1. Description

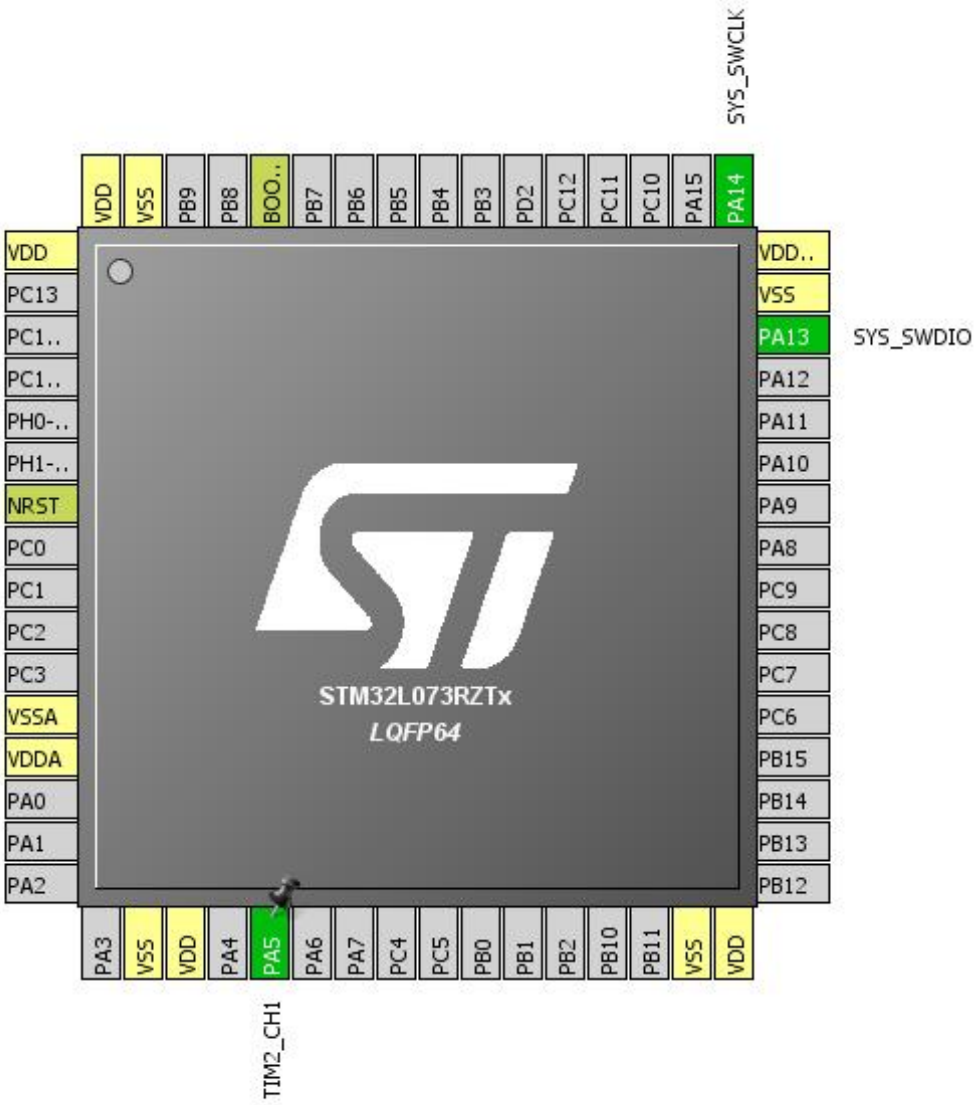
1.1. Project

Project Name	PWM_PRACTICE
Board Name	PWM_PRACTICE
Generated with:	STM32CubeMX 4.22.1
Date	02/04/2018

1.2. MCU

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

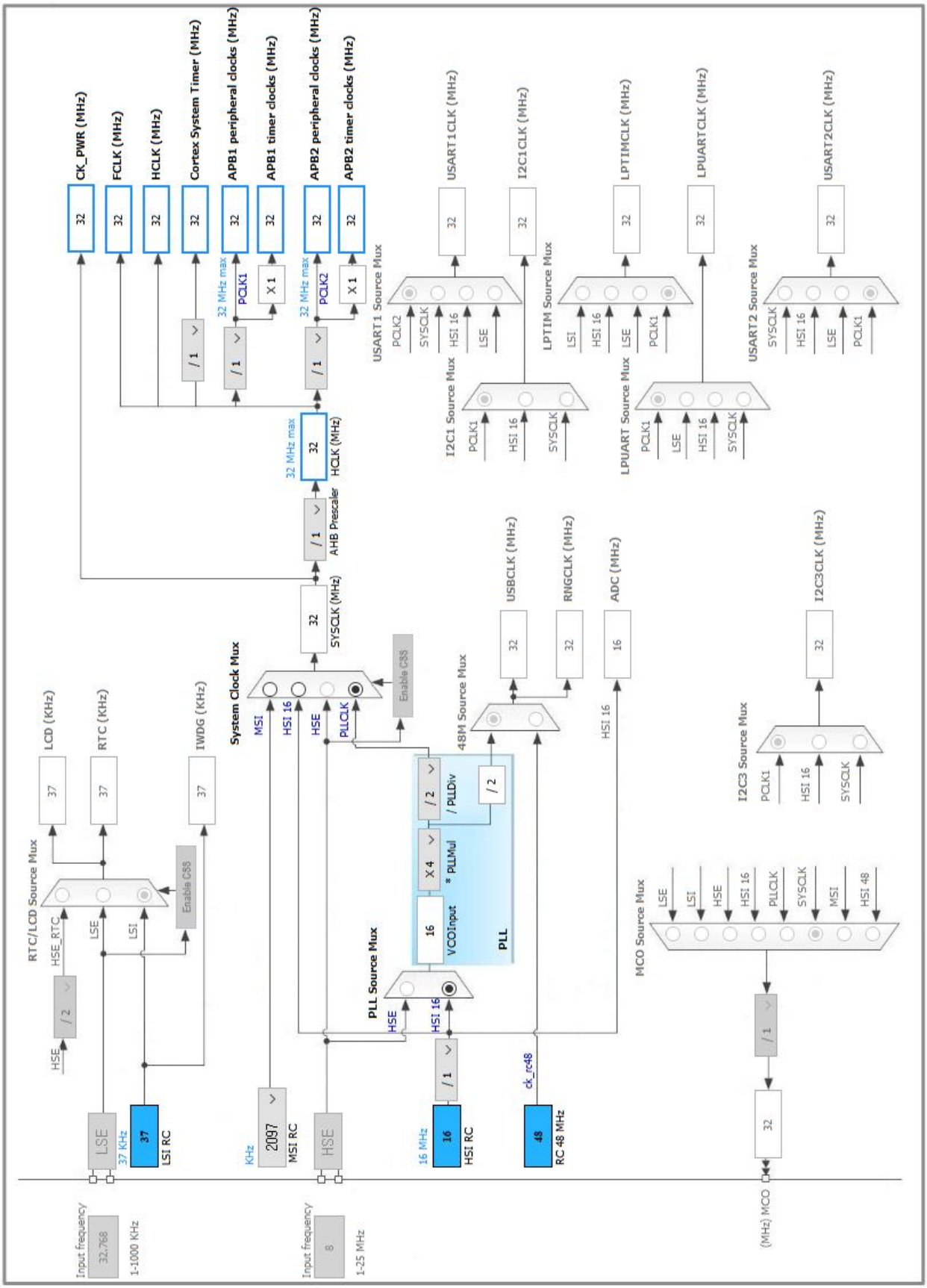
2. Pinout Configuration



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		
46	PA13	I/O	SYS_SWDIO	
47	VSS	Power		
48	VDD_USB	Power		
49	PA14	I/O	SYS_SWCLK	
60	BOOT0	Boot		
63	VSS	Power		
64	VDD	Power		

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. SYS

mode: Debug Serial Wire

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	Up
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)

*** User modified value**

6. System Configuration

6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
SYS	PA13	SYS_SWDIO	n/a	n/a	n/a	
	PA14	SYS_SWCLK	n/a	n/a	n/a	
TIM2	PA5	TIM2_CH1	Alternate Function 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
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_PRACTICE
Project Folder	D:\Drone\code\PWM_PRACTICE
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