3.3V

plus
WiFi click™

1. Introduction

WiFi PLUS Click is an accessory board in **mikroBUS™** form factor. It's a compact solution for adding WiFi communication to your device. It features **MRF24WB0MA** - 2.4GHz, IEEE std. 802.11 - compliant module as well as **MCW1001** companion controller with on-board TCP/IP stack and 802.11 connection manager. WiFi PLUS click communicates with target board via UART interface. Board is designed to use 3.3V power supply only. It has an option to achieve low power consumption.

2. Soldering the headers

Before using your click board, make sure to solder provided 1x8 male headers to both sides of the board. Two 1x8 male headers are included with the board in the package.

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Turn the board upside down so that bottom side is facing you upwards. Place shorter parts of the header pins in both soldering pad locations.
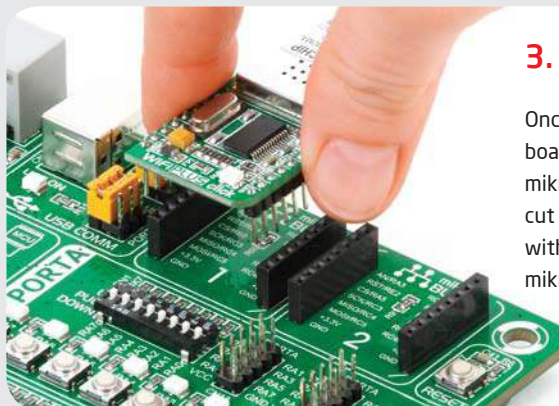
3

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 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 of the pins are aligned correctly, push the board all the way into the socket.

5. Essential features

The combination of the **MRF24WB0MA** and **MCW1001** results in support for IEEE Standard 802.11 and IP services. The **MRF24WB0MA** RF transceiver module contains integrated PCB antenna with range up to 400m. WiFI PLUS click does not use the memory resources of the target microcontroller for TCP/IP stack operations, which makes this module the best choice for using with wide range of different microcontrollers.

click™
BOARD
www.mikroe.com

6. WiFi plus click Board Schematics

7. SMD Jumpers

Jumpers **J1** and **J2** connect **MCW1001** controller RTS and CTS lines to the SCL and SDA lines on mikroBUS™ host connector, respectively. Considering that all mikroBUS™ host connectors on a target board usually share the same I²C lines, these jumpers must not be soldered if you want to use SCL and SDA pins on other module in the same time. Jumpers J1 and J2 are not soldered by default.

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 the examples for mikroC, mikroBasic and mikroPascal compilers on our **Libstock** website. Just download them and you are ready to start.

LIBSTOCK.com

9. Support

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

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