1. Description

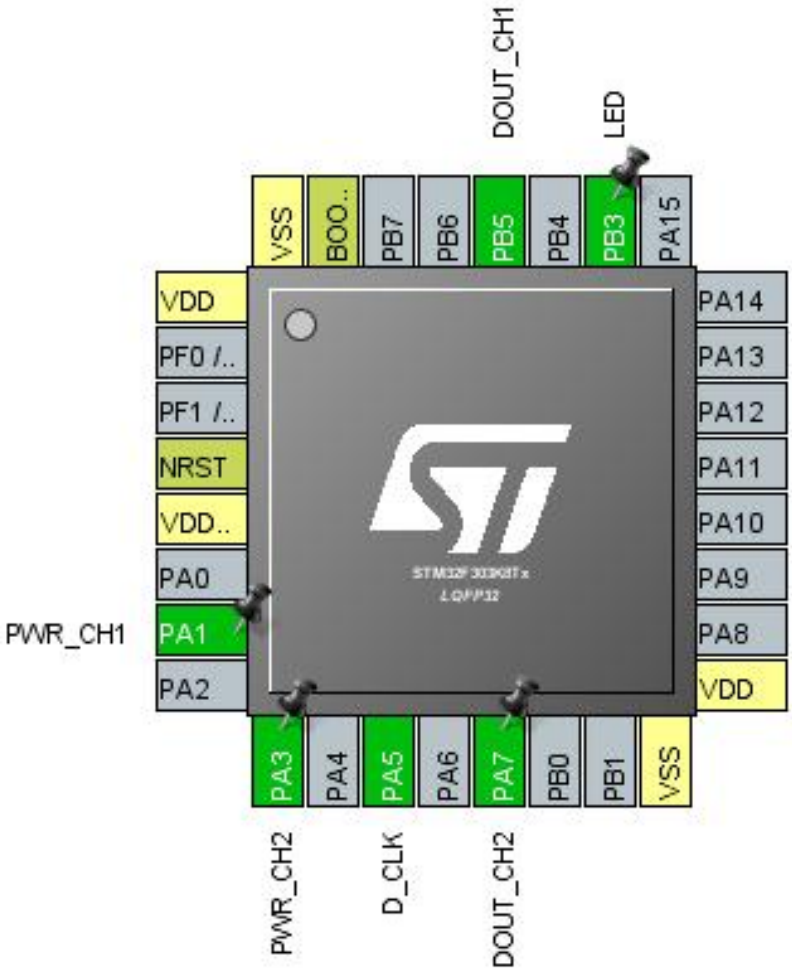
1.1. Project

Project Name	LedStrapWS
Board Name	custom
Generated with:	STM32CubeMX 5.0.0
Date	12/23/2018

1.2. MCU

MCU Series	STM32F3
MCU Line	STM32F303
MCU name	STM32F303K8Tx
MCU Package	LQFP32
MCU Pin number	32

2. Pinout Configuration

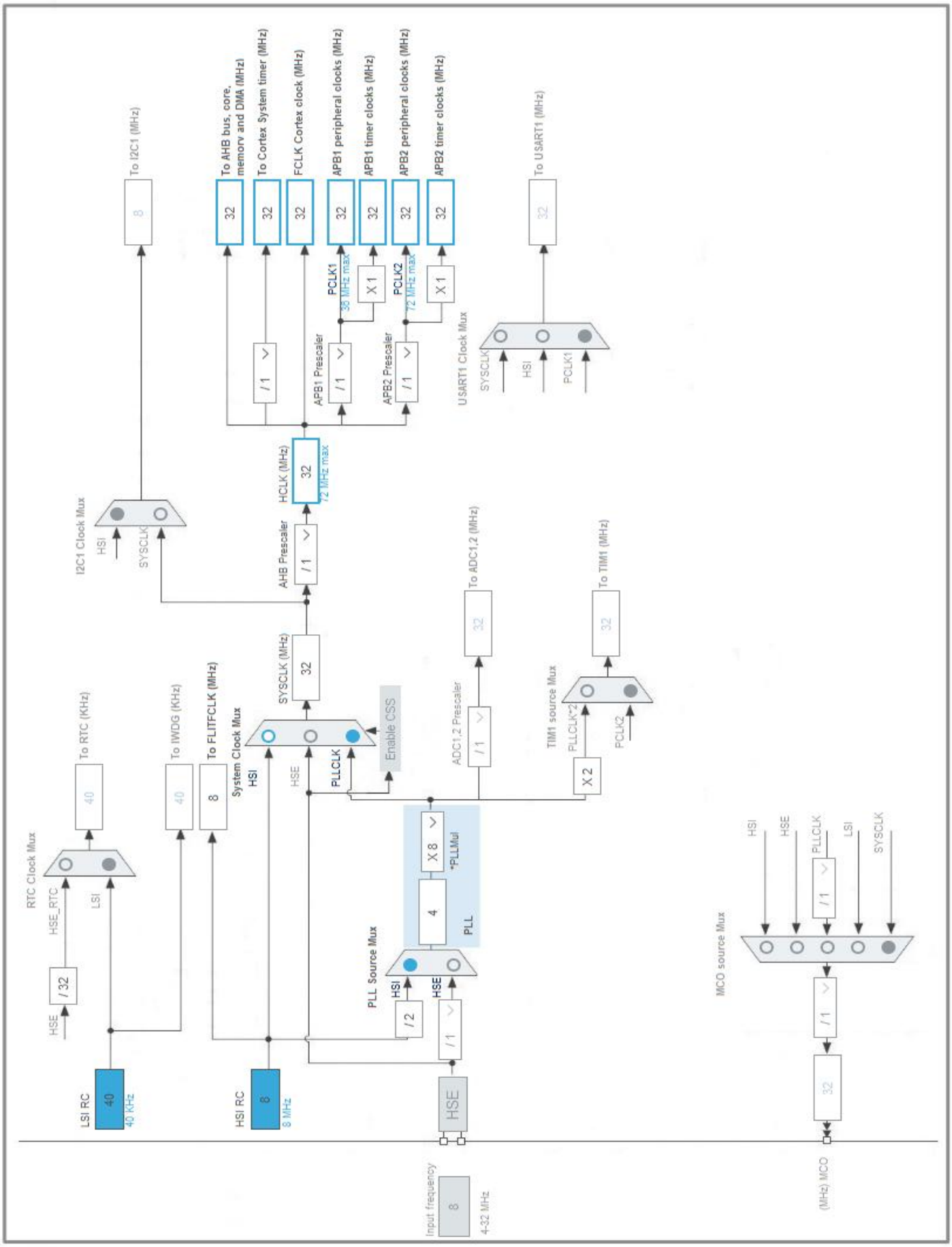


3. Pins Configuration

Pin Number LQFP32	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VDD	Power		
4	NRST	Reset		
5	VDDA/VREF+	Power		
7	PA1 *	I/O	GPIO_Output	PWR_CH1
9	PA3 *	I/O	GPIO_Output	PWR_CH2
11	PA5	I/O	SPI1_SCK	D_CLK
13	PA7 *	I/O	GPIO_Output	DOUT_CH2
16	VSS	Power		
17	VDD	Power		
26	PB3 *	I/O	GPIO_Output	LED
28	PB5	I/O	SPI1_MOSI	DOUT_CH1
31	BOOT0	Boot		
32	VSS	Power		

* The pin is affected with an I/O function

4. Clock Tree Configuration



5. Software Project

5.1. Project Settings

Name	Value
Project Name	LedStrapWS
Project Folder	E:\Home\Documents\AtolicSTM32\LedStrapWS
Toolchain / IDE	TrueSTUDIO
Firmware Package Name and Version	STM32Cube FW_F3 V1.10.0

5.2. 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	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 consumption)	No

6. Power Consumption Calculator report

6.1. Microcontroller Selection

Series	STM32F3
Line	STM32F303
MCU	STM32F303K8Tx
Datasheet	025083_Rev5

6.2. Parameter Selection

Temperature	25
Vdd	3.6

7. IPs and Middleware Configuration

7.1. SPI1

Mode: Transmit Only Master

7.1.1. Parameter Settings:

Basic Parameters:

Frame Format	Motorola
Data Size	**10 Bits ***
First Bit	MSB First

Clock Parameters:

Prescaler (for Baud Rate)	**4 ***
Baud Rate	**8.0 MBits/s ***
Clock Polarity (CPOL)	Low
Clock Phase (CPHA)	1 Edge

Advanced Parameters:

CRC Calculation	Disabled
NSSP Mode	**Disabled ***
NSS Signal Type	Software

7.2. SYS

Timebase Source: SysTick

*** User modified value**

8. System Configuration

8.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
SPI1	PA5	SPI1_SCK	Alternate Function Push Pull	No pull up pull down	**High ***	D_CLK
	PB5	SPI1_MOSI	Alternate Function Push Pull	No pull up pull down	**High ***	DOUT_CH1
GPIO	PA1	GPIO_Output	Output Push Pull	No pull up pull down	Low	PWR_CH1
	PA3	GPIO_Output	Output Push Pull	No pull up pull down	Low	PWR_CH2
	PA7	GPIO_Output	Output Push Pull	No pull up pull down	Low	DOUT_CH2
	PB3	GPIO_Output	Output Push Pull	No pull up pull down	Low	LED

8.2. DMA configuration

DMA request	Stream	Direction	Priority
SPI1_TX	DMA1_Channel3	Memory To Peripheral	Low

SPI1_TX: DMA1_Channel3 DMA request Settings:

Mode:	Normal
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	Half Word
Memory Data Width:	Half Word

8.3. 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
System tick timer	true	0	0
DMA1 channel3 global interrupt	true	0	0
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
SPI1 global interrupt	unused		
Floating point unit interrupt	unused		

*** User modified value**

9. Software Pack Report