



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



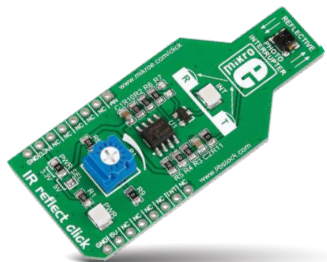
## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

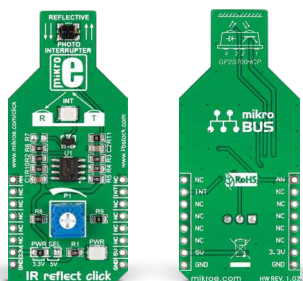
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## IR reflect click™

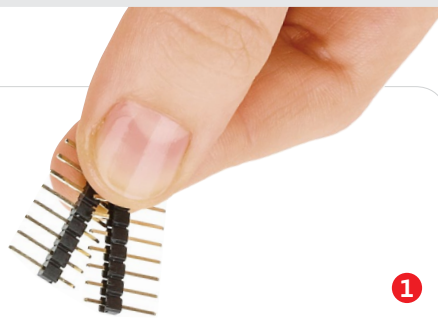


### 1. Introduction

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.

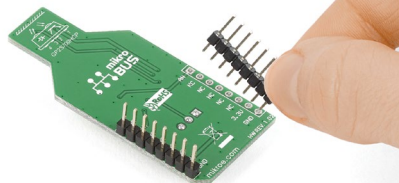
### 2. Soldering the headers

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.



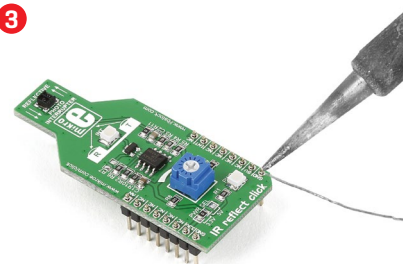
1

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.

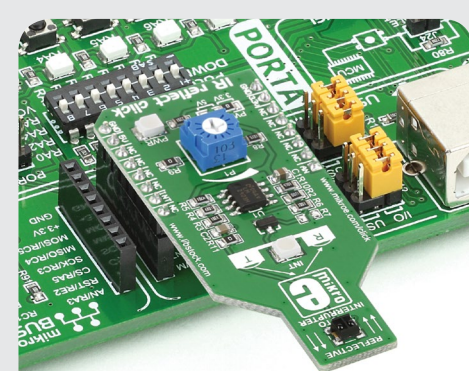
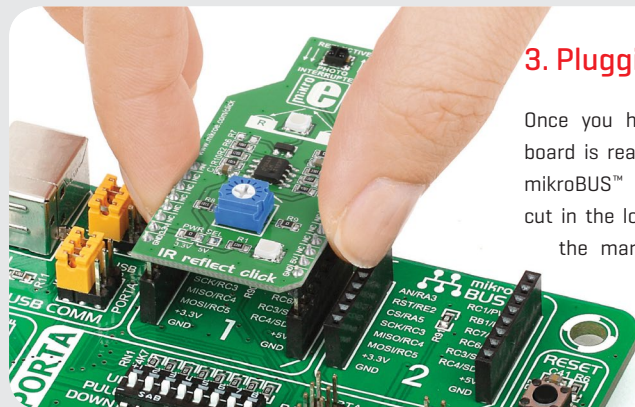
3



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

**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.

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

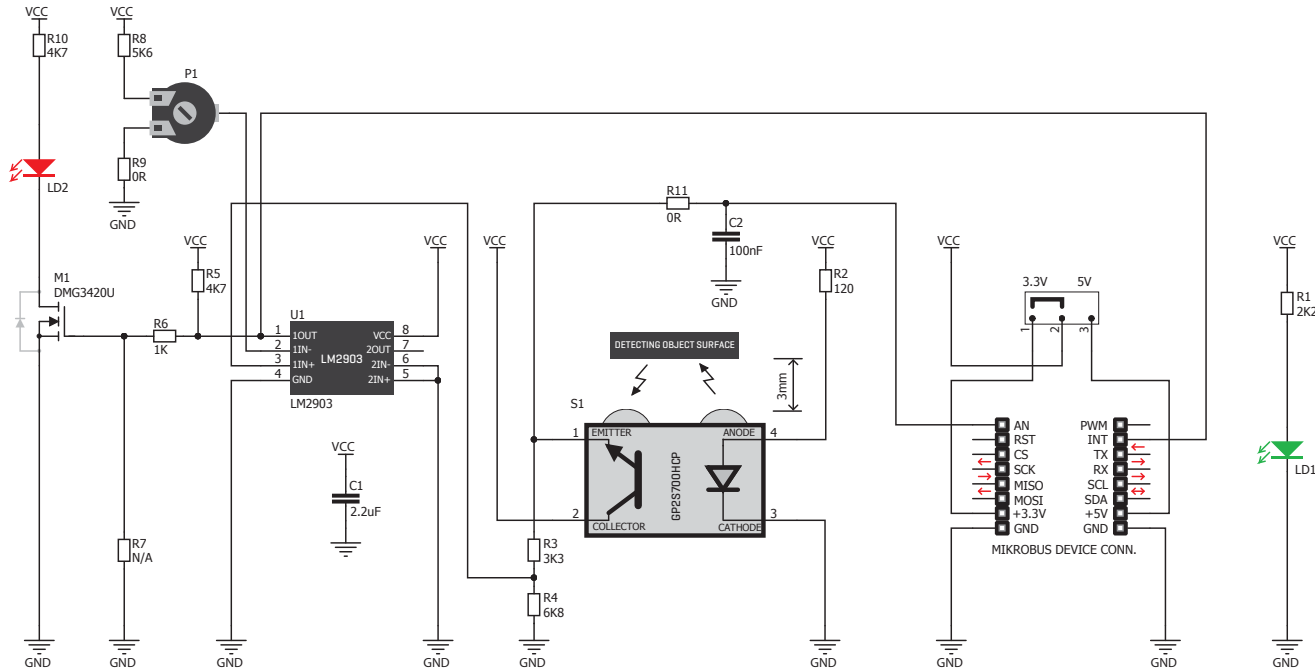


IR reflect click™ manual  
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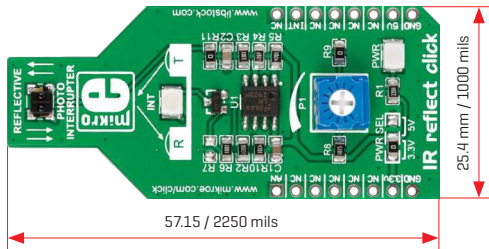


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## 5. Schematic

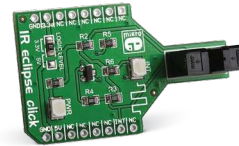


## 6. Dimensions



\* 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](http://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](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!



## 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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