

1. Description

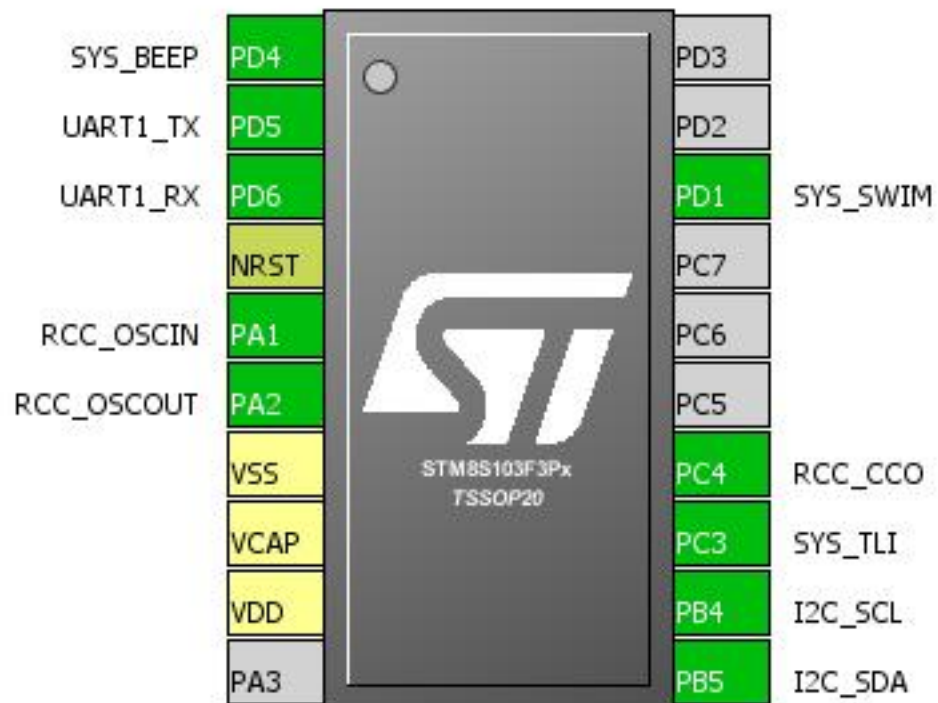
1.1. Project

| | |
|-----------------|------------------|
| Project Name | beeper |
| Board Name | No information |
| Generated with: | STM8CubeMX 1.5.0 |
| Date | 04/03/2022 |

1.2. MCU

| | |
|----------------|--------------|
| MCU Series | STM8S |
| MCU Line | STM8S103/105 |
| MCU name | STM8S103F3Px |
| MCU Package | TSSOP20 |
| MCU Pin number | 20 |

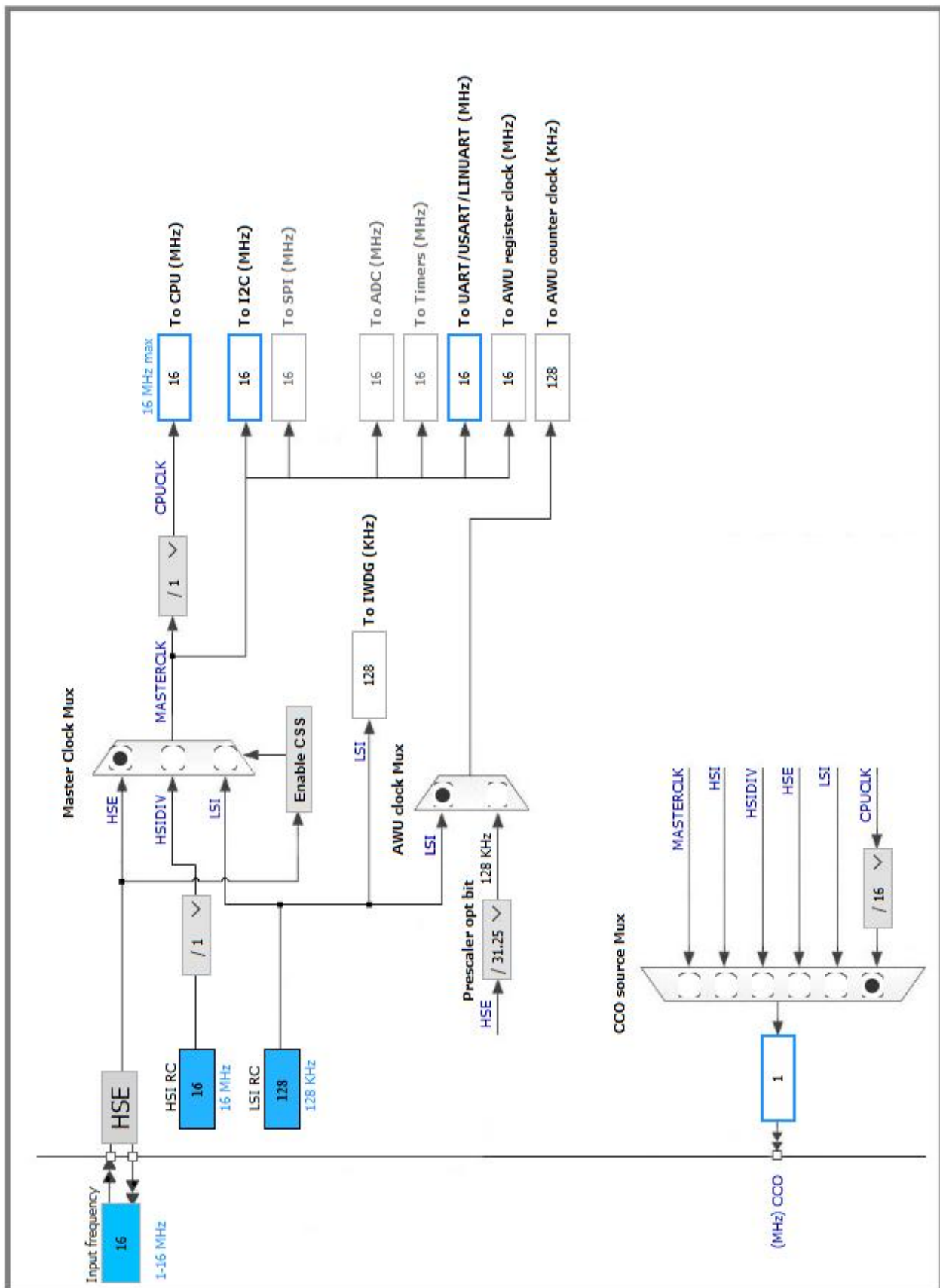
2. Pinout Configuration



3. Pins Configuration

| Pin Number TSSOP20 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|-----------------------|---------------------------------------|----------|--------------------------|-------|
| 1 | PD4 | I/O | SYS_BEEP | |
| 2 | PD5 | I/O | UART1_TX | |
| 3 | PD6 | I/O | UART1_RX | |
| 4 | NRST | Reset | | |
| 5 | PA1 | I/O | RCC_OSCIN | |
| 6 | PA2 | I/O | RCC_OSCOUT | |
| 7 | VSS | Power | | |
| 8 | VCAP | Power | | |
| 9 | VDD | Power | | |
| 11 | PB5 | I/O | I2C_SDA | |
| 12 | PB4 | I/O | I2C_SCL | |
| 13 | PC3 | I/O | SYS_TLI | |
| 14 | PC4 | I/O | RCC_CCO | |
| 18 | PD1 | I/O | SYS_SWIM | |

4. Clock Tree Configuration



5. Power Consumption Calculator report

5.1. Microcontroller Selection

| | |
|-----------|--------------|
| Series | STM8S |
| Line | STM8S103/105 |
| MCU | STM8S103F3Px |
| Datasheet | 15441_Rev13 |

5.2. Parameter Selection

| | |
|-------------|-----|
| Temperature | 25 |
| Vdd | 3.3 |

5.3. Battery Selection

| | |
|-------------------|------------------------------|
| Battery | Li-MnO ₂ (CR1225) |
| Capacity | 48.0 mAh |
| Self Discharge | 0.12 %/month |
| Nominal Voltage | 3.0 V |
| Max Cont Current | 1.0 mA |
| Max Pulse Current | 5.0 mA |
| Cells in series | 1 |
| Cells in parallel | 1 |

5.4. Sequence

| | |
|-----------------------|----------|
| Step | Step1 |
| Mode | RUN |
| Vdd | 3.3 |
| Voltage Source | Battery |
| Range | No Scale |
| Fetch Type | RAM |

| | |
|-------------------------------|-----------------------|
| Clock Configuration | HSI |
| Clock Source Frequency | 16.0 MHz |
| CPU Frequency | 15.625 kHz |
| Peripherals | ADC I2C SPI SYS UART1 |
| Additional Cons. | 0 mA |
| Average Current | 1.46 mA |
| Duration | 1 ms |
| DMIPS | 0.015625 |
| Ta Max | 104.6 |
| Category | In DS Table |

5.5. RESULTS

| | | | |
|---------------|----------------|-----------------|------------|
| Sequence Time | 1 ms | Average Current | 1.46 mA |
| Battery Life | 1 day, 8 hours | Average DMIPS | 0.02 DMIPS |

5.6. Chart

