Motor Class Reference

Class that implements a motor. More...

`#include <Motor.h>`

Public Member Functions

	Motor (**Pin** INA, **Pin** INB, **Pin** PWM) Constructor which creates and initializes a motor object. More...
void	**init** () Configures the pins. More...
void	**setDutyCycle** (int8_t dutyCycle) Sets the duty cycle. More...

Detailed Description

Class that implements a motor.

This class allows the user to implement a motor. The motor will respond to a duty cycle between -100 and 100, with a duty cycle of 0 causing the motor to coast regardless of direction. Each motor object of this class can controlled independently.

Constructor & Destructor Documentation

◆ Motor()

```
Motor::Motor ( Pin  INA,
               Pin  INB,
               Pin  PWM
             )
```

Constructor which creates and initializes a motor object.

This constructor creates a motor object with the given pins.

Parameters

INA The first direction pin of the motor driver.

INB The second direction pin of the motor driver.

PWM The duty cycle pin of the motor driver.

Member Function Documentation

◆ init()

```
void Motor::init ( )
```

Configures the pins.

This function configures the direction pins (that is, INA and INB) and duty cycle pin (that is, PWM) as output pins.

◆ setDutyCycle()

```
void Motor::setDutyCycle ( int8_t  dutyCycle )
```

Sets the duty cycle.

This function takes a duty cycle between -100 and 100 to write as a PWM signal to the motor driver. It automatically writes to the direction pins depending on the sign of the duty cycle and scales the absolute value of the provided duty cycle to the PWM pin.

Parameters

dutyCycle the duty cycle the motor is set to

The documentation for this class was generated from the following files:

- Motor.h
- Motor.cpp
