

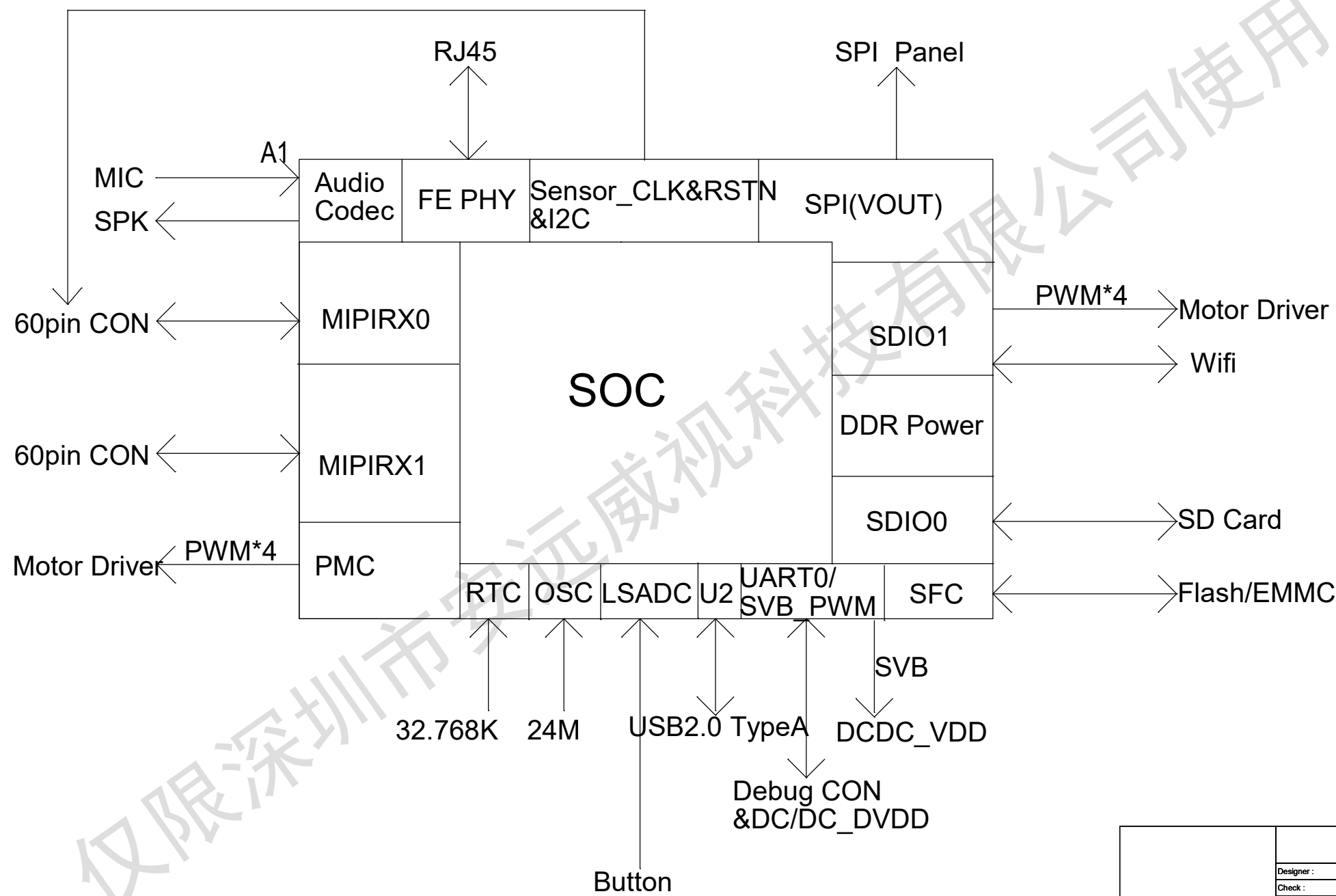
7206V10_RB_A

4L

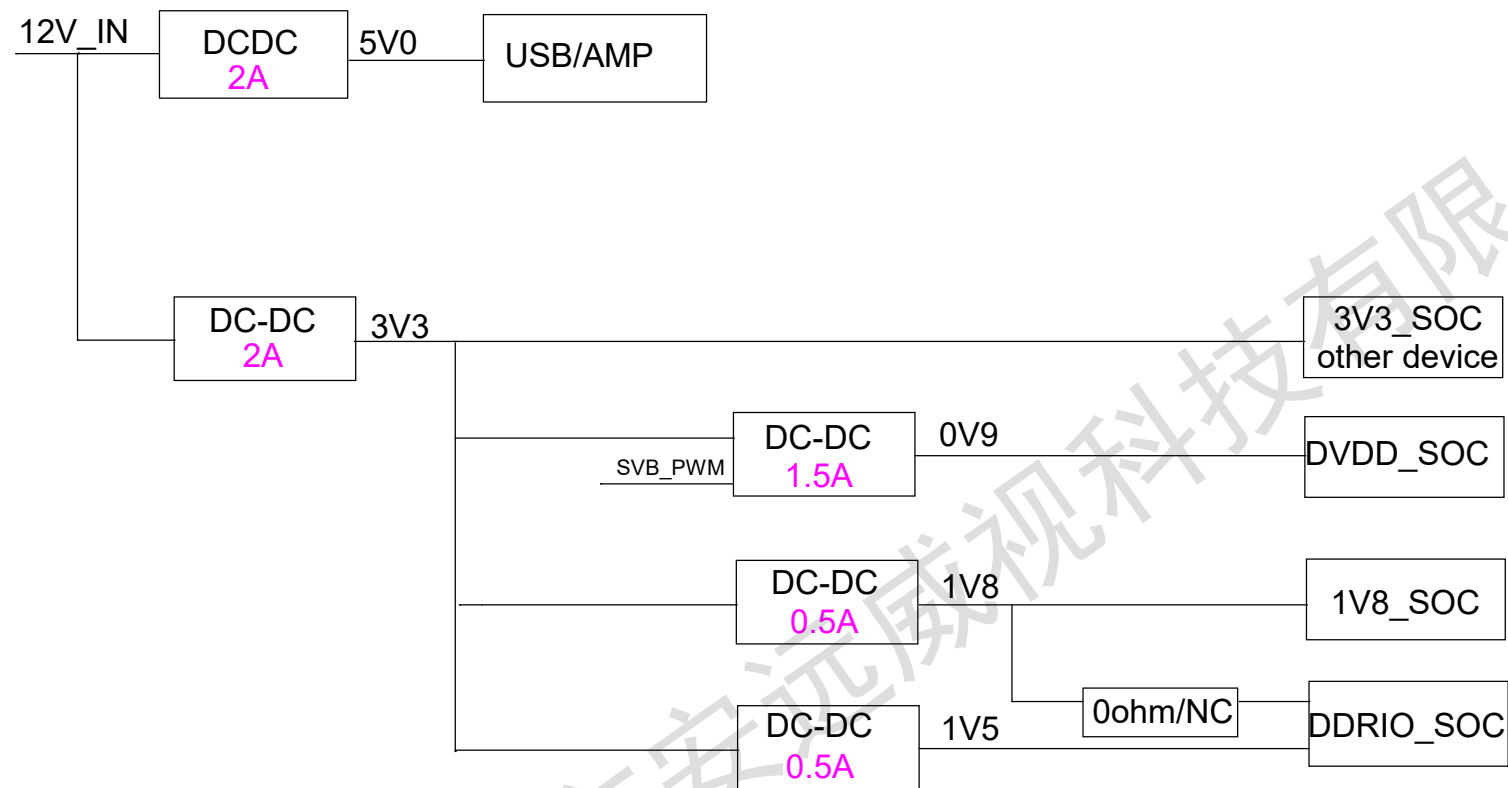
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Block Diagram

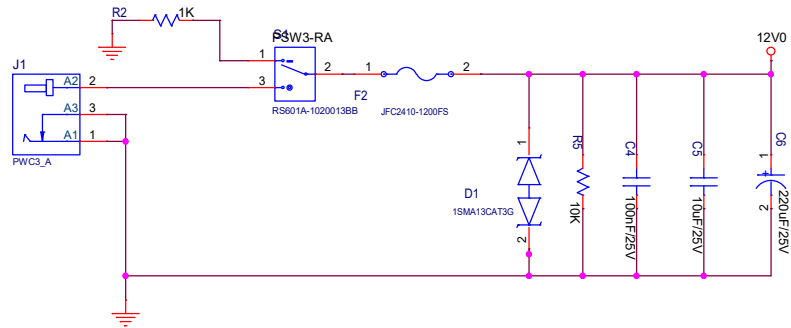


Power Tree

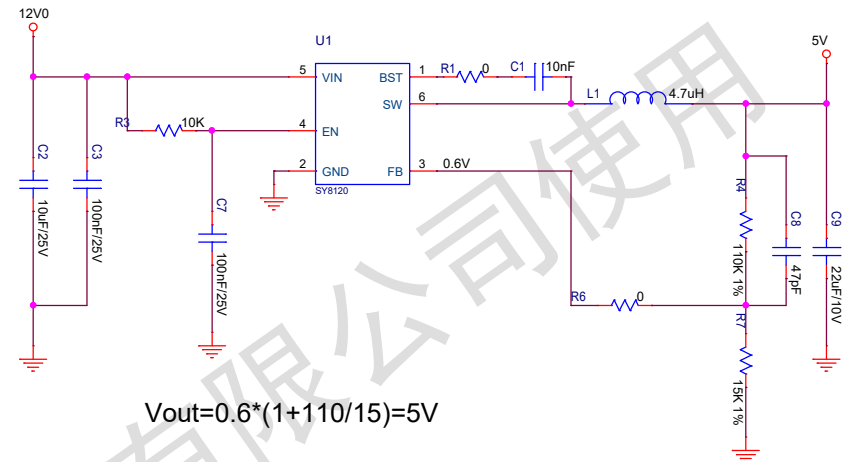


Power1

12V POWER IN



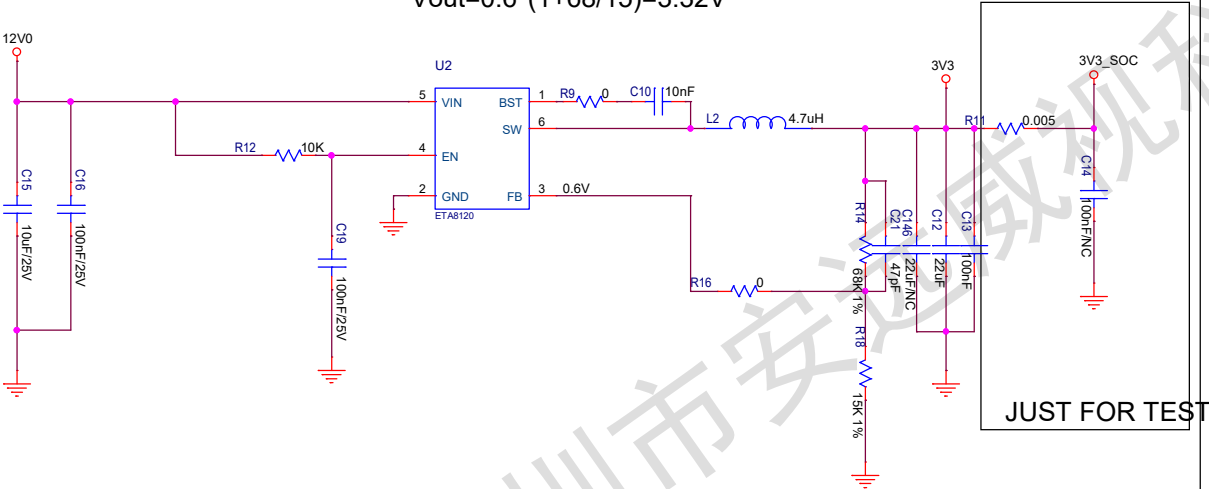
12V-->5V



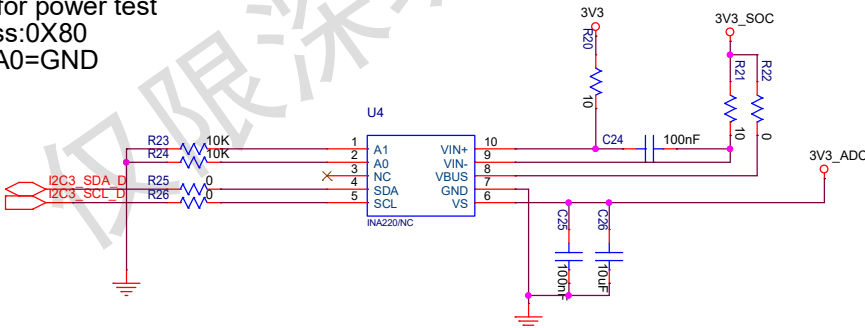
$V_{out} = 0.6 * (1 + 110/15) = 5V$

12V-->3V3

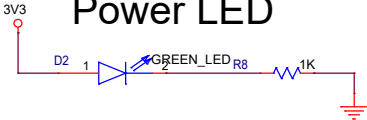
$V_{out} = 0.6 * (1 + 68/15) = 3.32V$



Note:Just for power test
I2C address:0X80
A1=GND A0=GND



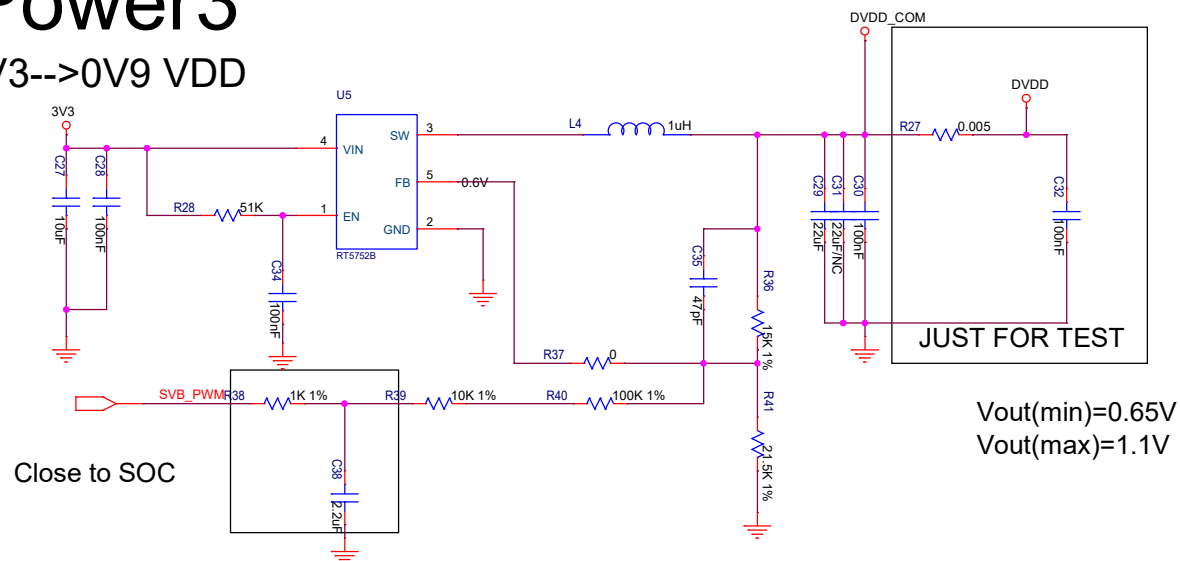
Power LED



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Power3

3V3-->0V9 VDD



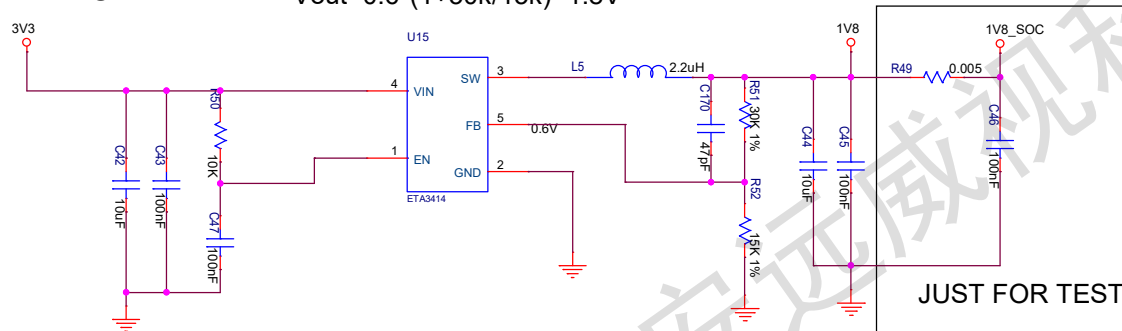
Vout(min)=0.65V
Vout(max)=1.1V

Tdelay=0.452RC=0.452*51k*100n=2.3ms

Close to SOC

3V3-->1V8

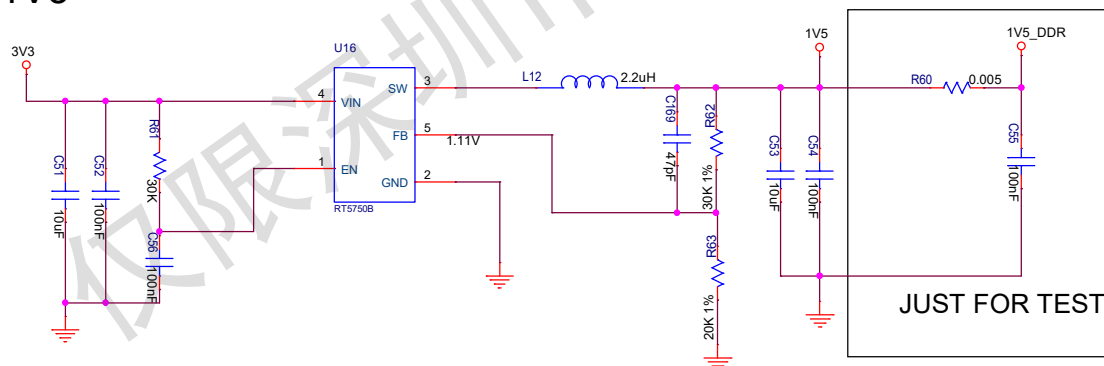
Vout=0.6*(1+30k/15k)=1.8V



Tdelay=0.452RC=0.452*10k*100n=0.45ms

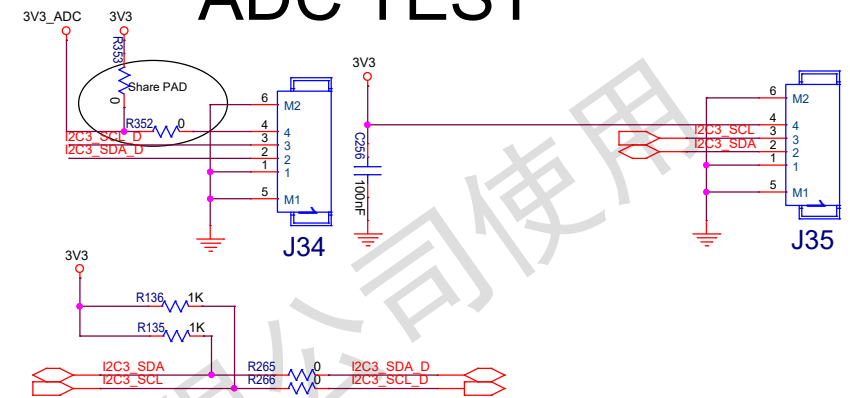
3V3-->1V5

Vout=0.6*(1+30k/20k)=1.5V

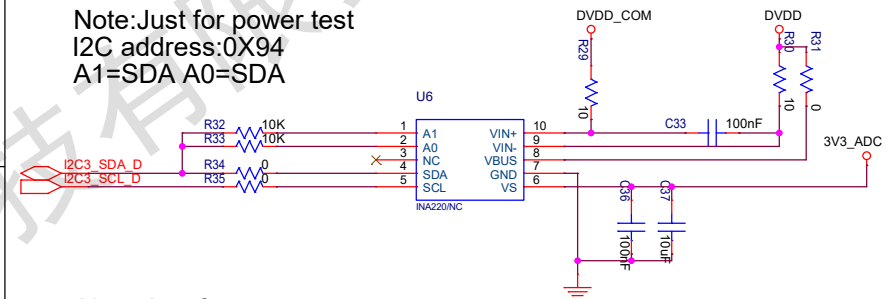


Tdelay=0.452RC=0.452*30k*100n=1.3ms

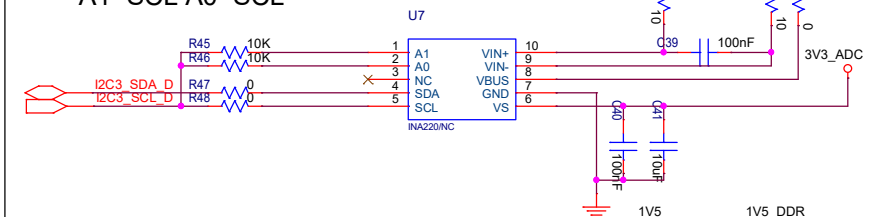
ADC TEST



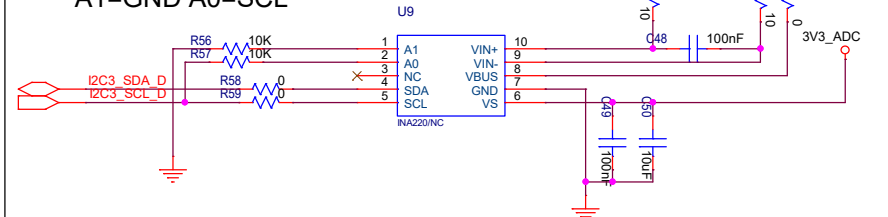
Note:Just for power test
I2C address:0X94
A1=SDA A0=SDA



Note:Just for power test
I2C address:0X9E
A1=SCL A0=SCL

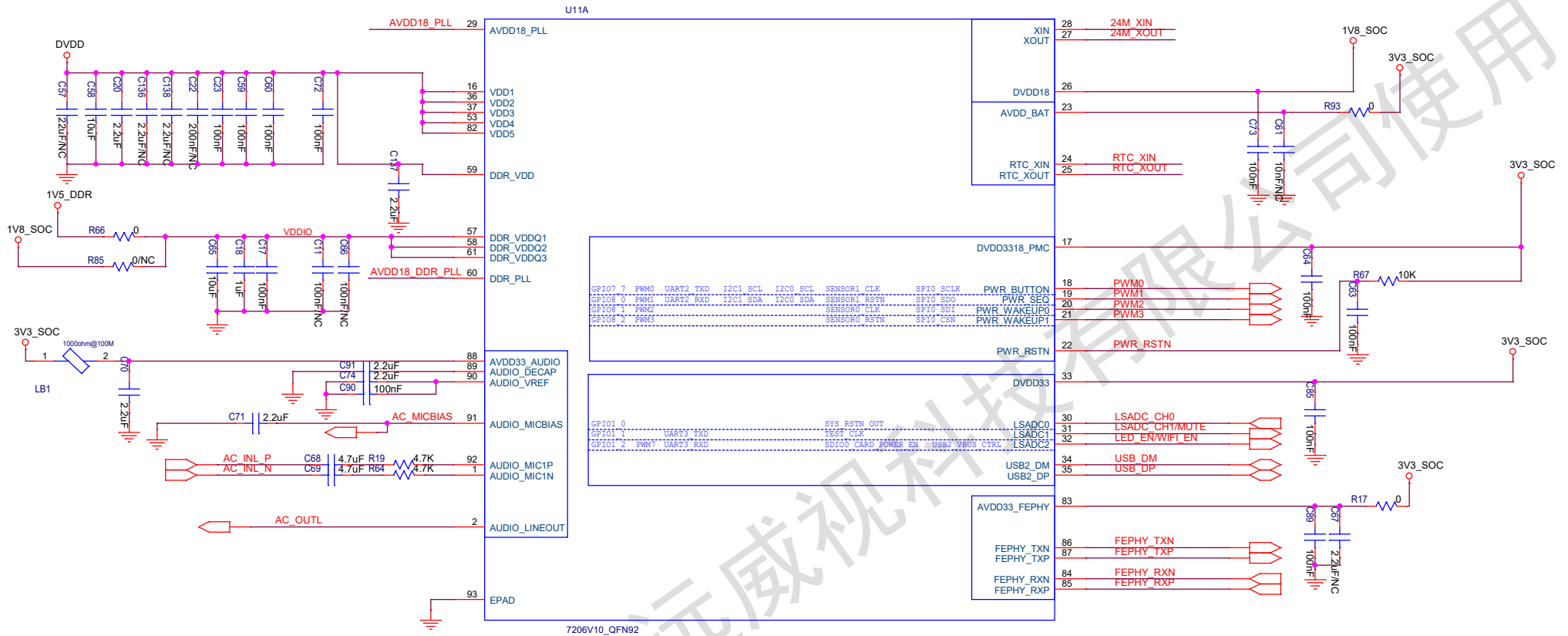


Note:Just for power test
I2C address:0X86
A1=GND A0=SCL

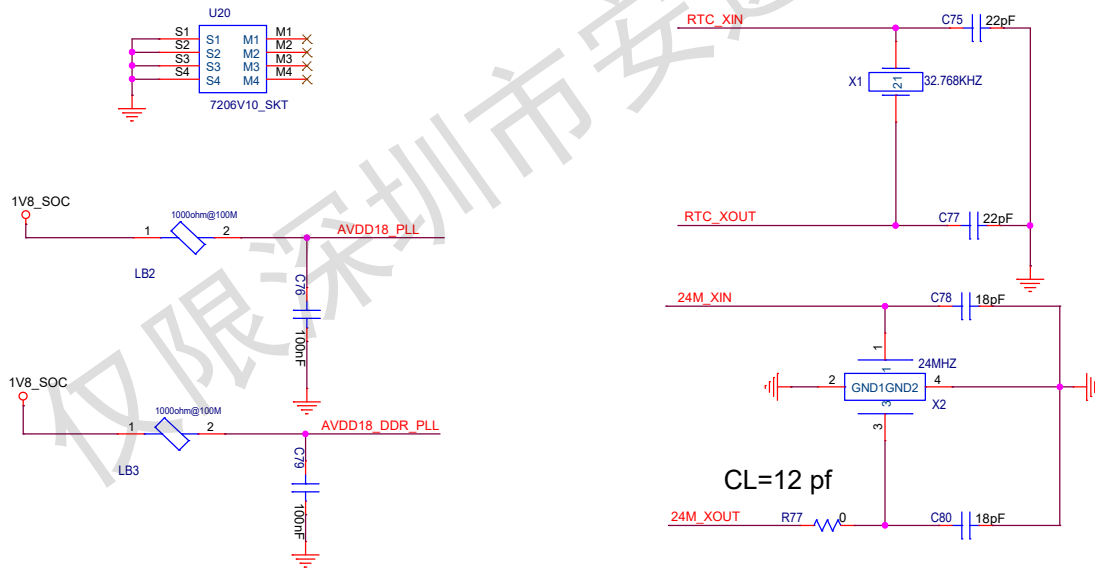


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MISC1 for SOC

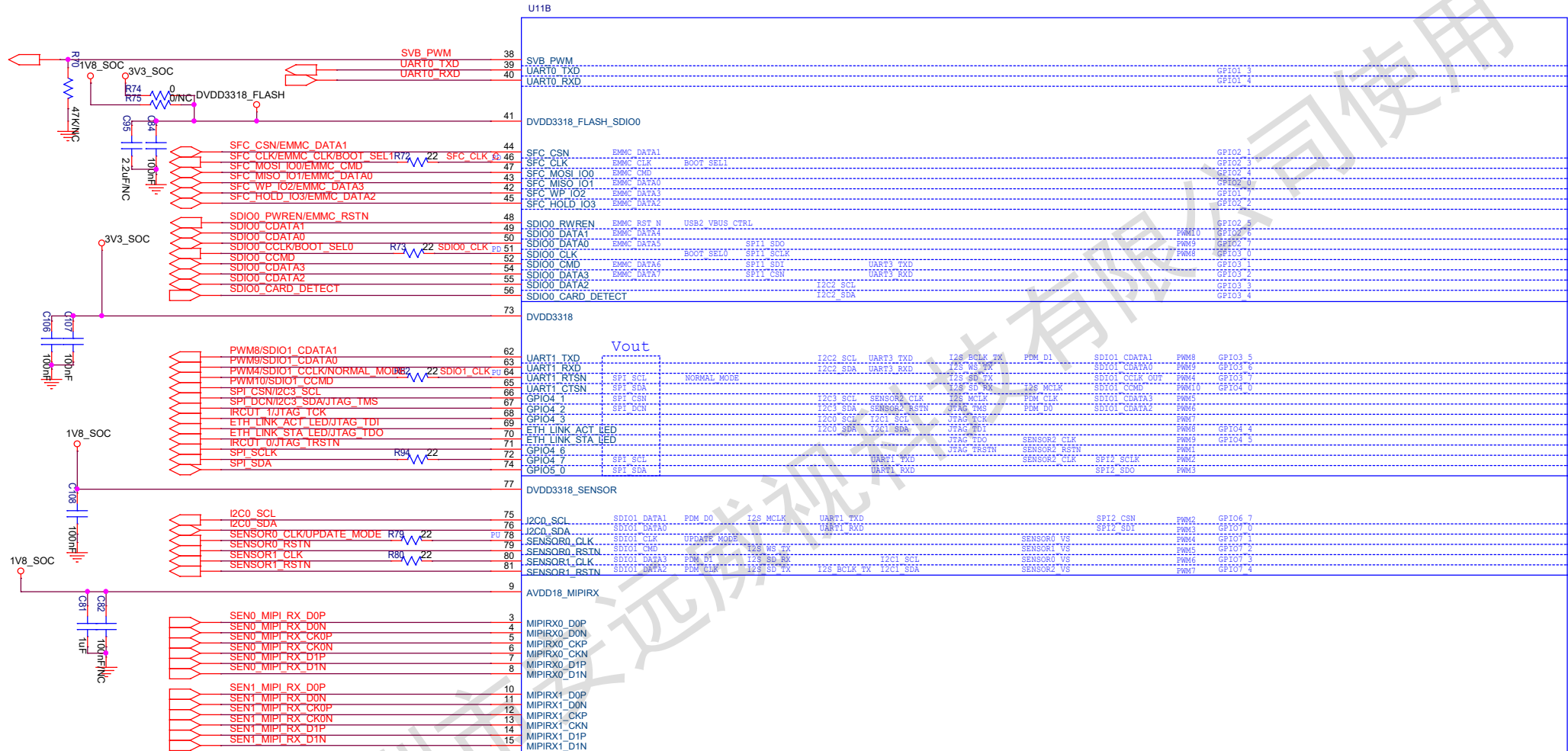


Important Notice:
If need the wake-up function, please only connect wakeup0.
Wakeup1 is temporarily unavailable!



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MISC2 for SOC

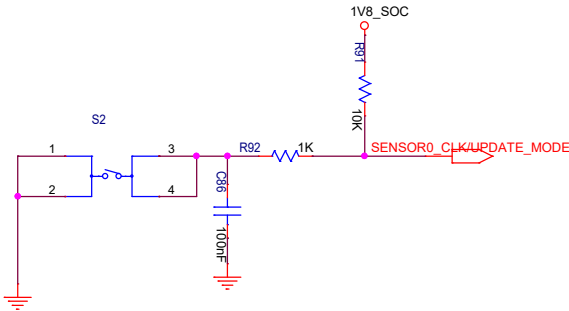


7206V10_QFN92

POWER ON SETTING

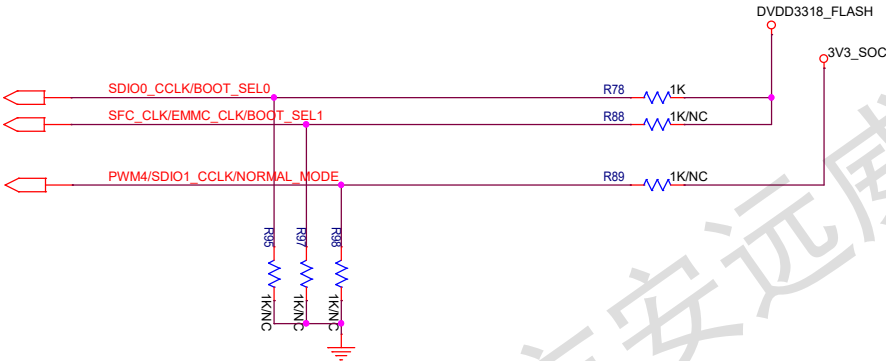
POWER ON SETTING of SOC

Notes: Power on Setting can use internal pull-up and pull-down if it doesn't reuse other function, else it need to think about actual status.



UPDATE_MODE	FUNCTION
0	Enable UPDATE FROM SDIO0 or USB
1	Disable UPDATE_MODE(default)

UPDATE_MODE is internal pull up.

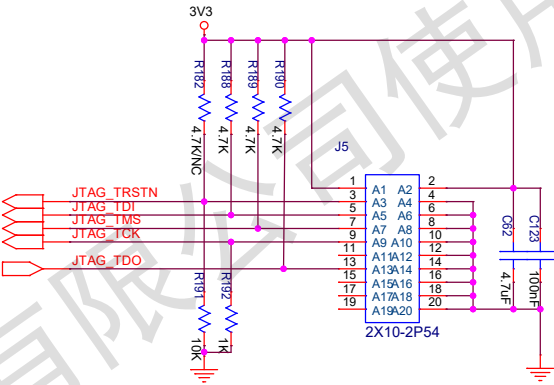


BOOT_SEL0	BOOT_SEL1	FUNCTION
1	0	BOOT FROM SPI NOR FLASH(default)
	1	BOOT FROM SPI NAND FLASH
0	0	BOOT FROM EMMC 4bit
	1	BOOT FROM EMMC 8bit

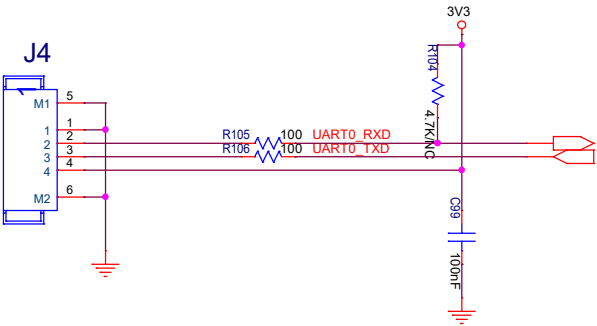
BOOT_SEL1 is internal pull down.
BOOT_SEL0 is internal pull down.

NORMAL_MODE	FUNCTION
0	Test Mode
1	Normal Mode(Default)

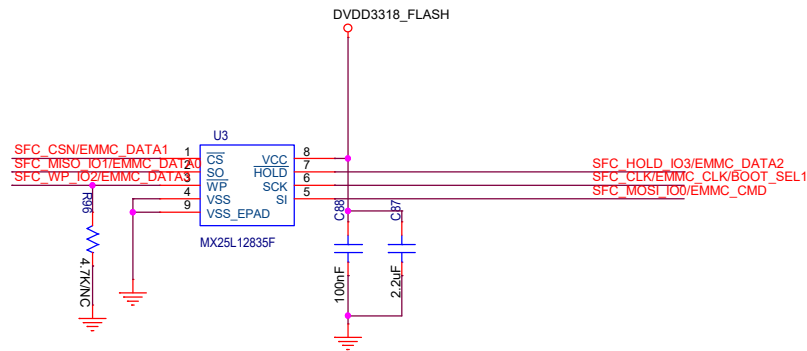
JTAG



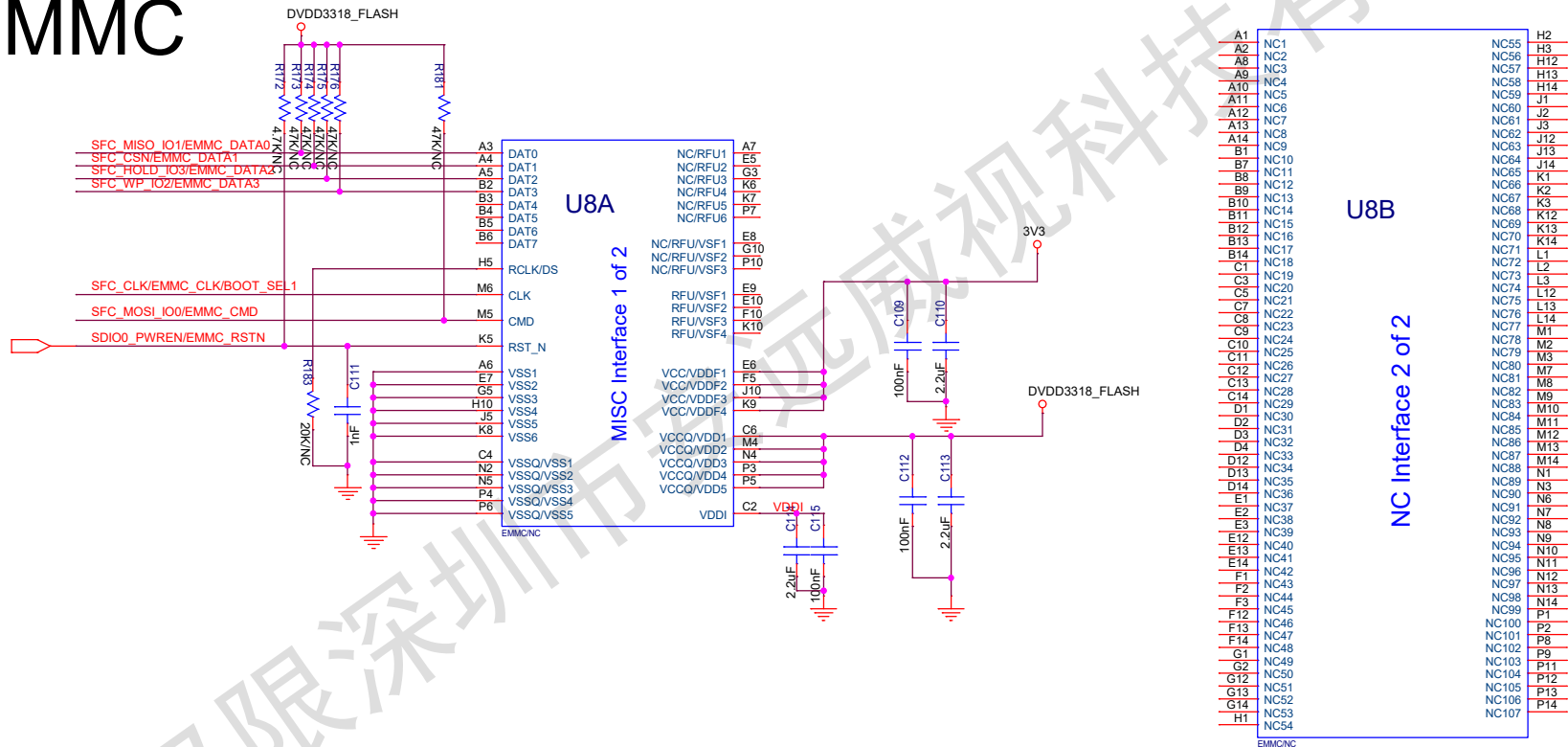
UART1 FOR DEBUG



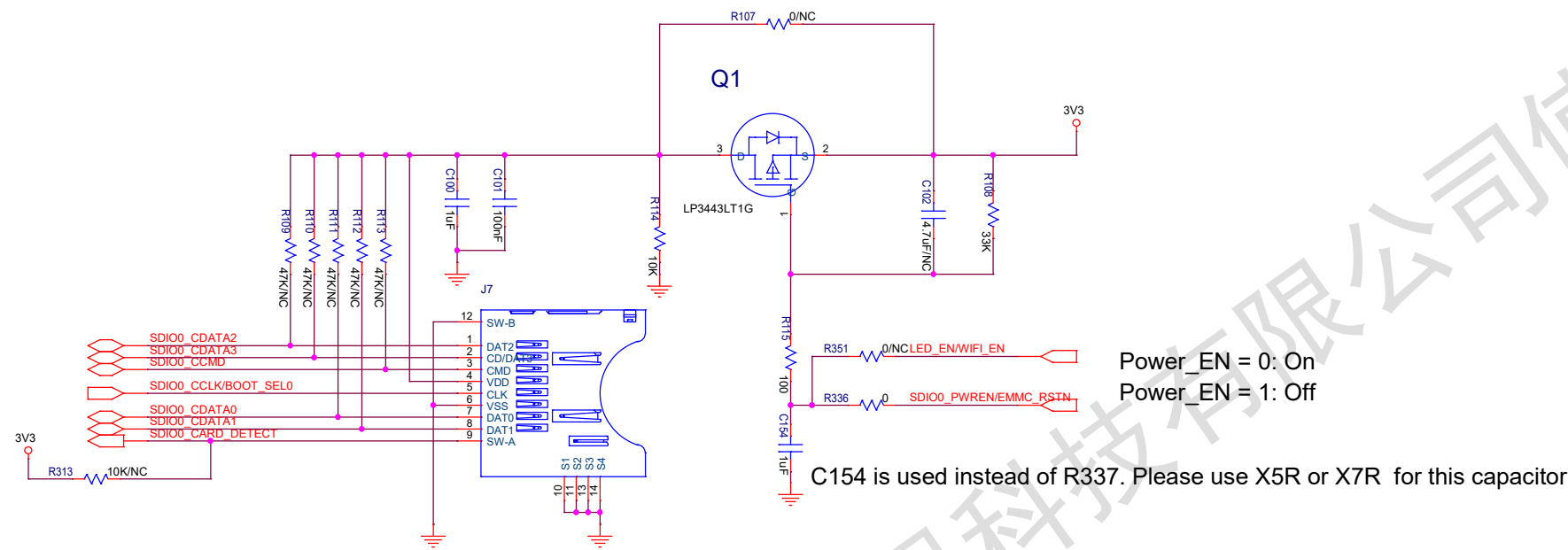
SPI FLASH



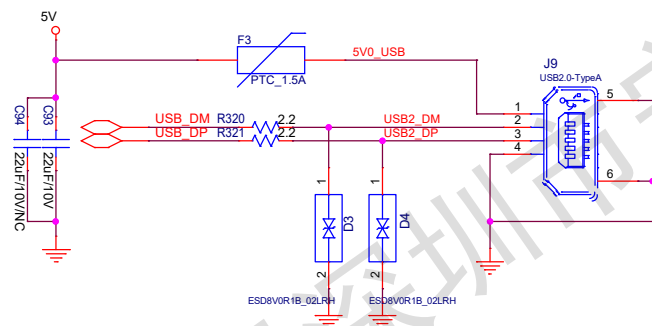
EMMC



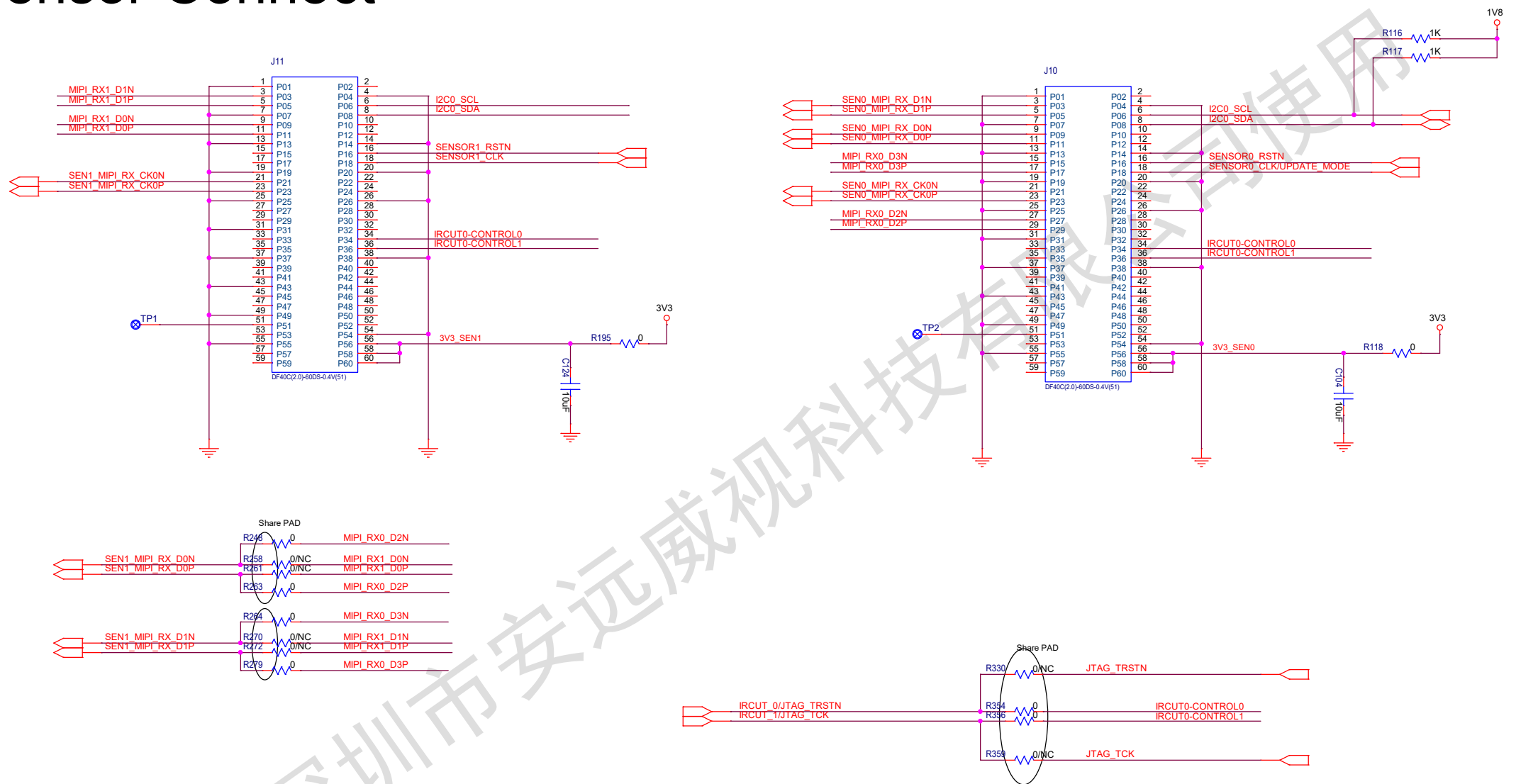
Micro-SD Card



USB Type-A

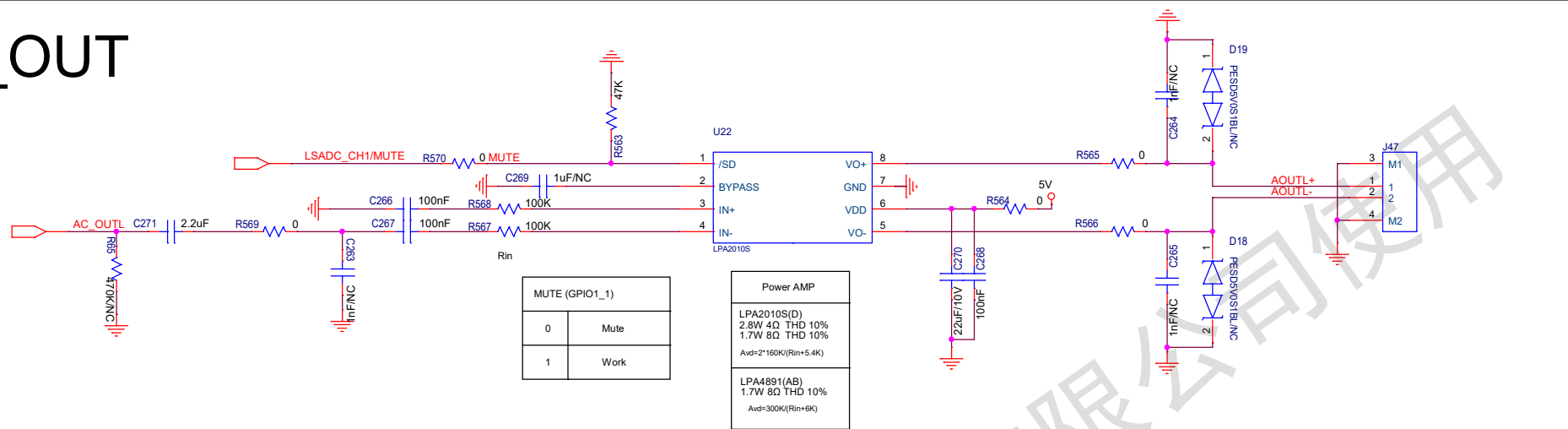


Sensor Connect

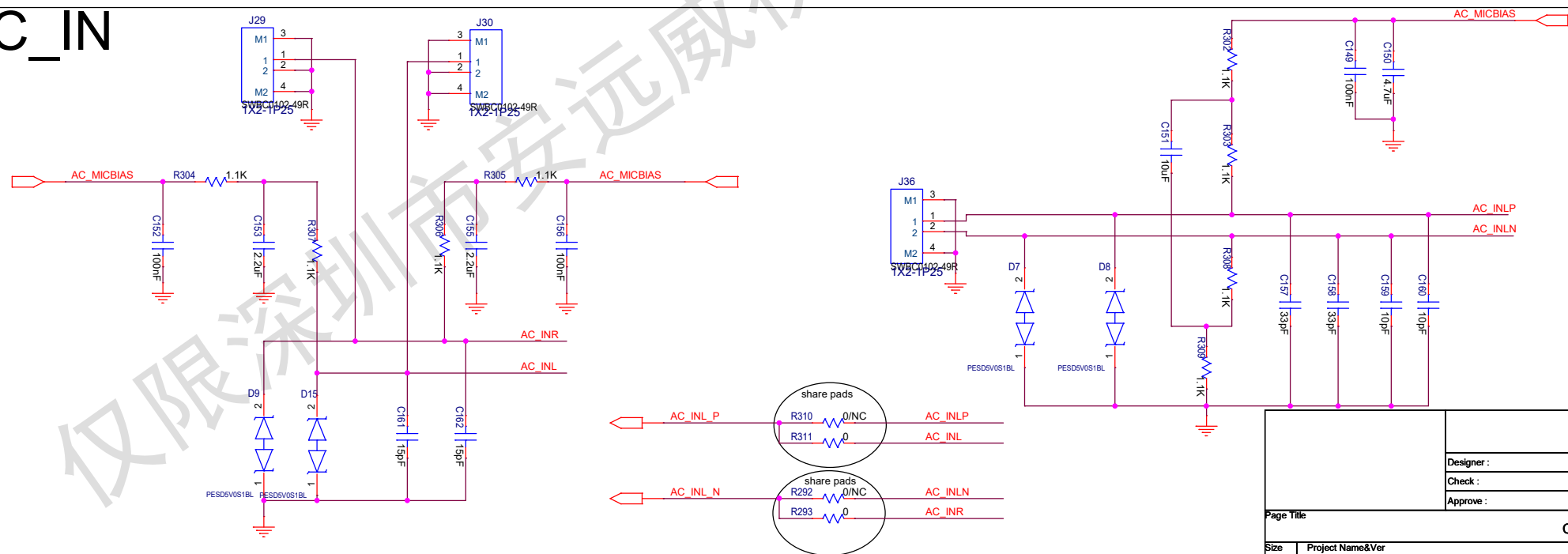


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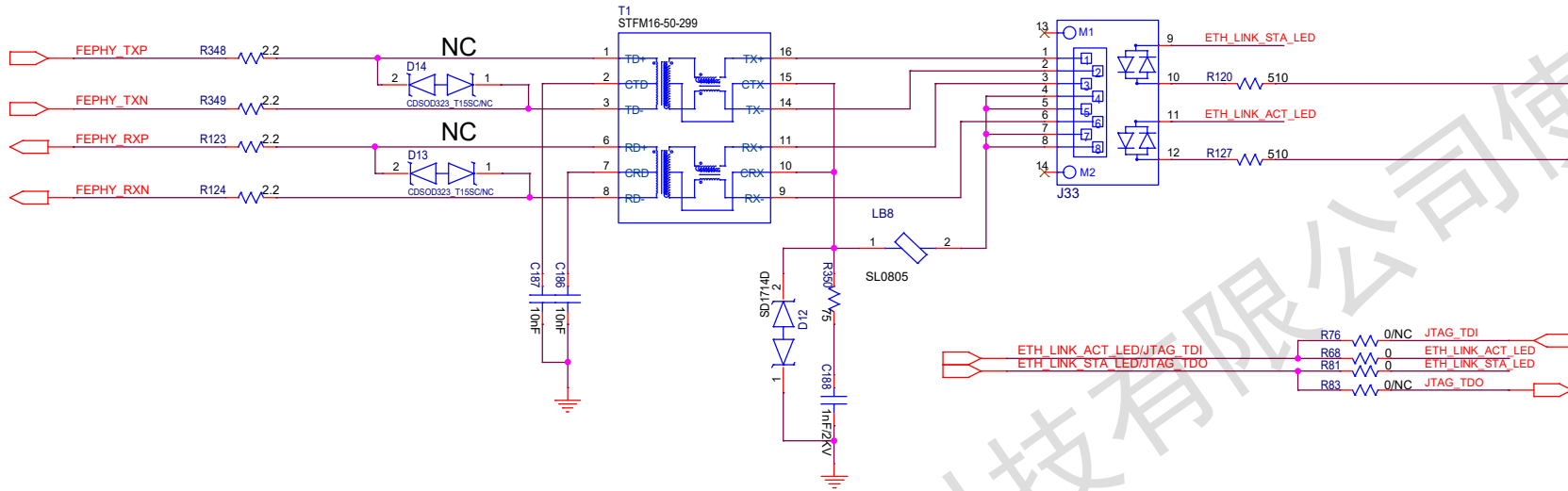
AUDIO_OUT



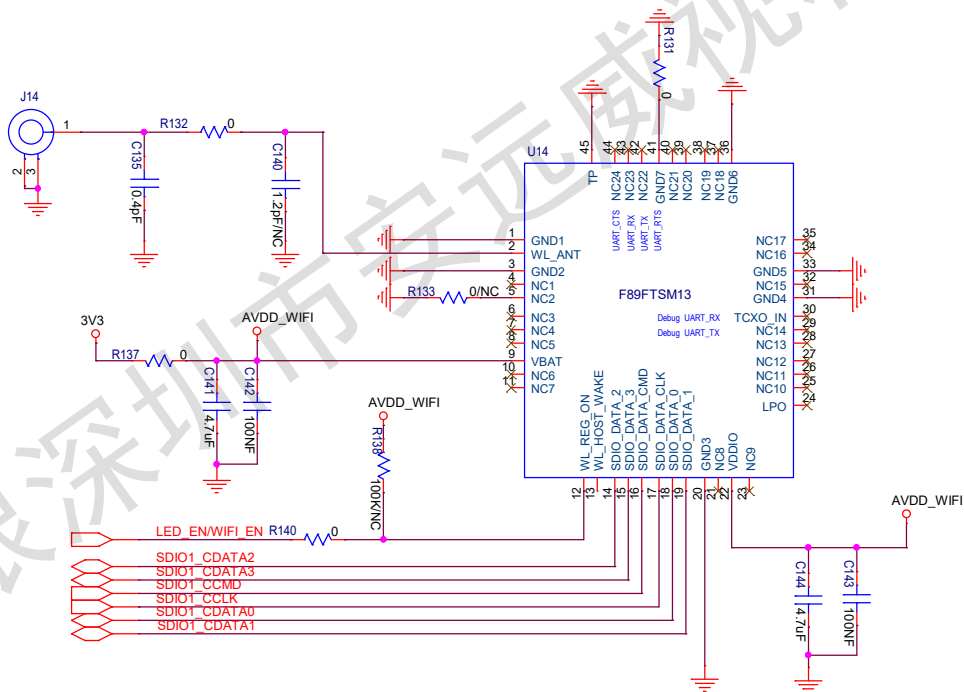
MIC_IN



RJ45

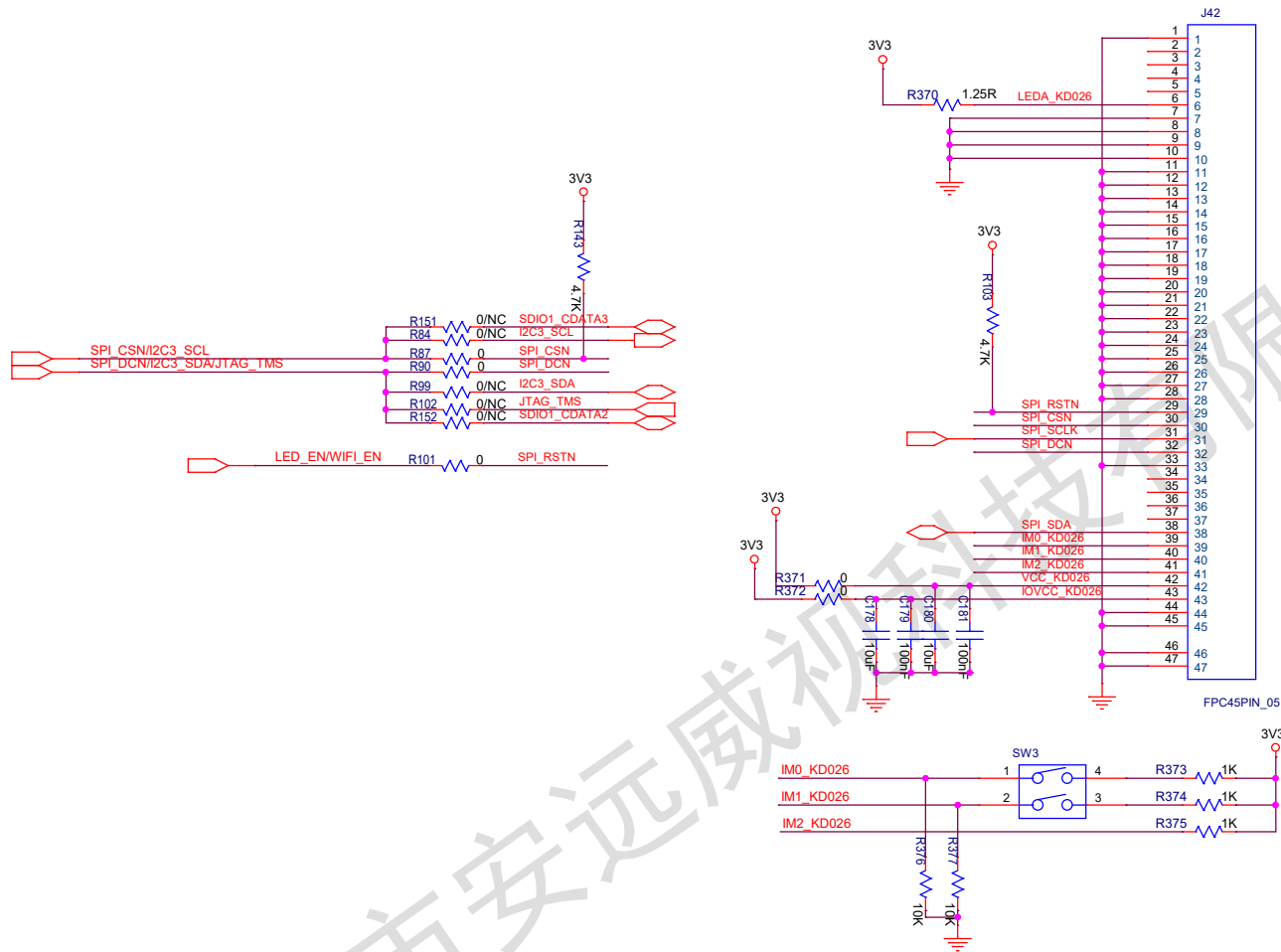


Wifi



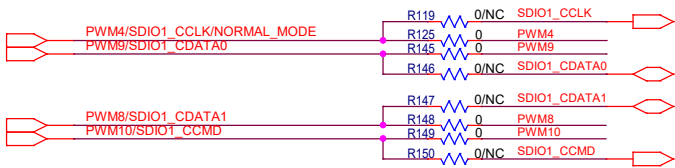
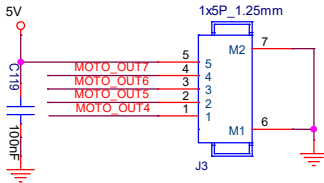
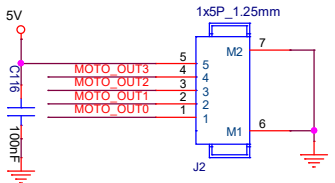
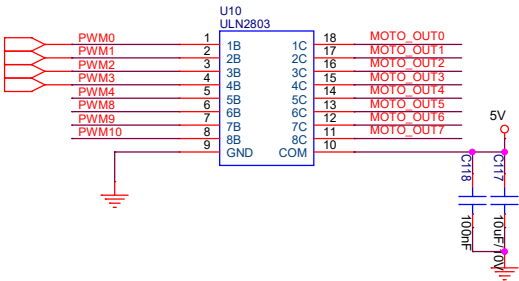
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SPI Panel

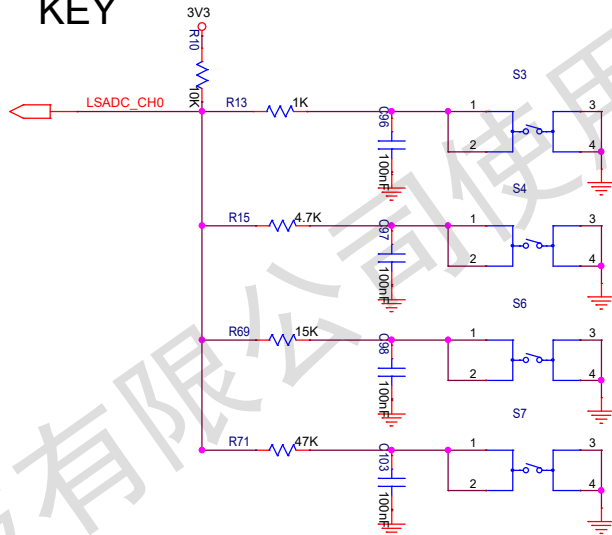


IM1 KD026	IM1 KD026	IM0 KD026	Interface type	DB PIN in use
1	0	1	3-Wire 9bit data serial interface 6PRGB	SDA SCL CS
1	1	1	4-Wire 8bit data serial interface	SDA SCL CS RS

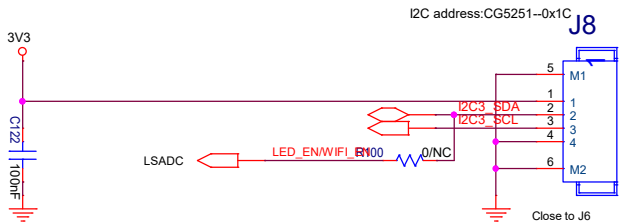
MOTOR



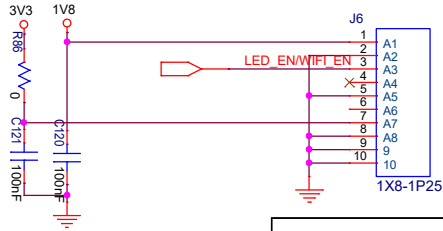
KEY



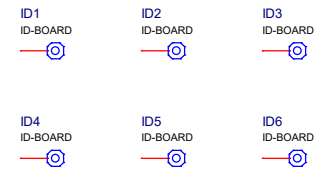
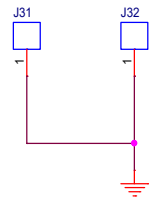
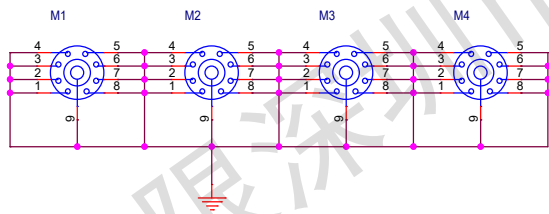
Light Sensor Connector



LED Connector



INSALLNATION HOLES GND TEST PIN PCB MARK POINT



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SCH Update Record

Version	Date	Author	Description
A	2025.01	XX	The First Version
B	2025.06	XX	1.Add R337 to solve the problem of configuration errors when powering on with an SD card 2.Update the package of SOC for easier soldering 3.Add SPI_RSTN
	2025.08	XX	1.Replace U16 with RT5750B to reduce ripple noise（R62→30K 1% R63→20K 1%） 2.Delete R104 3.Optimize the circuit parameters of the SD card:C102→NC,R108→33K,R337→C154 1uF

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