1. Description

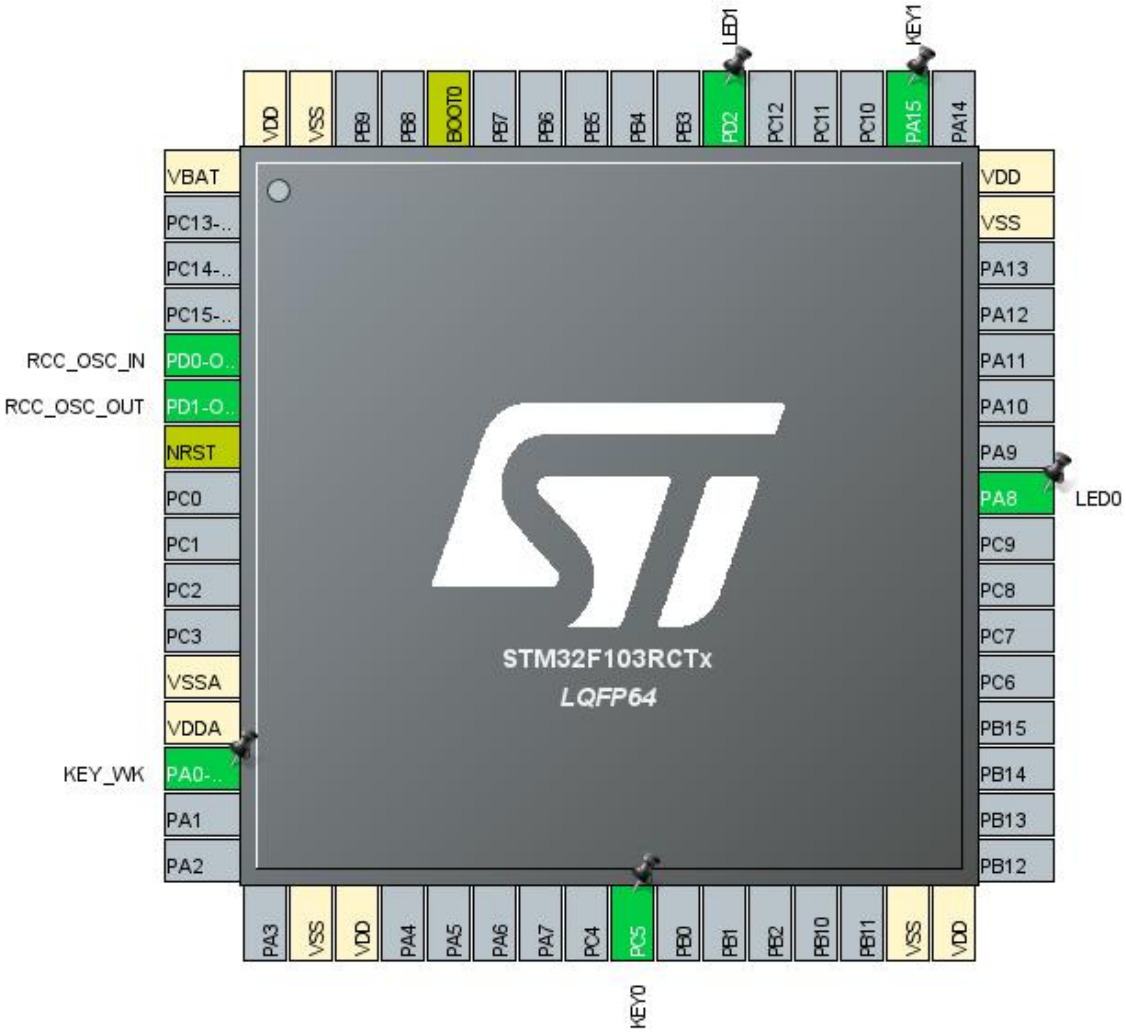
1.1. Project

Project Name	lab6
Board Name	custom
Generated with:	STM32CubeMX 5.3.0
Date	10/20/2019

1.2. MCU

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

2. Pinout Configuration

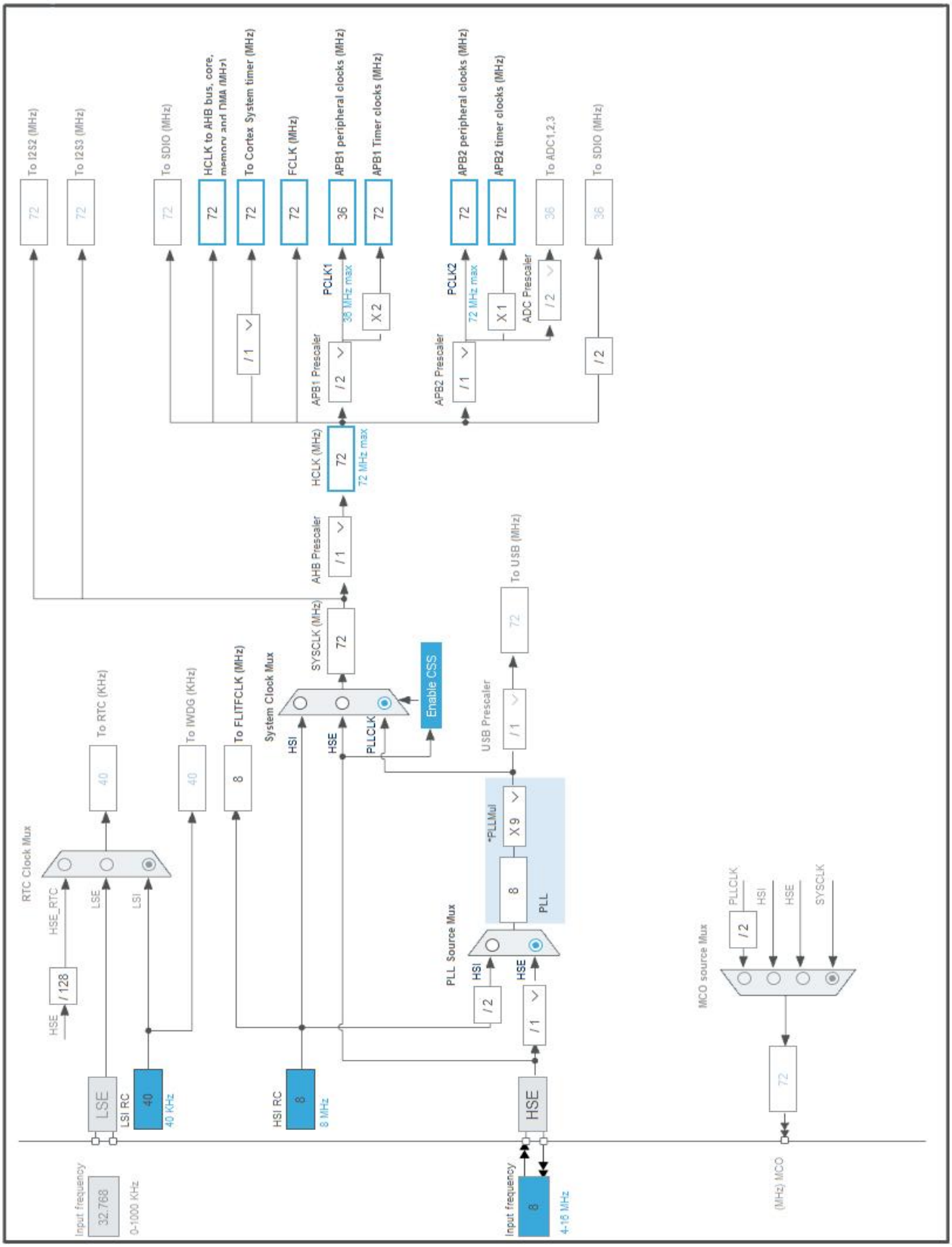


3. Pins Configuration

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		
12	VSSA	Power		
13	VDDA	Power		
14	PA0-WKUP	I/O	GPIO_EXTI0	KEY_WK
18	VSS	Power		
19	VDD	Power		
25	PC5	I/O	GPIO_EXTI5	KEY0
31	VSS	Power		
32	VDD	Power		
41	PA8 *	I/O	GPIO_Output	LED0
47	VSS	Power		
48	VDD	Power		
50	PA15	I/O	GPIO_EXTI15	KEY1
54	PD2 *	I/O	GPIO_Output	LED1
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	lab6
Project Folder	D:\worksoftware\STM32CubeIDE_1.0.2\workplace\lab6
Toolchain / IDE	STM32CubeIDE
Firmware Package Name and Version	STM32Cube FW_F1 V1.8.0

5.2. Code Generation Settings

Name	Value
STM32Cube MCU packages and embedded software	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

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

*** 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	
GPIO	PA0-WKUP	GPIO_EXTI0	External Interrupt Mode with Rising edge trigger detection	**Pull-down ***	n/a	KEY_WK
	PC5	GPIO_EXTI5	External Interrupt Mode with Rising edge trigger detection	**Pull-up ***	n/a	KEY0
	PA8	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED0
	PA15	GPIO_EXTI15	External Interrupt Mode with Rising edge trigger detection	**Pull-up ***	n/a	KEY1
	PD2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED1

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
EXTI line0 interrupt	true	1	0
EXTI line[9:5] interrupts	true	1	1
EXTI line[15:10] interrupts	true	1	2
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		

*** User modified value**

9. Software Pack Report