

## Embedded Challenge Spring 2023

### Team Project

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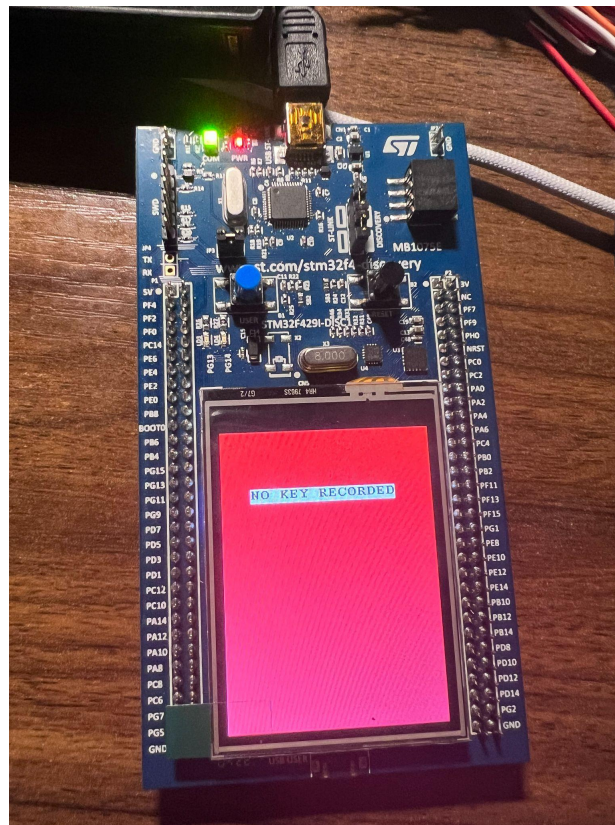
Vikram Balaji vb2284

### Introduction:

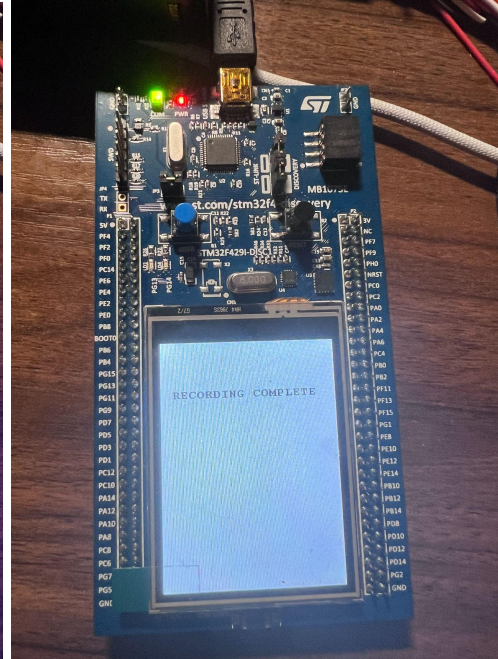
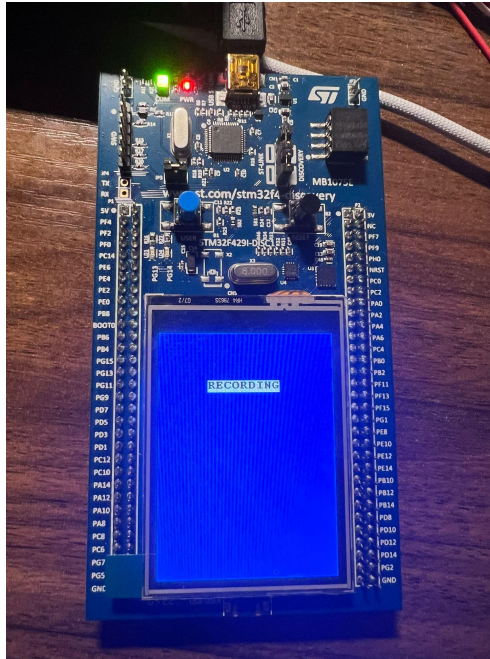
This manual explains how to use the STM32F429I-DISCI Gyroscope with Circle Gesture Detection Code to detect a circle gesture using a gyroscope.

### Procedure:

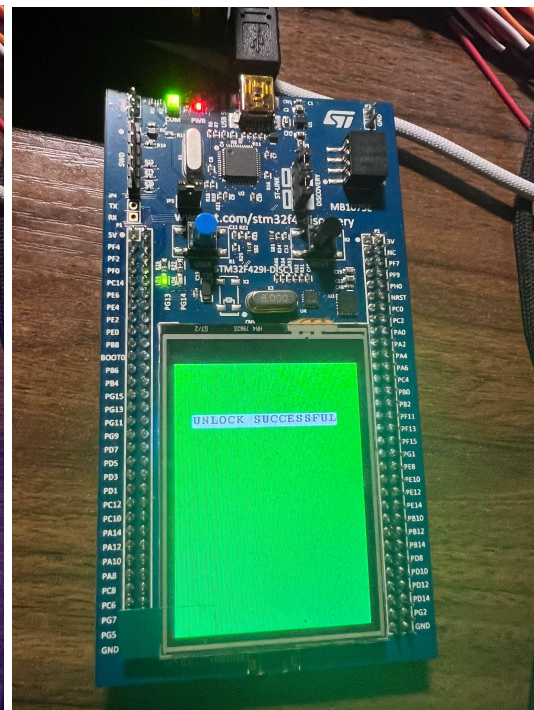
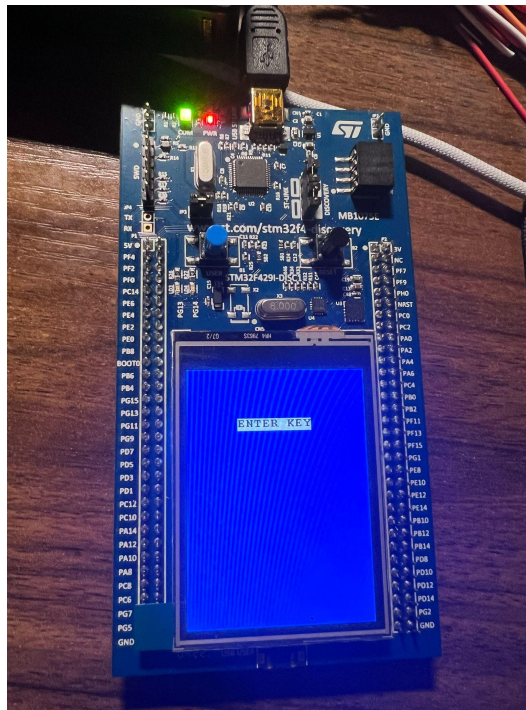
1. After the code is uploaded to the board and is ready to run, the user can press the blue button to activate the system.
2. The screen will indicate to users that no key is recorded with red background.



- Press and hold the blue button for longer than 2 seconds, the recording procedure will start and last for 2 seconds. The screen will display “Recording Complete” after the key is recorded.

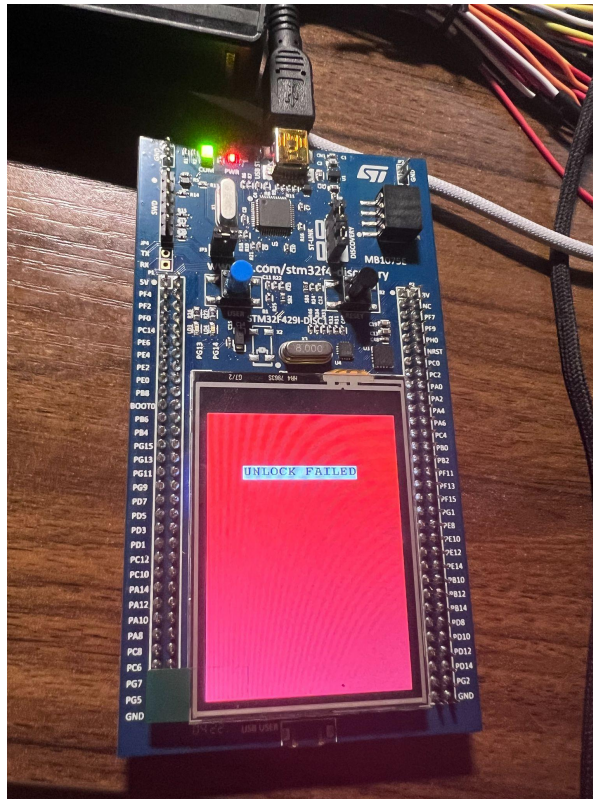


- Click the blue button to verify the key. If it matches the recorded result, the screen will display in green with “Unlock Successful” on it.





5. If the result does not match the recorded key, the screen will display in red with “Unlock Failed” on it.



6. Press and hold the blue button for longer than 2 seconds to reset the key. The new key will be recorded in 2 seconds.