Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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.
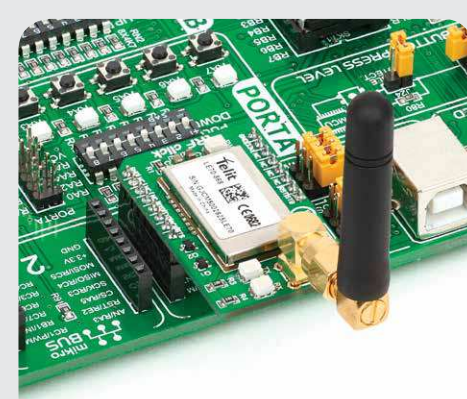
2. Soldering the headers

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.

1
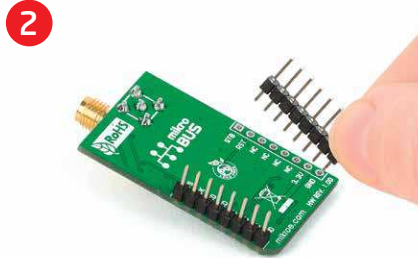
2 Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.
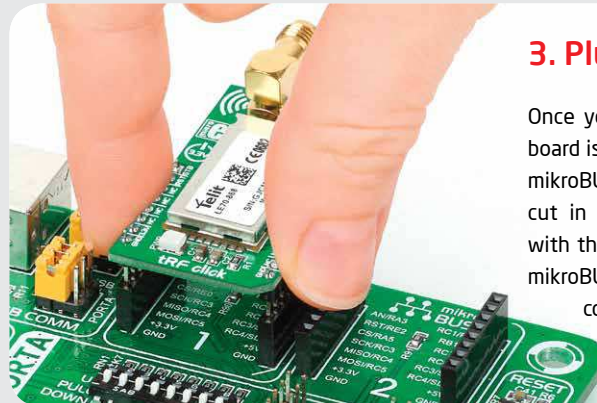
3 Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.
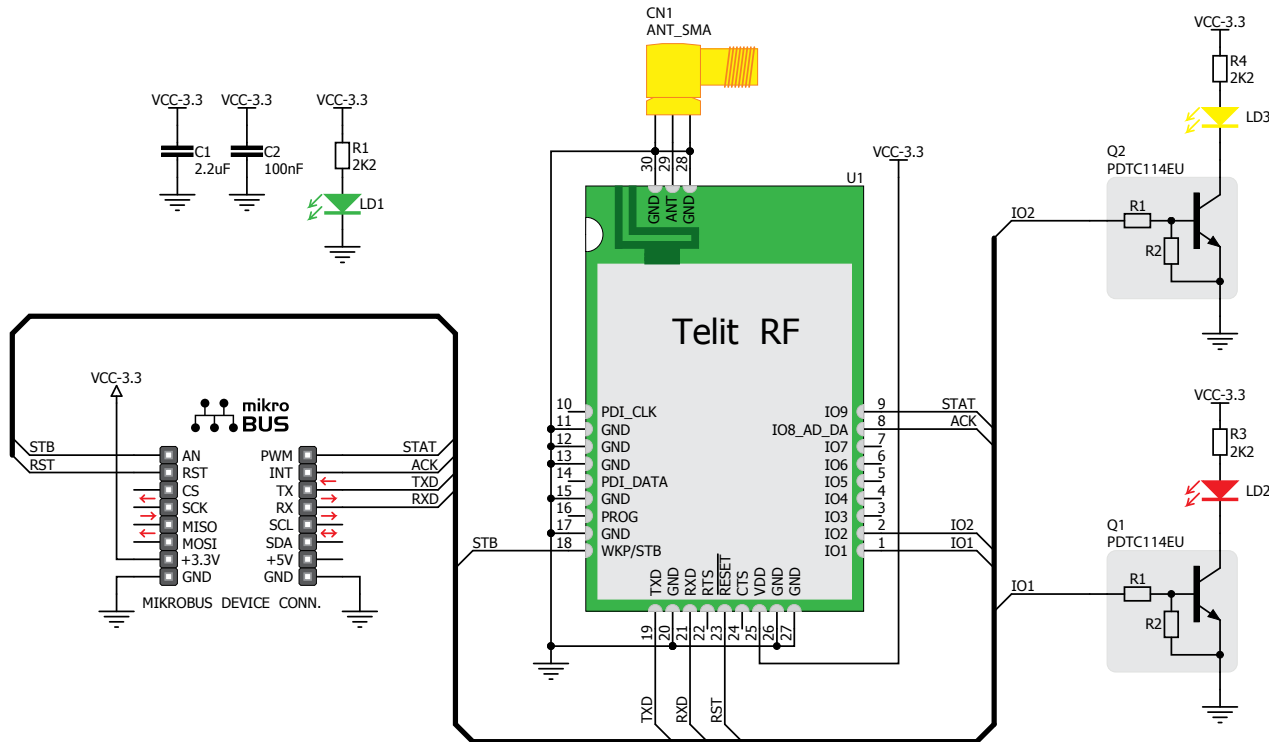
3. Plugging the board in

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

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.

click™ BOARD

www.mikroe.com

tRF click Manual
ver. 1.00

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5. tRF Click™ Board Schematic

6. Antenna

tRF click™ board also contains an SMA right angle conncetor for an external 868Mhz antenna. The antenna is not provided with the package, but can be ordered from MikroElektronika's online store.

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!

MikroElektronika
DEVELOPMENT TOOLS | COMPILERS | BOOKS