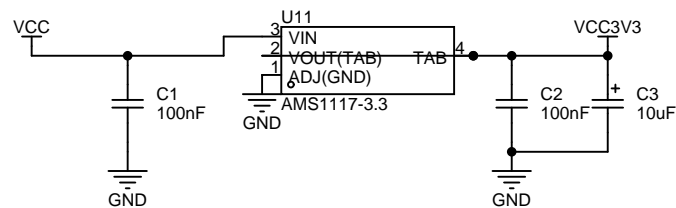
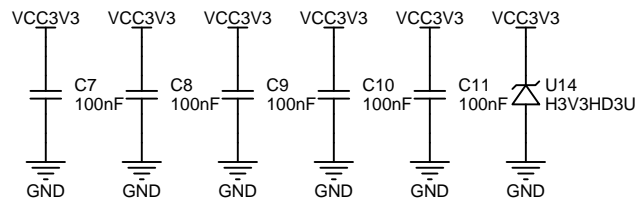


The diagram shows a 5V to 3.3V voltage regulator circuit. At the top, the text "5V-3.3V" is displayed. The circuit includes an input voltage source "VCC" connected to the VIN pin (pin 3) of the AMS1117-3.3 regulator (U11). A 100nF capacitor (C1) is connected between the VIN pin and ground (GND). The VOUT (TAB) pin (pin 2) is connected to the output voltage source "VCC3V3". The ADJ (GND) pin (pin 1) is connected to ground. A 100nF capacitor (C2) is connected between the VOUT pin and ground. A 10uF capacitor (C3) is connected between the VCC3V3 output and ground. The AMS1117-3.3 regulator is shown as a rectangular component with pins 1 through 4 labeled.



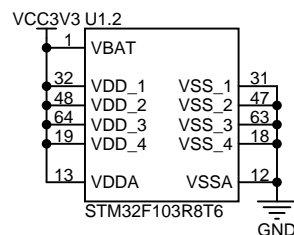
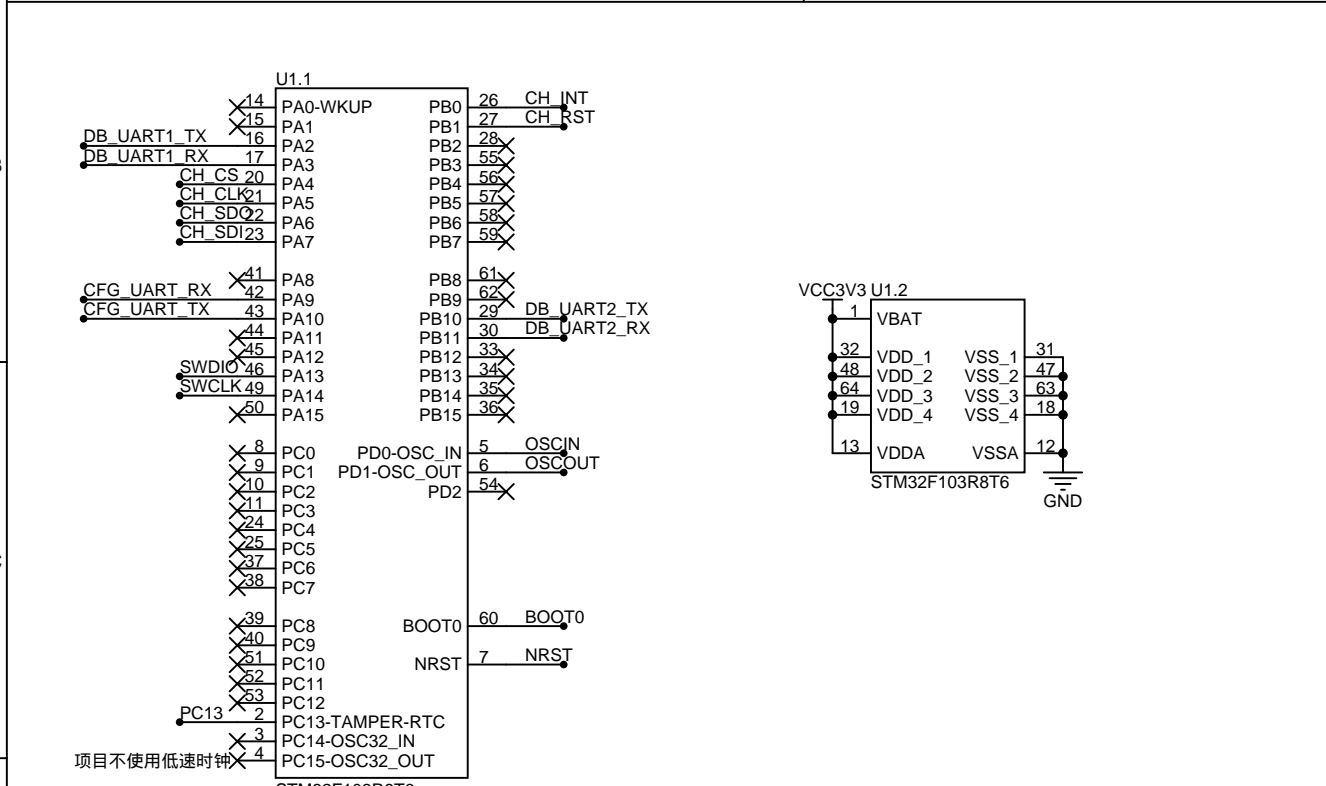
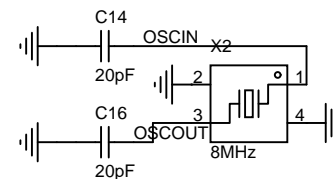
滤波与保护

The diagram illustrates a power supply filtering and protection circuit. It consists of six parallel branches connected between a VCC3V3 supply rail and a common GND rail. Each branch contains a 100nF capacitor (labeled C7, C8, C9, C10, and C11) in series with a diode (labeled U14, H3V3HD3U). The diodes are oriented with their cathodes towards the VCC3V3 rail and their anodes towards the GND rail, providing reverse polarity protection. The capacitors are used for decoupling and filtering high-frequency noise.

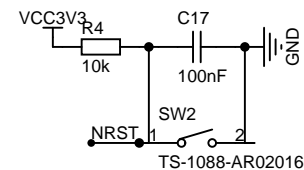


主时钟

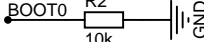
The diagram illustrates the main clock circuit for the STM32F103C8T6. It features an 8MHz quartz crystal connected to the OSCIN and OSCOUT pins of the microcontroller. The crystal is represented by a rectangle with four pins: 1 (top), 2 (left), 3 (bottom), and 4 (right). Pin 1 is connected to OSCIN (labeled x2) and has a 20pF capacitor (C14) to ground. Pin 2 is connected to OSCOUT and has a 20pF capacitor (C16) to ground. Pin 3 is connected to OSCOUT and has a 20pF capacitor (C16) to ground. Pin 4 is connected to OSCOUT and has a 20pF capacitor (C16) to ground. The microcontroller is shown as a rectangle with pins 1, 2, 3, and 4 labeled. The frequency is 8MHz.



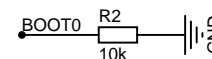
复位



BOOT



A circuit diagram showing the BOOT pin connected to a pull-up resistor R2 (10k) and a capacitor to ground (GND).



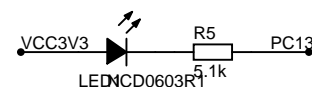
指示灯

LED1

R5
5.1k

VCC3V3

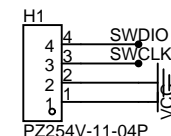
PC13



下载口

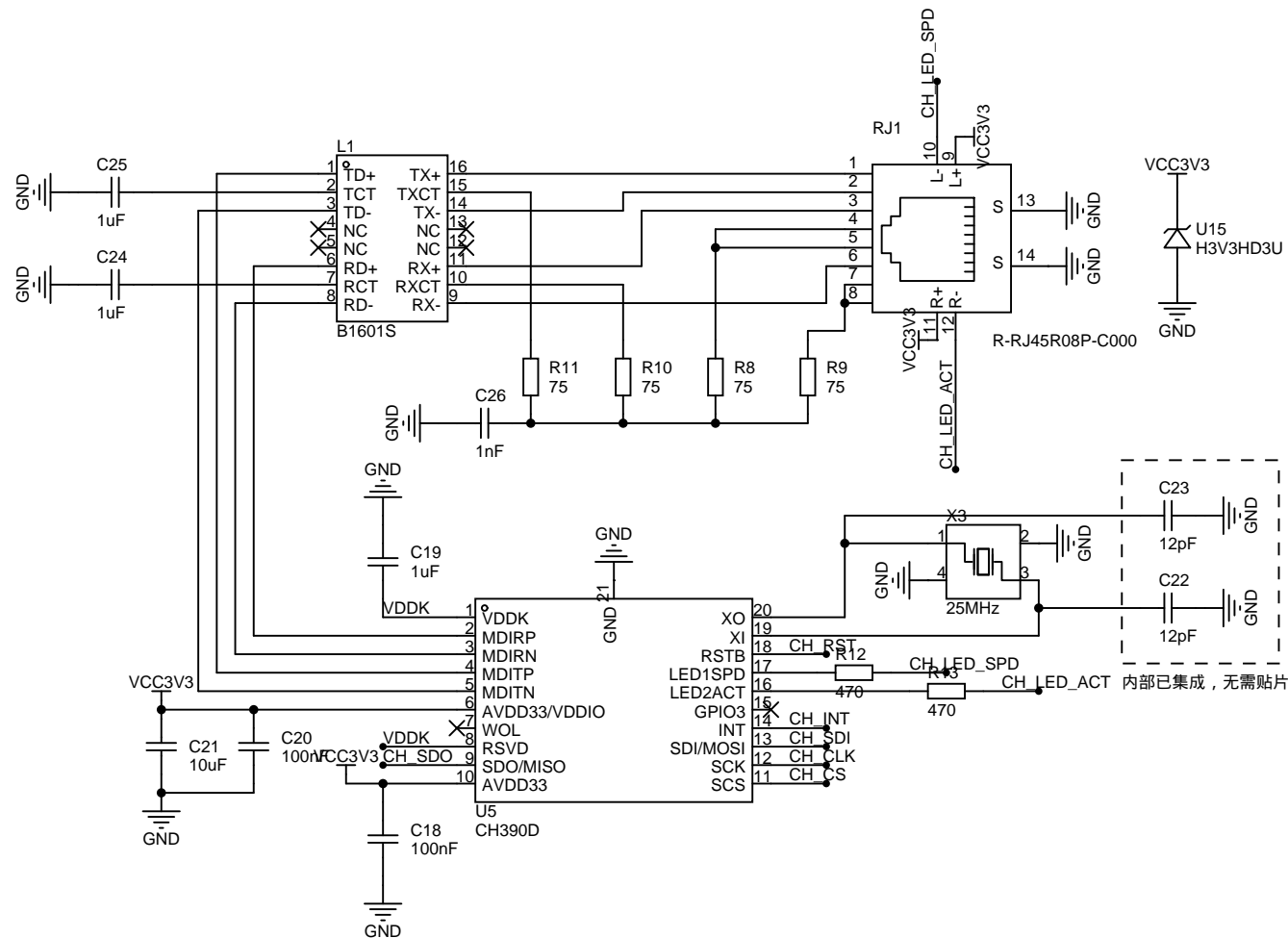
Diagram illustrating the download port (下载口) connections for the PZ254V-11-04P device. The port is labeled H1 and shows four pins connected to SWDIO, SWCLK, VCC, and GND. A 10k resistor is connected between the VCC pin and the SWCLK pin.

PZ254V-11-04P



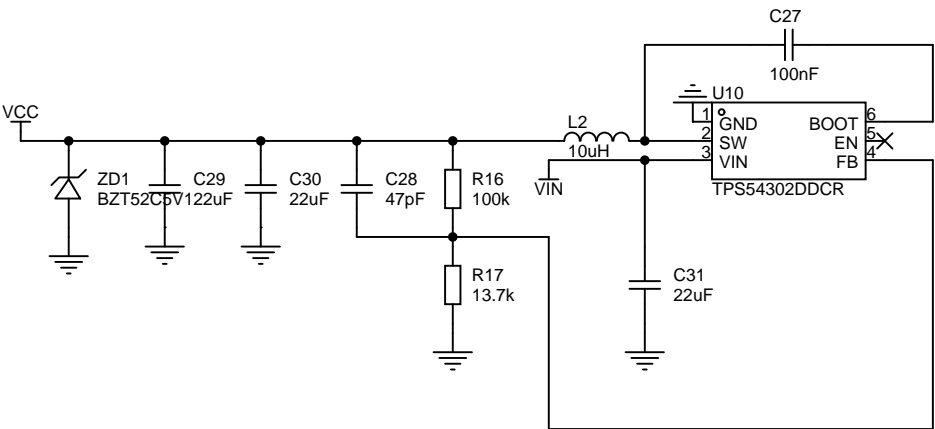
| | | | | | | | |
|---------------|--|--------|--|------------|----|---------|------------|
| STM32F103R8T6 | | 原理图 | | Schematic1 | | 创建日期 | 2026-03-23 |
| | | 板子 | | TCP2UART | | 更新日期 | 2026-03-23 |
| | | 绘制 | | TCP2UART | | | |
| | | 审阅 | | | | | |
| | | | | | | | |
| | | | | 版本 | 尺寸 | 页 1 共 4 | |
| | | 嘉立创EDA | | V1.0 | A4 | 嘉立创EDA | |

网口



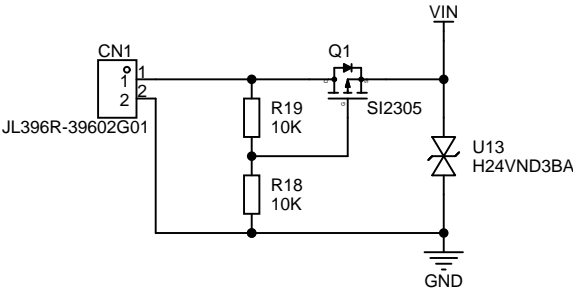
| | | | | | |
|---|------------|------|----|------------------|------------|
| 原理图 | Schematic1 | | | 创建日期 | 2026-03-23 |
| | | | | 更新日期 | 2026-03-23 |
| 板子 | TCP2UART | | | 图页 | CH390D |
| 绘制 | TCP2UART | | | | |
| 审阅 | | | | | |
| | | | | | |
| | | | | | |
| | | 版本 | 尺寸 | 页 2 共 4 | |
|  嘉立创EDA | | V1.0 | A4 | 嘉立创EDA | |

12V-5V

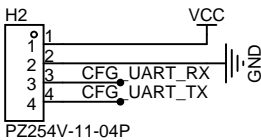


| | | | | | |
|--------|------------|----------|----|---------|------------|
| 原理图 | Schematic1 | | | 创建日期 | 2026-03-23 |
| 板子 | TCP2UART | | | 更新日期 | 2026-03-23 |
| 绘制 | | TCP2UART | | | |
| 审阅 | | | | | |
| | | | | | |
| | | 版本 | 尺寸 | 页 3 共 4 | |
| 嘉立创EDA | | V1.0 | A4 | 嘉立创EDA | |

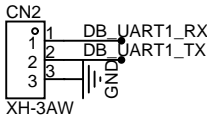
防反接与ESD



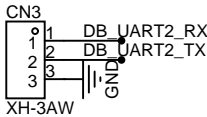
配置串口



透传口1



透传口2



| | | | | | |
|--------|------------|----------|----|---------|------------|
| 原理图 | Schematic1 | | | 创建日期 | 2026-03-23 |
| 板子 | TCP2UART | | | 更新日期 | 2026-03-24 |
| 绘制 | | TCP2UART | | | |
| 审阅 | | | | | |
| | | | | | |
| | | 版本 | 尺寸 | 页 4 共 4 | |
| 嘉立创EDA | | V1.0 | A4 | 嘉立创EDA | |