

1.SCH List

BB SCHEMATICS

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RF

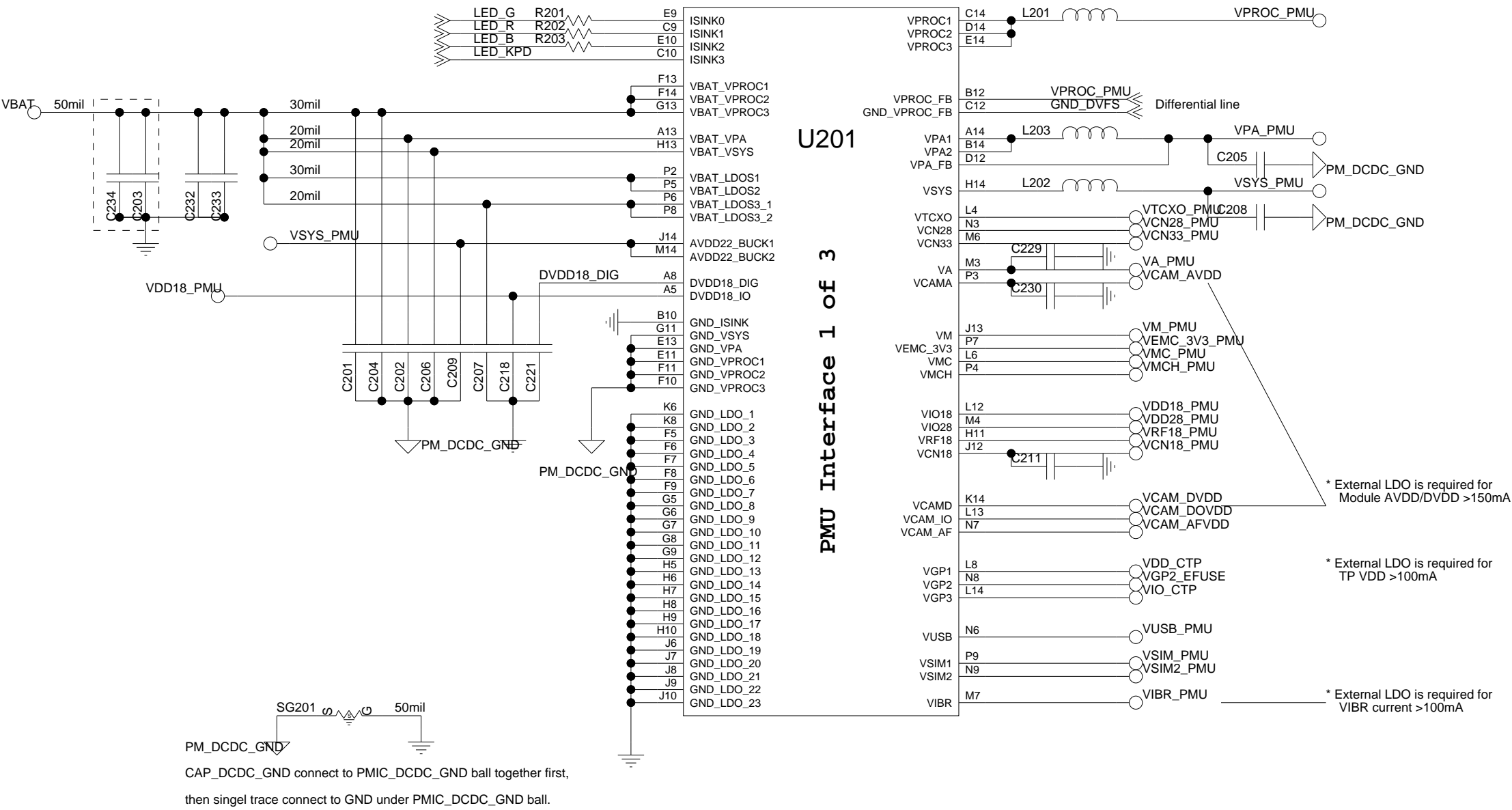
- 21. RF Input Output Ports
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- 23. WIFI/BT/FM/GPS MT6627
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- 27. Reserved
- 28. Reserved

Telegram Channel  
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The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 1 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

2. PMU-MT6323 Power



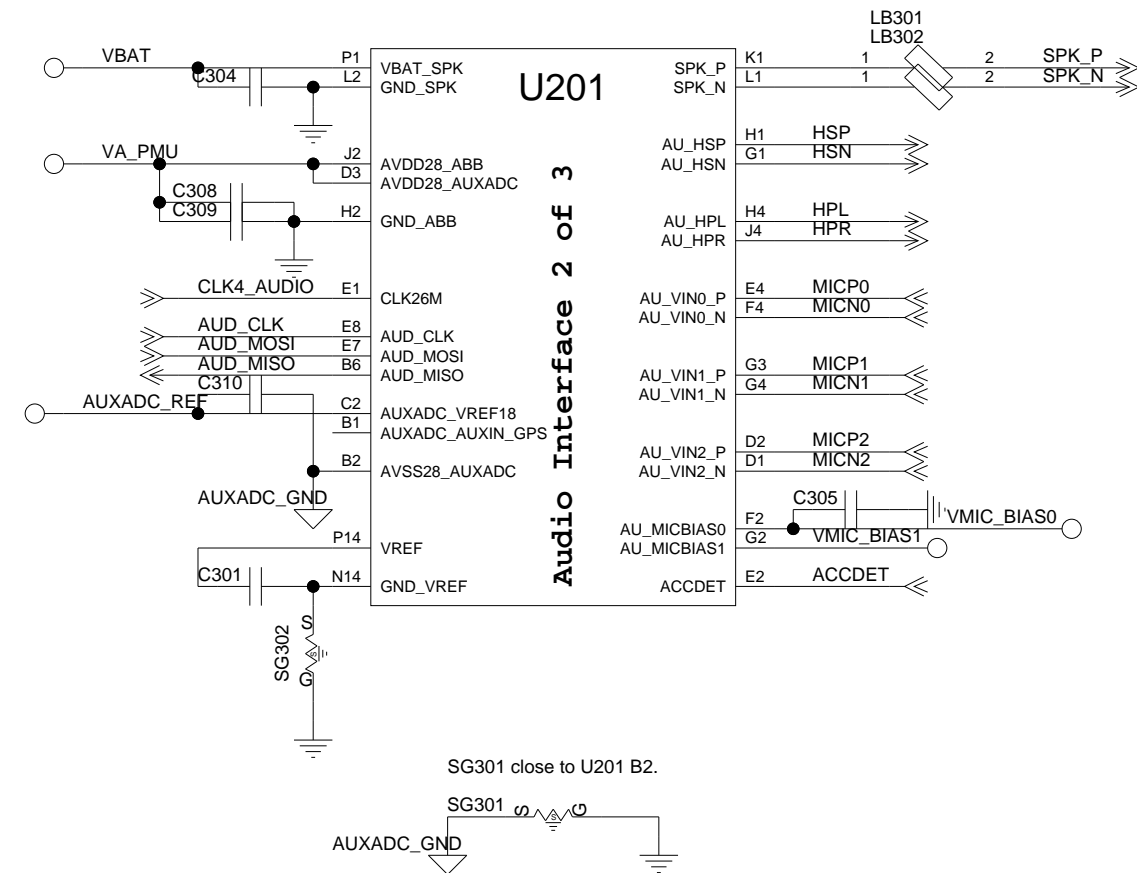
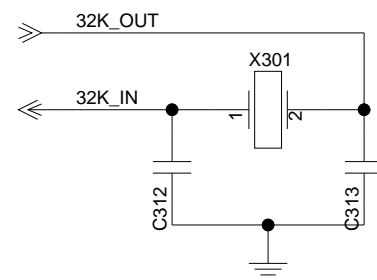
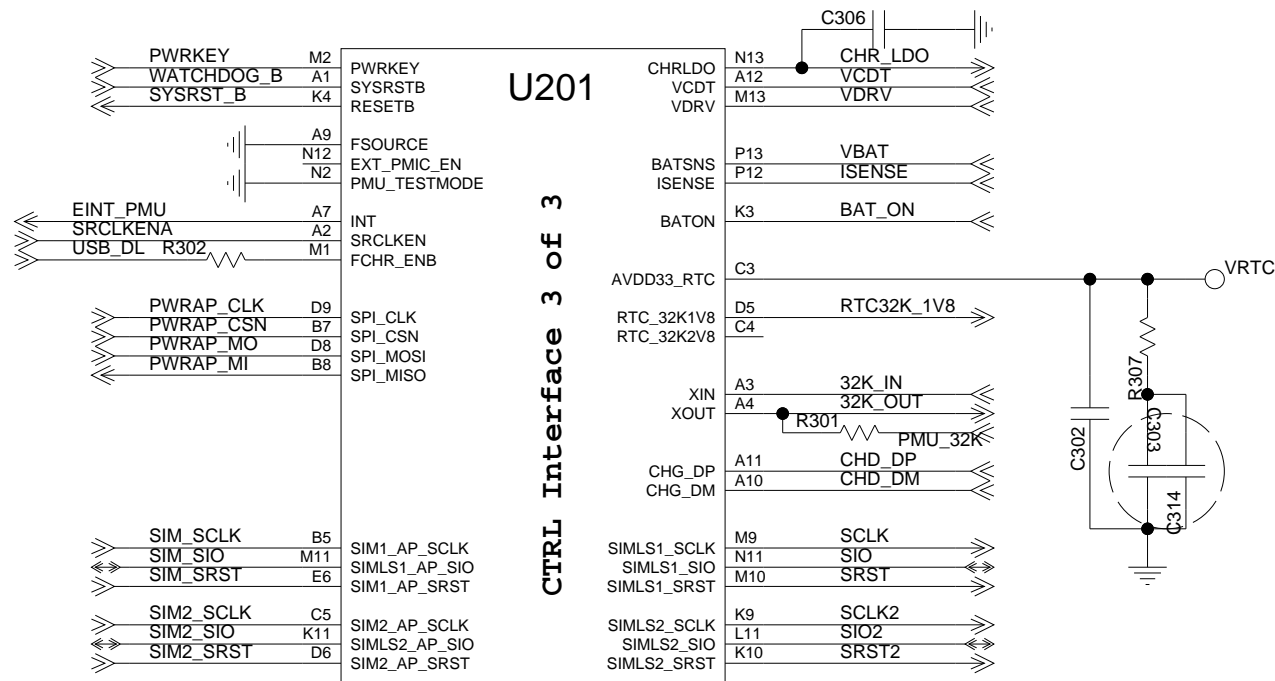
VPROC	1.15V (0.7~1.4V DVFS) Sleep mode 0.85V	2.8A	AP,Modem,SYS
VSYS	2.2V	1.2A	
VPA	0.5~3.4V	600mA	3G PA
VSRAM	1.05V (1.05~1.26 DVFS) Sleep mode 0.85V	600mA	AP SRAM
VA_PMU	2.8V	150mA	Analog, ADC
VTCXO	2.8V	40mA	MT6166 TCXO
VCN28	2.8V	30mA	FM, MT6627 TCXO
VCN33	3.3V	240mA	WiFi PA
VCAMA	2.8V	150mA	CAM_AVDD
AVDD28	2.8V	40mA	Audio block(internal)
VM	1.25V	700mA	Memory
VEMC_3V3	3.0V	400mA	eMMC NAND
VMC	1.8/3.3V	100mA	TF Card IO IF.
VMCH	3.3V	400mA	TF Card Power
VDD18	1.8V	300mA	1V8 IO, DDR, eMMC
VDD28	2.8V	200mA	2V8 IO
VRF18	1.825V	200mA	MT6166 Transceiver
VCN18	1.8V	200mA	MT6627
VCAM_DVDD	1.8V	150mA	CAM_DVDD
VCAM_DOVDD	8V	100mA	CAM_DOVDD
VCAM_AF	2.8V	100mA	CAM_AFVDD
VGP1	2.8V	100mA	CTP_AVDD
VGP2	1.8V	100mA	EFUSE
VGP3	1.2/1.3/1.5/1.8V	200mA	CTP_IOVDD
VUSB	3.3V	20mA	USB PHY
VSIM1	1.8/3.3V	50mA	SIM1
VSIM2	1.8/3.3V	50mA	SIM2
VIBR	2.8V	100mA	Vibrator
VRTC	2.8V	2mA	RTC block

The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 2 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

### 3. PMU-MT6323 Function Interface

	LPDDR2/1.2V	PCDDR3/1.35V	PCDDR3/1.5V	LPDDR1/1.8V	Default
SPI_CSN	H	H (20K)	H	L (20K)	PU
AUD_MOSI	L	L (20K)	H (20K)	L	PD



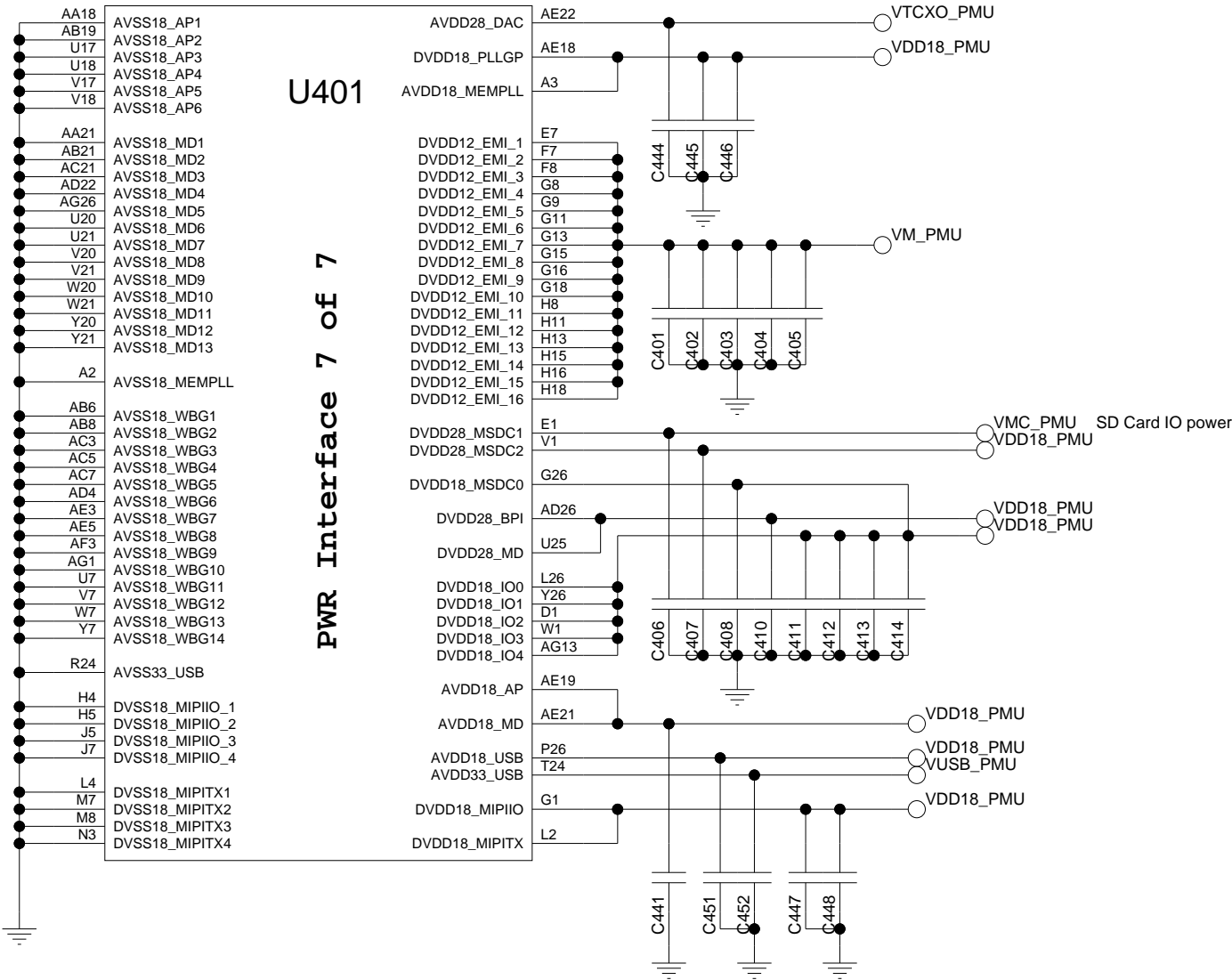
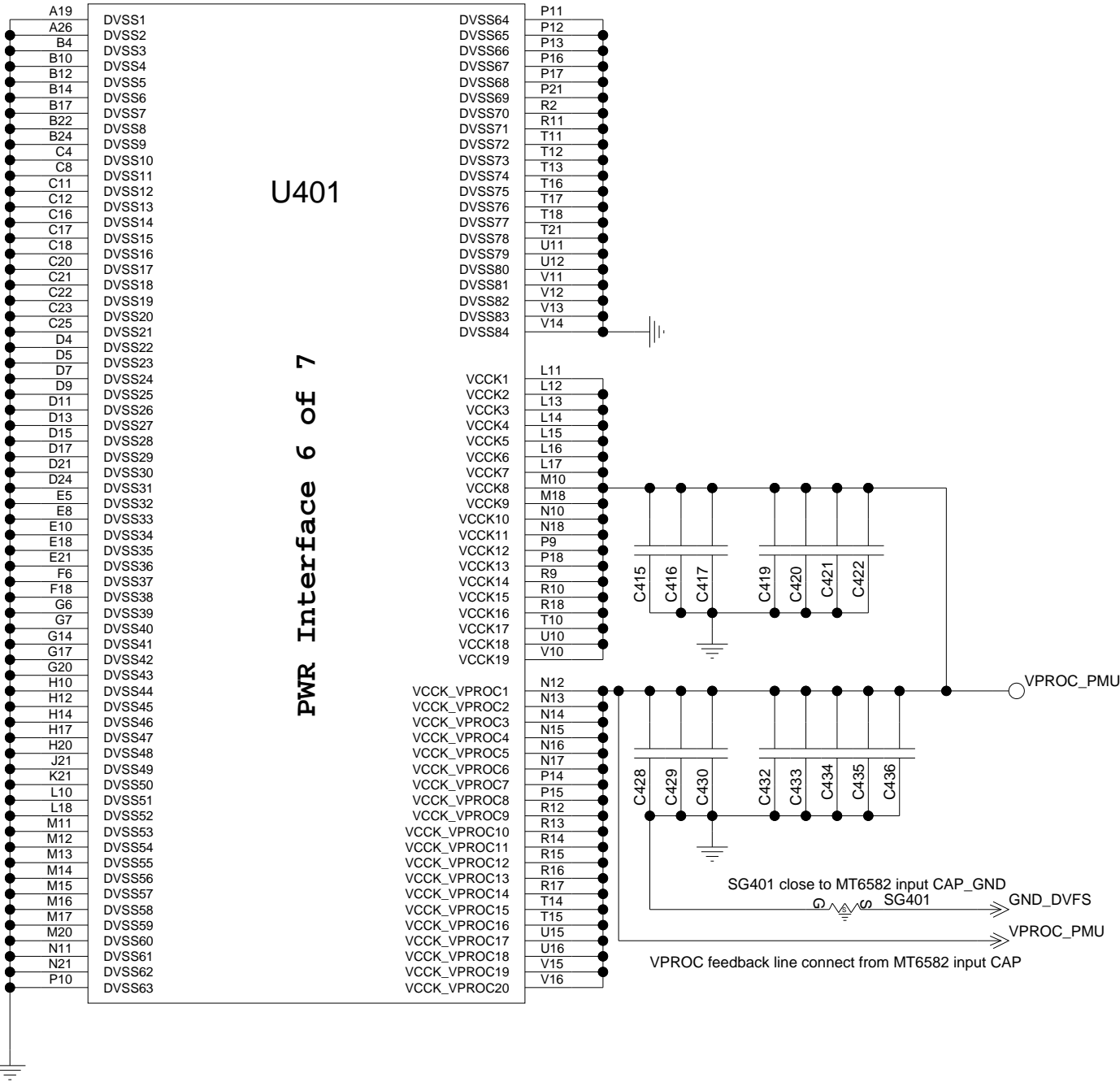
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DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 3 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

4. MT6582 Power Input

MT6582-T	39200565
MT6582-W	39200576
MT6582M-T	39200564
MT6582M-W	39200570



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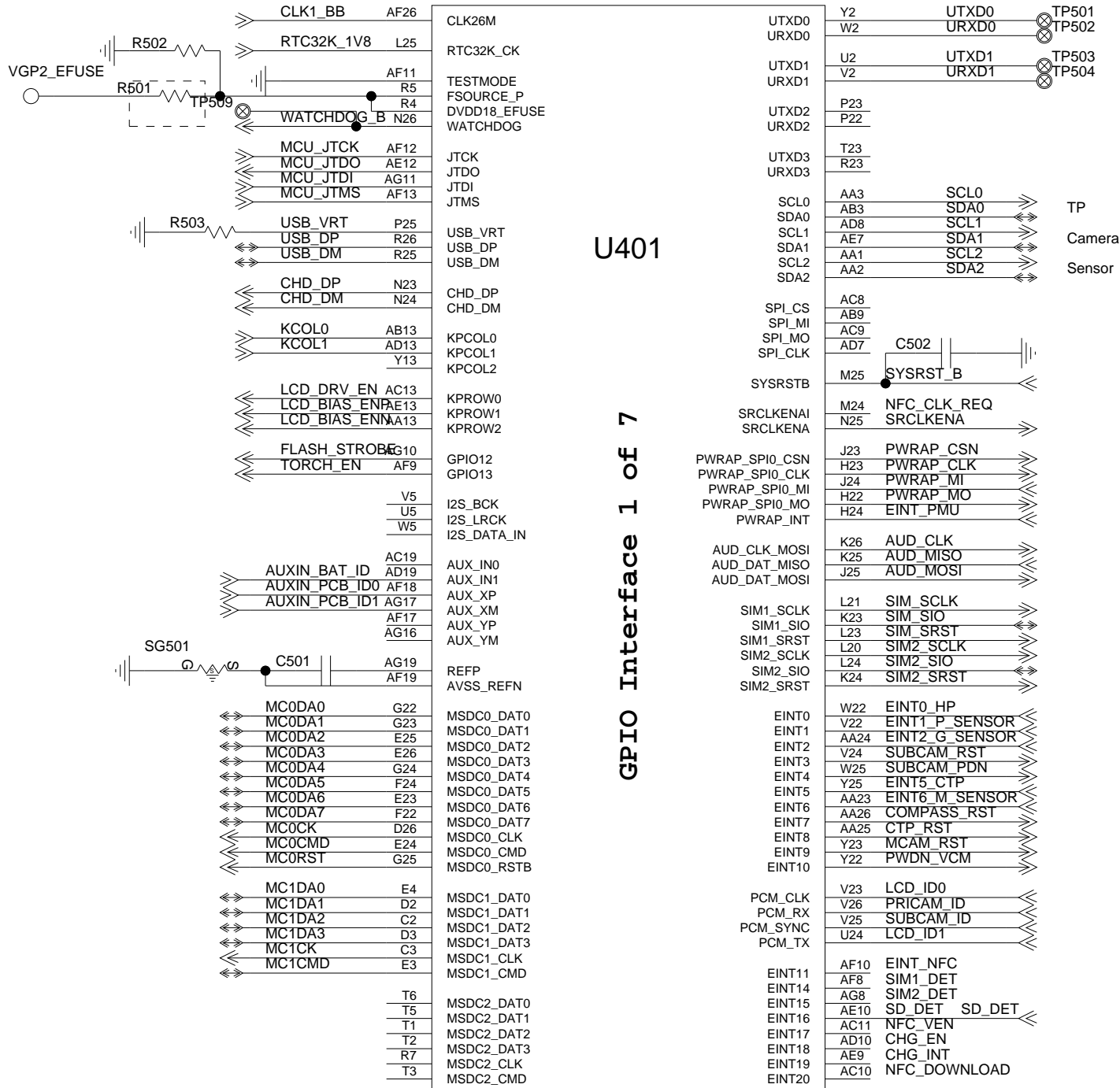
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 4 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

A

Note: For Efuse,R501 SMT 0 ohm,R502 should SMT 1uF(08071128);

For No Efuse,R501 DNI,R502 should SMT 0 ohm;



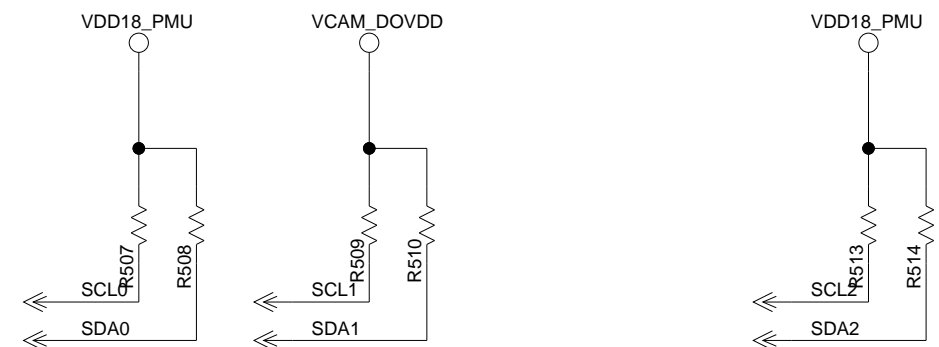
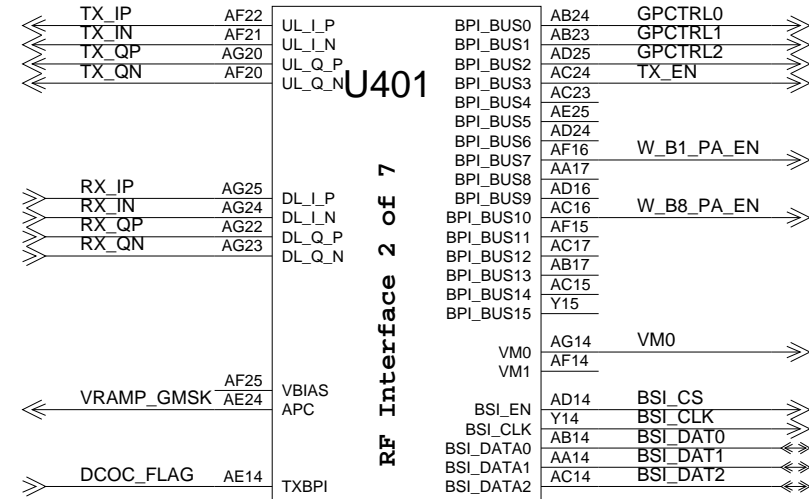
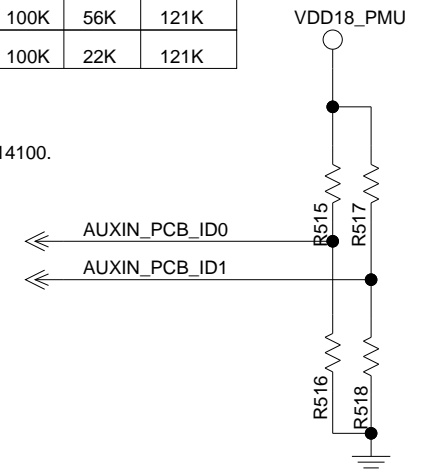
U401

GPIO Interface 1 of 7

PCB_ID	R515	R516	R517	R518
A	100K	100K	DNI	10K
B	100K	100K	121K	22K
C	100K	100K	121K	56K

PCB_ID	R515	R516	R517	R518
A	100K	100K	100K	100K
B	100K	100K	56K	121K
C	100K	100K	22K	121K

\* The Board ID file archive on the server,  
any requirements please contact Xubo 114100.



The type and specification of the components refer to the BOM

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				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 5 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

A

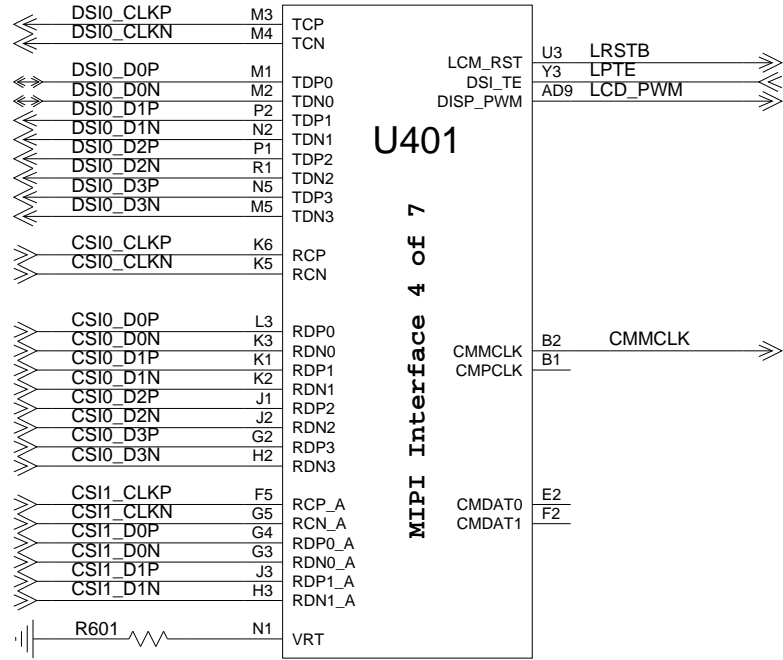
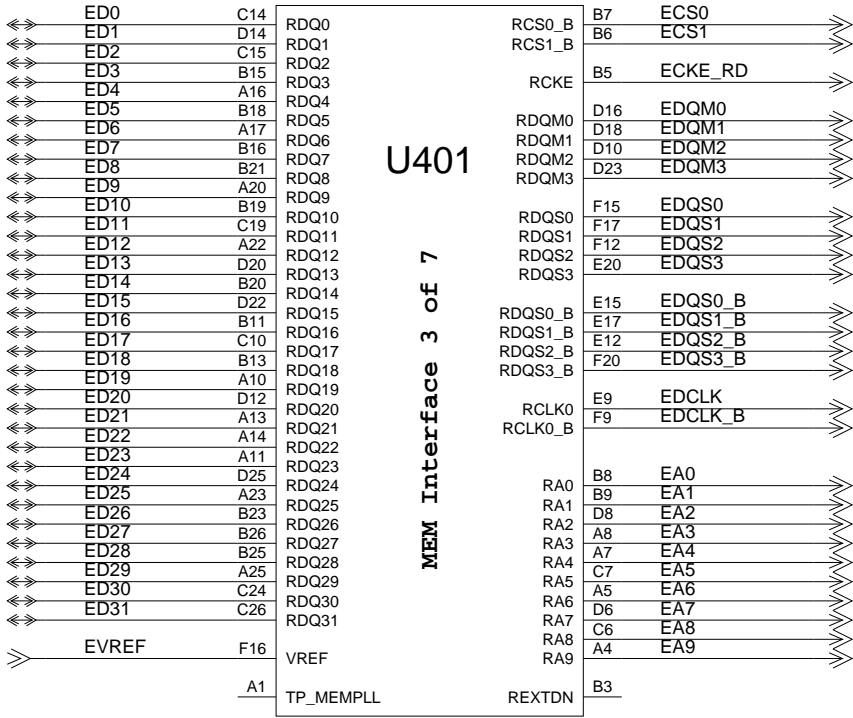
B

C

D

D

6. MT6582 High-speed BUS Interface (DDR2,MIPI)



The type and specification of the components refer to the BOM

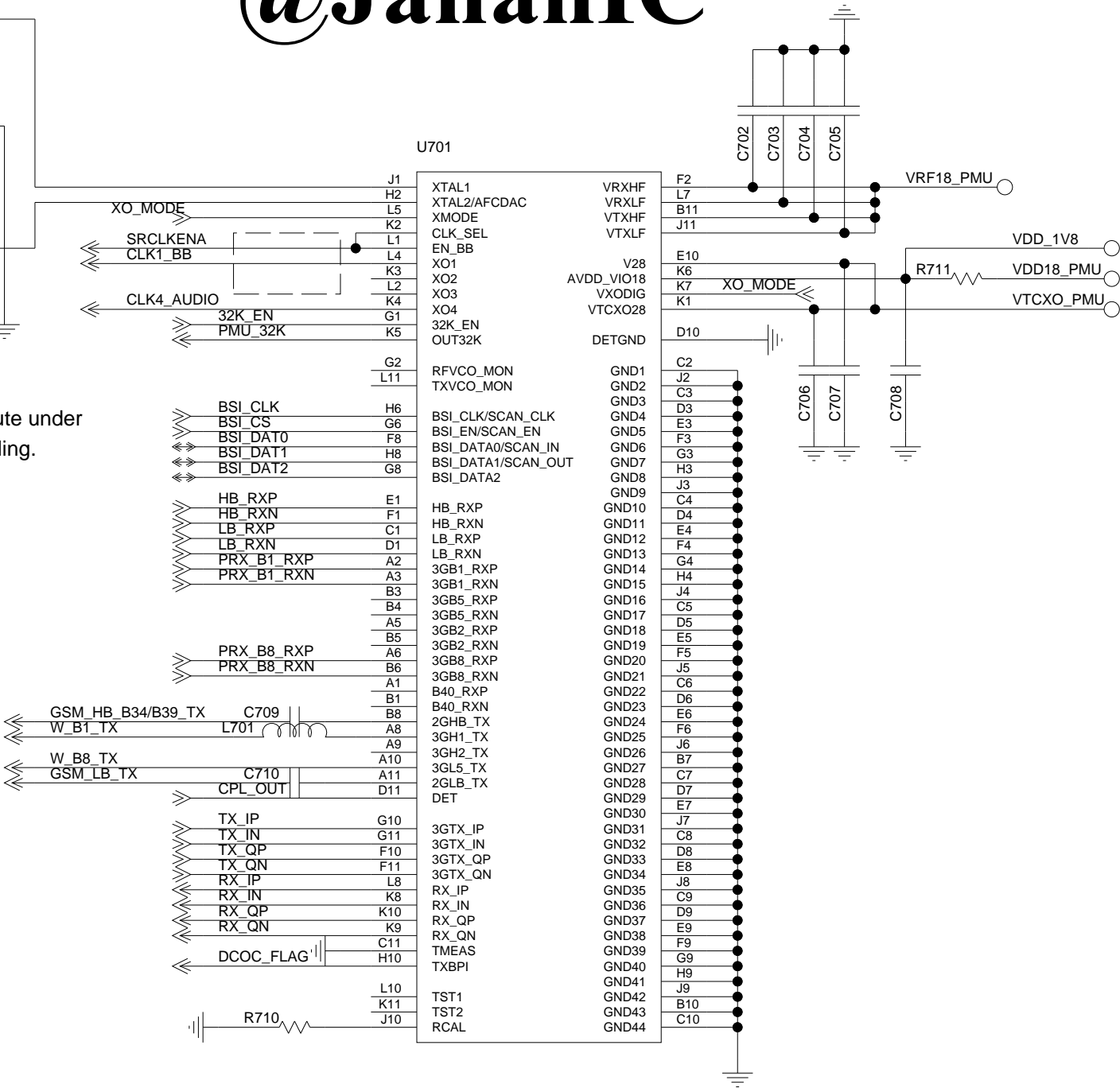
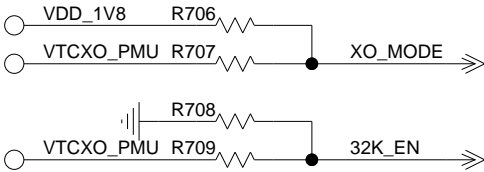
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DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 6 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

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GND\_AUXADC Connect X700 pin2 GND to MT6323 pin B2 first, then to main GND near pin B2

THERM\_ADC and AUXADC\_REF route as differential line, AUXADC\_GND route under THERM\_ADC and AUXADC\_REF to provide current return path and well shielding. The shielding ground line cannot overlap or close to noisy source.

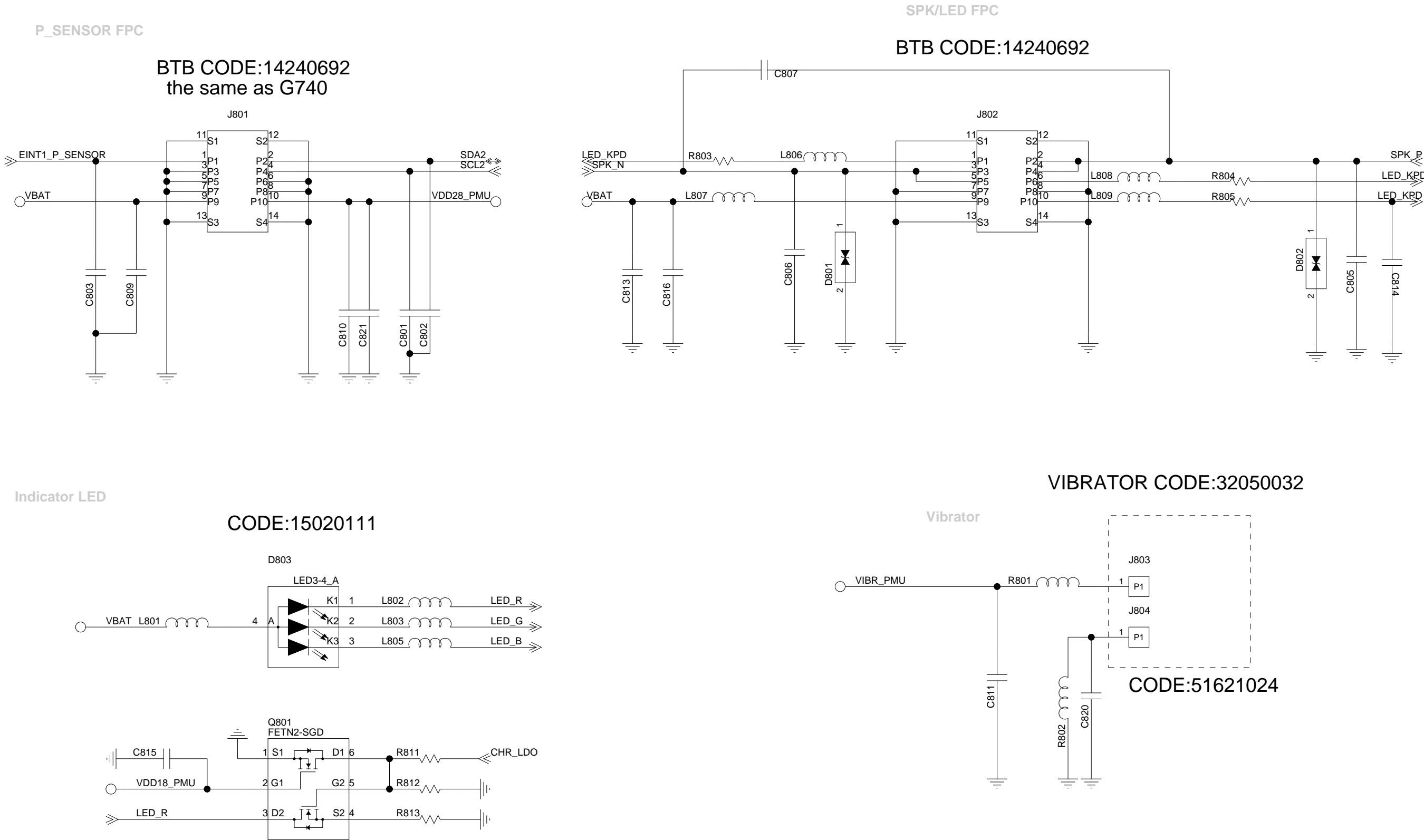
XO Config	VXODIG	XMODE	32K_EN
DCXO + 32K XO	VDD_1V8	VDD_1V8	GND
DCXO + 32K Less	VTCXO_2V8	VTCXO_2V8	VTCXO_2V8



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				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 7 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

8. Peripheral FPC Interface/Indicator LED/Vibrator



The type and specification of the components refer to the BOM

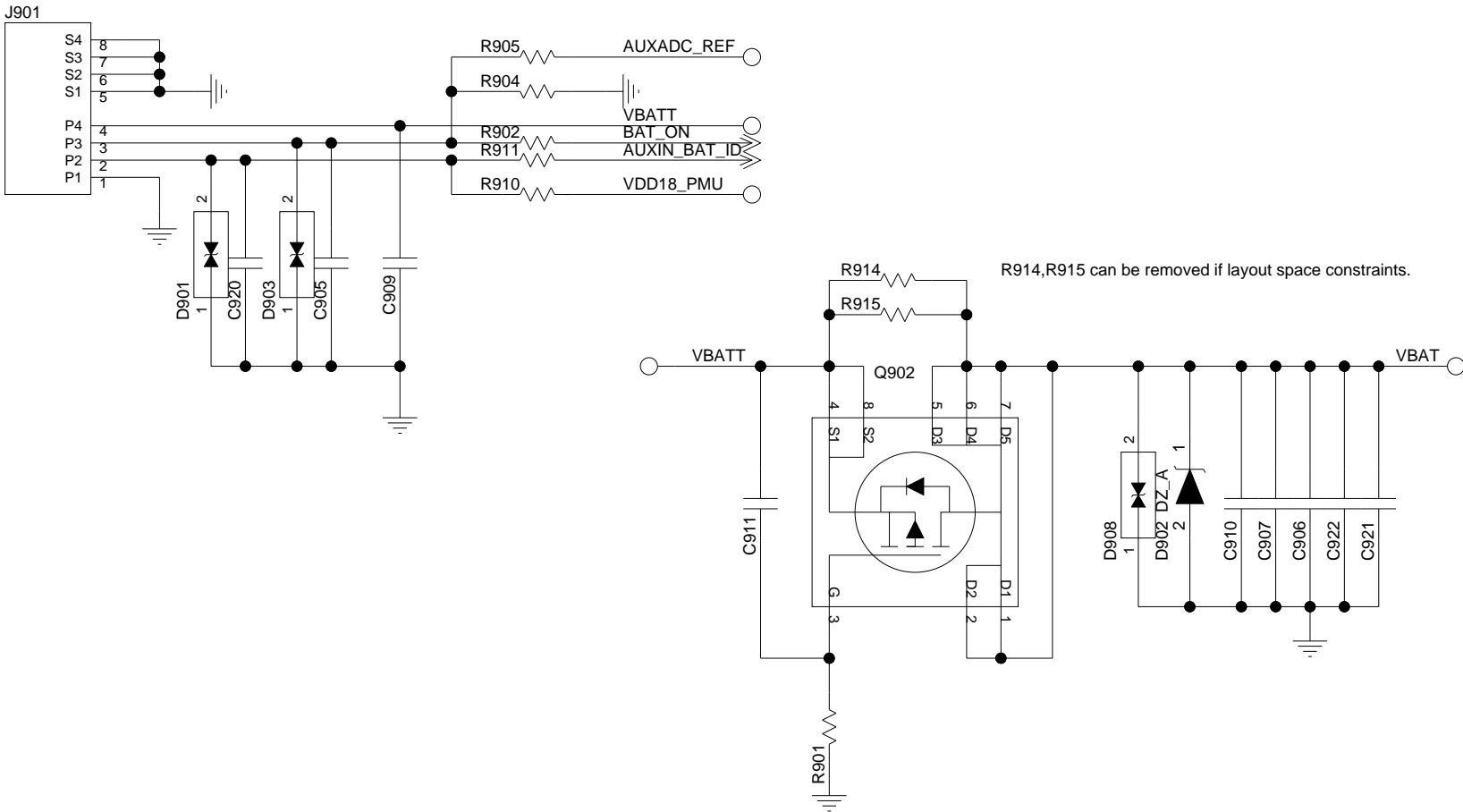
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 8 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	



9. Battery/USB/Charger

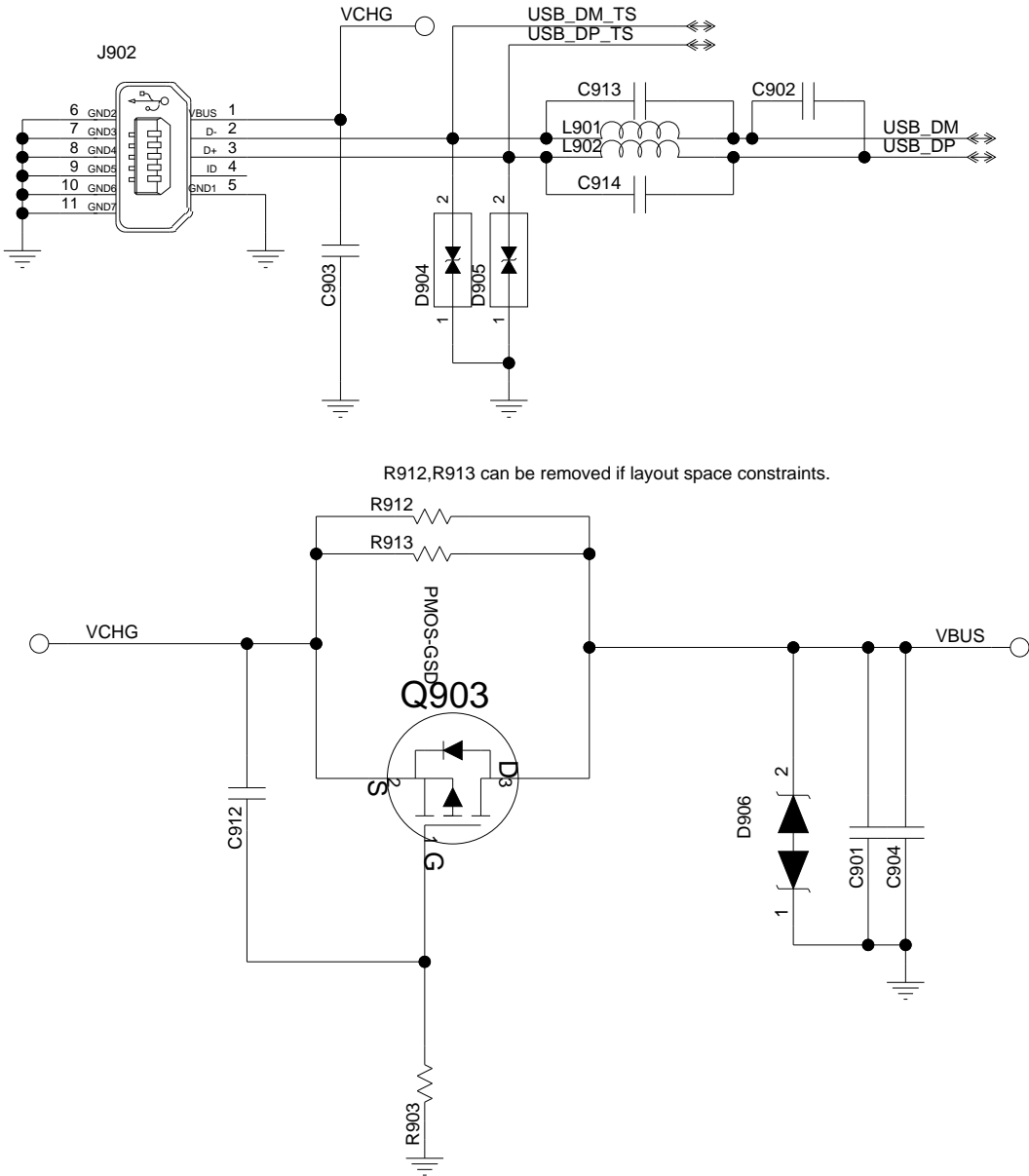
Battery Connector

CODE:14240582

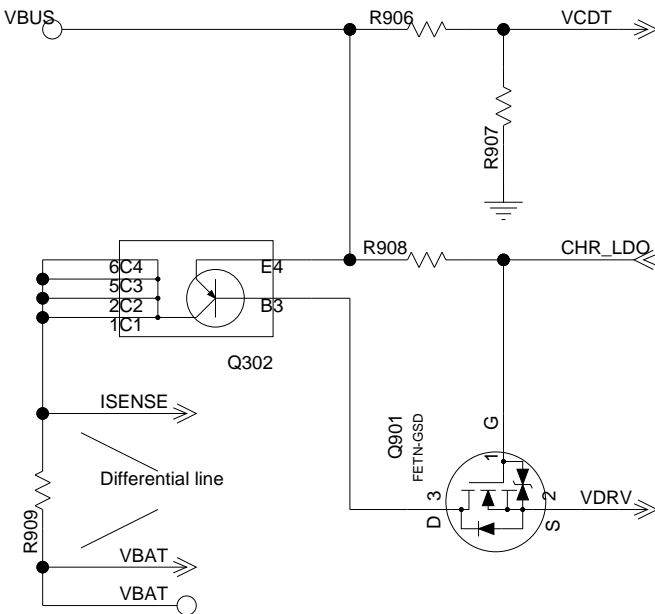


Micro USB Connector

CODE:14240656



Linear charger



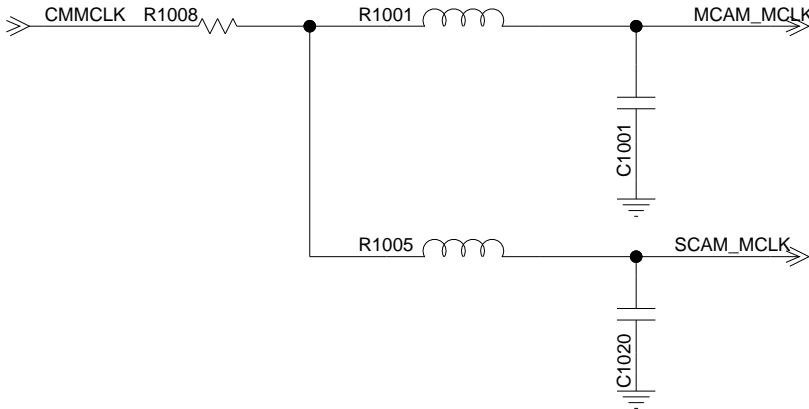
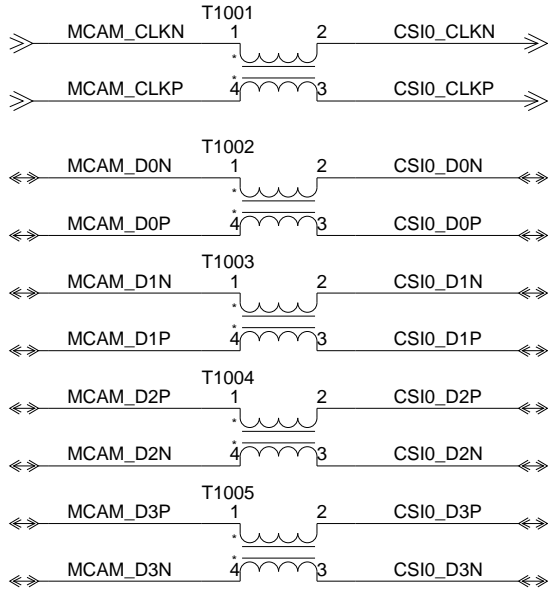
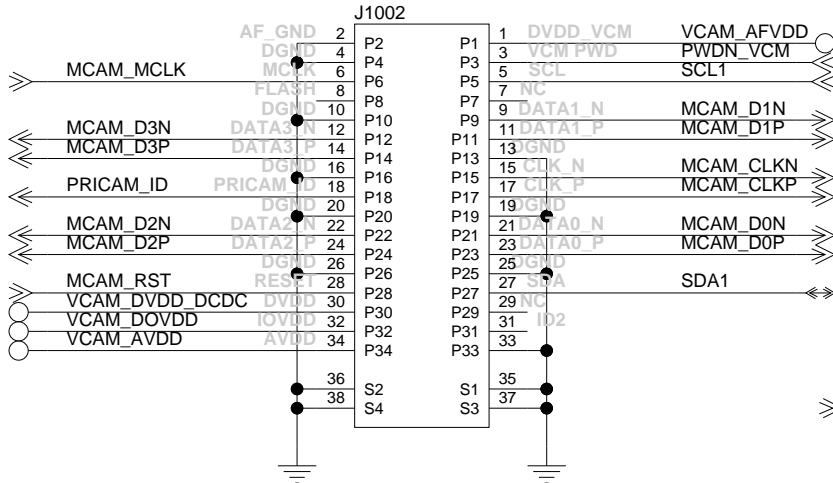
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REVIEWED	LIANGDAIXI 129964	VER		PART_NUMBER	
		A		03022LNN	
		SHEET 9 OF 28		HUAWEI TECH CO.,LTD.	

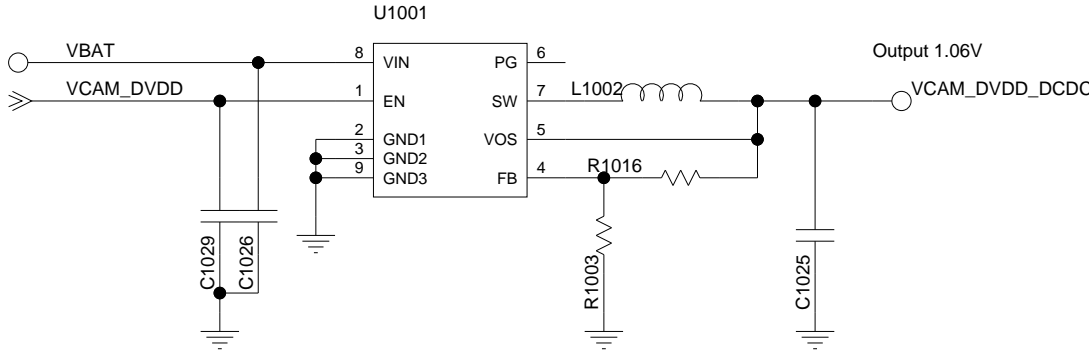
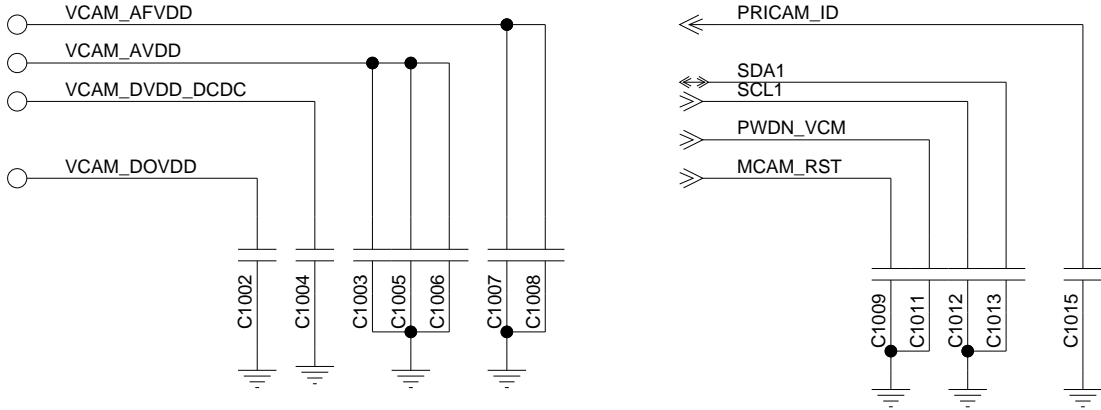
10. Main Camera/Slave Camera

Main Camera

8M MAIN CAMERA 23060131  
BTB CODE:14240579

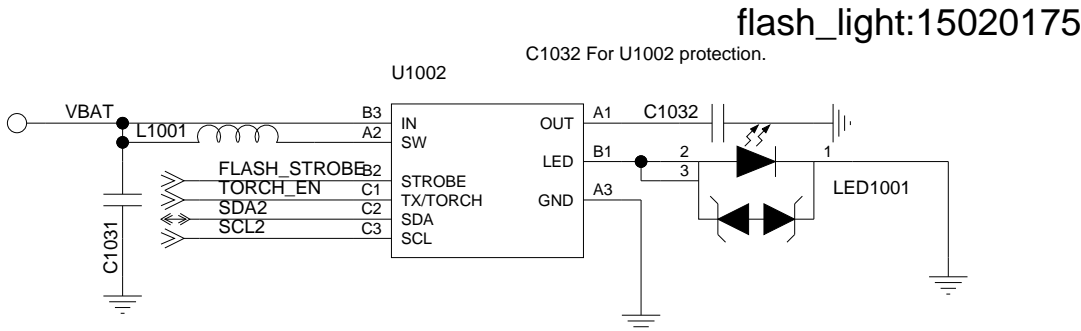
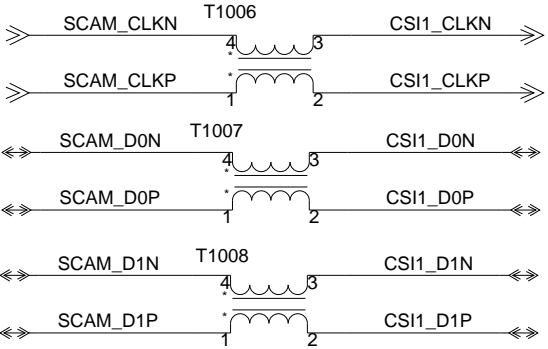
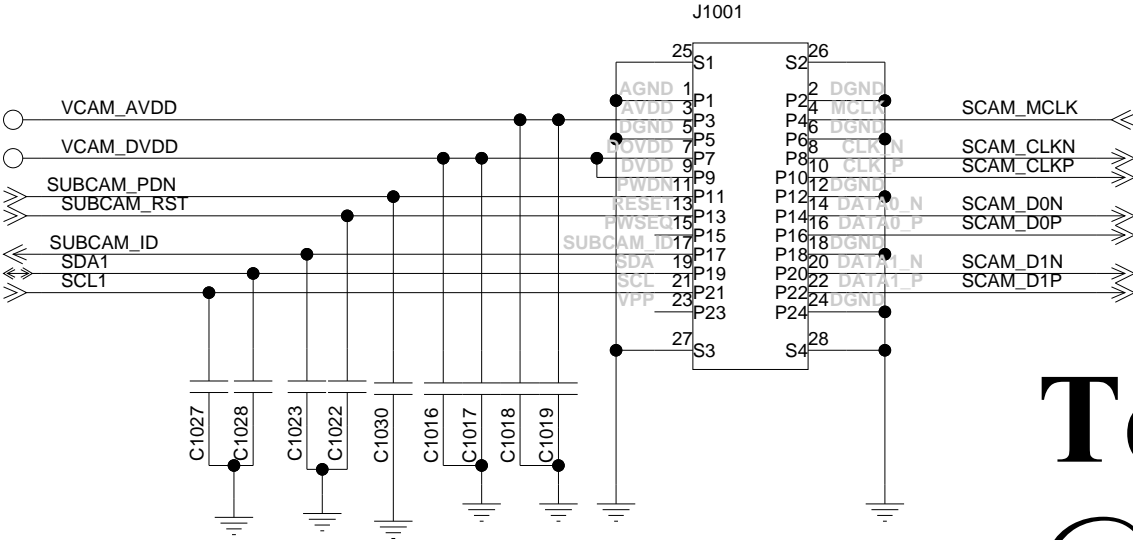


Main Camera Power



Slave Camera

5M SLAVE CAMERA 23060132  
BTB CODE:14240496

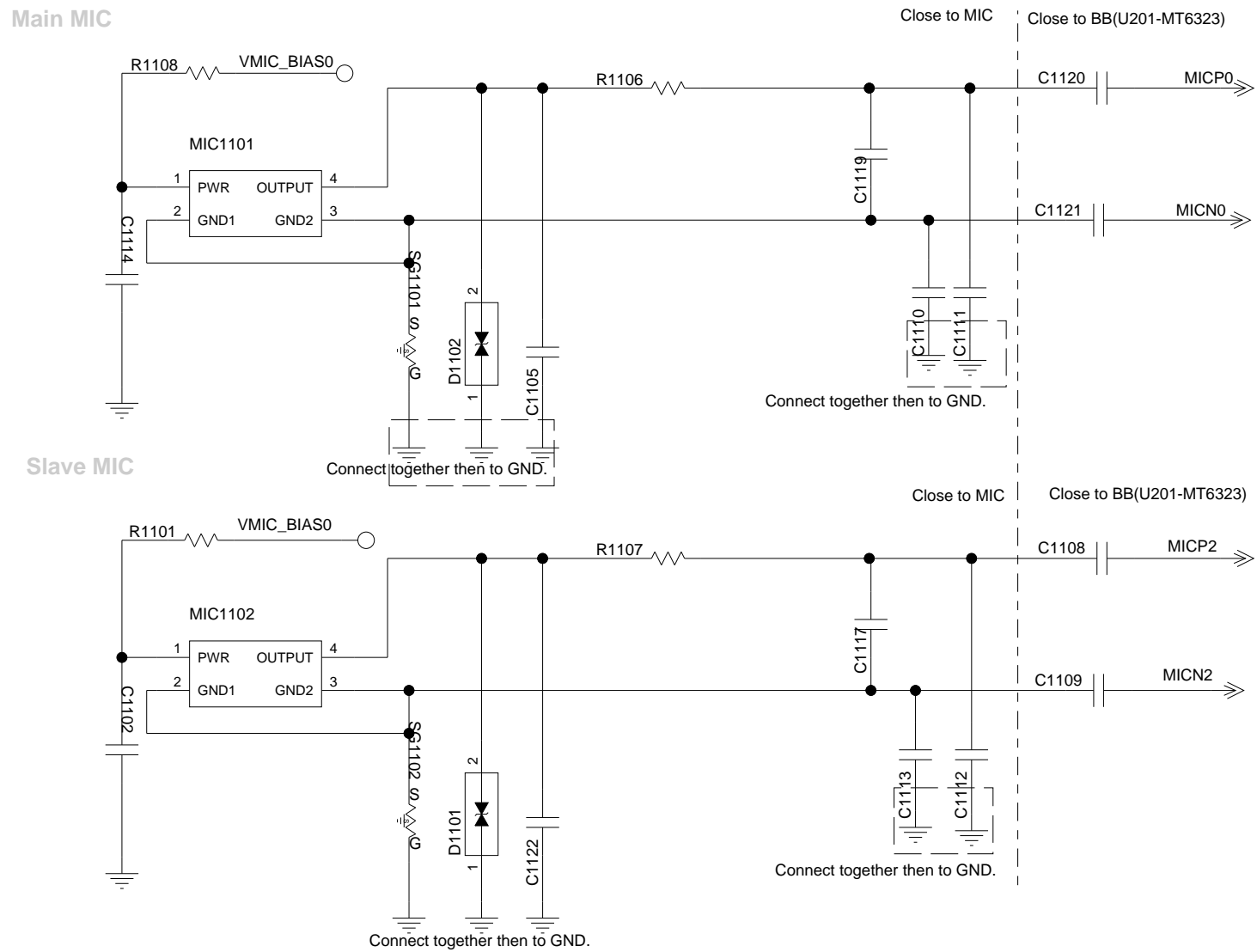
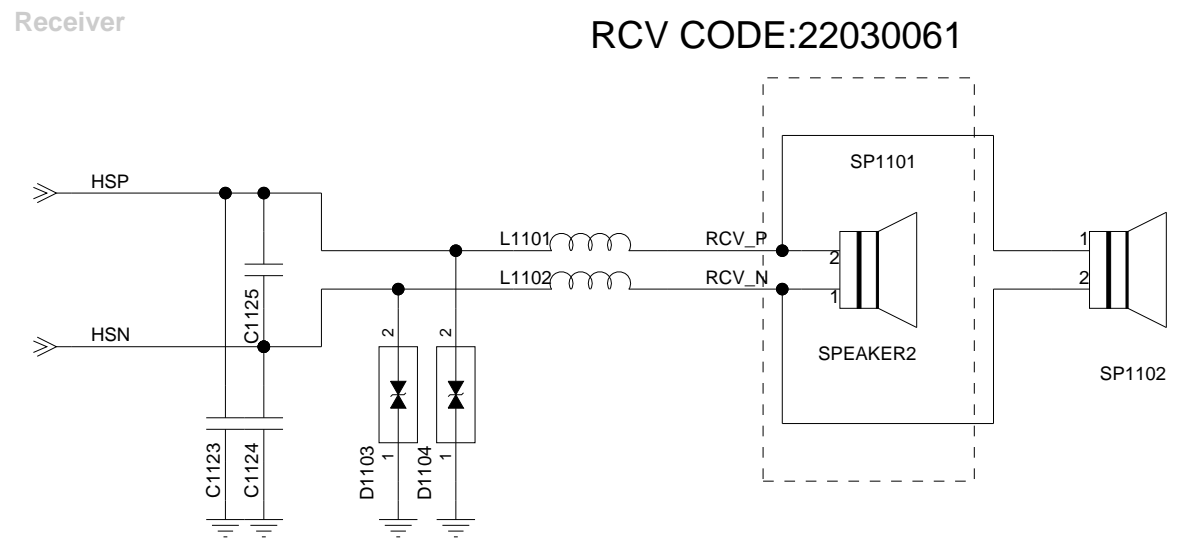
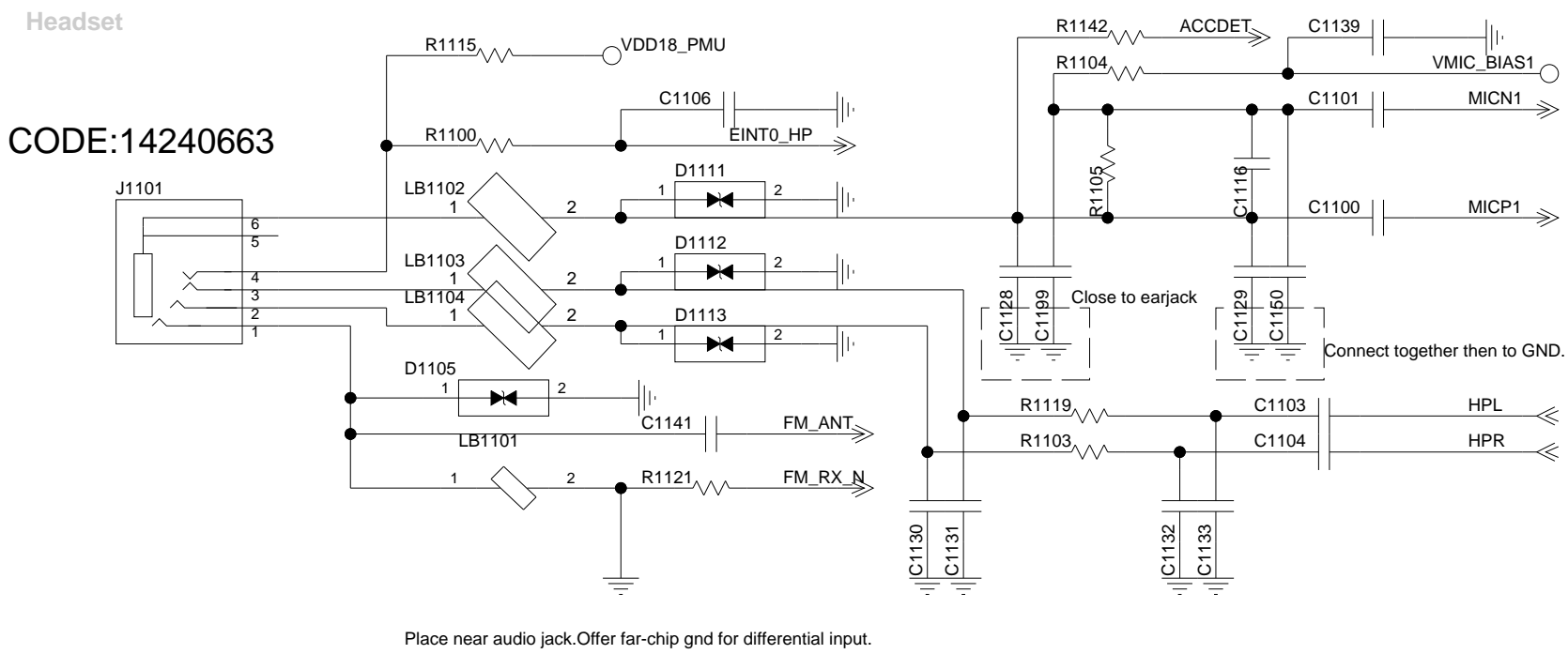


Telegram Channel  
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The type and specification of the components refer to the BOM

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				ECA NO	DATE
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 10 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

11. 3.5 Headset/MIC/Receiver



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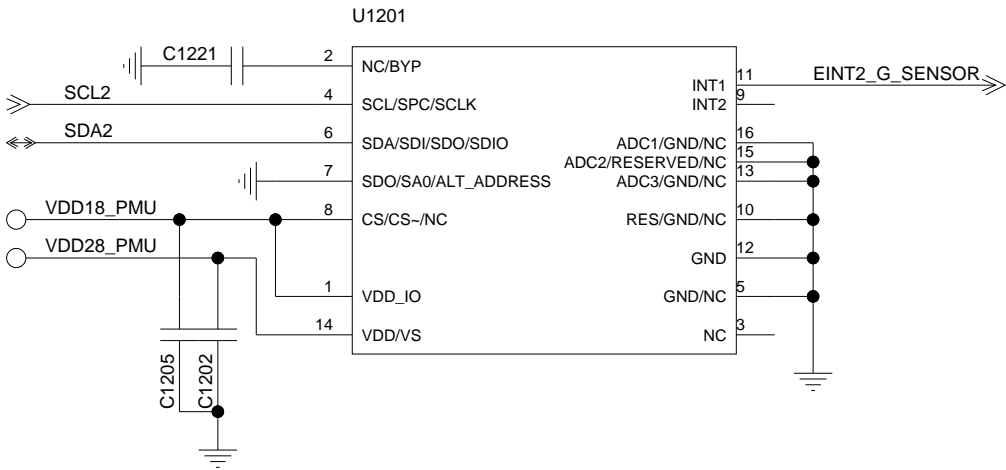
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 11 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

12. Sensor

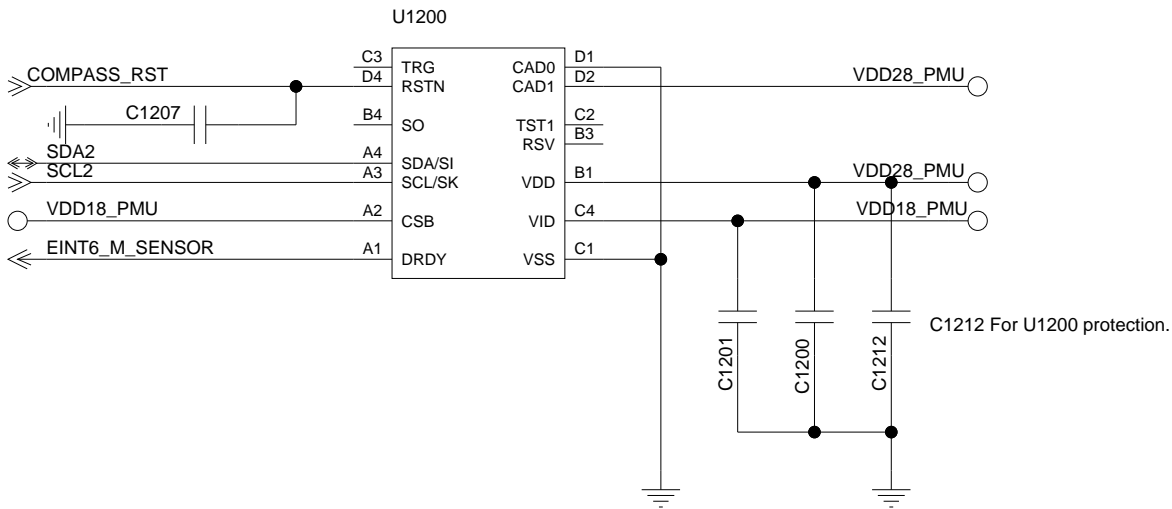
G Sensor

CODE:38140098



M Sensor-COMPASS

CODE:38140069

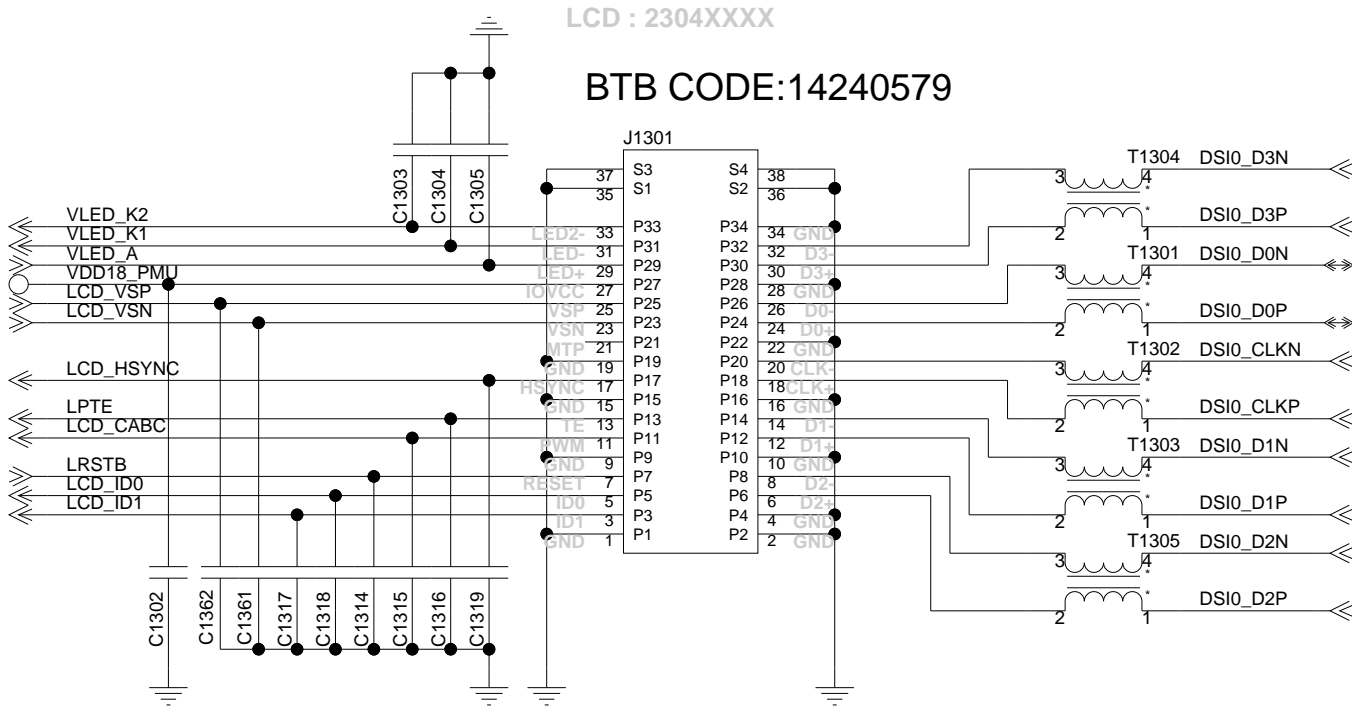


The type and specification of the components refer to the BOM

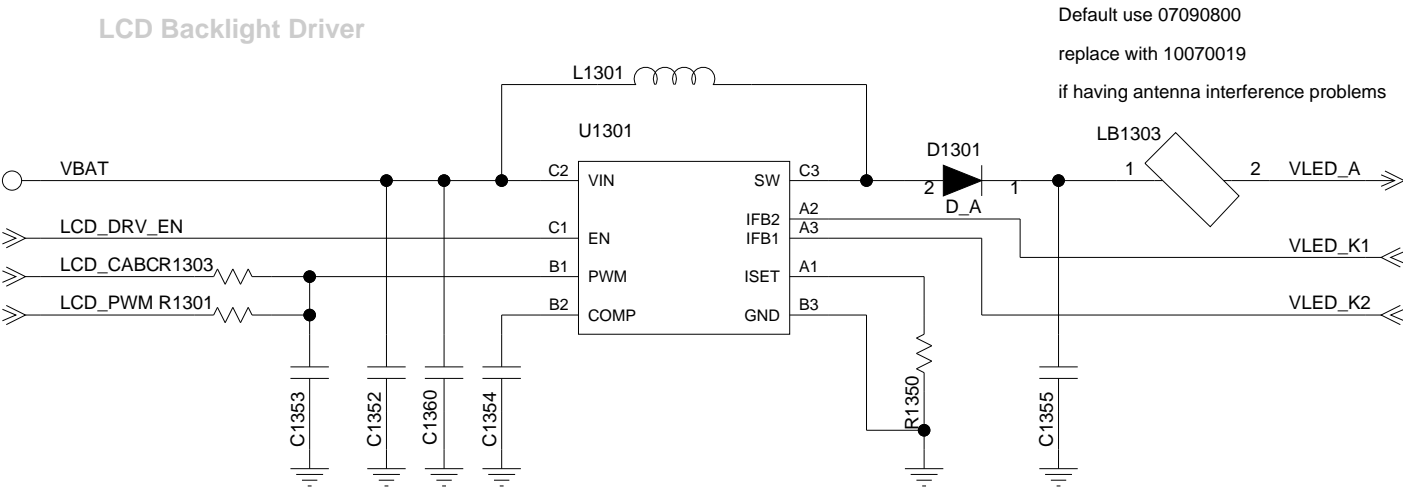
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 12 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

13. LCD/LCD Power

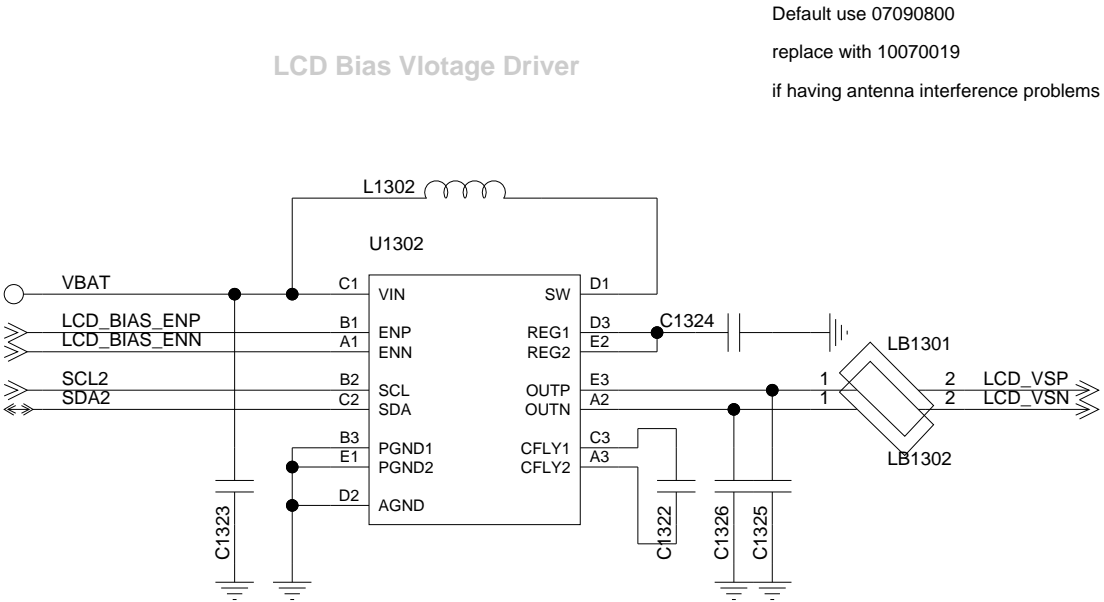
LCD



LCD Backlight Driver



LCD Bias Vlotage Driver

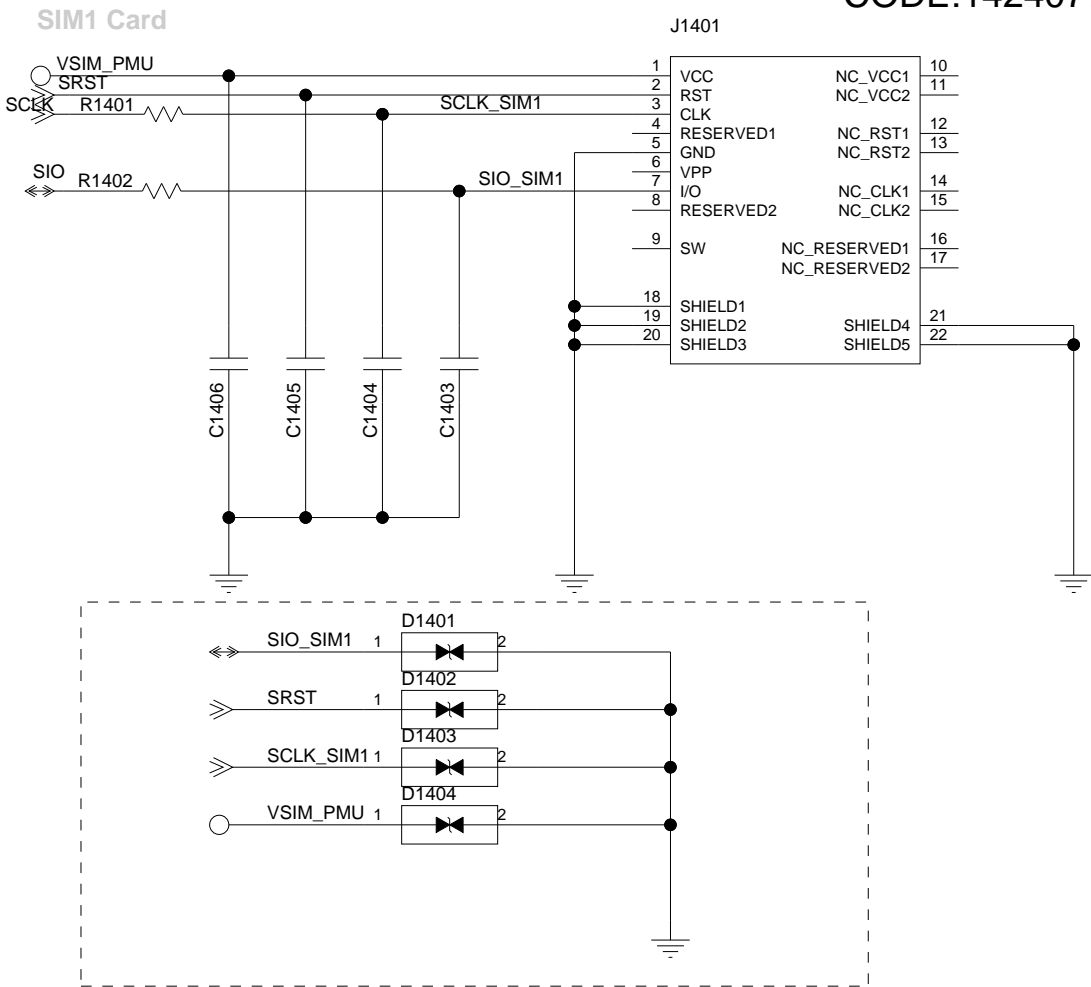


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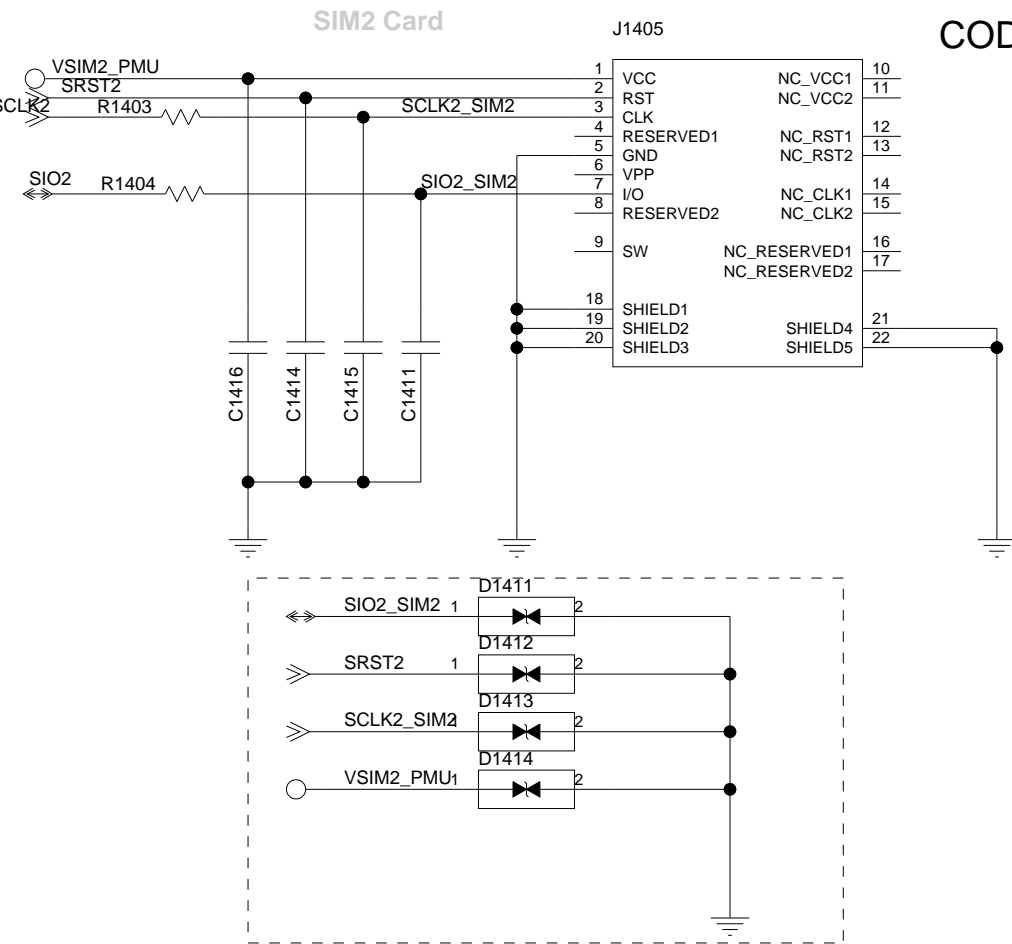
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 13 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

14. SIM/Micro SD Card

CODE:14240772



CODE:14240772



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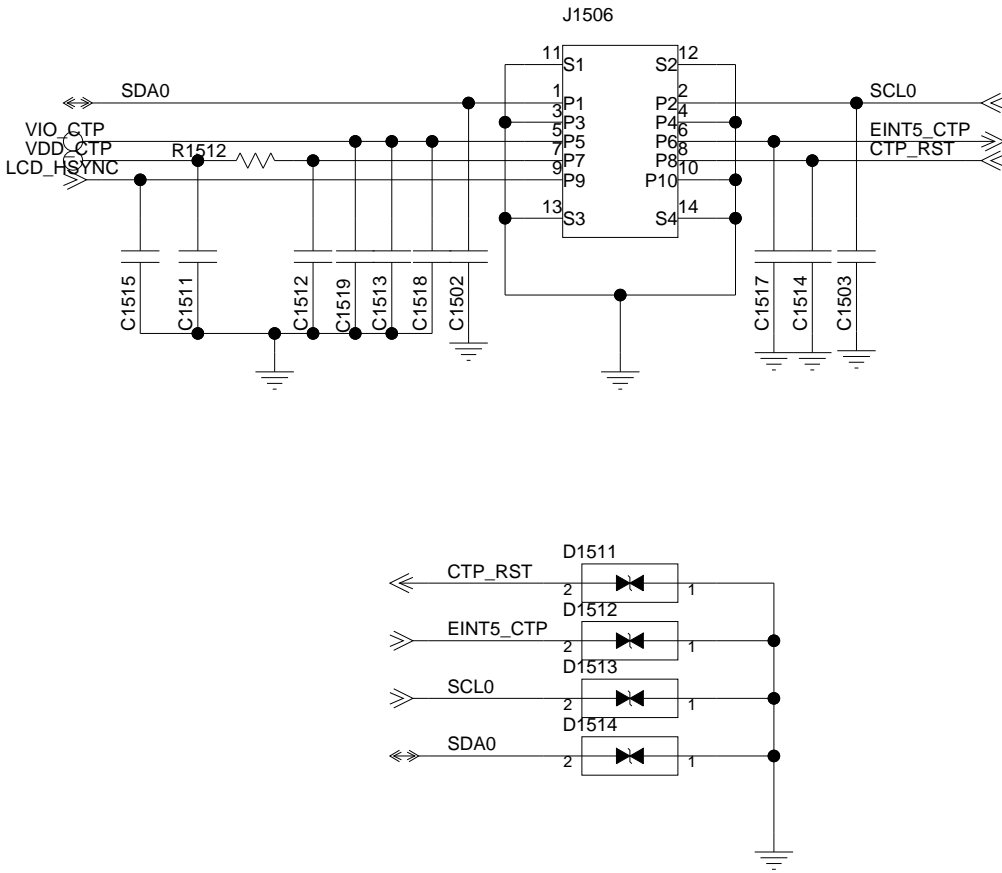
The type and specification of the components refer to the BOM

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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 14 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

15. CTP/Side Key (vloume,power)

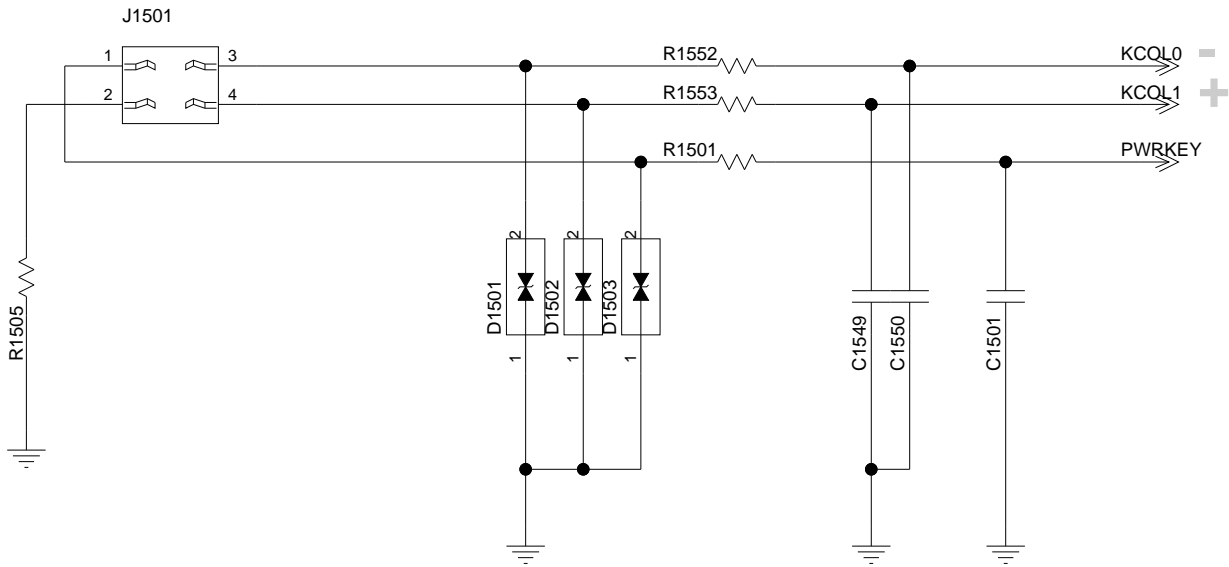
TP

CODE:14240692



Power Key/Volume +/- Key

CODE:14240778

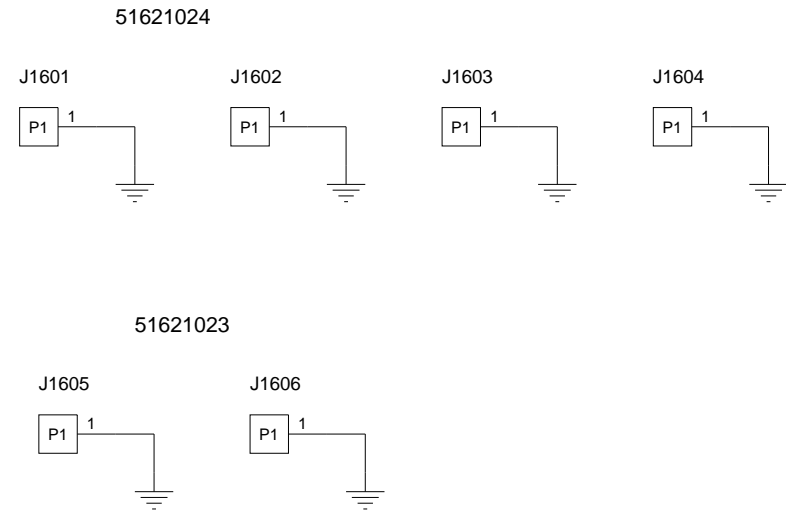


The type and specification of the components refer to the BOM

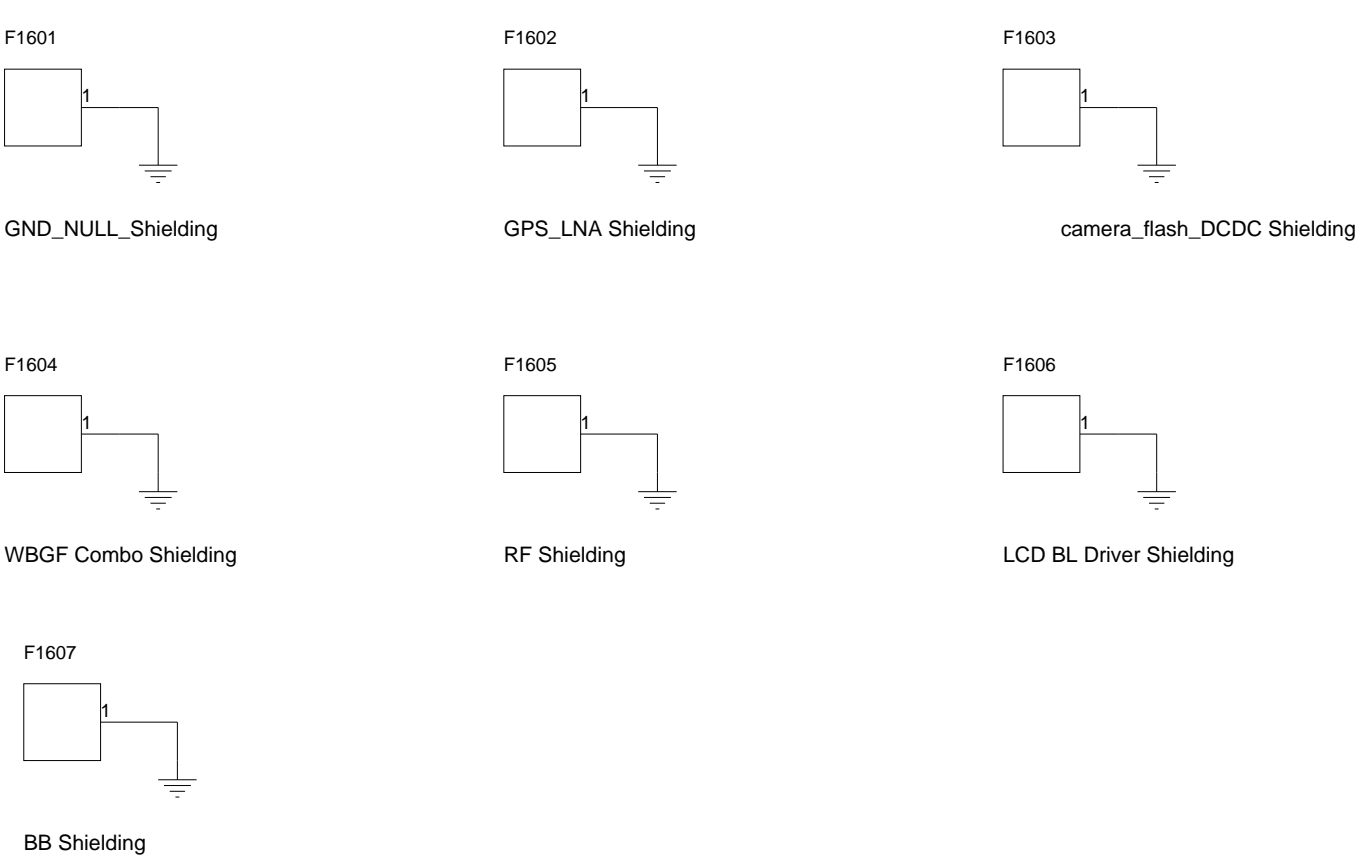
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 15 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

16. Shield

Front Housing GND Spring



Shielding



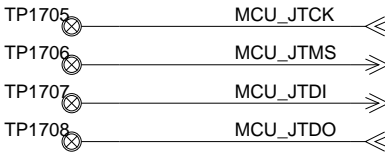
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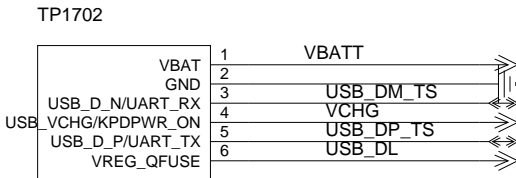


17. Testpoint/JTAG

JTAG



Equipment Test Point



\* Add protection components on each pin.

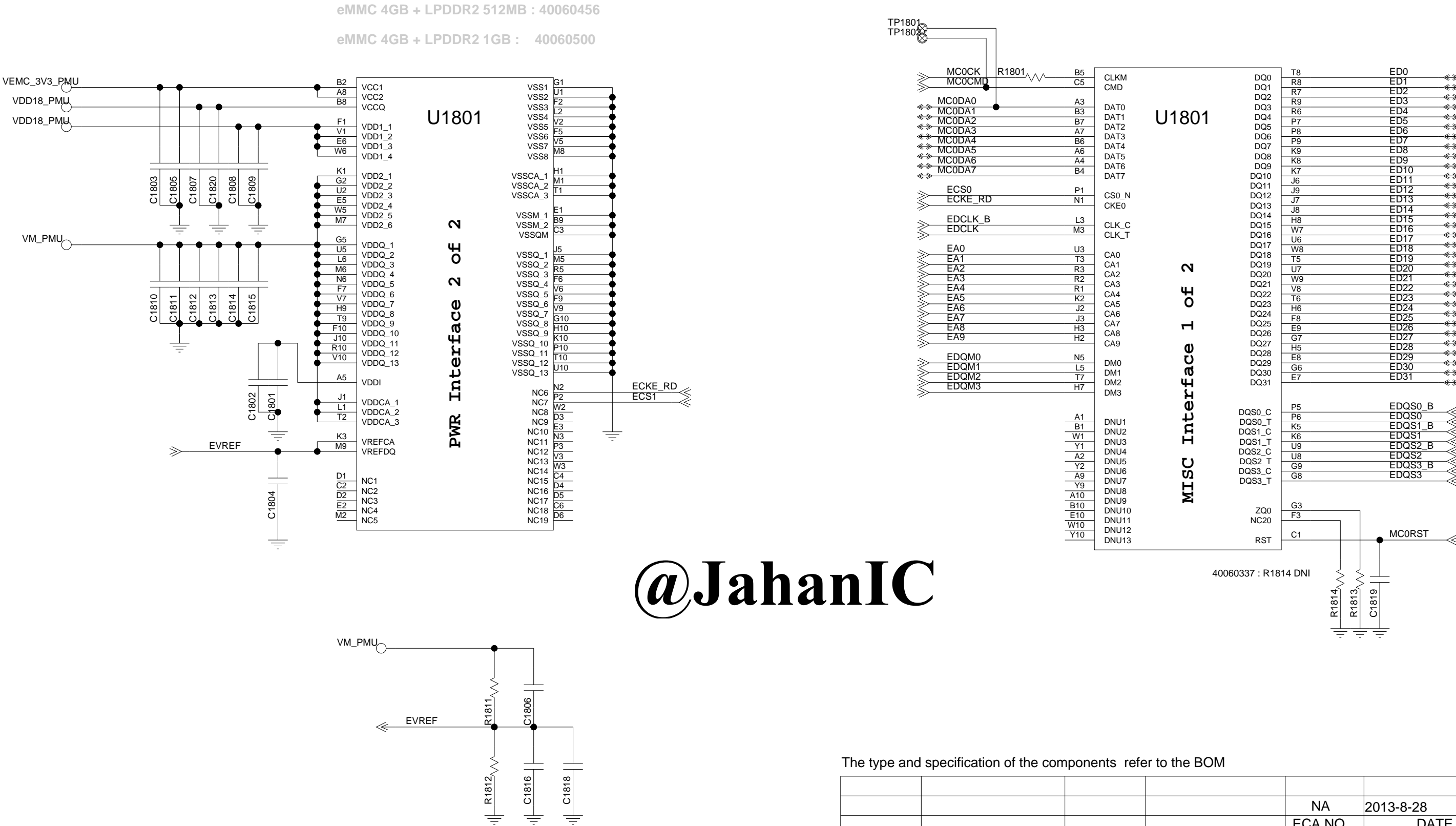
These can be removed depends on the layout design,

when they can share the battery,USB connector side protection components.

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DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 17 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

18. eMMC+LPDDR2



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DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 18 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

19. Reserved

The type and specification of the components refer to the BOM

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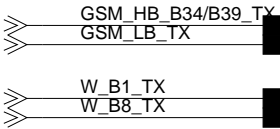
20. Reserved

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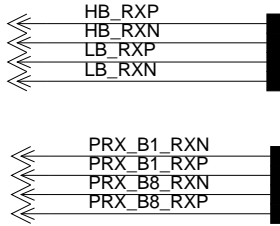
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REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 20 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

21. RF Input Output Ports

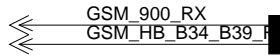
RF TX(MT6166->PA)



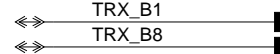
RF RX(MT6166<-PA)



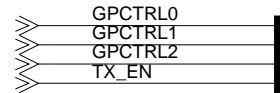
RF RX(PA<-ANT)\_GSM\_TD



RF TRX(Duplexer<->PA)\_B1\_B8



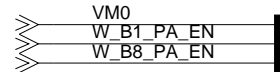
SKY77592 PA Control



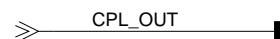
SKY77592 PA VRAMP Control



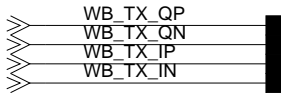
W\_B1\_B8 PA Control



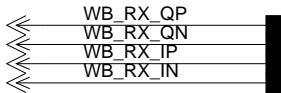
W\_B1\_B8 PA PWR DET



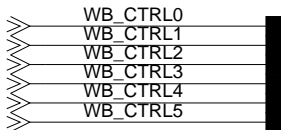
MT6627 WB TX IQ



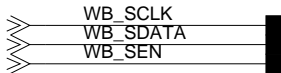
MT6627 WB RX IQ



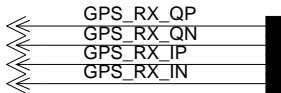
MT6627 WB CTRL



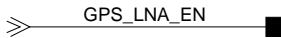
MT6627 WB SPI



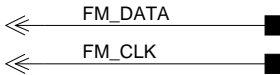
MT6627 GPS RX IQ



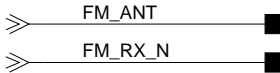
MT6627 GPS LNA EN



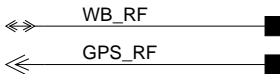
MT6627 FM I2S



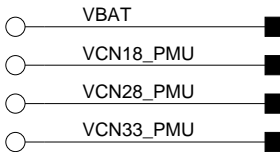
MT6627 FM RF



MT6627 WIFI/BT RF



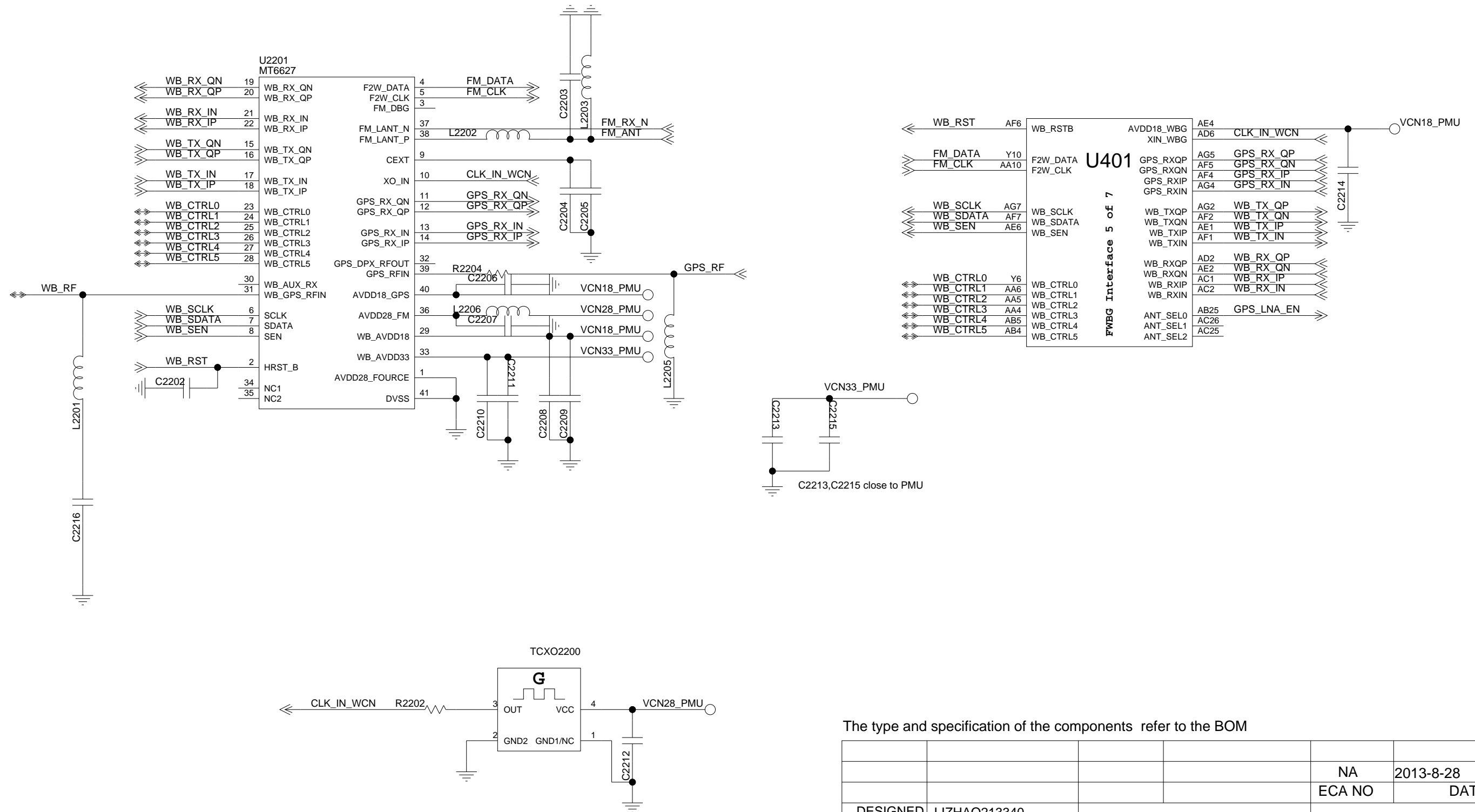
RF Device Power



The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 21 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

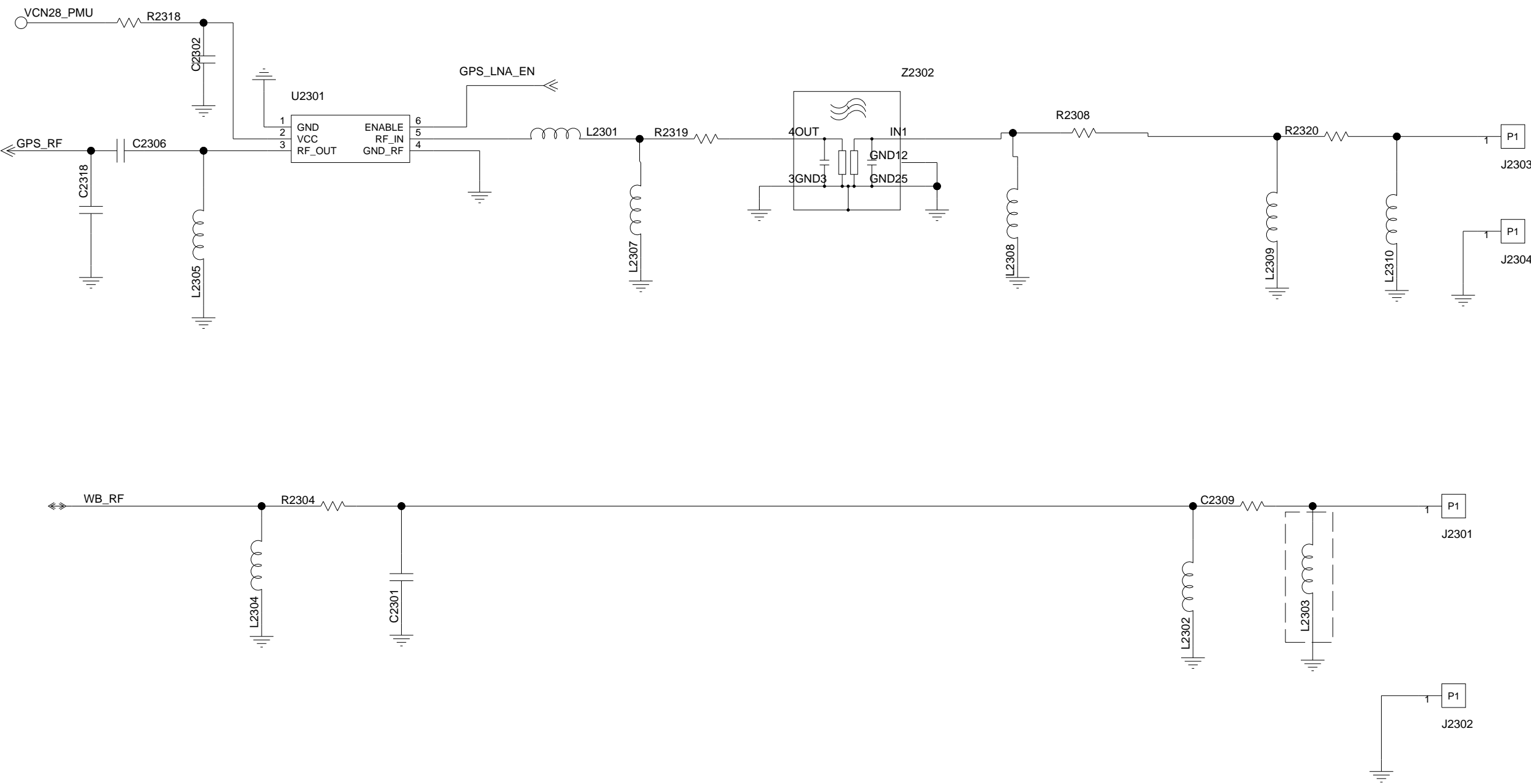
## 22. WIFI/BT/FM/GPS MT6627



The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 22 OF 28	
		B	03022LNN	HUAWEI TECH CO.,LTD.	

23. WIFI/BT/FM/GPS MT6627



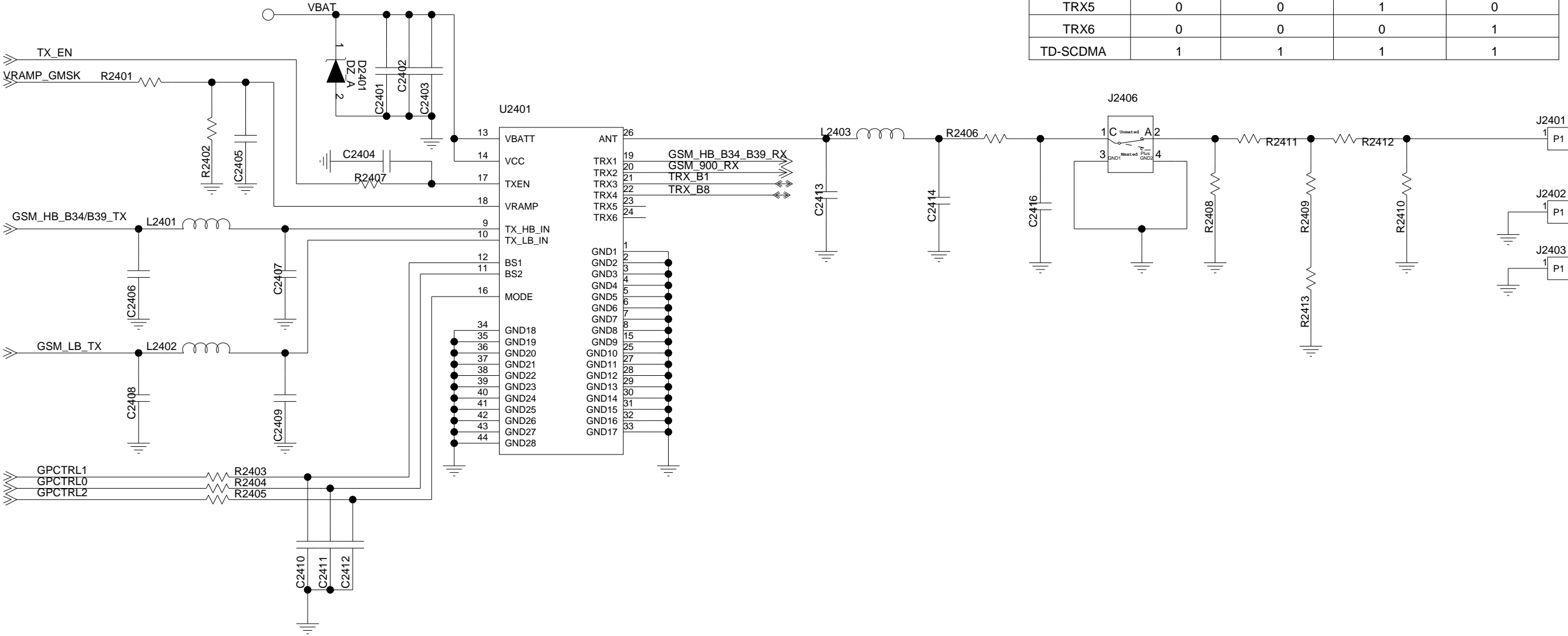
The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 23 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

24. UMTS/TD/GSM PAM

SKY77592 Mode Control Logic

Mode	Input Control Bits			
	TxEN	Mode	BS1	BS2
Standby	0	0	0	0
LB_GMSK_TX	1	0	0	1
HB_GMSK_TX	1	0	1	1
LB_EDGE_TX	1	1	0	1
HB_EDGE_TX	1	1	1	1
TRX1	0	1	0	0
TRX2	0	1	1	0
TRX3	0	1	0	1
TRX4	0	1	1	1
TRX5	0	0	1	0
TRX6	0	0	0	1
TD-SCDMA	1	1	1	1

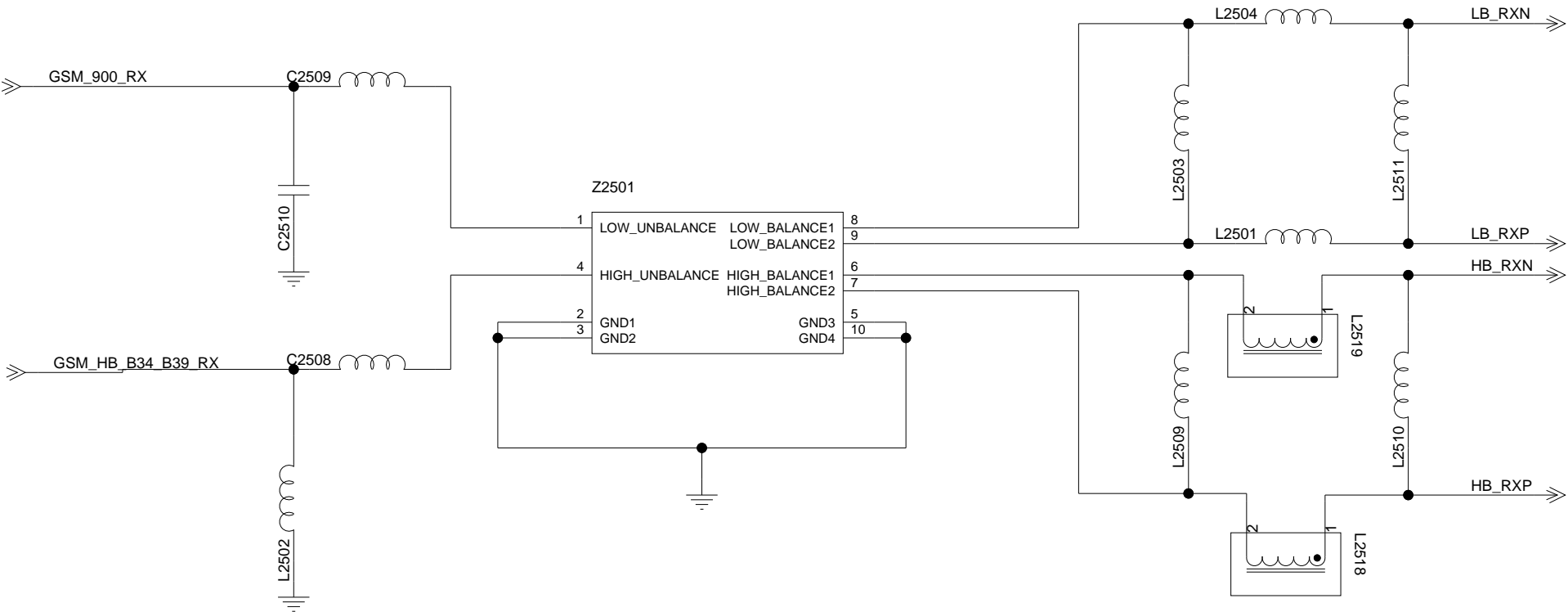


The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 24 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	



25. TD/GSM RX

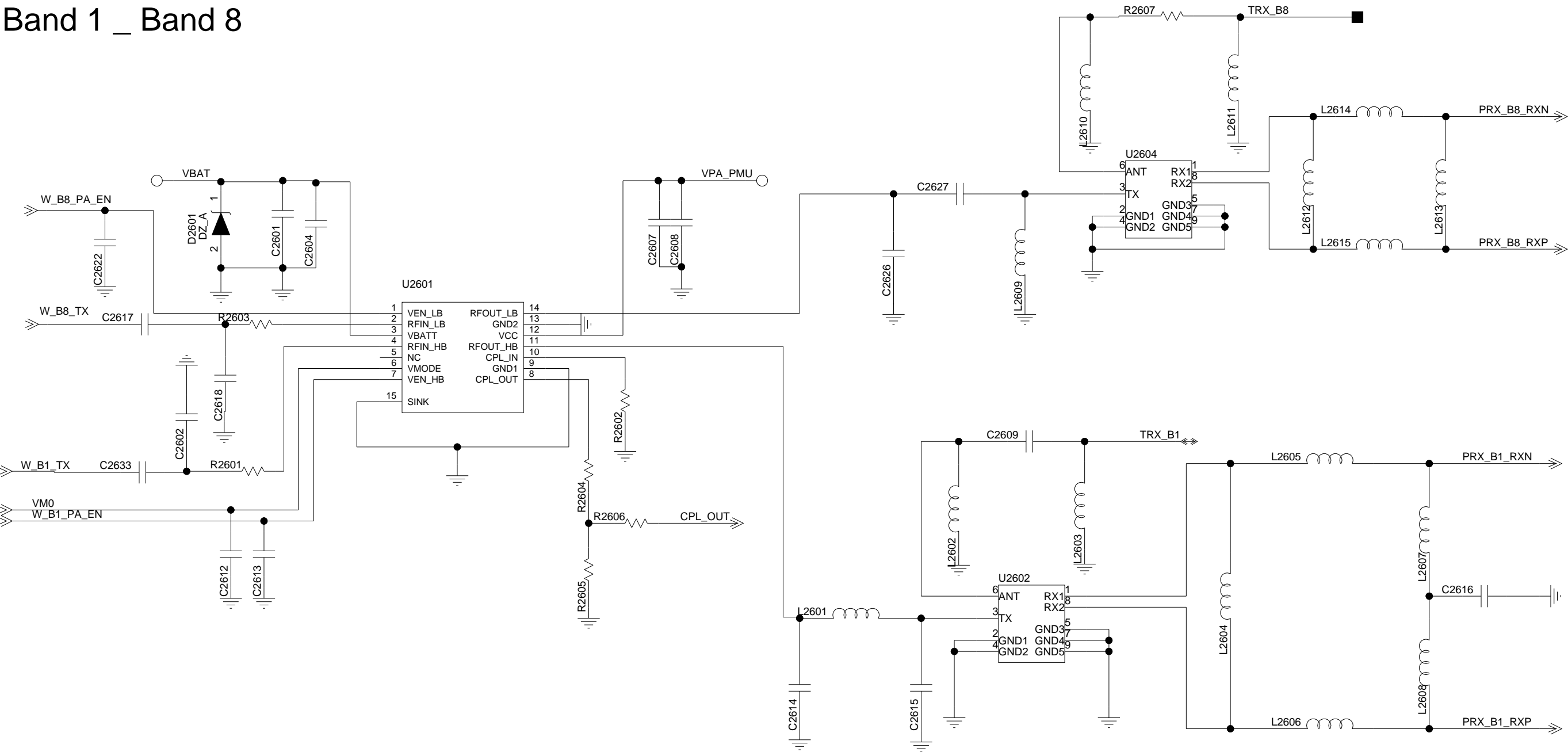


The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 25 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

26. UMTS

Band 1 \_ Band 8



SKY77758 Mode of Operation

Power Setting	Band	VEN_HB	VEN_LB	VMODE	VBATT
Power Down Mode		Low	Low	Low	On
Standby Mode		Low	Low	X	On
Low Power Mode(Pout=<17dBm)	Band1,Band2	High	Low	High	On
High Power Mode(Pout=17dBm to Pmax)	Band1,Band2	High	Low	Low	On
Low Power Mode(Pout=<17dBm)	Band5,Band8	Low	High	High	On
High Power Mode(Pout=17dBm to Pmax)	Band5,Band8	Low	High	Low	On

The type and specification of the components refer to the BOM

				N/A	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 26 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	

27. NFC PN547

The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 27 OF 28	
		B	03022LNN	HUAWEI TECH CO.,LTD.	

28. Reserved

The type and specification of the components refer to the BOM

				NA	2013-8-28
				ECA NO	DATE
DESIGNED	LIZHAO213340	HT1R300MT		03022LNN_SCHZH	
REVIEWED	LIANGDAIXI129964				
		VER	PART_NUMBER	SHEET 28 OF 28	
		A	03022LNN	HUAWEI TECH CO.,LTD.	