# 1. Description

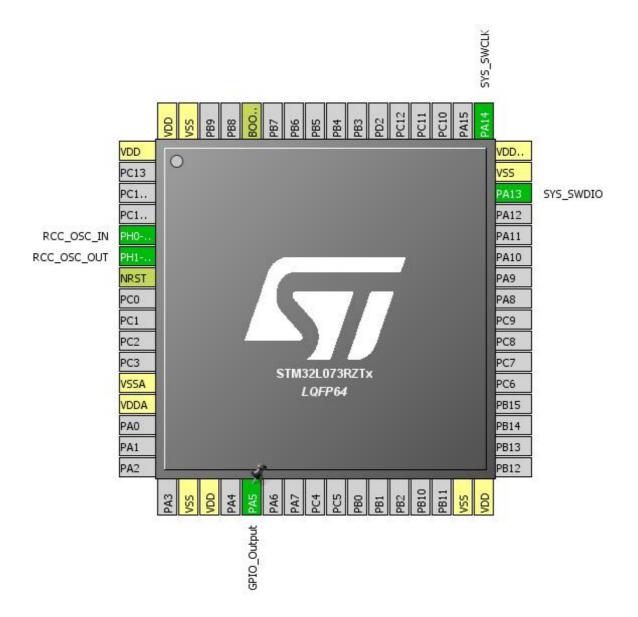
### 1.1. Project

Project Name	interrupt
Board Name	custom
Generated with:	STM32CubeMX 4.27.0
Date	10/11/2018

### 1.2. MCU

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

## 2. Pinout Configuration

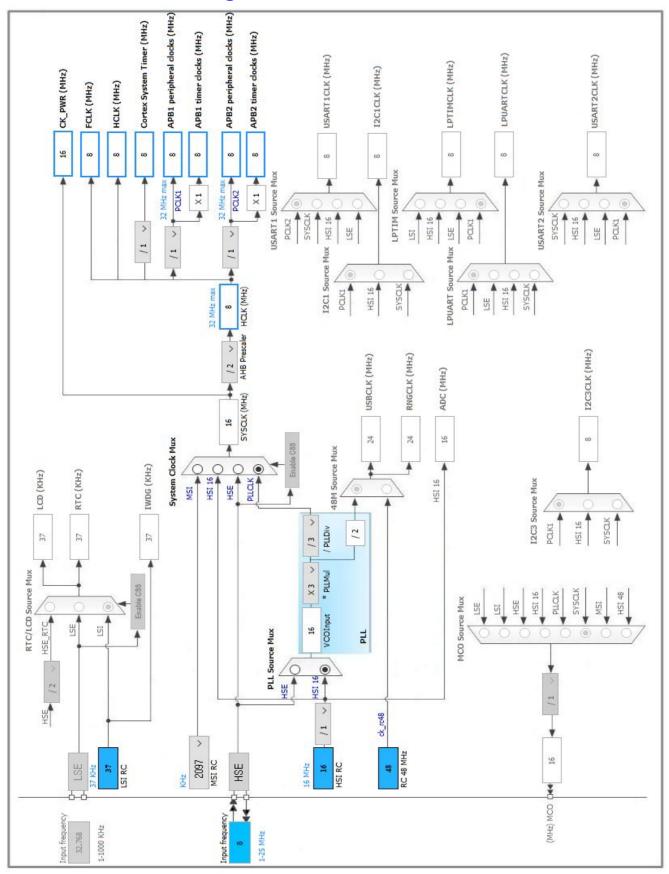


# 3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VDD	Power		
5	PH0-OSC_IN	I/O	RCC_OSC_IN	
6	PH1-OSC_OUT	I/O	RCC_OSC_OUT	
7	NRST	Reset		
12	VSSA	Power		
13	VDDA	Power		
18	VSS	Power		
19	VDD	Power		
21	PA5 *	I/O	GPIO_Output	
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	воото	Boot		
63	VSS	Power		
64	VDD	Power		

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

### 4. Clock Tree Configuration



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# **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
Buffer Cache Enabled
Prefetch Disabled
Preread Enabled

Flash Latency(WS) 0 WS (1 CPU cycle)

**RCC Parameters:** 

HSI Calibration Value 16

MSI Calibration Value 0

HSE Startup Timout Value (ms) 100

LSE Startup Timout Value (ms) 5000

**Power Parameters:** 

Power Regulator Voltage Scale Power Regulator Voltage Scale 1

#### 5.2. SYS

mode: Debug Serial Wire Timebase Source: SysTick

#### 5.3. TIM6

mode: Activated

#### 5.3.1. Parameter Settings:

#### **Counter Settings:**

Prescaler (PSC - 16 bits value)

Counter Mode

Counter Period (AutoReload Register - 16 bits value )

1 \*

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

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

interrupt Project
Configuration Report

\* 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	PH0- OSC IN	RCC_OSC_IN	n/a	n/a	n/a	
	PH1- OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
SYS	PA13	SYS_SWDIO	n/a	n/a	n/a	
	PA14	SYS_SWCLK	n/a	n/a	n/a	
GPIO	PA5	GPIO_Output	Output 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		0
System service call via SWI instruction	true 0 0		0
Pendable request for system service	true	0	0
System tick timer	true	0	0
PVD interrupt through EXTI line 16	unused		
Flash and EEPROM global interrupt	unused		
RCC and CRS global interrupt	unused		
TIM6 global interrupt and DAC1/DAC2 underrun error interrupts	unused		

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

# 7. Power Consumption Calculator report

### 7.1. Microcontroller Selection

Series	STM32L0
Line	STM32L0x3
мси	STM32L073RZTx
Datasheet	027096_Rev3

#### 7.2. Parameter Selection

Temperature	25
Vdd	3.0

# 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	interrupt
Project Folder	C:\Users\DSM2018\Desktop\Git\NoNamed\Drone-
Toolchain / IDE	EWARM V8
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	No
consumption)	

# 9. Software Pack Report