# 1. Description

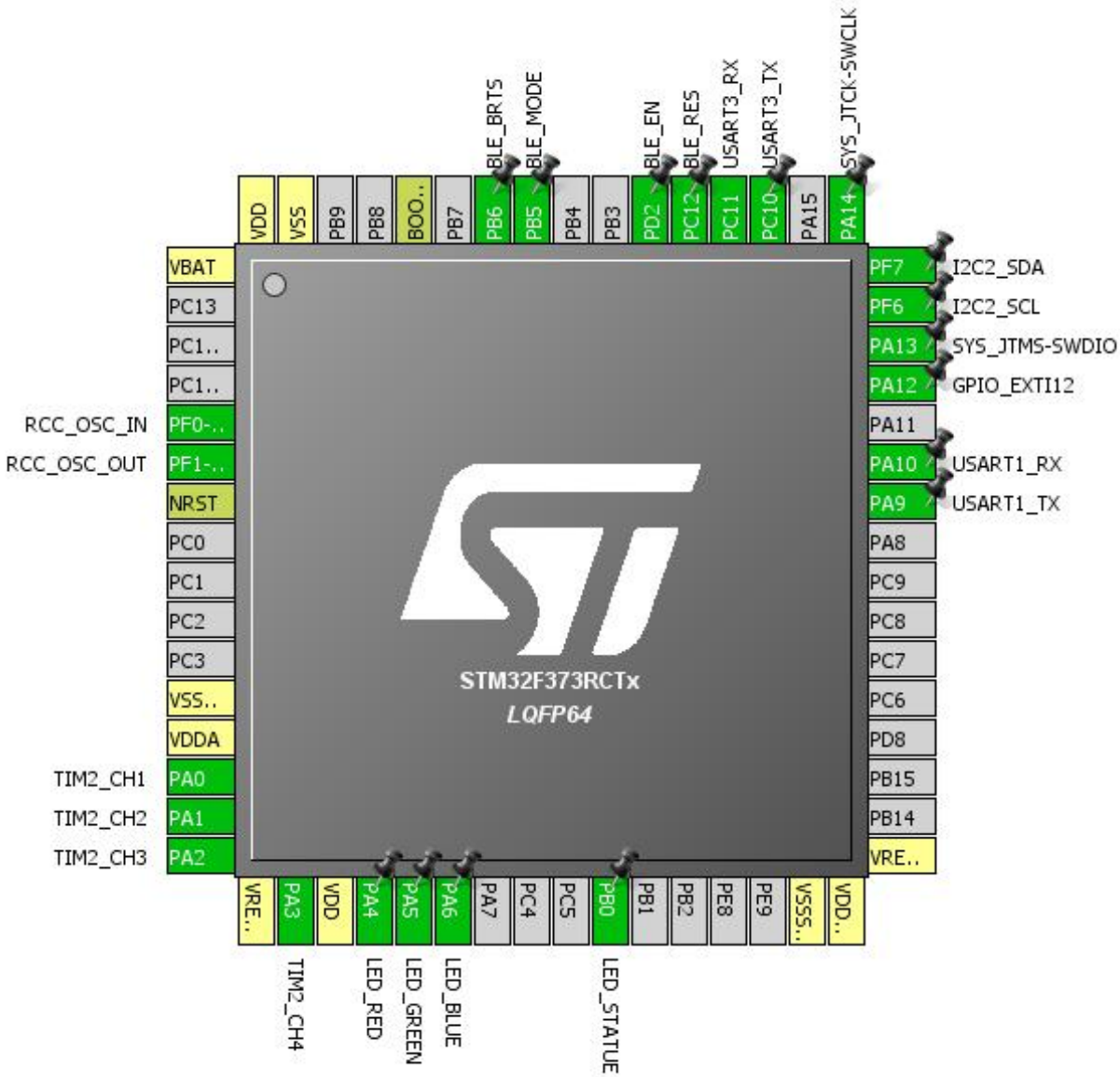
## 1.1. Project

| | |
|---|---|
| Project Name | Aircopter_V1_Demo_Poj |
| Generated with: | STM32CubeMX 4.7.0 |
| Date | 04/29/2015 |

## 1.2. MCU

| | |
|---|---|
| MCU Serie | STM32F3 |
| MCU Line | STM32F373 |
| MCU name | STM32F373RCTx |
| MCU Package | LQFP64 |
| MCU Pin number | 64 |

# 2. Pinout Configuration



# 3. IPs and Middlewares Configuration

| IP | Mode | Fonction | Pin |
|---|---|---|---|
| I2C2 | I2C:<br>I2C | I2C2_SCL | PF6 |
| | | I2C2_SDA | PF7 |
| RCC | High Speed Clock (HSE):<br>Crystal/Ceramic Resonator | RCC_OSC_IN | PF0-OSC_IN |
| | | RCC_OSC_OUT | PF1-OSC_OUT |
| SYS | Debug:<br>Serial Wire | SYS_JTCK-SWCLK | PA14 |
| | | SYS_JTMS-SWDIO | PA13 |
| TIM2 | Clock Source :<br>Internal Clock | N/A | N/A |
| | Channel1:<br>PWM Generation CH1 | TIM2_CH1 | PA0 |
| | Channel2:<br>PWM Generation CH2 | TIM2_CH2 | PA1 |
| | Channel3:<br>PWM Generation CH3 | TIM2_CH3 | PA2 |
| | Channel4:<br>PWM Generation CH4 | TIM2_CH4 | PA3 |
| USART1 | Mode:<br>Asynchronous | USART1_RX | PA10 |
| | | USART1_TX | PA9 |
| USART3 | Mode:<br>Asynchronous | USART3_RX | PC11 |
| | | USART3_TX | PC10 |

| MiddleWare | Mode |
|---|---|
| FREERTOS | Enabled |

# 4. Pins Configuration

| Pin | Pos | Function(s) | Label |
|---|---|---|---|
| PF0-OSC_IN | 5 | RCC_OSC_IN | |
| PF1-OSC_OUT | 6 | RCC_OSC_OUT | |
| PA0 | 14 | TIM2_CH1 | |
| PA1 | 15 | TIM2_CH2 | |
| PA2 | 16 | TIM2_CH3 | |
| PA3 | 18 | TIM2_CH4 | |
| PA4 * | 20 | GPIO_Output | LED_RED |
| PA5 * | 21 | GPIO_Output | LED_GREEN |
| PA6 * | 22 | GPIO_Output | LED_BLUE |
| PB0 * | 26 | GPIO_Output | LED_STATUE |
| PA9 | 42 | USART1_TX | |
| PA10 | 43 | USART1_RX | |
| PA12 | 45 | GPIO_EXTI12 | |
| PA13 | 46 | SYS_JTMS-SWDIO | |
| PF6 | 47 | I2C2_SCL | |
| PF7 | 48 | I2C2_SDA | |
| PA14 | 49 | SYS_JTCK-SWCLK | |
| PC10 | 51 | USART3_TX | |
| PC11 | 52 | USART3_RX | |
| PC12 * | 53 | GPIO_Output | BLE_RES |
| PD2 * | 54 | GPIO_Output | BLE_EN |
| PB5 * | 57 | GPIO_Output | BLE_MODE |
| PB6 * | 58 | GPIO_Output | BLE_BRTS |

* The pin is affected with an I/O function

# 5. Power Plugin report

## 5.1. Microcontroller Selection

| | |
|---|---|
| Serie | STM32F3 |
| Line | STM32F373 |
| MCU | STM32F373RCTx |
| Datasheet | 022691_Rev5 |

## 5.2. Parameter Selection

| | |
|---|---|
| Temperature | 25 |
| Vdd | 3.6 |

# 6. Software Project

## 6.1. Project Settings

| Name | Value |
|---|---|
| Project Name | Aircopter_V1_Demo_Poj |
| Project Folder | D:\project\Aircopter_V1_Demo\Aircopter_V1_Demo_Poj |
| Toolchain / IDE | EWARM |
| Firmware Package Name and Version | STM32Cube FW_F3 V1.1.1 |

## 6.2. 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 |

## 6.3. Toolchains Settings

| Name | Value |
|---|---|
| Compiler Optimizations | Balanced Size/Speed |