

## 1. Description

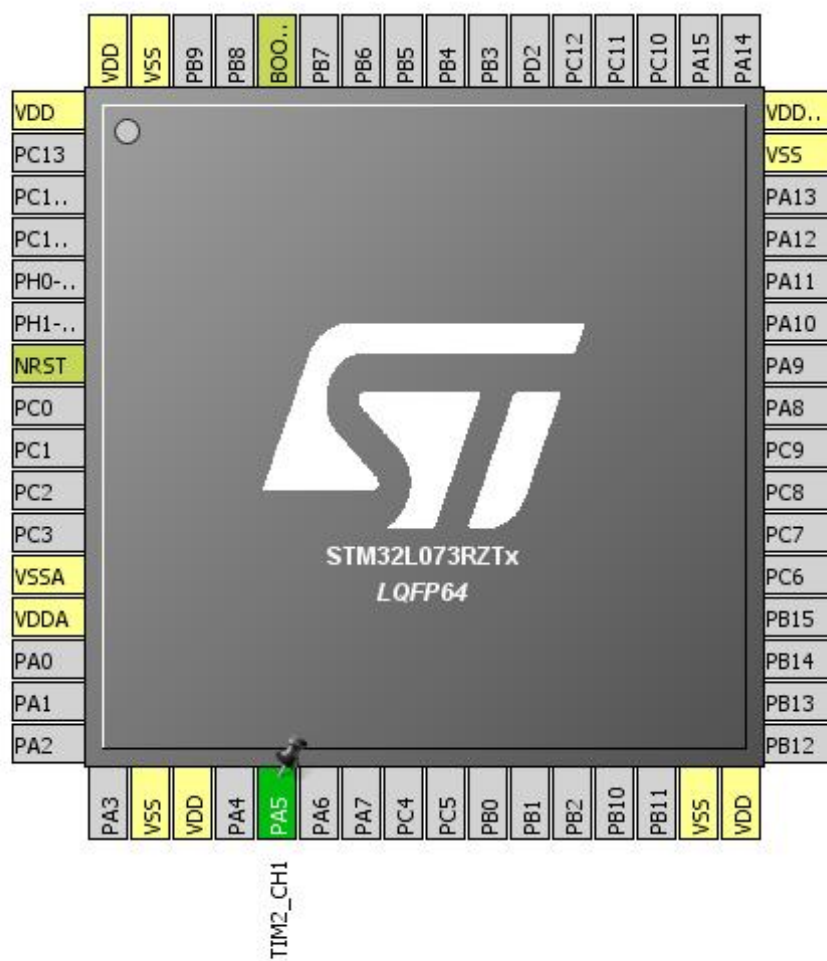
### 1.1. Project

Project Name	PWM_PRACTICE2
Board Name	PWM_PRACTICE2
Generated with:	STM32CubeMX 4.22.1
Date	02/03/2018

### 1.2. MCU

MCU Series	STM32L0
MCU Line	STM32L0x3
MCU name	STM32L073RZTx
MCU Package	LQFP64
MCU Pin number	64

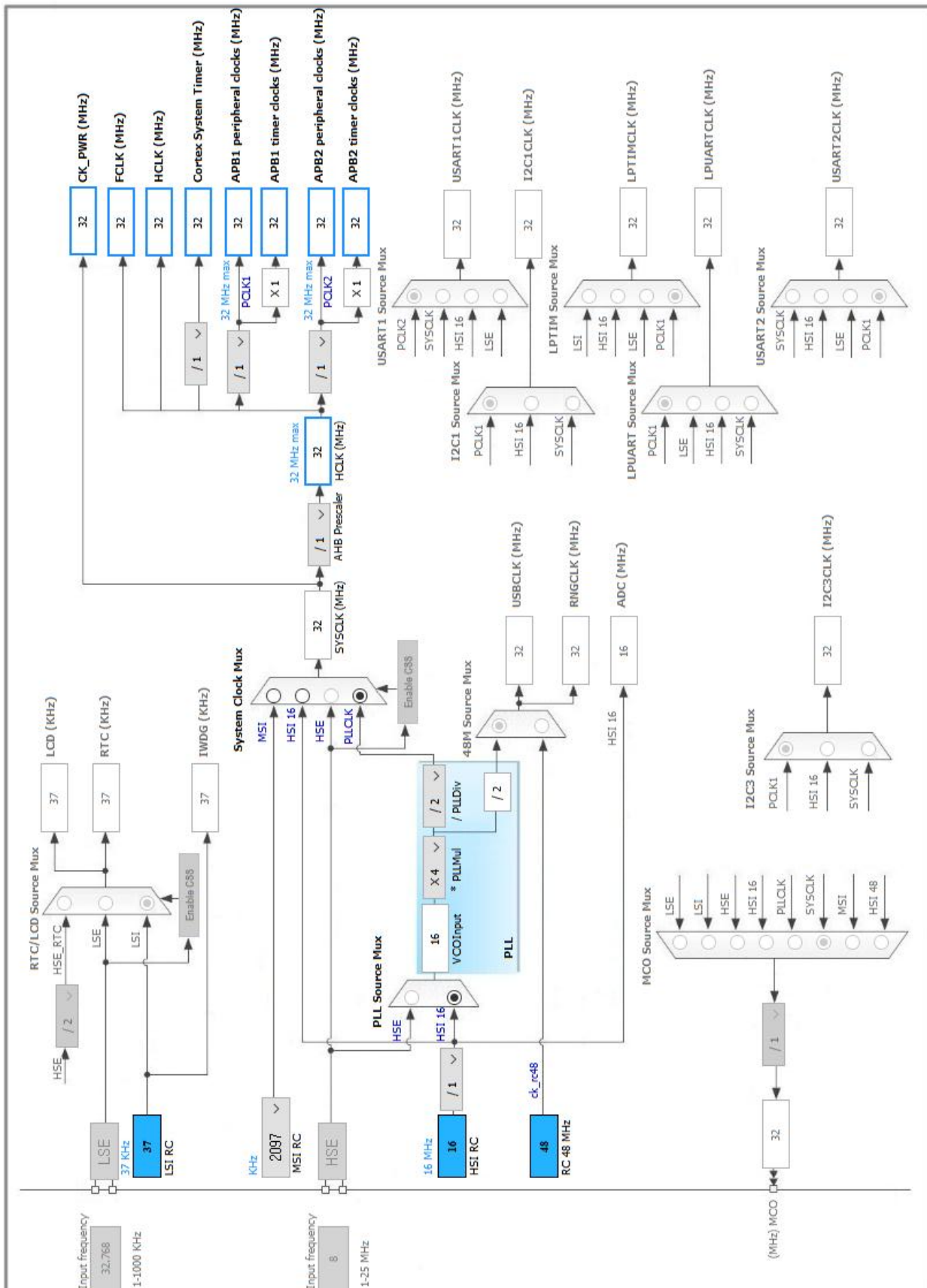
## 2. Pinout Configuration



### 3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VDD	Power		
7	NRST	Reset		
12	VSSA	Power		
13	VDDA	Power		
18	VSS	Power		
19	VDD	Power		
21	PA5	I/O	TIM2_CH1	
31	VSS	Power		
32	VDD	Power		
47	VSS	Power		
48	VDD_USB	Power		
60	BOOT0	Boot		
63	VSS	Power		
64	VDD	Power		

## 4. Clock Tree Configuration



## 5. IPs and Middleware Configuration

### 5.1. SYS

Timebase Source: SysTick

### 5.2. TIM2

Channel1: PWM Generation CH1

#### 5.2.1. Parameter Settings:

##### Counter Settings:

Prescaler (PSC - 16 bits value)	32 *
Counter Mode	Down *
Counter Period (AutoReload Register - 16 bits value )	3000 *
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 1:

Mode	PWM mode 1
Pulse (16 bits value)	1500 *
Fast Mode	Disable
CH Polarity	High

### 5.3. TIM6

mode: Activated

#### 5.3.1. Parameter Settings:

##### Counter Settings:

Prescaler (PSC - 16 bits value)	32000 *
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value )	199 *

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

Trigger Event Selection	Reset (UG bit from TIMx_EGR)
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\* User modified value

## 6. System Configuration

### 6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
TIM2	PA5	TIM2_CH1	Alternate Function Push Pull	No pull-up and no pull-down	<b>Medium *</b>	

### 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
System service call via SWI instruction	true	0	0
Pendable request for system service	true	0	0
System tick timer	true	0	0
TIM6 global interrupt and DAC1/DAC2 underrun error interrupts	true	0	0
PVD interrupt through EXTI line 16	unused		
Flash and EEPROM global interrupt	unused		
RCC and CRS global interrupt	unused		
TIM2 global interrupt	unused		

\* User modified value



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

### 7.1. Microcontroller Selection

Series	STM32L0
Line	STM32L0x3
MCU	STM32L073RZTx
Datasheet	027096_Rev3

### 7.2. Parameter Selection

Temperature	25
Vdd	3.0

## 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	PWM_PRACTICE2
Project Folder	D:\FOURTH\PWM_PRACTICE2
Toolchain / IDE	EWARM
Firmware Package Name and Version	STM32Cube FW_L0 V1.10.0

### 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