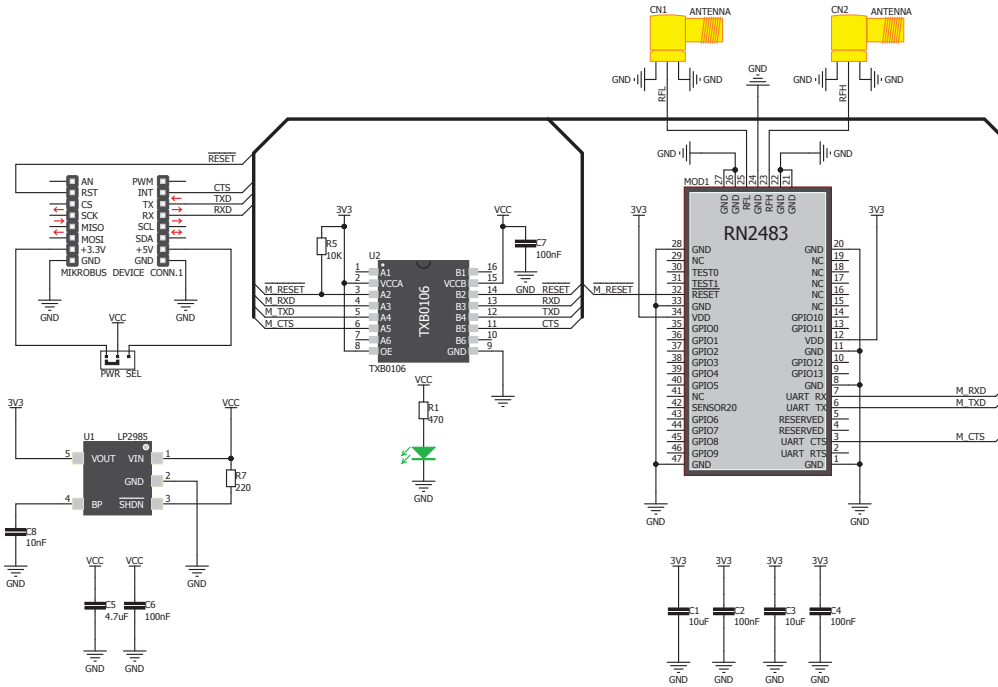


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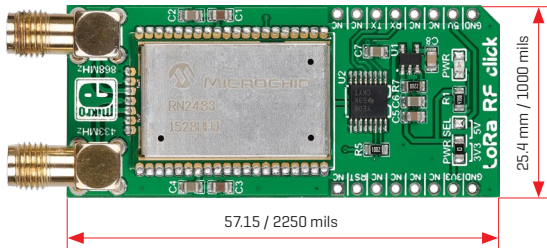


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5. Schematic



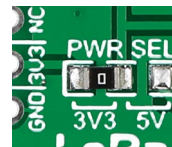
6. Dimensions



	mm	mils
LENGTH	57.15	2250
WIDTH	25.4	1000
HEIGHT*	5.33	210

* without headers

7. SMD jumper



LoRa RF click features an SMD jumper [zero ohm resistor] that let's you switch between a 3.3V or a 5V power supply.

8. Code examples

Once you have done all the necessary preparations, it's time to get your click board™ up and running. We have provided examples for mikroC™, mikroBasic™ and mikroPascal™ compilers on our **Libstock** website. Just download them and you are ready to start.



9. Support

MikroElektronika offers **free tech support** [www.mikroe.com/support] until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!



10. Disclaimer

MikroElektronika assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.

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