SD_CARD

File: 1.kicad_sch

POWER

File: 2.kicad_sch

RPI_CONNECTOR

File: 3.kicad_sch

BTB_ARTPI2_H7R7

File: 4.kicad_sch

LCD_CONNECTOR

File: 5.kicad_sch

WIFI_STLINK

File: 6.kicad_sch

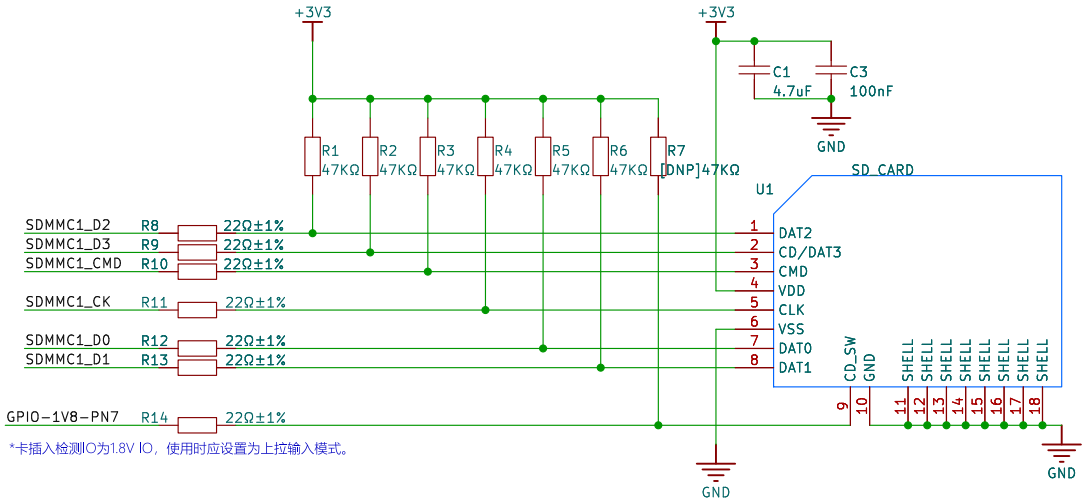
RT-Thread Team

Sheet: /
File: H7R_basic.kicad_sch

Title: ART-Pi 2 Base A 扩展板

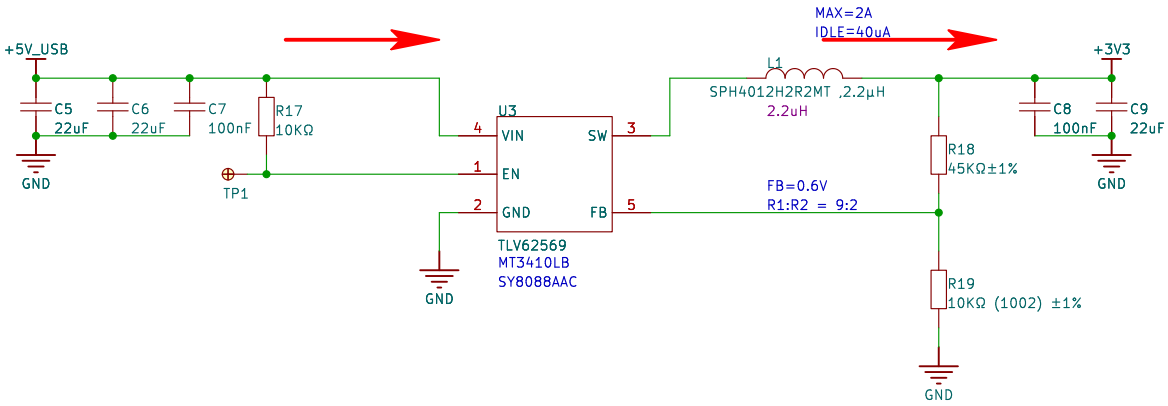
Size: A4	Date: 2025-02-22	**Rev: V1.0_preview**
KiCad E.D.A. 9.0.0		Id: 1/7

SD_CARD

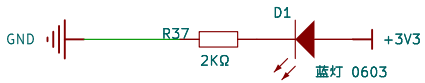


*卡插入检测IO为1.8V IO，使用时应设置为上拉输入模式。

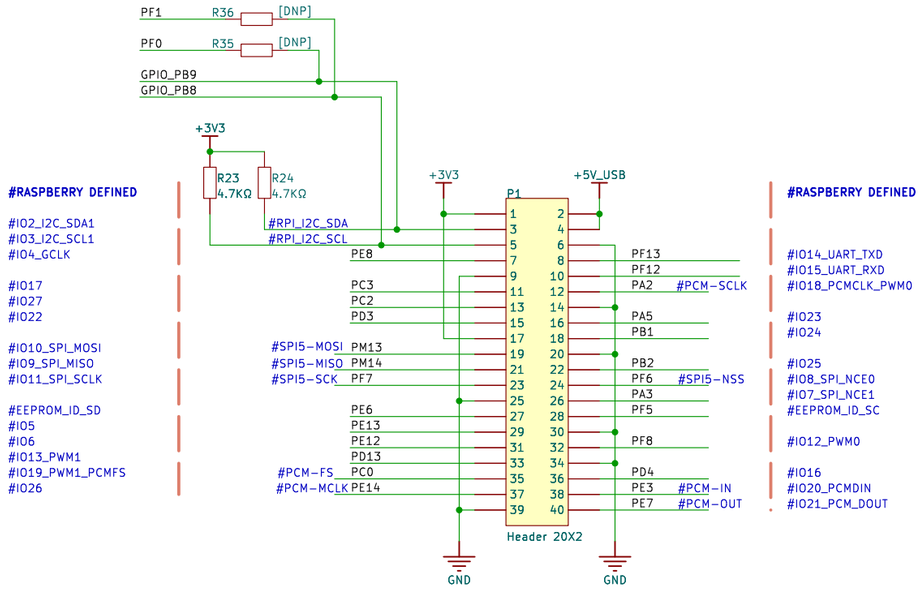
RT-Thread Team	
Sheet: /SD_CARD/	
File: 1.kicad_sch	
Title: SD_CARD	
Size: A4	Date: 2025-02-22
KiCad E.D.A. 9.0.0	Id: 2/7
	Rev: V1.0_preview



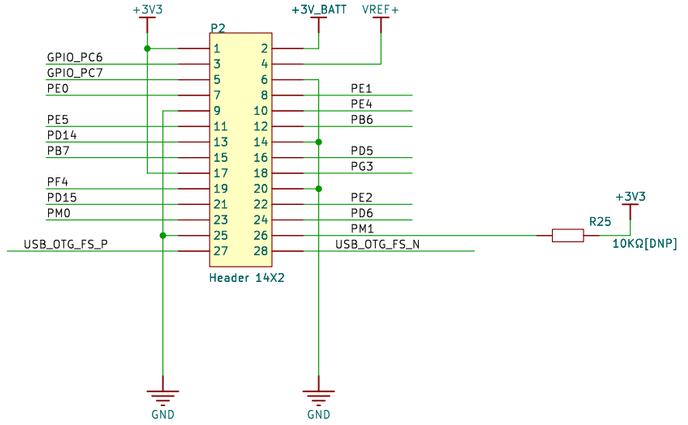
LED_PWR



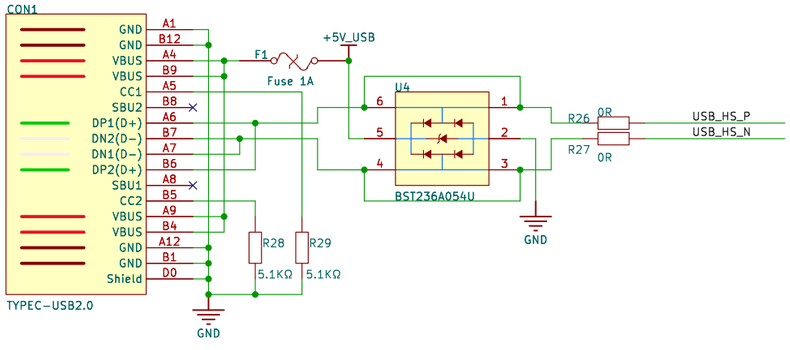
RT-Thread Team	
Sheet: /POWER/	
File: 2.kicad_sch	
Title: POWER	
Size: A4	Date: 2025-02-22
KiCad E.D.A. 9.0.0	Id: 3/7
	Rev: V1.0_preview

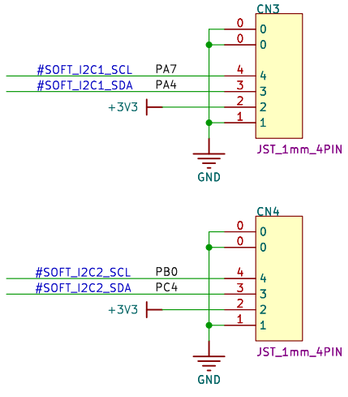


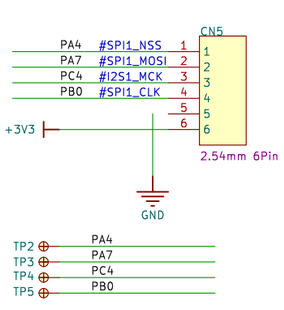
2.54mm双排针 2*20P



2.54mm双排针 2*14P







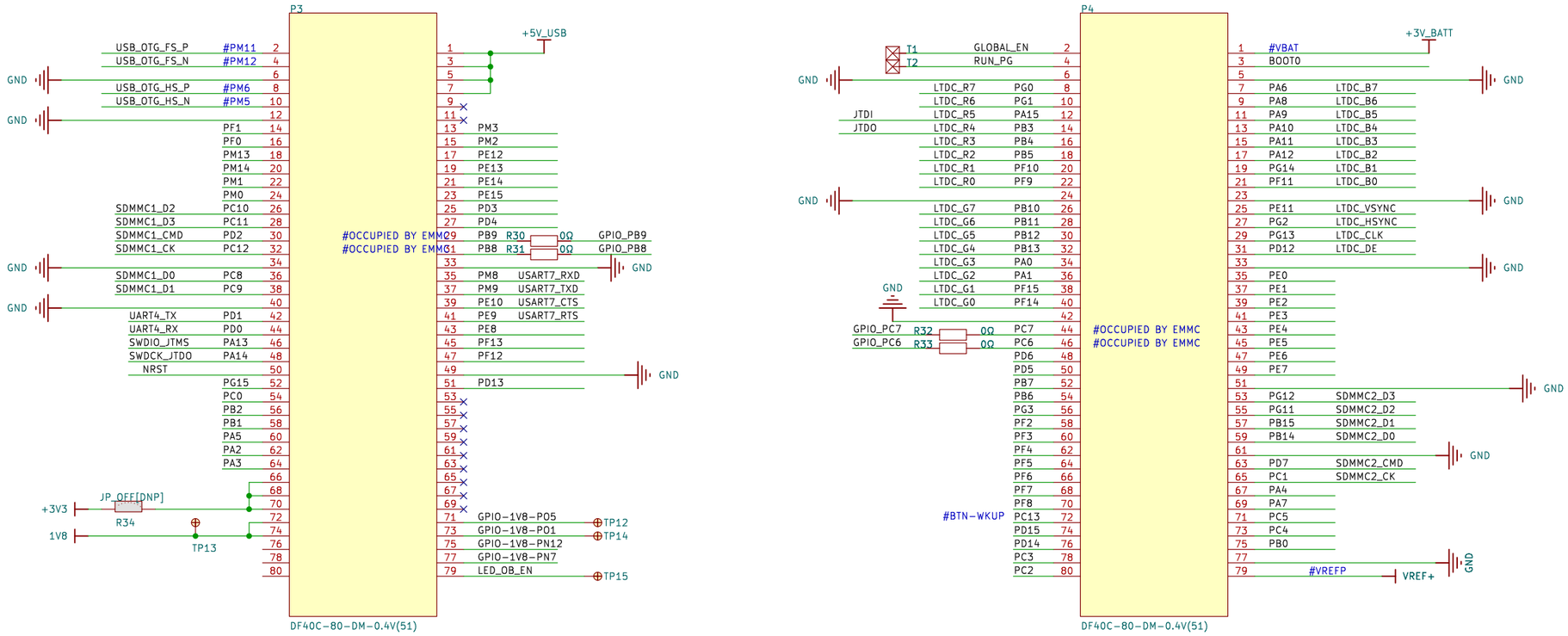
*使用EMMC版本ARTPI2-H7R7核心板时，如果使用SDMMC8线模式，因PB8 PB9被解除焊接，要使用I2C，应当补焊R35 R36

RT-Thread Team

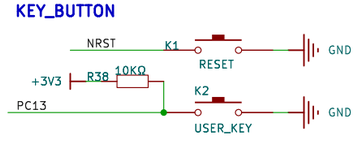
Sheet: /RPI_CONNECTOR/
File: 3.kicad_sch

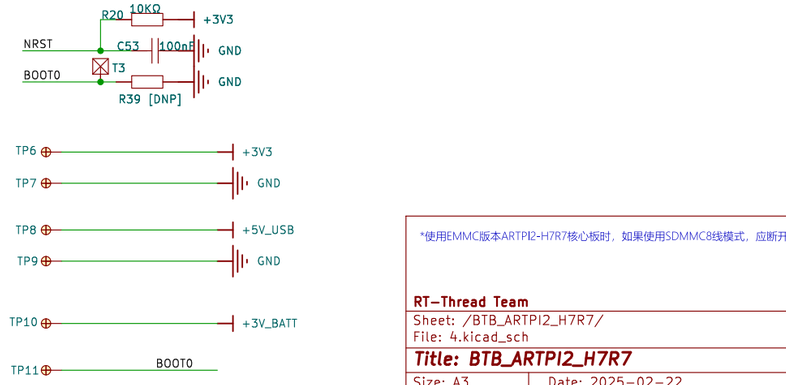
Title: CONNECTOR

Size: A3	Date: 2025-02-22	**Rev: V1.0_preview**
KiCad E.D.A. 9.0.0		Id: 4/7



KEY_BUTTON





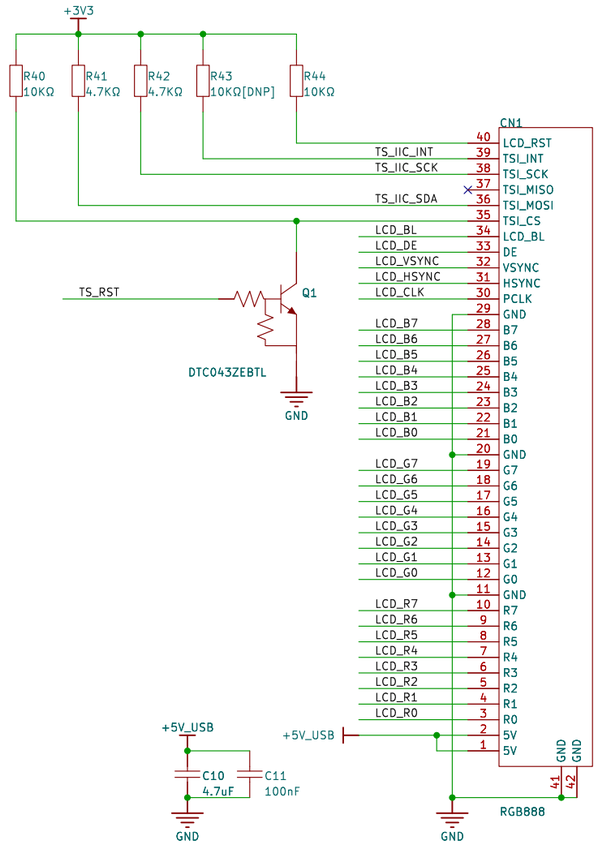
*使用EMMC版本ARTPI2-H7R7核心板时，如果使用SDMMC8线模式，应断开R30 R31 R32 R33，以保证信号质量

RT-Thread Team

Sheet: /BTB_ARTPI2_H7R7/		
File: 4.kicad_sch		
Title: BTB_ARTPI2_H7R7		
Size: A3	Date: 2025-02-22	**Rev: V1.0_preview**
KiCad E.D.A. 9.0.0		Id: 5/7

LCD-RGB888

LTDC_R7	LCD_R7
LTDC_R6	LCD_R6
LTDC_R5	LCD_R5
LTDC_R4	LCD_R4
LTDC_R3	LCD_R3
LTDC_R2	LCD_R2
LTDC_R1	LCD_R1
LTDC_R0	LCD_R0
LTDC_G7	LCD_G7
LTDC_G6	LCD_G6
LTDC_G5	LCD_G5
LTDC_G4	LCD_G4
LTDC_G3	LCD_G3
LTDC_G2	LCD_G2
LTDC_G1	LCD_G1
LTDC_G0	LCD_G0
LTDC_B7	LCD_B7
LTDC_B6	LCD_B6
LTDC_B5	LCD_B5
LTDC_B4	LCD_B4
LTDC_B3	LCD_B3
LTDC_B2	LCD_B2
LTDC_B1	LCD_B1
LTDC_B0	LCD_B0
LTDC_VSYNC	LCD_VSYNC
LTDC_HSYNC	LCD_HSYNC
LTDC_CLK	LCD_CLK
LTDC_DE	LCD_DE
PG15	LCD_BL
GPIO-1V8-PN12	TS_RST
PE15	TS_IIC_INT
PF0	TS_IIC_SDA
PF1	TS_IIC_SCK



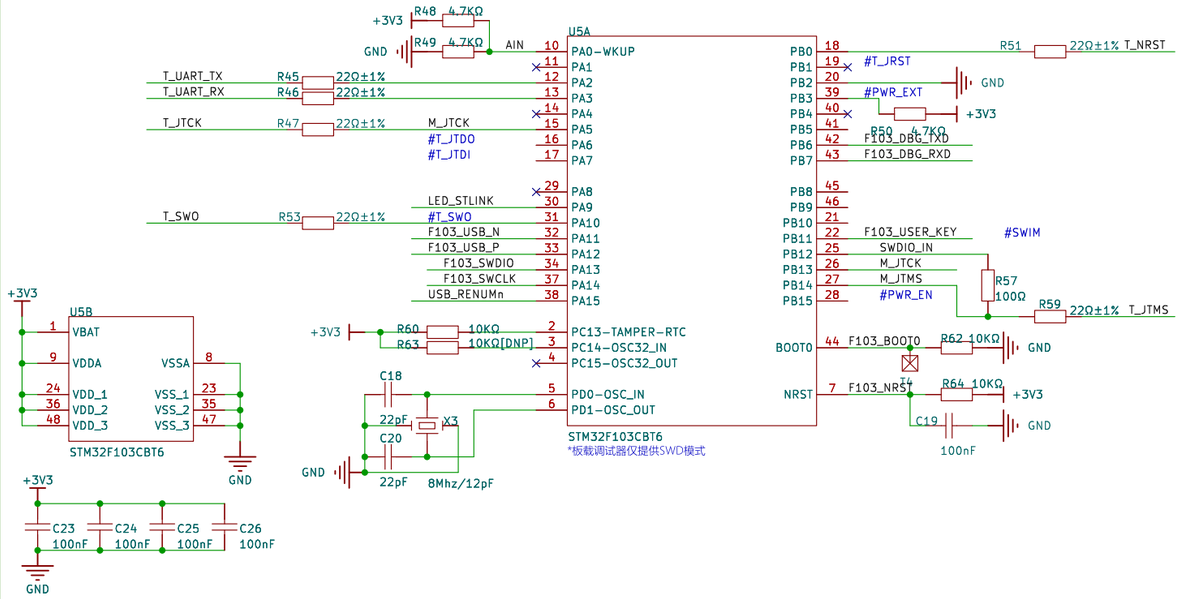
RT-Thread Team

Sheet: /LCD_CONNECTOR/
File: 5.kicad_sch

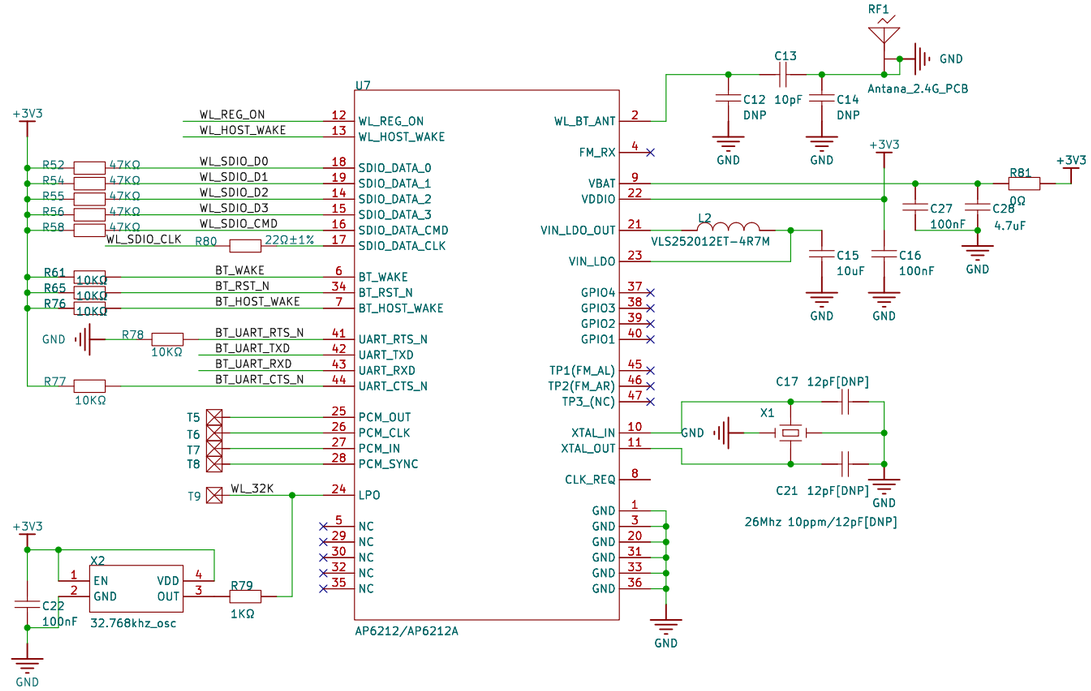
Title: LCD_CONNECTOR

Size: A3	Date: 2025-02-22	**Rev: V1.0_preview**
KiCad E.D.A. 9.0.0		Id: 6/7

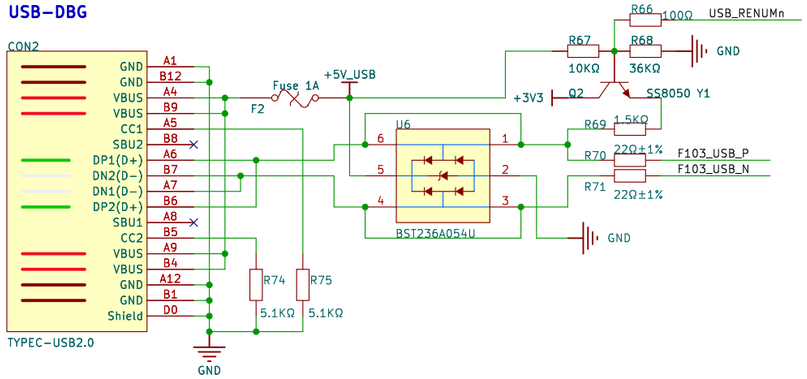
MCU_DEBUGGER_F103



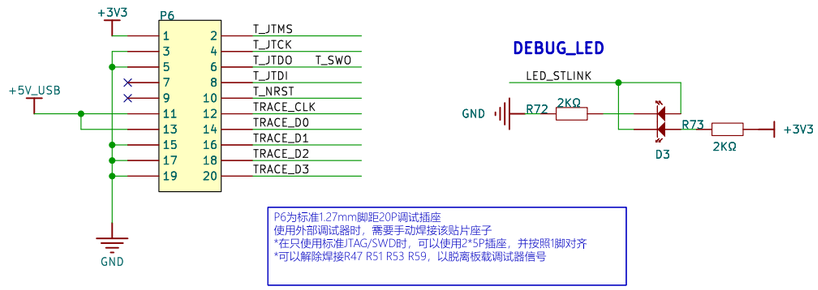
WIFI&BT CYWL6208



USB-DBG

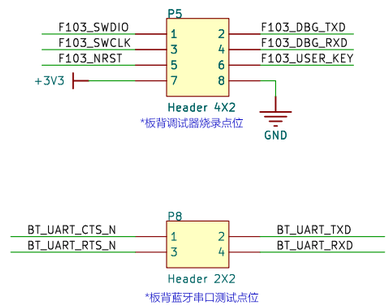


DEBUG PROBE



DEBUG_LED

DEBUG PogoPin



Target Debug Interface

UART4_RX	T_UART_RX
UART4_TX	T_UART_TX
SWDIO_JTMS	T_JTMS
SWDCK_JTDO	T_JTCK
JTDO	T_JTDO
JTDI	T_JTDI
NRST	T_NRST
PE2	TRACE_CLK
PE3	TRACE_D0
PE4	TRACE_D1
PE5	TRACE_D2
PE6	TRACE_D3

注意在使用外部JTAG或Trace调试时，
需关注调试所占IO的复用情况

BlueTooth & WIFI

#PB14	SDMMC2_D0	WL_SDIO_D0
#PB15	SDMMC2_D1	WL_SDIO_D1
#PG11	SDMMC2_D2	WL_SDIO_D2
#PG12	SDMMC2_D3	WL_SDIO_D3
#PD7	SDMMC2_CMD	WL_SDIO_CMD
#PC1	SDMMC2_CK	WL_SDIO_CLK
PM2		WL_REG_ON
PC5		WL_HOST_WAKE
PF2		BT_WAKE
PF3		BT_HOST_WAKE
PM3		BT_RST_N

TP16	#PE10	USART7_CTS	BT_UART_CTS_N
TP17	#PE9	USART7_RTS	BT_UART_RTS_N
TP18	#PM8	USART7_RXD	BT_UART_RXD
TP19	#PM9	USART7_TXD	BT_UART_TXD

H1 H2 H3 H4

RT-Thread Team

Sheet: /WIFI_STLINK/
File: 6.kicad_sch

Title: WIFI&STLINK

Size: A3	Date: 2025-02-22	Rev: V1.0_preview
KiCad E.D.A. 9.0.0		Id: 7/7