

## 1. Description

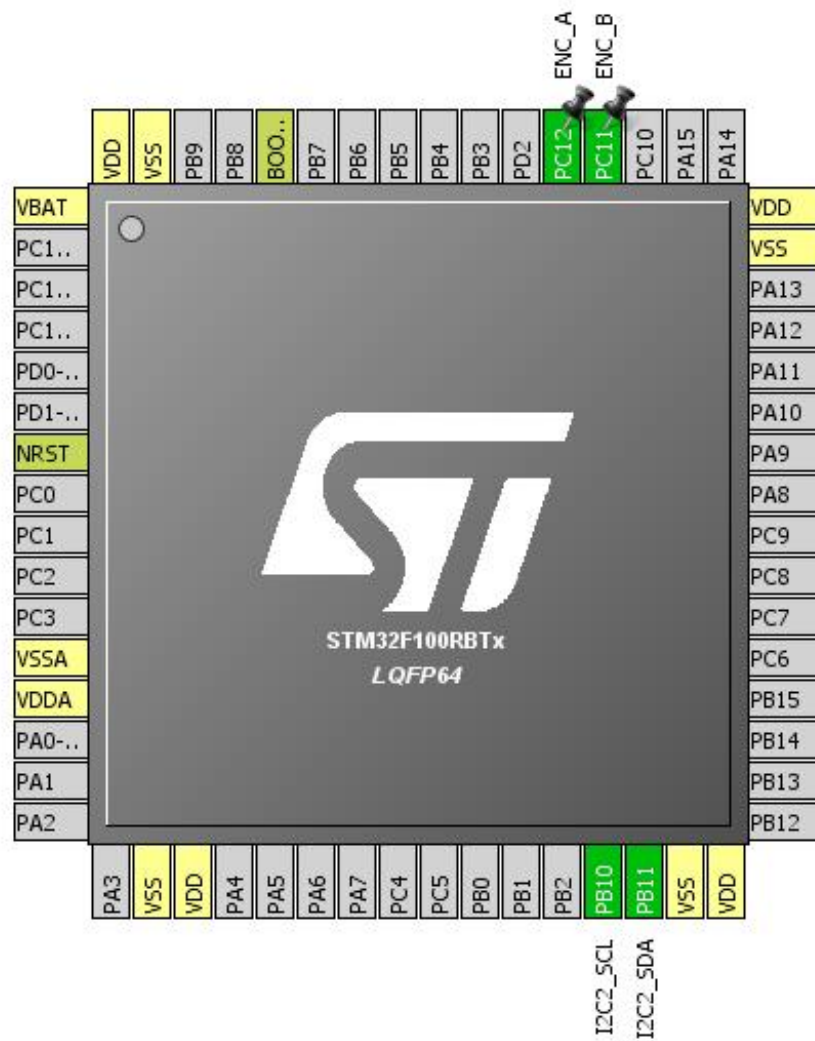
### 1.1. Project

Project Name	TestProject
Board Name	custom
Generated with:	STM32CubeMX 4.27.0
Date	10/31/2018

### 1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F100 Value Line
MCU name	STM32F100RBTx
MCU Package	LQFP64
MCU Pin number	64

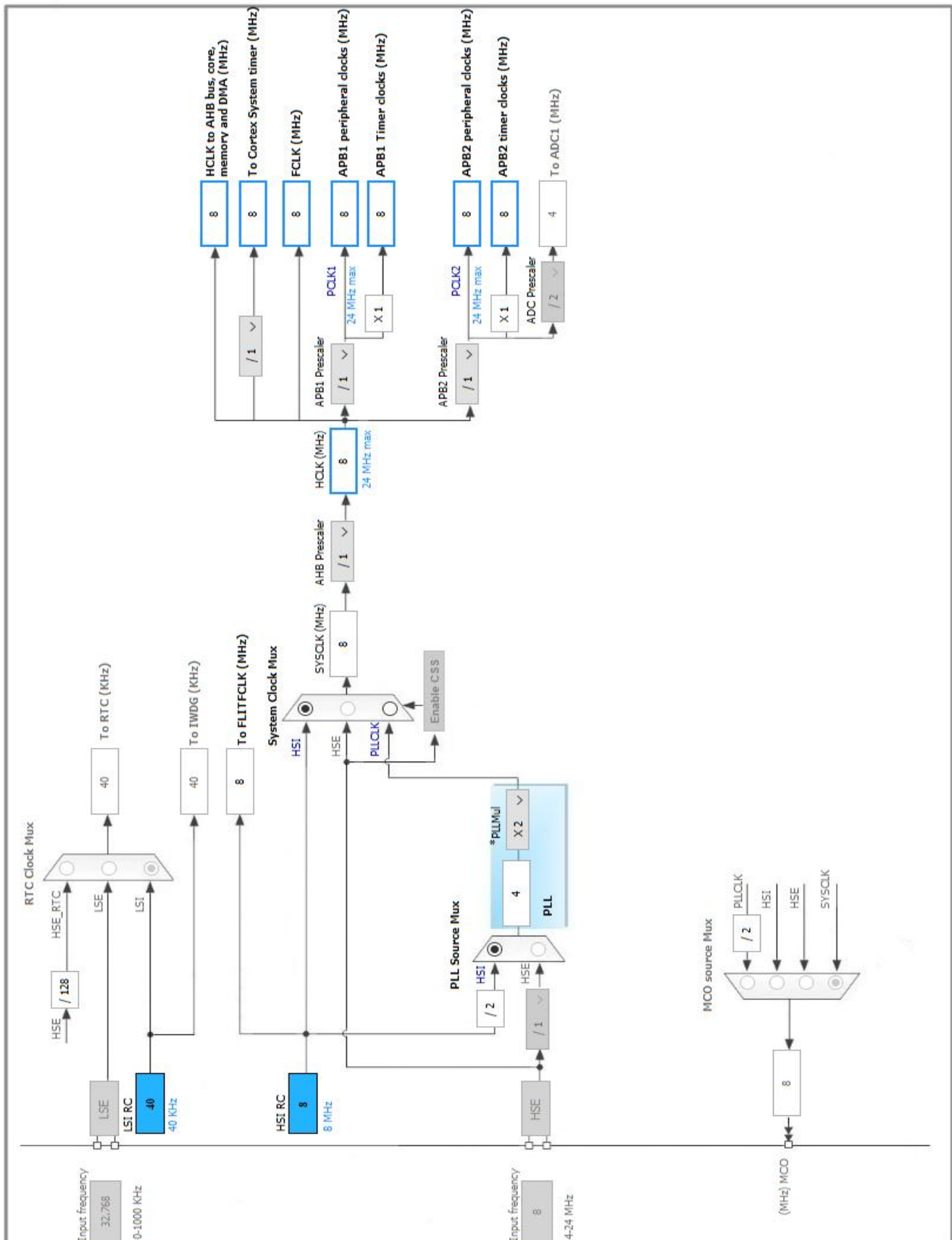
## 2. Pinout Configuration



### 3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
7	NRST	Reset		
12	VSSA	Power		
13	VDDA	Power		
18	VSS	Power		
19	VDD	Power		
29	PB10	I/O	I2C2_SCL	
30	PB11	I/O	I2C2_SDA	
31	VSS	Power		
32	VDD	Power		
47	VSS	Power		
48	VDD	Power		
52	PC11	I/O	GPIO_EXTI11	ENC_B
53	PC12	I/O	GPIO_EXTI12	ENC_A
60	BOOT0	Boot		
63	VSS	Power		
64	VDD	Power		

## 4. Clock Tree Configuration



## 5. IPs and Middleware Configuration

### 5.1. I2C2

#### I2C: I2C

##### 5.1.1. Parameter Settings:

###### Master Features:

I2C Speed Mode	Standard Mode
I2C Clock Speed (Hz)	100000

###### Slave Features:

Clock No Stretch Mode	Disabled
Primary Address Length selection	7-bit
Dual Address Acknowledged	Disabled
Primary slave address	0
General Call address detection	Disabled

### 5.2. SYS

Debug: No Debug

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
I2C2	PB10	I2C2_SCL	Alternate Function Open Drain	n/a	<b>High *</b>	
	PB11	I2C2_SDA	Alternate Function Open Drain	n/a	<b>High *</b>	
GPIO	PC11	GPIO_EXTI11	External Interrupt Mode with Rising edge trigger detection	<b>Pull-up *</b>	n/a	ENC_B
	PC12	GPIO_EXTI12	External Interrupt Mode with Rising edge trigger detection	<b>Pull-up *</b>	n/a	ENC_A

### 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		
I2C2 event interrupt	unused		
I2C2 error interrupt	unused		
EXTI line[15:10] interrupts	unused		

\* User modified value

## 7. Power Consumption Calculator report

### 7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F100 Value Line
MCU	STM32F100RBTx
Datasheet	16455_Rev9

### 7.2. Parameter Selection

Temperature	25
Vdd	3.3



## 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	TestProject
Project Folder	I:\Github\MotorBoard\TestbenchCode\TestProject
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***