

1. Description

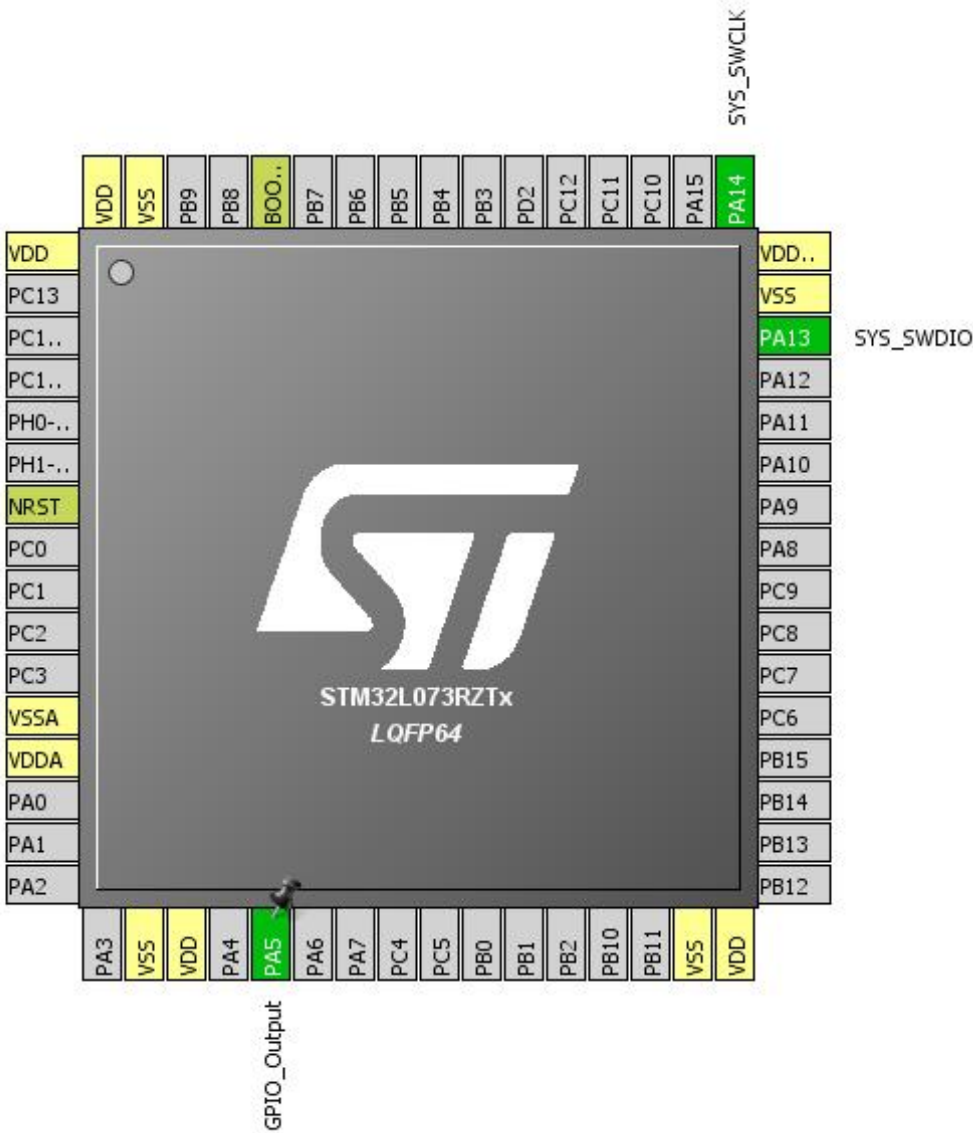
1.1. Project

| | |
|-----------------|--------------------|
| Project Name | timer_interrupt |
| Board Name | custom |
| Generated with: | STM32CubeMX 4.27.0 |
| Date | 10/04/2018 |

1.2. MCU

| | |
|----------------|---------------|
| MCU Series | STM32L0 |
| MCU Line | STM32L0x3 |
| MCU name | STM32L073RZTx |
| MCU Package | LQFP64 |
| MCU Pin number | 64 |

2. Pinout Configuration

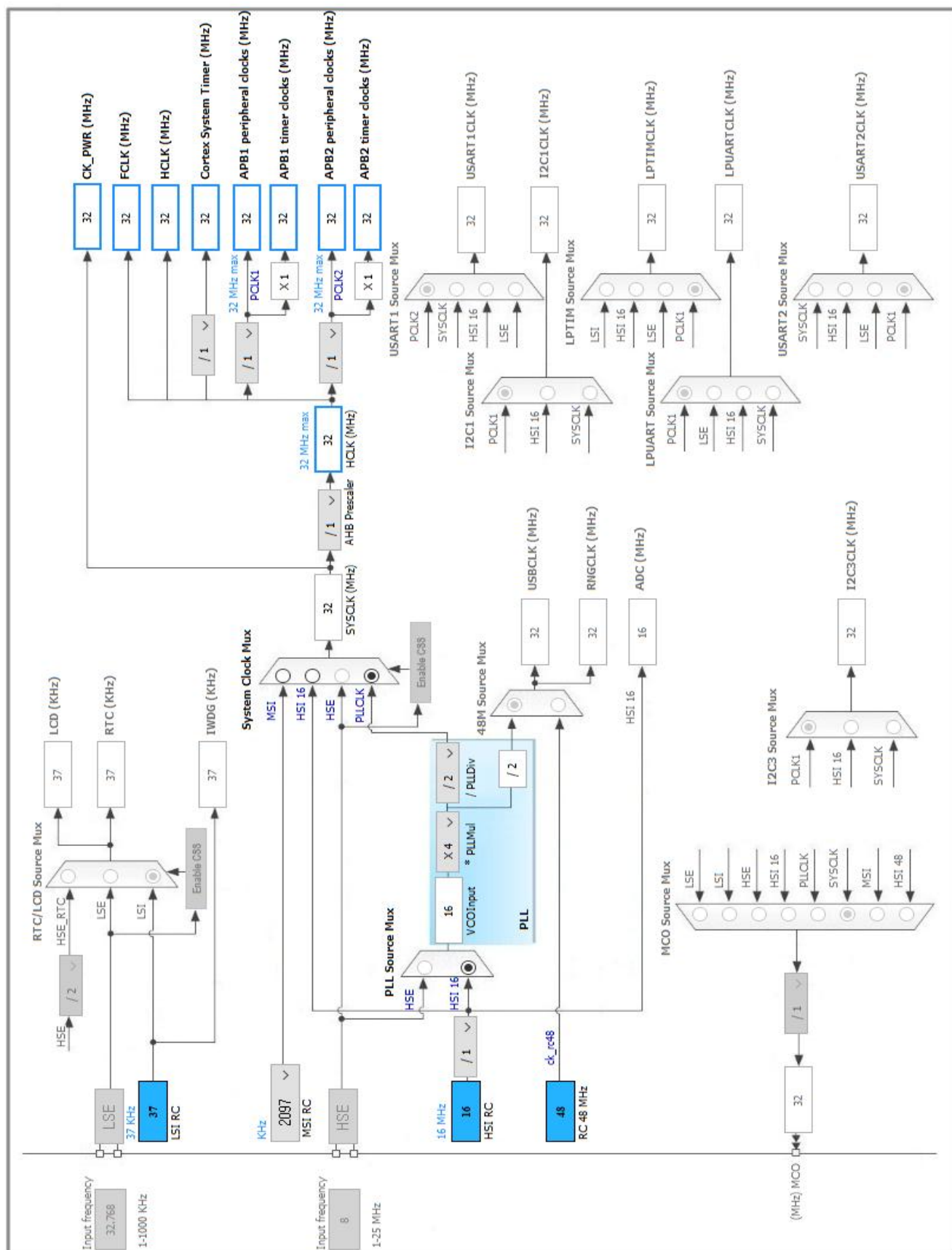


3. Pins Configuration

| Pin Number LQFP64 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|----------------------|---------------------------------------|----------|--------------------------|-------|
| 1 | VDD | Power | | |
| 7 | NRST | Reset | | |
| 12 | VSSA | Power | | |
| 13 | VDDA | Power | | |
| 18 | VSS | Power | | |
| 19 | VDD | Power | | |
| 21 | PA5 * | I/O | GPIO_Output | |
| 31 | VSS | Power | | |
| 32 | VDD | Power | | |
| 46 | PA13 | I/O | SYS_SWDIO | |
| 47 | VSS | Power | | |
| 48 | VDD_USB | Power | | |
| 49 | PA14 | I/O | SYS_SWCLK | |
| 60 | BOOT0 | Boot | | |
| 63 | VSS | Power | | |
| 64 | VDD | Power | | |

* The pin is affected with an I/O function

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. SYS

mode: Debug Serial Wire

Timebase Source: SysTick

5.2. TIM6

mode: Activated

5.2.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value) **31999 ***

Counter Mode Up

Counter Period (AutoReload Register - 16 bits value) **999 ***

Trigger Output (TRGO) Parameters:

Trigger Event Selection Reset (UG bit from TIMx_EGR)

* User modified value

6. System Configuration

6.1. 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 | |
| | PA14 | SYS_SWCLK | n/a | n/a | n/a | |
| GPIO | PA5 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | |

6.2. DMA configuration

nothing configured in DMA service

6.3. NVIC configuration

| Interrupt Table | Enable | Preenmption Priority | SubPriority |
|---|--------|----------------------|-------------|
| Non maskable Interrupt | true | 0 | 0 |
| Hard fault interrupt | true | 0 | 0 |
| System service call via SWI instruction | true | 0 | 0 |
| Pendable request for system service | true | 0 | 0 |
| System tick timer | true | 0 | 0 |
| PVD interrupt through EXTI line 16 | unused | | |
| Flash and EEPROM global interrupt | unused | | |
| RCC and CRS global interrupt | unused | | |
| TIM6 global interrupt and DAC1/DAC2 underrun error interrupts | unused | | |

* User modified value

7. Power Consumption Calculator report

7.1. Microcontroller Selection

| | |
|-----------|---------------|
| Series | STM32L0 |
| Line | STM32L0x3 |
| MCU | STM32L073RZTx |
| Datasheet | 027096_Rev3 |

7.2. Parameter Selection

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

8. Software Project

8.1. Project Settings

| Name | Value |
|-----------------------------------|---------------------------|
| Project Name | timer_interrupt |
| Project Folder | D:\\code\\timer_interrupt |
| Toolchain / IDE | EWARM V8 |
| Firmware Package Name and Version | STM32Cube FW_L0 V1.10.0 |

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 | No |
| 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 |

9. Software Pack Report