1. Description

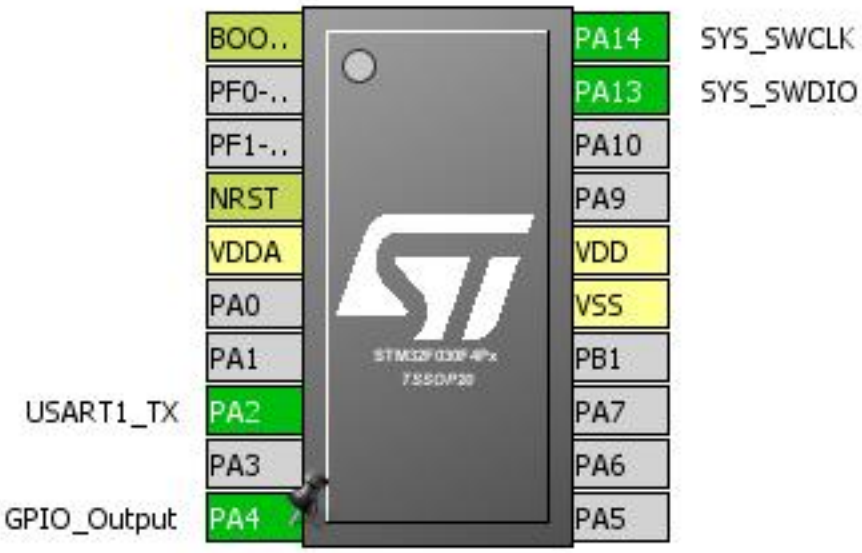
1.1. Project

Project Name	12_RTCC
Board Name	12_RTCC
Generated with:	STM32CubeMX 4.22.0
Date	01/28/2018

1.2. MCU

MCU Series	STM32F0
MCU Line	STM32F0x0 Value Line
MCU name	STM32F030F4Px
MCU Package	TSSOP20
MCU Pin number	20

2. Pinout Configuration

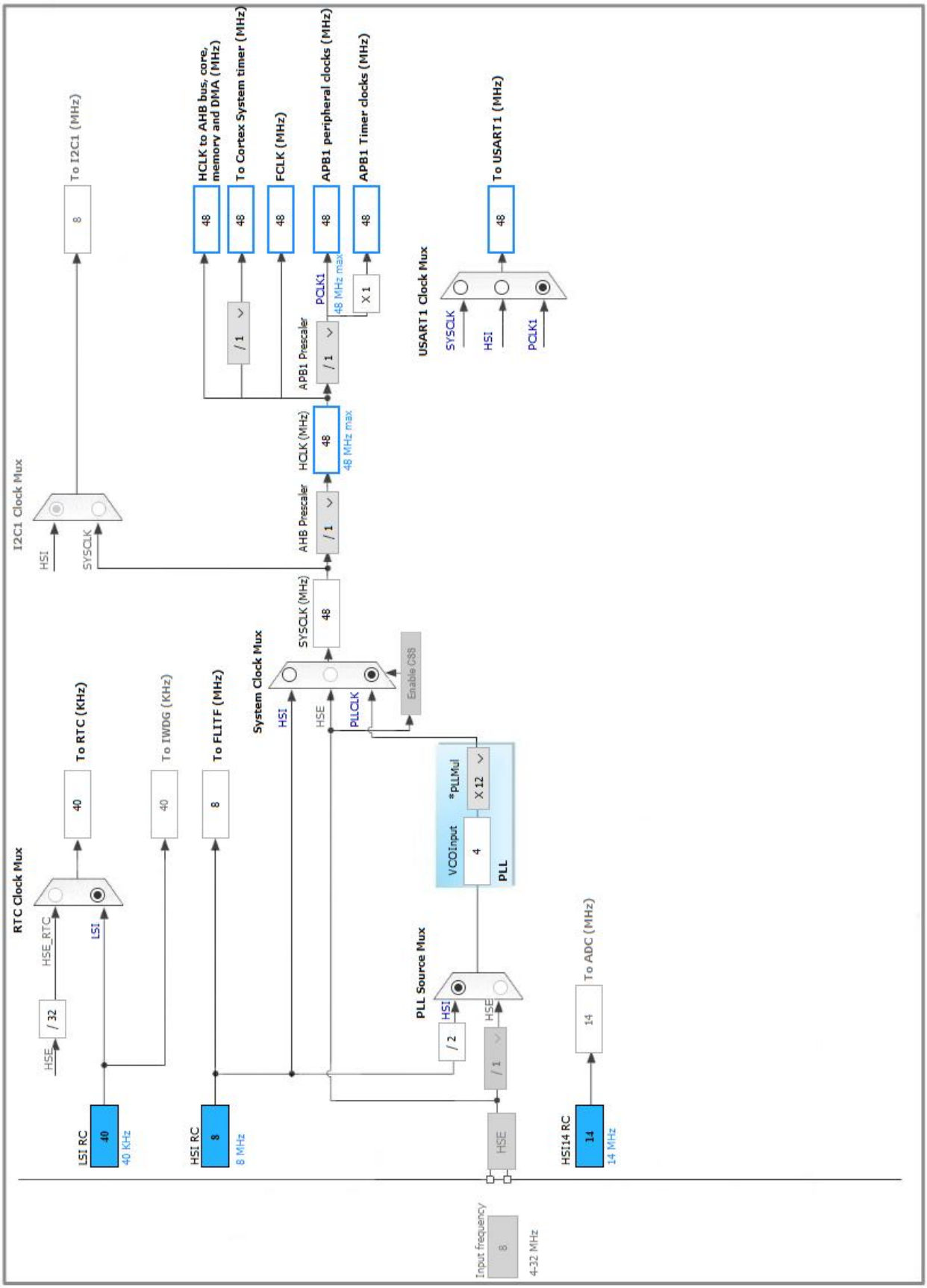


3. Pins Configuration

Pin Number TSSOP20	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	BOOT0	Boot		
4	NRST	Reset		
5	VDDA	Power		
8	PA2	I/O	USART1_TX	
10	PA4 *	I/O	GPIO_Output	
15	VSS	Power		
16	VDD	Power		
19	PA13	I/O	SYS_SWDIO	
20	PA14	I/O	SYS_SWCLK	

* The pin is affected with an I/O function

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. RTC

mode: Activate Clock Source

mode: Activate Calendar

5.1.1. Parameter Settings:

General:

Hour Format	Hourformat 24
Asynchronous Predivider value	127
Synchronous Predivider value	255

Calendar Time:

Data Format	BCD data format
Hours	0
Minutes	0
Seconds	0
Day Light Saving: value of hour adjustment	Daylightsaving None
Store Operation	Storeoperation Reset

Calendar Date:

Week Day	Monday
Month	January
Date	1
Year	0

5.2. SYS

mode: Debug Serial Wire

Timebase Source: SysTick

5.3. USART1

Mode: Single Wire (Half-Duplex)

5.3.1. Parameter Settings:

Basic Parameters:

Baud Rate	38400

Word Length	8 Bits (including Parity)
Parity	None
Stop Bits	1

Advanced Parameters:

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

Advanced Features:

Auto Baudrate	Disable
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
SYS	PA13	SYS_SWDIO	n/a	n/a	n/a	
	PA14	SYS_SWCLK	n/a	n/a	n/a	
USART1	PA2	USART1_TX	Alternate Function Open Drain	Pull-up	**High ***	
GPIO	PA4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	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
System service call via SWI instruction	true	0	0
Pendable request for system service	true	0	0
System tick timer	true	0	0
Flash global interrupt	unused		
RCC global interrupt	unused		
USART1 global interrupt	unused		

*** User modified value**

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F0
Line	STM32F0x0 Value Line
MCU	STM32F030F4Px
Datasheet	024849_Rev2

7.2. Parameter Selection

Temperature	25
Vdd	3.6

8. Software Project

8.1. Project Settings

Name	Value
Project Name	12_RTCC
Project Folder	C:\Users\armst\Desktop\STM32\STM32F030F4P6\GCC\12_RTCC
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