# 1. Description

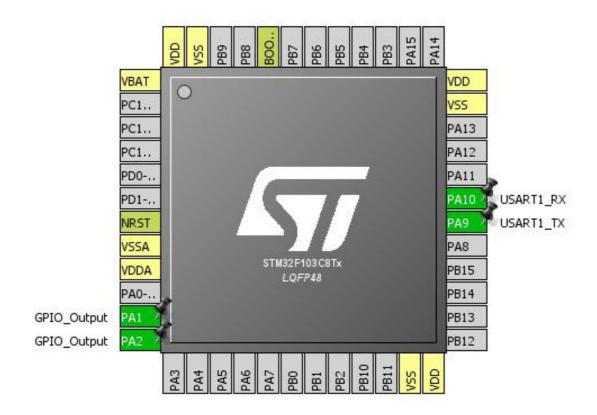
### 1.1. Project

Project Name	Cube
Board Name	Cube
Generated with:	STM32CubeMX 4.25.0
Date	05/26/2018

#### 1.2. MCU

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

## 2. Pinout Configuration

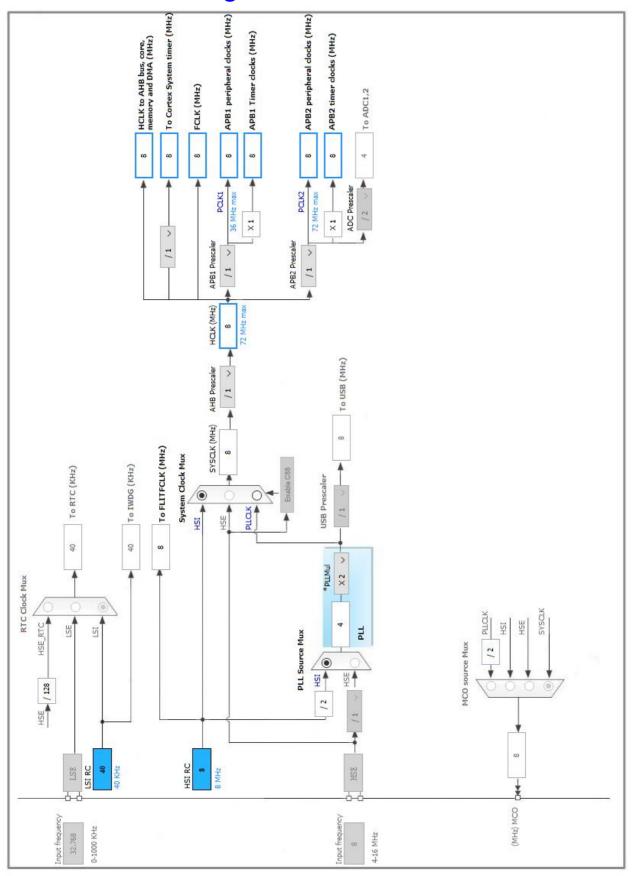


# 3. Pins Configuration

Pin Number LQFP48	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
11	PA1 *	I/O	GPIO_Output	
12	PA2 *	I/O	GPIO_Output	
23	VSS	Power		
24	VDD	Power		
30	PA9	I/O	USART1_TX	
31	PA10	I/O	USART1_RX	
35	VSS	Power		
36	VDD	Power		
44	воото	Boot		
47	VSS	Power		
48	VDD	Power		

<sup>\*</sup> The pin is affected with an I/O function

## 4. Clock Tree Configuration



## 5. IPs and Middleware Configuration

#### 5.1. SYS

**Debug: No Debug** 

**Timebase Source: SysTick** 

#### **5.2. USART1**

**Mode: Asynchronous** 

#### 5.2.1. 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

<sup>\*</sup> User modified value

# 6. System Configuration

### 6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull	Max	User Label
				down	Speed	
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	PA1	GPIO_Output	Output Push Pull	n/a	Low	
	PA2	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
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		0
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
USART1 global interrupt	unused		

<sup>\*</sup> 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	Cube
Project Folder	F:\\\\HW\RTOS\Cube
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 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