

Auto Guided Vehicle

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Chapter 1

File Index

1.1 File List

Here is a list of all files with brief descriptions:

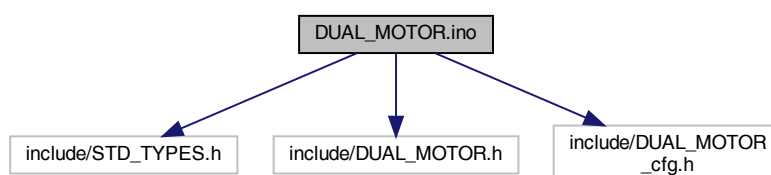
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Chapter 2

File Documentation

2.1 DUAL_MOTOR.ino File Reference

```
#include "include/STD_TYPES.h"
#include "include/DUAL_MOTOR.h"
#include "include/DUAL_MOTOR_cfg.h"
Include dependency graph for DUAL_MOTOR.ino:
```



Functions

- void **DUAL_MOTOR_init** (void)
- void **DUAL_MOTOR_rotate** (DUAL_MOTOR_t dualMotorNum, DUAL_MOTOR_DIR_t direction, u8 speed)
- void **DUAL_MOTOR_rotate** (DUAL_MOTOR_t dualMotorNum, DUAL_MOTOR_DIR_t direction)

2.1.1 Function Documentation

2.1.1.1 DUAL_MOTOR_init()

```
void DUAL_MOTOR_init (
    void )
```

Here is the caller graph for this function:



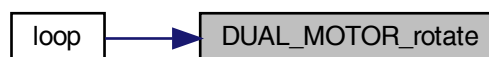
2.1.1.2 DUAL_MOTOR_rotate() [1/2]

```
void DUAL_MOTOR_rotate (
    DUAL_MOTOR_t dualMotorNum,
    DUAL_MOTOR_DIR_t direction )
```

2.1.1.3 DUAL_MOTOR_rotate() [2/2]

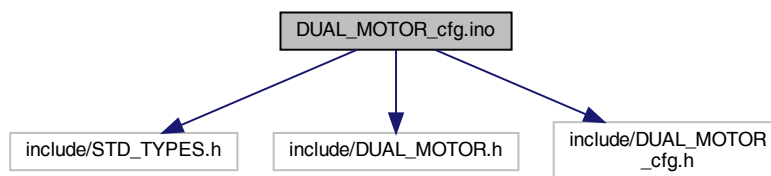
```
void DUAL_MOTOR_rotate (
    DUAL_MOTOR_t dualMotorNum,
    DUAL_MOTOR_DIR_t direction,
    u8 speed )
```

Here is the caller graph for this function:



2.2 DUAL_MOTOR_cfg.ino File Reference

```
#include "include/STD_TYPES.h"
#include "include/DUAL_MOTOR.h"
#include "include/DUAL_MOTOR_cfg.h"
Include dependency graph for DUAL_MOTOR_cfg.ino:
```



Variables

- `DUAL_MOTOR_CONGIG_t DUAL_MOTOR_configs []`
- `const u8 countDualMotorConfigs = sizeof(DUAL_MOTOR_configs) / sizeof(DUAL_MOTOR_CONGIG_t)`

2.2.1 Variable Documentation

2.2.1.1 countDualMotorConfigs

```
const u8 countDualMotorConfigs = sizeof( DUAL_MOTOR_configs ) / sizeof(DUAL_MOTOR_CONGIG_t)
```

2.2.1.2 DUAL_MOTOR_configs

```
DUAL_MOTOR_CONGIG_t DUAL_MOTOR_configs[]
```

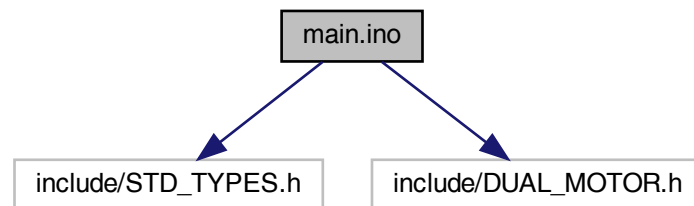
Initial value:

```
= {
    {DUAL_MOTOR0, 7, 6, 4, 3, 11, 10},
}
```

2.3 main.ino File Reference

Check Functionality of Dual DC motor driver.

```
#include "include/STD_TYPES.h"
#include "include/DUAL_MOTOR.h"
Include dependency graph for main.ino:
```



Functions

- void **setup** ()
- void **loop** ()

2.3.1 Detailed Description

Check Functionality of Dual DC motor driver.

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0.1

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This example shows how to drive two motors using the PWM and DIR pins. This is done using dual channel motor driver, both channel work the same way. CONNECTIONS: Arduino D11 <--> Left Motor Driver PWM Input Arduino D10 <--> Right Motor Driver PWM Input Arduino D6 <--> Left Motor Driver DIR Input 1 Arduino D7 <--> Left Motor Driver DIR Input 2 Arduino D4 <--> Right Motor Driver DIR Input 1 Arduino D3 <--> Right Motor Driver DIR Input 2 Arduino GND <--> Motor Driver GND

Note

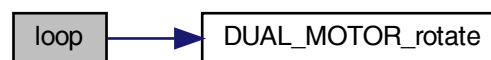
Motors connections can be found in **DUAL_MOTOR_cfg.ino** (p. 5)

2.3.2 Function Documentation

2.3.2.1 loop()

```
void loop ( )
```

Here is the call graph for this function:



2.3.2.2 setup()

```
void setup ( )
```

Here is the call graph for this function:



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