EnOcean click

1. Introduction

EnOcean click carries a **TCM310 transceiver**, which is a bidirectional gateway for EnOcean's **868 MHz** radio systems. This low-powered wireless module is intended for use together with EnOcean's range of energy harvesting modules that include self-powered, battery-free wireless switches, sensors and actuators. The board communicates with the target MCU through UART [TX, RX pins], with additional functionality provided by RST and EN pins. Uses a 3.3V power supply only.

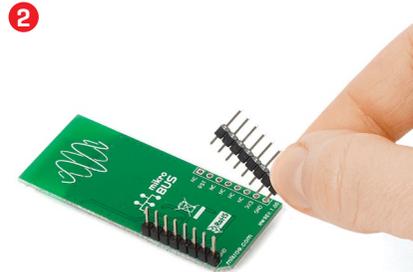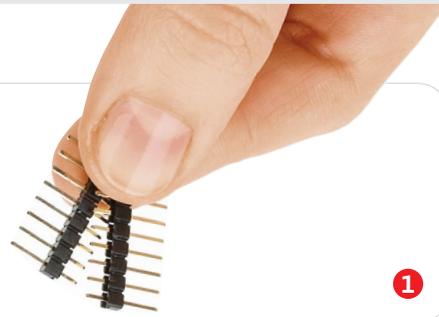## 2. Soldering the headers

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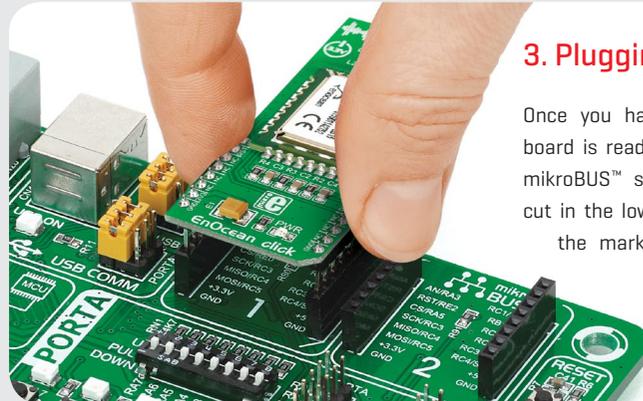
Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.
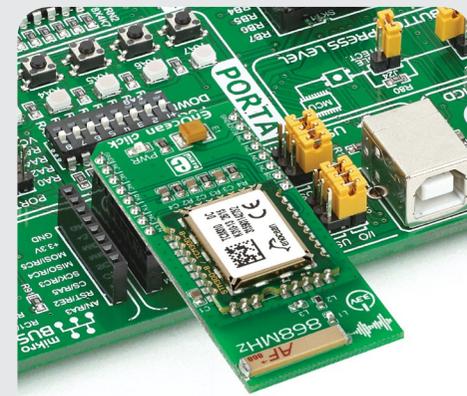
3. Plugging the board in

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

EnOcean offers a range of modules compatible with **TCM310**. Those are miniaturized energy converters that use the surrounding environment — motion, light or temperature differences — to harness enough energy to send a wireless signal to the receiver onboard EnOcean click. The TCM310 module can also be set up as a repeater to extend the range of the signal. You can then develop various battery-free switching systems, data loggers and similar.
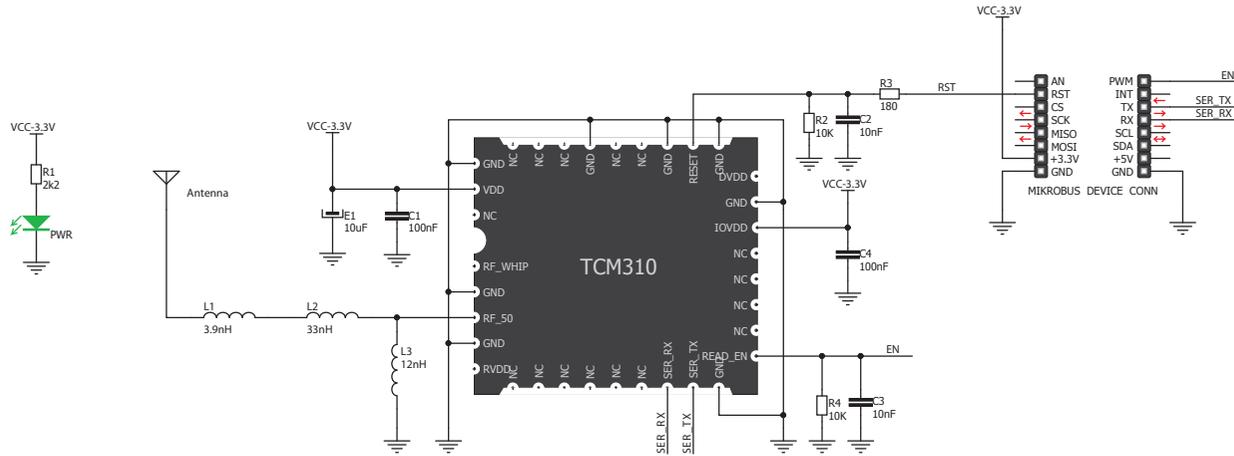
5. Schematic

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!

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6. Dimensions

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

* without headers

7. Onboard antenna

EnOcean click features a small high-performance 868MHz chip antenna onboard so no external antennas are required.

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.