# 1. Description

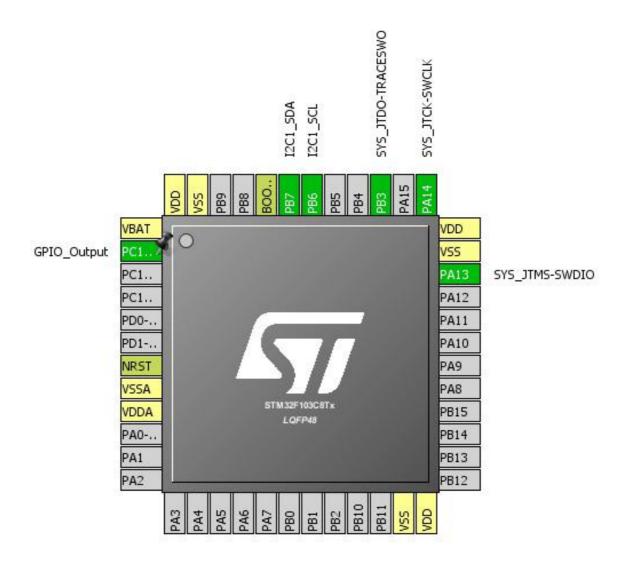
### 1.1. Project

Project Name	OLED
Board Name	custom
Generated with:	STM32CubeMX 4.27.0
Date	10/14/2018

#### 1.2. MCU

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

## 2. Pinout Configuration

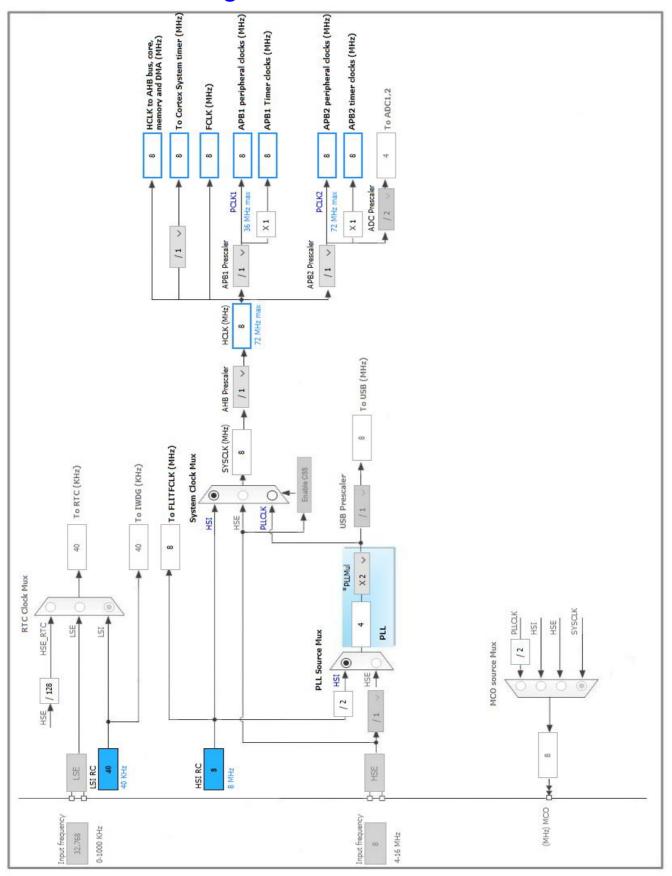


# 3. Pins Configuration

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	
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
23	VSS	Power		
24	VDD	Power		
34	PA13	I/O	SYS_JTMS-SWDIO	
35	VSS	Power		
36	VDD	Power		
37	PA14	I/O	SYS_JTCK-SWCLK	
39	PB3	I/O	SYS_JTDO-TRACESWO	
42	PB6	I/O	I2C1_SCL	
43	PB7	I/O	I2C1_SDA	
44	воото	Boot		
47	VSS	Power		
48	VDD	Power		

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

## 4. Clock Tree Configuration



## 5. IPs and Middleware Configuration

#### 5.1. I2C1

12C: 12C

#### 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: Trace Asynchronous Sw** 

**Timebase Source: SysTick** 

<sup>\*</sup> 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 *	
	PB7	I2C1_SDA	Alternate Function Open Drain	n/a	High *	
SYS	PA13	SYS_JTMS- SWDIO	n/a	n/a	n/a	
	PA14	SYS_JTCK- SWCLK	n/a	n/a	n/a	
	PB3	SYS_JTDO- TRACESWO	n/a	n/a	n/a	
GPIO	PC13- TAMPER- RTC	GPIO_Output	Output Push Pull	No pull-up and no pull-down	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		

<sup>\*</sup> 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
11/700	3.3

## 8. Software Project

#### 8.1. Project Settings

Name	Value
Project Name	OLED
Project Folder	C:\Users\onuur\Desktop\OLED
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 only the necessary library files
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