

main.c File Reference

: Main program body [More...](#)

```
#include "main.h"
#include "string.h"
```

Macros

#define	RT0 10000
#define	B 3470
#define	VCC 3.3
#define	R 10000
#define	DHT11_PORT GPIOA
#define	DHT11_PIN GPIO_PIN_4

Functions

void	SystemClock_Config (void)
	System Clock Configuration. More...
void	debugPrintln (UART_HandleTypeDef *uart_handle, char _out[])
	General purpose Function to send a char array over the UART and to automatically send a new line character after it. More...
void	microDelay (uint16_t delay)
	MICRO time delay. More...
uint8_t	DHT11_Start (void)
	The DHT11 START POINT. More...

uint8_t	DHT11_Read (void)
	to get an start reading the values from a dht11 sensor More...
int	main (void)
	The application entry point. More...
void	Error_Handler (void)
	This function is executed in case of error occurrence. More...

Variables

ADC_HandleTypeDef	hadc
I2C_HandleTypeDef	hi2c2
TIM_HandleTypeDef	htim1
UART_HandleTypeDef	huart2
uint16_t	readValue
char	str [60] = { 0 }
uint8_t	RHI
uint8_t	RHD
uint8_t	TCI
uint8_t	TCD
uint8_t	SUM

uint32_t	pMillis
uint32_t	cMillis
float	tCelsius = 0
float	tFahrenheit = 0
float	RH = 0

Detailed Description

: Main program body

Attention

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Function Documentation

◆ debugPrintln()

```
void debugPrintln ( UART_HandleTypeDef * uart_handle,
                  char _out[]
                  )
```

General purpose Function to send a char array over the UART and to automatically send a new line character after it.

Return values

int

◆ DHT11_Read()

```
uint8_t DHT11_Read ( void )
```

to get an start reading the values from a dht11 sensor

Return values

int

◆ DHT11_Start()

```
uint8_t DHT11_Start ( void )
```

The DHT11 START POINT.

Return values

int

◆ Error_Handler()

```
void Error_Handler ( void )
```

This function is executed in case of error occurrence.

Return values

None

◆ main()

```
int main ( void )
```

The application entry point.

Return values

int

◆ microDelay()

```
void microDelay ( uint16_t delay )
```

MICRO time delay.

Return values

int

◆ SystemClock_Config()

```
void SystemClock_Config ( void )
```

System Clock Configuration.

Return values

None

Initializes the RCC Oscillators according to the specified parameters in the RCC_OscInitTypeDef structure.

Initializes the CPU, AHB and APB buses clocks