1. Description

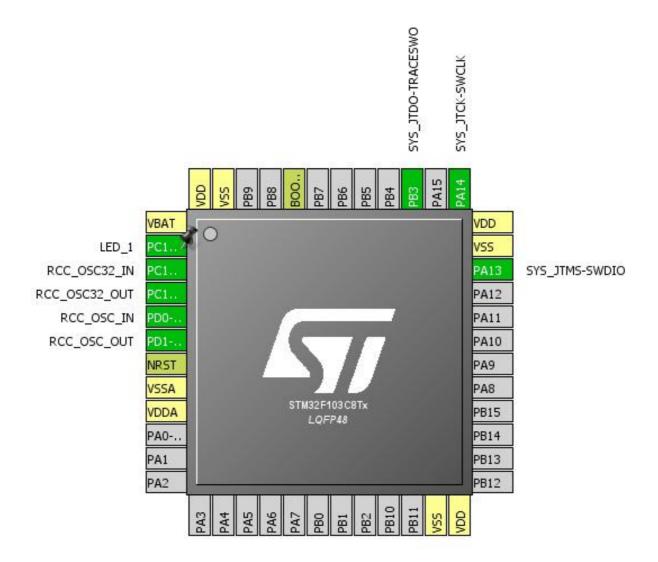
1.1. Project

Project Name	stm32f103c8tx-blink
Board Name	stm32f103c8tx-blink
Generated with:	STM32CubeMX 4.25.0
Date	04/04/2018

1.2. MCU

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

2. Pinout Configuration

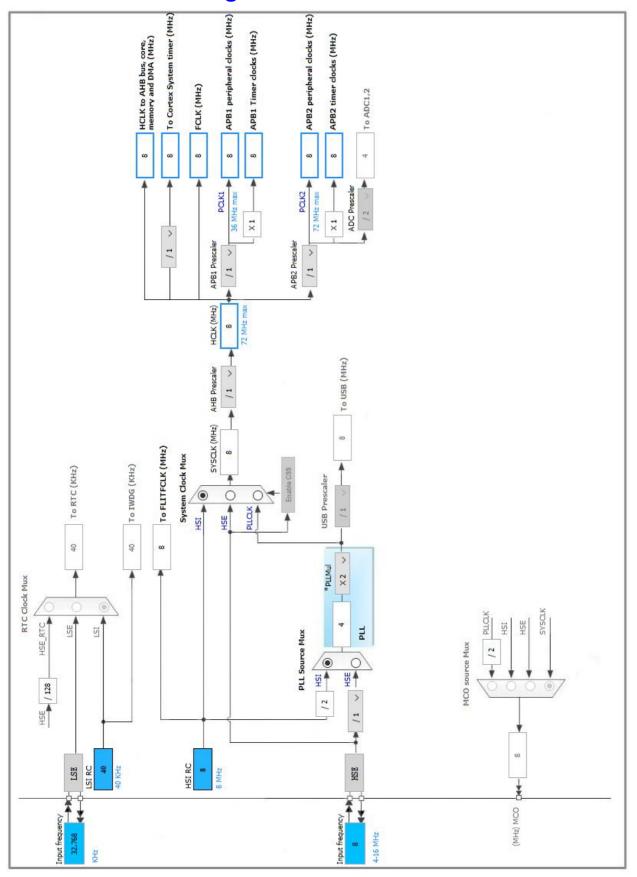


3. Pins Configuration

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	LED_1
3	PC14-OSC32_IN	I/O	RCC_OSC32_IN	
4	PC15-OSC32_OUT	I/O	RCC_OSC32_OUT	
5	PD0-OSC_IN	I/O	RCC_OSC_IN	
6	PD1-OSC_OUT	I/O	RCC_OSC_OUT	
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
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	
39	PB3	I/O	SYS_JTDO-TRACESWO	
44	воото	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. RCC

High Speed Clock (HSE): Crystal/Ceramic Resonator Low Speed Clock (LSE): Crystal/Ceramic Resonator

5.1.1. Parameter Settings:

System Parameters:

VDD voltage (V) 3.3
Prefetch Buffer Enabled

Flash Latency(WS) 0 WS (1 CPU cycle)

RCC Parameters:

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

5.2. SYS

Debug: Trace Asynchronous Sw

Timebase Source: SysTick

^{*} User modified value

6. System Configuration

6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
RCC	PC14- OSC32_IN	RCC_OSC32_IN	n/a	n/a	n/a	
	PC15- OSC32_OU T	RCC_OSC32_O UT	n/a	n/a	n/a	
	PD0- OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	PD1- OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
SYS	PA13	SYS_JTMS- SWDIO	n/a	n/a	n/a	
	PA14	SYS_JTCK- SWCLK	n/a	n/a	n/a	
	PB3	SYS_JTDO- TRACESWO	n/a	n/a	n/a	
GPIO	PC13- TAMPER- RTC	GPIO_Output	Output Push Pull	n/a	Low	LED_1

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
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
мси	STM32F103C8Tx
Datasheet	13587 Rev17

7.2. Parameter Selection

Temperature	25
Vdd	3.3

8. Software Project

8.1. Project Settings

Name	Value
Project Name	stm32f103c8tx-blink
Project Folder	D:\Workspace\Projects\stm32f103c8tx-blink
Toolchain / IDE	Makefile
Firmware Package Name and Version	STM32Cube FW_F1 V1.6.1

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	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	No
consumption)	

9. Software Pack Report