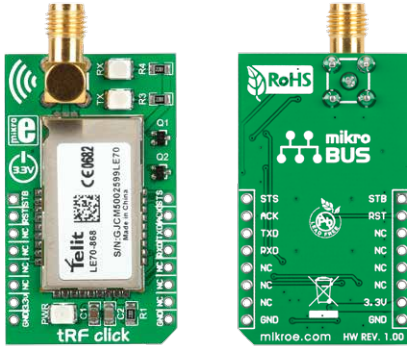




tRF click™

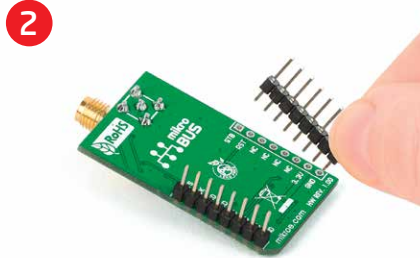
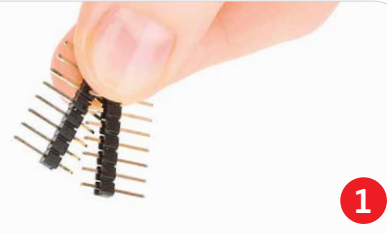
1. Introduction



tRF Click™ is an add-on board in **mikroBUS™** form factor. It's a compact and easy solution for adding 868MHz RF communication to your design. It features the Telit **LE70-868** - 868MHz transceiver module, an SMA connector for an antenna as well as two radio communication LEDs. tRF Click™ communicates with the target board microcontroller via **mikroBUS™** UART (Rx, Tx), AN, RST, PWM and INT lines. The board is designed to use 3.3V power supply only. A LED diode serves as a power indicator.

2. Soldering the headers

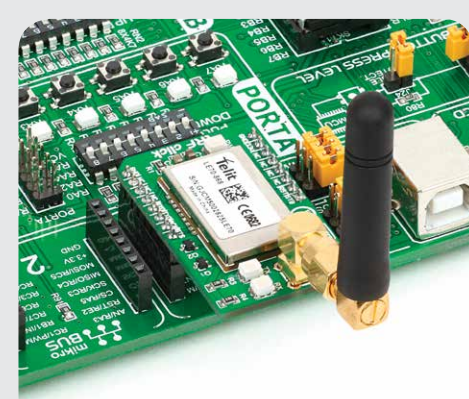
Before using your click™ board, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.



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.



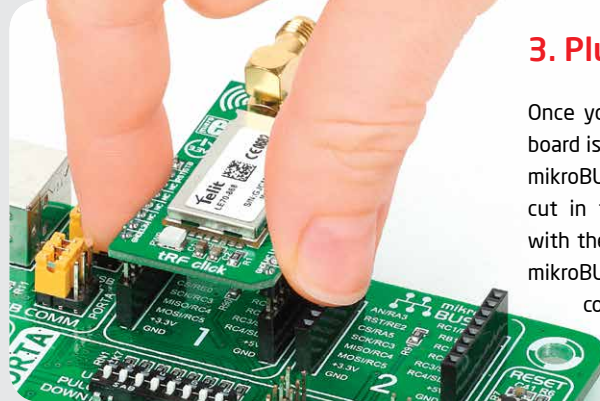
Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



4. Essential features

tRF Click™ with **LE70-868** IC represents a 868MHz RF transceiver module with an embedded stack that is easy to integrate and use in point-to-point or star network topologies. The board enables radio data rates from 4.8 to 57.6 kbps with maximum output power of 500mW and a range of over 4000 meters (maximum tested range) in open space. The board contains radio transmit (red) and receive (yellow) LEDs.

3. Plugging the board in



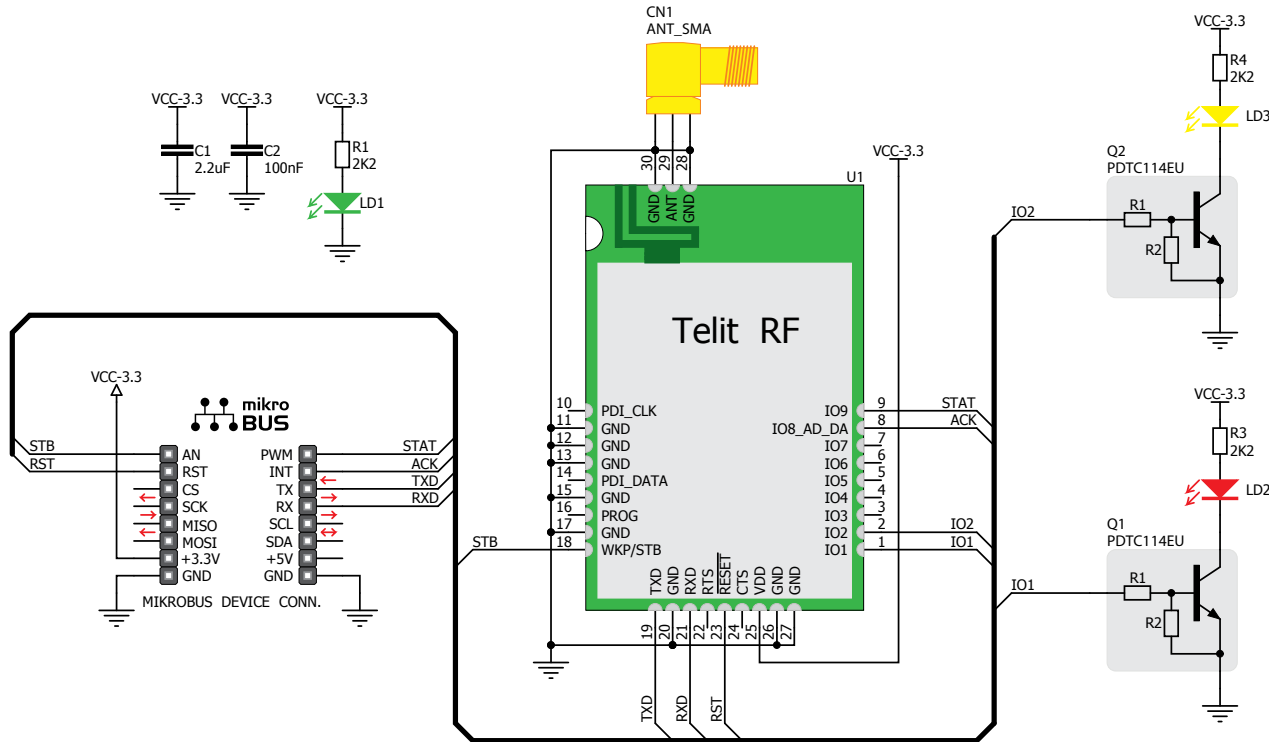
Once you have soldered the headers your board is ready to be placed into the desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all the pins are aligned correctly, push the board all the way into the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

click™
BOARD
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tRF click Manual
ver. 1.00



5. tRF Click™ Board Schematic



6. Antenna



7. 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.



8. Support

MikroElektronika offers **Free Tech Support** (www.mikroe.com/support/) until the end of product lifetime, so if something goes wrong, we are ready and willing to help!