

1. Description

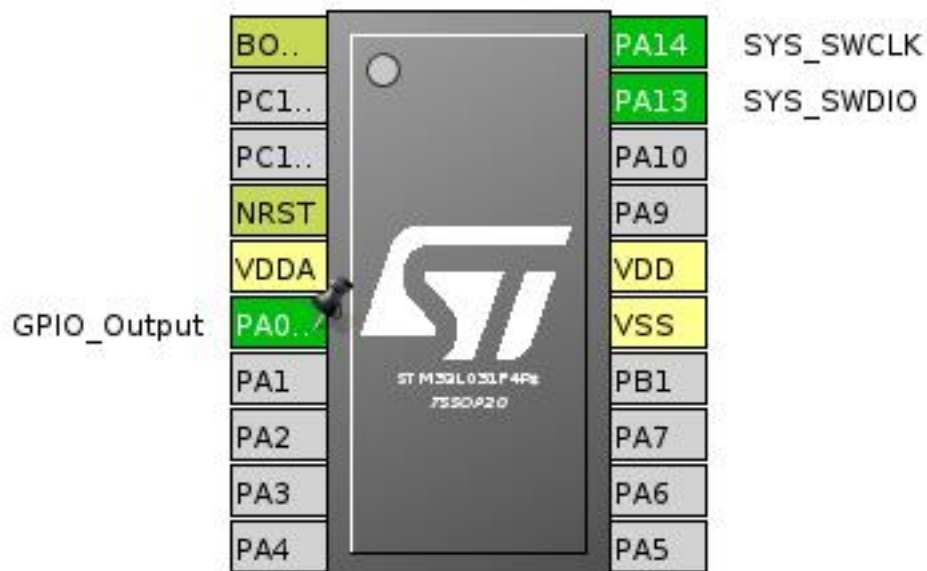
1.1. Project

| | |
|-----------------|--------------------|
| Project Name | heart |
| Board Name | heart |
| Generated with: | STM32CubeMX 4.24.0 |
| Date | 03/07/2018 |

1.2. MCU

| | |
|----------------|---------------|
| MCU Series | STM32L0 |
| MCU Line | STM32L0x1 |
| MCU name | STM32L031F4Px |
| MCU Package | TSSOP20 |
| MCU Pin number | 20 |

2. Pinout Configuration

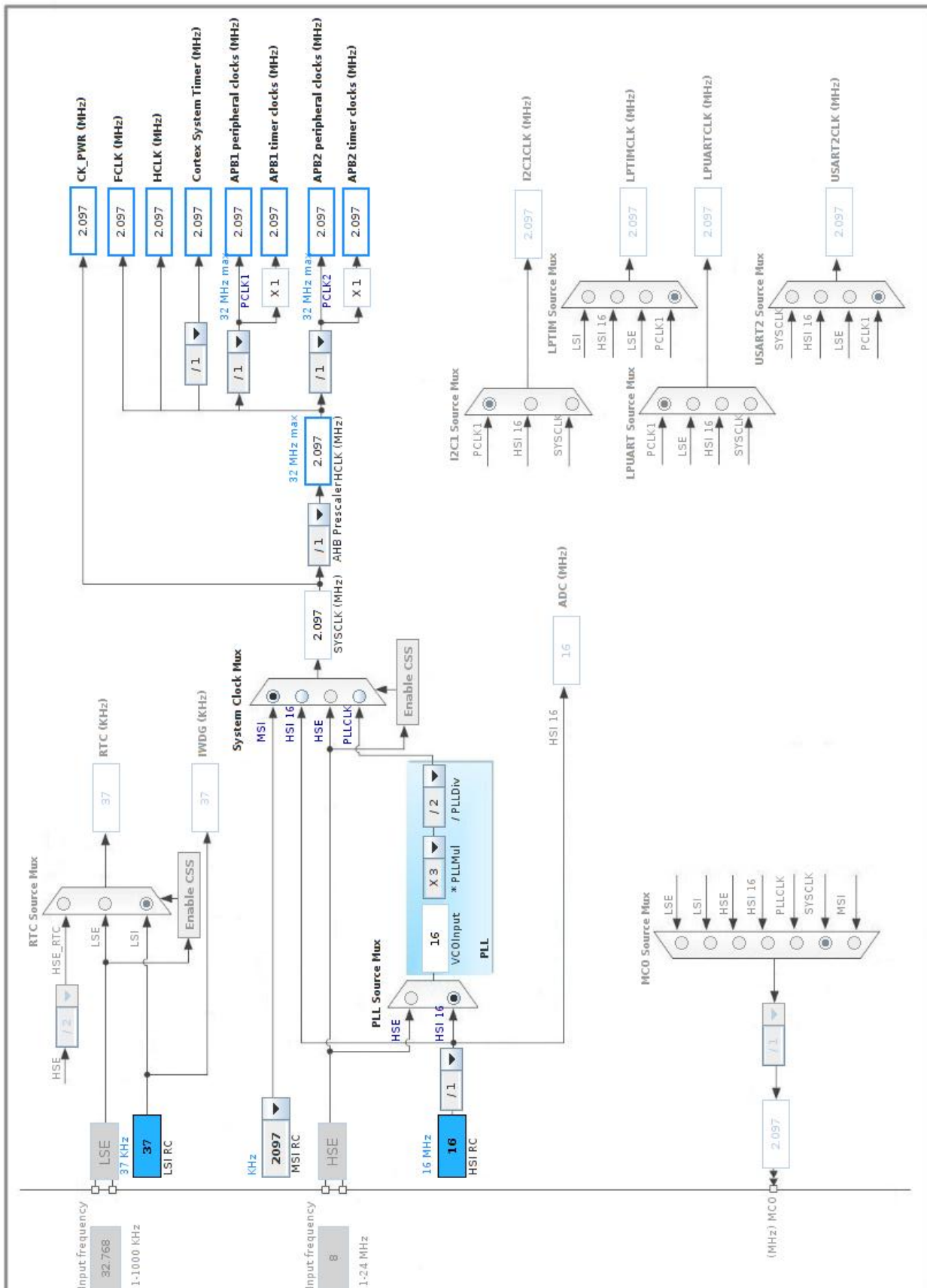


3. Pins Configuration

| Pin Number TSSOP20 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|-----------------------|---------------------------------------|----------|--------------------------|-------|
| 1 | BOOT0 | Boot | | |
| 4 | NRST | Reset | | |
| 5 | VDDA | Power | | |
| 6 | PA0-CK_IN * | I/O | GPIO_Output | |
| 15 | VSS | Power | | |
| 16 | VDD | Power | | |
| 19 | PA13 | I/O | SYS_SWDIO | |
| 20 | PA14 | I/O | SYS_SWCLK | |

* 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

* 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 | PA0-CK_IN | 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 global interrupt | unused | | |

* User modified value

7. Power Consumption Calculator report

7.1. Microcontroller Selection

| | |
|-----------|---------------|
| Series | STM32L0 |
| Line | STM32L0x1 |
| MCU | STM32L031F4Px |
| Datasheet | 027063_Rev4 |

7.2. Parameter Selection

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

8. Software Project

8.1. Project Settings

| Name | Value |
|-----------------------------------|---|
| Project Name | heart |
| Project Folder | /home/peter/repos/heart/stm32L031F4/heart |
| Toolchain / IDE | SW4STM32 |
| Firmware Package Name and Version | STM32Cube FW_L0 V1.10.0 |

8.2. 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 consumption) | Yes |

9. Software Pack Report