

# Keypad Module

Written by: Khaled Mustafa

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## Keypad Module APIs

### Keypad Initialization

```
/**
 * @brief Initializes the direction of the row keypad pins as output pins,
 * and the columns keypad pins as input pins.
 */
void KEYPAD_init(void);
```

### Keypad Get Key Pressed

```
/**
 * @brief Returns the number of position of the key pressed on the keypad
 * matrix.
 * @return An unsigned integer value that represents the position of the
 * key pressed.
 */
uint8 KEYPAD_getKeyPressed(void);
```

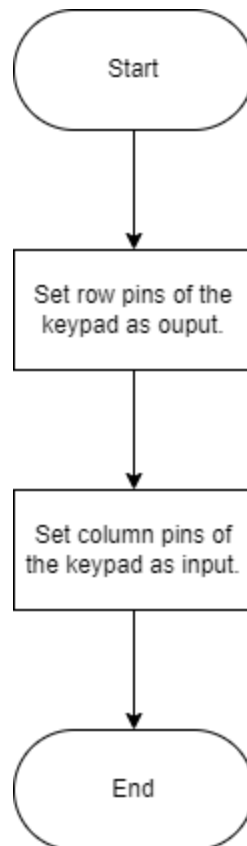
### Keypad Get Mapped Key

```
/**
 * @brief Maps the position of the key with the actual value of the keypad.
 * @param current_key_pressed An unsigned integer value that represents the
 * position of the key pressed.
 * @return An unsigned integer of the actual reading of the keypad.
 */
uint8 KEYPAD_mappedKey(uint8 current_key_pressed);
```

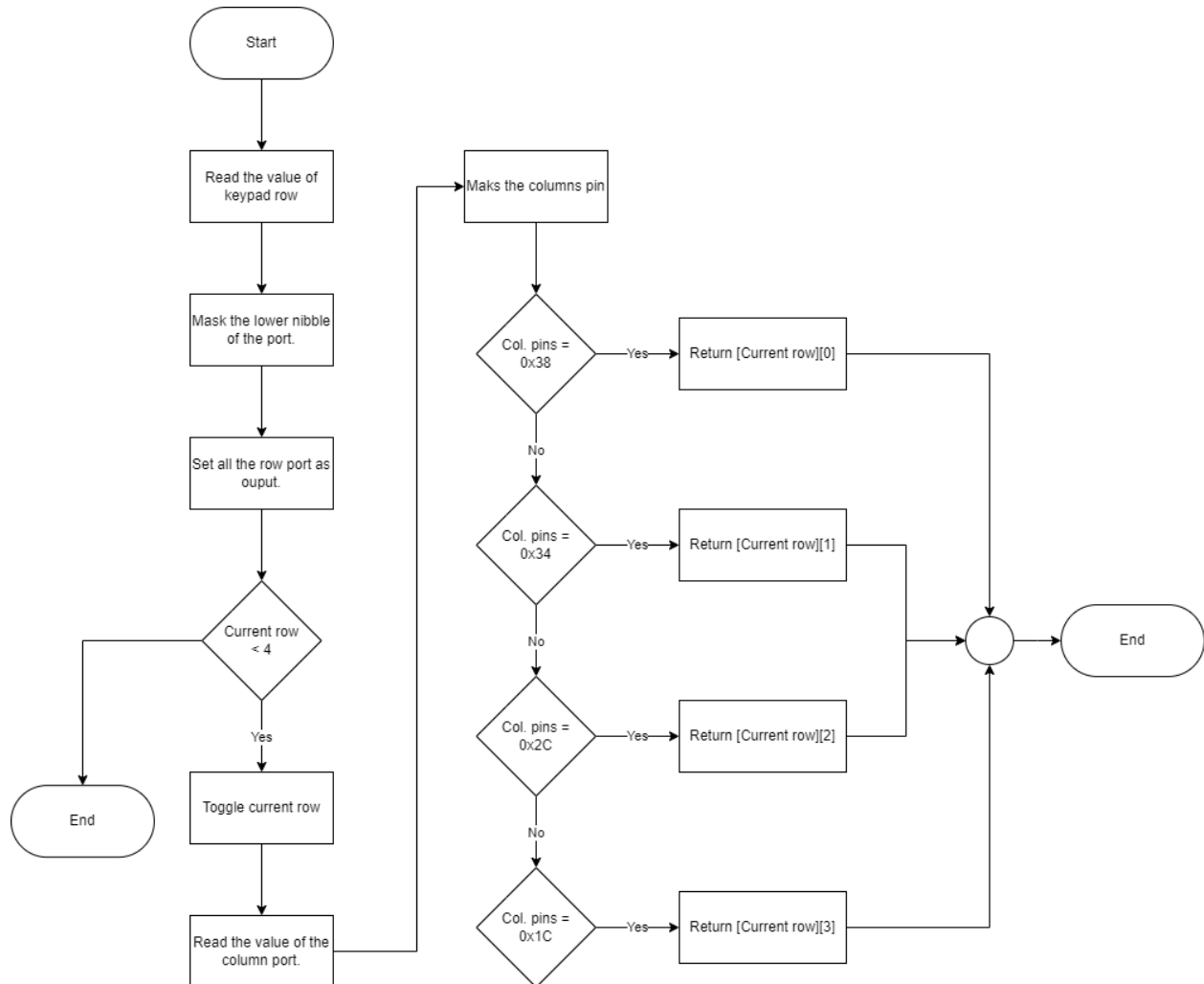
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## Keypad Module Low Level Design Flowcharts

### Keypad Initialization Flowchart



## Keypad Get Key Pressed Flowchart



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## Keypad Get Mapped Key Flowchart

