

1. Description

1.1. Project

| | |
|-----------------|-------------------|
| Project Name | CubeProjectOne |
| Board Name | NUCLEO-L053R8 |
| Generated with: | STM32CubeMX 4.9.0 |
| Date | 08/20/2015 |

1.2. MCU

| | |
|----------------|---------------|
| MCU Series | STM32L0 |
| MCU Line | STM32L0x3 |
| MCU name | STM32L053R8Tx |
| MCU Package | LQFP64 |
| MCU Pin number | 64 |

3. Pins Configuration

| Pin Number LQFP64 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|----------------------|---------------------------------------|----------|--------------------------|----------------------|
| 1 | VLCD | Power | | |
| 2 | PC13 | I/O | GPIO_EXTI13 | B1 [Blue PushButton] |
| 3 | PC14-OSC32_IN * | I/O | RCC_OSC32_IN | |
| 4 | PC15-OSC32_OUT * | I/O | RCC_OSC32_OUT | |
| 5 | PH0-OSC_IN * | I/O | RCC_OSC_IN | |
| 6 | PH1-OSC_OUT * | I/O | RCC_OSC_OUT | |
| 7 | NRST | Reset | | |
| 12 | VSSA | Power | | |
| 13 | VDDA | Power | | |
| 14 | PA0 ** | I/O | GPIO_Output | |
| 15 | PA1 ** | I/O | GPIO_Input | |
| 16 | PA2 * | I/O | USART2_TX | USART_TX |
| 17 | PA3 * | I/O | USART2_RX | USART_RX |
| 18 | VSS | Power | | |
| 19 | VDD | Power | | |
| 20 | PA4 ** | I/O | GPIO_Output | |
| 21 | PA5 ** | I/O | GPIO_Output | LD2 [Green Led] |
| 26 | PB0 ** | I/O | GPIO_Output | |
| 31 | VSS | Power | | |
| 32 | VDD | Power | | |
| 46 | PA13 | I/O | SYS_SWDIO | TMS |
| 47 | VSS | Power | | |
| 48 | VDD_USB | Power | | |
| 49 | PA14 | I/O | SYS_SWCLK | TCK |
| 55 | PB3 | I/O | GPIO_EXTI3 | |
| 60 | BOOT0 | Boot | | |
| 63 | VSS | Power | | |
| 64 | VDD | Power | | |

** The pin is affected with an I/O function

* The pin is affected with a peripheral function but no peripheral mode is activated

4. IPs and Middleware Configuration

4.1. SYS

mode: Serial Wire Debug (SWD)

4.2. TIM6

mode: Activated

Counter Settings:

| | |
|---|----|
| Prescaler (PSC - 16 bits value) | 0 |
| Counter Mode | Up |
| Counter Period (AutoReload Register - 16 bits value) | 0 |

Trigger Output (TRGO) Parameters:

| | |
|-------------------------|------------------------------|
| Trigger Event Selection | Reset (UG bit from TIMx_EGR) |
|-------------------------|------------------------------|

* User modified value

5. System Configuration

5.1. GPIO configuration

| IP | Pin | Signal | GPIO mode | GPIO pull/up pull down | Max Speed | User Label |
|-----------------------|----------------|---------------|--|-----------------------------|-----------|----------------------|
| SYS | PA13 | SYS_SWDIO | n/a | n/a | n/a | TMS |
| | PA14 | SYS_SWCLK | n/a | n/a | n/a | TCK |
| Single Mapped Signals | PC14-OSC32_IN | RCC_OSC32_IN | n/a | n/a | n/a | |
| | PC15-OSC32_OUT | RCC_OSC32_OUT | n/a | n/a | n/a | |
| | PH0-OSC_IN | RCC_OSC_IN | n/a | n/a | n/a | |
| | PH1-OSC_OUT | RCC_OSC_OUT | n/a | n/a | n/a | |
| | PA2 | USART2_TX | Alternate Function Push Pull | No pull-up and no pull-down | High * | USART_TX |
| | PA3 | USART2_RX | Alternate Function Push Pull | No pull-up and no pull-down | High * | USART_RX |
| | | | | | | |
| GPIO | PC13 | GPIO_EXTI13 | External Event Mode with Rising edge trigger detection | No pull-up and no pull-down | n/a | B1 [Blue PushButton] |
| | PA0 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | |
| | PA1 | GPIO_Input | Input mode | No pull-up and no pull-down | n/a | |
| | PA4 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | |
| | PA5 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LD2 [Green Led] |
| | PB0 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | |
| | PB3 | GPIO_EXTI3 | External Event Mode with Rising edge trigger detection | No pull-up and no pull-down | n/a | |

5.2. DMA configuration

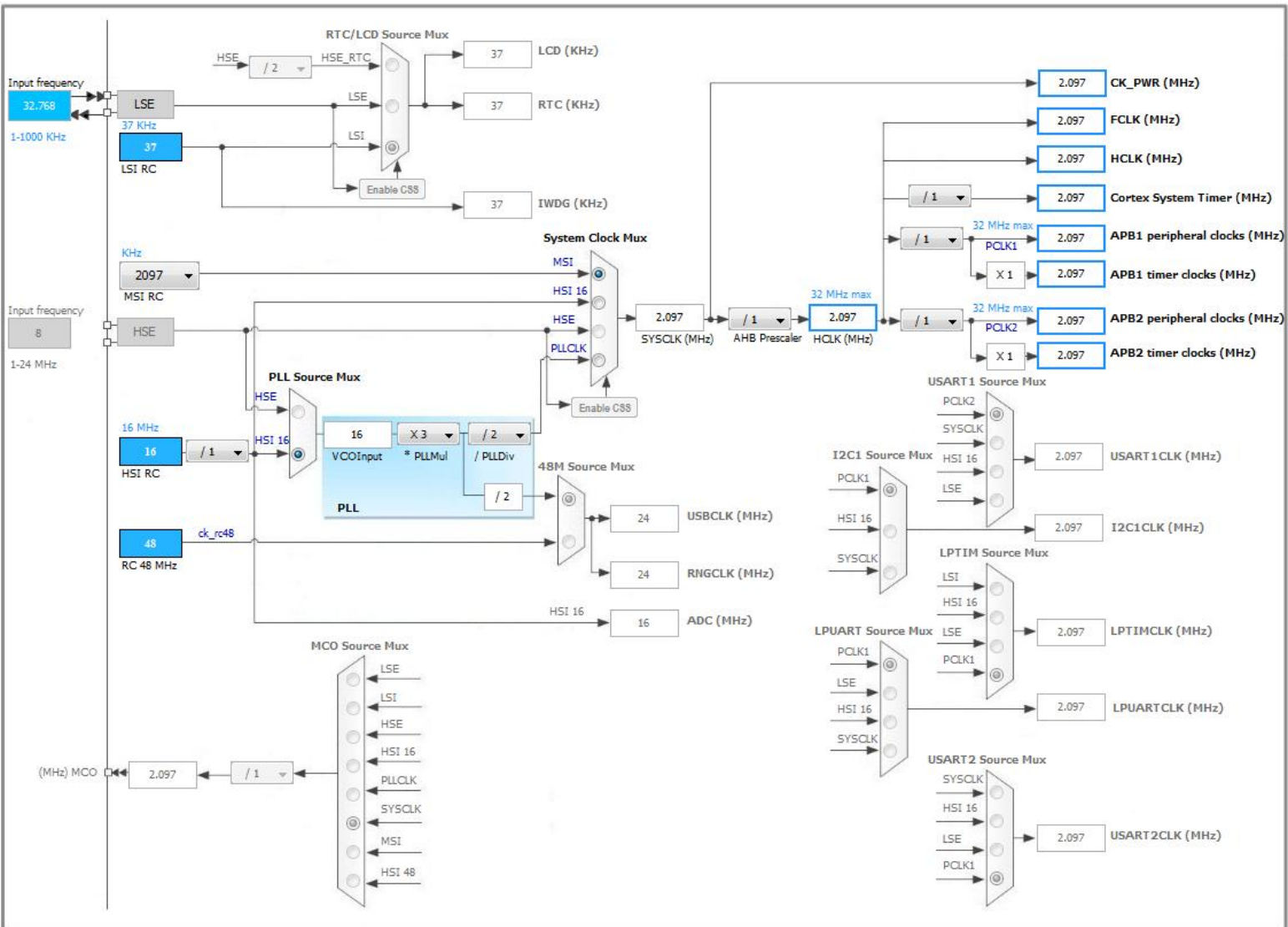
nothing configured in DMA service

5.3. NVIC configuration

| Interrupt Table | Enable | Preenmption Priority | SubPriority |
|---|--------|----------------------|-------------|
| System tick timer | true | 0 | 0 |
| RCC and CRS global interrupt | true | 0 | 0 |
| Non Maskable Interrupt | unused | | |
| PVD interrupt through EXTI line 16 | unused | | |
| TIM6 global interrupt and DAC1/DAC2 underrun error interrupts | unused | | |

* User modified value

6. Clock Tree Configuration



7. Power Plugin report

7.1. Microcontroller Selection

| | |
|-----------|---------------|
| Series | STM32L0 |
| Line | STM32L0x3 |
| MCU | STM32L053R8Tx |
| Datasheet | 025844_Rev4 |

7.2. Parameter Selection

| | |
|-------------|------|
| Temperature | 25 |
| Vdd | null |

8. Software Project

8.1. Project Settings

| Name | Value |
|-----------------------------------|---|
| Project Name | CubeProjectOne |
| Project Folder | \\SBS2011\Users\shares\merelda\My Documents\STM32Cube |
| Toolchain / IDE | MDK-ARM V5 |
| Firmware Package Name and Version | STM32Cube FW_L0 V1.1.2 |

8.2. 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) | No |

8.3. Toolchains Settings

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