

## 1. Description

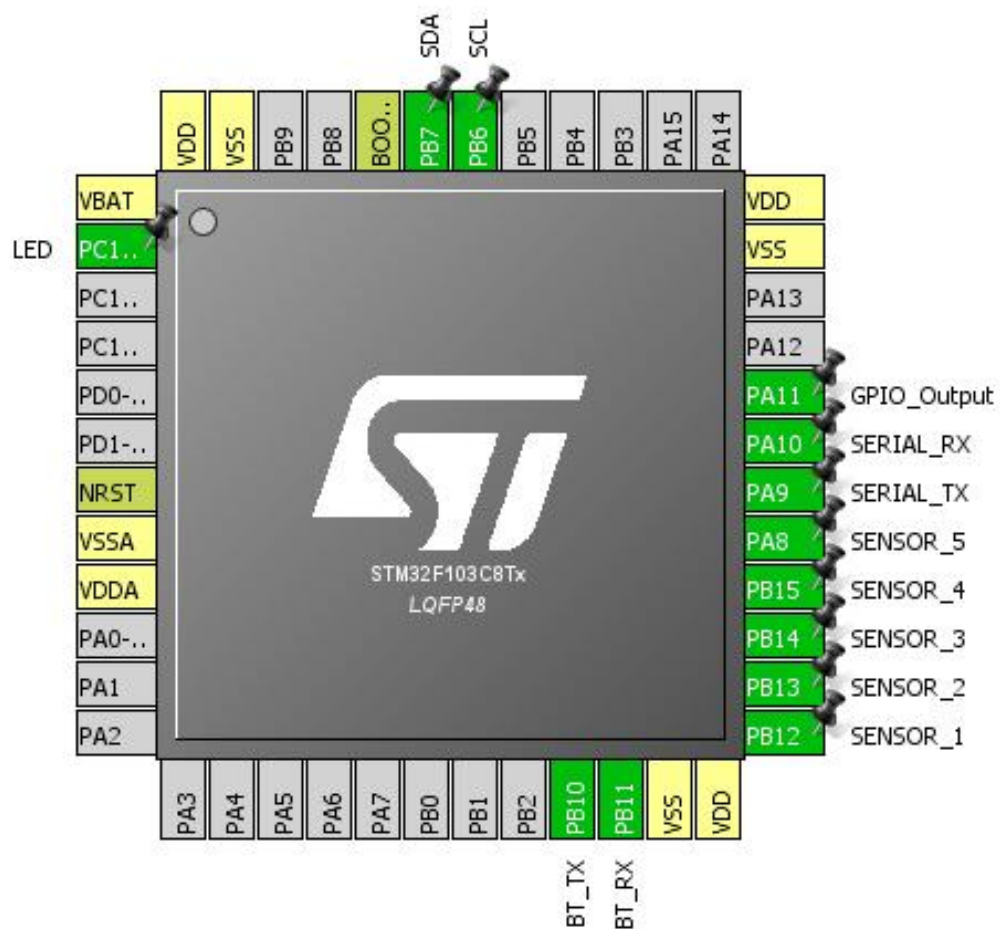
### 1.1. Project

Project Name	TESTING
Board Name	TESTING
Generated with:	STM32CubeMX 4.25.0
Date	08/29/2018

### 1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F103
MCU name	STM32F103C8Tx
MCU Package	LQFP48
MCU Pin number	48

## 2. Pinout Configuration



### 3. Pins Configuration

Pin Number LQFP48	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
2	PC13-TAMPER-RTC *	I/O	GPIO_Output	LED
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
21	PB10	I/O	USART3_TX	BT_TX
22	PB11	I/O	USART3_RX	BT_RX
23	VSS	Power		
24	VDD	Power		
25	PB12 *	I/O	GPIO_Output	SENSOR_1
26	PB13 *	I/O	GPIO_Output	SENSOR_2
27	PB14 *	I/O	GPIO_Output	SENSOR_3
28	PB15 *	I/O	GPIO_Output	SENSOR_4
29	PA8 *	I/O	GPIO_Output	SENSOR_5
30	PA9	I/O	USART1_TX	SERIAL_TX
31	PA10	I/O	USART1_RX	SERIAL_RX
32	PA11 *	I/O	GPIO_Output	
35	VSS	Power		
36	VDD	Power		
42	PB6	I/O	I2C1_SCL	SCL
43	PB7	I/O	I2C1_SDA	SDA
44	BOOT0	Boot		
47	VSS	Power		
48	VDD	Power		

\* The pin is affected with an I/O function



## 5. IPs and Middleware Configuration

### 5.1. I2C1

#### I2C: I2C

##### 5.1.1. Parameter Settings:

###### Master Features:

I2C Speed Mode	Standard Mode
I2C Clock Speed (Hz)	100000

###### Slave Features:

Clock No Stretch Mode	Disabled
Primary Address Length selection	7-bit
Dual Address Acknowledged	Disabled
Primary slave address	0
General Call address detection	Disabled

### 5.2. SYS

Debug: No Debug

Timebase Source: SysTick

### 5.3. USART1

Mode: Asynchronous

##### 5.3.1. Parameter Settings:

###### Basic Parameters:

Baud Rate	115200
Word Length	8 Bits (including Parity)
Parity	None
Stop Bits	1

###### Advanced Parameters:

Data Direction	Receive and Transmit
Over Sampling	16 Samples

## 5.4. USART3

Mode: Asynchronous

### 5.4.1. Parameter Settings:

#### Basic Parameters:

Baud Rate	115200
Word Length	8 Bits (including Parity)
Parity	None
Stop Bits	1

#### Advanced Parameters:

Data Direction	Receive and Transmit
Over Sampling	16 Samples

\* User modified value

## 6. System Configuration

### 6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
I2C1	PB6	I2C1_SCL	Alternate Function Open Drain	n/a	High *	SCL
	PB7	I2C1_SDA	Alternate Function Open Drain	n/a	High *	SDA
USART1	PA9	USART1_TX	Alternate Function Push Pull	n/a	High *	SERIAL_TX
	PA10	USART1_RX	Input mode	No pull-up and no pull-down	n/a	SERIAL_RX
USART3	PB10	USART3_TX	Alternate Function Push Pull	n/a	High *	BT_TX
	PB11	USART3_RX	Input mode	No pull-up and no pull-down	n/a	BT_RX
GPIO	PC13-TAMPER-RTC	GPIO_Output	Output Push Pull	n/a	Low	LED
	PB12	GPIO_Output	Output Push Pull	n/a	Low	SENSOR_1
	PB13	GPIO_Output	Output Push Pull	n/a	Low	SENSOR_2
	PB14	GPIO_Output	Output Push Pull	n/a	Low	SENSOR_3
	PB15	GPIO_Output	Output Push Pull	n/a	Low	SENSOR_4
	PA8	GPIO_Output	Output Push Pull	n/a	Low	SENSOR_5
	PA11	GPIO_Output	Output Push Pull	n/a	Low	

### 6.2. DMA configuration

nothing configured in DMA service

### 6.3. NVIC configuration

Interrupt Table	Enable	Preenmption Priority	SubPriority
Non maskable interrupt	true	0	0
Hard fault interrupt	true	0	0
Memory management fault	true	0	0
Prefetch fault, memory access fault	true	0	0
Undefined instruction or illegal state	true	0	0
System service call via SWI instruction	true	0	0
Debug monitor	true	0	0
Pendable request for system service	true	0	0
System tick timer	true	0	0
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
I2C1 event interrupt	unused		
I2C1 error interrupt	unused		
USART1 global interrupt	unused		
USART3 global interrupt	unused		

\* User modified value



## ***7. Power Consumption Calculator report***

### 7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
MCU	STM32F103C8Tx
Datasheet	13587_Rev17

### 7.2. Parameter Selection

Temperature	25
Vdd	3.3

## 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	TESTING
Project Folder	C:\Users\Rishav\Desktop\TESTING
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F1 V1.6.1

### 8.2. Code Generation Settings

Name	Value
STM32Cube Firmware Library Package	Copy all used libraries into the project folder
Generate peripheral initialization as a pair of '.c/.h' files	No
Backup previously generated files when re-generating	No
Delete previously generated files when not re-generated	Yes
Set all free pins as analog (to optimize the power consumption)	No

## ***9. Software Pack Report***