main.c File Reference

: Main program body More...

```
#include "main.h"
#include "cmsis_os.h"
#include "i2c.h"
#include "usart.h"
#include "gpio.h"
#include "function.h"
#include "stdio.h"
#include <math.h>
#include "Const.h"
```

Macros

#define	**AdressBMP** 0xee

Functions

void	**SystemClock_Config** (void) System Clock Configuration. More...
void	**MX_FREERTOS_Init** (void) FreeRTOS initialization. More...
int	**__io_putchar** (int ch) <fonction de transmission UART lors de l'utilisation de "printf" More...
int	**main** (void) The application entry point. More...
void	**Error_Handler** (void) This function is executed in case of error occurrence. More...

Variables

char	**mess** [30] < Variables More...
double	**Temp** = 0
double	**AccelX** = 0
double	**AccelY** = 0
double	**AccelZ** = 0

Detailed Description

: Main program body

Attention

Macro Definition Documentation

◆ AdressBMP

```
#define AdressBMP   0xee
```

Function Documentation

◆ __io_putchar()

```
int __io_putchar ( int  ch )
```

<fonction de transmission UART lors de l'utilisation de "printf"

◆ 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

Scan du BUS I2C Renvoie les adresses disponibles sur la console UART

Requete d'identification du capteur gyroscopique

Requete d'identification du capteur temperature/pression

Mesure cyclique de la temperature et de l'acceleration La mesure se fait toutes les secondes Les fonctions de mesures sont ecrites dans le fichier **function.c**

◆ MX_FREERTOS_Init()

void MX_FREERTOS_Init (void)

FreeRTOS initialization.

Parameters

None

Return values

None

◆ SystemClock_Config()

void SystemClock_Config (void)

System Clock Configuration.

Return values

None

Configure the main internal regulator output voltage

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

Initializes the CPU, AHB and APB buses clocks

Variable Documentation

◆ AccelX

double AccelX = 0

◆ AccelY

double AccelY = 0

◆ AccelZ

double AccelZ = 0

◆ mess

char mess[30]

< Variables

◆ Temp

double Temp = 0