



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!



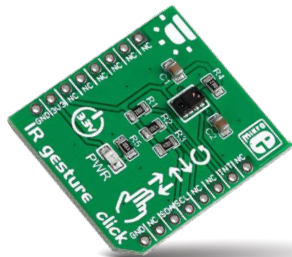
## Contact us

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

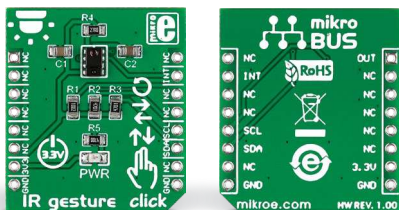
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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





## IR gesture click

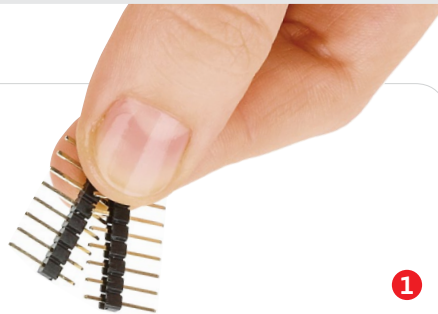


### 1. Introduction

*IR gesture click* carries a **APDS-9960 IC**, which is a digital proximity, ambient light, RGB and gesture sensor. The sensor integrates an LED and four directional photodiodes that receive the reflecting light. An internal gesture engine deduces the velocity, direction and distance of nearby objects (while cancelling the ambient light). The board communicates with the target board MCU through the mikroBUS™ I2C interface, with an additional hardware interrupt pin (INT). *Gesture click* uses 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.



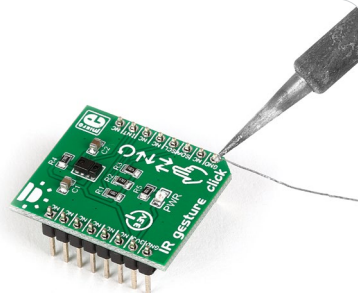
1

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.

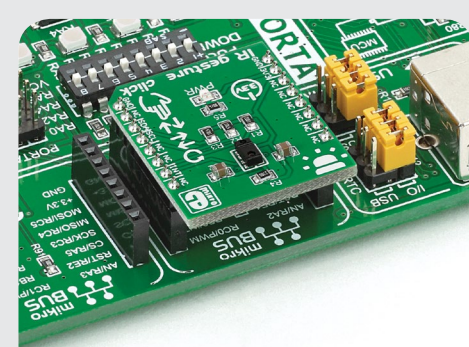
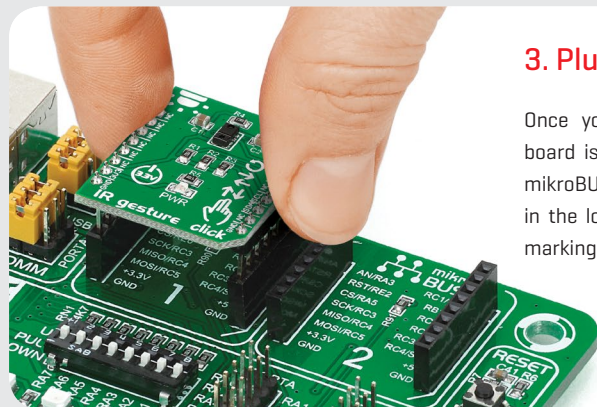
3



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

### 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

With APDS-9960 chip can be configured to recognize a number of contactless gestures. From basic directional swipes [up, down, left or right] to more complex combinations. Since the chip can work as a proximity sensor, the gesture engine can be configured to wake up automatically when a user's hand approaches. Power consumption can be further optimized with adjustable IR LED timing. Beside gesture detection, the IC can be implemented for color sensing, ambient light sensing and proximity applications, potentially simplifying your design.

# click

## BOARDS™

[www.mikroe.com](http://www.mikroe.com)

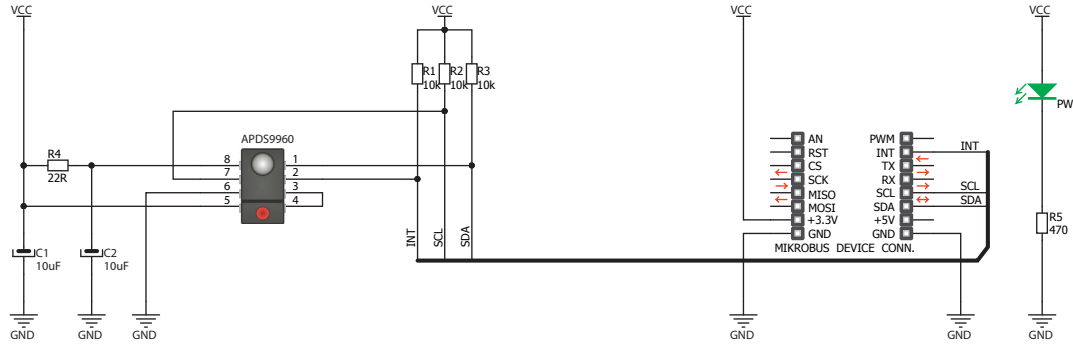


IR Gesture click Manual v100

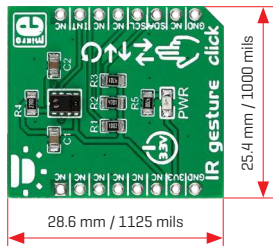


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## 5. Schematic



## 6. Dimensions



	mm	mils
LENGTH	28.6	1125
WIDTH	25.4	1000
HEIGHT*	3.3	130

\* without headers

## 7. Alternatives

IR gesture click is quite a versatile board. For more click boards™ with gesture recognition, light or proximity sensing capabilities, visit the official page:

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

## 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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