1. Description

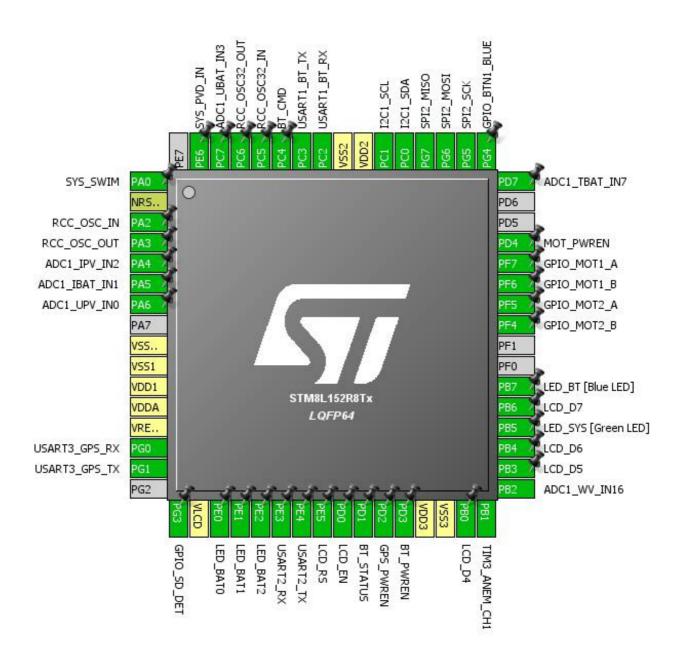
1.1. Project

| Project Name | Pinbelegung |
|-----------------|------------------|
| Board Name | No information |
| Generated with: | STM8CubeMX 1.4.0 |
| Date | 11/15/2019 |

1.2. MCU

| MCU Series | STM8L |
|----------------|--------------|
| MCU Line | STM8L151/152 |
| MCU name | STM8L152R8Tx |
| MCU Package | LQFP64 |
| MCU Pin number | 64 |

2. Pinout Configuration



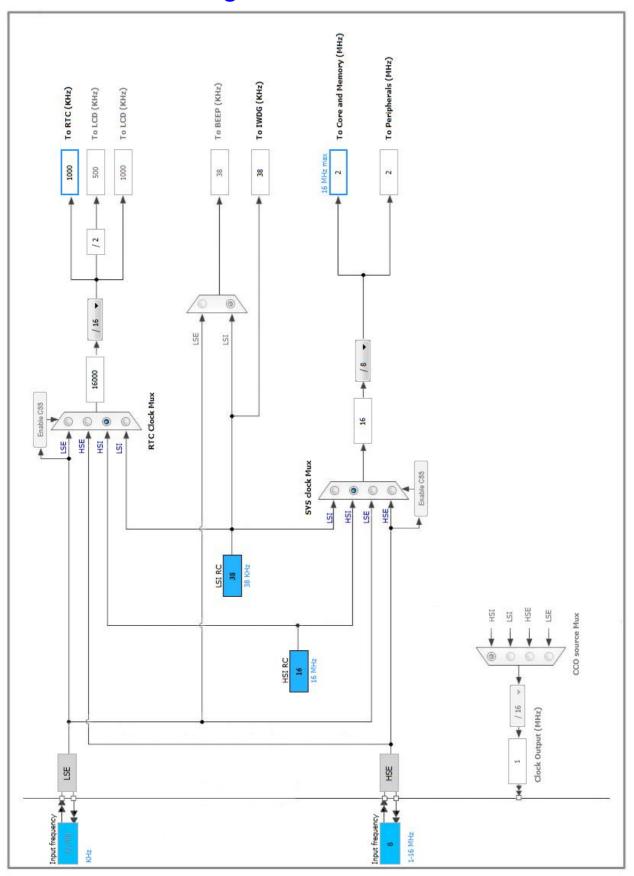
3. Pins Configuration

| Pin Number LQFP64 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|----------------------|---------------------------------------|----------|--------------------------|---------------------|
| 1 | PA0 | I/O | SYS_SWIM | |
| 2 | NRST/PA1 | Reset | 010_0vviivi | |
| 3 | PA2 | I/O | RCC_OSC_IN | |
| 4 | PA3 | I/O | RCC_OSC_OUT | |
| 5 | PA4 | I/O | ADC1_IN2 | ADC1_IPV_IN2 |
| 6 | PA5 | I/O | ADC1_IN1 | ADC1_IBAT_IN1 |
| 7 | PA6 | I/O | ADC1_IN0 | ADC1_UPV_IN0 |
| 9 | VSSA/VREF- | Power | | |
| 10 | VSS1 | Power | | |
| 11 | VDD1 | Power | | |
| 12 | VDDA | Power | | |
| 13 | VREF+/VREF+_DAC | Power | | |
| 14 | PG0 | I/O | USART3_RX | USART3_GPS_RX |
| 15 | PG1 | I/O | USART3_TX | USART3_GPS_TX |
| 17 | PG3 * | I/O | GPIO_Input | GPIO_SD_DET |
| 18 | VLCD | Power | | |
| 19 | PE0 * | I/O | GPIO_Output | LED_BAT0 |
| 20 | PE1 * | I/O | GPIO_Output | LED_BAT1 |
| 21 | PE2 * | I/O | GPIO_Output | LED_BAT2 |
| 22 | PE3 | I/O | USART2_RX | |
| 23 | PE4 | I/O | USART2_TX | |
| 24 | PE5 * | I/O | GPIO_Output | LCD_RS |
| 25 | PD0 * | I/O | GPIO_Output | LCD_EN |
| 26 | PD1 * | I/O | GPIO_Input | BT_STATUS |
| 27 | PD2 * | I/O | GPIO_Output | GPS_PWREN |
| 28 | PD3 * | I/O | GPIO_Output | BT_PWREN |
| 29 | VDD3 | Power | | |
| 30 | VSS3 | Power | | |
| 31 | PB0 * | I/O | GPIO_Output | LCD_D4 |
| 32 | PB1 | I/O | TIM3_CH1 | TIM3_ANEM_CH1 |
| 33 | PB2 | I/O | ADC1_IN16 | ADC1_WV_IN16 |
| 34 | PB3 * | I/O | GPIO_Output | LCD_D5 |
| 35 | PB4 * | I/O | GPIO_Output | LCD_D6 |
| 36 | PB5 * | I/O | GPIO_Output | LED_SYS [Green LED] |
| 37 | PB6 * | I/O | GPIO_Output | LCD_D7 |
| 38 | PB7 * | I/O | GPIO_Output | LED_BT [Blue LED] |

| Pin Number LQFP64 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|----------------------|---------------------------------------|----------|--------------------------|----------------|
| 41 | PF4 * | I/O | GPIO_Output | GPIO_MOT2_B |
| 42 | PF5 * | I/O | GPIO_Output | GPIO_MOT2_A |
| 43 | PF6 * | I/O | GPIO_Output | GPIO_MOT1_B |
| 44 | PF7 * | I/O | GPIO_Output | GPIO_MOT1_A |
| 45 | PD4 * | I/O | GPIO_Input | MOT_PWREN |
| 48 | PD7 | I/O | ADC1_IN7 | ADC1_TBAT_IN7 |
| 49 | PG4 * | I/O | GPIO_Input | GPIO_BTN1_BLUE |
| 50 | PG5 | I/O | SPI2_SCK | |
| 51 | PG6 | I/O | SPI2_MOSI | |
| 52 | PG7 | I/O | SPI2_MISO | |
| 53 | PC0 | I/O | I2C1_SDA | |
| 54 | PC1 | I/O | I2C1_SCL | |
| 55 | VDD2 | Power | | |
| 56 | VSS2 | Power | | |
| 57 | PC2 | I/O | USART1_RX | USART1_BT_RX |
| 58 | PC3 | I/O | USART1_TX | USART1_BT_TX |
| 59 | PC4 * | I/O | GPIO_Output | BT_CMD |
| 60 | PC5 | I/O | RCC_OSC32_IN | |
| 61 | PC6 | I/O | RCC_OSC32_OUT | |
| 62 | PC7 | I/O | ADC1_IN3 | ADC1_UBAT_IN3 |
| 63 | PE6 | I/O | SYS_PVD_IN | |

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

4. Clock Tree Configuration



5. Power Consumption Calculator report

5.1. Microcontroller Selection

| Series | STM8L |
|-----------|--------------|
| Line | STM8L151/152 |
| MCU | STM8L152R8Tx |
| Datasheet | 17943_Rev9 |

5.2. Parameter Selection

| Temperature | 25 |
|-------------|-----|
| Vdd | 3.0 |