# 1. Description

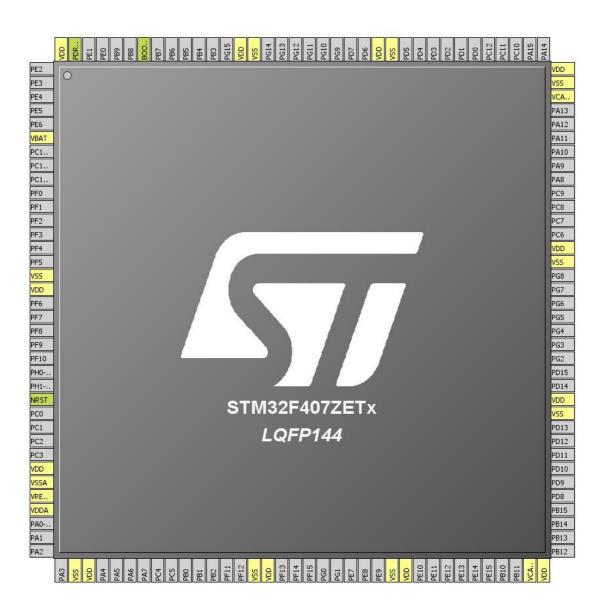
### 1.1. Project

Project Name	stm32F4
Board Name	stm32F4
Generated with:	STM32CubeMX 4.22.1
Date	10/11/2017

#### 1.2. MCU

MCU Series	STM32F4
MCU Line	STM32F407/417
MCU name	STM32F407ZETx
MCU Package	LQFP144
MCU Pin number	144

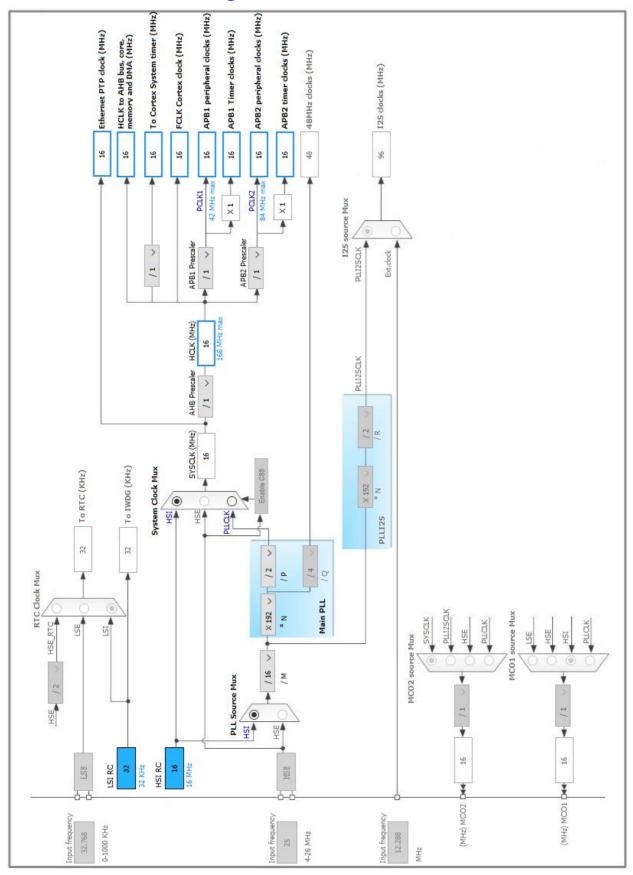
## 2. Pinout Configuration



# 3. Pins Configuration

Pin Number LQFP144	Pin Name (function after	Pin Type	Alternate Function(s)	Label
	reset)			
6	VBAT	Power		
16	VSS	Power		
17	VDD	Power		
25	NRST	Reset		
30	VDD	Power		
31	VSSA	Power		
32	VREF+	Power		
33	VDDA	Power		
38	VSS	Power		
39	VDD	Power		
51	VSS	Power		
52	VDD	Power		
61	VSS	Power		
62	VDD	Power		
71	VCAP_1	Power		
72	VDD	Power		
83	VSS	Power		
84	VDD	Power		
94	VSS	Power		
95	VDD	Power		
106	VCAP_2	Power		
107	VSS	Power		
108	VDD	Power		
120	VSS	Power		
121	VDD	Power		
130	VSS	Power		
131	VDD	Power		
138	BOOT0	Boot		
143	PDR_ON	Reset		
144	VDD	Power		

## 4. Clock Tree Configuration



# 5. IPs and Middleware Configuration

5.1. 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	Max	User Label
				down	Speed	

### 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
Pre-fetch 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
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
FPU global interrupt	unused		

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

# 7. Power Consumption Calculator report

#### 7.1. Microcontroller Selection

Series	STM32F4
Line	STM32F407/417
MCU	STM32F407ZETx
Datasheet	022152_Rev8

#### 7.2. Parameter Selection

Temperature	25
Vdd	3.3

# 8. Software Project

#### 8.1. Project Settings

Name	Value	
Project Name	stm32F4	
Project Folder	C:\Users\tangyq\Documents\CLOCK\STM32F4\stm32F4	
Toolchain / IDE	MDK-ARM V5	
Firmware Package Name and Version	STM32Cube FW_F4 V1.16.0	

#### 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	No
consumption)	