

RF BLOCK DIAGRAM

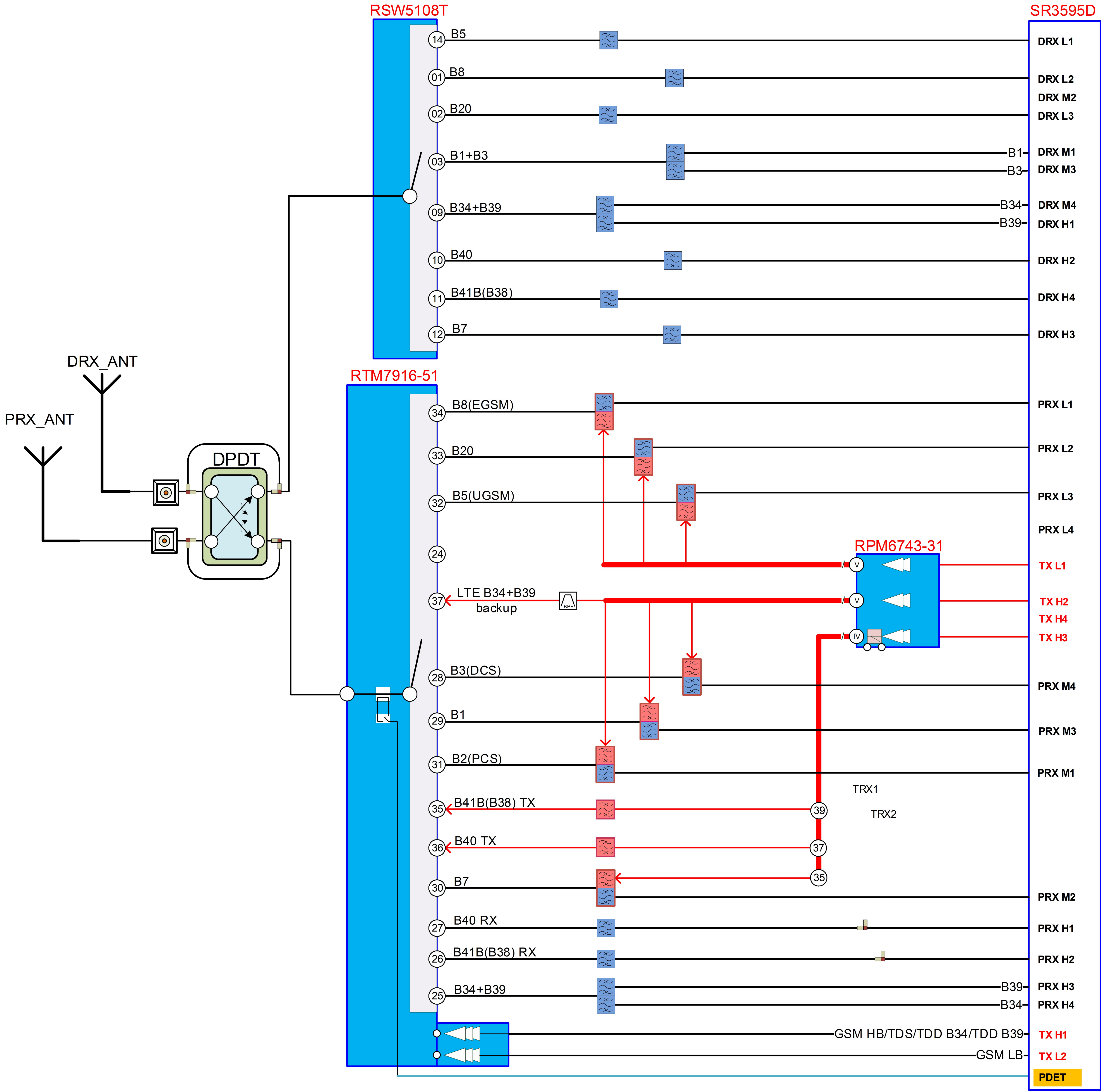
REVISION RECORD			
VER	ECO NO.	APPROVED	DATE

Platform:
UMS9230+SR3595D

Product support:
China+Europe+India

Band support:
TDD LTE: B34/39/40/41B(38)
FDD LTE:B1/3/5/7/8/20
WCDMA: B1/2/5/8
TDSCDMA: B34/39
GSM: B2/3/5/8
DL CA: 1C, 3C, 5B, 7B, 7C, 8B, 38C, 39C, 40C, 41C
3A-3A, 5A-5A, 7A-7A, 40A-40A, 41A-41A
UL CA: 1C, 3C, 7C, 8B, 38C, 39C, 40C, 41C

Key Part:
RTM7916-51
RPM6743-31
RSW5108T



DESIGNER:		DATE:	DEPARTMENT:
EQA:		DATE:	COMPANY:
APPROVED:		DATE:	UNISOC
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DOCUMENT NO.:		HWE	

6	5	4	3	2	1																																			
V0.1.0 UMS9230_D_CS_A_SCH_V0.1.0 Change_Note						<table><tr><th colspan="4">REVISION RECORD</th></tr><tr><th>LTB</th><th>ECO NO.</th><th>APPROVED:</th><th>DATE:</th></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>	REVISION RECORD				LTB	ECO NO.	APPROVED:	DATE:																										
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6

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1

Change_Note

V0.1.0

UMS9230_D_CS_A_SCH_V0.1.0

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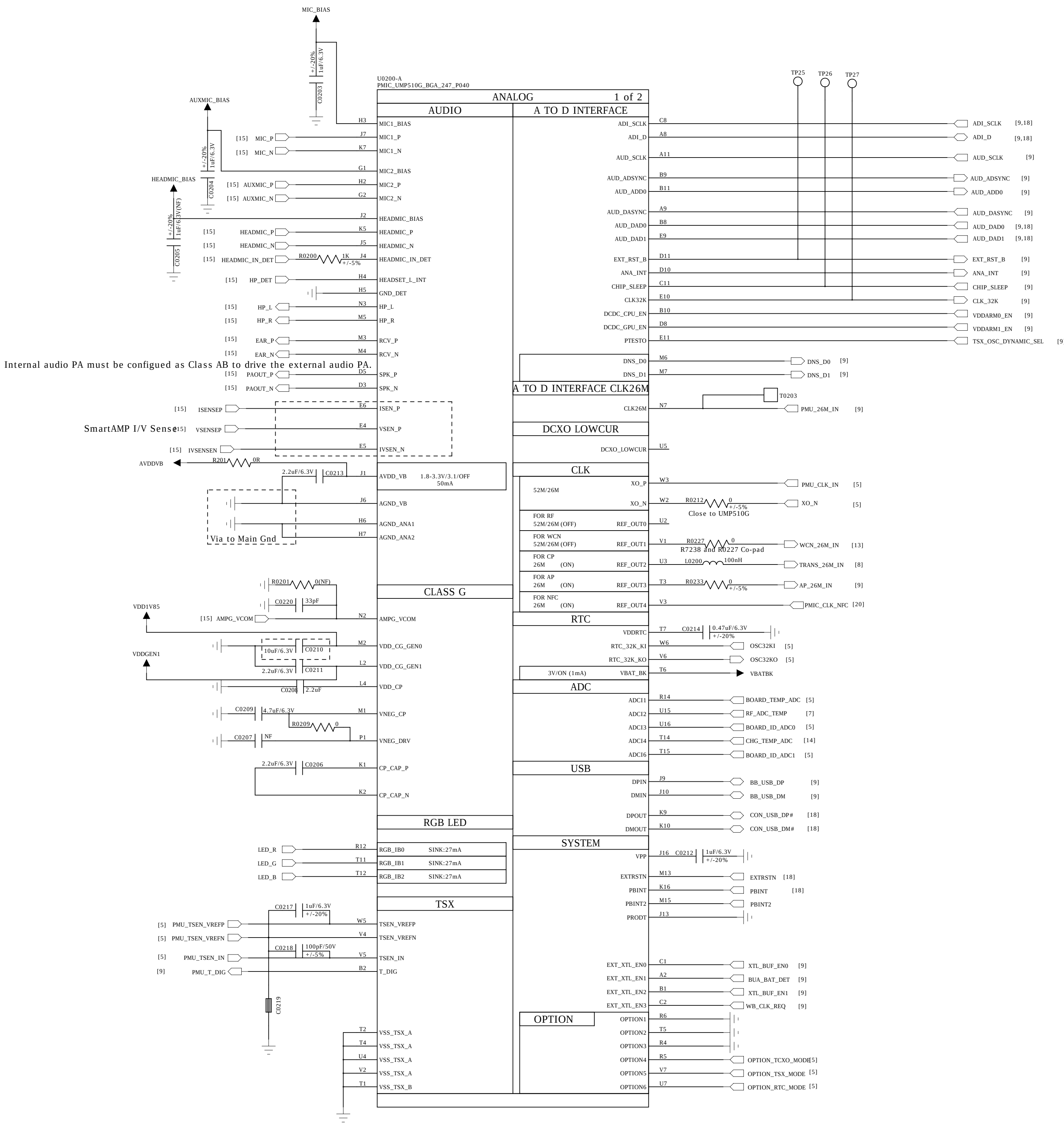
ECO NO.

APPROVED

DATE

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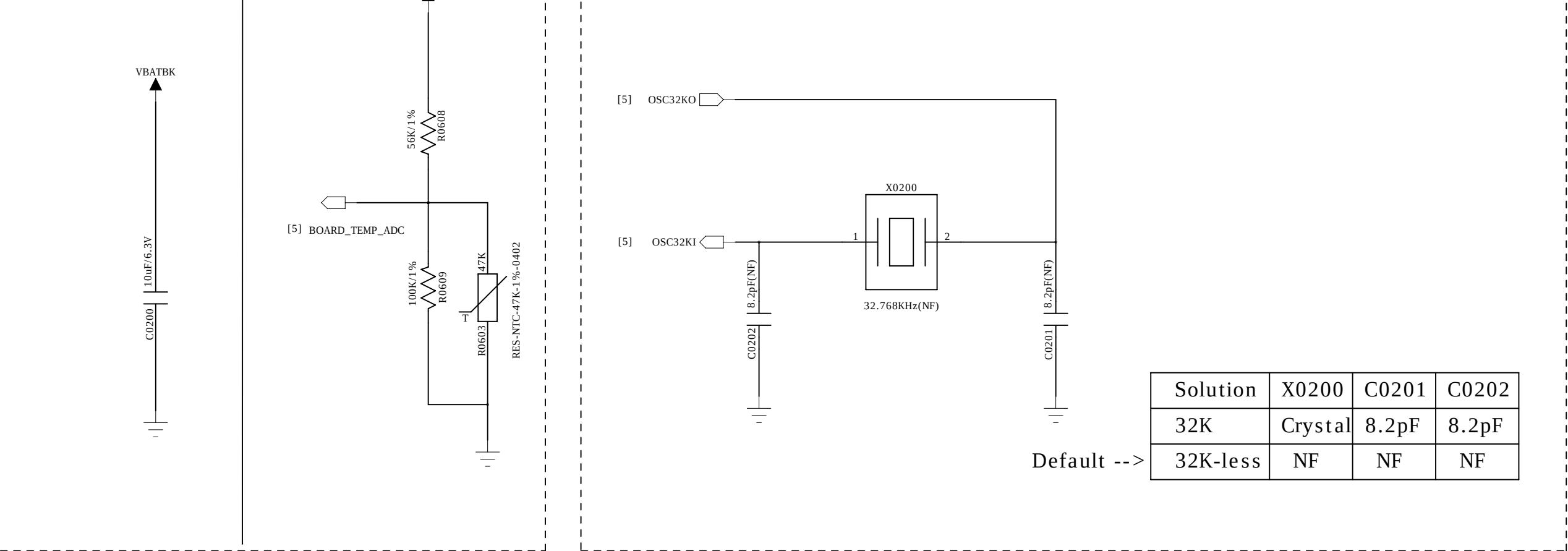
PMU_ANALOG



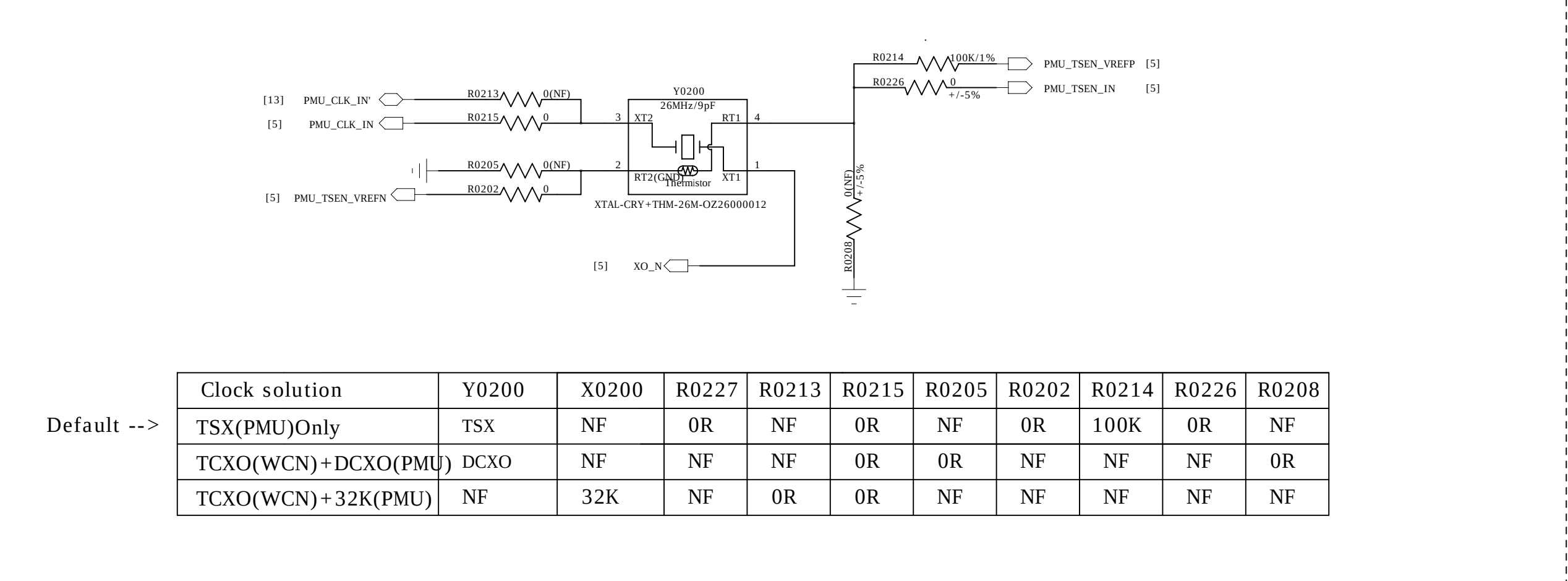
BKBT

NTC

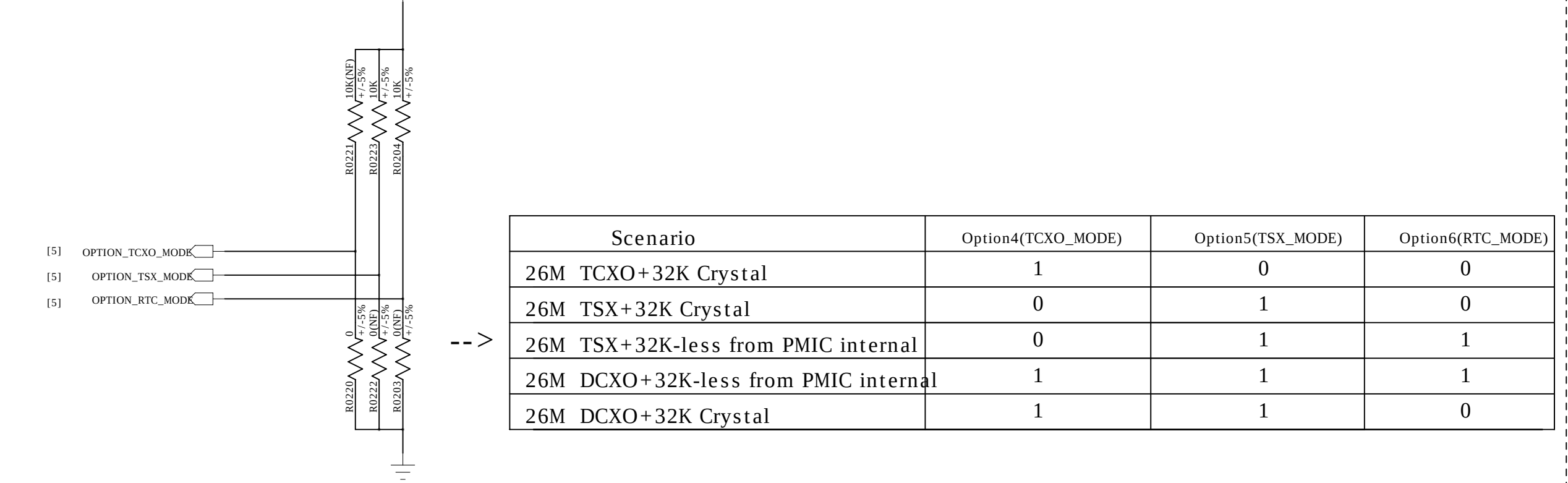
RTC



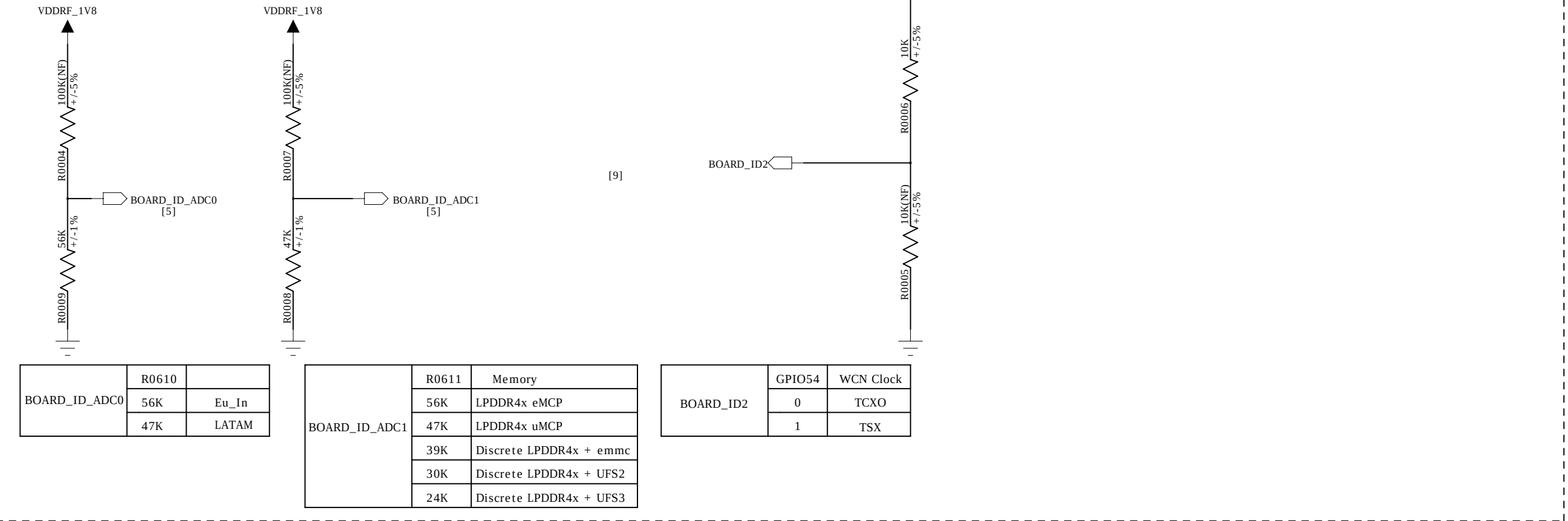
TSX(PMU) Only



OPTION

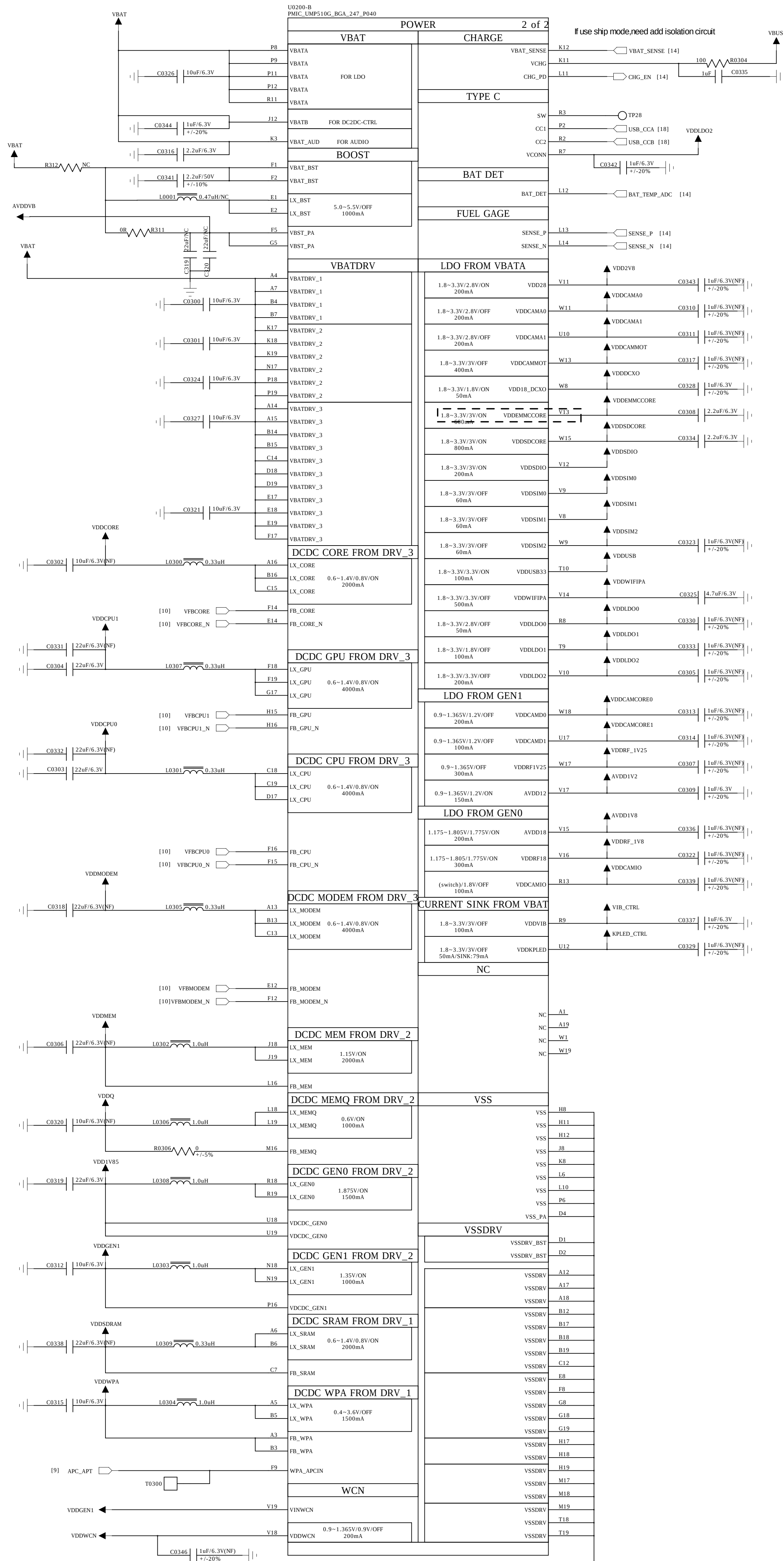


Band info/Board ID



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PMU_POWER



PMIC PN	PMIC VDDMMCCORE
UMP510G	3.0V/600mA

Notes: If UFS ICC is greater than 600mA, please use external LDO or DCDC.

Memory	UFS VCC	UFS VCCQ	UFS VCCQ2
UFS2.X Device	PMIC VDDMMCCORE 3.0V(Back up external LDO or DCDC)	Not Used	PMIC VDD1V85

UMP510G DCDC output

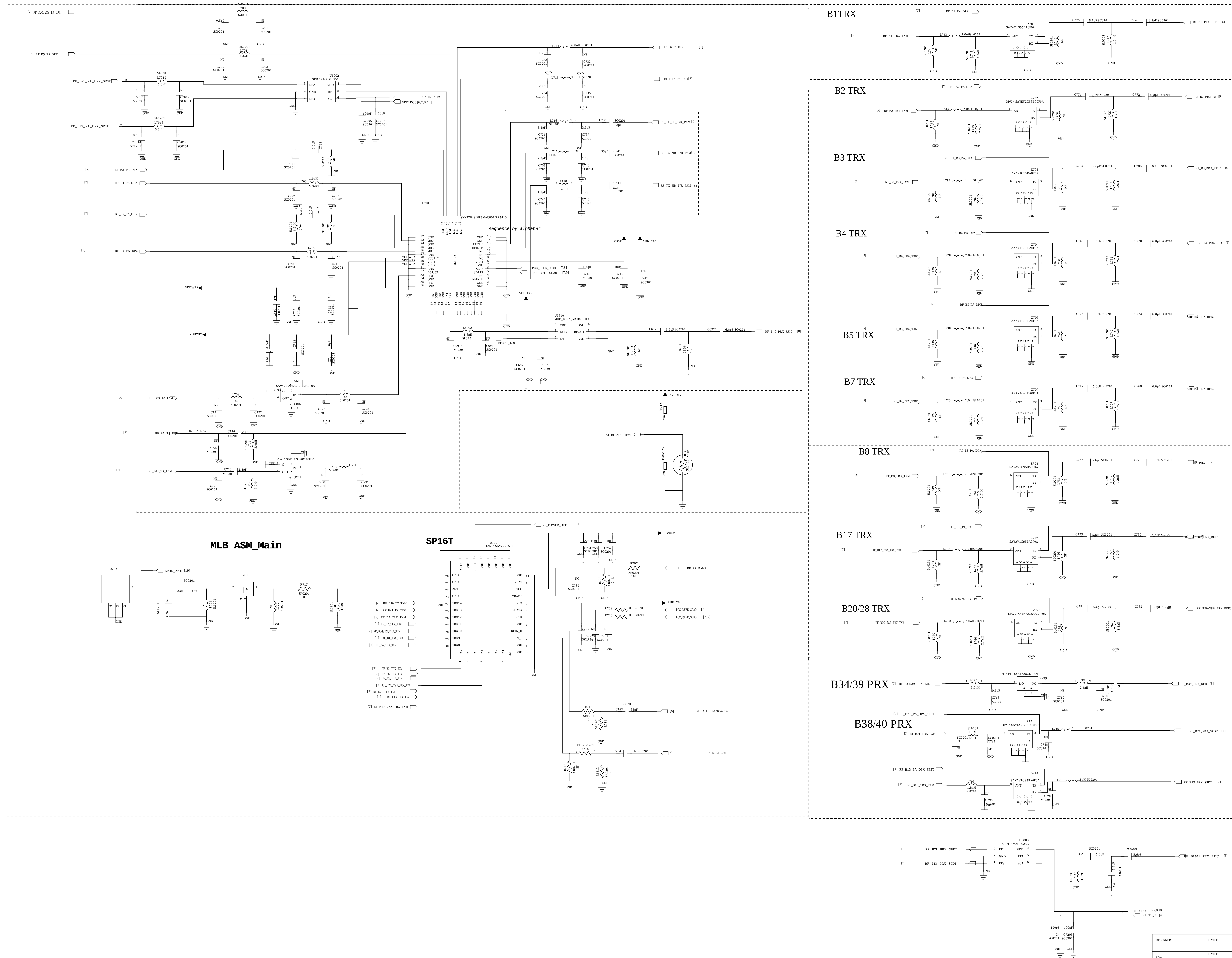
Input Power	Power Name	Output Voltage (V)	Output Current (mA)	Default Voltage (V)	Default
VBAT	DCDC CORE	0.3-1.3	2000	0.8	ON
	DCDC GPU	0.3-1.3	4000	0.8	ON
	DCDC CPU	0.3-1.3	4000	0.8	ON
	DCDC MODEM	0.3-1.3	4000	0.8	ON
	DCDC MEM	0.25-1.25	2000	1.15	ON
	DCDC MEMQ	0.25-1.25	1000	0.6	ON
	DCDC GEN0	1.8-2.5	1500	1.85	ON
	DCDC GEN1	0.6-1.5	1000	1.3	ON
	DCDC SRAM	0.3-1.3	2000	0.8	ON
	DCDC WPA	0.6-3.3	1500	/	OFF

UMP510G LDO output

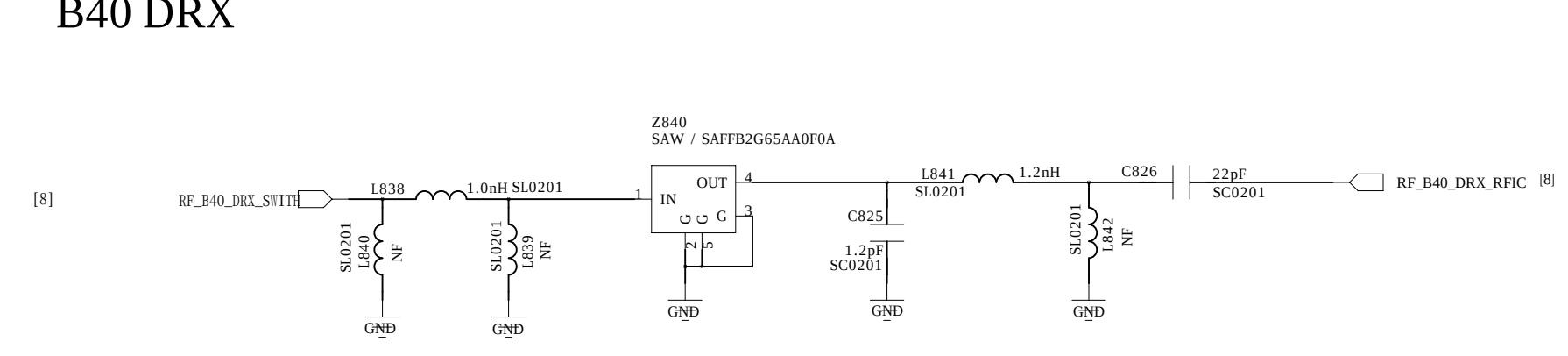
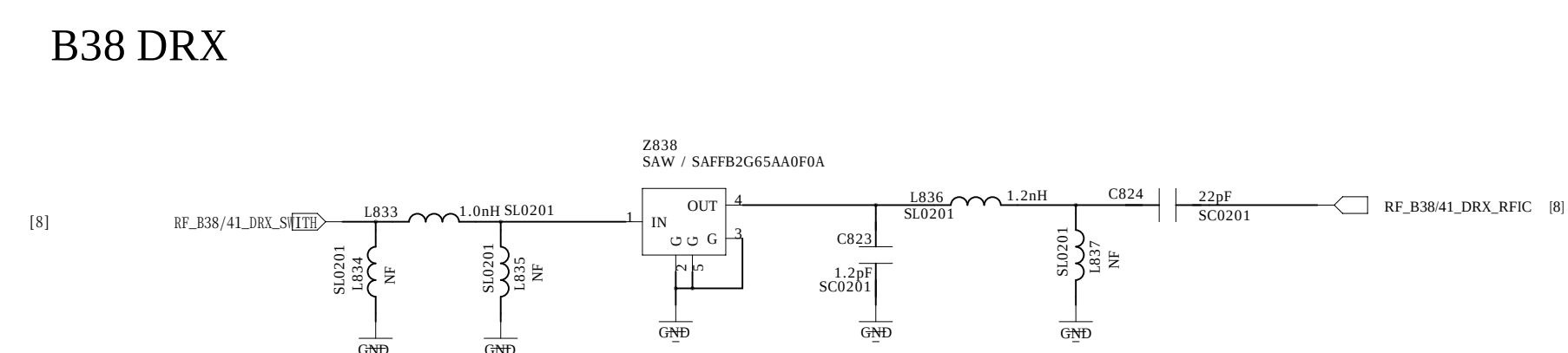
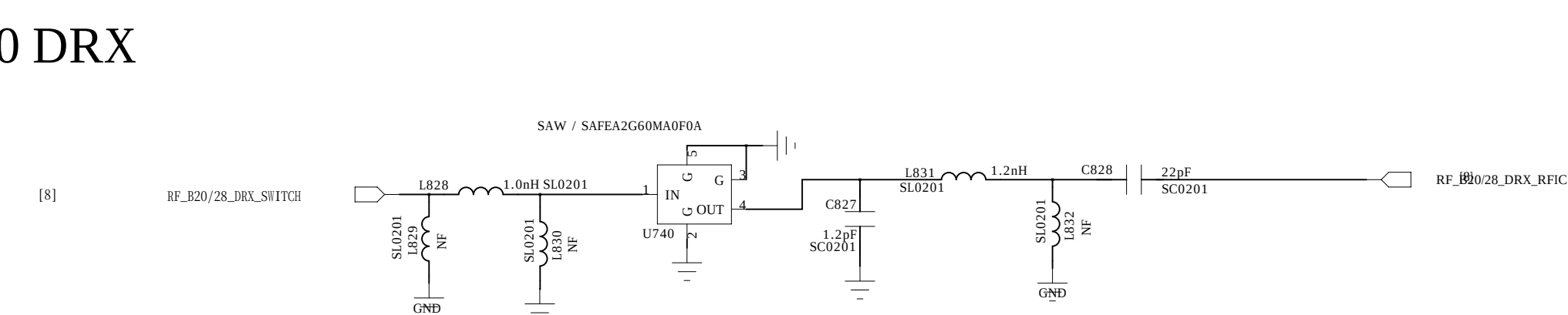
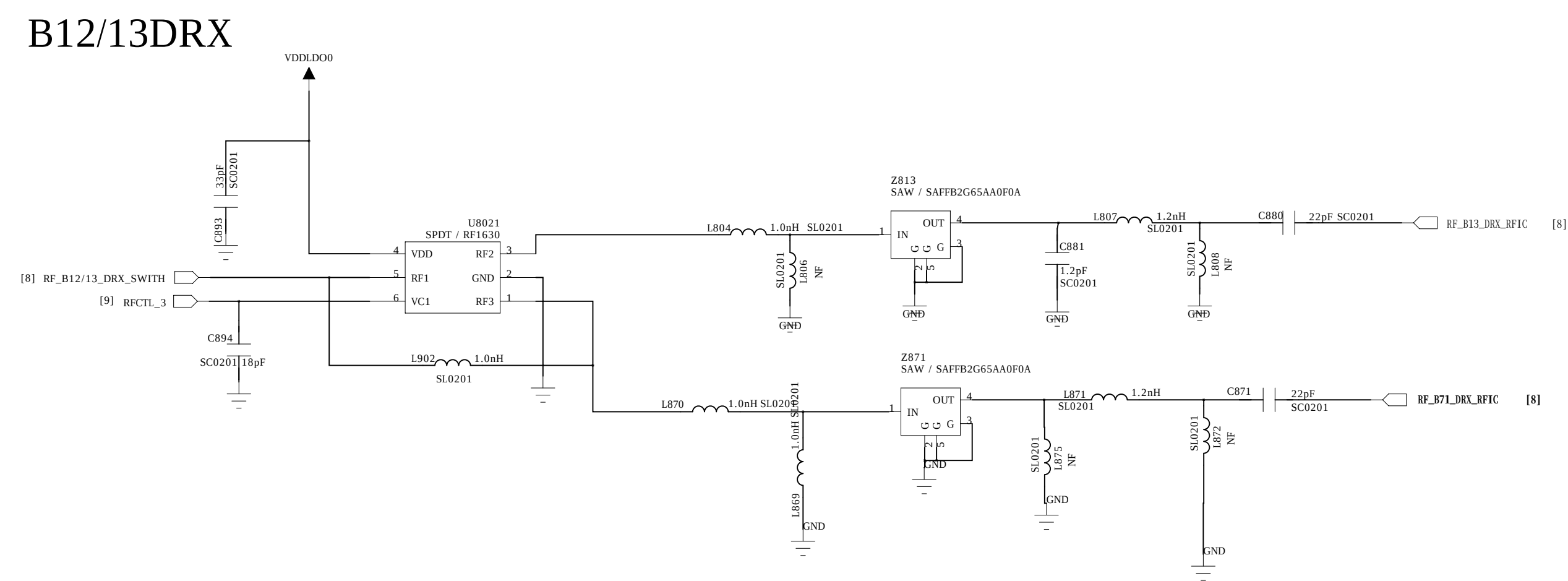
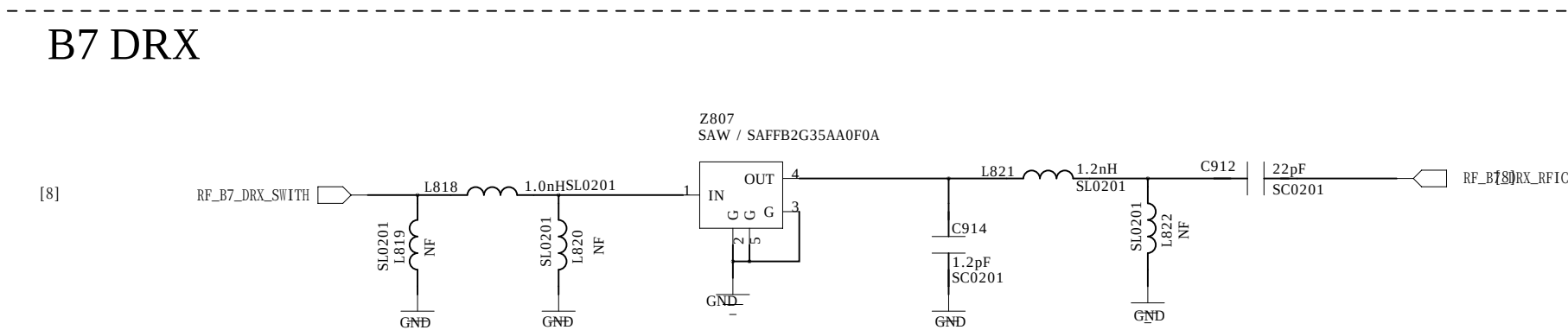
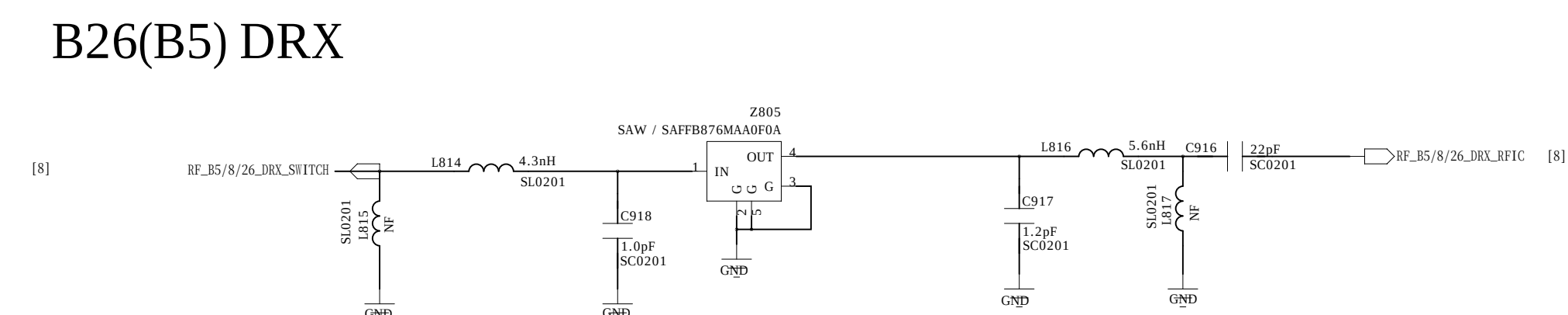
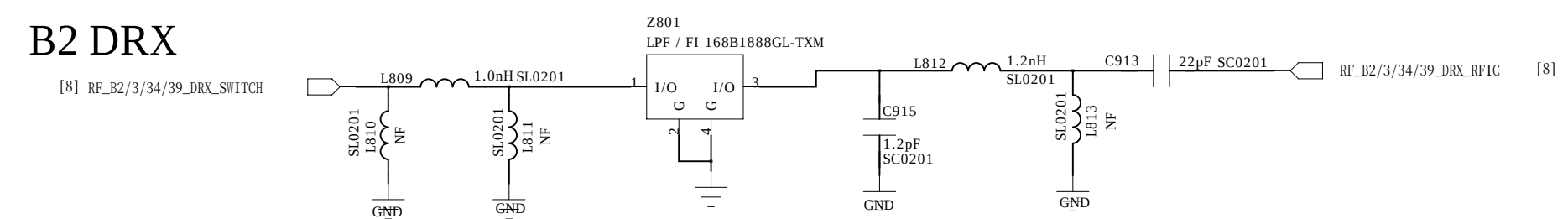
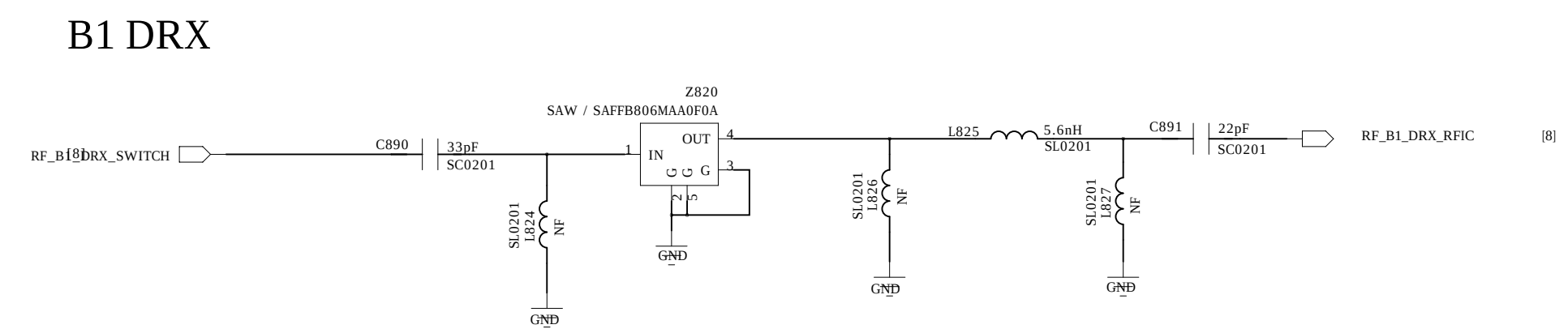
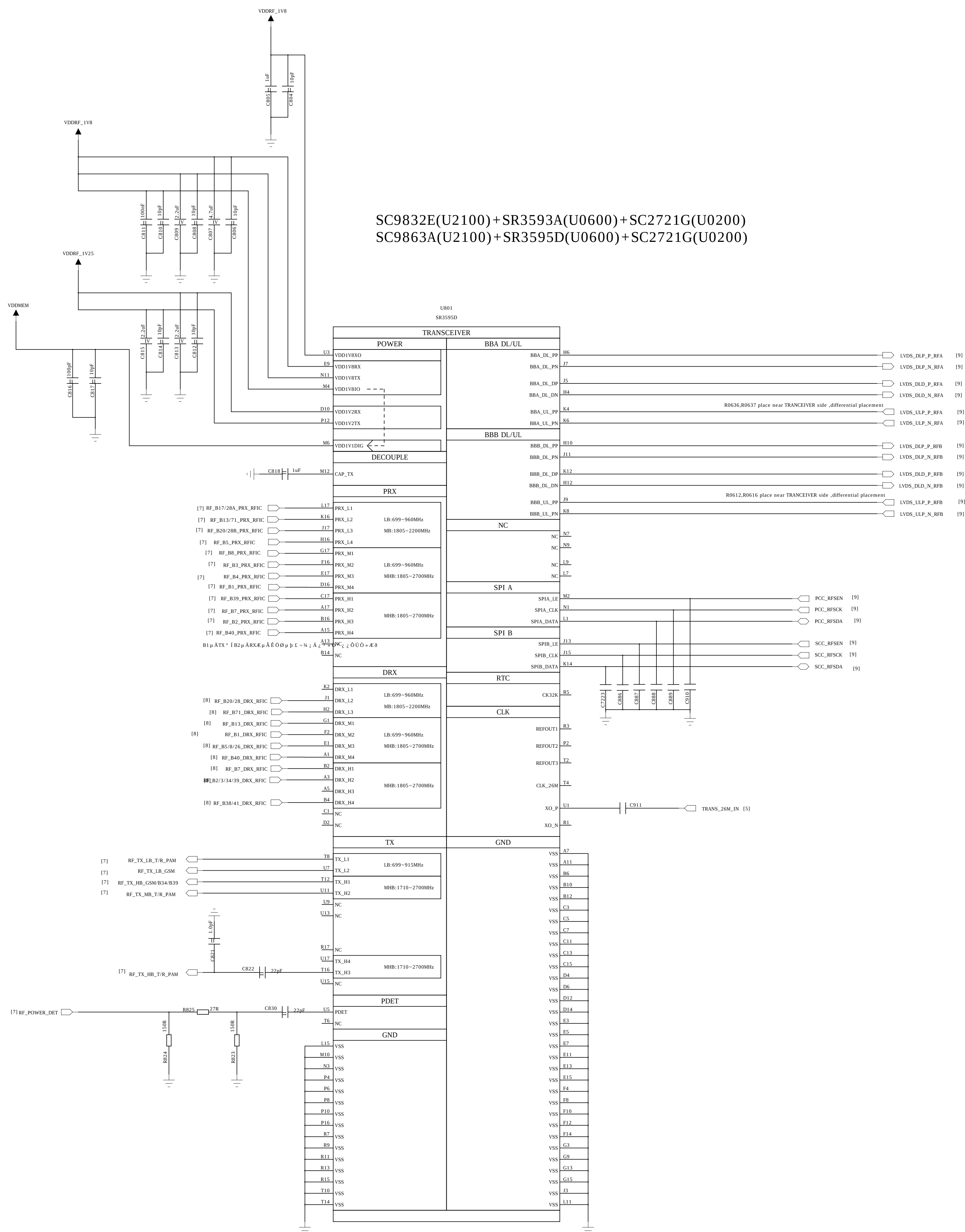
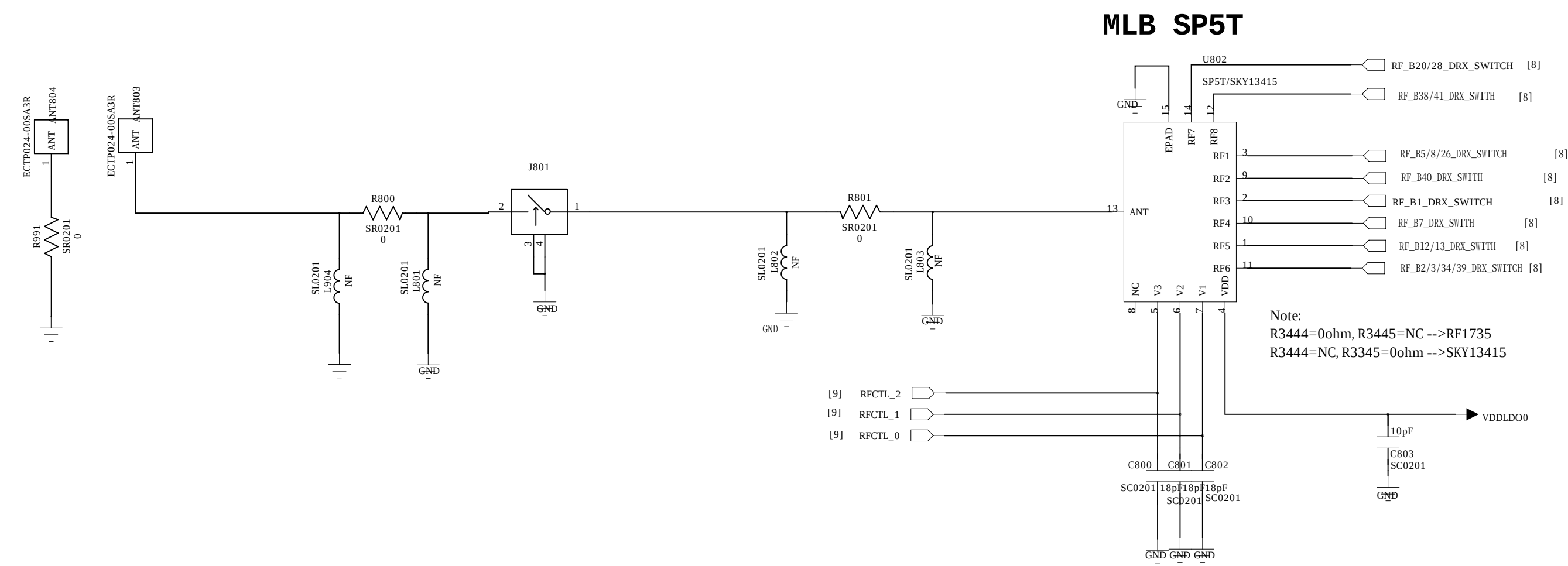
Input Power	Power Name	Output Voltage (V)	Output Current (mA)	Default Voltage (V)	Default
VBAT	VDD28	1.8-3.3	200	2.8	ON
	VDDCAMA0	1.8-3.3	200	2.8	OFF
	VDDCAMA1	1.8-3.3	200	2.8	OFF
	VDDCAMPOT	1.8-3.3	400	3	OFF
	VDD18_DCXO	1.8-3.3	50	1.8	ON
	VDDEMMCCORE	1.8-3.3	600	3	ON
	VDDSDCORE	1.8-3.3	800	3	ON
	VDDSDIO	1.8-3.3	200	3	ON
	VDDSIM0	1.8-3.3	60	3	OFF
	VDDSIM1	1.8-3.3	60	3	OFF
	VDDSIM2	1.8-3.3	60	3	OFF
	VDDUSB33	1.8-3.3	100	3.3	ON
	VDDWIFIPA	1.8-3.3	500	3.3	OFF
	VDDLDO0	1.8-3.3	50	2.8	OFF
	VDDLDO1	1.8-3.3	100	3.3	OFF
	VDDLDO2	1.8-3.3	200	3.3	OFF
GEN1	VDDCAMD0	1.0-1.25	400	1.1	OFF
	VDDCAMD1	1.0-1.25	200	1.1	OFF
	VDDRF1V25	1.0-1.25	300	1.25	OFF
	AVDD12	1.0-1.25	150	1.2	ON
GEN0	AVDD18	1.2-1.8	200	1.8	ON
	VDDRF18	1.2-1.8	300	1.8	ON
	VDDCAMIO	1.2-1.8	100	1.8	OFF
GEN1	WCN	1.0-1.6	200	1	OFF

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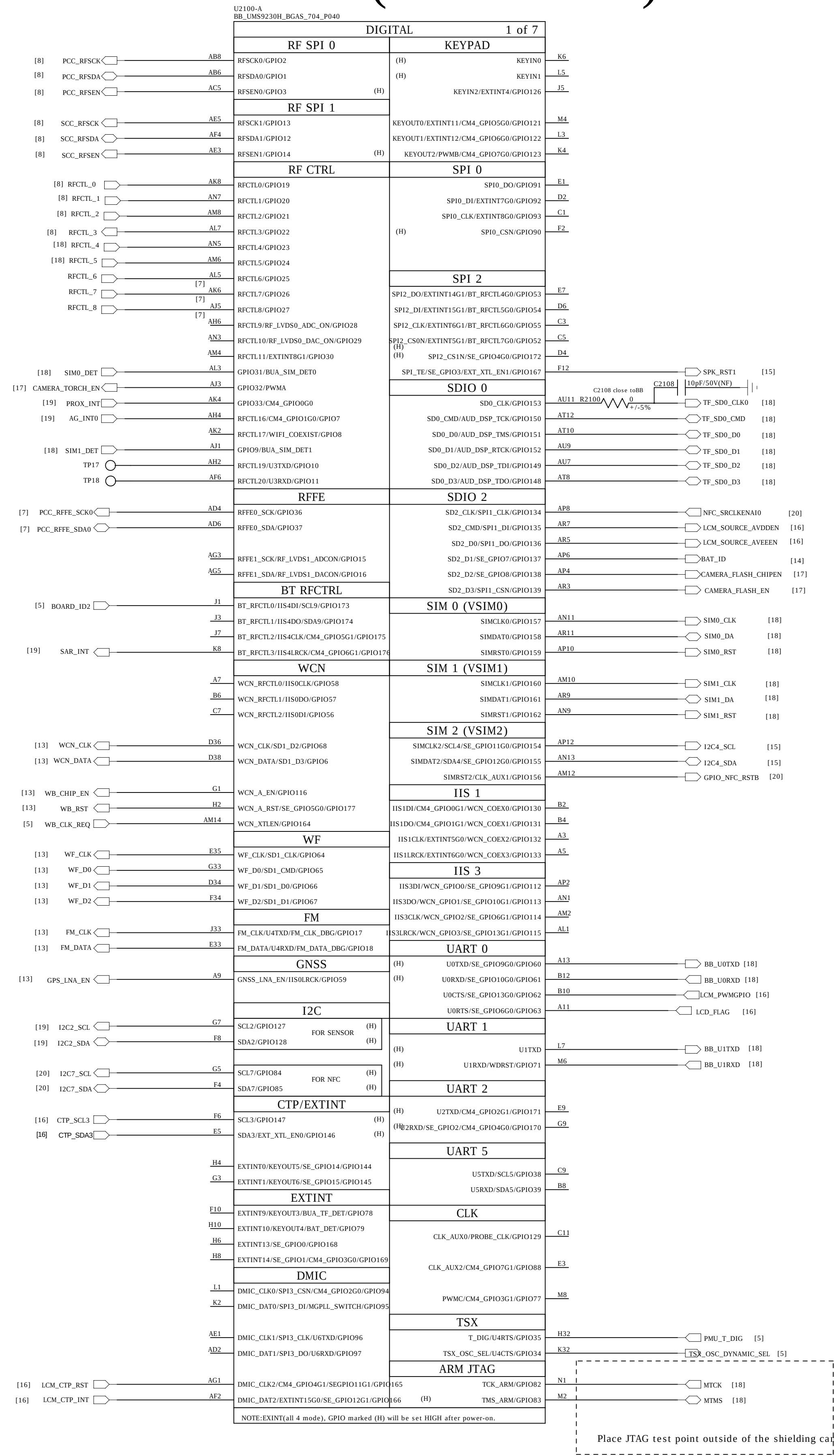
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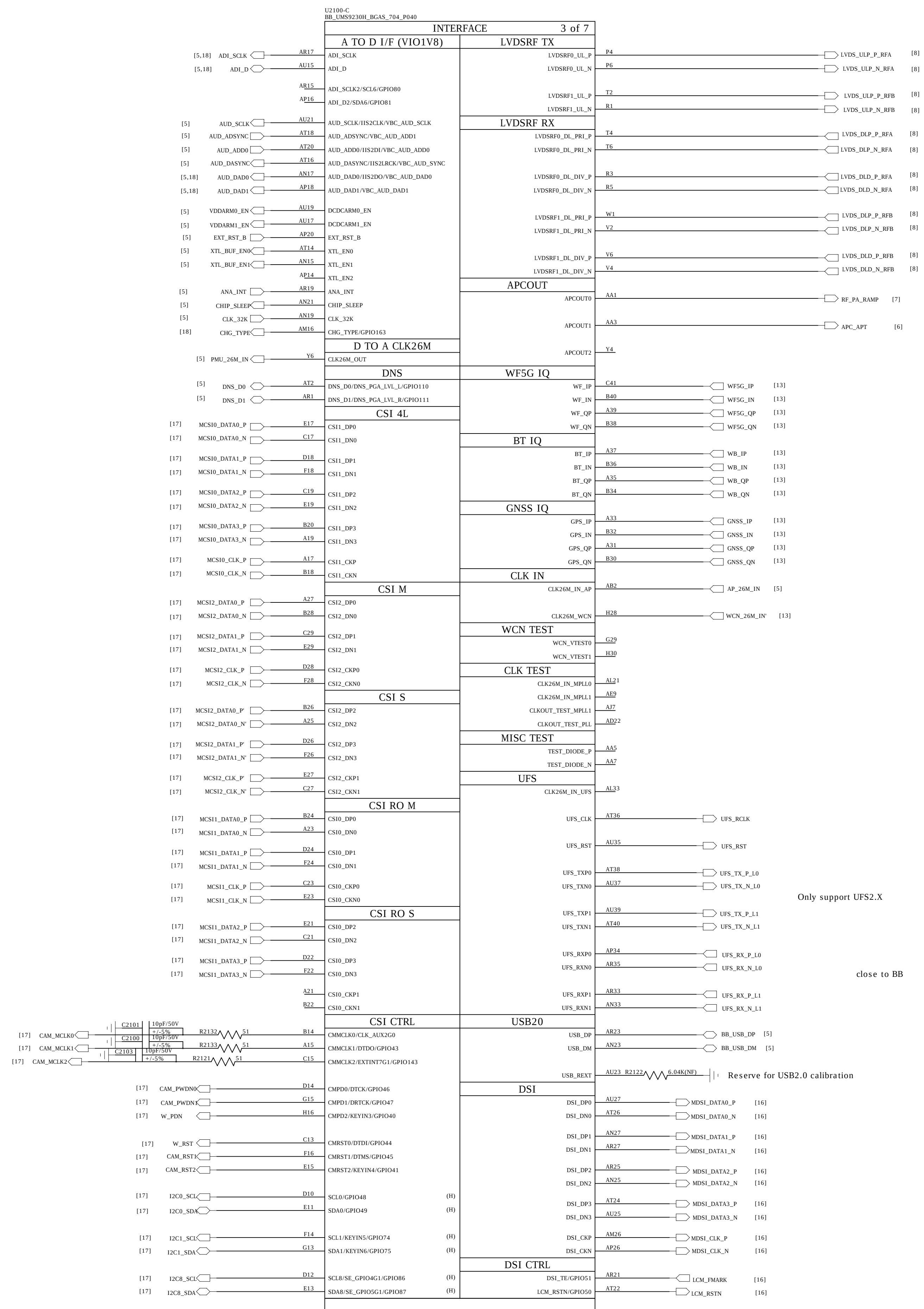
DIGITAL

Design notes: In this reference design,T612/T606 can't change to T616(UMS9230T)

T606/T612(UMS9230H)



Place JTAG test point outside of the shielding can

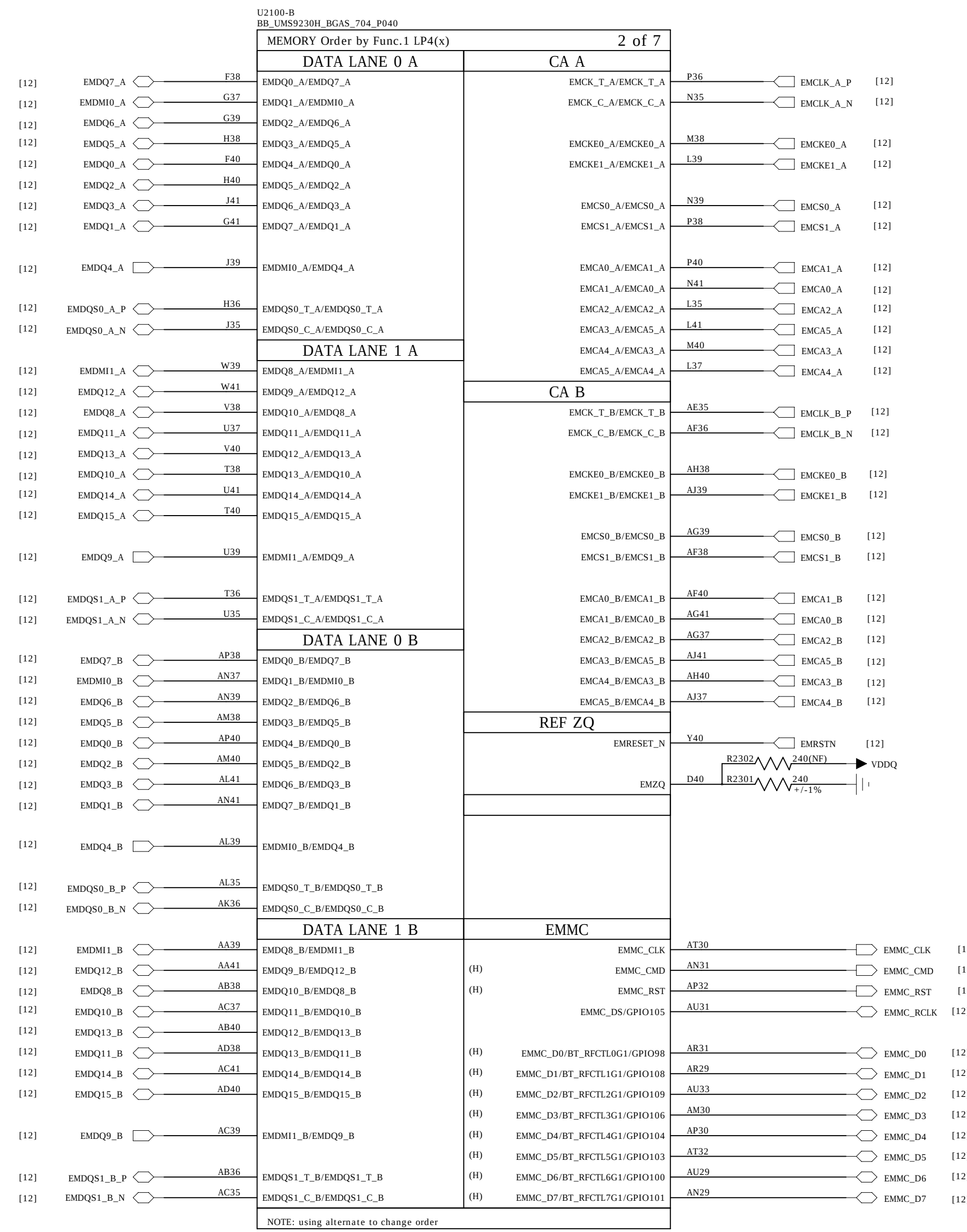


Only support UFS2.X

close to BE

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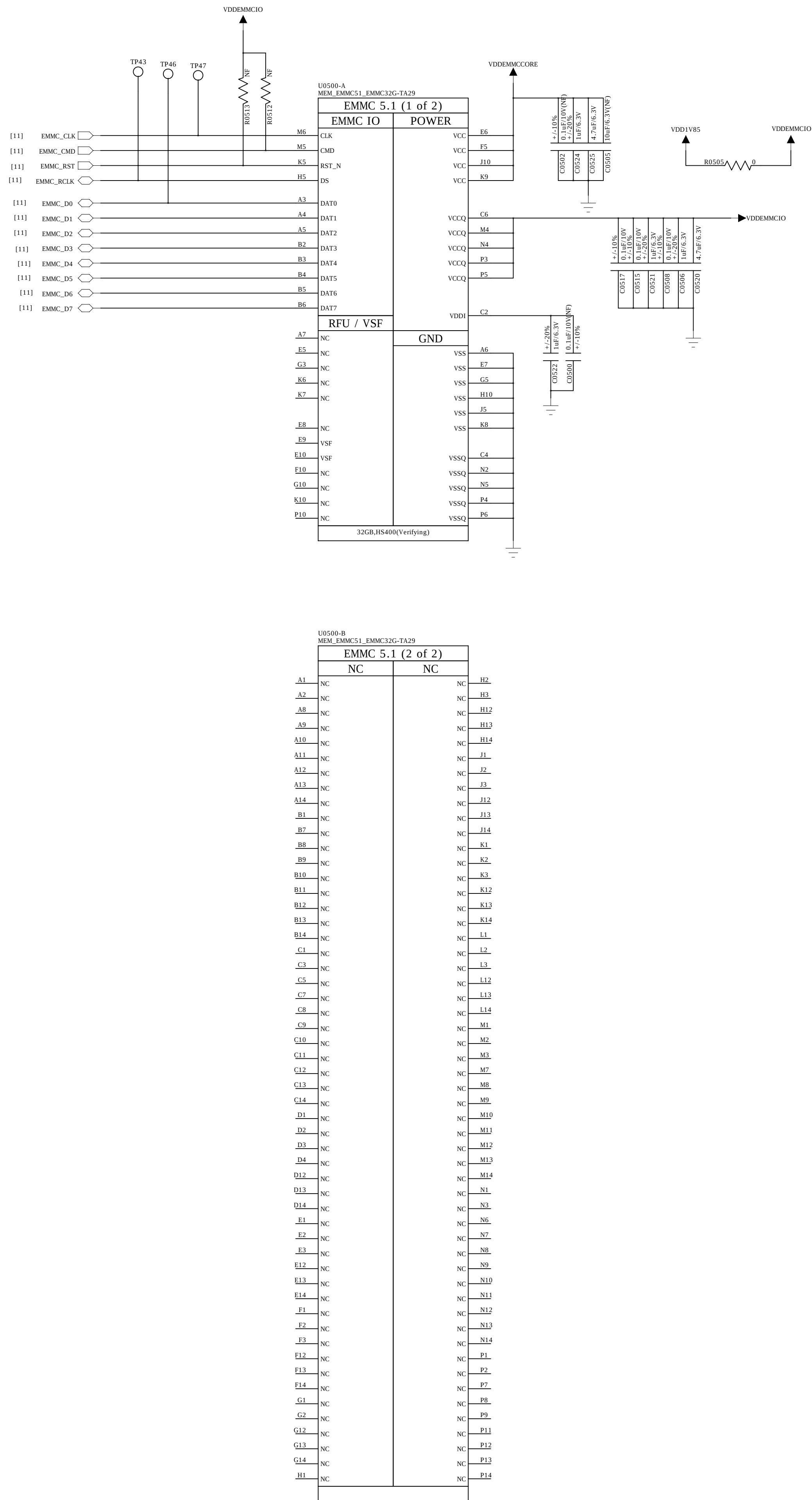
MEMORY



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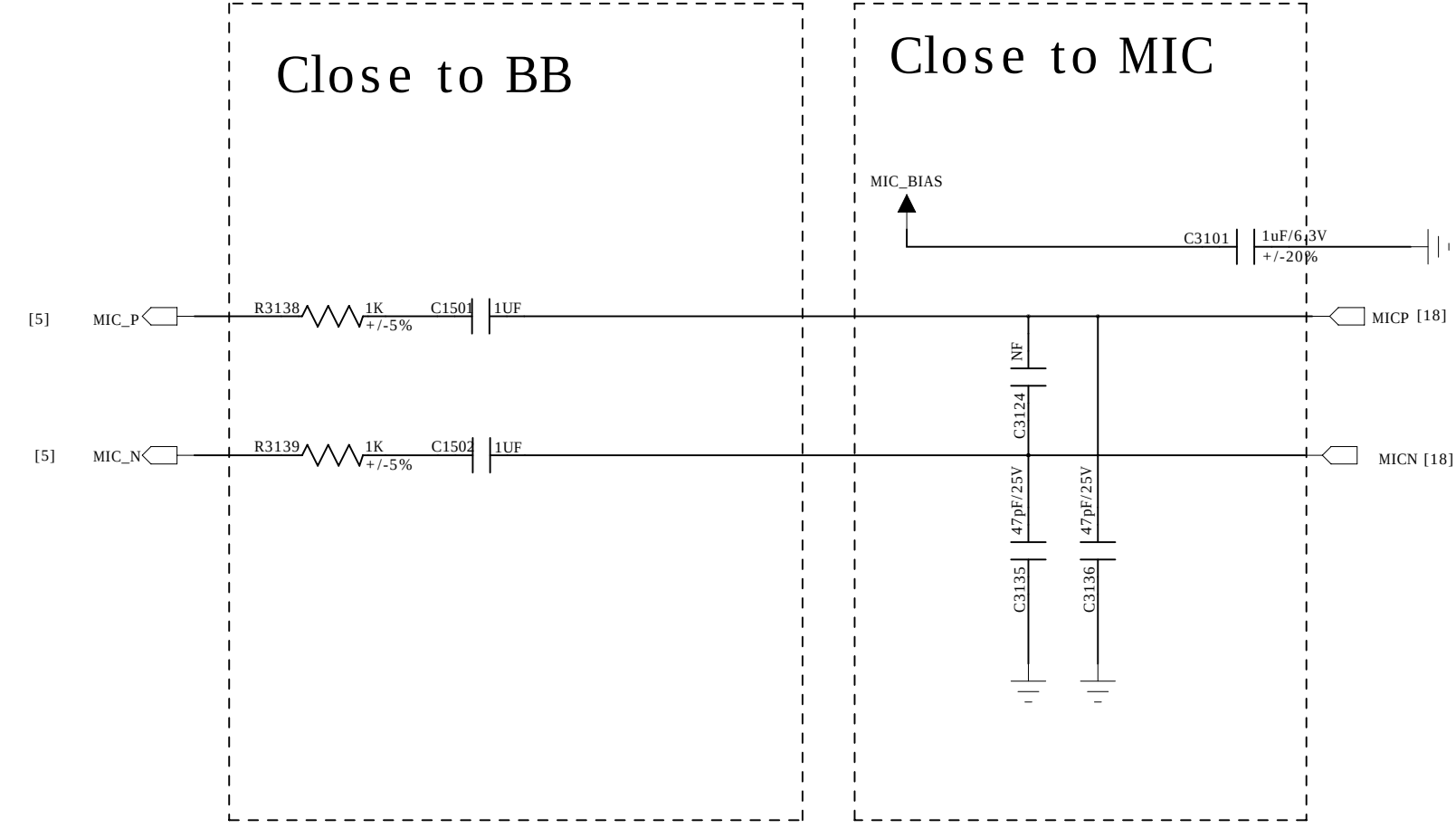
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eMMC

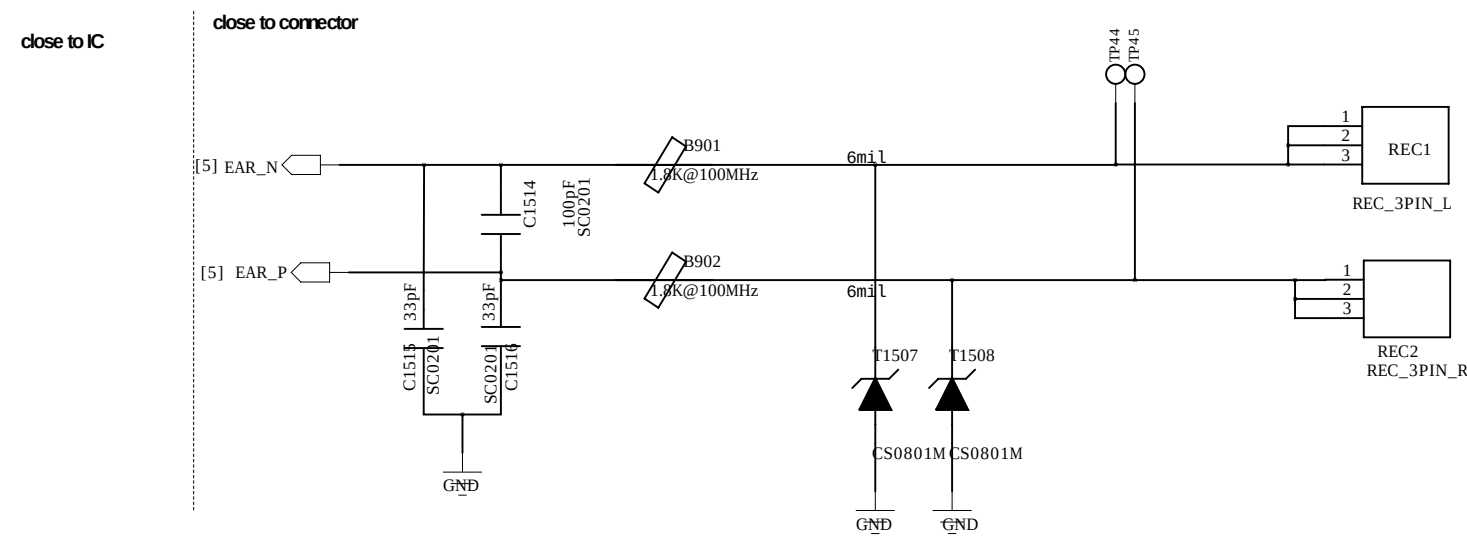


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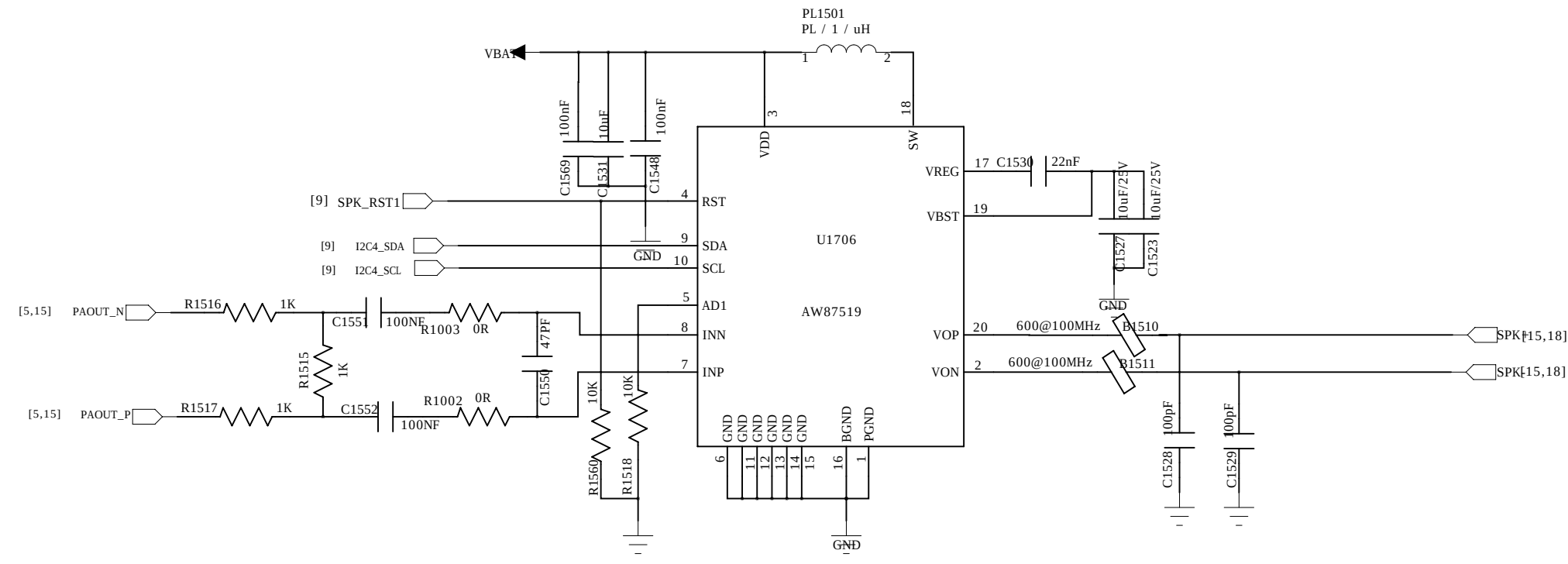
MAIN MIC



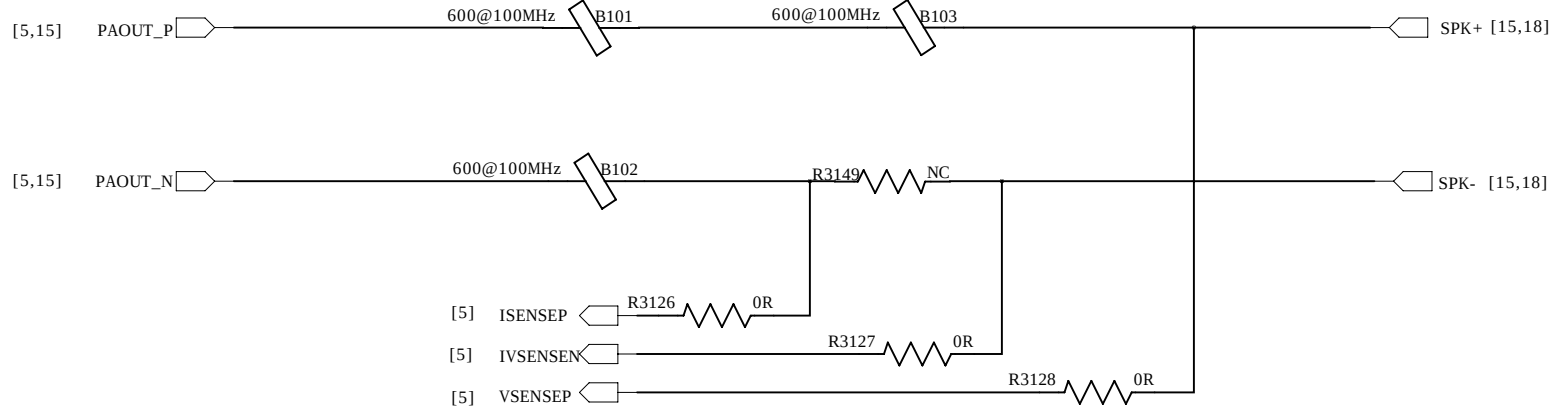
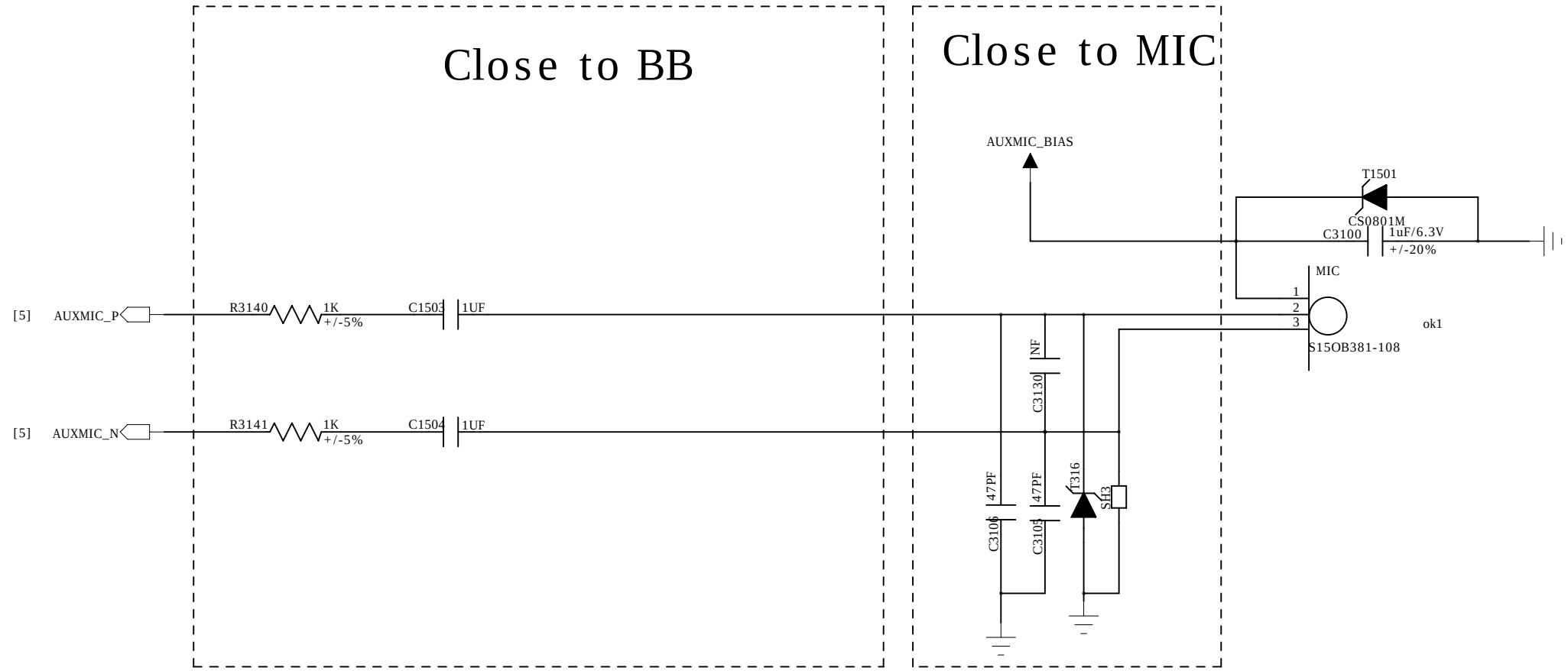
RECEIVER



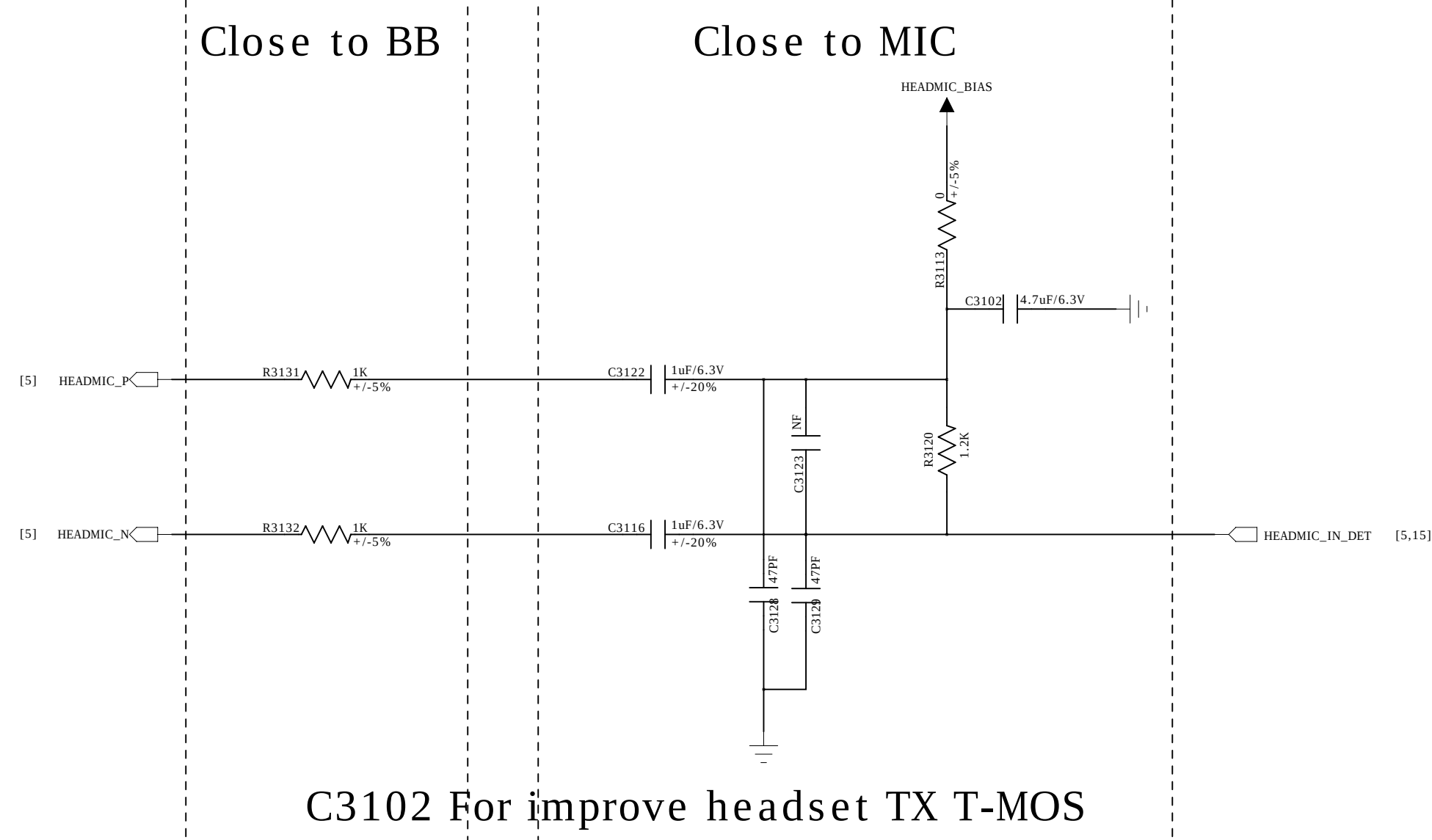
Audio PA



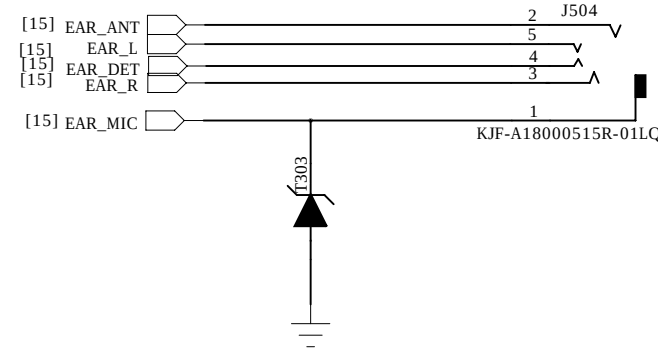
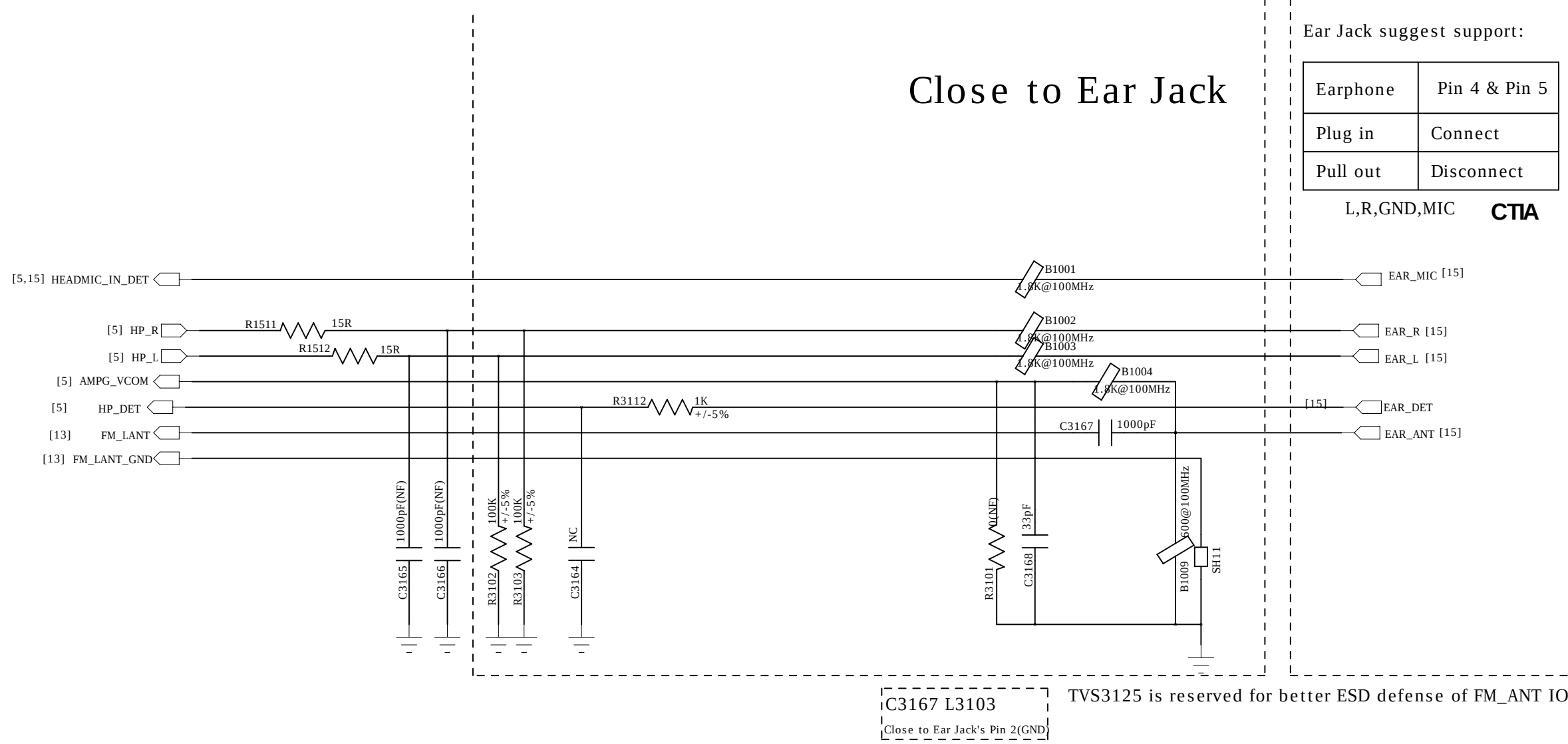
AUX MIC



HEAD MIC

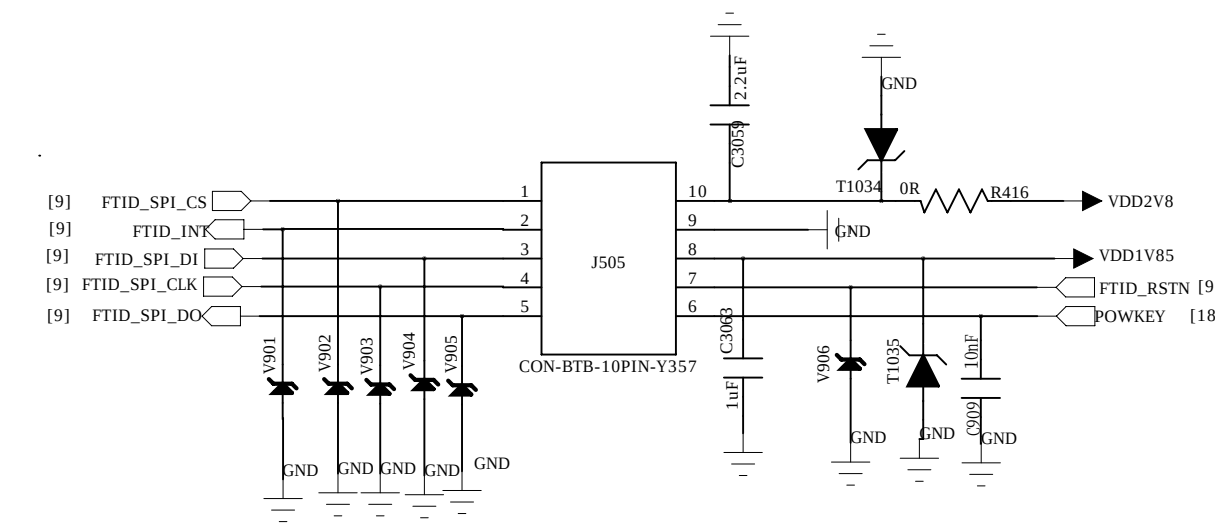


3.5mm Ear Jack

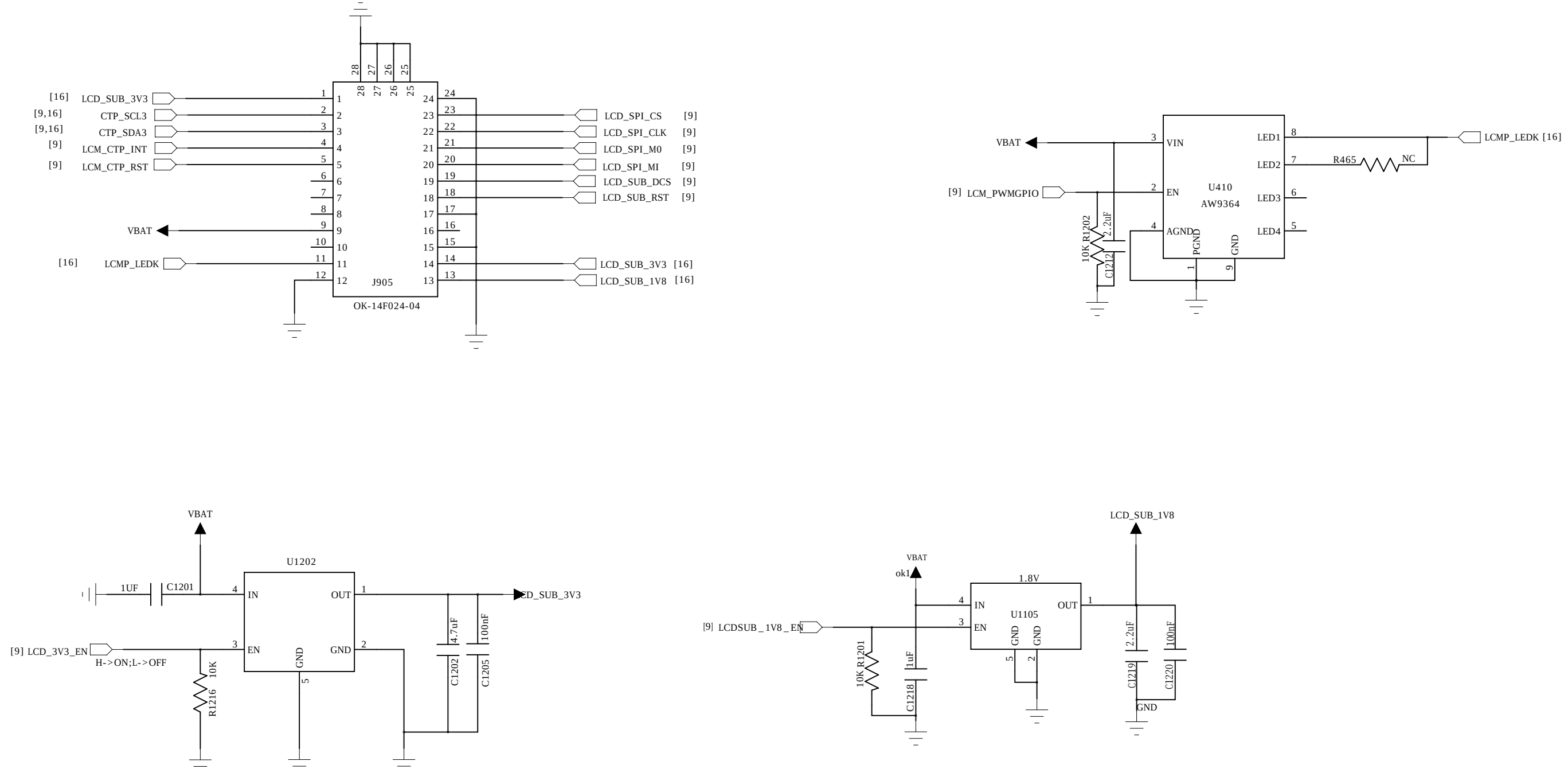


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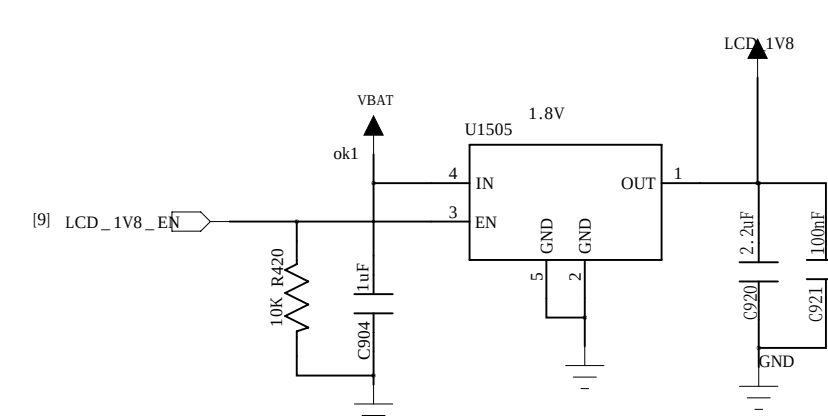
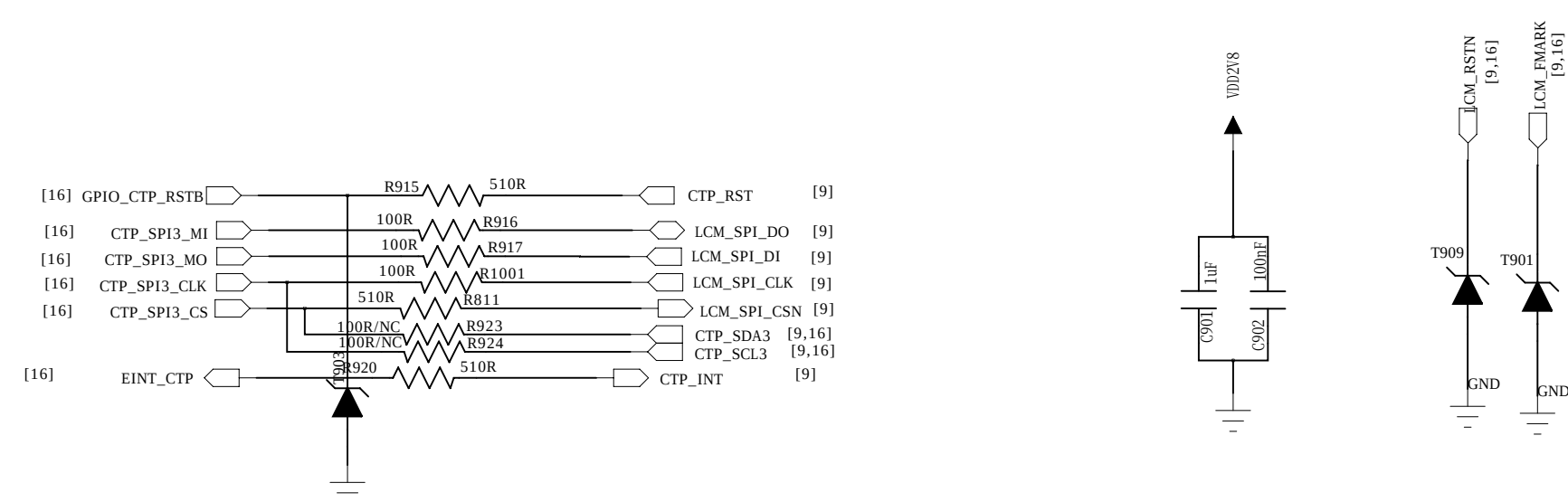
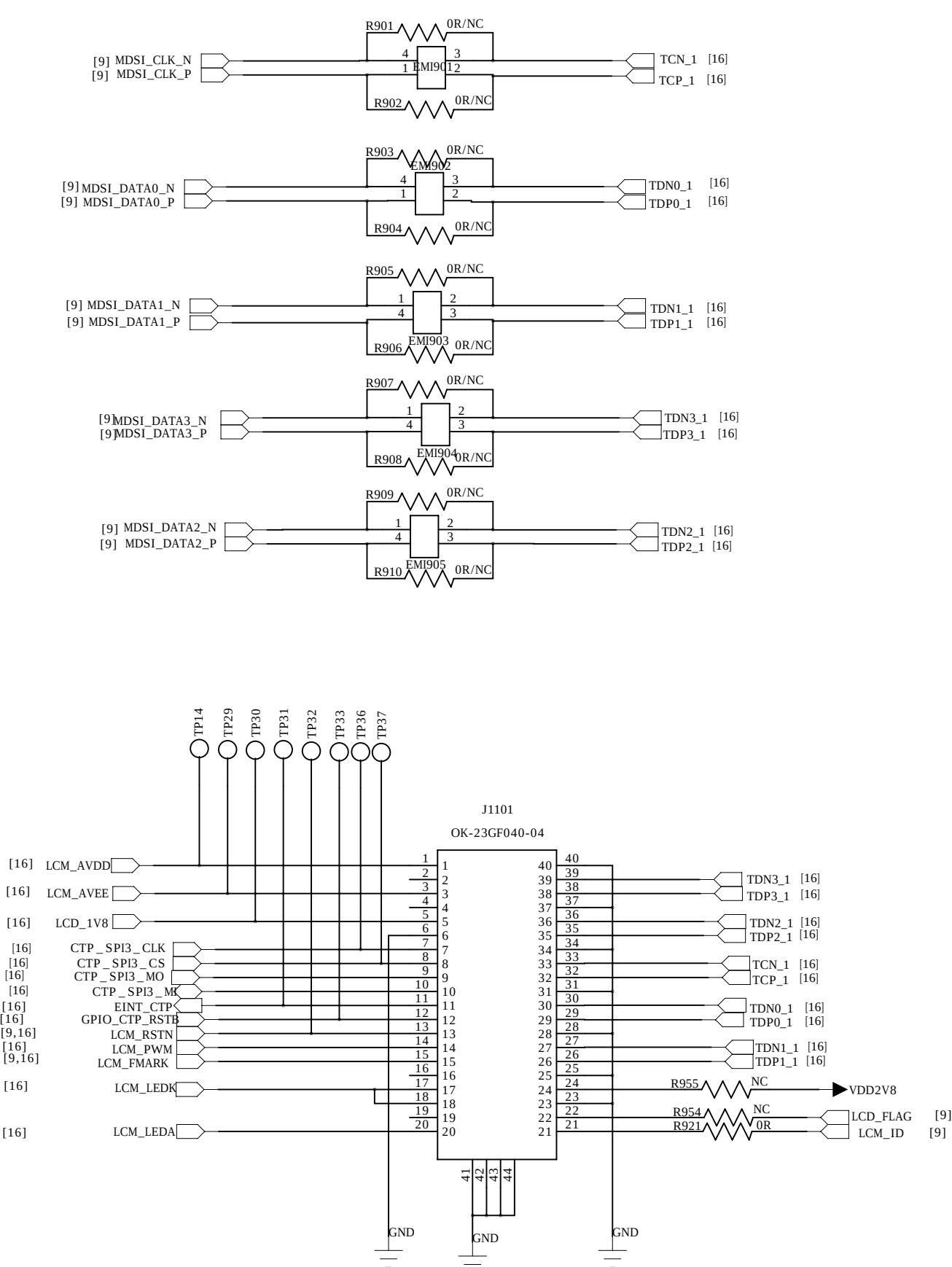
FRINGER



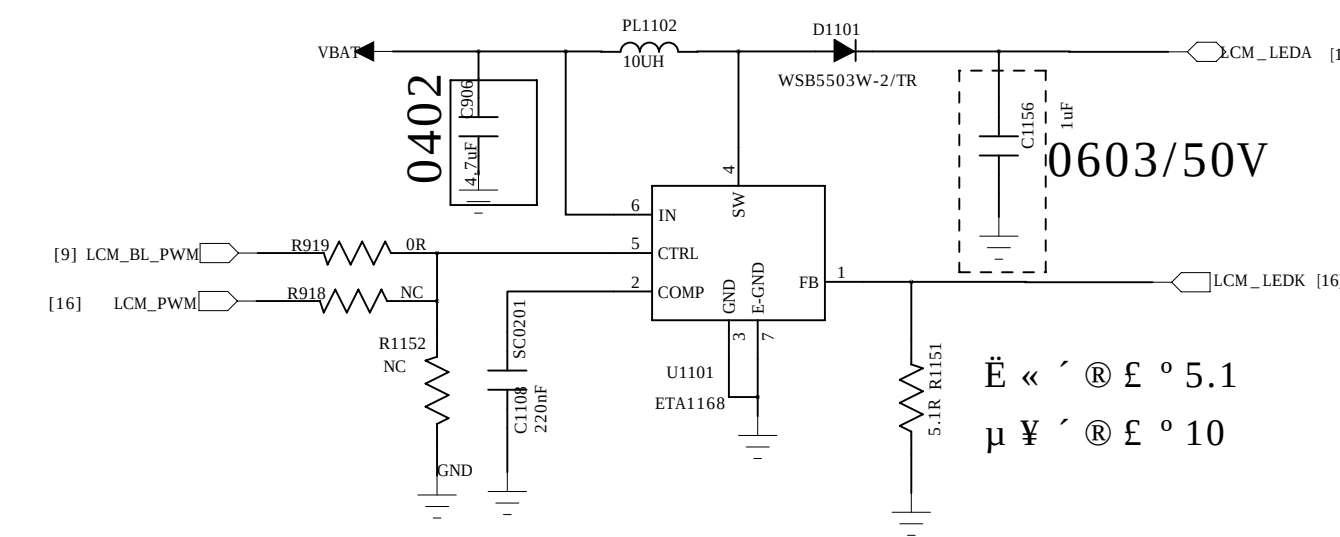
SUB_LCM



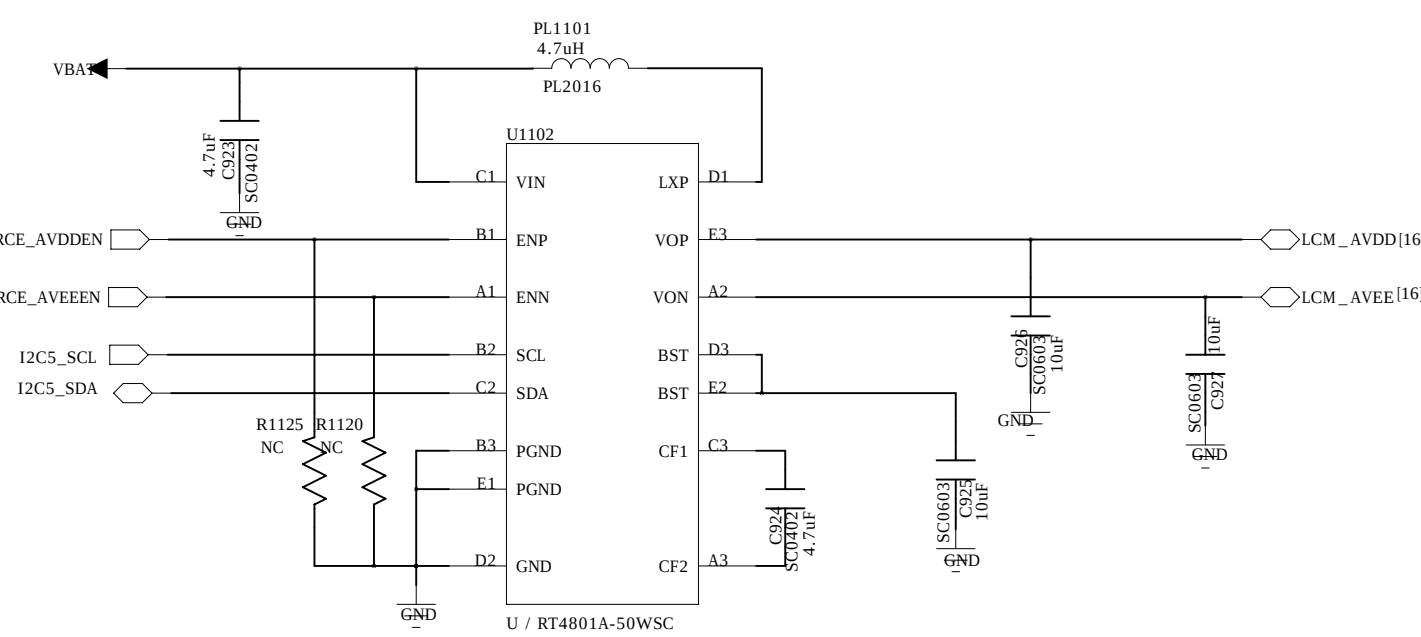
LCM(MIPI)



Back Light Driver

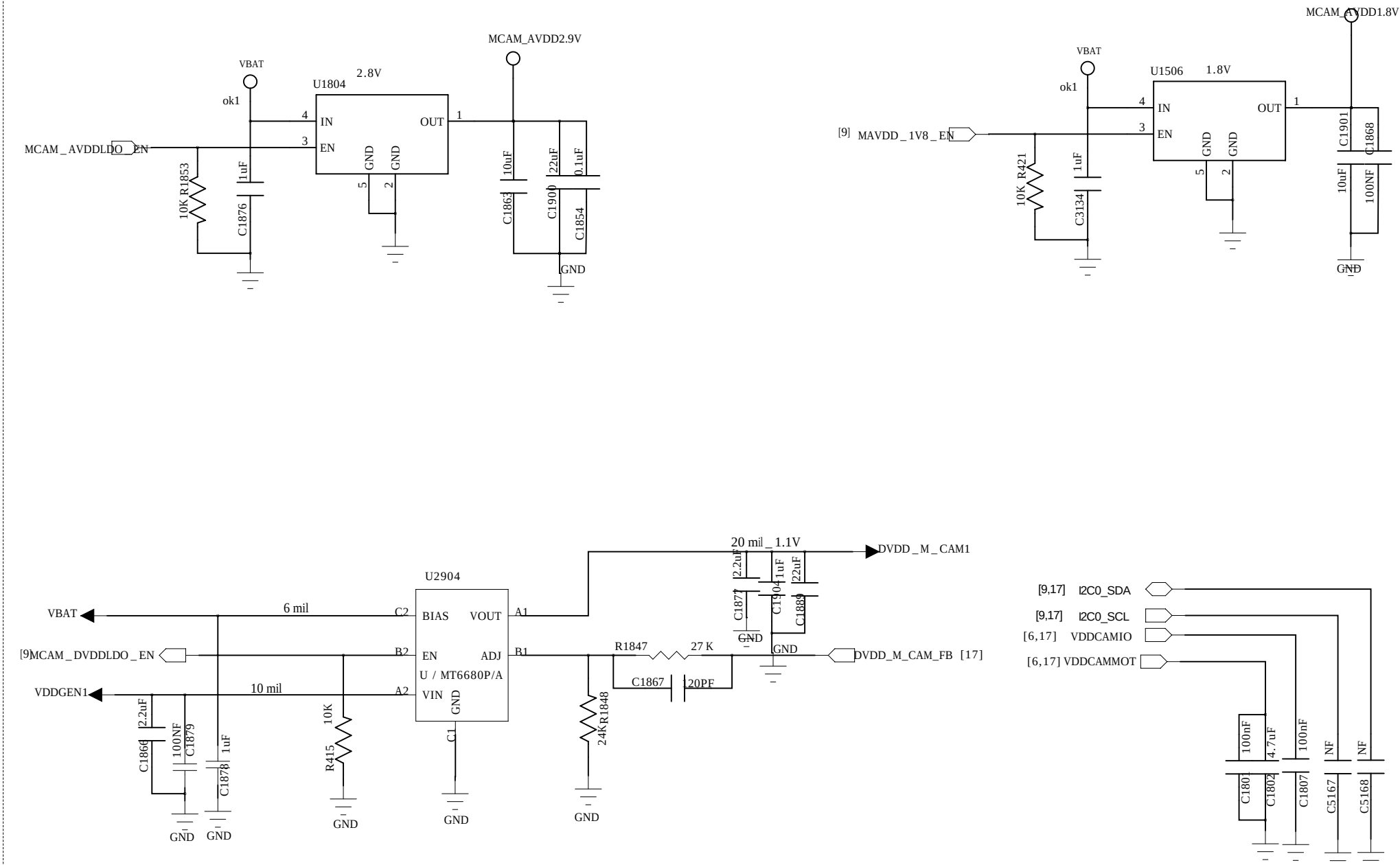
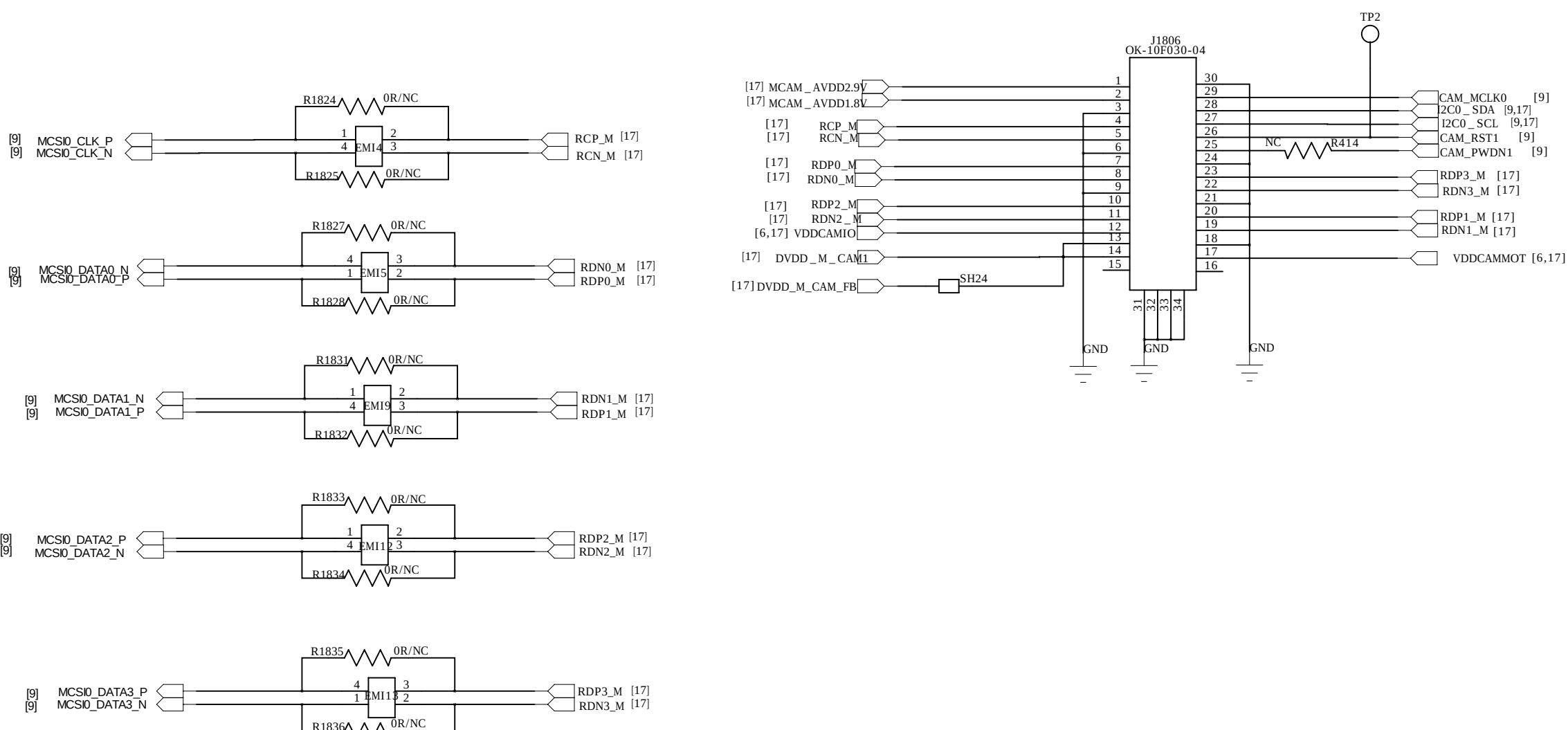


Source Driver

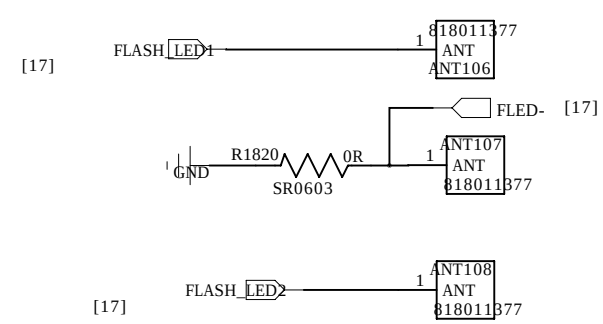


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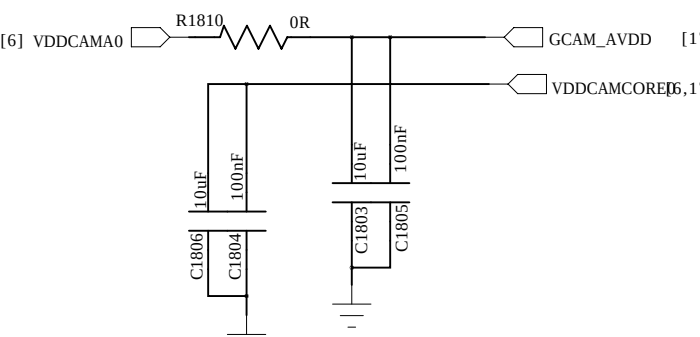
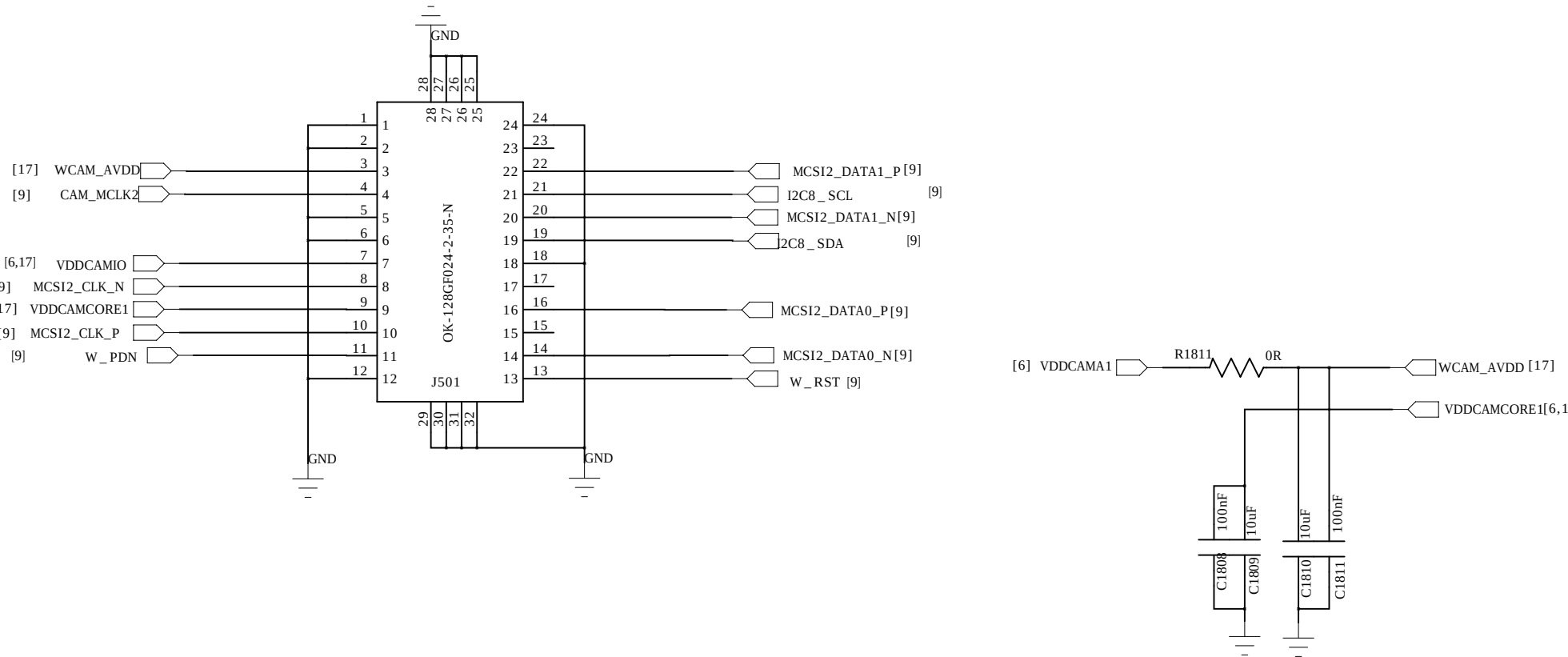
Rear main camera



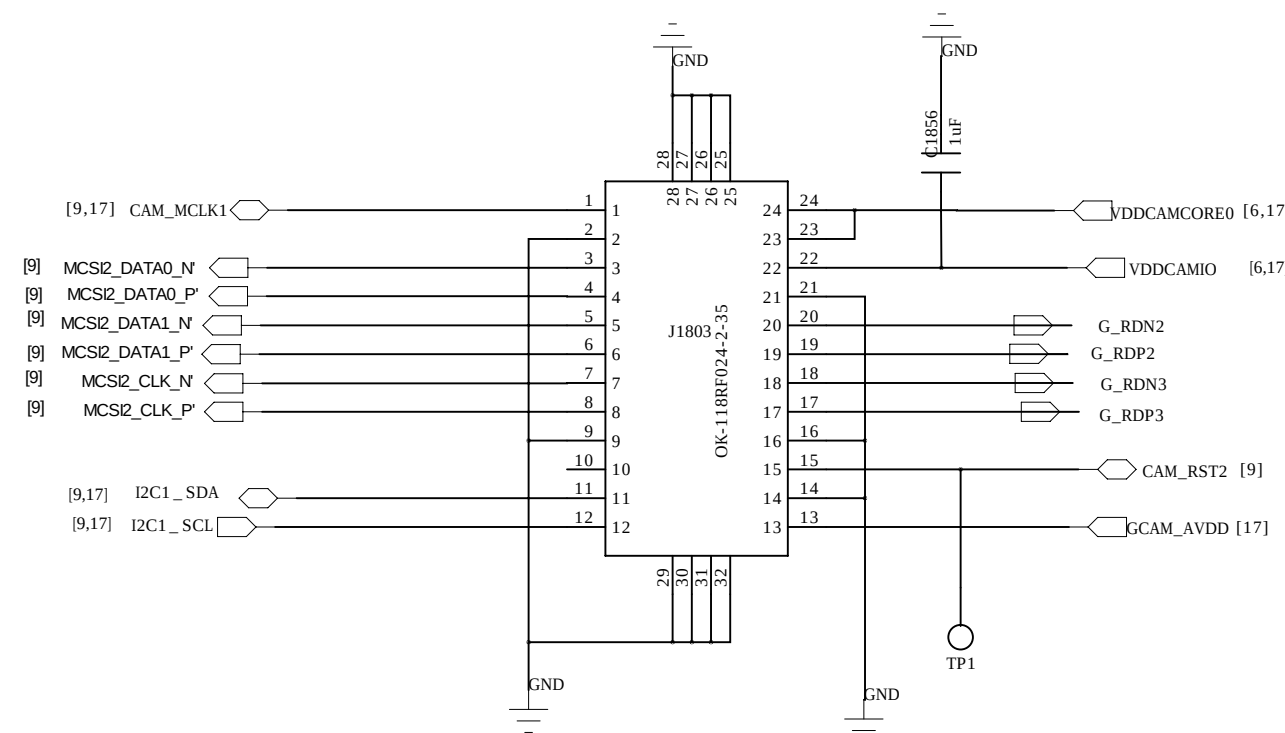
Reserve for RF desense issue debug



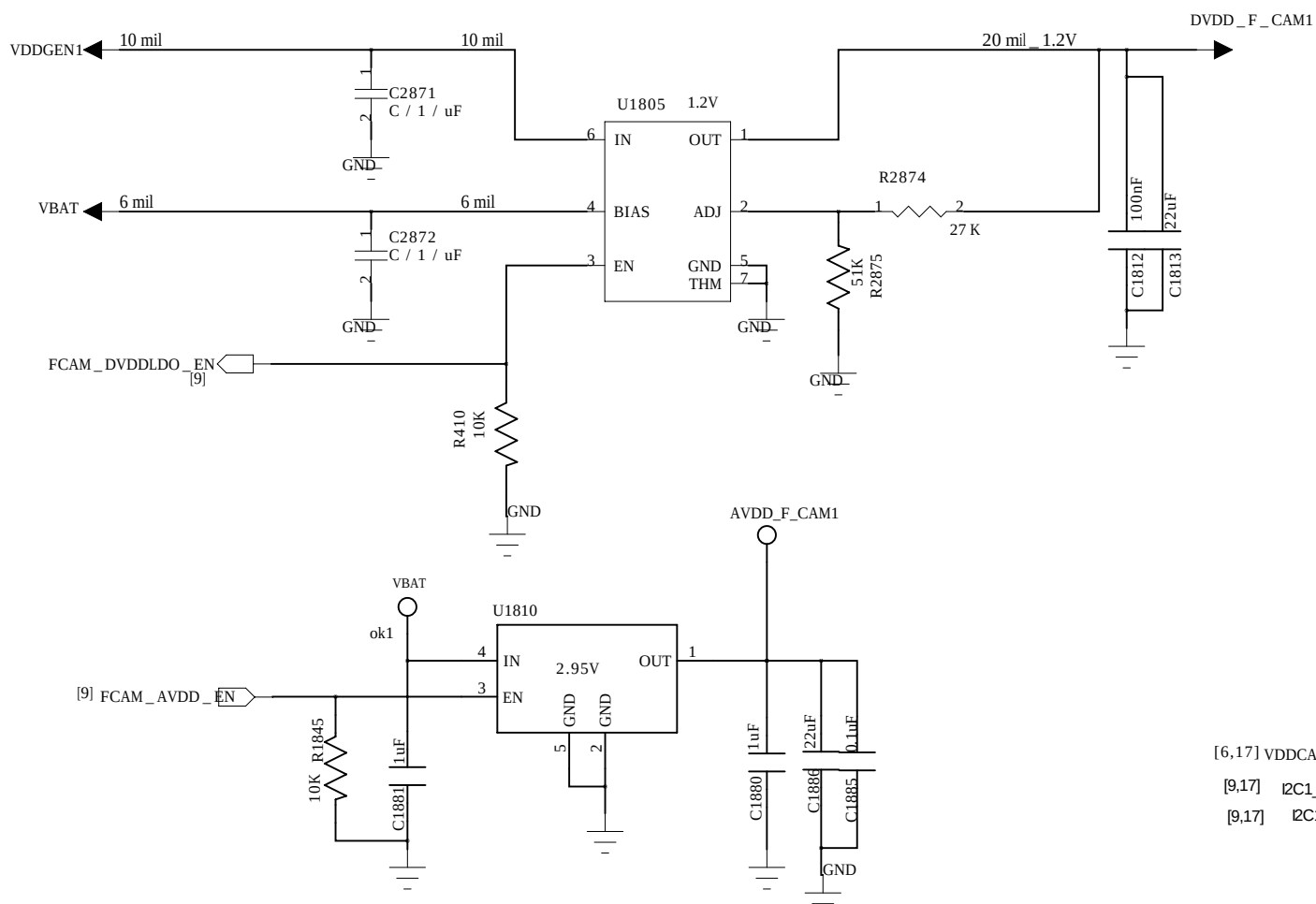
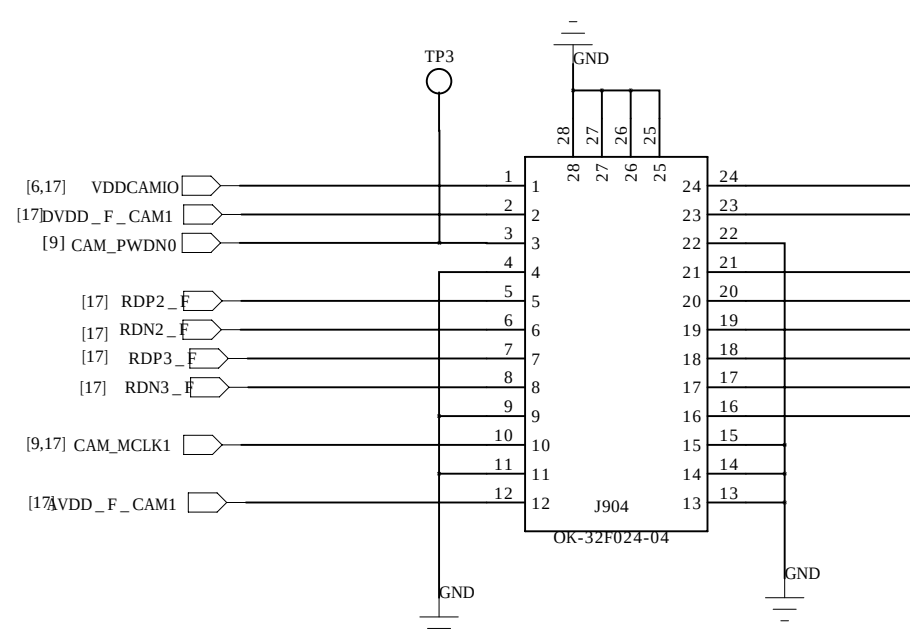
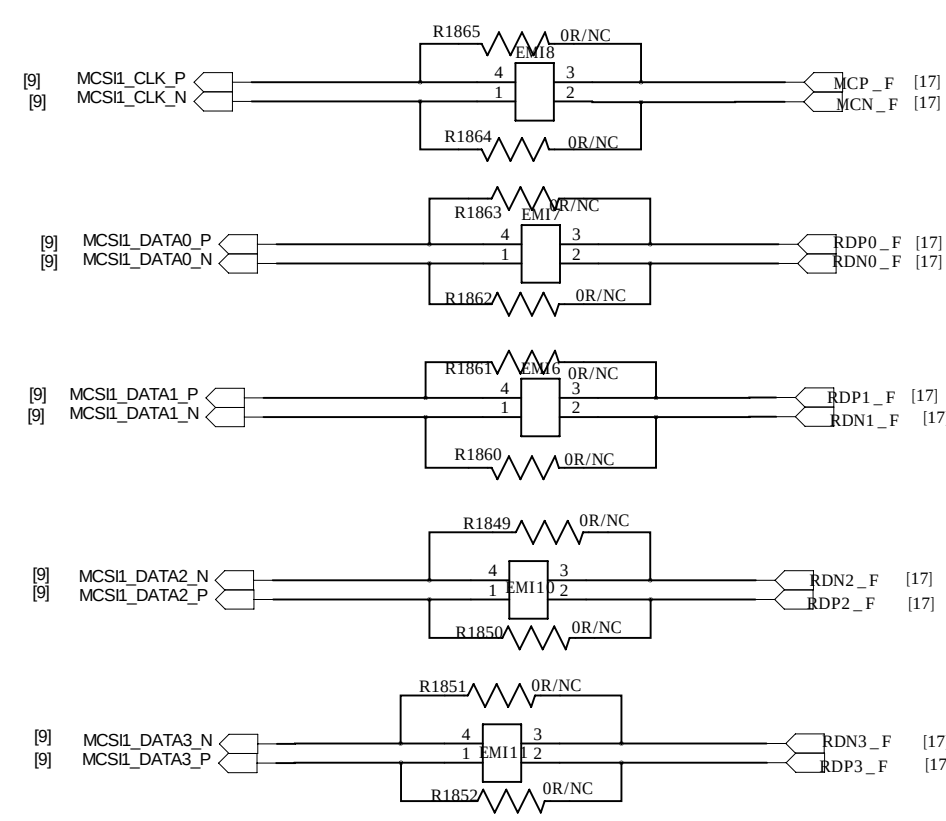
W_CAM



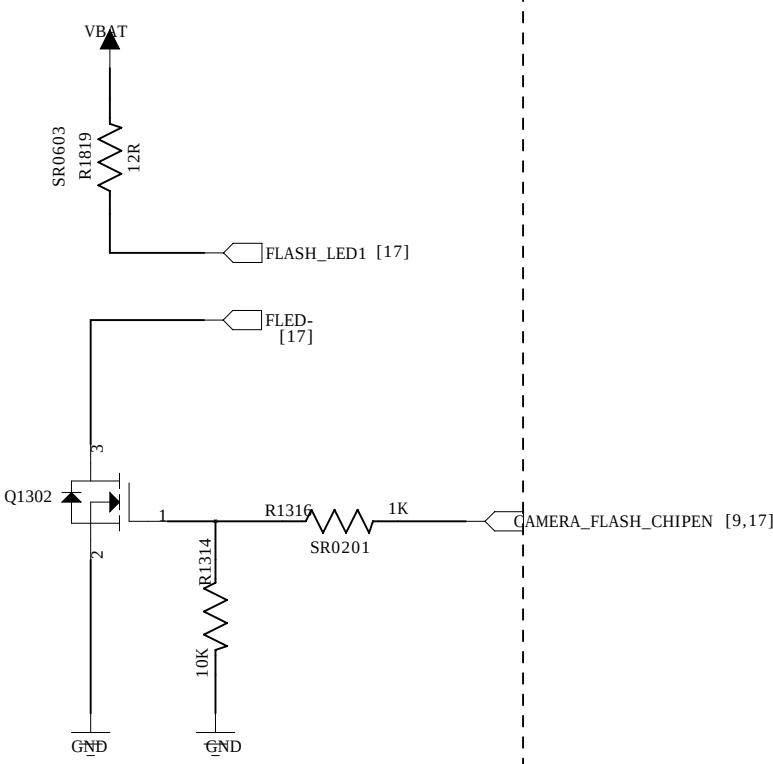
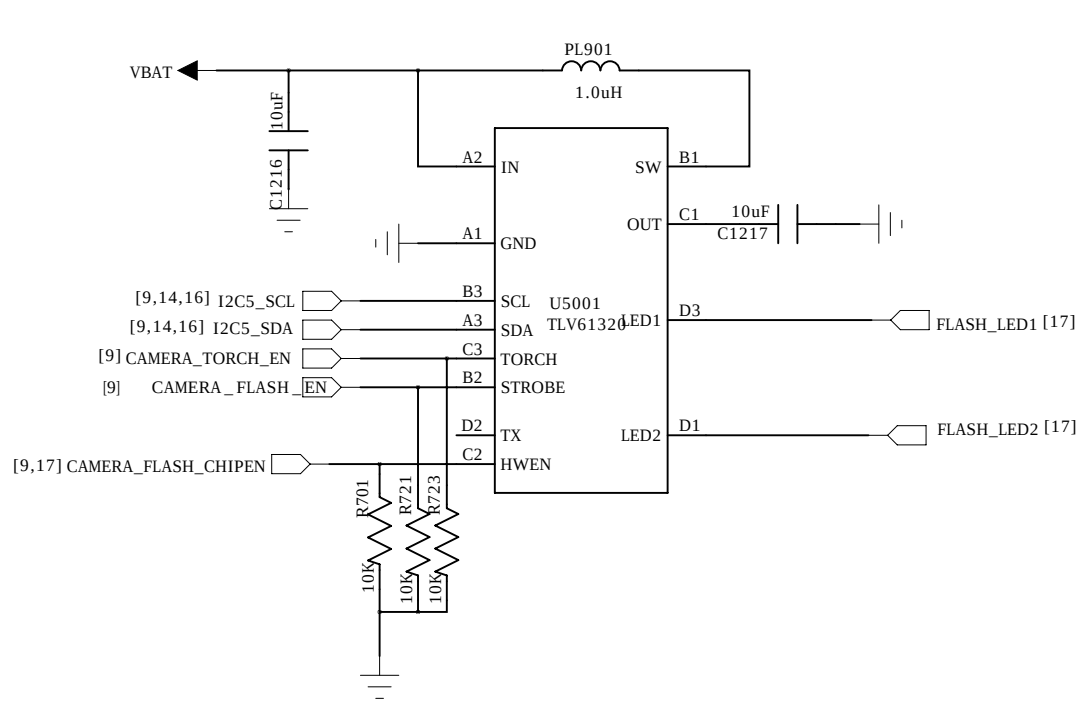
Ultra wide camera



Front camera



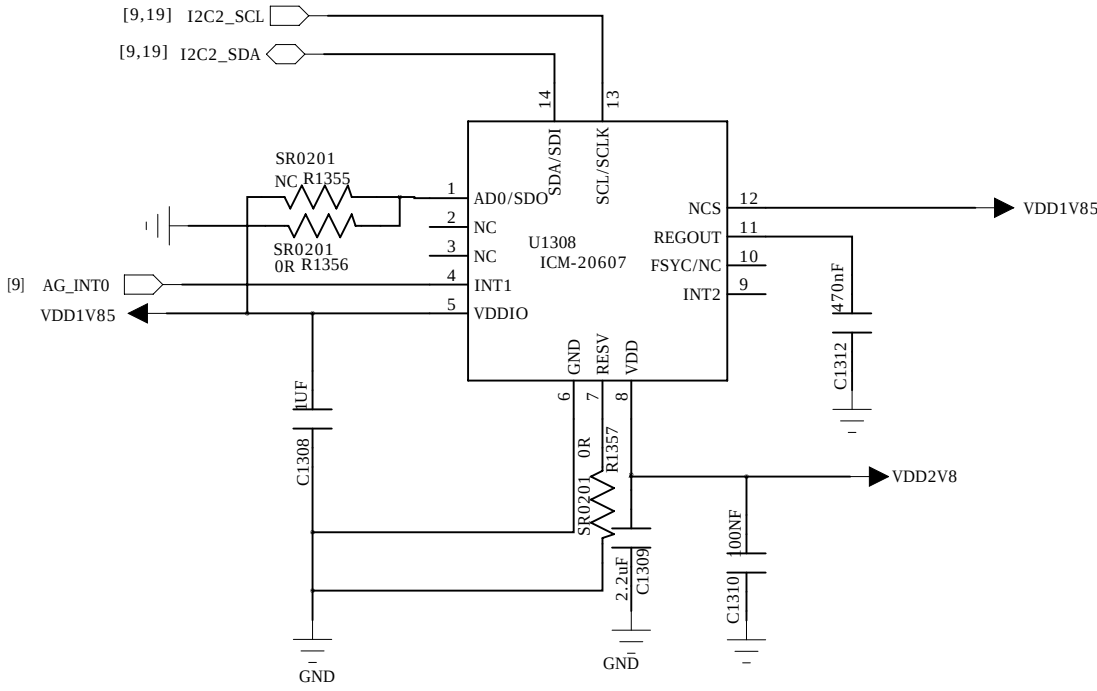
FlashLED



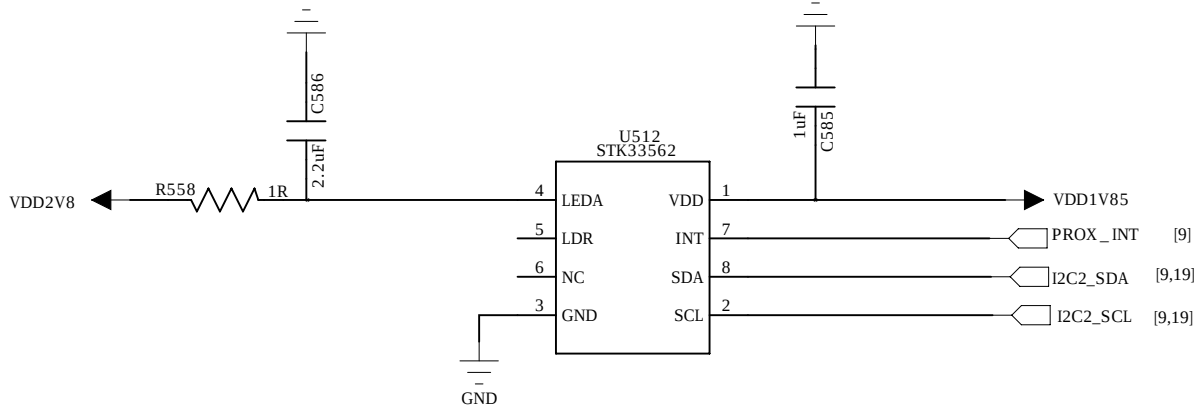
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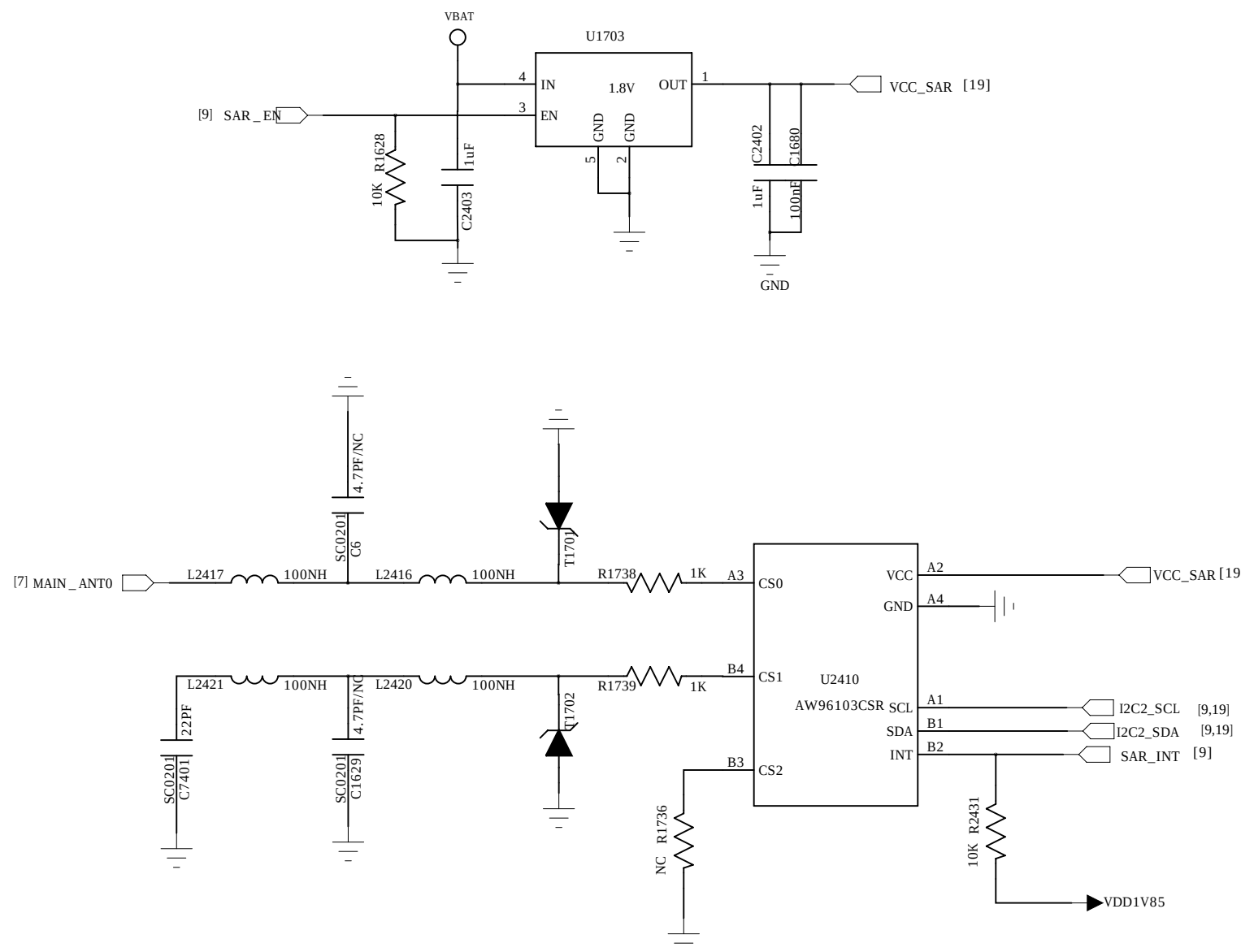
Accelerometer I3C



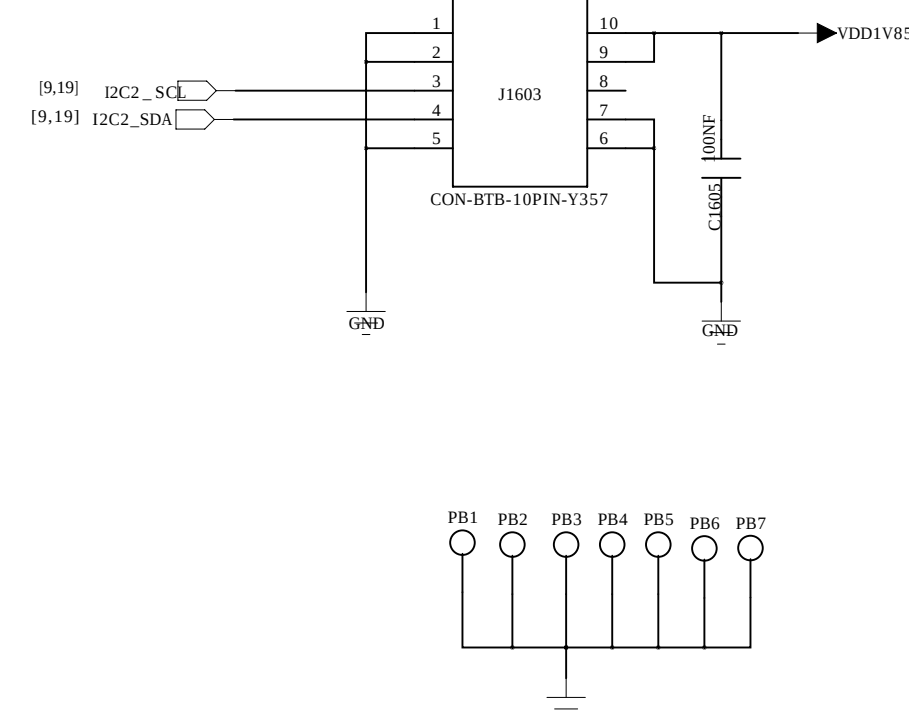
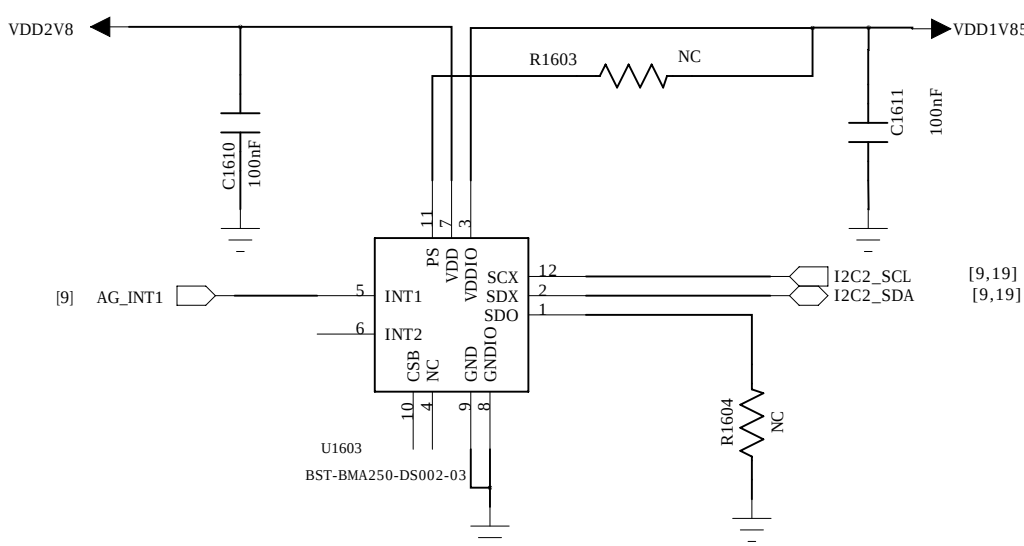
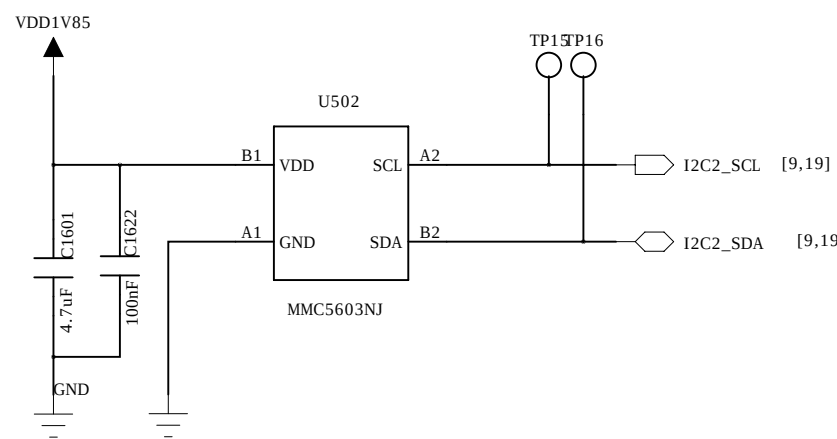
ALS & PROX



SAR Sensor

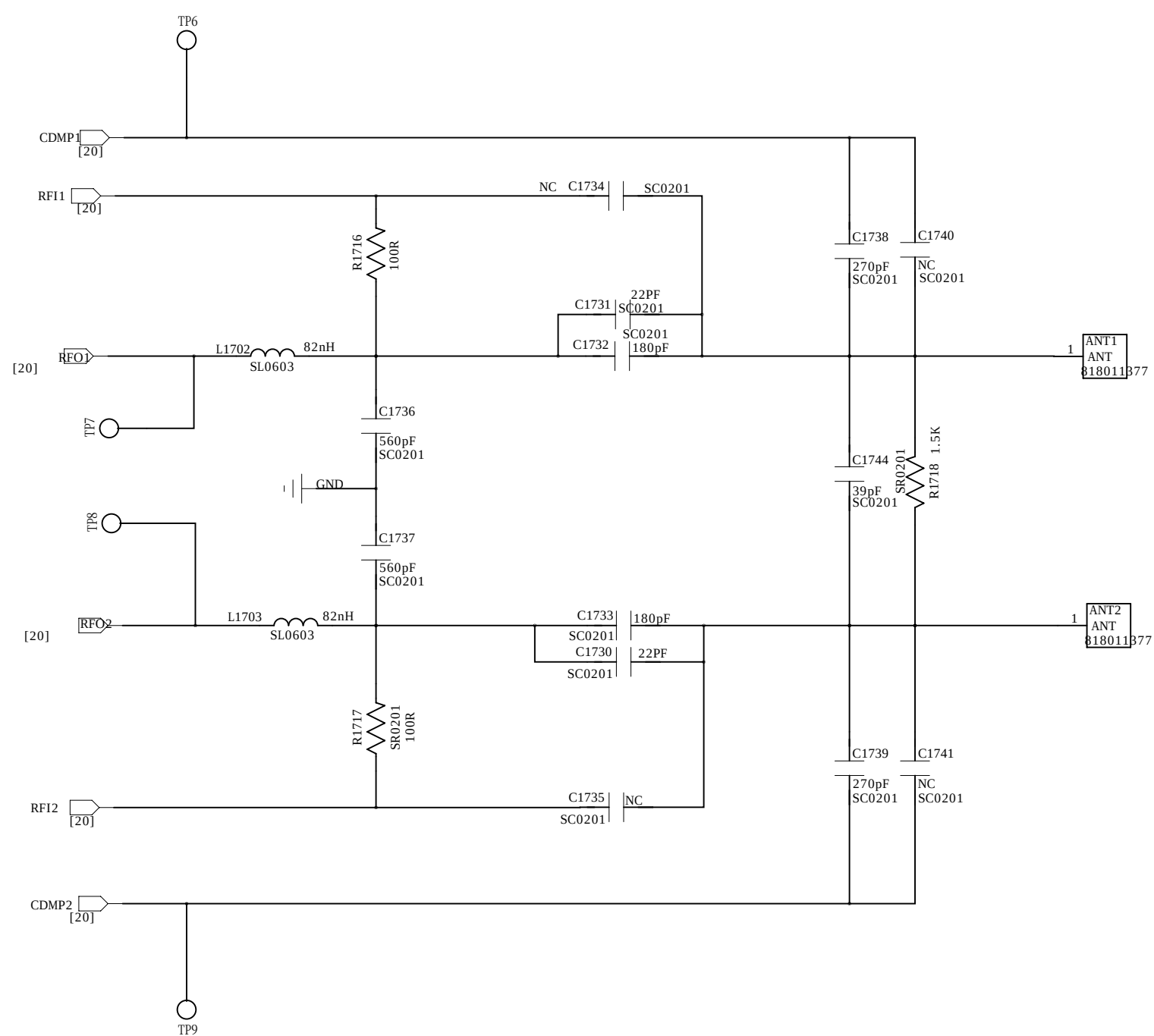
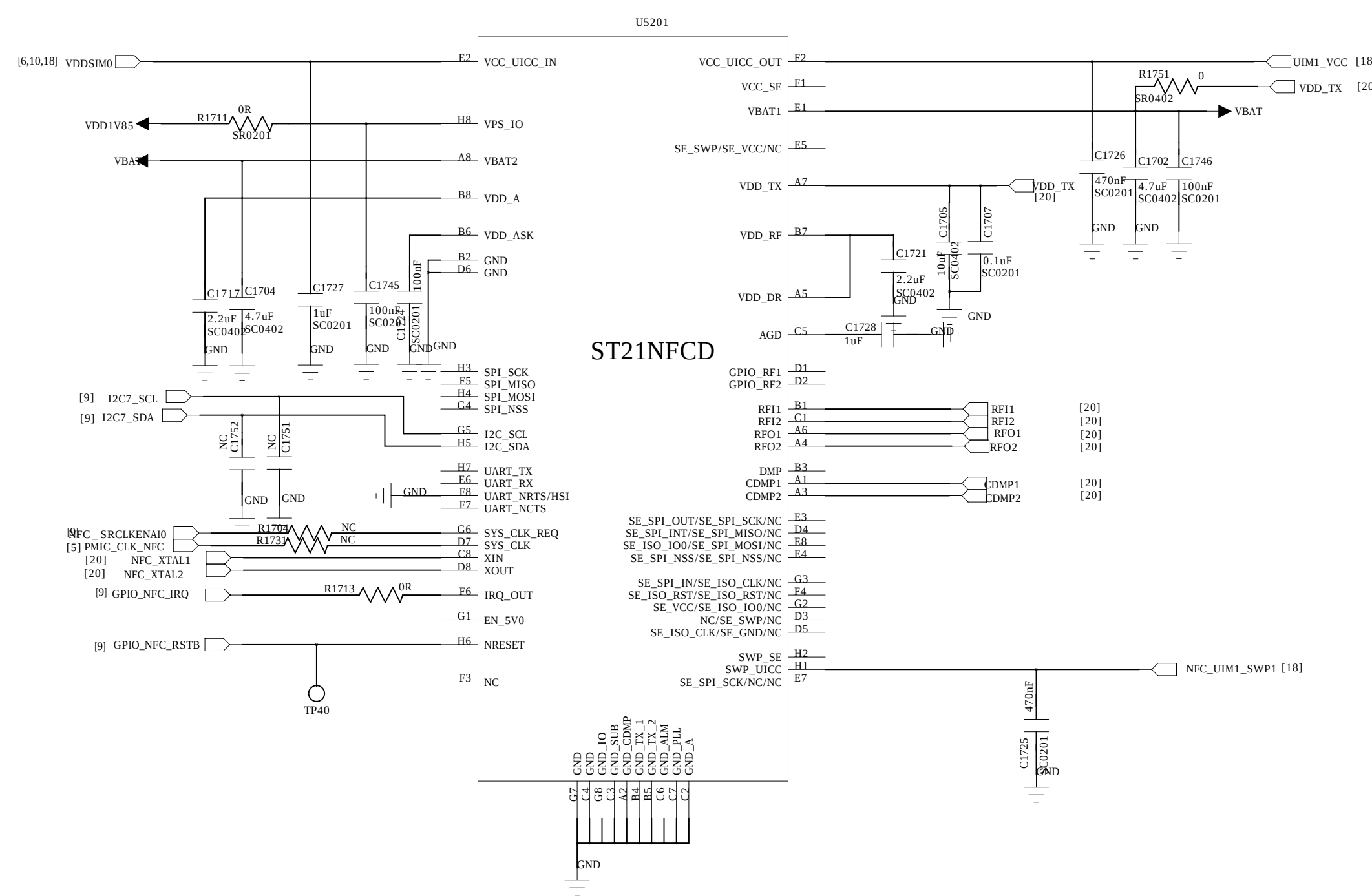
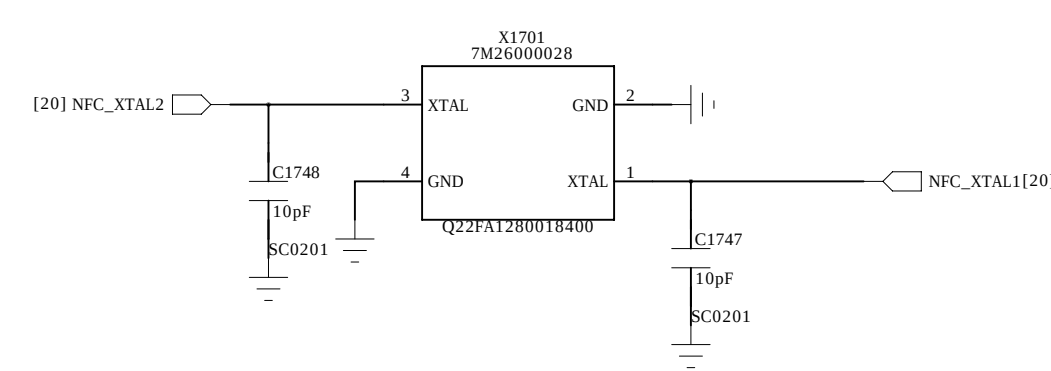


Magnetic Sensor



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		COMPANY: <Company Name>			
		TITLE: <Title>			
DRAWN: <Drawn By>	DIVISION: <Drawn Date>				
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