

## 1. Description

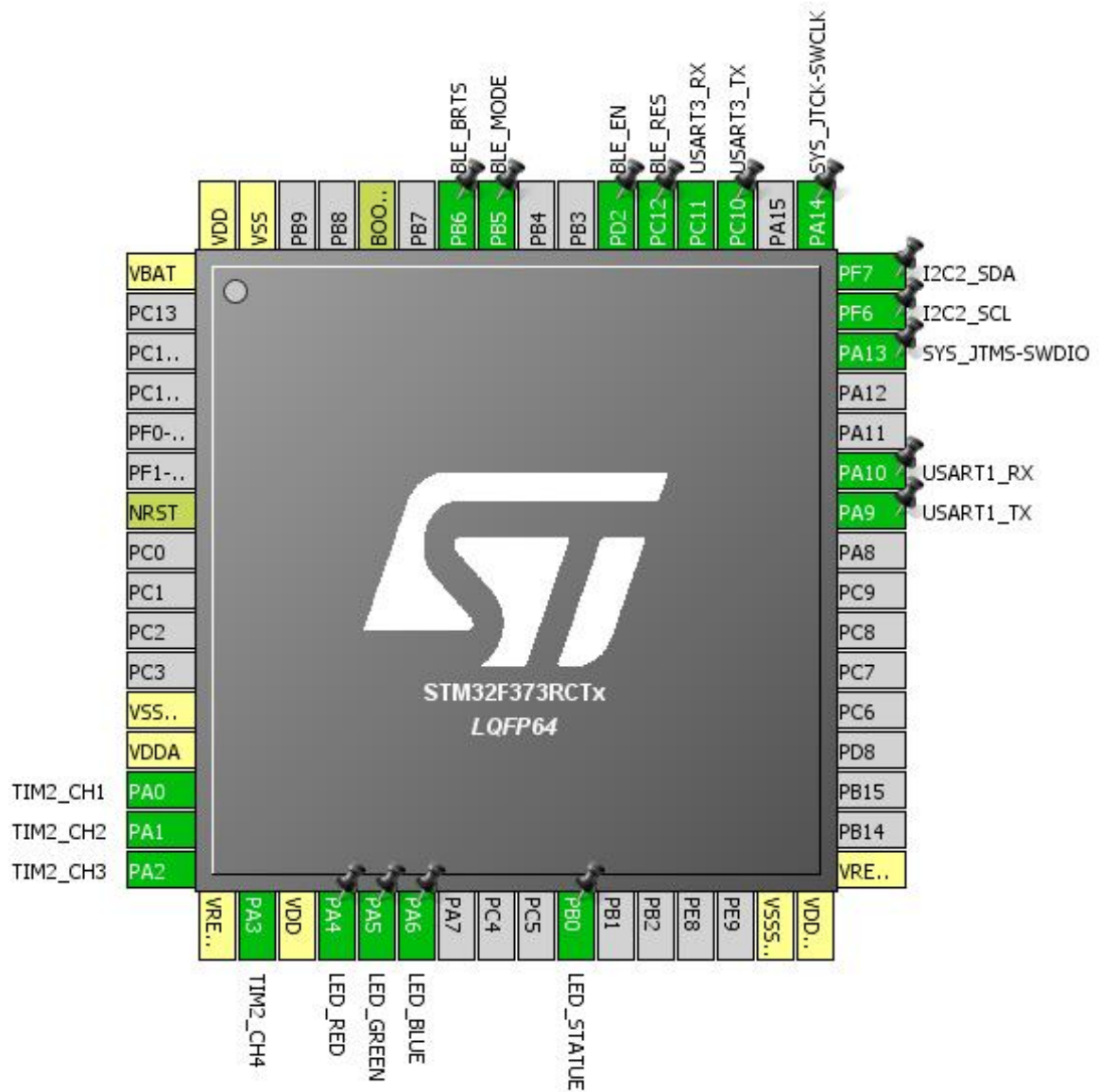
### 1.1. Project

|                 |                       |
|-----------------|-----------------------|
| Project Name    | Aircopter_V1_Demo_Poj |
| Generated with: | STM32CubeMX 4.7.0     |
| Date            | 04/09/2015            |

### 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  |
| 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      |
|--------|-----|----------------|------------|
| 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      |            |
| 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 |