1. Description

1.1. Project

Project Name	bms_pins
Generated with:	STM32CubeMX 4.4.0
Date	02/10/2015

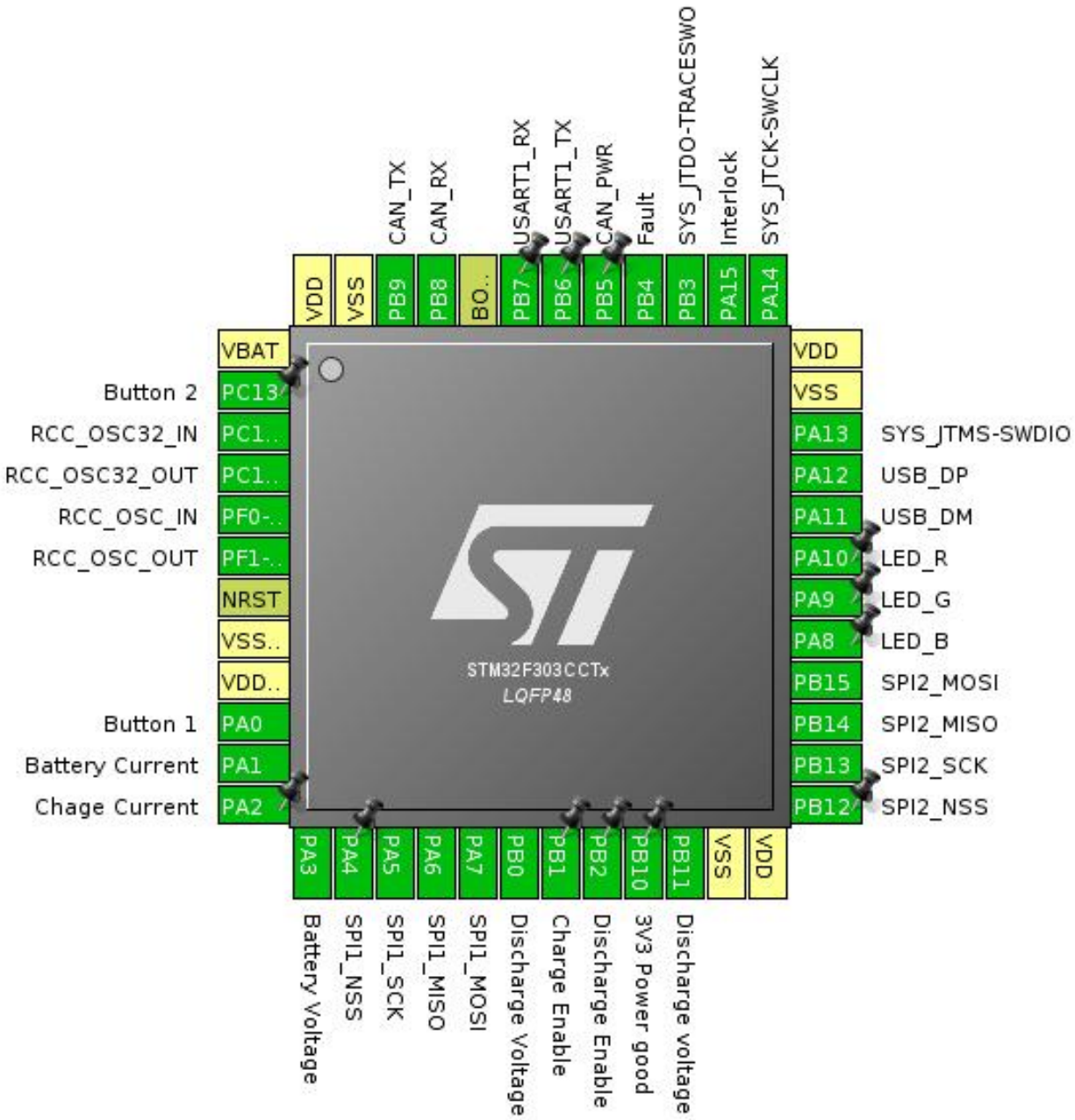
1.2. MCU

MCU Serie	STM32F3
MCU Line	STM32F303
MCU name	STM32F303CCTx
MCU Package	LQFP48
MCU Pin number	48

1.3. Caution

The report was generated although the configuration was in a modified state. It may be not accurate

2. Pinout Configuration



3. IPs and Middlewares Configuration

IP	Mode	Fonction	Pin
ADC1	IN3: IN3 Single-ended	ADC1_IN3	PA2
	Temperature Sensor Channel	N/A	N/A
	Vbat Channel	N/A	N/A
CAN	Mode	CAN_RX	PB8
		CAN_TX	PB9
COMP1	Input [+]: INP	COMP1_INP	PA1
COMP2	Input [+]: INP	COMP2_INP	PA3
COMP4	Input [+]: INP	COMP4_INP	PB0
COMP6	Input [+]: INP	COMP6_INP	PB11
CRC	Activated	N/A	N/A
IWDG	Activated	N/A	N/A
RCC	High Speed Clock (HSE): Crystal/Ceramic Resonator	RCC_OSC_IN	PF0-OSC_IN
		RCC_OSC_OUT	PF1-OSC_OUT
	Low Speed Clock (LSE) : Crystal/Ceramic Resonator	RCC_OSC32_IN	PC14-OSC32_IN
		RCC_OSC32_OUT	PC15-OSC32_OUT
RTC	Alarm A: Internal Alarm A	N/A	N/A
	Alarm B: Internal Alarm B	N/A	N/A
	WakeUp: Routed to OUT	RTC_OUT_ALARM	PC13
SPI1	Mode: Full-Duplex Master	SPI1_MISO	PA6
		SPI1_MOSI	PA7
		SPI1_SCK	PA5
	Hardware NSS Signal	SPI1_NSS	PA4
SPI2	Mode: Full-Duplex Master	SPI2_MISO	PB14
		SPI2_MOSI	PB15
		SPI2_SCK	PB13
	Hardware NSS Signal	SPI2_NSS	PB12
SYS	Debug: JTAG (5 pins)	SYS_JTCK-SWCLK	PA14
		SYS_JTDI	PA15
		SYS_JTDO-TRACESWO	PB3
		SYS_JTMS-SWDIO	PA13
		SYS_NJTRST	PB4
	System Wake-Up 1	SYS_WKUP1	PA0
	Mode:	USART1_RX	PB7

IP	Mode	Fonction	Pin
USART1	Asynchronous	USART1_TX	PB6
USB	Device (FS)	USB_DM	PA11
		USB_DP	PA12
WWDG	Activated	N/A	N/A

4. Pins Configuration

Pin	Pos	Function(s)	Label
PC13	2	RTC_OUT_ALARM	Button 2
PC14-OSC32_IN	3	RCC_OSC32_IN	
PC15-OSC32_OUT	4	RCC_OSC32_OUT	
PF0-OSC_IN	5	RCC_OSC_IN	
PF1-OSC_OUT	6	RCC_OSC_OUT	
PA0	10	SYS_WKUP1	Button 1
PA1	11	COMP1_INP	Battery Current
PA2	12	ADC1_IN3	Chage Current
PA3	13	COMP2_INP	Battery Voltage
PA4	14	SPI1_NSS	
PA5	15	SPI1_SCK	
PA6	16	SPI1_MISO	
PA7	17	SPI1_MOSI	
PB0	18	COMP4_INP	Discharge Voltage
PB1 *	19	GPIO_Output	Charge Enable
PB2 *	20	GPIO_Output	Discharge Enable
PB10 *	21	GPIO_Input	3V3 Power good
PB11	22	COMP6_INP	Discharge voltage
PB12	25	SPI2_NSS	
PB13	26	SPI2_SCK	
PB14	27	SPI2_MISO	
PB15	28	SPI2_MOSI	
PA8 *	29	GPIO_Output	LED_B
PA9 *	30	GPIO_Output	LED_G
PA10 *	31	GPIO_Output	LED_R
PA11	32	USB_DM	
PA12	33	USB_DP	
PA13	34	SYS_JTMS-SWDIO	
PA14	37	SYS_JTCK-SWCLK	
PA15	38	SYS_JTDI	Interlock
PB3	39	SYS_JTDO-TRACESWO	
PB4	40	SYS_NJTRST	Fault
PB5 *	41	GPIO_Input	CAN_PWR
PB6	42	USART1_TX	
PB7	43	USART1_RX	
PB8	45	CAN_RX	
PB9	46	CAN_TX	

* The pin is affected with an I/O function

5. Power Plugin report

5.1. Microcontroller Selection

Serie	STM32F3
Line	STM32F303
MCU	STM32F303CCTx
Datasheet	023353_Rev8

5.2. Parameter Selection

Temperature	25
Vdd	3.6