1. Description

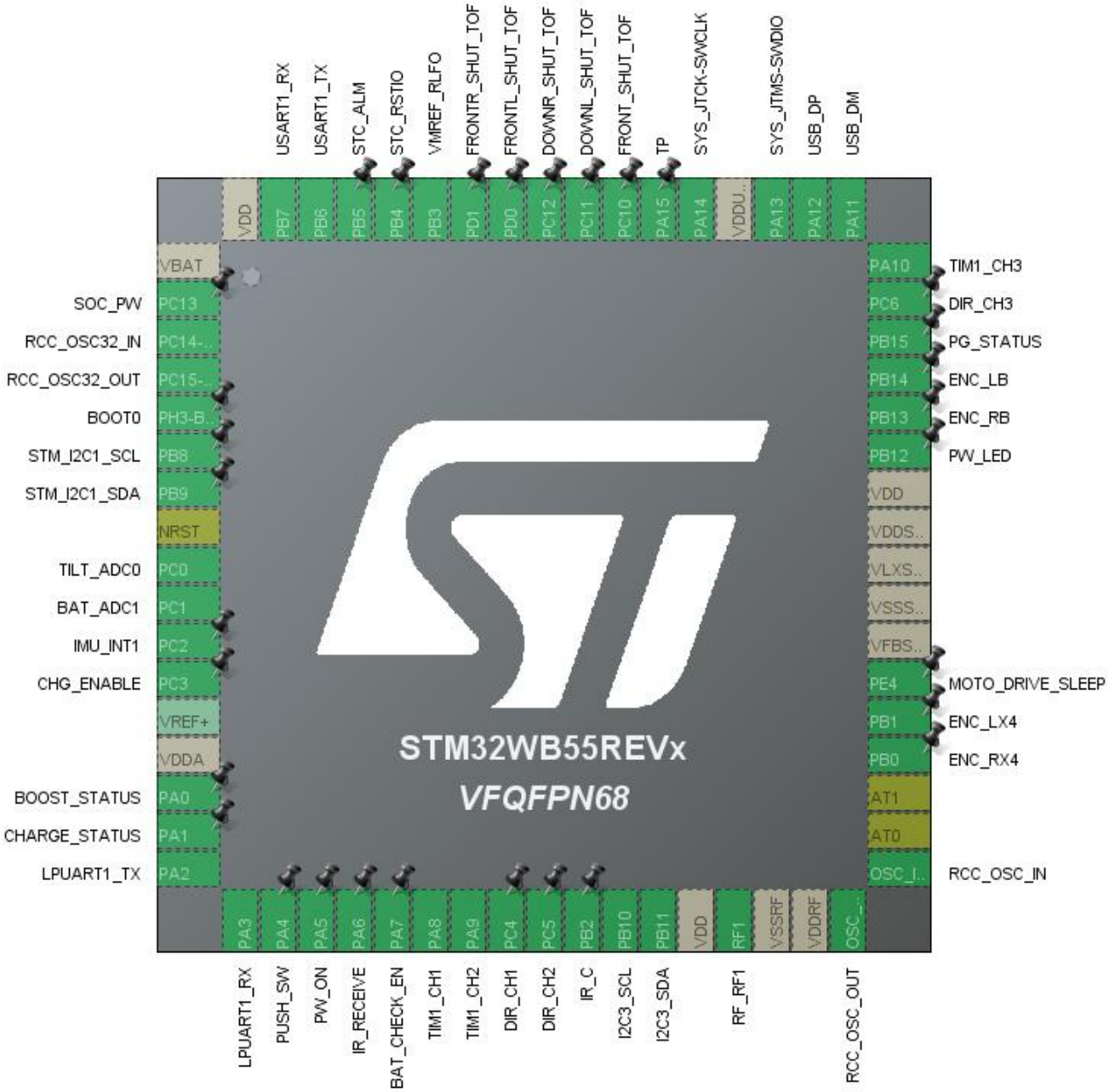
1.1. Project

Project Name	wb55
Board Name	custom
Generated with:	STM32CubeMX 5.2.1
Date	06/26/2019

1.2. MCU

MCU Series	STM32WB
MCU Line	STM32WBx5
MCU name	STM32WB55REVx
MCU Package	VFQFPN68
MCU Pin number	68

2. Pinout Configuration



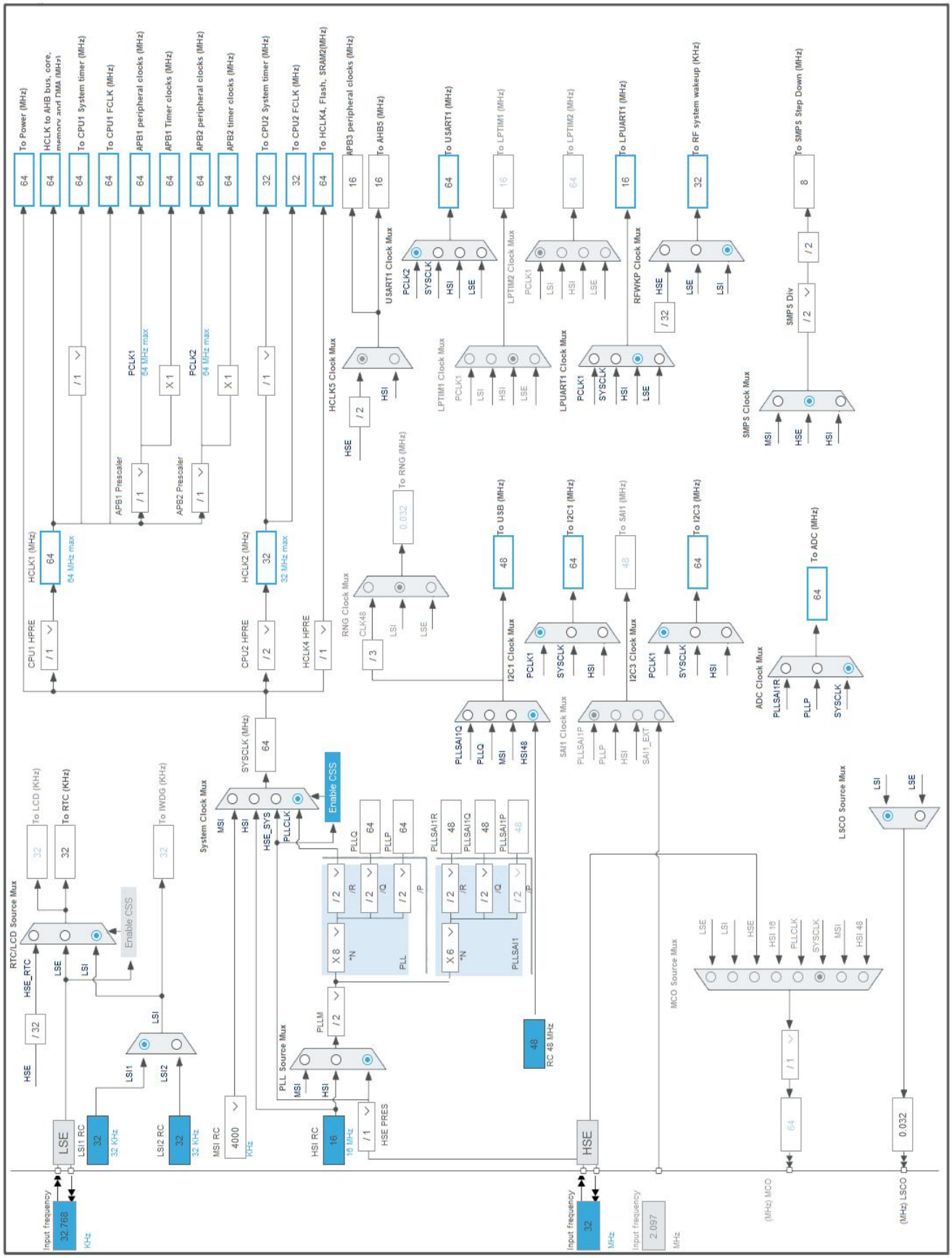
3. Pins Configuration

Pin Number VFQFPN68	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
2	PC13 *	I/O	GPIO_Output	SOC_PW
3	PC14-OSC32_IN	I/O	RCC_OSC32_IN	
4	PC15-OSC32_OUT	I/O	RCC_OSC32_OUT	
5	PH3-BOOT0	I/O	GPIO_Analog, RCC_LSCO	BOOT0
6	PB8	I/O	I2C1_SCL	STM_I2C1_SCL
7	PB9	I/O	I2C1_SDA	STM_I2C1_SDA
8	NRST	Reset		
9	PC0	I/O	ADC1_IN1	TILT_ADC0
10	PC1	I/O	ADC1_IN2	BAT_ADC1
11	PC2	I/O	GPIO_EXTI2	IMU_INT1
12	PC3 *	I/O	GPIO_Output	CHG_ENABLE
14	VDDA	Power		
15	PA0 *	I/O	GPIO_Input	BOOST_STATUS
16	PA1 *	I/O	GPIO_Output	CHARGE_STATUS
17	PA2	I/O	LPUART1_TX	
18	PA3	I/O	LPUART1_RX	
19	PA4 *	I/O	GPIO_Input	PUSH_SW
20	PA5 *	I/O	GPIO_Output	PW_ON
21	PA6	I/O	TIM16_CH1	IR_RECEIVE
22	PA7 *	I/O	GPIO_Output	BAT_CHECK_EN
23	PA8	I/O	TIM1_CH1	
24	PA9	I/O	TIM1_CH2	
25	PC4 *	I/O	GPIO_Output	DIR_CH1
26	PC5 *	I/O	GPIO_Output	DIR_CH2
27	PB2 *	I/O	GPIO_Output	IR_C
28	PB10	I/O	I2C3_SCL	
29	PB11	I/O	I2C3_SDA	
30	VDD	Power		
31	RF1	MonoIO	RF_RF1	
32	VSSRF	Power		
33	VDDRF	Power		
34	OSC_OUT	MonoIO	RCC_OSC_OUT	
35	OSC_IN	MonoIO	RCC_OSC_IN	
36	AT0	NC		
37	AT1	NC		

Pin Number VFQFPN68	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
38	PB0	I/O	GPIO_EXTI0	ENC_RX4
39	PB1	I/O	GPIO_EXTI1	ENC_LX4
40	PE4 *	I/O	GPIO_Output	MOTO_DRIVE_SLEEP
41	VFBSMPS	Power		
42	VSSSMPS	Power		
43	VLXSMPS	Power		
44	VDDSMPS	Power		
45	VDD	Power		
46	PB12 *	I/O	GPIO_Output	PW_LED
47	PB13 *	I/O	GPIO_Input	ENC_RB
48	PB14 *	I/O	GPIO_Input	ENC_LB
49	PB15 *	I/O	GPIO_Input	PG_STATUS
50	PC6 *	I/O	GPIO_Output	DIR_CH3
51	PA10	I/O	TIM1_CH3	
52	PA11	I/O	USB_DM	
53	PA12	I/O	USB_DP	
54	PA13	I/O	SYS_JTMS-SWDIO	
55	VDDUSB	Power		
56	PA14	I/O	SYS_JTCK-SWCLK	
57	PA15 *	I/O	GPIO_Input	TP
58	PC10 *	I/O	GPIO_Output	FRONT_SHUT_TOF
59	PC11 *	I/O	GPIO_Output	DOWNL_SHUT_TOF
60	PC12 *	I/O	GPIO_Output	DOWNR_SHUT_TOF
61	PD0 *	I/O	GPIO_Output	FRONTL_SHUT_TOF
62	PD1 *	I/O	GPIO_Output	FRONTR_SHUT_TOF
63	PB3	I/O	TIM2_CH2	VMREF_RLFO
64	PB4 *	I/O	GPIO_Output	STC_RSTIO
65	PB5 *	I/O	GPIO_Input	STC_ALM
66	PB6	I/O	USART1_TX	
67	PB7	I/O	USART1_RX	
68	VDD	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	wb55
Project Folder	D:\hisilicon\4-1. Homebot\2.PROGRAM\wb55
Toolchain / IDE	EWARM V8
Firmware Package Name and Version	STM32Cube FW_WB V1.1.1

5.2. 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	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

6. Power Consumption Calculator report

6.1. Microcontroller Selection

Series	STM32WB
Line	STM32WBx5
MCU	STM32WB55REVx
Datasheet	DS11929_Rev3

6.2. Parameter Selection

Temperature	25
Vdd	3.0

7. IPs and Middleware Configuration

7.1. ADC1

IN1: IN1 Single-ended

IN2: IN2 Single-ended

7.1.1. Parameter Settings:

ADC_Settings:

Clock Prescaler	**Asynchronous clock mode divided by 6 ***
Resolution	ADC 12-bit resolution
Data Alignment	Right alignment
Scan Conversion Mode	Enabled
Continuous Conversion Mode	**Enabled ***
Discontinuous Conversion Mode	Disabled
DMA Continuous Requests	**Enabled ***
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	**2 ***
External Trigger Conversion Source	Regular Conversion launched by software
External Trigger Conversion Edge	None
Rank	1
Channel	Channel 1
Sampling Time	**92.5 Cycles ***
Offset Number	No offset
Rank	**2 ***
Channel	Channel 1
Sampling Time	**92.5 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

7.2. HSEM

mode: Activated

7.3. I2C1

I2C: I2C

7.3.1. Parameter Settings:

Timing configuration:

Custom Timing	Disabled
I2C Speed Mode	**Fast Mode ***
I2C Speed Frequency (KHz)	400
Rise Time (ns)	0
Fall Time (ns)	0
Coefficient of Digital Filter	0
Analog Filter	Enabled
Timing	**0x00602173 ***

Slave Features:

Clock No Stretch Mode	Disabled
General Call Address Detection	Disabled
Primary Address Length selection	7-bit
Dual Address Acknowledged	Disabled
Primary slave address	0

7.4. I2C3

mode: I2C

7.4.1. Parameter Settings:

Timing configuration:

Custom Timing	Disabled
I2C Speed Mode	**Fast Mode ***
I2C Speed Frequency (KHz)	400
Rise Time (ns)	0
Fall Time (ns)	0
Coefficient of Digital Filter	0

Analog Filter	Enabled
Timing	**0x00602173 ***

Slave Features:

Clock No Stretch Mode	Disabled
General Call Address Detection	Disabled
Primary Address Length selection	7-bit
Dual Address Acknowledged	Disabled
Primary slave address	0

7.5. LPUART1

Mode: Asynchronous

7.5.1. Parameter Settings:

Basic Parameters:

Baud Rate	**230400 ***
Word Length	7 Bits (including Parity)
Parity	None
Stop Bits	1

Advanced Parameters:

Data Direction	Receive and Transmit
Single Sample	Disable
Prescaler	clock /1
Fifo Mode	**FIFO mode enable ***
Txfifo Threshold	**7 eighth full configuration ***
Rxfifo Threshold	**7 eighth full configuration ***

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

7.6. RCC

High Speed Clock (HSE): Crystal/Ceramic Resonator
Low Speed Clock (LSE) : Crystal/Ceramic Resonator
mode: LSCO Clock Output
7.6.1. Parameter Settings:

System Parameters:

VDD voltage (V)	3.3
Instruction Cache	Enabled
Prefetch Buffer	Disabled
Data Cache	Enabled
Flash Latency(WS)	3 WS (4 CPU cycle)

RCC Parameters:

HSI Calibration Value	16
MSI Calibration Value	0
MSI Auto Calibration	Disabled
MSI State	Enabled
HSI State	Enabled
HSE Startup Timout Value (ms)	100
LSE Startup Timout Value (ms)	5000

Power Parameters:

Power Regulator Voltage Scale	Power Regulator Voltage Scale 1

Peripherals Clock Configuration:

Generate the peripherals clock configuration	TRUE

7.7. RF

mode: Activate RF1

7.8. RTC

mode: Activate Clock Source
mode: Activate Calendar
7.8.1. Parameter Settings:

General:

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

Calendar Time:

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

Calendar Date:

Week Day	Monday
Month	January

7.9. SYS

Debug: Serial Wire

Timebase Source: SysTick

7.10. TIM1

Channel1: PWM Generation CH1

Channel2: PWM Generation CH2

Channel3: PWM Generation CH3

7.10.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	**1 ***
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value)	0
Internal Clock Division (CKD)	No Division
Repetition Counter (RCR - 8 bits value)	0
auto-reload preload	Disable

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)
Trigger Event Selection TRGO2	Reset (UG bit from TIMx_EGR)

Break And Dead Time management - BRK Configuration:

BRK State	Disable
BRK Polarity	High
BRK Filter (4 bits value)	0
BRK Sources Configuration	
- Digital Input	Disable
- COMP1	Disable
- COMP2	Disable

Break And Dead Time management - BRK2 Configuration:

BRK2 State	Disable

BRK2 Polarity	High
BRK2 Filter (4 bits value)	0
BRK2 Sources Configuration	
- Digital Input	Disable
- COMP1	Disable
- COMP2	Disable

Break And Dead Time management - Output Configuration:

Automatic Output State	Disable
Off State Selection for Run Mode (OSSR)	Disable
Off State Selection for Idle Mode (OSSI)	Disable
Lock Configuration	Off

Clear Input:

Clear Input Source	Disable

PWM Generation Channel 1:

Mode	PWM mode 1
Pulse (16 bits value)	0
Fast Mode	**Enable ***
CH Polarity	High
CH Idle State	Reset

PWM Generation Channel 2:

Mode	PWM mode 1
Pulse (16 bits value)	0
Fast Mode	**Enable ***
CH Polarity	High
CH Idle State	Reset

PWM Generation Channel 3:

Mode	PWM mode 1
Pulse (16 bits value)	0
Fast Mode	**Enable ***
CH Polarity	High
CH Idle State	Reset

7.11. TIM2

Channel2: PWM Generation CH2

7.11.1. Parameter Settings:

Counter Settings:

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

Counter Period (AutoReload Register - 32 bits value)	**6400-1 ***
Internal Clock Division (CKD)	No Division
auto-reload preload	Disable

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)

Clear Input:

Clear Input Source	Disable

PWM Generation Channel 2:

Mode	PWM mode 1
Pulse (32 bits value)	**2560 ***
Fast Mode	Disable
CH Polarity	High

7.12. TIM16

mode: Activated

Channel1: Input Capture direct mode

7.12.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	**64-1 ***
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value)	**0xffff ***
Internal Clock Division (CKD)	No Division
Repetition Counter (RCR - 8 bits value)	0
auto-reload preload	Disable

Input Capture Channel 1:

Polarity Selection	**Both Edges ***
IC Selection	Direct
Prescaler Division Ratio	No division
Input Filter (4 bits value)	0

7.13. TIM17

mode: Activated

7.13.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	**64-1 ***
Counter Mode	Up
Counter Period (AutoReload Register - 16 bits value)	**1000-1 ***
Internal Clock Division (CKD)	No Division
Repetition Counter (RCR - 8 bits value)	0
auto-reload preload	Disable

7.14. USART1

Mode: Asynchronous

7.14.1. 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
ClockPrescaler	clock /1
Fifo Mode	**Enable ***
Txfifo Threshold	**7 eighth full configuration ***
Rxfifo Threshold	**7 eighth full configuration ***

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

7.15. USB

mode: Device (FS)

7.15.1. Parameter Settings:

Basic Parameters:

Speed	Full Speed 12MBit/s
Physical interface	Internal Phy
Sof Enable	Disabled

Power Parameters:

Low Power	Disabled
Link Power Management	Disabled
Battery Charging	Disabled

7.16. STM32_WPAN

mode: BLE

7.16.1. BLE Applications and Services:

BLE Application Type:

BLE Application Type	Server profile

Server Mode:

BT SIG Beacon	Disabled
BT SIG Blood Pressure Sensor	Disabled
BT SIG Health Thermometer Sensor	Disabled
BT SIG Heart Rate Sensor	Disabled
Custom P2P Server	Enabled
Custom Template	Disabled

BLE Services Configuration:

The device needs to support the Peripheral Role	1
The device needs to support the Central Role	0
BLE_CFG_SVC_MAX_NBR_CB	7
BLE_CFG_CLT_MAX_NBR_CB	0

P2P Service:

P2P_SERVER_NUMBER	P2P_SERVER1

Local Name:

LOCAL_NAME	P2PSRV1

7.16.2. Configuration:

HW Timer Server:

CFG_HW_TS_MAX_NBR_CONCURRENT_TIMER	6
CFG_HW_TS_NVIC_RTC_WAKEUP_IT_PREEMPTPRIO	3
CFG_HW_TS_NVIC_RTC_WAKEUP_IT_SUBPRIO	0
CFG_HW_TS_USE_PRIMASK_AS_CRITICAL_SECTION	1
CFG_HW_TS_RTC_HANDLER_MAX_DELAY	(10 * (LSI_VALUE/1000))
CFG_HW_TS_RTC_WAKEUP_HANDLER_ID	RTC_WKUP_IRQn

HW UART:

CFG_HW_LPUART1_ENABLED	Disabled
CFG_HW_LPUART1_DMA_TX_SUPPORTED	Disabled
CFG_HW_USART1_ENABLED	Disabled
CFG_HW_USART1_DMA_TX_SUPPORTED	Disabled

Generic parameters:

CFG_HW_RESET_BY_FW	Enabled
CFG_DEBUGGER_SUPPORTED	Enabled
CFG_DEBUG_BLE_TRACE	Disabled
CFG_DEBUG_APP_TRACE	Disabled

Application parameters:

DBG_TRACE_UART_CFG	You need to activate either CFG_HW_UART1 or CFG_HW_LPUART1
CFG_CONSOLE_MENU	You need to activate either CFG_HW_UART1 or CFG_HW_LPUART1
CFG_ADV_BD_ADDRESS	0
CFG_FAST_CONN_ADV_INTERVAL_MIN	80
CFG_FAST_CONN_ADV_INTERVAL_MAX	100
CFG_LP_CONN_ADV_INTERVAL_MIN	1000
CFG_LP_CONN_ADV_INTERVAL_MAX	2500
CFG_IO_CAPABILITY	Display only
CFG_MITM_PROTECTION	MITM protection required
L2CAP_REQUEST_NEW_CONN_PARAM	0
CFG_LPM_SUPPORTED	Disabled
CFG_RTCCLK_DIVIDER_CONF	0

Debug options:

BLE_DBG_P2P_STM_EN	Disabled

7.16.3. Parameter Settings:

No CTS for USART1

*** User modified value**

8. System Configuration

8.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
ADC1	PC0	ADC1_IN1	Analog mode	No pull-up and no pull-down	n/a	TILT_ADC0
	PC1	ADC1_IN2	Analog mode	No pull-up and no pull-down	n/a	BAT_ADC1
I2C1	PB8	I2C1_SCL	Alternate Function Open Drain	Pull-up	Low	STM_I2C1_SCL
	PB9	I2C1_SDA	Alternate Function Open Drain	Pull-up	Low	STM_I2C1_SDA
I2C3	PB10	I2C3_SCL	Alternate Function Open Drain	Pull-up	Low	
	PB11	I2C3_SDA	Alternate Function Open Drain	Pull-up	Low	
LPUART1	PA2	LPUART1_TX	Alternate Function Push Pull	No pull-up and no pull-down	Low	
	PA3	LPUART1_RX	Alternate Function Push Pull	No pull-up and no pull-down	Low	
RCC	PC14-OSC32_IN	RCC_OSC32_IN	n/a	n/a	n/a	
	PC15-OSC32_OUT	RCC_OSC32_OUT	n/a	n/a	n/a	
	PH3-BOOT0	RCC_LSCO	Analog mode	No pull-up and no pull-down	n/a	BOOT0
	OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
	OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
RF	RF1	RF_RF1	n/a	n/a	n/a	
SYS	PA13	SYS_JTMS-SWDIO	n/a	n/a	n/a	
	PA14	SYS_JTCK-SWCLK	n/a	n/a	n/a	
TIM1	PA8	TIM1_CH1	Alternate Function Push Pull	No pull-up and no pull-down	Low	
	PA9	TIM1_CH2	Alternate Function Push Pull	No pull-up and no pull-down	Low	
	PA10	TIM1_CH3	Alternate Function Push Pull	No pull-up and no pull-down	Low	
TIM2	PB3	TIM2_CH2	Alternate Function Push Pull	No pull-up and no pull-down	Low	VMREF_RLFO
TIM16	PA6	TIM16_CH1	Alternate Function Push Pull	No pull-up and no pull-down	Low	IR_RECEIVE
USART1	PB6	USART1_TX	Alternate Function Push Pull	No pull-up and no pull-down	Low	
	PB7	USART1_RX	Alternate Function Push Pull	No pull-up and no pull-down	Low	
USB	PA11	USB_DM	Alternate Function Push Pull	No pull-up and no pull-down	Low	
	PA12	USB_DP	Alternate Function Push Pull	No pull-up and no pull-down	Low	
GPIO	PC13	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	SOC_PW
	PH3-BOOT0	GPIO_Analog	Analog mode	No pull-up and no pull-down	n/a	BOOT0
	PC2	GPIO_EXTI2	External Interrupt Mode with Rising edge trigger detection	No pull-up and no pull-down	n/a	IMU_INT1

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
	PC3	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	CHG_ENABLE
	PA0	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	BOOST_STATUS
	PA1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	CHARGE_STATUS
	PA4	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	PUSH_SW
	PA5	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	PW_ON
	PA7	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	BAT_CHECK_EN
	PC4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	DIR_CH1
	PC5	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	DIR_CH2
	PB2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	IR_C
	PB0	GPIO_EXTI0	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	n/a	ENC_RX4
	PB1	GPIO_EXTI1	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	n/a	ENC_LX4
	PE4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	MOTO_DRIVE_SLEEP
	PB12	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	PW_LED
	PB13	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	ENC_RB
	PB14	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	ENC_LB
	PB15	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	PG_STATUS
	PC6	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	DIR_CH3
	PA15	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	TP
	PC10	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	FRONT_SHUT_TOF
	PC11	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	DOWNL_SHUT_TOF
	PC12	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	DOWNR_SHUT_TOF
	PD0	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	FRONTL_SHUT_TOF
	PD1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	FRONTR_SHUT_TOF
	PB4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	STC_RSTIO
	PB5	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	STC_ALM

8.2. DMA configuration

DMA request	Stream	Direction	Priority
LPUART1_TX	DMA1_Channel1	Memory To Peripheral	Low
ADC1	DMA1_Channel2	Peripheral To Memory	Low

LPUART1_TX: DMA1_Channel1 DMA request Settings:

Mode:	Normal
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	Byte
Memory Data Width:	Byte

ADC1: DMA1_Channel2 DMA request Settings:

Mode:	**Circular ***
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
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	0	0
System tick timer	true	0	0
EXTI line0 interrupt	true	1	0
EXTI line1 interrupt	true	1	0
DMA1 channel1 global interrupt	true	0	0
DMA1 channel2 global interrupt	true	0	0
TIM1 update interrupt and TIM16 global interrupt	true	1	0
TIM1 trigger and commutation interrupts and TIM17 global interrupt	true	1	0
USART1 global interrupt	true	0	0
LPUART1 global interrupt	true	1	0
PVD/PVM0/PVM2 interrupts through EXTI lines 16/31/33	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
EXTI line2 interrupt	unused		
ADC1 global interrupt	unused		
USB high priority interrupt	unused		
USB low priority interrupt, USB wake-up interrupt through EXTI line 28	unused		
CPU2 SEV interrupt through EXTI line 40 and PWR CPU2 HOLD wake-up interrupt	unused		
TIM1 break interrupt	unused		
TIM1 capture compare interrupt	unused		
TIM2 global interrupt	unused		
I2C1 event interrupt	unused		
I2C1 error interrupt	unused		
I2C3 event interrupt	unused		
I2C3 error interrupt	unused		
PWR switching on the fly, end of BLE activity, end of 802.15.4 activity, end of critical radio phase interrupt	unused		

Interrupt Table	Enable	Preenmption Priority	SubPriority
HSEM global interrupt	unused		
FPU global interrupt	unused		

*** User modified value**

9. Software Pack Report