1. Description

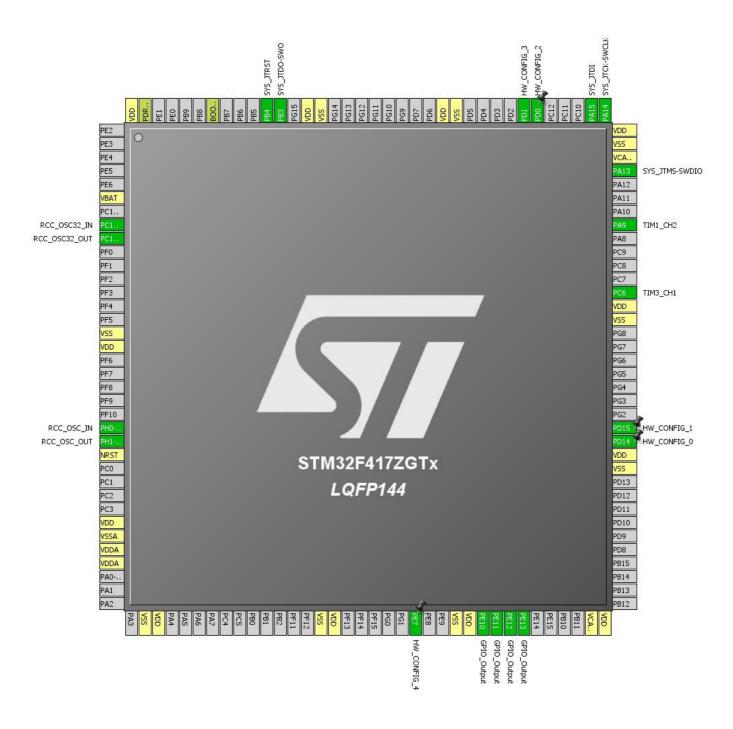
1.1. Project

| Project Name | Pokus rtos |
|-----------------|-------------------|
| Generated with: | STM32CubeMX 4.3.0 |
| Date | 07/29/2014 |

1.2. MCU

| MCU Serie | STM32F4 |
|----------------|---------------|
| MCU Line | STM32F407/417 |
| MCU name | STM32F417ZGTx |
| MCU Package | LQFP144 |
| MCU Pin number | 144 |

2. Pinout Configuration



3. IPs and Middlewares Configuration

| IP | Mode | Fonction | Pin |
|----------------------------------|----------------------------------|----------------|----------------|
| | High Speed Clock (HSE): | RCC_OSC_IN | PH0-OSC_IN |
| D00 | Crystal/Ceramic Resonator | RCC_OSC_OUT | PH1-OSC_OUT |
| RCC | Low Speed Clock (LSE): | RCC_OSC32_IN | PC14-OSC32_IN |
| | Crystal/Ceramic Resonator | RCC_OSC32_OUT | PC15-OSC32_OUT |
| | | SYS_JTCK-SWCLK | PA14 |
| | | SYS_JTDI | PA15 |
| SYS | Debug: JTAG (5 pins) | SYS_JTDO-SWO | PB3 |
| | | SYS_JTMS-SWDIO | PA13 |
| | | SYS_JTRST | PB4 |
| Clock Source : Internal Clock | | N/A | N/A |
| TIM1 | Channel2: PWM Generation CH2 | TIM1_CH2 | PA9 |
| | Clock Source : Internal Clock | N/A | N/A |
| TIM3 | Channel1: PWM Generation CH1 | TIM3_CH1 | PC6 |

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

4. Pins Configuration

| Pin | Pos | Function(s) | Label |
|----------------|-----|----------------|-------------|
| PC14-OSC32_IN | 8 | RCC_OSC32_IN | |
| PC15-OSC32_OUT | 9 | RCC_OSC32_OUT | |
| PH0-OSC_IN | 23 | RCC_OSC_IN | |
| PH1-OSC_OUT | 24 | RCC_OSC_OUT | |
| PE7 * | 58 | GPIO_Input | HW_CONFIG_4 |
| PE10 * | 63 | GPIO_Output | |
| PE11 * | 64 | GPIO_Output | |
| PE12 * | 65 | GPIO_Output | |
| PE13 * | 66 | GPIO_Output | |
| PD14 * | 85 | GPIO_Input | HW_CONFIG_0 |
| PD15 * | 86 | GPIO_Input | HW_CONFIG_1 |
| PC6 | 96 | TIM3_CH1 | |
| PA9 | 101 | TIM1_CH2 | |
| PA13 | 105 | SYS_JTMS-SWDIO | |
| PA14 | 109 | SYS_JTCK-SWCLK | |
| PA15 | 110 | SYS_JTDI | |
| PD0 * | 114 | GPIO_Input | HW_CONFIG_2 |
| PD1 * | 115 | GPIO_Input | HW_CONFIG_3 |
| PB3 | 133 | SYS_JTDO-SWO | |
| PB4 | 134 | SYS_JTRST | |

^{*} The pin is affected with an I/O function

5. Power Plugin report

5.1. Microcontroller Selection

| Serie | STM32F4 |
|-----------|---------------|
| Line | STM32F407/417 |
| MCU | STM32F417ZGTx |
| Datasheet | 022063_Rev5 |

5.2. Parameter Selection

| Temperature | 25 |
|-------------|-----|
| IVAA | 3.3 |

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 |

6. Software Project

6.1. Project Settings

| Name | Value |
|-----------------------------------|---|
| Project Name | Pokus rtos |
| Project Folder | D:\Projekty\JABLOTRON\001_GX-10\004_SW\05_Atolic\Pokus rtos |
| Toolchain / IDE | TrueSTUDIO 4.3.1 |
| Firmware Package Name and Version | STM32Cube FW_F4 V1.3.0 |

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 | Yes |
| consumption) | |

6.3. Toolchains Settings

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