

UART

4

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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 configuration_bits.c File Reference

2.2 main.c File Reference

```
#include <stdint.h>
#include <stdbool.h>
#include "user.h"
```

Functions

- int32_t [main](#) (void)

2.2.1 Function Documentation

2.2.1.1 main()

```
int32_t main (
    void )
```

2.3 UART.c File Reference

```
#include "UART.h"
```

Functions

- void [uart4_init](#) (void)
- char [uart4_getc](#) (void)
- void [uart4_putc](#) (char c)
- void [uart4_puts](#) (char *s)
- void [uart4_test](#) (void)

2.3.1 Function Documentation

2.3.1.1 [uart4_getc\(\)](#)

```
char uart4\_getc (  
    void )
```

Function prototype:

```
void uart4\_getc(void);
```

Description:

read char symbol from UART

Parameters:

none

Returns:

none

2.3.1.2 [uart4_init\(\)](#)

```
void uart4\_init (  
    void )
```

Function prototype:

```
void uart4\_init(void);
```

Description:

initialize UART

Parameters:

none

Returns:

none

2.3.1.3 uart4_putc()

```
void uart4_putc (
    char c )
```

Function prototype:

```
void uart4\_putc\(char c\);
```

Description:

put char symbol to UART

Parameters:

char symbol 'c'

Returns:

none

2.3.1.4 uart4_puts()

```
void uart4_puts (
    char * s )
```

Function prototype:

```
void uart4\_puts\(char \*s\);
```

Description:

put char array to UART

Parameters:

char array 's'

Returns:

none

2.3.1.5 uart4_test()

```
void uart4_test (
    void )
```

Function prototype:

```
void uart4\_test\(void\);
```

Description:

UART test and beginning program

Parameters:

none

Returns:

none

2.4 UART.h File Reference

```
#include <xc.h>
```

Functions

- void [uart4_init](#) (void)
- char [uart4_getc](#) (void)
- void [uart4_putc](#) (char c)
- void [uart4_puts](#) (char *s)
- void [uart4_test](#) (void)

2.4.1 Function Documentation

2.4.1.1 [uart4_getc\(\)](#)

```
char uart4\_getc (  
    void )
```

Function prototype:

```
void uart4\_getc(void);
```

Description:

read char symbol from UART

Parameters:

none

Returns:

none

2.4.1.2 [uart4_init\(\)](#)

```
void uart4\_init (  
    void )
```

Function prototype:

```
void uart4\_init(void);
```

Description:

initialize UART

Parameters:

none

Returns:

none

2.4.1.3 uart4_putc()

```
void uart4_putc (
    char c )
```

Function prototype:

```
void uart4\_putc\(char c\);
```

Description:

put char symbol to UART

Parameters:

char symbol 'c'

Returns:

none

2.4.1.4 uart4_puts()

```
void uart4_puts (
    char * s )
```

Function prototype:

```
void uart4\_puts\(char \*s\);
```

Description:

put char array to UART

Parameters:

char array 's'

Returns:

none

2.4.1.5 uart4_test()

```
void uart4_test (
    void )
```

Function prototype:

```
void uart4\_test\(void\);
```

Description:

UART test and beginning program

Parameters:

none

Returns:

none

2.5 user.c File Reference

```
#include <stdint.h>
#include <stdbool.h>
#include "user.h"
#include <sys/attrs.h>
#include "UART.h"
```

Functions

- void [init_gpio](#) (void)
- void [init_app](#) (void)
- void [turn_on_off_leds](#) ()

2.5.1 Function Documentation

2.5.1.1 [init_app\(\)](#)

```
void init_app (
    void )
```

begins program

Parameters

out	<i>none</i>	
in	<i>none</i>	

Returns

none

2.5.1.2 [init_gpio\(\)](#)

```
void init_gpio (
    void )
```

initialize input output

Parameters

out	<i>none</i>	
in	<i>none</i>	

Returns

none

2.5.1.3 turn_on_off_leds()

```
void turn_on_off_leds ( )
```

all functional of programm

Parameters

out	<i>none</i>	
in	<i>none</i>	

Returns

none

2.6 user.h File Reference

```
#include <stdint.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`

Functions

- void `init_app` (void)

2.6.1 Macro Definition Documentation

2.6.1.1 BTN1_PORT_BIT

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

2.6.1.2 BTN2_PORT_BIT

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

2.6.1.3 LD1_PORT_BIT

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

2.6.1.4 LD2_PORT_BIT

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

2.6.1.5 LD3_PORT_BIT

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

2.6.1.6 LD4_PORT_BIT

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

2.6.2 Function Documentation

2.6.2.1 init_app()

```
void init_app (
    void )
```

begins program

Parameters

out	<i>none</i>	
in	<i>none</i>	

Returns

none

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