## 1. Description

### 1.1. Project

Project Name	dingshi
Board Name	custom
Generated with:	STM32CubeMX 4.27.0
Date	02/21/2019

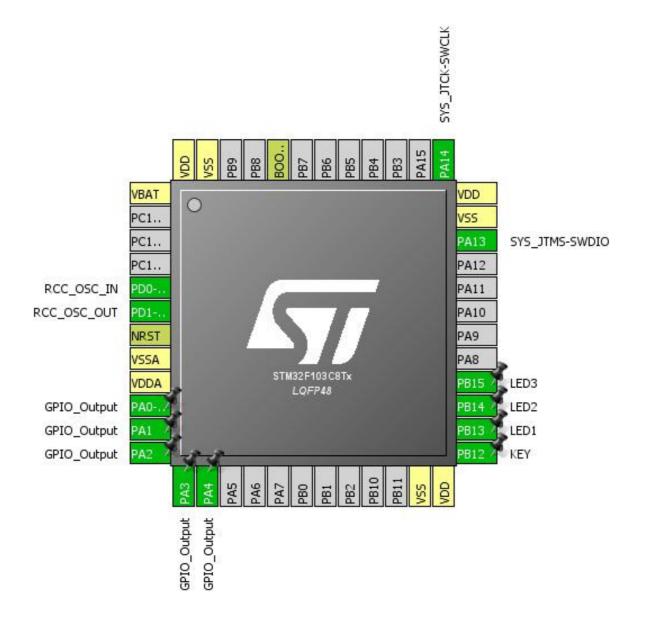
### 1.2. MCU

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

### 1.3. Caution

The report was generated although the configuration was in a modified state. It may be not accurate

### 2. Pinout Configuration

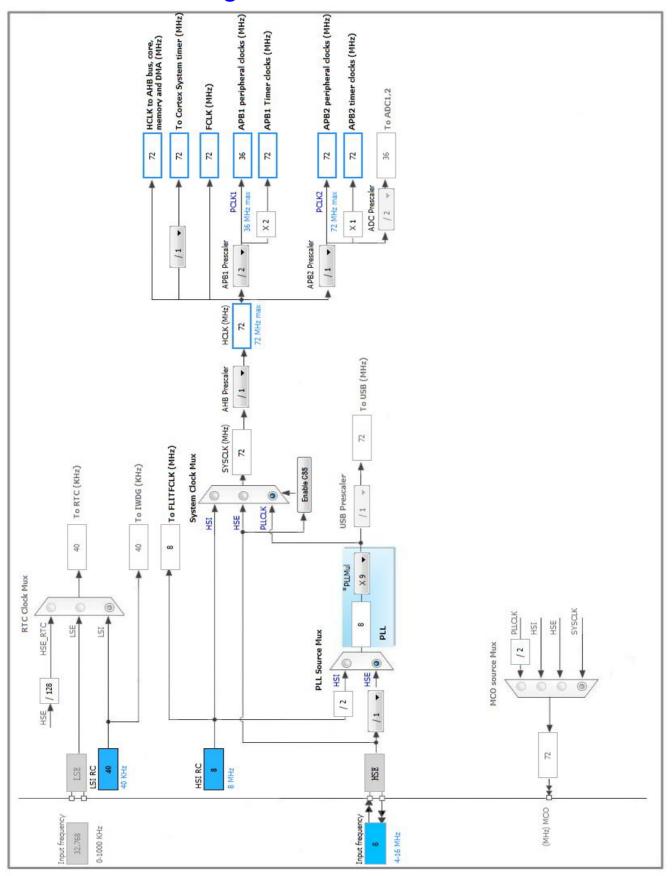


# 3. Pins Configuration

Pin Number LQFP48	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
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		
10	PA0-WKUP *	I/O	GPIO_Output	
11	PA1 *	I/O	GPIO_Output	
12	PA2 *	I/O	GPIO_Output	
13	PA3 *	I/O	GPIO_Output	
14	PA4 *	I/O	GPIO_Output	
23	VSS	Power		
24	VDD	Power		
25	PB12 *	I/O	GPIO_Input	KEY
26	PB13 *	I/O	GPIO_Output	LED1
27	PB14 *	I/O	GPIO_Output	LED2
28	PB15 *	I/O	GPIO_Output	LED3
34	PA13	I/O	SYS_JTMS-SWDIO	
35	VSS	Power		
36	VDD	Power		
37	PA14	I/O	SYS_JTCK-SWCLK	
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. RCC

High Speed Clock (HSE): Crystal/Ceramic Resonator

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
HSE Startup Timout Value (ms) 100
LSE Startup Timout Value (ms) 5000

#### 5.2. SYS

**Debug: Serial Wire** 

Timebase Source: SysTick

#### 5.3. TIM2

Clock Source : Internal Clock

5.3.1. Parameter Settings:

#### **Counter Settings:**

Prescaler (PSC - 16 bits value) **3600-1** \*

Counter Mode Up

Counter Period (AutoReload Register - 16 bits value ) 2000-1 \*

Internal Clock Division (CKD) No Division auto-reload preload Disable

#### **Trigger Output (TRGO) Parameters:**

Master/Slave Mode (MSM bit) Disable (Trigger input effect not delayed)

Trigger Event Selection Reset (UG bit from TIMx\_EGR)

<sup>\*</sup> 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	
SYS	PA13	SYS_JTMS- SWDIO	n/a	n/a	n/a	
	PA14	SYS_JTCK- SWCLK	n/a	n/a	n/a	
GPIO	PA0-WKUP	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	
	PA1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	
	PA2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	
	PA3	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	
	PA4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	
	PB12	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	KEY
	PB13	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED1
	PB14	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED2
	PB15	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED3

### 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		0
System tick timer	true 0 0		0
TIM2 global interrupt	true	0	0
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC 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	dingshi
Project Folder	C:\Users\test\Desktop\11\dingshi
Toolchain / IDE	EWARM V7
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	Yes
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