1. Description

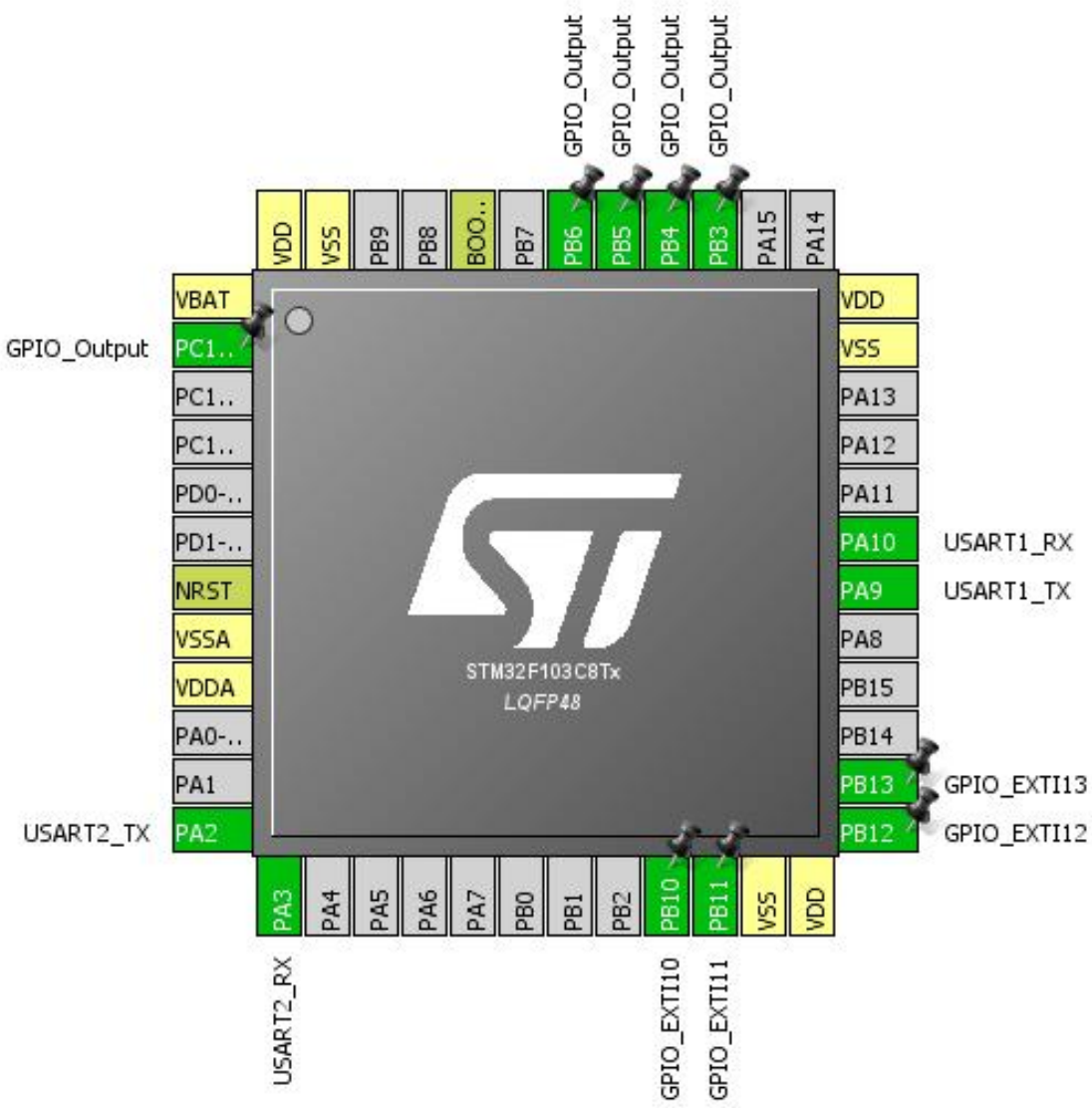
1.1. Project

Project Name	FIRWAME
Board Name	FIRWAME
Generated with:	STM32CubeMX 4.24.0
Date	02/06/2018

1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F103
MCU name	STM32F103C8Tx
MCU Package	LQFP48
MCU Pin number	48

2. Pinout Configuration

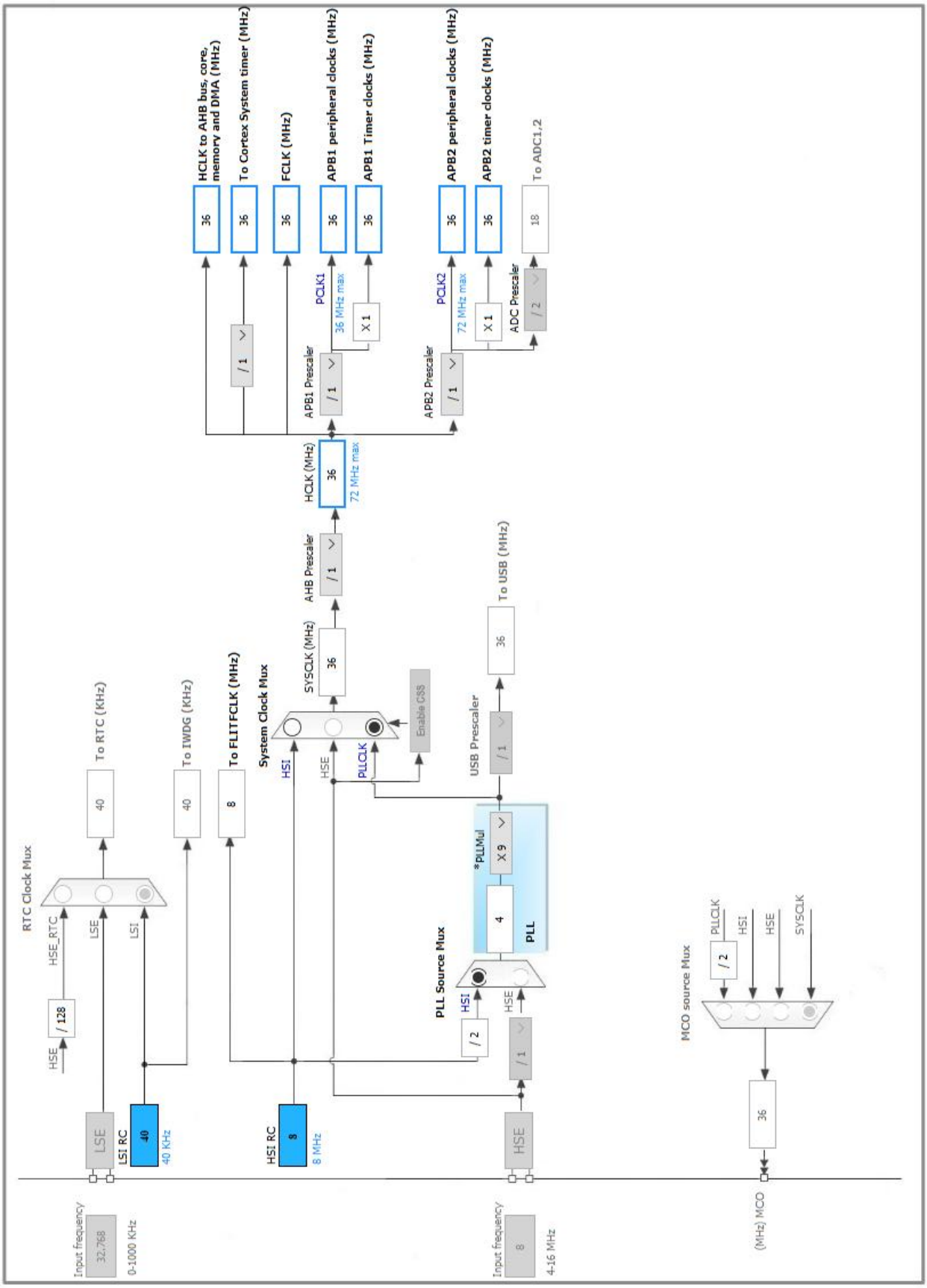


3. Pins Configuration

Pin Number LQFP48	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
2	PC13-TAMPER-RTC *	I/O	GPIO_Output	
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
12	PA2	I/O	USART2_TX	
13	PA3	I/O	USART2_RX	
21	PB10	I/O	GPIO_EXTI10	
22	PB11	I/O	GPIO_EXTI11	
23	VSS	Power		
24	VDD	Power		
25	PB12	I/O	GPIO_EXTI12	
26	PB13	I/O	GPIO_EXTI13	
30	PA9	I/O	USART1_TX	
31	PA10	I/O	USART1_RX	
35	VSS	Power		
36	VDD	Power		
39	PB3 *	I/O	GPIO_Output	
40	PB4 *	I/O	GPIO_Output	
41	PB5 *	I/O	GPIO_Output	
42	PB6 *	I/O	GPIO_Output	
44	BOOT0	Boot		
47	VSS	Power		
48	VDD	Power		

* The pin is affected with an I/O function

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. SYS

Debug: No Debug

Timebase Source: SysTick

5.2. TIM2

Clock Source : Internal Clock

5.2.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	**3600 ***
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value)	**499 ***
Internal Clock Division (CKD)	No Division
auto-reload preload	**Enable ***

Trigger Output (TRGO) Parameters:

Master/Slave Mode (MSM bit)	Disable (Trigger input effect not delayed)
Trigger Event Selection	Reset (UG bit from TIMx_EGR)

5.3. USART1

Mode: Asynchronous

5.3.1. Parameter Settings:

Basic Parameters:

Baud Rate	115200
Word Length	8 Bits (including Parity)
Parity	None
Stop Bits	1

Advanced Parameters:

Data Direction	Receive and Transmit
Over Sampling	16 Samples

5.4. USART2

Mode: Asynchronous

5.4.1. Parameter Settings:

Basic Parameters:

Baud Rate	115200
Word Length	8 Bits (including Parity)
Parity	None
Stop Bits	1

Advanced Parameters:

Data Direction	Receive and Transmit
Over Sampling	16 Samples

*** User modified value**

6. System Configuration

6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
USART1	PA9	USART1_TX	Alternate Function Push Pull	n/a	**High ***	
	PA10	USART1_RX	Input mode	No pull-up and no pull-down	**n/a**	
USART2	PA2	USART2_TX	Alternate Function Push Pull	n/a	**High ***	
	PA3	USART2_RX	Input mode	No pull-up and no pull-down	**n/a**	
GPIO	PC13-TAMPER-RTC	GPIO_Output	Output Push Pull	n/a	**High ***	
	PB10	GPIO_EXTI10	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	**n/a**	
	PB11	GPIO_EXTI11	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	**n/a**	
	PB12	GPIO_EXTI12	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	**n/a**	
	PB13	GPIO_EXTI13	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	**n/a**	
	PB3	GPIO_Output	Output Push Pull	n/a	**High ***	
	PB4	GPIO_Output	Output Push Pull	n/a	**High ***	
	PB5	GPIO_Output	Output Push Pull	n/a	**High ***	
	PB6	GPIO_Output	Output Push Pull	n/a	**High ***	

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
Prefetch 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	0	0
System tick timer	true	0	0
TIM2 global interrupt	true	0	0
EXTI line[15:10] interrupts	true	0	0
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
USART1 global interrupt	unused		
USART2 global interrupt	unused		

*** User modified value**

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
MCU	STM32F103C8Tx
Datasheet	13587_Rev17

7.2. Parameter Selection

Temperature	25
Vdd	3.3

8. Software Project

8.1. Project Settings

Name	Value
Project Name	FIRWAME
Project Folder	C:\Users\ngocm\Dropbox\DO_AN_TN\STM32\FIRWAME
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F1 V1.6.0

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	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

9. Software Pack Report