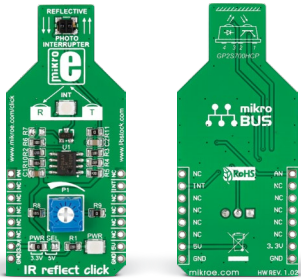


IR reflect click™

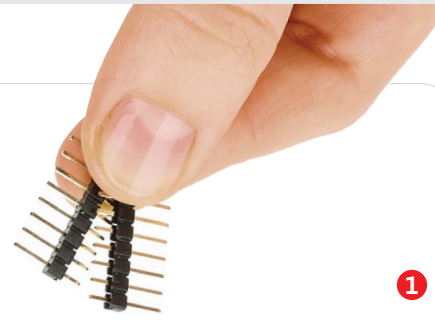


1. Introduction

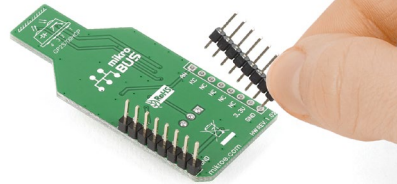
IR reflect click™ carries a **GP2S700HCP reflective photointerrupter**. On this type of photointerrupter the infrared emitter and receiver are facing the same direction; the infrared beam from the emitter gets bounced back to the receiver when an object is placed within the detecting range of the sensor [Optimal Sensing Distance is 3mm]. IR reflect click™ communicates with the target board microcontroller through **mikroBUS™ AN** and **INT** pins [an onboard potentiometer sets the Interrupt threshold]. It's designed to use either a 3.3V [by default] or 5V 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.

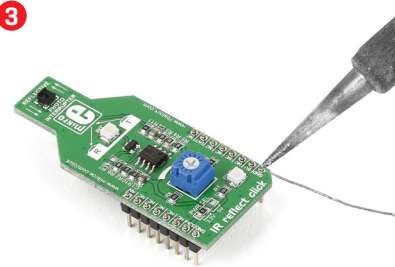


2

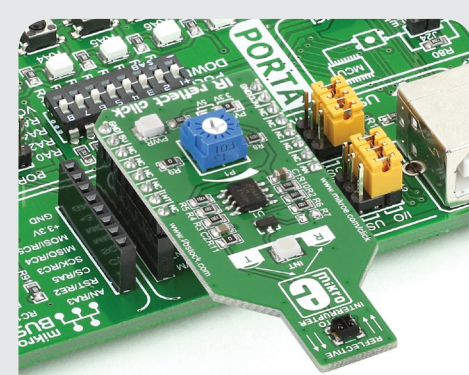


Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.

3

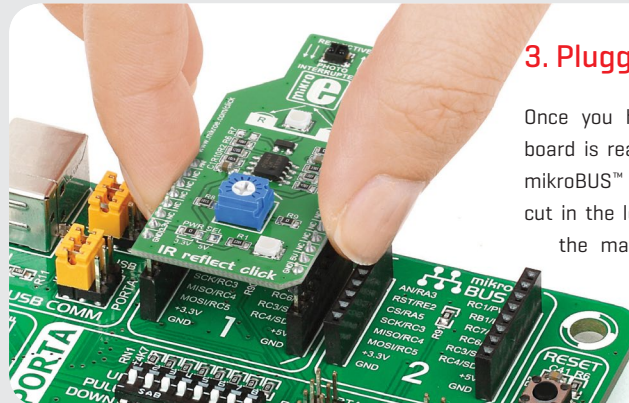


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



4. Essential features

These sensors are used to detect an object's presence or motion, such as a piece of paper passing through a printer. To avoid setting off false alarms, avoid exposing the sensor to other sources of infrared light [which could come from an ordinary incandescent light bulb]. Also, black objects won't reflect infrared so the click™ won't detect them. On the other hand, reflective metallic surfaces will trigger the sensor from a larger range.



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.

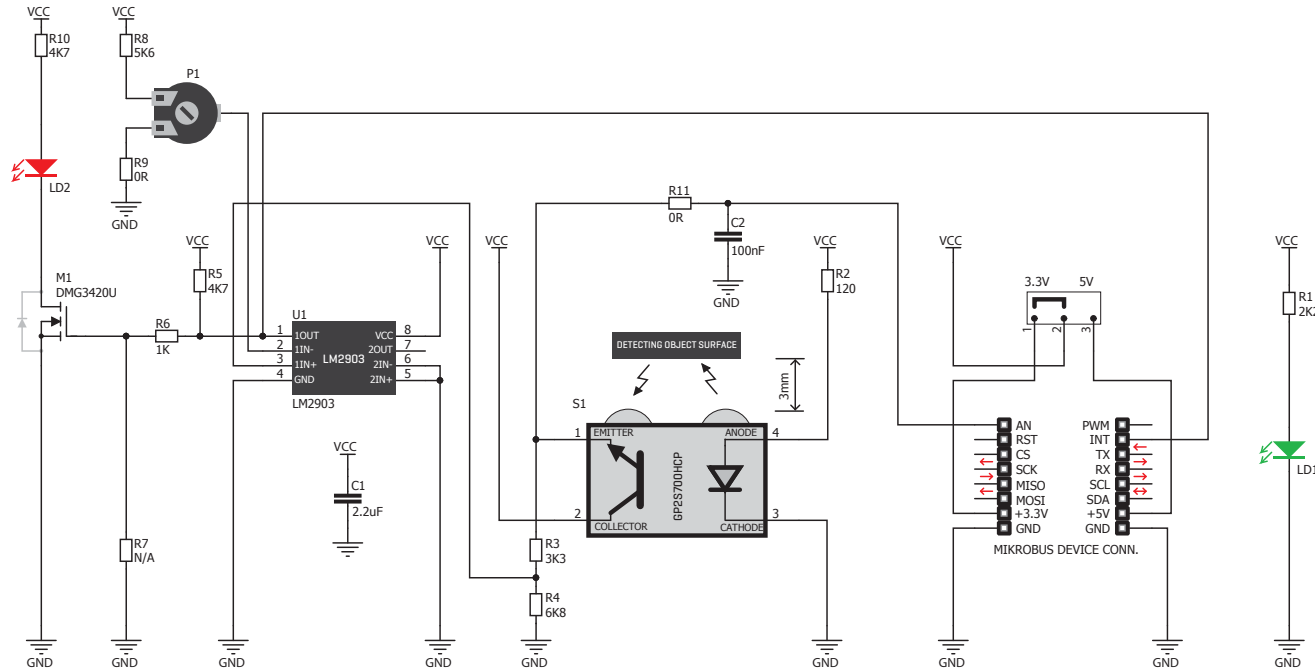
click™
BOARD
www.mikroe.com



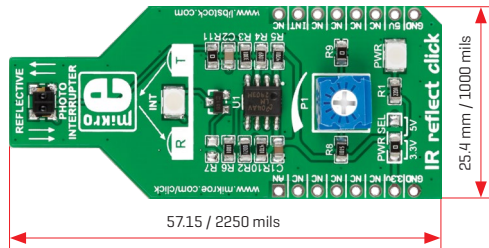
IR reflect click™ manual
ver 1.02



5. Schematic



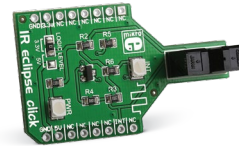
6. Dimensions



	mm	mils
LENGTH	57.15	2250
WIDTH	25.4	1000
HEIGHT*	7.62	300

* without headers

7. IR eclipse click™



A different type of photo interrupter, one in which the emitter and receiver face each other is also available, with IR eclipse click™. Visit: www.mikroe.com/click/ir-eclipse

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!



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.

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