# 1. Description

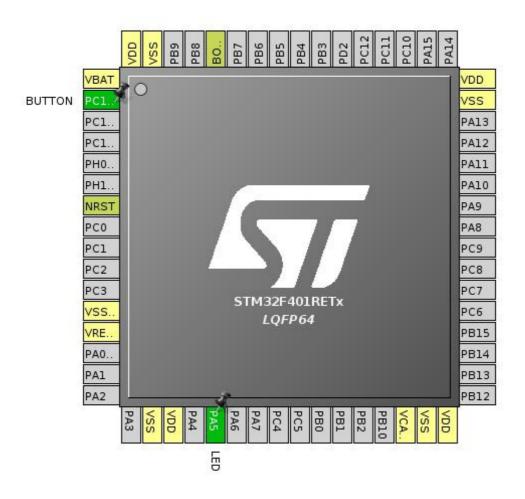
### 1.1. Project

Project Name	EXTI_Example
Board Name	EXTI_Example
Generated with:	STM32CubeMX 4.16.0
Date	08/03/2016

#### 1.2. MCU

MCU Series	STM32F4
MCU Line	STM32F401
MCU name	STM32F401RETx
MCU Package	LQFP64
MCU Pin number	64

### 2. Pinout Configuration

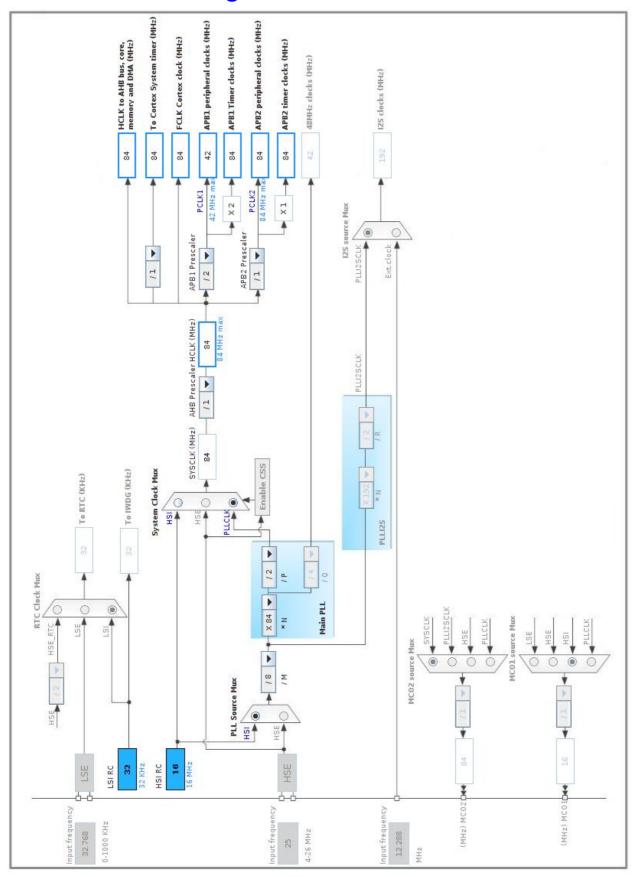


# 3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
2	PC13-ANTI_TAMP	I/O	GPIO_EXTI13	BUTTON
7	NRST	Reset		
12	VSSA/VREF-	Power		
13	VREF+	Power		
18	VSS	Power		
19	VDD	Power		
21	PA5 *	I/O	GPIO_Output	LED
30	VCAP1	Power		
31	VSS	Power		
32	VDD	Power		
47	VSS	Power		
48	VDD	Power		
60	воото	Boot		
63	VSS	Power		
64	VDD	Power		

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

### 4. Clock Tree Configuration



## 5. IPs and Middleware Configuration

5.1. SYS

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	
GPIO	PC13-	GPIO_EXTI13	External Interrupt	No pull-up and no pull-down	n/a	BUTTON
	ANTI_TAMP		Mode with Falling			
			edge trigger detection			
	PA5	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED

### 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
Pre-fetch 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
EXTI line[15:10] interrupts	true	0	0
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
FPU global interrupt	unused		

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

### 7. Power Consumption Calculator report

#### 7.1. Microcontroller Selection

Series	STM32F4
Line	STM32F401
мси	STM32F401RETx
Datasheet	025644_Rev3

#### 7.2. Parameter Selection

Temperature	25
Vdd	null

## 8. Software Project

#### 8.1. Project Settings

Name	Value
Project Name	EXTI_Example
Project Folder	/home/jose/workspaceCortex/EXTI_Example
Toolchain / IDE	SW4STM32
Firmware Package Name and Version	STM32Cube FW_F4 V1.13.0

#### 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	Yes
Delete previously generated files when not re-generated	Yes
Set all free pins as analog (to optimize the power	No
consumption)	