# 1. Description

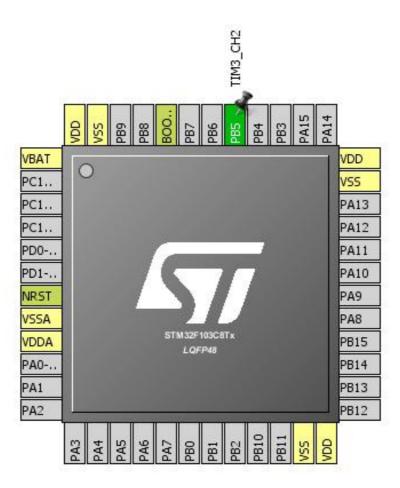
### 1.1. Project

Project Name	pwm for armichair
Board Name	pwm for armichair
Generated with:	STM32CubeMX 4.25.0
Date	03/21/2018

### 1.2. MCU

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

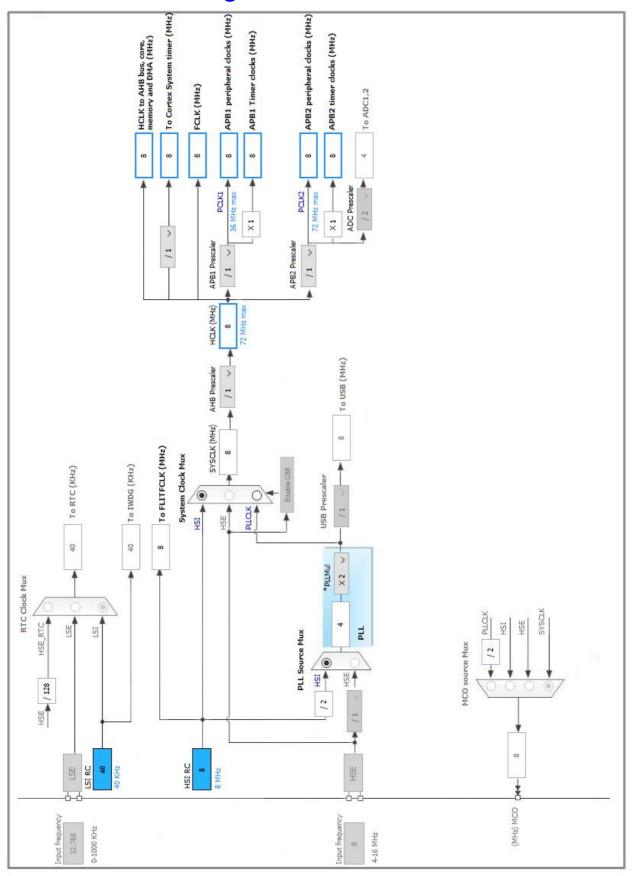
## 2. Pinout Configuration



# 3. Pins Configuration

Pin Number LQFP48	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
23	VSS	Power		
24	VDD	Power		
35	VSS	Power		
36	VDD	Power		
41	PB5	I/O	TIM3_CH2	
44	воото	Boot		
47	VSS	Power		
48	VDD	Power		

## 4. Clock Tree Configuration



### 5. IPs and Middleware Configuration

#### 5.1. SYS

**Debug: No Debug** 

Timebase Source: SysTick

#### 5.2. TIM3

mode: Clock Source

**Channel2: PWM Generation CH2** 

#### 5.2.1. Parameter Settings:

#### **Counter Settings:**

Prescaler (PSC - 16 bits value) 8 \*

Counter Mode Up

Counter Period (AutoReload Register - 16 bits value) 200 \*

Internal Clock Division (CKD) No Division

#### **Trigger Output (TRGO) Parameters:**

Master/Slave Mode Disable (no sync between this TIM (Master) and its Slaves

Trigger Event Selection Reset (UG bit from TIMx\_EGR)

#### **PWM Generation Channel 2:**

Mode PWM mode 1

Pulse (16 bits value) 0

Fast Mode Disable CH Polarity High

<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
TIM3	PB5	TIM3_CH2	Alternate Function 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		
TIM3 global interrupt	unused		

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

# 7. Power Consumption Calculator report

#### 7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
мси	STM32F103C8Tx
Datasheet	13587_Rev17

#### 7.2. Parameter Selection

Temperature	25
Vdd	3.3

## 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	pwm for armichair
Project Folder	C:\Users\AJF\Desktop\arm and other micros code test\arm project\pwm for
Toolchain / IDE	EWARM
Firmware Package Name and Version	STM32Cube FW_F1 V1.4.0

### 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	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	No
consumption)	

## 9. Software Pack Report