

## main.cpp File Reference

---

```
#include <stdlib.h>
#include <avr/io.h>
#include <avr/wdt.h>
#include <avr/interrupt.h>
#include <string.h>
#include "FreeRTOS.h"
#include "task.h"
#include "queue.h"
#include "croutine.h"
#include "rs232int.h"
#include "time_stamp.h"
#include "frt_task.h"
#include "frt_text_queue.h"
#include "frt_queue.h"
#include "frt_shared_data.h"
#include "shares.h"
#include "xmega_util.h"
#include "task_user.h"
#include "task_LED.h"
#include "task_MOTOR.h"
#include "task_EdgeSense.h"
```

## Functions

---

frt\_text\_queue **print\_ser\_queue** (32, NULL, 10)  
int **main** (void)

---

## Variables

---

shared\_data< bool > \* **IR\_flg**

---

## Detailed Description

---

This file contains the **main()** code for a program which runs a port of the FreeRTOS for AVR devices for a sumo robot. This port is specific to the XMEGA family. License: This file is released under the Lesser GNU Public License, version 2. This program is intended for educational use only, but it is not limited thereto.

## Function Documentation

---

### ◆ main()

int main ( void )

The main function sets up the RTOS. Some test tasks are created. Then the scheduler is started up; the scheduler runs until power is turned off or there's a reset.

#### Returns

This is a real-time microcontroller program which doesn't return. Ever.