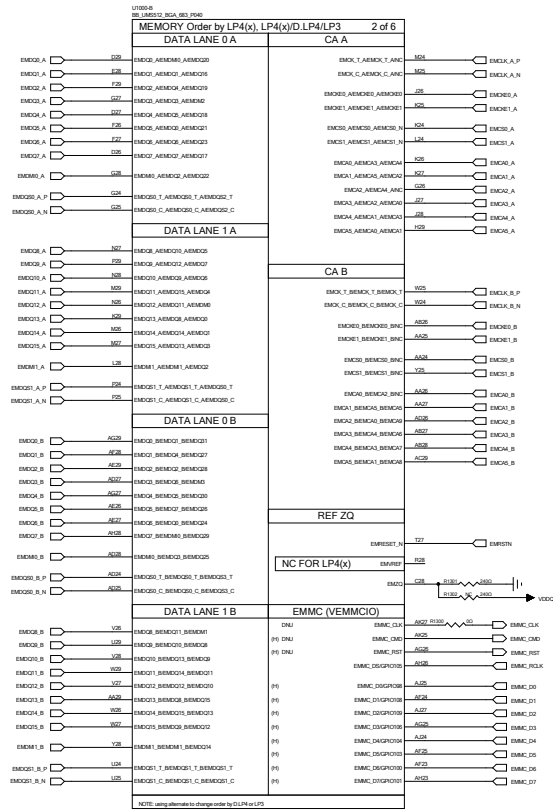


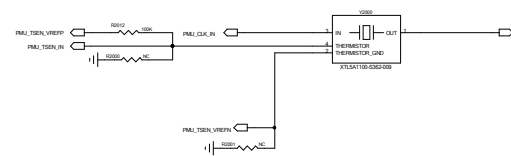
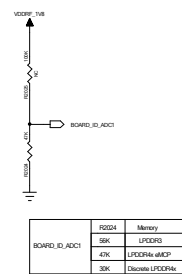
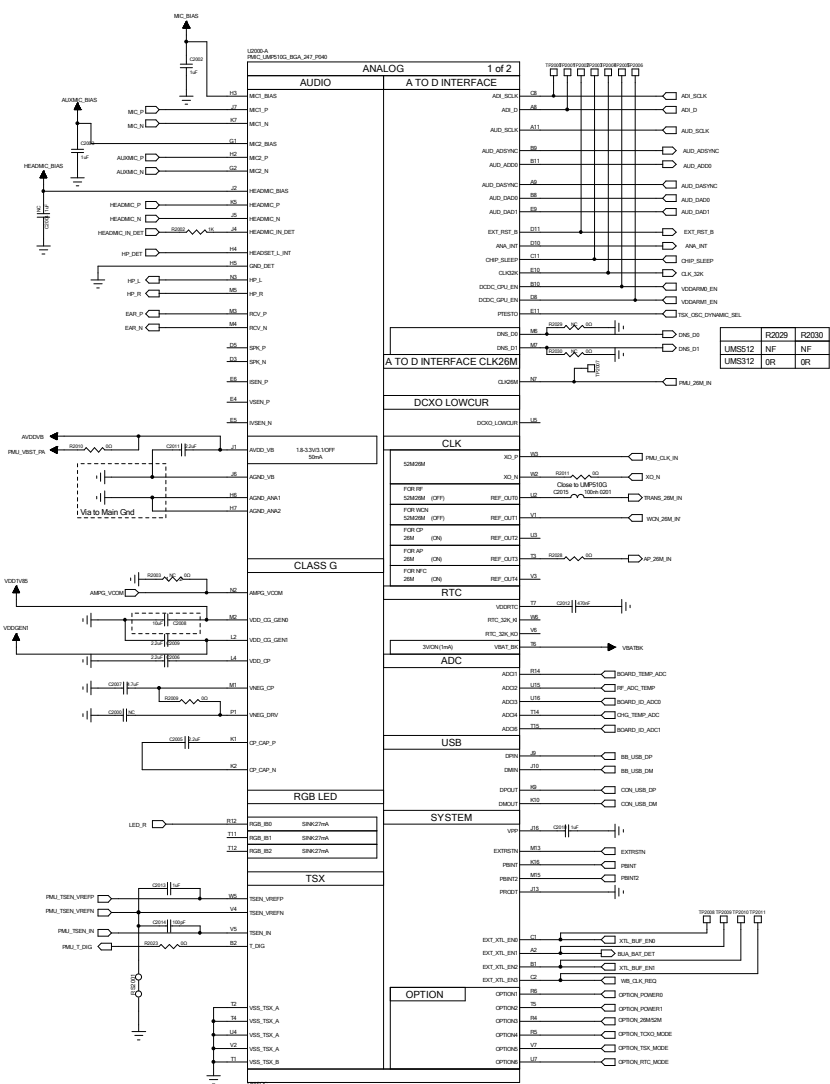
REVISION/RECORD			
LTR	RECORD	APPROVED	DATE



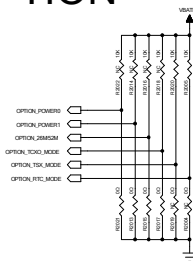
COMPANY			
TITLE			
UMS512			
CODE	SIZE	DRAWING NO	REV
P352CE	D	P352CE	V0.30
SCALE		SHEET 14 30	

DRAWN	DATED
Wentao.Zhong	20201009
CHECKED	DATED
QUALITY CONTROL	DATED
RELEASED	DATED

PMU_ANALOG



OPTION



Item	Scenario	Option1	Option2
0	UMSS12+UMP510G	0	0
1	UMSS12+UMP510G+DCDC	0	1
2		1	0
3	UMSS12+UMP510G+DCDC+LPDDR3/4VDDMEMO power supply for SDRAM	1	1

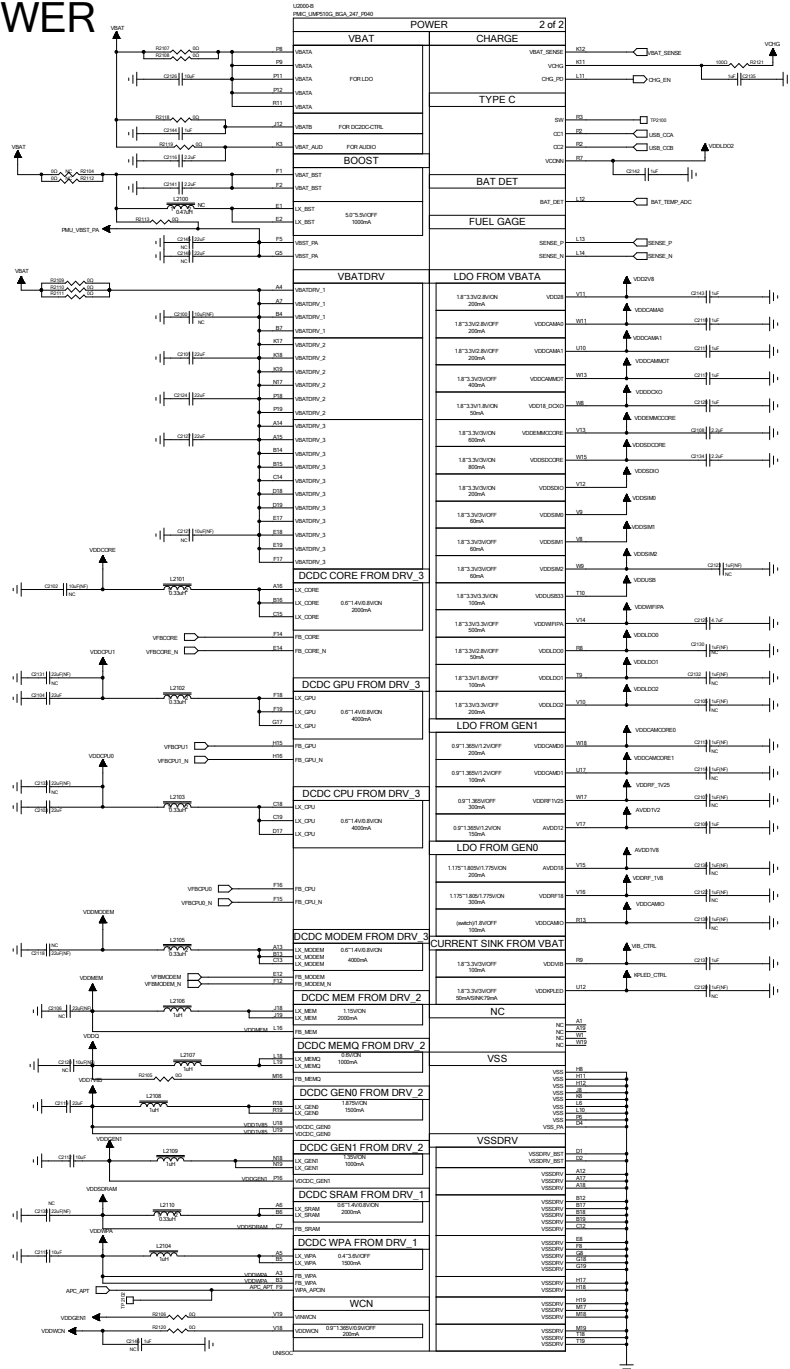
Scenario	Option3(26M_52M)	Option4(TCXO_MODE)	Option5(TSX_MODE)	Option6(RTC_MODE)
26M TCXO+32K Crystal	0	1	0	0
26M TSX+32K Crystal	0	0	1	0
26M TSX+32K-less from PMIC internal	0	0	1	1
26M DCXO+32K-less from PMIC internal	0	1	1	1
26M DCXO+32K Crystal	0	1	1	0

UMP510G 6 Interrupt Input IO

UMP510G			Platform	note
1st function	2nd function	3rd function	UMXS12	
EXT-XTL-EN0	NA		CP	
EXT-XTL-EN1	VBATDET_OK		BUA	
EXT-XTL-EN2	NA	NA	Sensor Hub	
EXT-XTL-EN3	NA		UMWV2652	
PTSTO	EXT_XTL_EN4	T_SEL	T_SEL	T_SEL use to select Temp sensor from TSEL0 or TSEL1
DCDCGPU-EN	EXT_XTL_EN5			

COMPUTER:				
TITLE:				
UMS512				
CODE:	SIZE:	DRAWING NO	REV:	
P352CE	D	P352CE	v0.30	
SCALE:			SHEET: 5 OF 30	

PMU_POWER



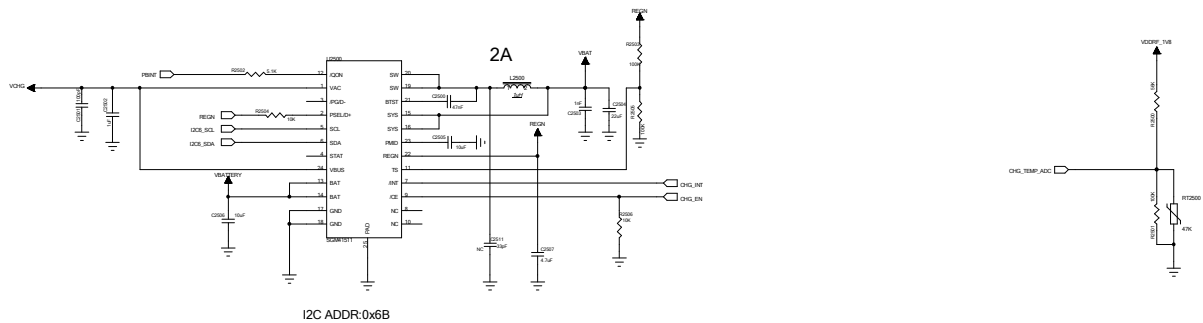
REVISION/RECORD			
LTR	RECORD	APPROVED	DATE

COMPANY			
TITLE			
UMS512			
CODE	SIZE	DRAWING NO	REV
P352CE	D	P352CE	V0.30
SCALE		SHEET 46 30	

DRAWN	Wentao.Zhong	DATED	20201009
CHECKED		DATED	
QUALITY CONTROL		DATED	
RELEASED		DATED	

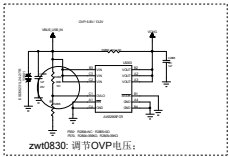
REVISION/RECORD			
LTR	SECOND	APPROVED	DATE

CHARGE

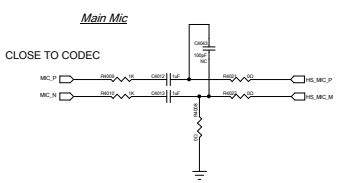
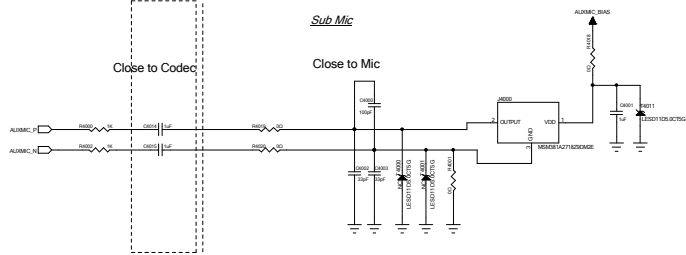


		COMPANY:			
		TITLE:			
GROUP: Wentao Zhong		UMS512			
DATE: 20201009					
CHARGED:	DATE:	CODE:	SIZE:	DRAWING NO:	REV:
QUALITY CONTROL:	DATE:	P352CE	D	P352CE	V0.30
RELEASED:	DATE:	SCALE:			SHEET: 7 30

REVISION RECORD			
CR	RECORD	APPROVAL	DATE

[illegible]

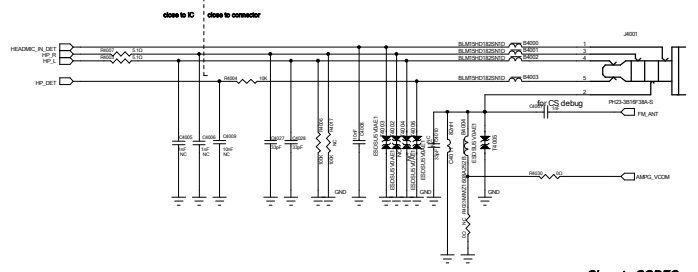
REVISION/RECORD			
LTN	ECOING	APPROVED	DATE



CTIA Mode

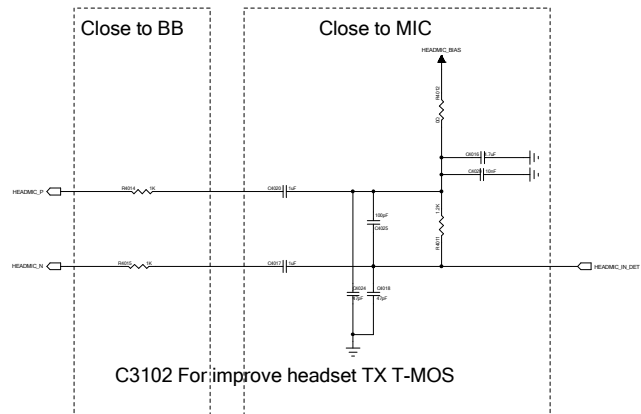
Note: Ferrite beads and their corresponding bypass capacitors on CDC_HPH_L_P, CDC_HPH_L_M and CDC_HPH_REF are needed to reduce noise generated by audio/FM concurrency

Headset Mic



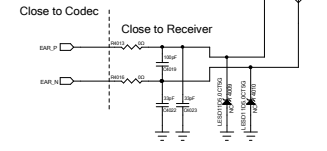
Close to CODEC
connect to CODEC pin G14 and connect to GND at CODEC

HEAD MIC



C3102 For improve headset TX T-MOS

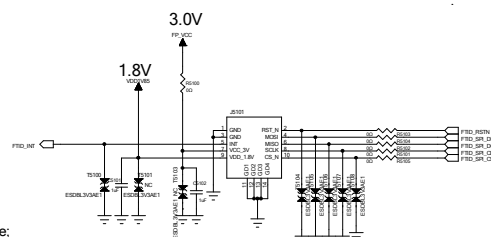
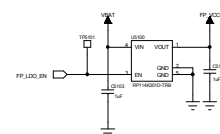
Handset Receiver



COMPANY:			
TITLE:			
UMS512			
DESIGN:	Wentao.Zhong	DATED:	20201009
CHECKED:		DATED:	
QUALITY CONTROL:		DATED:	
RELEASED:		DATED:	
CODE:	P352CE	SIZE:	D
DRAWINGNO:	P352CE	REV:	V0.30
SHEET: 11 OF 30			

REVISION/RECORD			
LTN	ECONO	APPROVED	DATE

Fingerprint Connector



核对指纹模组的pin脚定义与PCBpin脚定义OK

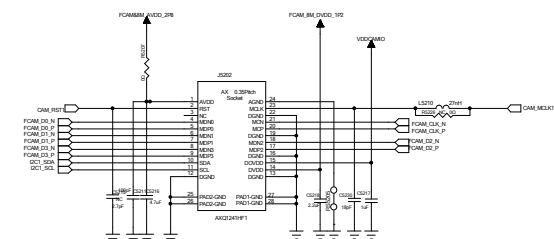
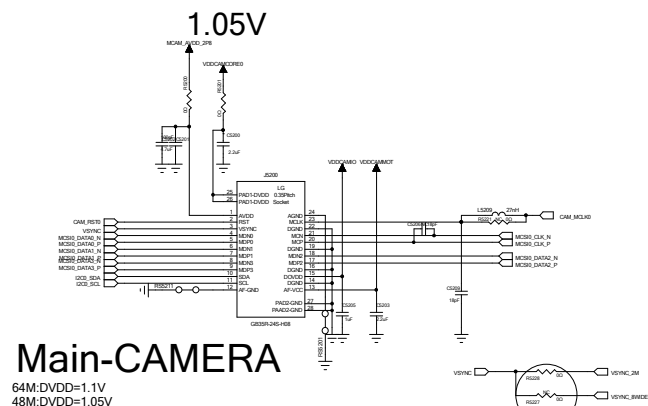
1	GND
2	RST N
3	GND
4	MOSI
5	INT
6	MISO
7	VCC:2V8/3
8	SCLK
9	DVDD1V8
10	CS N

V GF3658:VCC供电 2.8V/3.0V/3.3V

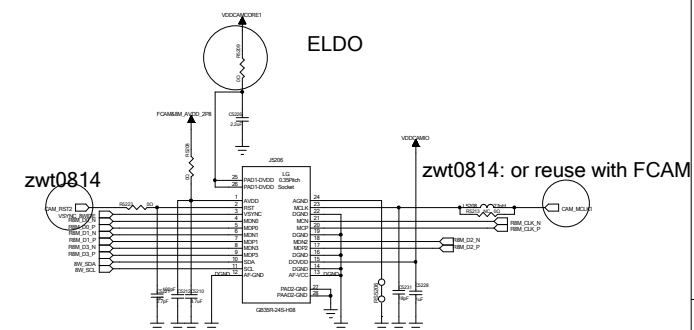
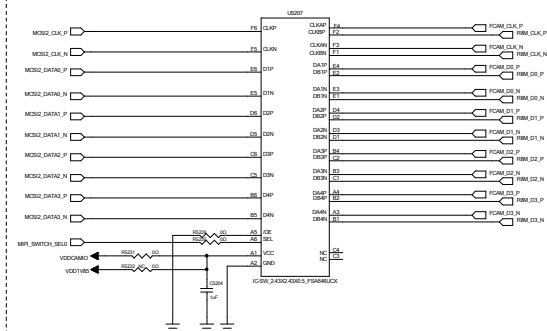
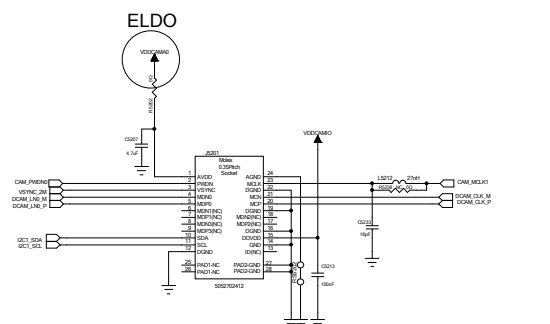
FPC1520A:DVDD 1.8V

DRAWN Wentao Zhong		DATED 20201009		UMS512	
CHECKED	DATED	CODE	SIZE	DRAWING NO	REV.
QUALITY CONTROL	DATED	P352CE	D	P352CE	V0.30
RELEASED	DATED	SCALE: SHEET: 44 30			

REVISION/RECORD			
LT#	ECNO#	APPROVED:	DATE:



Front-CAM-8M
Attention Conn Type:AXQ1241HF1

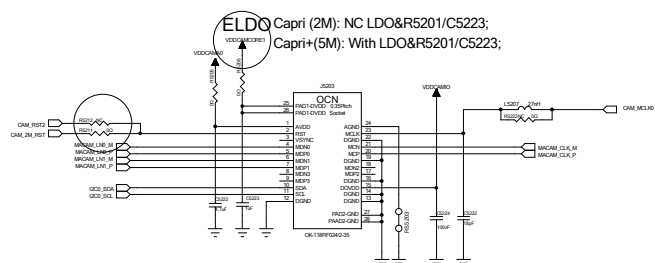


8M FF-Wide

If sensor of F8M and R8W is different, choose front CAM I2C BUS.

```

graph LR
    DC1_SDA --- R8203 --- Bus
    DC1_SCL --- R8204 --- Bus
    DC2_SDA --- R8205 --- Bus
    DC2_SCL --- R8206 --- Bus
    Bus --- RW_SDA
    Bus --- RW_SCL
  
```



2M&5M FF-Macro
Macro CAM Conn change to OCN--0911

		COMPANY:			
		TITLE:			
		UMS512			
DRAWN Wentao Zhong	DATED 20201009				
CHECKED	DATED	CODE	SIZE	DRAWING NO	REV
QUALITY CONTROL	DATED	P352CE	D	P352CE	V0.30
RELEASED	DATED	SCALE:		SHEET: 45 30	

6

5

4

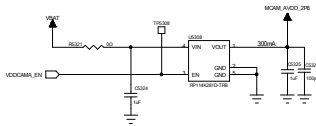
3

2

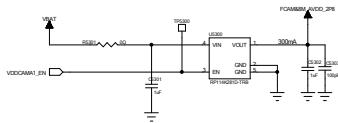
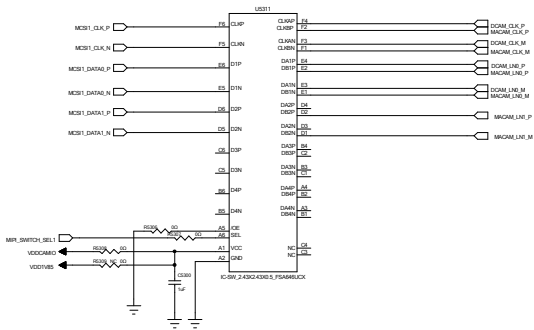
1

REVISION/RECORD			
LTN	ECCHNG	APPROVED	DATE

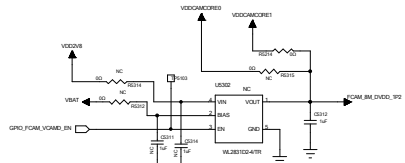
Front 13M



MCAM AVDD 2.8v

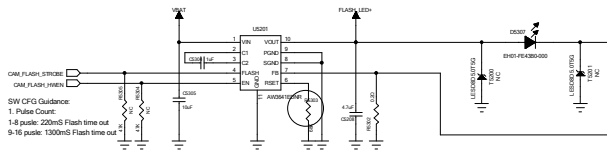


FCAM&8M CAM AVDD 2.8v



Front CAM DVDD 1.05v

MIAN-FLASH



OC8110 R5204=82K Torch current=50mV/R5205=106mA
Flash current=(14uA*R5204)/(5*R5205)=489mA

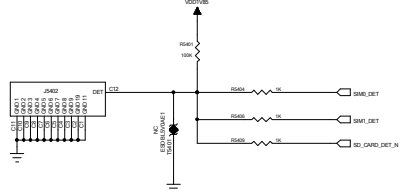
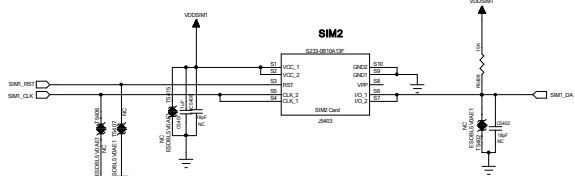
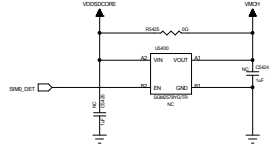
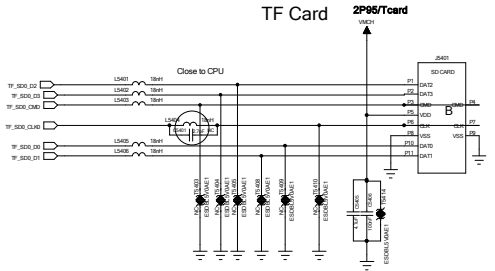
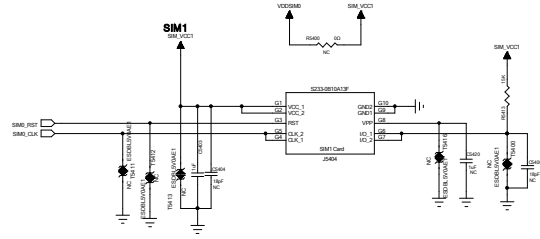
AW3641 R5204=56K Torch current=47mV/R5205=100mA
Flash current=(1.26V/R5204/R5205)*10.2K=488mA

AW3641 R5204=27K Torch current=47mV/R5205=235mA
Flash current=(1.26V/R5204/R5205)*10.2K=945mA

AW3641 R5204=68K,R5205=0.2 Torch current=47mV/R5205=235mA
Flash current=(1.26V/R5204/R5205)*10.2K=945mA

COMPANY:			
TITLE:			
UMS512			
CODE:	SIZE:	DRAWING NO:	REV:
P352CE	D	P352CE	V0.30
SCALE:			
SHEET: 46 30			

REVISION/RECORD			
LTN	ECCHNG	APPROVED	DATE



INT Normal:0
Insert:1

COMPANY			
TITLE			
UMS512			
DESIGN	Wentao.Zhong	DATED	20201009
CHECKED		DATED	
QUALITY CONTROL		DATED	
RELEASED		DATED	
CODE	P352CE	SIZE	D
DRAWING NO	P352CE	REV	V0.30
SCALE	SHEET 487 30		

6

5

4

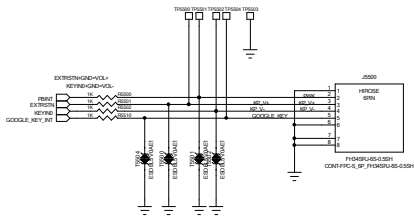
3

2

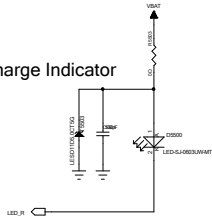
1

REVISION/RECORD			
LTN	ECCHNG	APPROVED	DATE

MP Test point



Charge Indicator



COMPANY:			
TITLE:			
UMS512			
CODE:	SIZE:	DRAWING NO:	REV:
P352CE	D	P352CE	V0.30
SCALE:			
SHEET: 188 30			

DRAWN:	DATED:
Wentao.Zhong	20201009
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

6

5

4

3

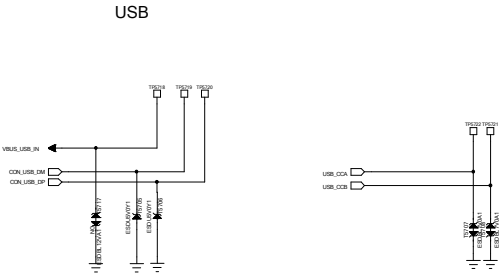
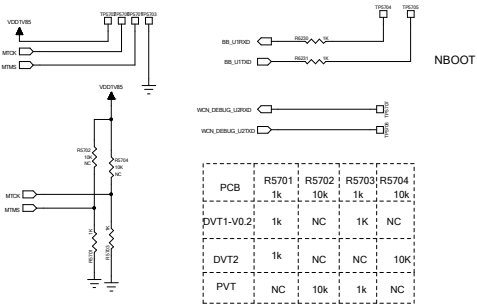
2

1

Debug Test Point

Fixture Test Point

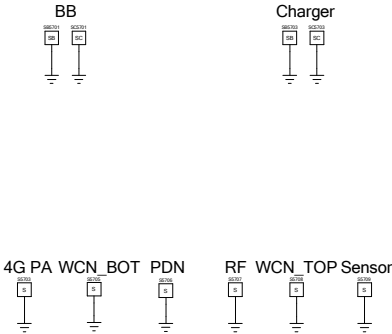
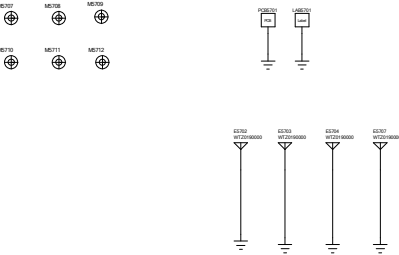
REVISION/RECORD			
LTN	EDCHG	APPROVED	DATE



Mark

shielding can

Metal Grounding

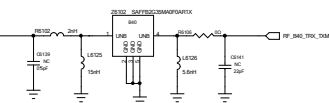
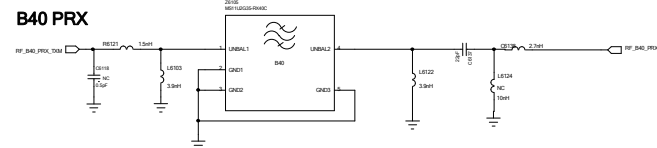


Top

Bottom

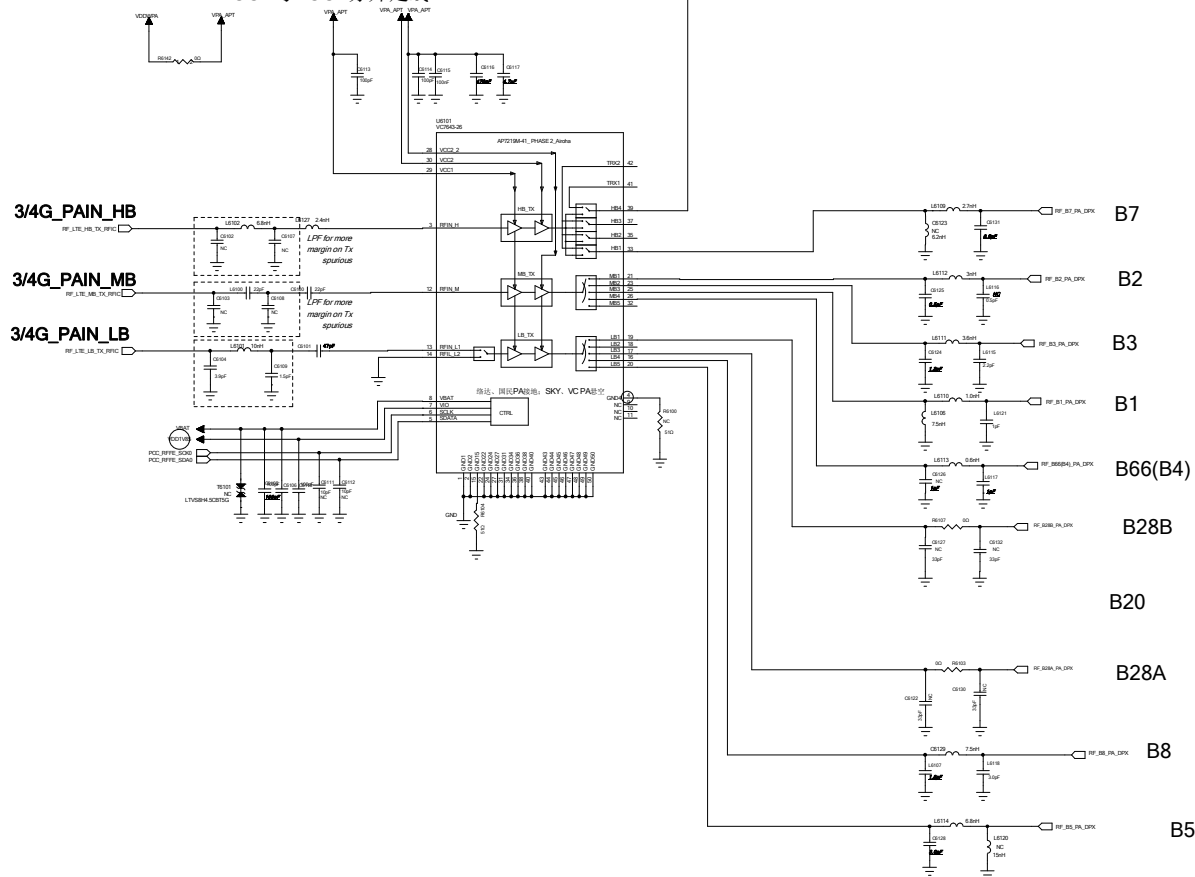
		COMPANY			
		TITLE			
		UMS512			
DESIGN	DATE	CODE	SIZE	DRAWING NO.	REV
Wentao.Zhong	20201009				
CHECKED	DATE	P352CE	D	P352CE	V0.30
QUALITY CONTROL	DATE				
RELEASED	DATE	SCALE			SHEET 40 30

REVISION/RECORD			
LT#	RECORD	APPROVED	DATE



VPA_PMU width>60mil;(min width>=20mil,length<=100mils)
VCC1>=10mil;VCC2>=50mil
VPA_PMU PA side load C 6.2UF+5%

VCC1与VCC2分开走线



DRAWN: Wentao Zhong	DATED: 20201009
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

COMPANY:				
TITLE:				
UMS512				
CODE:	SIZE:	DRAWING NO:	REV:	
P352CE	D	P352CE	V0.30	
SCALE:		SHEET: 22 30		

6

5

4

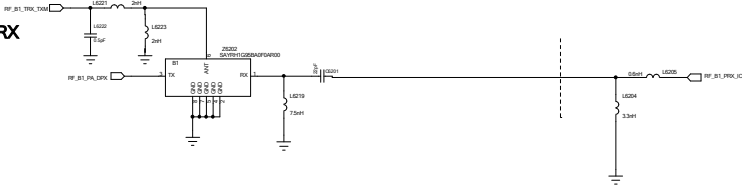
3

2

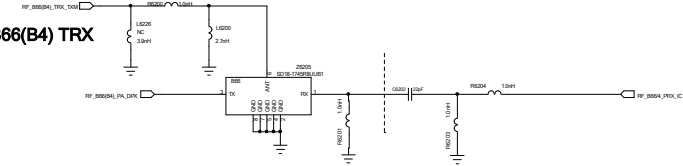
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REVISION/RECORD			
LTN	ECCHNG	APPROVED	DATE

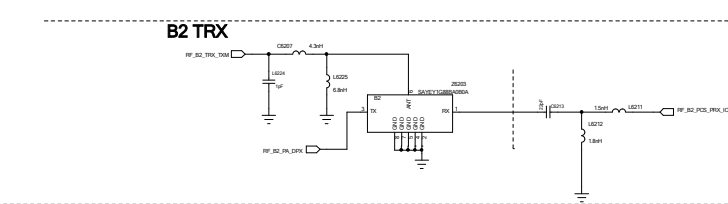
B1 TRX



B66(B4) TRX



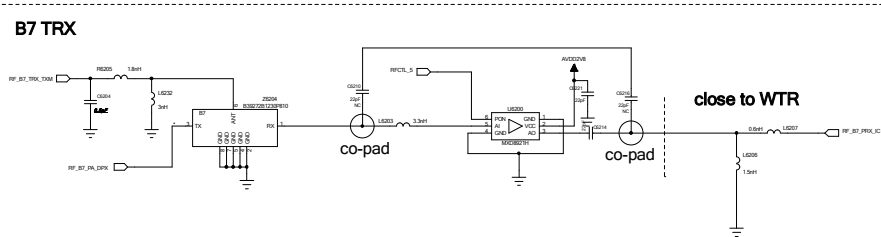
B2 TRX



B3 TRX



B7 TRX



COMPANY:			
TITLE:			
UMS512			
CODE:	SIZE:	DRAWING/NO:	REV:
P352CE	D	P352CE	V0.30
SCALE:		SHEET: 43 30	

DESIGN:	DATED:
Wentao.Zhong	20201009
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

6

5

4

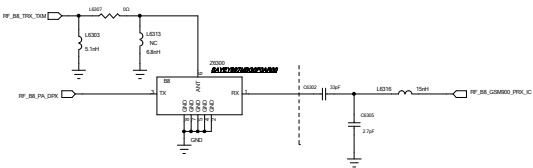
3

2

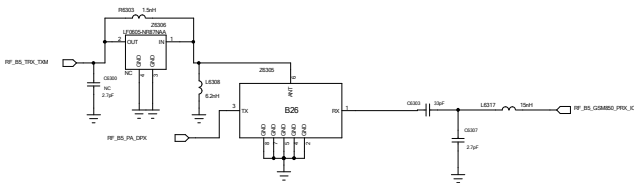
1

REVISION/RECORD			
LTN	RECORD	APPROVED	DATE

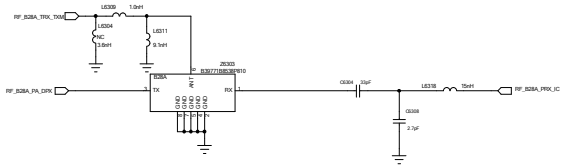
B8 TRX



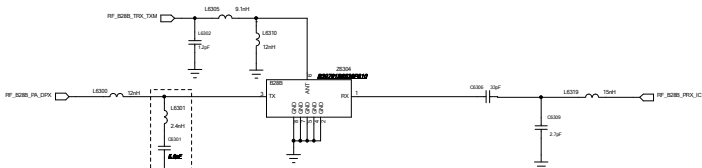
B5 TRX



B28A TRX



B28B TRX



Notch Filter for CE Test

COMPANY:			
TITLE:			
UMS512			
CODE:	SIZE:	DRAWING NO:	REV:
P352CE	D	P352CE	V0.30
SCALE:		SHEET: 44 30	

DRAWN:	DATED:
Wentao.Zhong	20201009
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

6

5

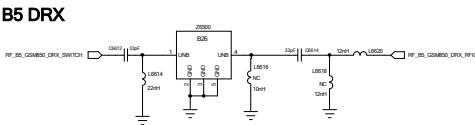
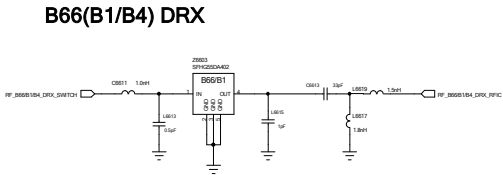
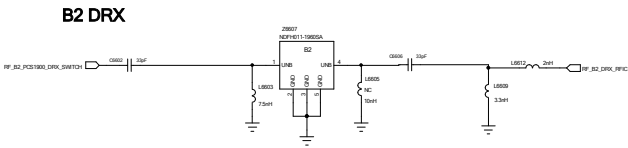
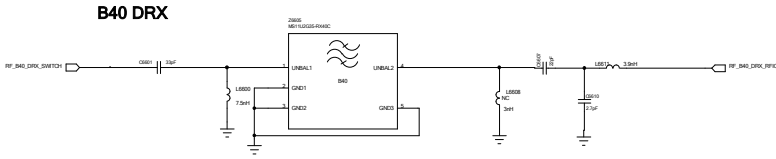
4

3

2

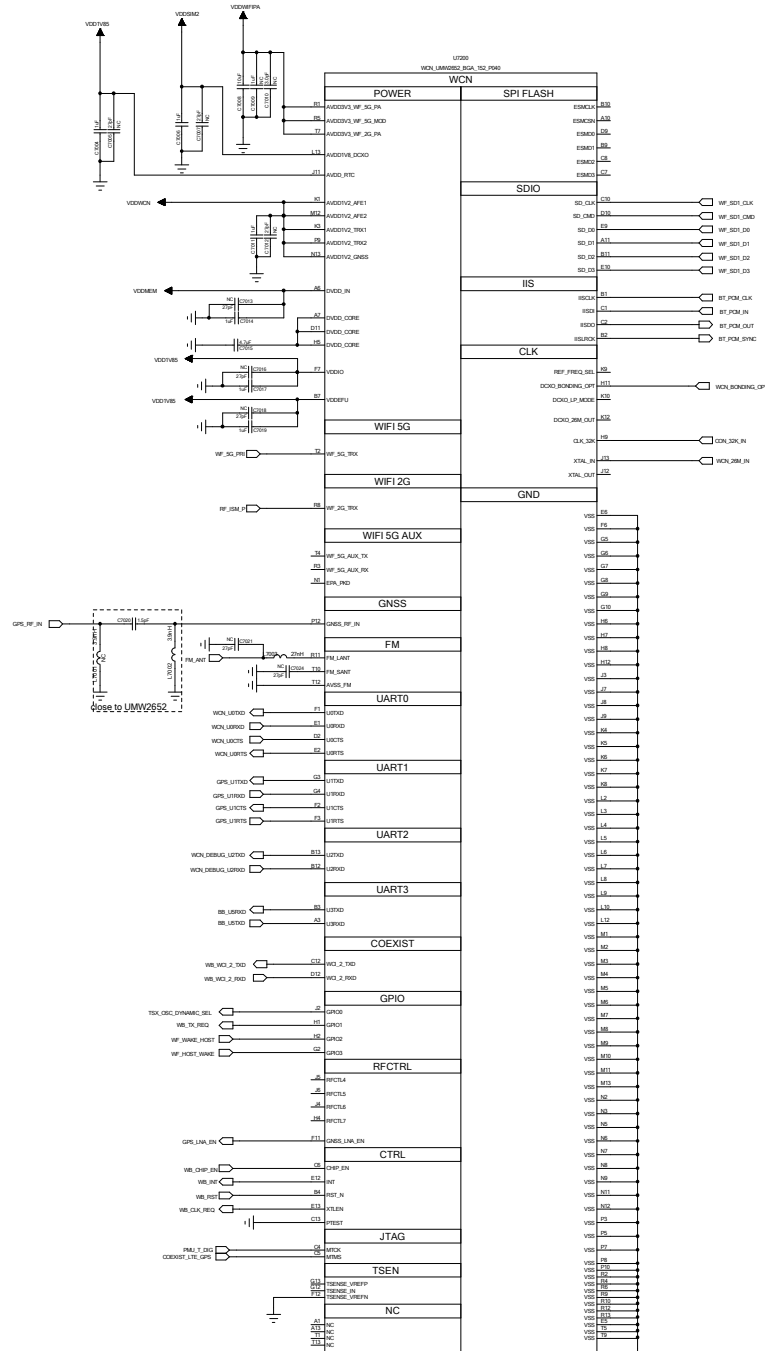
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REVISION/RECORD			
LTN	ECCHNG	APPROVED	DATE



COMPANY:			
TITLE:			
UMS512			
CODE:	SIZE:	DRAWING NO:	REV:
P352CE	D	P352CE	V0.30
SCALE:		SHEET: 27 30	

REVISION/RECORD			
LTN	ECCHG	APPROVED	DATE



Strapping Pin

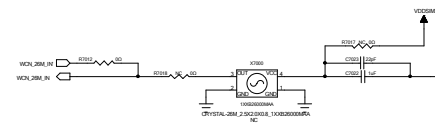
FREQ_SEL -- Internal Pull-up	
0	38.4MHz
1	26MHz / 52MHz (only when buffer mode and DCXO_LP_MODE external tie low)

BONDING_OPT	
0	buffer mode
1	XO mode



TSX (PMU) Only

	R7012	R7018	X7000	R7017	C7023	C7022	R7236	R7237
TSX (PMU) Only	0R	NF	NF	NF	NF	NF	NF	NF
backup TCXO (WCN) :	NF	0R	TCXO	0R	22pF	1uF	0R	0R



COMPANY			
TITLE			
UMS512			
CODE	SIZE	DRAWING NO	REV
P352CE	D	P352CE	V0.30
SCALE		SHEET 49 30	

