

## 1. Description

### 1.1. Project

Project Name	lab1_mashoo
Board Name	custom
Generated with:	STM32CubeMX 4.27.0
Date	03/27/2020

### 1.2. MCU

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

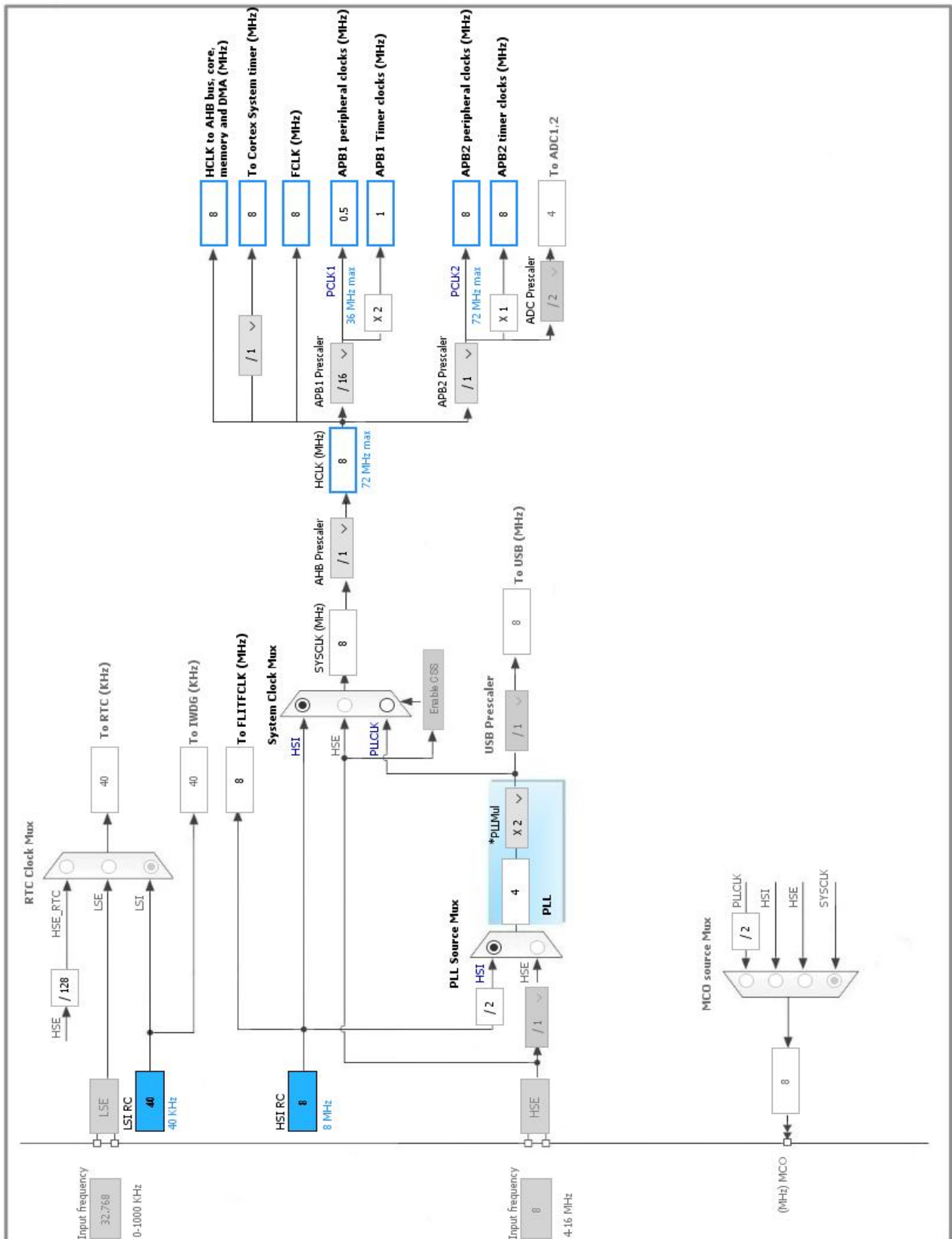


### 3. Pins Configuration

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	Tx clock
3	PC14-OSC32_IN *	I/O	GPIO_Input	Rx clock
4	PC15-OSC32_OUT *	I/O	GPIO_Output	Tx data
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
18	PB0 *	I/O	GPIO_Input	Rx data
23	VSS	Power		
24	VDD	Power		
34	PA13	I/O	SYS_JTMS-SWDIO	
35	VSS	Power		
36	VDD	Power		
37	PA14	I/O	SYS_JTCK-SWCLK	
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: Serial Wire

Timebase Source: SysTick

### 5.2. TIM2

Clock Source : Internal Clock

#### 5.2.1. Parameter Settings:

##### Counter Settings:

Prescaler (PSC - 16 bits value)	<b>9999 *</b>
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value )	<b>50 *</b>
Internal Clock Division (CKD)	No Division
auto-reload preload	<b>Enable *</b>

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

Master/Slave Mode (MSM bit)	Disable (Trigger input effect not delayed)
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	
	PA14	SYS_JTCK-SWCLK	n/a	n/a	n/a	
GPIO	PC13-TAMPER-RTC	GPIO_Output	Output Push Pull	<b>Pull-up *</b>	Low	Tx clock
	PC14-OSC32_IN	GPIO_Input	Input mode	<b>Pull-down *</b>	n/a	Rx clock
	PC15-OSC32_OUT	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	Tx data
	PB0	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	Rx data

### 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
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC 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	lab1_mashoo
Project Folder	C:\BGU\2020\S2\Network\Lab\projects\lab1\lab1_mashoo
Toolchain / IDE	EWARM V8
Firmware Package Name and Version	STM32Cube FW_F1 V1.6.1

### 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	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

## ***9. Software Pack Report***