

1. Description

1.1. Project

Project Name	F3_BSP
Board Name	F4_BSP
Generated with:	STM32CubeMX 6.5.0
Date	06/14/2022

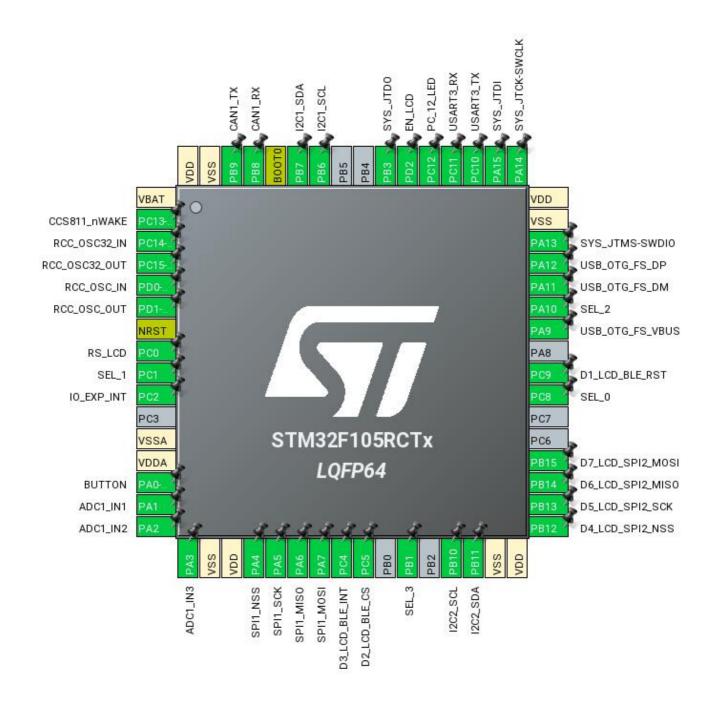
1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F105/107
MCU name	STM32F105RCTx
MCU Package	LQFP64
MCU Pin number	64

1.3. Core(s) information

Core(s)	Arm Cortex-M3

2. Pinout Configuration



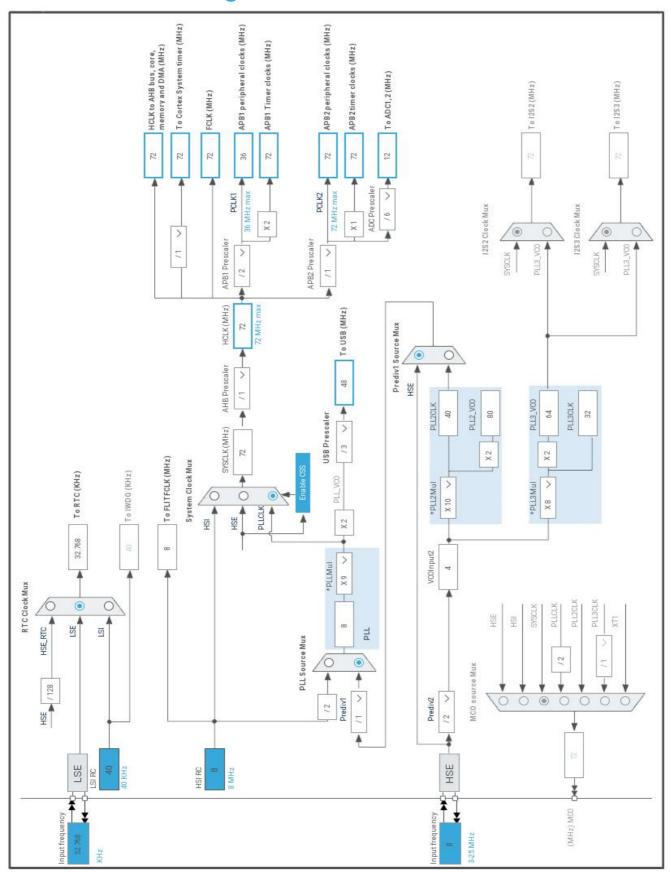
3. Pins Configuration

Pin Number	Pin Name	Pin Type	Alternate	Label
LQFP64	(function after		Function(s)	
	reset)			
1	VBAT	Power		
2	PC13-TAMPER-RTC *	I/O	GPIO_Output	CCS811_nWAKE
3	PC14-OSC32_IN	1/0	RCC_OSC32_IN	CCS011_IIWARL
4	PC15-OSC32_OUT	1/0	RCC_OSC32_OUT	
5	PD0-OSC_IN	1/0	RCC_OSC_IN	
6	PD1-OSC_OUT	I/O	RCC_OSC_OUT	
7	NRST	Reset	1.00_000_001	
8	PC0 *	I/O	GPIO_Output	RS_LCD
9	PC1 *	1/0	GPIO_Output	SEL_1
10	PC2	1/0	GPIO_EXTI2	IO_EXP_INT
12	VSSA	Power		
13	VDDA	Power		
14	PA0-WKUP	I/O	GPIO_EXTI0	BUTTON
15	PA1	I/O	ADC1_IN1	ADC1_IN1
16	PA2	I/O	ADC1_IN2	ADC1_IN2
17	PA3	I/O	ADC1_IN3	ADC1_IN3
18	VSS	Power		
19	VDD	Power		
20	PA4 *	I/O	GPIO_Output	SPI1_NSS
21	PA5	I/O	SPI1_SCK	SPI1_SCK
22	PA6	I/O	SPI1_MISO	SPI1_MISO
23	PA7	I/O	SPI1_MOSI	SPI1_MOSI
24	PC4	I/O	GPIO_EXTI4	D3_LCD_BLE_INT
25	PC5 *	I/O	GPIO_Output	D2_LCD_BLE_CS
27	PB1 *	I/O	GPIO_Output	SEL_3
29	PB10	I/O	I2C2_SCL	I2C2_SCL
30	PB11	I/O	I2C2_SDA	I2C2_SDA
31	VSS	Power		
32	VDD	Power		
33	PB12 *	I/O	GPIO_Output	D4_LCD_SPI2_NSS
34	PB13	I/O	SPI2_SCK	D5_LCD_SPI2_SCK
35	PB14 *	I/O	GPIO_Output	D6_LCD_SPI2_MISO
36	PB15	I/O	SPI2_MOSI	D7_LCD_SPI2_MOSI
39	PC8 *	I/O	GPIO_Output	SEL_0
40	PC9 *	I/O	GPIO_Output	D1_LCD_BLE_RST
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	GPIO_Output	SEL_2
44	PA11	I/O	USB_OTG_FS_DM	
45	PA12	I/O	USB_OTG_FS_DP	
46	PA13	I/O	SYS_JTMS-SWDIO	
47	VSS	Power		
48	VDD	Power		
49	PA14	I/O	SYS_JTCK-SWCLK	
50	PA15	I/O	SYS_JTDI	
51	PC10	I/O	USART3_TX	USART3_TX
52	PC11	I/O	USART3_RX	USART3_RX
53	PC12 *	I/O	GPIO_Output	PC_12_LED
54	PD2 *	I/O	GPIO_Output	EN_LCD
55	PB3	I/O	SYS_JTDO	
58	PB6	I/O	I2C1_SCL	I2C1_SCL
59	PB7	I/O	I2C1_SDA	I2C1_SDA
60	воото	Boot		
61	PB8	I/O	CAN1_RX	CAN1_RX
62	PB9	I/O	CAN1_TX	CAN1_TX
63	VSS	Power		
64	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	F3_BSP
Project Folder	/home/tommaso/Documenti/STM32/workspace/F3_BSP
Toolchain / IDE	SW4STM32
Firmware Package Name and Version	STM32Cube FW_F1 V1.8.4
Application Structure	Basic
Generate Under Root	No
Do not generate the main()	No
Minimum Heap Size	0x200
Minimum Stack Size	0xD00

5.2. Code Generation Settings

Name	Value
STM32Cube MCU packages and embedded software	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
Keep User Code when re-generating	Yes
Delete previously generated files when not re-generated	Yes
Set all free pins as analog (to optimize the power	Yes
consumption)	
Enable Full Assert	No

5.3. Advanced Settings - Generated Function Calls

Rank	Function Name	Peripheral Instance Name
1	MX_GPIO_Init	GPIO
2	MX_DMA_Init	DMA
3	SystemClock_Config	RCC
4	MX_RTC_Init	RTC
5	MX_USB_DEVICE_Init	USB_DEVICE
6	MX_CAN1_Init	CAN1
7	MX_I2C1_Init	I2C1
8	MX_TIM3_Init	TIM3
9	MX_TIM1_Init	TIM1
10	MX_CRC_Init	CRC
11	MX_TIM6_Init	TIM6

Rank	Function Name	Peripheral Instance Name
12	MX_I2C2_Init	I2C2
13	MX_SPI2_Init	SPI2
14	MX_ADC1_Init	ADC1
15	MX_TIM7_Init	TIM7
16	MX_USART3_UART_Init	USART3

6. Power Consumption Calculator report

6.1. Microcontroller Selection

Series	STM32F1
Line	STM32F105/107
MCU	STM32F105RCTx
Datasheet	DS6014_Rev10

6.2. Parameter Selection

Temperature	25
Vdd	3.3

6.3. Battery Selection

Battery	Li-SOCL2(A3400)
Capacity	3400.0 mAh
Self Discharge	0.08 %/month
Nominal Voltage	3.6 V
Max Cont Current	100.0 mA
Max Pulse Current	200.0 mA
Cells in series	1
Cells in parallel	1

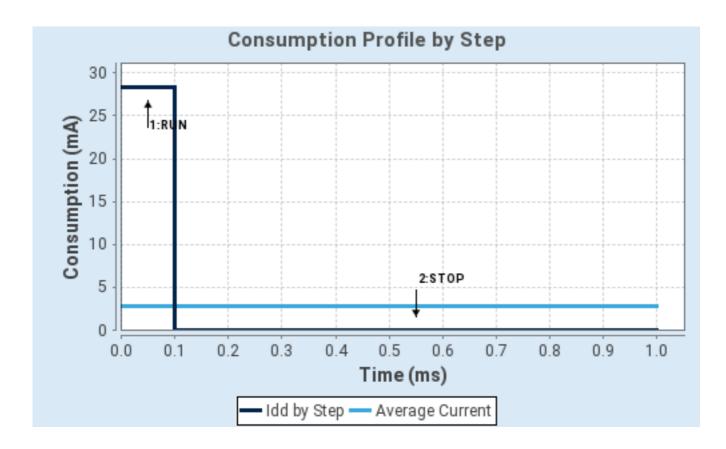
6.4. Sequence

Step	Step1	Step2
Mode	RUN	STOP
Vdd	3.3	3.3
Voltage Source	Battery	Battery
Range	No Scale	No Scale
Fetch Type	FLASH	n/a
CPU Frequency	72 MHz	0 Hz
Clock Configuration	HSE PLL	Regulator LP
Clock Source Frequency	8 MHz	0 Hz
Peripherals		
Additional Cons.	0 mA	0 mA
Average Current	28.3 mA	26 μΑ
Duration	0.1 ms	0.9 ms
DMIPS	90.0	0.0
Ta Max	100.8	105
Category	In DS Table	In DS Table

6.5. Results

Sequence Time	1 ms	Average Current	2.85 mA
Battery Life	1 month, 19 days,	Average DMIPS	61.0 DMIPS
	4 hours		

6.6. Chart



7. Peripherals and Middlewares Configuration

7.1. ADC1 mode: IN1 mode: IN2 mode: IN3

mode: Temperature Sensor Channel

7.1.1. Parameter Settings:

ADCs_Common_Settings:

Mode Independent mode

ADC_Settings:

Data Alignment Right alignment

Scan Conversion Mode Enabled
Continuous Conversion Mode Disabled
Discontinuous Conversion Mode Disabled

ADC_Regular_ConversionMode:

Enable Regular Conversions Enable Number Of Conversion 3 *

External Trigger Conversion Source Regular Conversion launched by software

Rank 1

Channel 1

Sampling Time 239.5 Cycles *

<u>Rank</u> 2 *

Channel 2 *
Sampling Time 239.5 Cycles *

<u>Rank</u> 3 *

Channel Temperature Sensor *

Sampling Time 239.5 Cycles *

ADC_Injected_ConversionMode:

Enable Injected Conversions Disable

WatchDog:

Enable Analog WatchDog Mode false

7.2. CAN1

mode: Activated

7.2.1. Parameter Settings:

Bit Timings Parameters:

Prescaler (for Time Quantum) 9 *

Time Quantum 250.0 *

Time Quanta in Bit Segment 1 13 Times *

Time Quanta in Bit Segment 2 2 Times *

Time for one Bit 4000 *

Baud Rate 250000 *

ReSynchronization Jump Width 1 Time

Basic Parameters:

Time Triggered Communication Mode

Automatic Bus-Off Management

Automatic Wake-Up Mode

Enable *

Automatic Retransmission

Enable *

Receive Fifo Locked Mode

Transmit Fifo Priority

Disable

Enable *

Advanced Parameters:

Test Mode Normal

7.3. CRC

mode: Activated

7.4. I2C1 I2C: I2C

7.4.1. Parameter Settings:

Master Features:

I2C Speed Mode Fast Mode *

I2C Clock Speed (Hz) 400000

Fast Mode Duty Cycle Duty cycle Tlow/Thigh = 2

Slave Features:

Clock No Stretch Mode Disabled
Primary Address Length selection 7-bit
Dual Address Acknowledged Disabled

Primary slave address

General Call address detection Disabled

7.5. I2C2

12C: 12C

7.5.1. Parameter Settings:

Master Features:

I2C Speed Mode Standard Mode

I2C Clock Speed (Hz) 100000

Slave Features:

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

7.6. RCC

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

7.6.1. 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
HSE Startup Timout Value (ms) 100
LSE Startup Timout Value (ms) 5000

7.7. RTC

mode: Activate Clock Source

mode: Activate Calendar

7.7.1. Parameter Settings:

Calendar Time:

Data Format BCD data format

 Hours
 0

 Minutes
 0

 Seconds
 0

General:

Auto Predivider Calculation Enabled

Asynchronous Predivider value Automatic Predivider Calculation Enabled

Output Alarm pulse signal on the TAMPER pin

Calendar Date:

Week Day Monday
Month January
Date 1
Year 21 *

7.8. SPI1

Mode: Full-Duplex Master

7.8.1. Parameter Settings:

Basic Parameters:

Frame Format Motorola

Data Size 8 Bits

First Bit MSB First

Clock Parameters:

Prescaler (for Baud Rate) 128 *

Baud Rate 562.5 KBits/s *

Clock Polarity (CPOL) Low

Clock Phase (CPHA) 2 Edge *

Advanced Parameters:

CRC Calculation Disabled
NSS Signal Type Software

7.9. SPI2

Mode: Half-Duplex Master

7.9.1. Parameter Settings:

Basic Parameters:

Frame Format Motorola

Data Size 8 Bits

First Bit MSB First

Clock Parameters:

Prescaler (for Baud Rate) 32 *

Baud Rate 1.125 MBits/s *

Clock Polarity (CPOL) Low
Clock Phase (CPHA) 1 Edge

Advanced Parameters:

CRC Calculation Disabled
NSS Signal Type Software

7.10. SYS

Debug: JTAG (4 pins)

Timebase Source: SysTick

7.11. TIM1

Clock Source: Internal Clock

Channel1: Output Compare No Output Channel2: Output Compare No Output Channel3: Output Compare No Output Channel4: Output Compare No Output

7.11.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)

Counter Mode

Counter Period (AutoReload Register - 16 bits value)

Internal Clock Division (CKD)

Description Operator (PSD obliterator)

Repetition Counter (RCR - 8 bits value) 0

auto-reload preload Enable *

Trigger Output (TRGO) Parameters:

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

Trigger Event Selection Reset (UG bit from TIMx_EGR)

Break And Dead Time management - BRK Configuration:

BRK State Disable
BRK Polarity High

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

Output Compare No Output Channel 1:

Mode Frozen (used for Timing base)

Pulse (16 bits value)

Output compare preload

CH Polarity

CH Idle State

Disable

High

Reset

Output Compare No Output Channel 2:

Mode Frozen (used for Timing base)

Pulse (16 bits value)

Output compare preload

CH Polarity

CH Idle State

Disable

High

Reset

Output Compare No Output Channel 3:

Mode Frozen (used for Timing base)

Pulse (16 bits value) 625 *

Output compare preload Disable

CH Polarity High

CH Idle State Reset

Output Compare No Output Channel 4:

Mode Frozen (used for Timing base)

Pulse (16 bits value)

Output compare preload

CH Polarity

CH Idle State

A00 *

Disable

High

Reset

7.12. TIM3

Clock Source : Internal Clock

7.12.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value) 36000 *

Counter Mode Up

Counter Period (AutoReload Register - 16 bits value) 9999 *

Internal Clock Division (CKD)

auto-reload preload

Enable *

Trigger Output (TRGO) Parameters:

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

Trigger Event Selection Reset (UG bit from TIMx_EGR)

7.13. TIM6

mode: Activated

7.13.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value) 36000 *

Counter Mode Up

Counter Period (AutoReload Register - 16 bits value) 9999 *

auto-reload preload Enable *

Trigger Output (TRGO) Parameters:

Trigger Event Selection Reset (UG bit from TIMx_EGR)

7.14. TIM7

mode: Activated

7.14.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value) 32000 *

Counter Mode Up

Counter Period (AutoReload Register - 16 bits value) 199 *

auto-reload preload Enable *

Trigger Output (TRGO) Parameters:

Trigger Event Selection Reset (UG bit from TIMx_EGR)

7.15. USART3

Mode: Asynchronous

7.15.1. Parameter Settings:

Basic Parameters:

Baud Rate 115200

Word Length 8 Bits (including Parity)

Parity None Stop Bits 1

Advanced Parameters:

Data Direction Receive and Transmit

Over Sampling 16 Samples

7.16. USB_OTG_FS

Mode: Device_Only

mode: Activate_VBUS

7.16.1. Parameter Settings:

Speed Device Full Speed 12MBit/s

Low powerDisabledVBUS sensingEnabledSignal start of frameDisabled

7.17. STMicroelectronics.X-CUBE-BLE2.3.2.2

mode: WirelessJjBlueNRGAa2

7.17.1. Parameter Settings:

Log & Debug:

BLE2_DEBUG 0: No debug message

PRINT_CSV_FORMAT 0: .csv format message print disabled

BLUENRG2_DEBUG 0: No debug message

Basic Parameters:

HCI_READ_PACKET_SIZE 128
HCI_MAX_PAYLOAD_SIZE 128
HCI_READ_PACKET_NUM_MAX 32 *

Connection Parameters (for expert users):

 Scan Interval (SCAN_P)
 16384

 Scan Window (SCAN_L)
 16384

 Supervision Timeout (SUPERV_TIMEOUT)
 60

 Min Connection Period (CONN_P1)
 40

 Max Connection Period (CONN_P2)
 40

 Min Connection Length (CONN_L1)
 2000

 Max Connection Length (CONN_L2)
 2000

Advertising Type (ADV_DATA_TYPE)

Connectable Undirected Advertising

(ADV_IND)

Min Advertising Interval (ADV_INTERV_MIN) 1600 *

Max Advertising Interval (ADV_INTERV_MAX) 1600 *

Min Connection Event Interval (L2CAP_INTERV_MIN)

Max Connection Event Interval (L2CAP_INTERV_MAX)

20

Timeout Multiplier (L2CAP_TIMEOUT_MULTIPLIER)

600

7.17.2. Platform Settings:

Exti Line PC4
BUS IO driver SPI1
Reset Line PC9
CS Line PA4

7.18. USB DEVICE

Class For FS IP: Communication Device Class (Virtual Port Com)

7.18.1. Parameter Settings:

Basic Parameters:

USBD_MAX_NUM_INTERFACES (Maximum number of supported interfaces)

1
USBD_MAX_NUM_CONFIGURATION (Maximum number of supported configuration)

1
USBD_MAX_STR_DESC_SIZ (Maximum size for the string descriptors)

512
USBD_SELF_POWERED (Enabled self power)

Enabled

USBD_DEBUG_LEVEL (USBD Debug Level) 0: No debug message

Class Parameters:

USB CDC Rx Buffer Size 1000
USB CDC Tx Buffer Size 1000

7.18.2. Device Descriptor:

Device Descriptor:

VID (Vendor IDentifier) 1155

LANGID_STRING (Language Identifier) English(United States)

MANUFACTURER_STRING (Manufacturer Identifier) STMicroelectronics

Device Descriptor FS:

PID (Product IDentifier) 22336

PRODUCT_STRING (Product Identifier) STM32 Virtual ComPort

CONFIGURATION_STRING (Configuration Identifier) CDC Config
INTERFACE_STRING (Interface Identifier) CDC Interface

^{*} 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	PA1	ADC1_IN1	Analog mode	n/a	n/a	ADC1_IN1
	PA2	ADC1_IN2	Analog mode	n/a	n/a	ADC1_IN2
	PA3	ADC1_IN3	Analog mode	n/a	n/a	ADC1_IN3
CAN1	PB8	CAN1_RX	Input mode	Pull-up *	n/a	CAN1_RX
	PB9	CAN1_TX	Alternate Function Push Pull	n/a	High *	CAN1_TX
I2C1	PB6	I2C1_SCL	Alternate Function Open Drain	n/a	High *	I2C1_SCL
	PB7	I2C1_SDA	Alternate Function Open Drain	n/a	High *	I2C1_SDA
I2C2	PB10	I2C2_SCL	Alternate Function Open Drain	n/a	High *	I2C2_SCL
	PB11	I2C2_SDA	Alternate Function Open Drain	n/a	High *	I2C2_SDA
RCC	PC14- OSC32_IN	RCC_OSC32_IN	n/a	n/a	n/a	
	PC15- OSC32_OU T	RCC_OSC32_O UT	n/a	n/a	n/a	
	PD0- OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	PD1- OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
SPI1	PA5	SPI1_SCK	Alternate Function Push Pull	n/a	High *	SPI1_SCK
	PA6	SPI1_MISO	Input mode	No pull-up and no pull-down	n/a	SPI1_MISO
	PA7	SPI1_MOSI	Alternate Function Push Pull	n/a	High *	SPI1_MOSI
SPI2	PB13	SPI2_SCK	Alternate Function Push Pull	n/a	High *	D5_LCD_SPI2_SCK
	PB15	SPI2_MOSI	Alternate Function Push Pull	n/a	High *	D7_LCD_SPI2_MOSI
SYS	PA13	SYS_JTMS- SWDIO	n/a	n/a	n/a	
	PA14	SYS_JTCK- SWCLK	n/a	n/a	n/a	
	PA15	SYS_JTDI	n/a	n/a	n/a	
	PB3	SYS_JTDO	n/a	n/a	n/a	
USART3	PC10	USART3_TX	Alternate Function Push Pull	n/a	High *	USART3_TX
	PC11	USART3_RX	Input mode	Pull-up *	n/a	USART3_RX
USB_OTG_ FS	PA9	USB_OTG_FS_ VBUS	Input mode	No pull-up and no pull-down	n/a	

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
	PA11	USB_OTG_FS_ DM	n/a	n/a	n/a	
	PA12	USB_OTG_FS_ DP	n/a	n/a	n/a	
GPIO	PC13- TAMPER- RTC	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	CCS811_nWAKE
	PC0	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	RS_LCD
	PC1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	SEL_1
	PC2	GPIO_EXTI2	External Interrupt	Pull-up *	n/a	IO_EXP_INT
			Mode with Falling			
			edge trigger detection			
	PA0-WKUP	GPIO_EXTI0	External Interrupt	No pull-up and no pull-down	n/a	BUTTON
			Mode with Rising/Falling edge			
	PA4	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	SPI1_NSS
	PC4	GPIO_EXTI4	External Interrupt Mode with Rising edge trigger detection	Pull-down *	n/a	D3_LCD_BLE_INT
	PC5	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	D2_LCD_BLE_CS
	PB1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	SEL_3
	PB12	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	D4_LCD_SPI2_NSS
	PB14	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	D6_LCD_SPI2_MISO
	PC8	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	SEL_0
	PC9	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	D1_LCD_BLE_RST
	PA10	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	SEL_2
	PC12	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	PC_12_LED
	PD2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	High *	EN_LCD

8.2. DMA configuration

DMA request	Stream	Direction	Priority
I2C1_TX	DMA1_Channel6	Memory To Peripheral	Low
I2C1_RX	DMA1_Channel7	Peripheral To Memory	Low
ADC1	DMA1_Channel1	Peripheral To Memory	Low
USART3_RX	DMA1_Channel3	Peripheral To Memory	Low
USART3_TX	DMA1_Channel2	Memory To Peripheral	Low

I2C1_TX: DMA1_Channel6 DMA request Settings:

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

I2C1_RX: DMA1_Channel7 DMA request Settings:

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

ADC1: DMA1_Channel1 DMA request Settings:

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

USART3_RX: DMA1_Channel3 DMA request Settings:

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

Memory Data Width: Byte

USART3_TX: DMA1_Channel2 DMA request Settings:

Mode: Normal
Peripheral Increment: Disable
Memory Increment: Enable *

Peripheral Data Width: Byte Memory Data Width: Byte

8.3. NVIC configuration

8.3.1. NVIC

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		
RTC global interrupt	true	7	0		
RCC global interrupt	true	1	0		
EXTI line0 interrupt	true	15	0		
EXTI line2 interrupt	true	3	0		
EXTI line4 interrupt	true	3	0		
DMA1 channel1 global interrupt	true	4	0		
DMA1 channel2 global interrupt	true	4	0		
DMA1 channel3 global interrupt	true	4	0		
DMA1 channel6 global interrupt	true	2	0		
DMA1 channel7 global interrupt	true	2	0		
CAN1 TX interrupt	true	1	0		
CAN1 RX0 interrupt	true	3	0		
TIM1 capture compare interrupt	true	2	0		
TIM3 global interrupt	true	5	0		
I2C1 event interrupt	true	2	0		
USART3 global interrupt	true	4	0		
TIM6 global interrupt	true	5	0		
TIM7 global interrupt	true	5	0		
USB OTG FS global interrupt	true	1	0		
PVD interrupt through EXTI line 16		unused			
Flash global interrupt		unused			
ADC1 and ADC2 global interrupts	unused				
CAN1 RX1 interrupt	unused				
CAN1 SCE interrupt	unused				
TIM1 break interrupt	unused				
TIM1 update interrupt	unused				
TIM1 trigger and commutation interrupts	unused				
I2C1 error interrupt	unused				
I2C2 event interrupt		unused			
	1				

Interrupt Table	Enable	Preenmption Priority	SubPriority
I2C2 error interrupt		unused	
SPI1 global interrupt	unused		
SPI2 global interrupt		unused	
RTC alarm interrupt through EXTI line 17		unused	

8.3.2. NVIC Code generation

Enabled interrupt Table	Select for init sequence ordering	Generate IRQ handler	Call HAL handler
Non maskable interrupt	false	true	false
Hard fault interrupt	false	true	false
Memory management fault	false	true	false
Prefetch fault, memory access fault	false	true	false
Undefined instruction or illegal state	false	true	false
System service call via SWI instruction	false	true	false
Debug monitor	false	true	false
Pendable request for system service	false	true	false
System tick timer	false	true	true
RTC global interrupt	false	true	true
RCC global interrupt	false	true	false
EXTI line0 interrupt	false	true	true
EXTI line2 interrupt	false	true	true
EXTI line4 interrupt	false	true	true
DMA1 channel1 global interrupt	false	true	true
DMA1 channel2 global interrupt	false	true	true
DMA1 channel3 global interrupt	false	true	true
DMA1 channel6 global interrupt	false	true	true
DMA1 channel7 global interrupt	false	true	true
CAN1 TX interrupt	false	true	true
CAN1 RX0 interrupt	false	true	true
TIM1 capture compare interrupt	false	true	true
TIM3 global interrupt	false	true	true
I2C1 event interrupt	false	true	true
USART3 global interrupt	false	true	true
TIM6 global interrupt	false	true	true
TIM7 global interrupt	false	true	true
USB OTG FS global interrupt	false	true	true

* User modified value

9. System Views

9.1. Category view

9.1.1. Current

10. Software Pack Report

10.1. Software Pack selected

Vendor	Name	Version	Component
STMicroelectronic	X-CUBE-BLE2	3.2.2	Class : Wireless
s			Group :
			BlueNRG-2
			SubGroup :
			Controller
			Version : 3.2.2
			Class : Wireless
			Group :
			BlueNRG-2
			SubGroup :
			HCI_TL
			Variant : Basic
			Version: 3.2.2
			Class : Wireless
			Group :
			BlueNRG-2
			SubGroup :
			HCI_TL_INTERF
			ACE
			Variant :
			UserBoard
			Version: 3.2.2
			Class : Wireless
			Group :
			BlueNRG-2
			SubGroup : Utils
			Version: 3.2.2

11. Docs & Resources

Type Link