1. Description

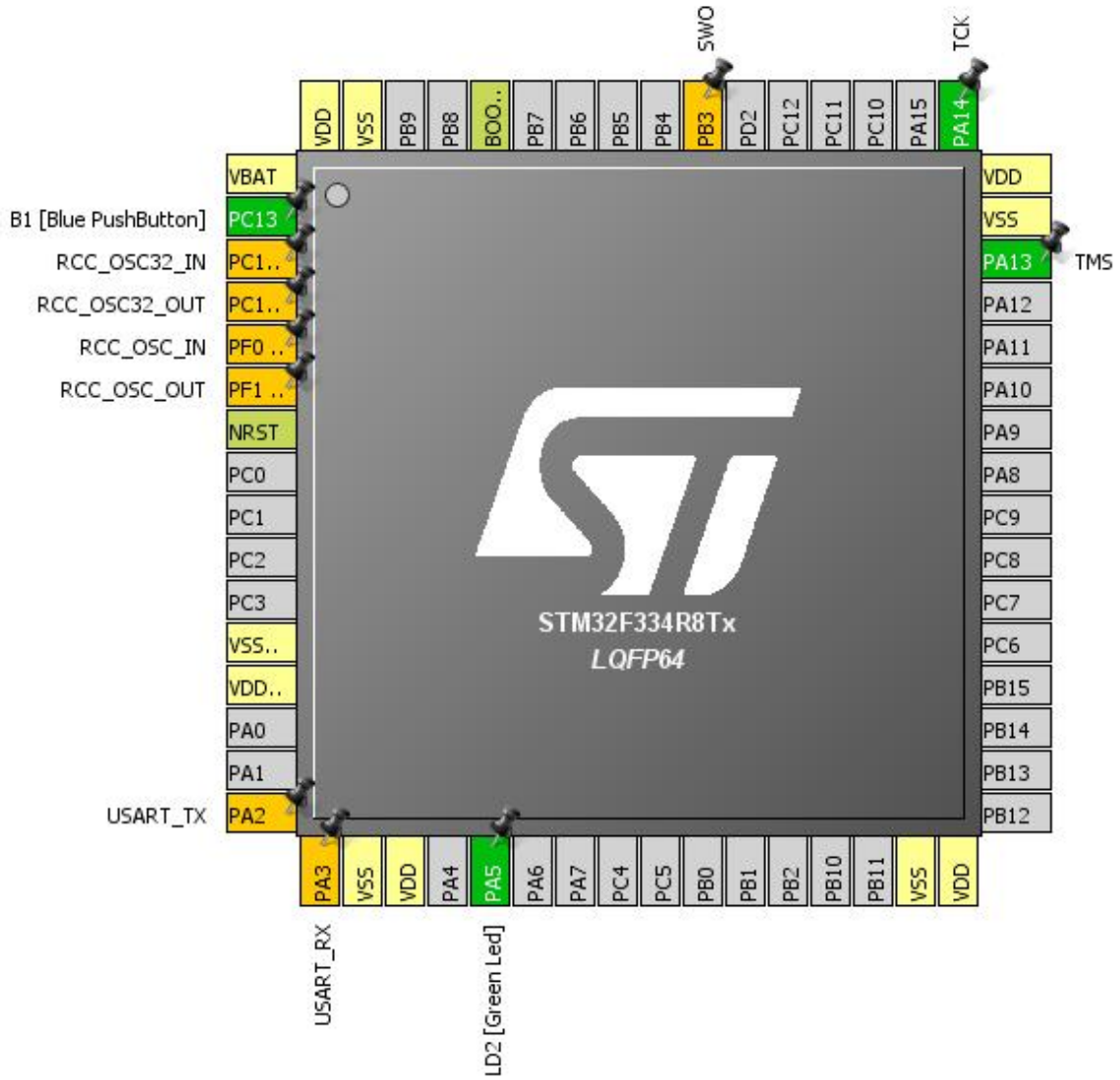
1.1. Project

Project Name	swtimertest
Board Name	NUCLEO-F334R8
Generated with:	STM32CubeMX 4.22.1
Date	01/24/2018

1.2. MCU

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

2. Pinout Configuration



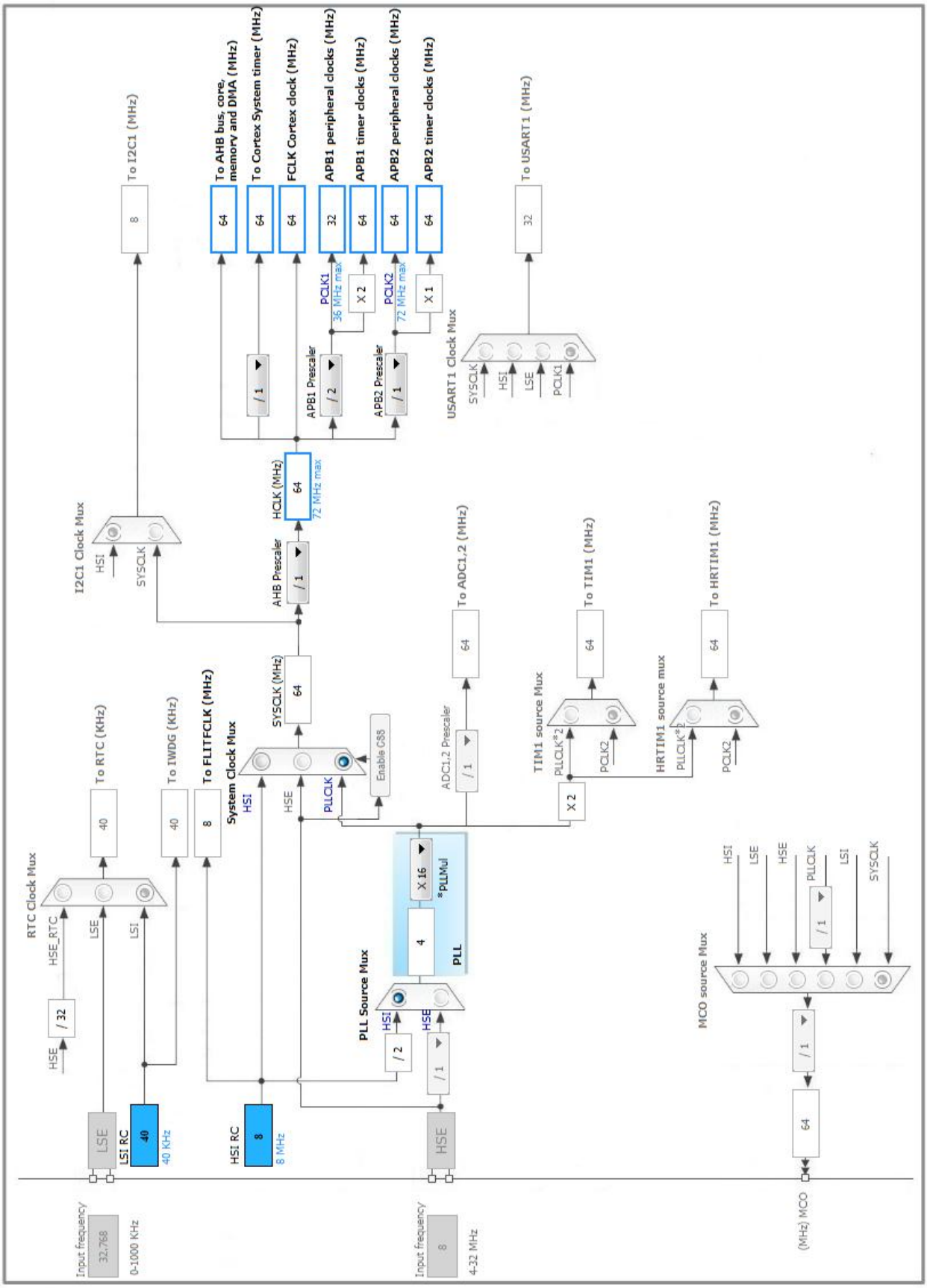
3. Pins Configuration

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	BOOT0	Boot		
63	VSS	Power		
64	VDD	Power		

** The pin is affected with an I/O function

* The pin is affected with a peripheral function but no peripheral mode is activated

4. Clock Tree Configuration



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. TIM3

Clock Source : Internal Clock

Channel1: Output Compare No Output

Channel2: Output Compare No Output

Channel3: Output Compare No Output

Channel4: Output Compare No Output

5.3.1. Parameter Settings:

Counter Settings:	
Prescaler (PSC - 16 bits value)	**15 ***
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value)	**0xffff ***
Internal Clock Division (CKD)	No Division
auto-reload preload	Disable
Trigger Output (TRGO) Parameters:	

Master/Slave Mode	**Enable (sync between this TIM (Master) and its Slaves (through TRGO)) ***
Trigger Event Selection TRGO	Reset (UG bit from TIMx_EGR)

Clear Input:

Clear Input Source	Disable

Output Compare No Output Channel 1:

Mode	Frozen (used for Timing base)
Pulse (16 bits value)	0
CH Polarity	High

Output Compare No Output Channel 2:

Mode	Frozen (used for Timing base)
Pulse (16 bits value)	0
CH Polarity	High

Output Compare No Output Channel 3:

Mode	Frozen (used for Timing base)
Pulse (16 bits value)	0
CH Polarity	High

Output Compare No Output Channel 4:

Mode	Frozen (used for Timing base)
Pulse (16 bits value)	0
CH Polarity	High

5.4. TIM7

mode: Activated

5.4.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	**63 ***
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value)	**65535 ***
auto-reload preload	Disable

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_JTMS-SWDIO	n/a	n/a	n/a	TMS
	PA14	SYS_JTCK-SWCLK	n/a	n/a	n/a	TCK
Single Mapped Signals	PC14 / OSC32_IN	RCC_OSC32_IN	n/a	n/a	n/a	
	PC15 / OSC32_OUT	RCC_OSC32_OUT	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 Mode with Falling edge trigger detection**	No pull up pull down	n/a	B1 [Blue PushButton]
	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
TIM3 global interrupt	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		

*** User modified value**

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F3
Line	STM32F334
MCU	STM32F334R8Tx
Datasheet	025409_Rev6

7.2. Parameter Selection

Temperature	25
Vdd	3.6

8. Software Project

8.1. Project Settings

Name	Value
Project Name	swtimertest
Project Folder	C:\Users\User\dev\hermesFam\generalEmbed\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 consumption)	No