

BLOCK

5

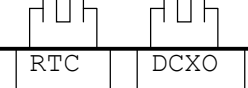
4

3

2

1

32.768KHz 24MHz



DDR3/DDR3L 16X1

DRAMC

SPI /EMMC

STORAGE

TF CARD

SDC3.0

MICRO USB

Dev

USB SWITCH

USB2.0

HOST

USB HOST1

USB HOST2

USB HOST3

USB HOST4

USB HUB
FE1.1S

USBID

POWER KEY

PMIC
AXP2101

PI-TWI4

BAT

NMI/RESET

VBUS

DC-DC

DC12VIN

KEY

PMC

GPADC

**V853
TGBGA318**

SDIO1

UART3

SDIO
WIFI

EMAC/GMAC

PHY

LAN CONN

RGB/VDPO

RGB OUT

DISPLAY Socket
Capacitor TP

MIPI DSI

MIPI DSI

TWI2

MIPI-CSI

MIPI CSI 4lane/2x2lane

LINE OUT

PA

SPEAKER

MIC1/2
LINE IN

MICIN/LINE IN (二选一)

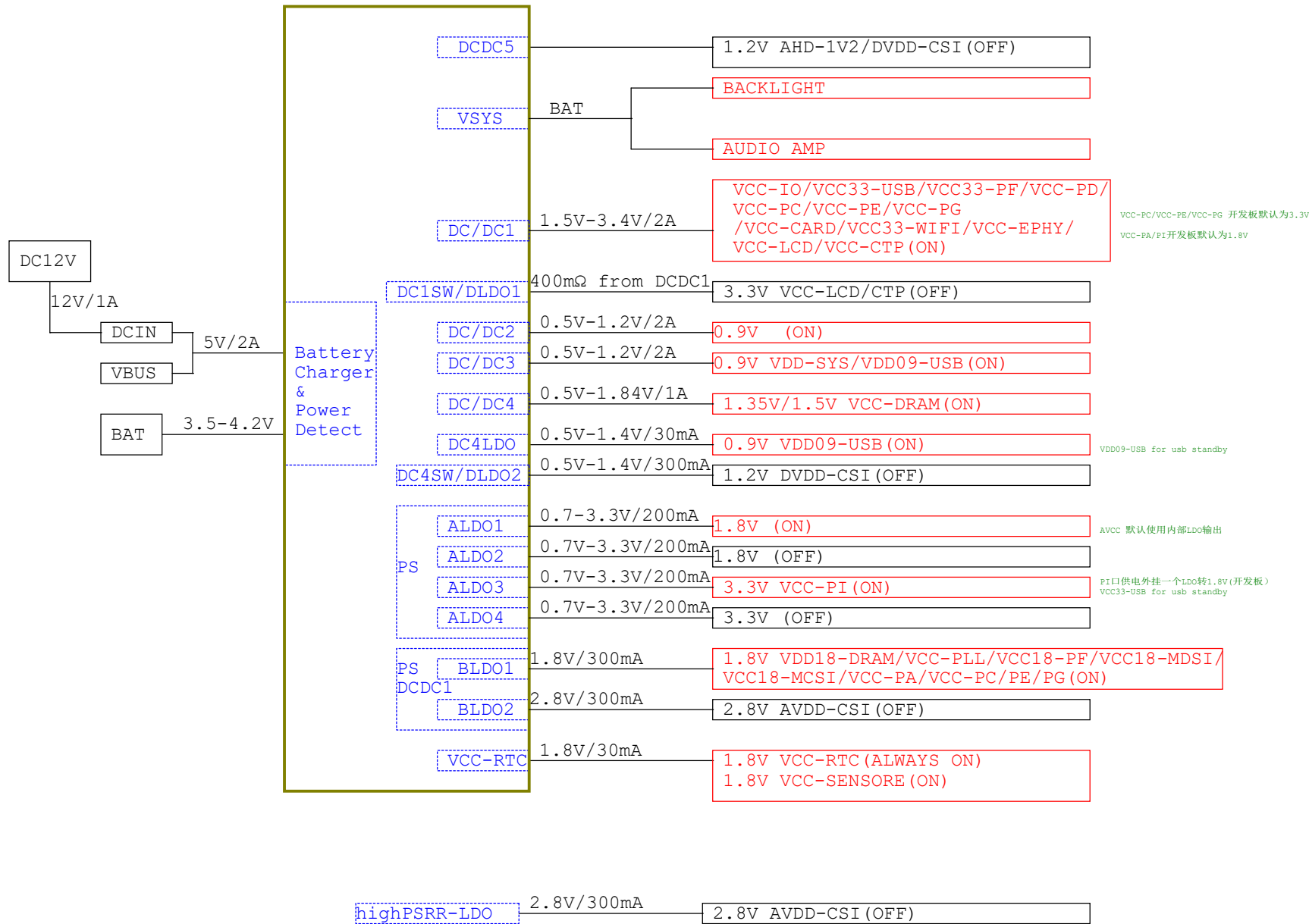


SHEN ZHEN HDYT TECOLOGY CO.LTD			
Design name		Smart Scale	
Size	Document Number	Rev	
A3	BLOCK	V00	
Date:	Wednesday, December 07, 2022	Sheet	2 of 16

POWER TREE

AXP2101

DEFAULT POWER ON
 DEFAULT POWER OFF



GPIO ASSIGNMENT

4

3

2

1

D

D

C

C

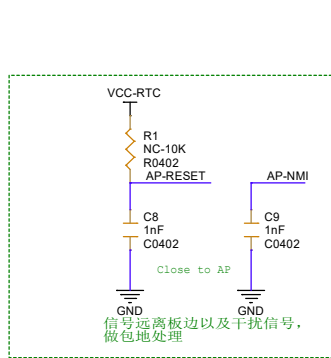
B

B

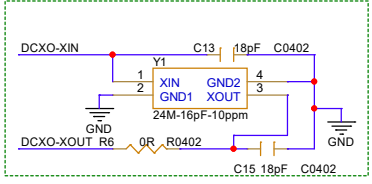
A

A

SHEN ZHEN HDYT TECOLOGY CO.LTD			
Design name Smart Scale			
Size A3	Document Number GPIO ASSIGNMENT		Rev V00
Date: Wednesday, December 07, 2022	Sheet 1	of 4	16

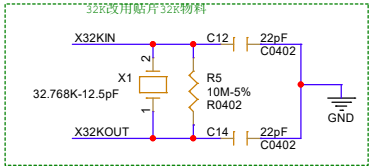


DCXO-24Mhz

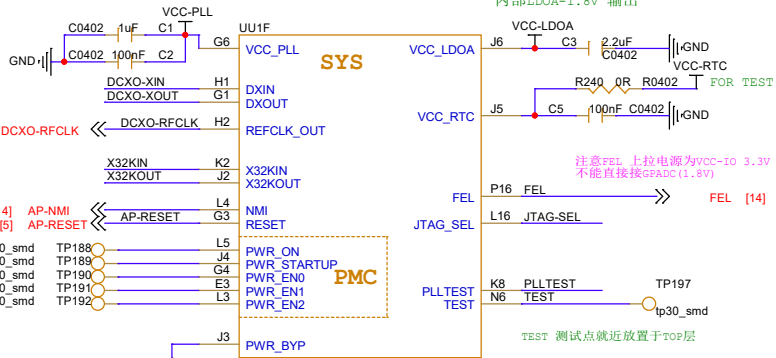
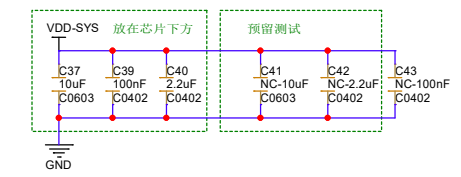


使用全志物料24Mhz-E3SB24E004304E

32.768KHz

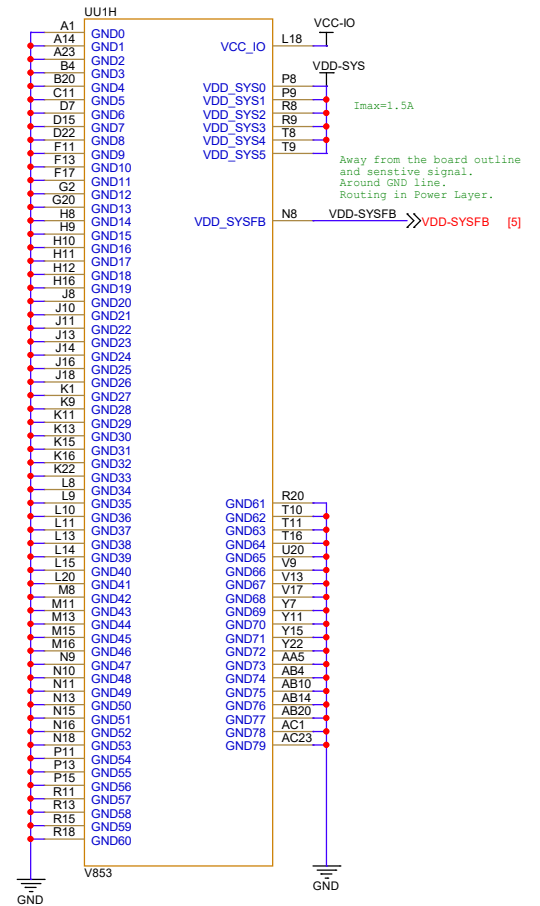
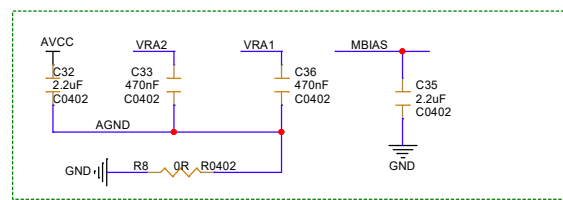
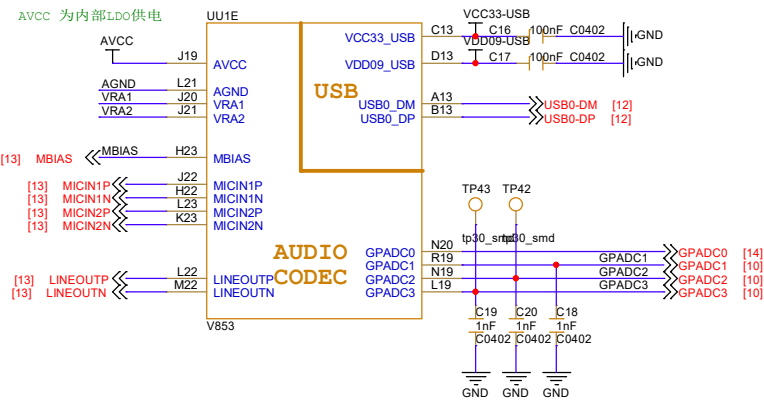
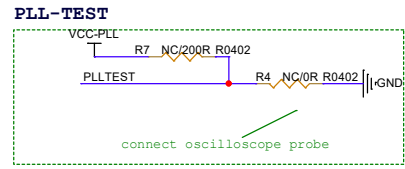


DECOUPLE CAP

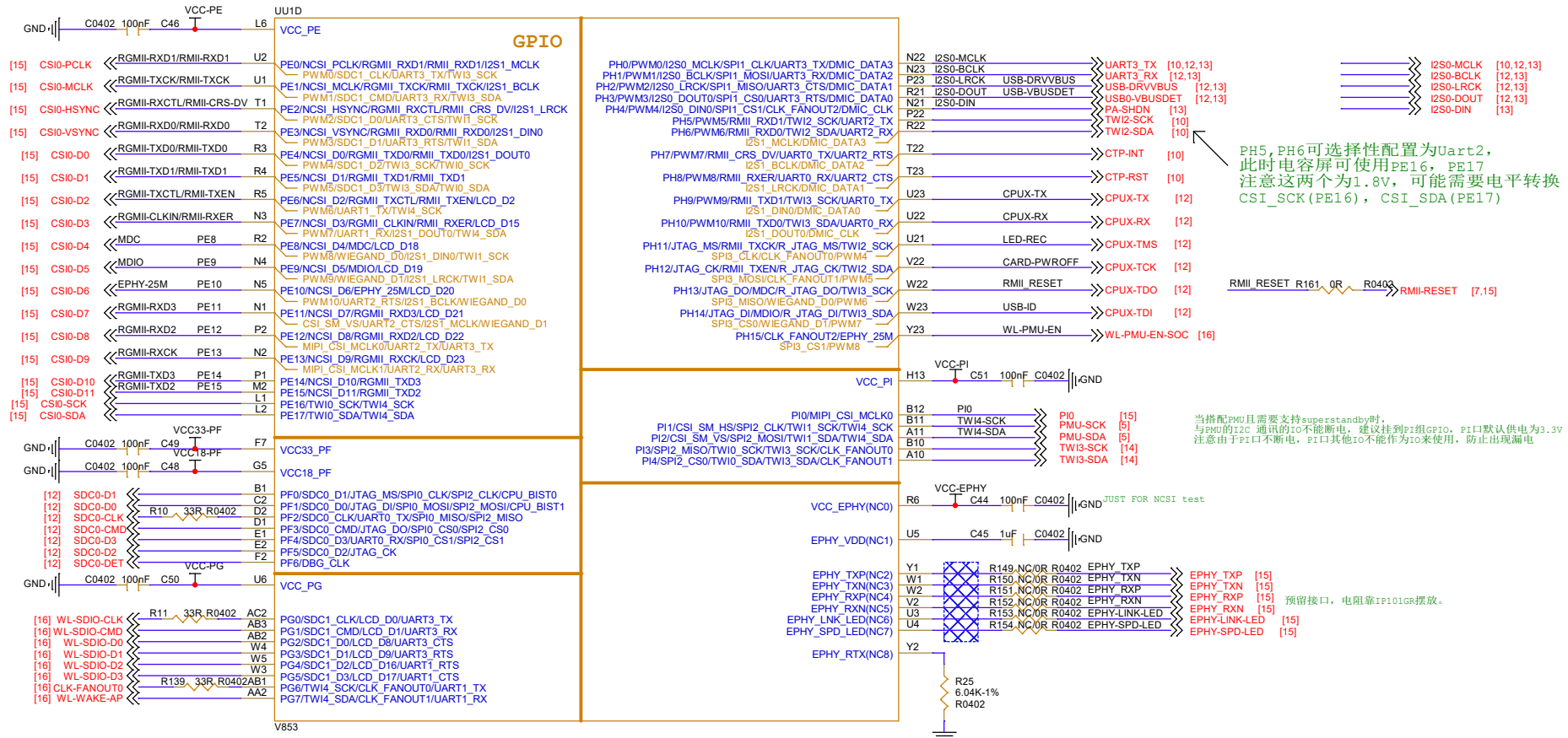


PMC 模块功能由RESET-BYP决定, 配置说明如下:

RESET-BYP	浮空为高电平	1. PMC 功能PIN有效;
	接地为低电平	2. 上电内部复位有效 (需要外接高电平);
		3. 工作时支持外部复位PMC来复位SOC;
		4. PMC 功能PIN无效: 只有NMI/RESET信号有效;
		5. 上电内部复位有效; 也可外接PMU_PWROK信号复位;
		6. 工作时支持外部复位;



SOC



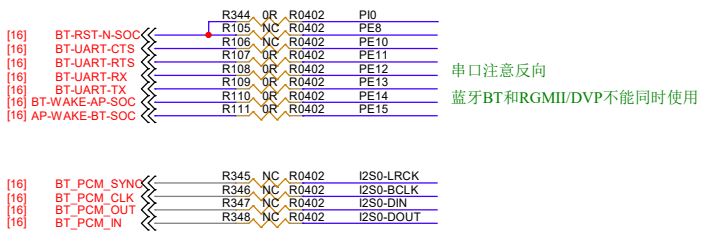
PH5, PH6可选择性配置为Uart2, 此时电容屏可使用PE16, PE17 注意这两个为1.8V, 可能需要电平转换 CSI_SCK(PE16), CSI_SDA(PE17)

当搭配PMU且需要支持superstandby时, 与PMU的I2C 通讯的IO不能断电, 建议挂到P组GPIO, P口默认供电为3.3V 注意由于P口不断电, P口其他IO不能作为IO来使用, 防止出现漏电

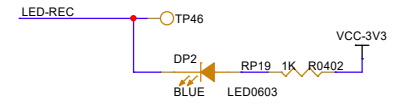
预留接口, 电阻靠IP101GR摆放。

PE

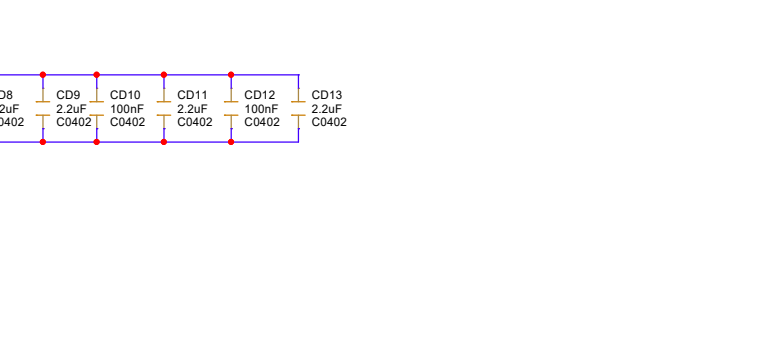
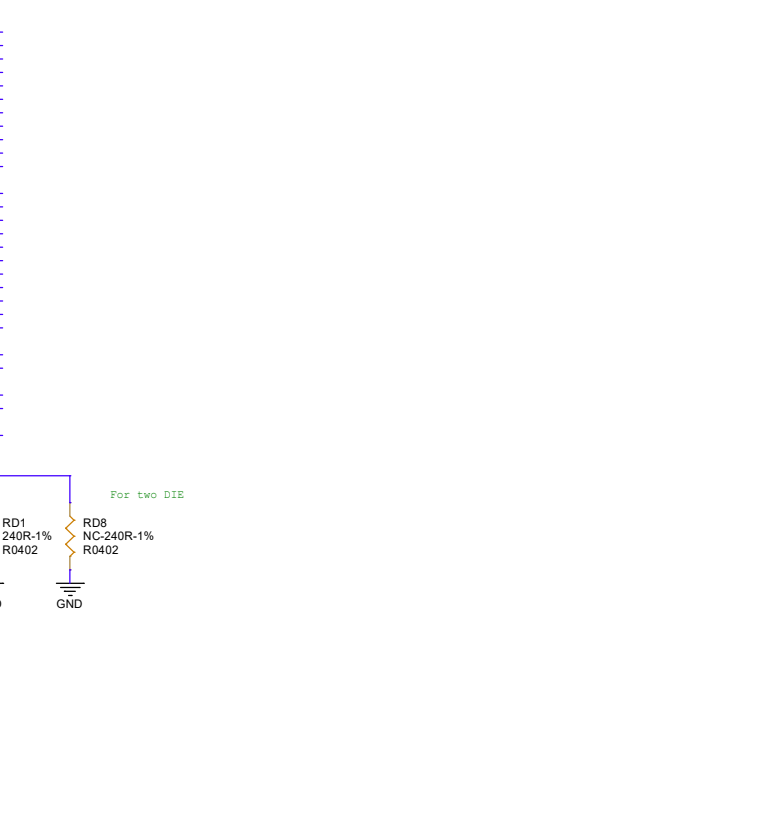
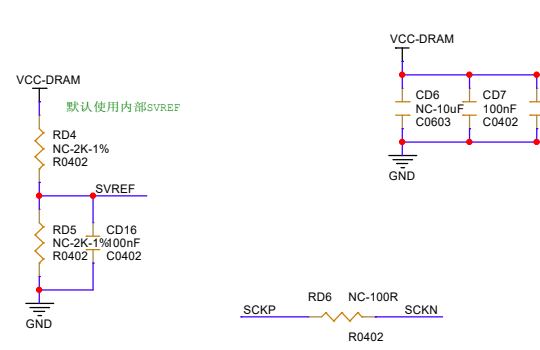
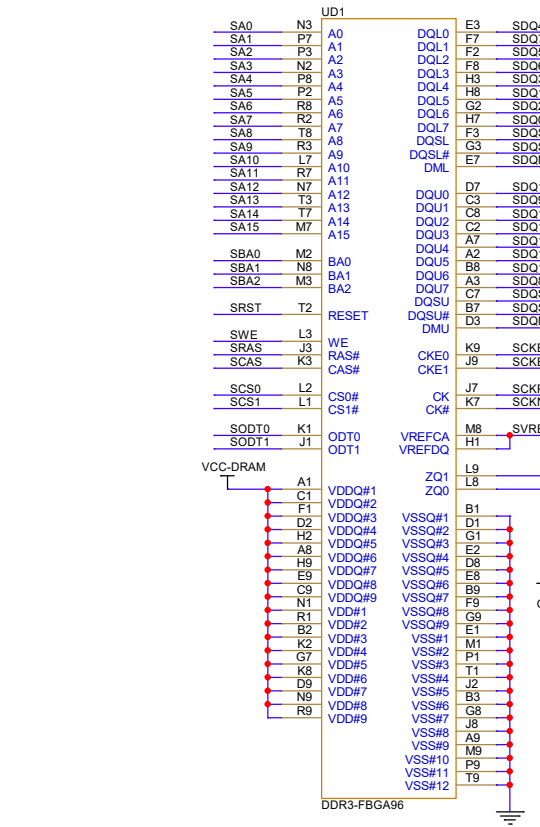
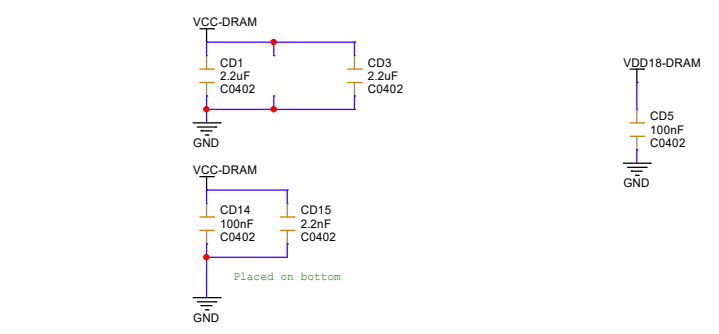
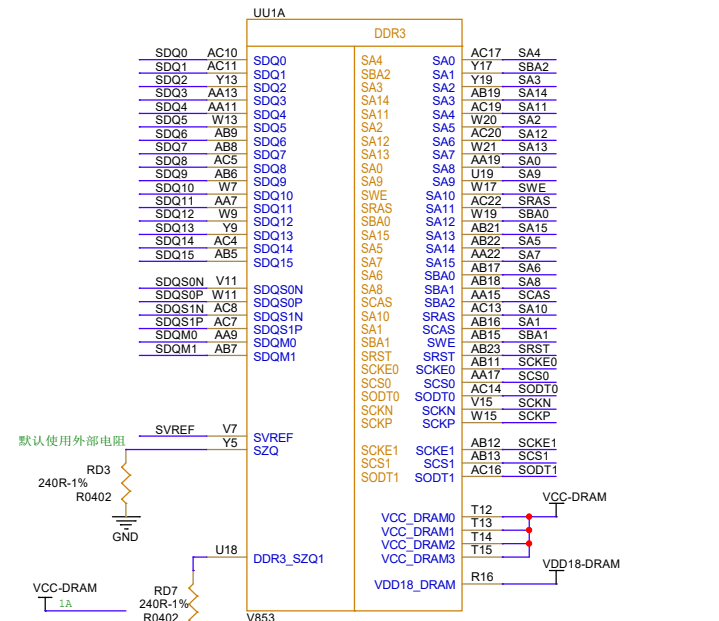
0R 电阻默认贴上, 验证时可将其他模块电阻去掉



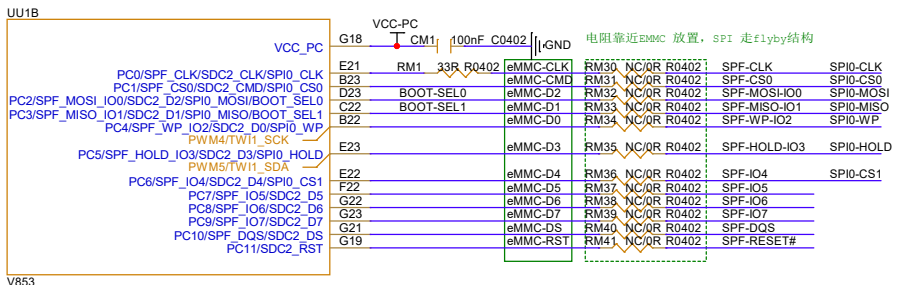
串口注意反向
蓝牙BT和RGMII/DVP不能同时使用



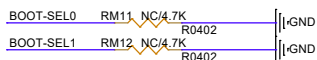
DDR3 16X1



FLASH



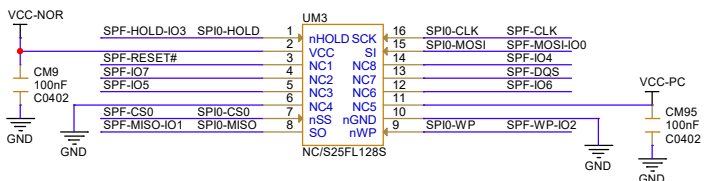
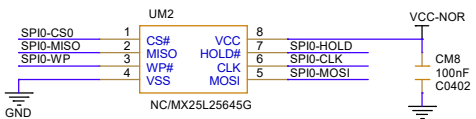
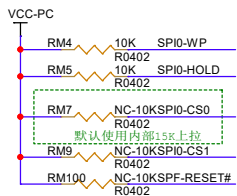
BOOT-SEL



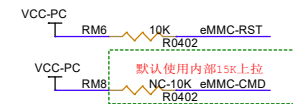
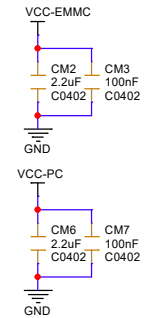
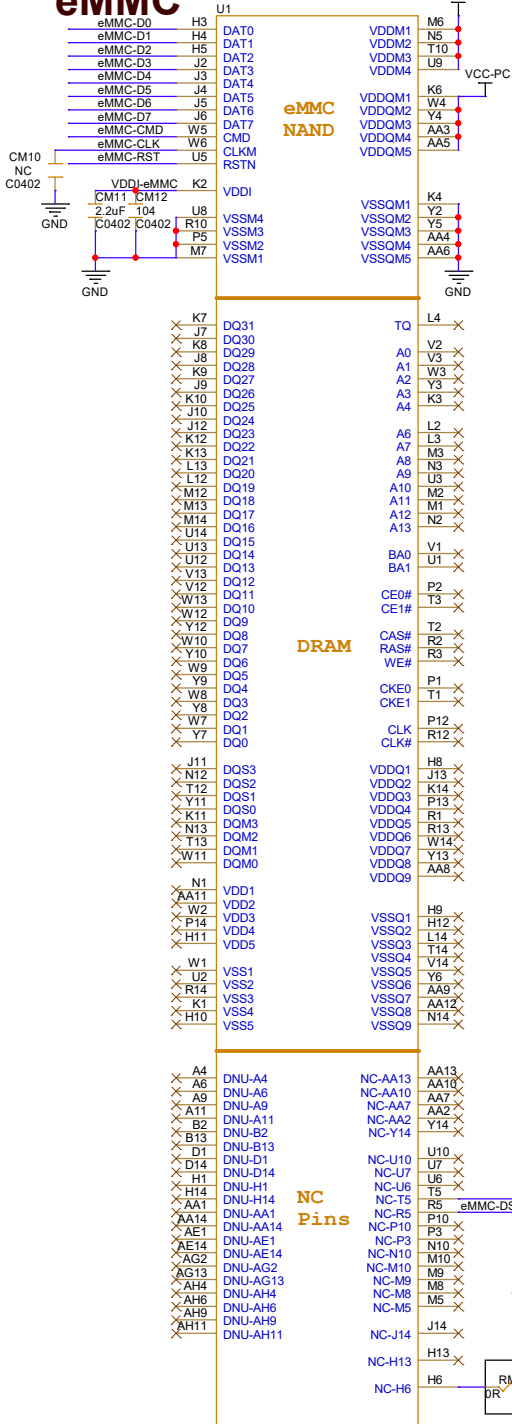
电阻靠近信号分叉点放置，以免影响信号质量

```
boot_sel[1:0]
0 0 SPI NAND>SPI NOR(4线)->SPI NOR(1线)>USB
0 1 SPI NOR(4线)->SPI NOR(1线)->SPI NAND->USB(快起)
1 0 SDC0->SPI NAND->SPI NOR(4线)->SPI NOR(1线)->UART BRUN->USB
1 1 (默认) SDC0->SPI NOR(4线)->SPI NOR(1线)->EMMC2_USR->EMMC2_BOOT->
SPI0 NAND->UART BRUN->USB
```

PC-SPI0



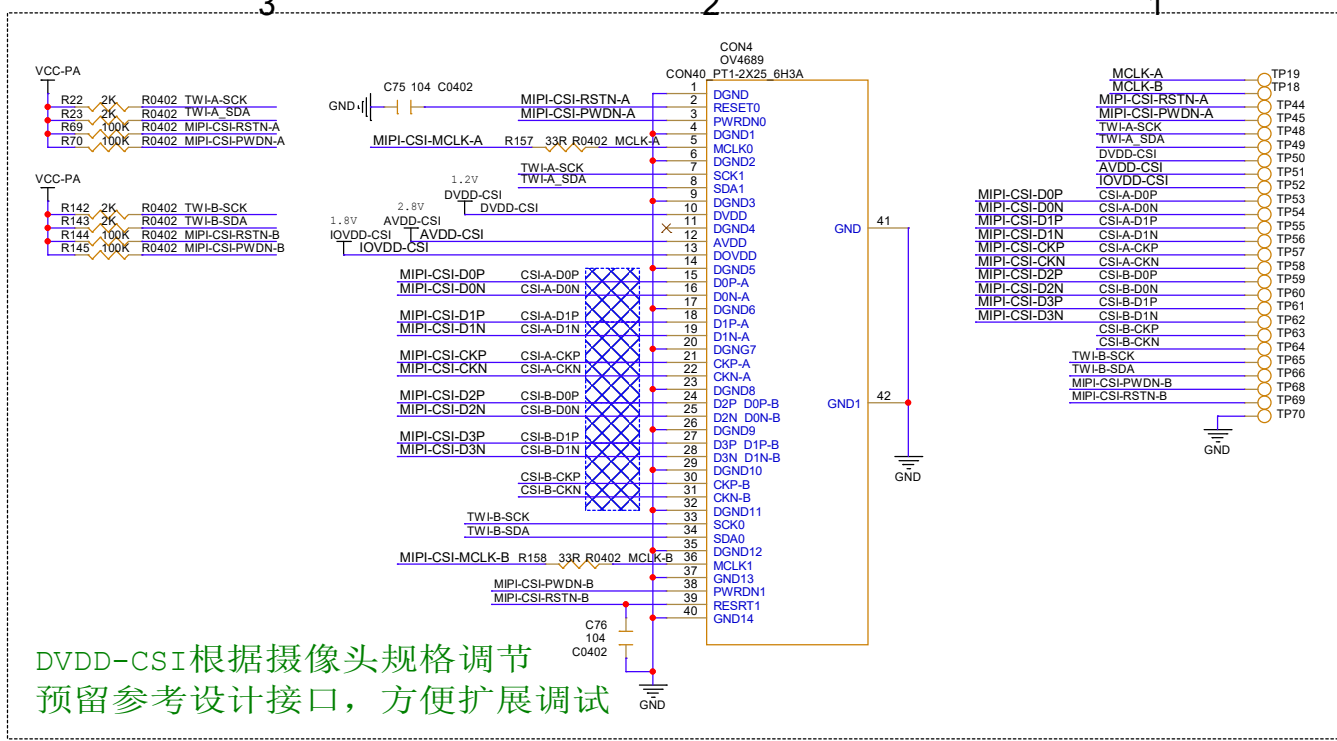
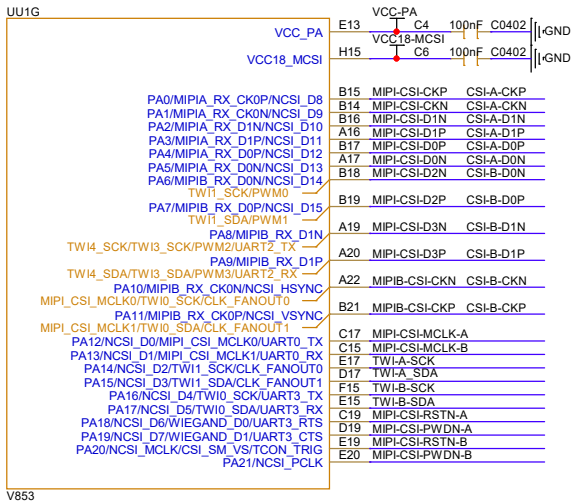
eMMC



可以使用内部15k下拉，外部下拉默认10k
If use eMMC is not v5.0/v5.1, then NC this resistor.

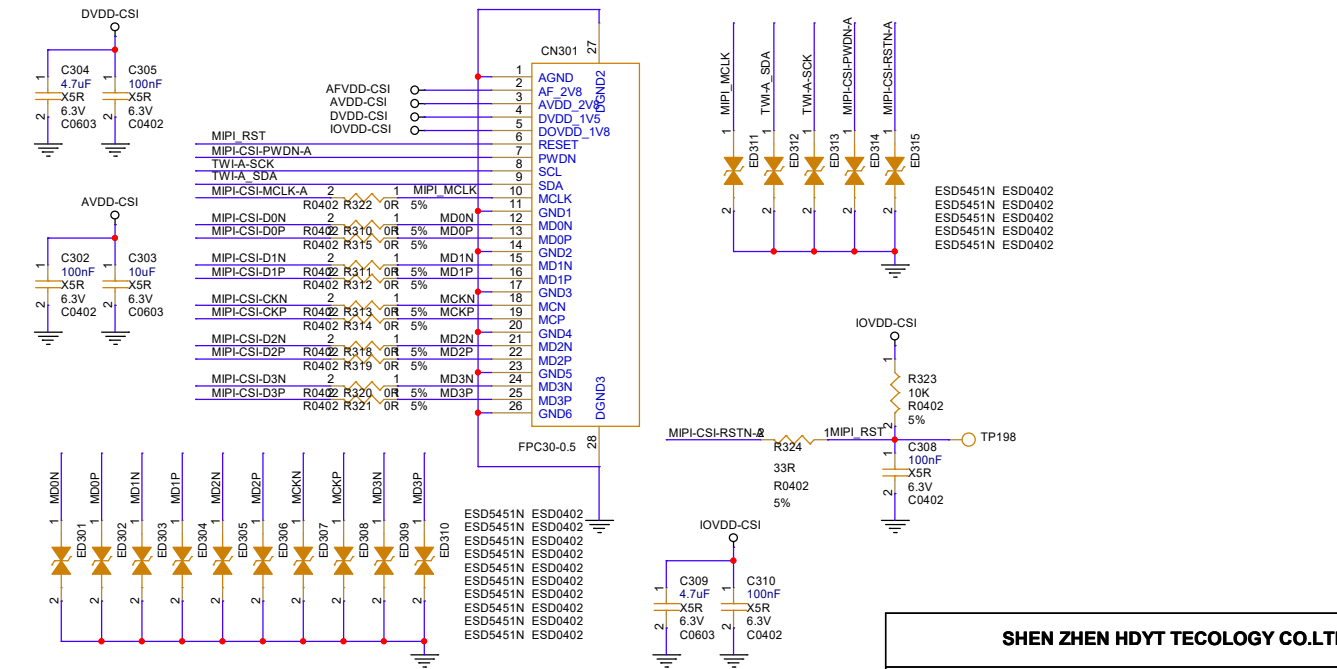
If eMMC is not v5.0/v5.1, then NC this two resistors.

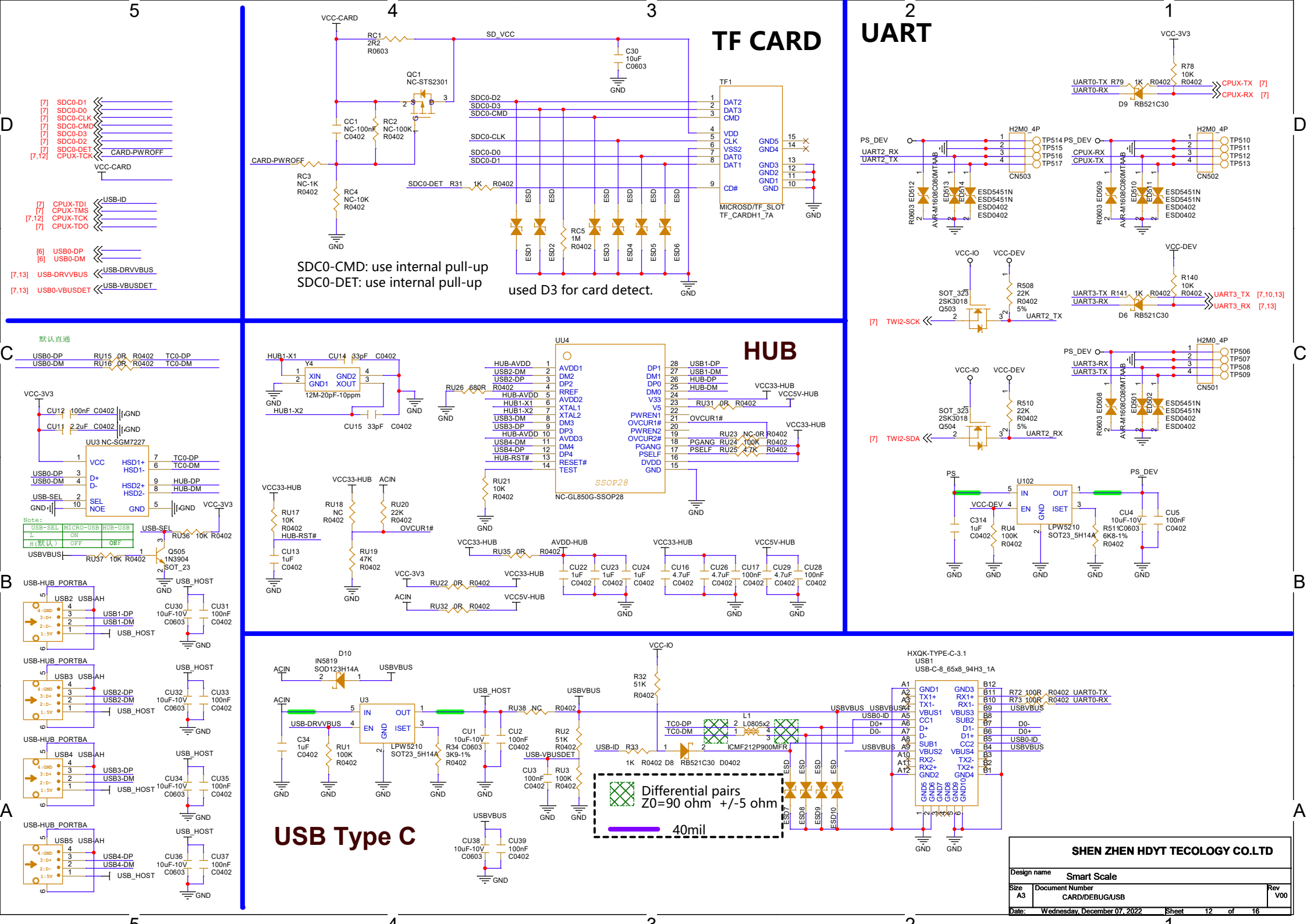
MIPI CSI



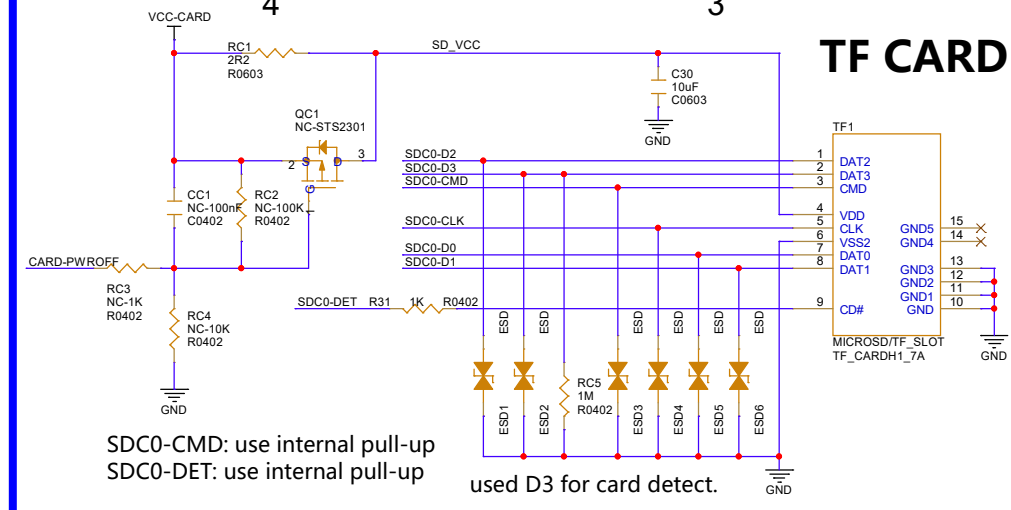
IO	两组MIPI-2lane	MIPI-4lane
PA0	MIPIA-CESI-CK0P	MIPI-CESI-CKP
PA1	MIPIA-CESI-CK0N	MIPI-CESI-CKN
PA2	MIPIA-CESI-D1N	MIPI-CESI-D1N
PA3	MIPIA-CESI-D1P	MIPI-CESI-D1P
PA4	MIPIA-CESI-D0P	MIPI-CESI-D0P
PA5	MIPIA-CESI-D0N	MIPI-CESI-D0N
PA6	MIPIB-CESI-D0N	MIPI-CESI-D2N
PA7	MIPIB-CESI-D0P	MIPI-CESI-D2P
PA8	MIPIB-CESI-D1P	MIPI-CESI-D3N
PA9	MIPIB-CESI-D1N	MIPI-CESI-D3P
PA10	MIPIB-CESI-CK0N	
PA11	MIPIB-CESI-CK0P	

MIPI Camera OV5648 (5M)

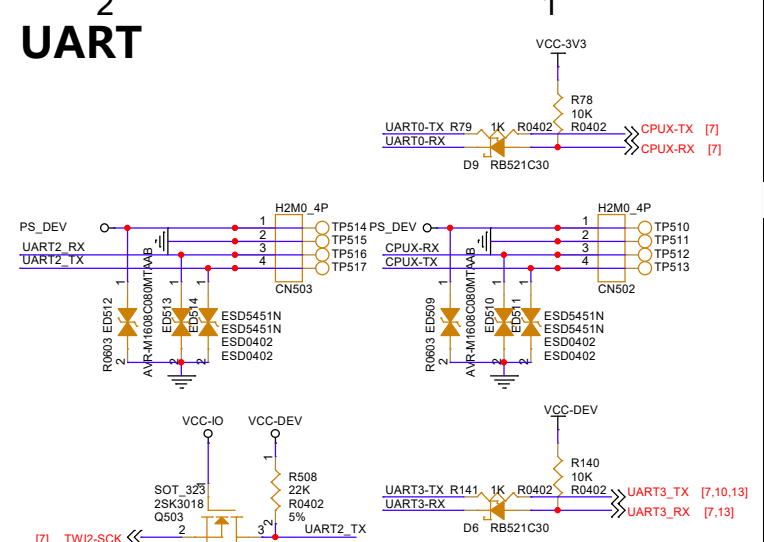




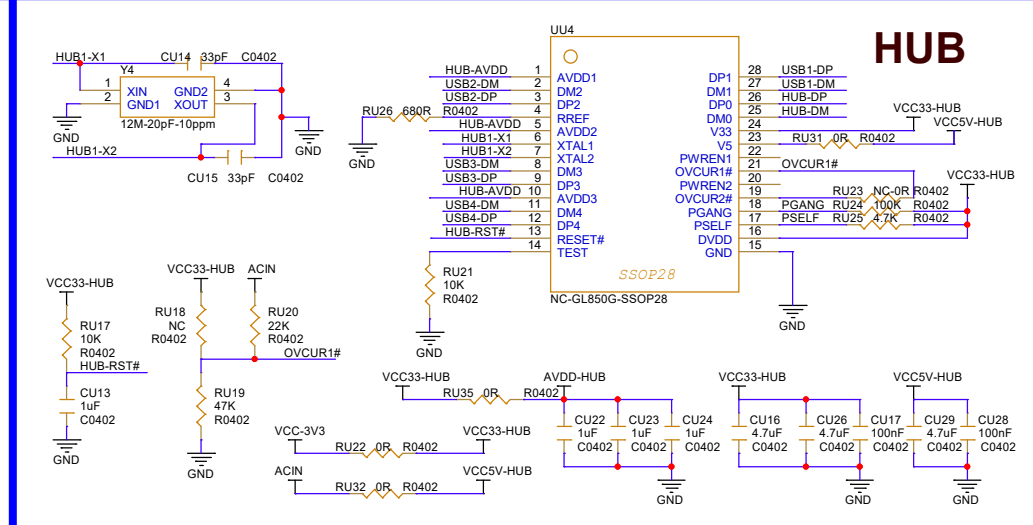
TF CARD



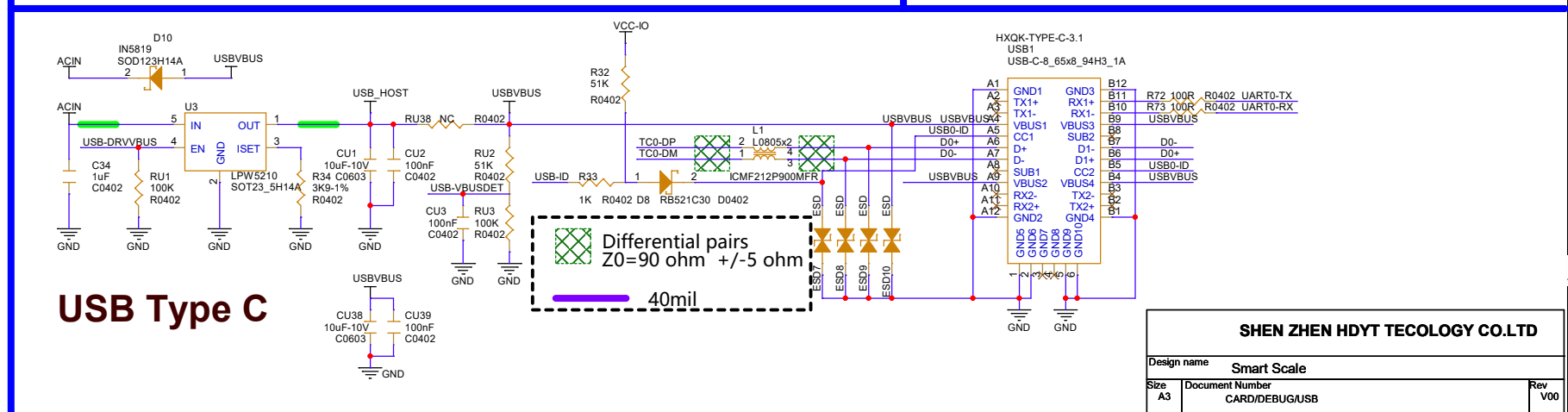
UART



HUB

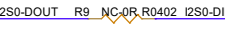
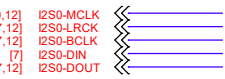
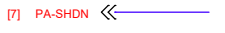
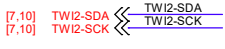


USB Type C

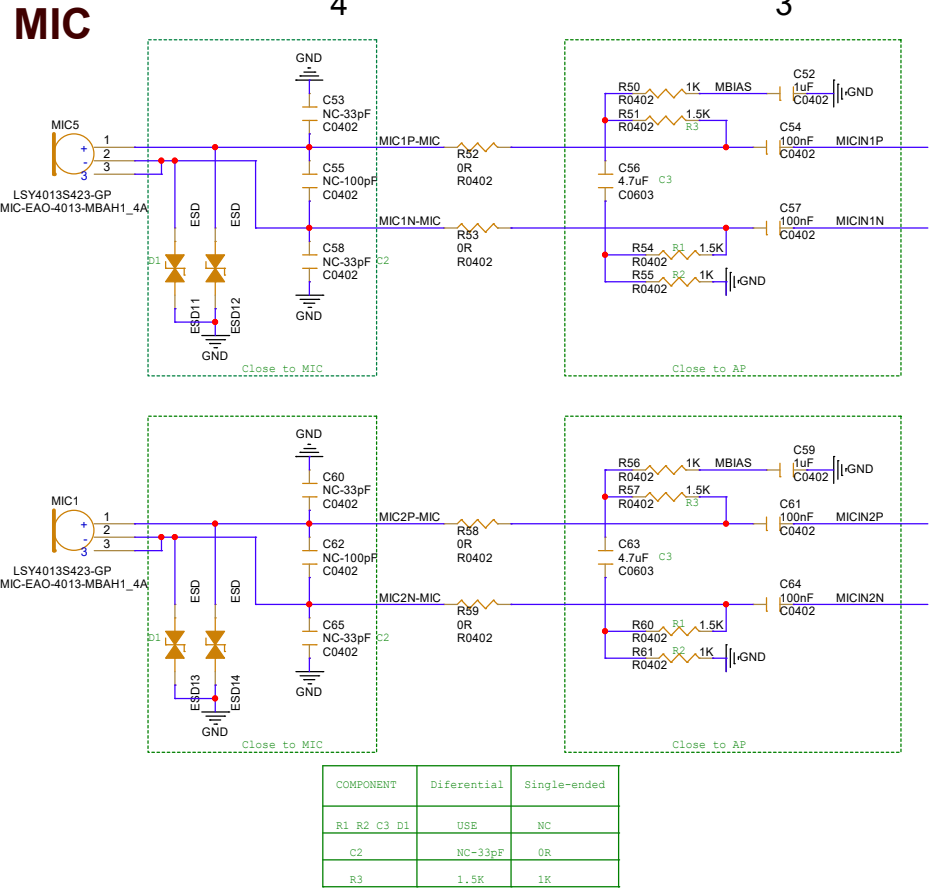


SHEN ZHEN HDYT TECOLOGY CO.LTD		
Design name	Smart Scale	
Size	Document number	Rev
A3	CARD/DEBUG/USB	V00
Date:	Wednesday, December 07, 2022	Sheet 12 of 16

AUDIO

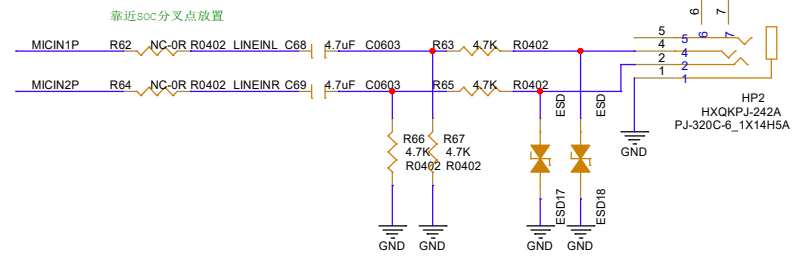


Need PCB MARK Signal Net

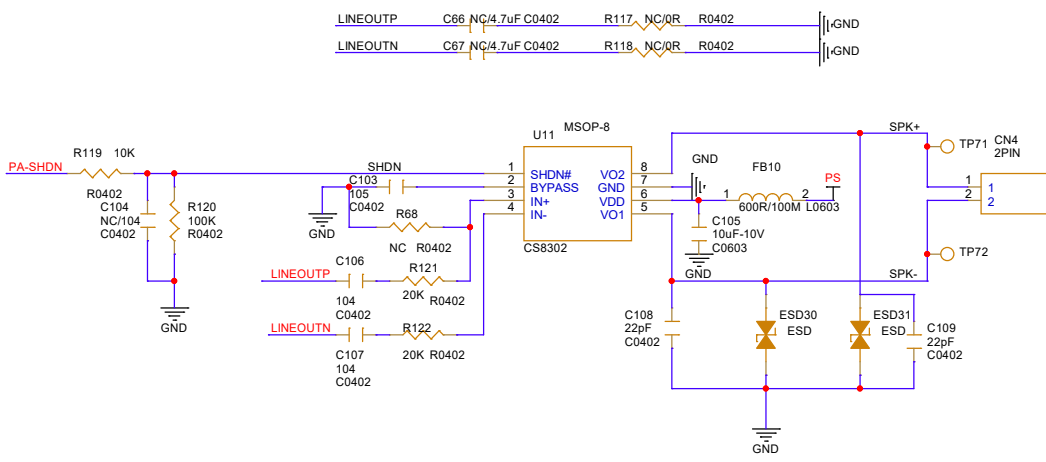


COMPONENT	Diferential	Single-ended
R1 R2 C3 D1	USE	NC
C2	NC-33pF	0R
R3	1.5K	1K

LINE IN

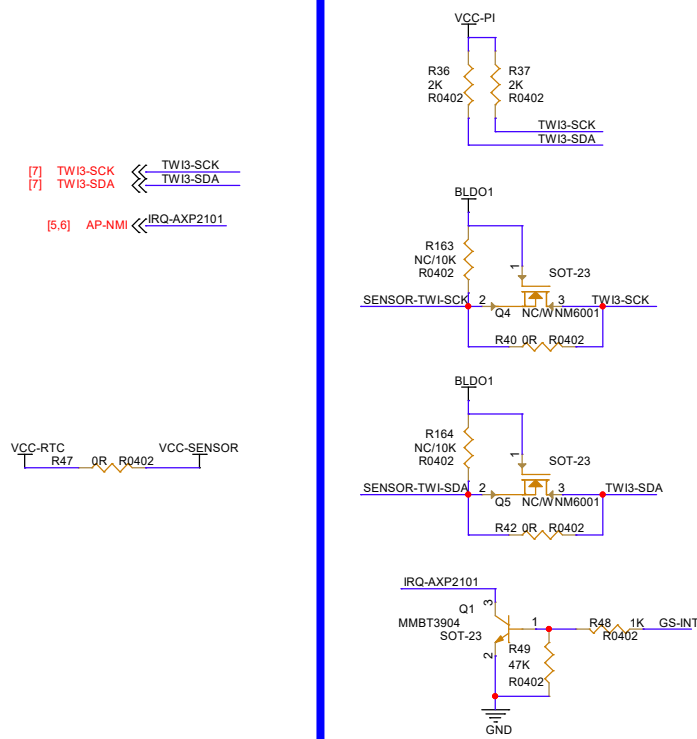


LINE OUT

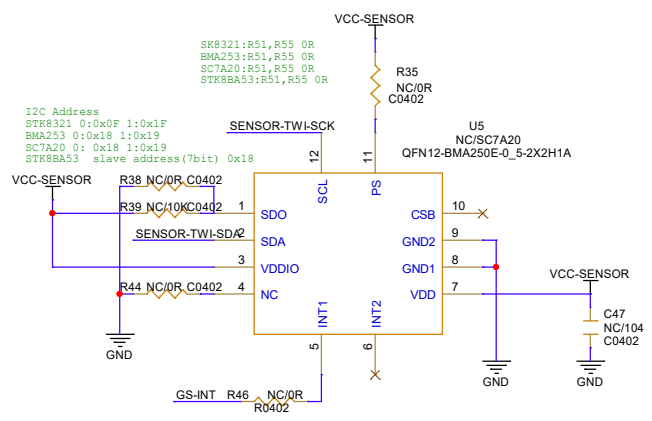


SHEN ZHEN HDYT TECOLOGY CO.LTD		
Design name Smart Scale		
Size A3	Document Number AUDIO	Rev V00
Date: Wednesday, December 07, 2022	Sheet 13	of 16

3axis G-sensor

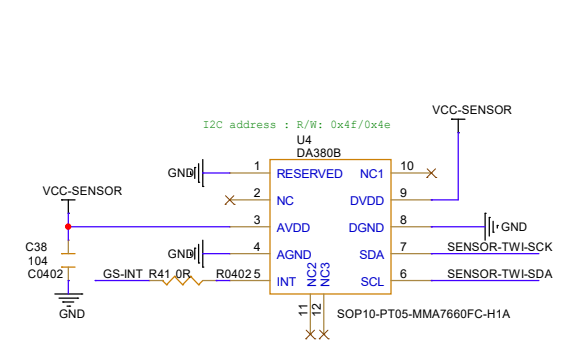


SC7A20



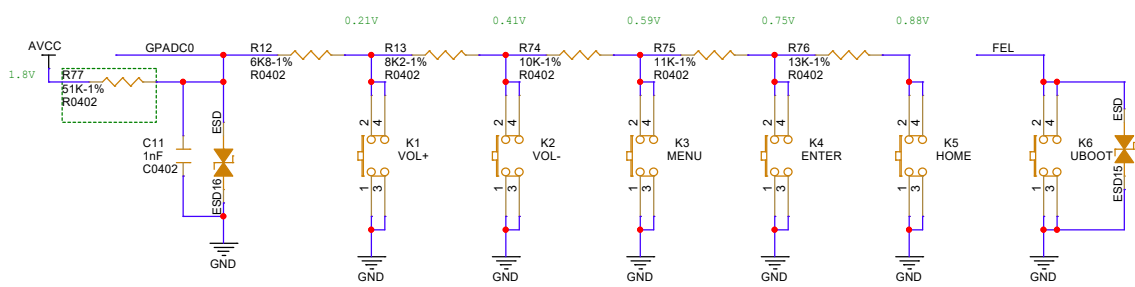
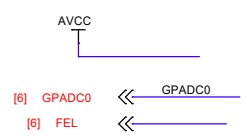
临时保留备用

DA380B

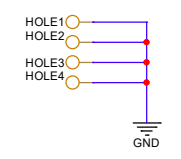


临时保留备用

KEY



SCREW HOLES



SHEN ZHEN HDYT TECOLOGY CO.LTD			
Design name	Smart Scale		
Size	Document Number	Rev	
A3	14 SENSOR/KEY	V00	
Date:	Wednesday, December 07, 2022	Sheet	14 of 16

