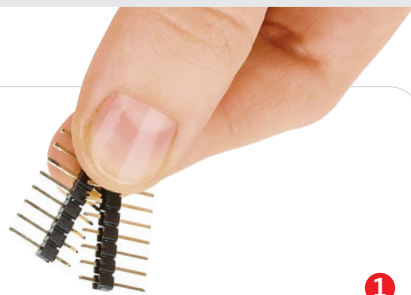


## FLAME click™

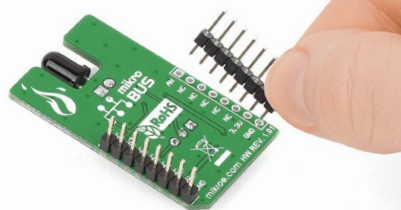
### 2. Soldering the headers

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.



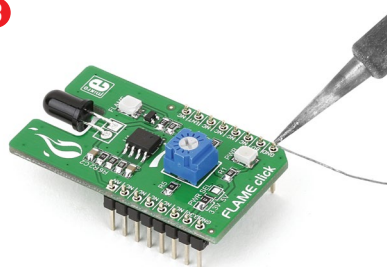
1

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.

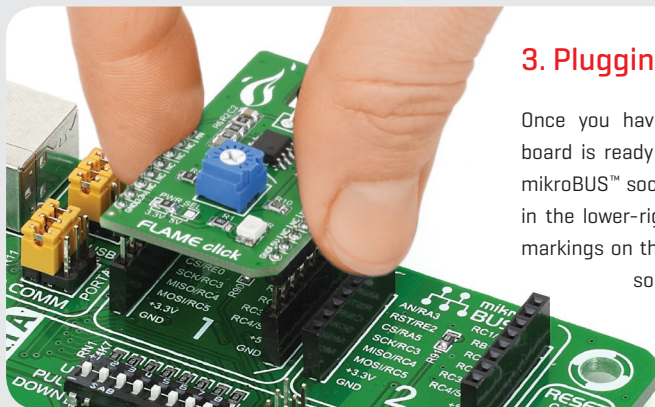
3



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

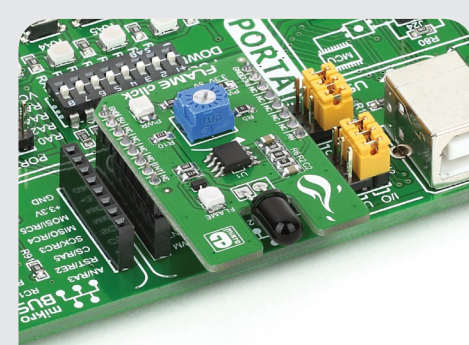
### 1. Introduction

FLAME click™ is a fire detection solution. It carries a **PT334-6B NPN** silicon phototransistor that's covered in black epoxy and therefore sensitive only to infrared light. A **potentiometer** lets you calibrate the sensor for its specific environment. The board communicates with the target board microcontroller through the mikroBUS™ AN and INT pins. It can use both a 3.3V or a 5V power supply.



### 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



### 4. Essential features

FLAME click™ can operate in two ways. It can output a continuous analog signal from the phototransistor, or send an interrupt to the target board MCU. The onboard potentiometer allows you to **set the exact threshold** that will **trigger the interrupt**. This will require some fine tuning as the **phototransistor will be sensitive to the surrounding thermal radiation**. Properly calibrated, flame click™ can be used in a variety of safety applications. Fire sensors based on phototransistors have a faster reaction time compared to smoke or heat detectors.

# click™ BOARD

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

FLAME click™ manual  
ver 1.01



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