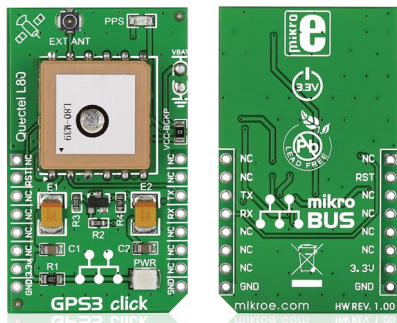


## GPS3 click™

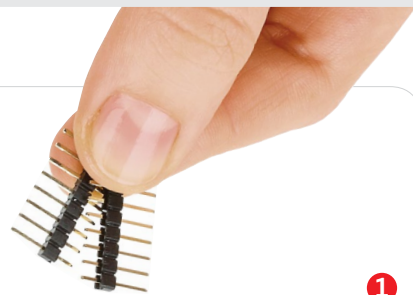
### 1. Introduction



GPS3 click™ carries **Quectel's L80**, a high-sensitivity ultra slim **GPS module** with a patch antenna. With it, you can add GPS functionality to your design without the need for an external antenna (although the click™ board has a connector for one should you require it). An onboard red LED will blink to indicate successful satellite acquisition. GPS3 click™ communicates with the target board through **mikroBUS™** UART (RX, TX) and RST lines. The board is designed to use a 3.3V power supply.

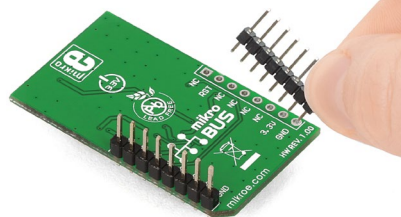
### 2. Soldering the headers

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.



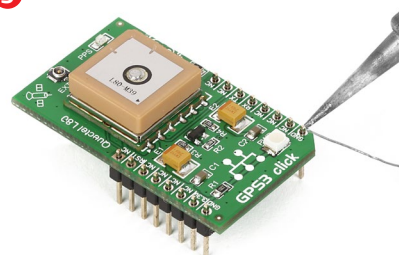
1

2

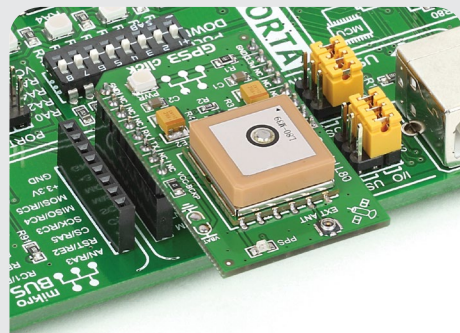


Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.

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.

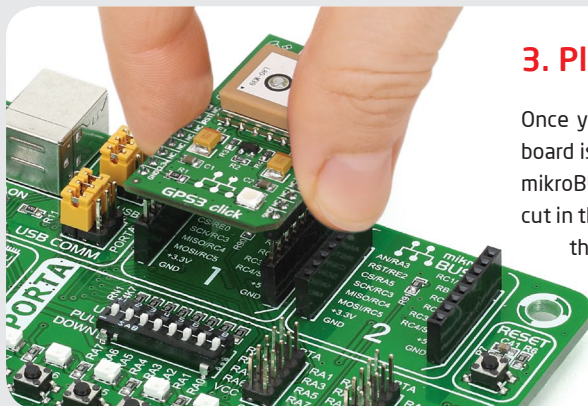


### 4. Essential features

The L80 module aboard GPS3 click™ incorporates several technologies that enhance the GPS performance. **EASY™** Technology ensures that L80 can calculate and predict orbits automatically using data stored in its internal flash memory. **AlwaysLocate™** technology adaptively adjusts the on/off time to balance between positioning accuracy and power consumption. The **Automatic antenna switching** function enables switching between the internal patch antenna and the external active antenna, keeping positioning during the switching process.

### 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.



click™  
BOARD  
[www.mikroe.com](http://www.mikroe.com)

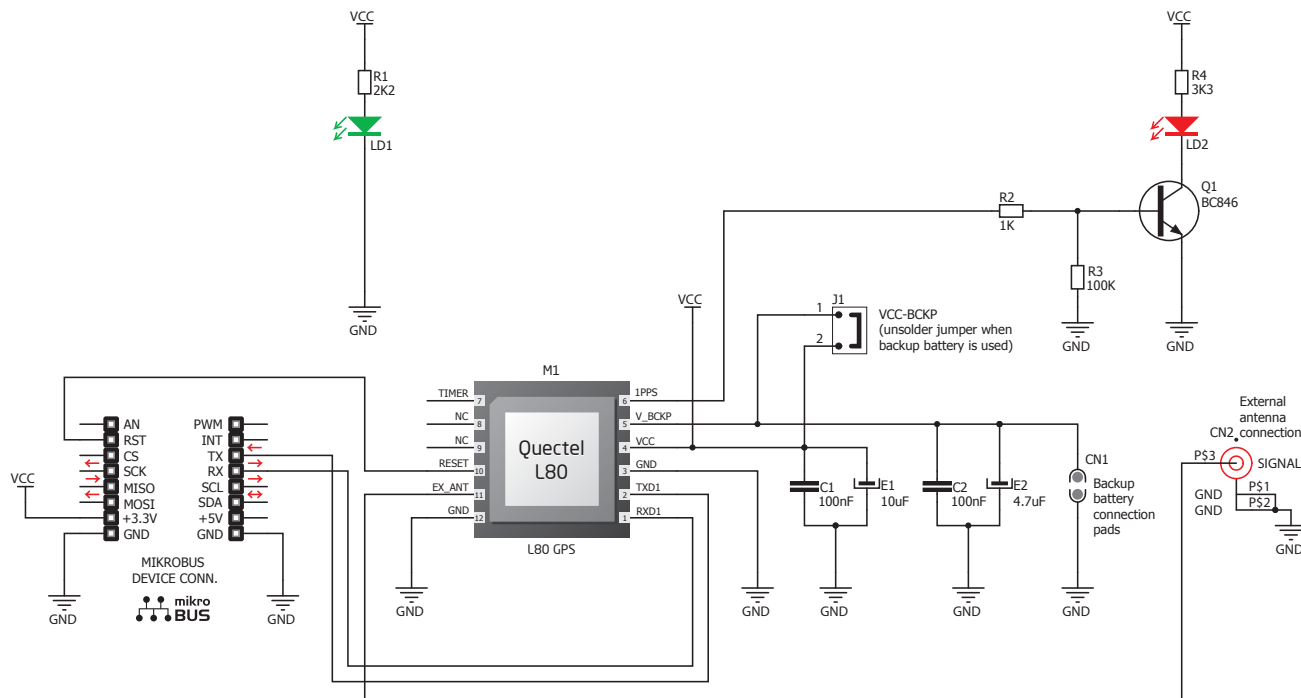


GPS3 click™ manual  
ver. 1.00



0 100000 027318

## 5. GPS3 click™ board schematic



## 6. External antenna connector

GPS3 click™ has a connector for an external active antenna that could be used alongside, or instead of the patch antenna that's already on the module. To get one, search for "GPS antenna" at [www.mikroe.com/store](http://www.mikroe.com/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](http://www.mikroe.com/support)) until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Mikroe:

[MIKROE-1714](#)