1. Description

1.1. Project

Project Name	STM32F103RD
Generated with:	STM32CubeMX 4.7.1
Date	05/12/2015

1.2. MCU

MCU Serie	STM32F1
MCU Line	STM32F103
MCU name	STM32F103RDTx
MCU Package	LQFP64
MCU Pin number	64

2. Pinout Configuration
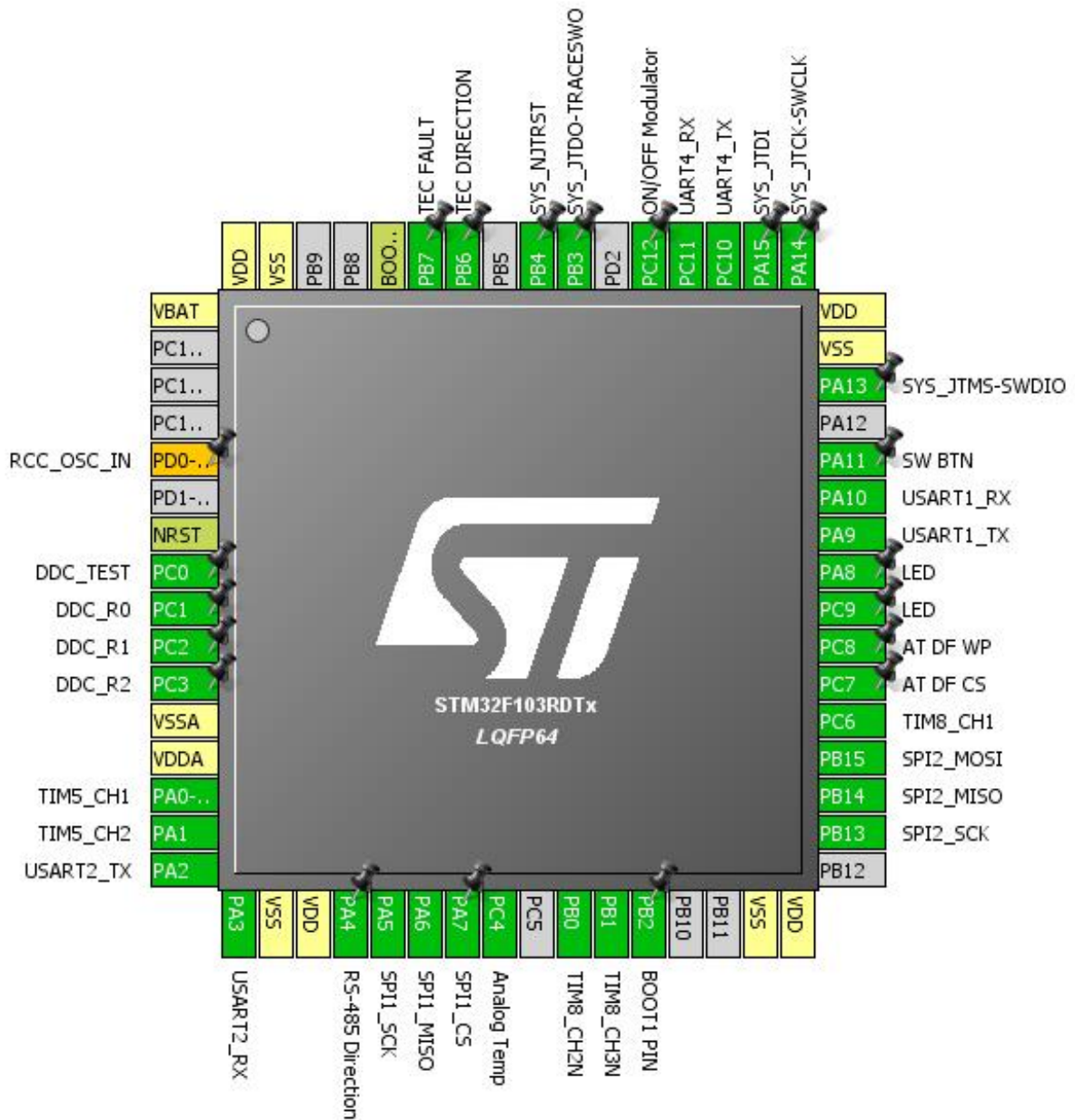
3. IPs and Middlewares Configuration

IP	Mode	Fonction	Pin
ADC1	IN14	ADC1_IN14	PC4
SPI1	Mode: Receive Only Master	SPI1_MISO	PA6
		SPI1_SCK	PA5
SPI2	Mode: Full-Duplex Master	SPI2_MISO	PB14
		SPI2_MOSI	PB15
		SPI2_SCK	PB13
SYS	Debug: JTAG(5-pin)	SYS_JTCK-SWCLK	PA14
		SYS_JTDI	PA15
		SYS_JTDO-TRACESWO	PB3
		SYS_JTMS-SWDIO	PA13
		SYS_NJTRST	PB4
TIM5	Slave Mode: External Clock Mode 1	N/A	N/A
	Trigger Source: TI1_ED	TIM5_CH1	PA0-WKUP
	Channel2: PWM Generation CH2	TIM5_CH2	PA1
TIM8	Clock Source : Internal Clock	N/A	N/A
	Channel1: PWM Generation CH1	TIM8_CH1	PC6
	Channel2: PWM Generation CH2N	TIM8_CH2N	PB0
	Channel3: PWM Generation CH3N	TIM8_CH3N	PB1
UART4	Mode: Asynchronous	UART4_RX	PC11
		UART4_TX	PC10
USART1	Mode: Asynchronous	USART1_RX	PA10
		USART1_TX	PA9
USART2	Mode: Asynchronous	USART2_RX	PA3
		USART2_TX	PA2

4. Pins Configuration

Pin	Pos	Function(s)	Label
PD0-OSC_IN *	5	RCC_OSC_IN	
PC0 **	8	GPIO_Output	DDC_TEST
PC1 **	9	GPIO_Output	DDC_R0
PC2 **	10	GPIO_Output	DDC_R1
PC3 **	11	GPIO_Output	DDC_R2
PA0-WKUP	14	TIM5_CH1	
PA1	15	TIM5_CH2	
PA2	16	USART2_TX	
PA3	17	USART2_RX	
PA4 **	20	GPIO_Output	RS-485 Direction
PA5	21	SPI1_SCK	
PA6	22	SPI1_MISO	
PA7 **	23	GPIO_Output	SPI1_CS
PC4	24	ADC1_IN14	Analog Temp
PB0	26	TIM8_CH2N	
PB1	27	TIM8_CH3N	
PB2 **	28	GPIO_Input	BOOT1 PIN
PB13	34	SPI2_SCK	
PB14	35	SPI2_MISO	
PB15	36	SPI2_MOSI	
PC6	37	TIM8_CH1	
PC7 **	38	GPIO_Output	AT DF CS
PC8 **	39	GPIO_Output	AT DF WP
PC9 **	40	GPIO_Output	LED
PA8 **	41	GPIO_Output	LED
PA9	42	USART1_TX	
PA10	43	USART1_RX	
PA11 **	44	GPIO_Output	SW BTN
PA13	46	SYS_JTMS-SWDIO	
PA14	49	SYS_JTCK-SWCLK	
PA15	50	SYS_JTDI	
PC10	51	UART4_TX	
PC11	52	UART4_RX	
PC12 **	53	GPIO_Output	ON/OFF Modulator
PB3	55	SYS_JTDO-TRACESWO	
PB4	56	SYS_NJTRST	
PB6 **	58	GPIO_Output	TEC DIRECTION
PB7 **	59	GPIO_Input	TEC FAULT

** The pin is affected with an I/O function

 * The pin is affected with a peripheral function but no peripheral mode is activated

5. Power Plugin report

5.1. Microcontroller Selection

Serie	STM32F1
Line	STM32F103
MCU	STM32F103RDTx
Datasheet	14611_Rev9

5.2. Parameter Selection

Temperature	25
Vdd	3.3