

OLED - FreeRTOS

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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 D:/git/TheConnectedMCU_Labs/belash-bo/lab5-6/main.c File Reference

```
#include "FreeRTOS.h"
#include "task.h"
#include "semphr.h"
#include "queue.h"
#include "user.h"
#include "OLED.h"
#include "OLED/OledChar.h"
#include "OLED/OledGrph.h"
#include "UART.h"
#include "ConfigPerformance.h"
```

Functions

- int [main](#) (void)
- void [vApplicationStackOverflowHook](#) (TaskHandle_t pxTask, char *pcTaskName)
- void [vApplicationTickHook](#) (void)
- void [vAssertCalled](#) (const char *pcFile, unsigned long ulLine)
- void [_general_exception_handler](#) (void)

2.1.1 Function Documentation

2.1.1.1 [_general_exception_handler\(\)](#)

```
void _general_exception_handler (
    void )
```

2.1.1.2 main()

```
int main (
    void )
```

2.1.1.3 vApplicationStackOverflowHook()

```
void vApplicationStackOverflowHook (
    TaskHandle_t pxTask,
    char * pcTaskName )
```

2.1.1.4 vApplicationTickHook()

```
void vApplicationTickHook (
    void )
```

2.1.1.5 vAssertCalled()

```
void vAssertCalled (
    const char * pcFile,
    unsigned long ulLine )
```

2.2 D:/git/TheConnectedMCU_Labs/belash-bo/lab5-6/user.c File Reference

```
#include <xc.h>
#include <stdint.h>
#include <sys/attribs.h>
#include "FreeRTOS.h"
#include "task.h"
#include "semphr.h"
#include "user.h"
#include "OLED.h"
#include "OledChar.h"
#include "OledGrph.h"
#include "UART.h"
```

Functions

- void [InitGPIO](#) (void)
- void [InitBIOSGPIO](#) (void)
- void [InitApp](#) (void)
- void [Task1](#) (void *pvParameters)
- void [Task2](#) (void *pvParameters)
- void [DelayMs](#) (int t)

2.2.1 Function Documentation

2.2.1.1 DelayMs()

```
void DelayMs (  
    int t )
```

2.2.1.2 InitApp()

```
void InitApp (  
    void )
```

2.2.1.3 InitBIOSGPIO()

```
void InitBIOSGPIO (  
    void )
```

2.2.1.4 InitGPIO()

```
void InitGPIO (  
    void )
```

2.2.1.5 Task1()

```
void Task1 (  
    void * pvParameters )
```

2.2.1.6 Task2()

```
void Task2 (  
    void * pvParameters )
```

2.3 D:/git/TheConnectedMCU_Labs/belash-bo/lab5-6/user.h File Reference

```
#include "FreeRTOS.h"
#include "semphr.h"
```

Macros

- `#define LD1_PORT_BIT` LATGbits.LATG6
- `#define LD2_PORT_BIT` LATDbits.LATD4
- `#define LD3_PORT_BIT` LATBbits.LATB11
- `#define LD4_PORT_BIT` LATGbits.LATG15
- `#define BTN1_PORT_BIT` PORTAbits.RA5
- `#define BTN2_PORT_BIT` PORTAbits.RA4
- `#define BIOS_LD1_PORT_BIT` LATEbits.LATE0
- `#define BIOS_LD2_PORT_BIT` LATEbits.LATE1
- `#define BIOS_LD3_PORT_BIT` LATEbits.LATE2
- `#define BIOS_LD4_PORT_BIT` LATEbits.LATE3
- `#define BIOS_LD5_PORT_BIT` LATEbits.LATE4
- `#define BIOS_LD6_PORT_BIT` LATEbits.LATE5
- `#define BIOS_LD7_PORT_BIT` LATEbits.LATE6
- `#define BIOS_LD8_PORT_BIT` LATEbits.LATE7
- `#define BIOS_SW1_PORT_BIT` PORTEbits.RE8
- `#define BIOS_SW2_PORT_BIT` PORTEbits.RE9
- `#define BIOS_SW3_PORT_BIT` PORTAbits.RA14
- `#define BIOS_SW4_PORT_BIT` PORTCbits.RC1

Functions

- void `InitApp` (void)
- void `Task1` (void *pvParameters)
- void `Task2` (void *pvParameters)
- void `DelayMs` (int t)

2.3.1 Macro Definition Documentation

2.3.1.1 BIOS_LD1_PORT_BIT

```
#define BIOS_LD1_PORT_BIT LATEbits.LATE0
```

2.3.1.2 BIOS_LD2_PORT_BIT

```
#define BIOS_LD2_PORT_BIT LATEbits.LATE1
```

2.3.1.3 BIOS_LD3_PORT_BIT

```
#define BIOS_LD3_PORT_BIT LATEbits.LATE2
```

2.3.1.4 BIOS_LD4_PORT_BIT

```
#define BIOS_LD4_PORT_BIT LATEbits.LATE3
```

2.3.1.5 BIOS_LD5_PORT_BIT

```
#define BIOS_LD5_PORT_BIT LATEbits.LATE4
```

2.3.1.6 BIOS_LD6_PORT_BIT

```
#define BIOS_LD6_PORT_BIT LATEbits.LATE5
```

2.3.1.7 BIOS_LD7_PORT_BIT

```
#define BIOS_LD7_PORT_BIT LATEbits.LATE6
```

2.3.1.8 BIOS_LD8_PORT_BIT

```
#define BIOS_LD8_PORT_BIT LATEbits.LATE7
```

2.3.1.9 BIOS_SW1_PORT_BIT

```
#define BIOS_SW1_PORT_BIT PORTEbits.RE8
```

2.3.1.10 BIOS_SW2_PORT_BIT

```
#define BIOS_SW2_PORT_BIT PORTEbits.RE9
```

2.3.1.11 BIOS_SW3_PORT_BIT

```
#define BIOS_SW3_PORT_BIT PORTAbits.RA14
```

2.3.1.12 BIOS_SW4_PORT_BIT

```
#define BIOS_SW4_PORT_BIT PORTCbits.RC1
```

2.3.1.13 BTN1_PORT_BIT

```
#define BTN1_PORT_BIT PORTAbits.RA5
```

2.3.1.14 BTN2_PORT_BIT

```
#define BTN2_PORT_BIT PORTAbits.RA4
```

2.3.1.15 LD1_PORT_BIT

```
#define LD1_PORT_BIT LATGbits.LATG6
```

2.3.1.16 LD2_PORT_BIT

```
#define LD2_PORT_BIT LATDbits.LATD4
```

2.3.1.17 LD3_PORT_BIT

```
#define LD3_PORT_BIT LATBbits.LATB11
```

2.3.1.18 LD4_PORT_BIT

```
#define LD4_PORT_BIT LATGbits.LATG15
```

2.3.2 Function Documentation

2.3.2.1 DelayMs()

```
void DelayMs (  
    int t )
```

2.3.2.2 InitApp()

```
void InitApp (  
    void )
```

2.3.2.3 Task1()

```
void Task1 (  
    void * pvParameters )
```

2.3.2.4 Task2()

```
void Task2 (  
    void * pvParameters )
```


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