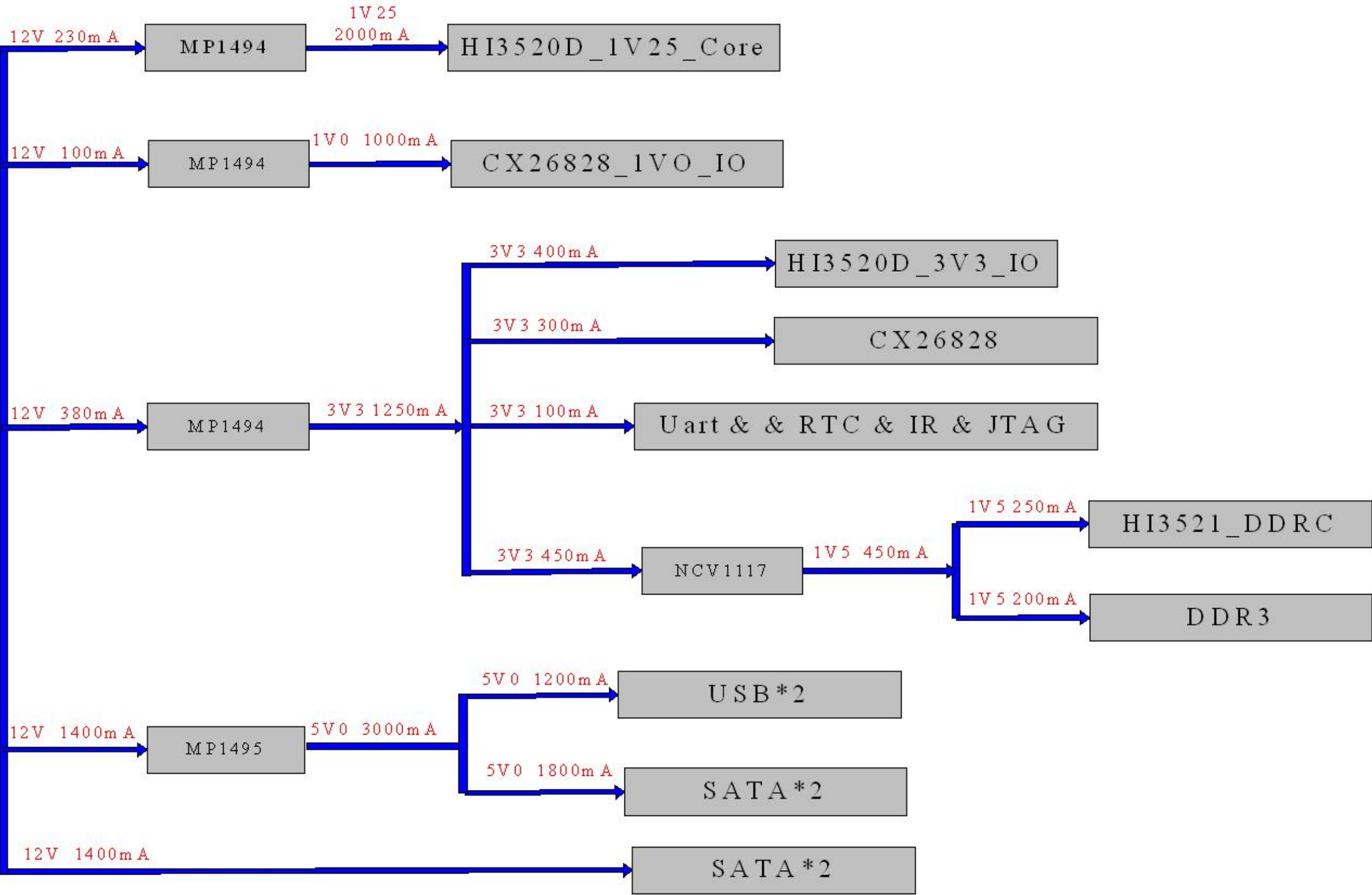


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B					
C					
D					
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POWER TREE

12V Adapter



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	YUJIANHONG 00181445	HI3520DDMEB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 3 OF 16	
		B	03030001	HUAWEI TECH CO.,LTD.	

# Change list

2013.01.01 Ver.A schematic.

2013.04.21 Ver.B schematic.

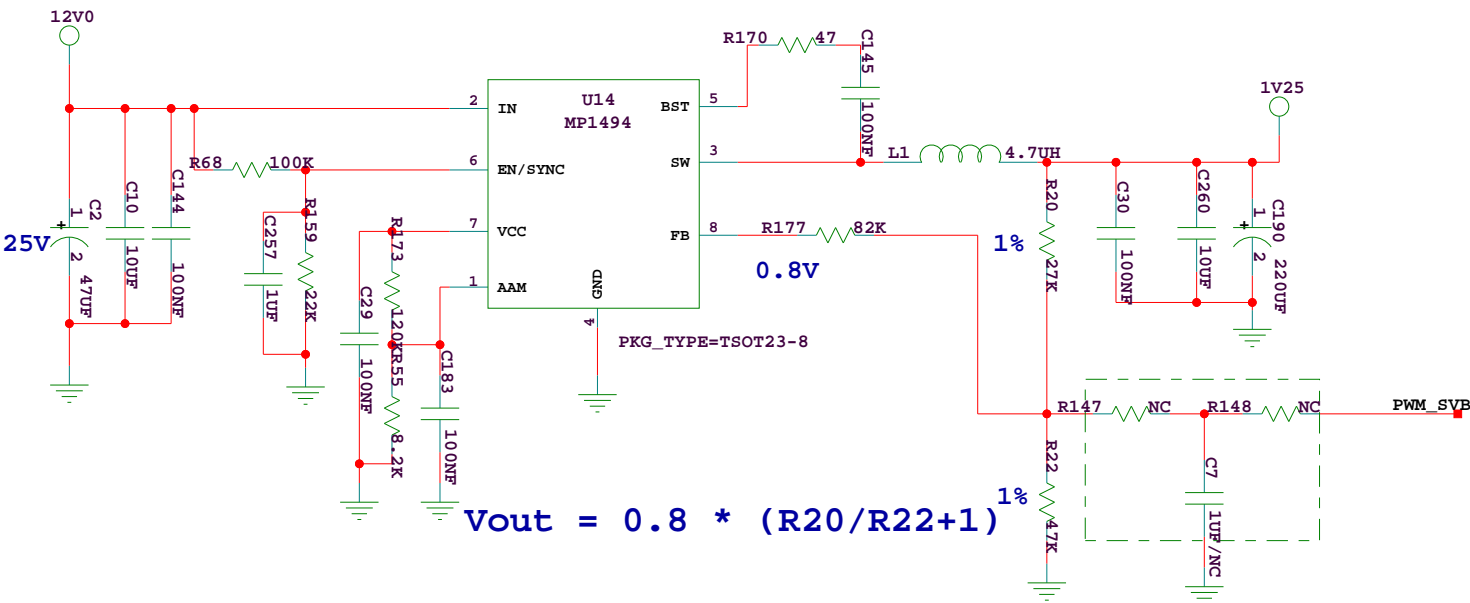
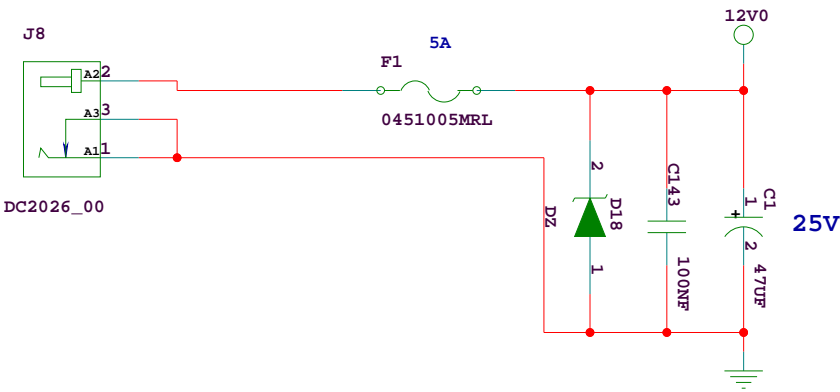
- 1)Updata VDAC RETX value.Change R59 from 200R to 191R,change R156 from NC to 3.01K
- 2)Change C257 from 100nF to 1uF
- 3)Change R179 from 158R to 750R.Change R89 from 750R to 160R
- 4)Updata HDMI REXT value.Change R188 from 6.8K to 11K.Change R134 from 51K to 39K
- 5)Add LPF to the VGA\_RGB output(NC in the SCH & PCB )
- 6)Add JTAG\_SEL select
- 7)Add External RTC circuit.This circuit has not been modified in the PCB

The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	YUJIANHONG 00181445	HI3520DDMEB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 4 OF 17	
		B	03030001	HUAWEI TECH CO.,LTD.	

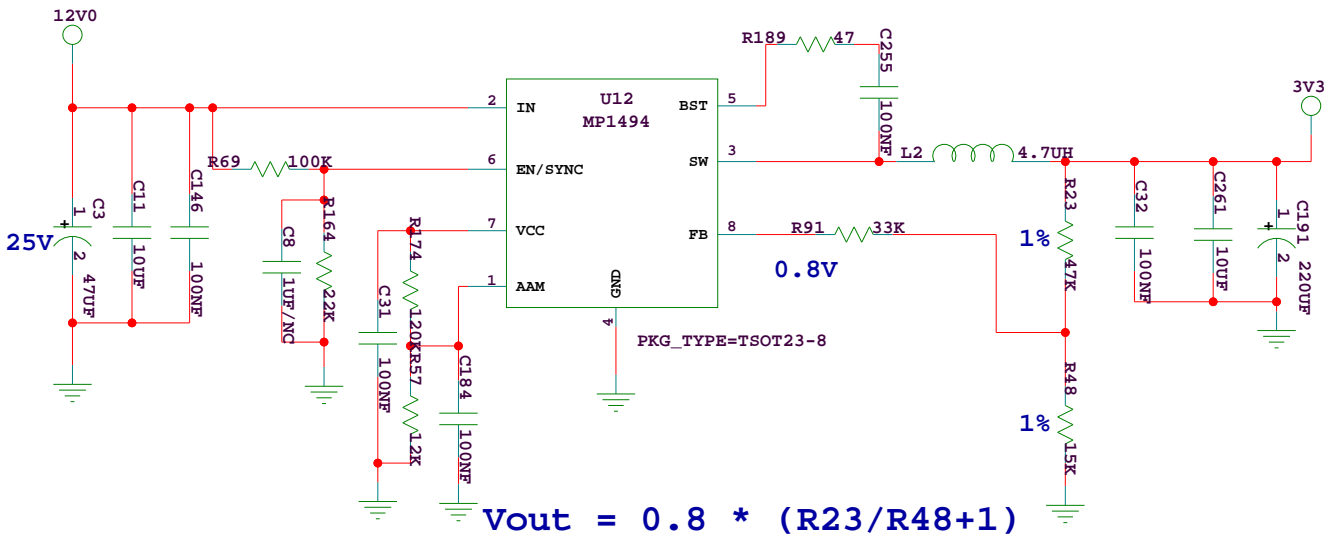
POWER SUPPLY 1

12V --> 1V25 For Hi3520D\_Core 2A MAX

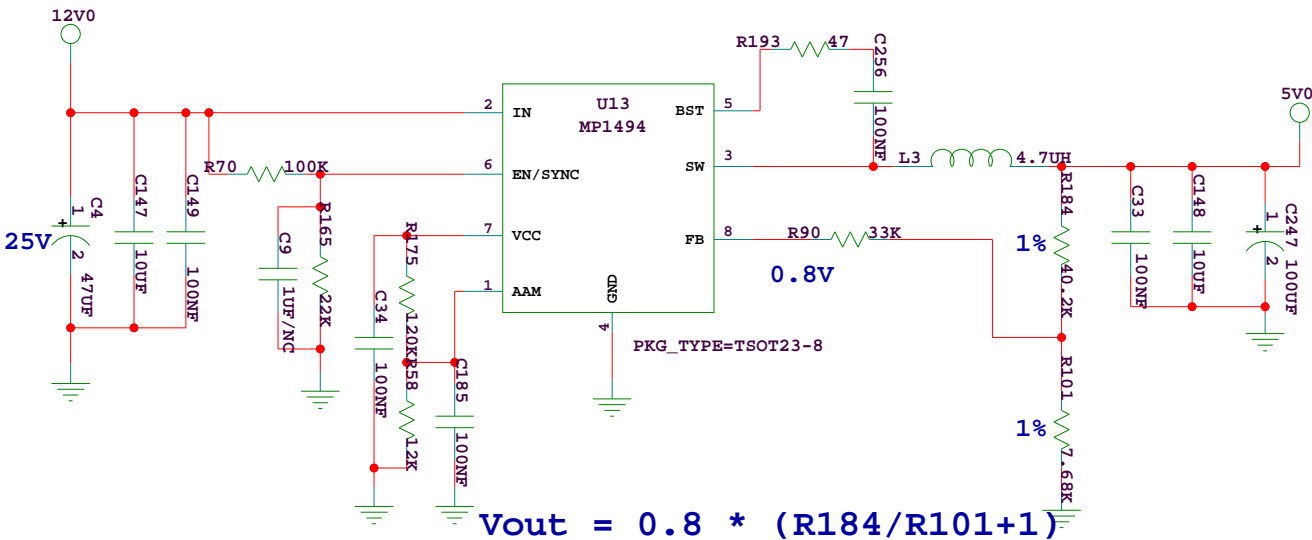


This circuit should be placed near to U14  
This circuit is left for the SVB test,default NC.

12V --> 3V3



12V --> 5V0

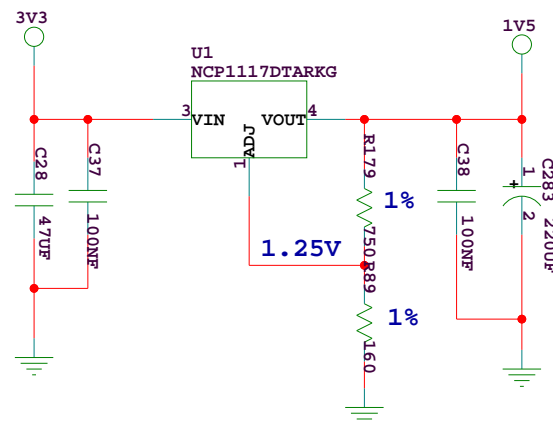


The type and specification of the components refer to the BOM

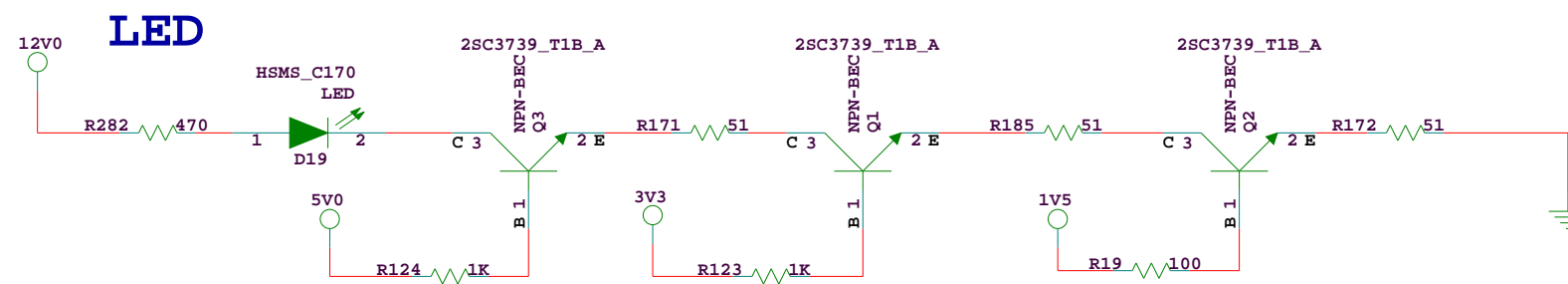
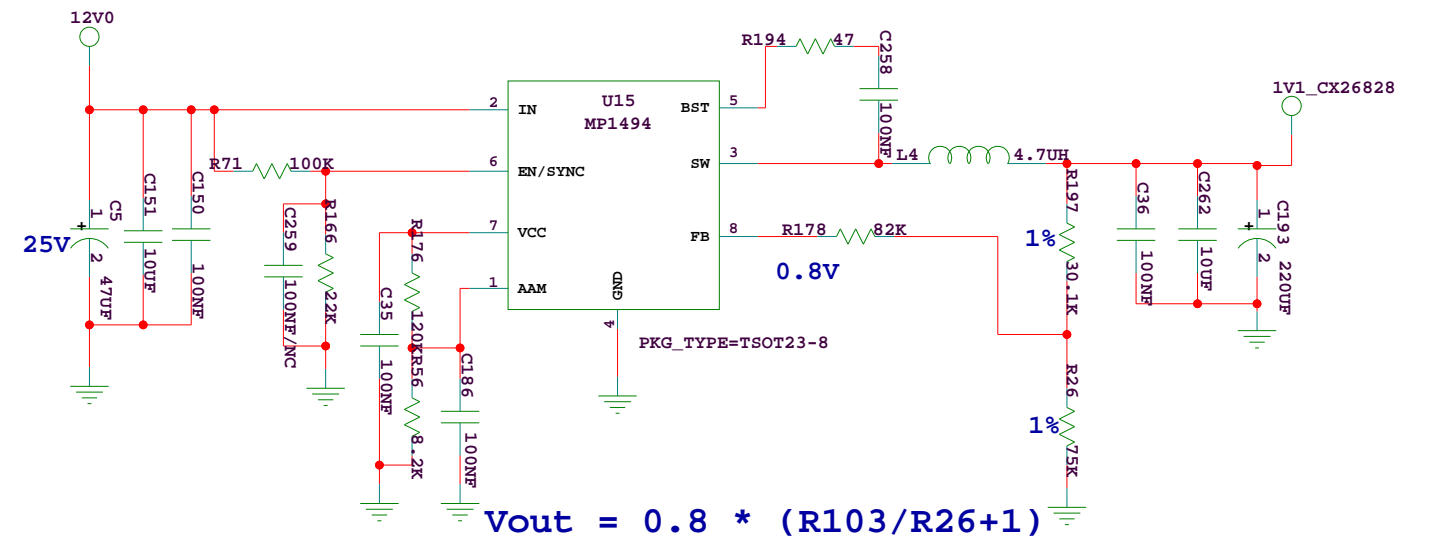
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REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 5 OF 17	
		B	03030001	HUAWEI TECH CO.,LTD.	

## POWER SUPPLY 2

## 3V3 --> 1V5 For DDR3



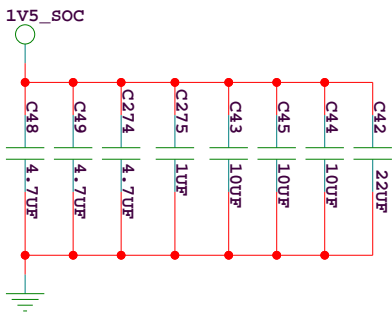
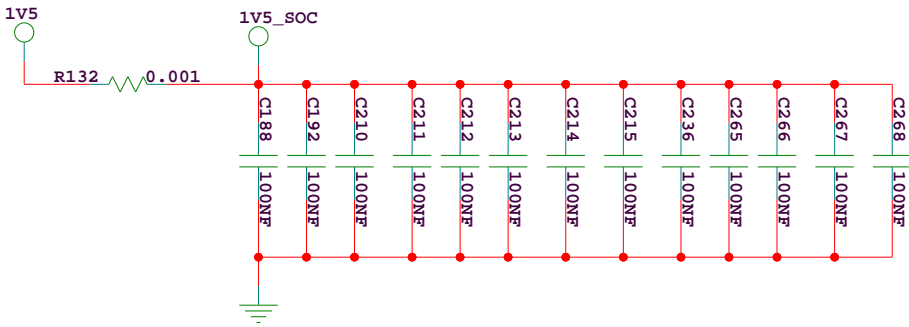
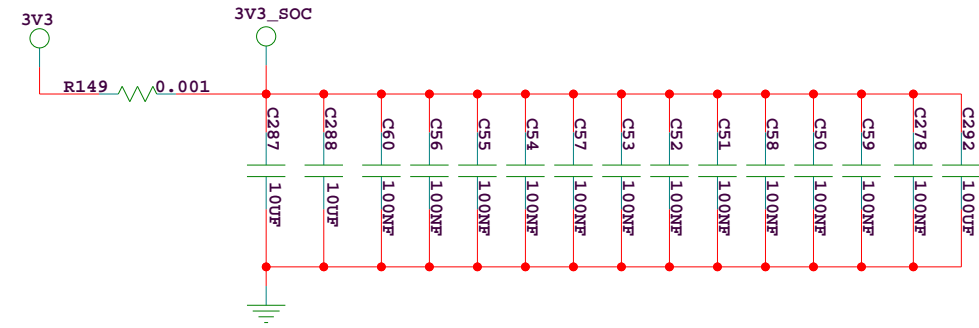
**12V --> 1V0 For Cx26828\_IO**



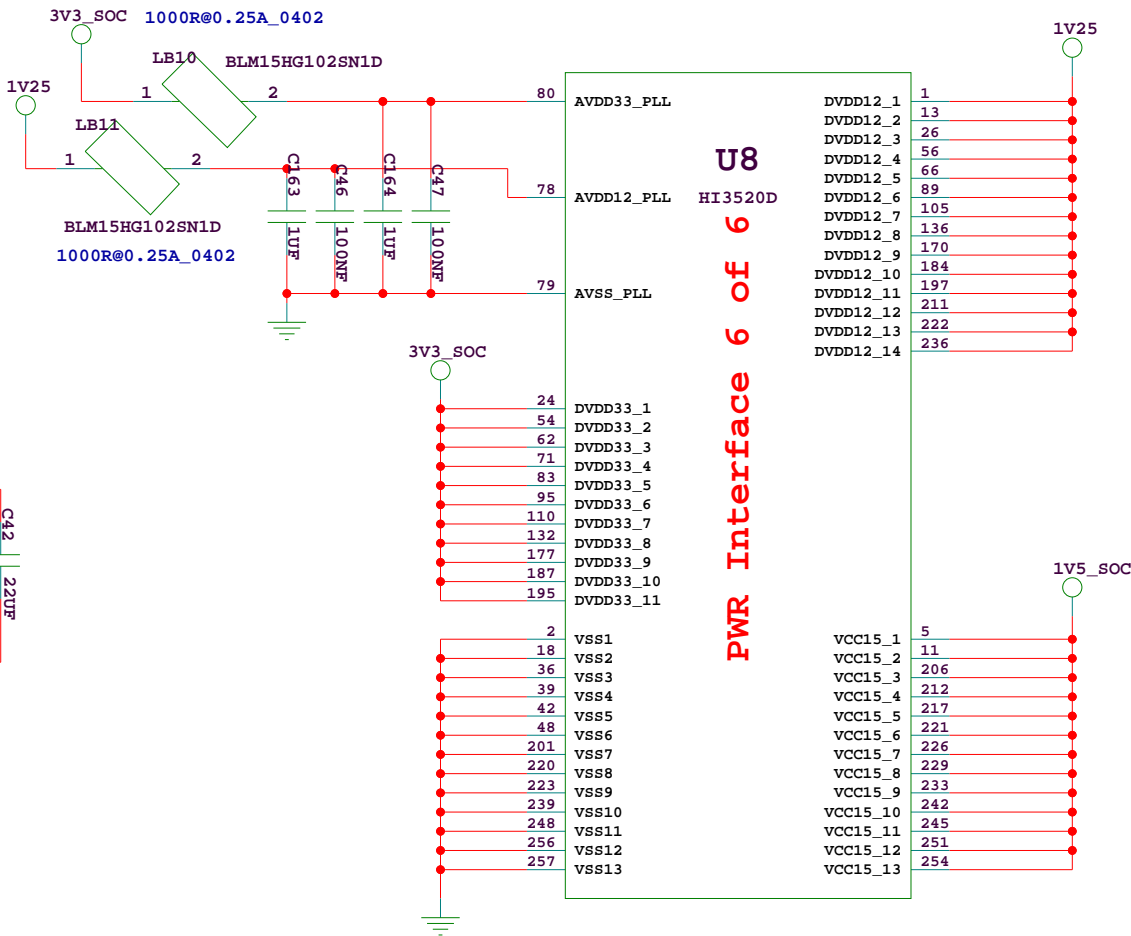
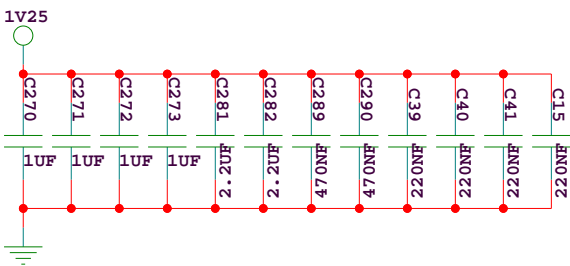
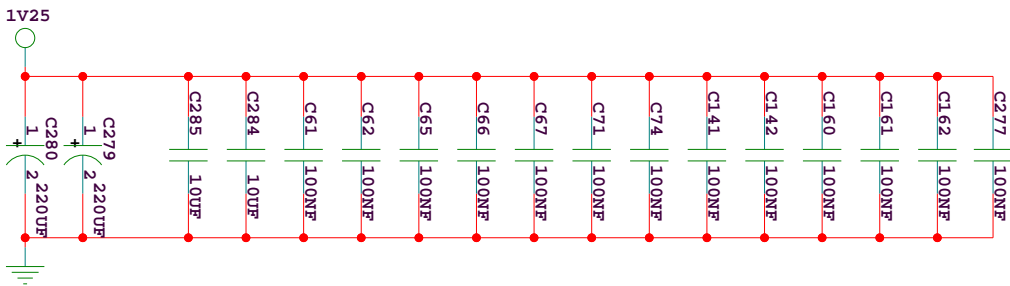
The type and specification of the components refer to the BOM

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REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 6 OF 17	
		B	03030001	HUAWEI TECH CO.,LTD.	

Hi3520D POWER\_GND



The kind and quantity of the caps must be the same as that for the Hi3520D demo board.



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	YUJIANHONG 00181445	HI3520DDMEB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 7 OF 17	
		B	03030001	HUAWEI TECH CO.,LTD.	



**A**



B

C

D



Hi3520D SYS\_RST\_JTAG

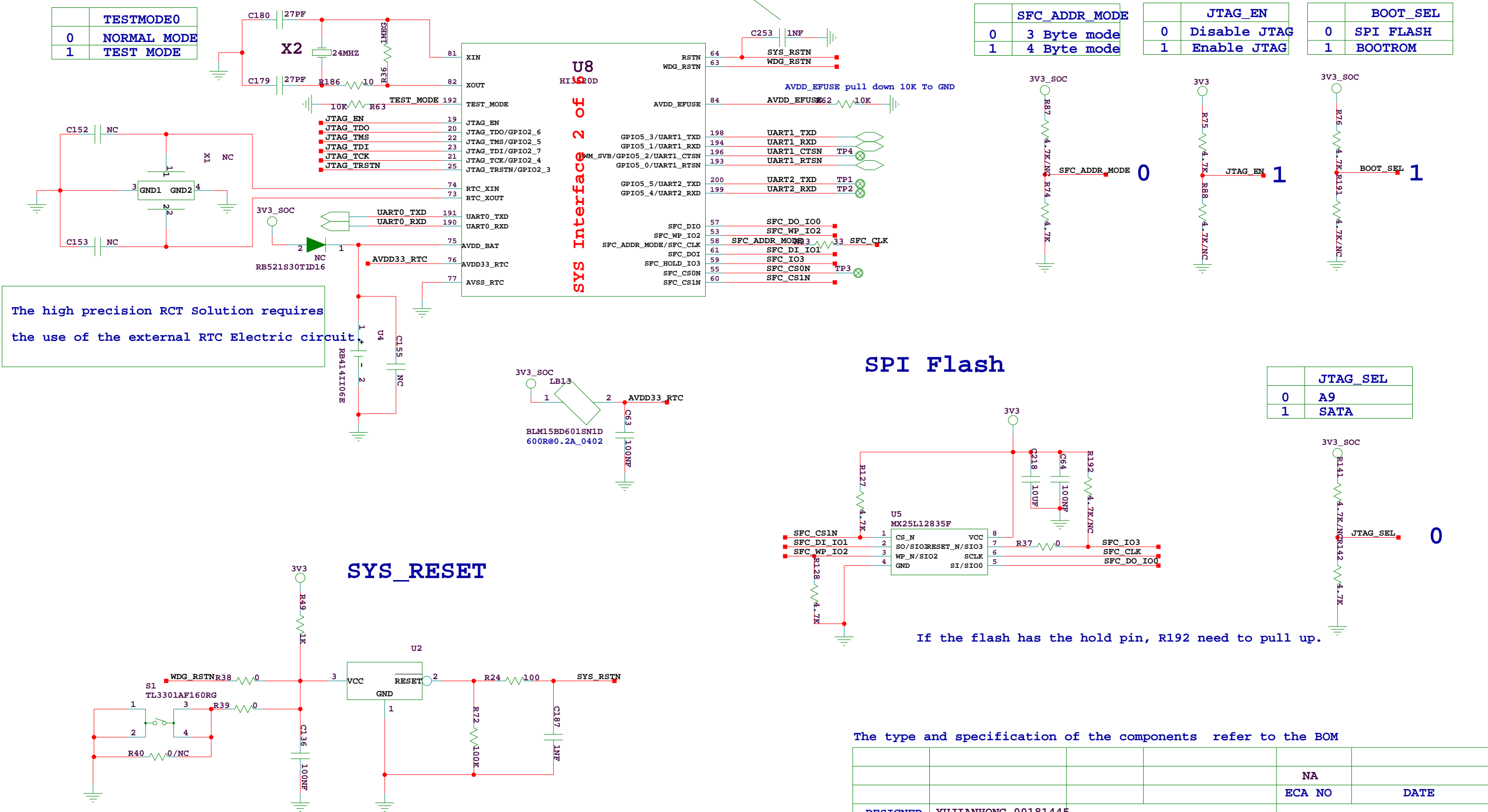
A

B

C

D

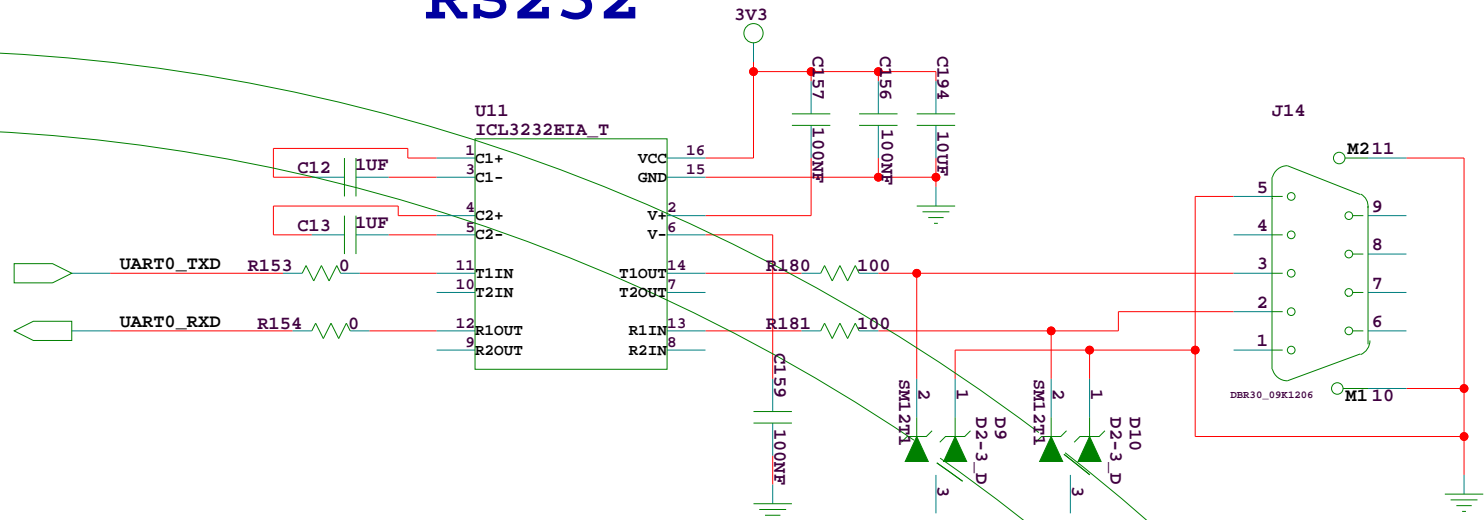
put this Cap close to Hi3520D



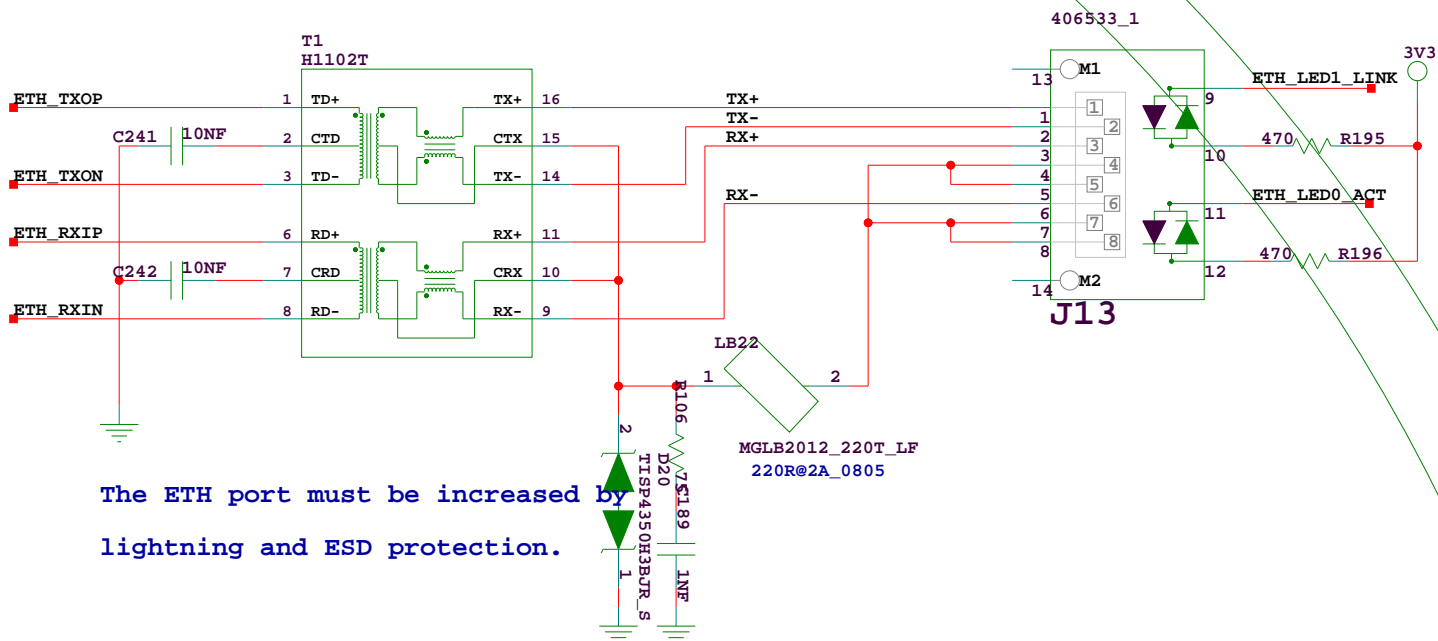
The type and specification of the components refer to the BOM					
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REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 9	OF 17
		B	03030001	HUAWEI TECH CO.,LTD	

# JTAG & RS232 & RS485 & ETH & RTC

# RS232

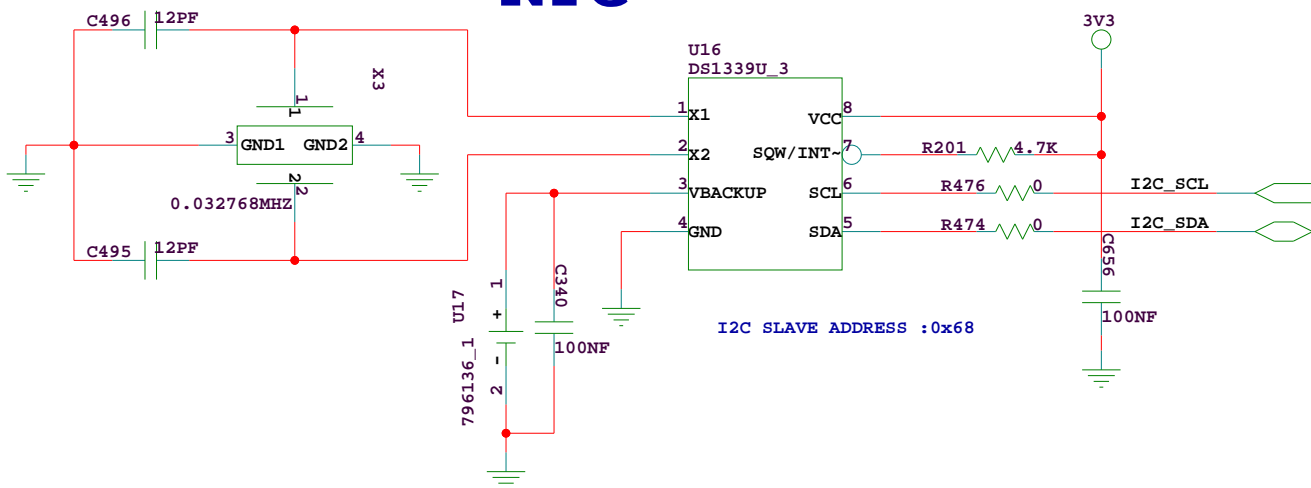


## ETH



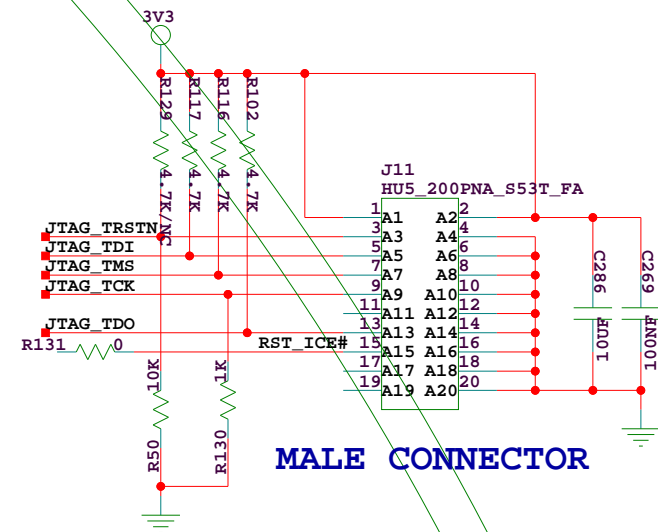
The ETH port must be increased by lightning and ESD protection.

# RTC

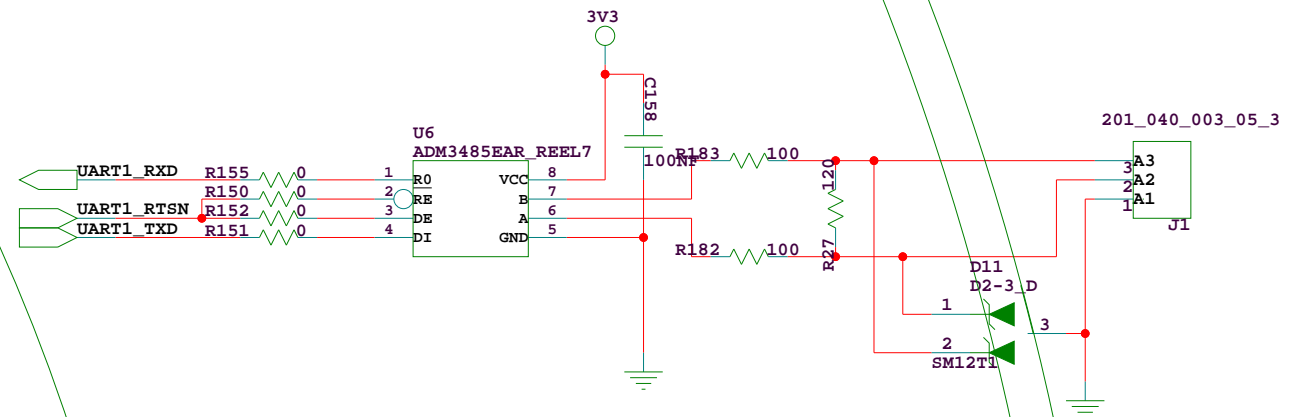


The high precision RCT Solution requires the use of the external RTC Electric circuit.

# JTAG



# RS485

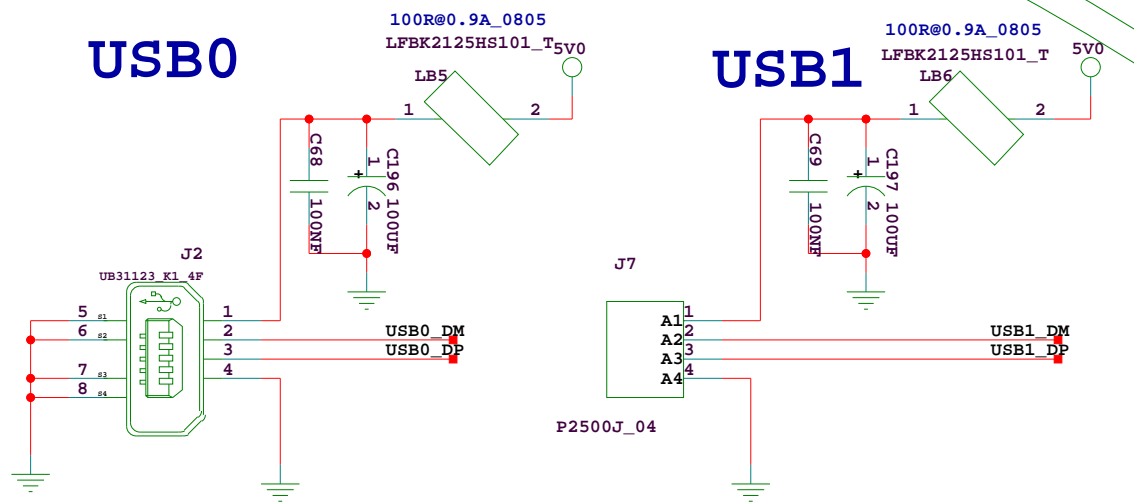


The type and specification of the components refer to the BOM

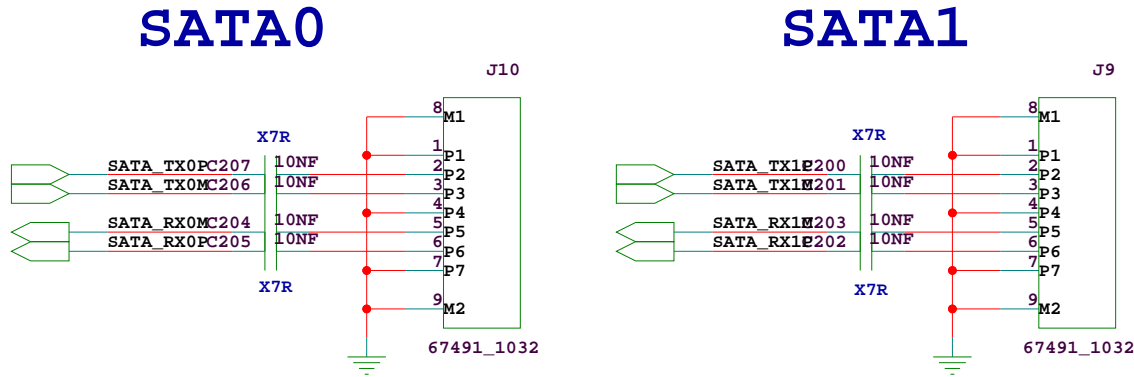
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					ECA NO			DATE	
DESIGNED	YUJIANHONG	00181445	HI3520DDMEB			00001234			
REVIEWED	LISI	XXXXX							
			VER	PART_NUMBER	SHEET	10	OF	17	
			B	03030001	HUAWEI TECH CO.,LTD.				

**HUAWEI TECH CO.,LTD.**

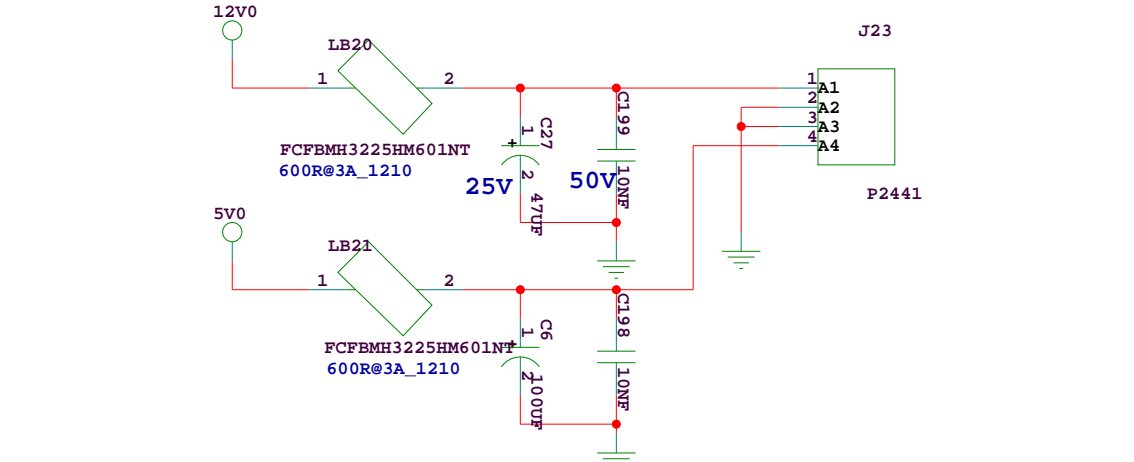
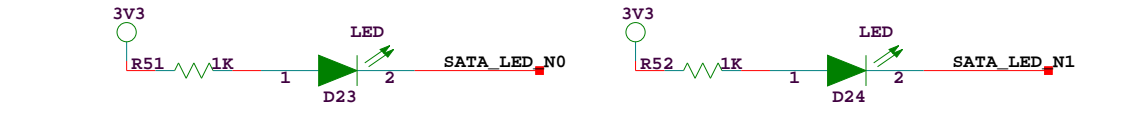
Interface



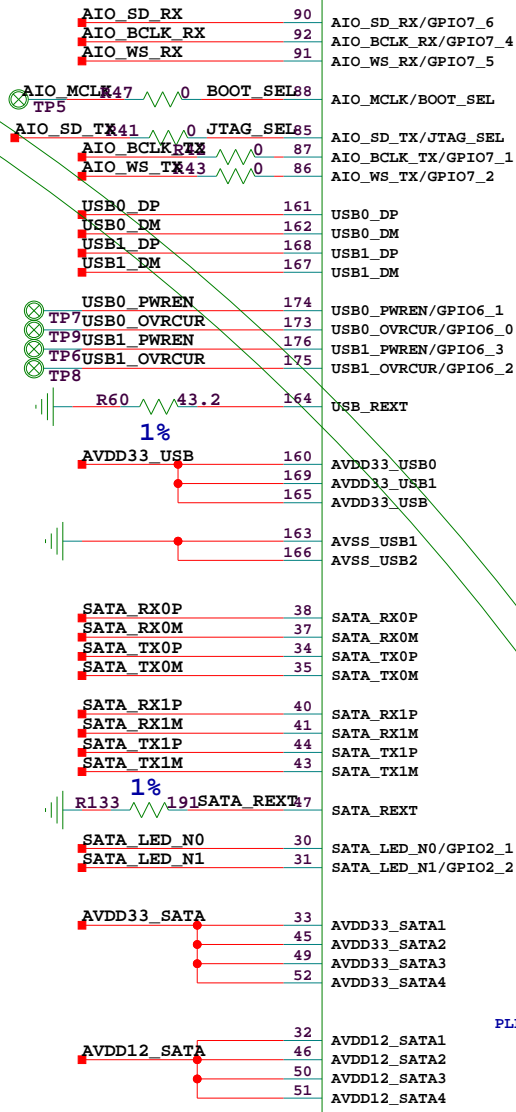
The USB differential trace impedance is 90 OHM  
9/5/9 trace width is OK for two-layer board



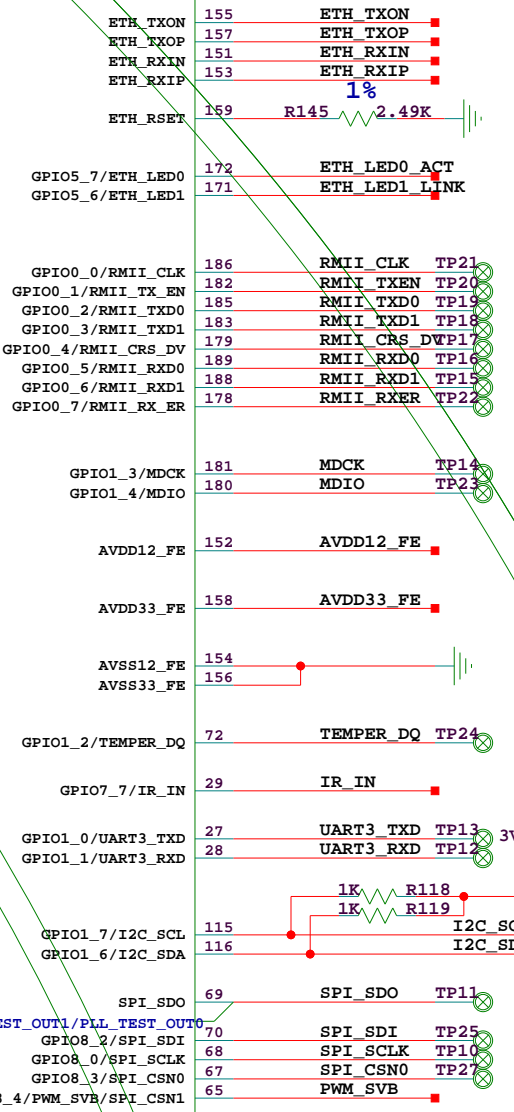
The SATA differential trace impedance is 100 OHM.  
The material of the coupling caps must be X7R.  
6/5/6 trace width is OK for two-layer board, 3inch is Max.



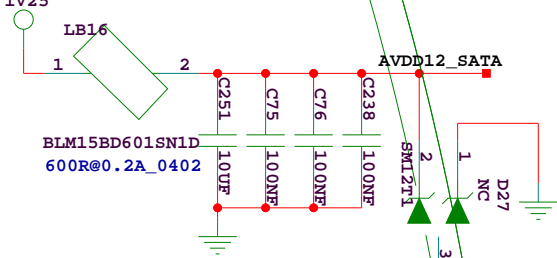
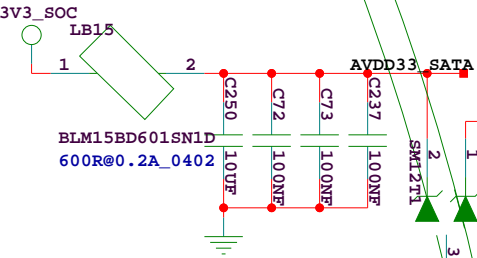
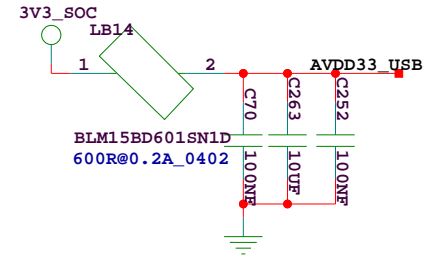
AIO\_MCLK & AIO\_SD\_TX can't use as GPIO.



U8  
HI3520D  
INTERFACE Interface 3 of 6



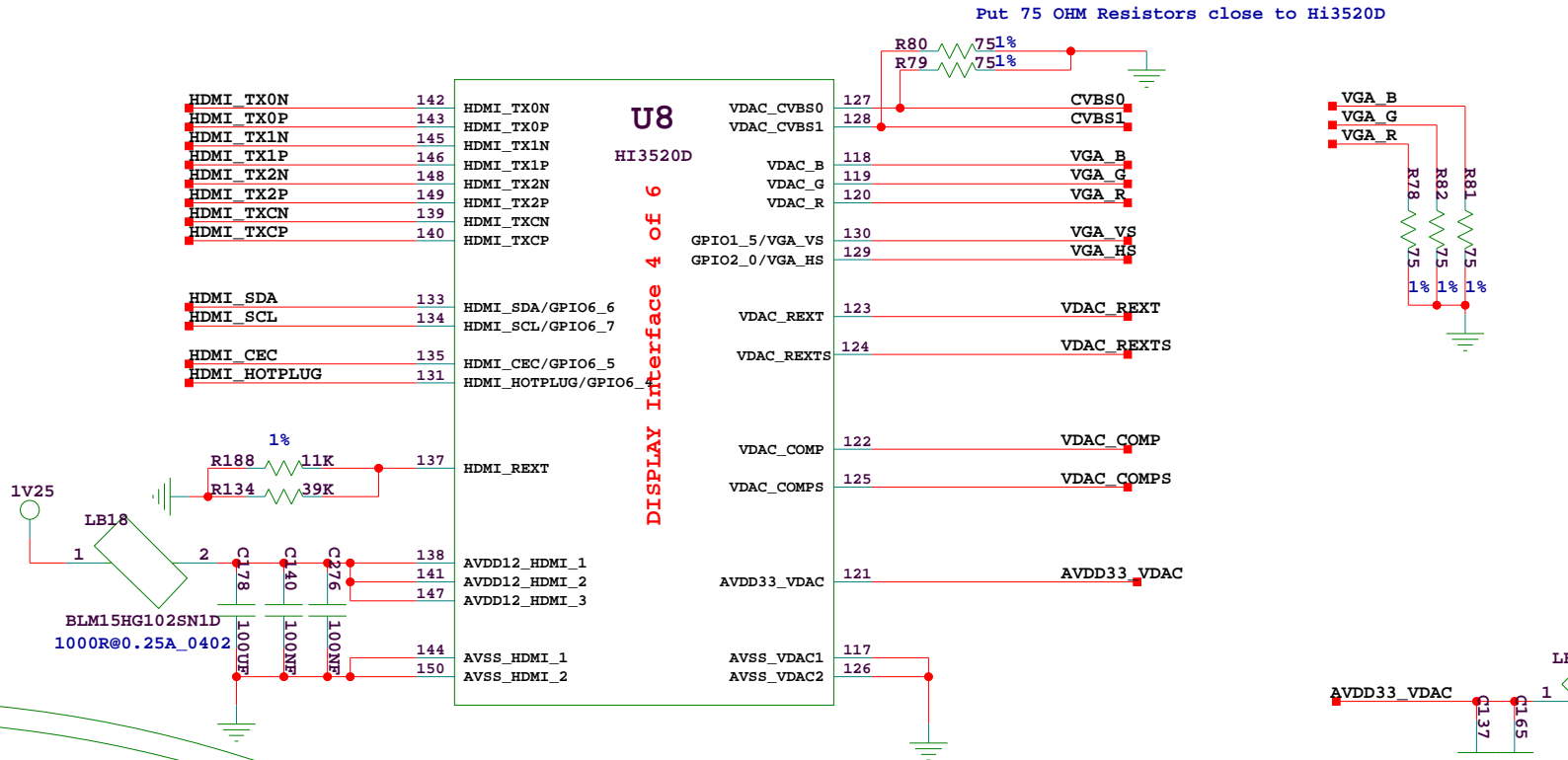
SPI\_SDO can't use as GPIO.



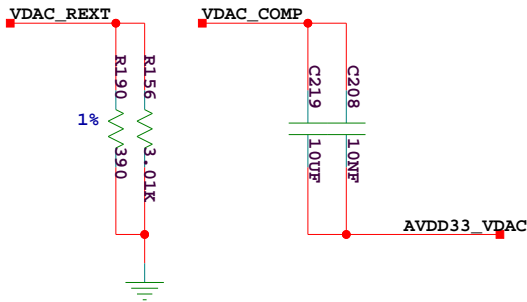
The type and specification of the components refer to the BOM

			NA		
			ECA NO	DATE	
DESIGNED	YUJIANHONG	00181445			
REVIEWED	LISI	XXXXX			
			VER	PART_NUMBER	SHEET 11 OF 17
			B	03030001	HUAWEI TECH CO.,LTD.

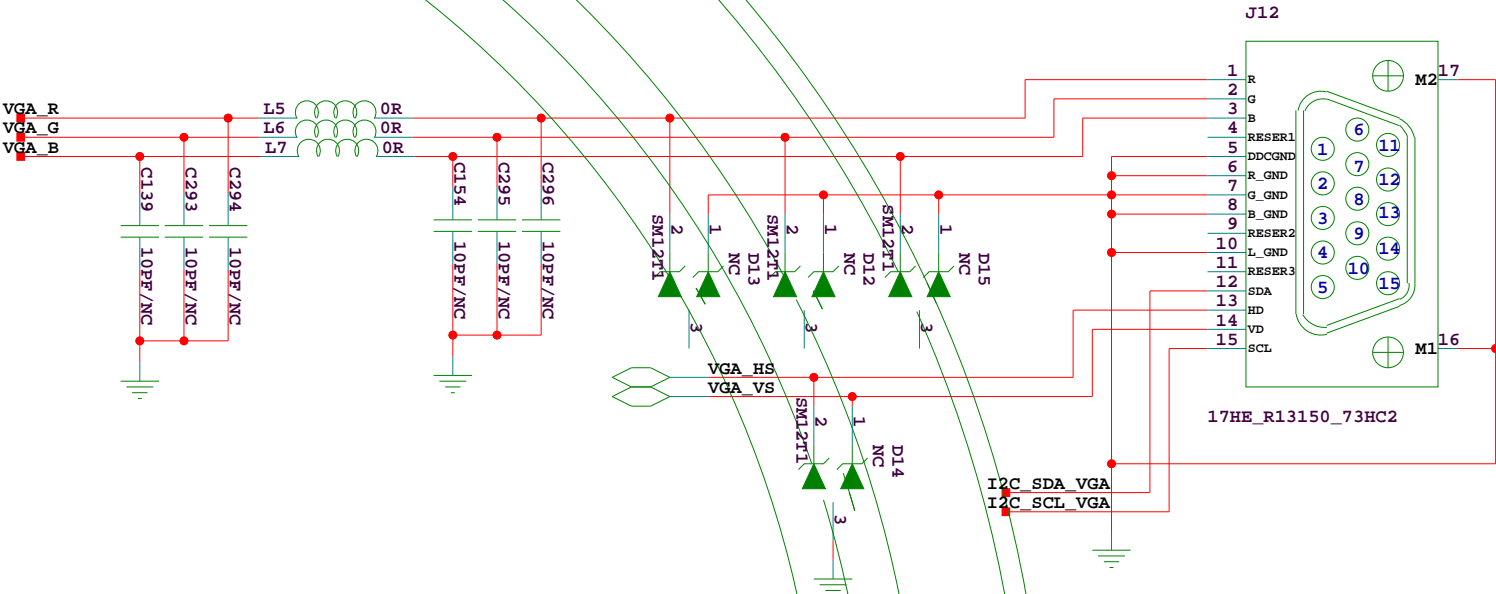
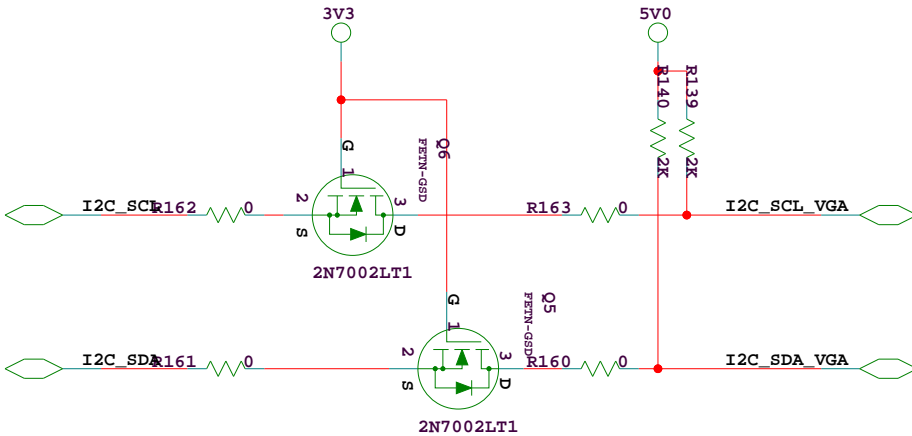
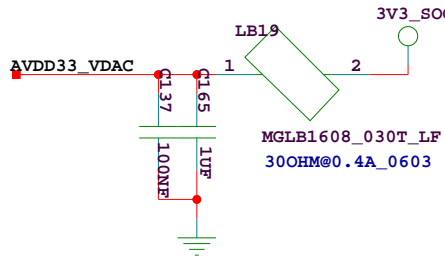
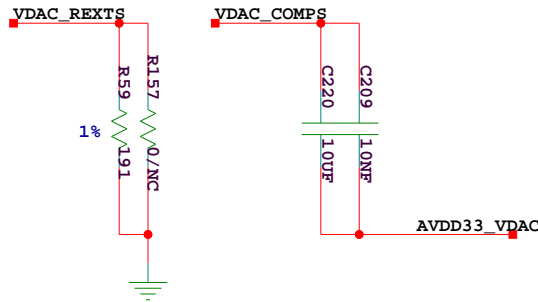
DISPLAY



DAC external pins for channel RGB



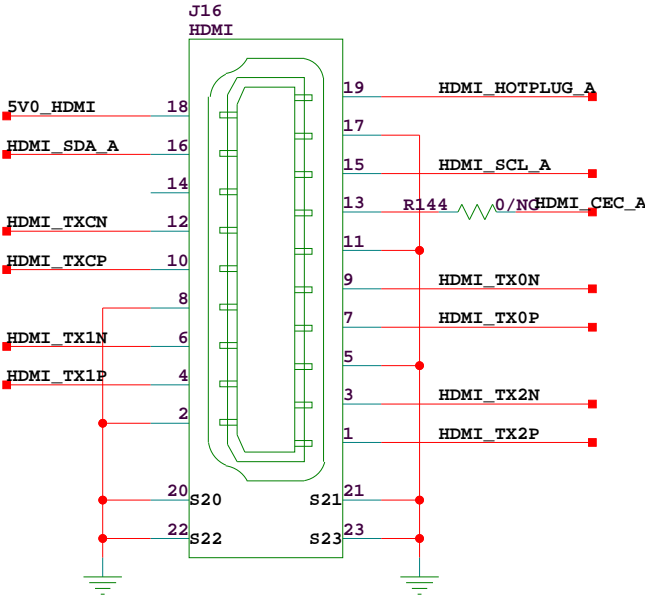
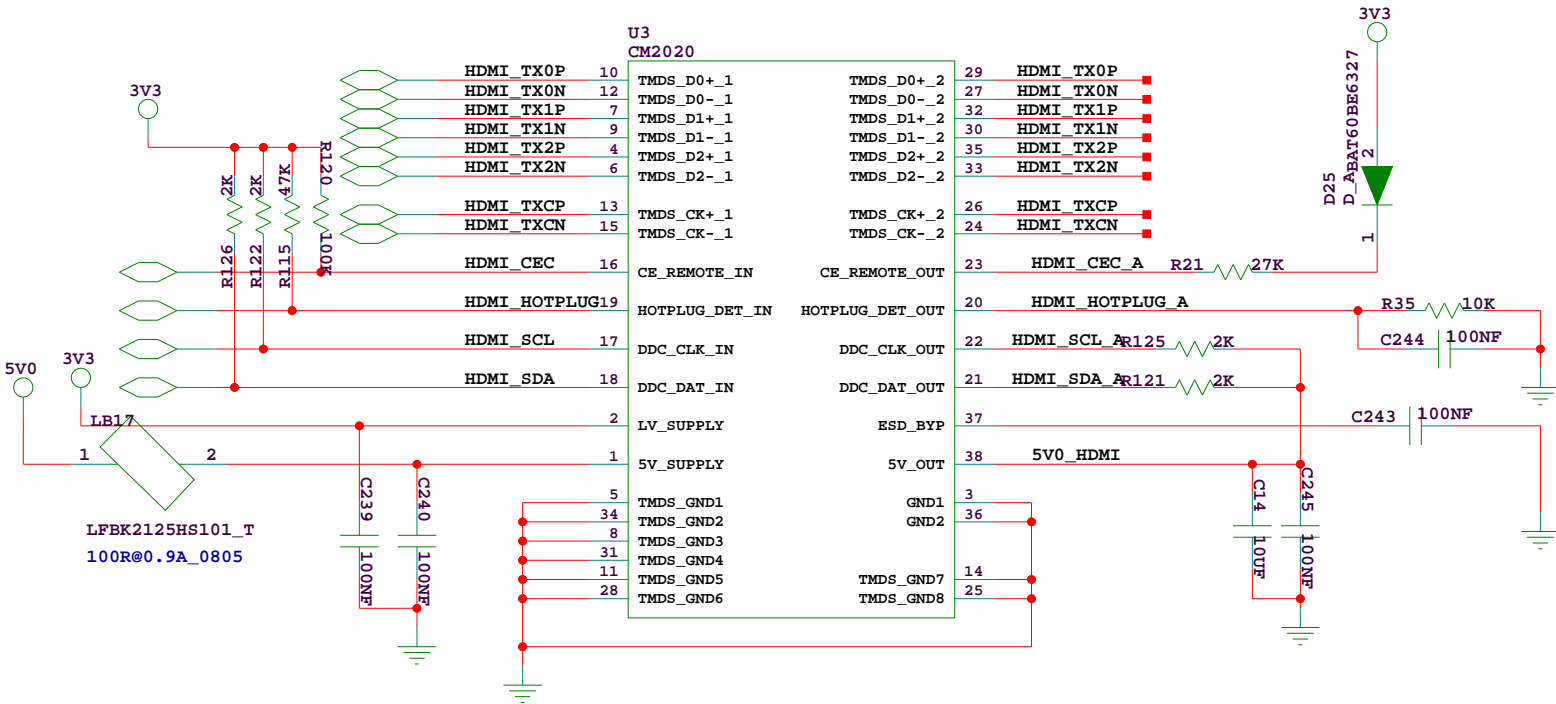
DAC external pins for channel CVBS



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	YUJIANHONG 00181445	HI3520DDMEB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 12 OF 17	
		B	03030001	HUAWAI TECH CO.,LTD.	

HDMI

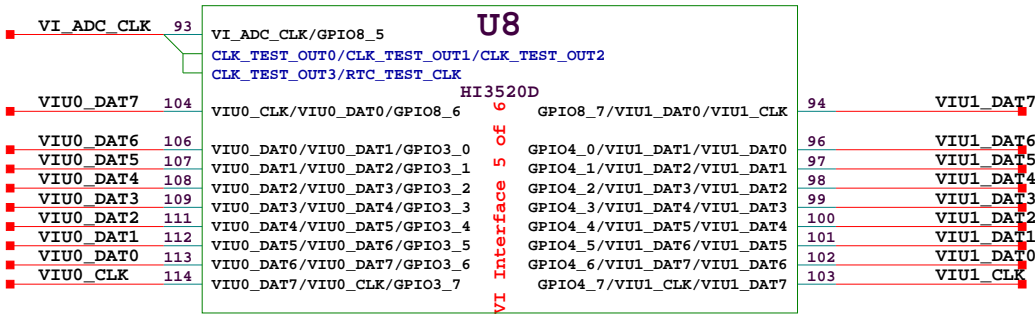


The HDMI differential trace impedance is 100 OHM  
6/5/6 trace width is OK for two-layer board

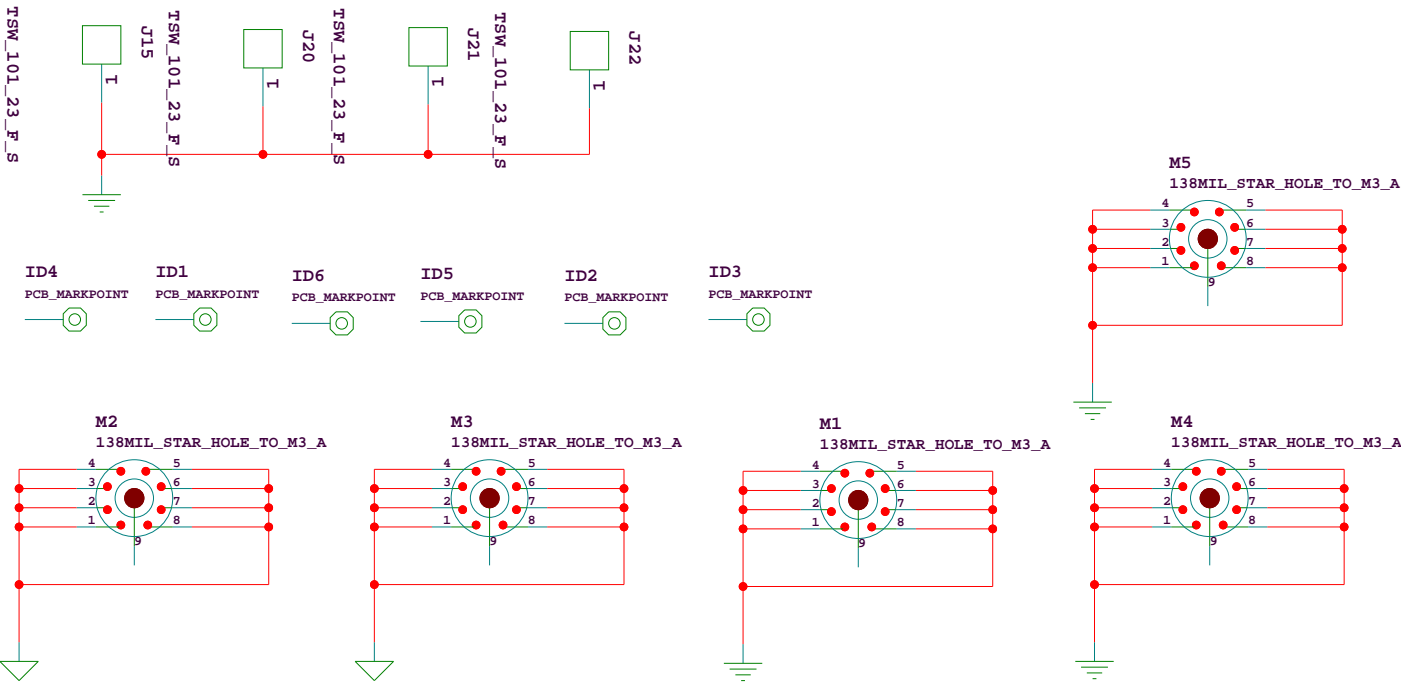
The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	YUJIANHONG 00181445	HI3520DDMEB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 13 OF 17	
		B	03030001	HUAWEI TECH CO.,LTD.	

VI



- 1) 2xBT.656@108MHz for 8D1/CIF real-time inputs.
- 2) 1xBT.656@144MHz for 4x960H real-time inputs.  
But only 4x960H(not 8x960H) real-time inputs can be Supported.You can choose VIU0 or VIU1.
- 3) 2xBT.656@148MHz for 2x720P real-time inputs.The Demo board does not have this funtion.
- 4) 2xBT.656 can combin into 1xBT.1120@74/148MHz for 1x720P/1080P real-time input.  
The Demo board does not have this funtion.
- 5) VI\_ADC\_CLK can output 24MHz 27MHz and 54MHz.
- 6) You can change the VI\_DATA order form DAT0 to DAT7,or from DAT7 to DAT0.



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	YUJIANHONG 00181445	HI3520DDMEB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 14 OF 17	
		B	03030001	HUAWEI TECH CO.,LTD.	

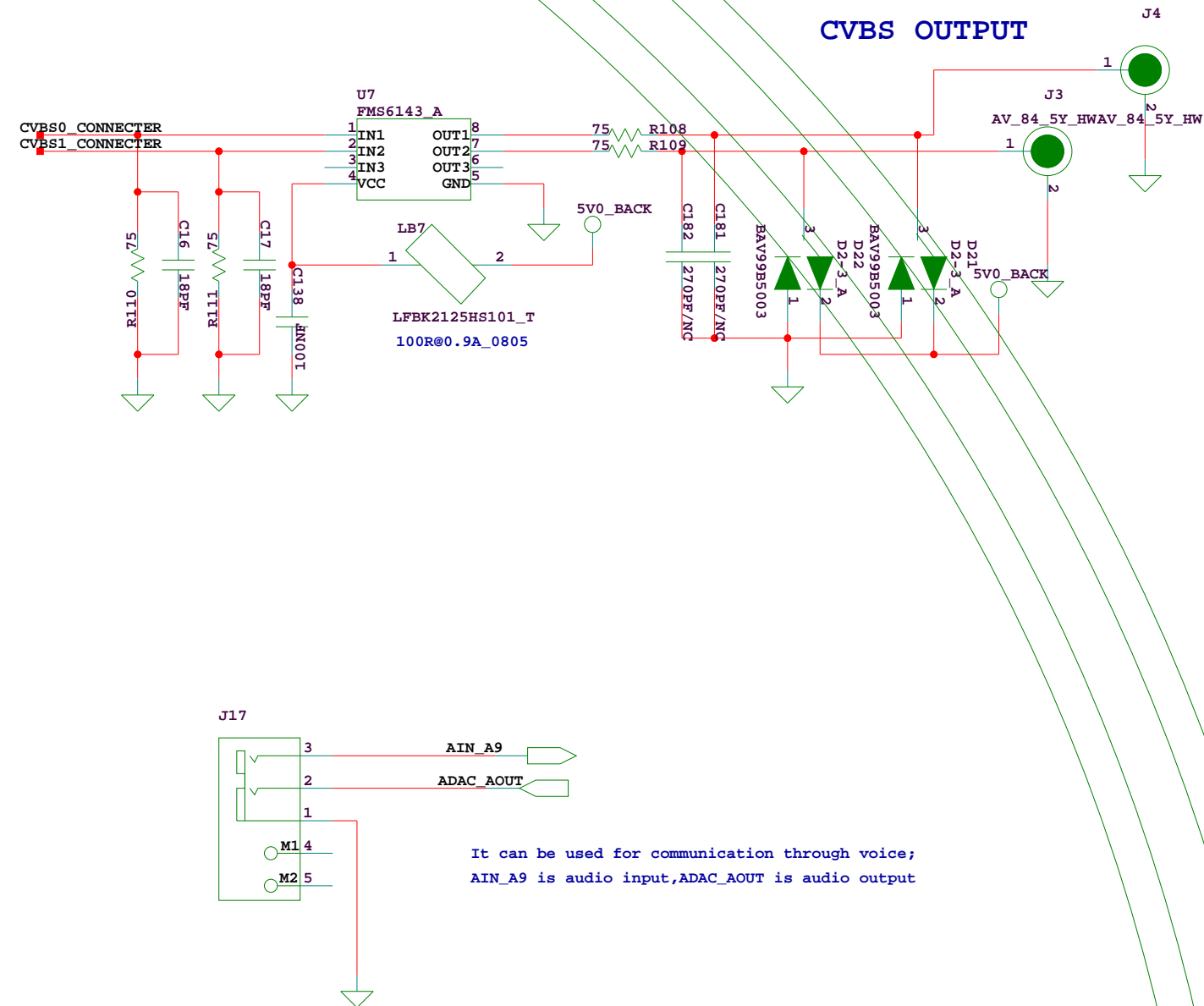








# Backboard



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	ZHANGSAN XXXXX	HI3520DDMEB		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET	17 OF 17
		B	03030001	HUAWEI TECH CO.,LTD.	