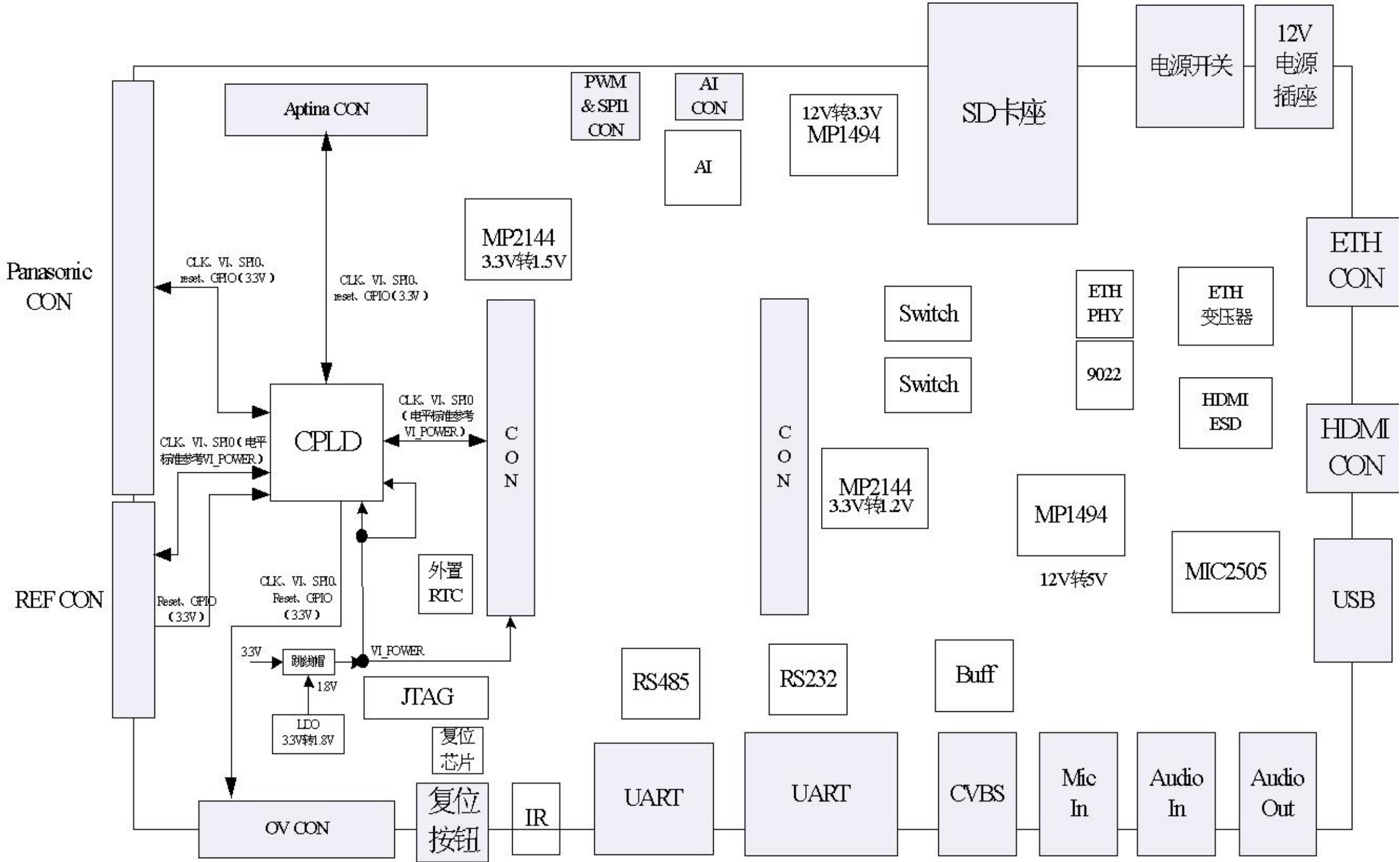




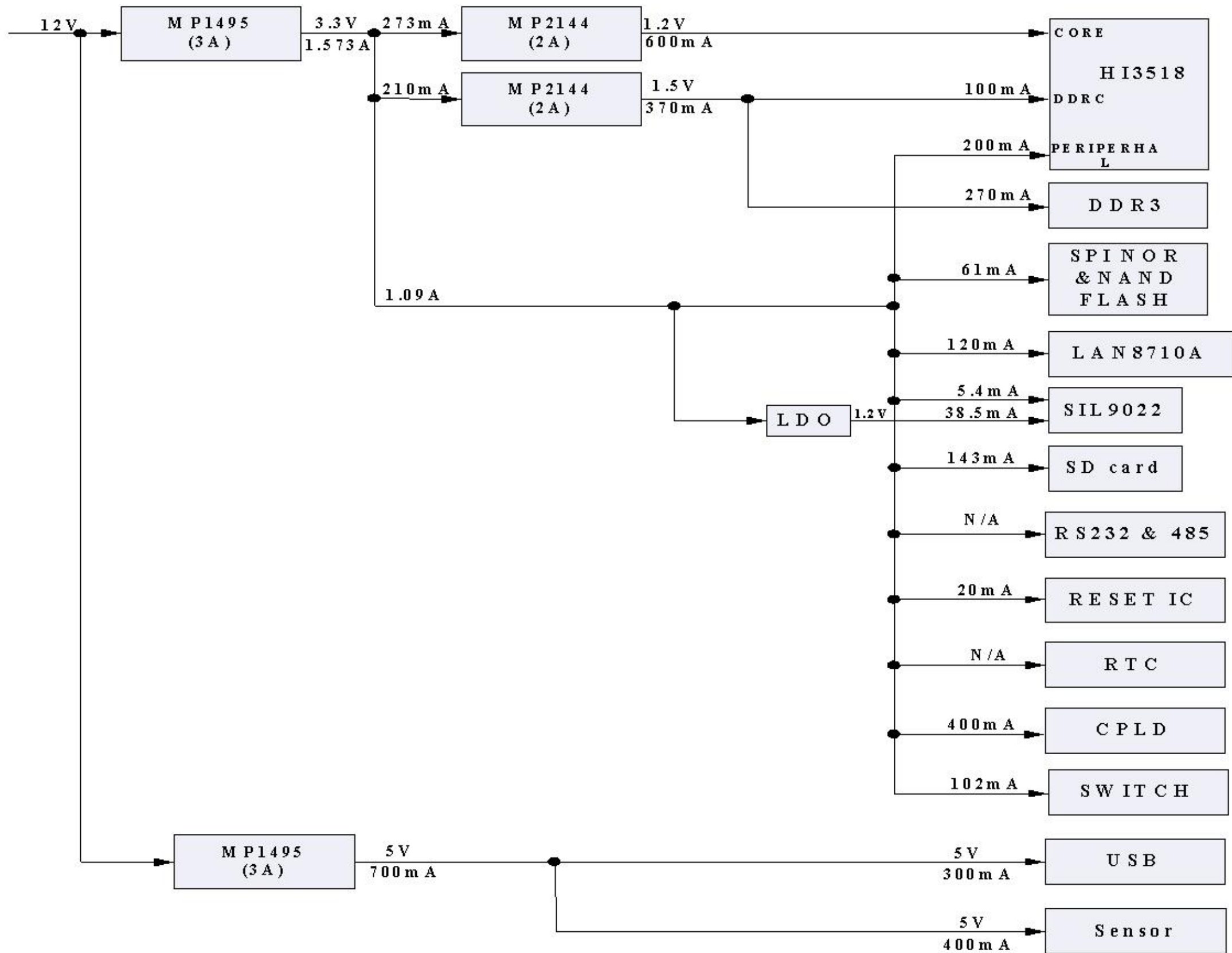
Block Diagram



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 2 OF 18	
		A	03030001	HUAWEI TECH CO.,LTD.	

# Power Tree

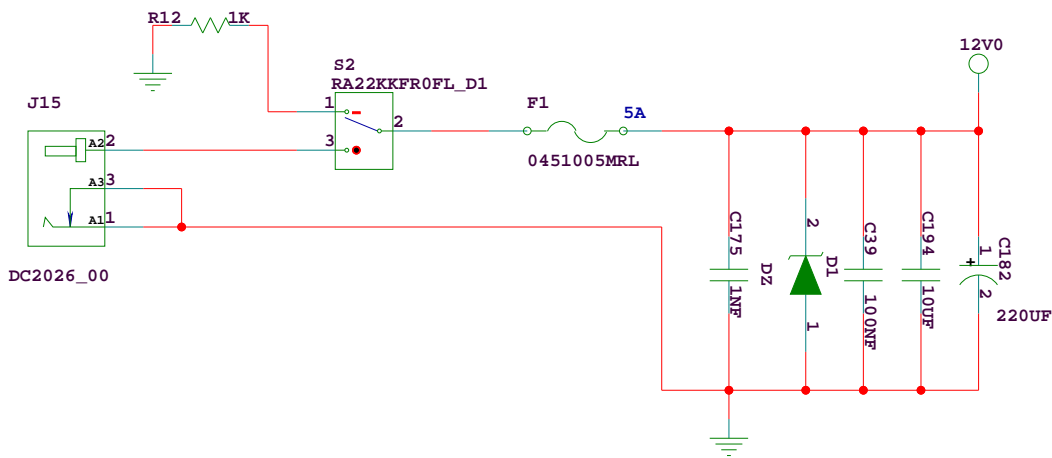


The type and specification of the components refer to the BOM

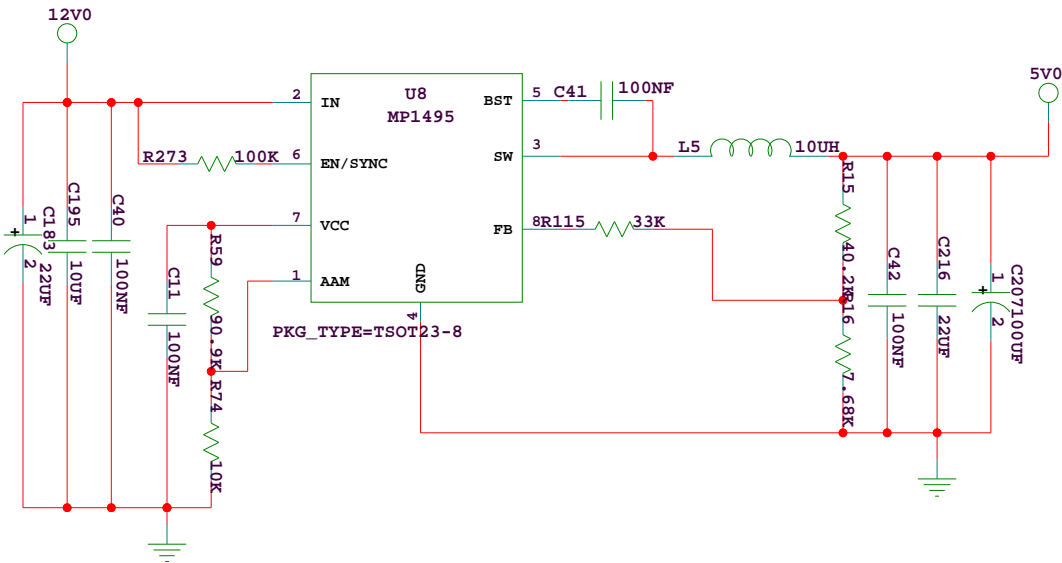
				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 3 OF 20	
		A	03030001	HUAWEI TECH CO.,LTD.	

Power 1

Power 1

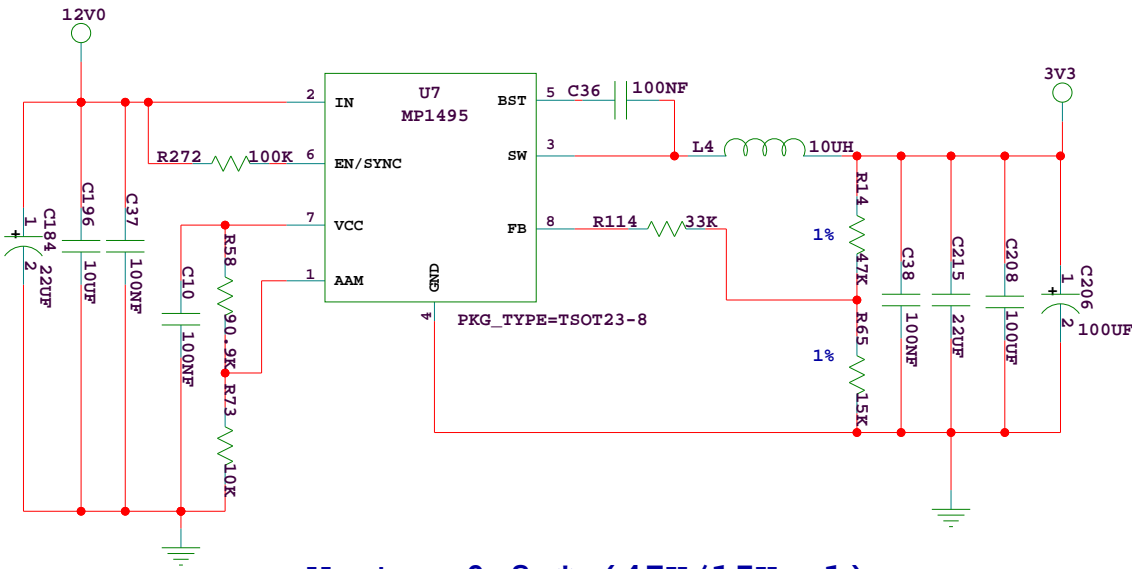


DC/DC



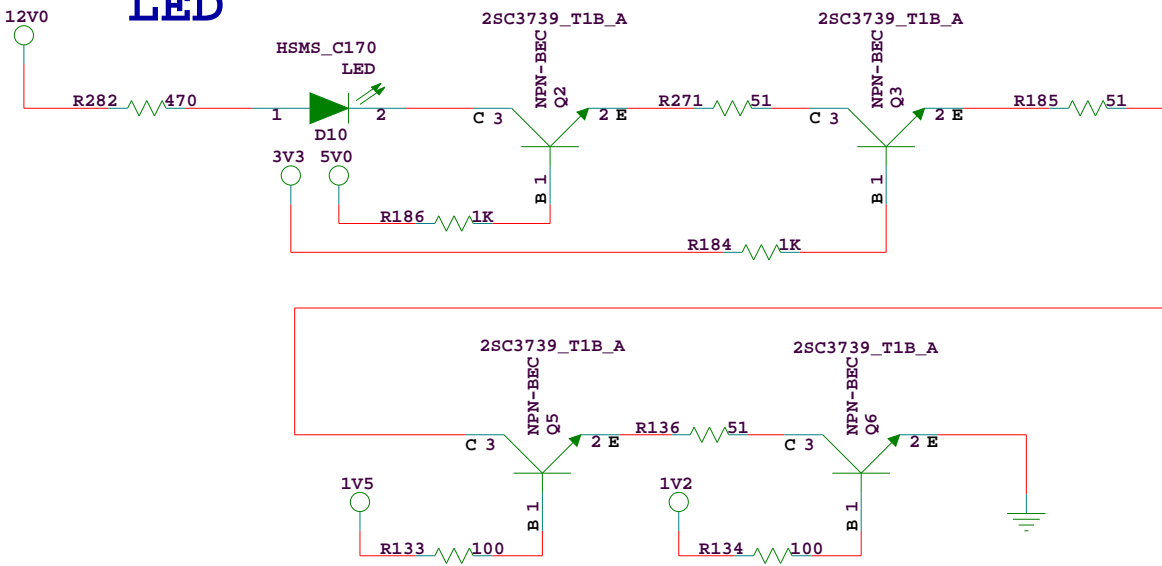
$V_{out} = 0.8 * (40.2K / 7.68K + 1)$

DC/DC



$V_{out} = 0.8 * (47K / 15K + 1)$

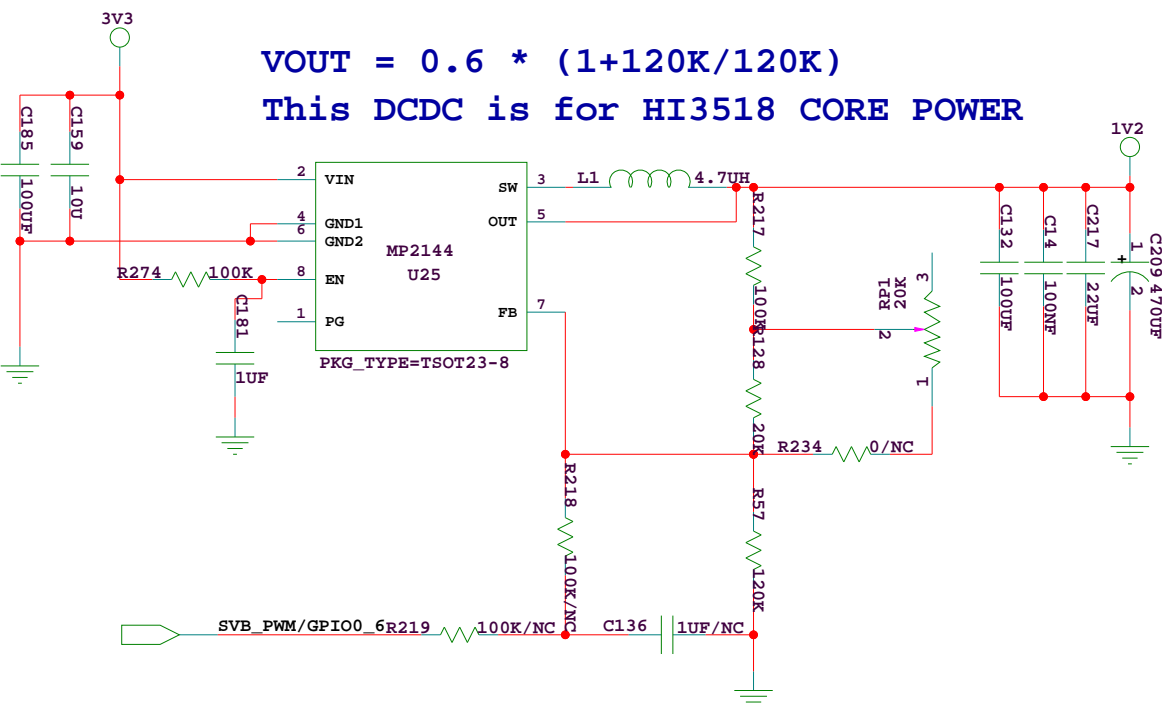
LED



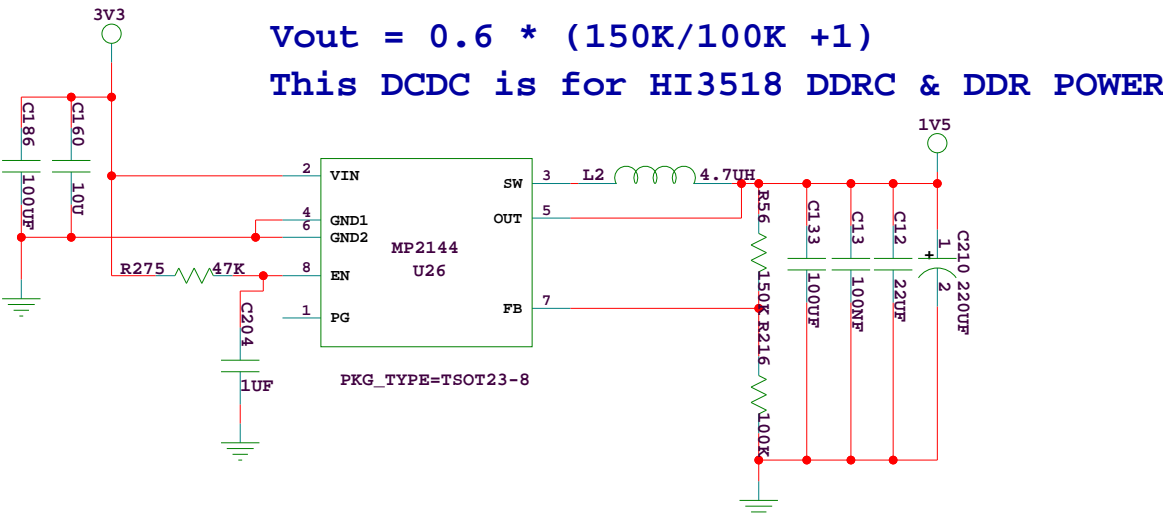
The type and specification of the components refer to the BOM

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				ECA NO	DATE
DESIGNED	LIANGSIDA 185904	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 4 OF 19	
		A	03030001	HUAWEI TECH CO.,LTD.	

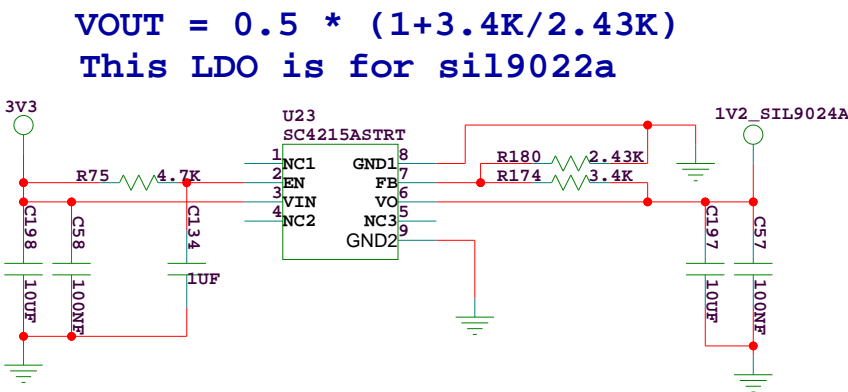
Power 2



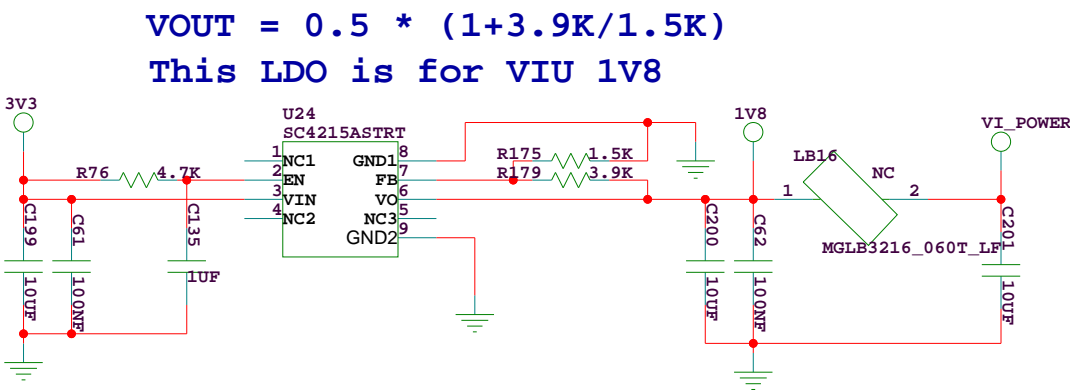
$V_{OUT} = 0.6 * (1+120K/120K)$   
This DCDC is for HI3518 CORE POWER



$V_{out} = 0.6 * (150K/100K + 1)$   
This DCDC is for HI3518 DDRC & DDR POWER



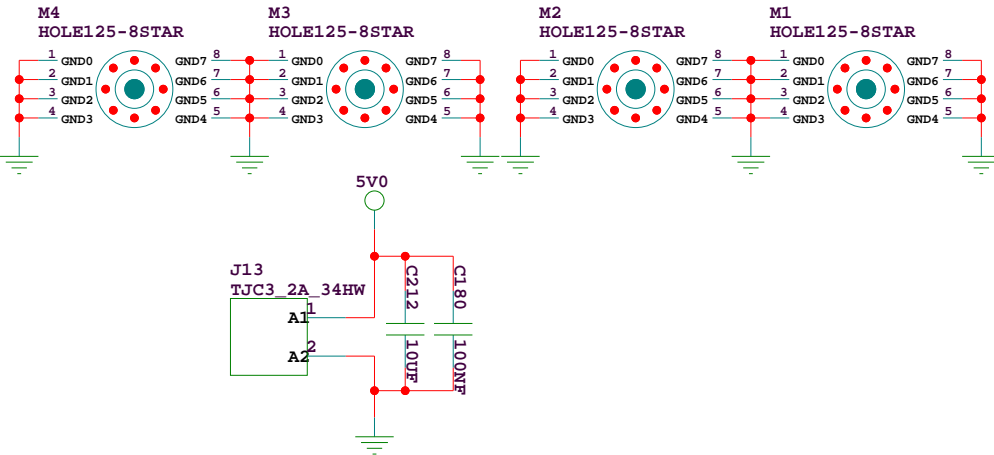
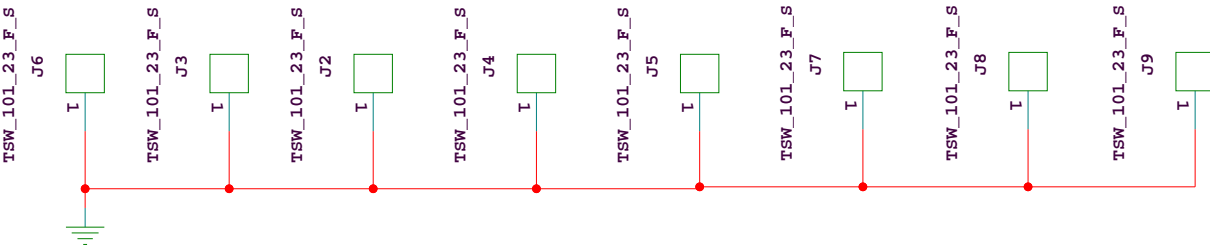
$V_{OUT} = 0.5 * (1+3.4K/2.43K)$   
This LDO is for sil9022a



$V_{OUT} = 0.5 * (1+3.9K/1.5K)$   
This LDO is for VIU 1V8

NOTE:Sensor VI/SPIO Have Two Conduction:1V8 and 3V3

VI	LB16 Conncent	LB17 Conncent
3V3	NO	YES
1V8	YES	NO



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	A3TITLEBLOCK		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 5 OF 19	
		A	03030001	HUAWEI TECH CO.,LTD.	

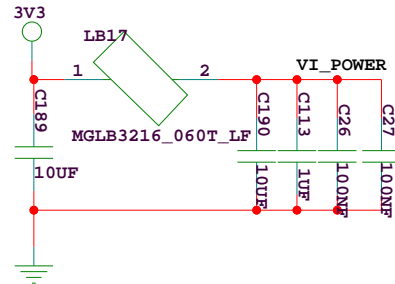
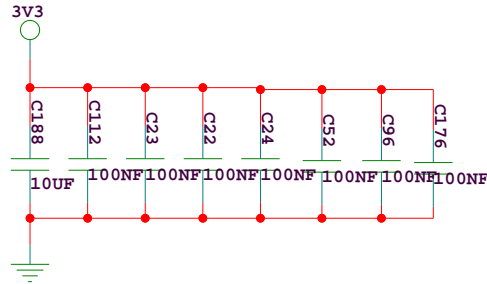
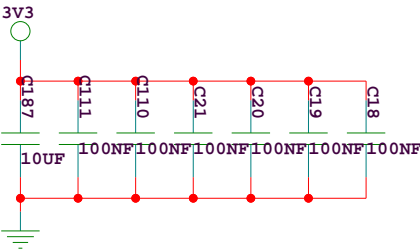
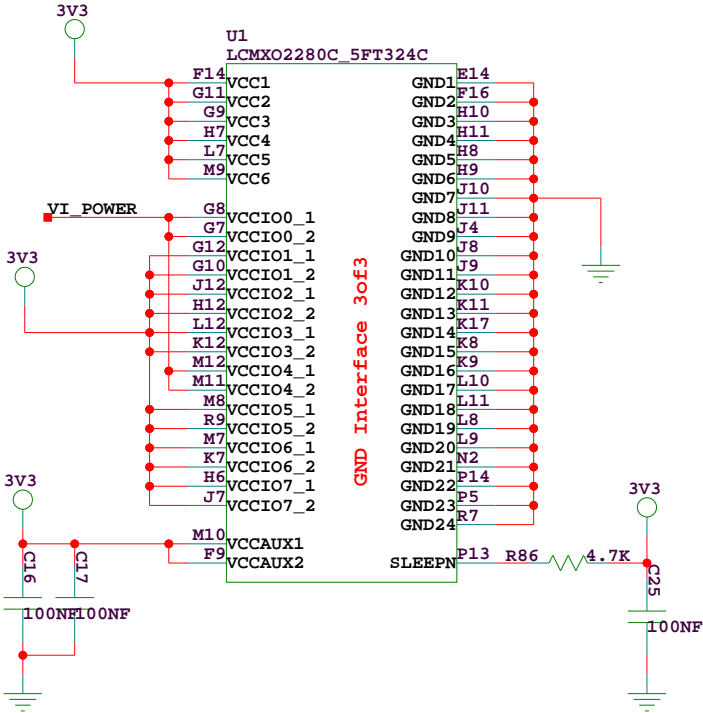
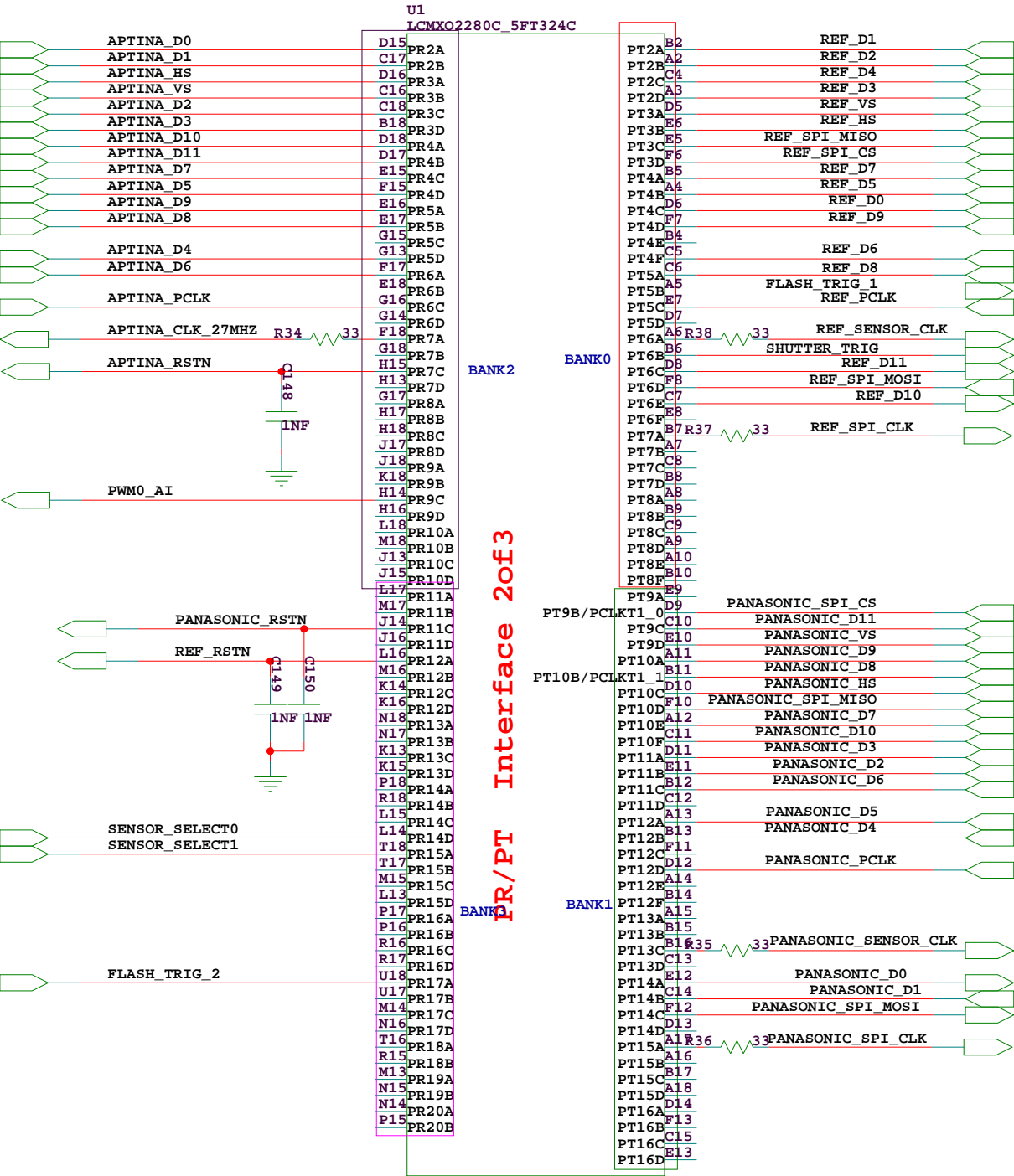
## A



D



CPLD BANK0-3 & POWER & GND



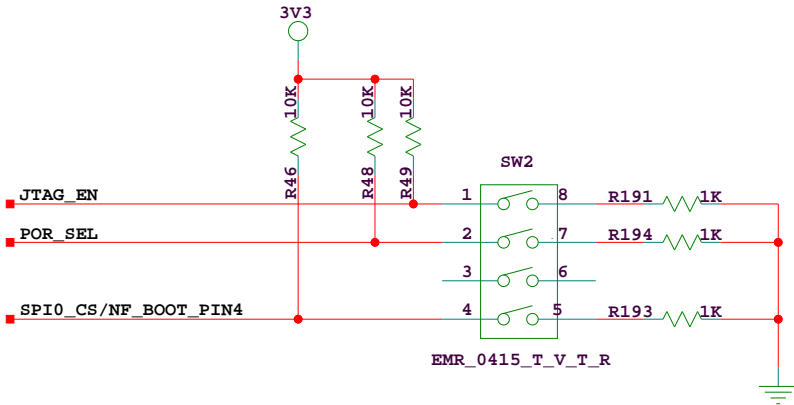
Hi3518 VI has two power domain:3V3 or 1V8.  
when using 3V3 sensor or 1V8 sensor,follow the table next

sensor power	connect	disconnect
3V3	LB17	LB16
1V8	LB16	LB17

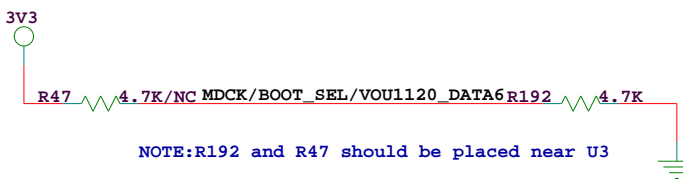
The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 7 OF 18	
		A	03030001	HUAWEI TECH CO.,LTD.	

# HI3518 CONFIGURE & ADC Check

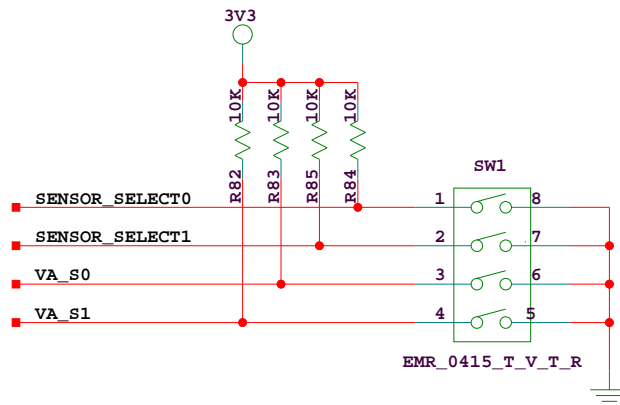
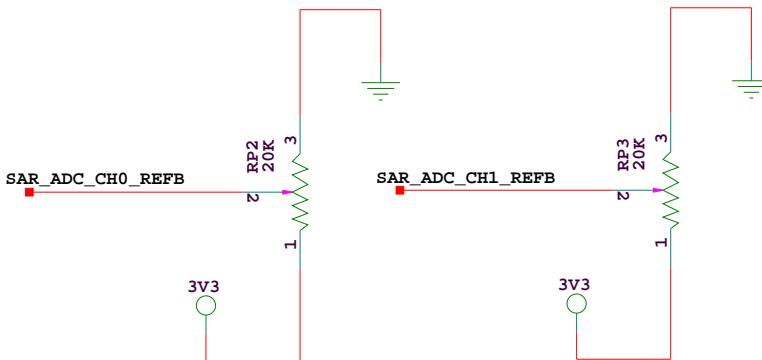


SW2	P1	JTAG_EN
0		Disable JTAG
1		Enable JTAG
SW2	P2	POR_SEL
0		Enable POR
1		Disable POR



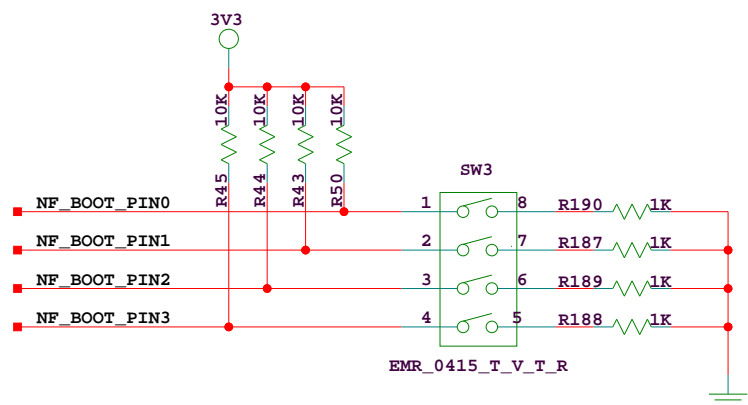
BOOT_SEL	boot mode
0	SPI FLASH
1	NAND FLASH

this module is to identify the ADC function in HI3518



SW1[2:1]	SENSOR
00	MN34031
01	AR0130
10	OV9715
11	REF

SW1[4:3]	ETH/VOU1120
00	/
01	ETH
10	VOU1120
11	/



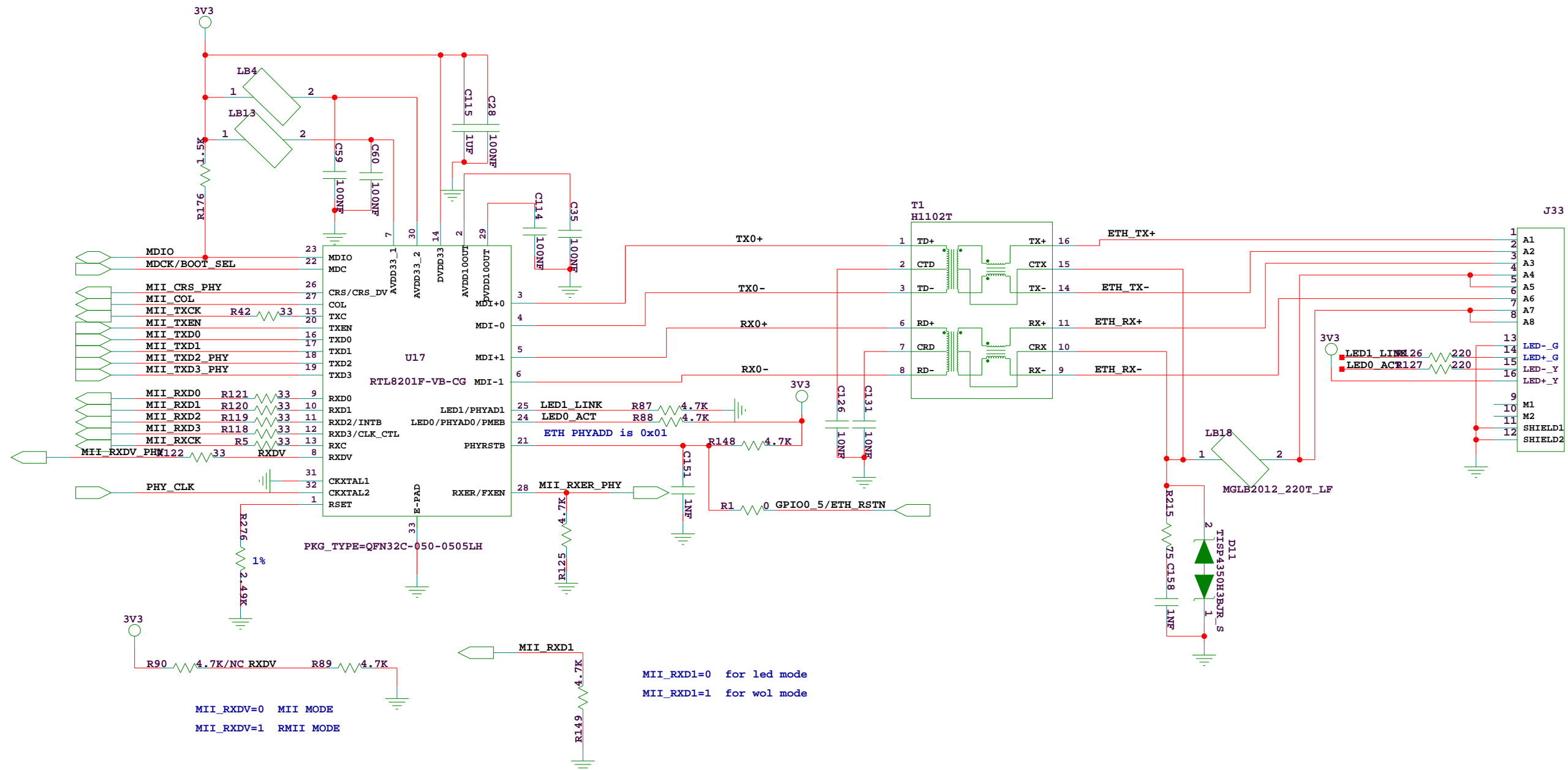
NF_BOOT_PIN[4:0]	Page size	ECC	Block size
00001	2k Bytes	1 bit	64 pages
00011	2k Bytes	4 bit	64 pages
00101	2k Bytes	24 bit	64 pages
00110	2k Bytes	1 bit	64 pages
01000	4k Bytes	4 bit	128 pages
01001	4k Bytes	4 bit	64 pages
01010	2k Bytes	4 bit	64 pages
01011	4k Bytes	24 bit	128 pages
01101	8k Bytes	24 bit	128 pages
10000	8k Bytes	24 bit	64 pages
10001	4k Bytes	24 bit	64 pages
10011	4k Bytes	1 bit	64 pages
10101	2k Bytes	4 bit	128 pages
11001	2k Bytes	24 bit	128 pages

The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 8 OF 18	
		A	03030001	HUAWEI TECH CO.,LTD.	



ETH



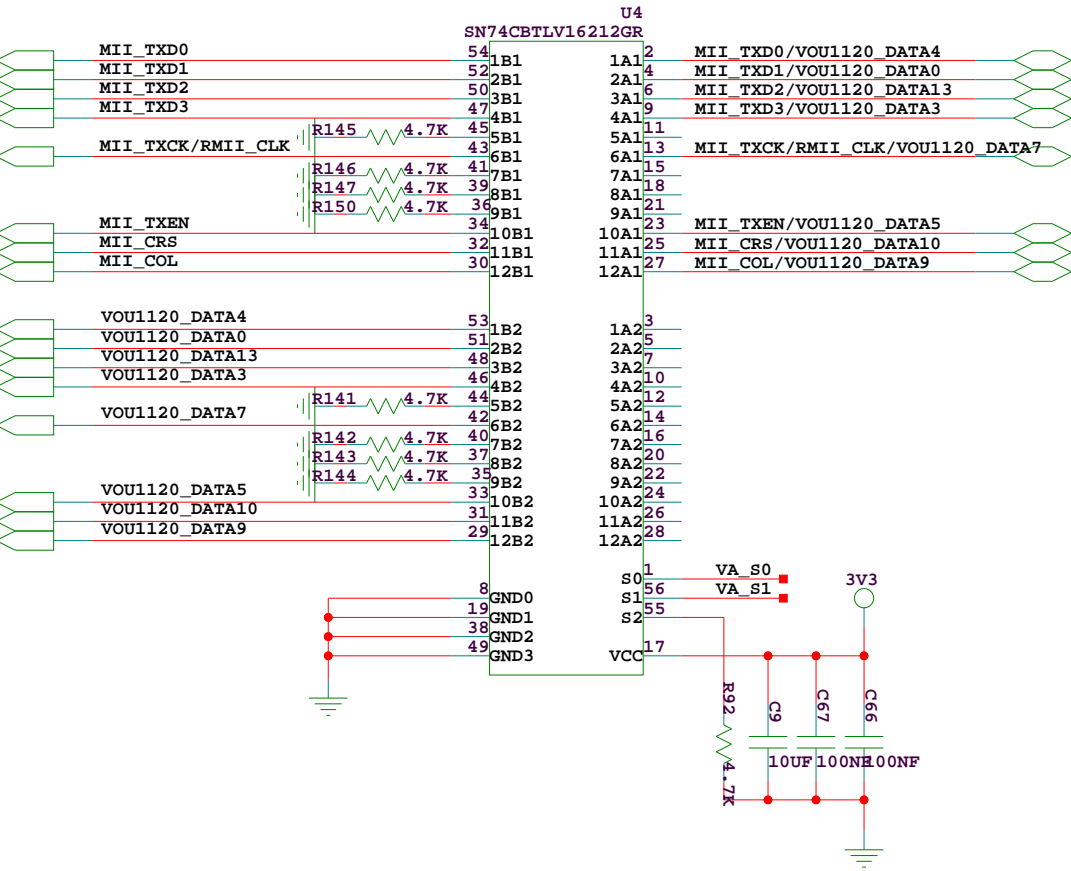
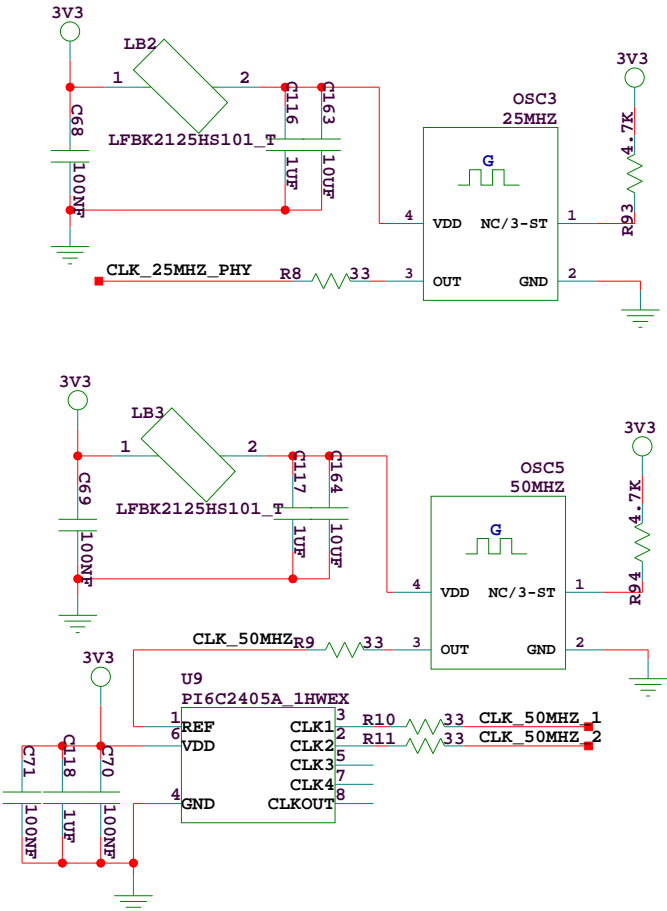
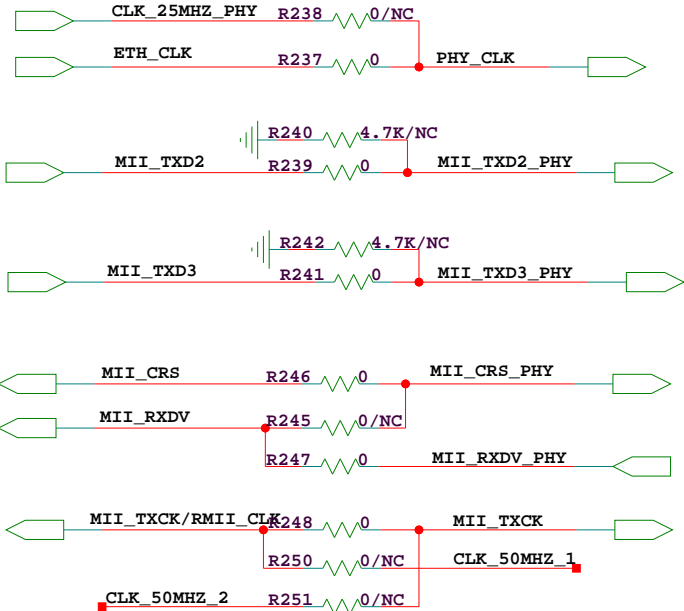
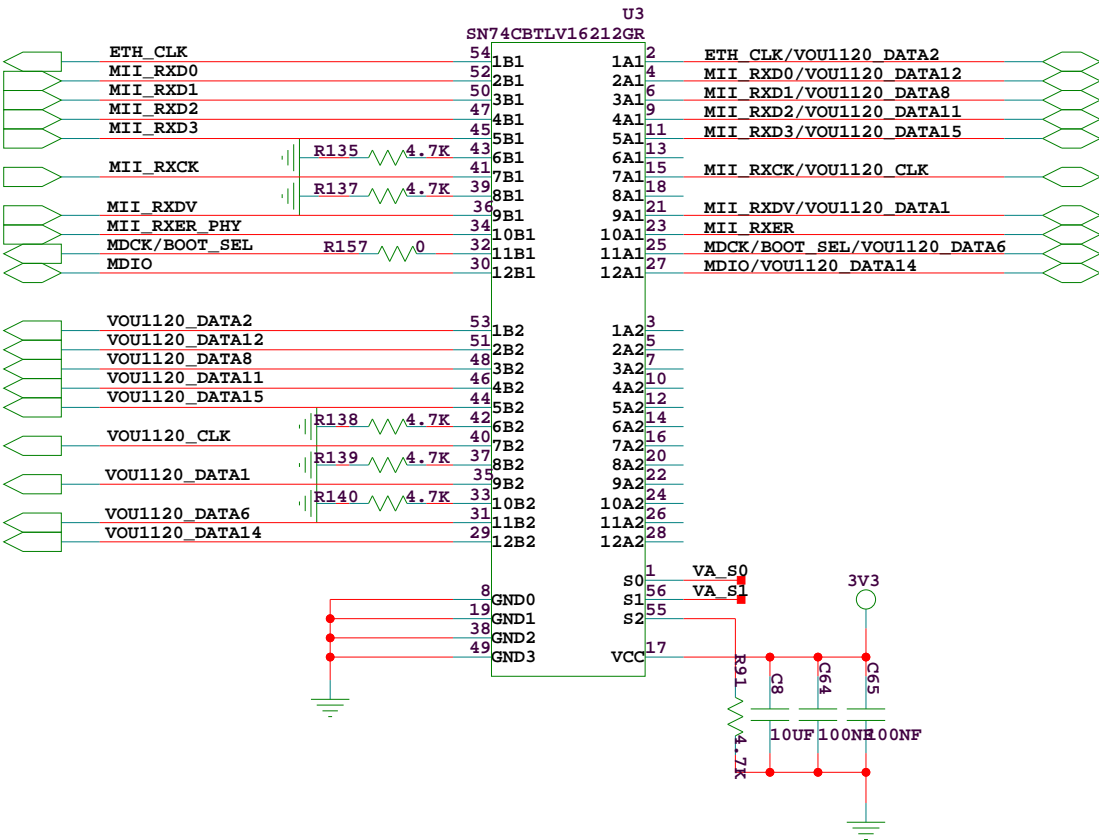
```
MII_RXDV=0    MII MODE
MII_RXDV=1    RMII MODE
```

```
MII_RXD1=0   for led mode
MII_RXD1=1   for wol mode
```

The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 9 OF 18	
		A	03030001	HUAWEI TECH CO.,LTD.	

ETH MII/RMII SWITCH



note:MII & RMII CONFIG			
MODE	PHY CLOCK	Connect res	Disconnect res
MII	from hi3518	R237 R239 R241 R246 R247 R248	R238 R240 R242 R245 R250 R251
MII	from 25MHZ crystal	R238 R239 R241 R246 R247 R248	R237 R240 R242 R245 R250 R251
RMII	from hi3518	R240 R242 R248 R245 R237	R238 R239 R241 R250 R246 R247 R251
RMII	from 50MHZ crystal	R240 R242 R251 R245 R250 R237	R238 R239 R241 R246 R247 R248

default:MII MODE PHY CLOCK FROM HI3518

The type and specification of the components refer to the BOM			
			NA
			ECA NO
DESIGNED	ZHANGSAN XXXXX	HI3518PERB	
REVIEWED	LISI XXXXX	00001234	
		VER	PART_NUMBER
		A	03030001
			SHEET 10 OF 18
			HUAWEI TECH CO.,LTD.

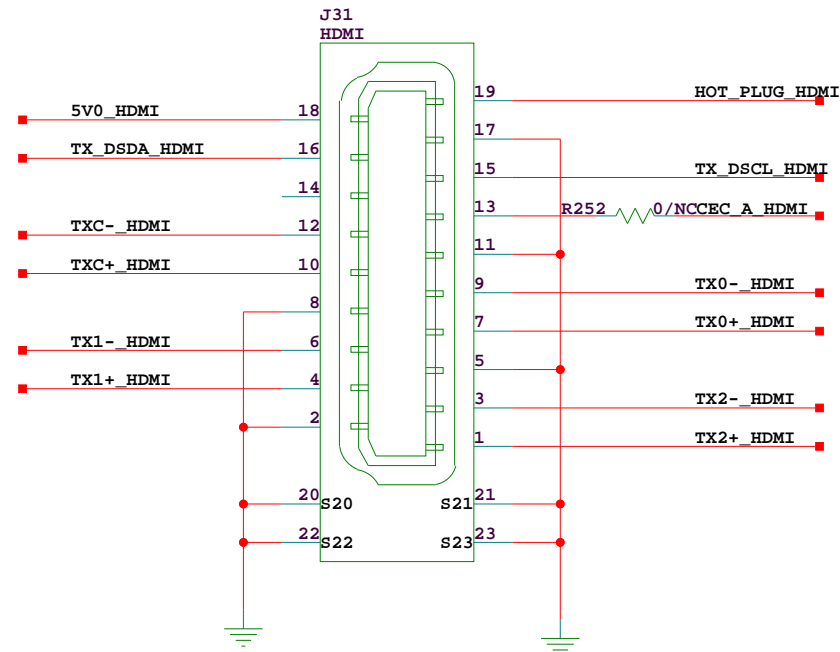
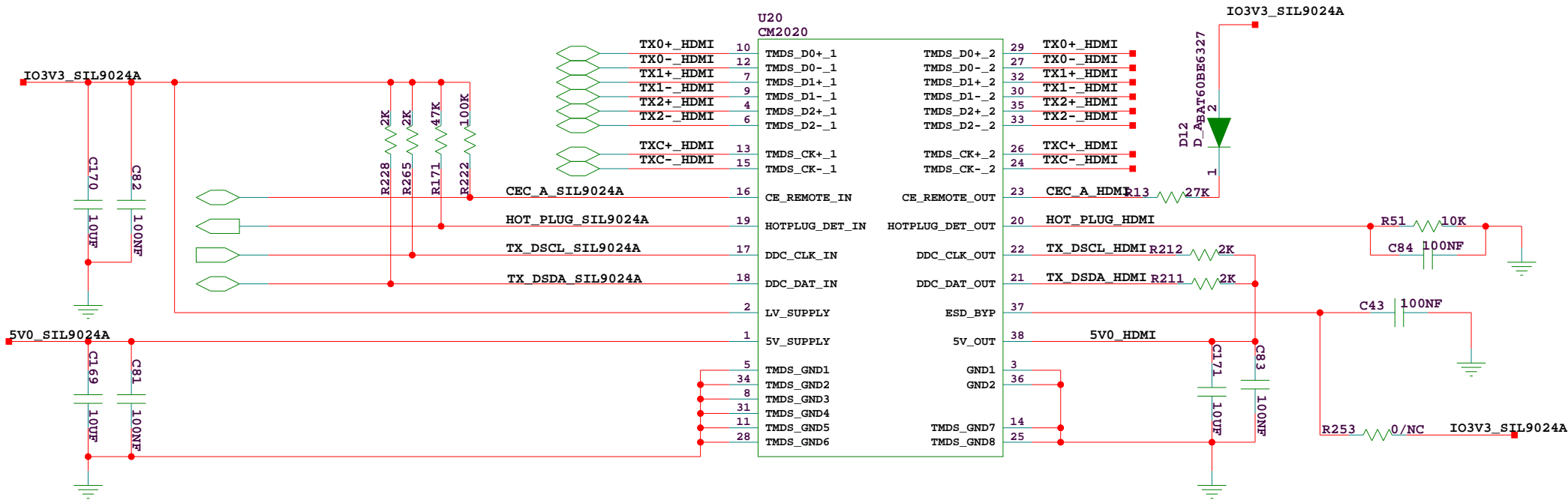
**A**

D

**A**

BCD

HDMI ESD



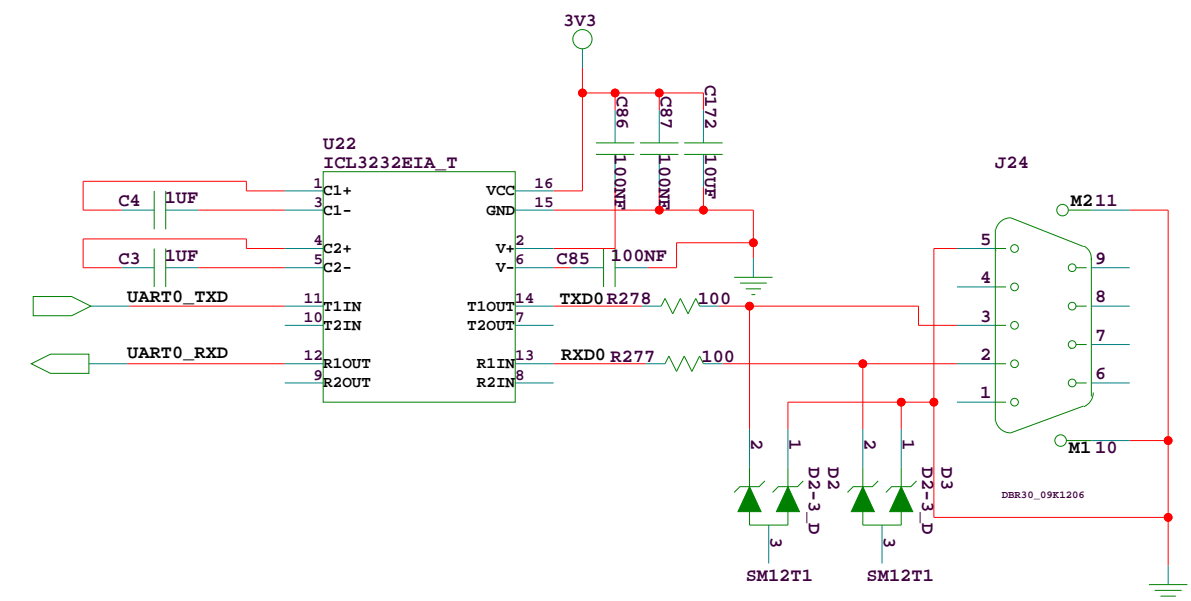
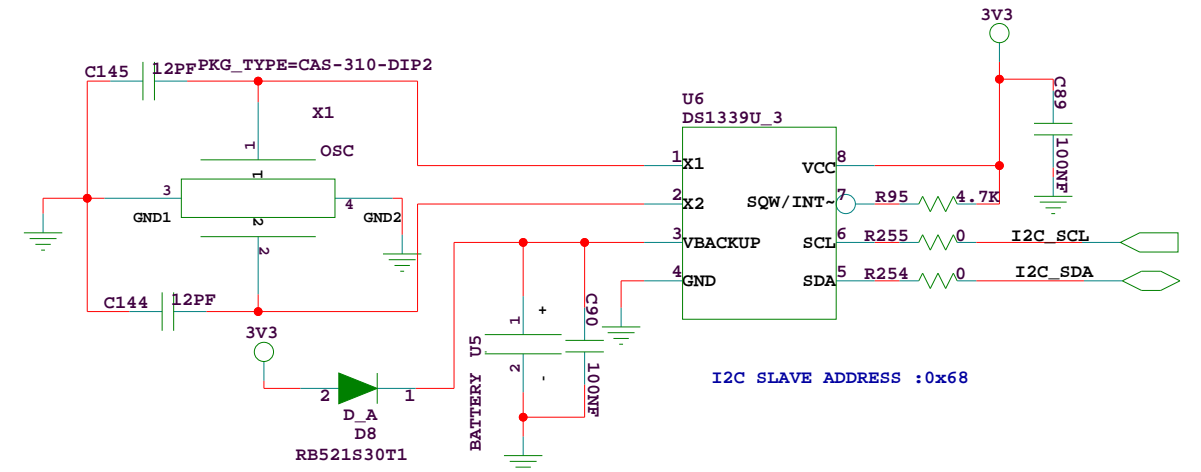
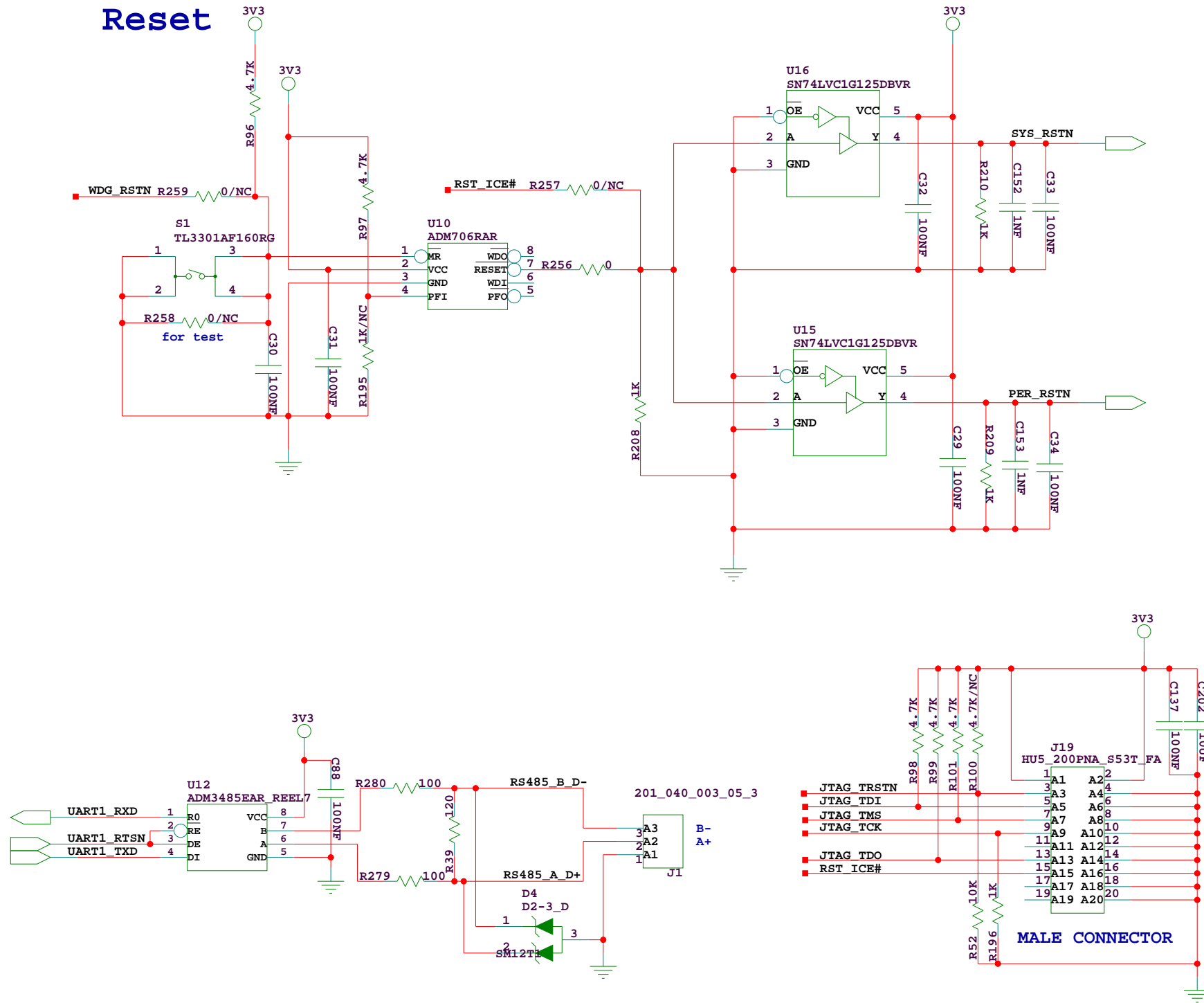
The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 12 OF 20	
		A	03030001	HUAWEI TECH CO.,LTD.	

A

If boot from NAND FLASH, you should connect the NF\_CSN0 to your master NAND FLASH.

## Reset



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 13 OF 18	
		A	03030001	HUAWEI TECH CO.,LTD.	

A

B

C

D

D

1

2

3

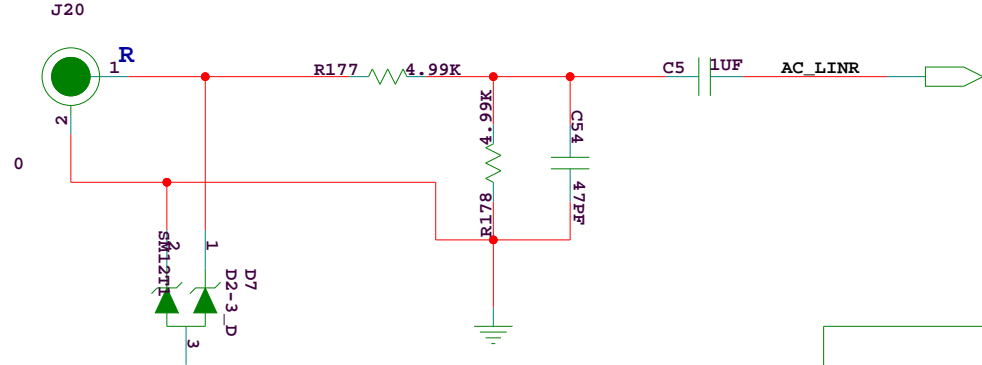
4

5

6

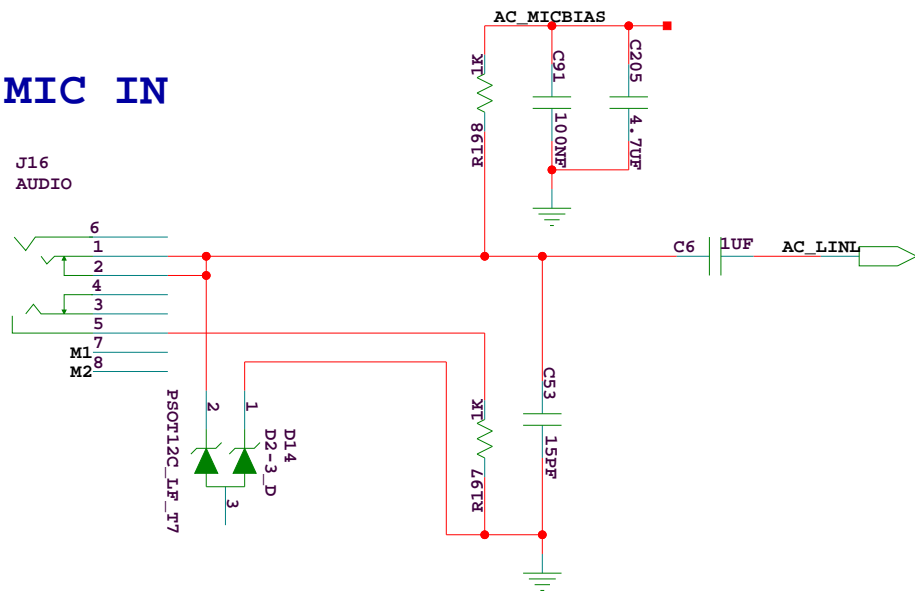
Audio

LINE IN



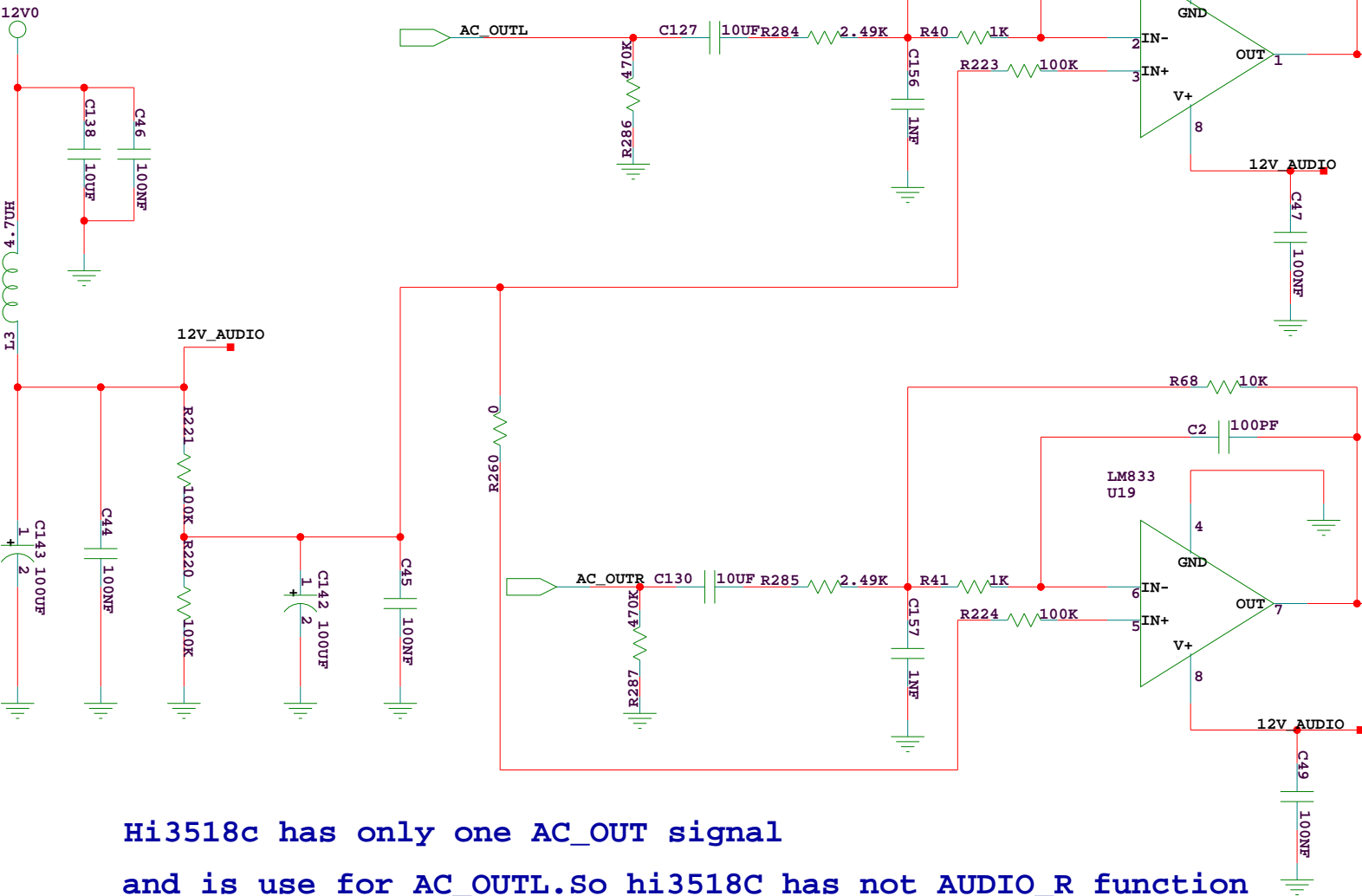
Hi3518c has not this function

MIC IN



NOTE:hi3518C has only one line in signal and is use for mic\_in function

LINE OUT



Hi3518c has only one AC\_OUT signal and is use for AC\_OUTL.So hi3518C has not AUDIO\_R function

The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 14 OF 18	
		A	03030001	HUAWEI TECH CO.,LTD.	



**A**

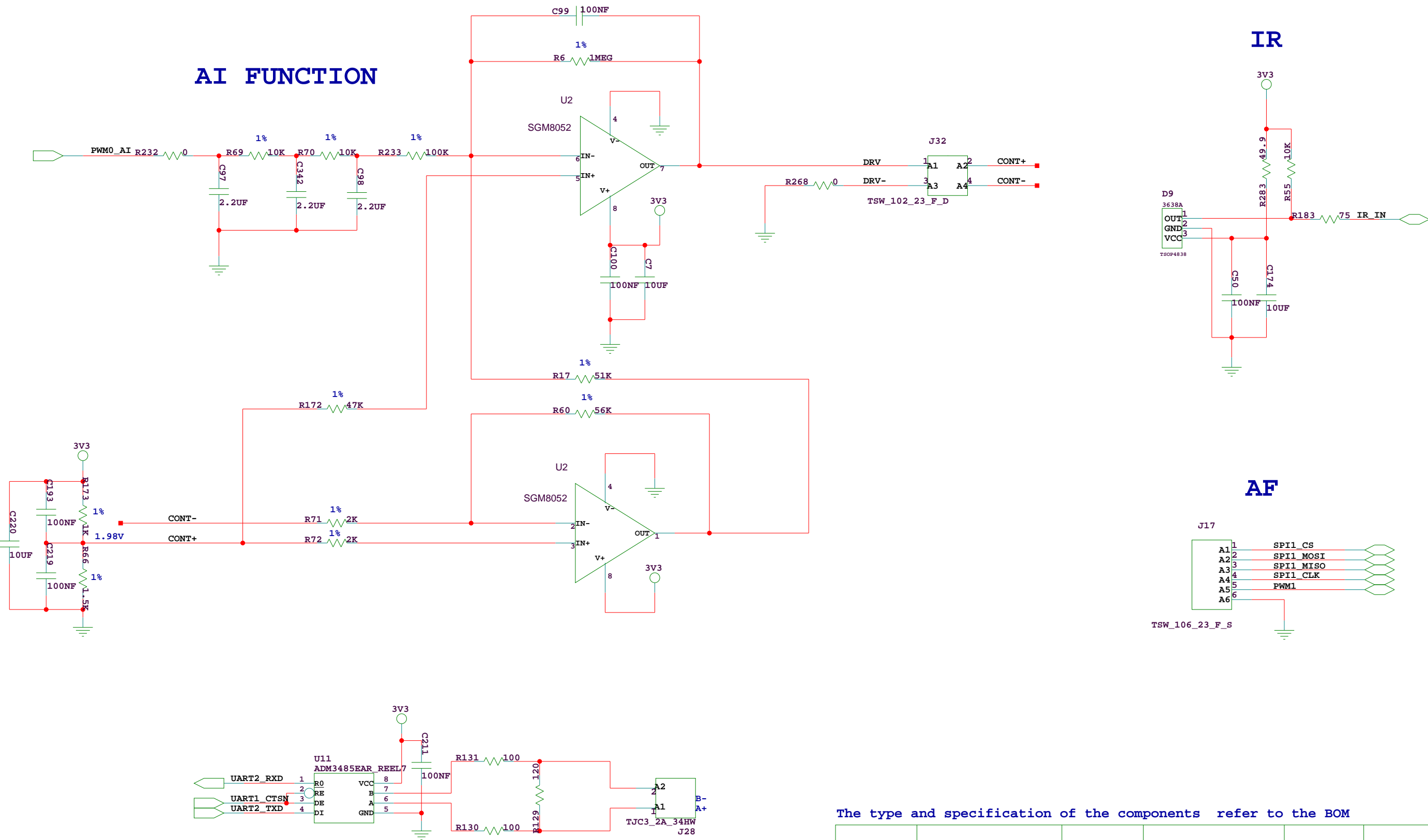


NOTE:hi3518c donot have USB\_OVRCUR signal

The type and specification of the components refer to the BOM

D

# PWM for AI controll & AF & IR

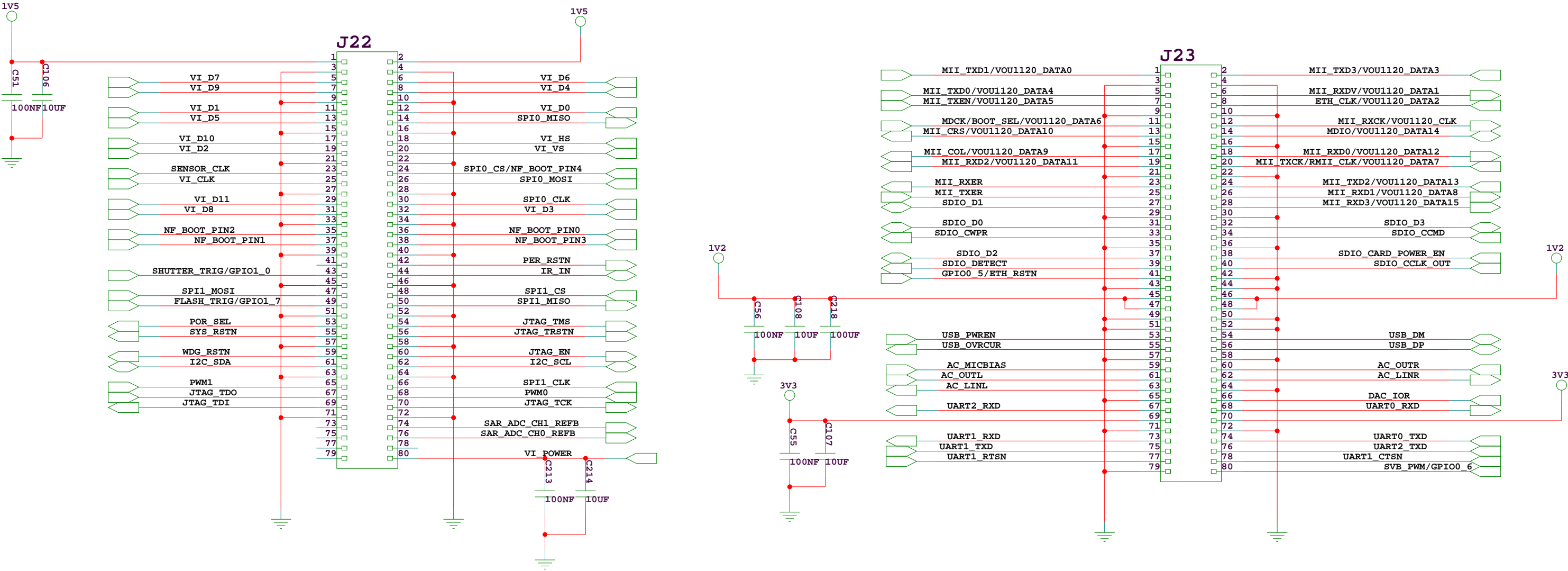


NOTE:UART2 is use to verify RS485 function.  
and UART1\_CTSN is use for UART2\_RSTN

The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 16 OF 18	
		A	03030001	HUAWAI TECH CO.,LTD.	

# Connector to Mainboard

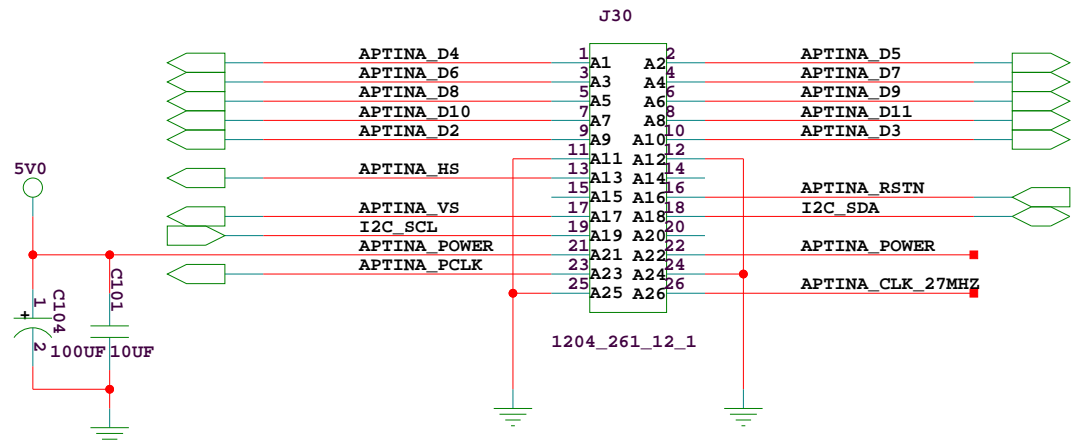


The type and specification of the components refer to the BOM

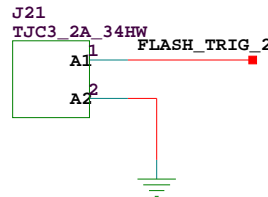
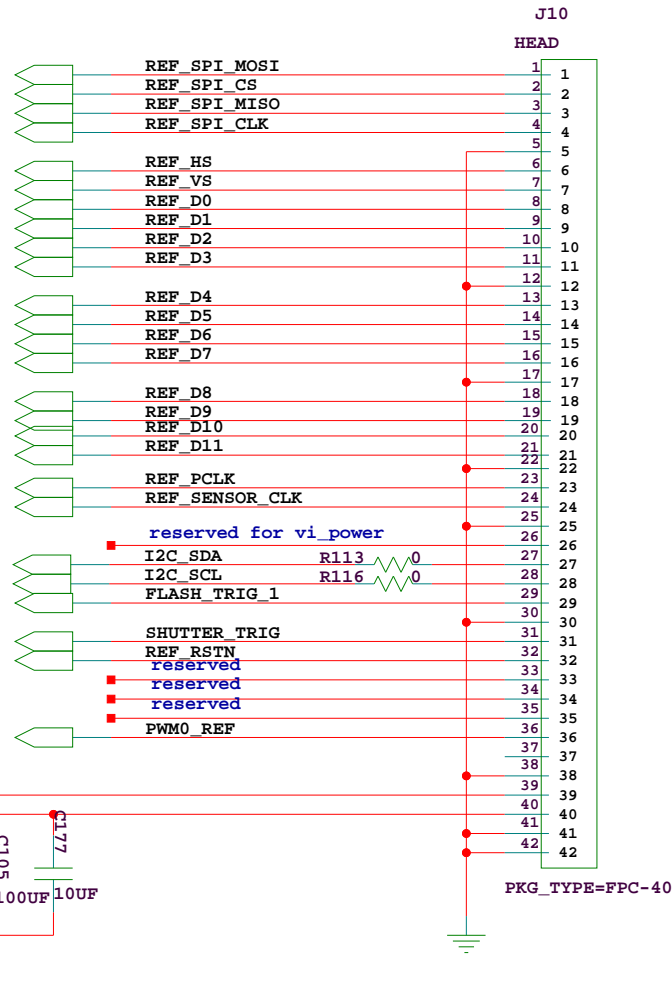
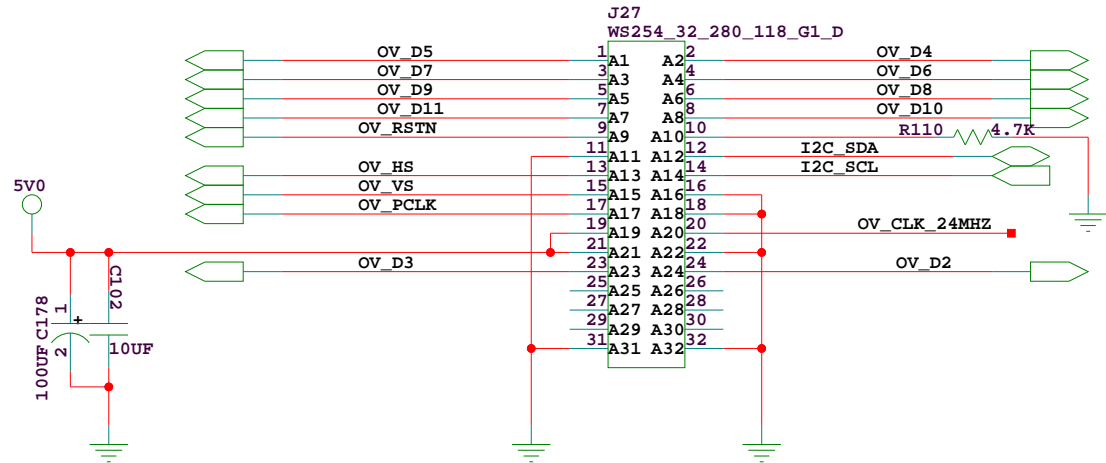
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DESIGNED	ZHANGSAN XXXXX	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 17 OF 19	
		A	03030001	HUAWEI TECH CO.,LTD.	

# Connector for Aptina & panasonic & Ov & REF sens

interface of Aptina\_9P003/9M034



interface of OV2715



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	YUJIANHONG00181445	HI3518PERB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 18 OF 19	
		A	03030001	HUAWEI TECH CO.,LTD.	