1. Description

1.1. Project

Project Name	hc-12-rr-beacon
Board Name	No information
Generated with:	STM8CubeMX 1.5.0
Date	05/18/2022

1.2. MCU

MCU Series	STM8S
MCU Line	STM8S Value Line
MCU name	STM8S003F3Px
MCU Package	TSSOP20
MCU Pin number	20

2. Pinout Configuration
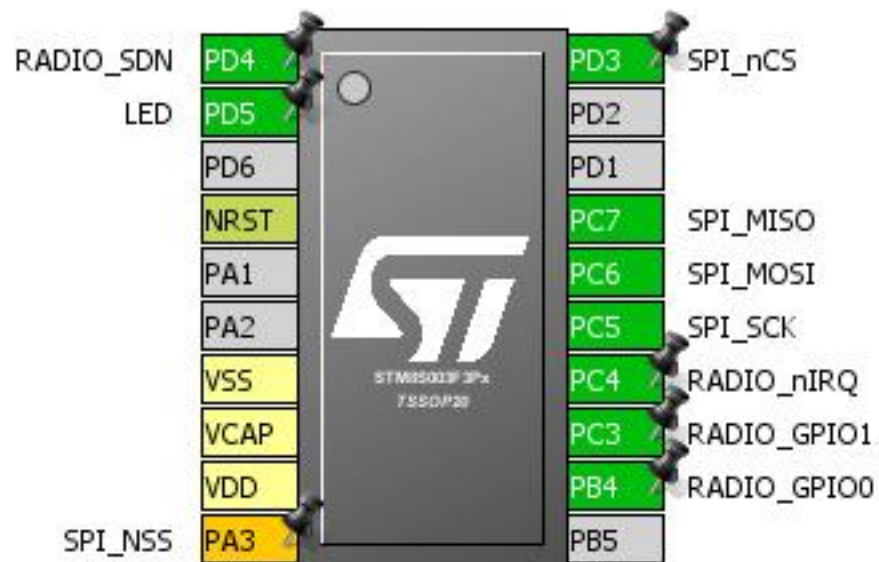
3. Pins Configuration

Pin Number TSSOP20	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	PD4 *	I/O	GPIO_Output	RADIO_SDN
2	PD5 *	I/O	GPIO_Output	LED
4	NRST	Reset		
7	VSS	Power		
8	VCAP	Power		
9	VDD	Power		
10	PA3 **	I/O	SPI_NSS	
12	PB4 *	I/O	GPIO_Input	RADIO_GPIO0
13	PC3 *	I/O	GPIO_Input	RADIO_GPIO1
14	PC4 *	I/O	GPIO_Input	RADIO_nIRQ
15	PC5	I/O	SPI_SCK	
16	PC6	I/O	SPI_MOSI	
17	PC7	I/O	SPI_MISO	
20	PD3 *	I/O	GPIO_Output	SPI_nCS

 * The pin is affected with an I/O function

** The pin is affected with a peripheral function but no peripheral mode is activated

4. Clock Tree Configuration
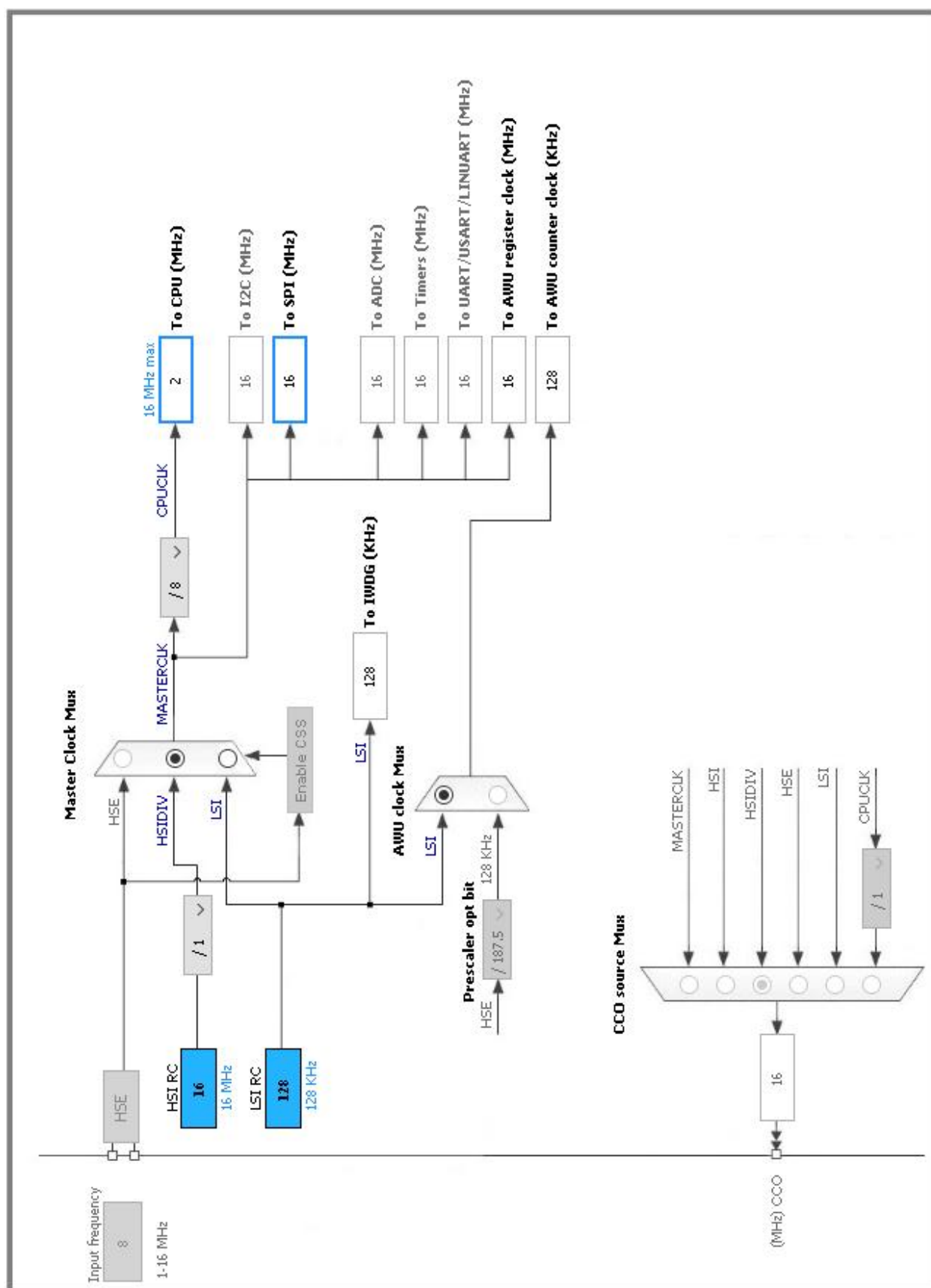
5. Power Consumption Calculator report

5.1. Microcontroller Selection

Series	STM8S
Line	STM8S Value Line
MCU	STM8S003F3Px
Datasheet	18576_Rev8

5.2. Parameter Selection

Temperature	25
Vdd	3.3

5.3. Sequence

Step	Step1	Step2
Mode	RUN	WAIT
Vdd	3.3	3.3
Voltage Source	Battery	Battery
Range	No Scale	No Scale
Fetch Type	FLASH	NA
Clock Configuration	HSI	HSI
Clock Source Frequency	16.0 MHz	16.0 MHz
CPU Frequency	2.0 MHz	15.625 kHz
Peripherals	SPI TIM2	TIM2
Additional Cons.	20 mA	0 mA
Average Current	20.86 mA	450.13 µA
Duration	250 ms	3 s
DMIPS	2.0	0.0
Ta Max	99.22	104.88
Category	In DS Table	In DS Table

5.4. RESULTS

| Sequence Time | 3.25 s | Average Current | 2.02 mA |
| Battery Life | 0 | Average DMIPS | 2.0 DMIPS |

5.5. Chart

Consumption Profile by Step