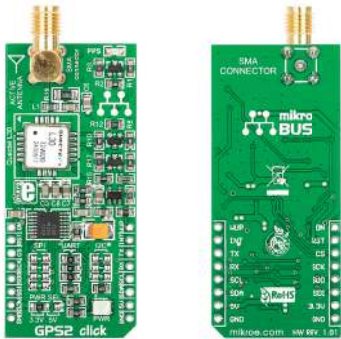




GPS2 click™

1. Introduction



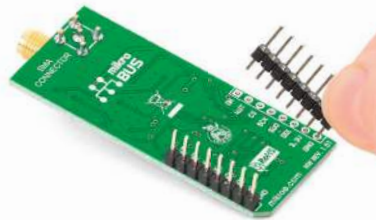
GPS2 Click™ is an accessory board in **mikroBUS™** form factor. It's a compact and easy solution for adding GPS module to your design. It features **Quectel L30** GPS module as well as SMA antenna connector. GPS2 Click™ communicates with target board microcontroller via **mikroBUS™** UART (Tx, Rx), I²C (SCL, SDA), SPI (MISO, MOSI, SCK, CS), PWM, INT, AN and RST lines. The board is designed to use 3.3V and 5V power supply. LED diode (GREEN) indicates the presence of power supply.

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.



2

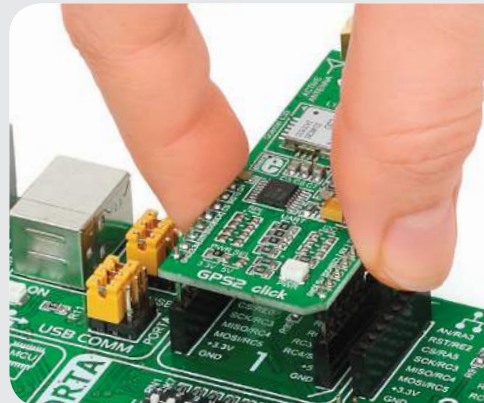


Turn the board upside down so that bottom side is facing you upwards. Place shorter parts of the header pins in both soldering pad locations.

3

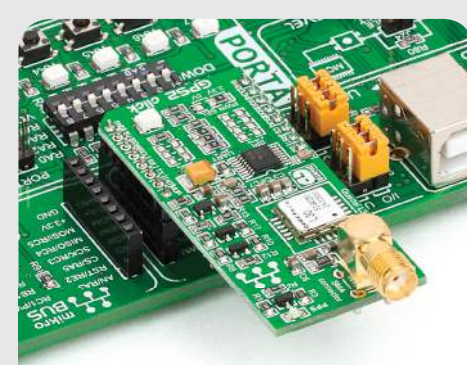


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



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.



4. Essential features

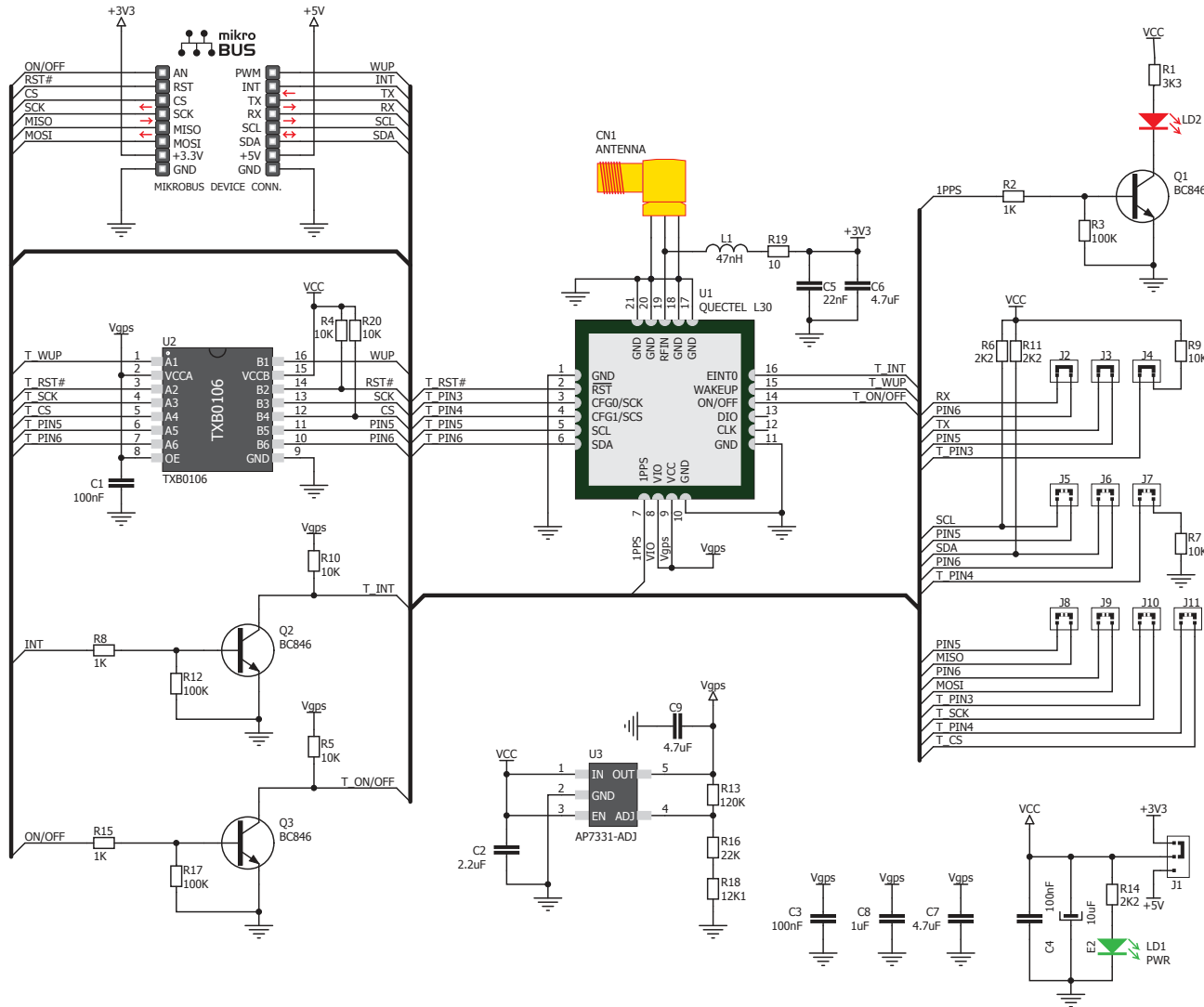
GPS2 Click™ with it's **Quectel L30** IC is a compact solution for adding Global Positioning Systems (GPS) to your design. The **Quectel L30** has advanced jamming suppression mechanism and innovative RF architecture ensuring maximum GPS performance. The module supports location, navigation and industrial applications including autonomous GPS C/A, SBAS (WAAS or EGNOS) and A-GPS. The board is designed for use with active antennas.

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GPS2 click Manual
ver. 1.01



5. GPS2 Click™ Board Schematic



6. SMD Jumpers

There are three groups of jumpers: UART (**J2,J3,J4**), I²C (**J5,J6,J7**) and SPI (**J8,J9,J10,J11**). By soldering zero-ohm SMD jumpers in appropriate group, you will be able to change communication between target board microcontroller and **Quectel L30** module. There is one SMD jumper **J1** used to select between 3.3V or 5V power supply. **J1** jumper is soldered in 3.3V position by default.

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 the 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/esupport) until the end of product lifetime, so if something goes wrong, we are ready and willing to help!