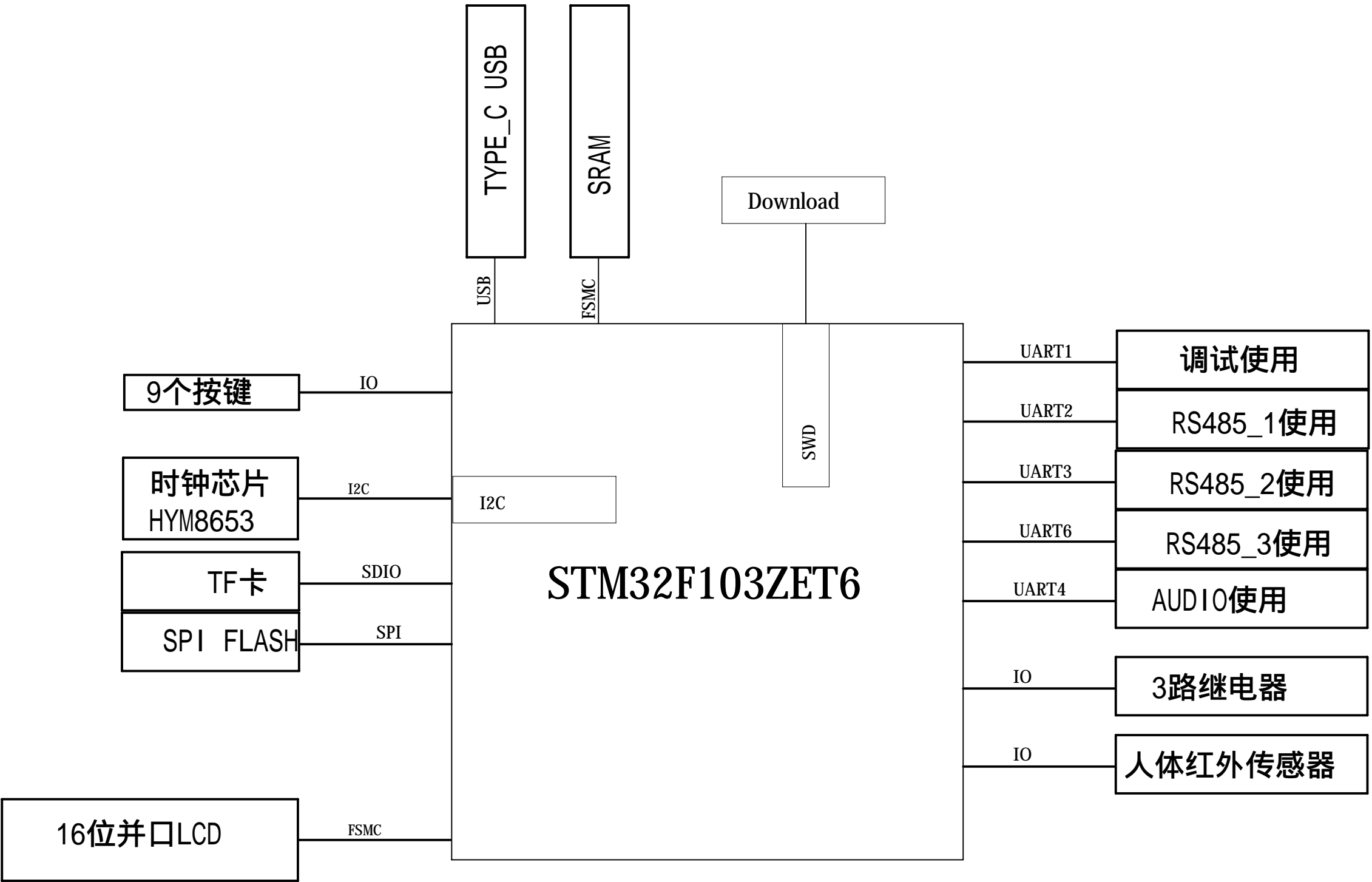
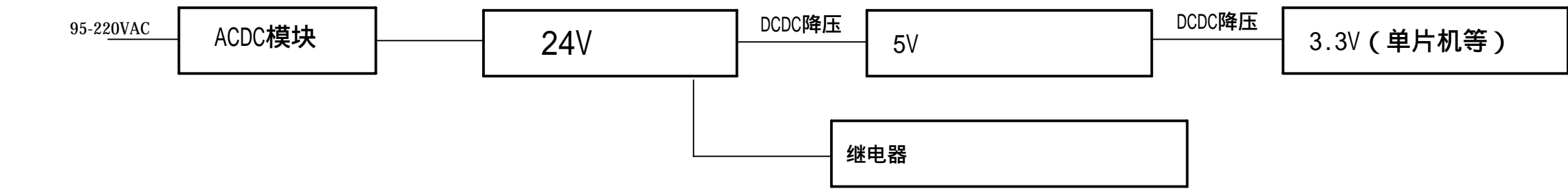
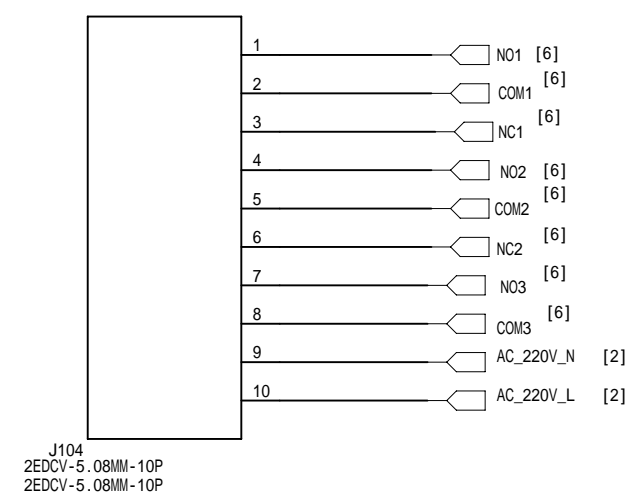
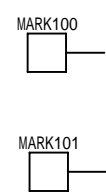
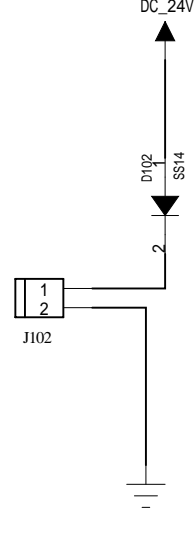
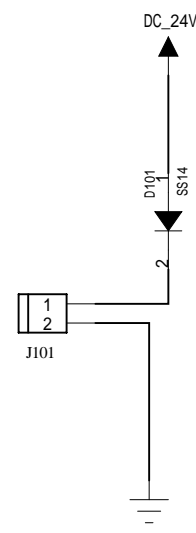
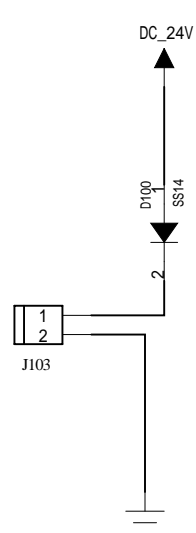


电源系统

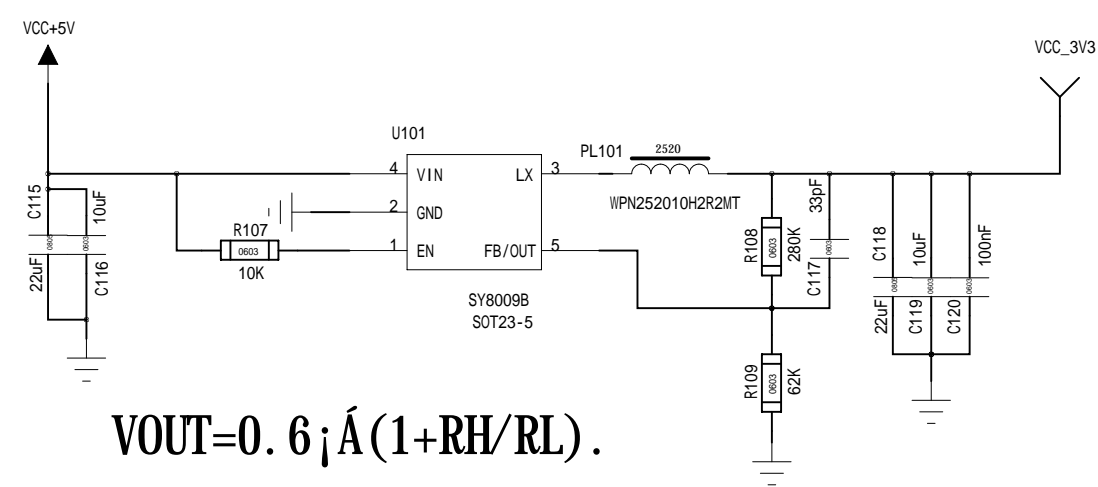


ACDC模块电路

The diagram illustrates the internal circuit of the ACDC module (U100). It features a transformer (RT100) with a turns ratio of 100:11, connected to two AC inputs: AC_220V_L and AC_220V_N. The transformer's secondary is connected to the module's pins 2 (+V) and N (0V). The module's internal components include a bridge rectifier (C1), a 680µF/35V electrolytic capacitor (C2), a 100µF electrolytic capacitor (C10), a 47µF/16V electrolytic capacitor (C107), and a 1000µF/65V electrolytic capacitor (C108). The output is a DC 24V line, which is connected to the module's pins TP100 and TP101.

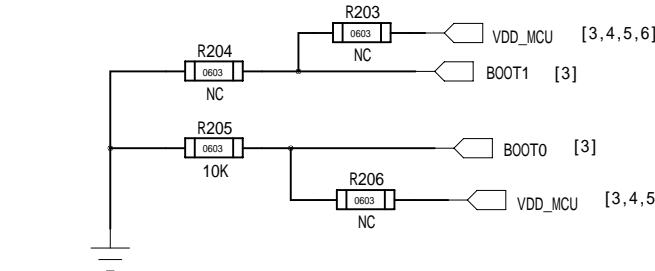
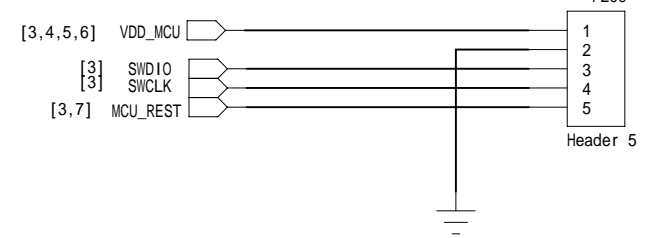
[illegible]

$$V_{OUT} = 0.815 \text{ V} (1 + R_H/R_L).$$



$$V_{OUT} = 0.6 \text{ V} (1 + R_H/R_L).$$

STM32_SWD下载接口



PA4/PA15#SPI1_SS
PA5/PB3#SPI1_SCK
PA6/PB4#SPI1_MISO
PA7/PB5#SPI1_MOSI

PB9/PB12#SPI2_SS
PB10/PB13#SPI2_SCK
PB14/PC2#SPI2_MISO
PB15/PC2#SPI2_MOSI

PA4/PA15#SPI3_SS
PB3#SPI3_SCK
PB4#SPI3_MISO
PB5#SPI3_MOSI

[2,7,8] VCC_3V3

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

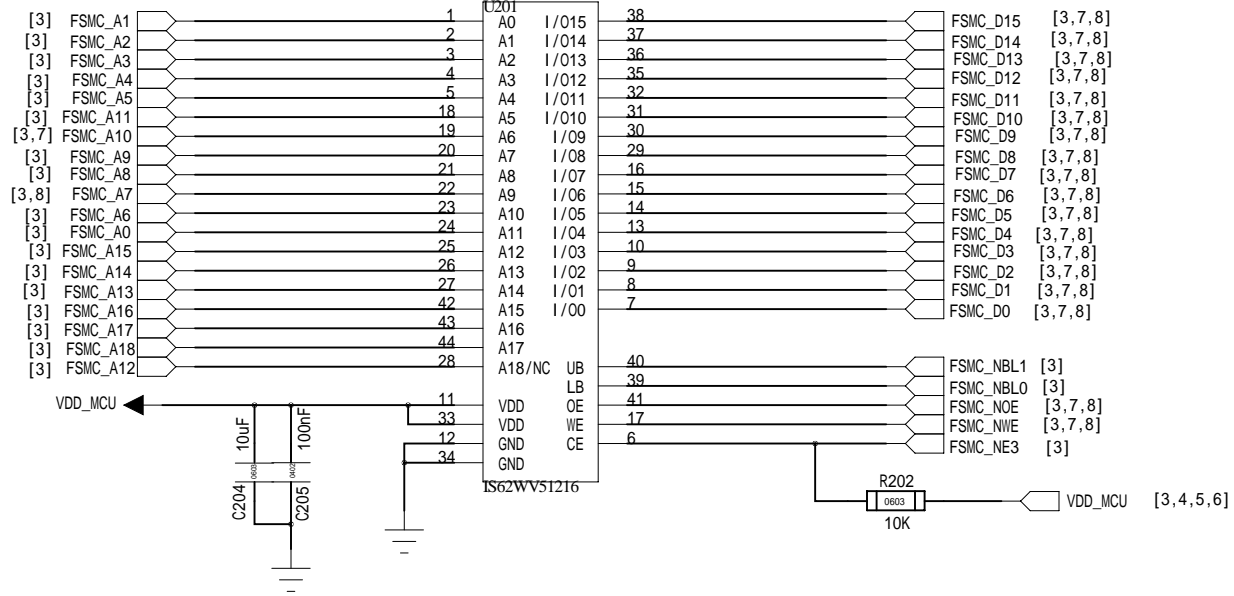
[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

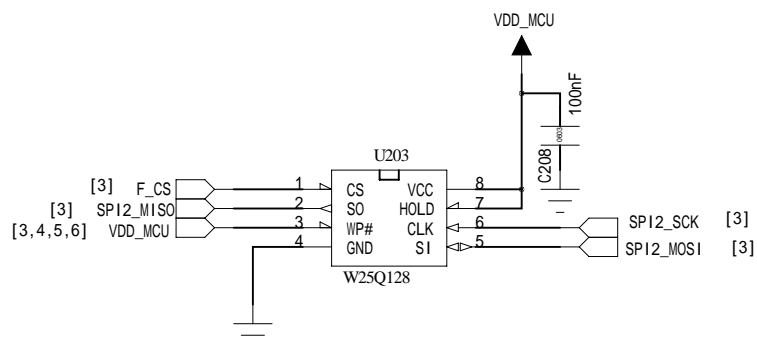
[3,4,5,6] VDD_MCU

[3,4,5,6] VDD_MCU

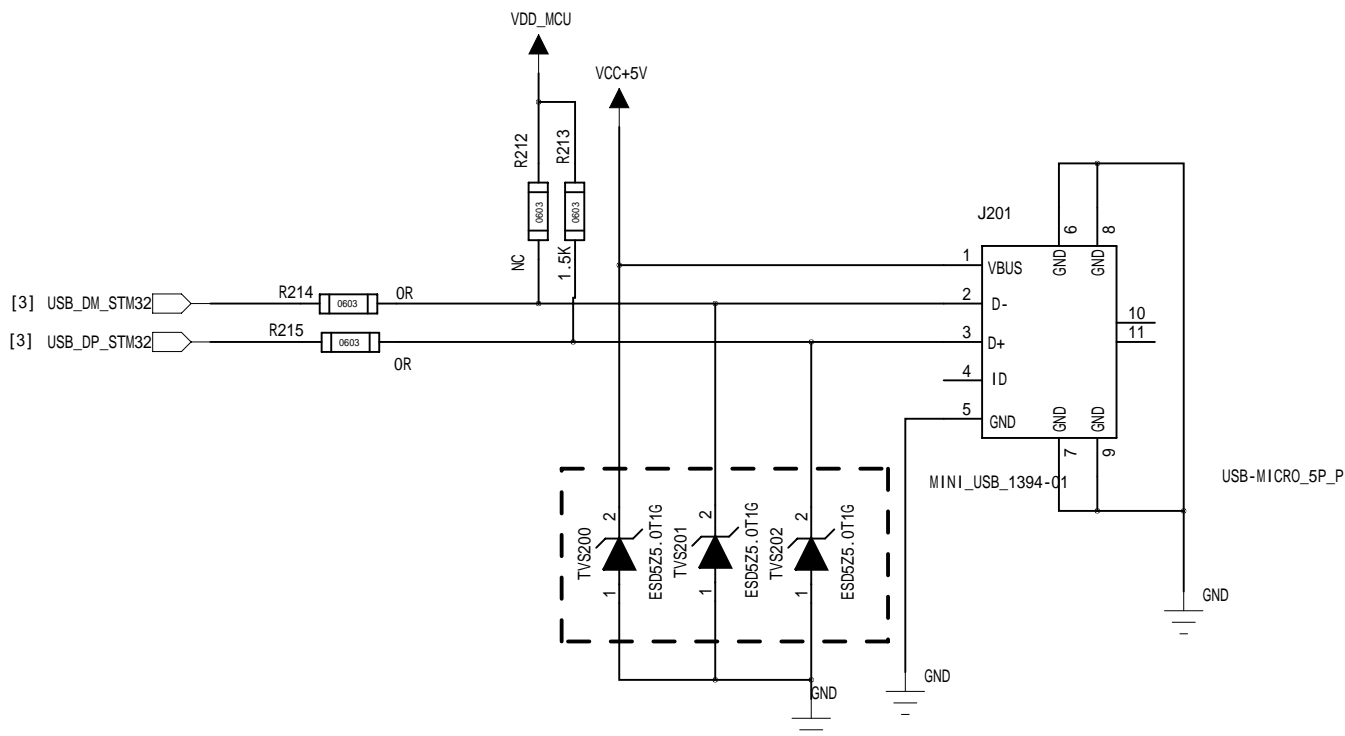
SRAM



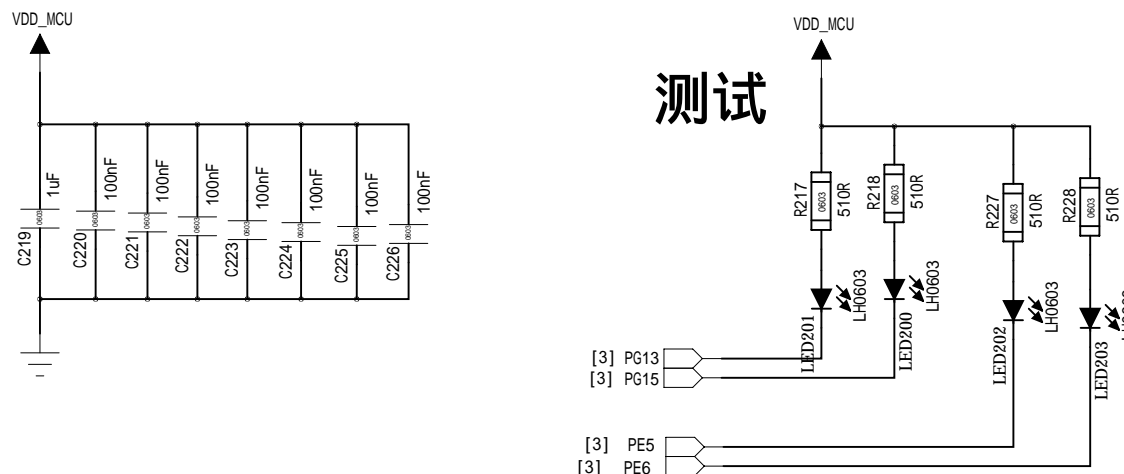
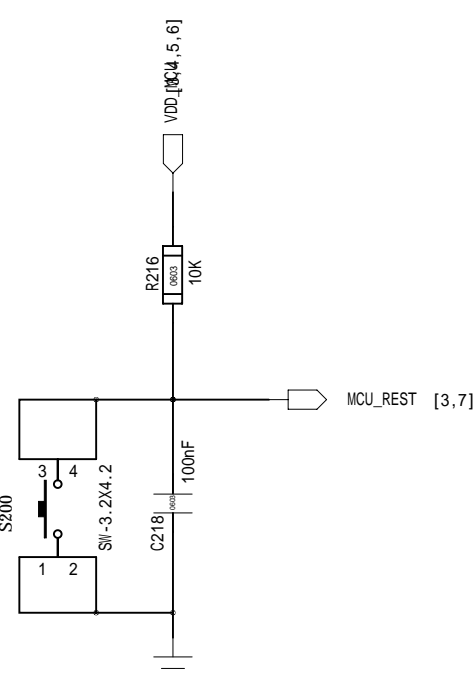
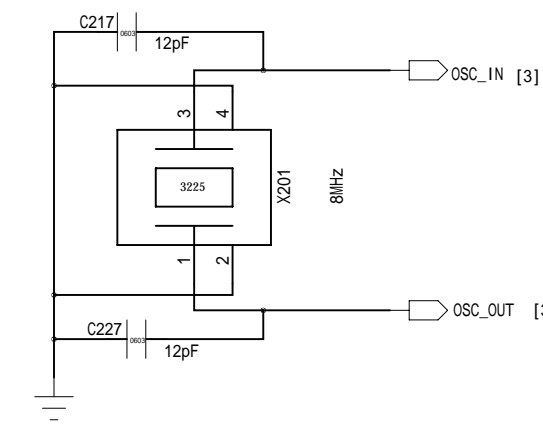
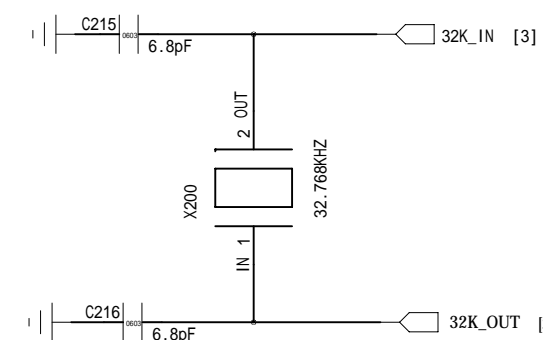
SPI_FLASH



MCU_USB接口



STM32F103ZET6 STM32F407ZGT6 STM32F429ZET6 STM32L476ZET6



测试

CAN

PA11/PB8/PD0: CAN_RX
PA12/PB9/PD1: CAN_TX
PB12/PCAN2_RX
PB13/PCAN2_TX

I2C

PB6/PB8: I2C1_SCL
PB7/PB9: I2C1_SDA
PB10: I2C2_SCL
PB11: I2C2_SDA
PA8: I2C3_SCL
PC9: I2C3_SDA

UART

PA8/PB6#USART1_TX
PA10/PB7#USART1_RX
PA2/PD5#USART2_TX
PA3/PD6#USART2_RX
PB10/PC10#USART3_TX
PB11/PC11#USART3_RX
PA0/PC10#UART4_TX
PA14/PC11#UART4_RX
PC12#UART5_TX
PD2#UART5_RX
PC6/PC14#USART6_TX
PC7/PC9#USART6_RX

SPI

PA4/PA15#SPI1_SS
PA5/PB3#SPI1_SCK
PA6/PB4#SPI1_MISO
PA7/PB5#SPI1_MOSI
PB9/PB12#SPI2_SS
PB10/PB13#SPI2_SCK
PB14/PC2#SPI2_MISO
PB15/PC2#SPI2_MOSI
PA4/PA15#SPI3_SS
PB3#SPI3_SCK
PB4#SPI3_MISO
PB5#SPI3_MOSI

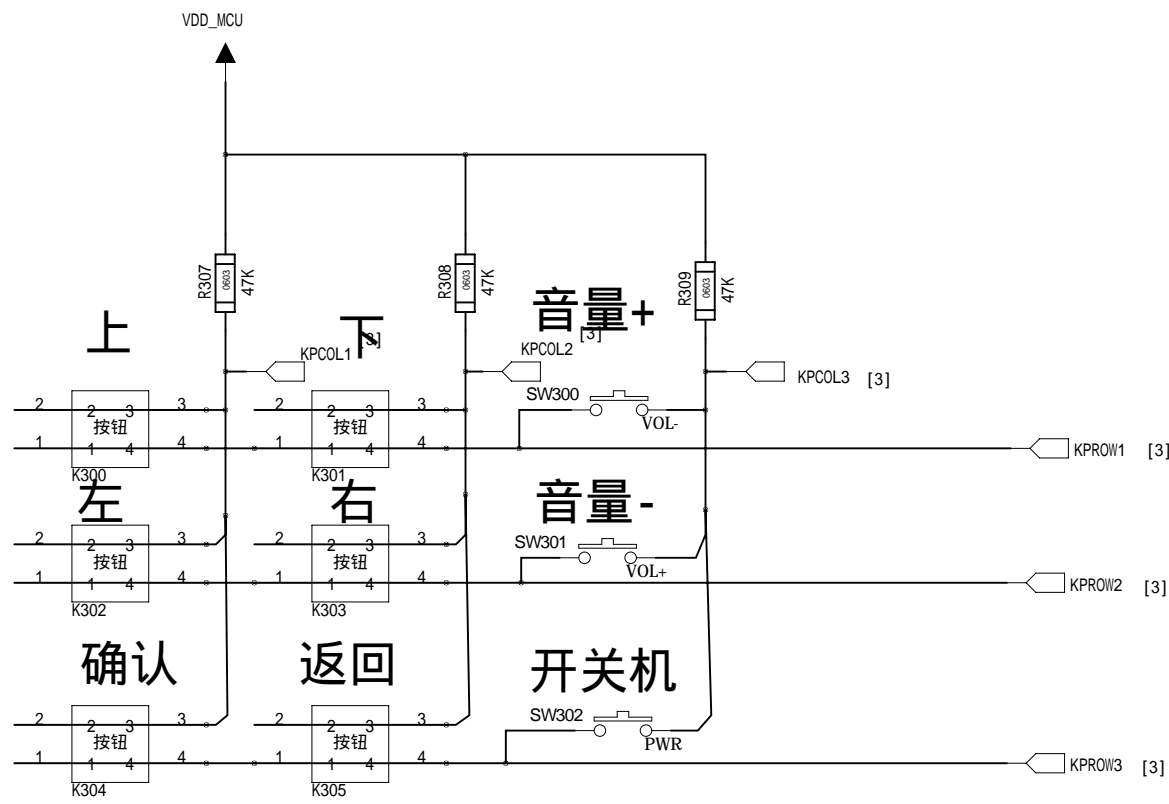
F103 : I2S

PC6 : I2S2_MCK
PA15/PA4/PA15 : I2S3_WS
PB3/PC10 : I2S3_SCK
PB5/PC12 : I2S3_SD
PC11/PB4 : I2S3ext1_SD

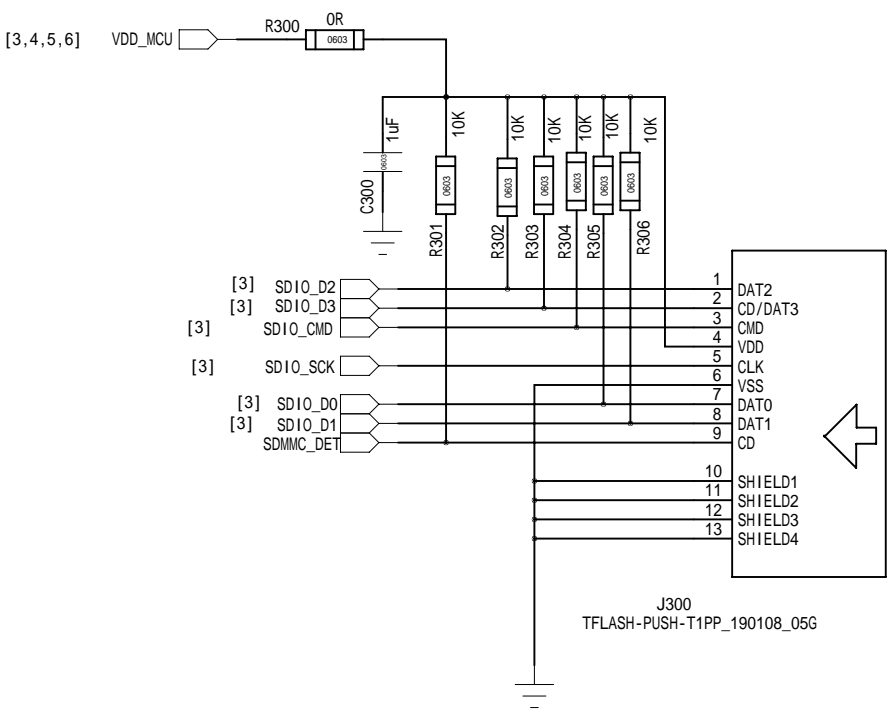
F407 : I2S

PC6 : I2S2_MCK
PA15/PA4/PA15 : I2S3_WS
PB3/PC10 : I2S3_SCK
PB5/PC12 : I2S3_SD
PC11/PB4 : I2S3ext1_SD

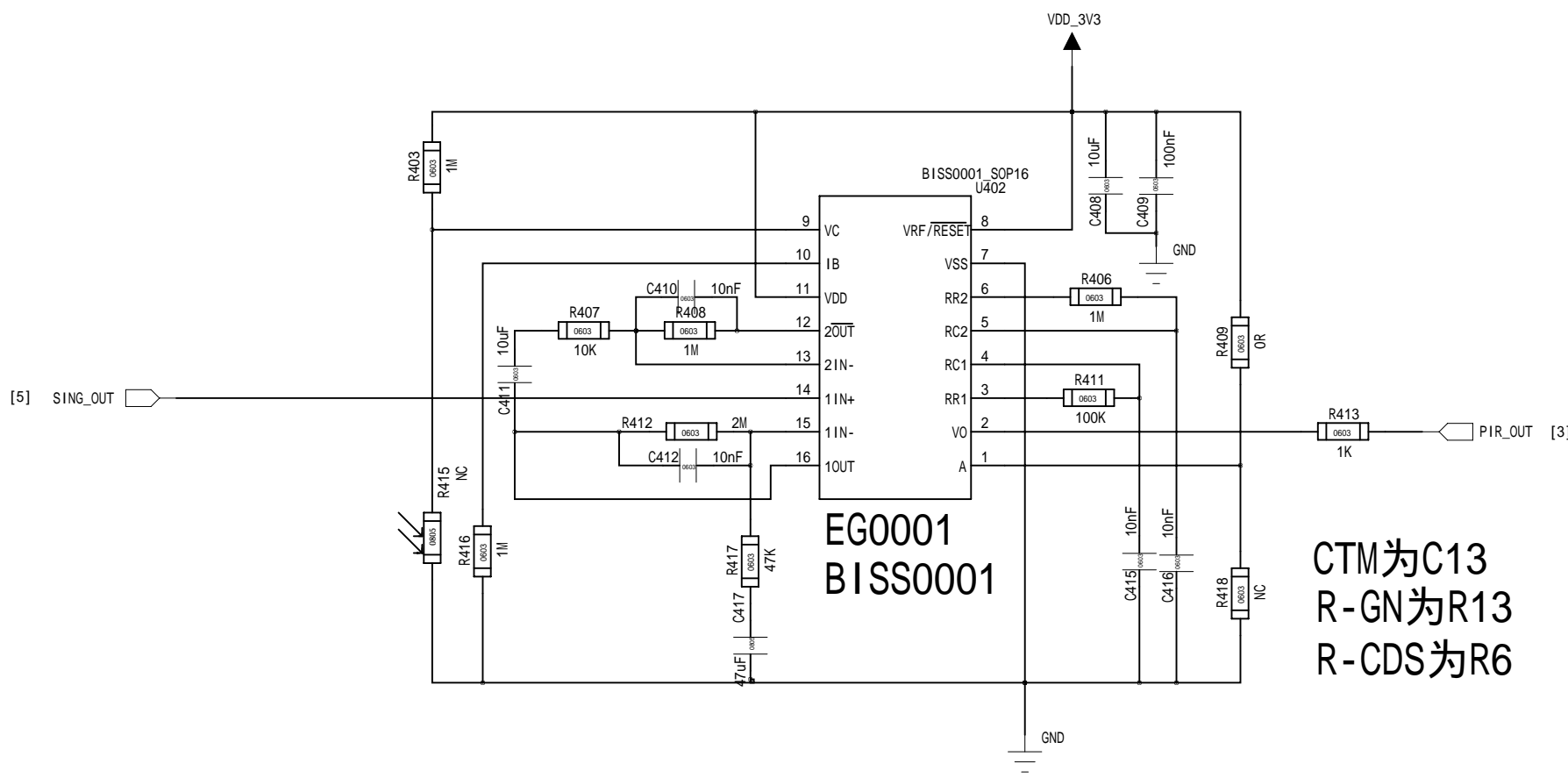
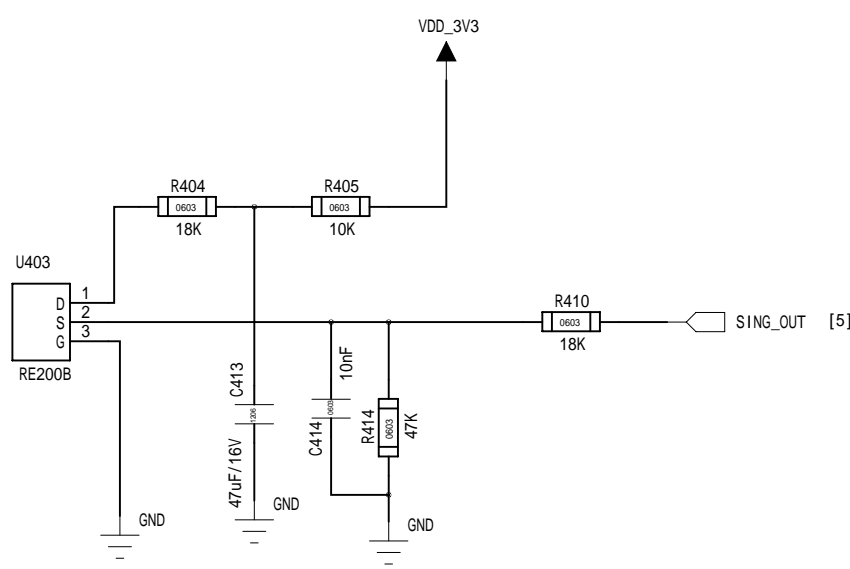
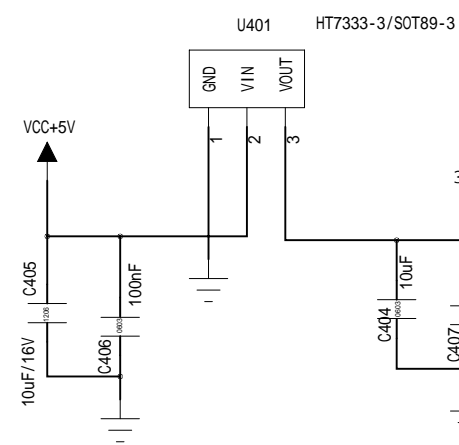
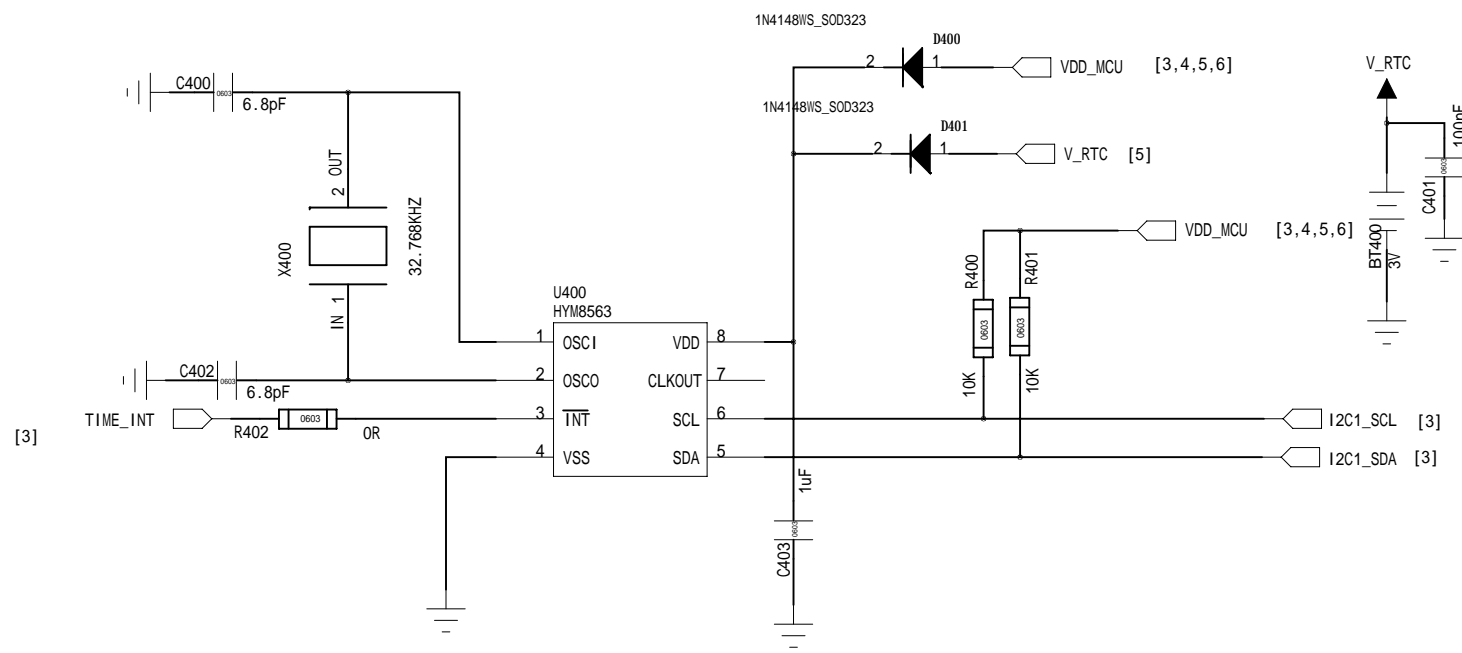
按键

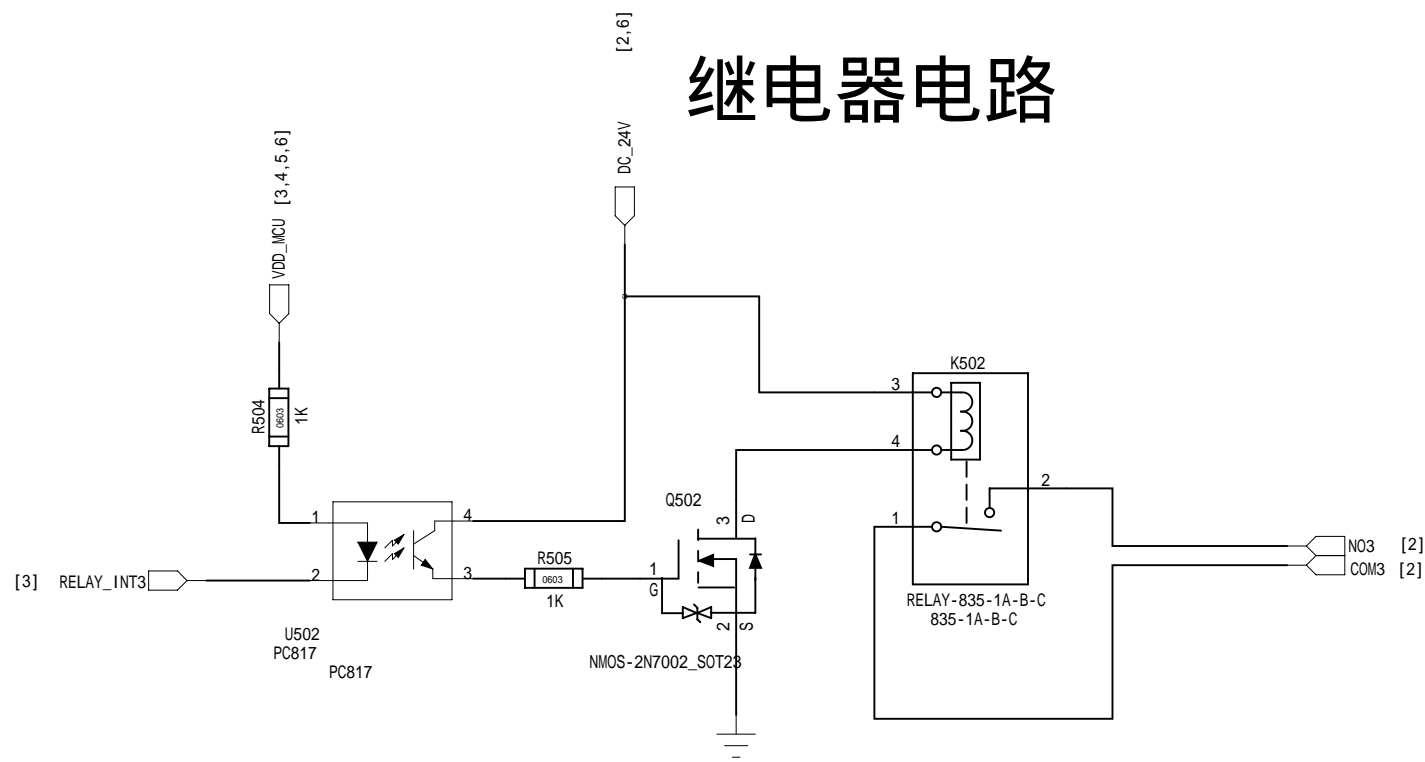
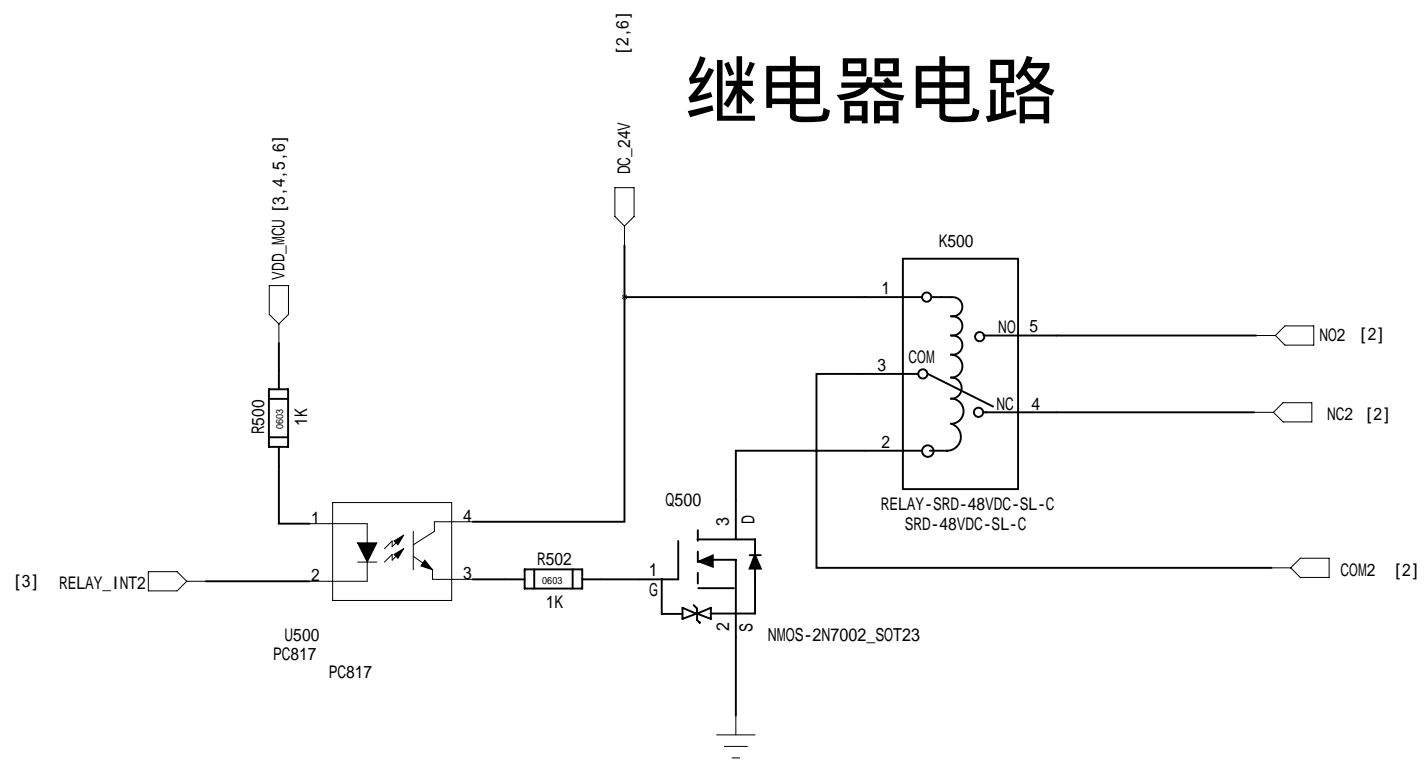
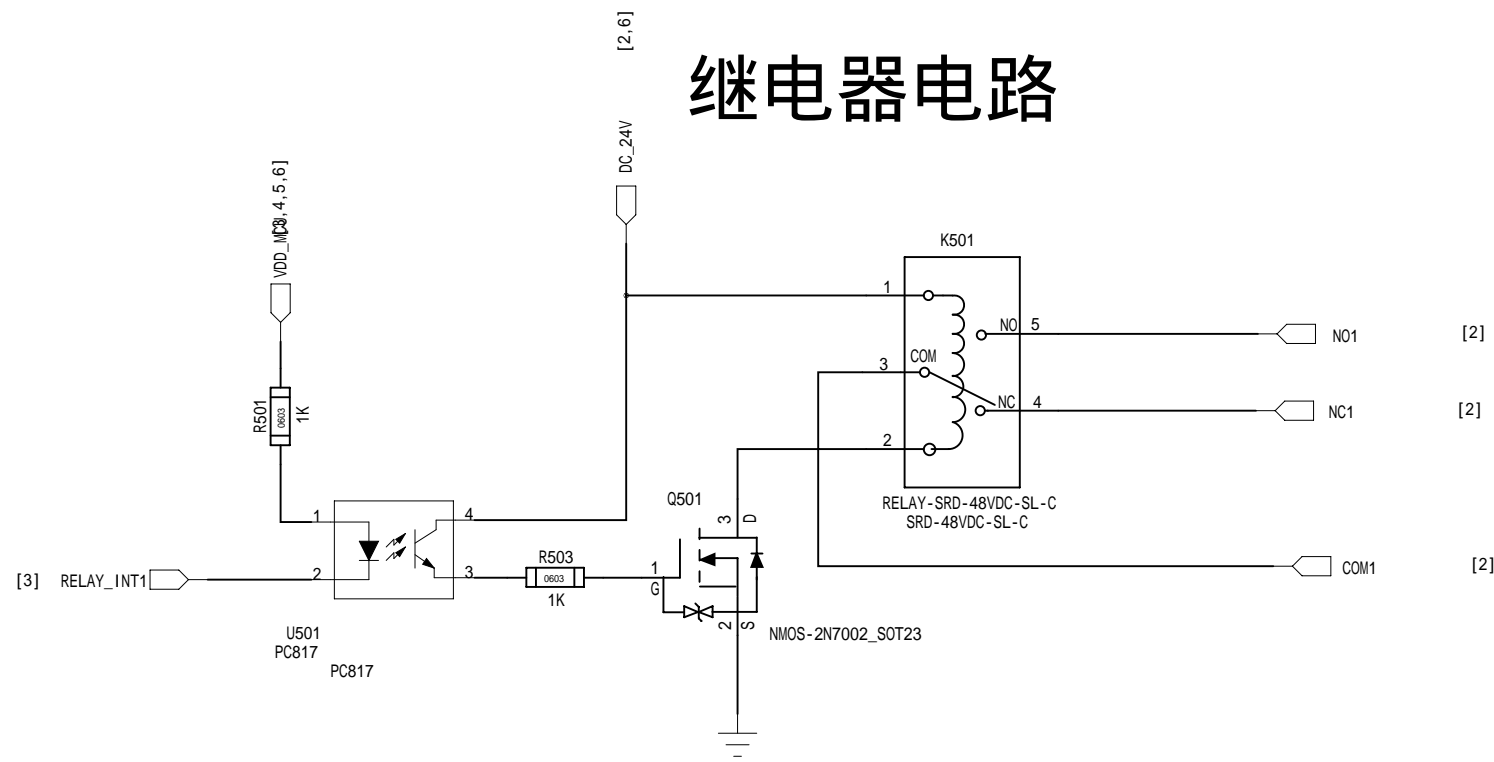


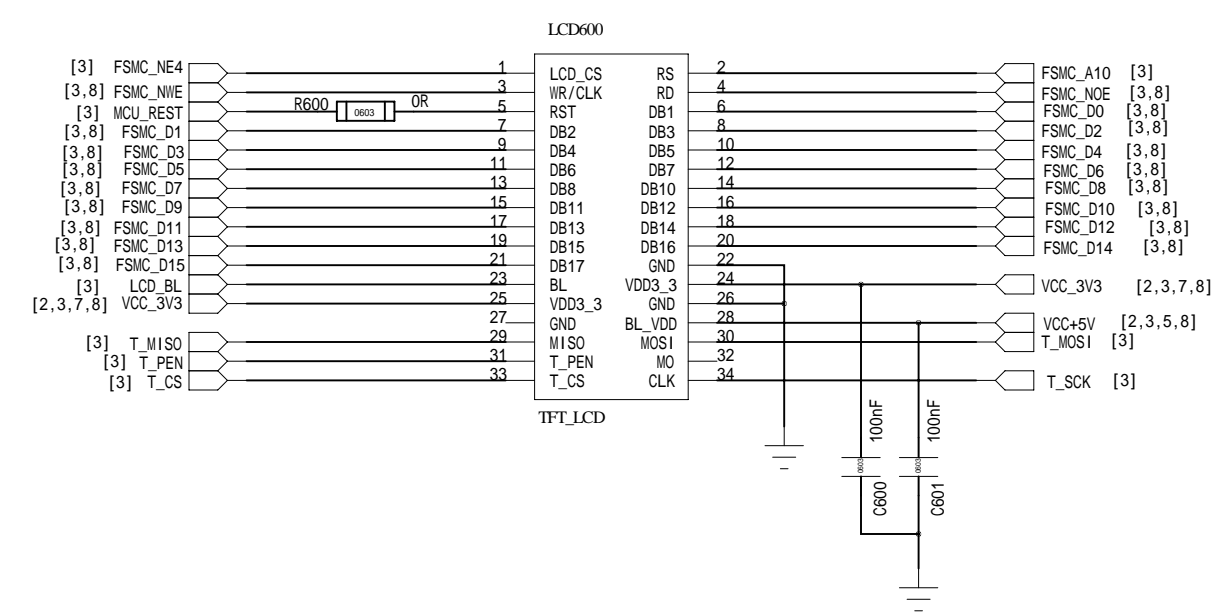
TF卡



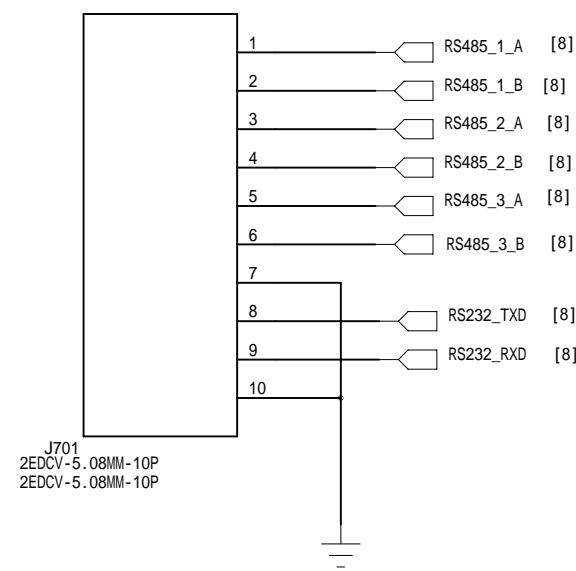
时钟电路



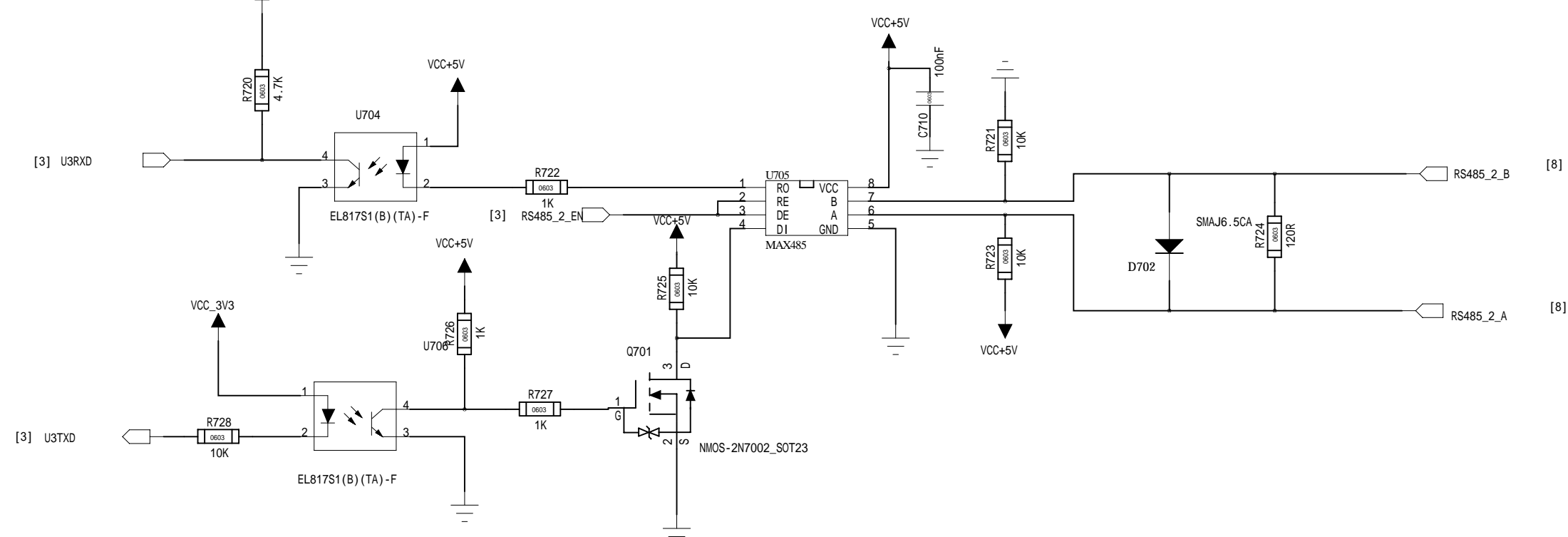




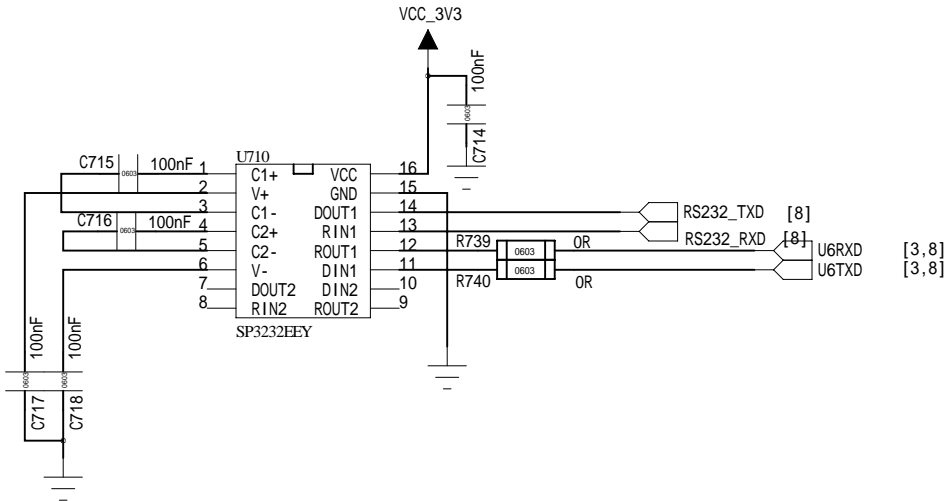
RS485电路



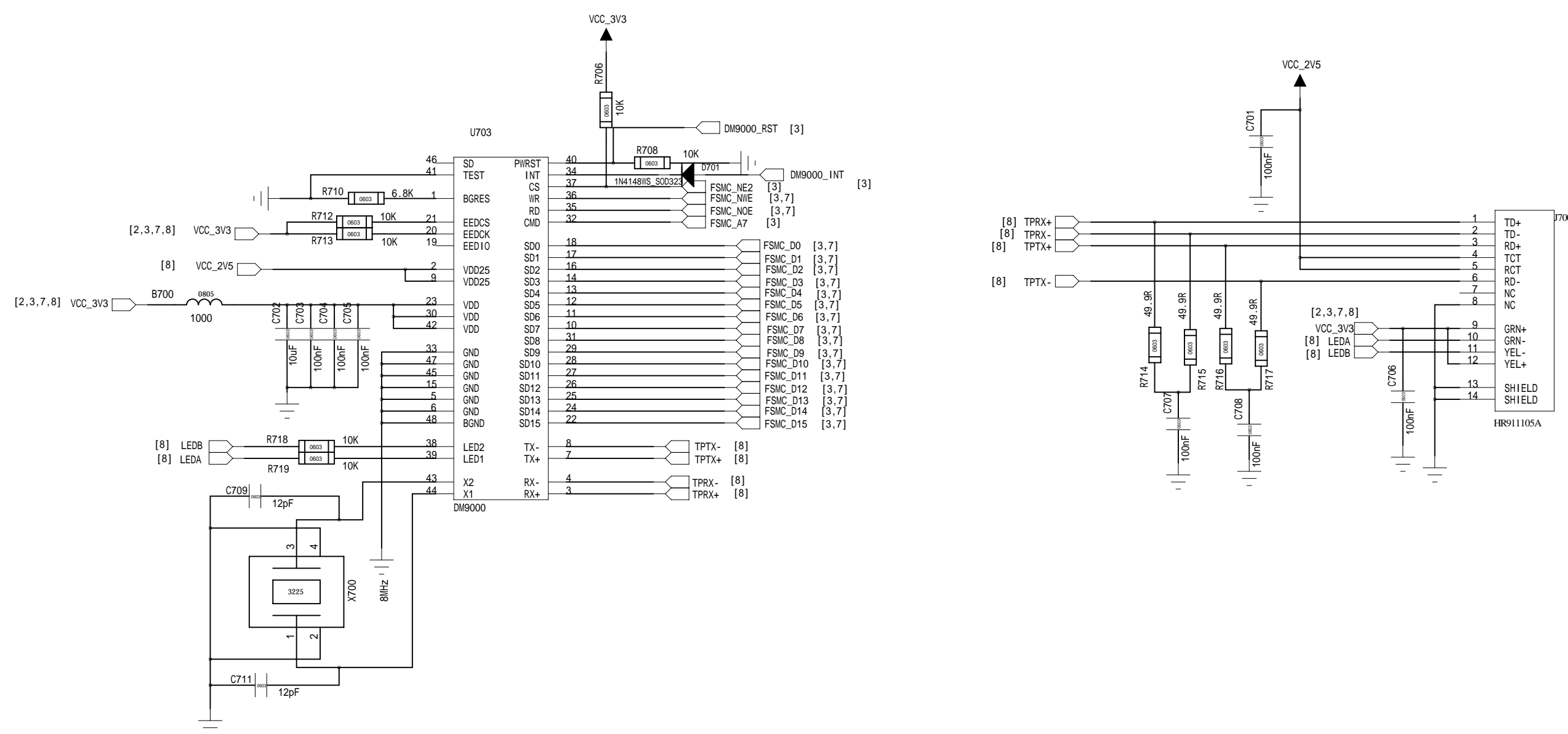
RS485电路



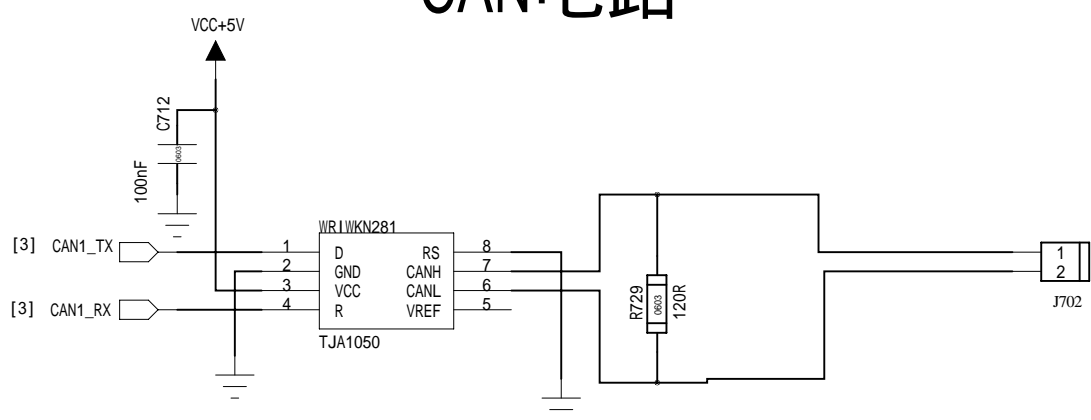
RS485电路



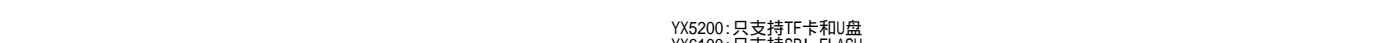
以太网



CAN电路



1. 解码
2. 解码



YX5200:只支持TF卡和U盘

