1. Description

1.1. Project

Project Name	rt_czeny
Board Name	rt_czeny
Generated with:	STM32CubeMX 4.13.0
Date	06/23/2016

1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F103
MCU name	STM32F103T8Ux
MCU Package	VFQFPN36
MCU Pin number	36

2. Pinout Configuration
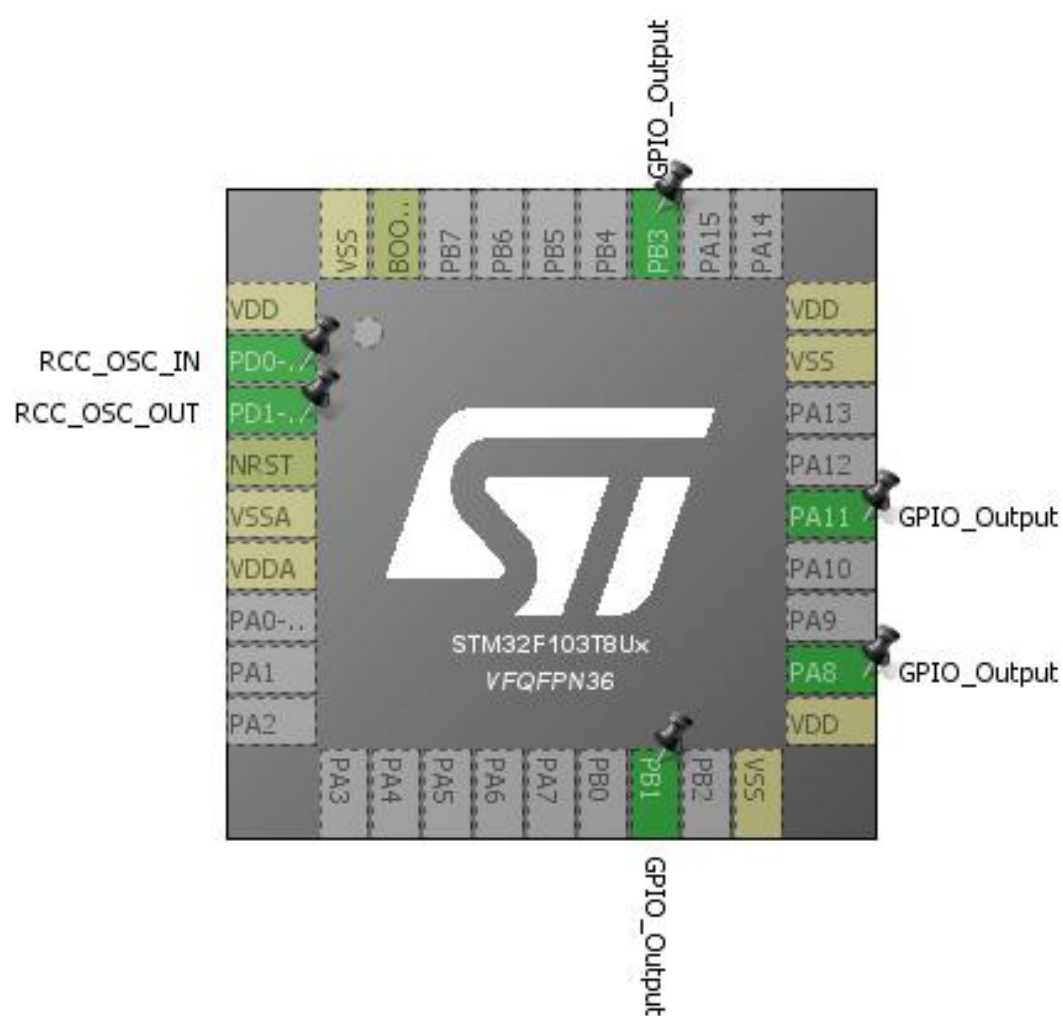
3. Pins Configuration

Pin Number VFQFPN36	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VDD	Power		
2	PD0-OSC_IN	I/O	RCC_OSC_IN	
3	PD1-OSC_OUT	I/O	RCC_OSC_OUT	
4	NRST	Reset		
5	VSSA	Power		
6	VDDA	Power		
16	PB1 *	I/O	GPIO_Output	
18	VSS	Power		
19	VDD	Power		
20	PA8 *	I/O	GPIO_Output	
23	PA11 *	I/O	GPIO_Output	
26	VSS	Power		
27	VDD	Power		
30	PB3 *	I/O	GPIO_Output	
35	BOOT0	Boot		
36	VSS	Power		

* The pin is affected with an I/O function

4. Clock Tree Configuration
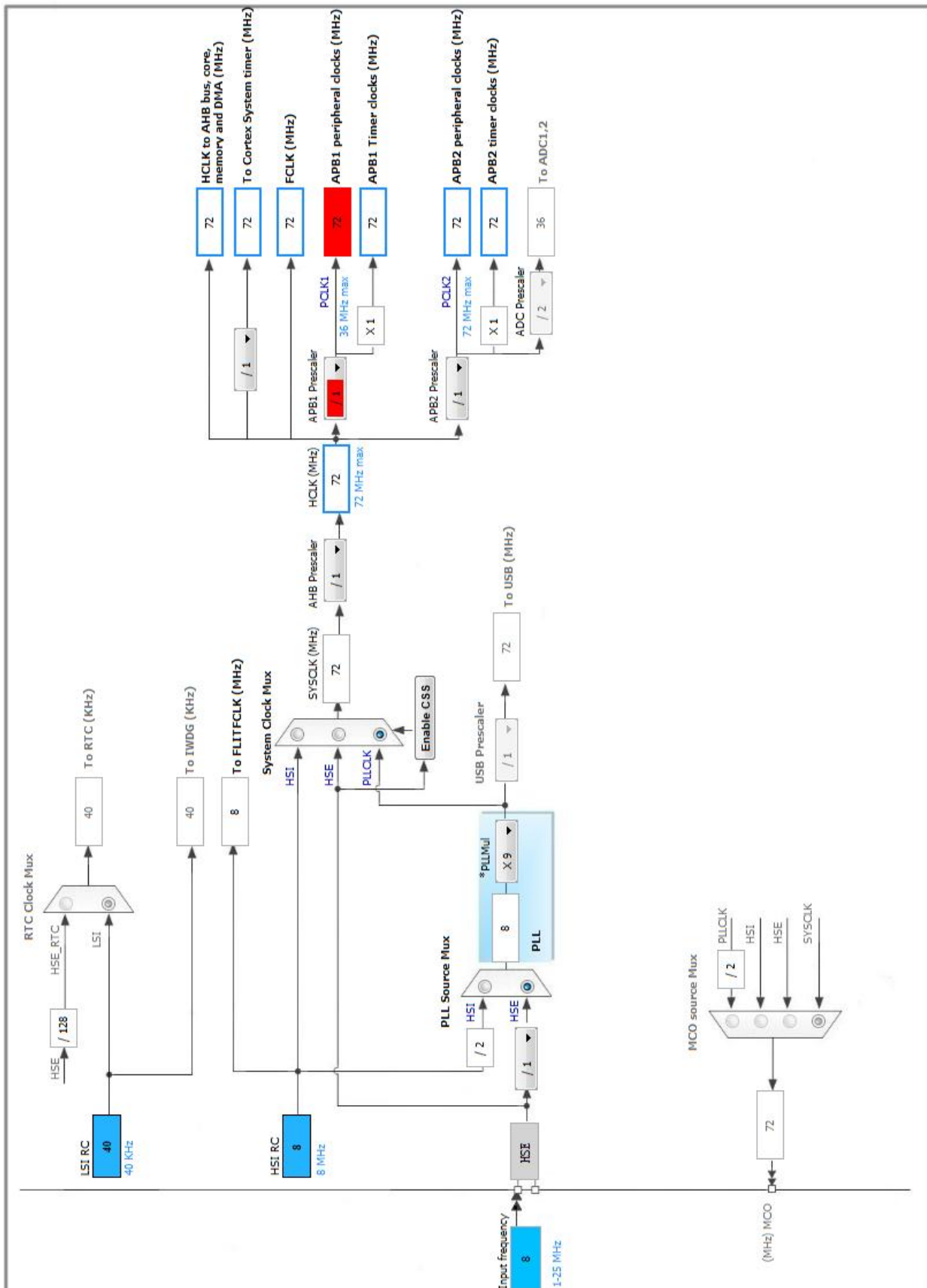
5. IPs and Middleware Configuration

5.1. RCC

High Speed Clock (HSE): BYPASS Clock Source

5.1.1. 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

5.2. SYS

Timebase Source: SysTick

5.3. FREERTOS

mode: Enabled

5.3.1. Config parameters:

Versions:

CMSIS-RTOS version	1.02
FreeRTOS version	8.2.1

Kernel settings:

USE_PREEMPTION	Enabled
CPU_CLOCK_HZ	SystemCoreClock
TICK_RATE_HZ	1000
MAX_PRIORITIES	7
MINIMAL_STACK_SIZE	128
MAX_TASK_NAME_LEN	16
USE_16_BIT_TICKS	Disabled
IDLE_SHOULD_YIELD	Enabled
USE_MUTEXES	Enabled
USE_RECURSIVE_MUTEXES	Enabled

USE_COUNTING_SEMAPHORES	Enabled
QUEUE_REGISTRY_SIZE	8
USE_APPLICATION_TASK_TAG	Disabled
TOTAL_HEAP_SIZE	3072
Memory Management scheme	heap_4
USE_ALTERNATIVE_API	Disabled
ENABLE_BACKWARD_COMPATIBILITY	Enabled
USE_PORT_OPTIMISED_TASK_SELECTION	Disabled
USE_TICKLESS_IDLE	Disabled

Hook function related definitions:

USE_IDLE_HOOK	Disabled
USE_TICK_HOOK	Disabled
USE_MALLOC_FAILED_HOOK	Disabled
CHECK_FOR_STACK_OVERFLOW	Disabled

Run time and task stats gathering related definitions:

USE_TRACE_FACILITY	Enabled
GENERATE_RUN_TIME_STATS	Disabled

Co-routine related definitions:

USE_CO_ROUTINES	Disabled
MAX_CO_ROUTINE_PRIORITIES	2

Software timer definitions:

USE_TIMERS	Disabled
TIMER_TASK_PRIORITY	2
TIMER_QUEUE_LENGTH	10

Interrupt nesting behaviour configuration:

LIBRARY_LOWEST_INTERRUPT_PRIORITY	15
LIBRARY_MAX_SYSCALL_INTERRUPT_PRIORITY	5

5.3.2. Include parameters:

Include definitions:

vTaskPrioritySet	Enabled
uxTaskPriorityGet	Enabled
vTaskDelete	Enabled
vTaskCleanUpResources	Disabled
vTaskSuspend	Enabled
vTaskDelayUntil	Disabled
vTaskDelay	Enabled
xTaskGetSchedulerState	Enabled
xTaskResumeFromISR	Enabled
xQueueGetMutexHolder	Disabled

xSemaphoreGetMutexHolder	Disabled
pcTaskGetTaskName	Disabled
uxTaskGetStackHighWaterMark	Disabled
xTaskGetCurrentTaskHandle	Disabled
eTaskGetState	Disabled
xEventGroupSetBitFromISR	Disabled
xTimerPendFunctionCall	Disabled

* 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	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	PB1	GPIO_Output	Output Push Pull	n/a	Low	
	PA8	GPIO_Output	Output Push Pull	n/a	Low	
	PA11	GPIO_Output	Output Push Pull	n/a	Low	
	PB3	GPIO_Output	Output Push Pull	n/a	Low	

6.2. DMA configuration

nothing configured in DMA service

6.3. NVIC configuration

Interrupt Table	Enable	Preenmption Priority	SubPriority
System tick timer	true	15	0
Non maskable interrupt	unused		
Hard fault interrupt	unused		
Memory management fault	unused		
Prefetch fault, memory access fault	unused		
Undefined instruction or illegal state	unused		
Debug monitor	unused		
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		

* User modified value

7. Power Plugin report

7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
MCU	STM32F103T8Ux
Datasheet	13587_Rev17

7.2. Parameter Selection

Temperature	25
Vdd	3.3

8. Software Project

8.1. Project Settings

Name	Value
Project Name	rt_czeny
Project Folder	C:\Users\Administrator\Desktop\helloworld\helloworld\rt_czeny
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F1 V1.3.1

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