

00.Table_and_Revision_History

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(1-2) 版本说明

Revision History		
Rev.Code	Date	Description
V1.00	2025-11-18	创建原理图

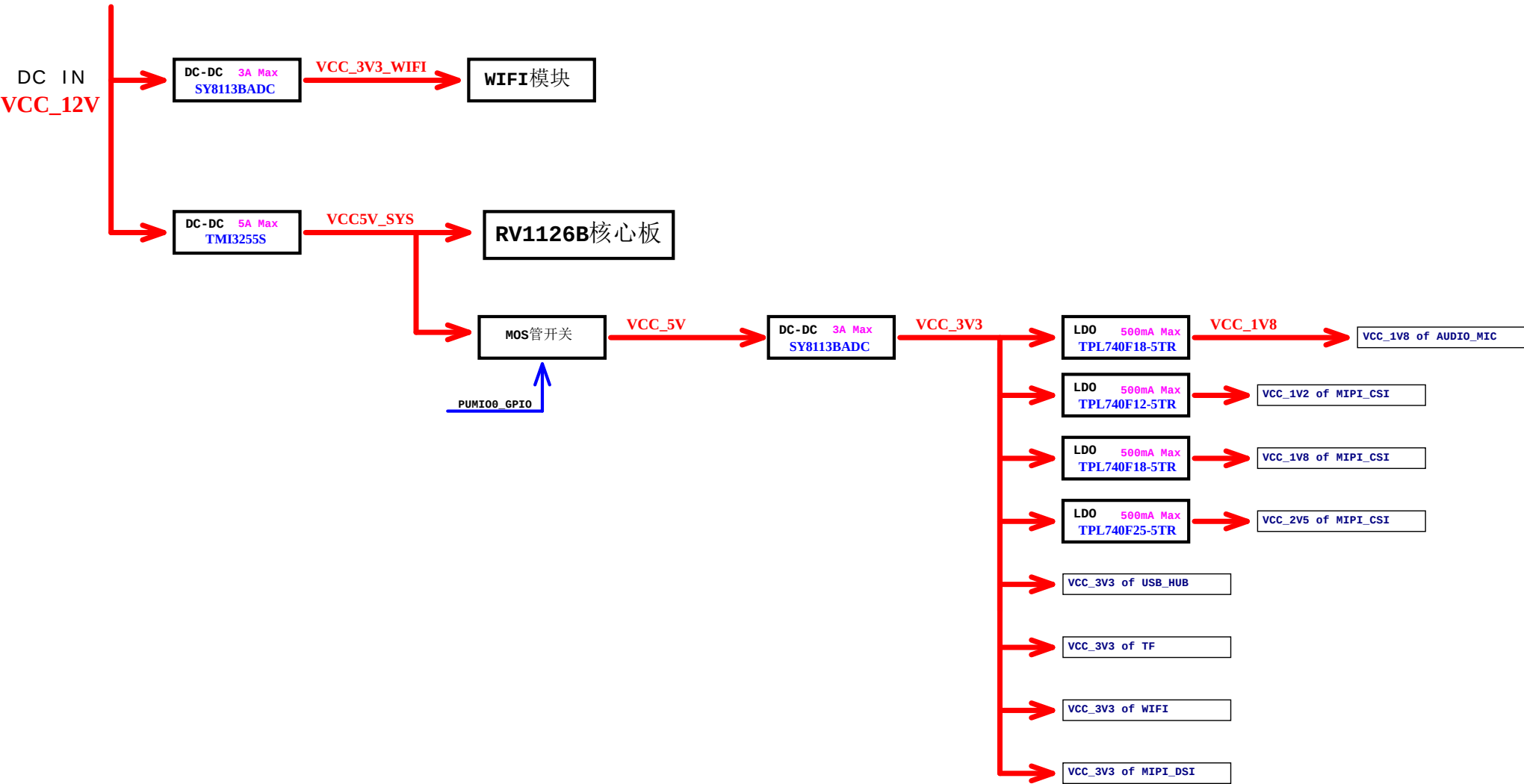
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01.MAIN.SchDoc

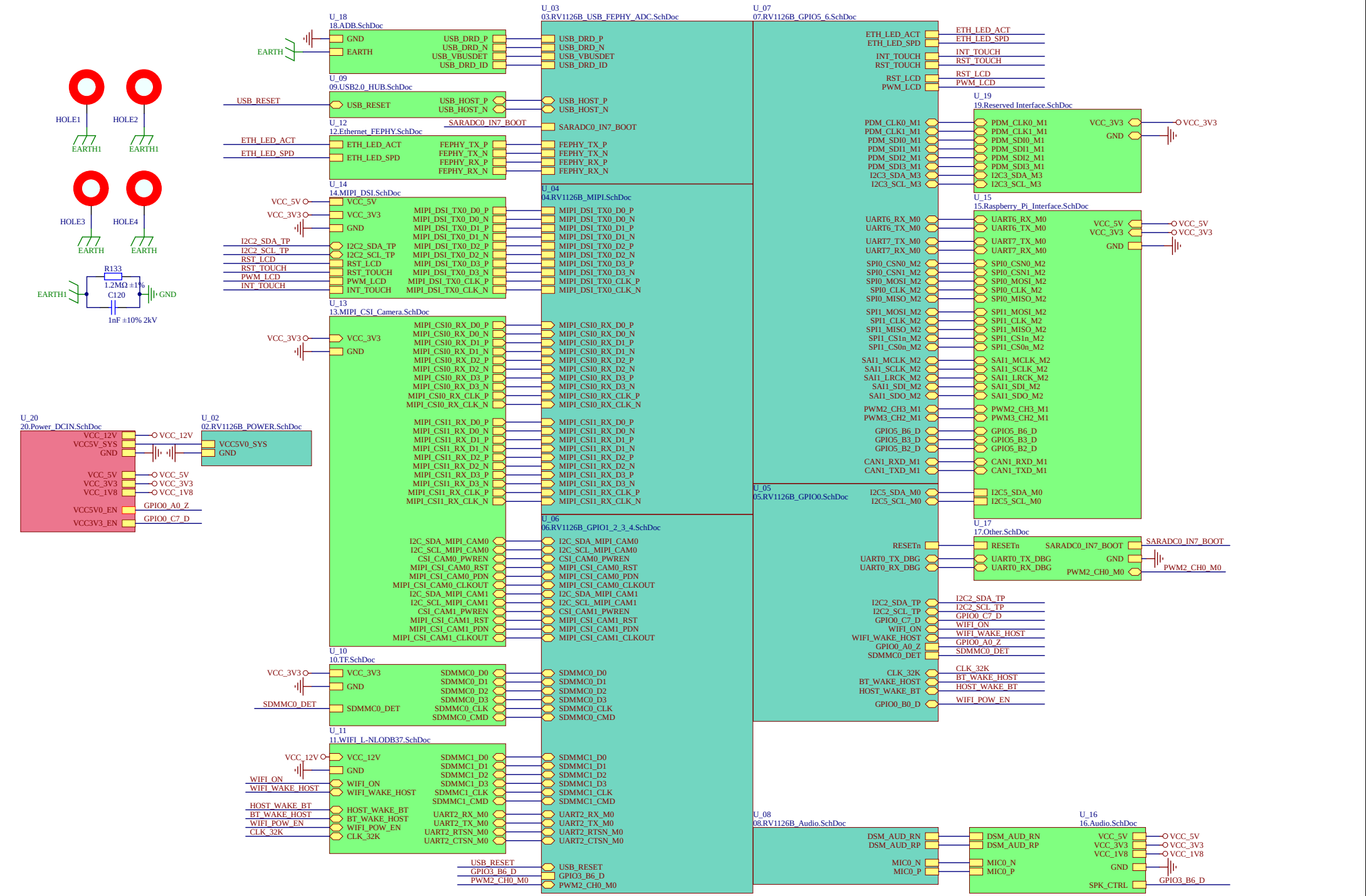
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00.Power Diagram and Sequence.SchDoc

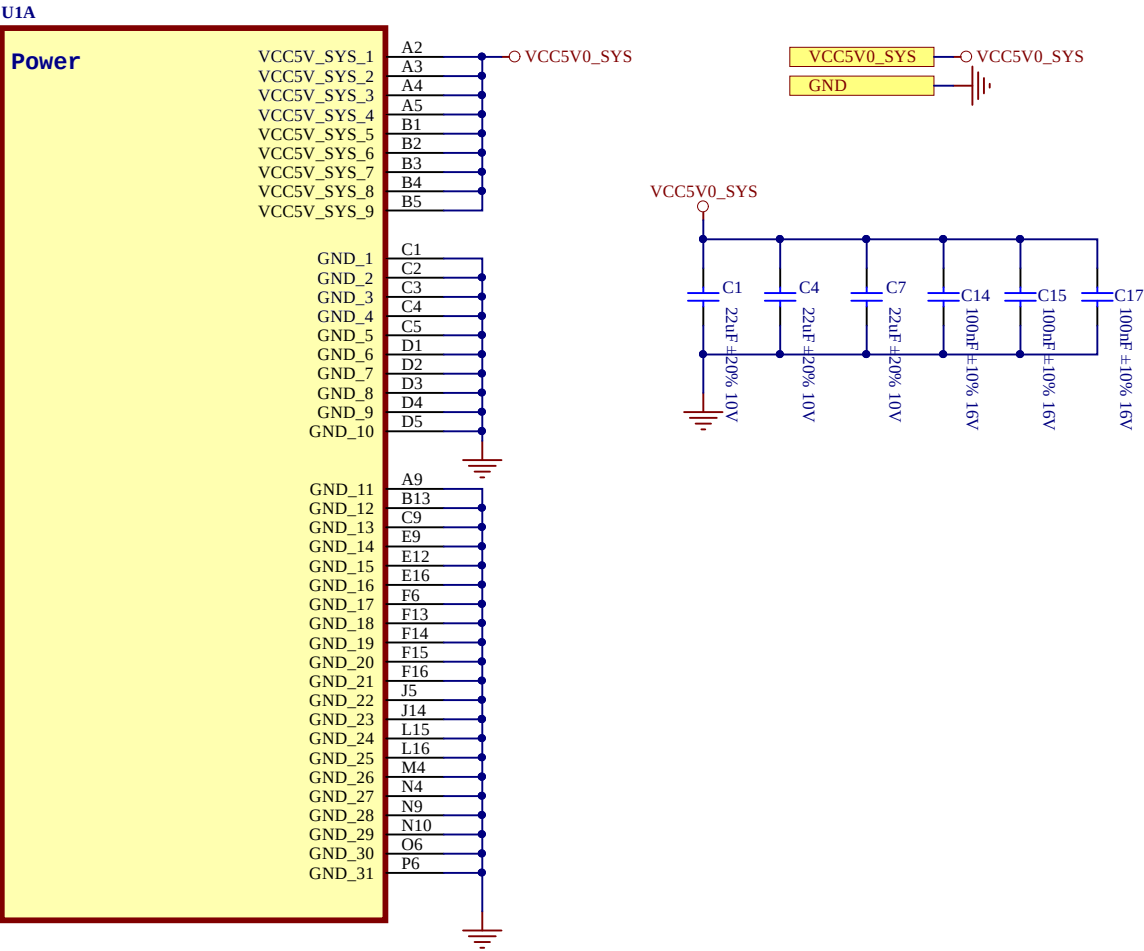
Power Diagram and Sequence



01.MAIN

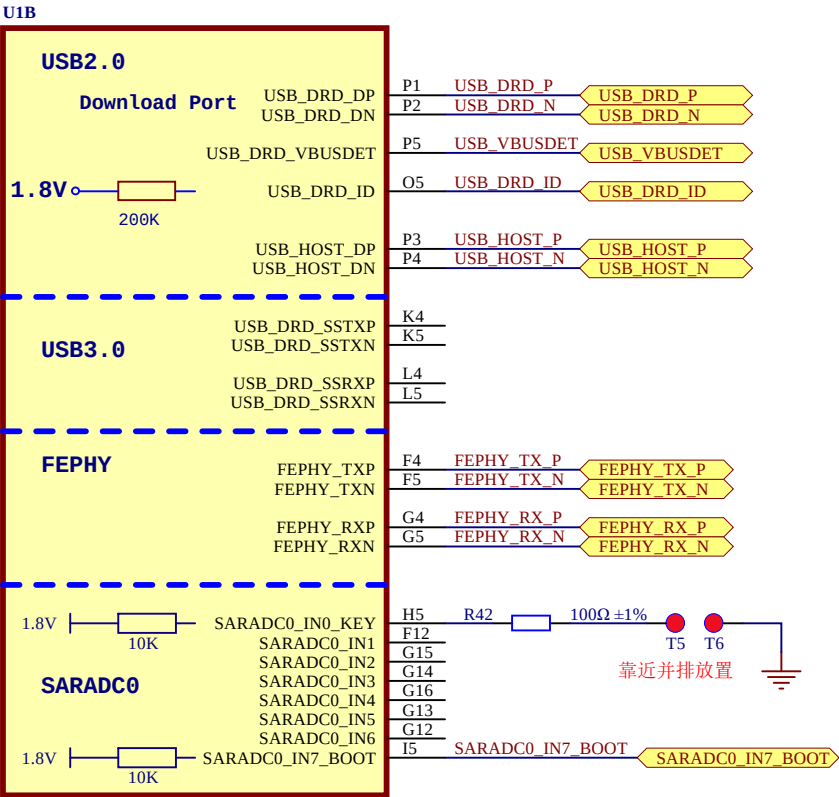


02.RV1126B_POWER



Note:
RV1126B-POWER design rules:
1. Input voltage range: DC-5V
2. Current range: ≥2A

03.RV1126B_USB_FEPHY_ADC



Note:

SARADC0_IN0_KEY:系统启动时拉低可以进入Loader烧写模式，内部10K电阻上拉到1.8V
SARADC0_IN7_BOOT:系统启动时拉低可进入Maskrom模式，内部10K电阻上拉到1.8V

Note:

- USB2.0 design rules:
- 1.USB_DRD为固件下载接口，底板必须预留该接口
 - 2.USB接口的复用关系见下图
 - 3.由于USB3.0的DRD和USB2.0的DRD是同一个USB3.0的控制器，因此USB3.0和USB2.0的DRD只能同时做Device或者做HOST

	Case1 (Recommend)	Case2 (Recommend)	Case3 (Not recommend)
USB 2.0 DRD (FW download)	USB 2.0 DRD	Combined for USB3.0 DRD	USB2.0 HOST
USB3.0 DRD	N/A		Combined for USB3.0 HOST
USB2.0 HOST	USB2.0 HOST	USB2.0 HOST	

Note:

- 以太网设计规范:
- 1.RV1126B只有1个GMAC控制器，FEPHY和RGMII二者只能选择其中一个，不能同时使用

04.RV1126B_MIP

U1C

MIPI DPHY CSI RX0

MIPI_DPHY_CSI_RX0_D0P	LVDS_RX0_D0P
MIPI_DPHY_CSI_RX0_D0N	LVDS_RX0_D0N
MIPI_DPHY_CSI_RX0_D1P	LVDS_RX0_D1P
MIPI_DPHY_CSI_RX0_D1N	LVDS_RX0_D1N
MIPI_DPHY_CSI_RX0_D2P	LVDS_RX0_D2P
MIPI_DPHY_CSI_RX0_D2N	LVDS_RX0_D2N
MIPI_DPHY_CSI_RX0_D3P	LVDS_RX0_D3P
MIPI_DPHY_CSI_RX0_D3N	LVDS_RX0_D3N
MIPI_DPHY_CSI_RX0_CLK0P	LVDS_RX0_CLK0P
MIPI_DPHY_CSI_RX0_CLK0N	LVDS_RX0_CLK0N
MIPI_DPHY_CSI_RX0_CLK1P	LVDS_RX0_CLK1P
MIPI_DPHY_CSI_RX0_CLK1N	LVDS_RX0_CLK1N

K1	MIPI_CSI0_RX_D0_P	MIPI_CSI0_RX_D0_P
L1	MIPI_CSI0_RX_D0_N	MIPI_CSI0_RX_D0_N
K3	MIPI_CSI0_RX_D1_P	MIPI_CSI0_RX_D1_P
L3	MIPI_CSI0_RX_D1_N	MIPI_CSI0_RX_D1_N
M1	MIPI_CSI0_RX_D2_P	MIPI_CSI0_RX_D2_P
N1	MIPI_CSI0_RX_D2_N	MIPI_CSI0_RX_D2_N
M3	MIPI_CSI0_RX_D3_P	MIPI_CSI0_RX_D3_P
N3	MIPI_CSI0_RX_D3_N	MIPI_CSI0_RX_D3_N
K2	MIPI_CSI0_RX_CLK_P	MIPI_CSI0_RX_CLK_P
L2	MIPI_CSI0_RX_CLK_N	MIPI_CSI0_RX_CLK_N
M2		
N2		

MIPI DPHY CSI RX1

MIPI_DPHY_CSI_RX1_D0P	LVDS_RX1_D0P
MIPI_DPHY_CSI_RX1_D0N	LVDS_RX1_D0N
MIPI_DPHY_CSI_RX1_D1P	LVDS_RX1_D1P
MIPI_DPHY_CSI_RX1_D1N	LVDS_RX1_D1N
MIPI_DPHY_CSI_RX1_D2P	LVDS_RX1_D2P
MIPI_DPHY_CSI_RX1_D2N	LVDS_RX1_D2N
MIPI_DPHY_CSI_RX1_D3P	LVDS_RX1_D3P
MIPI_DPHY_CSI_RX1_D3N	LVDS_RX1_D3N
MIPI_DPHY_CSI_RX1_CLK0P	LVDS_RX1_CLK0P
MIPI_DPHY_CSI_RX1_CLK0N	LVDS_RX1_CLK0N
MIPI_DPHY_CSI_RX1_CLK1P	LVDS_RX1_CLK1P
MIPI_DPHY_CSI_RX1_CLK1N	LVDS_RX1_CLK1N

I3	MIPI_CSI1_RX_D0_P	MIPI_CSI1_RX_D0_P
I4	MIPI_CSI1_RX_D0_N	MIPI_CSI1_RX_D0_N
H3	MIPI_CSI1_RX_D1_P	MIPI_CSI1_RX_D1_P
H4	MIPI_CSI1_RX_D1_N	MIPI_CSI1_RX_D1_N
H1	MIPI_CSI1_RX_D2_P	MIPI_CSI1_RX_D2_P
H2	MIPI_CSI1_RX_D2_N	MIPI_CSI1_RX_D2_N
J1	MIPI_CSI1_RX_D3_P	MIPI_CSI1_RX_D3_P
J2	MIPI_CSI1_RX_D3_N	MIPI_CSI1_RX_D3_N
I1	MIPI_CSI1_RX_CLK_P	MIPI_CSI1_RX_CLK_P
I2	MIPI_CSI1_RX_CLK_N	MIPI_CSI1_RX_CLK_N
J3		
J4		

MIPI DPHY DSI TX

MIPI_DPHY_DSI_TX_D0P	
MIPI_DPHY_DSI_TX_D0N	
MIPI_DPHY_DSI_TX_D1P	
MIPI_DPHY_DSI_TX_D1N	
MIPI_DPHY_DSI_TX_D2P	
MIPI_DPHY_DSI_TX_D2N	
MIPI_DPHY_DSI_TX_D3P	
MIPI_DPHY_DSI_TX_D3N	
MIPI_DPHY_DSI_TX_CLKP	
MIPI_DPHY_DSI_TX_CLKN	

E4	MIPI_DSI_TX0_D0_P	MIPI_DSI_TX0_D0_P
E3	MIPI_DSI_TX0_D0_N	MIPI_DSI_TX0_D0_N
F2	MIPI_DSI_TX0_D1_P	MIPI_DSI_TX0_D1_P
G2	MIPI_DSI_TX0_D1_N	MIPI_DSI_TX0_D1_N
F3	MIPI_DSI_TX0_D2_P	MIPI_DSI_TX0_D2_P
G3	MIPI_DSI_TX0_D2_N	MIPI_DSI_TX0_D2_N
F1	MIPI_DSI_TX0_D3_P	MIPI_DSI_TX0_D3_P
G1	MIPI_DSI_TX0_D3_N	MIPI_DSI_TX0_D3_N
E1	MIPI_DSI_TX0_CLK_P	MIPI_DSI_TX0_CLK_P
E2	MIPI_DSI_TX0_CLK_N	MIPI_DSI_TX0_CLK_N

Note:

- MIPI CSI RX设计规范:
- 1.RV1126B有2组MIPI CSI RX输入，支持MIPI V1.2版本
 - 2.通道支持的最大传输速率为2.5Gbps/Lane
 - 3.每组port的1*4Lane可以拆成2*2lane输入
 - 4.最大可同时支持4路MIPI CSI RX输入

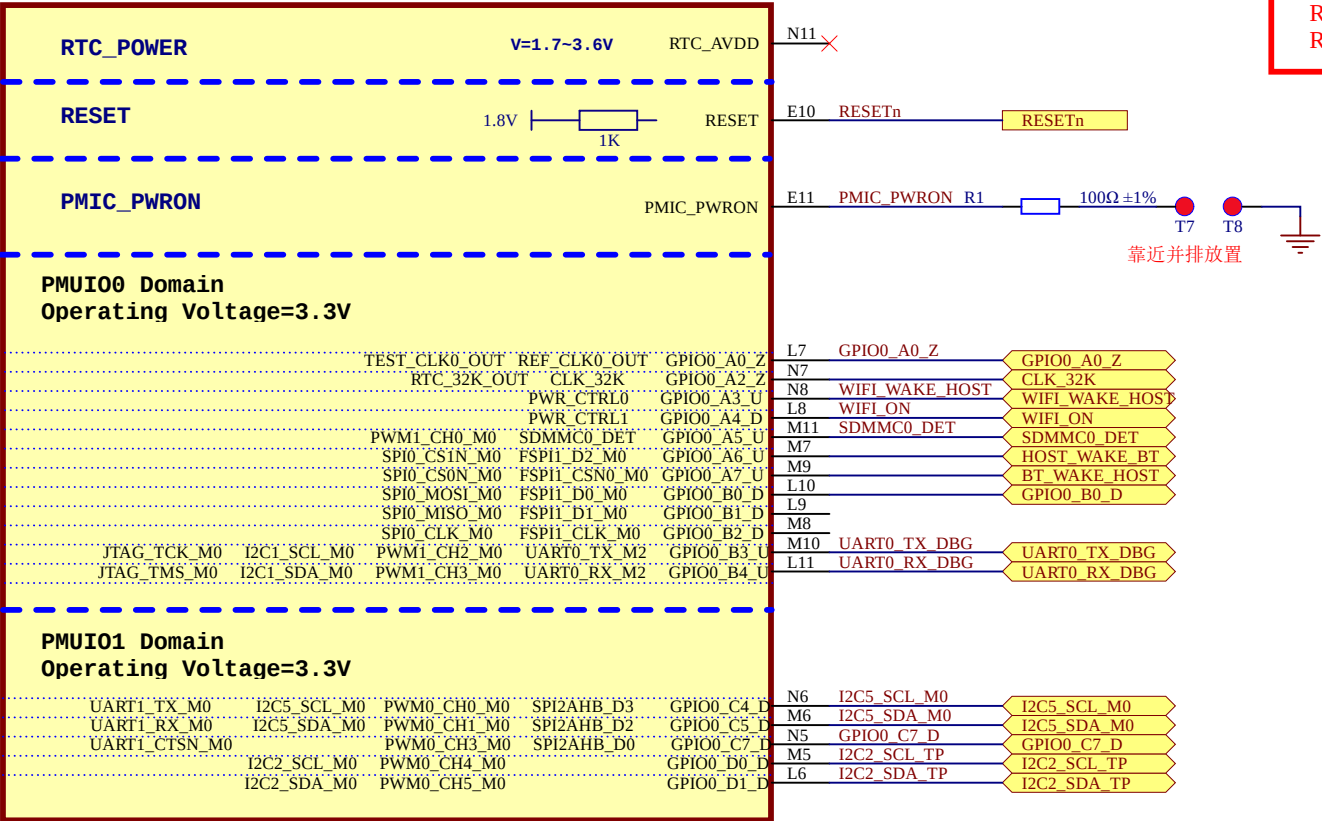
Option1	Sensor 1 x4lane	MIPI_CSI_RX D0~3 MIPI_CSI_RX CLK0
Option2	Sensor 1 x2lane + Sensor 2 x2lane	MIPI_CSI_RX D0~1 MIPI_CSI_RX CLK0 MIPI_CSI_RX D2~3 MIPI_CSI_RX CLK1

Note:

- MIPI CSI TX设计规范:
- 1.RV1126B有1组MIPI DSI TX输入，支持MIPI V1.2版本
 - 2.通道支持的最大传输速率为1.5Gbps/Lane
 - 3.最大分辨率支持1920x1080@60Hz

产品名称	AI主板	设计人员	JOW	审核人员	CHM	图纸名称	RV1126B_MIP	Easy Eai 广州灵眸科技有限公司		
产品型号	EASY-EAI-PI2	设计日期	2025-11-18	审核日期	2025-11-18	图纸版本	V1.00	第 04 张 / 共 20 张	A4	

U1D



Note:
RTC电源峰值电流
RTC_AVDD: <1uA@3.3V(该功能不用, 引脚保持悬空即可)

06.RV1126B_GPI01_2_3_4

U1E

VCCIO1 Domain									
Operating Voltage=1.8V									
			SAI1_MCLK_M0	FSPi0_CSN0	GPI01_B0_U				H15
			SAI1_SDO_M0	FSPi0_D2	GPI01_B2_U				I16
			SAI1_LRCK_M0	FSPi0_D0	GPI01_B4_U				H14
			SAI1_SCLK_M0	FSPi0_D1	GPI01_B5_U				I14
			SAI1_SDI_M0	FSPi0_D3	GPI01_B6_U				H16
				FSPi0_CLK	GPI01_B7_D				I15
VCCIO2 Domain									
Operating Voltage=1.8/3.3V									
(软件上可切换1.8V或3.3V)									
			I2C0_SDA_M1	UART0_RX_M0	SDMMC0_D0	GPI02_A0_D	M14	SDMMC0_D0	SDMMC0_D0
			I2C0_SCL_M1	UART0_TX_M0	SDMMC0_D1	GPI02_A1_D	M15	SDMMC0_D1	SDMMC0_D1
TEST_CLK1_OUT	JTAG_TCK_M1	UART4_RTSN_M3	UART3_RX_M0	SDMMC0_D2	GPI02_A2_D	I16	N16	SDMMC0_D2	SDMMC0_D2
	JTAG_TMS_M1	UART4_CTSN_M3	UART3_TX_M0	SDMMC0_D3	GPI02_A3_D	M16	N16	SDMMC0_D3	SDMMC0_D3
		UART4_RX_M3	UART3_RTSN_M0	SDMMC0_CLK	GPI02_A4_D	N14	N14	SDMMC0_CLK	SDMMC0_CLK
		UART4_TX_M3	UART3_CTSN_M0	SDMMC0_CMD	GPI02_A5_D	N15	N15	SDMMC0_CMD	SDMMC0_CMD
VCCIO3 Domain									
Operating Voltage=3.3V									
				SDMMC1_CLK	GPI03_A0_D	E7	E7	SDMMC1_CLK	SDMMC1_CLK
				SDMMC1_CMD	GPI03_A1_D	D7	D7	SDMMC1_CMD	SDMMC1_CMD
			I2C1_SCL_M1	SDMMC1_D0	GPI03_A2_D	D6	D6	SDMMC1_D0	SDMMC1_D0
			I2C1_SDA_M1	SDMMC1_D1	GPI03_A3_D	E5	E5	SDMMC1_D1	SDMMC1_D1
				SDMMC1_D2	GPI03_A4_D	E8	E8	SDMMC1_D2	SDMMC1_D2
				SDMMC1_D3	GPI03_A5_D	E6	E6	SDMMC1_D3	SDMMC1_D3
				UART2_RTSN_M0	GPI03_A6_D	J16	J16	UART2_RTSN_M0	UART2_RTSN_M0
				UART2_CTSN_M0	GPI03_A7_D	I13	I13	UART2_CTSN_M0	UART2_CTSN_M0
				UART2_RX_M0	GPI03_B0_D	J15	J15	UART2_RX_M0	UART2_RX_M0
			SAI2_SDI2_M0	UART2_TX_M0	GPI03_B1_D	J13	J13	UART2_TX_M0	UART2_TX_M0
FLASH_TRIG_OUT	PWM2_CH0_M0	SAI2_SDO_M0	SPI1_MOSI_M1	GPI03_B2_D	I12	I12	I12	PWM2_CH0_M0	PWM2_CH0_M0
PRELIGHT_TRIG_OUT	PWM2_CH1_M0	SAI2_SDI0_M0	SPI1_MISO_M1	GPI03_B3_D	H13	H13	H13		
FEPHY_LEDLINK_M0	PWM2_CH2_M0	I2C4_SCL_M0	SAI2_SCLK_M0	SPI1_CLK_M1	UART1_RTSN_M1	K15	K15	CSI_CAM0_PWREN	CSI_CAM0_PWREN
FEPHY_LEDSPD_M0	PWM2_CH3_M0	I2C4_SDA_M0	SAI2_LRCK_M0	SPI1_CSN0_M1	UART1_CTSN_M1	K16	K16	CSI_CAM1_PWREN	CSI_CAM1_PWREN
	SDMMC1_DET_N	I2C5_SCL_M1	SAI2_MCLK_M0	SPI1_CSN1_M1	UART1_TX_M1	J12	J12	GPI03_B6_D	GPI03_B6_D
		I2C5_SDA_M1	SAI2_SDI1_M0	UART1_RX_M1	GPI03_B7_D	H12	H12	USB_RESET	USB_RESET
VCCIO4 Domain									
Operating Voltage=1.8V									
			CAM_CLK3_OUT	I2C1_SDA_M2	UART4_RTSN_M0	GPI04_A0_U	C7	I2C_SDA_MIPI_CAM0	I2C_SDA_MIPI_CAM0
			CAM_CLK2_OUT	I2C1_SCL_M2	UART4_CTSN_M0	GPI04_A1_U	D8	I2C_SCL_MIPI_CAM0	I2C_SCL_MIPI_CAM0
					UART4_RX_M0	GPI04_A2_D	B7	MIPI_CSI_CAM0_PDN	MIPI_CSI_CAM0_PDN
PWM0_CH4_M1					UART4_TX_M0	GPI04_A3_D	C6	MIPI_CSI_CAM0_RST	MIPI_CSI_CAM0_RST
PWM0_CH5_M1	SPI0_CSN1_M1	SAI1_MCLK_M1				GPI04_A4_D	C8	MIPI_CSI_CAM1_PDN	MIPI_CSI_CAM1_PDN
	SPI0_MOSI_M1	SAI1_SCLK_M1	I2C3_SCL_M1			GPI04_A5_D	B6	MIPI_CSI_CAM1_RST	MIPI_CSI_CAM1_RST
	SPI0_MISO_M1	SAI1_LRCK_M1	I2C3_SDA_M1			GPI04_A6_D	B8	I2C_SDA_MIPI_CAM1	I2C_SDA_MIPI_CAM1
PWM0_CH6_M1	SPI0_CSN0_M1	SAI1_SDI_M1	I2C4_SDA_M2	UART5_TX_M0	GPI04_A7_D	A8	A8	I2C_SCL_MIPI_CAM1	I2C_SCL_MIPI_CAM1
PWM0_CH7_M1	SPI0_CLK_M1	SAI1_SDO_M1	I2C4_SCL_M2	UART5_RX_M0	GPI04_A7_D	A7	A7	MIPI_CSI_CAM1_CLKOUT	MIPI_CSI_CAM1_CLKOUT
			CAM_CLK1_OUT	UART5_RTSN_M0	GPI04_B0_D	A6	A6	MIPI_CSI_CAM0_CLKOUT	MIPI_CSI_CAM0_CLKOUT
			CAM_CLK0_OUT	UART5_CTSN_M0	GPI04_B1_D				

07.RV1126B_GPI05_6

UIF

VCCIO5 Domain
Operating Voltage=3.3V

	DSMC_CSN1	ETH_TXD3_M1	UART4_RTSN_M1	PWM2_CH4_M0	VI_CIF_D0_M1	VO_LCDC_D0	GPIO5_A0
I2C5_SCL_M2	DSMC_DQS1	SAI2_SDI2_M1	UART4_CTSN_M1	PWM2_CH5_M0	VI_CIF_D1_M1	VO_LCDC_D1	GPIO5_A1
	DSMC_D15	SAI2_SDI1_M1	ETH_PPSCCLK_M1	UART4_TX_M1	PWM0_CH5_M2	VI_CIF_D2_M1	GPIO5_A2
	DSMC_D14	SAI2_MCLK_M1	SPI0_CSN0_M2	UART4_RX_M1	PWM0_CH4_M2	VO_LCDC_D3	GPIO5_A3
	DSMC_D13	SAI2_SDO_M1	SPI0_MOSI_M2	UART5_TX_M1	PWM0_CH3_M1	VO_LCDC_D4	GPIO5_A4
	DSMC_D12	SAI2_SCLK_M1	SPI0_MISO_M2	UART5_RX_M1	PWM0_CH2_M1	VO_LCDC_D5	GPIO5_A5
	DSMC_D11	SAI2_SDI0_M1	SPI0_CLK_M2	UART5_RTSN_M1	PWM0_CH1_M1	VO_LCDC_D6	GPIO5_A6
I2C5_SDA_M2	DSMC_D10	SAI2_LRCK_M1	SPI0_CSN1_M2	UART5_CTSN_M1	PWM0_CH0_M1	VI_CIF_D3_M1	GPIO5_A7
	DSMC_D9		ETH_RXCTL_M1	UART6_TX_M0	VI_CIF_D4_M1	VO_LCDC_D8	GPIO5_B0
	DSMC_D8		ETH_RXD0_M1	UART6_RX_M0	VI_CIF_D5_M1	VO_LCDC_D9	GPIO5_B1
	DSMC_RESETN	DSMC_INT1	ETH_RXD1_M1	UART6_RTSN_M0	PWM2_CH0_M1	VI_CIF_D6_M1	GPIO5_B2
	DSMC_RDYN		ETH_MCLK_M1	UART6_CTSN_M0	PWM2_CH1_M1	VI_CIF_D7_M1	GPIO5_B3
	DSMC_CSN0			UART7_TX_M0		VI_CIF_D8_M1	GPIO5_B4
	DSMC_DQS0		ETH_MDIO_M1	UART7_RX_M0		VI_CIF_D9_M1	GPIO5_B5
	DSMC_CLKN	DSMC_INT0	ETH_MDC_M1	UART7_RTSN_M0	PWM2_CH2_M1	VI_CIF_D10_M1	GPIO5_B6
	DSMC_CLKP		ETH_TXD0_M1	UART7_CTSN_M0	PWM2_CH3_M1	VI_CIF_D11_M1	GPIO5_B7
	DSMC_D7		ETH_TXD1_M1		PWM3_CH0_M1	VI_CIF_D12_M1	GPIO5_C0
	DSMC_D6		ETH_CLK_25M_OUT_M1		PWM3_CH1_M1	VI_CIF_D13_M1	GPIO5_C1
	DSMC_D5		ETH_TXCTL_M1		PWM3_CH2_M1	VI_CIF_D14_M1	GPIO5_C2
	DSMC_D4	SAI1_MCLK_M2	ETH_RXD2_M1		PWM3_CH3_M1	VI_CIF_D15_M1	GPIO5_C3
	DSMC_D3	SAI1_SDO_M2	ETH_RXD3_M1		PWM3_CH4_M1	VI_CIF_VSYNC_M1	GPIO5_C4
	DSMC_D2	SAI1_SCLK_M2	ETH_TXD2_M1		PWM3_CH5_M1	VI_CIF_CLKOUT_M1	GPIO5_C5
	DSMC_D1	SAI1_LRCK_M2	ETH_TXCLK_M1		PWM3_CH6_M1	VI_CIF_CLKIN_M1	GPIO5_C6
	DSMC_D0	SAI1_SDI_M2	ETH_RXCLK_M1		PWM3_CH7_M1	VI_CIF_HSYNC_M1	GPIO5_C7
I2C3_SCL_M2	DSMC_CSN3		ETH_PTP_REFCLK_M1		PWM0_CH6_M2	SPI1_CSN0_M2	VO_LCDC_DEN
I2C3_SDA_M2	DSMC_CSN2		ETH_PPSTRIG_M1		PWM1_CH2_M1	SPI1_CLK_M2	VO_LCDC_HSYNC
	DSMC_INT3			UART3_RTSN_M1	PWM1_CH1_M1	SPI1_MOSI_M2	VO_LCDC_VSYNC
	DSMC_INT2			UART3_CTSN_M1	PWM1_CH0_M1	SPI1_MISO_M2	VO_LCDC_CLK
I2C2_SCL_M1		FEPHY_LEDLINK_M1		UART3_TX_M1	PWM0_CH7_M2	SPI1_CSN1_M2	CAN0_RXD_M0
I2C2_SDA_M1		FEPHY_LEDSPD_M1		UART3_RX_M1	PWM1_CH3_M1		CAN0_TXD_M0
				UART0_TX_M1	PWM2_CH6_M0	JTAG_TCK_M2	CAN1_RXD_M0
				UART0_RX_M1	PWM2_CH7_M0	JTAG_TMS_M2	CAN1_TXD_M0

C10			
D9			
D10			
B10	SPI0_CSN0_M2	SPI0_CSN0_M2	LCD_D3
D14	SPI0_MOSI_M2	SPI0_MOSI_M2	LCD_D4
B9	SPI0_MISO_M2	SPI0_MISO_M2	LCD_D5
B11	SPI0_CLK_M2	SPI0_CLK_M2	LCD_D6
A12	SPI0_CSN1_M2	SPI0_CSN1_M2	LCD_D7
D16	UART6_TX_M0	UART6_TX_M0	
C14	UART6_RX_M0	UART6_RX_M0	
E13	GPIO5_B2_D	GPIO5_B2_D	LCD_D10
B14	GPIO5_B3_D	GPIO5_B3_D	LCD_D11
A13	UART7_TX_M0	UART7_TX_M0	LCD_D12
E14	UART7_RX_M0	UART7_RX_M0	LCD_D13
A15	GPIO5_B6_D	GPIO5_B6_D	LCD_D14
B12	PWM2_CH3_M1	PWM2_CH3_M1	LCD_D15
A11			
D13	PWM3_CH2_M1	PWM3_CH2_M1	
A10	SAI1_MCLK_M2	SAI1_MCLK_M2	LCD_D19
C12	SAI1_SDO_M2	SAI1_SDO_M2	LCD_D20
C16	SAI1_SCLK_M2	SAI1_SCLK_M2	LCD_D21
B16	SAI1_LRCK_M2	SAI1_LRCK_M2	LCD_D22
A16	SAI1_SDI_M2	SAI1_SDI_M2	LCD_D23
C11	SPI1_CSN0_M2	SPI1_CSN0_M2	LCD_DEN
D15	SPI1_CLK_M2	SPI1_CLK_M2	LCD_HSYNC
D11	SPI1_MOSI_M2	SPI1_MOSI_M2	LCD_VSYNC
D12	SPI1_MISO_M2	SPI1_MISO_M2	LCD_CLK
B15	SPI1_CSN1_M2	SPI1_CSN1_M2	
C15			
E15	PWM_LCD	PWM_LCD	
A14	RST_LCD	RST_LCD	

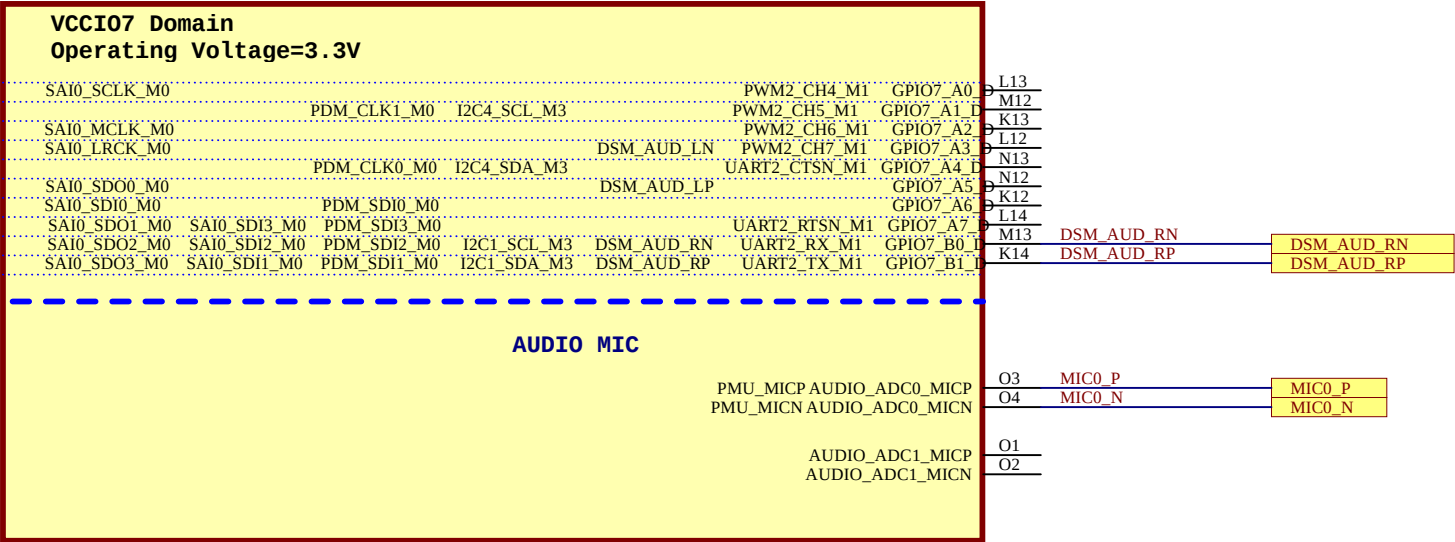
VCCIO6 Domain
Operating Voltage=3.3V

SARADC1_IN0	ETH_PPSTRIG_M0	CAN0_RXD_M1	VI_CIF_D0_M0	SAI0_SCLK_M1	I2C3_SCL_M3	UART4_TX_M2	PWM1_CH0_M2	GPIO6_A0
SARADC1_IN1	ETH_PTP_REFCLK_M0	CAN0_TXD_M1	VI_CIF_D1_M0	SAI0_LRCK_M1	I2C3_SDA_M3	UART4_RX_M2	PWM1_CH1_M2	GPIO6_A1
SARADC1_IN2	ETH_PPSCCLK_M0	CAN1_RXD_M1	VI_CIF_D2_M0	SAI0_SDO0_M1	I2C4_SCL_M1	UART5_TX_M2	PWM1_CH2_M2	GPIO6_A2
SARADC1_IN3	ETH_RXD2_M0	CAN1_TXD_M1	VI_CIF_D3_M0	SAI0_SDI0_M1	I2C4_SDA_M1	UART5_RX_M2	PWM1_CH3_M2	GPIO6_A3
SARADC1_IN4	ETH_RXD3_M0		VI_CIF_D4_M0	SAI0_MCLK_M1	I2C5_SCL_M3	UART5_RTSN_M2	PWM2_CH0_M2	GPIO6_A4
SARADC1_IN5	ETH_TXD2_M0		VI_CIF_D5_M0		I2C5_SDA_M3	UART5_CTSN_M2	PWM2_CH1_M2	GPIO6_A5
SARADC1_IN6	ETH_TXD3_M0		VI_CIF_D6_M0			UART4_RTSN_M2	PWM2_CH2_M2	GPIO6_A6
SARADC1_IN7	ETH_TXD0_M0	SAI0_SDO1_M1	VI_CIF_D7_M0	SAI0_SDI3_M1		UART4_CTSN_M2	PWM2_CH3_M2	GPIO6_A7
SARADC2_IN0	ETH_TXD1_M0	SAI0_SDO2_M1	VI_CIF_D8_M0	SAI0_SDI2_M1	SPI1_CSN1_M0	UART6_TX_M1		GPIO6_B0
	ETH_TXCTL_M0	SAI0_SDO3_M1	VI_CIF_D9_M0	SAI0_SDI1_M1	SPI1_CSN0_M0	UART6_RX_M1		GPIO6_B1
	ETH_RXD0_M0		VI_CIF_D10_M0	PDM_SDI2_M1	SPI1_MOSI_M0	UART6_RTSN_M1		GPIO6_B2
	ETH_RXD1_M0		VI_CIF_D11_M0	PDM_SDI3_M1	SPI1_MISO_M0	UART6_CTSN_M1		GPIO6_B3
	ETH_MCLK_M0		VI_CIF_D12_M0	PDM_CLK0_M1	SPI1_CLK_M0	UART7_TX_M1		GPIO6_B4
SARADC2_IN1	ETH_RXCTL_M0		VI_CIF_D13_M0	PDM_SDI0_M1		UART7_RX_M1		GPIO6_B5
SARADC2_IN2			VI_CIF_D14_M0	PDM_SDI1_M1		UART7_RTSN_M1		GPIO6_B6
SARADC2_IN3	ETH_MDIO_M0		VI_CIF_D15_M0	PDM_CLK1_M1		UART7_CTSN_M1		GPIO6_B7
SARADC2_IN4	ETH_MDC_M0		VI_CIF_VSYNC_M0		I2C2_SCL_M2	UART3_RTSN_M2	PWM0_CH0_M2	GPIO6_C0
SARADC2_IN5	ETH_CLK_25M_OUT_M0		VI_CIF_CLKIN_M0			UART3_CTSN_M2	PWM0_CH1_M2	GPIO6_C1
SARADC2_IN6	ETH_TXCLK_M0		VI_CIF_CLKOUT_M0	FEPHY_LEDLINK_M2		UART3_TX_M2	PWM0_CH2_M2	GPIO6_C2
SARADC2_IN7	ETH_RXCLK_M0		VI_CIF_HSYNC_M0	FEPHY_LEDSPD_M2	I2C2_SDA_M2	UART3_RX_M2	PWM0_CH3_M2	GPIO6_C3

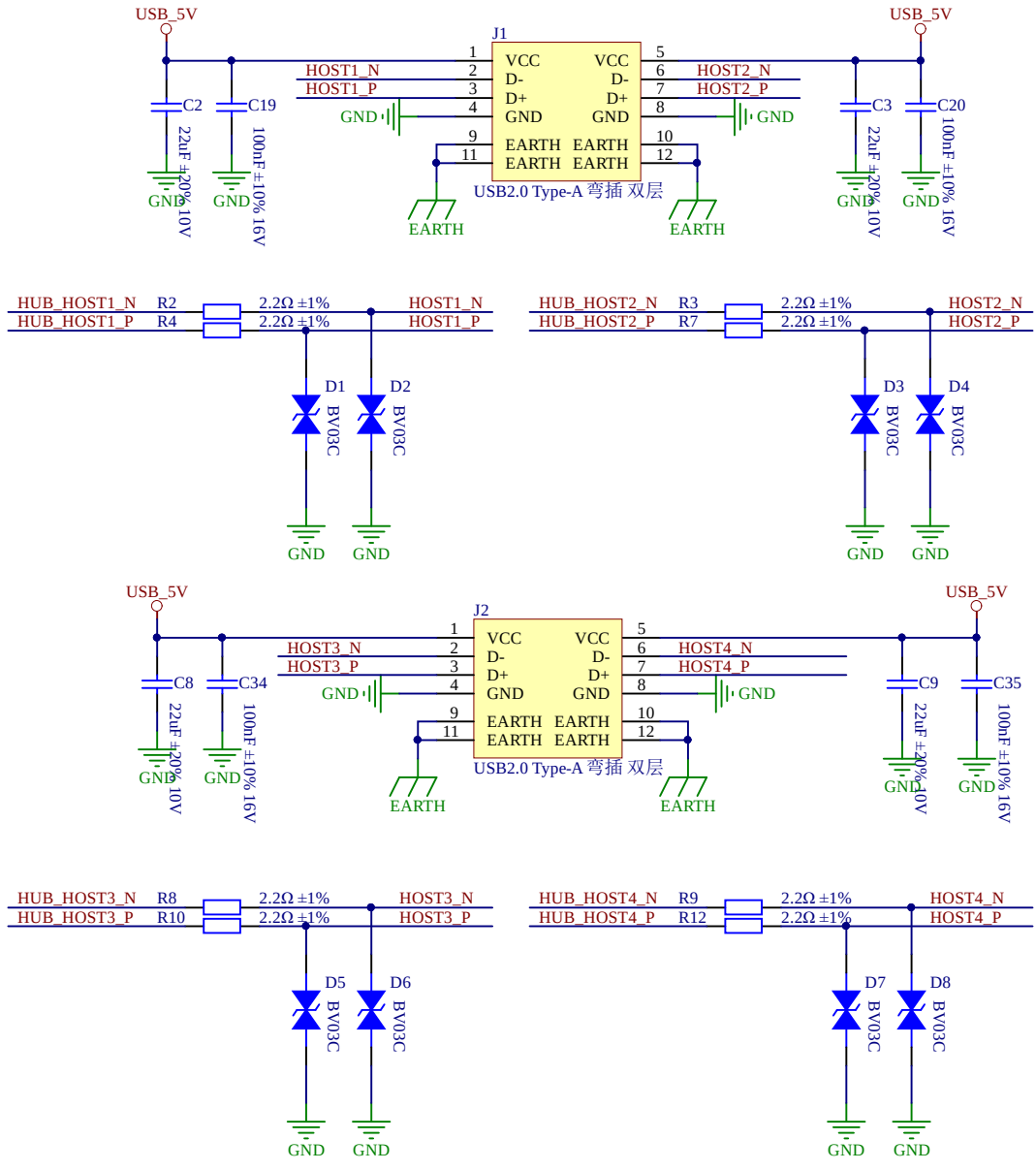
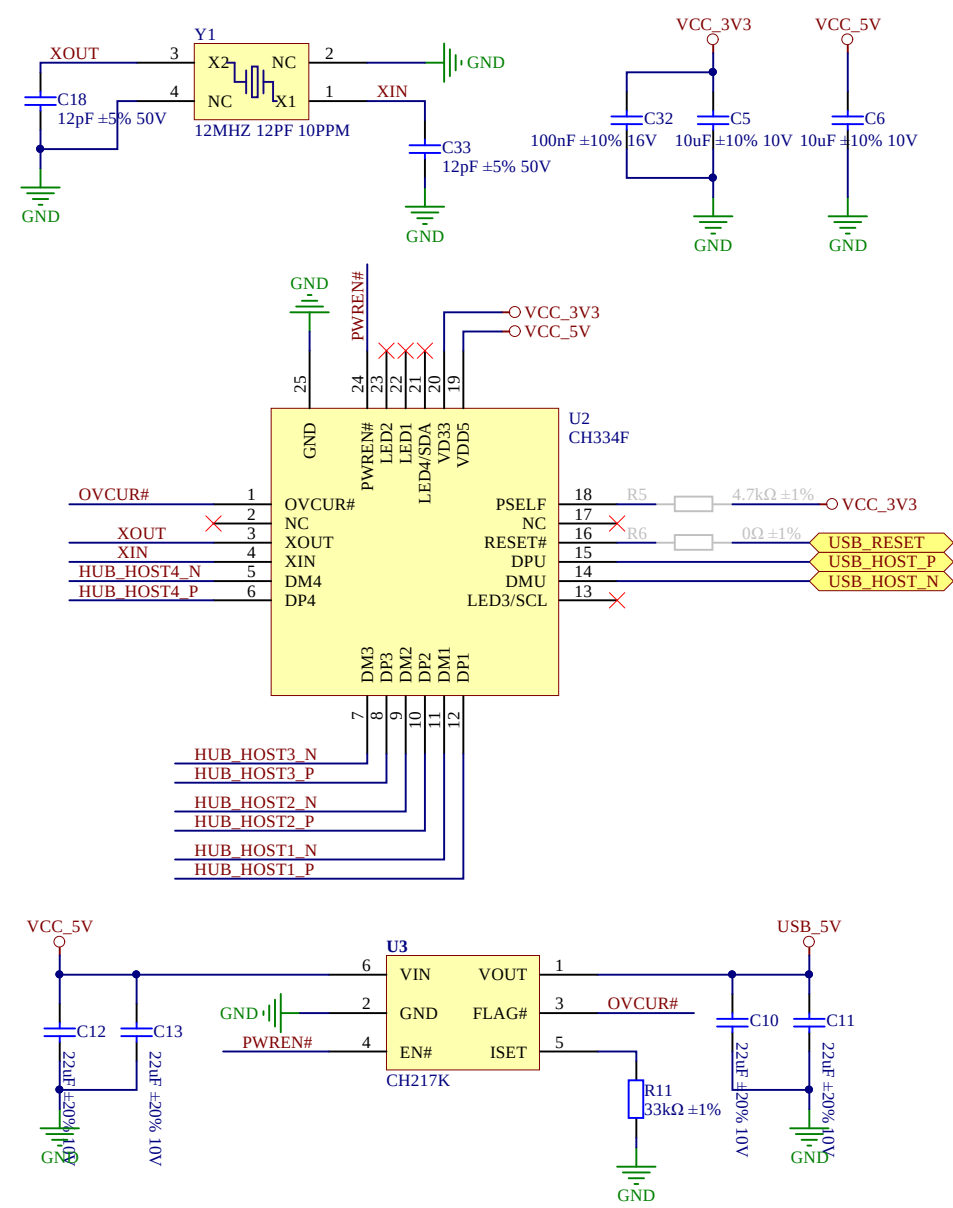
P16	I2C3_SCL_M3	I2C3_SCL_M3	
P12	I2C3_SDA_M3	I2C3_SDA_M3	
O12	CAN1_RXD_M1	CAN1_RXD_M1	
P13	CAN1_TXD_M1	CAN1_TXD_M1	
P14			
O13			
P11			
O11			
P15			
P10			
O16	PDM_SDI2_M1	PDM_SDI2_M1	
O9	PDM_SDI3_M1	PDM_SDI3_M1	
O15	PDM_CLK0_M1	PDM_CLK0_M1	
O8	PDM_SDI0_M1	PDM_SDI0_M1	
P8	PDM_SDI1_M1	PDM_SDI1_M1	
O7	PDM_CLK1_M1	PDM_CLK1_M1	
O10	RST_TOUCH	RST_TOUCH	
P9	INT_TOUCH	INT_TOUCH	
P7	ETH_LED_ACT	ETH_LED_ACT	
P10	ETH_LED_SPD	ETH_LED_SPD	

08.RV1126B_Audio

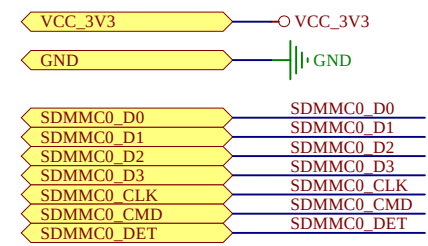
U1G



09.USB2.0 HUB

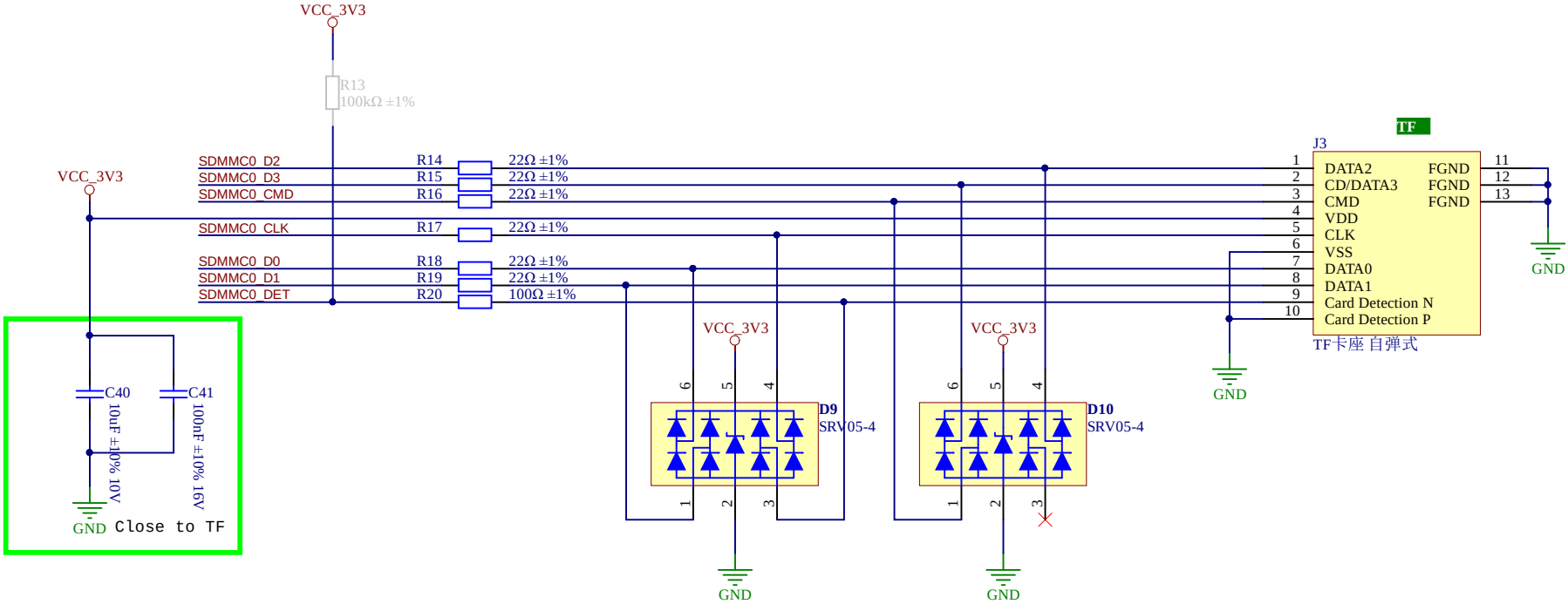


10.TF

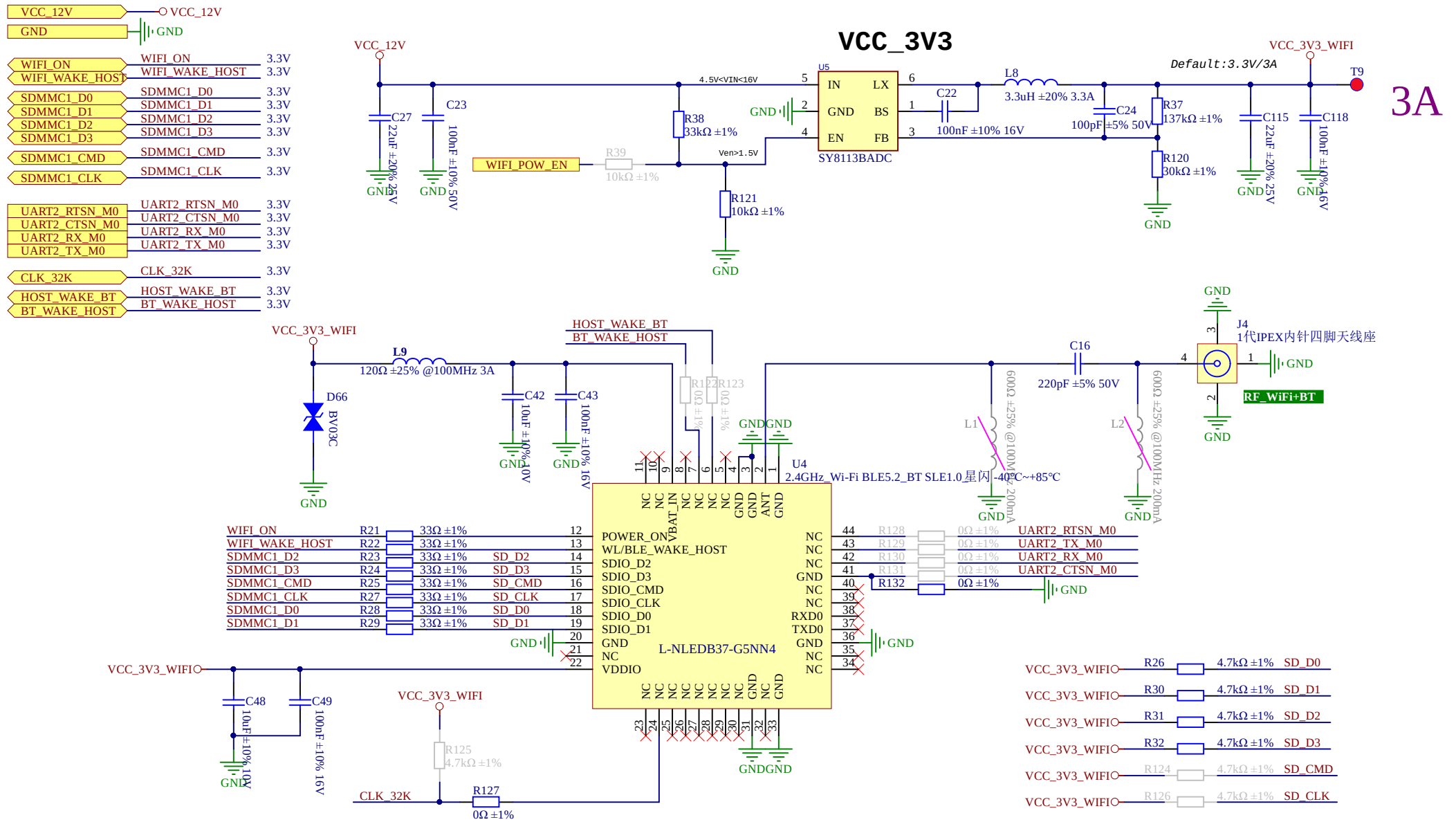


TF CARD

NOTE:
Place the SDMMC0_CLK resistor closed to SOC for better signal quality if long trace.
The resistor can deleted if trace is short.

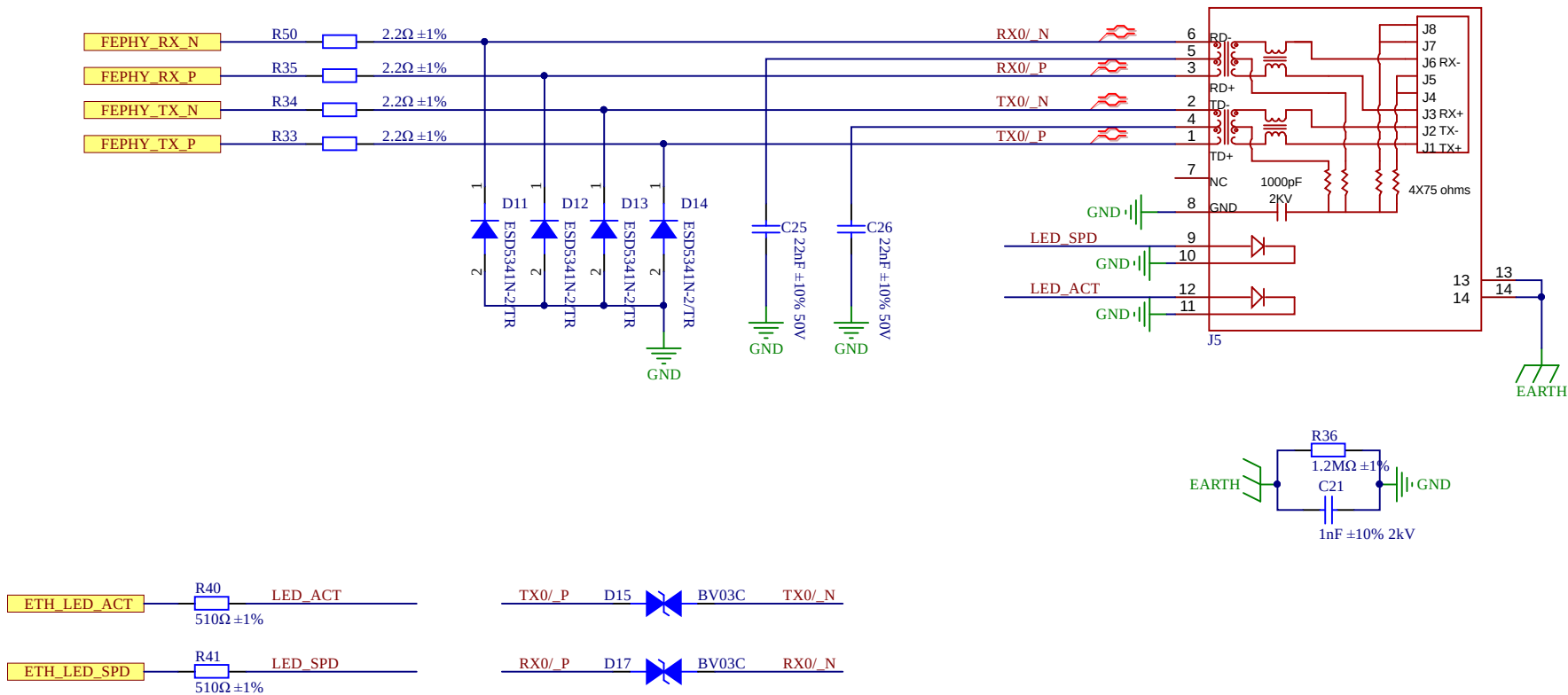


11.WIFI_L-NLEDB37-G5NN4

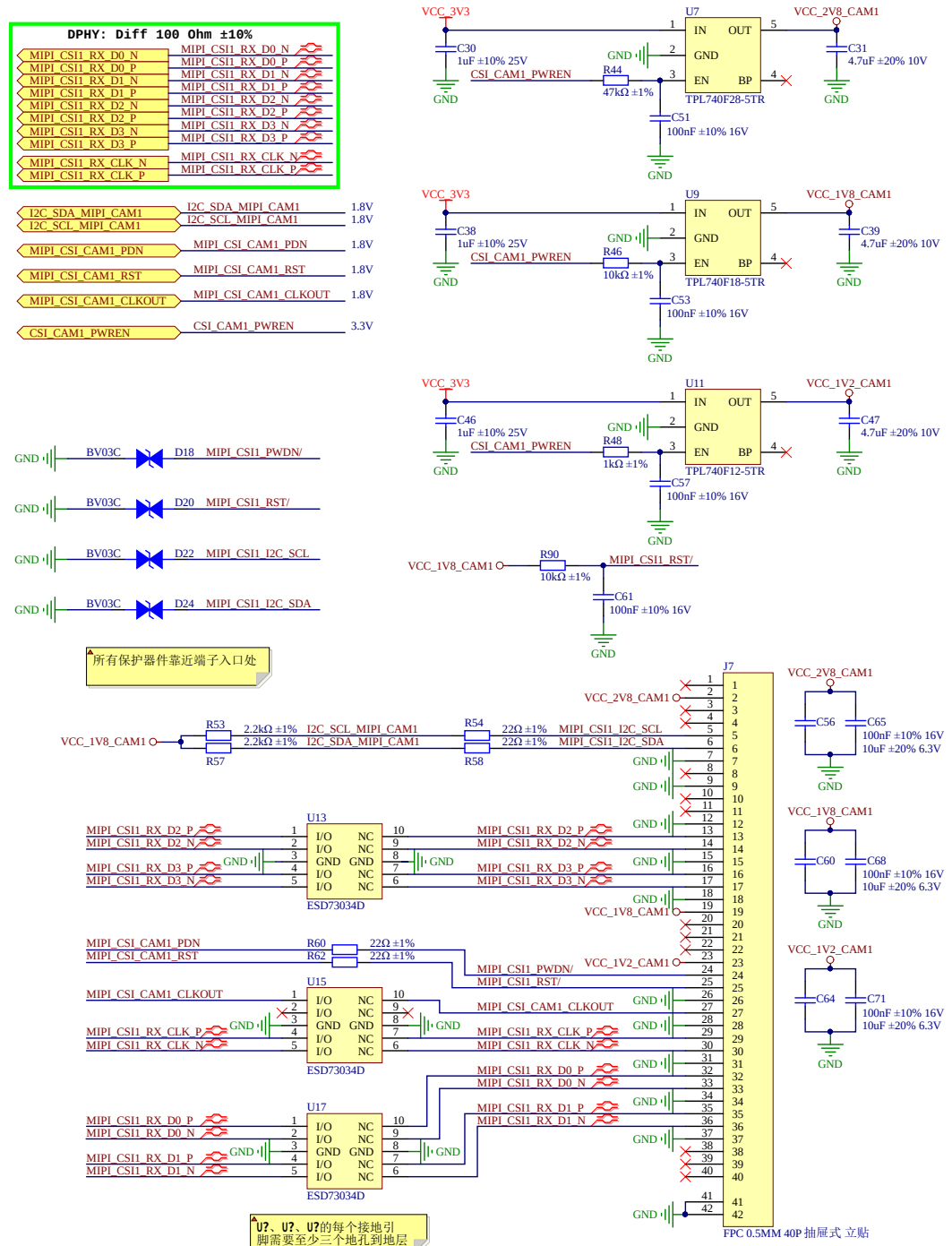
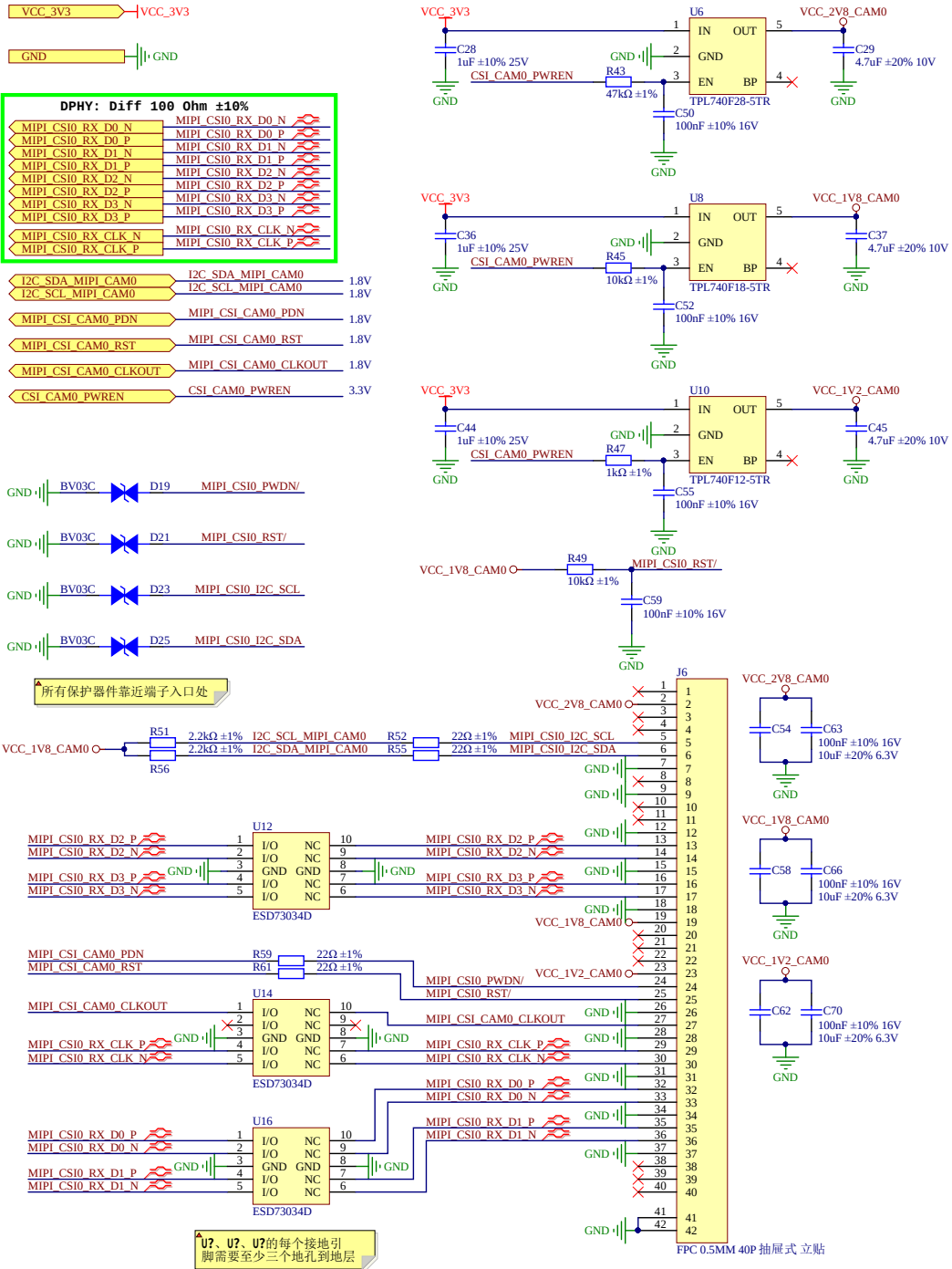


产品名称	AI主板	设计人员	JOW	审核人员	CHM	图纸名称	WIFI_L-NLEDB37-G5NN4			 广州灵眸科技有限公司
产品型号	EASY-EAI-PI2	设计日期	2025-11-18	审核日期	2025-11-18	图纸版本	V1.00	第 11 张 / 共 20 张	A4	

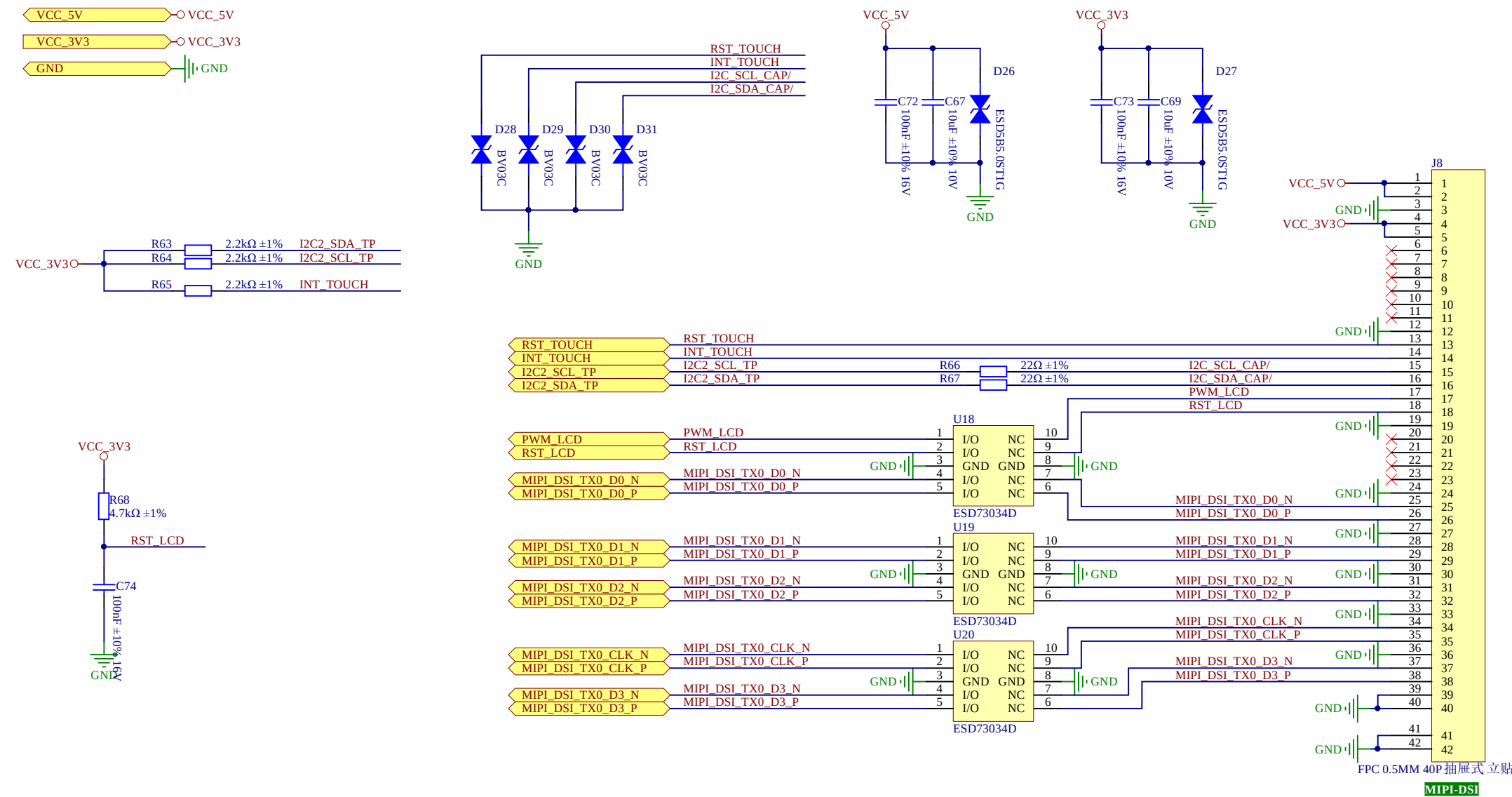
12.Ethernet-RMII



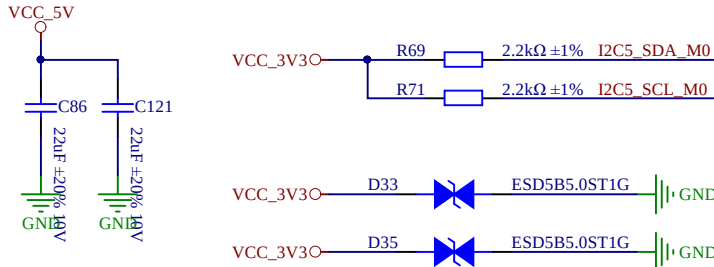
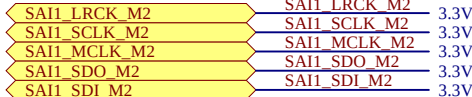
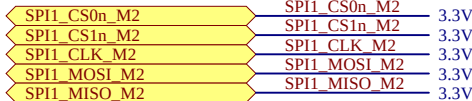
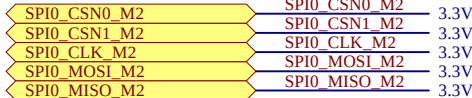
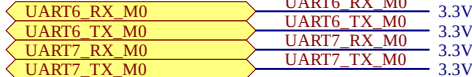
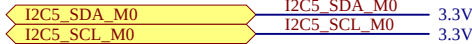
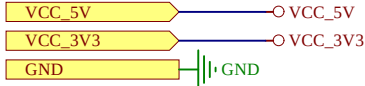
13.MIPI_CSI_Camera



14.MIPI_DSI



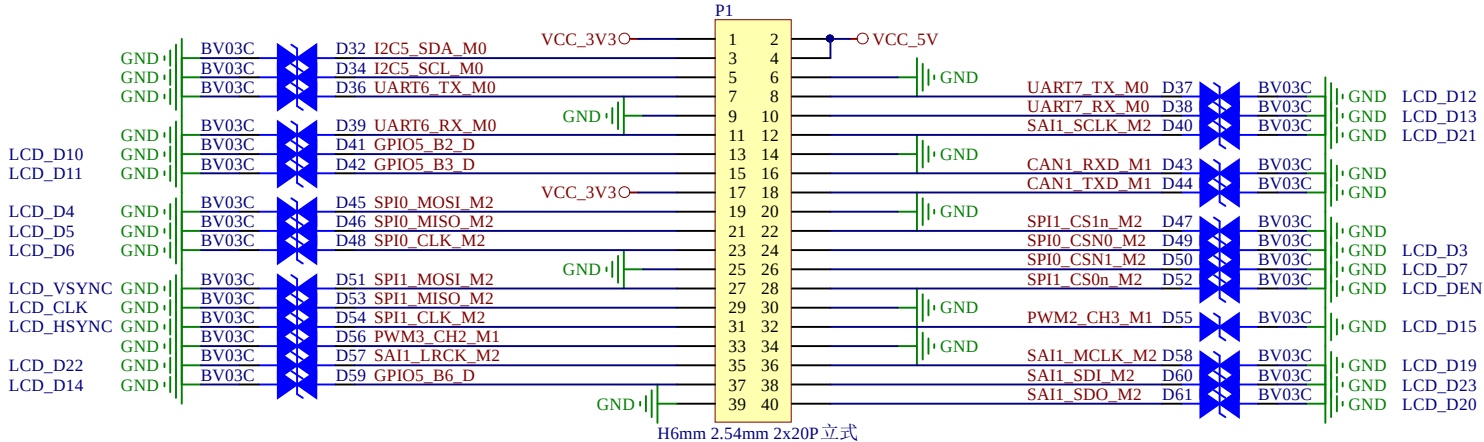
15. Raspberry_Pi_Interface



复用关系	RGB565	BT1120
LCD_D3	B3	Y0
LCD_D4	B4	Y1
LCD_D5	B5	Y2
LCD_D6	B6	Y3
LCD_D7	B7	Y4
LCD_D10	G2	Y5
LCD_D11	G3	Y6
LCD_D12	G4	Y7
LCD_D13	G5	C0
LCD_D14	G6	C1
LCD_D15	G7	C2
LCD_D19	R3	C3
LCD_D20	R4	C4
LCD_D21	R5	C5
LCD_D22	R6	C6
LCD_D23	R7	C7
LCD_DEN	DEN	---
LCD_HSYNC	HSYNC	---
LCD_VSYNC	VSYNC	---
LCD_CLK	CLK	DLK

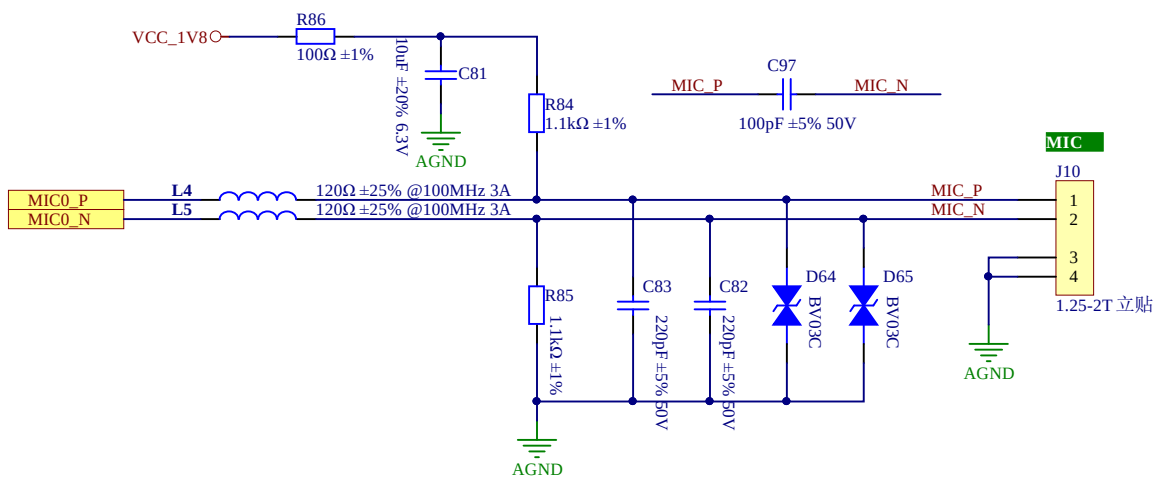
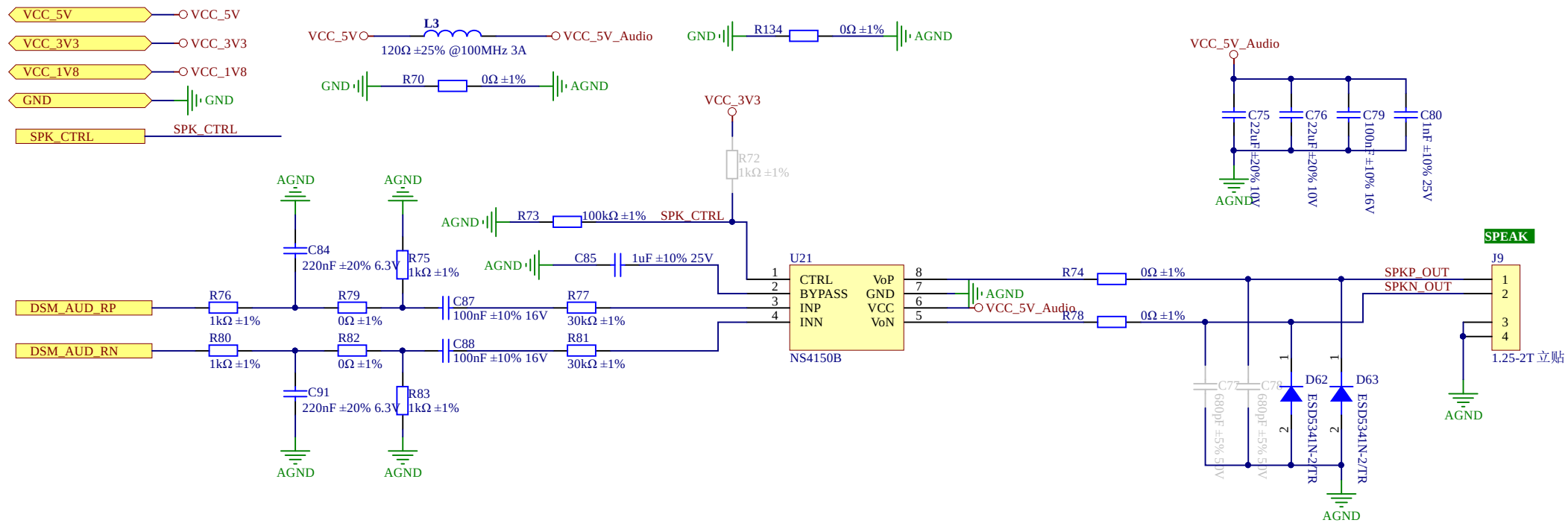
该组引脚可以复用成RGB565/BT11

▲所有保护器件靠近端子入口处

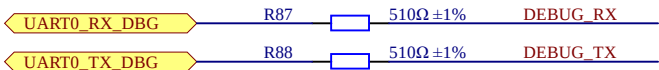
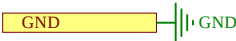


产品名称	AI 主板	设计人员	JOW	审核人员	CHM	图纸名称	Raspberry_Pi_Interface		
产品型号	EASY-EAI-PI12	设计日期	2025-11-18	审核日期	2025-11-18	图纸版本	V1.00	第 15 张 / 共 20 张	A

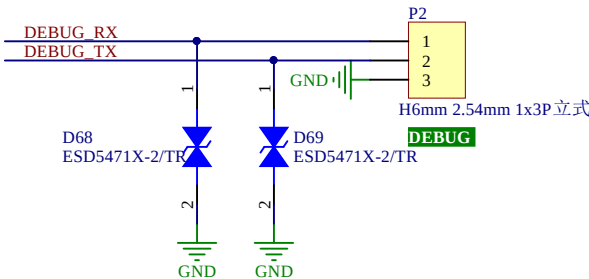
16.Audio



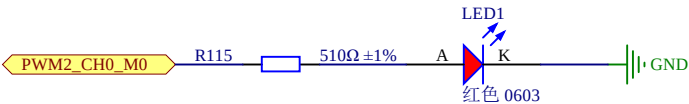
17.0ther



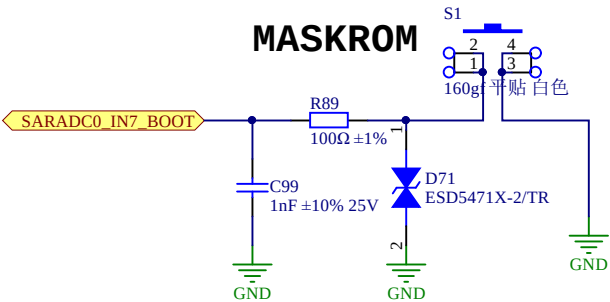
DEBUG UART



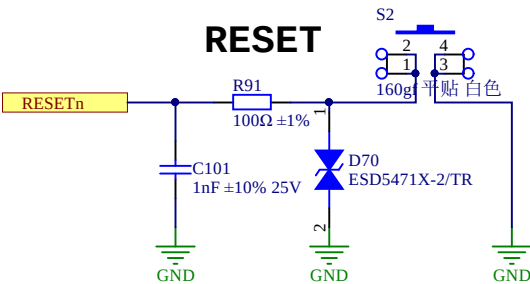
LED指示灯



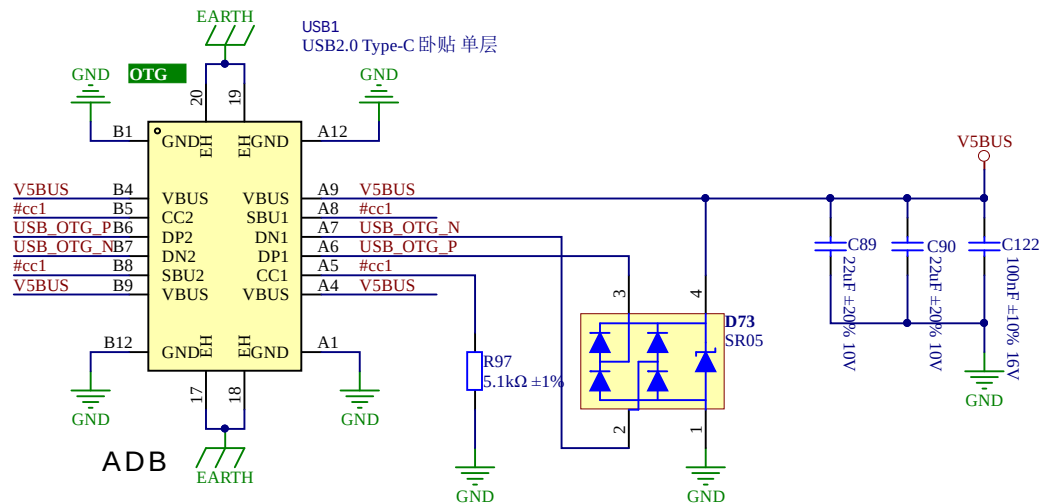
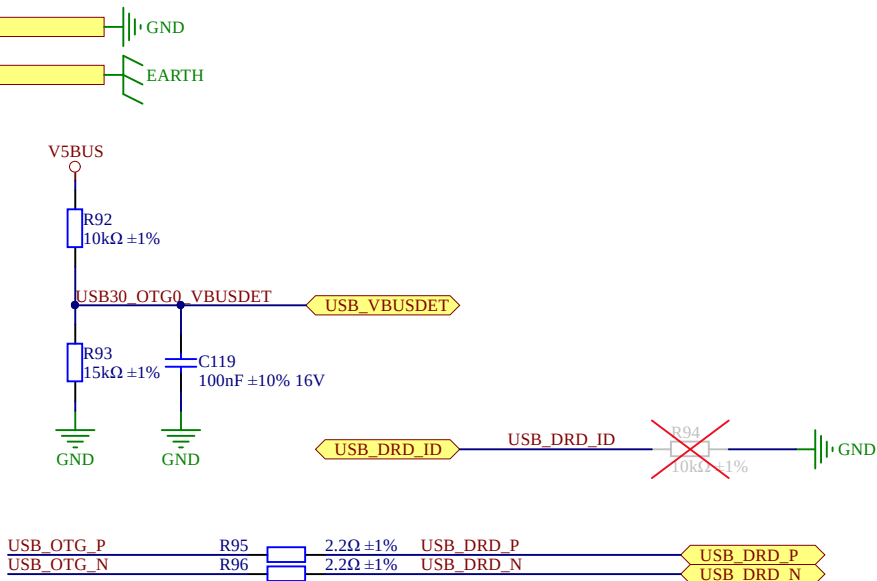
MASKROM



RESET

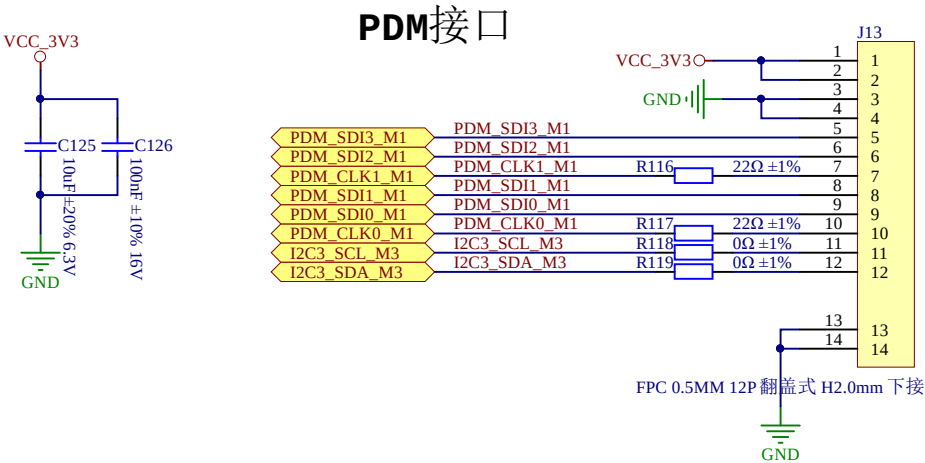
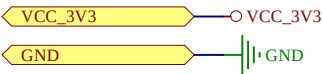


18. ADB



产品名称	AI 主板	设计人员	JOW	审核人员	CHM	图纸名称	ADB			 广州灵眸科技有限公司
产品型号	EASY-EAI-PI2	设计日期	2025-11-18	审核日期	2025-11-18	图纸版本	V1.00	第 18 张 / 共 20 张	A4	

19.Reserved Interface



20.Power

