## 1. Description

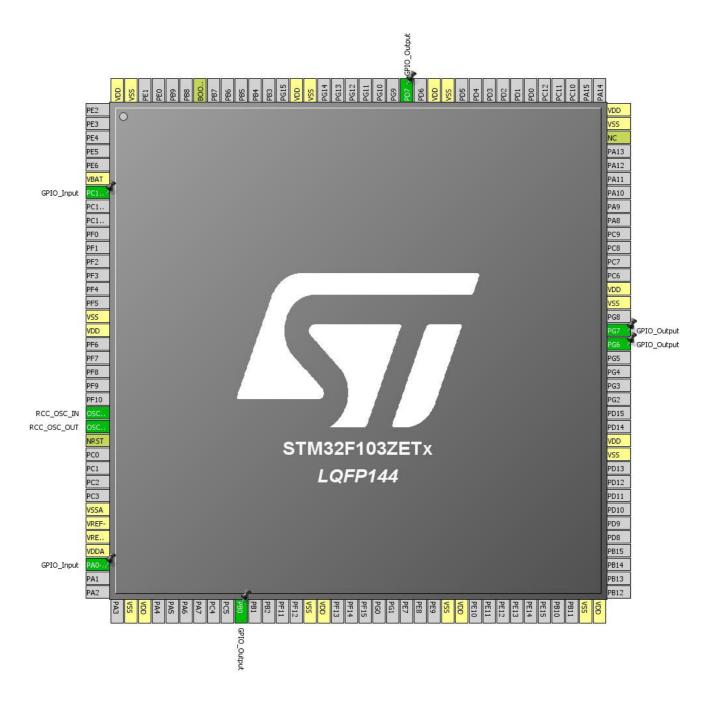
### 1.1. Project

Project Name	YS-F1Pro
Board Name	YS-F1Pro
Generated with:	STM32CubeMX 4.14.0
Date	05/30/2016

#### 1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F103
MCU name	STM32F103ZETx
MCU Package	LQFP144
MCU Pin number	144

### 2. Pinout Configuration



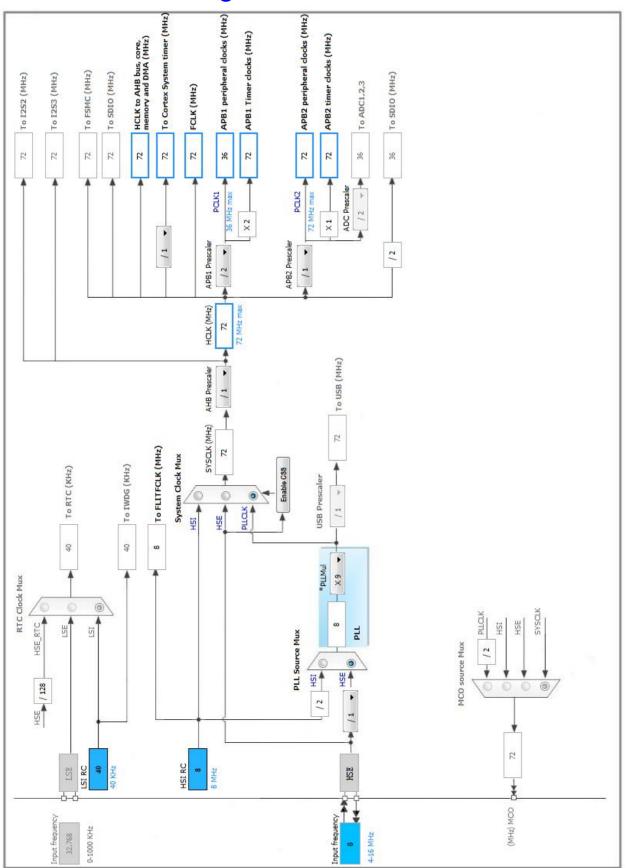
# 3. Pins Configuration

Pin Number LQFP144	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
6	VBAT	Power		
7	PC13-TAMPER-RTC *	I/O	GPIO_Input	
16	VSS	Power		
17	VDD	Power		
23	OSC_IN	I/O	RCC_OSC_IN	
24	OSC_OUT	I/O	RCC_OSC_OUT	
25	NRST	Reset		
30	VSSA	Power		
31	VREF-	Power		
32	VREF+	Power		
33	VDDA	Power		
34	PA0-WKUP *	I/O	GPIO_Input	
38	VSS	Power		
39	VDD	Power		
46	PB0 *	I/O	GPIO_Output	
51	VSS	Power		
52	VDD	Power		
61	VSS	Power		
62	VDD	Power		
71	VSS	Power		
72	VDD	Power		
83	VSS	Power		
84	VDD	Power		
91	PG6 *	I/O	GPIO_Output	
92	PG7 *	I/O	GPIO_Output	
94	VSS	Power		
95	VDD	Power		
106	NC	NC		
107	VSS	Power		
108	VDD	Power		
120	VSS	Power		
121	VDD	Power		
123	PD7 *	I/O	GPIO_Output	
130	VSS	Power		
131	VDD	Power		
138	воото	Boot		

Pin Number LQFP144	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
143	VSS	Power		
144	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

#### 5.2. SYS

**Timebase Source: SysTick** 

<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	OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
GPIO	PC13- TAMPER- RTC	GPIO_Input	Input mode	Pull-up *	n/a	
	PA0-WKUP	GPIO_Input	Input mode	Pull-down *	n/a	
	PB0	GPIO_Output	Output Push Pull	n/a	Low	
	PG6	GPIO_Output	Output Push Pull	n/a	Low	
	PG7	GPIO_Output	Output Push Pull	n/a	Low	
	PD7	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
Debug monitor	true 0 0		0
System tick timer	true 0 0		0
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		

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

## 7. Power Plugin report

#### 7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
мси	STM32F103ZETx
Datasheet	14611_Rev11

#### 7.2. Parameter Selection

Temperature	25
Vdd	3.3

## 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	YS-F1Pro
Project Folder	E:\\2. (HAL)\1. (HAL)\YSF1_HAL-004. GPIO-
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	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)	