## IO\_Config.h File Reference

Header for a library that implements the input/output configuration. More...

```
#include <avr/io.h>
#include "Pin.h"
```

Go to the source code of this file.

### **Functions**

```
void IO_Init()
```

Sets up the engine speed and wheel speed interrupt pins. More...

### **Variables**

```
const Pin P_MOT_INA = {&PORTA, PIN0_bm}

const Pin P_MOT_INB = {&PORTA, PIN1_bm}

const Pin P_MOT_PWM = {&PORTE, PIN2_bm}

const Pin P_ENC_A = {&PORTA, PIN4_bm}

const Pin P_ENC_B = {&PORTA, PIN5_bm}

const Pin S_MOT_INA = {&PORTA, PIN2_bm}

const Pin S_MOT_INB = {&PORTA, PIN3_bm}

const Pin S_MOT_PWM = {&PORTE, PIN3_bm}

const Pin S_ENC_A = {&PORTA, PIN6_bm}

const Pin S_ENC_B = {&PORTA, PIN6_bm}
```

## **Detailed Description**

Header for a library that implements the input/output configuration.

This library allows the user to configure the inputs/outputs in one place. The library assigns ports and pin numbers via **Pin** objects to each input/output. Additionally, the library sets up interrupts for the engine speed and rear wheel speed hall effect sensors.

#### **Author**

KC Egger, Rahul Goyal, Alexandros Petrakis

#### Date

2019-12-09

# **Function Documentation**

# • IO\_Init()

void IO\_Init ( )

Sets up the engine speed and wheel speed interrupt pins.

This function sets up the engine speed and wheel speed for interrupt functionality.

Generated by doxygen 1.8.14