# 1. Description

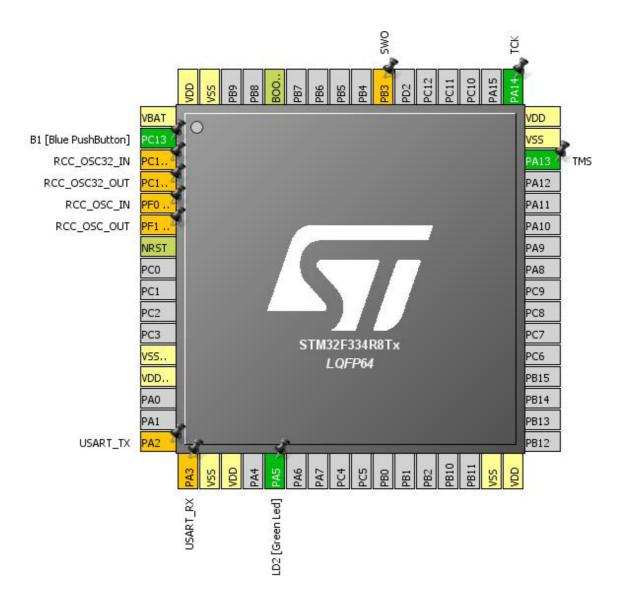
### 1.1. Project

Project Name	swtimertest
Board Name	NUCLEO-F334R8
Generated with:	STM32CubeMX 4.22.1
Date	01/22/2018

### 1.2. MCU

MCU Series	STM32F3
MCU Line	STM32F334
MCU name	STM32F334R8Tx
MCU Package	LQFP64
MCU Pin number	64

## 2. Pinout Configuration



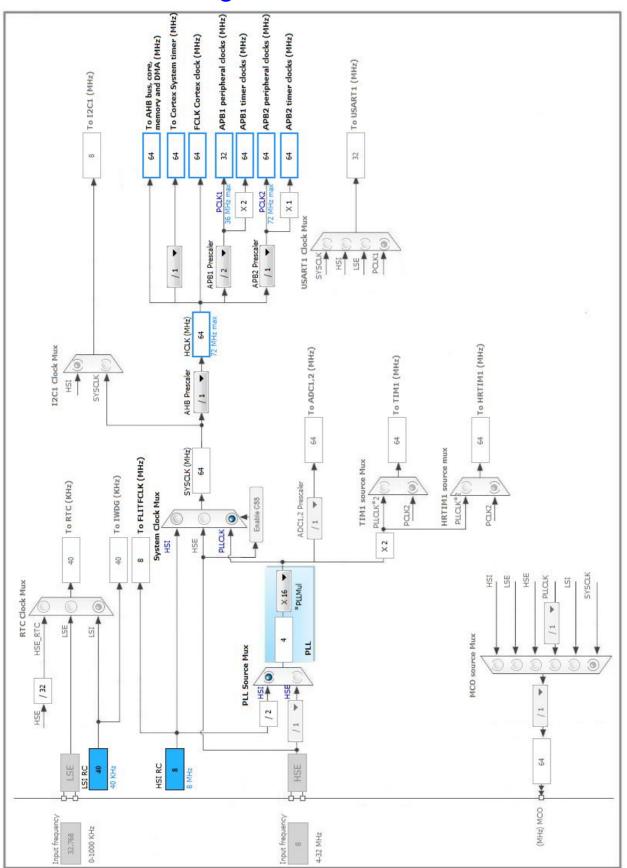
# 3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
2	PC13	I/O	GPIO_EXTI13	B1 [Blue PushButton]
3	PC14 / OSC32_IN *	I/O	RCC_OSC32_IN	
4	PC15 / OSC32_OUT *	I/O	RCC_OSC32_OUT	RCC_OSC32_OUT
5	PF0/OSC_IN *	I/O	RCC_OSC_IN	
6	PF1 / OSC_OUT *	I/O	RCC_OSC_OUT	
7	NRST	Reset		
12	VSSA/VREF-	Power		
13	VDDA/VREF+	Power		
16	PA2 *	I/O	USART2_TX	USART_TX
17	PA3 *	I/O	USART2_RX	USART_RX
18	VSS	Power		
19	VDD	Power		
21	PA5 **	I/O	GPIO_Output	LD2 [Green Led]
31	VSS	Power		
32	VDD	Power		
46	PA13	I/O	SYS_JTMS-SWDIO	TMS
47	VSS	Power		
48	VDD	Power		
49	PA14	I/O	SYS_JTCK-SWCLK	TCK
55	PB3 *	I/O	SYS_JTDO-TRACESWO	SWO
60	воото	Boot		
63	VSS	Power		
64	VDD	Power		

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

<sup>\*</sup> The pin is affected with a peripheral function but no peripheral mode is activated

## 4. Clock Tree Configuration



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## 5. IPs and Middleware Configuration

#### 5.1. CRC

mode: Activated

#### 5.1.1. Parameter Settings:

#### **Basic Parameters:**

Default Polynomial State Enable

Default Init Value State Enable

#### **Advanced Parameters:**

Input Data Inversion Mode None
Output Data Inversion Mode Disable
Input Data Format Bytes

#### 5.2. SYS

**Debug: Serial Wire** 

**Timebase Source: SysTick** 

#### 5.3. TIM6

mode: Activated

#### 5.3.1. Parameter Settings:

#### **Counter Settings:**

Prescaler (PSC - 16 bits value) 0
Counter Mode Up
Counter Period (AutoReload Register - 16 bits value ) 639 \*
auto-reload preload Disable

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

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

#### 5.4. TIM7

mode: Activated

#### 5.4.1. Parameter Settings:

#### **Counter Settings:**

Prescaler (PSC - 16 bits value) 1023 \*

Counter Mode Up

Counter Period (AutoReload Register - 16 bits value ) 0xfffff \*

auto-reload preload Disable

**Trigger Output (TRGO) Parameters:** 

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

<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
SYS	PA13	SYS_JTMS- SWDIO	n/a	n/a	n/a	TMS
	PA14	SYS_JTCK- SWCLK	n/a	n/a	n/a	TCK
Single Mapped	PC14 / OSC32_IN	RCC_OSC32_IN	n/a	n/a	n/a	
Signals	PC15 / OSC32_OU T	RCC_OSC32_O UT	n/a	n/a	n/a	RCC_OSC32_OUT
	PF0 / OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	PF1 / OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
	PA2	USART2_TX	Alternate Function Push Pull	No pull up pull down	High *	USART_TX
	PA3	USART2_RX	Alternate Function Push Pull	No pull up pull down	High *	USART_RX
	PB3	SYS_JTDO- TRACESWO	n/a	n/a	n/a	SWO
GPIO	PC13	GPIO_EXTI13	External Interrupt	No pull up pull down	n/a	B1 [Blue PushButton]
			Mode with Falling			
			edge trigger detection			
	PA5	GPIO_Output	Output Push Pull	No pull up pull down	Low	LD2 [Green 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	3	3
System tick timer	true	0	0
TIM6 global and DAC1 underrun error interrupts	true	1	1
TIM7 global and DAC2 underrun error interrupts	true	1	2
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
EXTI line[15:10] interrupts	unused		
Floating point unit interrupt	unused		

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

# 7. Power Consumption Calculator report

#### 7.1. Microcontroller Selection

Series	STM32F3
Line	STM32F334
мси	STM32F334R8Tx
Datasheet	025409_Rev6

#### 7.2. Parameter Selection

Temperature	25
IVAA	3.6

# 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	swtimertest
Project Folder	C:\Users\User\dev\hermesFam\swtimertest
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F3 V1.9.0

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