

Commissioning Heartbeat Sensor and Comparison Against Oximeter

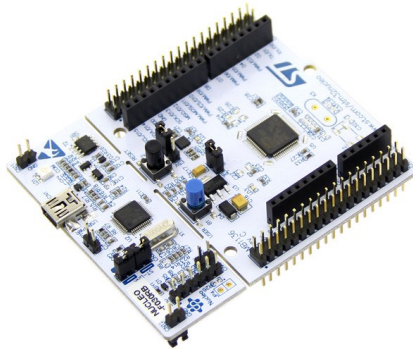
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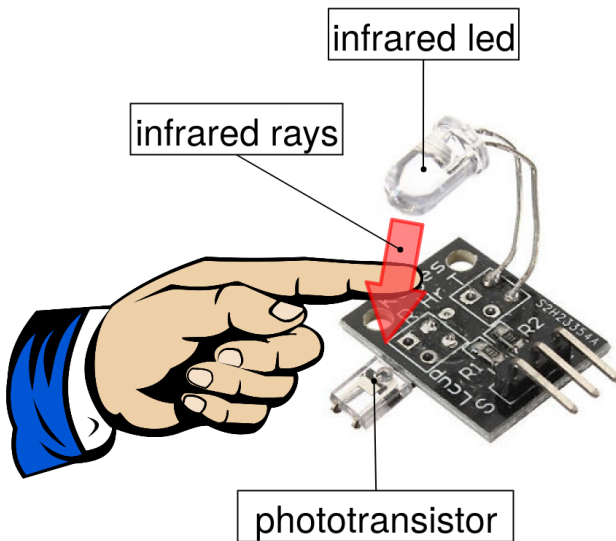
October 25, 2018

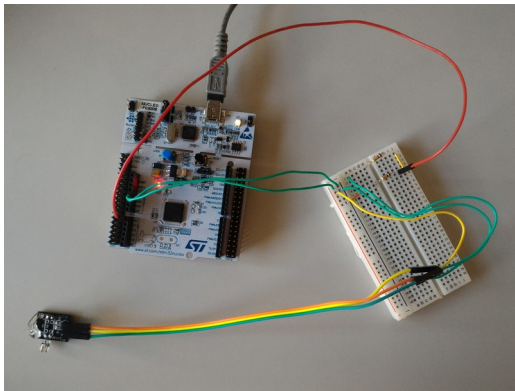
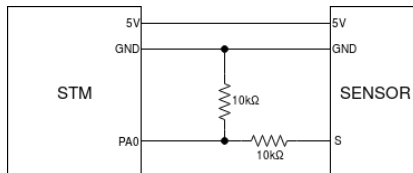
- NUCLEO F030R8
 - STM32F030R8



- Keyes KY-039







- *Mbed OS 5*¹
 - browser-based IDE
- Principle of Algorithm
 - 1 get value
 - a few starting values are required to initialize the algorithm
 - 2 deviation calculation
 - determine divergence
 - 3 deviation evaluation
 - heart beat detected / not detected
 - 4 pulse notification
 - turn LED on/off

¹os.mbed.com

- sensor precision has a significant impact on the results
- method of heart beat detection via infrared rays works

Thank You For Your Attention !