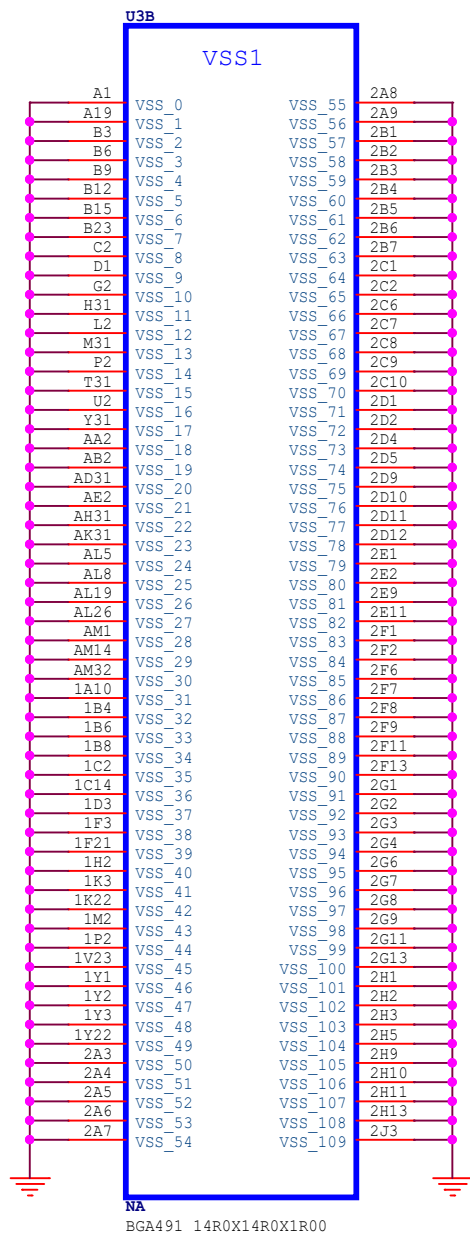
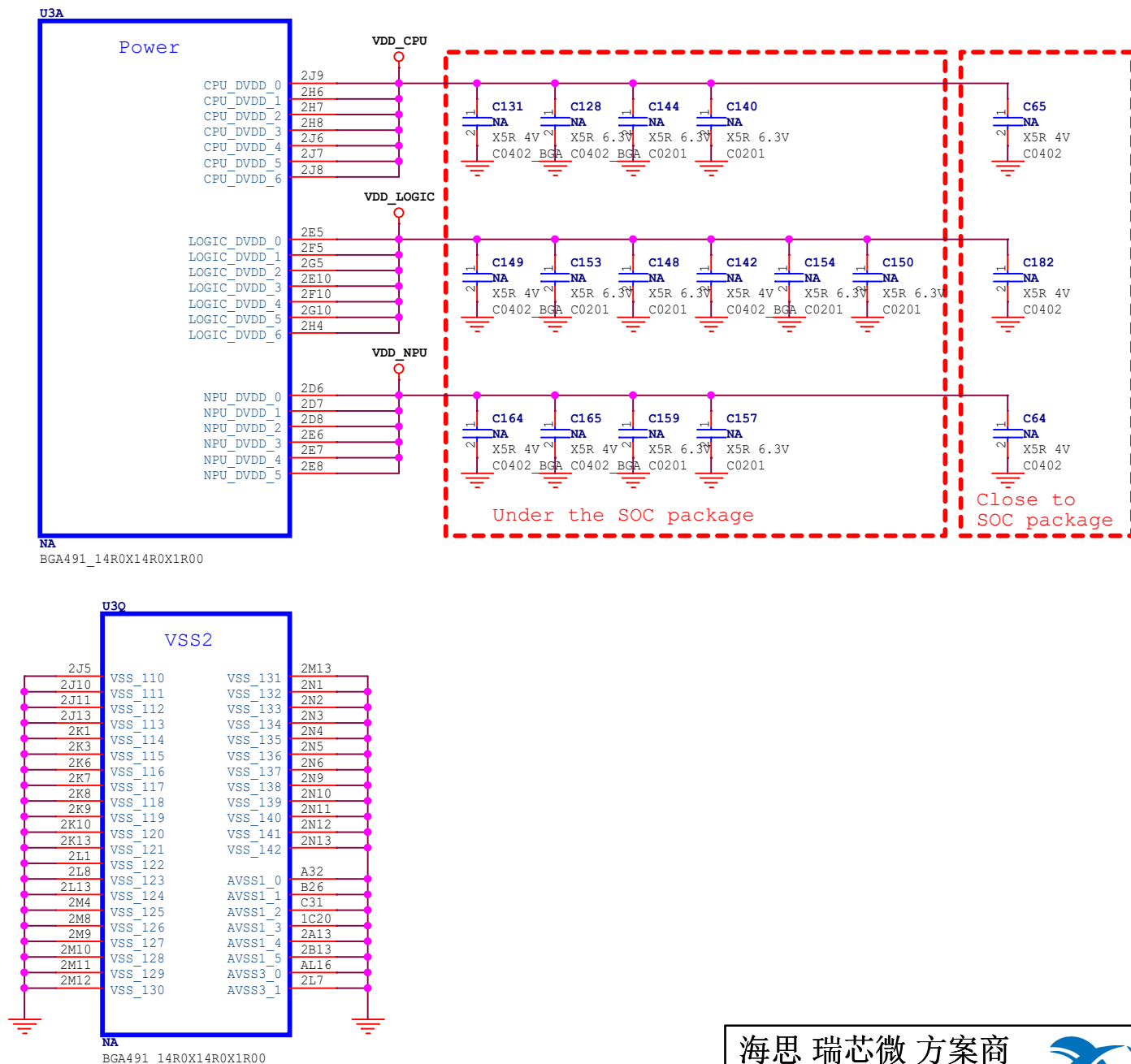


GND



Power



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Project: RV1126B AI-IPC REF

File: 01.RV1126B-Power/GND

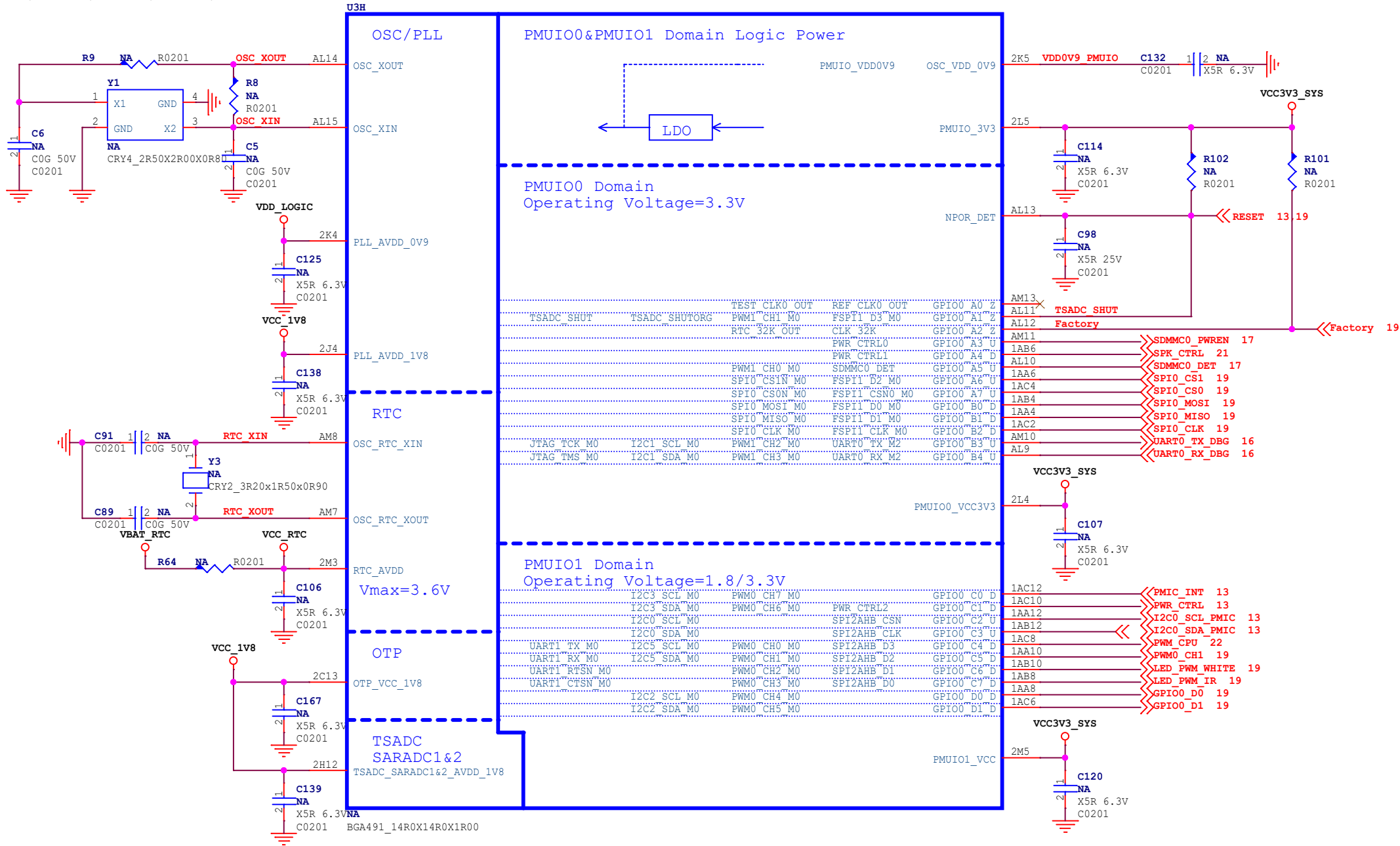
Date: Wednesday, August 06, 2025

Designer: www.XYlinker.com

TEL 13148846151

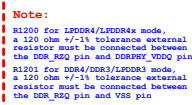
Sheet: 1 of 23

OSC/PLL/RTC/OTP/PMU

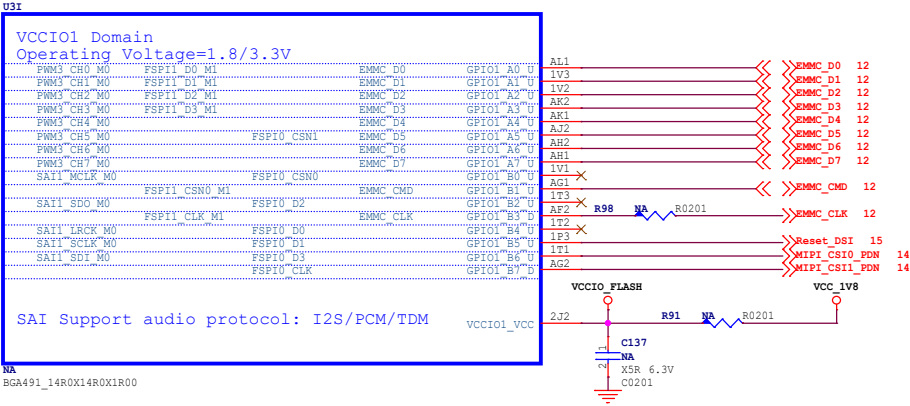


LPDDR4/4x DQ

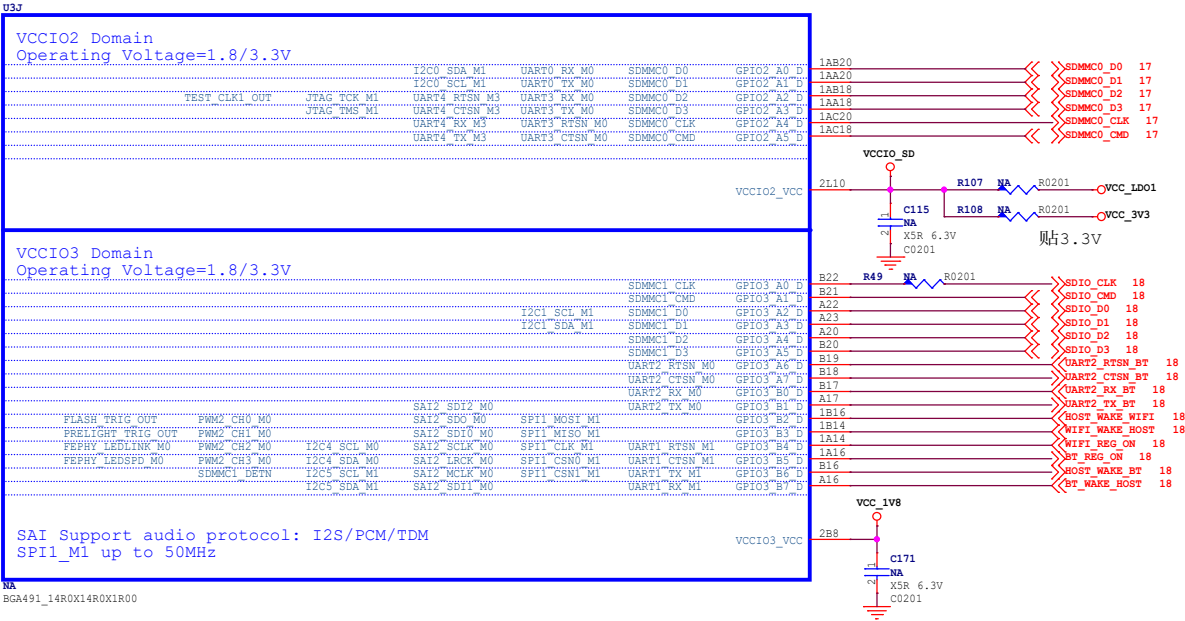
DDR Power



EMMC/FSPI



SDMMC0/SDMMC1/JTAG/UART/I2S2

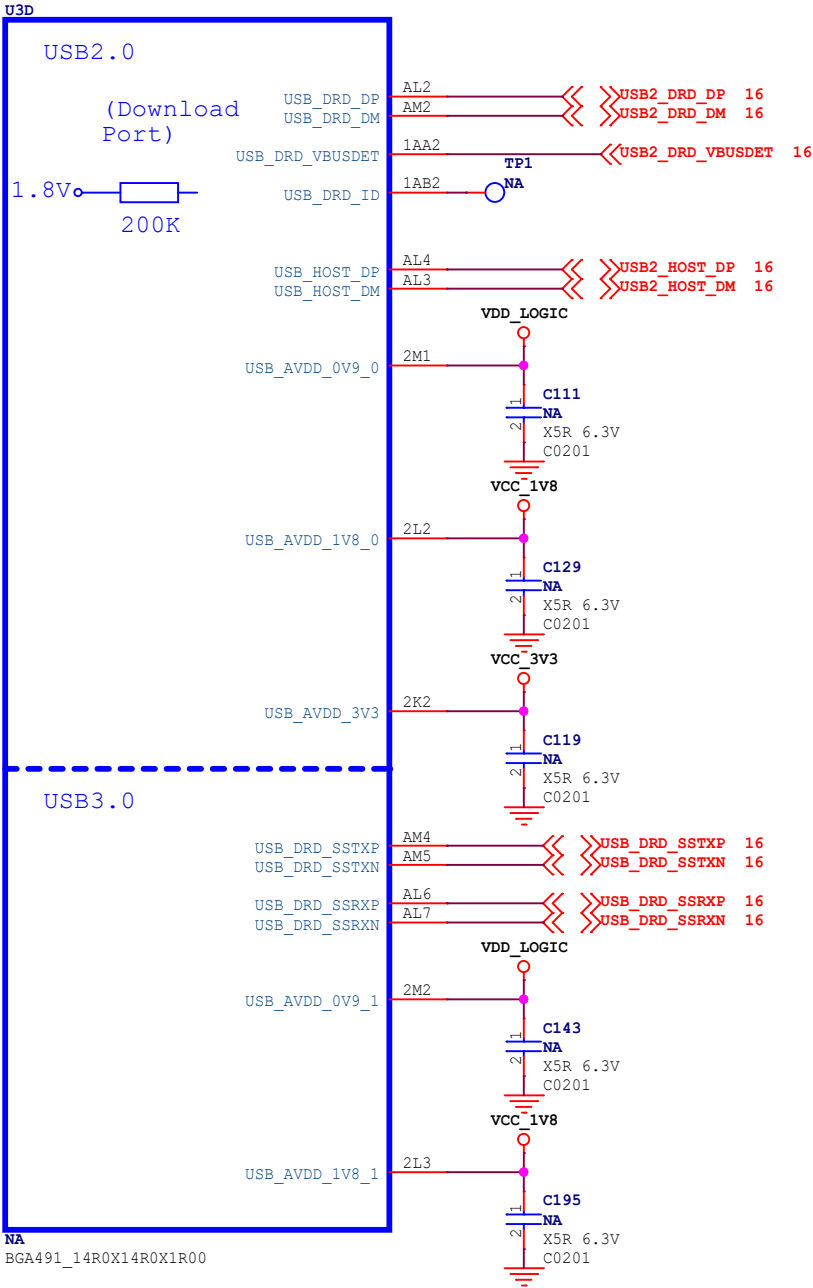


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Project:	RV1126B AI-IPC REF	TEL:	13148846151
File:	04.RV1126B-Flash/SDMMC	Sheet:	4 of 23
Date:	Wednesday, August 06, 2025		
Designer:	www.XYlinker.com		

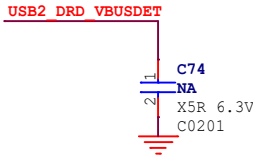


USB Controller



Note:

- USB2.0 design rules:
1. Trace impedance 90ohm+/-10%
 2. The distance between other signals follows the 3W rule.



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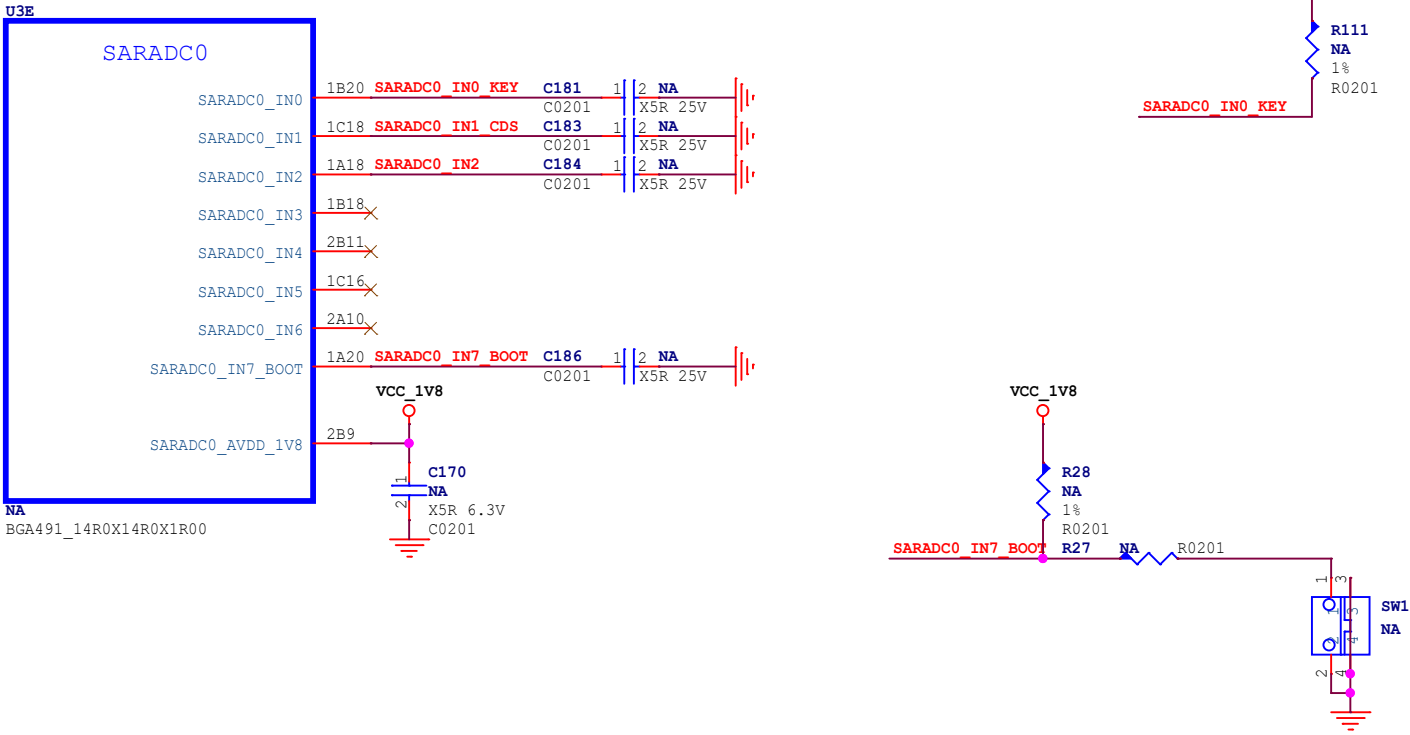
Project:	RV1126B AI-IPC REF
File:	05.RV1126B-USB Controller
Date:	Wednesday, August 06, 2025
Designer:	www.XYlinker.com



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TEL	13148846151
Sheet:	5 of 23

SARADC0



- 19 SARADC0_IN1_CDS
- 19 SARADC0_IN0_KEY
- 19 SARADC0_IN2
- 19 SARADC0_IN7_BOOT

BOOT Mode Config of SARADC0_IN7

Item	Rup	Rdwon	Boot Mode
Config1	NC	10K	USB/UART0 (Maskrom mode)
Config2	100K	12K/27K	FSPI0--SDMMC0--USB/UART0
Config3	100K	51K/82K	FSPI0--EMMC--USB/UART0
Config4	100K	120K	EMMC--USB/UART0
Config5	100K	200K	EMMC--SDMMC0--USB/UART0
Config6	100K	330K/820K	SDMMC0--USB/UART0
Config7	10K	NC	FSPI0--EMMC--SDMMC0--USB/UART0 (Auto mode)

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Project: RV1126B AI-IPC REF

File: 06.RV1126B-SARADC

Date: Wednesday, August 06, 2025

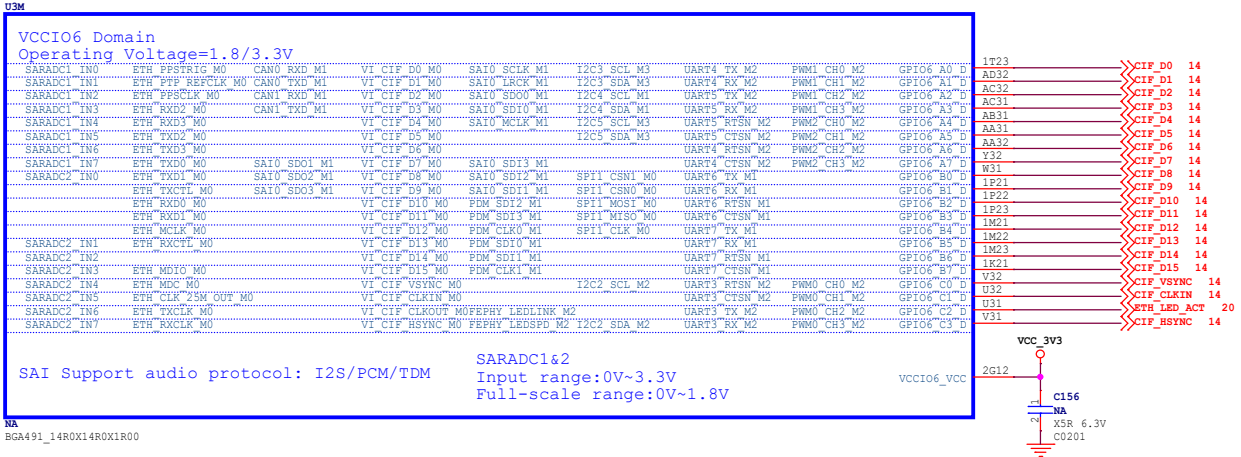
Designer: www.XYlinker.com

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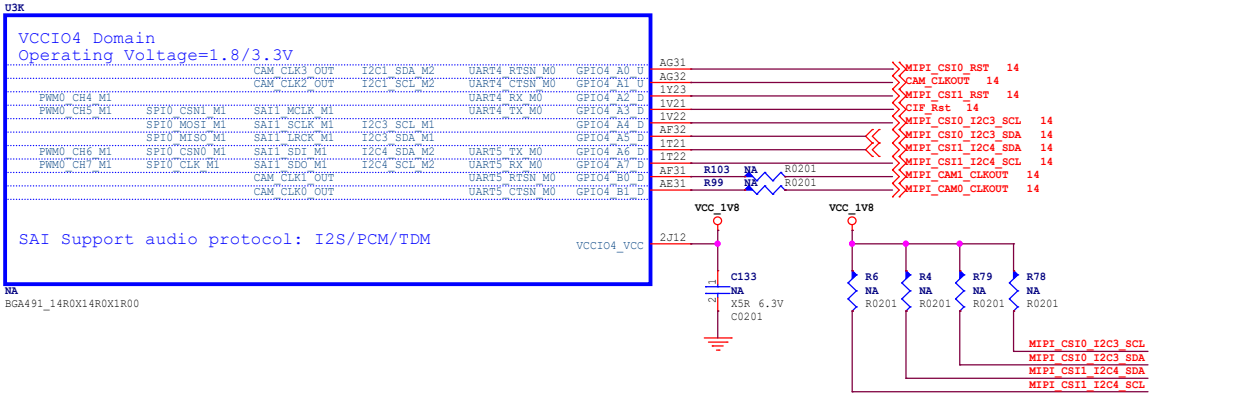
TEL 13148846151

Sheet 6 of 23

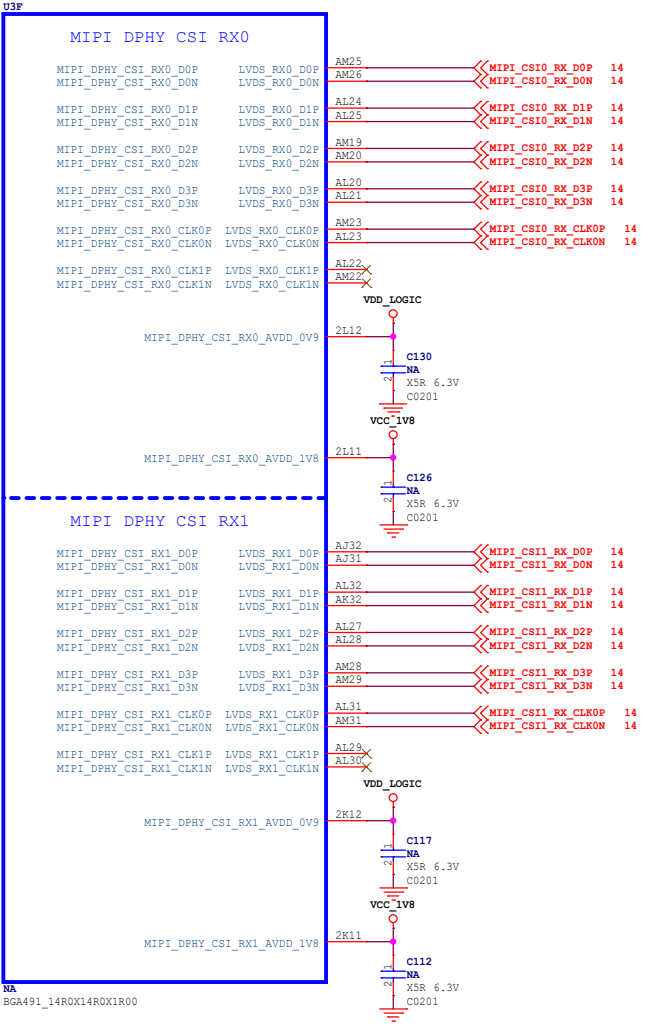
VI_CIF/ETH/SAI/UART/PWM/I2C



I2C/SPI/MIPI-CLK



MIPI-CSI

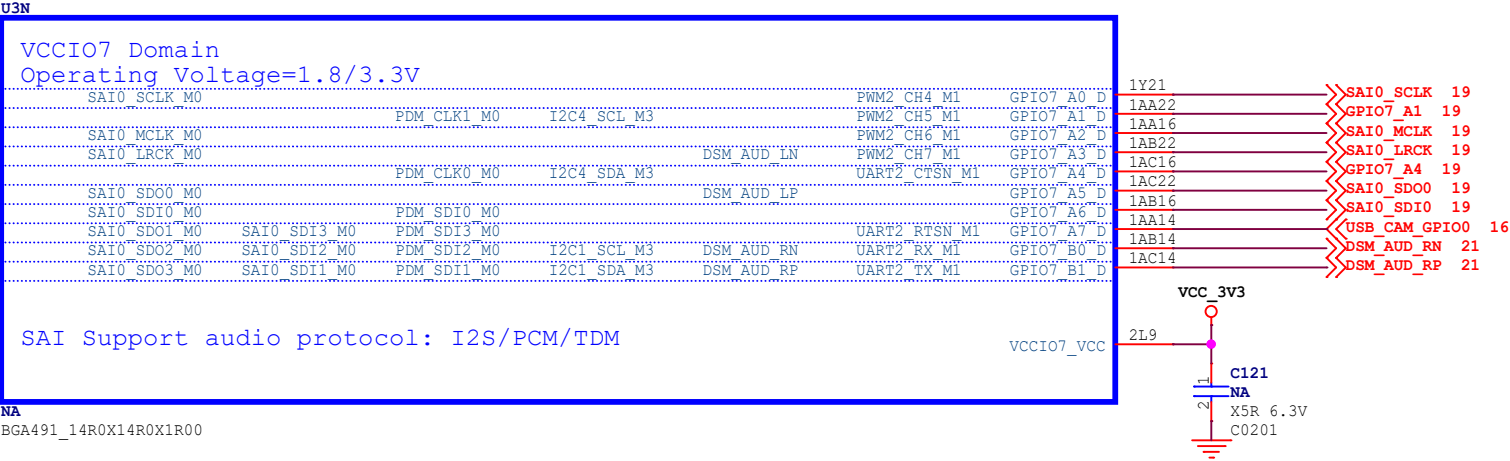


Note:

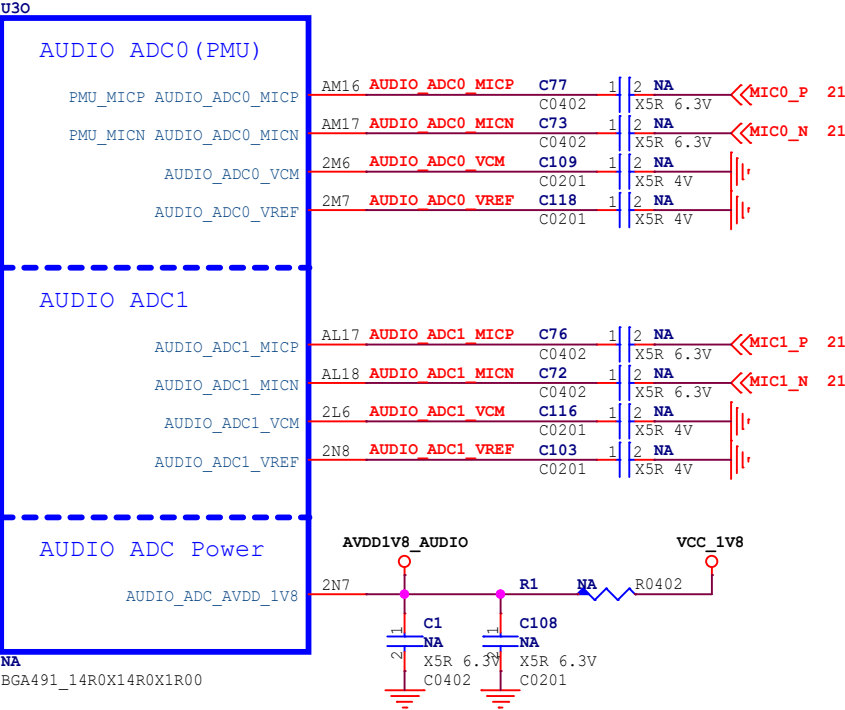
MIPI CSI RX design rules:

1. Trace impedance 100ohm+/-10%
2. The distance between other signals follows the 3W rule.

Audio Interface



Audio ADC

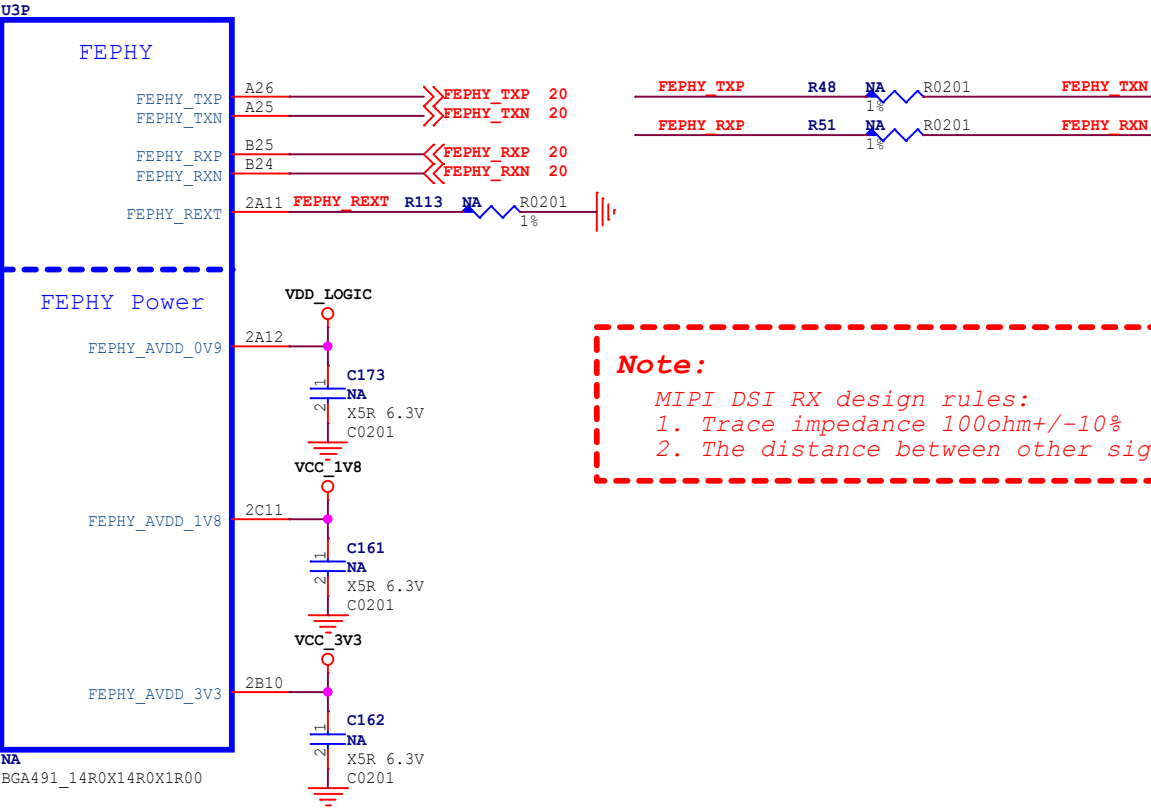


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Project:	RV1126B AI-IPC REF	TEL	13148846151
File:	09.RV1126B-Audio	Sheet:	9 of 23
Date:	Wednesday, August 06, 2025		
Designer:	www.XYlinker.com		

FEPHY

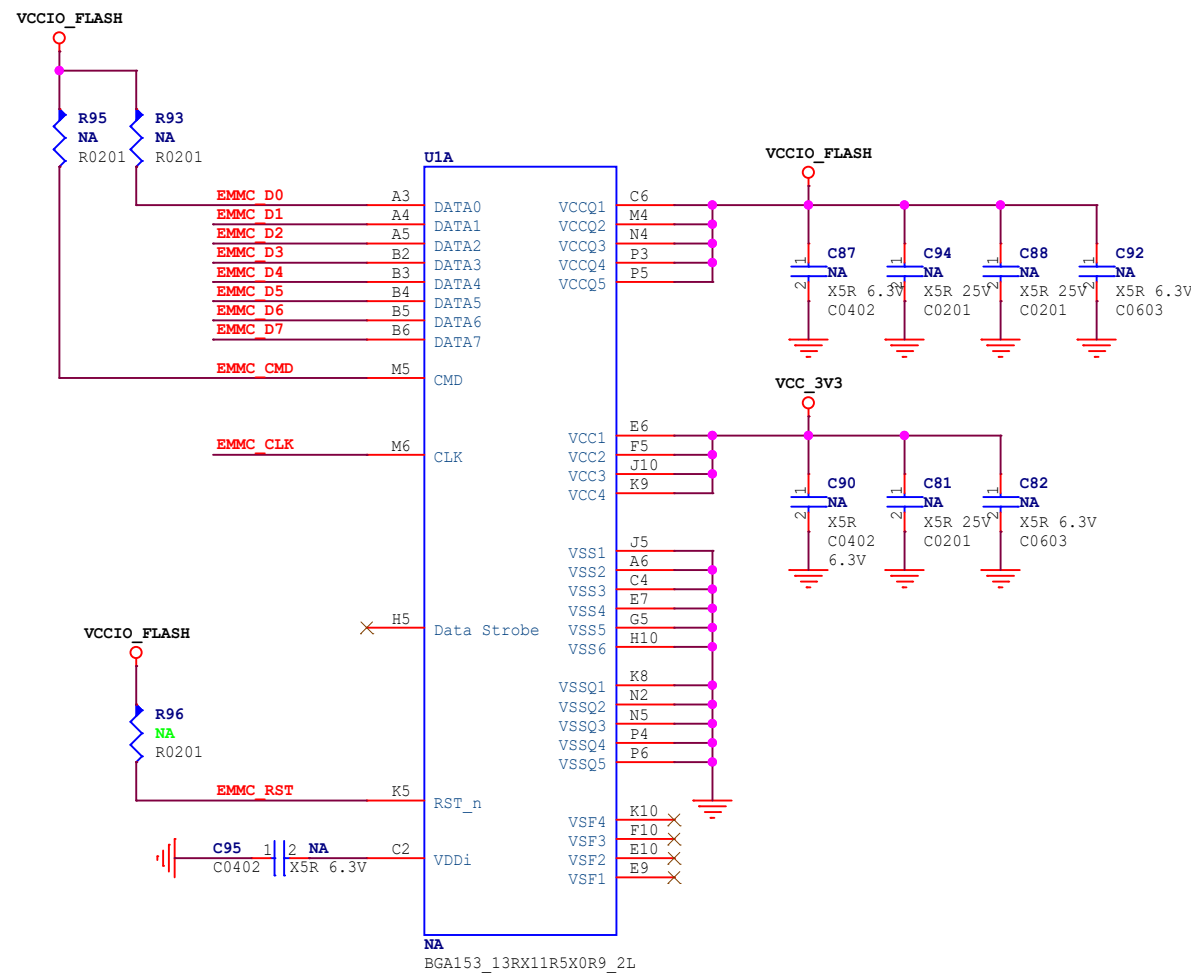
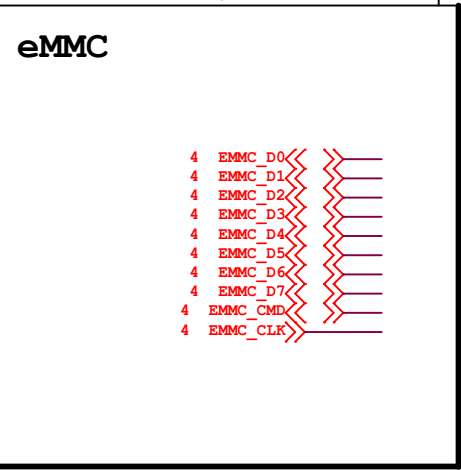


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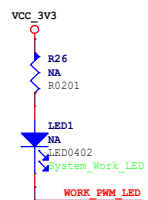
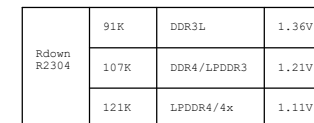
Project:	RV1126B AI-IPC REF
File:	10.RV1126B-FEPHY
Date:	Wednesday, August 06, 2025
Designer:	www.XYlinker.com



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Sheet:	10 of 23



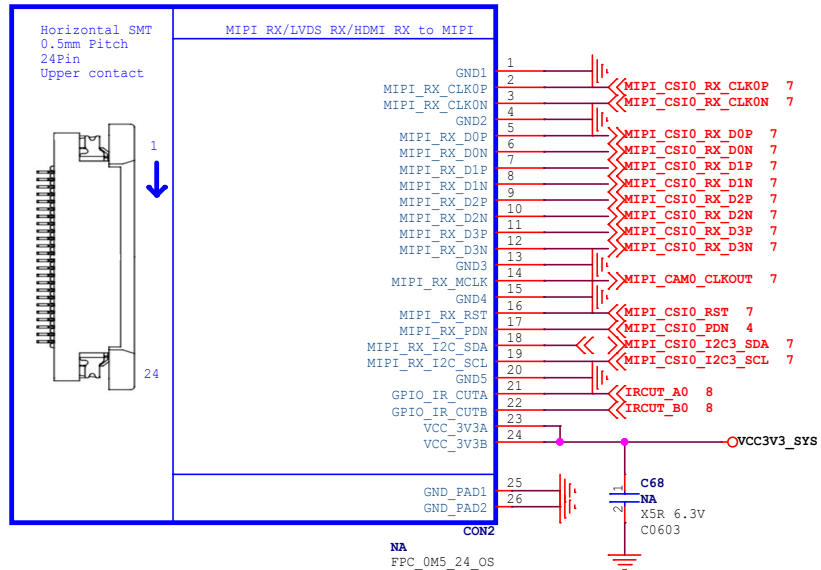
需要确认具体型号



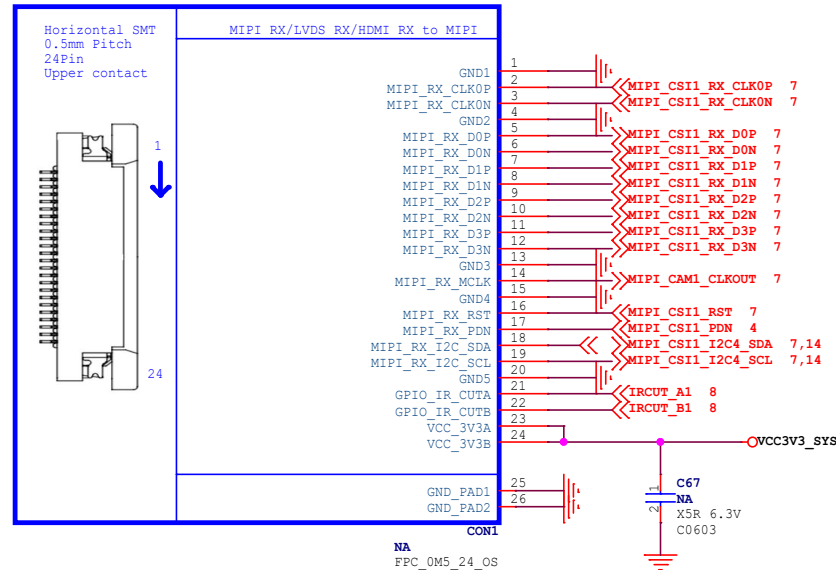
Breathing light IO

增加TVS，用于PMIC的浪涌保护
TVS recommend increase for PMIC surge protection

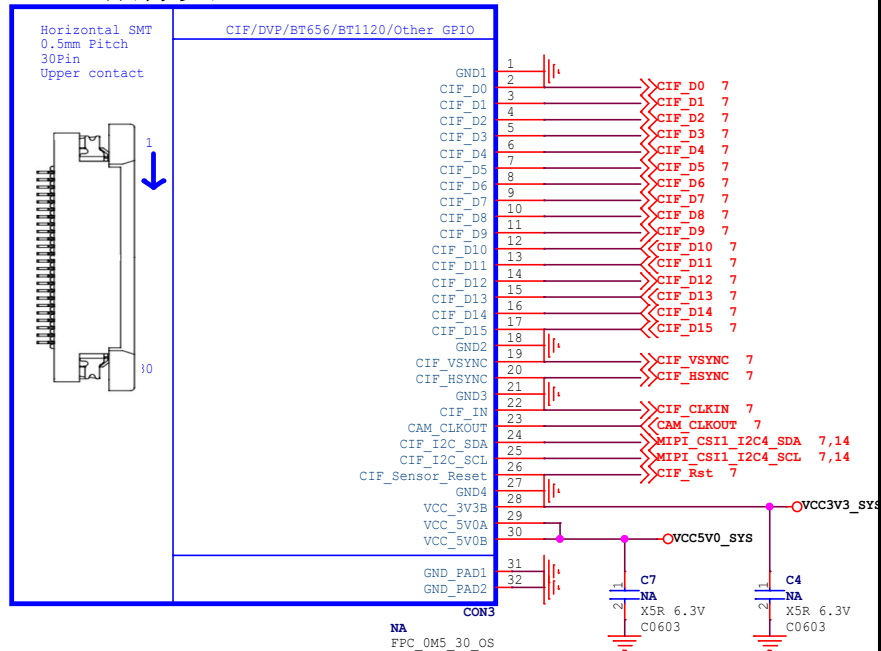
Sensor0



Sensor1



DVP摄像头



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Project: RV1126B AI-IPC REF

File: 14.VI-Camera

Date: Wednesday, August 06, 2025

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TEL: 13148846151

Sheet: 14 of 23

Horizontal SMT
0.3mm Pitch
30Pin
Upper contact

CIF/DVP/BT656/BT1120/Other GPIO

1
31

LED+A
LED+B
LED+C
NC1
LED-A
LED-B
LED-C
LED-D
GND1
GND2
MIPI_D2P
MIPI_D2N
GND3
MIPI_D1P
MIPI_D1N
GND4
MIPI_CLKP
MIPI_CLKN
GND5
MIPI_D0P
MIPI_D0N
GND6
MIPI_D3P
MIPI_D3N
GND7
NC2
Reset
NC3
VDDIO
VDDA
VDDB
GND_PAD1
GND_PAD2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

NA
X7R
50V
SC0805

VCC_LED A2
VCC_LED K2

MIPI_DSI_D2P 8
MIPI_DSI_D2N 8
MIPI_DSI_D1P 8
MIPI_DSI_D1N 8
MIPI_DSI_CLKP 8
MIPI_DSI_CLKN 8
MIPI_DSI_D0P 8
MIPI_DSI_D0N 8
MIPI_DSI_D3P 8
MIPI_DSI_D3N 8

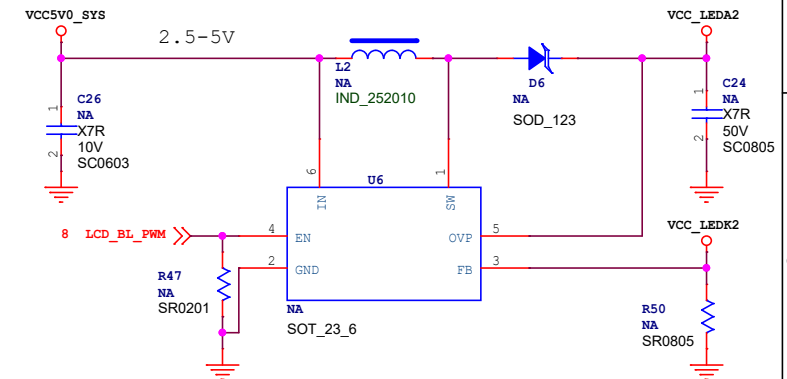
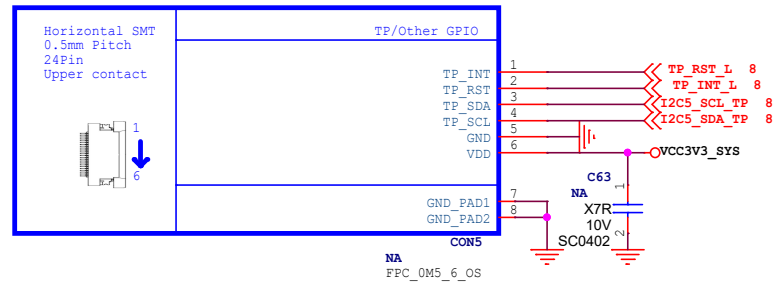
Reset_DSI 4

VCC1V8_LCD
VCC3V3_SYS

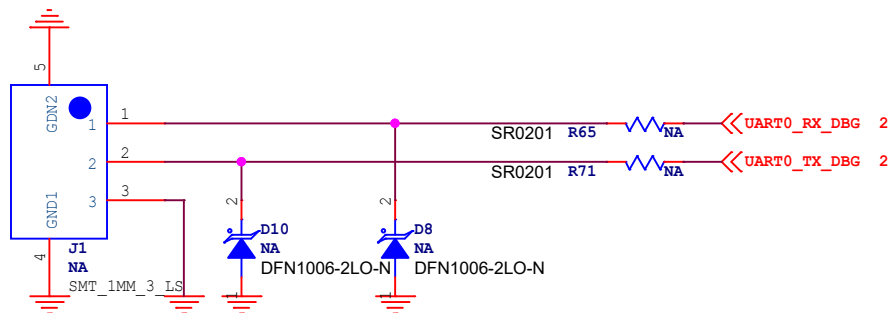
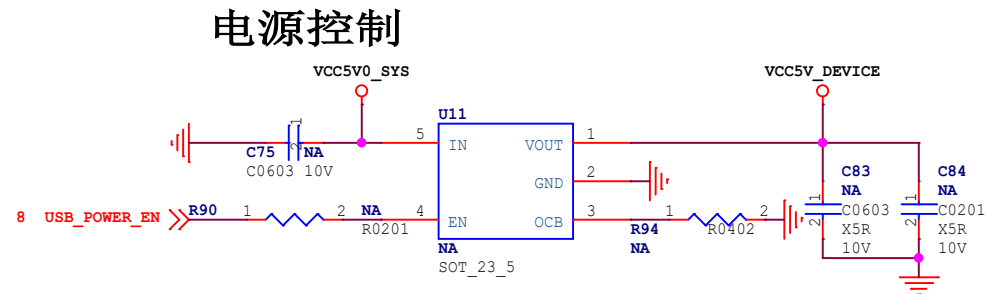
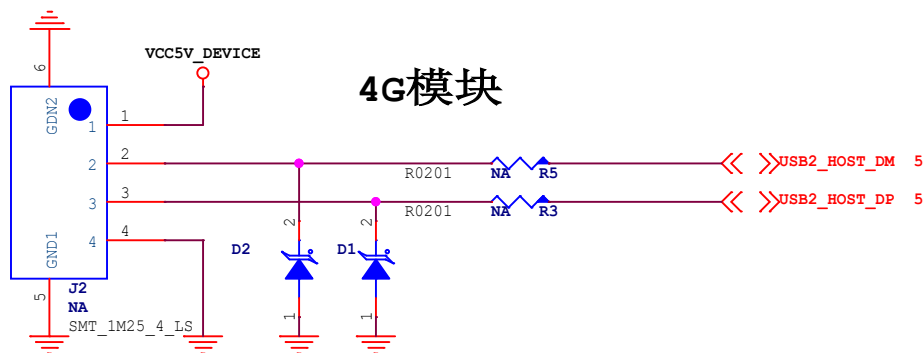
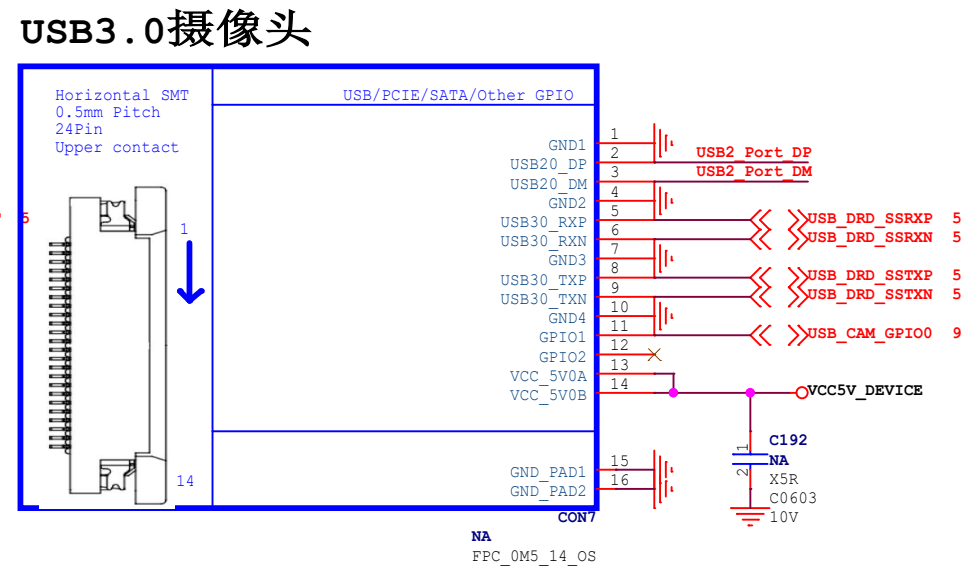
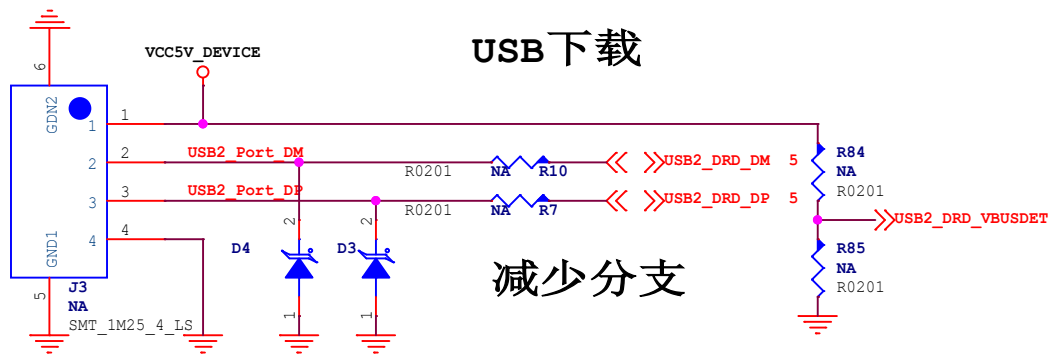
NA
X7R
10V
SC0603

CON4

NA
CON31F_FP03_51GF

[illegible]

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Project: RV1126B AI-IPC REF

File: 16.USB-Debug

Date: Wednesday, August 06, 2025

Designer: www.XYlinker.com

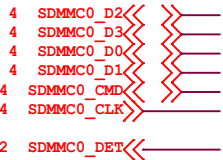


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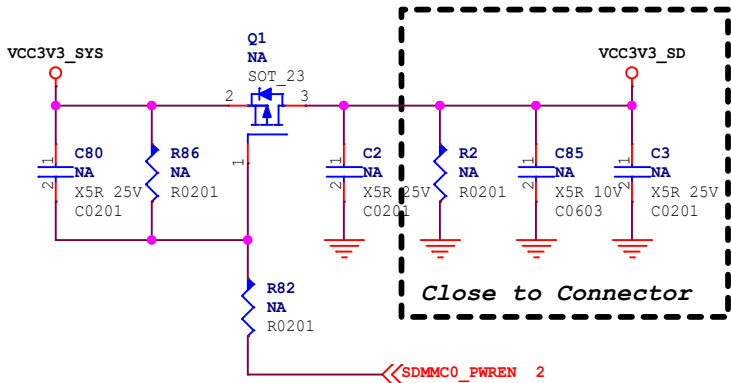
TEL: 13148846151

Sheet: 16 of 23

Micro-SD Card



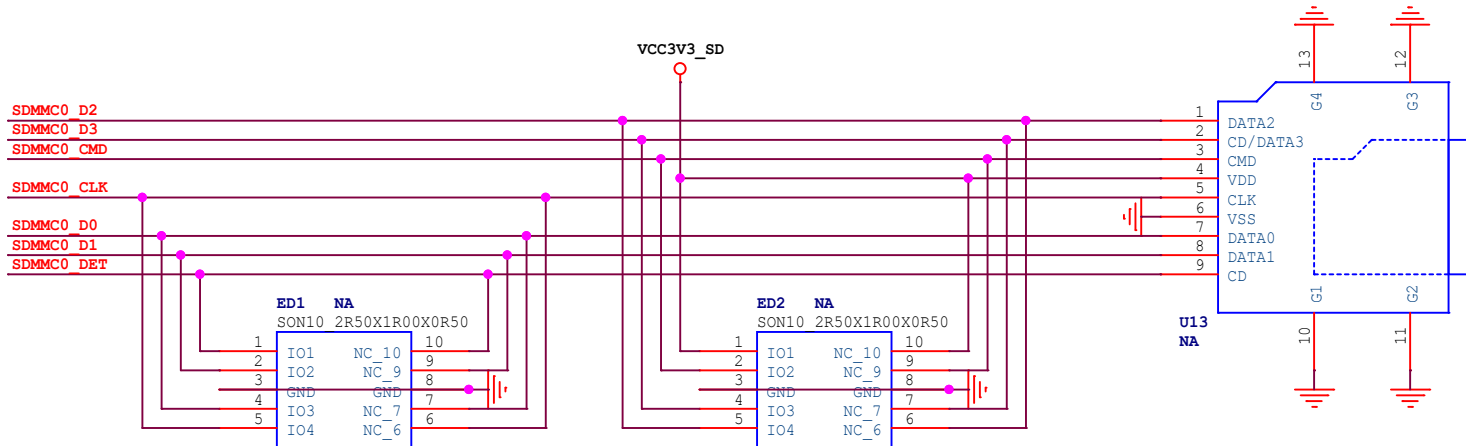
Card Power

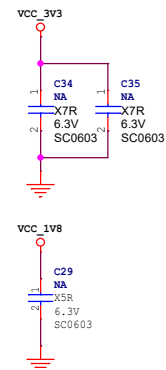


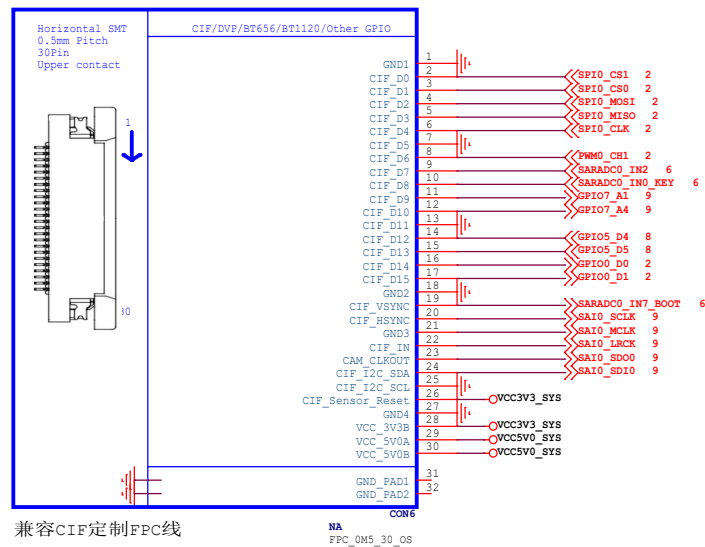
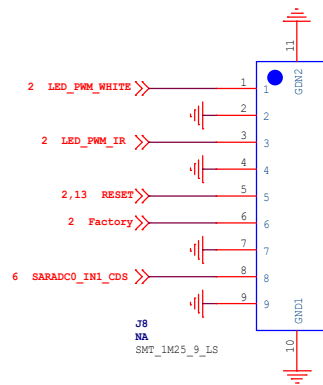
SDMMC0_PWREN=L VCC3V3_SD=3.3V(Default)
SDMMC0_PWREN=H VCC3V3_SD=0V

Card IO Power

OPTION 3
Usually used for SD3.0.
It can support SD upgrade,
but can't support SD boot.



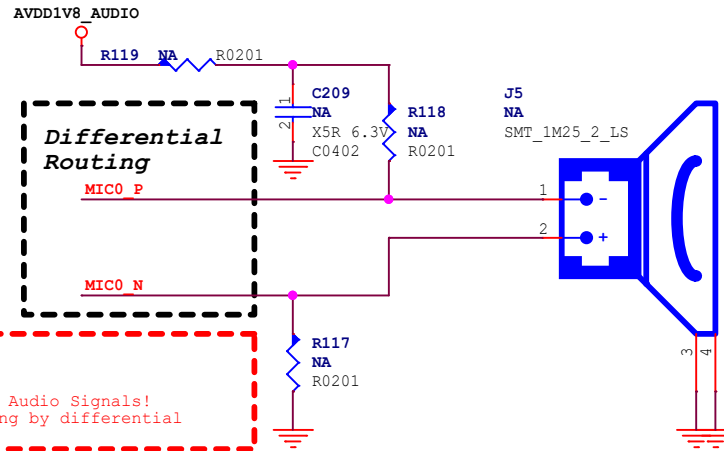




Audio Input

9 MIC0_P
9 MIC0_N
9 MIC1_P
9 MIC1_N

ECM

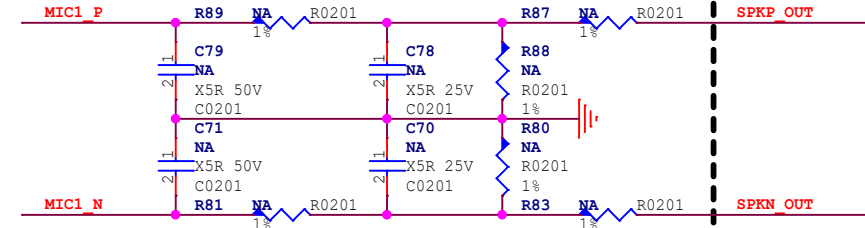


Differential Routing

Note

Differential/Balanced Audio Signals!
Layout must be routing by differential

Loopback



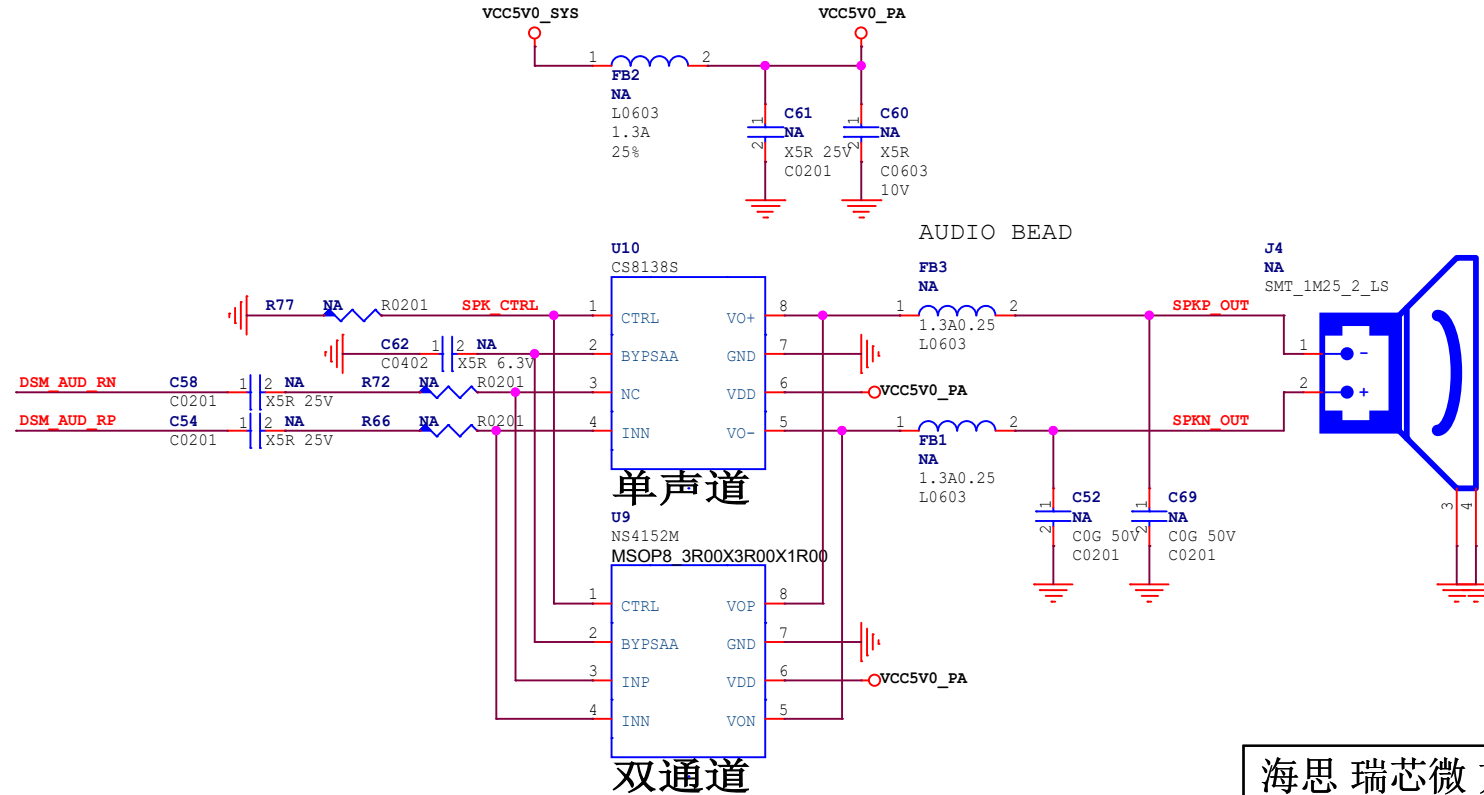
Differential Routing

Differential Routing

Audio OUTPUT

9 DSM_AUD_RN
9 DSM_AUD_RP

2 SPK_CTRL

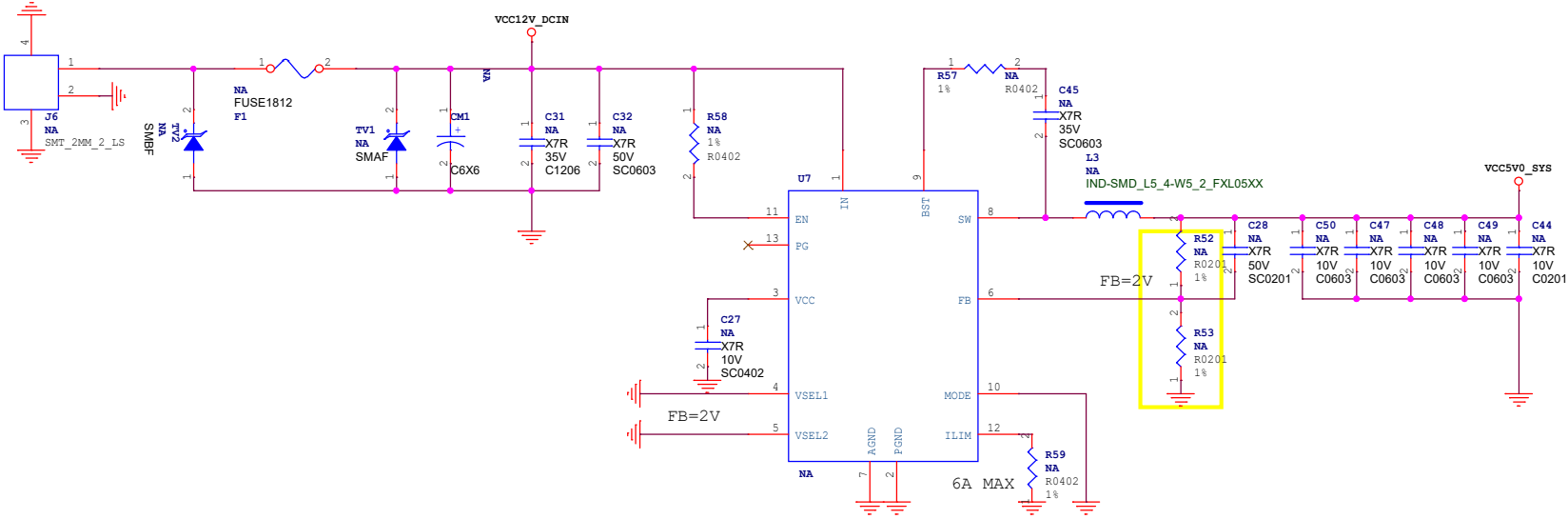


单声道

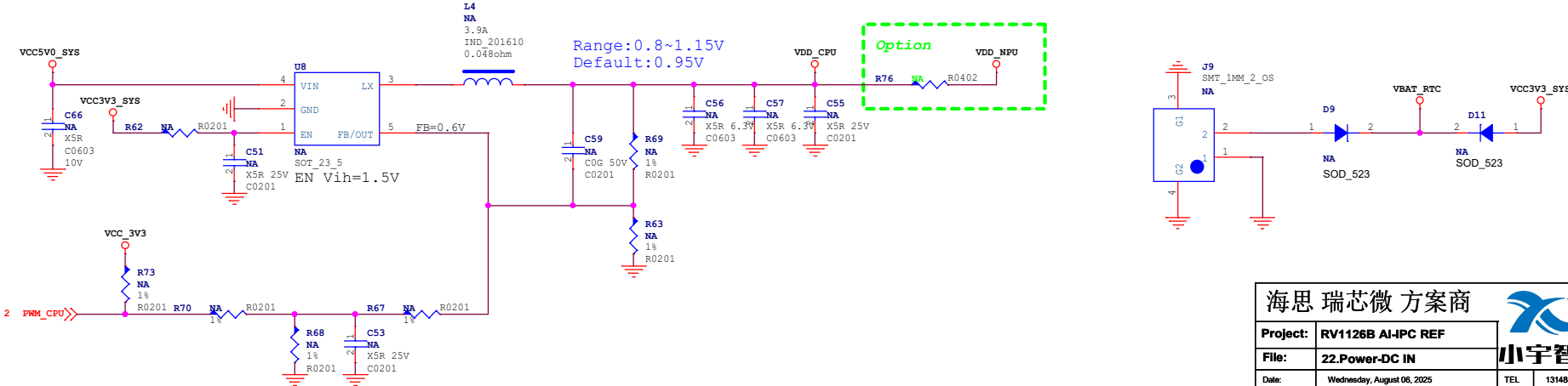
双通道

海思 瑞芯微 方案商			
Project:	RV1126B AI-IPC REF	 小宇智联	
File:	21.Audio		
Date:	Wednesday, August 06, 2025		
Designer:	www.XYlinker.com	TEL	13148846151
		Sheet:	21 of 23

12V--->VCC5V0_SYS
Setp 1
DC IN 9V-24V



VCC5V0_SYS--->VDD_CPU
Step 2
VCC_CPU



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Project: RV1126B AI-IPC REF

File: 22.Power-DC IN

Date: Wednesday, August 06, 2025

Designer: www.XYlinker.com



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TEL: 13148846151

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