## 1. Description

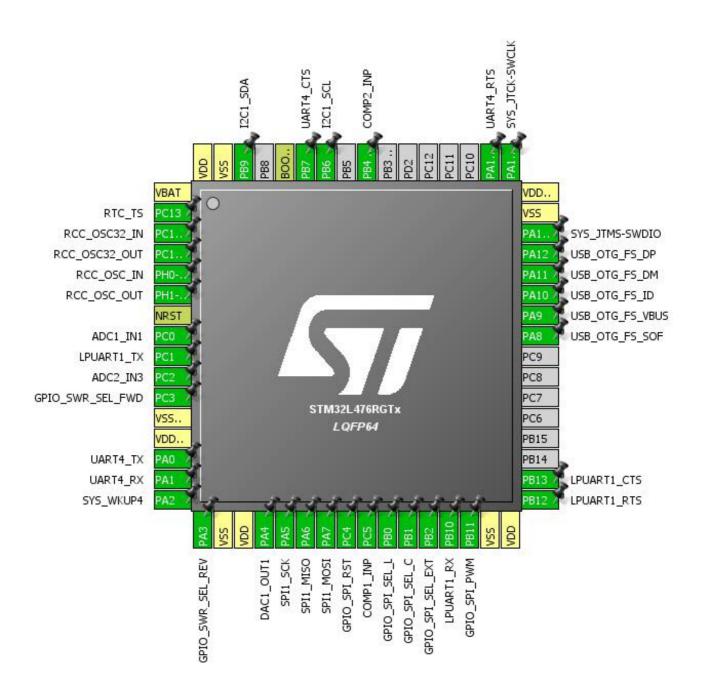
### 1.1. Project

Project Name	DL0WH_BiTuner
Board Name	custom
Generated with:	STM32CubeMX 4.27.0
Date	01/05/2019

#### 1.2. MCU

MCU Series	STM32L4
MCU Line	STM32L4x6
MCU name	STM32L476RGTx
MCU Package	LQFP64
MCU Pin number	64

## 2. Pinout Configuration



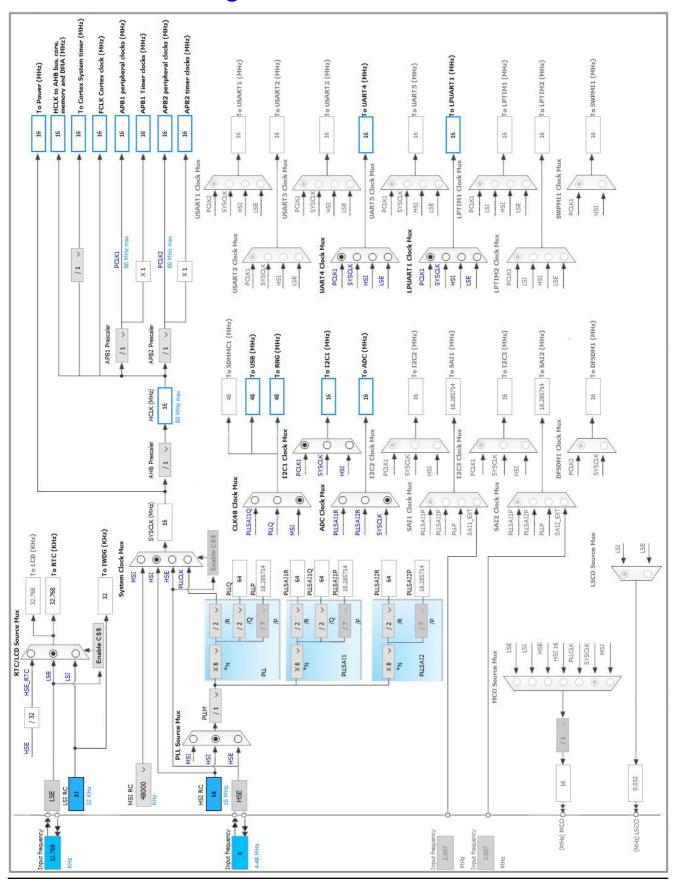
## 3. Pins Configuration

Pin Number	Pin Name	Pin Type	Alternate	Label
LQFP64	(function after		Function(s)	
200.	reset)			
1	VBAT	Power		
2	PC13	I/O	RTC_TS	
3	PC14-OSC32_IN (PC14)	I/O	RCC_OSC32_IN	
4	PC15-OSC32_OUT (PC15)	I/O	RCC_OSC32_OUT	
5	PH0-OSC_IN (PH0)	I/O	RCC_OSC_IN	
6	PH1-OSC_OUT (PH1)	I/O	RCC_OSC_OUT	
7	NRST	Reset		
8	PC0	I/O	ADC1_IN1	
9	PC1	I/O	LPUART1_TX	
10	PC2	I/O	ADC2_IN3	
11	PC3 *	I/O	GPIO_Output	GPIO_SWR_SEL_FWD
12	VSSA/VREF-	Power		
13	VDDA/VREF+	Power		
14	PA0	I/O	UART4_TX	
15	PA1	I/O	UART4_RX	
16	PA2	I/O	SYS_WKUP4	
17	PA3 *	I/O	GPIO_Output	GPIO_SWR_SEL_REV
18	VSS	Power		
19	VDD	Power		
20	PA4	I/O	DAC1_OUT1	
21	PA5	I/O	SPI1_SCK	
22	PA6	I/O	SPI1_MISO	
23	PA7	I/O	SPI1_MOSI	
24	PC4 *	I/O	GPIO_Output	GPIO_SPI_RST
25	PC5	I/O	COMP1_INP	
26	PB0 *	I/O	GPIO_Output	GPIO_SPI_SEL_L
27	PB1 *	I/O	GPIO_Output	GPIO_SPI_SEL_C
28	PB2 *	I/O	GPIO_Output	GPIO_SPI_SEL_EXT
29	PB10	I/O	LPUART1_RX	
30	PB11 *	I/O	GPIO_Output	GPIO_SPI_PWM
31	VSS	Power		
32	VDD	Power		
33	PB12	I/O	LPUART1_RTS	
34	PB13	I/O	LPUART1_CTS	
41	PA8	I/O	USB_OTG_FS_SOF	
42	PA9	I/O	USB_OTG_FS_VBUS	

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
43	PA10	I/O	USB_OTG_FS_ID	
44	PA11	I/O	USB_OTG_FS_DM	
45	PA12	I/O	USB_OTG_FS_DP	
46	PA13 (JTMS-SWDIO)	I/O	SYS_JTMS-SWDIO	
47	VSS	Power		
48	VDDUSB	Power		
49	PA14 (JTCK-SWCLK)	I/O	SYS_JTCK-SWCLK	
50	PA15 (JTDI)	I/O	UART4_RTS	
56	PB4 (NJTRST)	I/O	COMP2_INP	
58	PB6	I/O	I2C1_SCL	
59	PB7	I/O	UART4_CTS	
60	воото	Boot		
62	PB9	I/O	I2C1_SDA	
63	VSS	Power		
64	VDD	Power		

<sup>\*</sup> The pin is affected with an I/O function

## 4. Clock Tree Configuration



## 5. IPs and Middleware Configuration

#### 5.1. ADC1

IN1: IN1 Single-ended

5.1.1. Parameter Settings:

ADCs\_Common\_Settings:

Mode Independent mode

ADC\_Settings:

Clock Prescaler Asynchronous clock mode divided by 1

Resolution ADC 12-bit resolution

Data Alignment Right alignment

Scan Conversion Mode Disabled
Continuous Conversion Mode Disabled

Discontinuous Conversion Mode Disabled

DMA Continuous Requests Disabled

End Of Conversion Selection End of single conversion

Overrun behaviour Overrun data preserved

Low Power Auto Wait Disabled

ADC\_Regular\_ConversionMode:

Enable Regular Conversions Enable
Enable Regular Oversampling Disable
Number Of Conversion 1

External Trigger Conversion Source Regular Conversion launched by software

External Trigger Conversion Edge None
Rank 1

Channel Channel 1
Sampling Time 2.5 Cycles
Offset Number No offset

ADC\_Injected\_ConversionMode:

Enable Injected Conversions Disable

**Analog Watchdog 1:** 

Enable Analog WatchDog1 Mode false

**Analog Watchdog 2:** 

Enable Analog WatchDog2 Mode false

**Analog Watchdog 3:** 

Enable Analog WatchDog3 Mode false

#### 5.2. ADC2

#### IN3: IN3 Single-ended

#### 5.2.1. Parameter Settings:

ADCs\_Common\_Settings:

Mode Independent mode

ADC\_Settings:

Clock Prescaler Asynchronous clock mode divided by 1

Resolution ADC 12-bit resolution
Data Alignment Right alignment

Scan Conversion Mode Disabled
Continuous Conversion Mode Disabled
Discontinuous Conversion Mode Disabled
DMA Continuous Requests Disabled

End Of Conversion Selection End of single conversion

Overrun behaviour Overrun data preserved

Low Power Auto Wait Disabled

ADC\_Regular\_ConversionMode:

Enable Regular ConversionsEnableEnable Regular OversamplingDisableNumber Of Conversion1

External Trigger Conversion Source Regular Conversion launched by software

External Trigger Conversion Edge None
Rank 1

Channel Channel 3
Sampling Time 2.5 Cycles
Offset Number No offset

ADC\_Injected\_ConversionMode:

Enable Injected Conversions Disable

**Analog Watchdog 1:** 

Enable Analog WatchDog1 Mode false

**Analog Watchdog 2:** 

Enable Analog WatchDog2 Mode false

**Analog Watchdog 3:** 

Enable Analog WatchDog3 Mode false

#### 5.3. ADC3

mode: Temperature Sensor Channel

mode: Vbat Channel

5.3.1. Parameter Settings:

ADC\_Settings:

Clock Prescaler Asynchronous clock mode divided by 1

Resolution ADC 12-bit resolution

Data Alignment Right alignment

Scan Conversion Mode Enabled
Continuous Conversion Mode Disabled
Discontinuous Conversion Mode Disabled
DMA Continuous Requests Disabled

End Of Conversion Selection End of single conversion

Overrun behaviour Overrun data preserved

Low Power Auto Wait Disabled

ADC\_Regular\_ConversionMode:

Enable Regular Conversions Enable

Enable Regular Oversampling

Enable \*

Oversampling Right Shift No bit shift for oversampling

Oversampling Ratio Oversampling ratio 16x \*

Regular Oversampling Mode Oversampling Continued Mode

Triggered Regular Oversampling Single trigger for all oversampled conversions

Number Of Conversion 2

External Trigger Conversion Source Regular Conversion launched by software

External Trigger Conversion Edge None
Rank 1

Channel Temperature Sensor

Sampling Time 12.5 Cycles \*

Offset Number No offset

Rank 2 \*

Channel Vbat \*

Sampling Time 12.5 Cycles \*

Offset Number No offset

ADC\_Injected\_ConversionMode:

Enable Injected Conversions Disable

**Analog Watchdog 1:** 

Enable Analog WatchDog1 Mode false

**Analog Watchdog 2:** 

Enable Analog WatchDog2 Mode false

**Analog Watchdog 3:** 

Enable Analog WatchDog3 Mode

false

#### 5.4. COMP1

mode: Input [+]

Input [-]: 1/2 Internal VRef 5.4.1. Parameter Settings:

**Basic Parameters:** 

Speed / Power Mode High Speed

Trigger Mode Rising/Falling Edge Interrupt \*

Hysteresis Level Medium \*

**Output Configuration:** 

Blanking Source None

Output Pol COMP output on GPIO isn't inverted

#### 5.5. COMP2

Input [+]: INP

Input [-]: 1/2 Internal VRef 5.5.1. Parameter Settings:

#### **Basic Parameters:**

Speed / Power Mode High Speed

Trigger Mode Rising/Falling Edge Interrupt \*

Hysteresis Level Medium \*

**Output Configuration:** 

Blanking Source None

Output Pol COMP output on GPIO isn't inverted

#### 5.6. CRC

mode: Activated

5.6.1. Parameter Settings:

**Basic Parameters:** 

Default Polynomial State Enable

Default Init Value State Enable

**Advanced Parameters:** 

Input Data Inversion Mode None Disable Output Data Inversion Mode Input Data Format Bytes

#### 5.7. DAC1

**OUT1 mode: Connected to external pin only** 

5.7.1. Parameter Settings:

#### **DAC Out1 Settings:**

Output Buffer Disable \* Trigger None

**User Trimming** Factory trimming Sample And Hold Sampleandhold Disable

#### 5.8. I2C1

12C: 12C

#### 5.8.1. Parameter Settings:

#### Timing configuration:

I2C Speed Mode Fast Mode \*

400 I2C Speed Frequency (KHz) Rise Time (ns) 0 0 Fall Time (ns) 0 Coefficient of Digital Filter

Analog Filter Enabled

Timing 0x0010061A \*

#### **Slave Features:**

Primary slave address

Clock No Stretch Mode Enabled \* General Call Address Detection Disabled Primary Address Length selection 7-bit Disabled Dual Address Acknowledged 0

#### 5.9. IWDG

mode: Activated

5.9.1. Parameter Settings:

#### **Watchdog Clocking:**

 IWDG counter clock prescaler
 4

 IWDG window value
 4095

 IWDG down-counter reload value
 4095

#### 5.10. LPUART1

**Mode: Asynchronous** 

Hardware Flow Control (RS232): CTS/RTS

5.10.1. Parameter Settings:

#### **Basic Parameters:**

Baud Rate 209700

Word Length 8 Bits (including Parity) \*

Parity None Stop Bits 1

**Advanced Parameters:** 

Data Direction Receive and Transmit

Single Sample Disable

**Advanced Features:** 

TX Pin Active Level Inversion

RX Pin Active Level Inversion

Disable

Data Inversion

Disable

TX and RX pins Swapping

Overrun

Enable

DMA on RX Error

MSB First

Disable

#### 5.11. RCC

High Speed Clock (HSE): Crystal/Ceramic Resonator Low Speed Clock (LSE): Crystal/Ceramic Resonator

#### 5.11.1. Parameter Settings:

**System Parameters:** 

VDD voltage (V) 3.3
Instruction Cache Enabled
Prefetch Buffer Enabled \*
Data Cache Enabled

Flash Latency(WS) 2 WS (3 CPU cycle)

**RCC Parameters:** 

HSI Calibration Value 16

MSI Calibration Value 0

MSI Auto Calibration Enabled

HSE Startup Timout Value (ms) 100

LSE Startup Timout Value (ms) 5000

LSE Drive Capability

LSE oscillator low drive capability

**Power Parameters:** 

Power Regulator Voltage Scale 2 \*

5.12. RNG

mode: Activated

5.13. RTC

mode: Activate Clock Source

mode: Activate Calendar Alarm A: Internal Alarm A WakeUp: Internal WakeUp

mode: Timestamp

5.13.1. 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 DayMondayMonthJanuaryDate1Year0

Alarm A:

Hours 0
Minutes 0
Seconds 0
Sub Seconds 0

Alarm Mask Date Week day

Alarm Mask Hours

Disable

Alarm Mask Minutes

Disable

Alarm Mask Seconds

Disable

Alarm Sub Second Mask

All Alarm SS fields are masked.

Alarm Date Week Day Sel Date
Alarm Date 1

Wake UP:

Wake Up Clock RTCCLK / 16

Wake Up Counter 0

Time Stamp:

Time Stamp Pin Edge Time Stamp occurs on the Rising edge

#### 5.14. SPI1

# Mode: Full-Duplex Master 5.14.1. Parameter Settings:

#### **Basic Parameters:**

Frame Format Motorola

Data Size 8 Bits \*

First Bit MSB First

**Clock Parameters:** 

Prescaler (for Baud Rate) 2

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

#### 5.15. SYS

**Debug: Serial Wire** 

mode: System Wake-Up 4

Power Voltage Detector In: Power Voltage Detector In (Internal analog voltage)

Timebase Source: TIM1 5.15.1. Parameter Settings:

#### Programmable\_Voltage\_Detector\_Settings:

PVD detection Level PWR PVD LEVEL 5 (2.8 V) \*

PWR PVD Mode basic mode is used

#### 5.16. TIM5

mode: Clock Source

#### 5.16.1. Parameter Settings:

#### **Counter Settings:**

Prescaler (PSC - 16 bits value) 0

Counter Mode Up

Counter Period (AutoReload Register - 32 bits value ) 15999999 \*

Internal Clock Division (CKD) No Division

auto-reload preload Enable \*

#### **Trigger Output (TRGO) Parameters:**

Master/Slave Mode (MSM bit) Disable (Trigger input effect not delayed)

Trigger Event Selection TRGO Reset (UG bit from TIMx\_EGR)

#### 5.17. UART4

**Mode: Asynchronous** 

Hardware Flow Control (RS232): CTS/RTS

#### 5.17.1. Parameter Settings:

**Basic Parameters:** 

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 Enable \*

Auto Baudrate Mode ON START BIT

TX Pin Active Level Inversion

RX Pin Active Level Inversion

Disable

Data Inversion

Disable

TX and RX Pins Swapping

Overrun

Enable

DMA on RX Error

MSB First

Disable

#### 5.18. USB OTG FS

Mode: OTG/Dual\_Role\_Device Activate\_VBUS: VBUS sensing

mode: Activate\_SOF

#### 5.19. FREERTOS

mode: Enabled

5.19.1. Config parameters:

Versions:

FreeRTOS version 10.0.1 CMSIS-RTOS version 1.02

Kernel settings:

USE\_PREEMPTION Enabled

CPU\_CLOCK\_HZ SystemCoreClock

TICK\_RATE\_HZ 1000 MAX\_PRIORITIES 7

MINIMAL\_STACK\_SIZE

MAX\_TASK\_NAME\_LEN

USE\_16\_BIT\_TICKS

IDLE\_SHOULD\_YIELD

USE\_MUTEXES

USE\_RECURSIVE\_MUTEXES

Disabled

USE\_COUNTING\_SEMAPHORES

Disabled

QUEUE\_REGISTRY\_SIZE 8

USE\_APPLICATION\_TASK\_TAG
Enabled \*

ENABLE\_BACKWARD\_COMPATIBILITY
Disabled \*

USE\_PORT\_OPTIMISED\_TASK\_SELECTION
Enabled
USE\_TICKLESS\_IDLE
Disabled
USE\_TASK\_NOTIFICATIONS
Enabled \*

RECORD\_STACK\_HIGH\_ADDRESS
Enabled \*

#### Memory management settings:

Memory Allocation Dynamic

TOTAL\_HEAP\_SIZE 16000 \*

Memory Management scheme heap\_4

#### **Hook function related definitions:**

USE\_IDLE\_HOOK

USE\_TICK\_HOOK

Disabled

USE\_MALLOC\_FAILED\_HOOK

Disabled

USE\_DAEMON\_TASK\_STARTUP\_HOOK

CHECK\_FOR\_STACK\_OVERFLOW

Disabled

Option1 \*

#### Run time and task stats gathering related definitions:

#### Co-routine related definitions:

USE\_CO\_ROUTINES Disabled MAX\_CO\_ROUTINE\_PRIORITIES 2

#### Software timer definitions:

USE\_TIMERS Enabled
TIMER\_TASK\_PRIORITY 2
TIMER\_QUEUE\_LENGTH 10
TIMER\_TASK\_STACK\_DEPTH 512

#### Interrupt nesting behaviour configuration:

LIBRARY\_LOWEST\_INTERRUPT\_PRIORITY 15
LIBRARY\_MAX\_SYSCALL\_INTERRUPT\_PRIORITY 5

#### 5.19.2. Include parameters:

#### Include definitions:

vTaskPrioritySet Enabled uxTaskPriorityGet Enabled Enabled vTaskDelete vTaskCleanUpResources Enabled \* vTaskSuspend Enabled vTaskDelayUntil Enabled \* Enabled vTaskDelay Enabled xTaskGetSchedulerState Enabled  $x \\ Task \\ Resume \\ From ISR$ xQueueGetMutexHolder Enabled \* xSemaphoreGetMutexHolder Enabled \* pcTaskGetTaskName Enabled \* ux Task Get Stack High Water MarkEnabled \* xTaskGetCurrentTaskHandle Enabled \* eTaskGetState Enabled \* xEventGroupSetBitFromISR Enabled \* xTimerPendFunctionCall Enabled \* xTaskAbortDelay Enabled \* xTaskGetHandle Enabled \*

#### \* User modified value

## 6. System Configuration

## 6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
ADC1	PC0	ADC1_IN1	Analog mode for ADC conversion	No pull-up and no pull-down	n/a	
ADC2	PC2	ADC2_IN3	Analog mode for ADC conversion	No pull-up and no pull-down	n/a	
COMP1	PC5	COMP1_INP	Analog mode	No pull-up and no pull-down	n/a	
COMP2	PB4 (NJTRST)	COMP2_INP	Analog mode	No pull-up and no pull-down	n/a	
DAC1	PA4	DAC1_OUT1	Analog mode	No pull-up and no pull-down	n/a	
I2C1	PB6	I2C1_SCL	Alternate Function Open Drain	Pull-up	Very High *	
	PB9	I2C1_SDA	Alternate Function Open Drain	Pull-up	Very High	
LPUART1	PC1	LPUART1_TX	Alternate Function Push Pull	No pull-up and no pull-down	Medium *	
	PB10	LPUART1_RX	Alternate Function Push Pull	Pull-up *	Medium *	
	PB12	LPUART1_RTS	Alternate Function Push Pull	No pull-up and no pull-down	Medium *	
	PB13	LPUART1_CTS	Alternate Function Push Pull	Pull-up *	Medium *	
RCC	PC14- OSC32_IN (PC14)	RCC_OSC32_IN	n/a	n/a	n/a	
	PC15- OSC32_OU T (PC15)	RCC_OSC32_O UT	n/a	n/a	n/a	
	PH0- OSC_IN (PH0)	RCC_OSC_IN	n/a	n/a	n/a	
	PH1- OSC_OUT (PH1)	RCC_OSC_OUT	n/a	n/a	n/a	
RTC	PC13	RTC_TS	n/a	n/a	n/a	
SPI1	PA5	SPI1_SCK	Alternate Function Push Pull	No pull-up and no pull-down	Very High *	
	PA6	SPI1_MISO	Alternate Function Push Pull	Pull-down *	Very High	
	PA7	SPI1_MOSI	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
SYS	PA2	SYS_WKUP4	n/a	n/a	n/a	

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
	PA13 (JTMS- SWDIO)	SYS_JTMS- SWDIO	n/a	n/a	n/a	
	PA14 (JTCK- SWCLK)	SYS_JTCK- SWCLK	n/a	n/a	n/a	
UART4	PA0	UART4_TX	Alternate Function Push Pull	No pull-up and no pull-down	Medium *	
	PA1	UART4_RX	Alternate Function Push Pull	Pull-up *	Medium *	
	PA15 (JTDI)	UART4_RTS	Alternate Function Push Pull	No pull-up and no pull-down	Medium *	
	PB7	UART4_CTS	Alternate Function Push Pull	Pull-up *	Medium *	
USB_OTG_ FS	PA8	USB_OTG_FS_ SOF	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PA9	USB_OTG_FS_ VBUS	Input mode	No pull-up and no pull-down	n/a	
	PA10	USB_OTG_FS_I D	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PA11	USB_OTG_FS_ DM	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PA12	USB_OTG_FS_ DP	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
GPIO	PC3	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	GPIO_SWR_SEL_FWD
	PA3	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	GPIO_SWR_SEL_REV
	PC4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	GPIO_SPI_RST
	PB0	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Very High	GPIO_SPI_SEL_L
	PB1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Very High	GPIO_SPI_SEL_C
	PB2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Very High	GPIO_SPI_SEL_EXT
	PB11	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	GPIO_SPI_PWM

### 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
System service call via SWI instruction	true	0	0
Debug monitor	true	0	0
Pendable request for system service	true	15	0
System tick timer	true	15	0
ADC1 and ADC2 interrupts	true	5	0
TIM1 update interrupt and TIM16 global interrupt	true	0	0
SPI1 global interrupt	true	5	0
ADC3 global interrupt	true	5	0
TIM5 global interrupt	true	5	0
UART4 global interrupt	true	5	0
COMP1 and COMP2 interrupts through EXTI lines 21 and 22	true	5	0
LPUART1 global interrupt	true	5	0
PVD/PVM1/PVM2/PVM3/PVM4 interrupts through EXTI lines 16/35/36/37/38		unused	
RTC tamper and time stamp, CSS on LSE interrupts through EXTI line 19		unused	
RTC wake-up interrupt through EXTI line 20		unused	
Flash global interrupt		unused	
RCC global interrupt	unused		
I2C1 event interrupt	unused		
I2C1 error interrupt	unused		
RTC alarm interrupt through EXTI line 18	unused		
TIM6 global interrupt, DAC channel1 and channel2 underrun error interrupts	unused		
RNG global interrupt		unused	
FPU global interrupt		unused	

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

## 7. Power Consumption Calculator report

#### 7.1. Microcontroller Selection

Series	STM32L4
Line	STM32L4x6
мси	STM32L476RGTx
Datasheet	025976_Rev4

#### 7.2. Parameter Selection

Temperature	25
Vdd	3.6

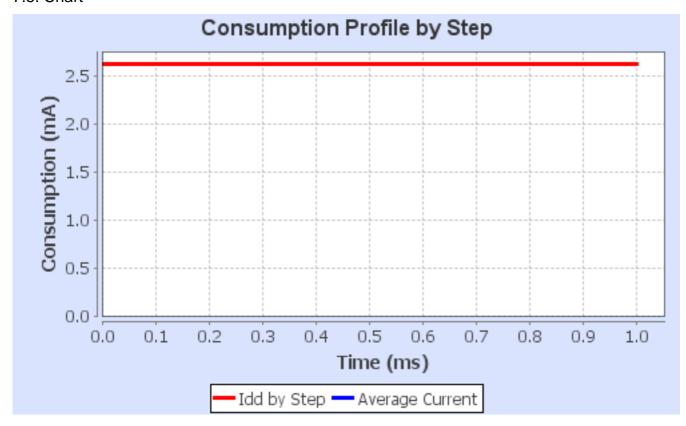
#### 7.3. Sequence

Step	Step1
Mode	RUN
Vdd	3.6
Voltage Source	Battery
Range	Range2-Medium
Fetch Type	FLASH/ART/Cache
Clock Configuration	HSE
Clock Source Frequency	16 MHz
CPU Frequency	16 MHz
Peripherals	ADC1:fs_10_ksps ADC2:fs_10_ksps ADC3:fs_10_ksps AHB_APB1_Bridge AHB_APB2_Bridge CRC DAC1:OUT1- Buffer_OFF-Middle_code GPIOA GPIOB GPIOC GPIOD GPIOH I2C1 LPTIM1 PVD/BOR RNG RTC SPI1 TIM5 UART4 USB OTG FS
Additional Cons.	0 mA
Average Current	2.62 mA
Duration	1 ms
DMIPS	0.0
Та Мах	104.58
Category	In DS Table

#### 7.4. RESULTS

Sequence Time	1 ms	Average Current	2.62 mA
Battery Life	0	Average DMIPS	20.0 DMIPS

#### 7.5. Chart



## 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	DL0WH_BiTuner
Project Folder	Z:\nfs_ds_nfs\git\DL0WH_BiTuner\SW\DL0WH_BiTuner
Toolchain / IDE	TrueSTUDIO
Firmware Package Name and Version	STM32Cube FW_L4 V1.13.0

### 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	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)	Yes	

<b>9.</b>	Software	Pack	Report
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