# 1. Description

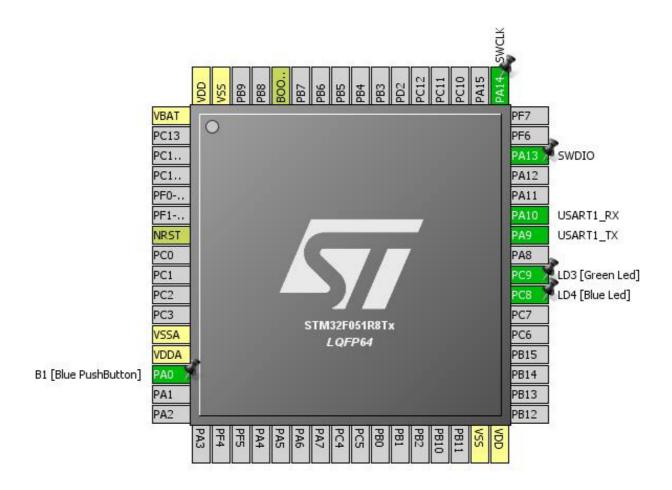
## 1.1. Project

| Project Name    | ServoLifter       |
|-----------------|-------------------|
| Generated with: | STM32CubeMX 4.3.0 |
| Date            | 07/23/2014        |

### 1.2. MCU

| MCU Serie      | STM32F0       |
|----------------|---------------|
| MCU Line       | STM32F0x1     |
| MCU name       | STM32F051R8Tx |
| MCU Package    | LQFP64        |
| MCU Pin number | 64            |

## 2. Pinout Configuration



## 3. IPs and Middlewares Configuration

| IP          | Mode              | Fonction  | Pin  |
|-------------|-------------------|-----------|------|
| 0.40        | Octob Mina Dahara | SYS_SWCLK | PA14 |
| SYS Serial- | Serial-WireDebug  | SYS_SWDIO | PA13 |
|             | Mode:             | USART1_RX | PA10 |
| USART1      | Asynchronous      | USART1_TX | PA9  |

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

### ServoLifter Project

## 4. Pins Configuration

| Pin   | Pos | Function(s) | Label                |
|-------|-----|-------------|----------------------|
| PA0   | 14  | GPIO_EXTI0  | B1 [Blue PushButton] |
| PC8 * | 39  | GPIO_Output | LD4 [Blue Led]       |
| PC9 * | 40  | GPIO_Output | LD3 [Green Led]      |
| PA9   | 42  | USART1_TX   |                      |
| PA10  | 43  | USART1_RX   |                      |
| PA13  | 46  | SYS_SWDIO   | SWDIO                |
| PA14  | 49  | SYS_SWCLK   | SWCLK                |

<sup>\*</sup> The pin is affected with an I/O function

## 5. Power Plugin report

#### 5.1. Microcontroller Selection

| Serie     | STM32F0       |
|-----------|---------------|
| Line      | STM32F0x1     |
| MCU       | STM32F051R8Tx |
| Datasheet | 022265_Rev4   |

#### 5.2. Parameter Selection

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

### 5.3. Battery Selection

| Battery           | Not set     |
|-------------------|-------------|
| Capacity          | 0.0 mAh     |
| Self discharge    | 0.0 %/month |
| Nominal voltage   | 0.0 V       |
| Max Cont Current  | 0.0 mA      |
| Max Pulse Current | 0.0 mA      |
| Cells in series   | 1           |
| Cells in parallel | 1           |

#### ServoLifter Project

## 6. Software Project

### 6.1. Project Settings

| Name                              | Value  |  |
|-----------------------------------|--|--|
| Project Name                      | ServoLifter                                  |  |
| Project Folder                    | C:\Users\mmi\Documents\STM32Cube\ServoLifter |  |
| Toolchain / IDE                   | MDK-ARM 4.73                                 |  |
| Firmware Package Name and Version | STM32Cube FW_F0 V1.0.0                       |  |

### 6.2. Code Generation Settings

| Name  | Value                                 |
|---|---------------------------------------|
| STM32Cube Firmware Library Package                            | Copy only the necessary library files |
| 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            | No                                    |
| consumption)  |                                       |

#### 6.3. Toolchains Settings

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