# 1. Description

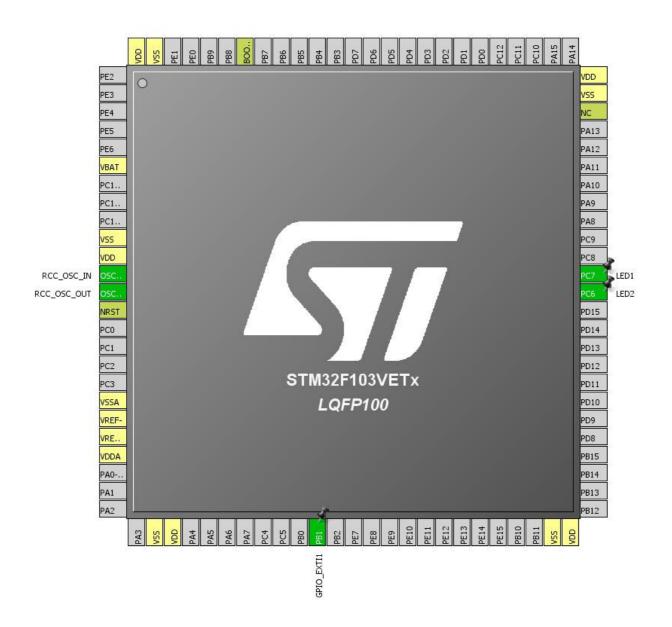
## 1.1. Project

Project Name	gpio_interrupt
Board Name	custom
Generated with:	STM32CubeMX 4.26.0
Date	08/18/2018

#### 1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F103
MCU name	STM32F103VETx
MCU Package	LQFP100
MCU Pin number	100

## 2. Pinout Configuration

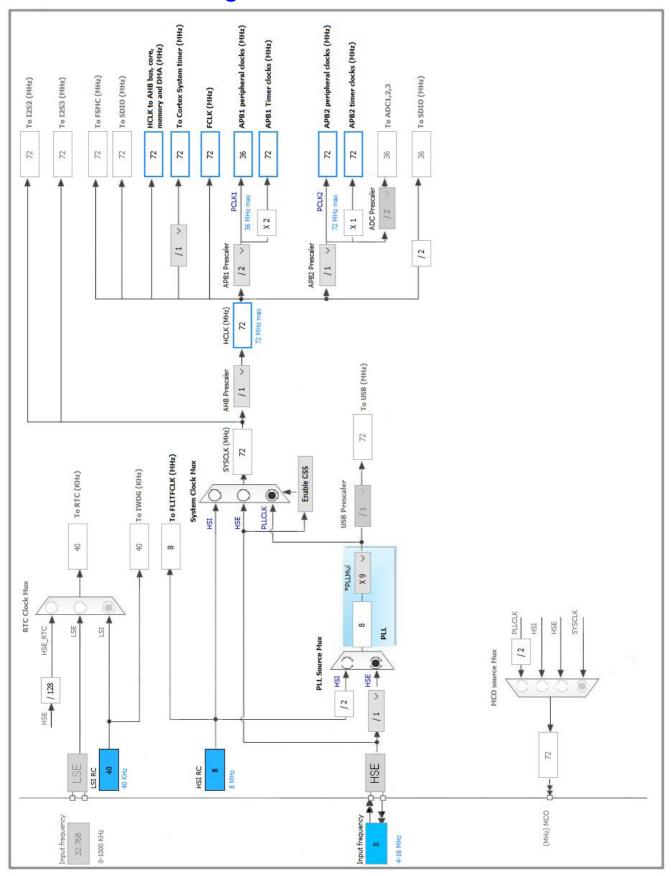


# 3. Pins Configuration

Pin Number LQFP100	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
6	VBAT	Power		
10	VSS	Power		
11	VDD	Power		
12	OSC_IN	I/O	RCC_OSC_IN	
13	OSC_OUT	I/O	RCC_OSC_OUT	
14	NRST	Reset		
19	VSSA	Power		
20	VREF-	Power		
21	VREF+	Power		
22	VDDA	Power		
27	VSS	Power		
28	VDD	Power		
36	PB1	I/O	GPIO_EXTI1	
49	VSS	Power		
50	VDD	Power		
63	PC6 *	I/O	GPIO_Output	LED2
64	PC7 *	I/O	GPIO_Output	LED1
73	NC	NC		
74	VSS	Power		
75	VDD	Power		
94	BOOT0	Boot		
99	VSS	Power		
100	VDD	Power		

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

## 4. Clock Tree Configuration



# **5.** *IPs and Middleware Configuration* **5.1.** *RCC*

High Speed Clock (HSE): Crystal/Ceramic Resonator

5.1.1. Parameter Settings:

#### **System Parameters:**

VDD voltage (V) 3.3
Prefetch Buffer Enabled

Flash Latency(WS) 2 WS (3 CPU cycle)

**RCC Parameters:** 

HSI Calibration Value 16
HSE Startup Timout Value (ms) 100
LSE Startup Timout Value (ms) 5000

#### 5.2. SYS

**Debug: No Debug** 

**Timebase Source: SysTick** 

<sup>\*</sup> User modified value

# 6. System Configuration

## 6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull	Max	User Label
				down	Speed	
RCC	OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
GPIO	PB1	GPIO_EXTI1	External Interrupt	Pull-up *	n/a	
			Mode with Falling	·		
			edge trigger detection			
	PC6	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED2
	PC7	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED1

## 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		0
System tick timer	true 0 0		0
EXTI line1 interrupt	true	0	0
PVD interrupt through EXTI line 16		unused	
Flash global interrupt	unused		
RCC global interrupt	unused		

<sup>\*</sup> User modified value

# 7. Power Consumption Calculator report

#### 7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
мси	STM32F103VETx
Datasheet	14611_Rev12

#### 7.2. Parameter Selection

Temperature	25
Vdd	3.3

# 8. Software Project

#### 8.1. Project Settings

Name	Value	
Project Name	gpio_interrupt	
Project Folder	D:\[project]\stm32f103vet6\source\gpio_interrupt	
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	Yes
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