

1. Description

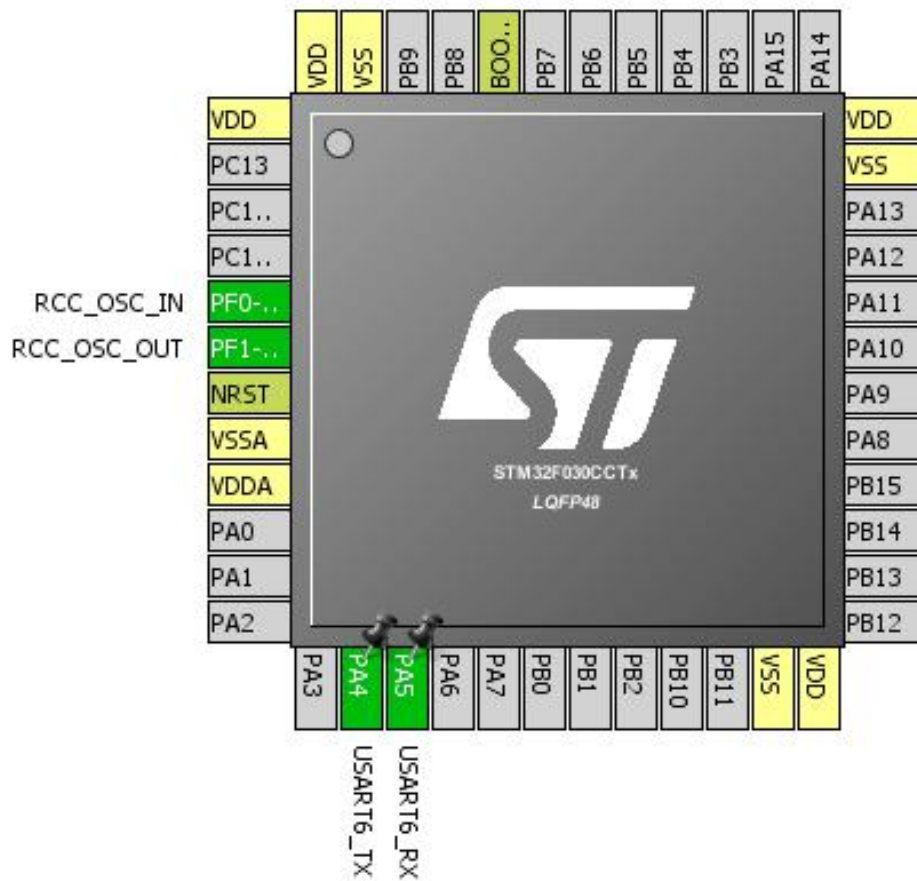
1.1. Project

Project Name	bootloader_STM32F030CC
Board Name	bootloader_STM32F030CC
Generated with:	STM32CubeMX 4.21.0
Date	08/08/2017

1.2. MCU

MCU Series	STM32F0
MCU Line	STM32F0x0 Value Line
MCU name	STM32F030CCTx
MCU Package	LQFP48
MCU Pin number	48

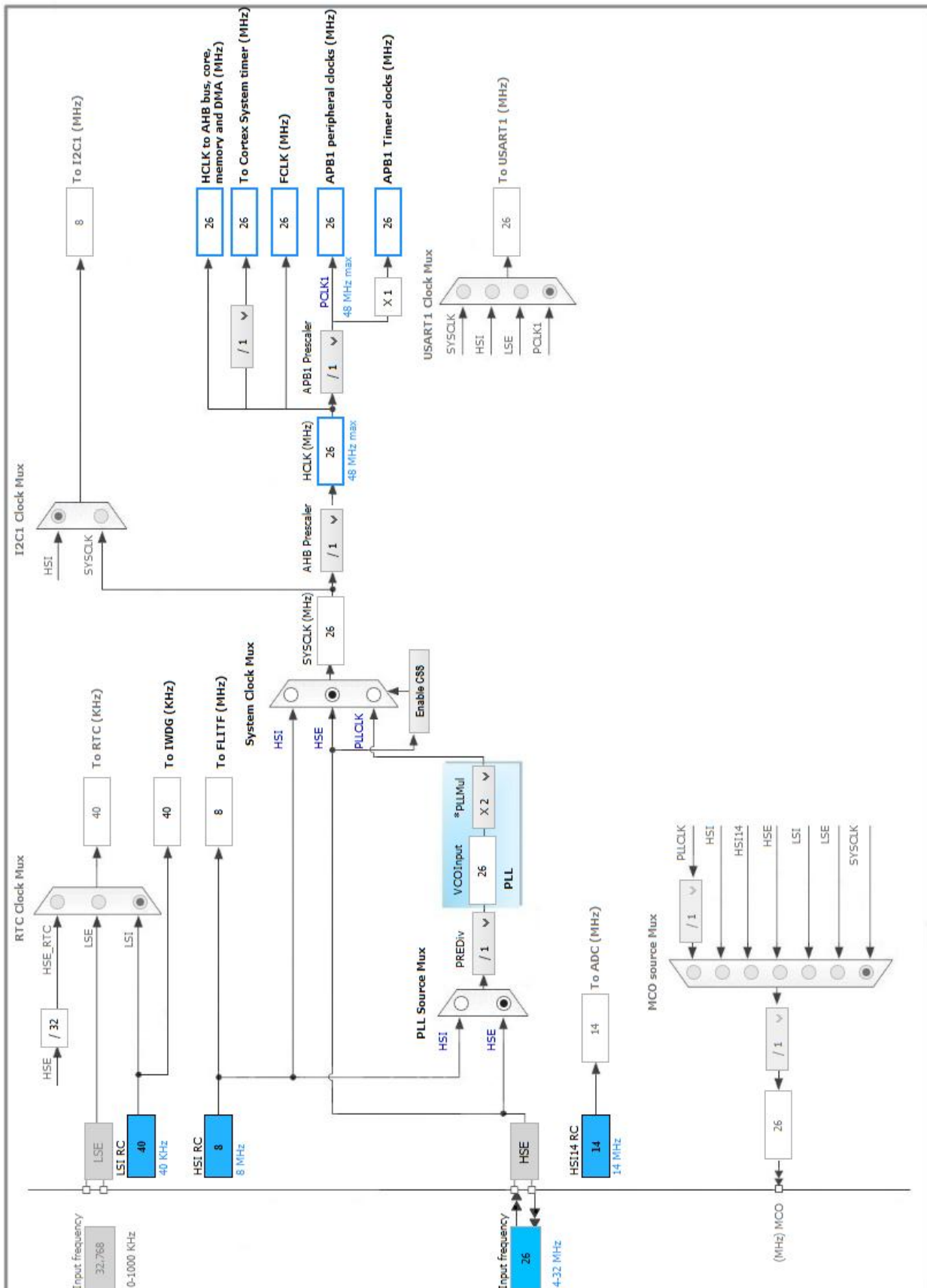
2. Pinout Configuration



3. Pins Configuration

Pin Number LQFP48	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VDD	Power		
5	PF0-OSC_IN	I/O	RCC_OSC_IN	
6	PF1-OSC_OUT	I/O	RCC_OSC_OUT	
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
14	PA4	I/O	USART6_TX	USART6_TX
15	PA5	I/O	USART6_RX	USART6_RX
23	VSS	Power		
24	VDD	Power		
35	VSS	Power		
36	VDD	Power		
44	BOOT0	Boot		
47	VSS	Power		
48	VDD	Power		

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. IWDG

mode: Activated

5.1.1. Parameter Settings:

Watchdog Clocking:

IWDG counter clock prescaler	256 *
IWDG window value	4095
IWDG down-counter reload value	4095

5.2. RCC

High Speed Clock (HSE): Crystal/Ceramic Resonator

5.2.1. Parameter Settings:

System Parameters:

VDD voltage (V)	3.3
Prefetch Buffer	Enabled
Flash Latency(WS)	1 WS (2 CPU cycle)

RCC Parameters:

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

5.3. TIM7

mode: Activated

5.3.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	0
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value)	0

auto-reload preload	Disable
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5.4. USART6

Mode: Asynchronous

5.4.1. Parameter Settings:

Basic Parameters:

Baud Rate	115200
Word Length	7 Bits (including Parity)
Parity	None
Stop Bits	1

Advanced Parameters:

Data Direction	Receive and Transmit
Over Sampling	16 Samples
Single Sample	Disable

Advanced Features:

TX Pin Active Level Inversion	Disable
RX Pin Active Level Inversion	Disable
Data Inversion	Disable
TX and RX Pins Swapping	Disable
Overrun	Enable
DMA on RX Error	Enable
MSB First	Disable

* 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	PF0-OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	PF1-OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
USART6	PA4	USART6_TX	Alternate Function Push Pull	Pull-up	High *	USART6_TX
	PA5	USART6_RX	Alternate Function Push Pull	Pull-up	High *	USART6_RX

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
System service call via SWI instruction	true	0	0
Pendable request for system service	true	0	0
System tick timer	true	0	0
TIM7 global interrupt	true	0	0
USART3 to USART6 global interrupts	true	0	0
Flash global interrupt	unused		
RCC global interrupt	unused		

* User modified value

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F0
Line	STM32F0x0 Value Line
MCU	STM32F030CCTx
Datasheet	024849_Rev2

7.2. Parameter Selection

Temperature	25
Vdd	3.6

8. Software Project

8.1. Project Settings

Name	Value
Project Name	bootloader_STM32F030CC
Project Folder	C:\Users\Francis\git\STMCube
Toolchain / IDE	TrueSTUDIO
Firmware Package Name and Version	STM32Cube FW_F0 V1.8.0

8.2. Code Generation Settings

Name	Value
STM32Cube Firmware Library Package	Copy only the necessary library files
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