1. Description

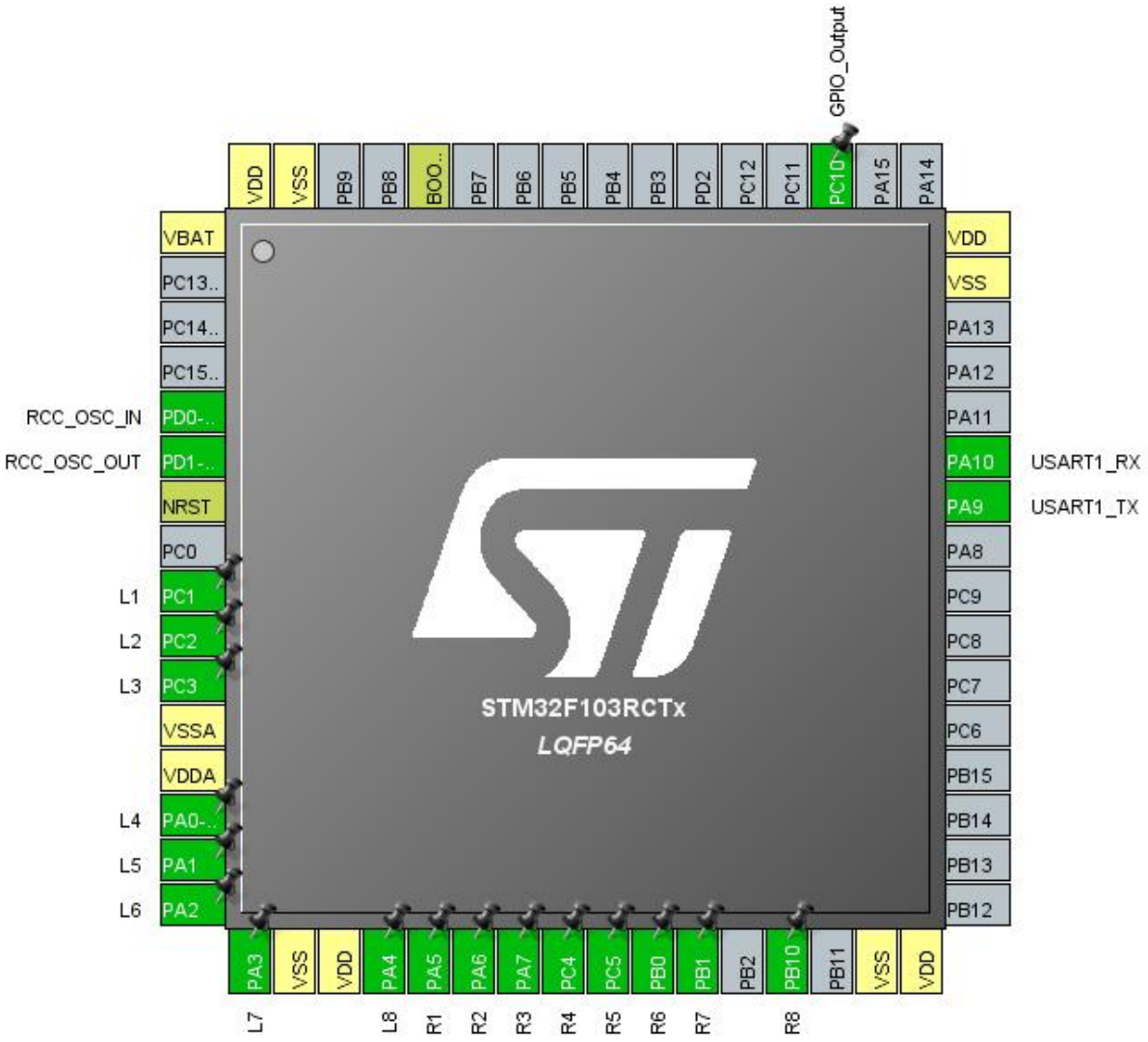
1.1. Project

Project Name	TEST
Board Name	TEST
Generated with:	STM32CubeMX 5.1.0
Date	03/16/2019

1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F103
MCU name	STM32F103RCTx
MCU Package	LQFP64
MCU Pin number	64

2. Pinout Configuration

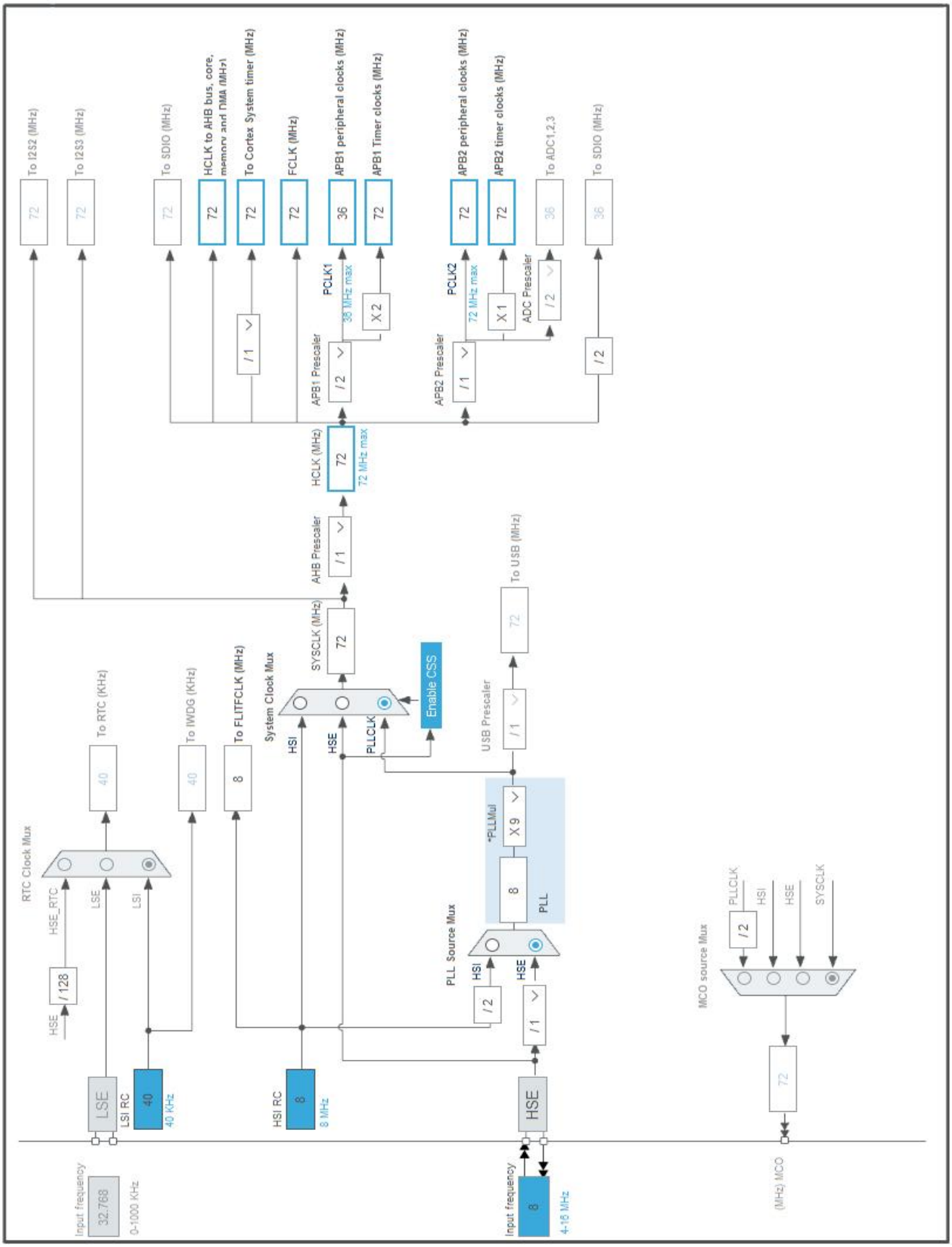


3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
5	PD0-OSC_IN	I/O	RCC_OSC_IN	
6	PD1-OSC_OUT	I/O	RCC_OSC_OUT	
7	NRST	Reset		
9	PC1 *	I/O	GPIO_Output	L1
10	PC2 *	I/O	GPIO_Output	L2
11	PC3 *	I/O	GPIO_Output	L3
12	VSSA	Power		
13	VDDA	Power		
14	PA0-WKUP *	I/O	GPIO_Output	L4
15	PA1 *	I/O	GPIO_Output	L5
16	PA2 *	I/O	GPIO_Output	L6
17	PA3 *	I/O	GPIO_Output	L7
18	VSS	Power		
19	VDD	Power		
20	PA4 *	I/O	GPIO_Output	L8
21	PA5 *	I/O	GPIO_Input	R1
22	PA6 *	I/O	GPIO_Input	R2
23	PA7 *	I/O	GPIO_Input	R3
24	PC4 *	I/O	GPIO_Input	R4
25	PC5 *	I/O	GPIO_Input	R5
26	PB0 *	I/O	GPIO_Input	R6
27	PB1 *	I/O	GPIO_Input	R7
29	PB10 *	I/O	GPIO_Input	R8
31	VSS	Power		
32	VDD	Power		
42	PA9	I/O	USART1_TX	
43	PA10	I/O	USART1_RX	
47	VSS	Power		
48	VDD	Power		
51	PC10 *	I/O	GPIO_Output	
60	BOOT0	Boot		
63	VSS	Power		
64	VDD	Power		

* The pin is affected with an I/O function

4. Clock Tree Configuration



5. Software Project

5.1. Project Settings

Name	Value
Project Name	TEST
Project Folder	C:\Users\001\Desktop\TEST\TEST
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F1 V1.7.0

5.2. 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

6. Power Consumption Calculator report

6.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
MCU	STM32F103RCTx
Datasheet	14611_Rev12

6.2. Parameter Selection

Temperature	25
Vdd	3.3

7. IPs and Middleware Configuration

7.1. RCC

High Speed Clock (HSE): Crystal/Ceramic Resonator

7.1.1. Parameter Settings:

System Parameters:

VDD voltage (V)	3.3
Prefetch Buffer	Enabled
Flash Latency(WS)	2 WS (3 CPU cycle)

RCC Parameters:

HSI Calibration Value	16
HSE Startup Timout Value (ms)	100
LSE Startup Timout Value (ms)	5000

7.2. SYS

Debug: No Debug

Timebase Source: SysTick

7.3. USART1

Mode: Asynchronous

7.3.1. 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

*** User modified value**

8. System Configuration

8.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
RCC	PD0-OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	PD1-OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
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**	
GPIO	PC1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	L1
	PC2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	L2
	PC3	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	L3
	PA0-WKUP	GPIO_Output	Output Push Pull	No pull-up and no pull-down	**High ***	L4
	PA1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	**High ***	L5
	PA2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	L6
	PA3	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	L7
	PA4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	L8
	PA5	GPIO_Input	Input mode	**Pull-up ***	n/a	R1
	PA6	GPIO_Input	Input mode	**Pull-up ***	n/a	R2
	PA7	GPIO_Input	Input mode	**Pull-up ***	n/a	R3
	PC4	GPIO_Input	Input mode	**Pull-up ***	n/a	R4
	PC5	GPIO_Input	Input mode	**Pull-up ***	n/a	R5
	PB0	GPIO_Input	Input mode	**Pull-up ***	n/a	R6
	PB1	GPIO_Input	Input mode	**Pull-up ***	n/a	R7
	PB10	GPIO_Input	Input mode	**Pull-up ***	n/a	R8
	PC10	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	

8.2. DMA configuration

nothing configured in DMA service

8.3. 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
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
USART1 global interrupt	unused		

*** User modified value**

9. Software Pack Report