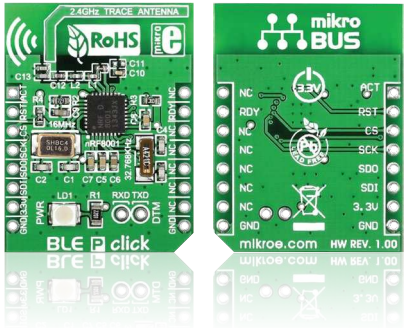
EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.



BLE P click™

1. Introduction



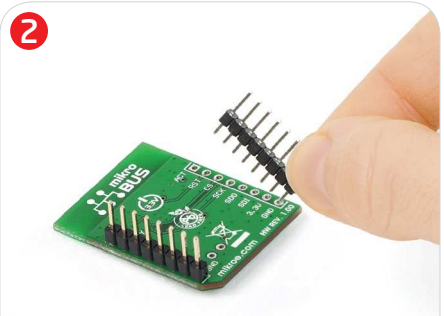
BLE P click™ is a simple solution for adding a Bluetooth 4.0 (alternatively known as Bluetooth Low Energy) peripheral device to your design. It communicates with the target board through **mikroBUS™** SPI (CS, SCK, MISO, MOSI), INT (RDY) and AN (ACT) lines. Beside the mikroBUS™ socket, BLE P click™ also features additional UART input and output pins (RXD and TXD). These enable you to test the RF parameters of the BLE P's radio design. The board 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.

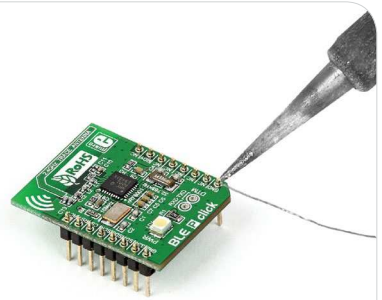


1



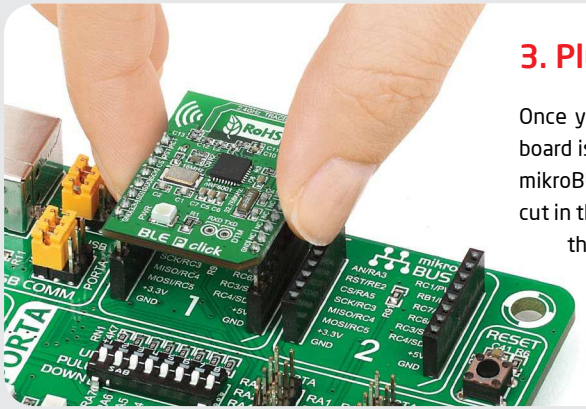
2

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.



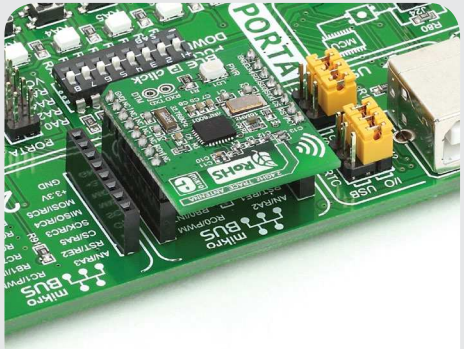
3

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

BLE P click™ carries a nRF8001 single-chip Bluetooth low energy IC. Compared to its predecesors, Bluetooth 4.0 has reduced power consumption while keeping a similar range. nRF8001 click™ has a built-in stack that features a low energy PHY layer, low energy link layer slave, low energy host for devices in the peripheral role and an Application Controller Interface. Applications for BLE P include Sport and fitness sensors, Health care sensors, proximity sensors, smart watches, Personal User Interface Devices and remote controls.

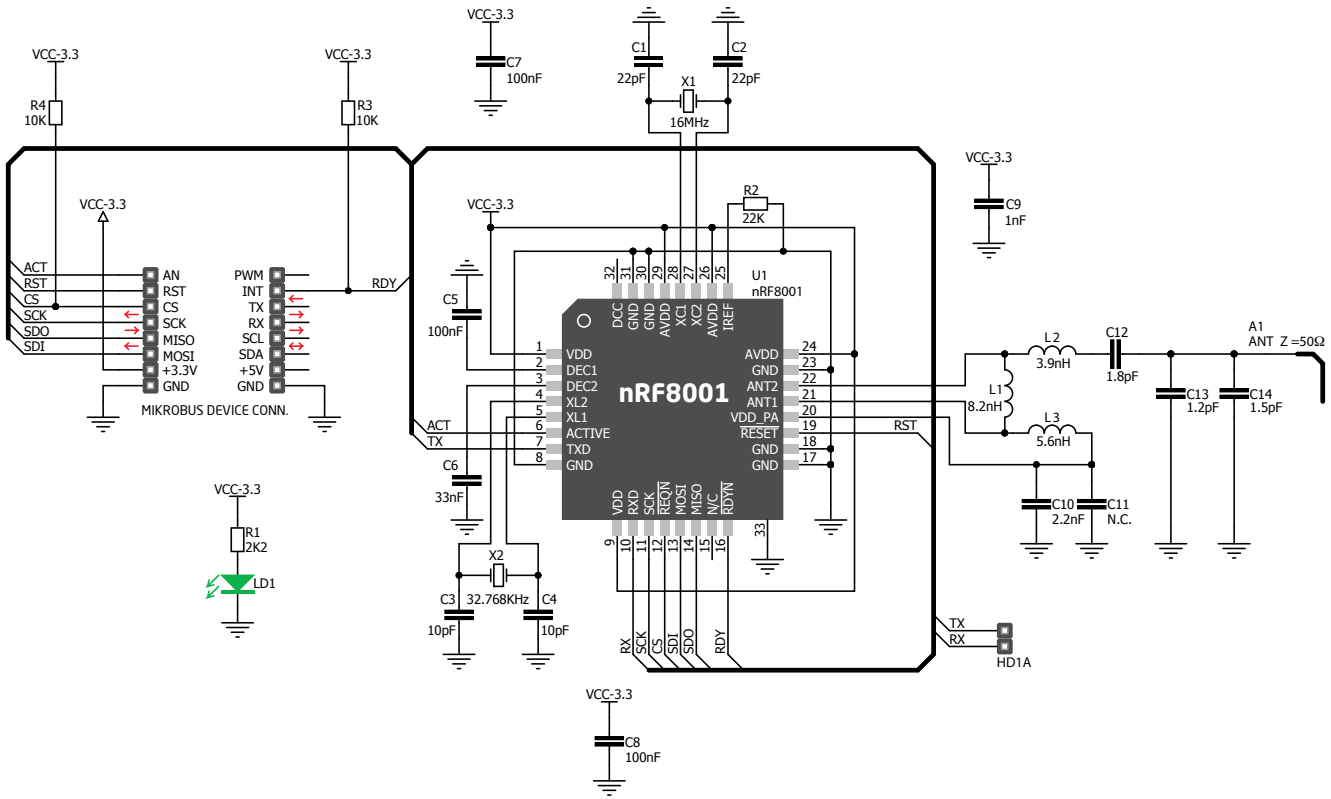
click™ BOARD

www.mikroe.com

BLE P click™ manual
ver. 1.00

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5. BLE P click™ board schematic



6. PCB trace antenna



BLE P click™ features a PCB trace antenna, designed for the 2400-2483.5 MHz frequency band. Maximum device range is up to 40 meters in open space.

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.

LIBSTOCK.com

8. 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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