

SAAR_N_PXA1826_NZ3_FF_NA

Design variants	Area	Operator	Bands	CA supported (* possible performance degradation)	Not supported bands and CA	Notes
SKU1 (original)	China	CMCC, CU, CT	1,2,3,5,7,8,17,20,34,38,39,40,41	41+5/8, 40+5/8, 3+5/8 3+7*	CA 3+40, 39+41	All China bands and CA combinations
SKU1-A	NA	ATT	1,2,4,5,8,12,20,29,30,41	2+5/12/29; 4+5/12/29; 30+5/12/29 30+2*	B3,7 CA 30+4	All ATT bands with minor CA limitations
SKU1-B	EU	VF, Orange, other	1,2,3,5,7,8,12,20,38,40,41	3+8/20, 7+8/20 3+7*	CA 8+20	All EU bands with some CA limitations
SKU1-C	APAC, SK	VF, Telstra, ZTE, Optus, KT, SK	1,2,3,5,7,8,28,38,40,41	1+5/8/28, 3+5/8/28, 7+5/8/28 3+7*	CA 1+3	All APAC and SK bands, with some CA limitations
SKU1-D	LATAM	Telefónica, other	1,2,4,5,7,8/12,28,38,40,41	2+5/8/28, 4+5/8/28, 7+5/8/28	B3 CA 5+12	All LA bands with some CA limitations

REVISION HISTORY		
REVISION	DATE	DESCRIPTION
REV1.0	21-4-15	Release V1.0
REV1.1	6-5-15	ECN1

MARVELL SEMICONDUCTOR
PROPRIETARY INFORMATION

ORGANIZATION	MARVELL PTK	DESIGNER NAME	AVI TORRES
DRAWING TITLE			
SAAR_N_PXA1826_NZ3_FF			
SIZE	A3	PCB NO.	Rev
		PCB20841	1.0
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88PM812 LDO ALLOCATION TABLE

PMODE 0

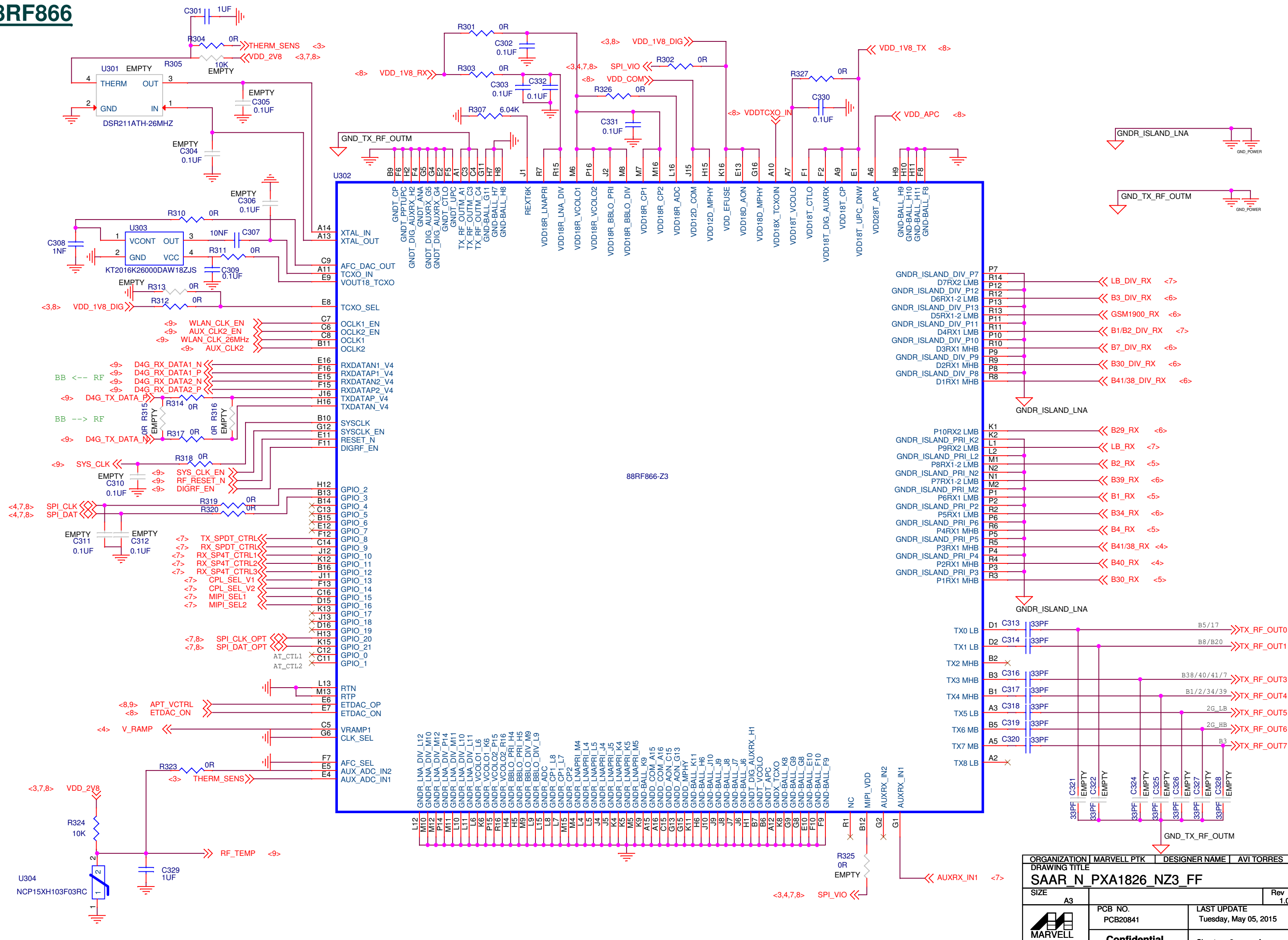
Supply Order	Supply	Deafult Enable	Deafult Volatge	Max Current	Usage
0	Buck1	On	1.15V	3000mA	VCC_MAIN,G2_VDD_1P0
1	LDO18LN	On	1.8V	200mA	VLDO_RF_18 (TXCO), VDD3_PM812
2	Buck2	On	1.8V	1200mA	1V8_IO,NAND,LPDDR2(VDD1),LCD
3	Buck3	On	1.2V	1200mA	RF_1V2,HSIC,LPDDR2(VDD2\VDDQ\VDDCA) VDD_CODEC
4	LDO1LV	On	1.1V	200mA	G2_VDD_1P0 (optional)
4	LDO3	On	2.8V	300mA	VLDO_RF_2V8
0	Buck5	Off	1.1V	1200mA	RF_APT (optinal) / WIFI_3V3
5	Buck4	On	1.8V	1200mA	VBUCK_RF_1V8
6	LDO7	On	2.8V	300mA	FREE
6	LDO5	On	3.1V	300mA	AVDD_USB
7	LDO14	On	2.8V	300mA	FREE
0	LDO6	Off	2.8V	300mA	FREE
0	LDO8	Off	2.8V	300mA	FREE
0	LDO11	Off	2.8V	300mA	LCD VCI
0	LDO9	Off	1.8V	300mA	FREE
0	LDO2(lmax 10mA)	Off	2.1V	10mA	MICBIAS_EXT
0	LDO4	Off	2.8V	300mA	USIM1_IO
0	LDO10	Off	2.8V	300mA	USIM2_IO
0	LDO12	Off	2.8V	300mA	SD_IO(BB)
0	LDO13	Off	2.8V	300mA	SD_CORE
0	LDO15	Off	2.8V	300mA	EC459 ANT TUNER
0	LDO16	Off	2.8V	300mA	FREE
0	LDO17	Off	2.8V	300mA	LNA_GPS_2V8,RGB
0	LDO19	Off	2.8V	200mA	GPS


I2C ADRESS TABLE

Peripheral	Slave Address 7bit/8bit	PWR_I2C (1.8V)	CI2C (1.8V)
		Shared	GPIO53, GPIO54
Procida PMIC	0x30 / 0x60 -> 0x37 / 0x6E	X	
Procida Codec	0x38 / 0X70	X	
Lipari Charger	0x68 / 0xD0	X	
Touch (Cypress CY8CTST242)	0x12 / 0x24		X
LCD Backlight Driver (ISL97698)	0x27 / 0x4E		X
RGB Driver (PCA9632)	0x59 / 0xB2		X
Board ID + Remote EEPROM	0x50 / 0xA0		X

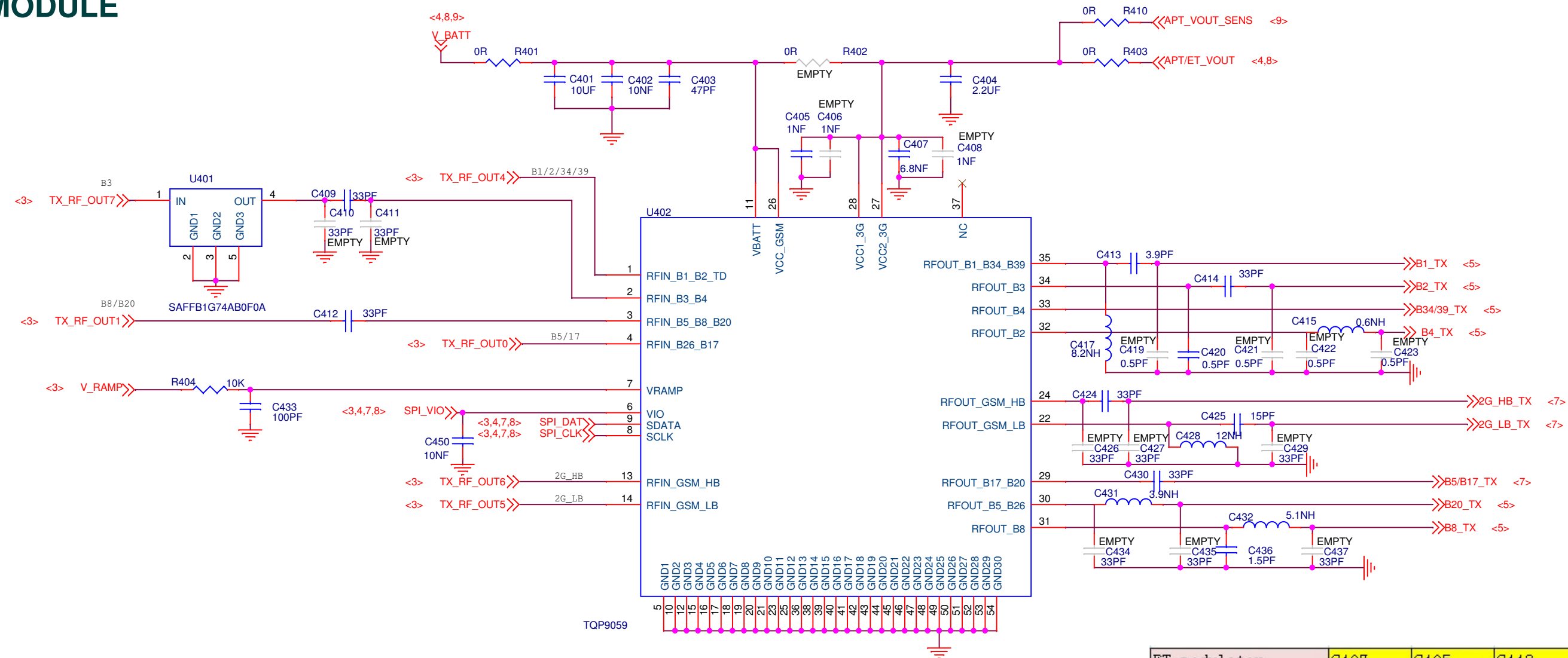
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88RF866

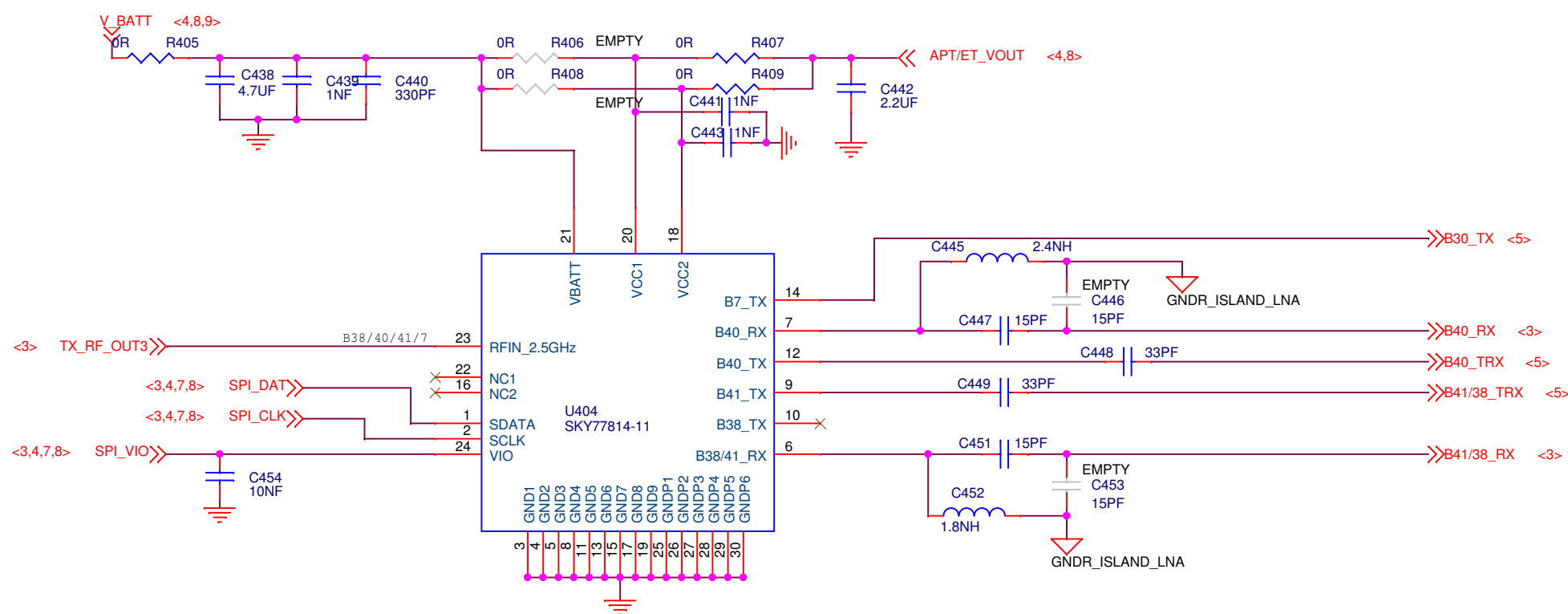


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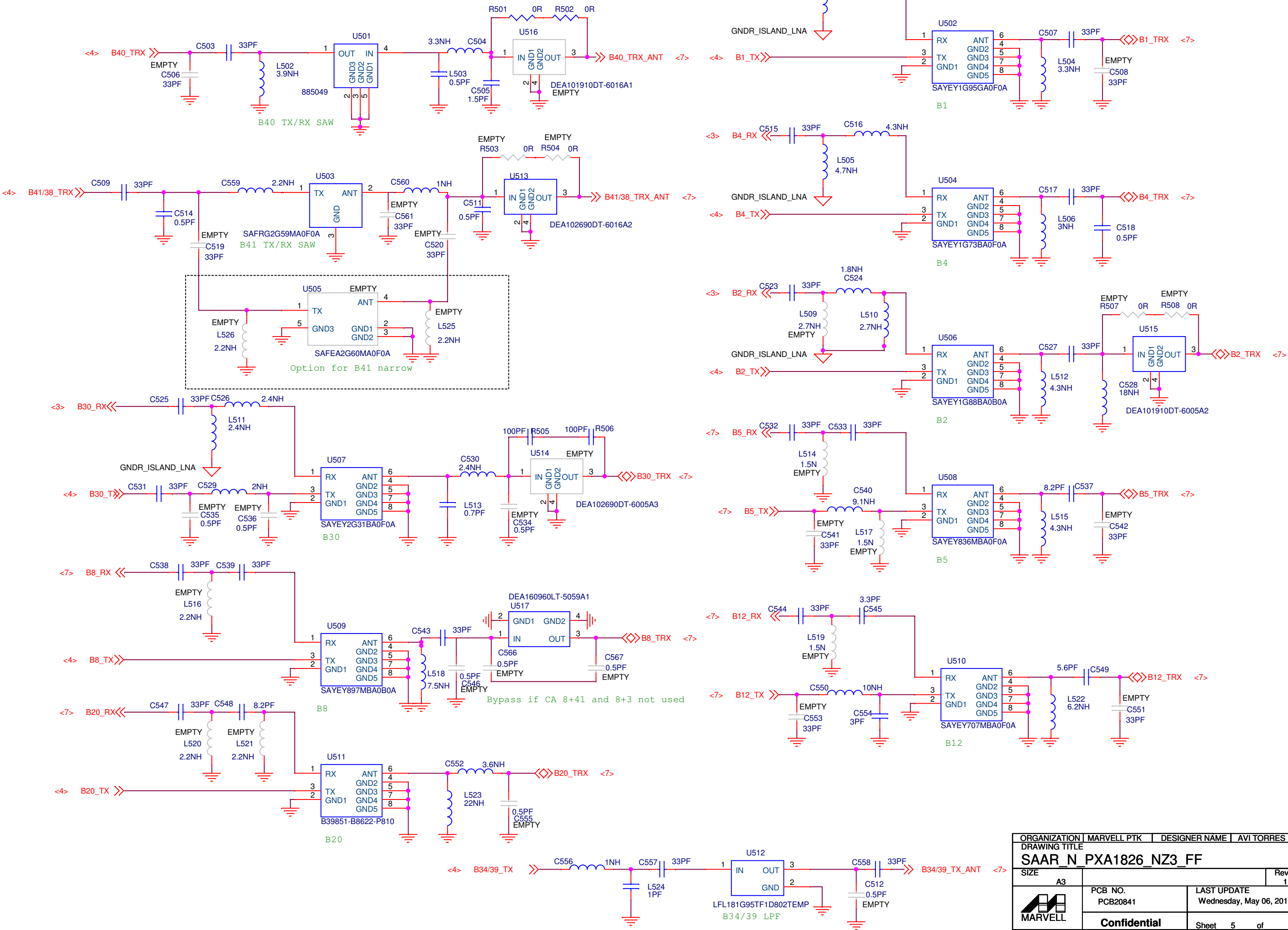
PA_MODULE




ET modulator	C407	C405	C443	C441
If R2A217 is used	10nF	2.7nF	6.8nF	1nF
If R2A227 is used	6.8nF	1nF	1nF	1nF
Placement: C407 close to U402 pin27, C405 close to U402 pin28, C443 close to U404 pin18, C443 close to U404 pin20.				

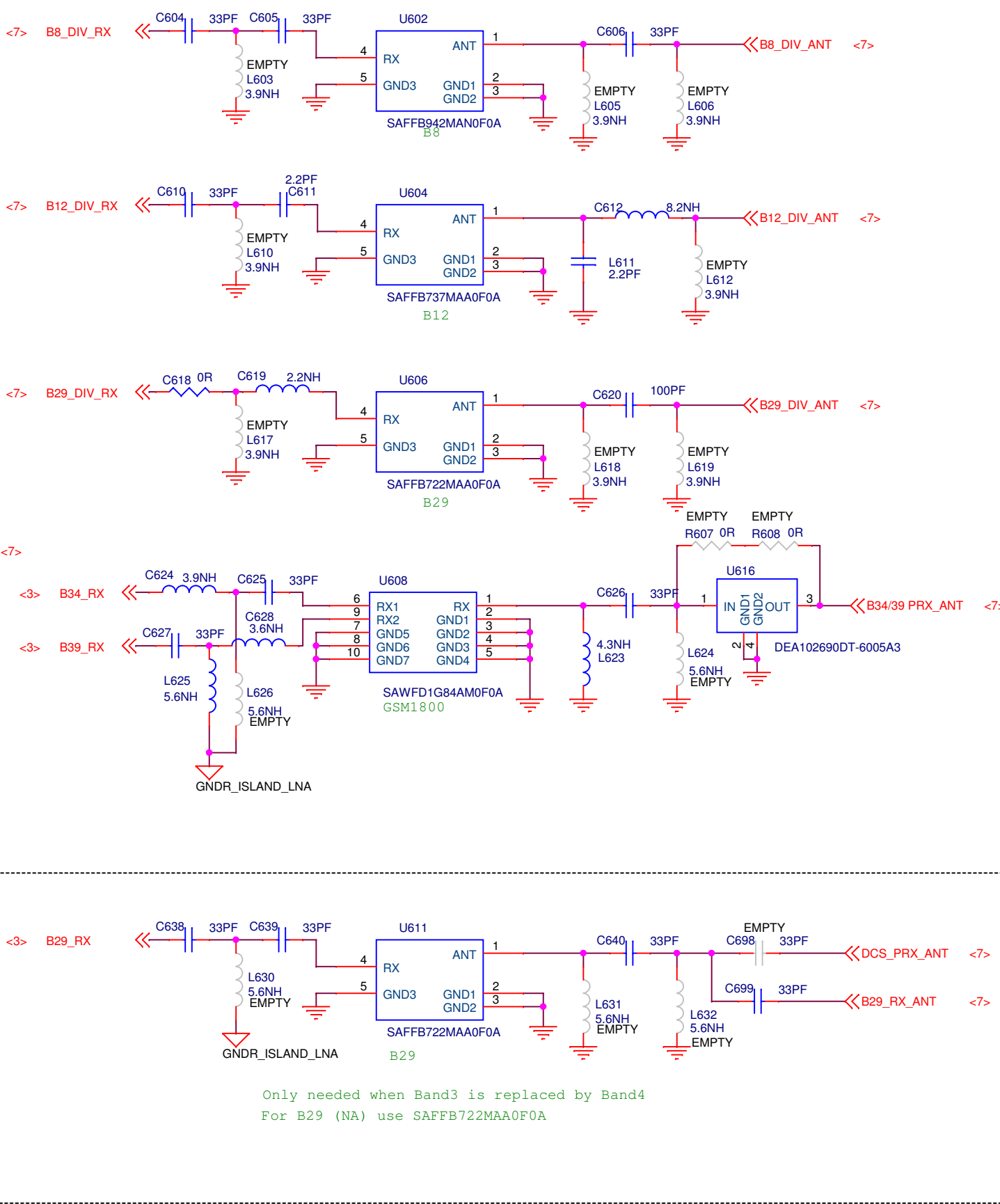
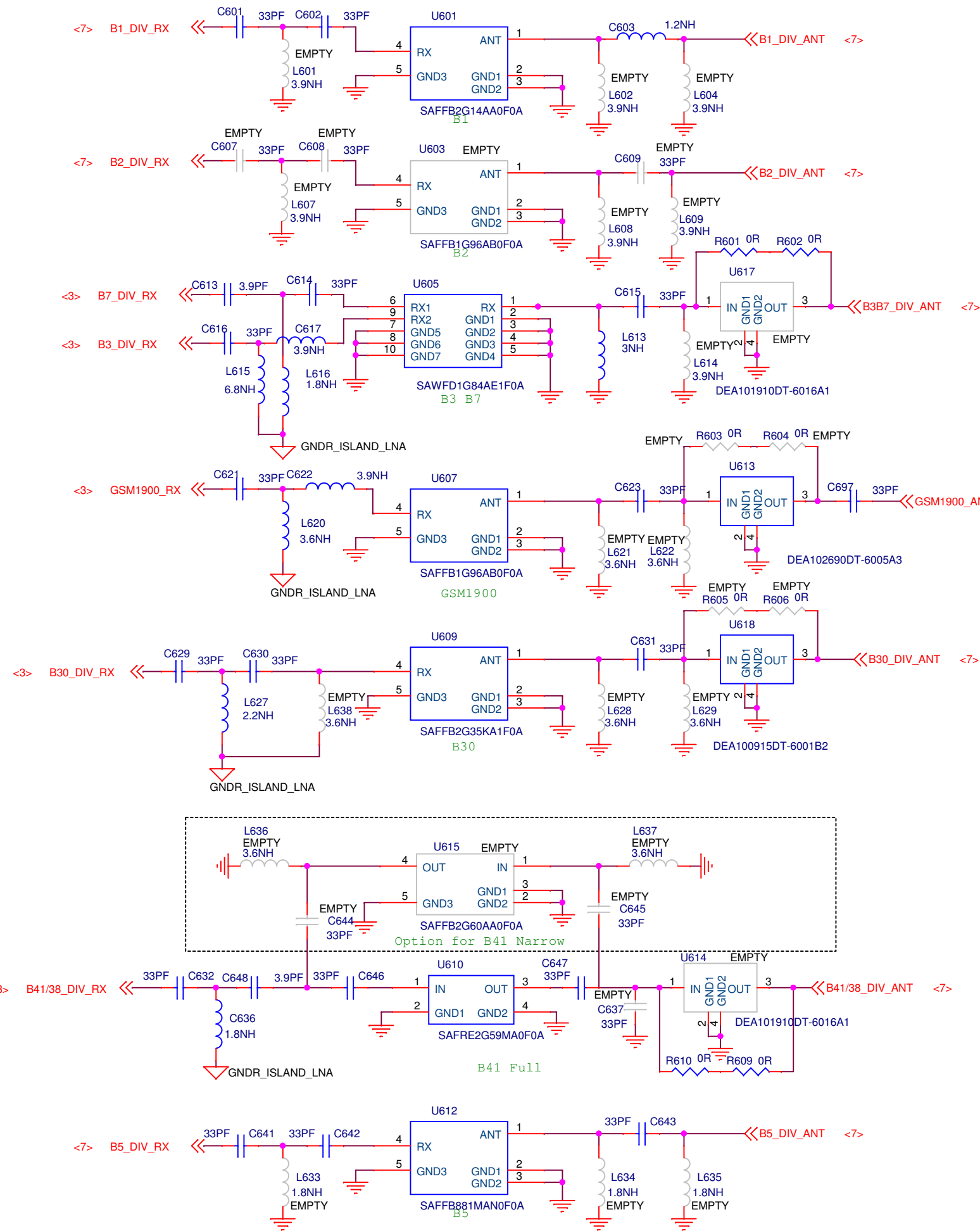



DUP&TRX_FILTER



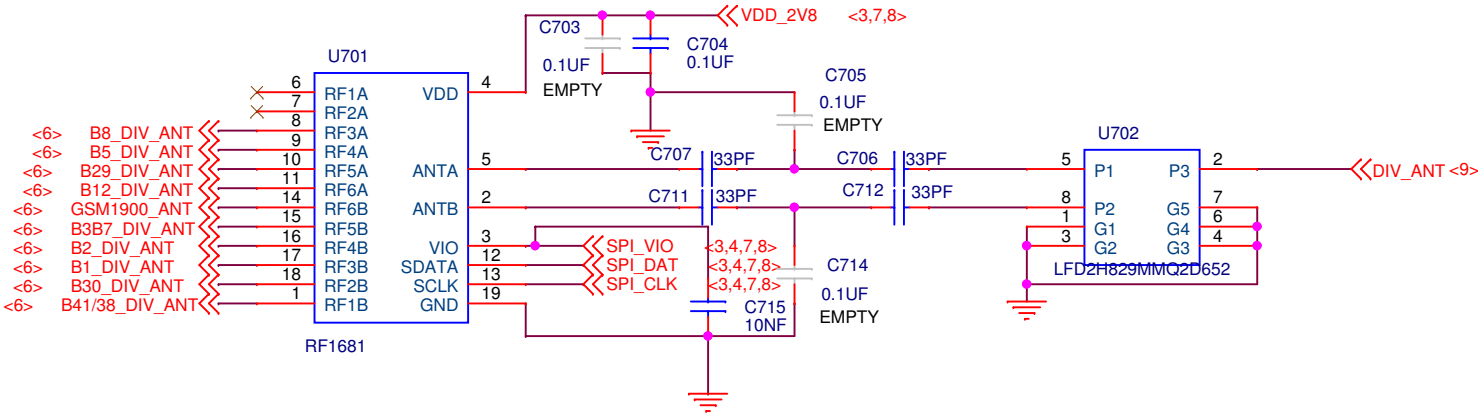
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DRAWING TITLE			
SAAR_N_PXA1826_NZ3_FF			
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RX FILTERS

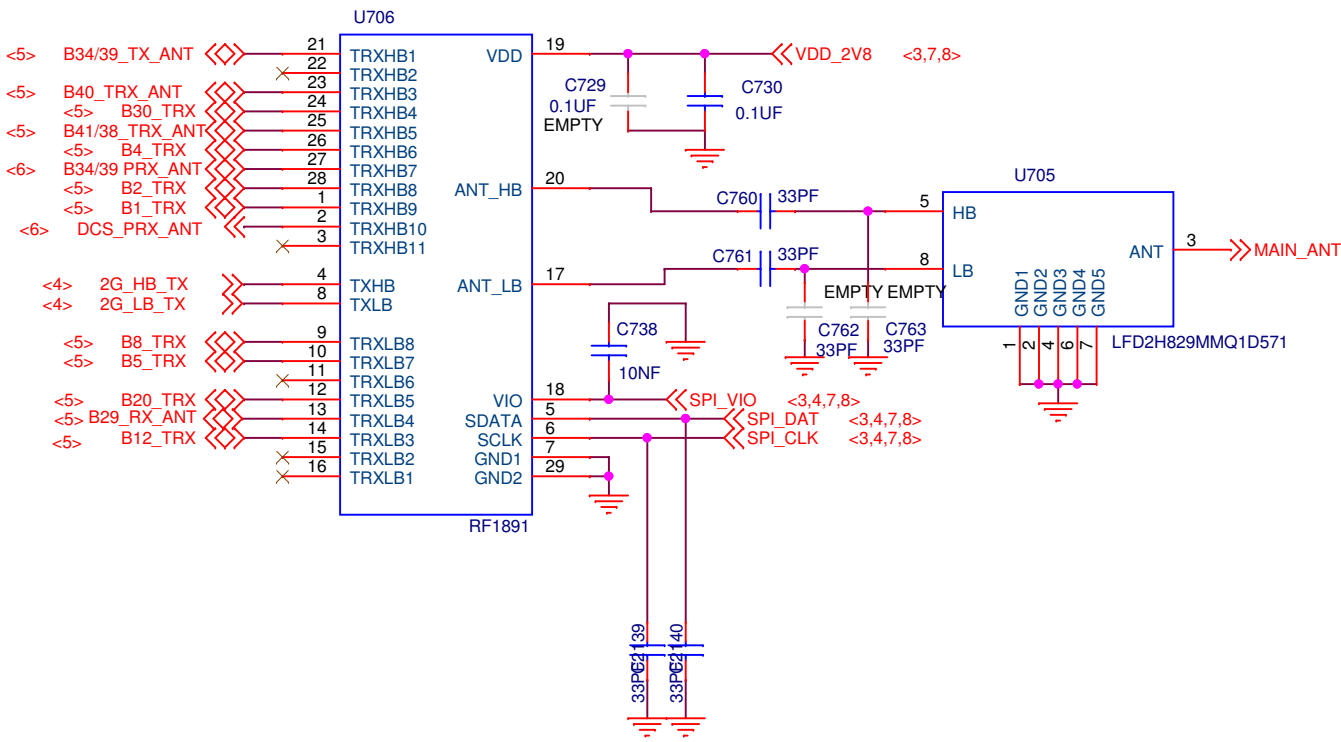


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DRAWING TITLE			
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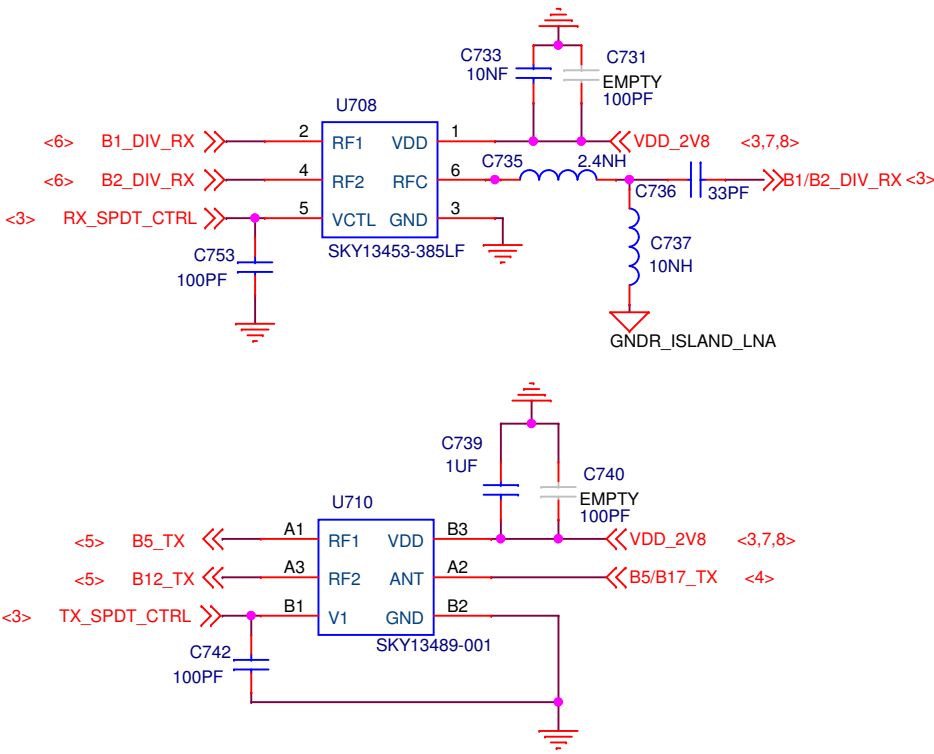
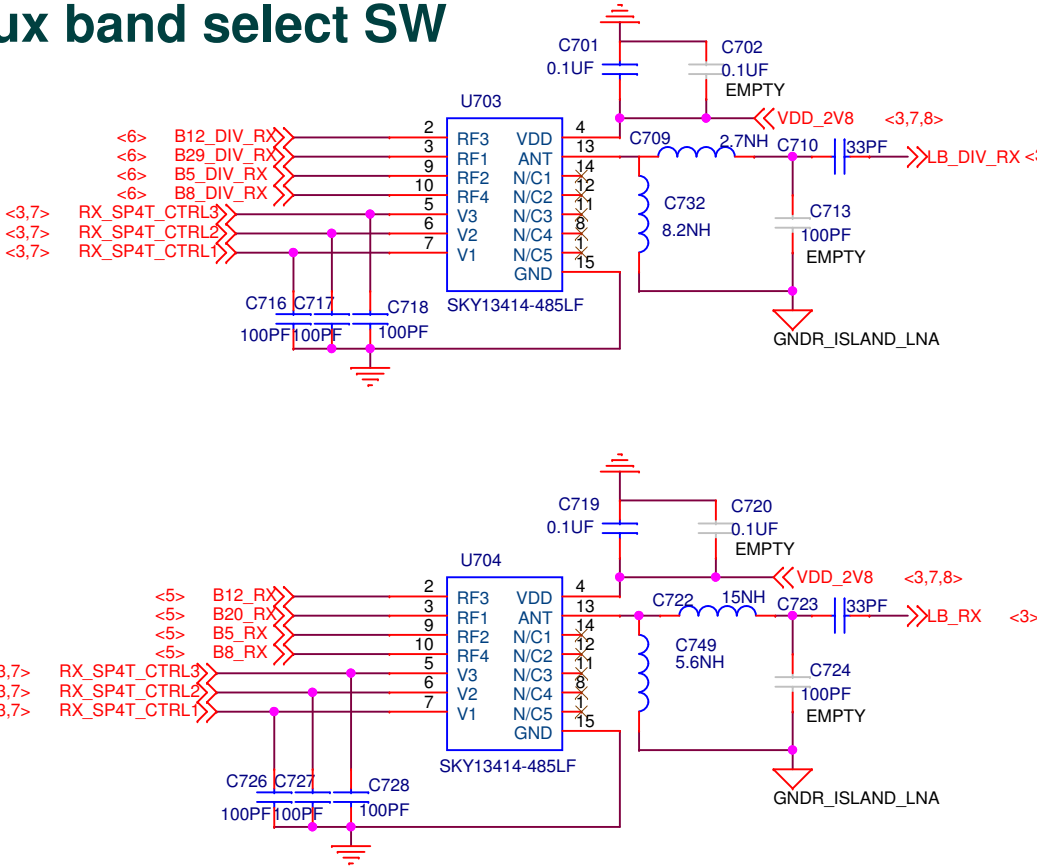
Diversity - Band select switch and antenna system



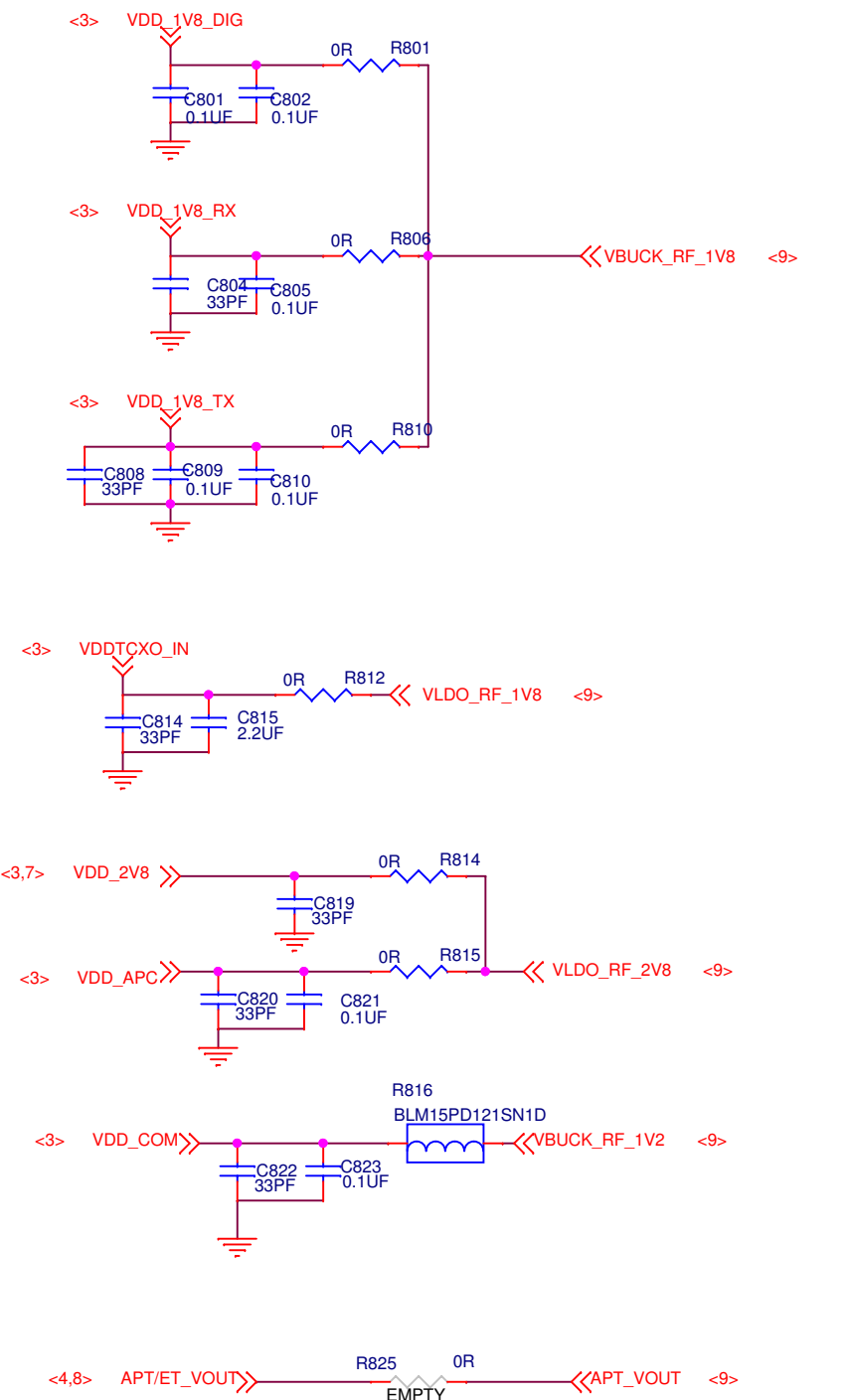
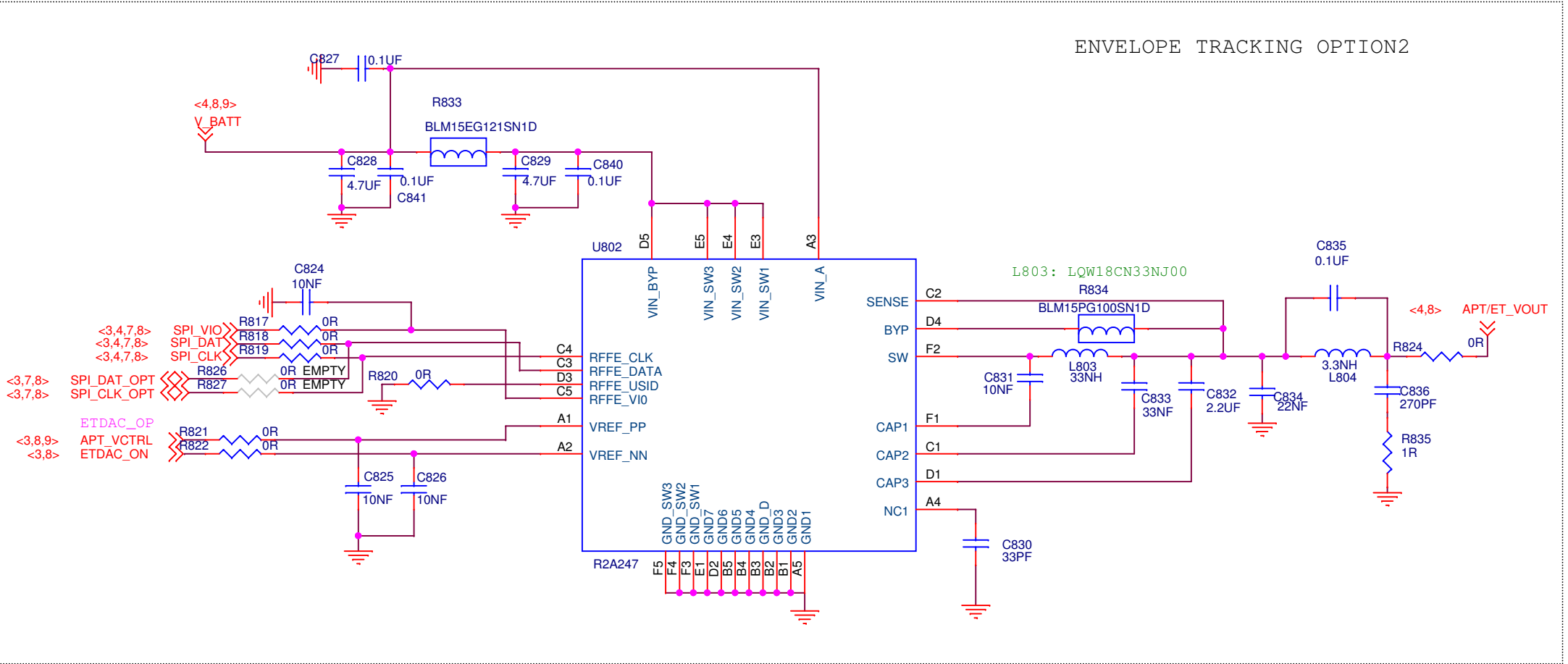
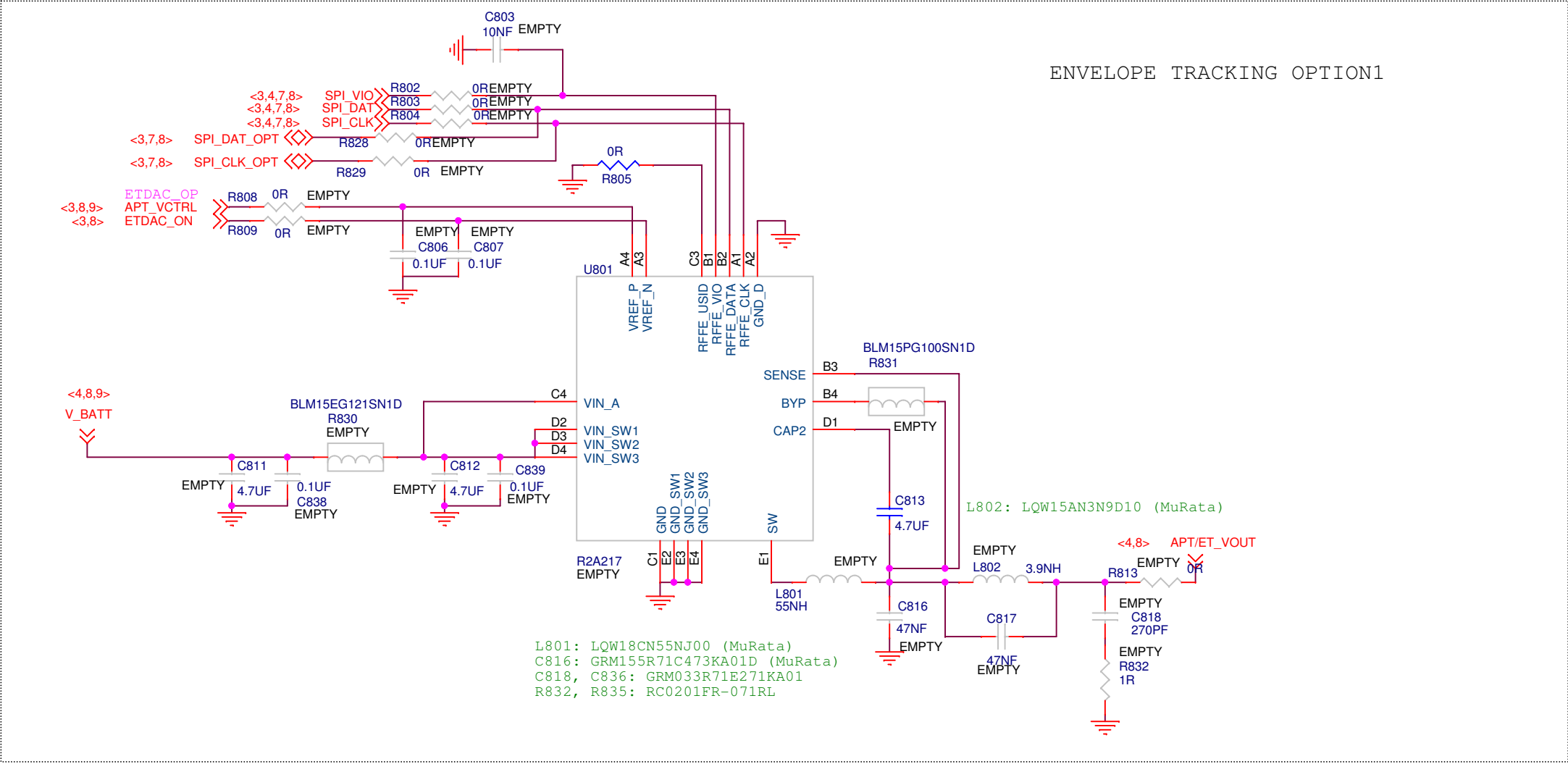
MAIN - Band select switch



Aux band select SW

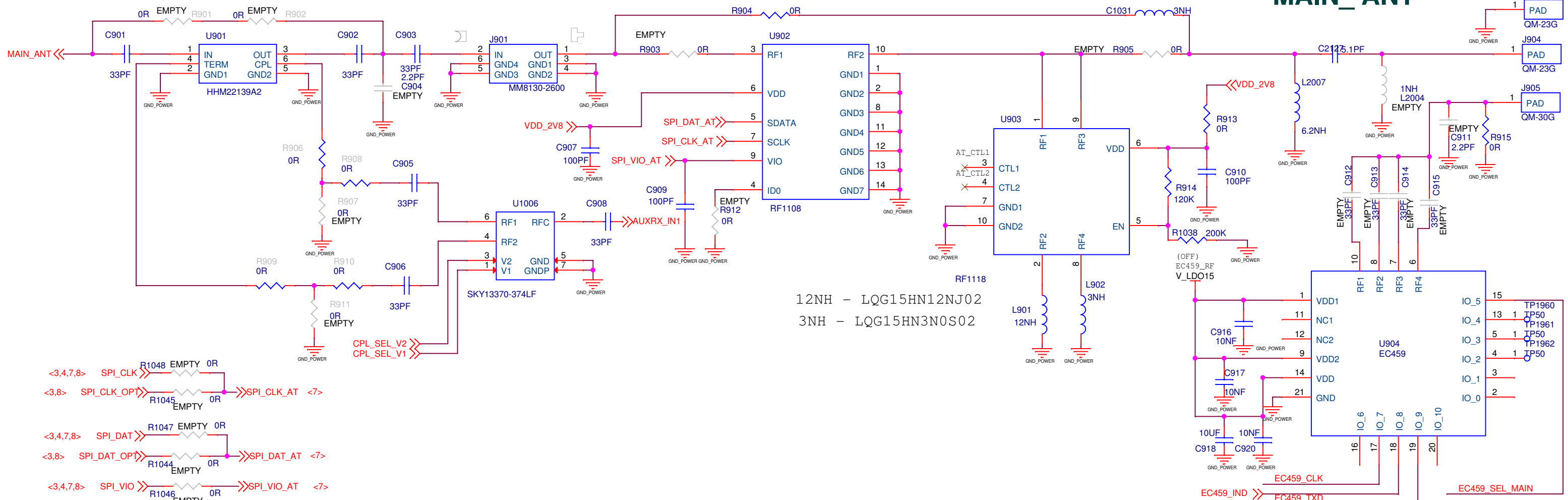


POWER

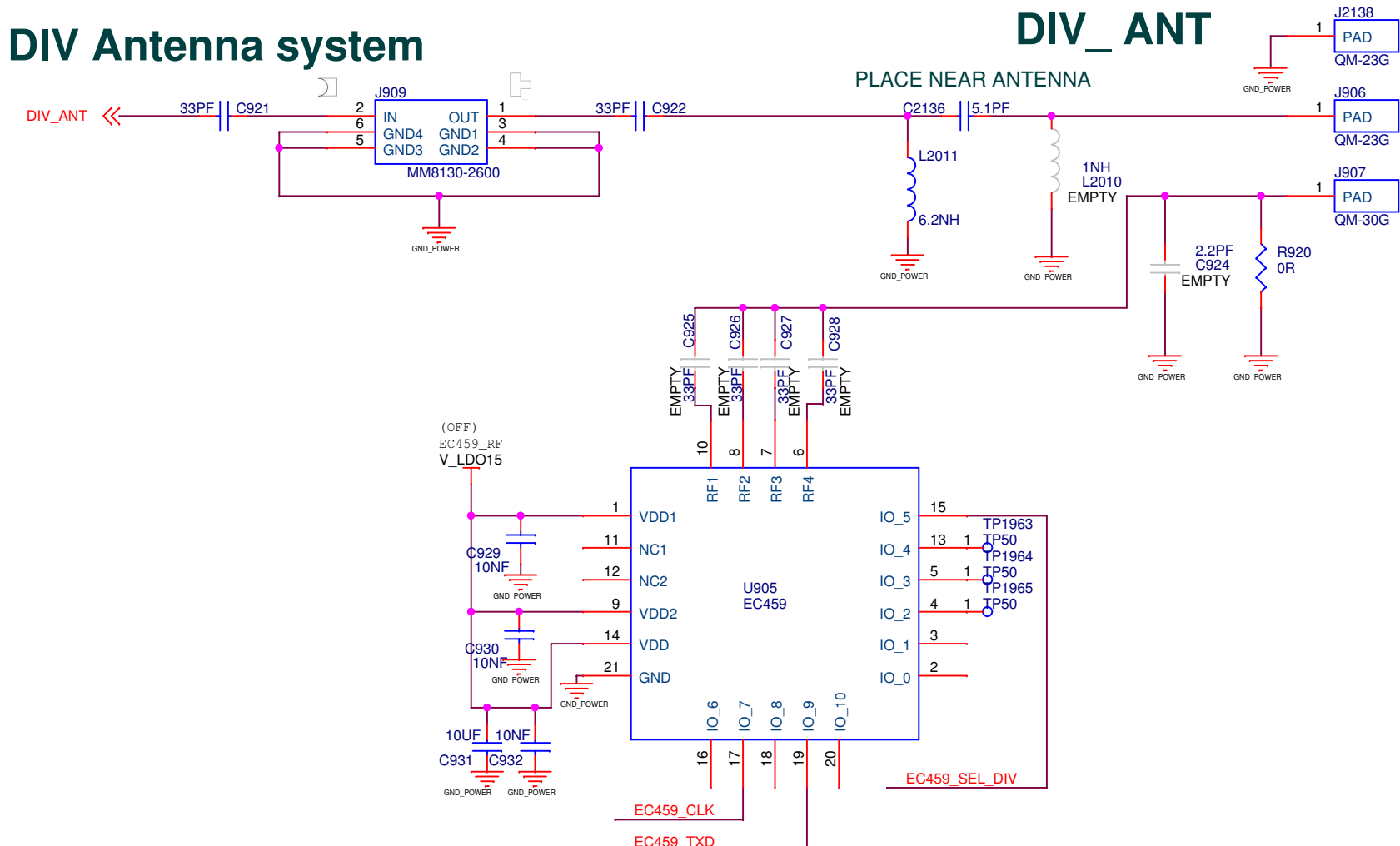


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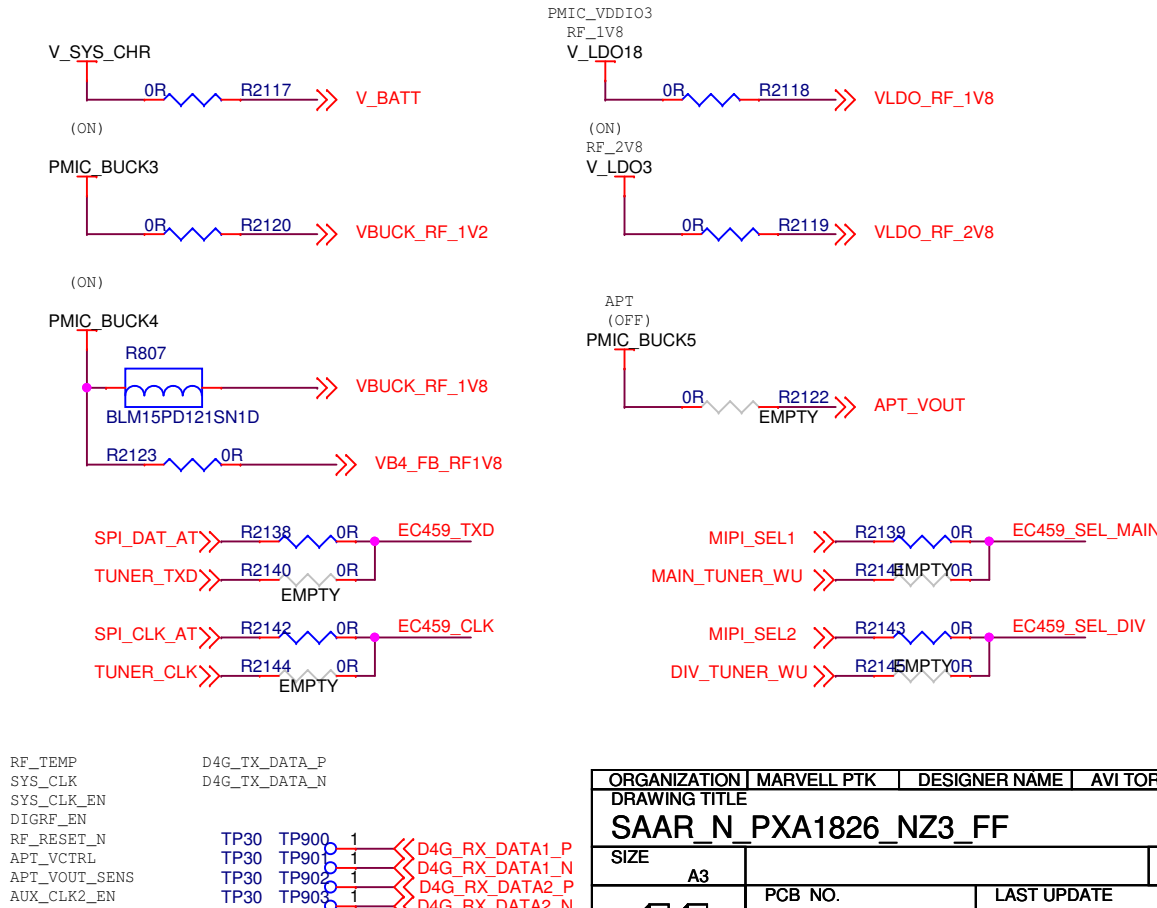
MAIN Antenna system




DIV Antenna system

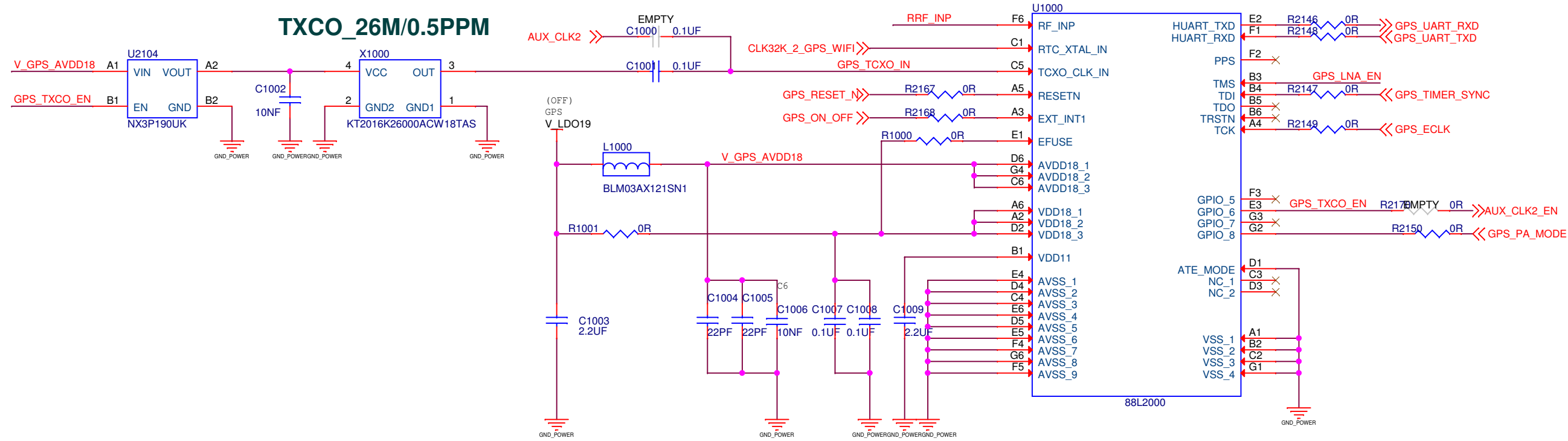


RF <-> BB INTERFACE CONNECTIVITY

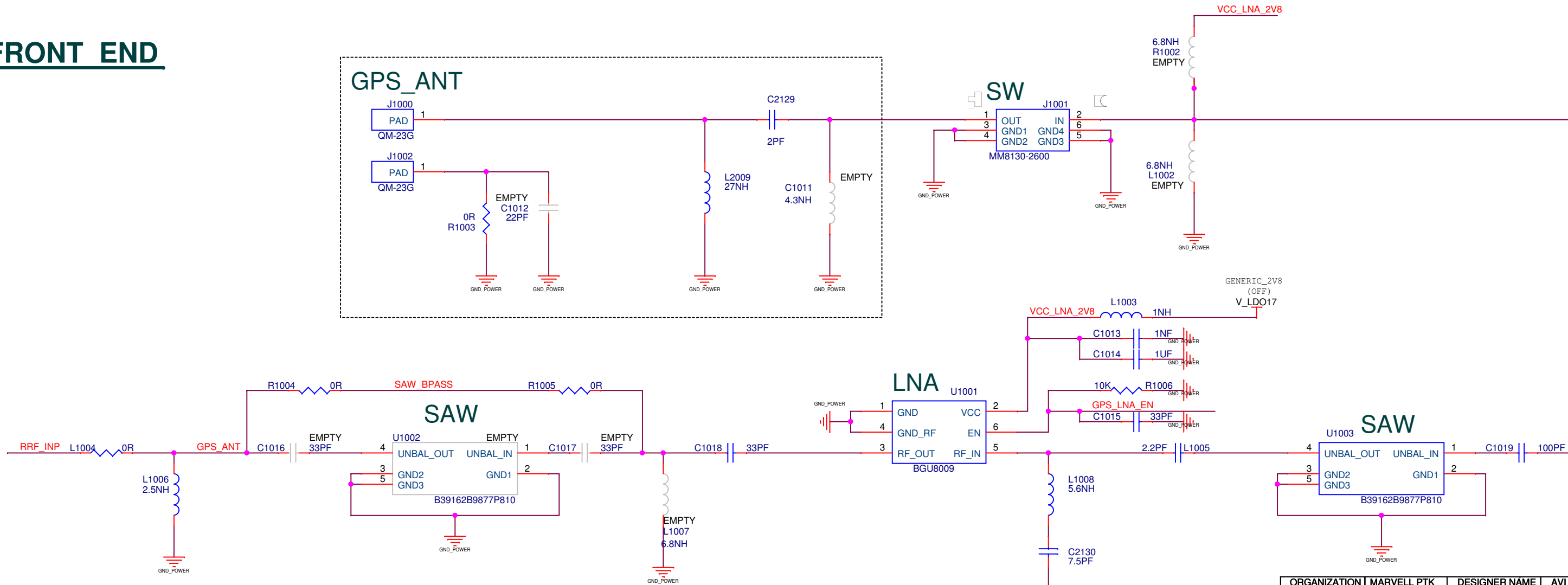


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GPS+GNSS L2000

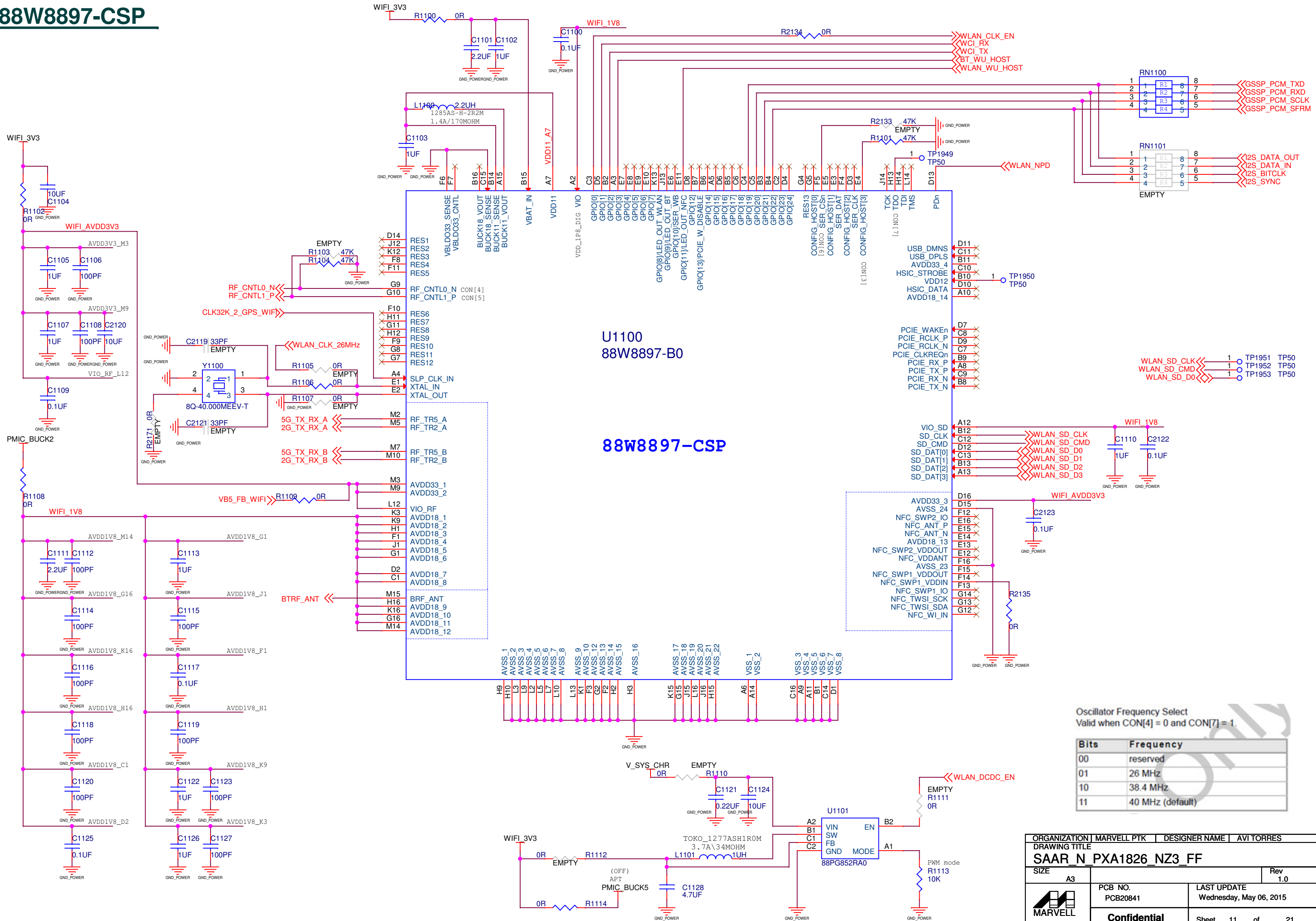


FRONT END




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88W8897-CSP



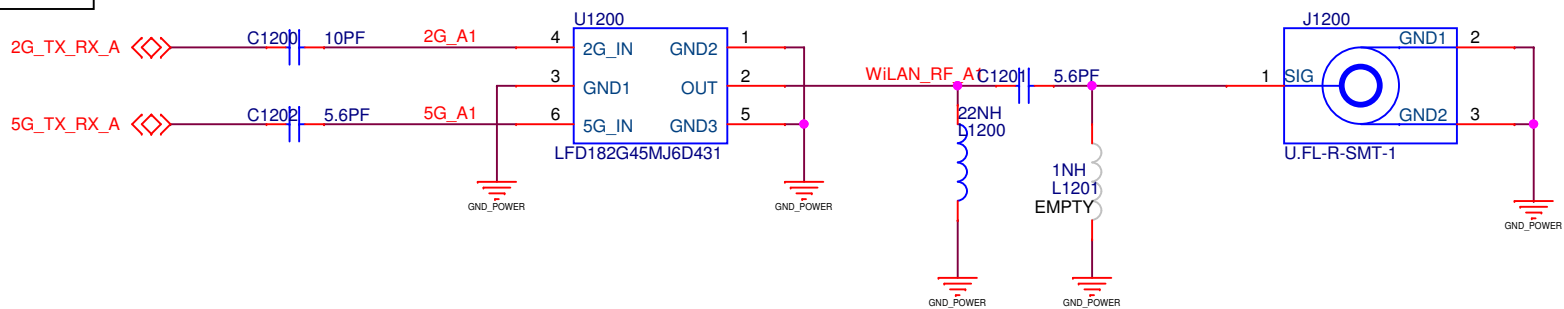
Oscillator Frequency Select
Valid when CON[4] = 0 and CON[7] = 1.

Bits	Frequency
00	reserved
01	26 MHz
10	38.4 MHz
11	40 MHz (default)

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88W8897-2X2 MIMO + BT RF FRONT END

WLAN PATH A



WLAN PATH B

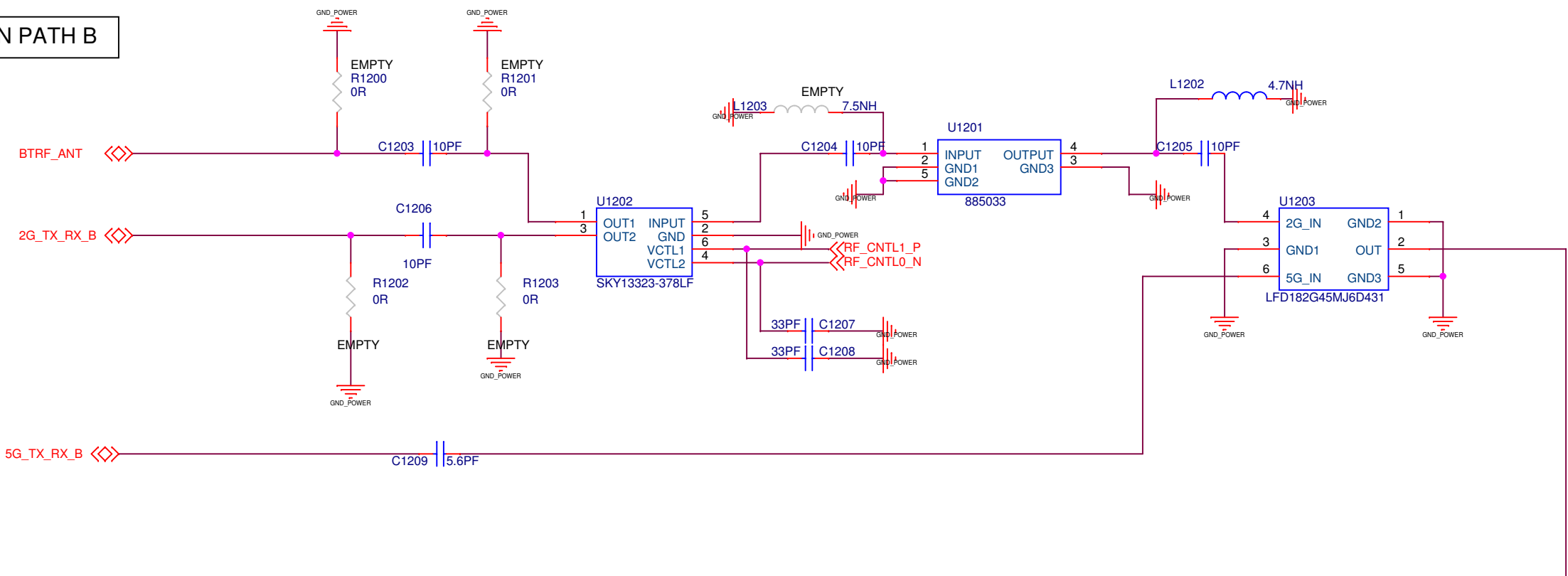
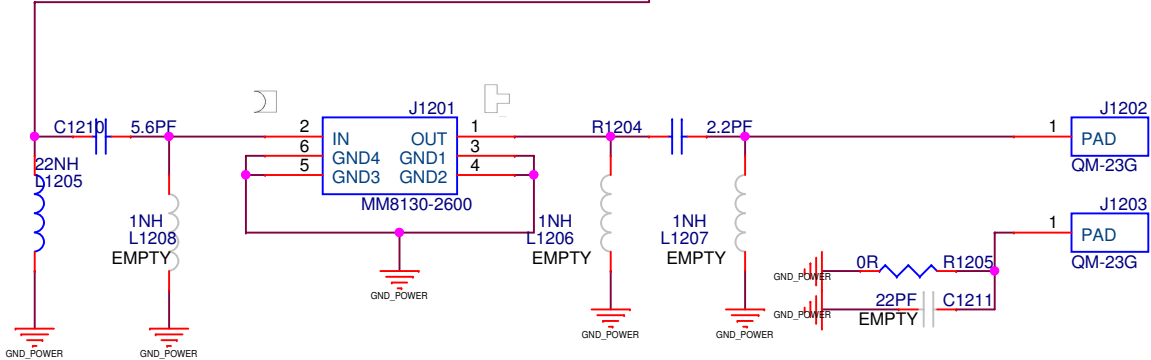



Table 5. SKY13323-378LF Truth Table

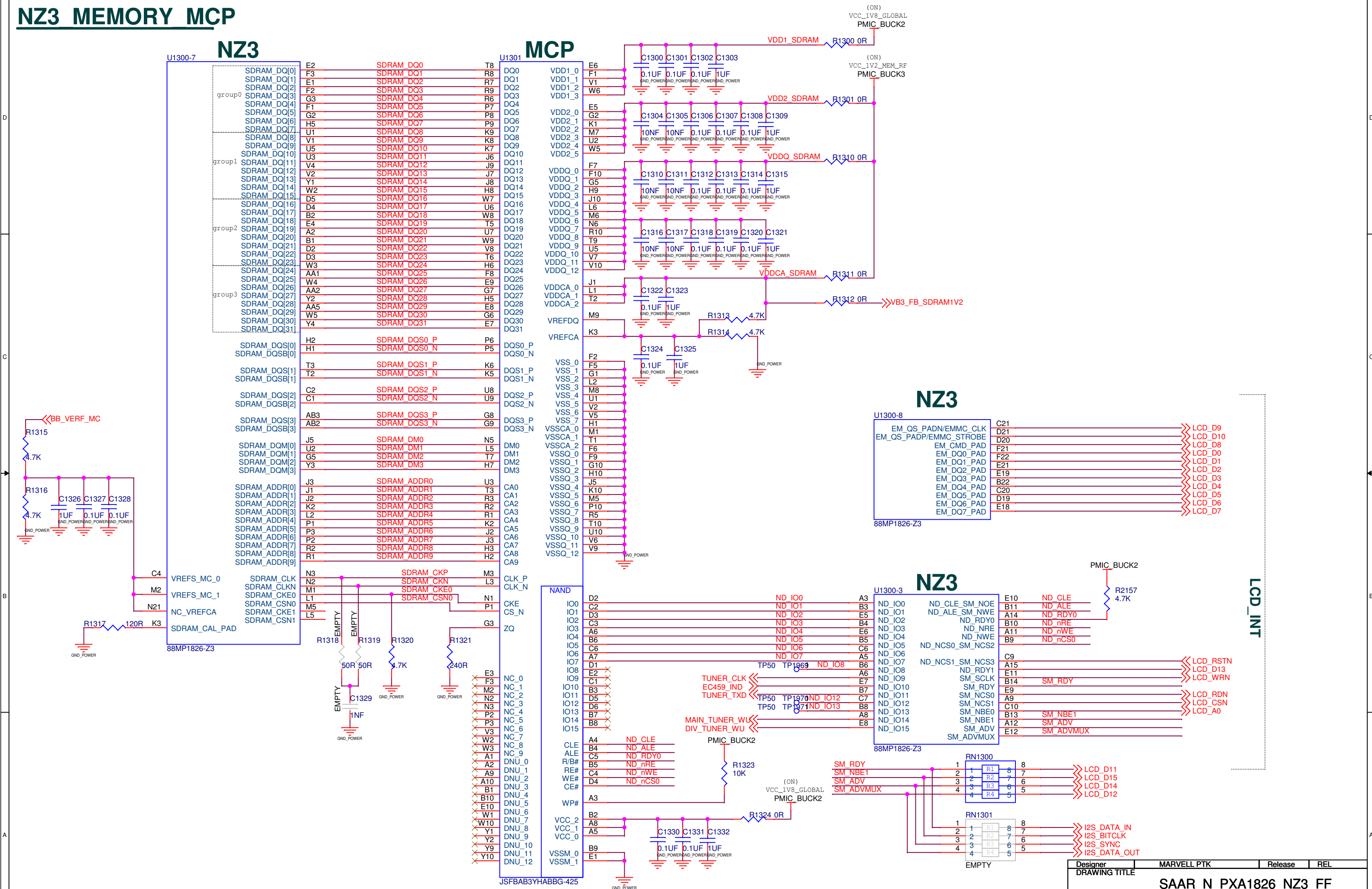
VCTL1 (Pin 6)	VCTL2 (Pin 4)	INPUT to OUTPUT1 Path	INPUT to OUTPUT2 Path
0	1	Isolation	Insertion loss
1	0	Insertion loss	Isolation



Antenna 2
WLAN ANT

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NZ3 MEMORY MCP

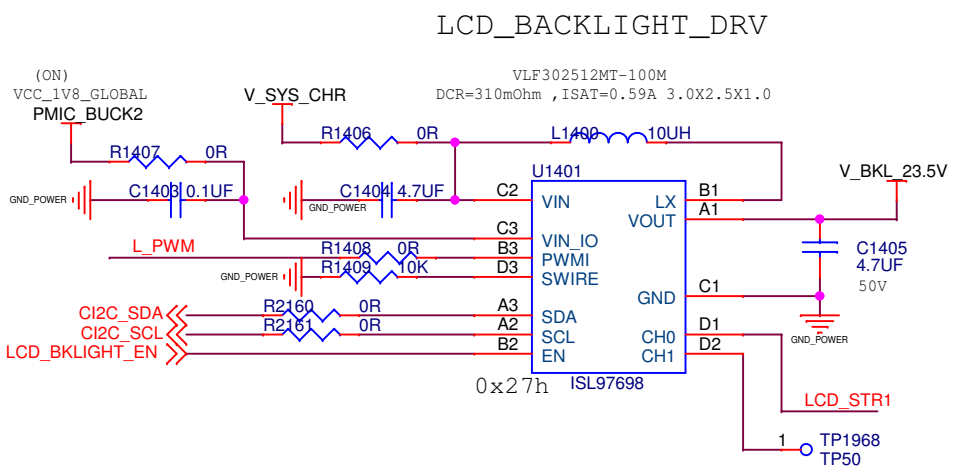
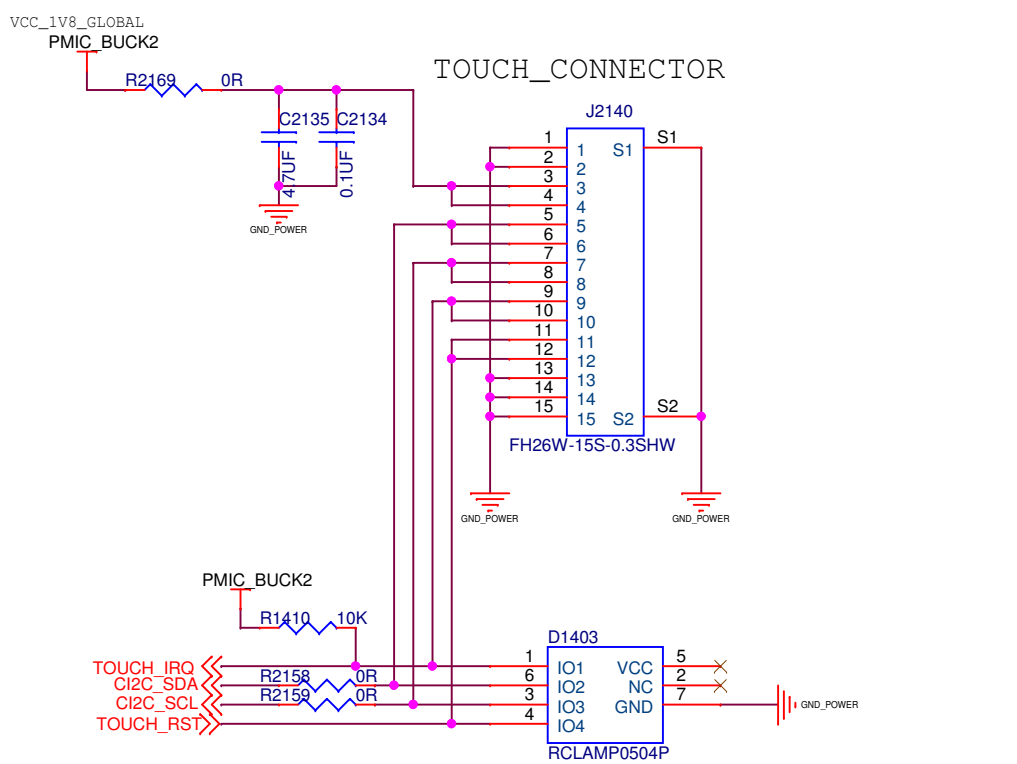
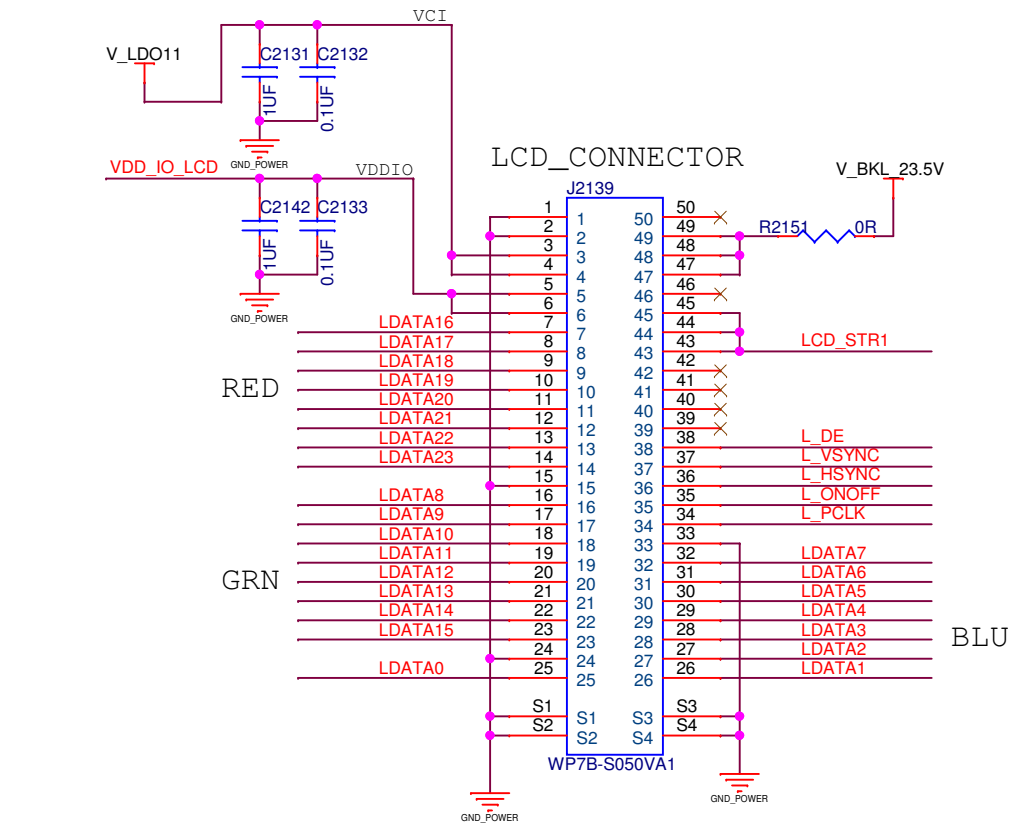
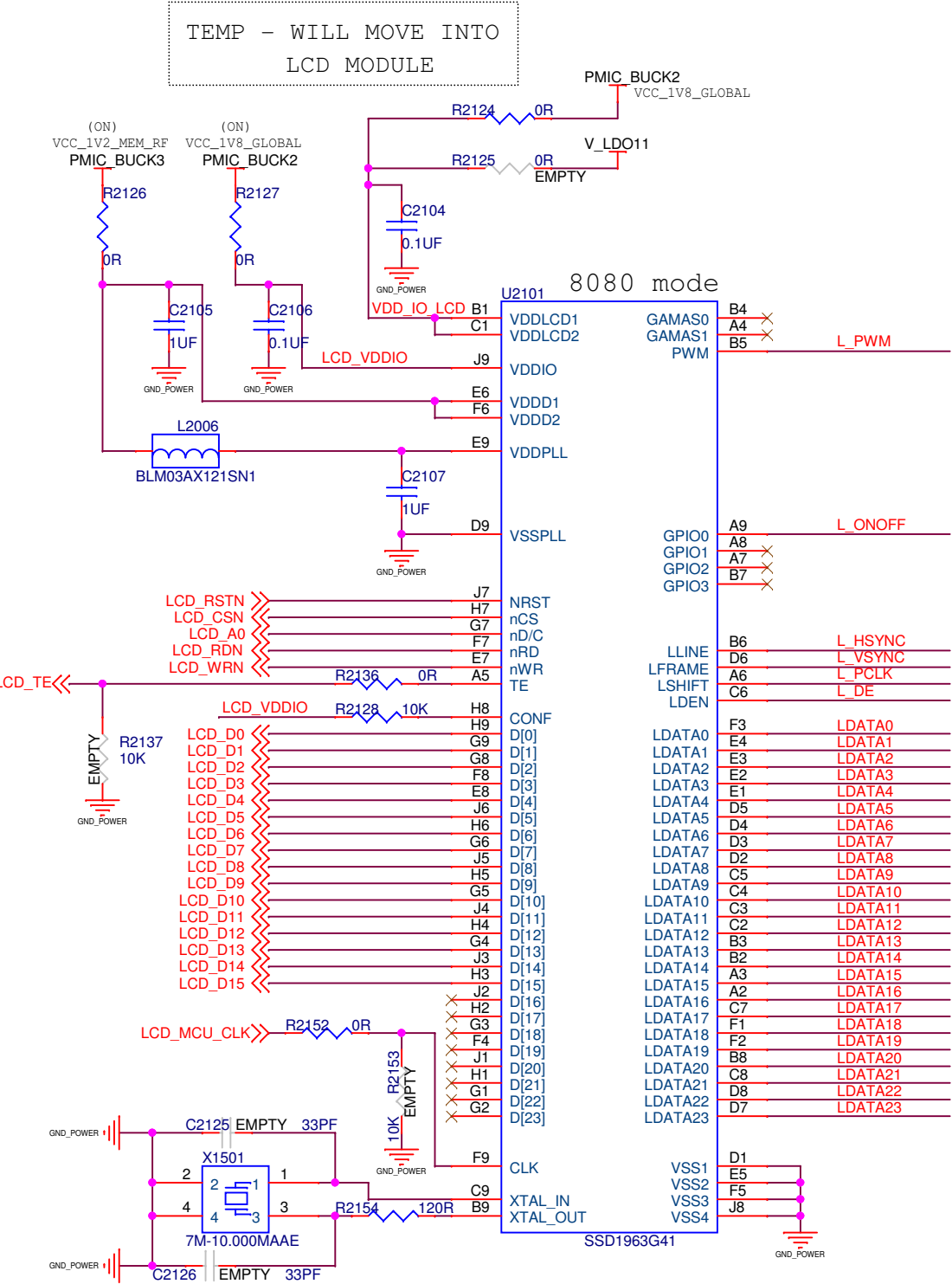


MCP list

JSFBAB3YHABBG-425	JSC	1Gb LPDDR2x32 + 2Gb NAND x8
FM6BD2G1GA-2.5BLCGE	ESMT	1Gb LPDDR2x32 + 2Gb NAND x8
MX63U2GC1GCAXMI00	Macronix	1Gb LPDDR2x32 + 2Gb NAND x8

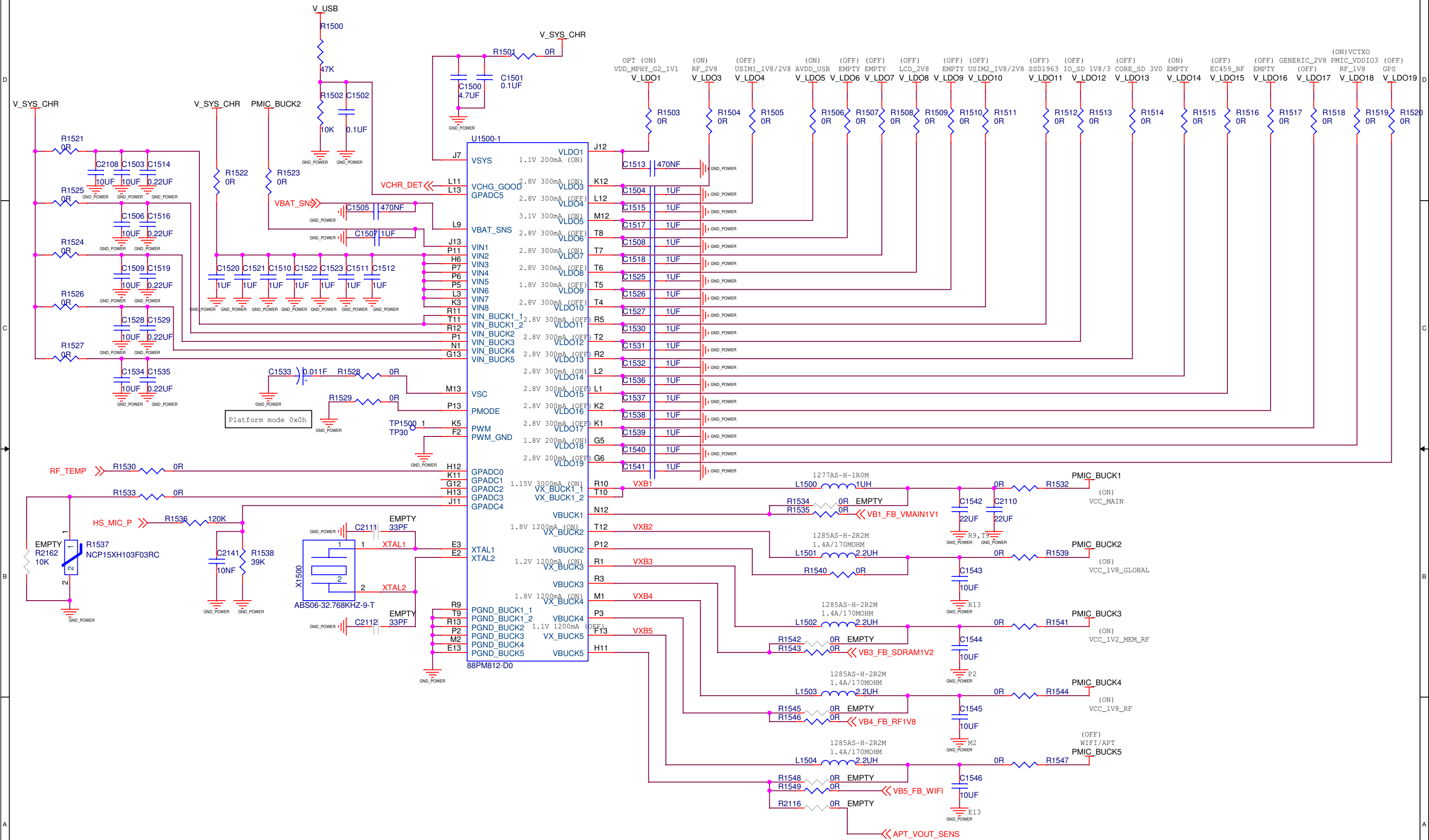
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DRAWING TITLE			
SAAR_N_PXA1826_NZ3_FF			
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LCD + TOUCH



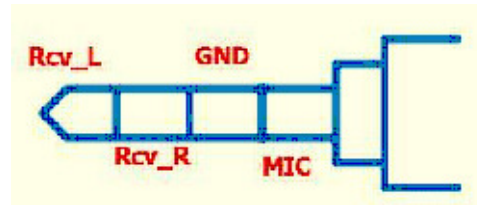
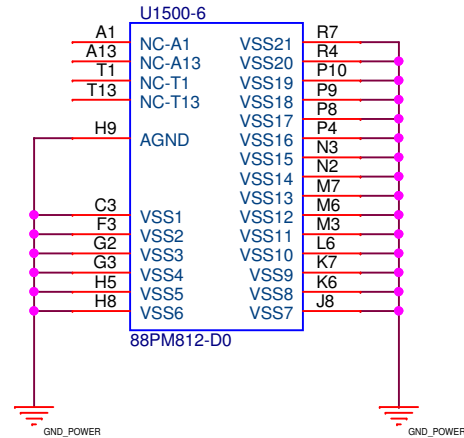
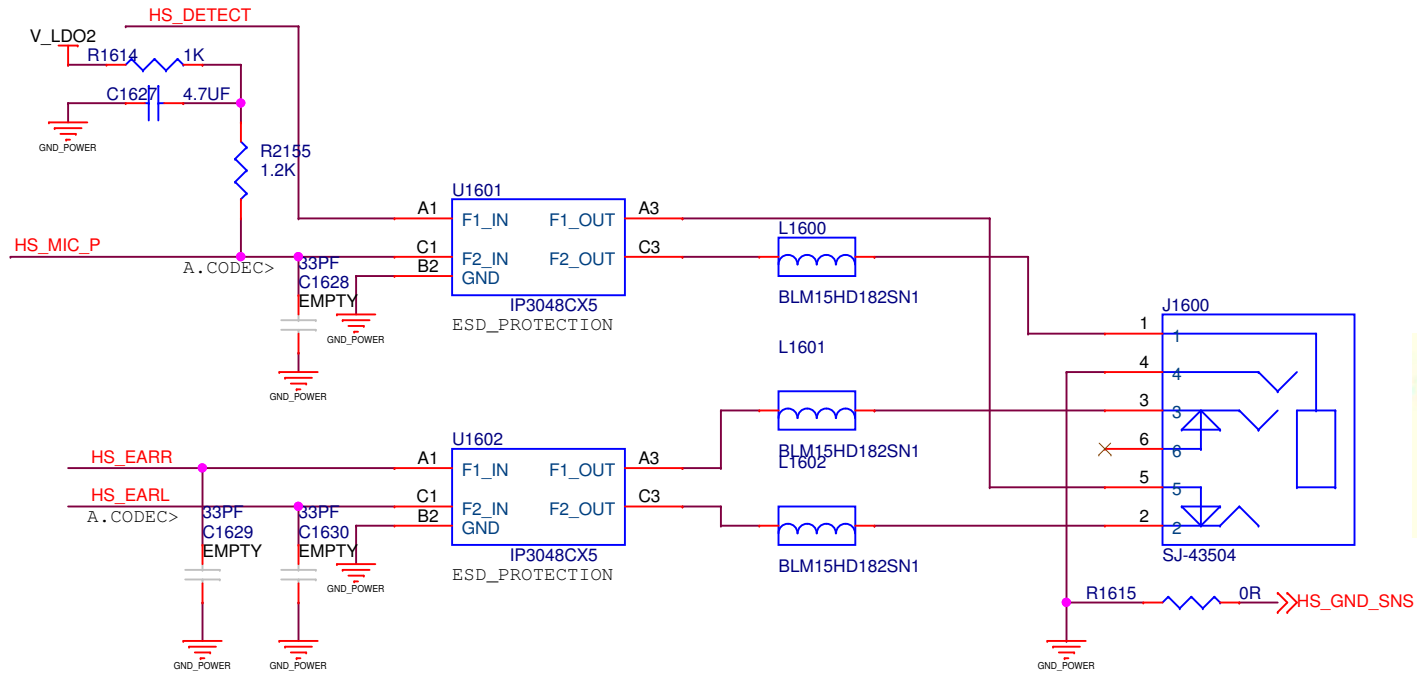
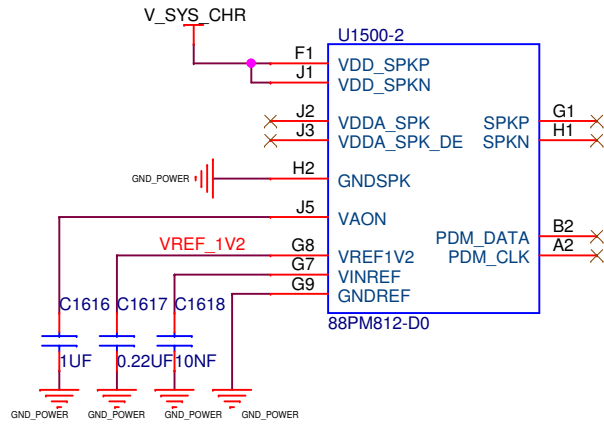
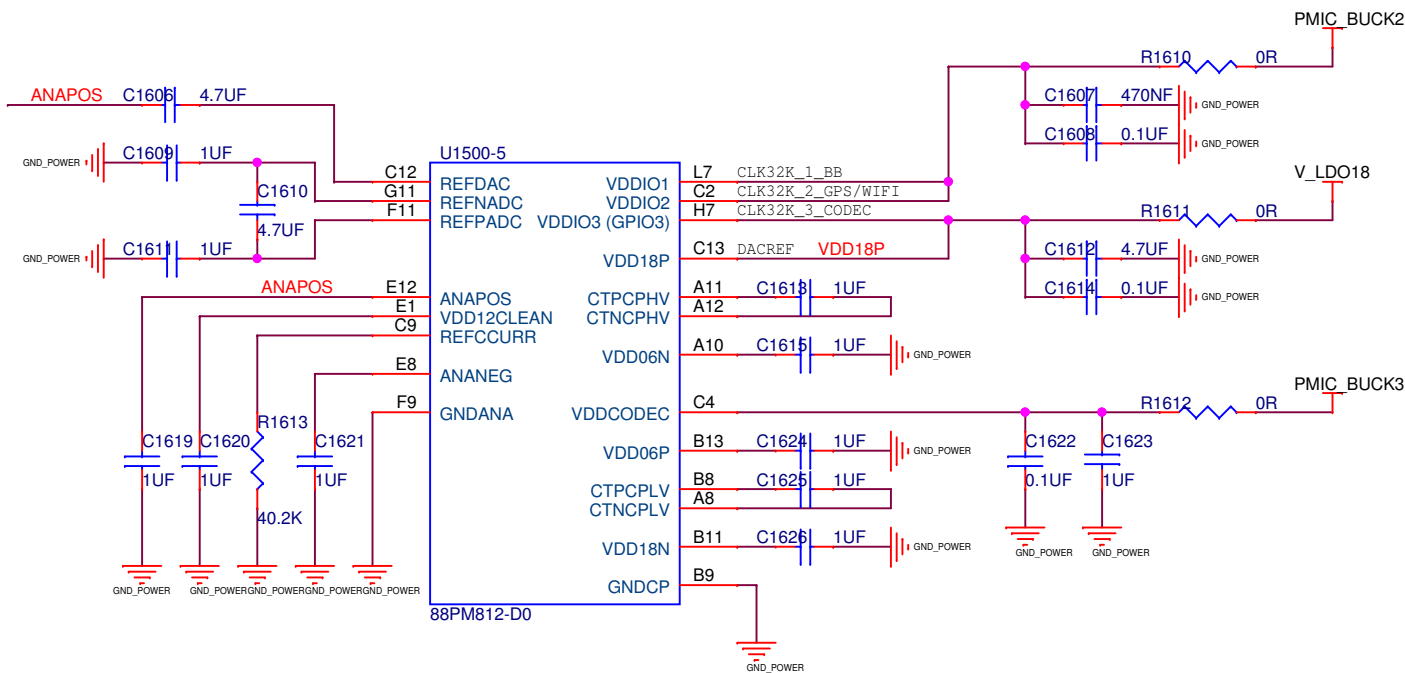
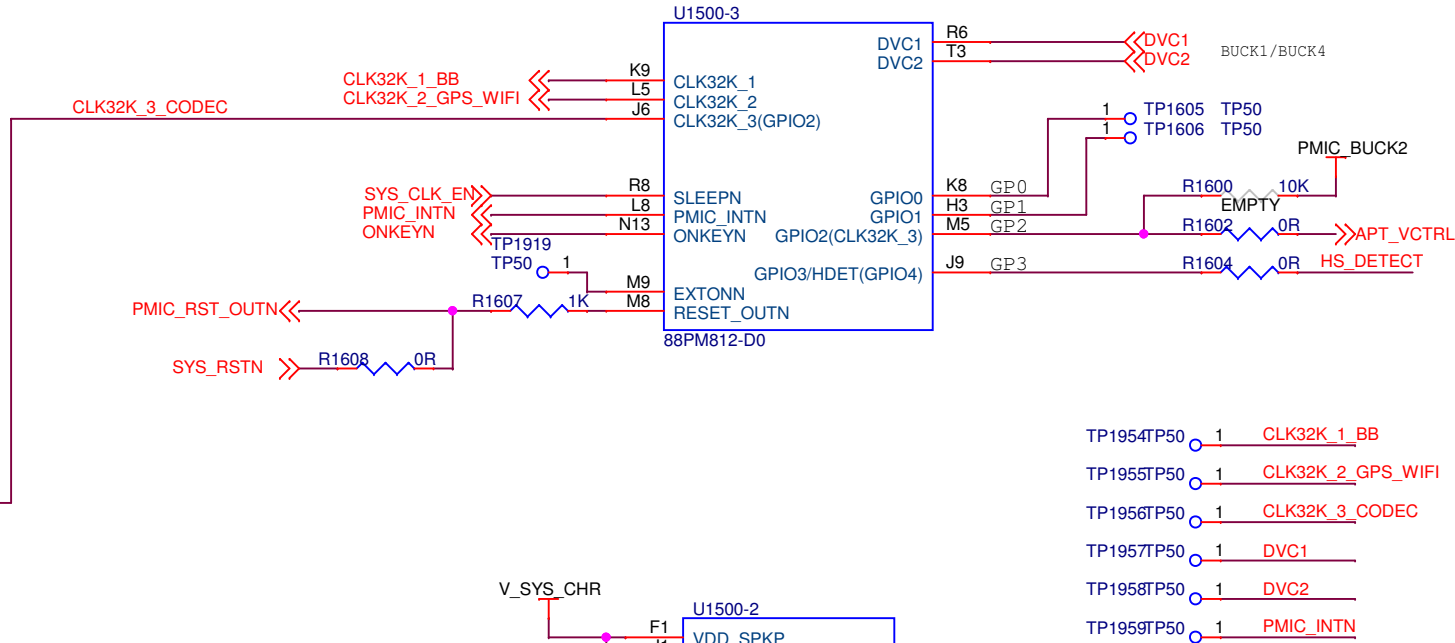
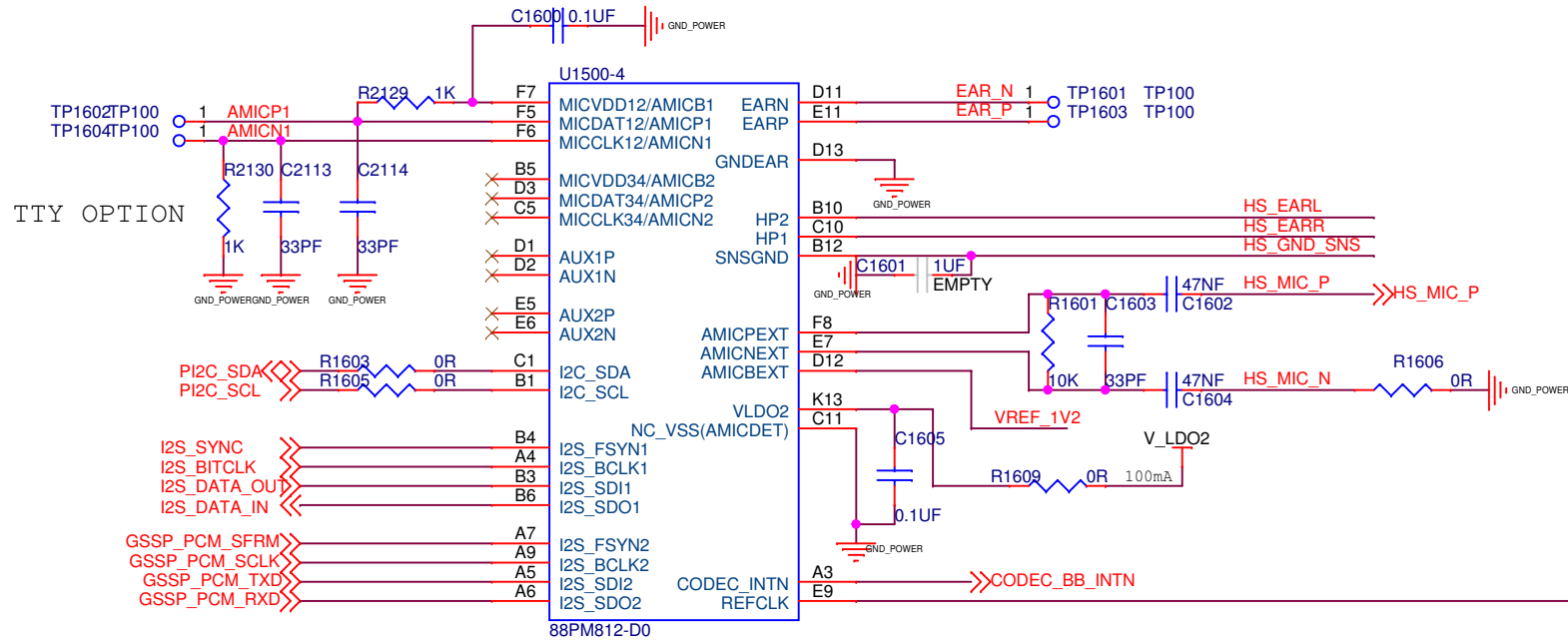
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PM812 POWER SUPPLY



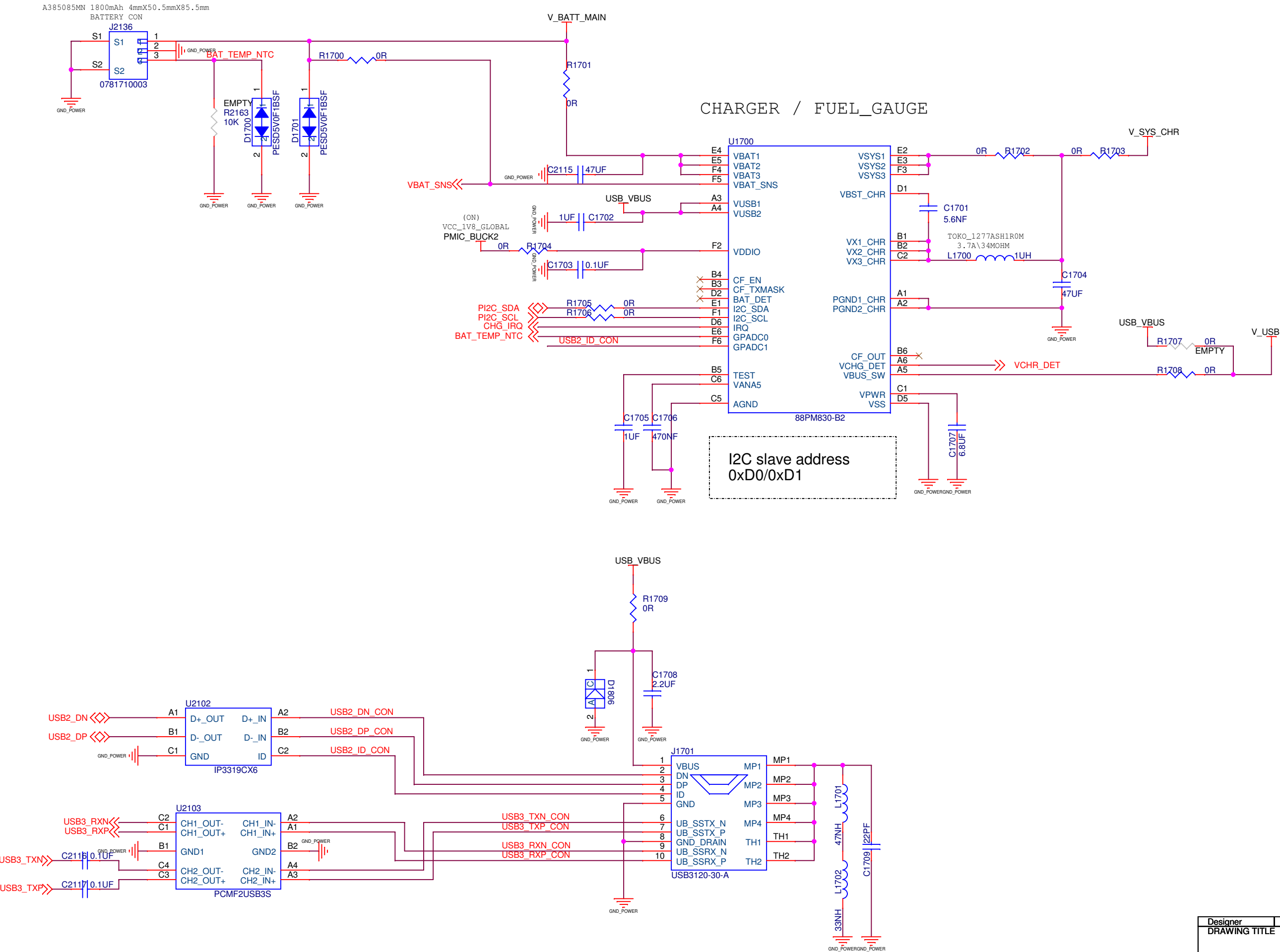
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PM812 MSIC/AUDIO CODEC



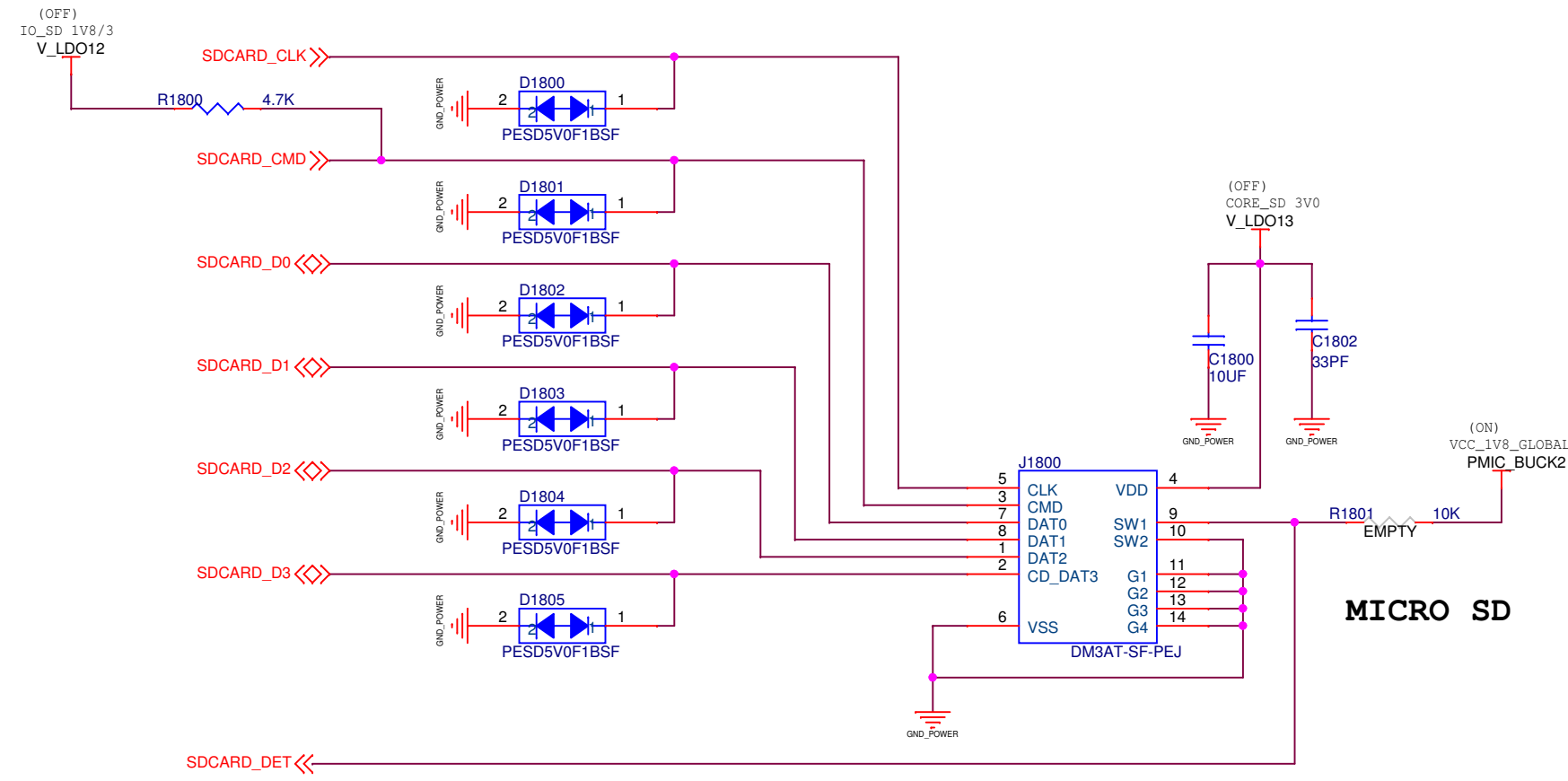
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CHARGER/USB

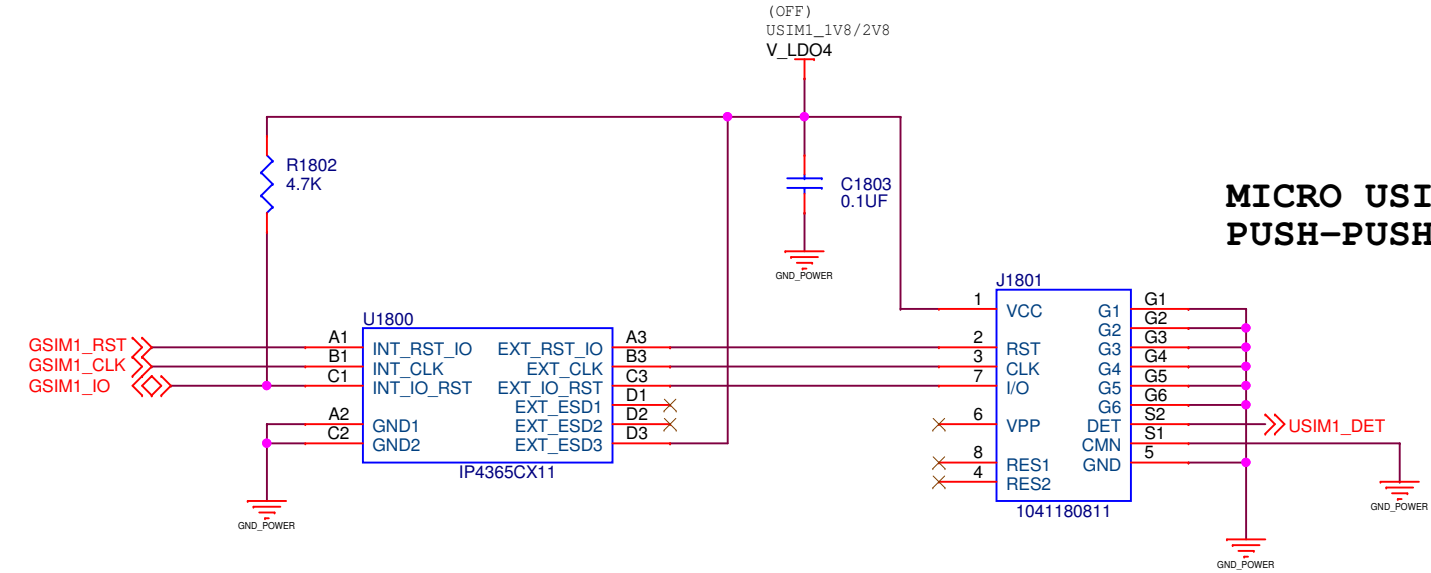


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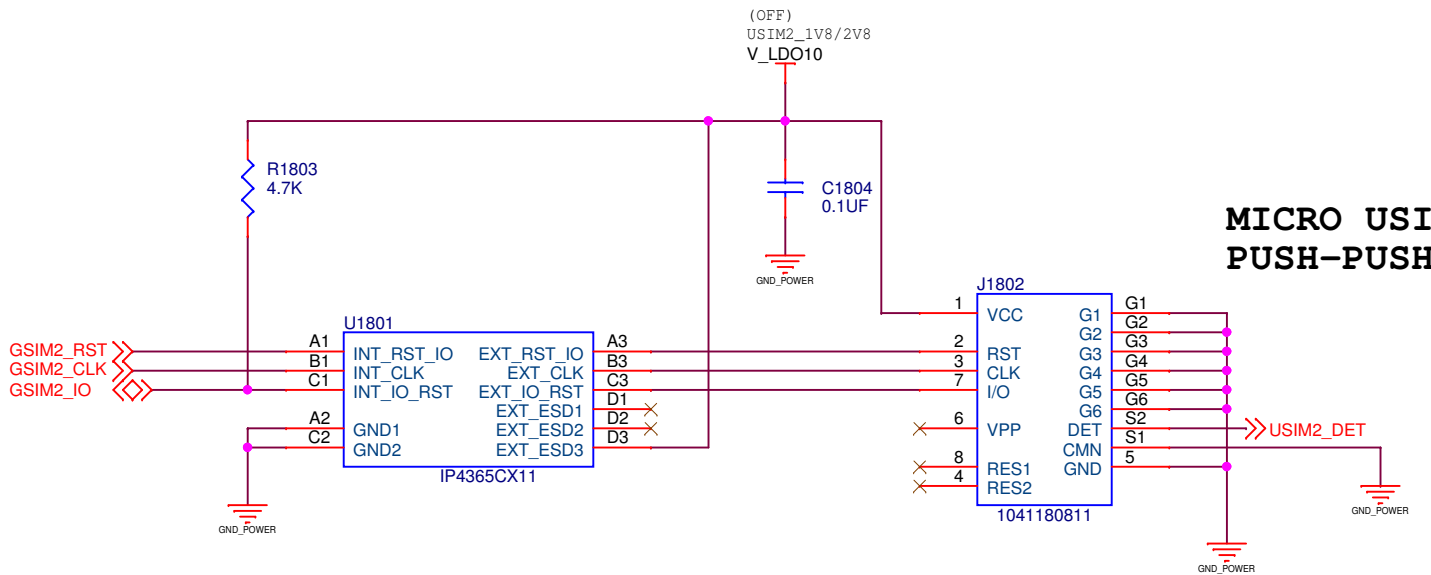
USIM / SD



MICRO USIM1
PUSH-PUSH

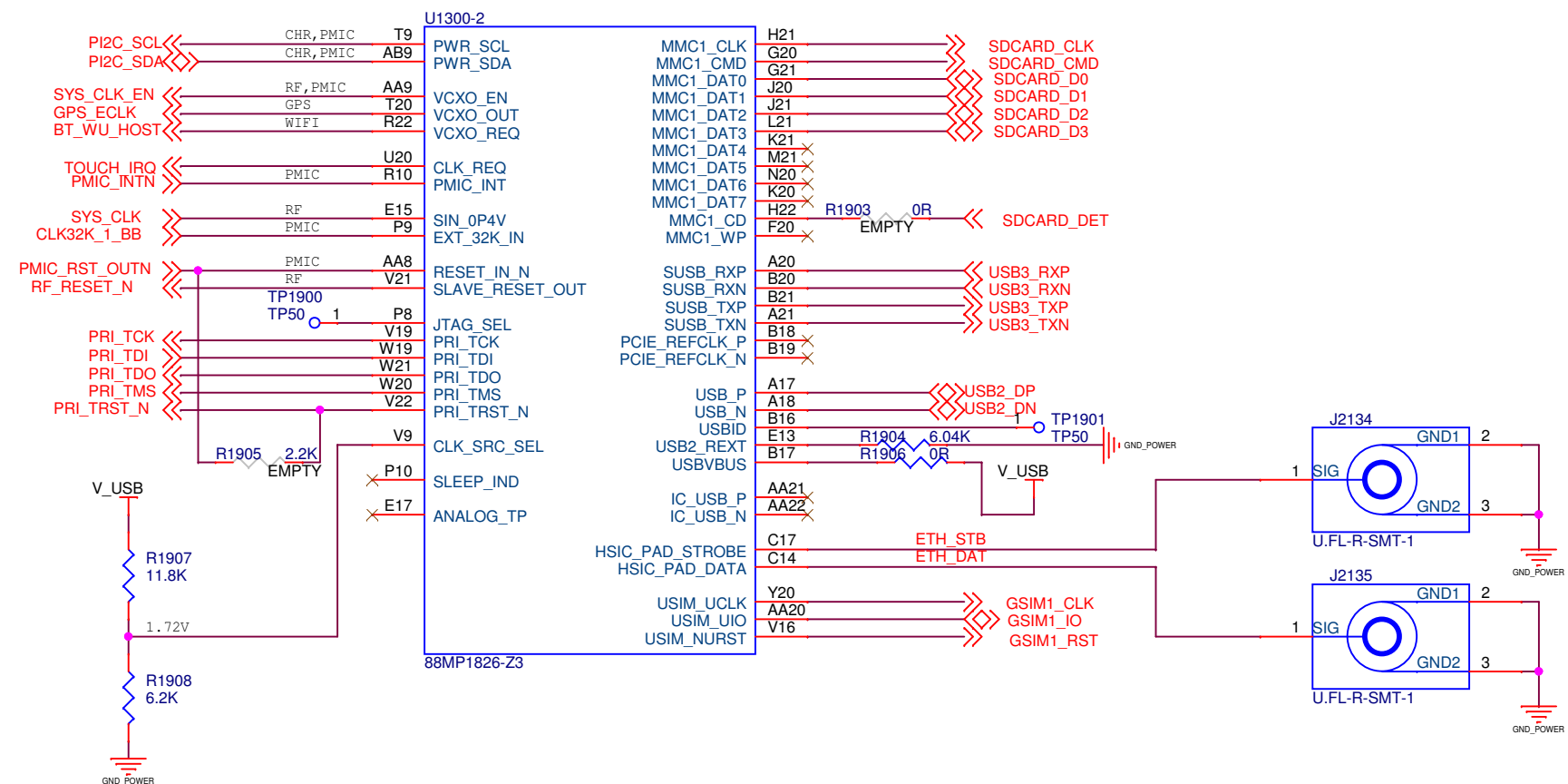
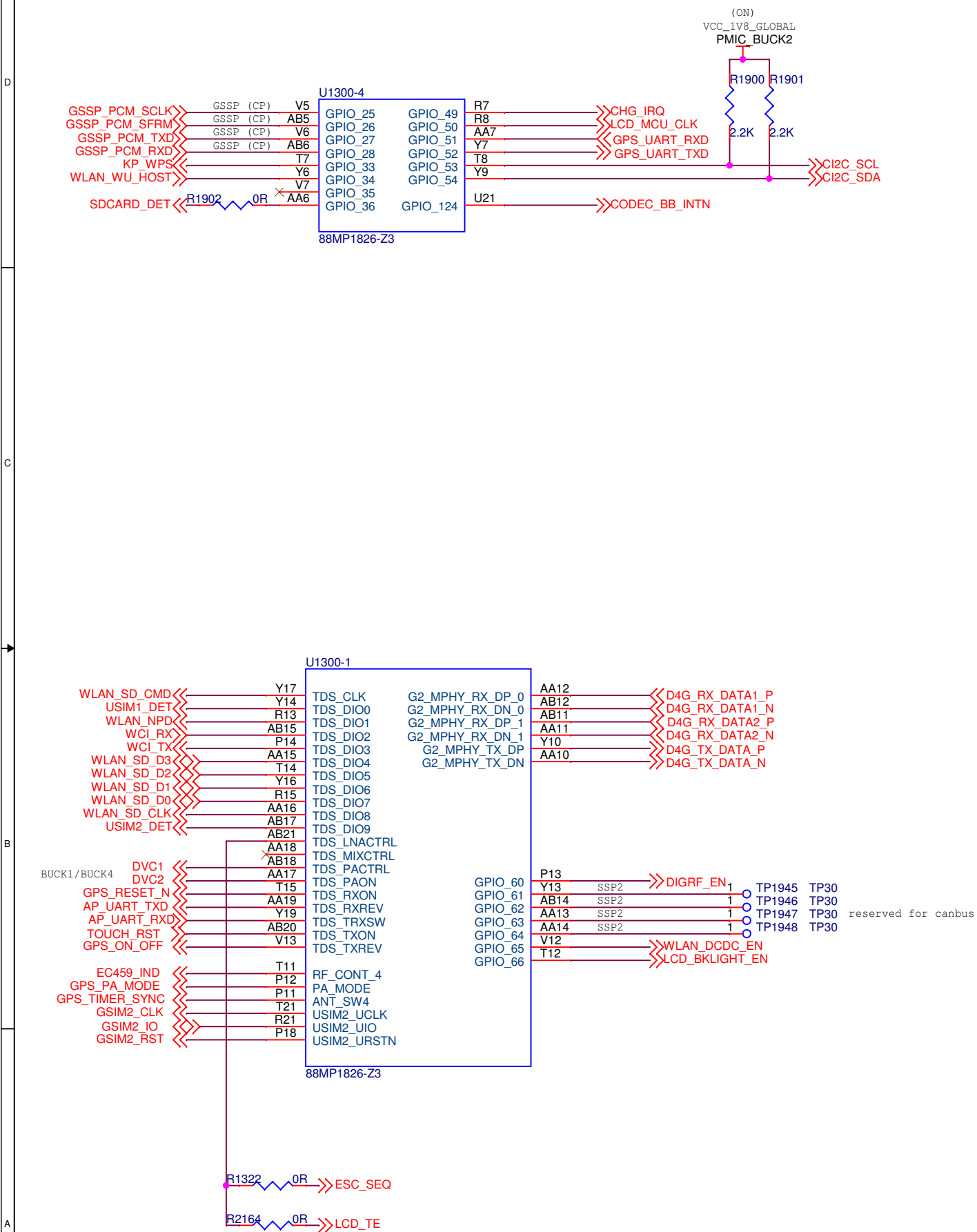



MICRO USIM2
PUSH-PUSH



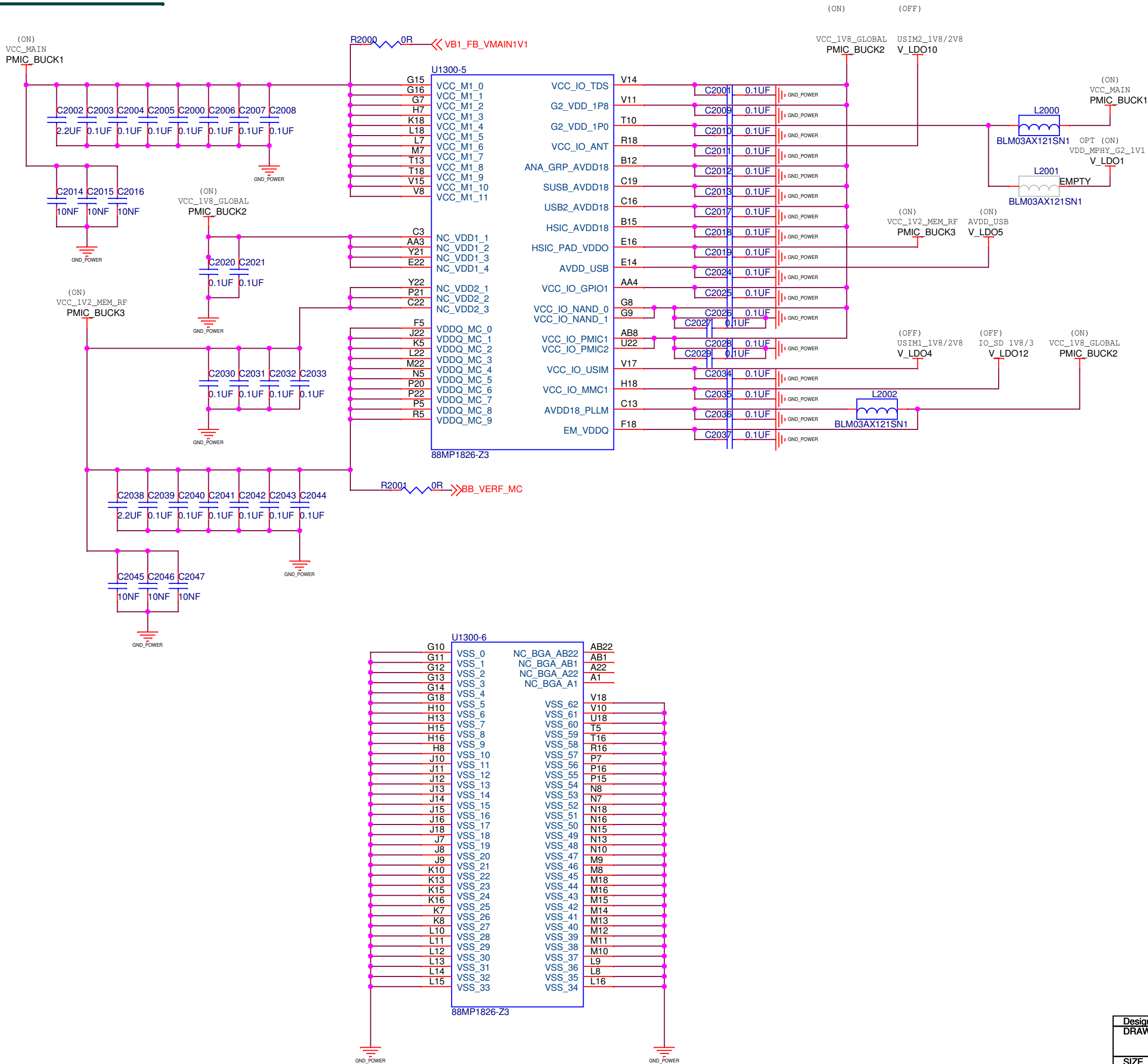
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NEZHA3 GPIO



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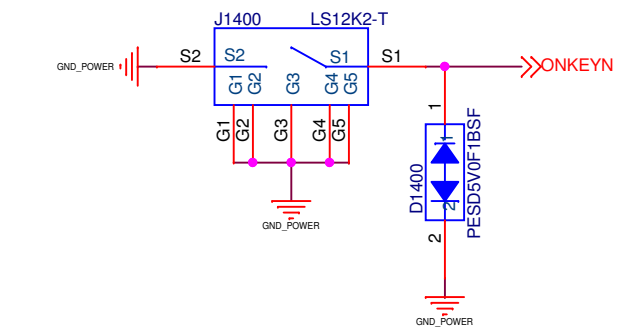
NEZHA3 POWER DOMAIN



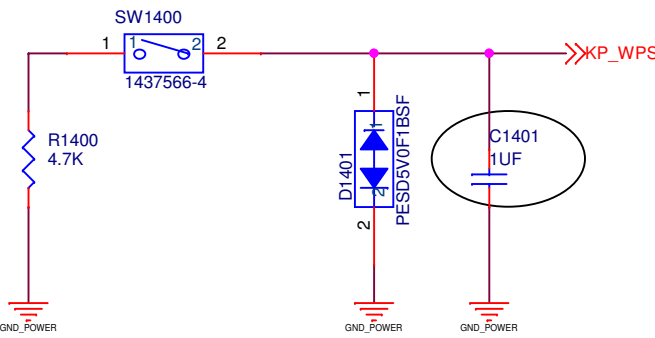
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BB GND'S & DEBUG CONNECTOR & BOARD ID

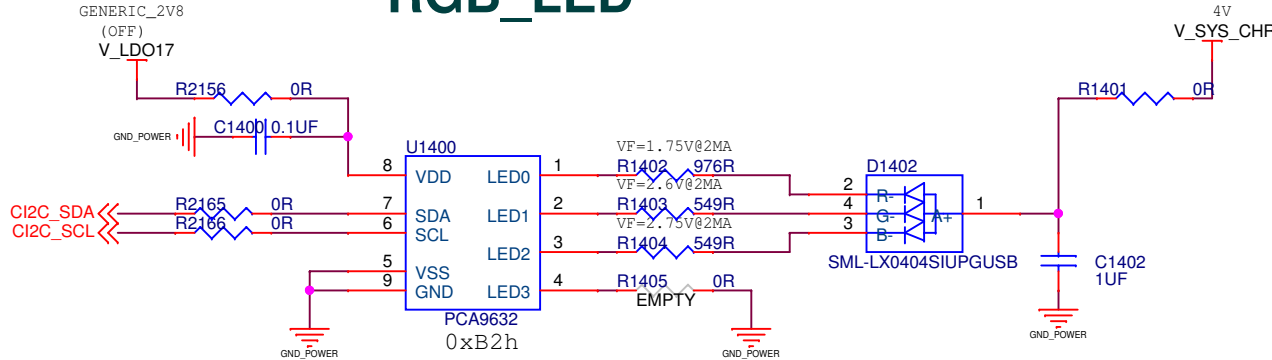
ONKEY_SW (RA)



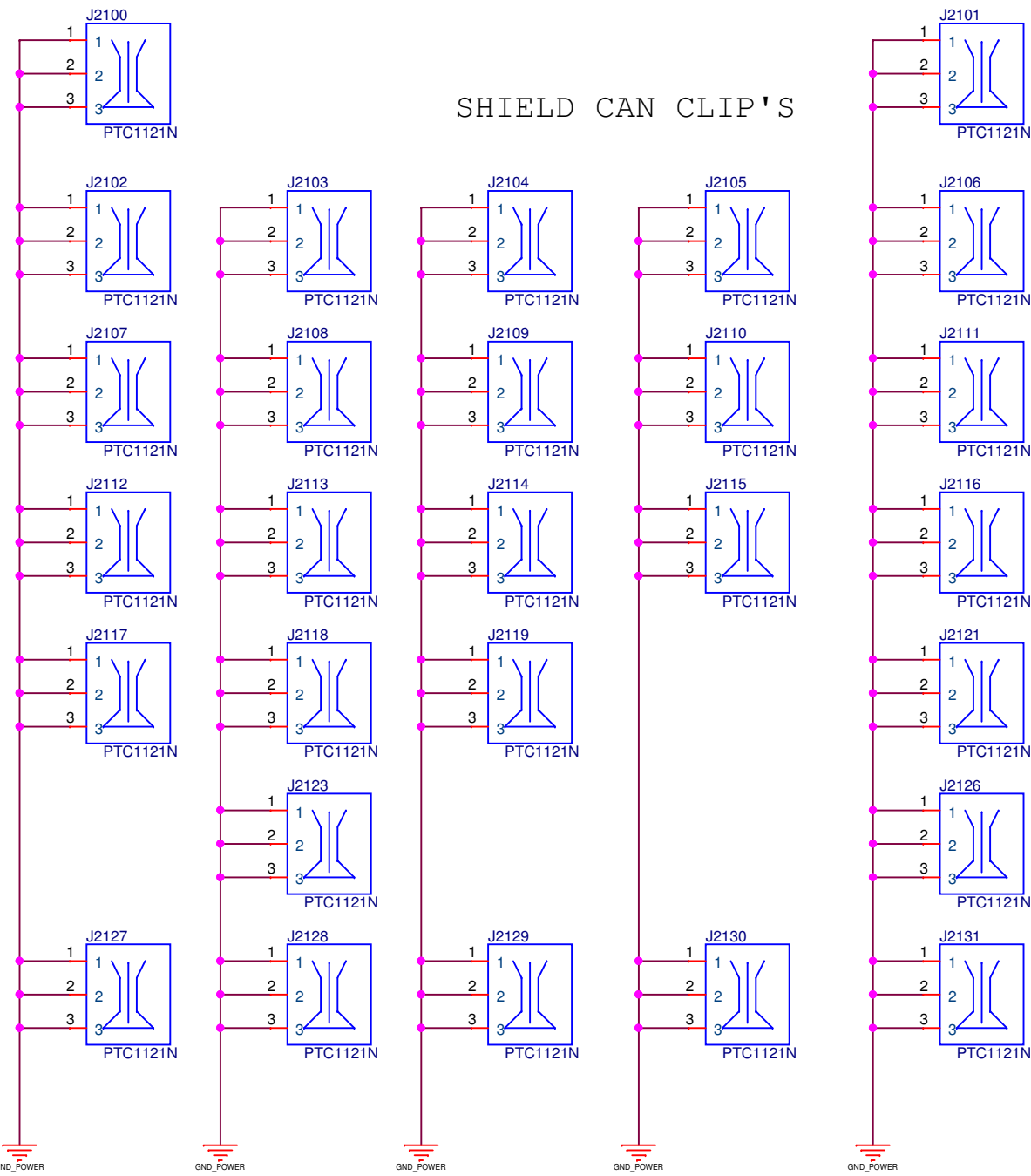
WPS BUTTON



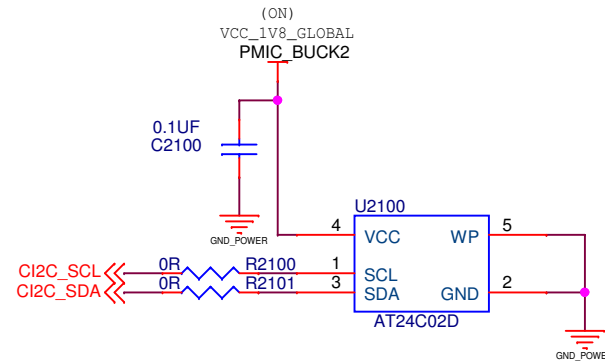
RGB_LED



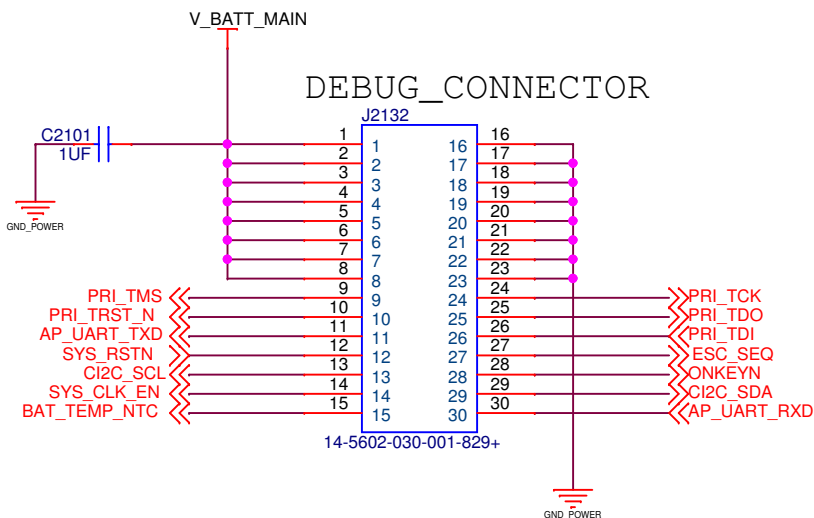
SHIELD CAN CLIP'S



AUTOMATION_EEPROM BOARD_REV_EEPROM



DEBUG_CONNECTOR



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