

BOARD_ID4=No connect

11

PPIV8

MAKE_BASE=TRUE

11

BOARD_ID2

NOSTUFF
R0503

ROOM-SOC

01005 MF 5% 1 2 1.00K 1/32W

0=EUREKA, 1=KAROO

11

BOARD_ID1

NOSTUFF
R0501

ROOM-SOC

01005 MF 5% 1 2 1.00K 1/32W

0=FORM FACTOR A, 1=FORM FACTOR B

BOARD_ID0=No connect

12

PPIV8

MAKE_BASE=TRUE

BOOT_CONFIG1=No connect

BOOT_CONFIG0=No connect

PPIV8

15 8 9 11 12 13 16 17 18 25 29

BOARD_REV[3:0]
FLOAT=LOW, PULLUP=HIGH

1111 Pre-Proto w/D520 (non enclosure)

1110 PROTO1

1101 PROTO2

1100 PROTO2v5

1011 EVT1

1010 EVT2

XXXX SPARE

1000 CARRIER

XXXX SPARE

0010 DVT

XXXX SPARE

0000 PVT

BOARD_ID[4:0]
FLOAT=LOW, PULLUP=HIGH

01000 D10 MLB

01001 D10 DEV

01010 D11 MLB

01011 D11 DEV

01100 D101 MLB

01101 D101 DEV

01110 D111 MLB

01111 D111 DEV

0=MLB, 1=DEV

0=FORM FACTOR A, 1=FORM FACTOR B

0=EUREKA, 1=KAROO

BOOT_CONFIG[2:0]
FLOAT=LOW, PULLUP=HIGH

000 SPI0

001 SPI0 TEST MODE

010 NVME0_X2

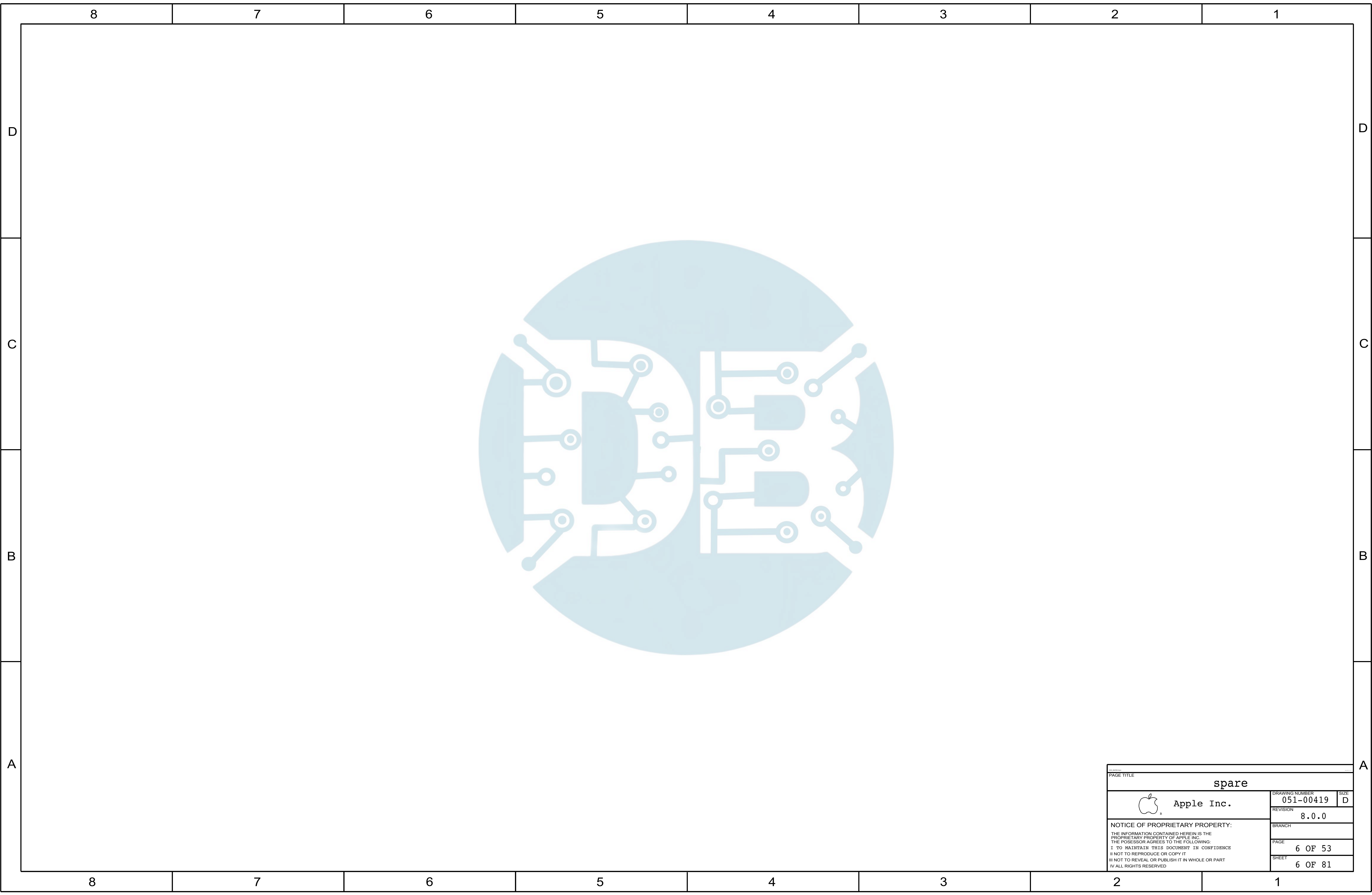
011 NVME0 X2 TEST


100 NVME0 X1

101 NVME0 X1 TEST

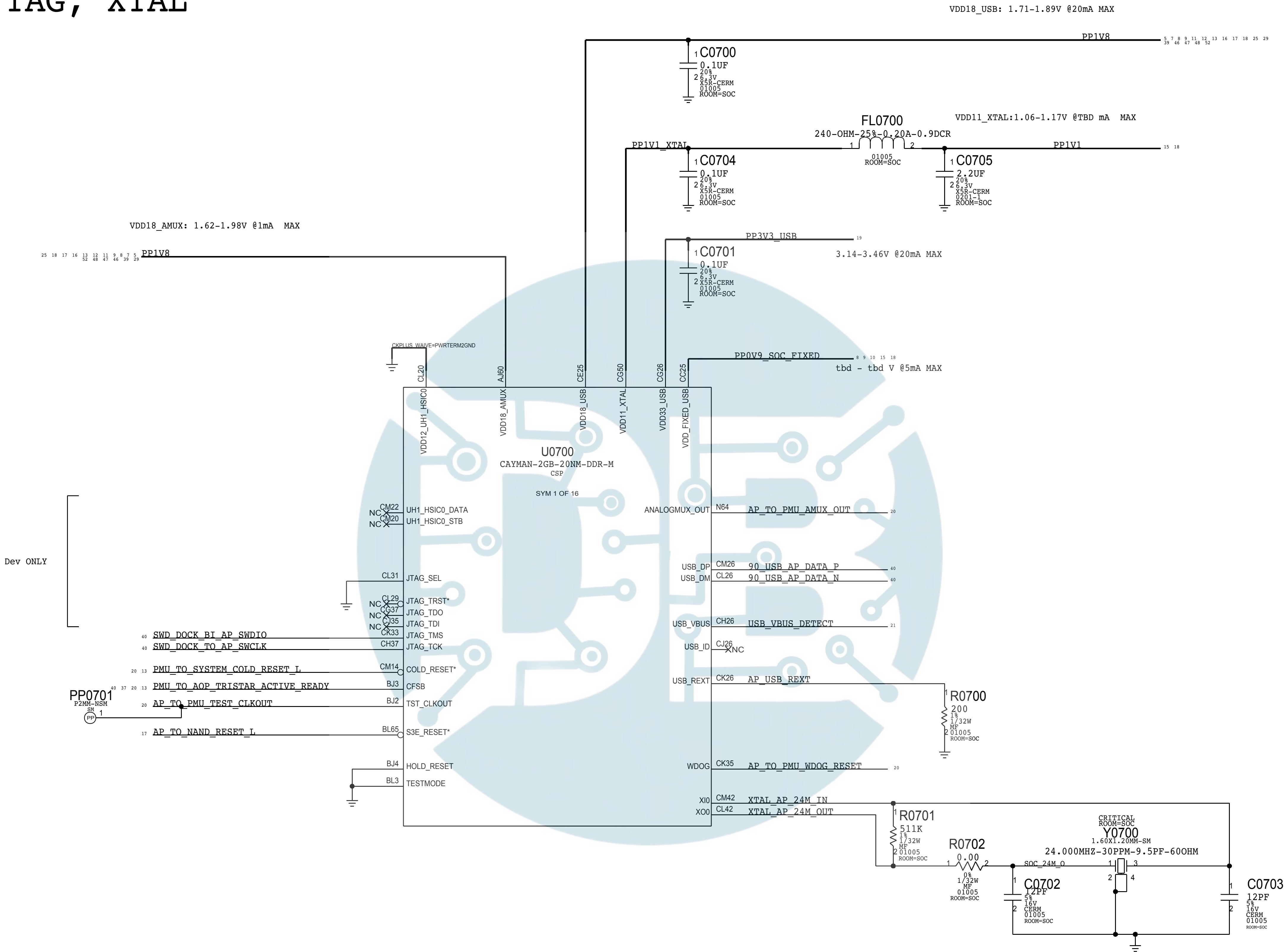
110 SLOW SPI0 TEST

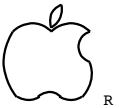
111 FAST SPI0 TEST



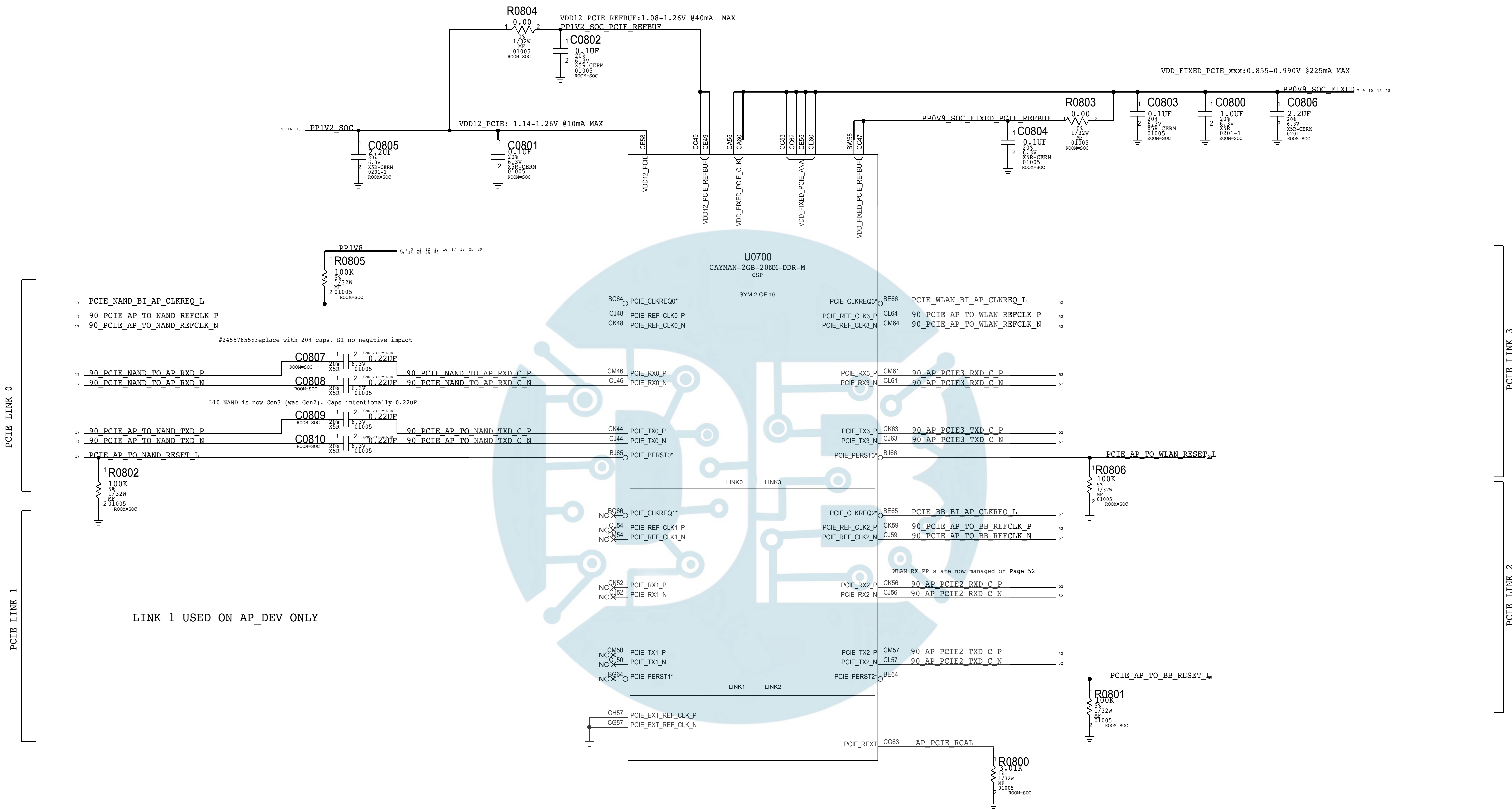
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	PAGE	6 OF 53
	SHEET	6 OF 81
	SIZE	D

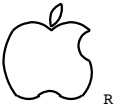
SOC - USB, JTAG, XTAL



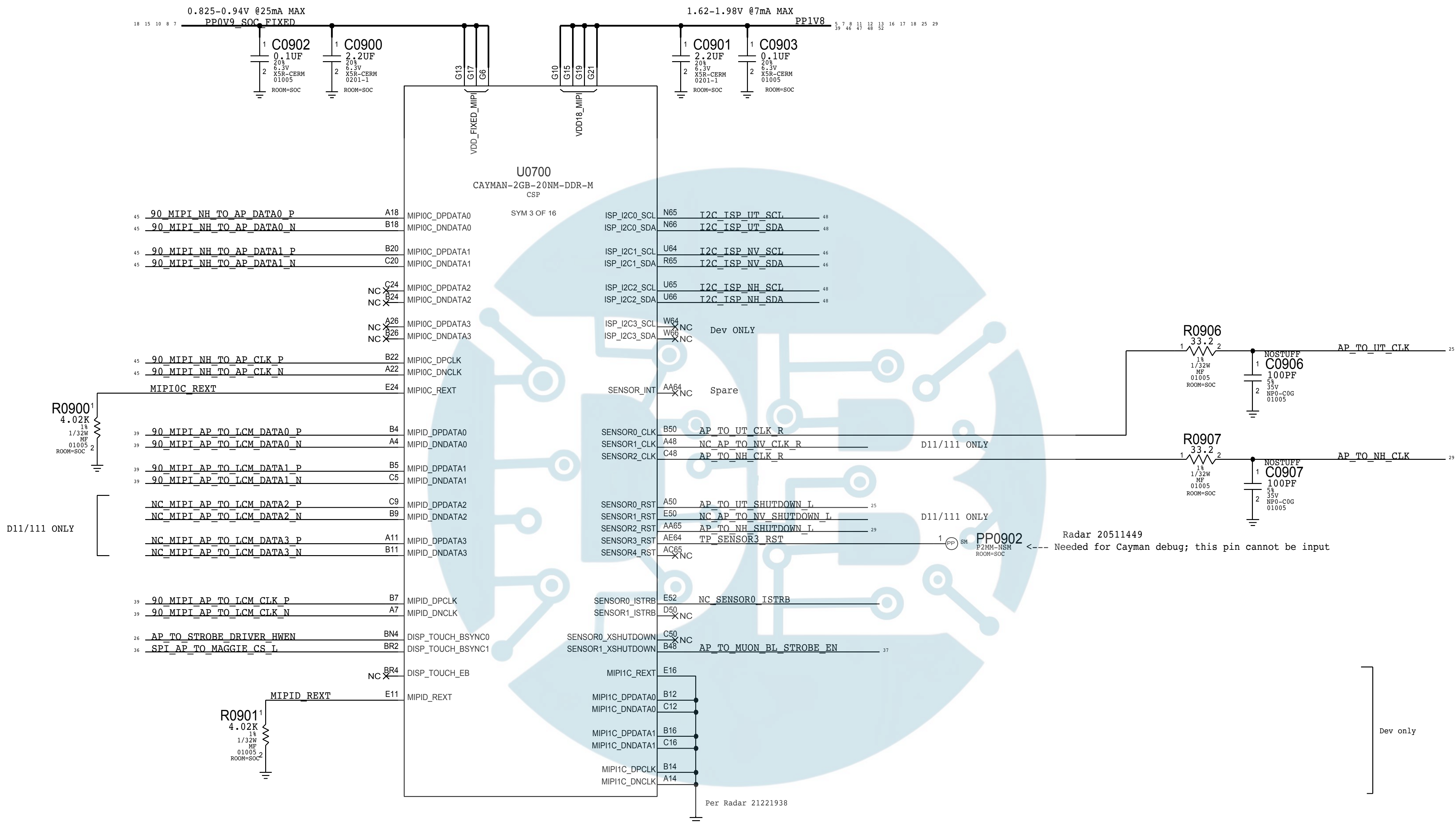
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SOC - PCIE INTERFACES

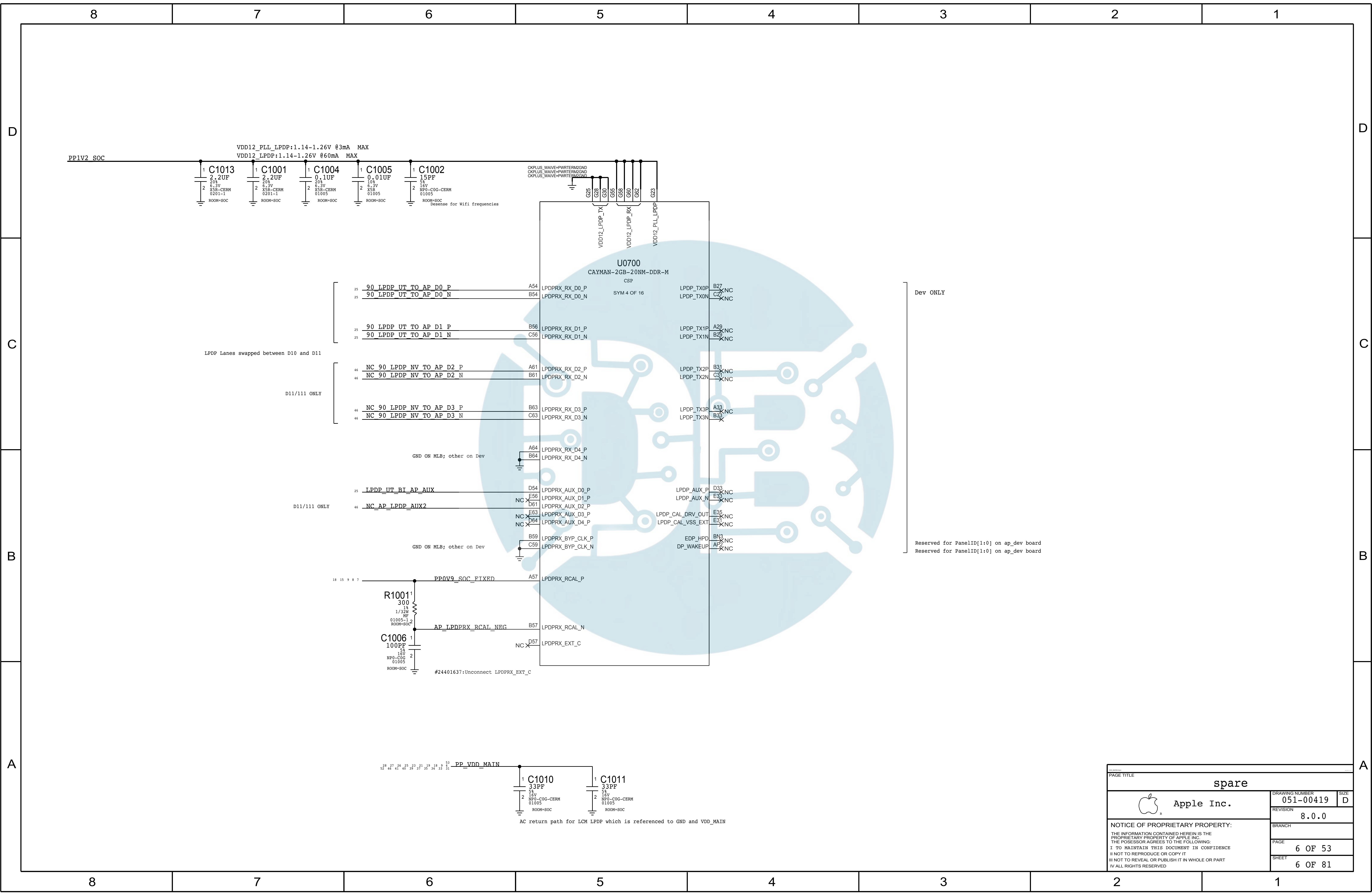


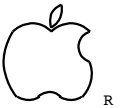
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SOC - MIPI & ISP INTERFACES

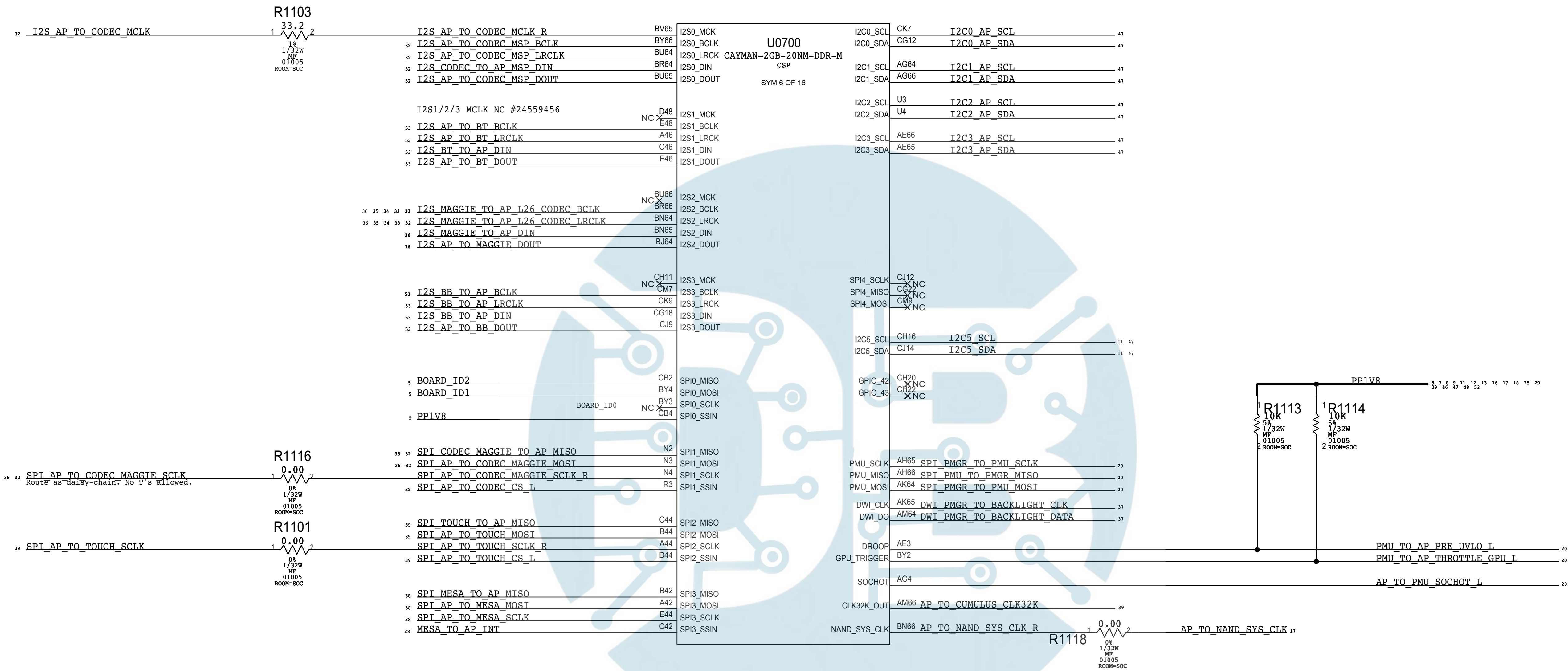


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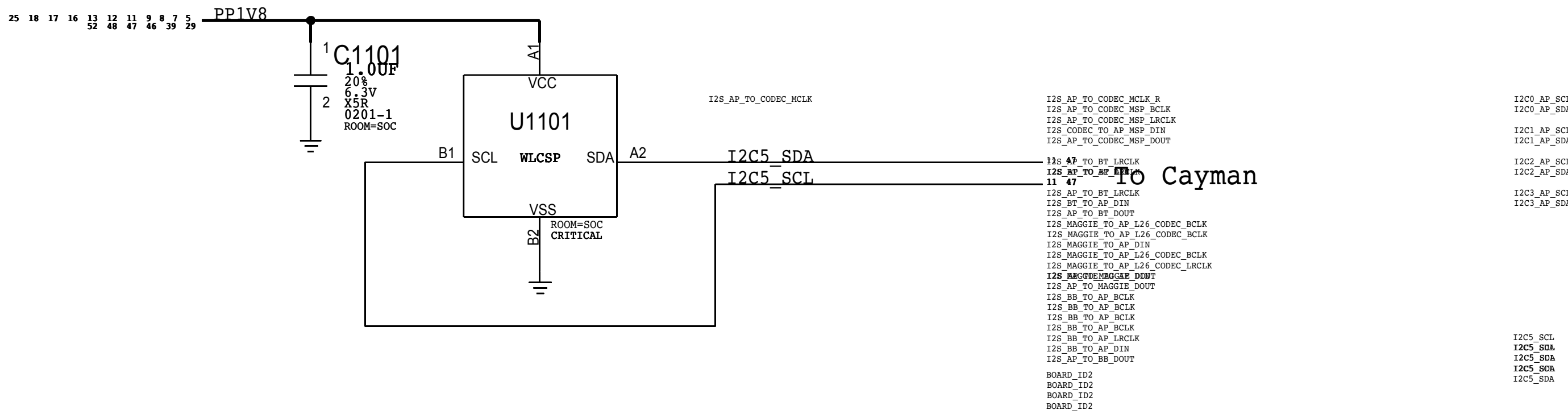



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SOC - SERIAL INTERFACES

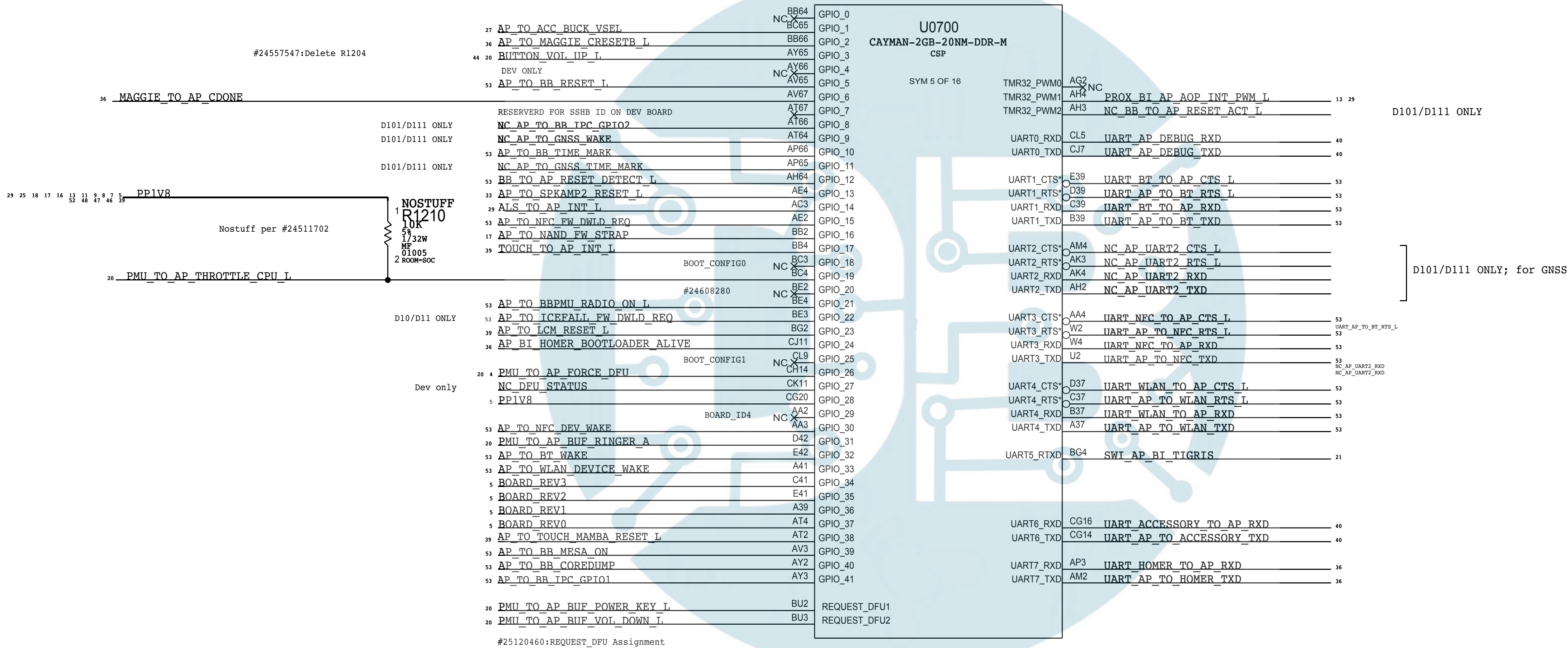


I2C5
See Radar#25316444 for Details



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SOC - GPIO INTERFACES



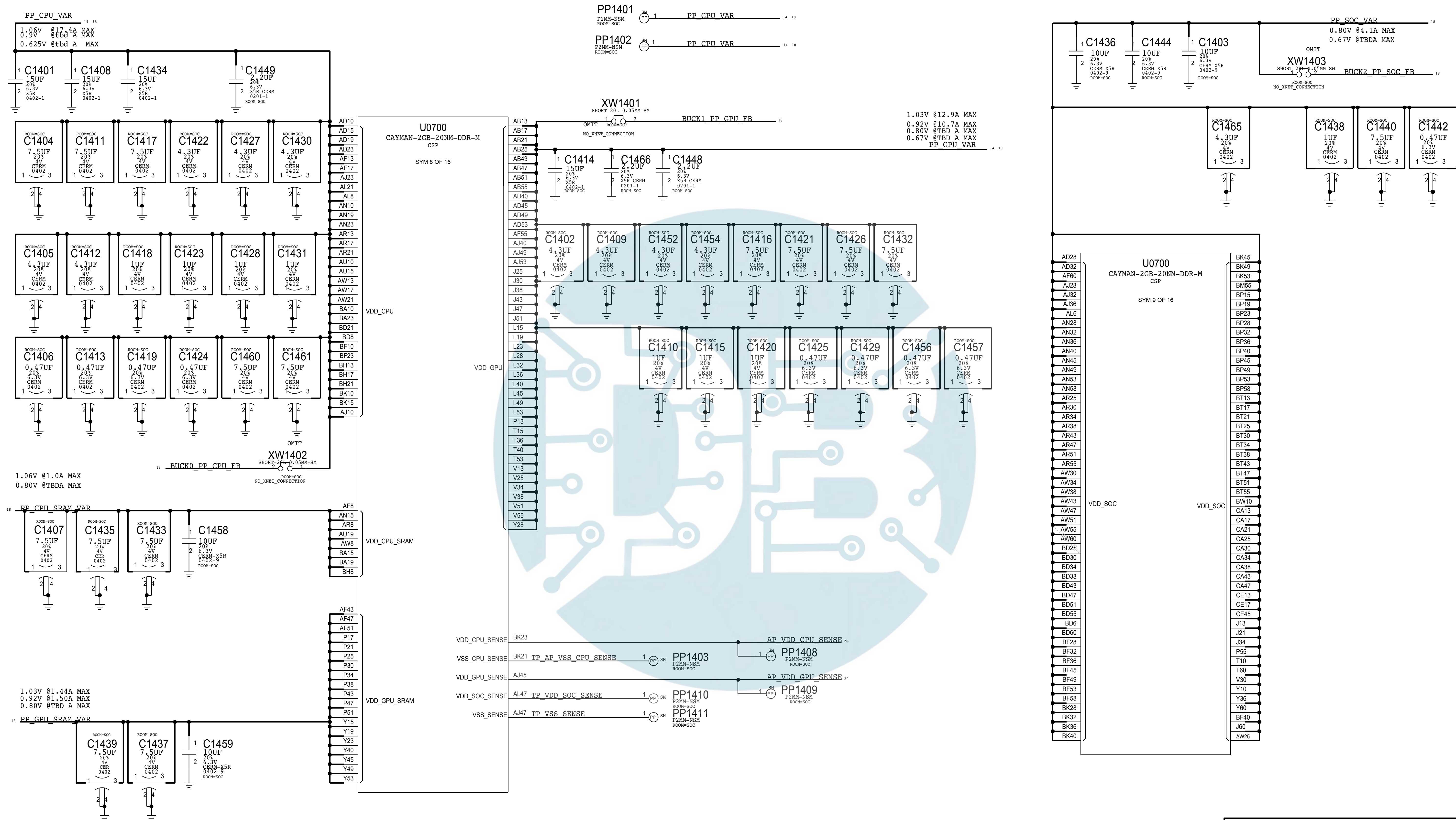
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SOC - CPU, GPU & SOC RAILS



D



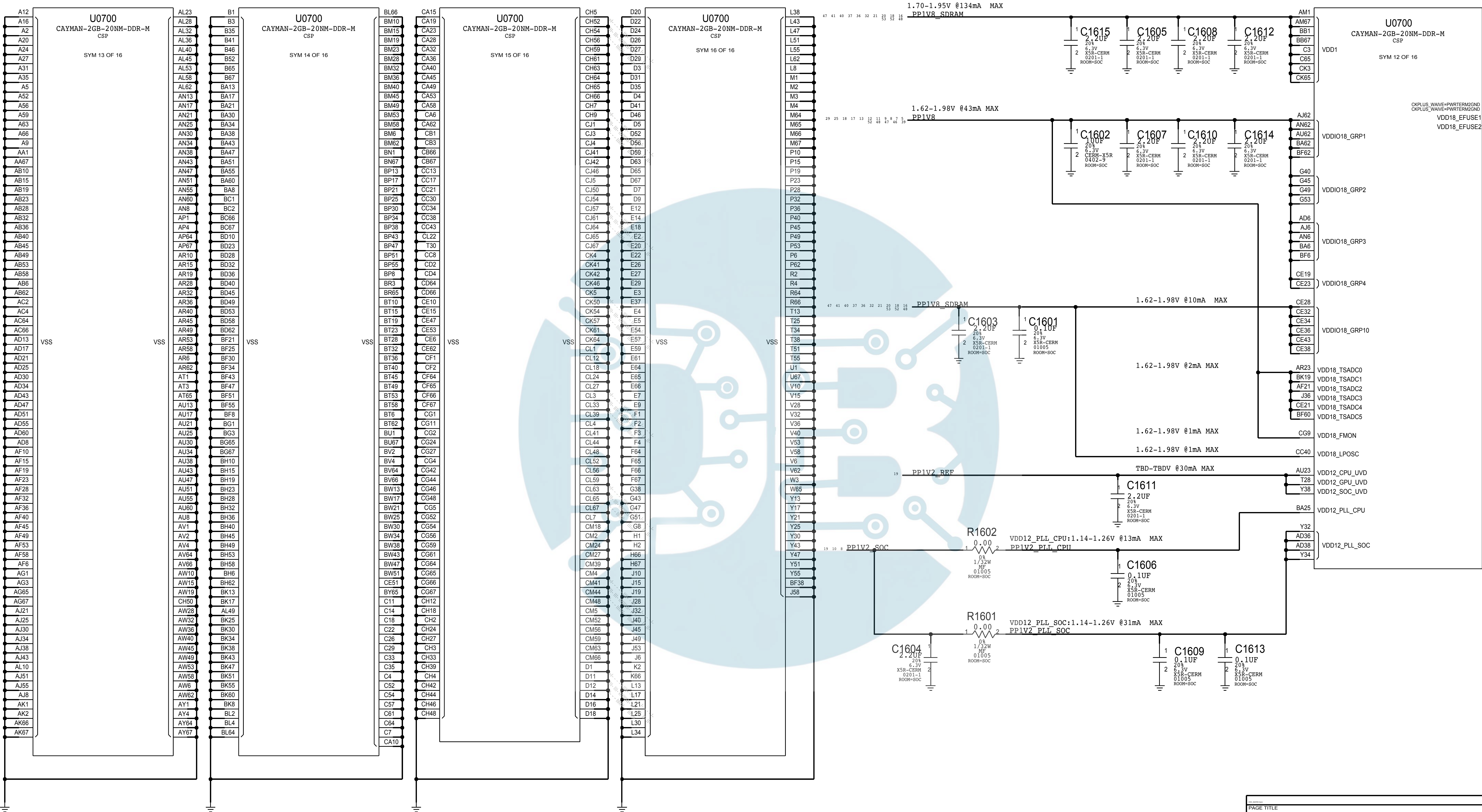
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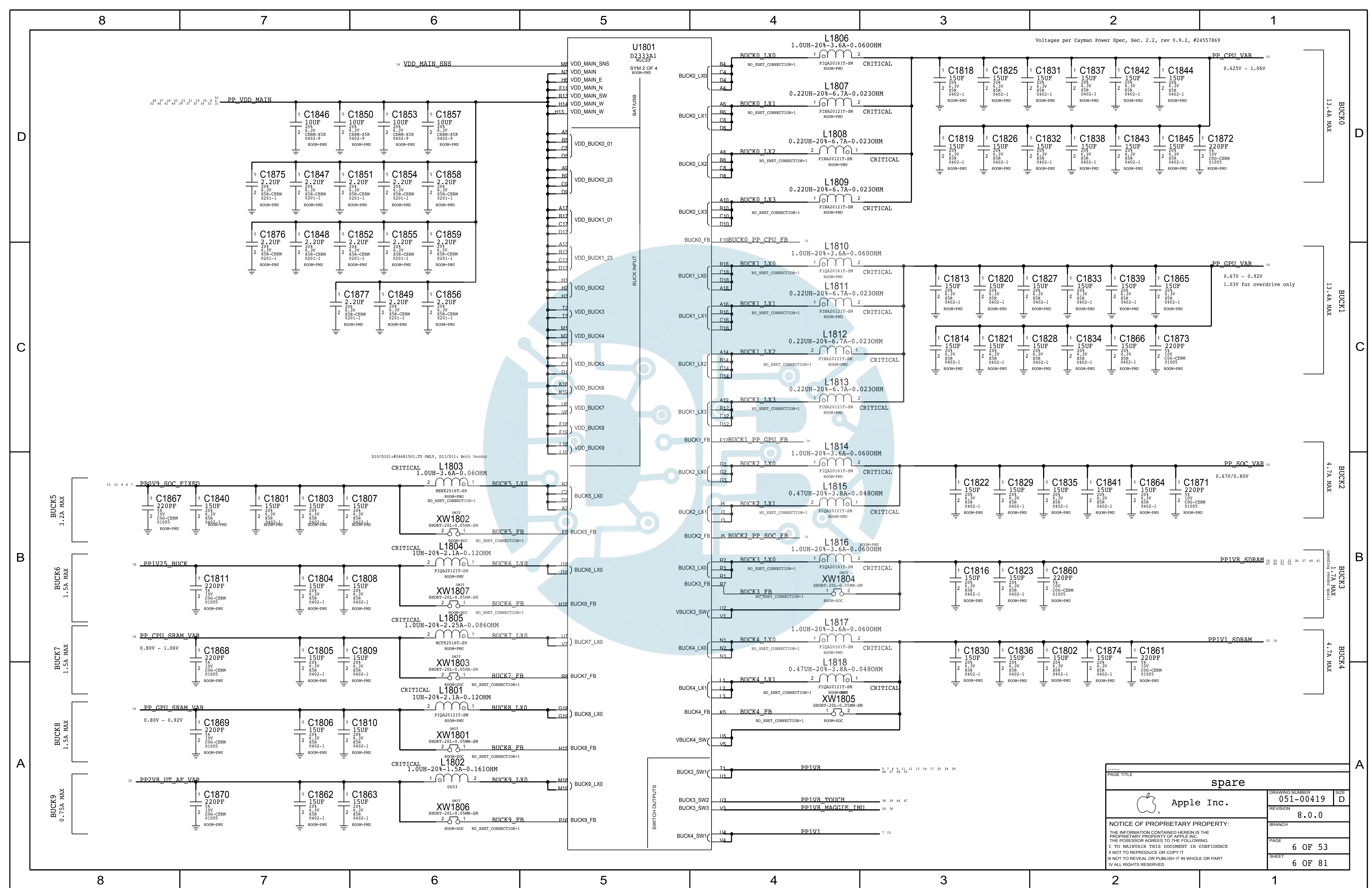
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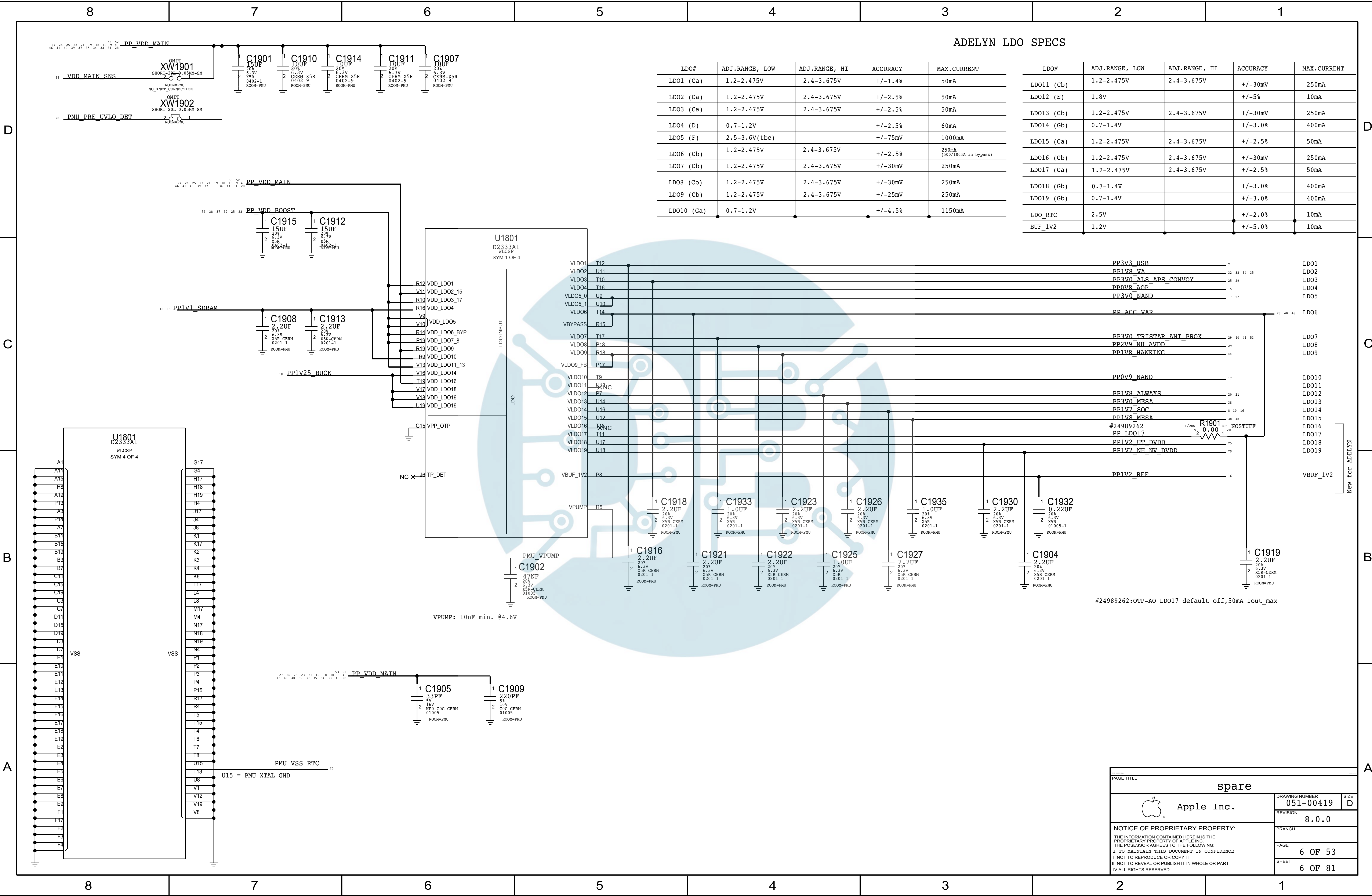
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SOC - POWER SUPPLIES







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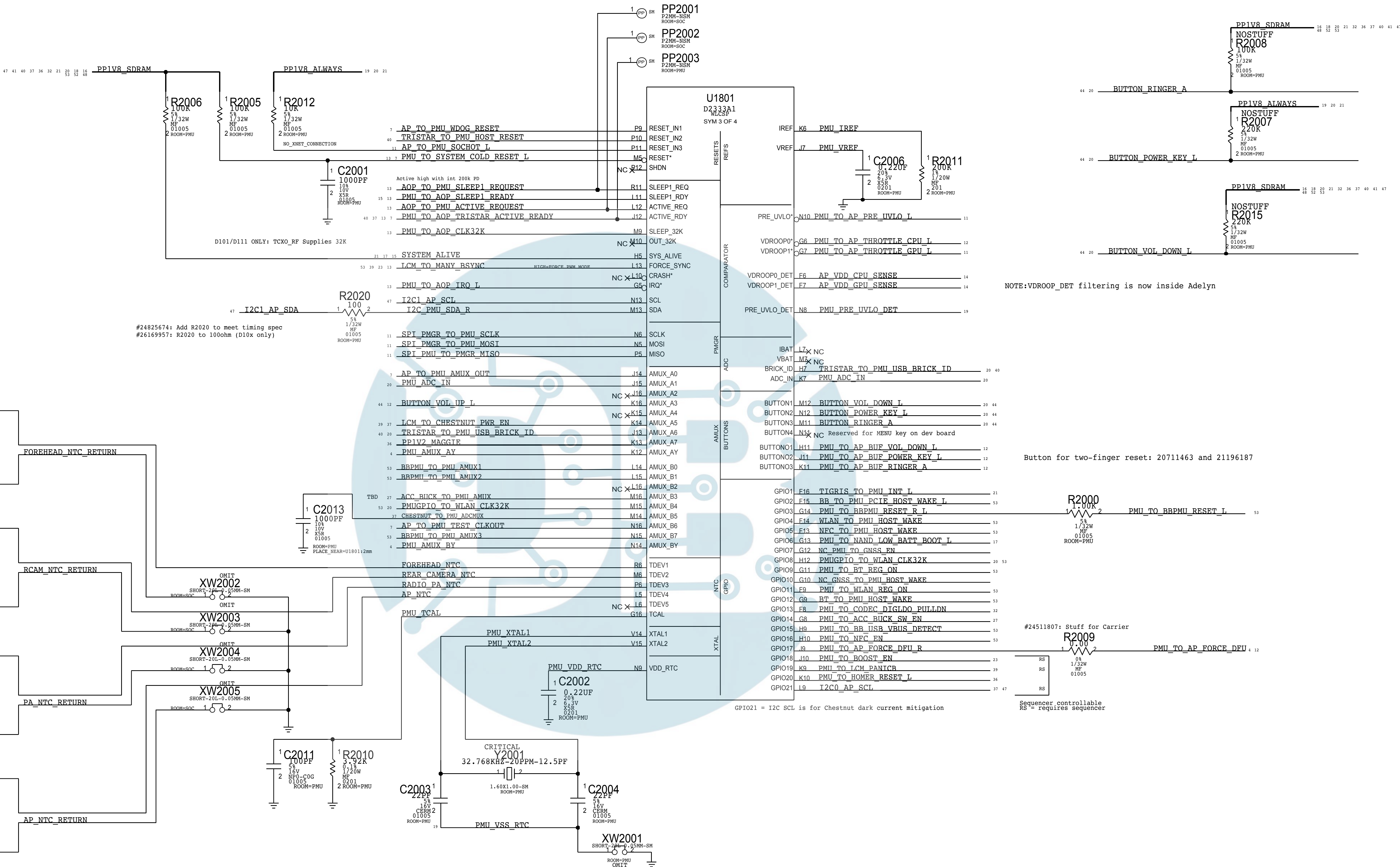
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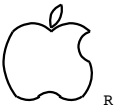
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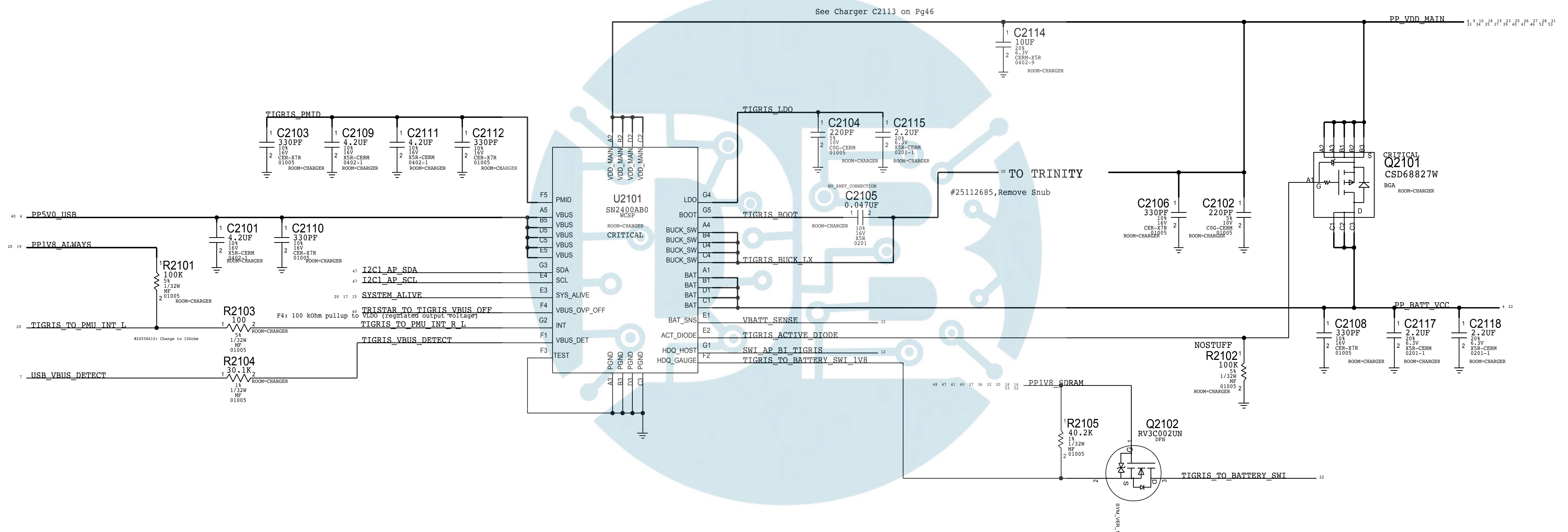
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BUTTON PULL-UP RESISTORS

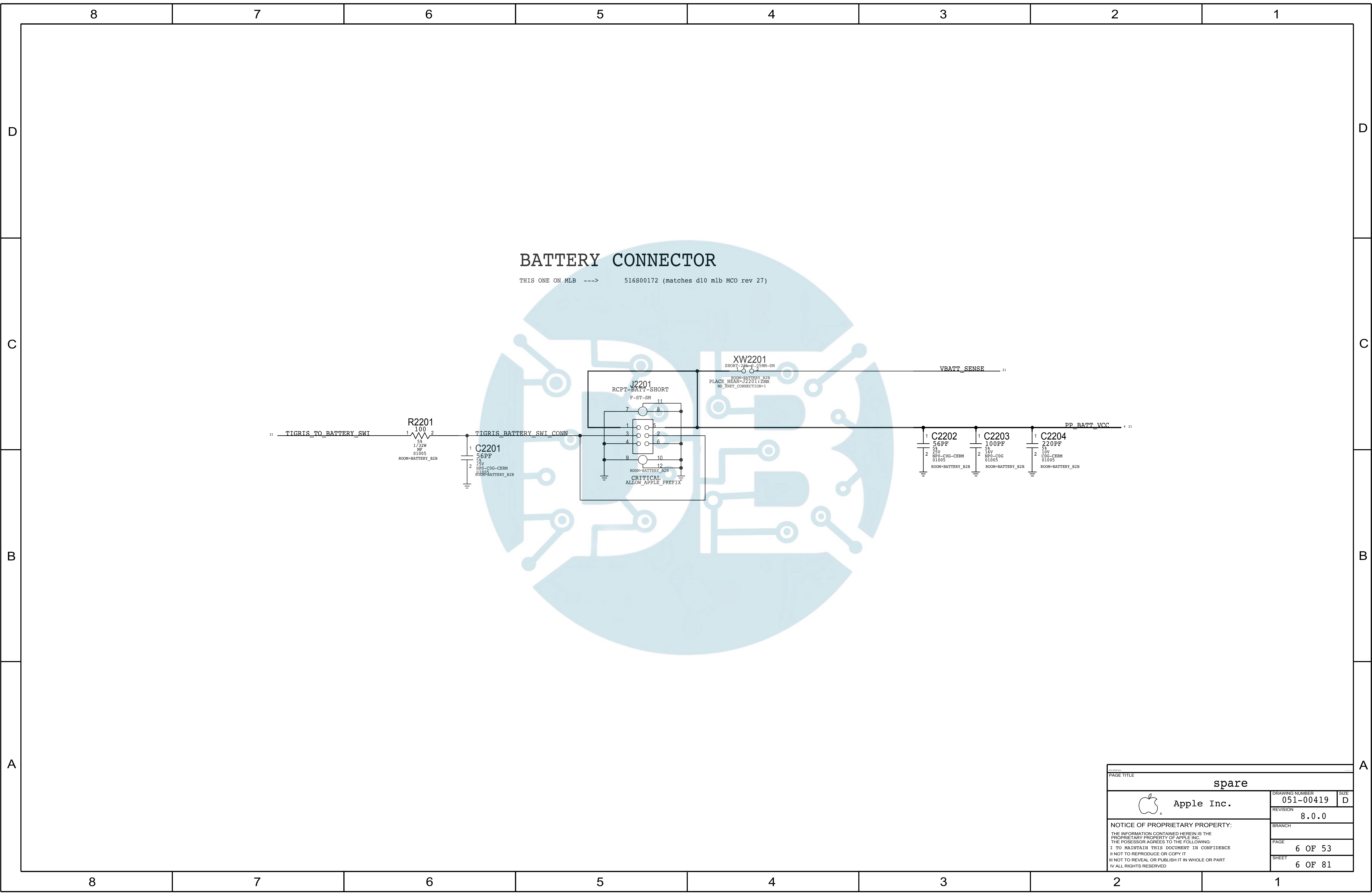


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TIGRIS CHARGER



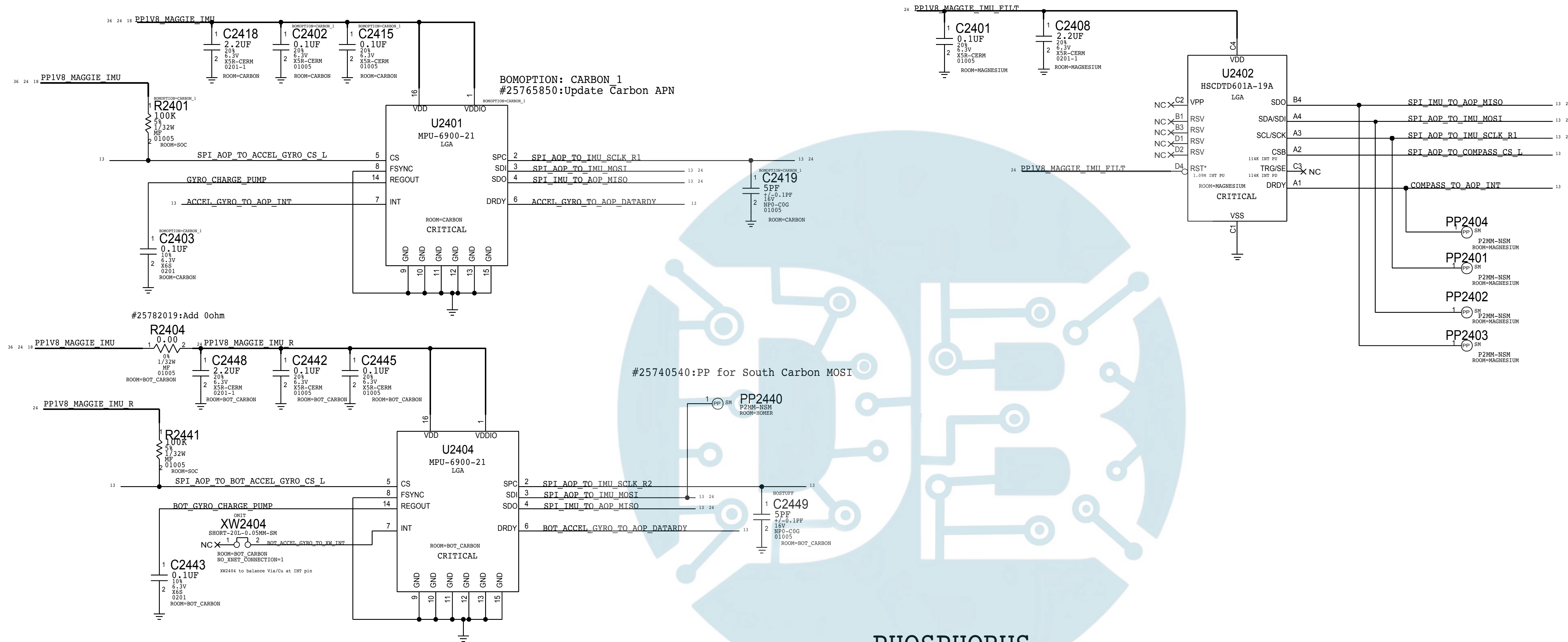
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CARBON - ACCEL & GYRO

INVENSENSE, MPU-6800: C2403=0.1UF

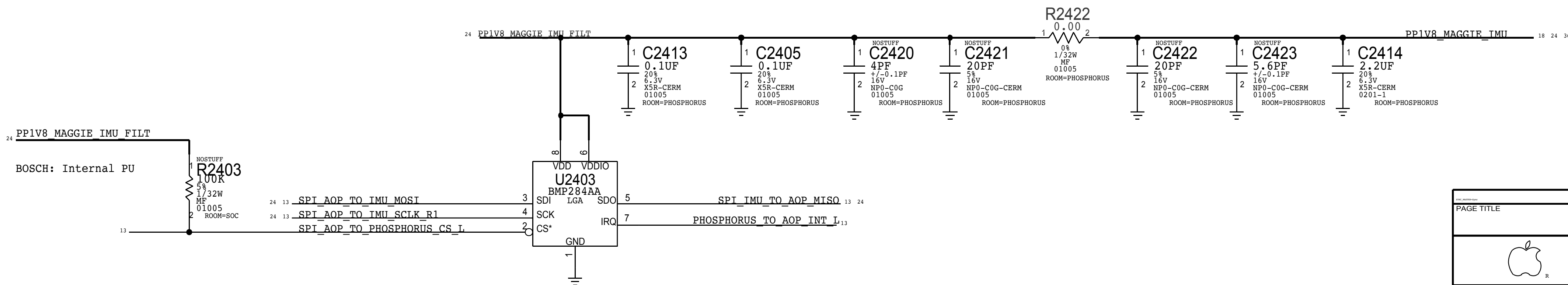
MAGNESIUM - COMPASS




PHOSPHORUS

#24593845, #25691124

BOSCH (APN:338S00188): nostuff C2420/C2421/C2422/C2423 and R2403 PU



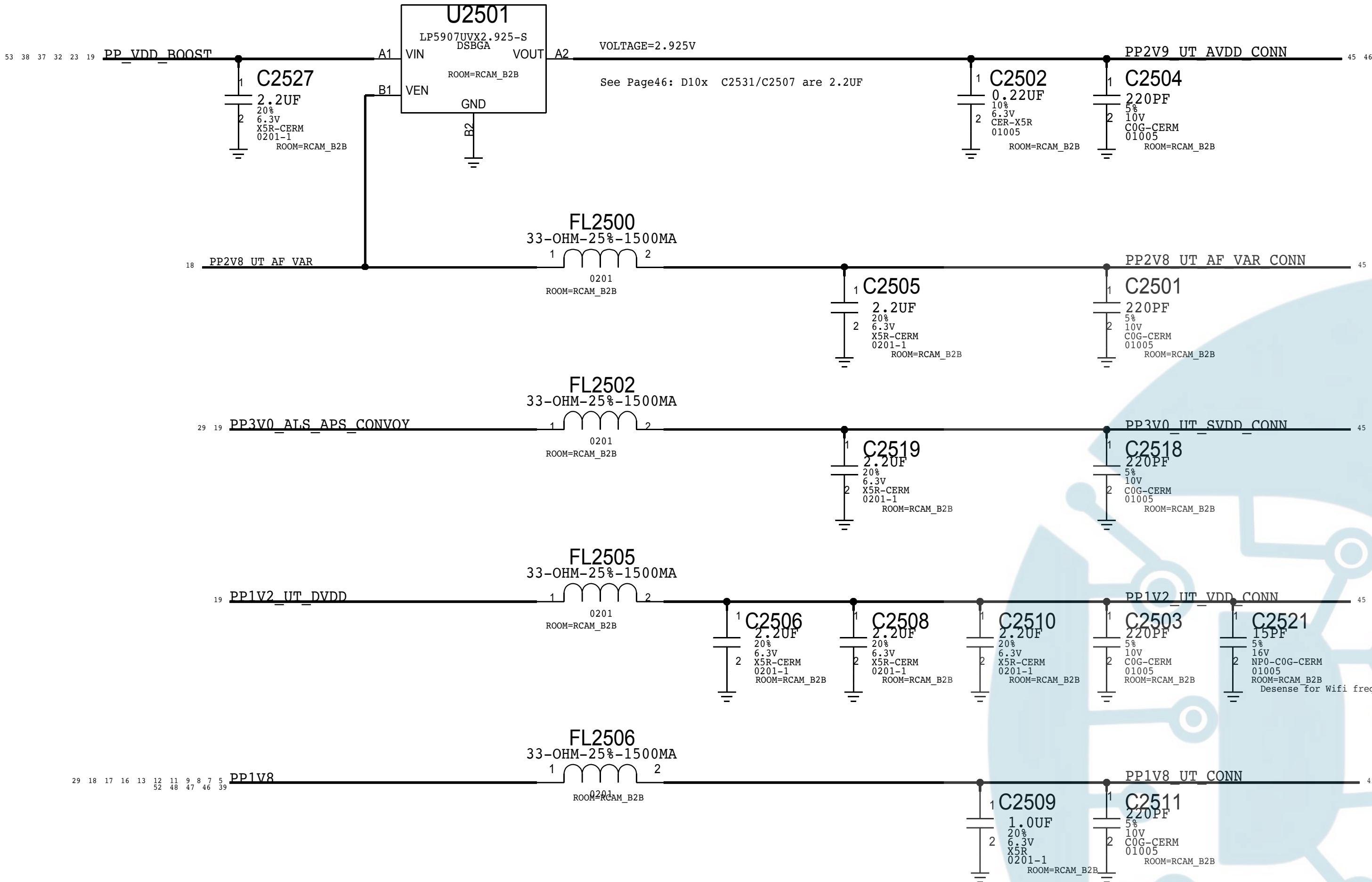
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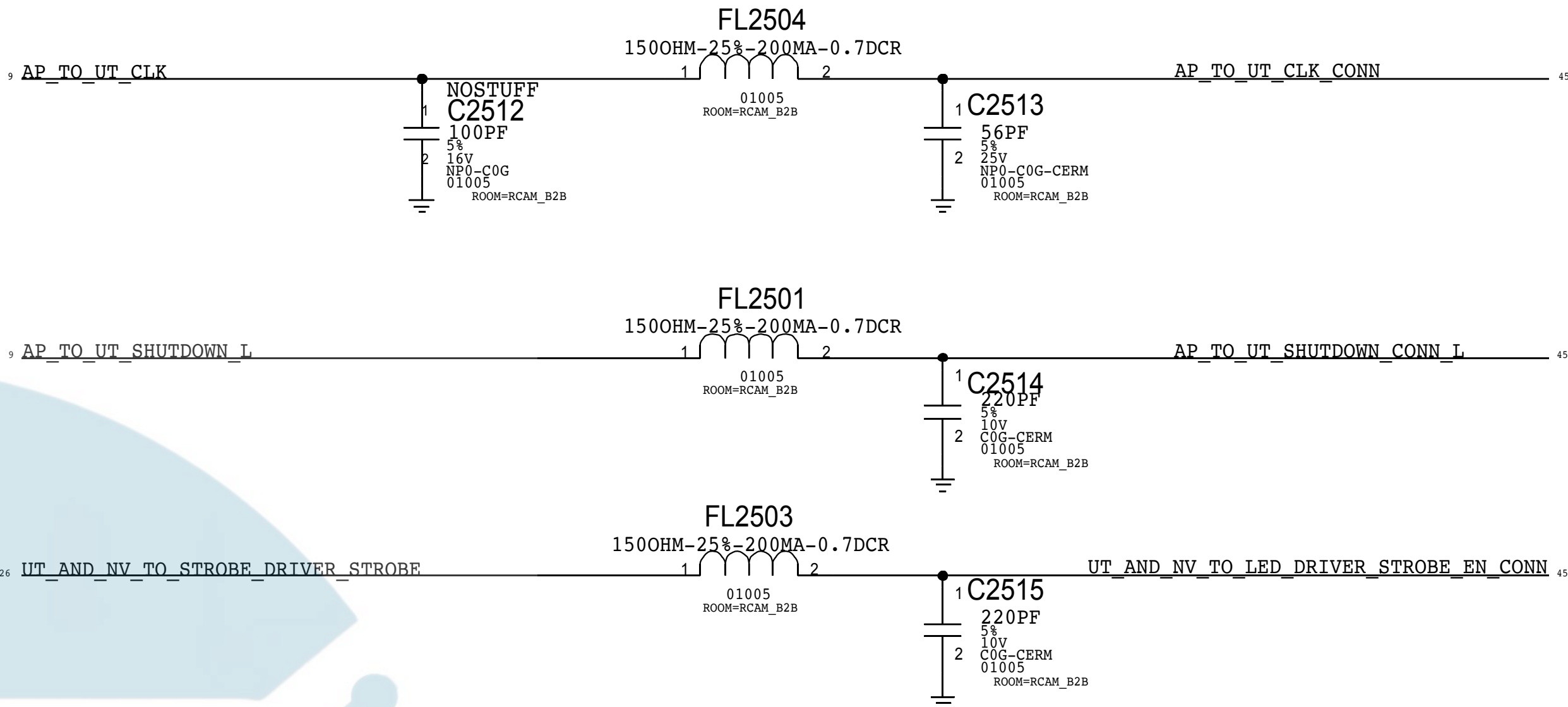
UTAH POWER

NOTE: OUTPUT IMPEDANCE MUST BE >0.005-OHM
IN ORDER TO MEET CAP ESR REQUIREMENT PER LDO SPEC.
VENDOR ALSO RECOMMENDS CIN = COUT FOR STABILITY

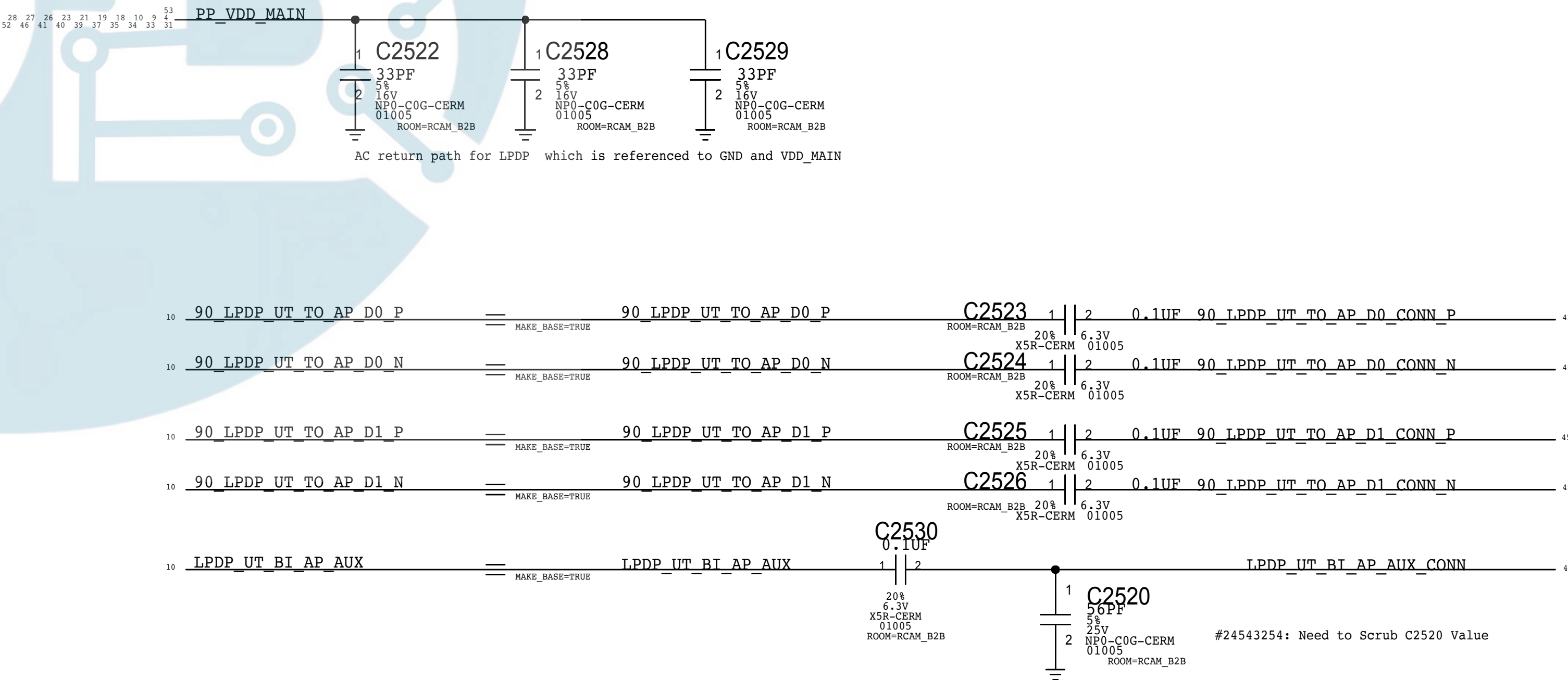
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IO FILTERS



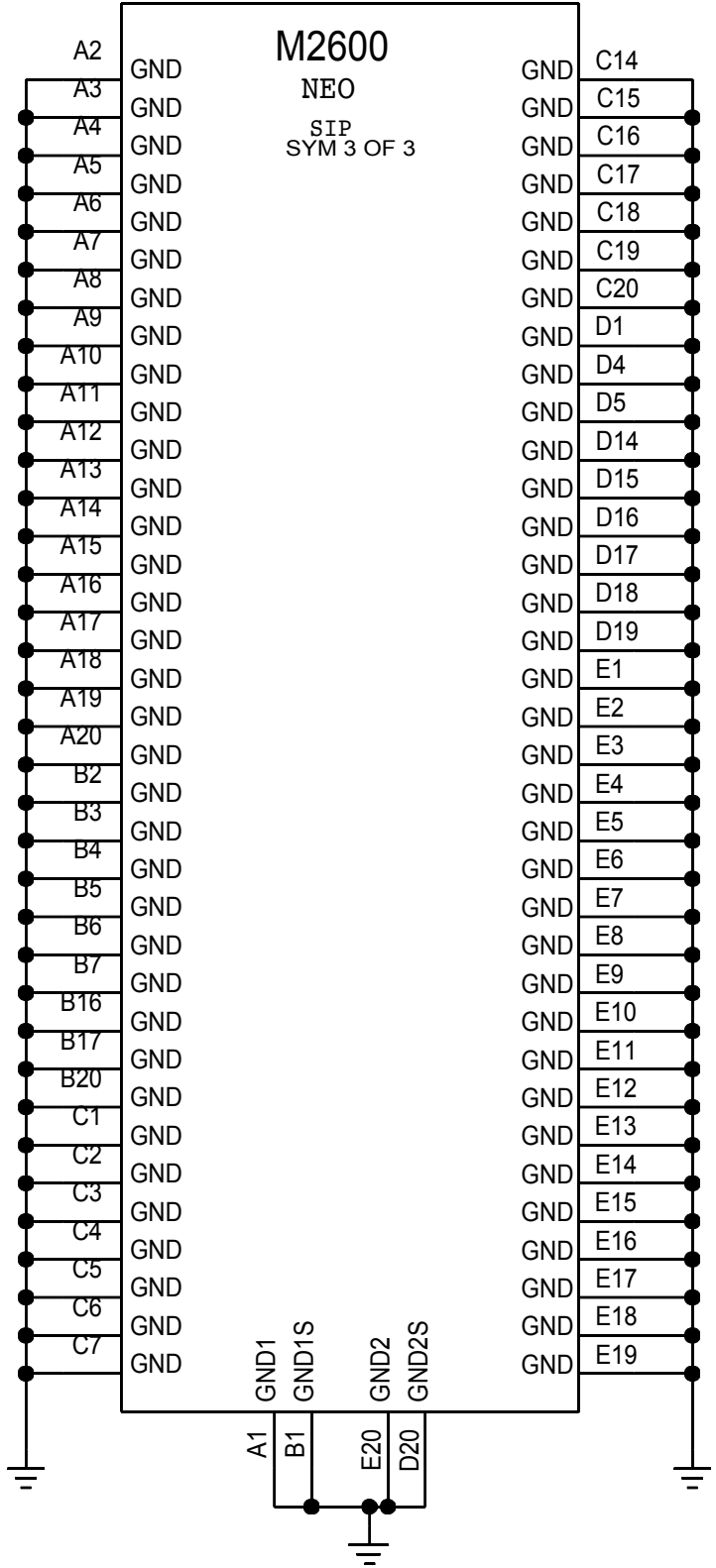
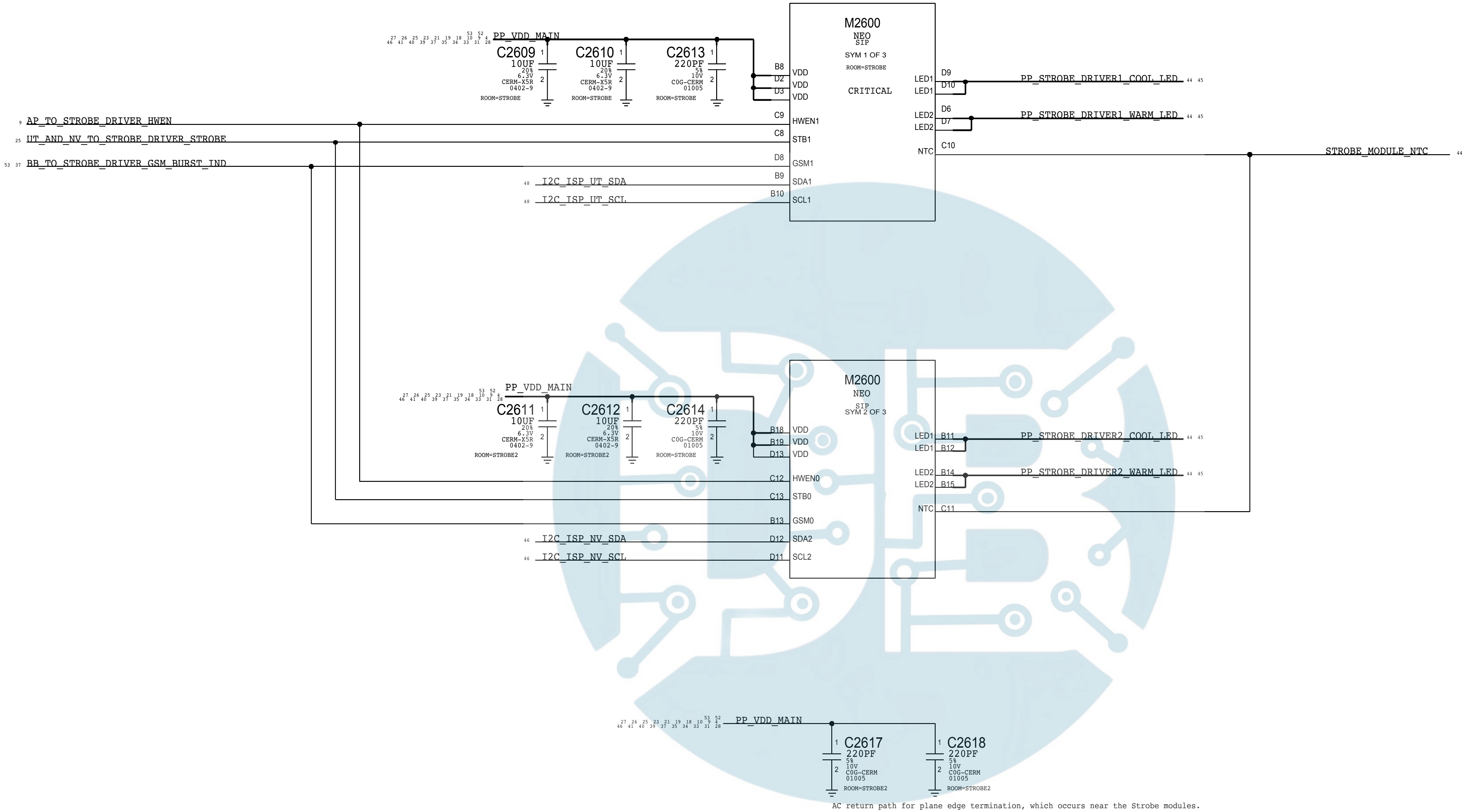
LPDP FILTERS



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STROBE DRIVERS INSIDE NEO SIP MODULE

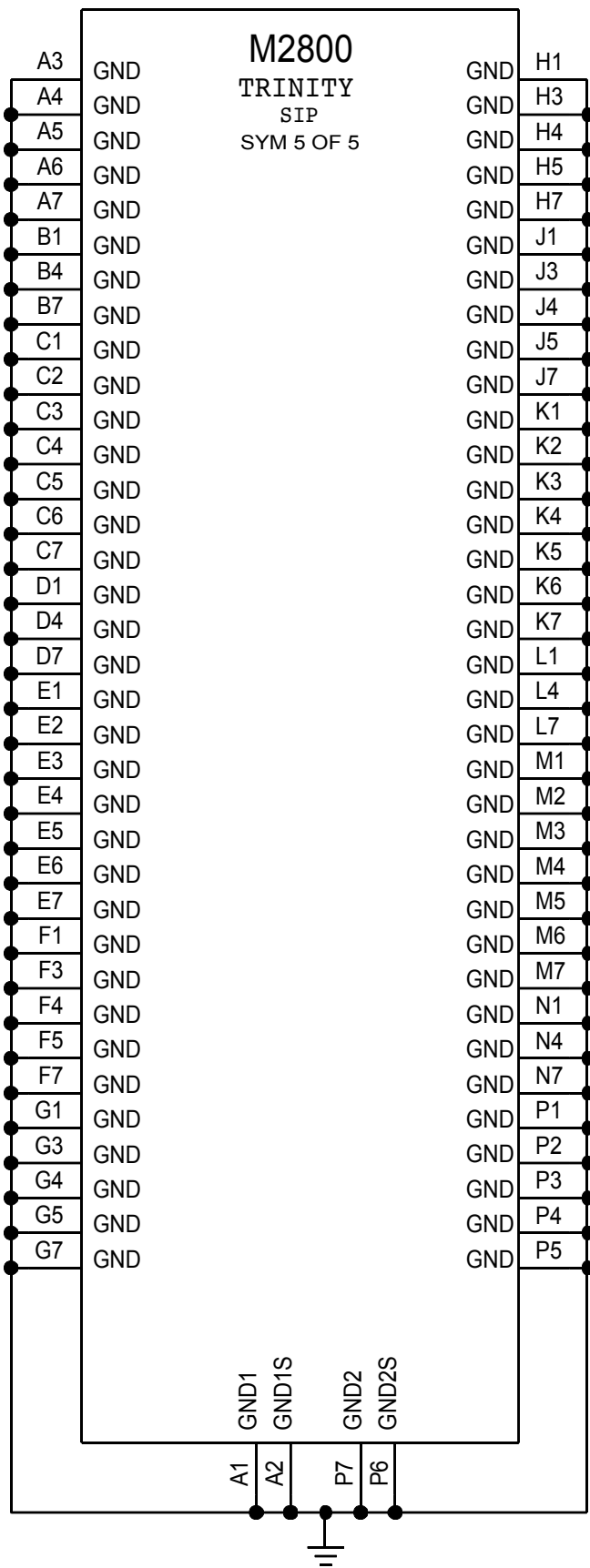
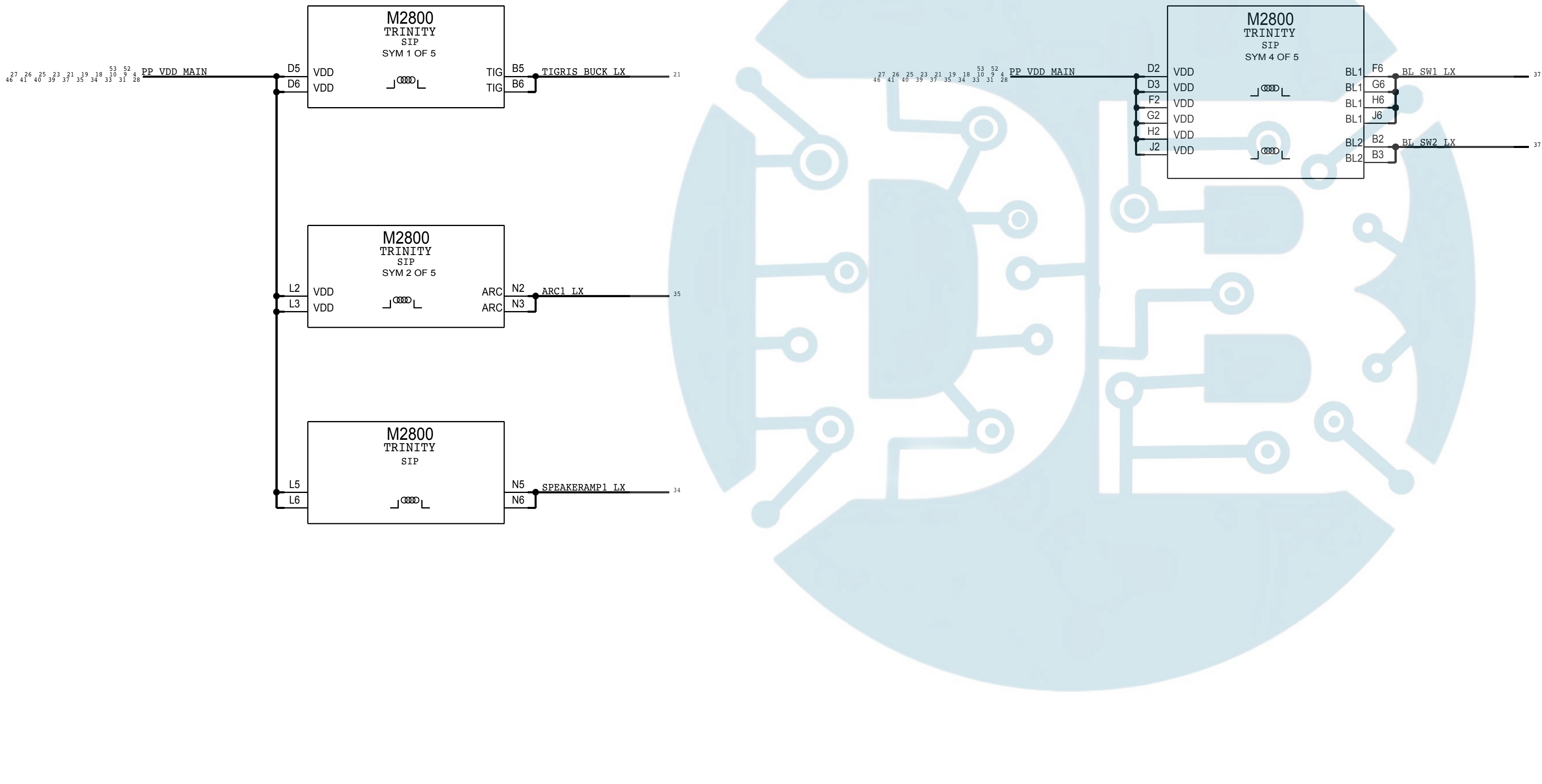
D10/sip_neo



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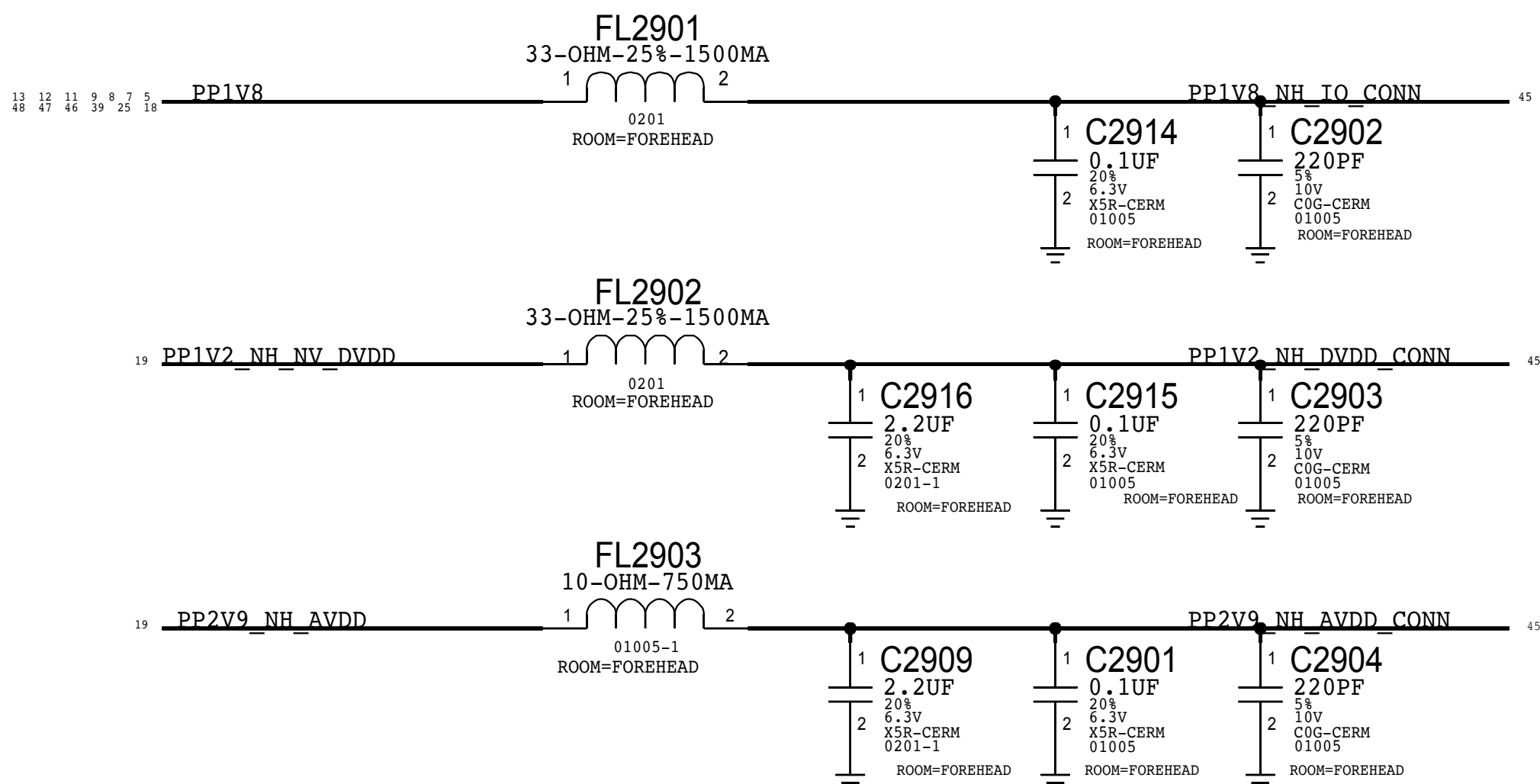
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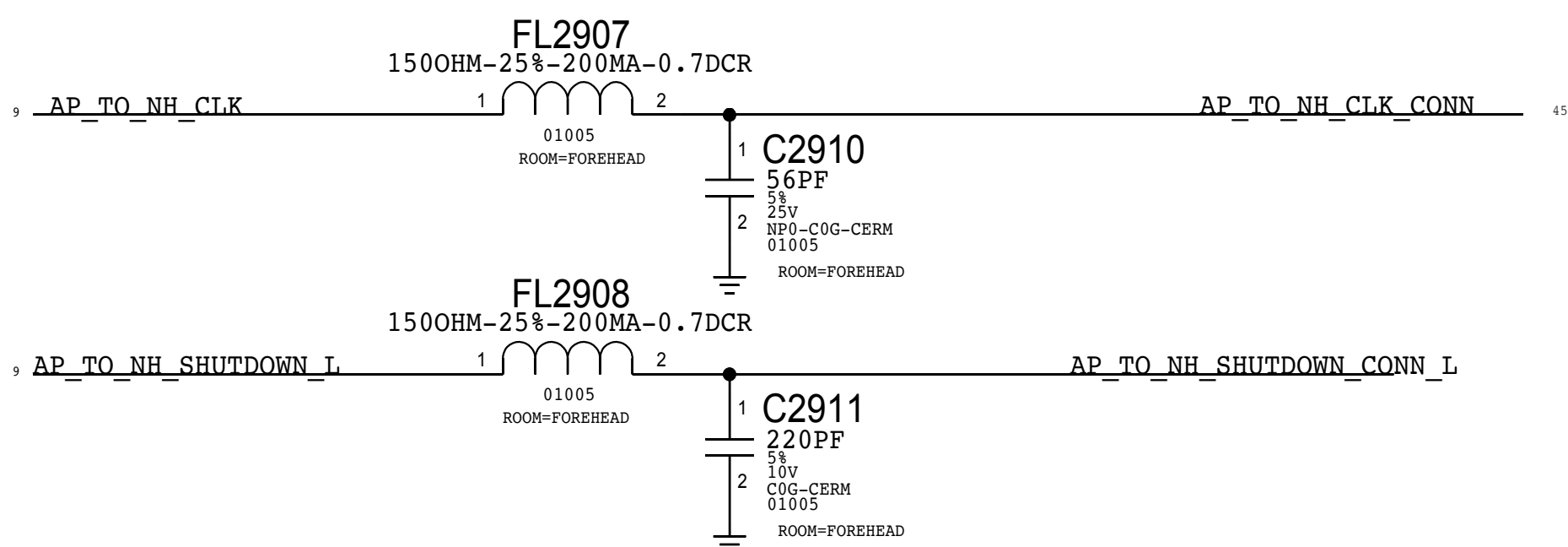
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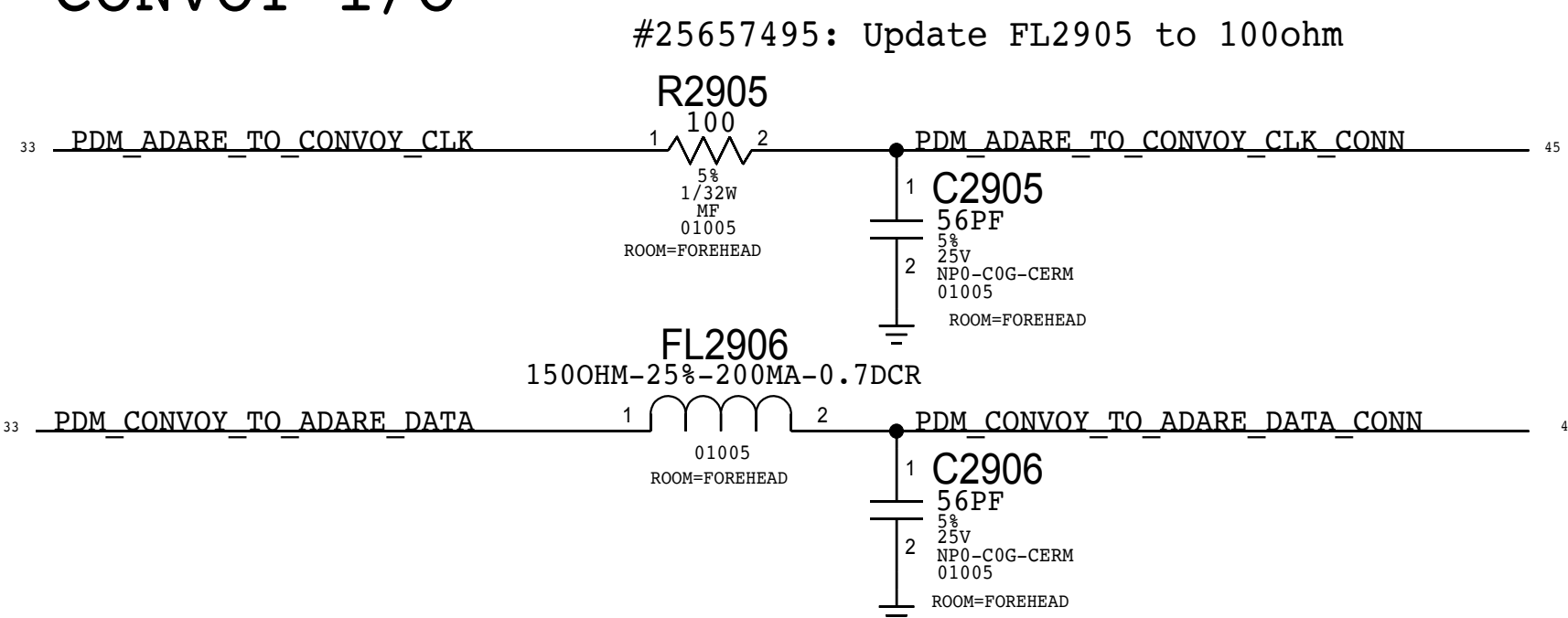
NEW HAMPSHIRE POWER



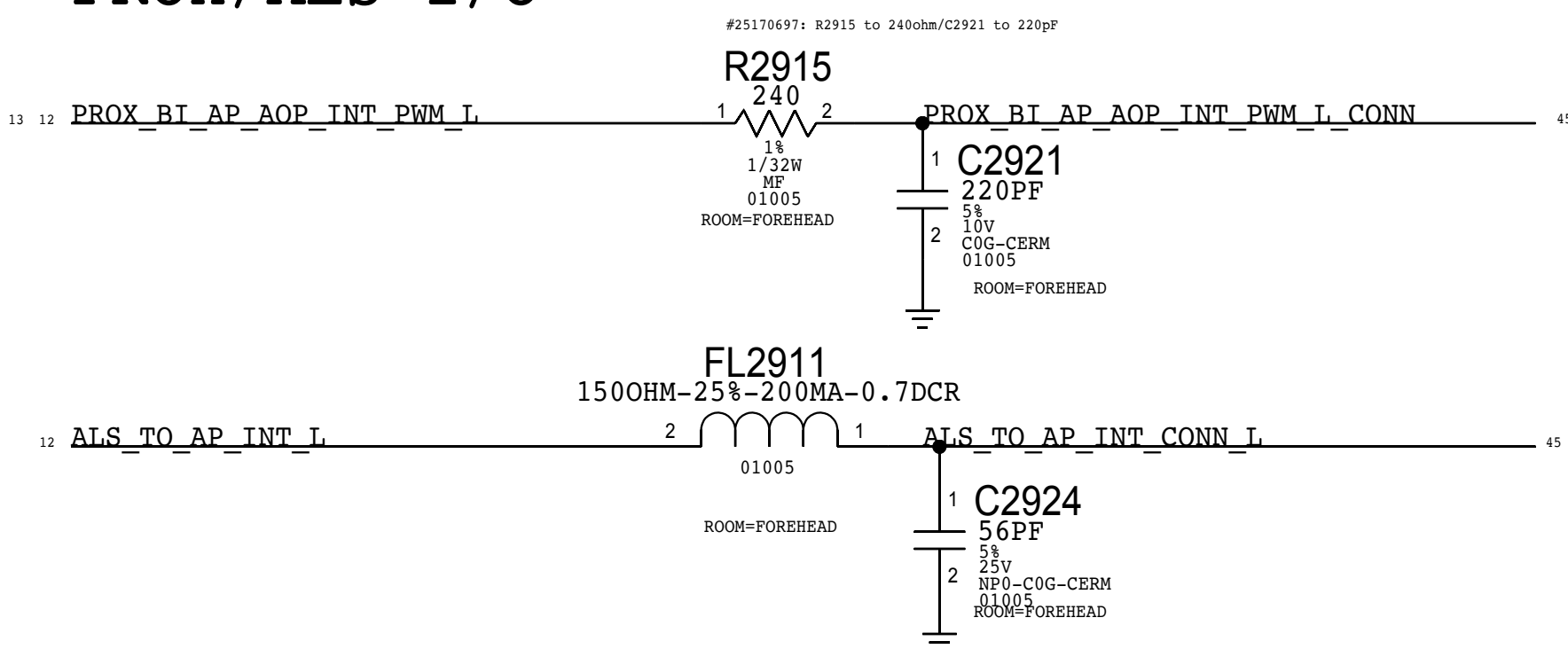
NEW HAMPSHIRE I/O



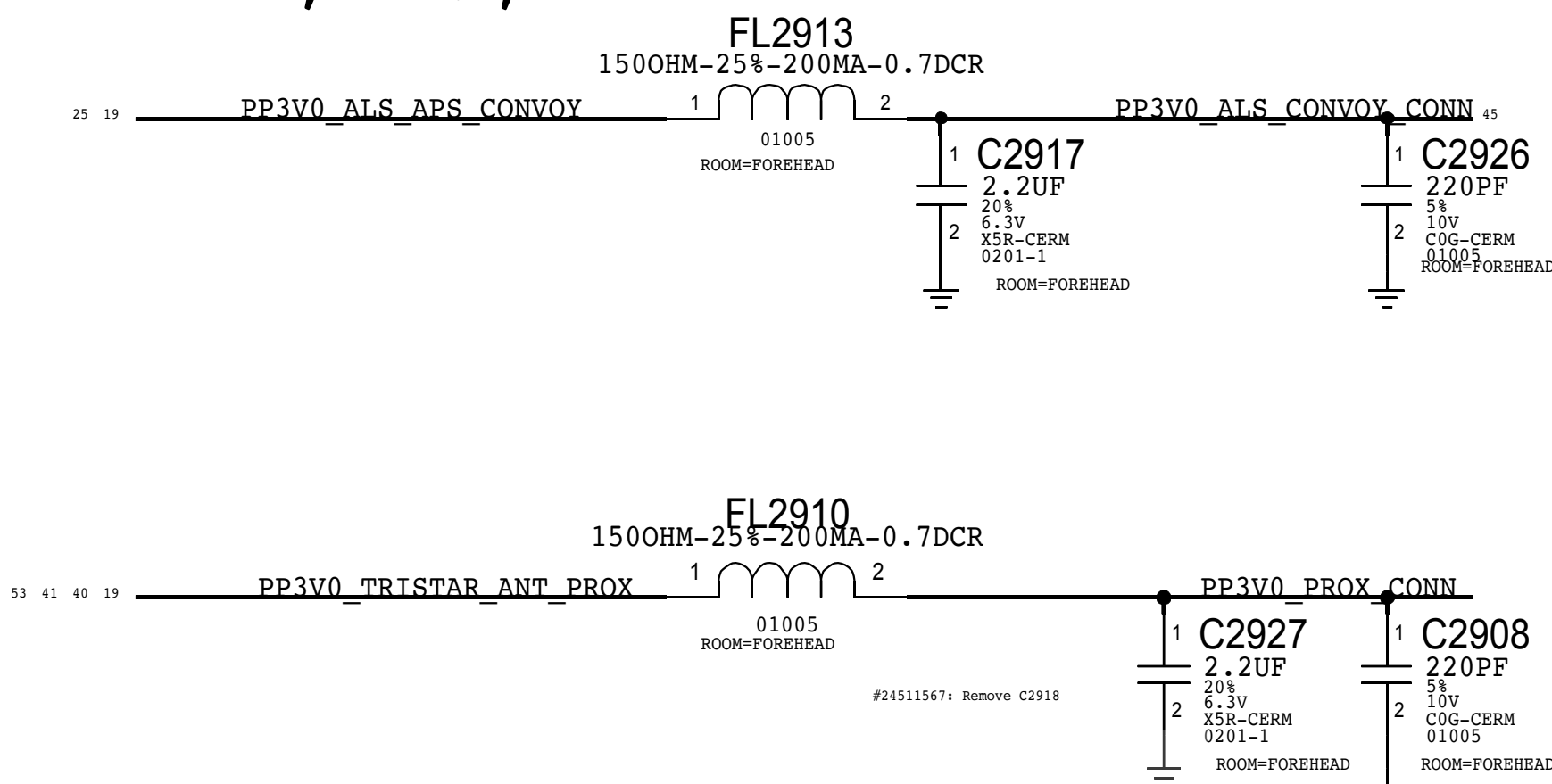
CONVOY I/O



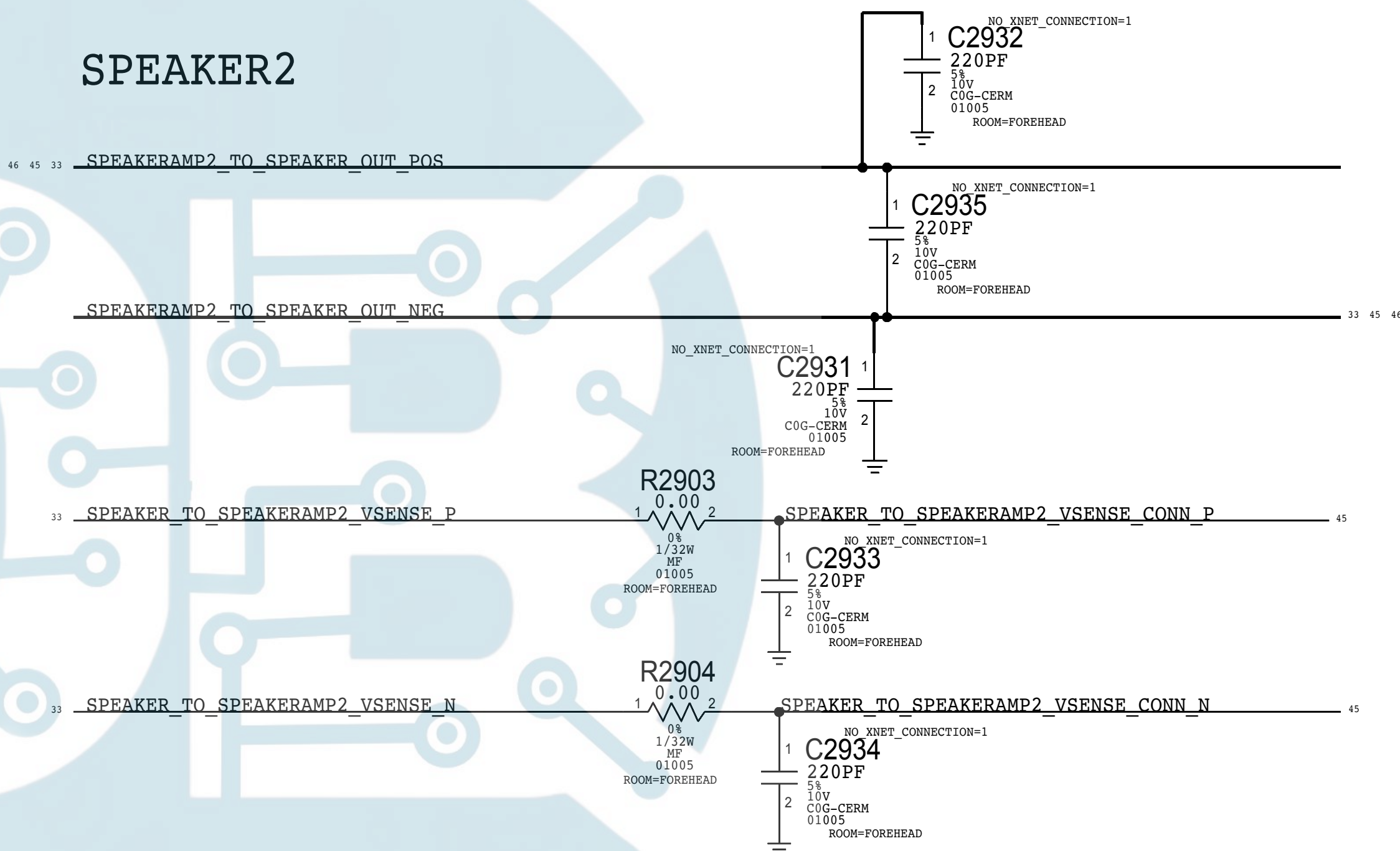
PROX/ALS I/O



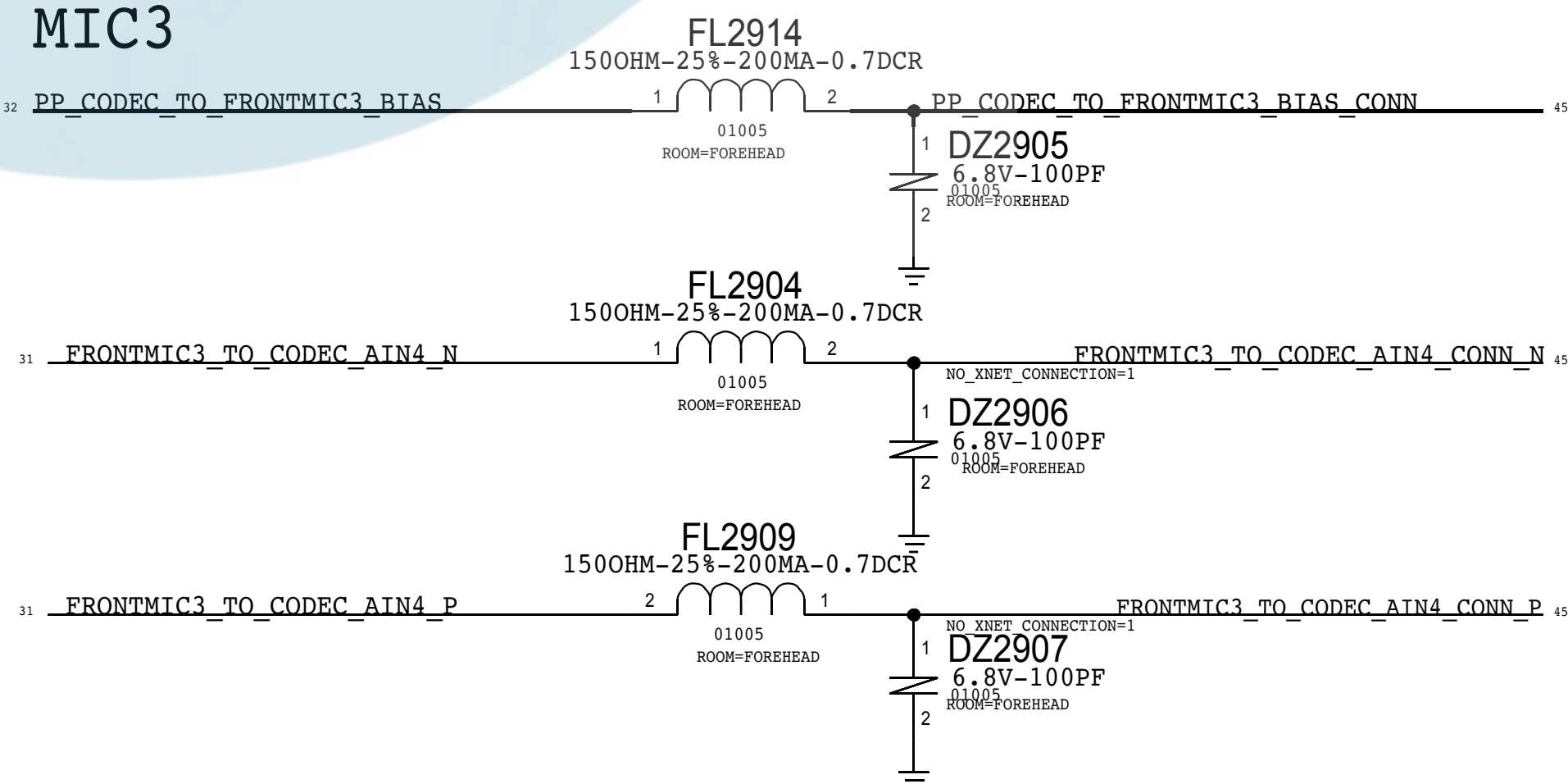
PROX, ALS, & CONVOY POWER

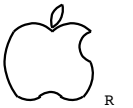


SPEAKER2



MIC3



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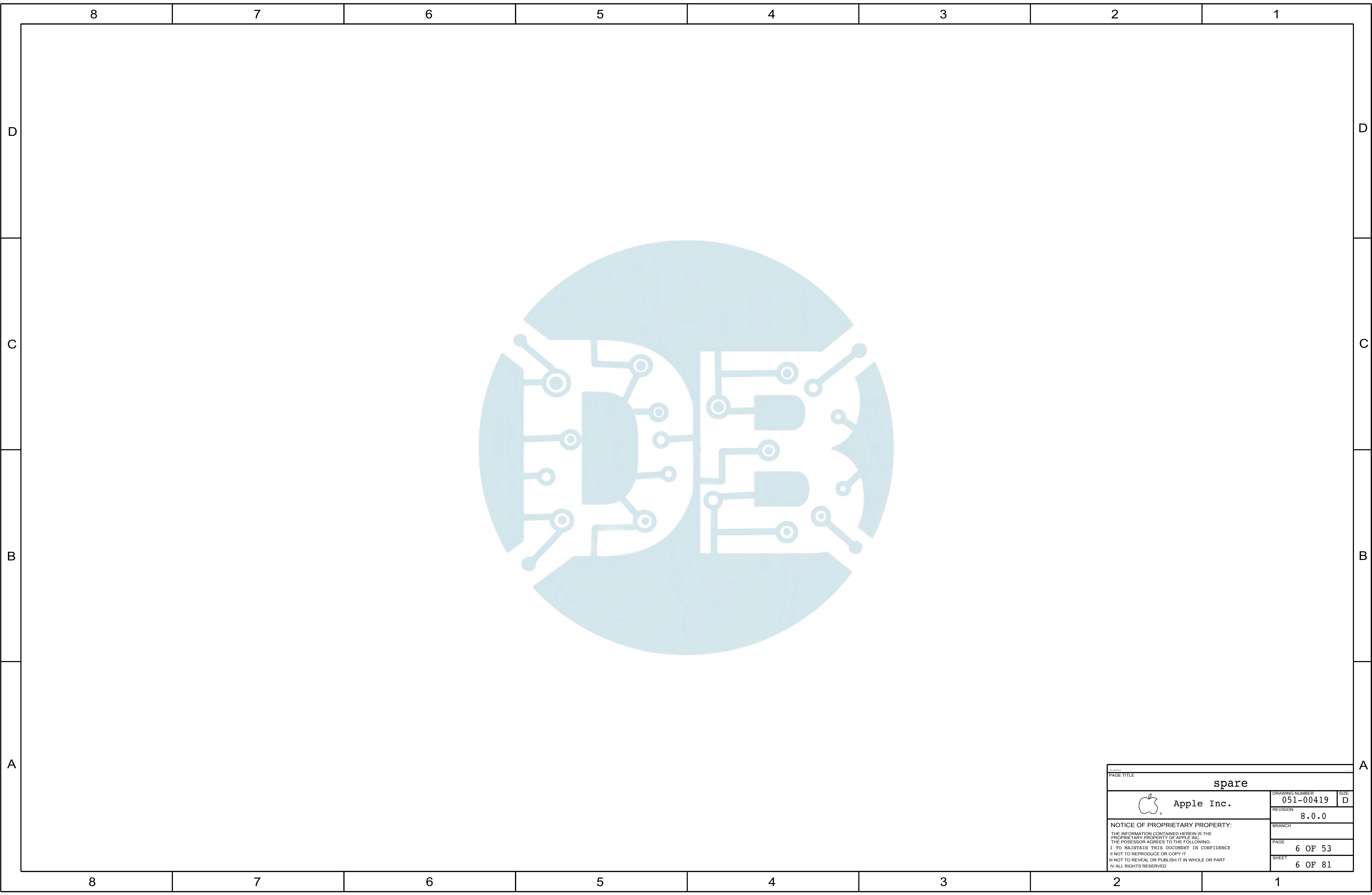
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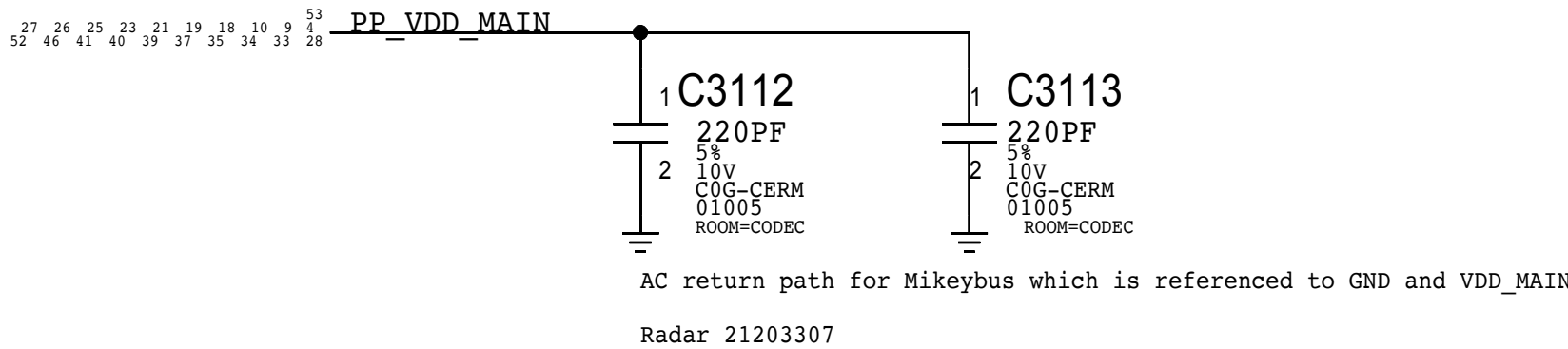
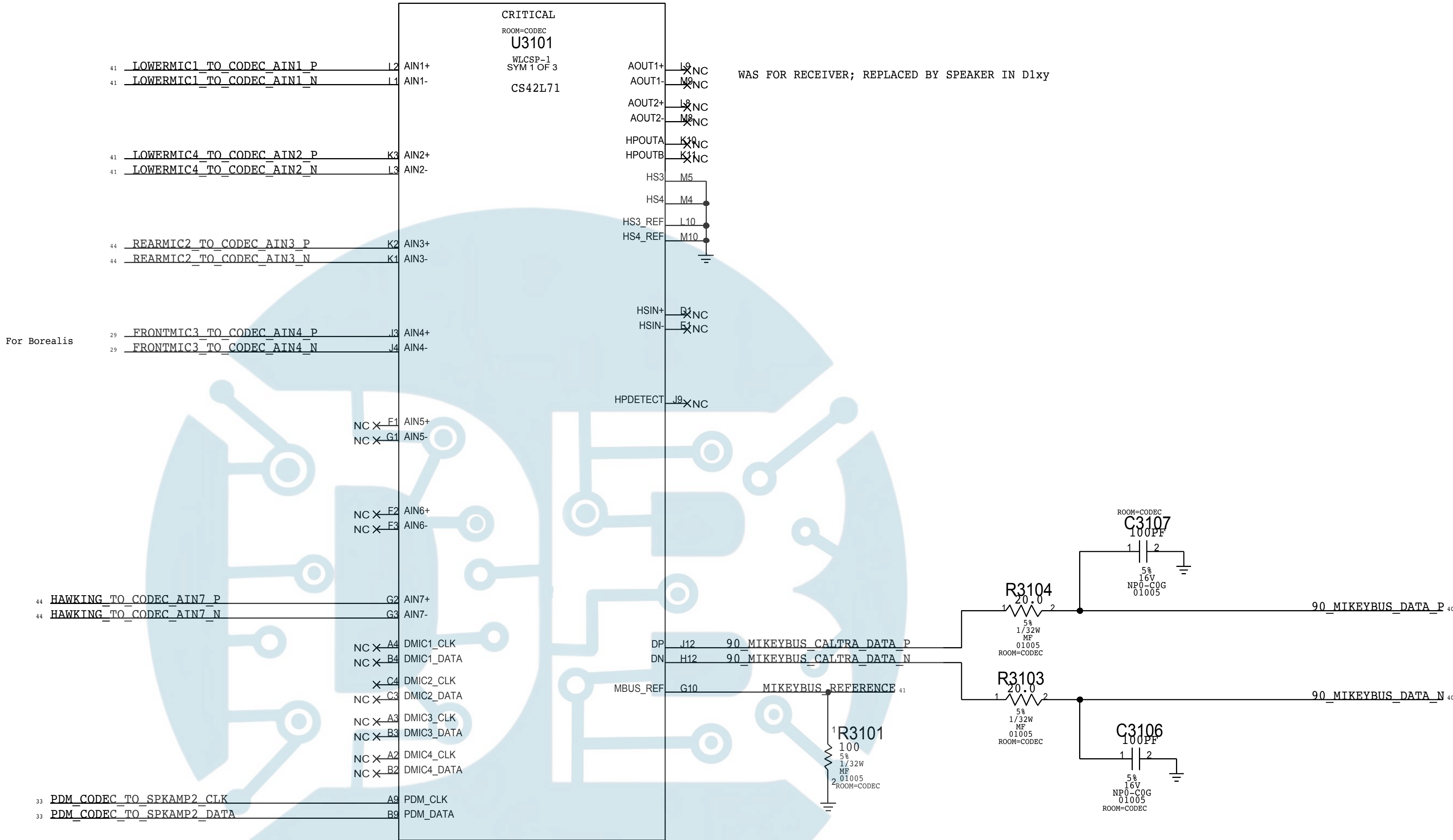
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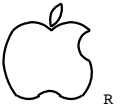
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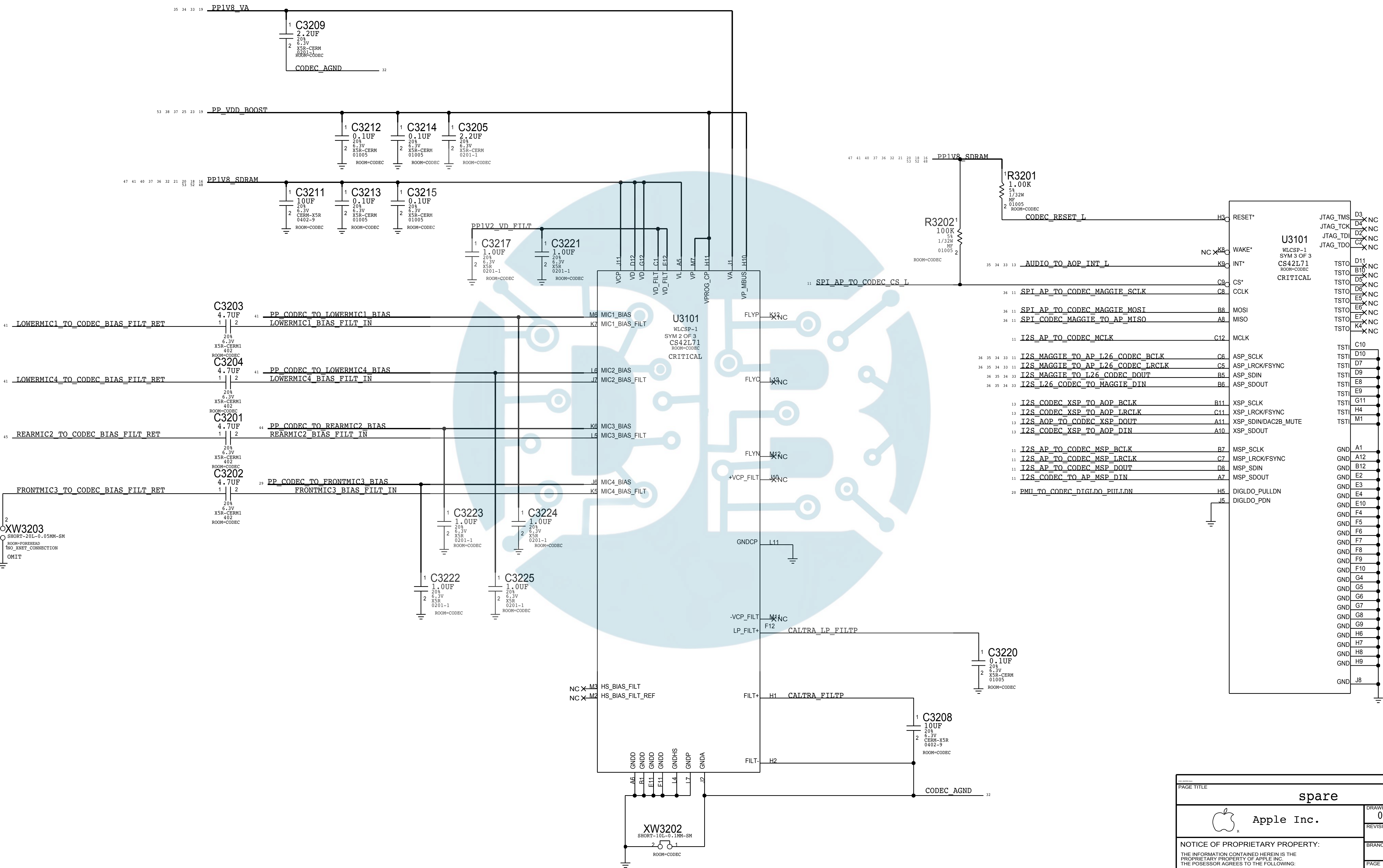


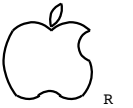
CALTRA AUDIO CODEC (ANALOG INPUTS & OUTPUTS)



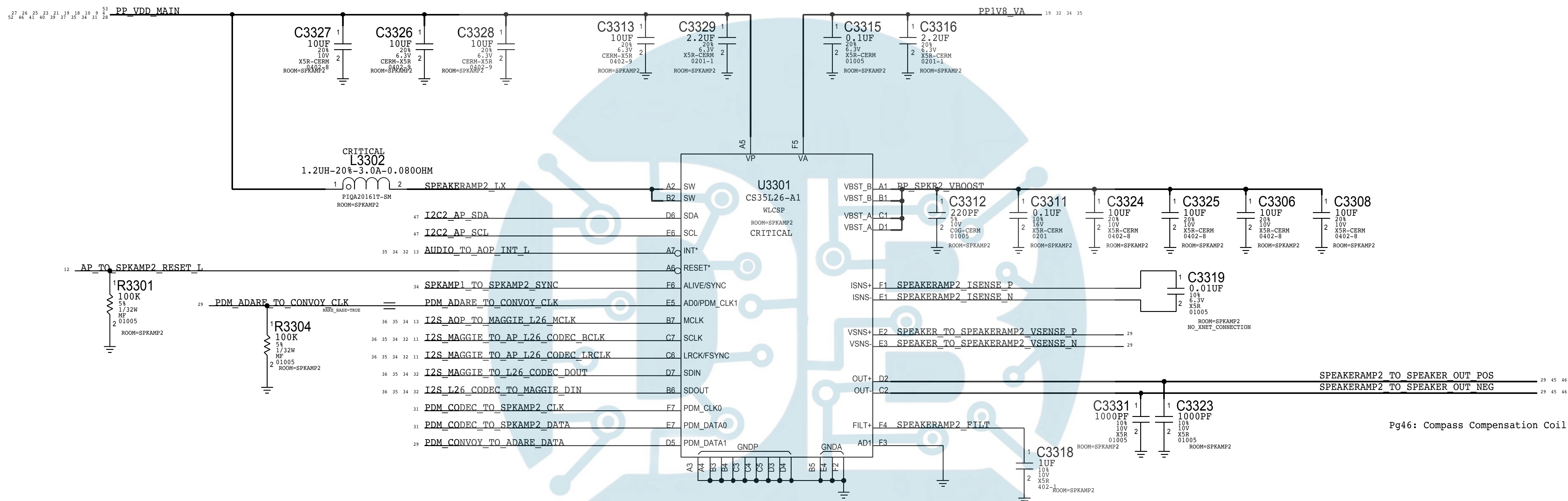
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CALTRA AUDIO CODEC (POWER & I/O)

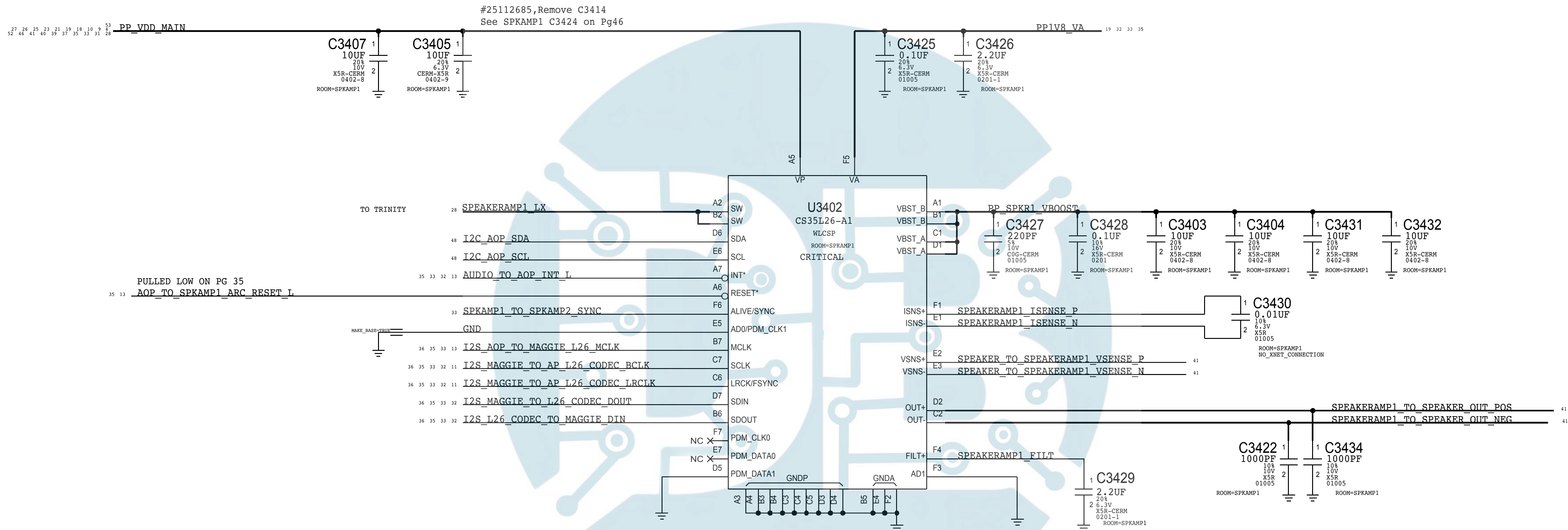


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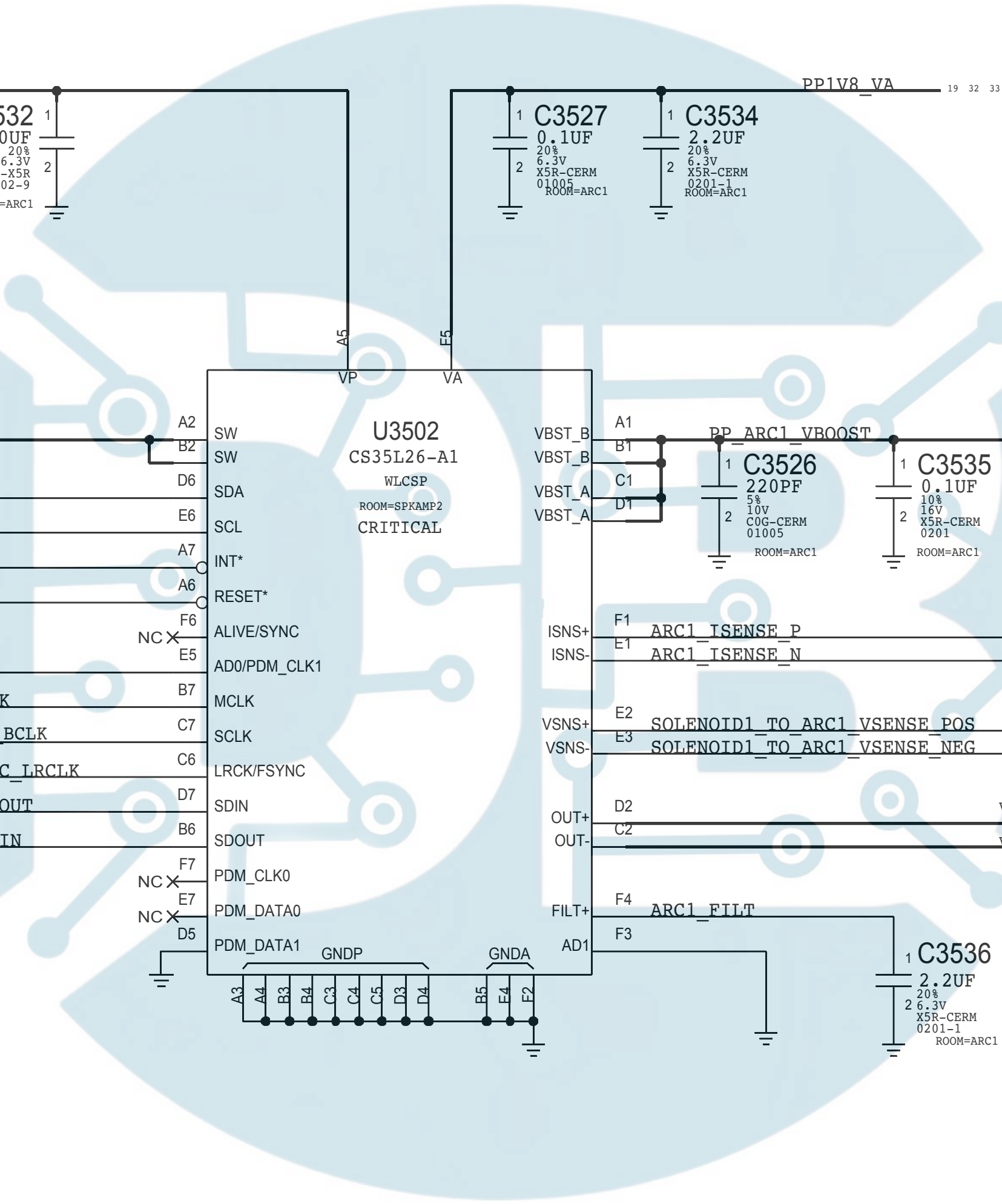
SPEAKER AMPLIFIER 2 (North)




SPEAKER AMPLIFIER 1
(South)



ARC D



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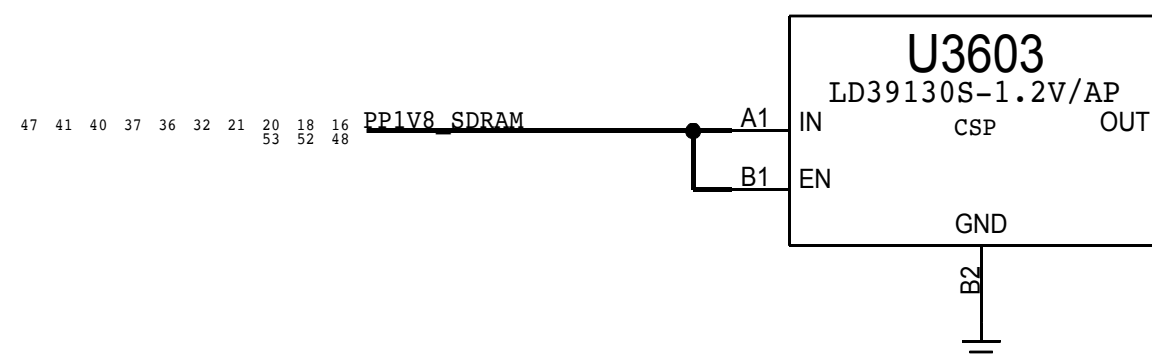
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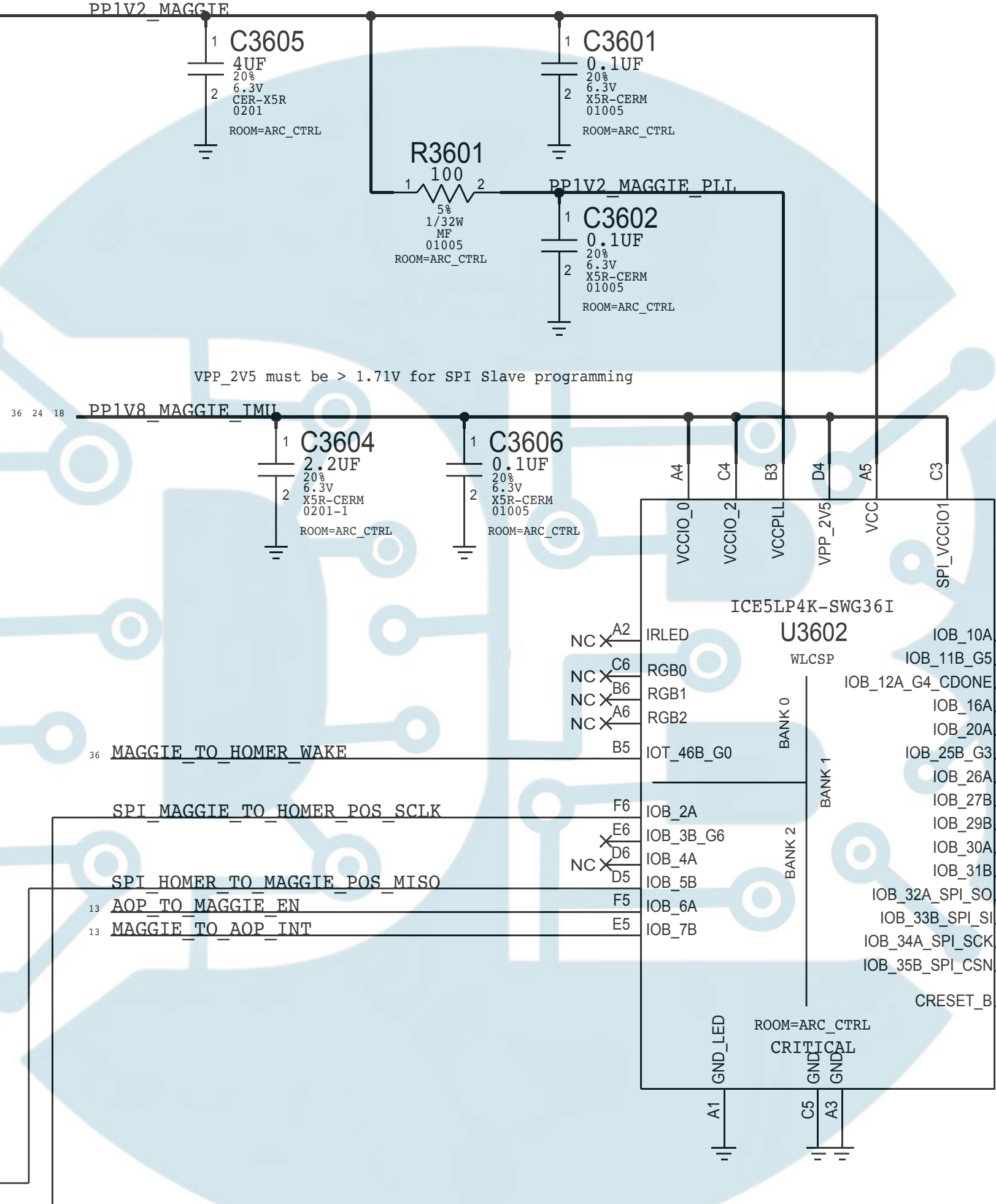
MAGGIE LDO

APN: 353S00842



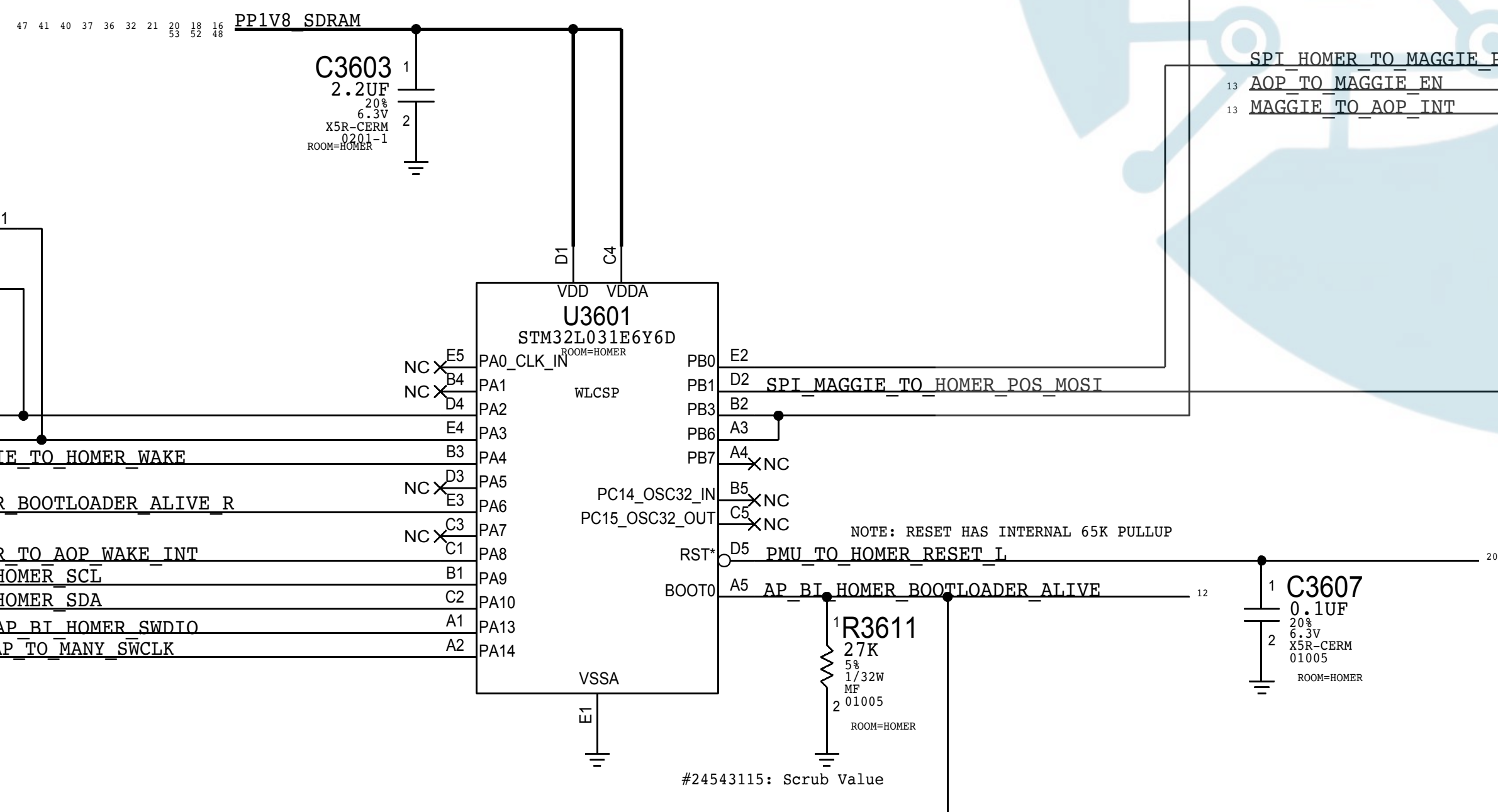
MAGGIE


APN: 336S00020



HOMER STM32L0 MICRO

STM32L03 APN: 337S00231

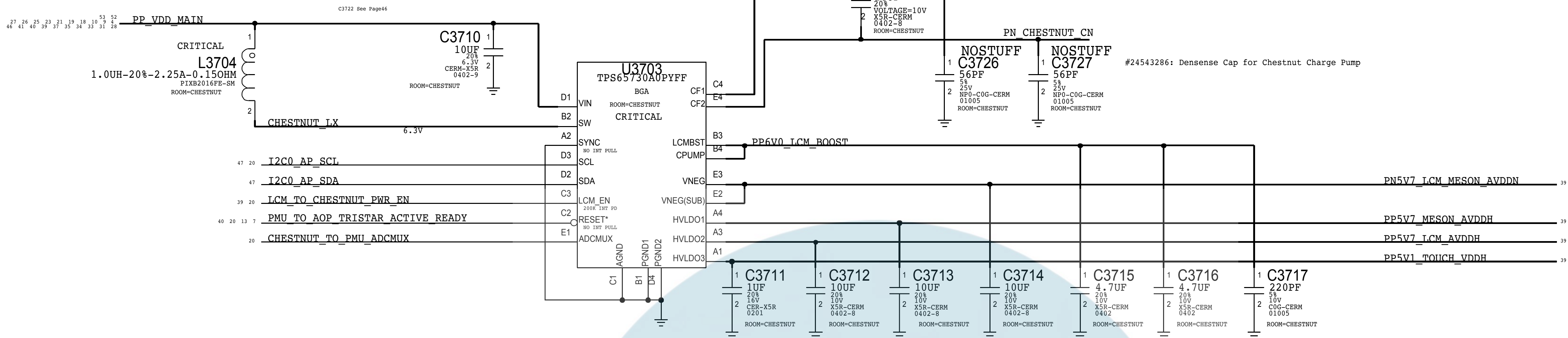


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DISPLAY & TOUCH - POWER SUPPLIES

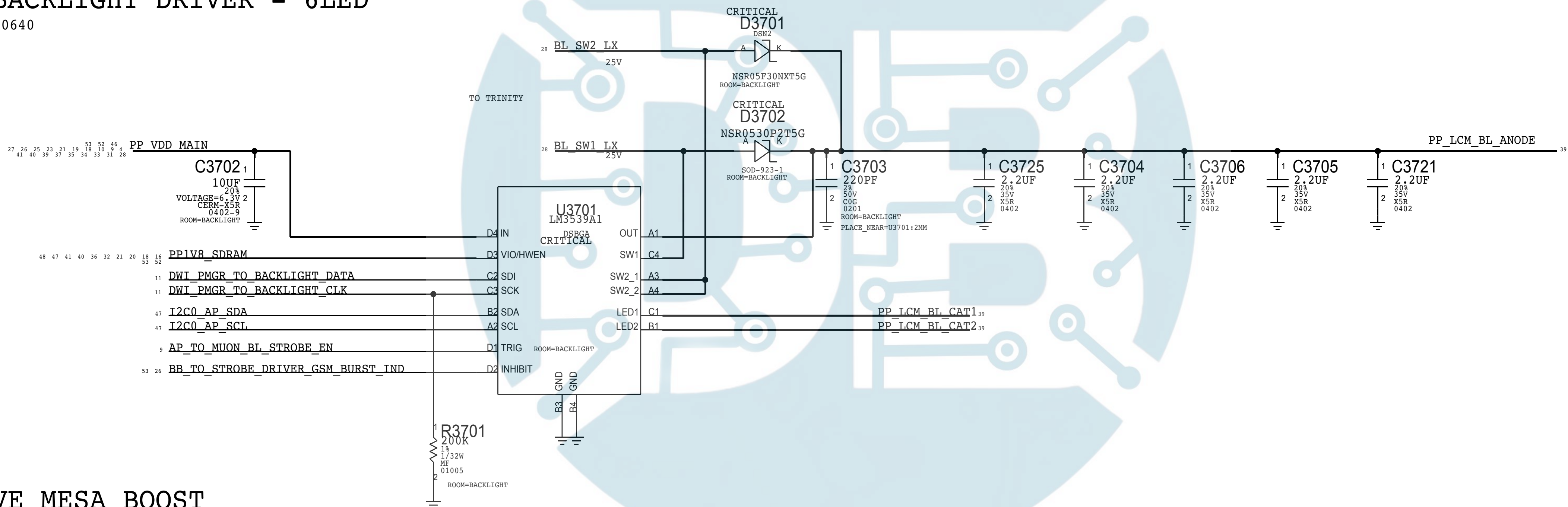
CHESTNUT DISPLAY PMU

APN:338S1172



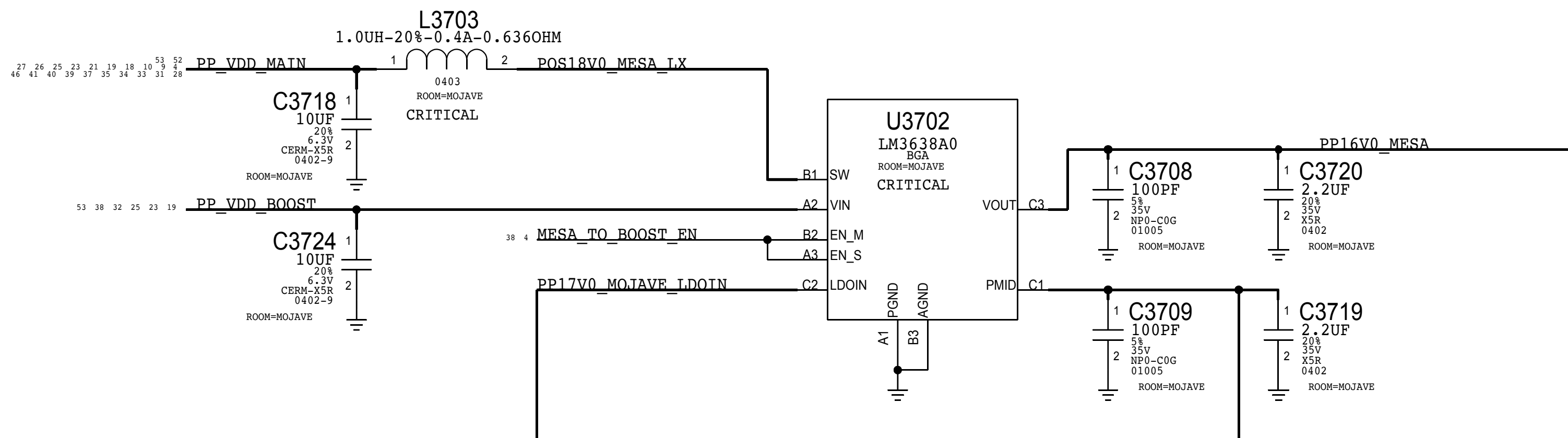
LED BACKLIGHT DRIVER - 6LED

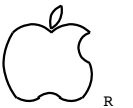
APN:353S00640



MOJAVE MESA BOOST

APN:353S00671



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MESA POWER

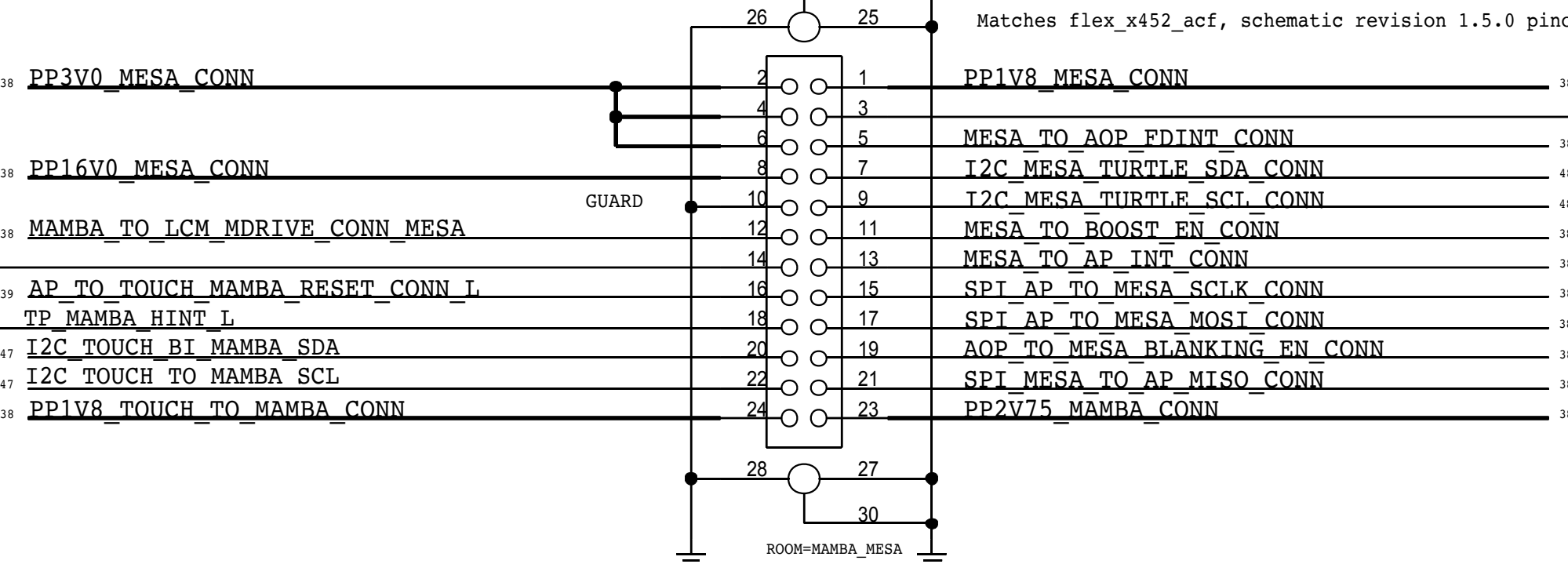
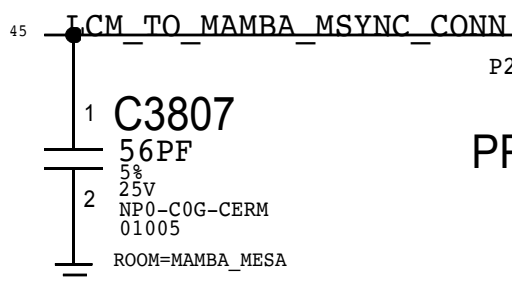
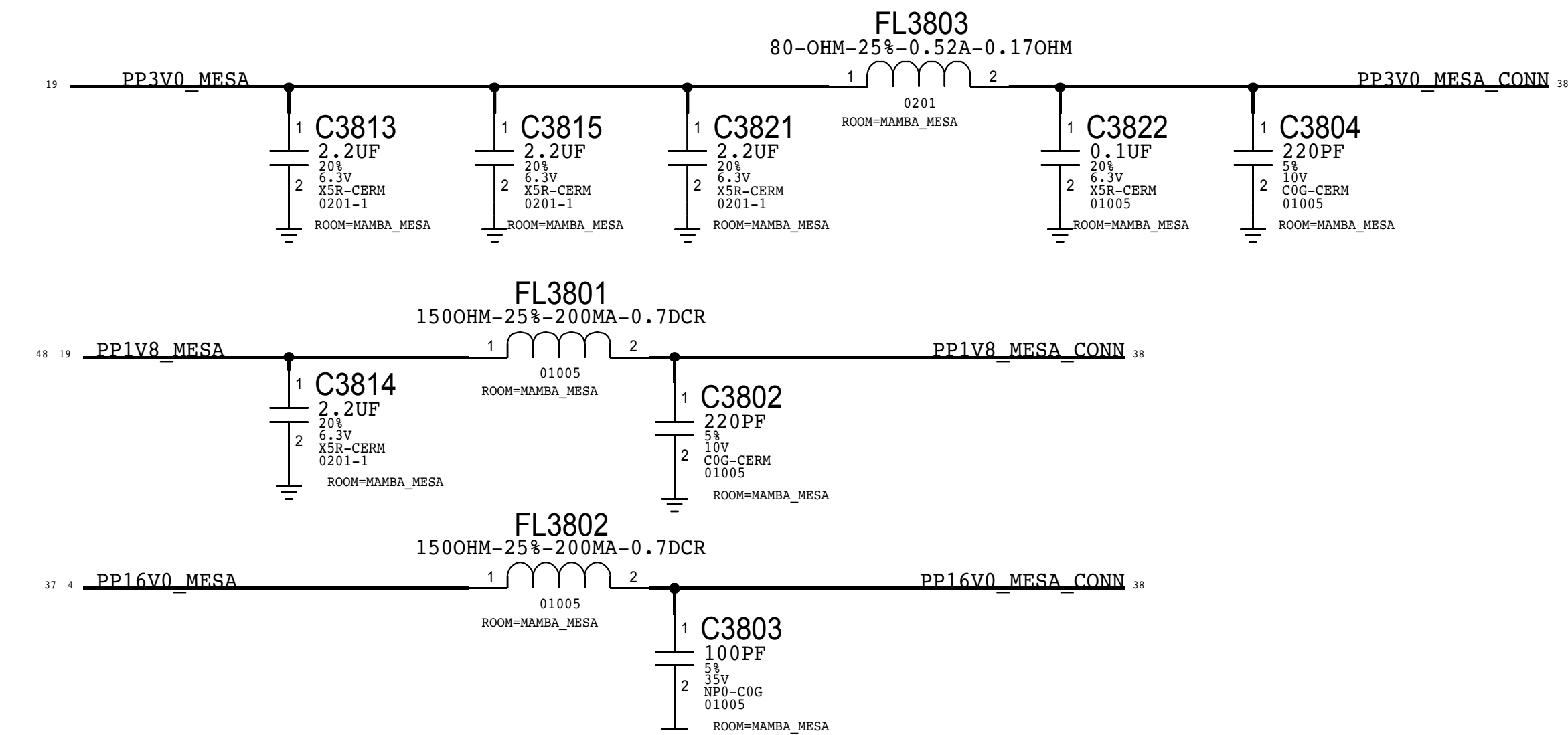
MAMBA AND MESA CONNECTOR

MLB: 516S00141 (RCPT)
FLEX: 516S00142 (PLUG)

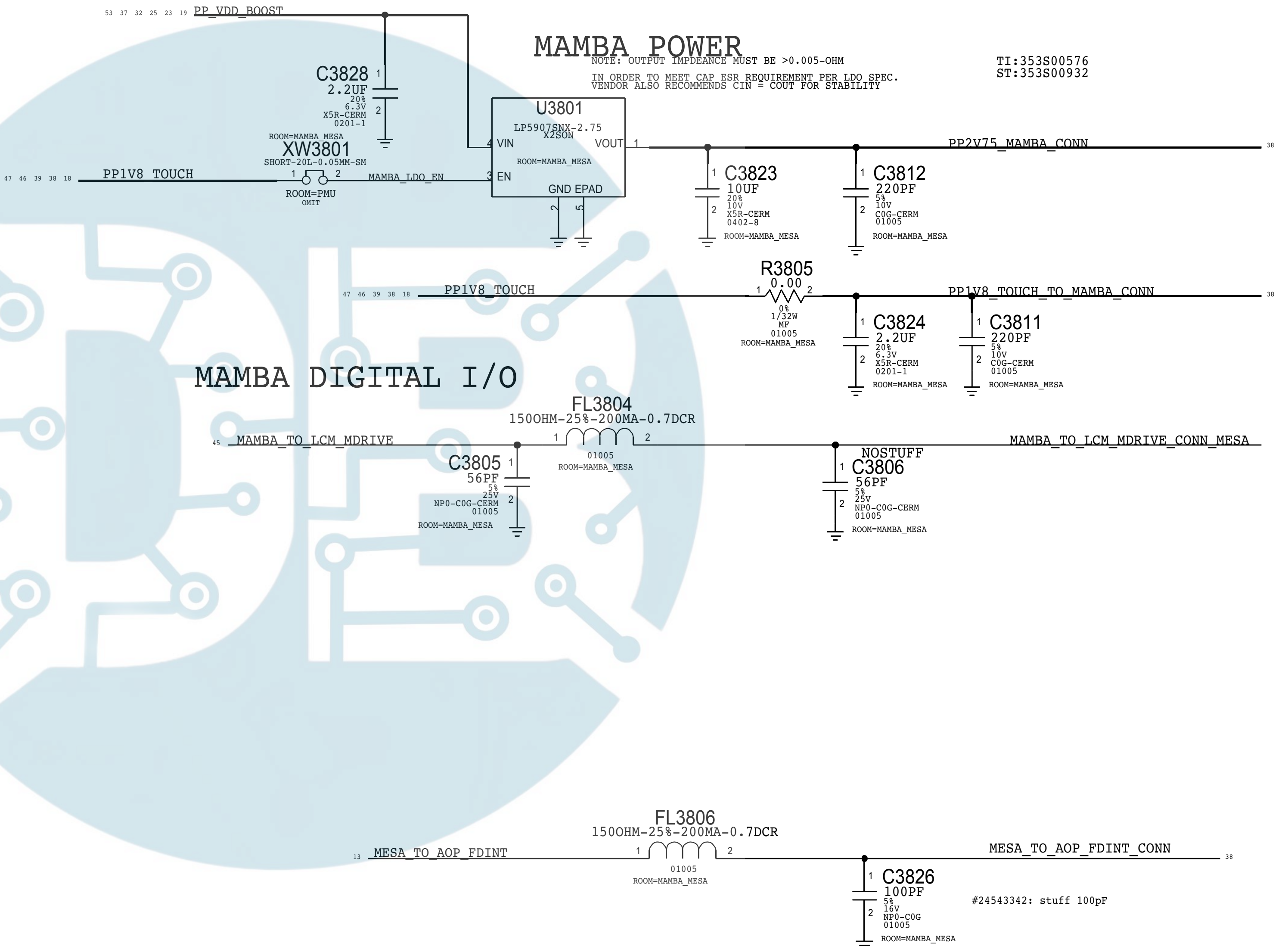
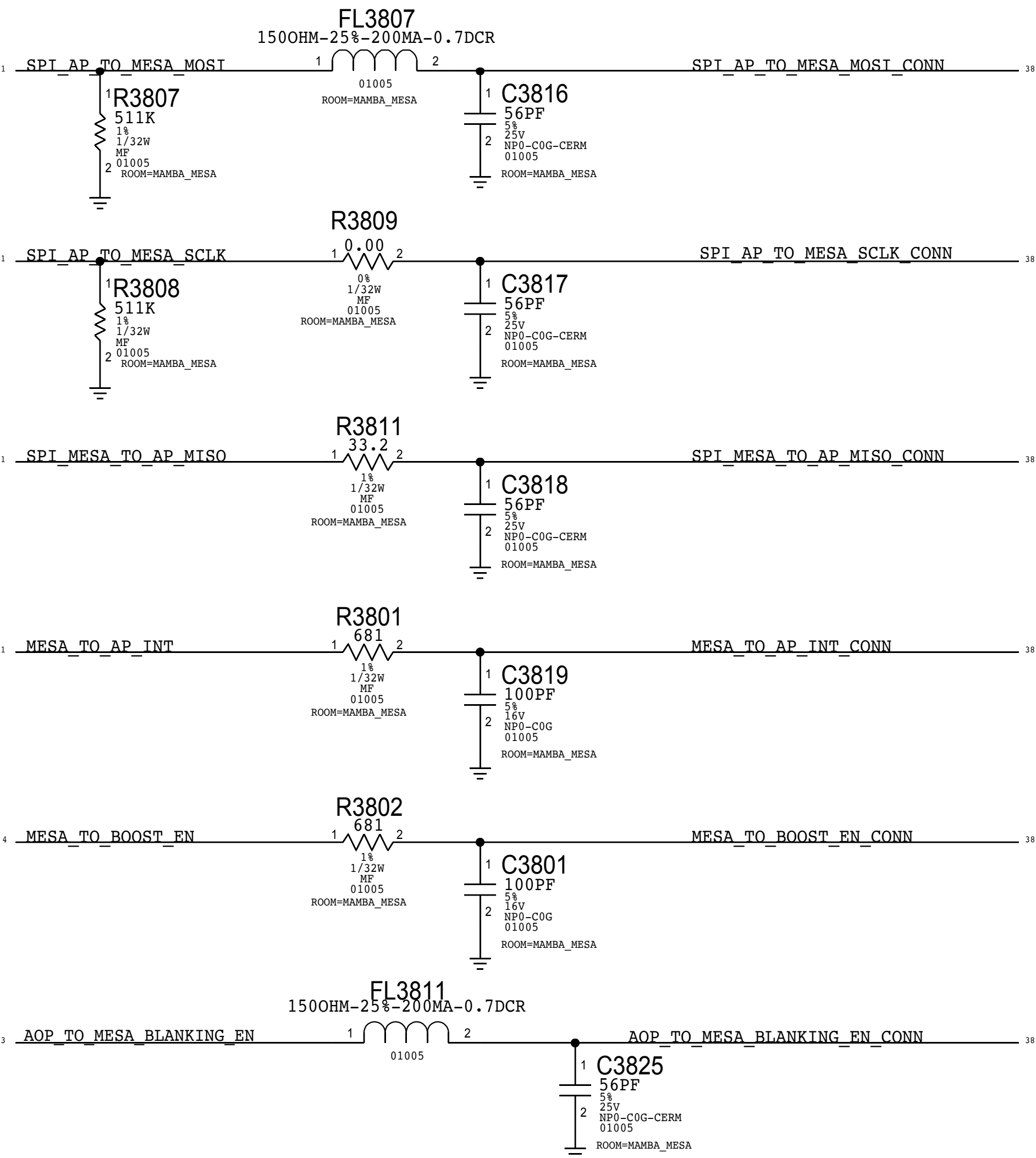
CRITICAL
J3801


BB35C-RA24-3A
F-ST-SM

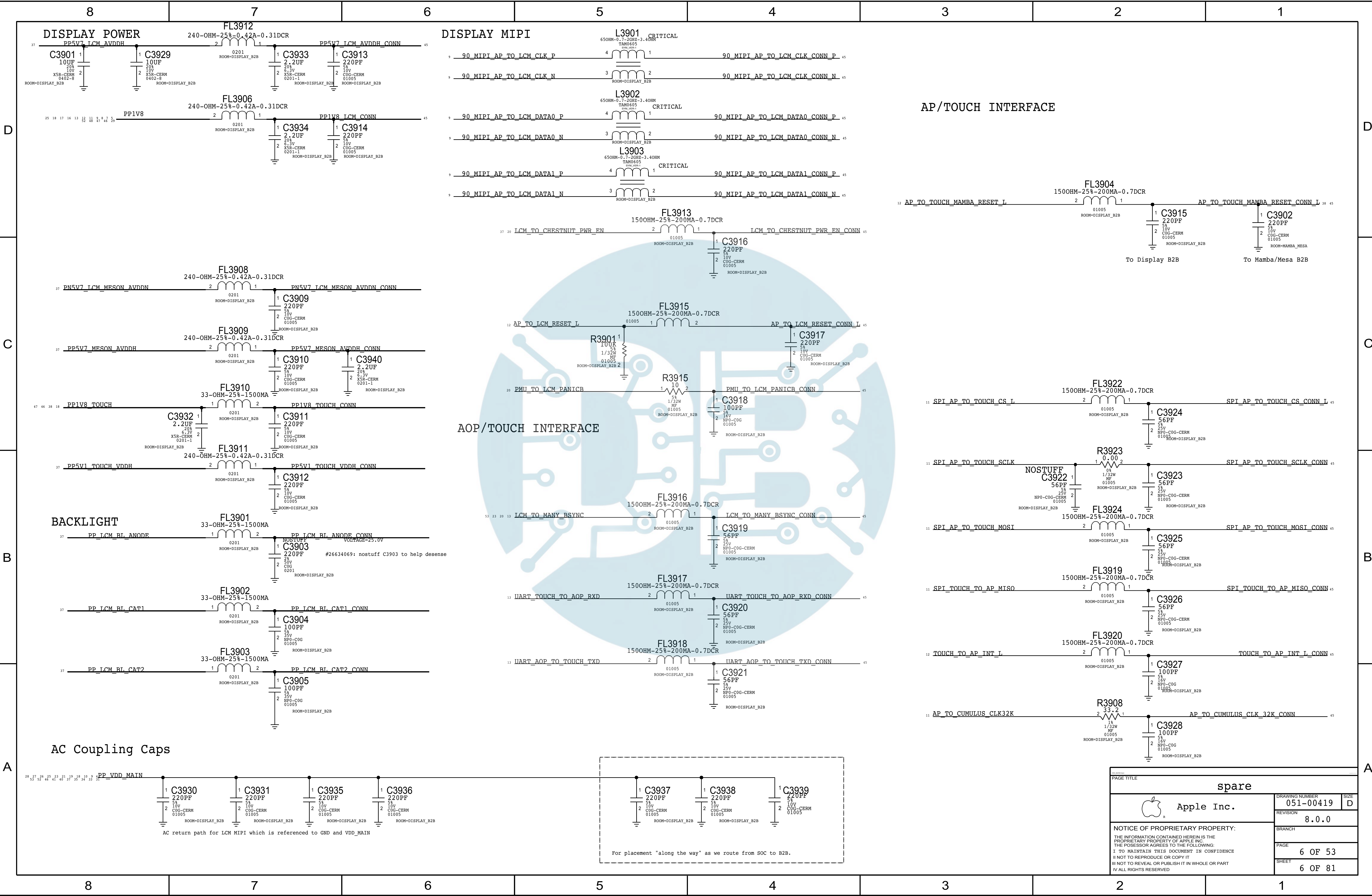
Matches flex_x452_acf, schematic revision 1.5.0 pinout



MESA DIGITAL I/O



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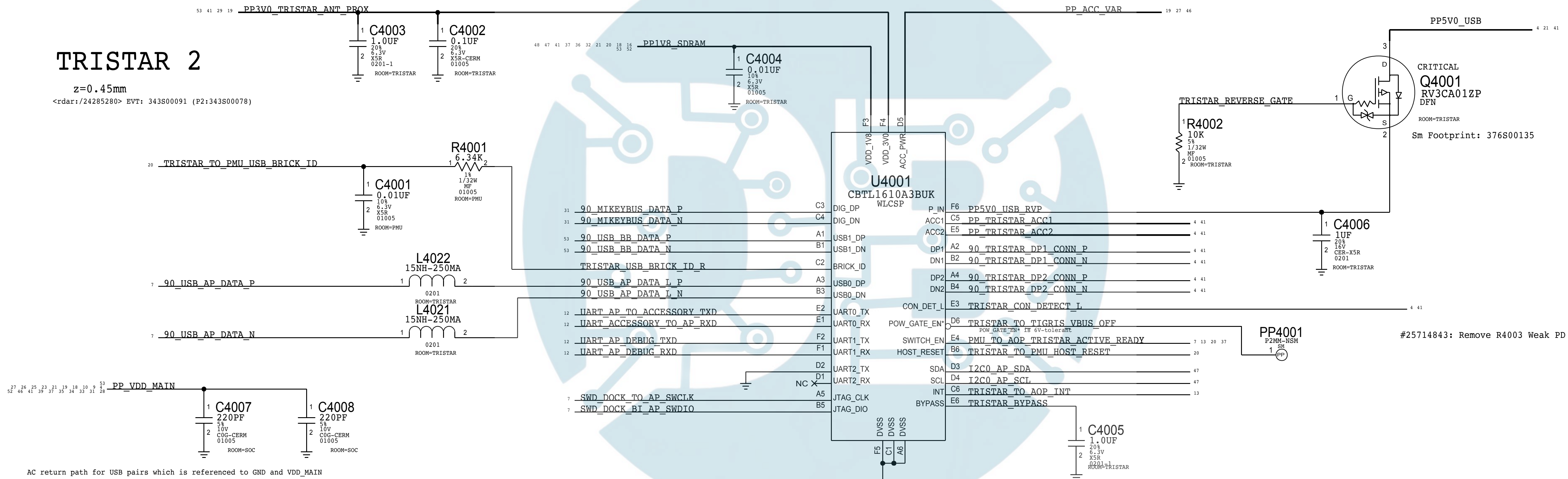
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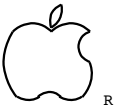
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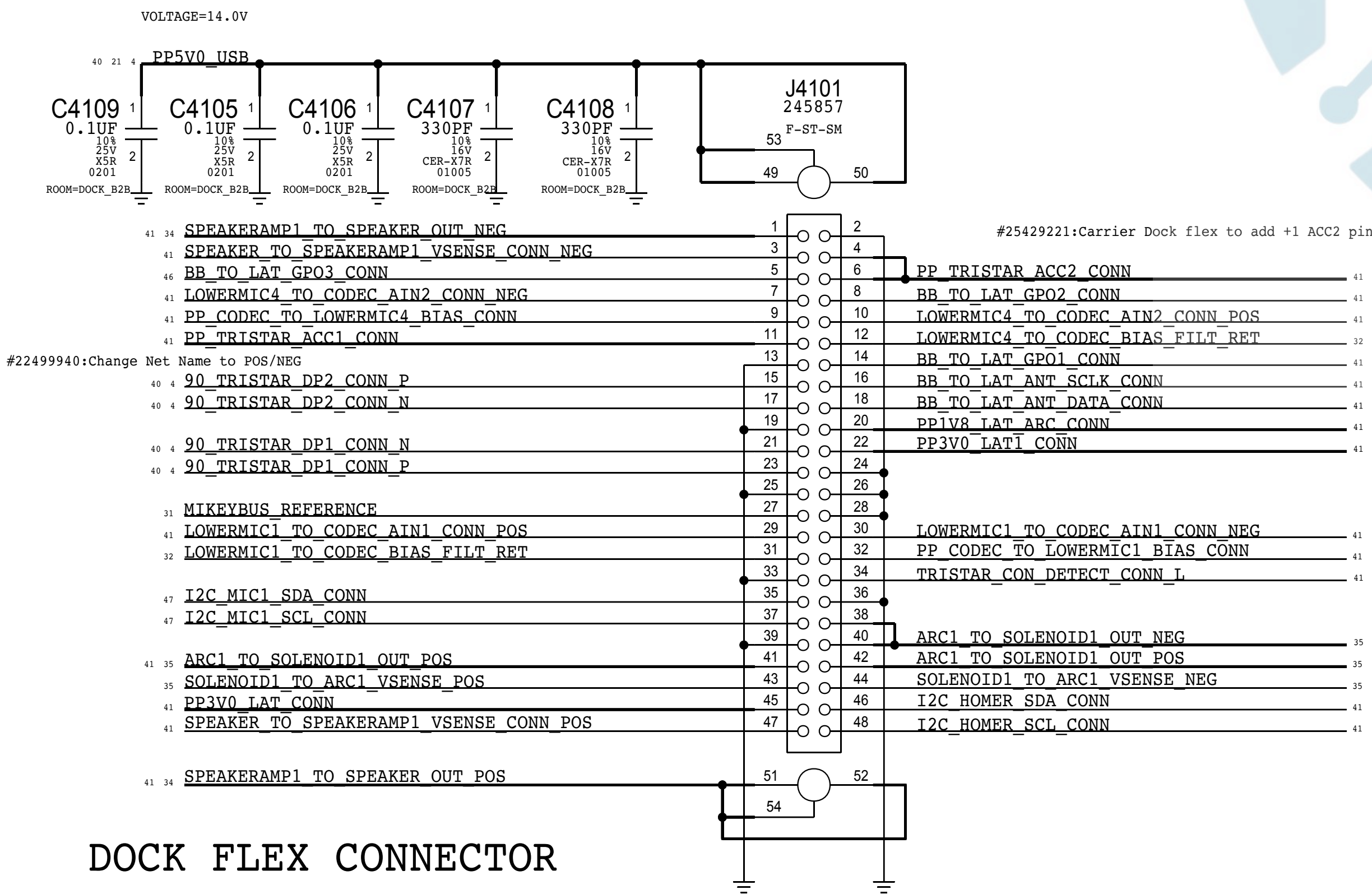
TRISTAR 2

z=0.45mm
<rdar:24285280> EVT: 343S00091 (P2:343S00078)



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Please loop in Matt Mow (Antenna Team) when changing these components!



#26118161: Update FL4104 to 49.9ohm



FL4101
1500HM-25%-200MA-0.7DCR

53 BB_TO_LAT_GPO1 2 1 41 BB_TO_LAT_GPO1_CONN

01005
ROOM=DOCK_B2B

1 C4110
56PF
25V
NP0-C0G-CERM
01005
ROOM=DOCK_B2B

FL4102
1500HM-25%-200MA-0.7DCR

53 BB_TO_LAT_GPO2 2 1 41 BB_TO_LAT_GPO2_CONN

01005
ROOM=DOCK_B2B

1 C4111
56PF
25V
NP0-C0G-CERM
01005
ROOM=DOCK_B2B

Per ANT Erdinc, change to cap

TRISTAR CON DETECT I

R4102
1.00K
1 2

FL4105
10-OHM=1.1A
1 2

PP TRISTAR ACC1

FL4106
22-OHM=25%-1800MA
1 2

PP TRISTAR ACC2

ROOM=DOCK_B2B

#25098110: Decrease DCR

C4116
27PF
1 2

C4117
100PF
1 2

C4118
100PF
1 2

TRISTAR_CON_DETECT_CONN I

PP_TRISTAR_ACC1_CONN

PP_TRISTAR_ACC2_CONN

VOLTAGE=4.3V

FL4117-4

150OHM-25%-200MA-0.7DCR

31 LOWERMIC1_TO_CODEC_AIN1_P 2 1 LOWERMIC1_TO_CODEC_AIN1_CONN_POS 41

01005
ROOM=DOCK_B2B

C4128
56PF
5%
25V
NPO-COG-CERM
01005
ROOM=DOCK_B2B

FL4117
150OHM-25%-200MA-0.7DCR

31 LOWERMIC1_TO_CODEC_AIN1_N 2 1 LOWERMIC1_TO_CODEC_AIN1_CONN_NEG 41

01005
ROOM=DOCK_B2B

C4129
56PF
5%
25V
NPO-COG-CERM
01005
ROOM=DOCK_B2B

FL4118
150OHM-25%-200MA-0.7DCR

32 PP_CODEC_TO_LOWERMIC1_BIAS 2 1 PP_CODEC_TO_LOWERMIC1_BIAS_CONN 41

01005
ROOM=DOCK_B2B

C4130
220PF
5%
10V
C0G-CERM
01005
ROOM=DOCK_B2B

FL4119
150OHM-25%-200MA-0.7DCR

31 LOWERMIC4_TO_CODEC_AIN2_P 2 1 LOWERMIC4_TO_CODEC_AIN2_CONN_POS 41

01005
ROOM=DOCK_B2B

C4131
56PF
5%
25V
NPO-COG-CERM
01005
ROOM=DOCK_B2B

FL4120
150OHM-25%-200MA-0.7DCR

31 LOWERMIC4_TO_CODEC_AIN2_N 2 1 LOWERMIC4_TO_CODEC_AIN2_CONN_NEG 41

01005
ROOM=DOCK_B2B

C4132
56PF
5%
25V
NPO-COG-CERM
01005
ROOM=DOCK_B2B

FL4121
150OHM-25%-200MA-0.7DCR

32 PP_CODEC_TO_LOWERMIC4_BIAS 2 1 PP_CODEC_TO_LOWERMIC4_BIAS_CONN 41

01005
ROOM=DOCK_B2B

C4133
220PF
5%
10V
C0G-CERM
01005
ROOM=DOCK_B2B

FL4114
150OHM-25%-200MA-0.7DCR

SPEAKER_TO_SPEAKERAMP1_VSENSE_P 2 1 SPEAKER_TO_SPEAKERAMP1_VSENSE_CONN_POS 41

01005
ROOM=DOCK_B2B

C4126
220PF
5%
10V
C0G-CERM
01005
ROOM=DOCK_B2B

FL4115
150OHM-25%-200MA-0.7DCR

SPEAKER_TO_SPEAKERAMP1_VSENSE_N 2 1 SPEAKER_TO_SPEAKERAMP1_VSENSE_CONN_NEG 41

01005
ROOM=DOCK_B2B

C4127
220PF
5%
10V
C0G-CERM
01005
ROOM=DOCK_B2B

41 34 SPEAKERAMP1_TO_SPEAKER_OUT_POS

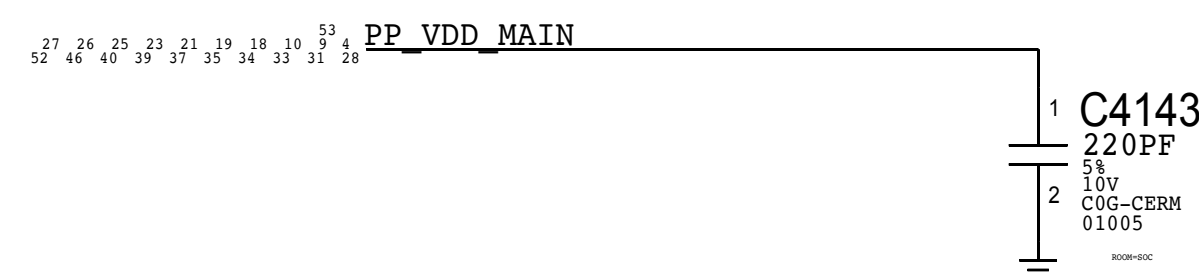
C4103
220PF
5%
10V
C0G-CERM
01005
ROOM=DOCK_B2B


41 34 SPEAKERAMP1_TO_SPEAKER_OUT_NEG

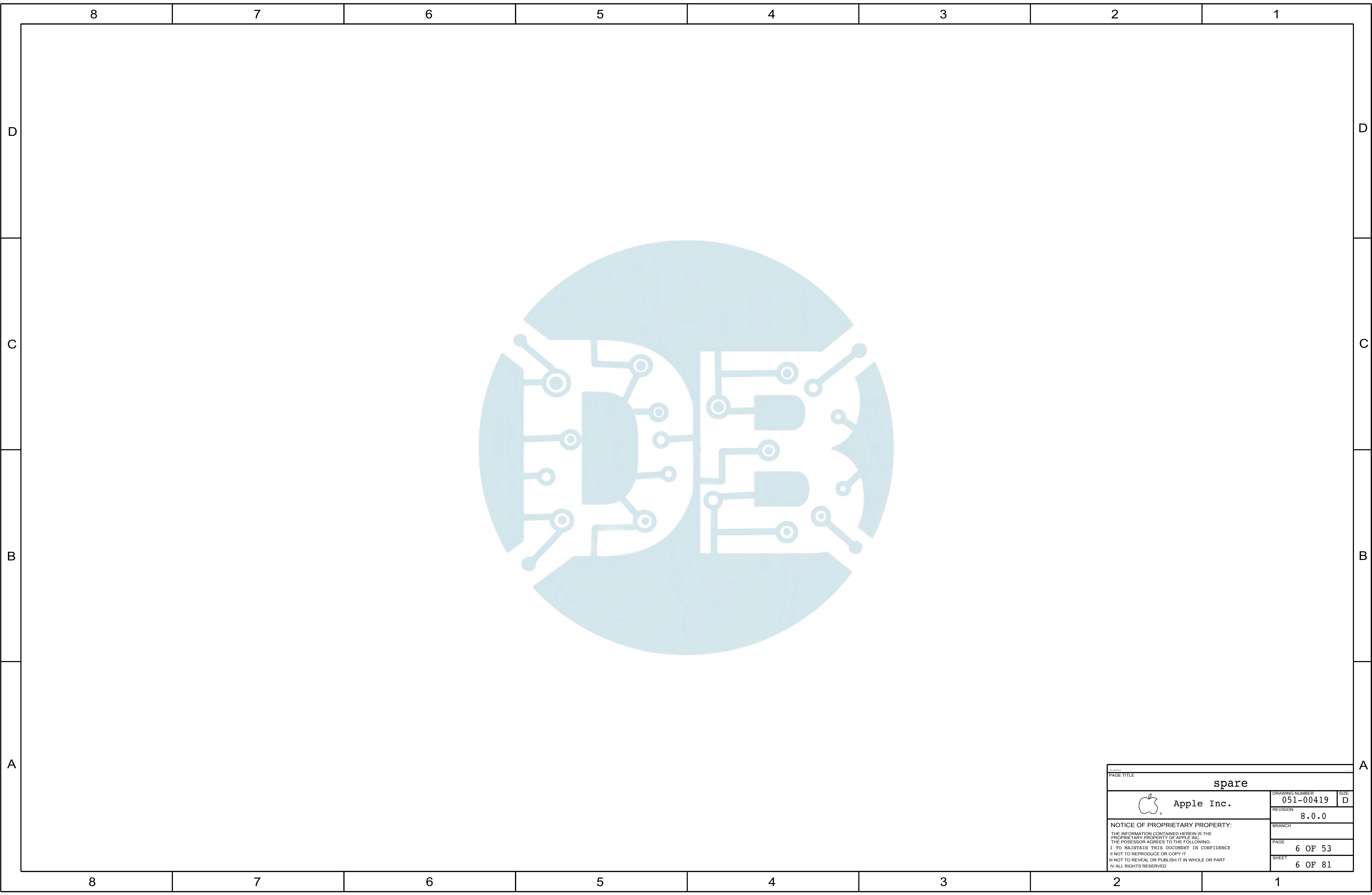
C4104
220PF
5%
10V
C0G-CERM
01005
ROOM=DOCK_B2B

FL4117-4

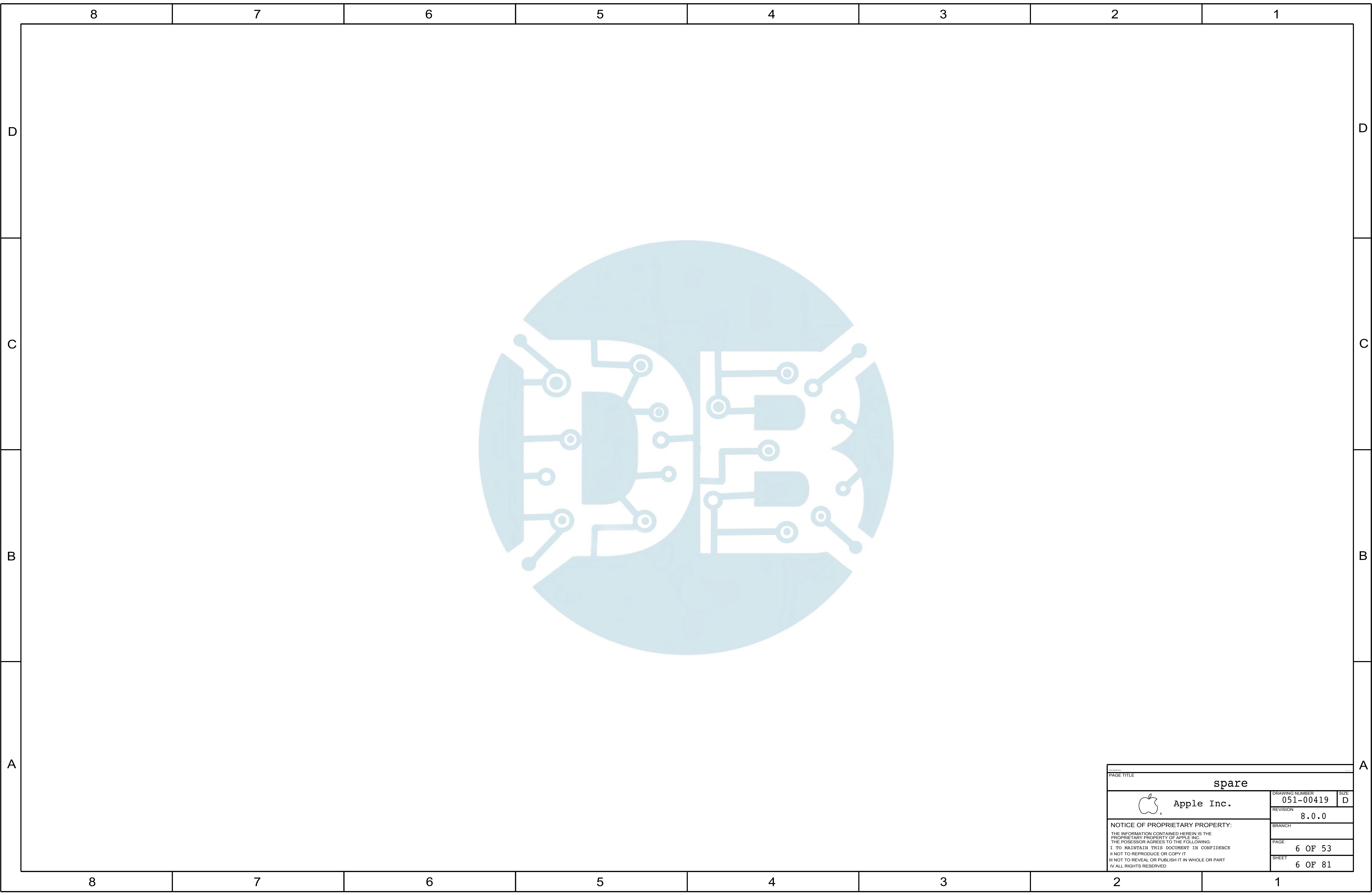
AC return path for USB pairs which is referenced to GND and VDD_MAIN

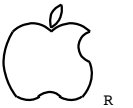


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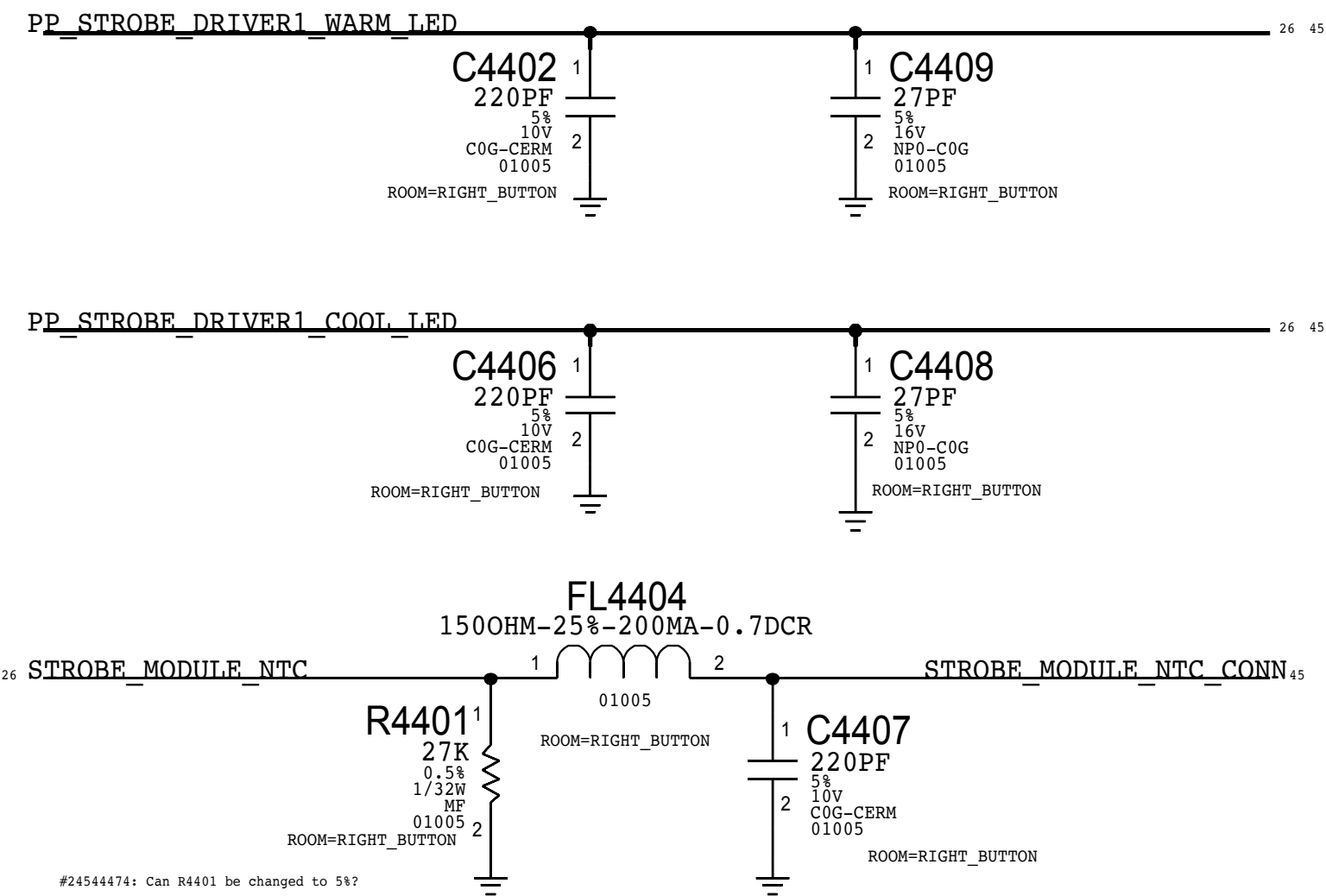


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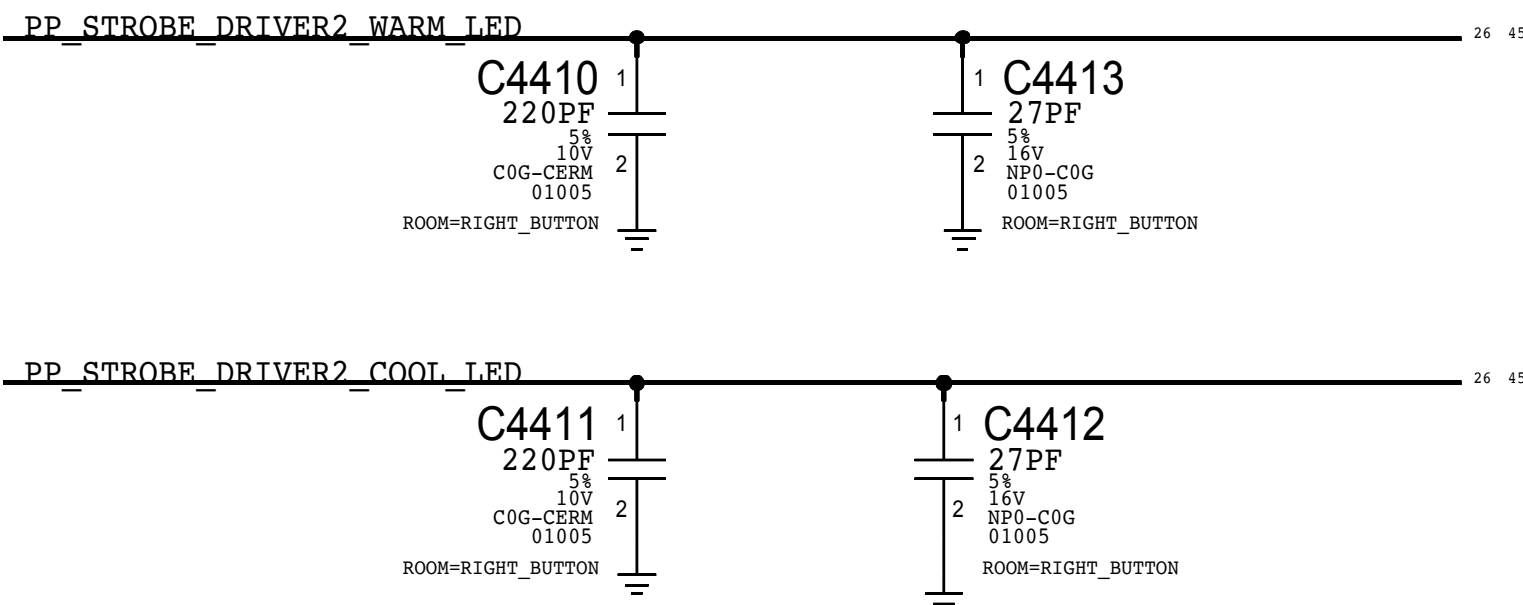


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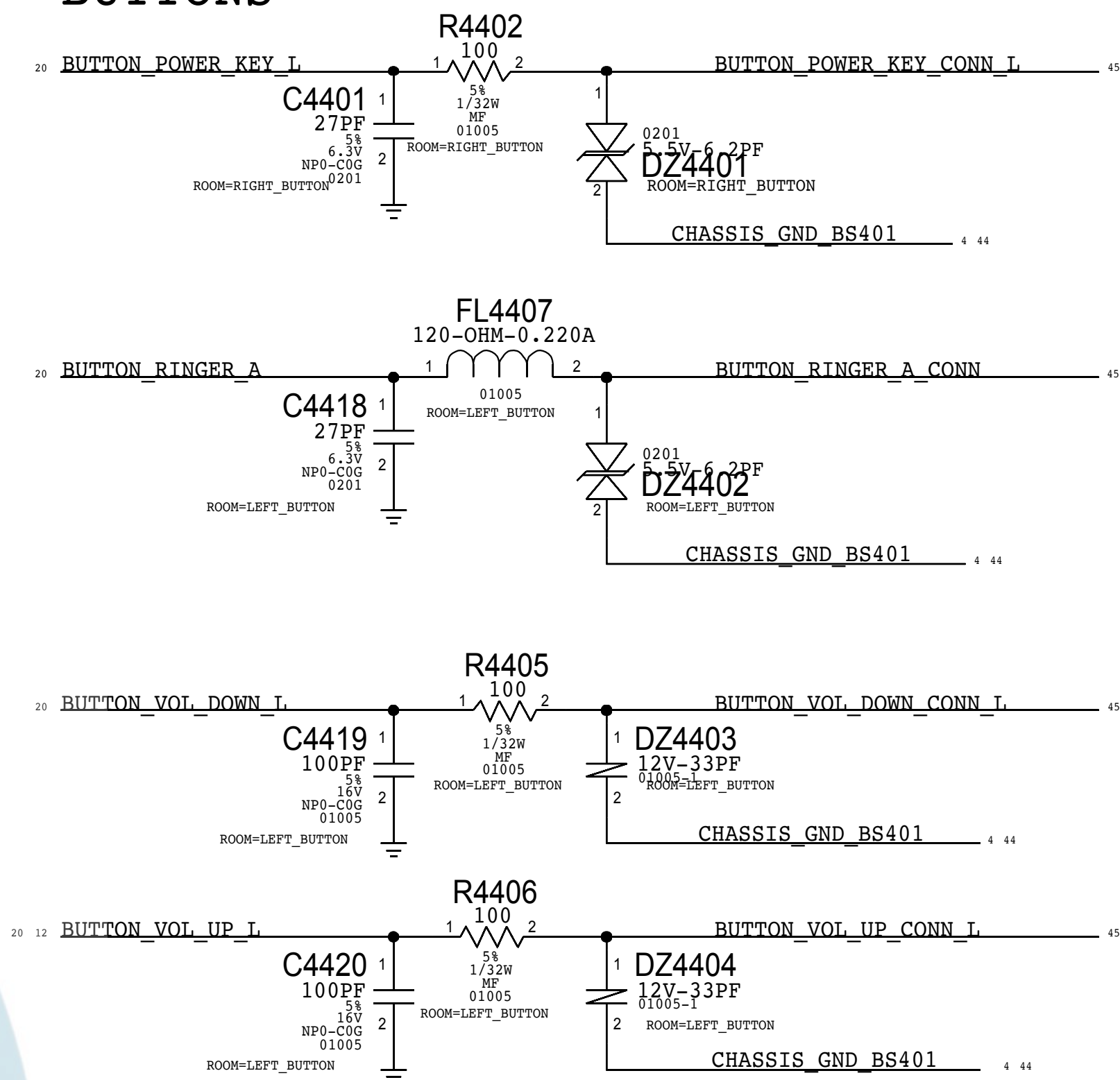
STROBE1



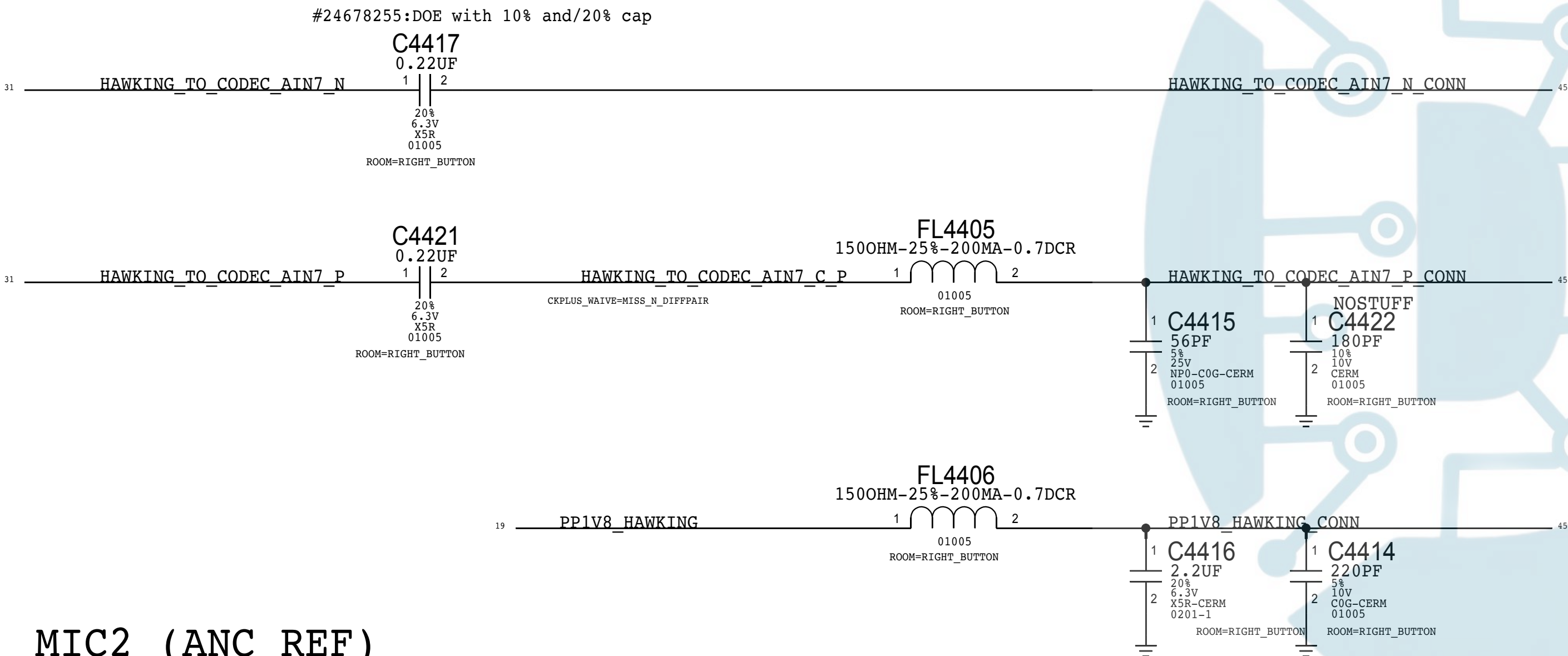
STROBE2



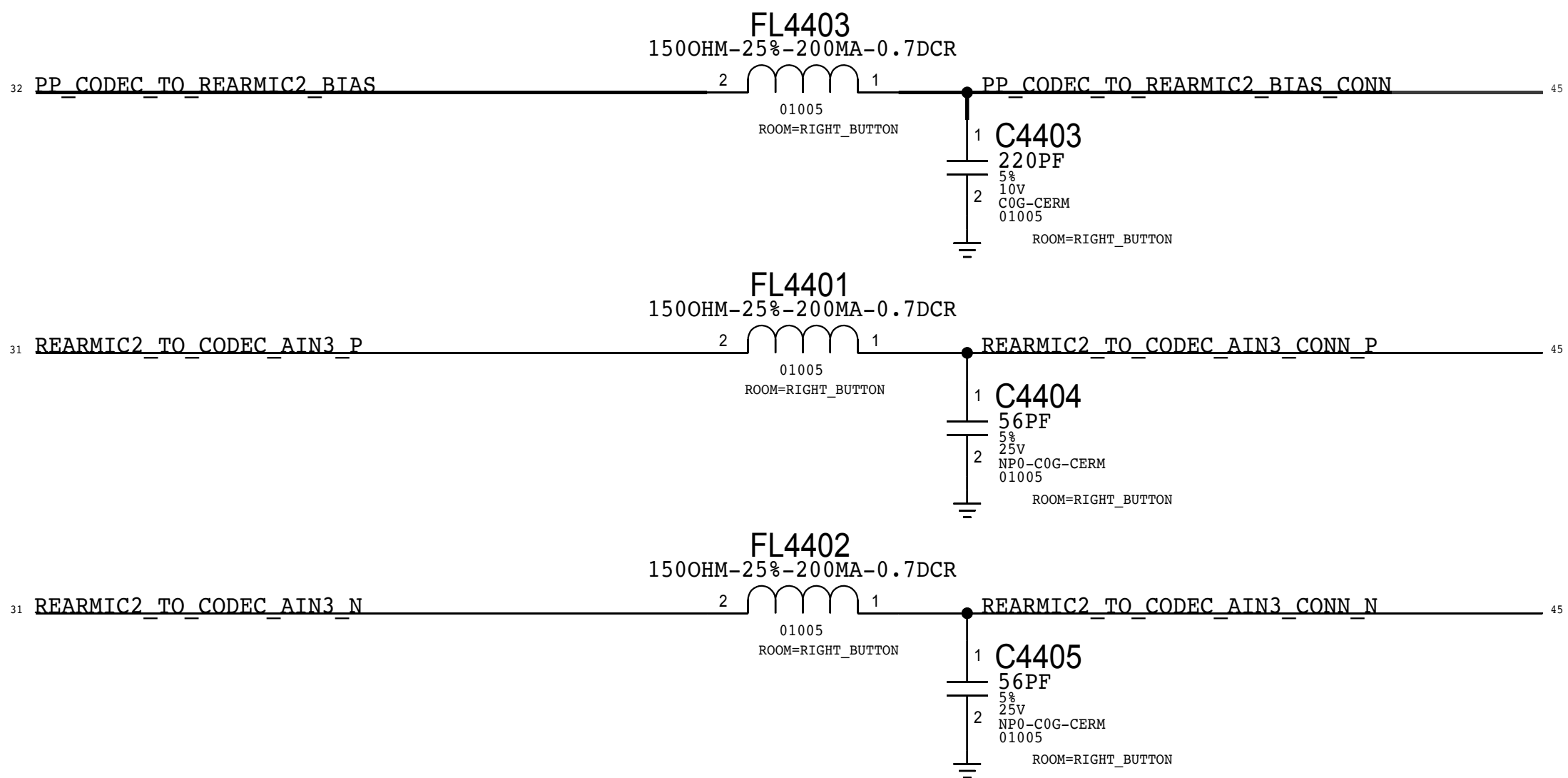
BUTTONS




HAWKING

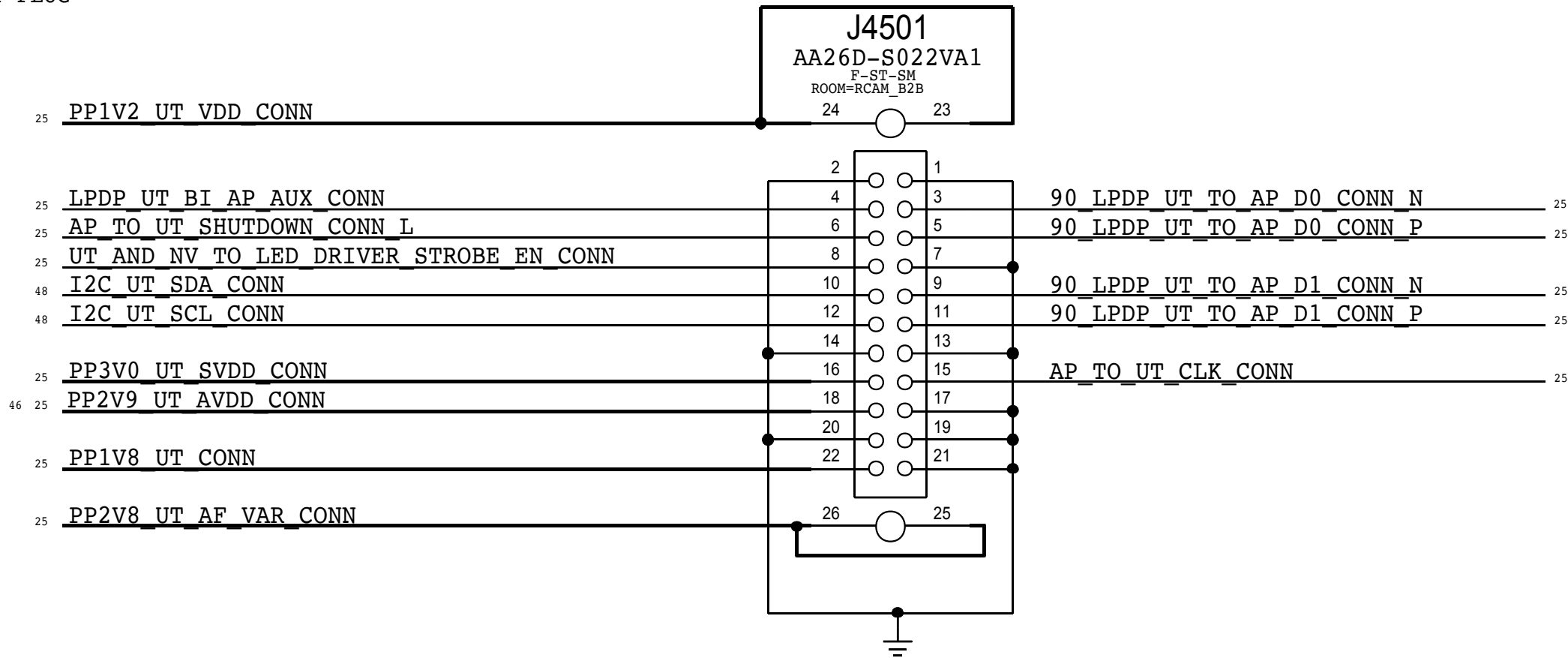


MIC2 (ANC REF)



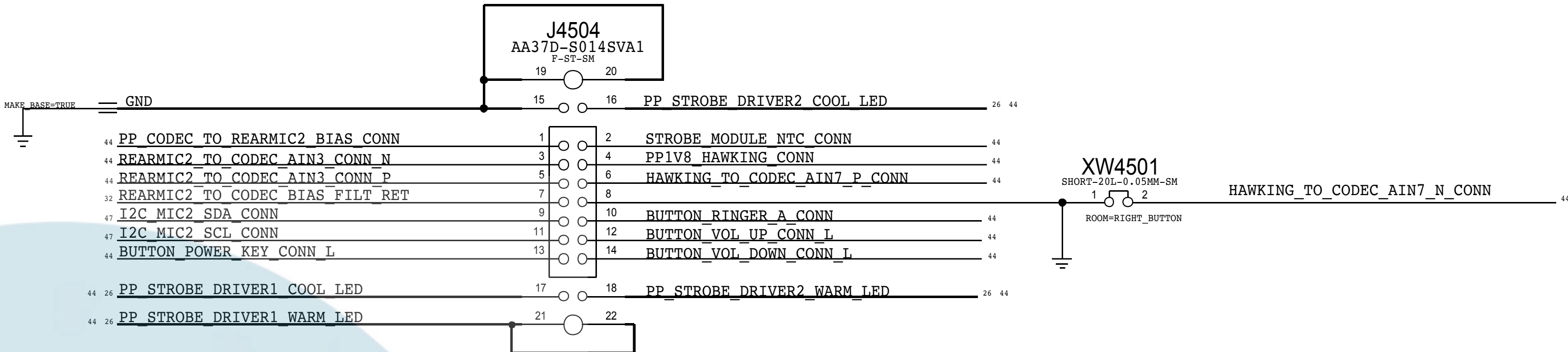
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THIS ONE ----> 516S00152 RCPT (USED ON MLB)
516S00151 PLUG



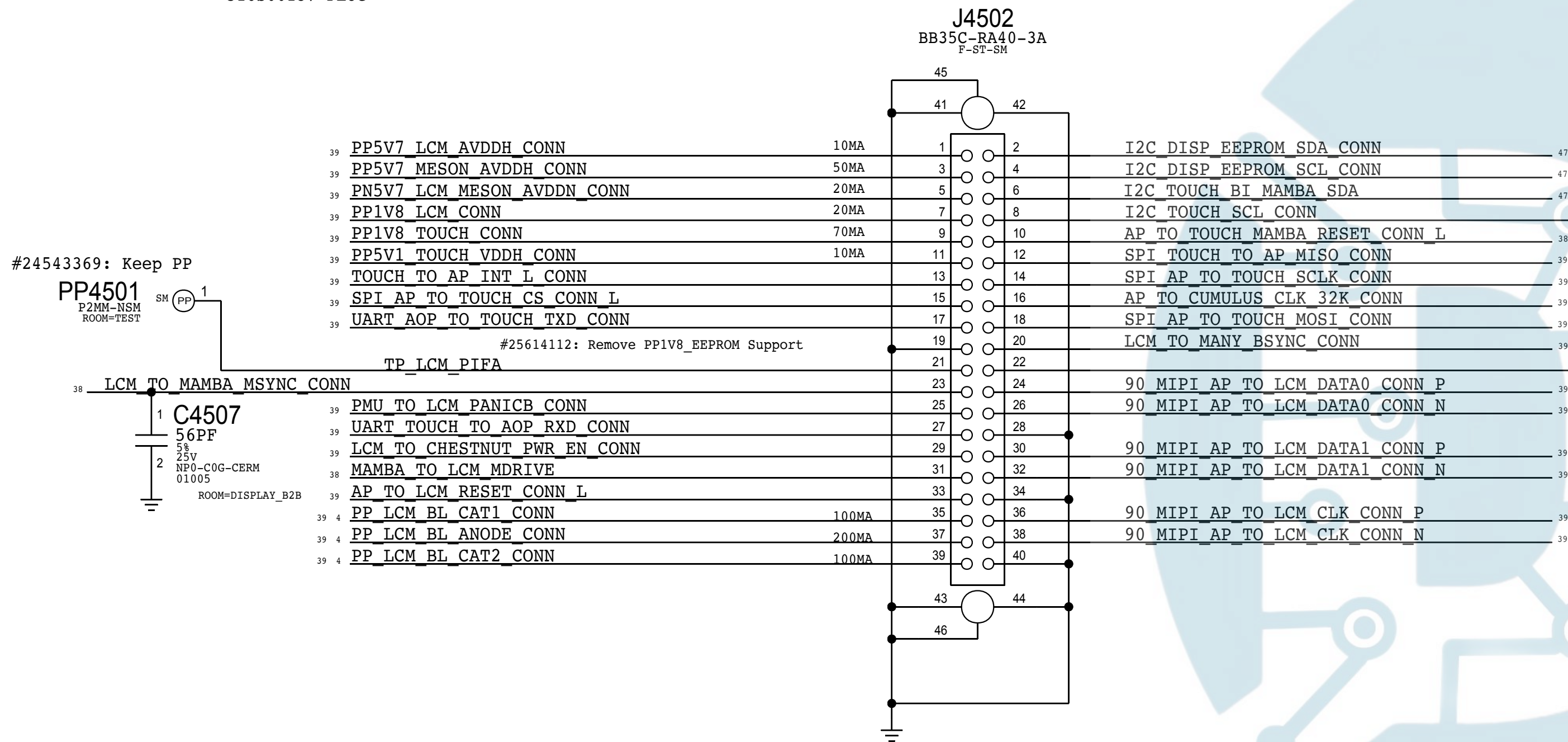
COMBINED BUTTON FLEX CONNECTOR

MLB APN: 516S00150
FLEX APN: 516S00149



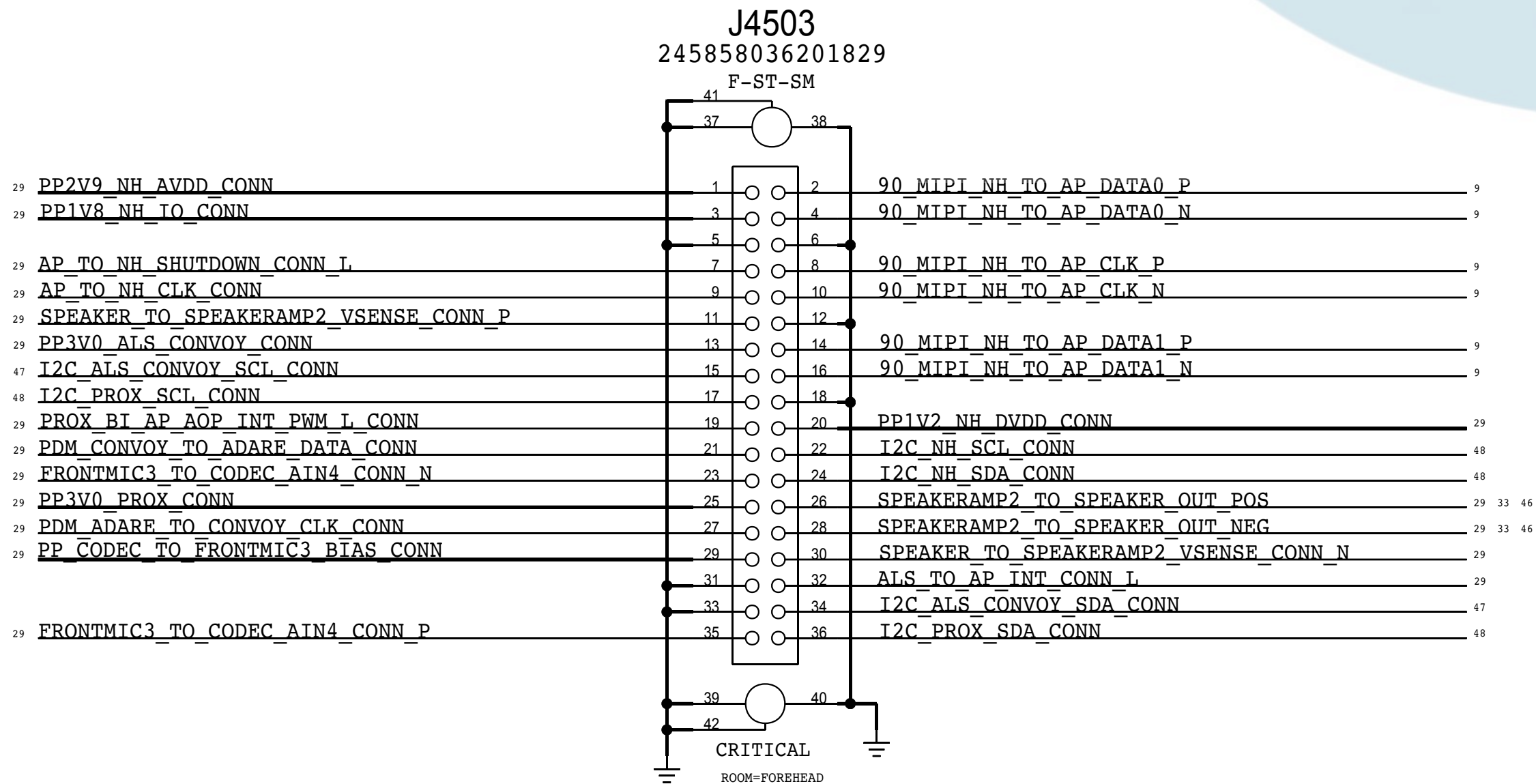
DISPLAY / TOUCH FLEX CONNECTOR

THIS ONE ----> 516S00138 RCPT (USED ON MLB)
516S00137 PLUG



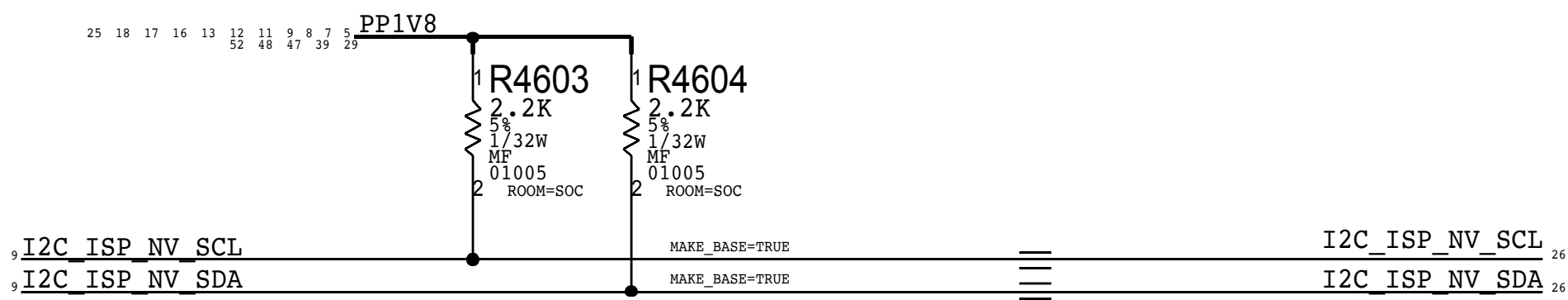
FOREHEAD FLEX CONNECTOR

THIS ONE ----> 516S00146 RCPT (USED ON MLB)
516S00145 PLUG

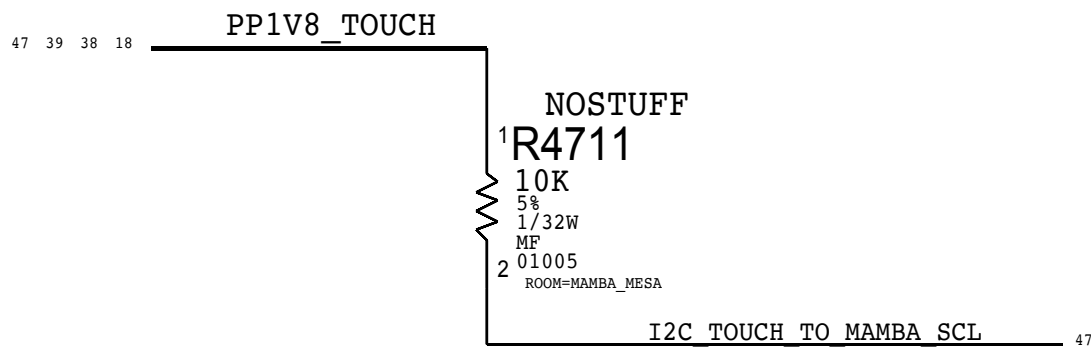


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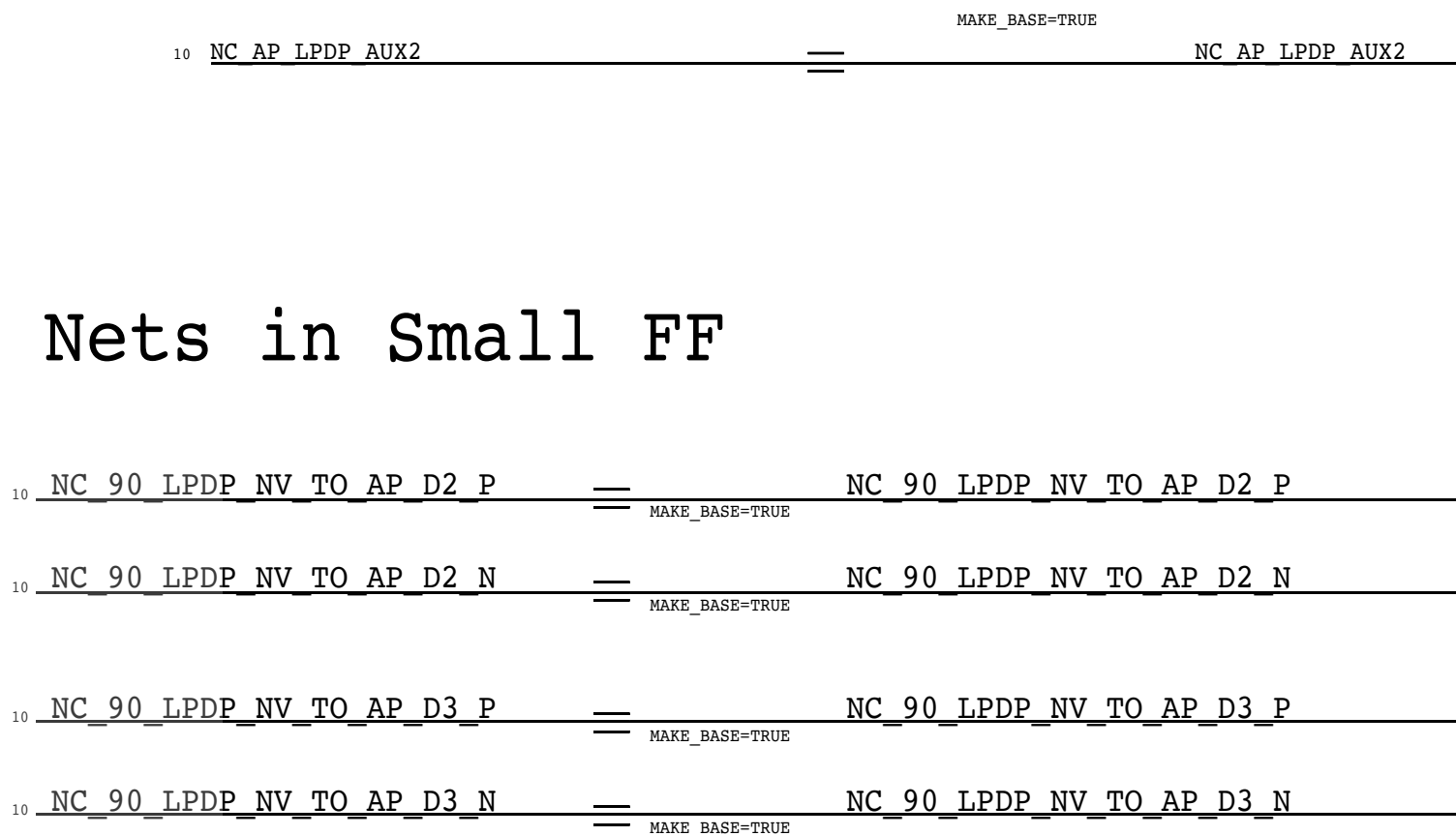
ISP I2C1



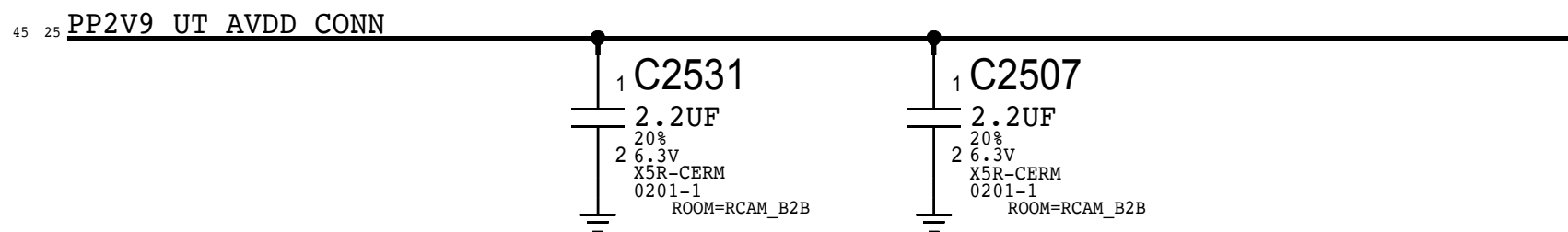
#26682438:Move to Page 46
TOUCH I2C



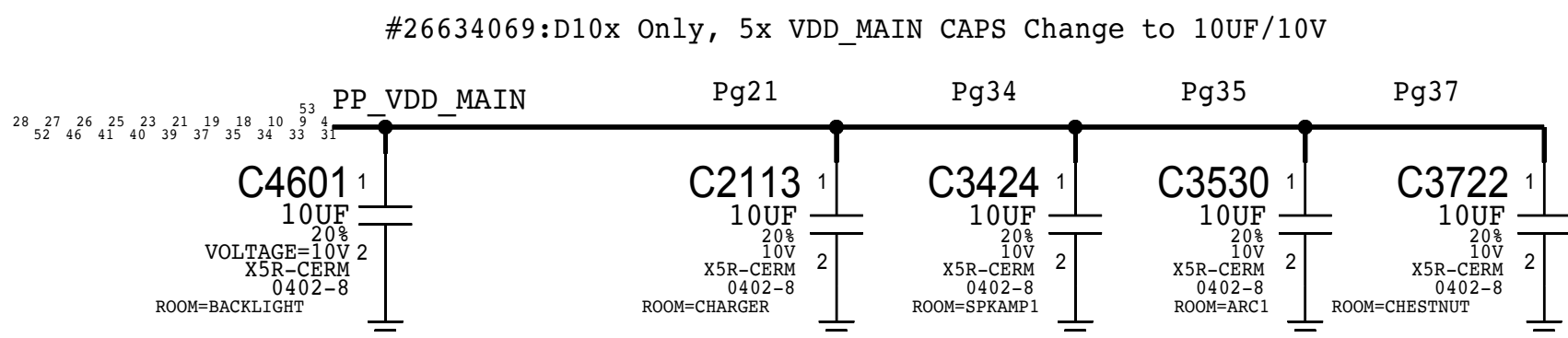
NC Nets in Small FF



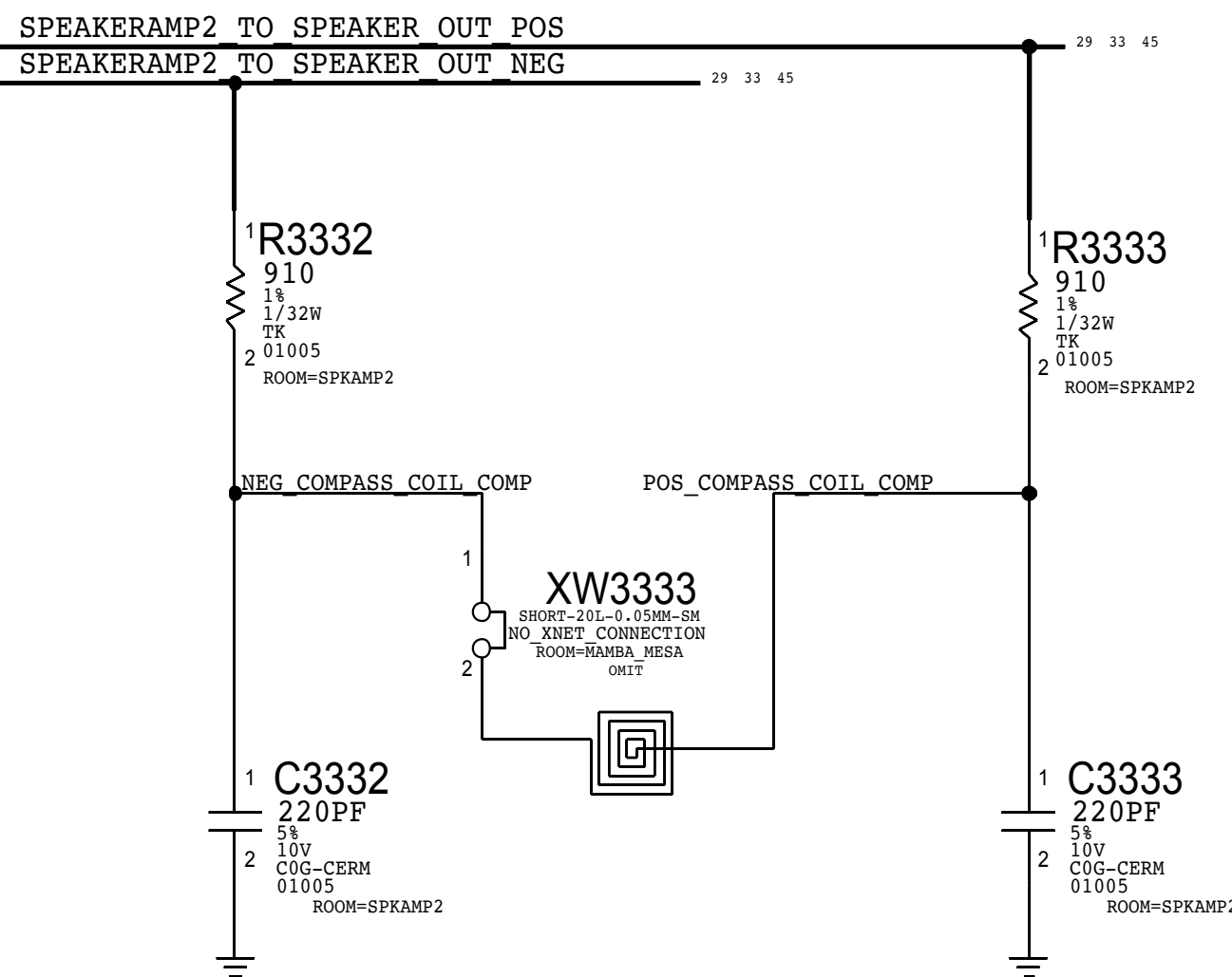
UT B2B



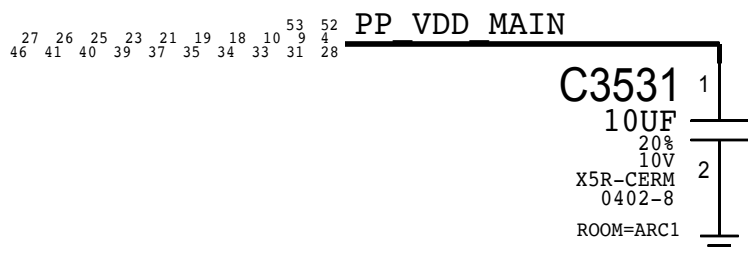
VDD_MAIN Cap



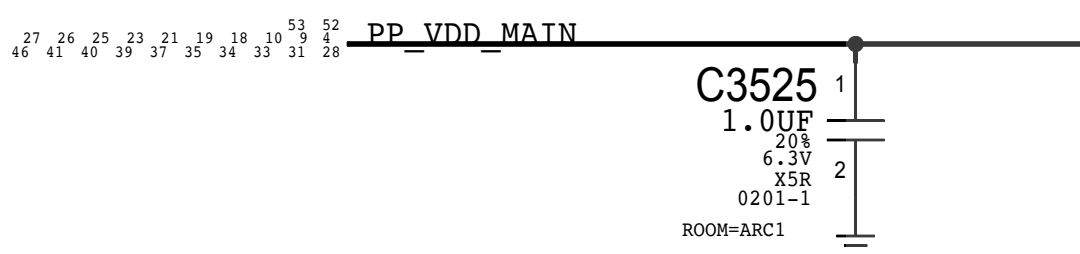
Top Speaker Compass Coil



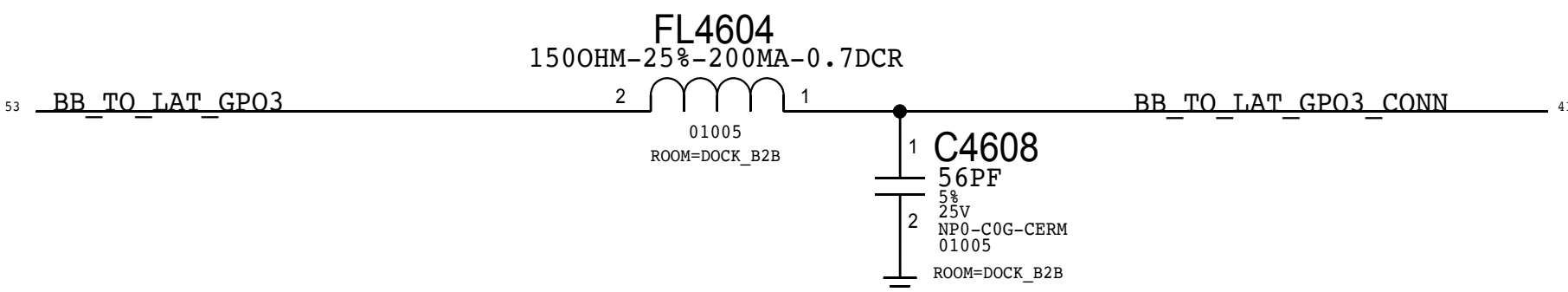
#25742582,Add back C3531 in layout at ARC



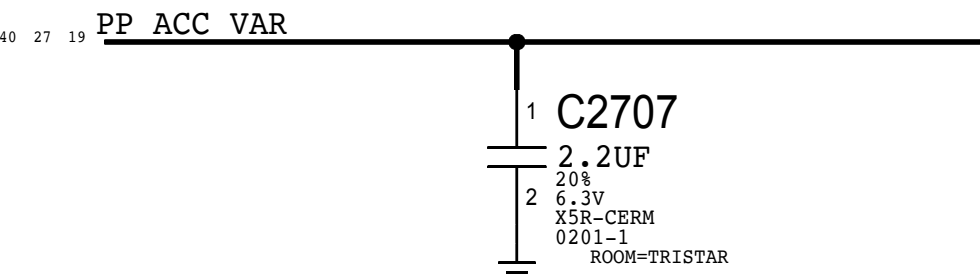
#26104509:C3525 Change to 1UF 0201 in DVT



Dock B2B (Pg 41)

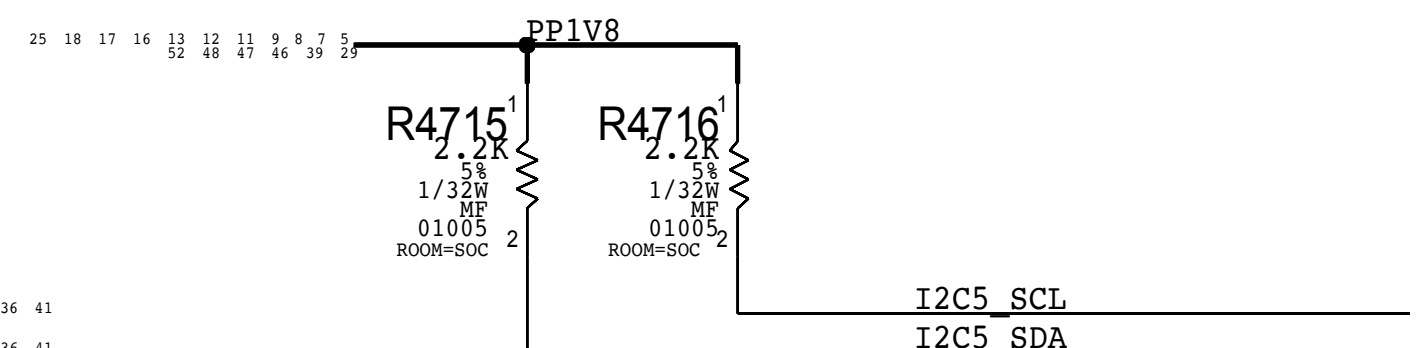
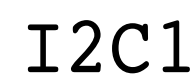



ACC Buck Caps



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I2C0



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AOP
I2C

ISP
I2C0

#24544699: Support 1MHz

#24550735: ISP I2C0 PU

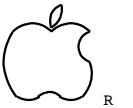
#24958320: Intentional R4815 Change
Reduce undershoot when Prox Driving

Intentional R4815 Change

I2C1
See page 46

I2C2

TO MAMBA/MESA FLEX

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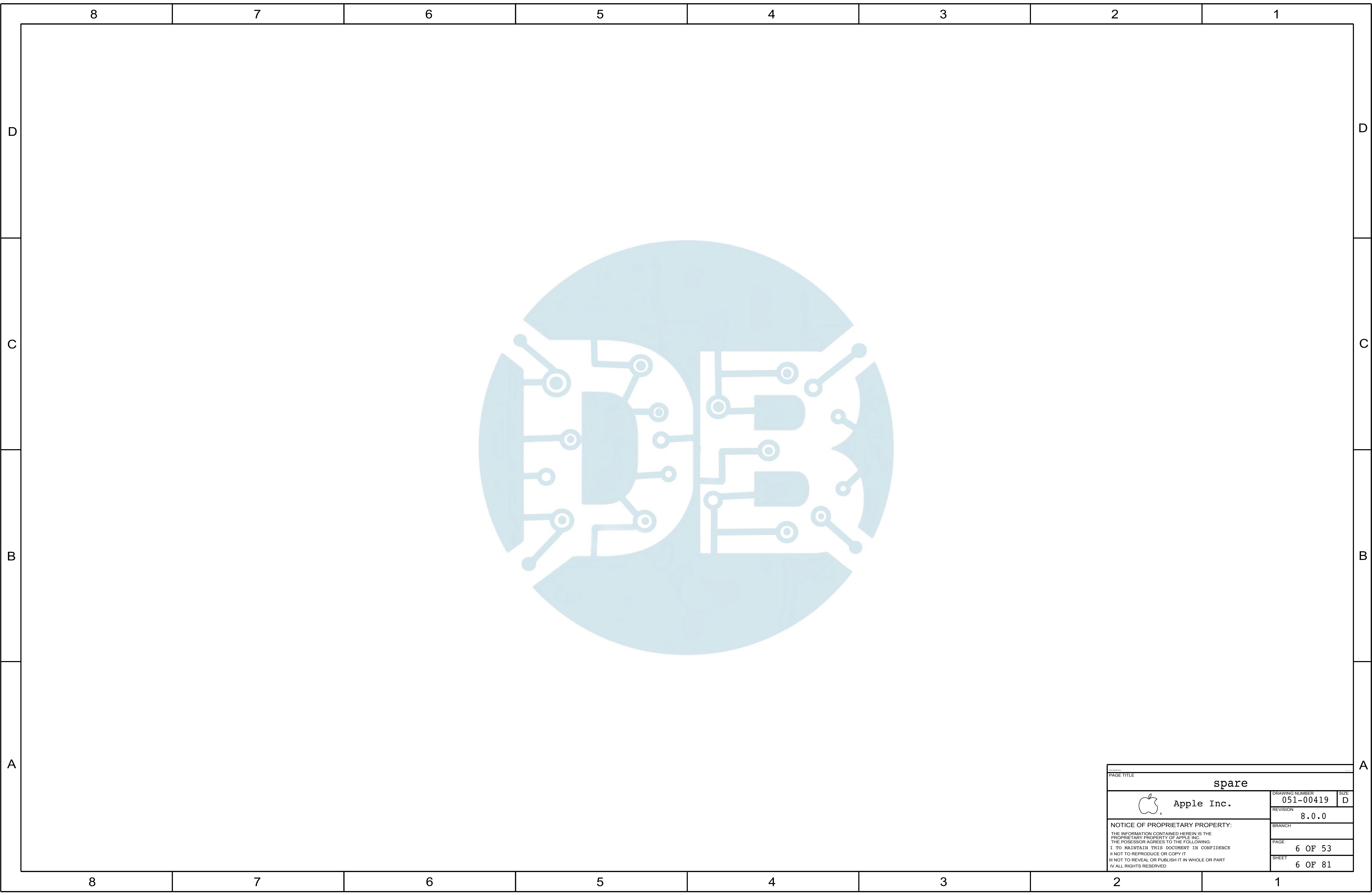
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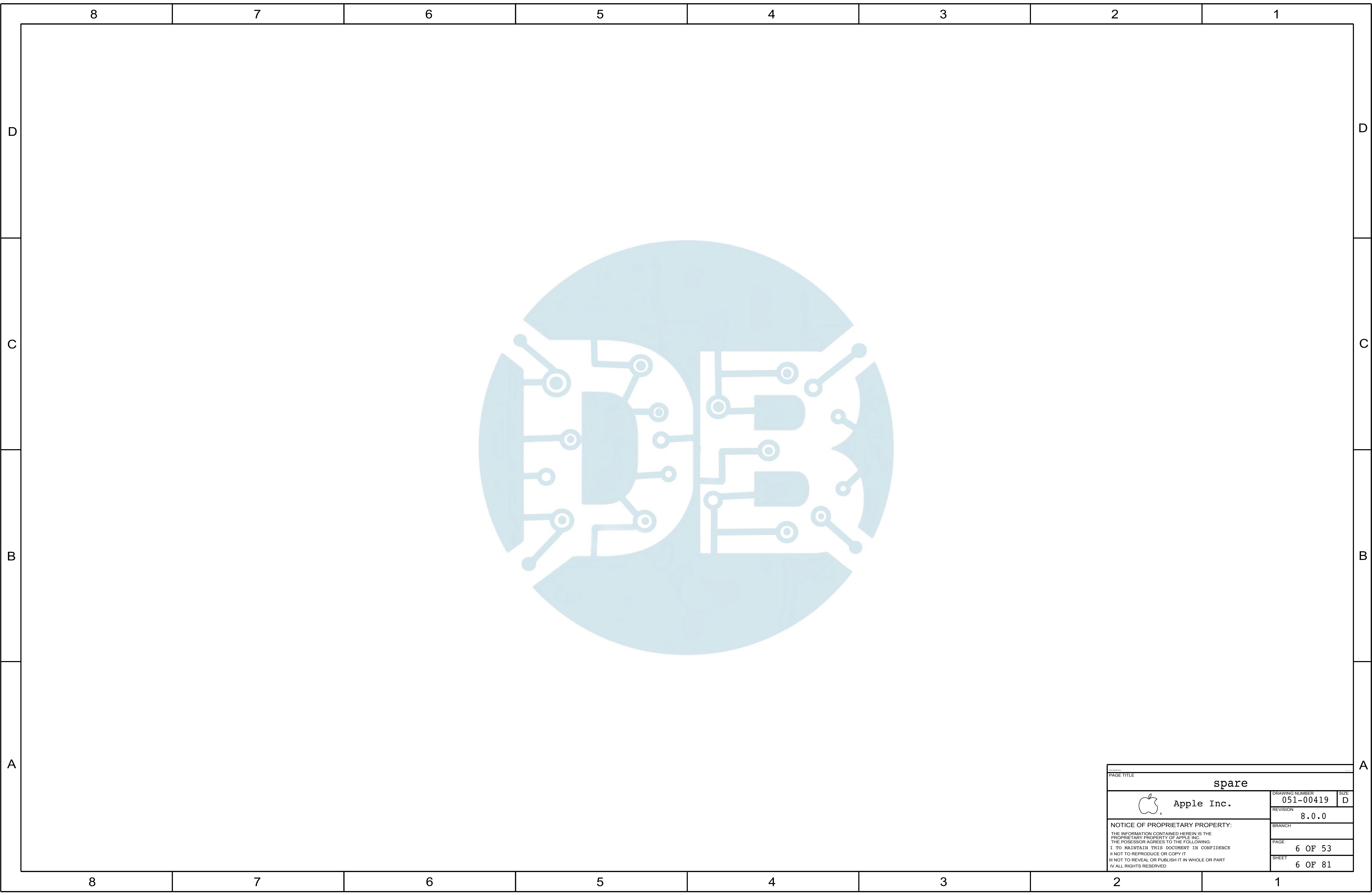
B


A

D1x I2C Table

Bus	Device	Binary	7-bit Address	8-bit Address	Max Speed
ISP I2C0 1.5MHz	SALT LAKE (PRIMARY)	0010000X	0x10	0x20	1.5MHz
	SALT LAKE (SECONDARY)	0110000X	0x30	0x60	1.5MHz
	GRUNBERG (STANDARD)	0011100X	0x1C	0x38	1.5MHz
	GRUNBERG (SPECIAL ABSOLUTE RW)	0011101X	0x1D	0x3A	1.5MHz
	GRUNBERG (SPECIAL DELTA READ)	0011110X	0x1E	0x3C	1.5MHz
	STROBE 1	1100011X	0x63	0xC6	1.5MHz
ISP I2C1 1.5MHz	LAS VEGAS (PRIMARY)	0100000X	0x20	0x40	1.5MHz
	LAS VEGAS (SECONDARY)	0110000X	0x30	0x60	1.5MHz
	EDWIN	1100011X	0x63	0xC6	400 kHz
	STROBE 2	0000110X	0x06	0x0C	1.5MHz
ISP I2C2 4.5MHz	CONCORD	0010000X	0x10	0x20	1.5MHz
ADP I2C 1.5MHz	ARC DRIVER 1	100000YX	0x41	0x82	1.5MHz
	PROX	1011000X	0x58	0xB0	1.5MHz
	SPKAMP1 (L2B)	100000YX	0x40	0x80	1.5MHz
	TURTLE	0101100X	0x2e	0x58	400 kHz
	MESA	1100001X	0x81	0xC2	400 kHz
Touch I2C 300kHz	MAMBA	1100000X	0x90	0xC0	1.5MHz
EEPROM I2C	MESON	1000000X	0x40	0x80	510 kHz
	EEPROM	1010001X	0x51	0xA2	400 kHz
AP I2C0 4.5MHz	BOOST	1110101X	0x75	0xEA	3.4 MHz
	TRISTAR	0011010X	0x1A	0x34	400 kHz
	BACKLIGHT 1	1100010X	0x62	0xC4	1.5MHz
	CHESTNUT	0100111X	0x27	0x4E	400 kHz
AP I2C1 4.0MHz	ADELYN	1110100X	0x74	0xEB	400 kHz
	TIGRIS	1110101X	0x75	0xEA	400 kHz
	BACKLIGHT 2	1100010X	0x62	0xC4	1.5MHz
AP I2C2 4.5MHz	ALS	0101001X	0x29	0x52	400 kHz
	CONVOY	0100001X	0x21	0x42	3.4 MHz
		0100010X	0x22	0x44	400 kHz
	SPKAMP 2 (L2B)	100002YX	0x40	0x80	400 MHz
AP I2C3 1.5MHz	DOCK FLEX (MIC1)	1010100X	0x54	0xA5	1.5MHz
	COMBINED BUTTON FLEX (MIC2)	1010100X	0x56	0xAC	1.5MHz
	DISP EEPROM	1010001X	0x51	0xA2	400kHz
Homer I2C 1.5MHz	SCHRODINGER (STANDARD)	0001110X	0xE	0x1C	1.5MHz
	SCHRODINGER (CAL REG'S)	0001111X	0xF	0x1D	1.5MHz
	EEPROM (STANDARD)	1010000X	0x50	0xA0	
	EEPROM (CONFID)	1010000X	0x90	0xA0	

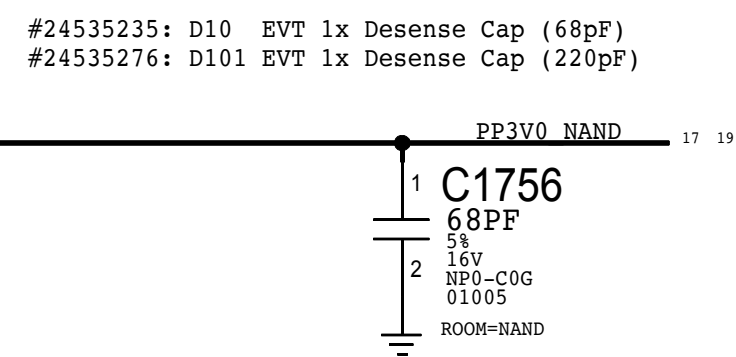
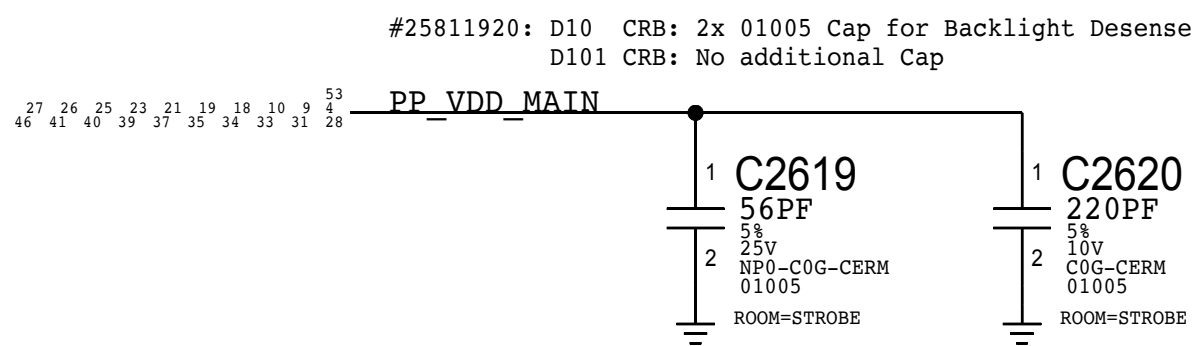
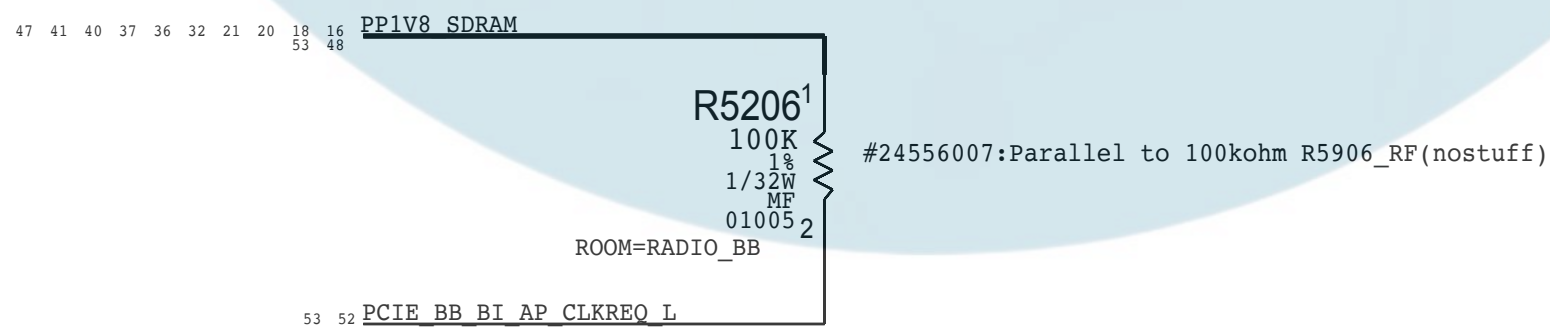
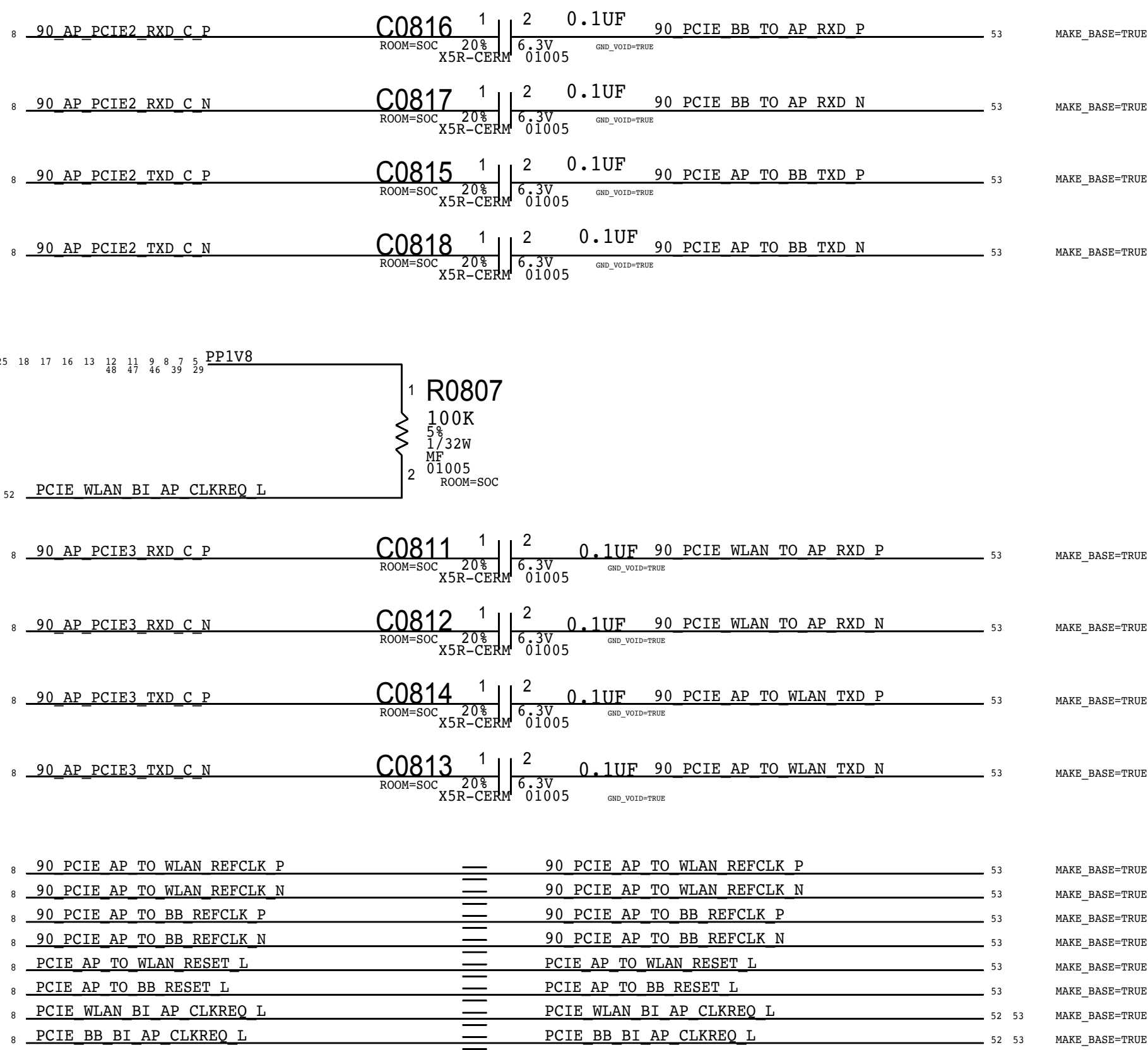
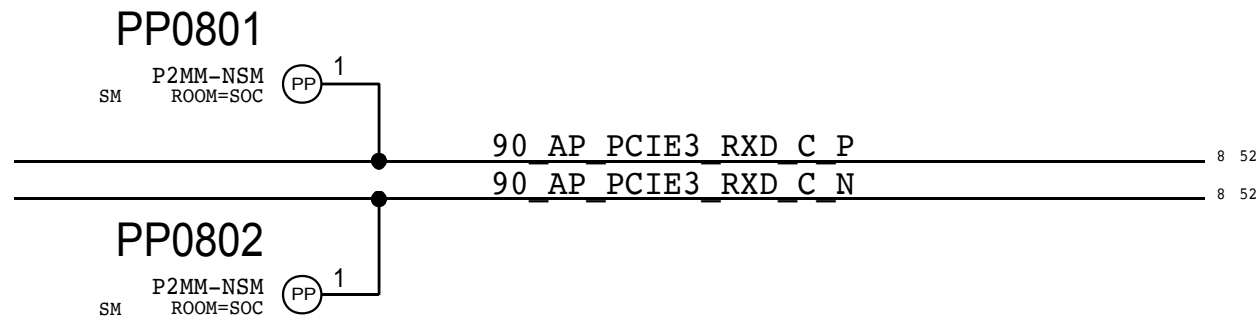


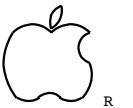


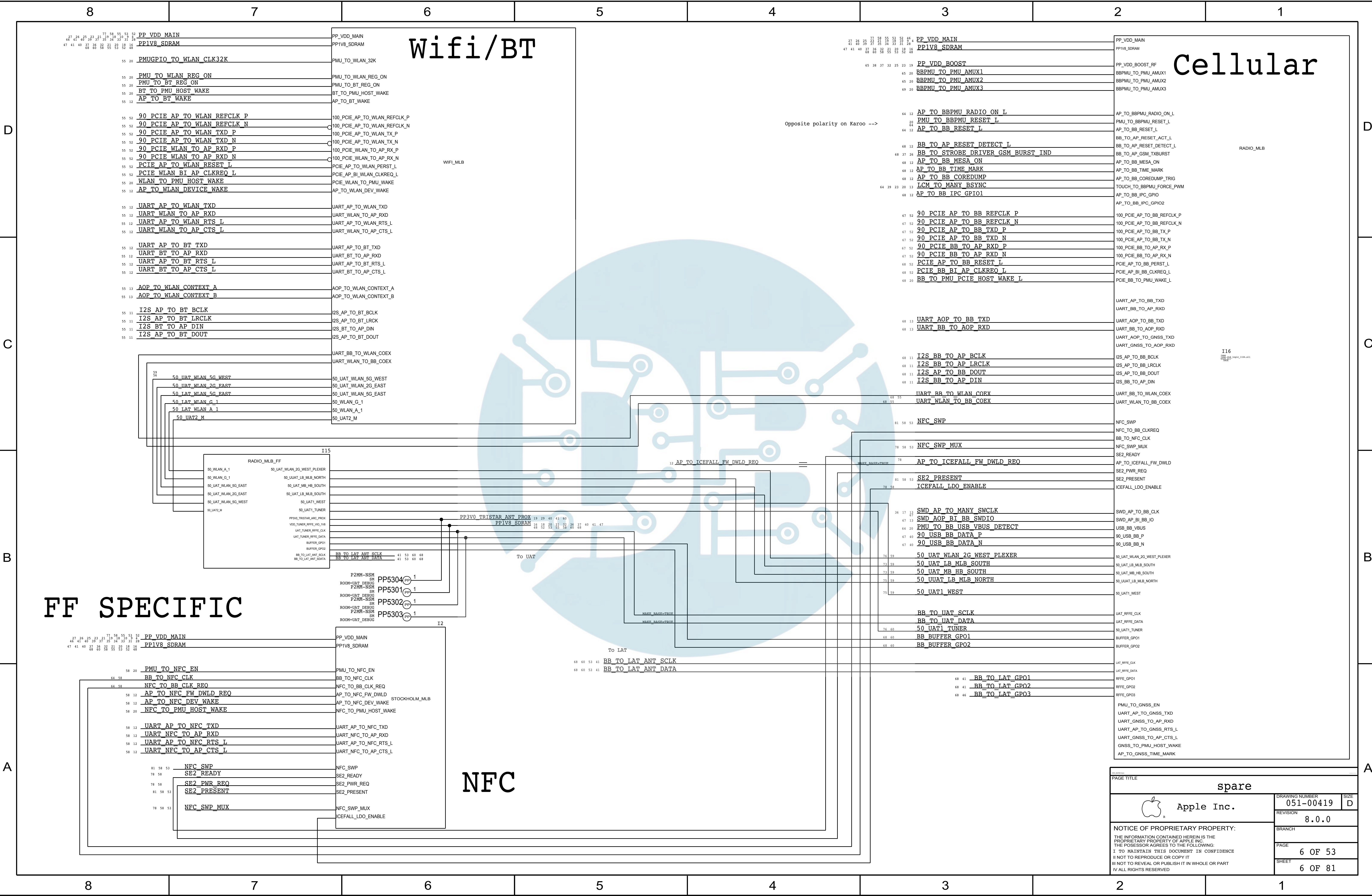
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	SIZE	D

This page contains items which differ accross all MLB designs

PCIe lanes



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Wifi/BT

Cellular

FF SPECIFIC

NFC

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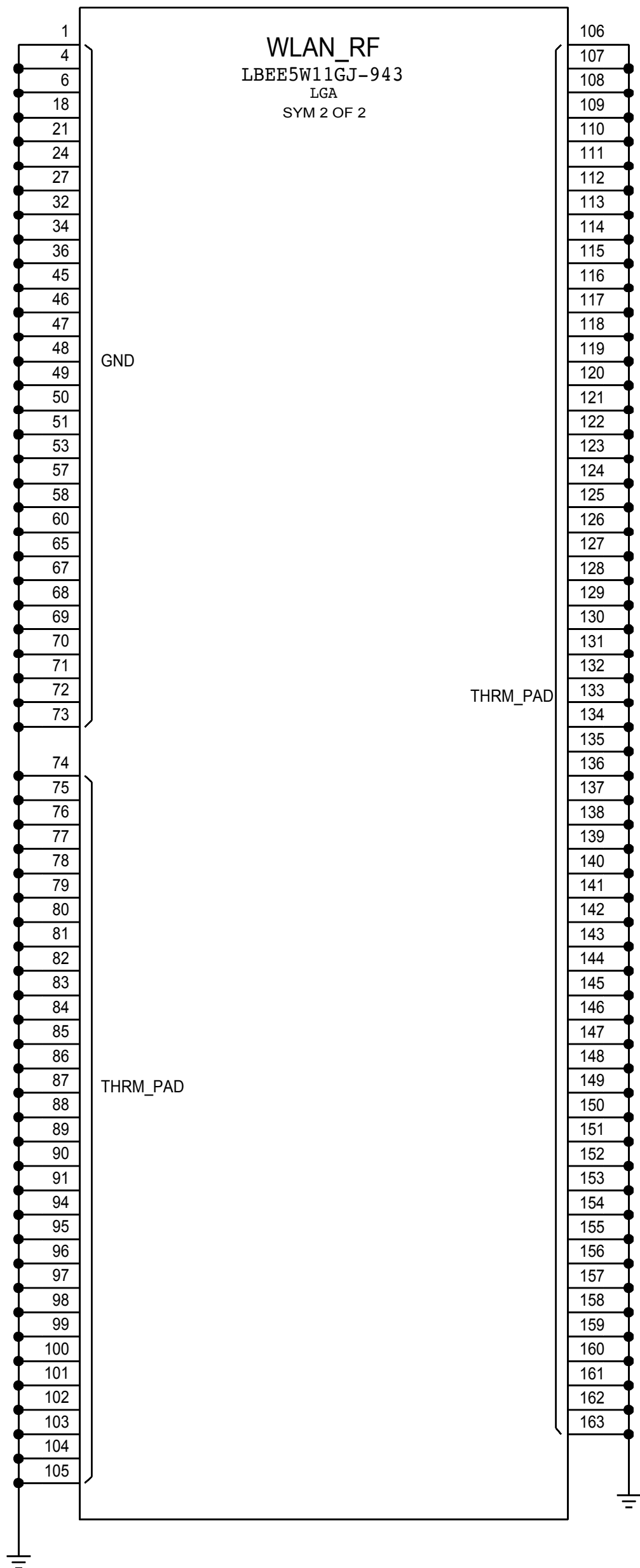
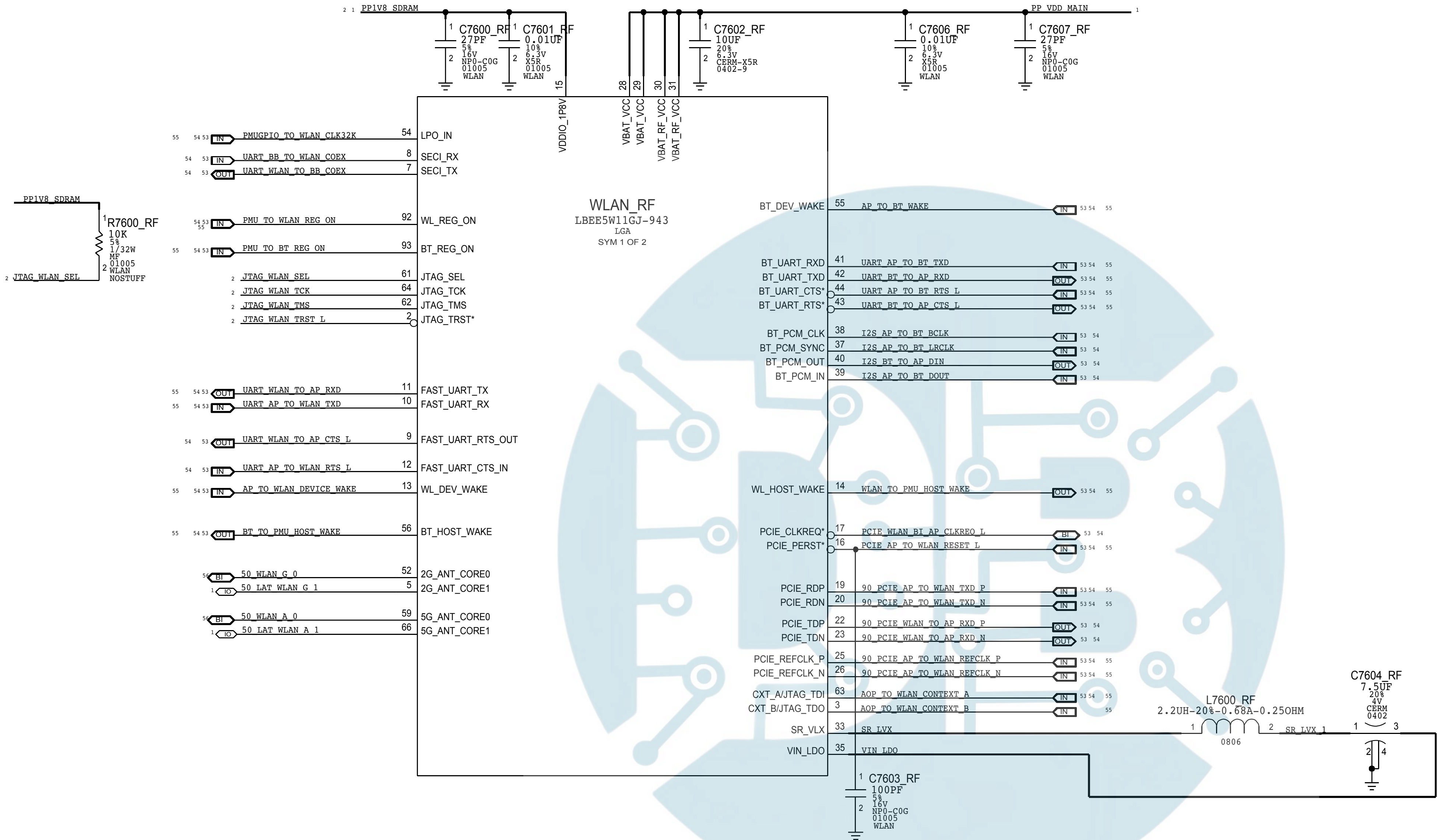
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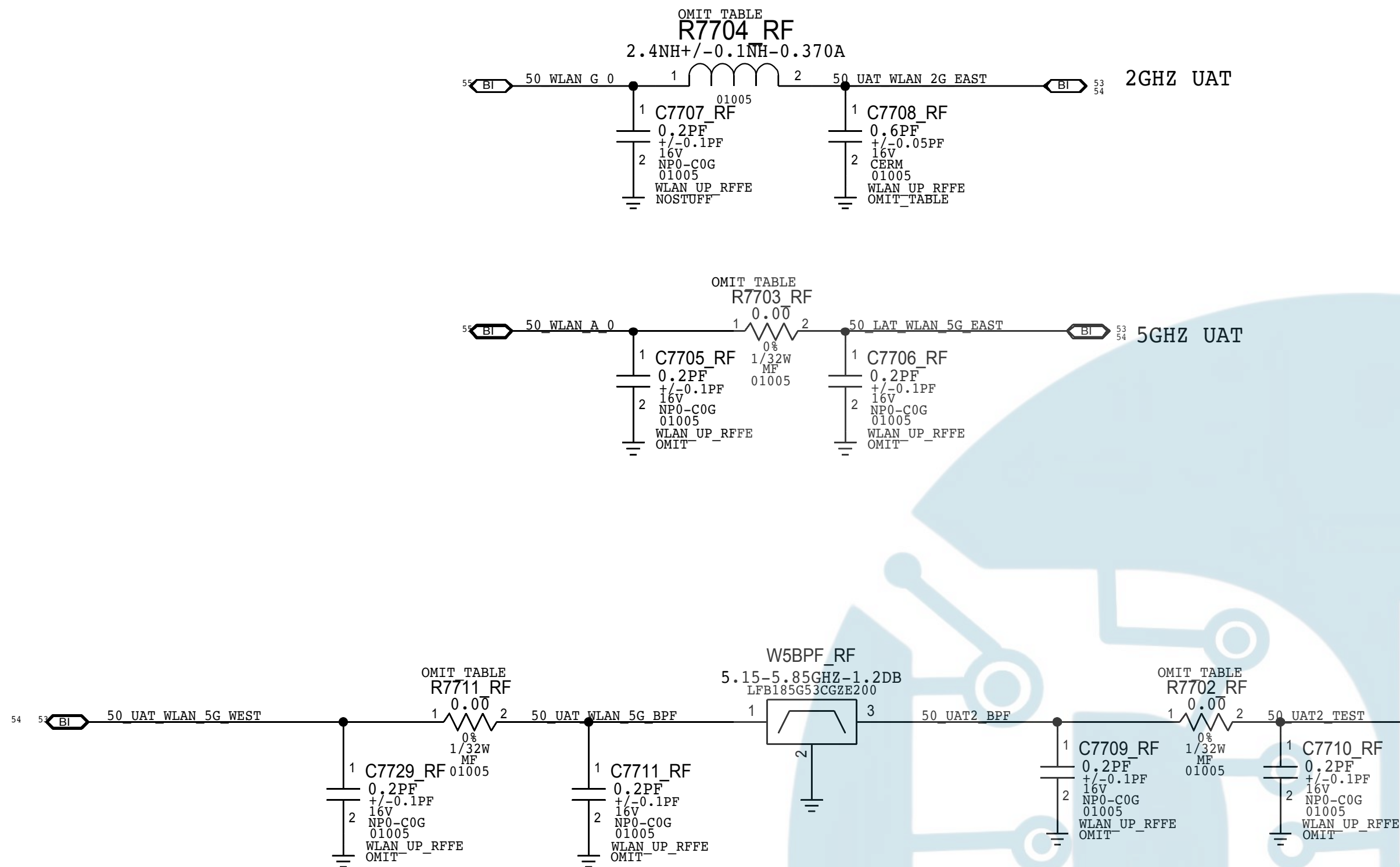
WIFI/BT




PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339800201	339800199	ALTERNATE	WLAN_RF	ALT WIFI/BT MODULE

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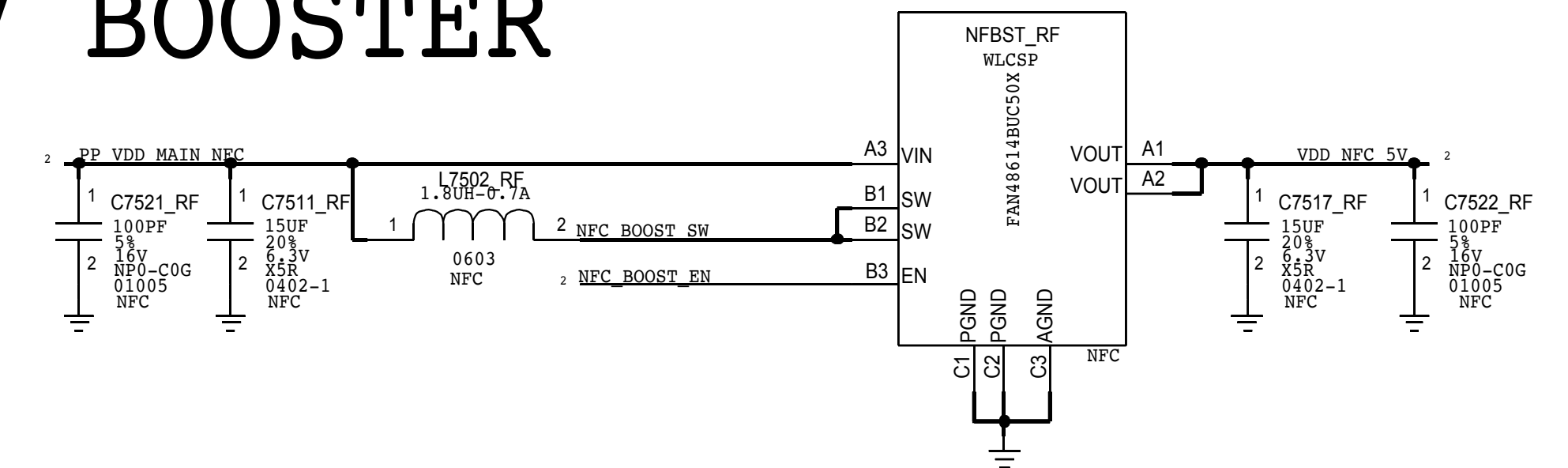
WIFI UPPER ANTENNA FEEDS



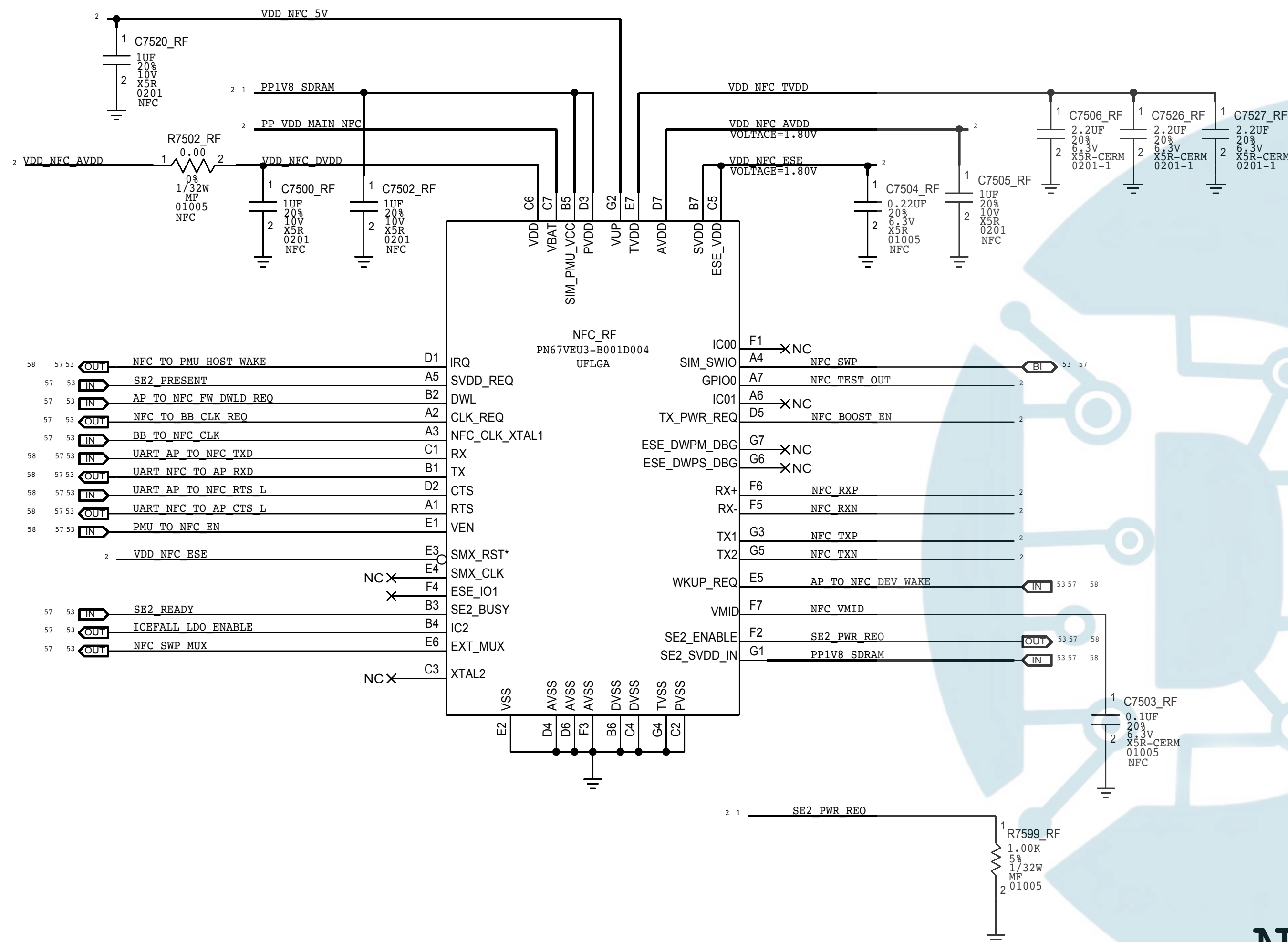
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STOCKHOLM

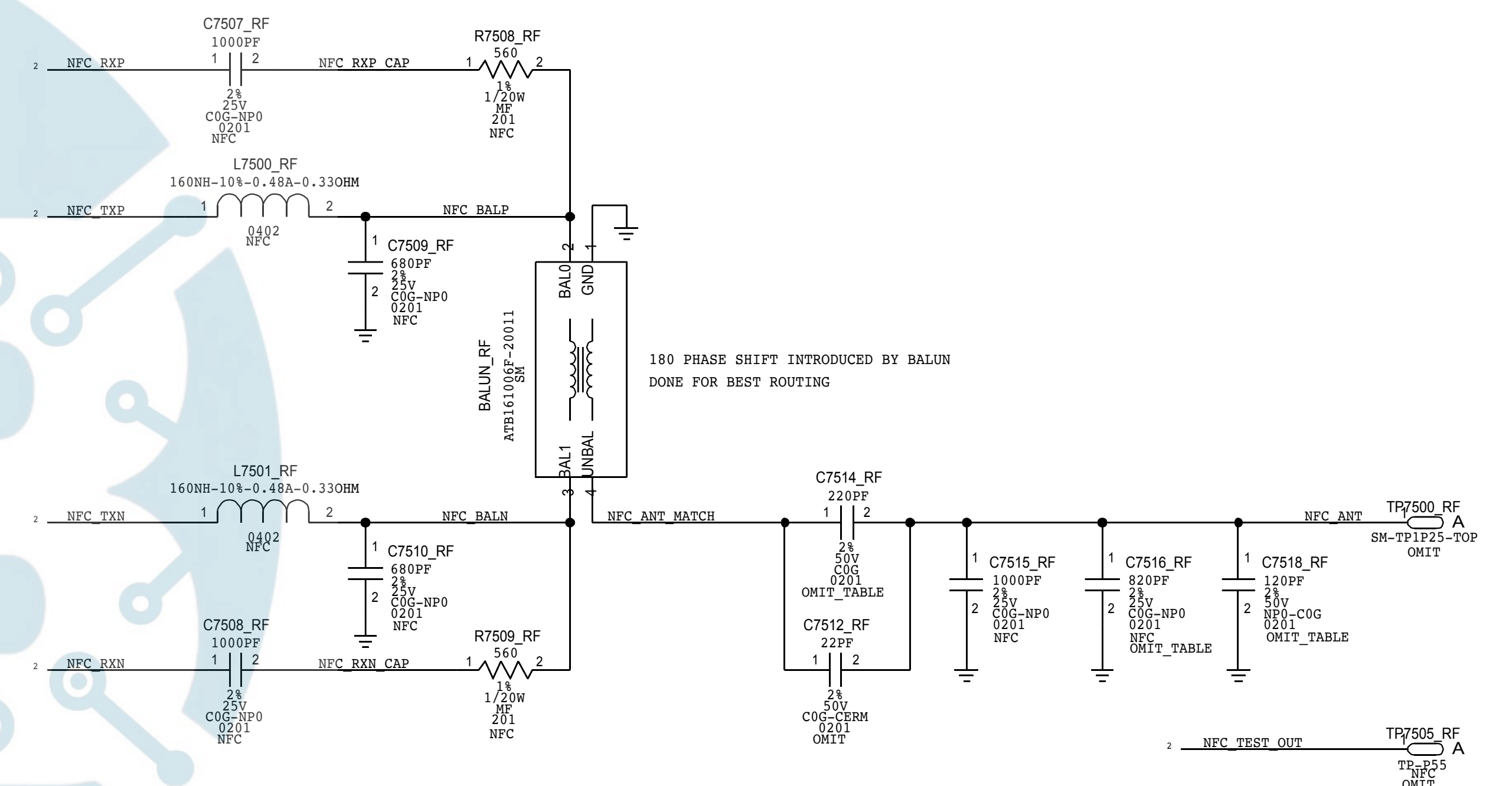
5V BOOSTER



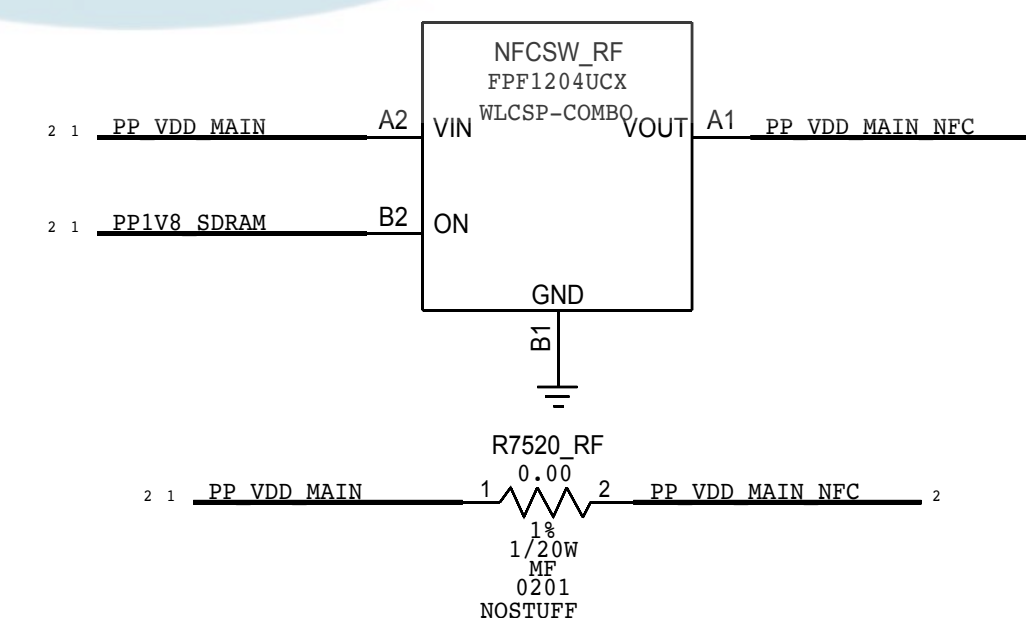
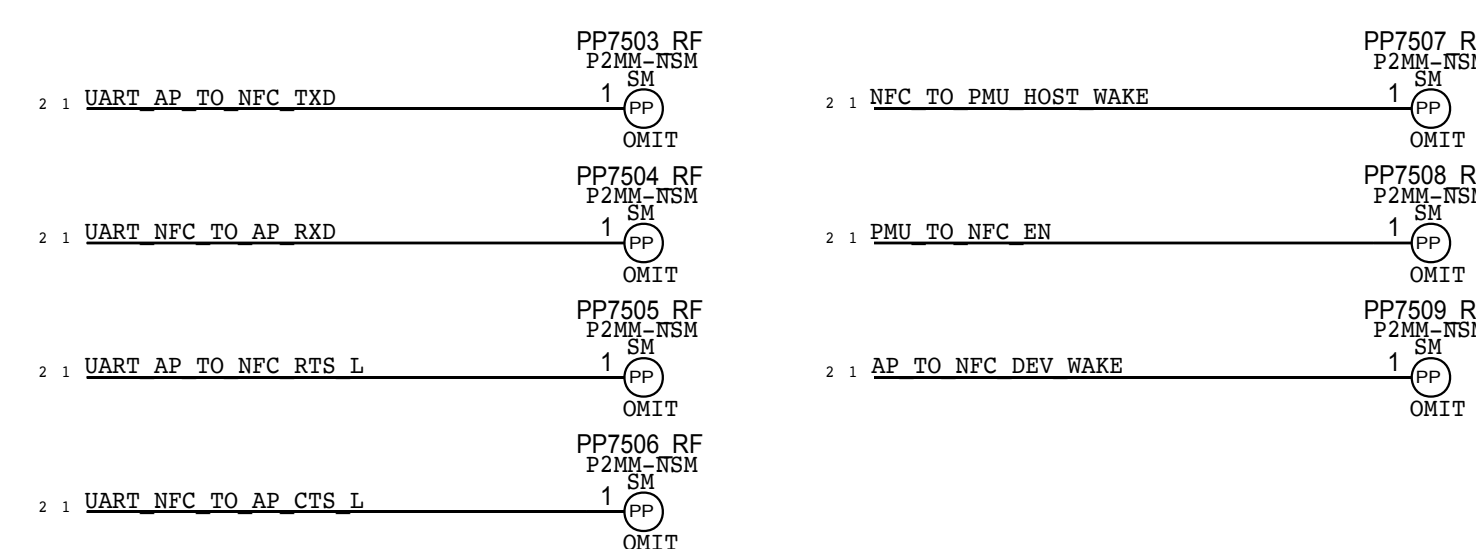
NFC CONTROLLER




NFC FRONT END



NFC LOAD SWITCH



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D10 RADIO MLB_FF

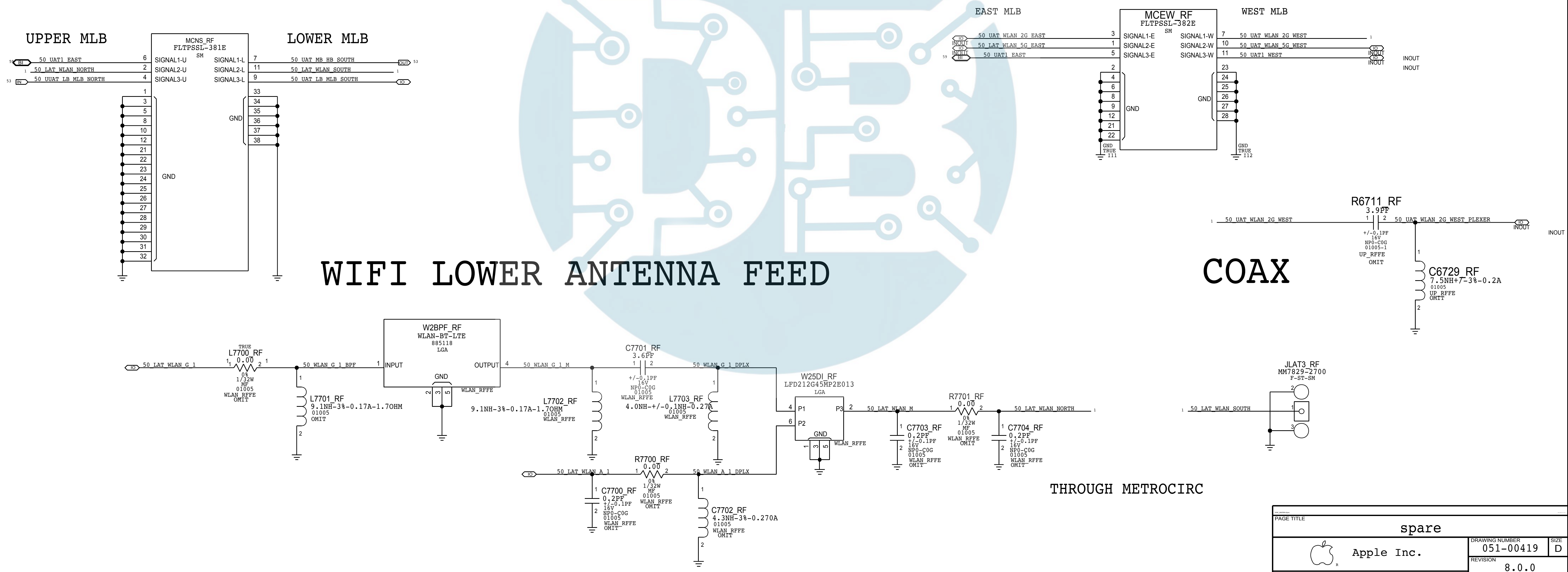
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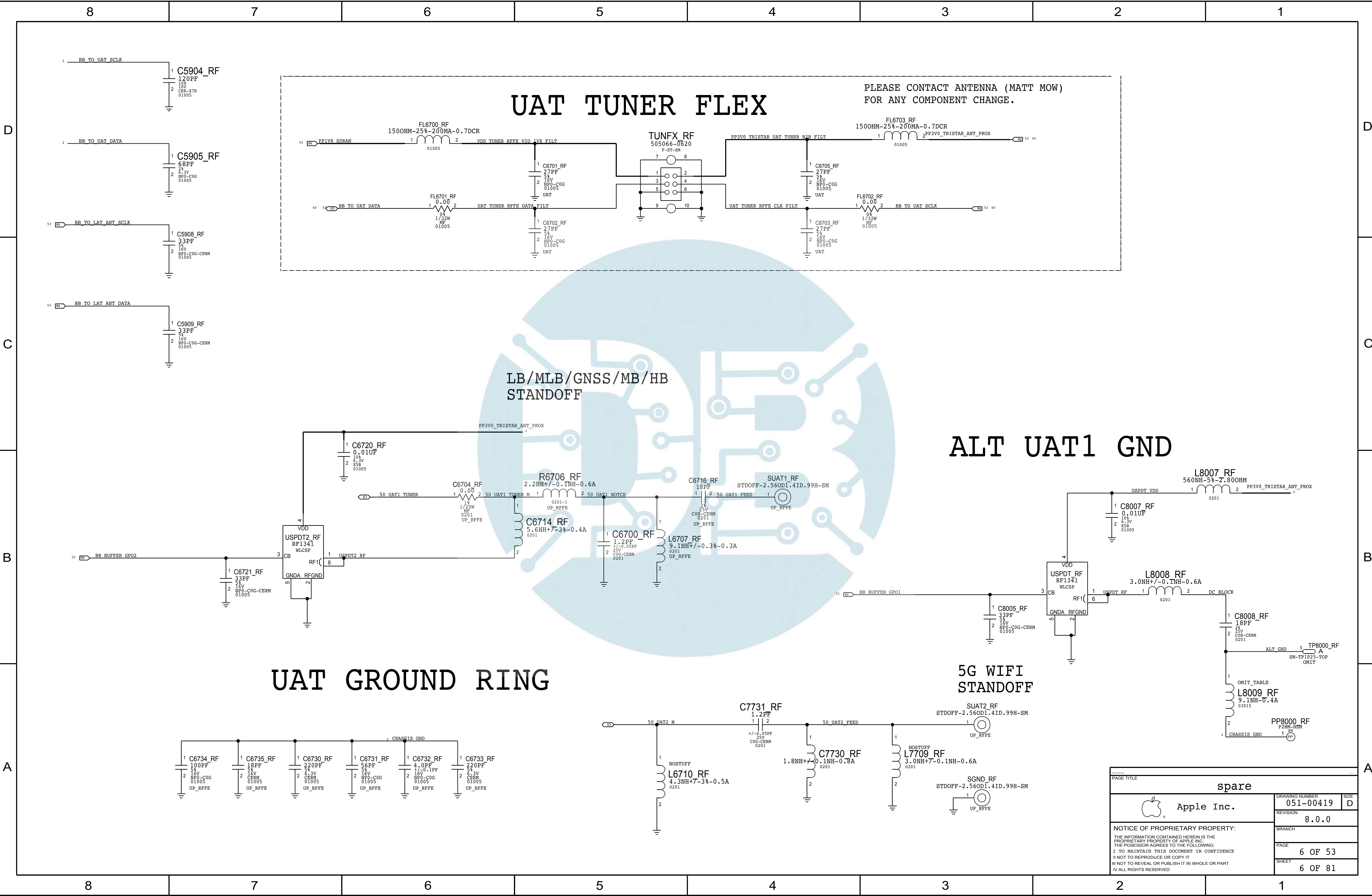
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D10 EAST-WEST METROCIRC

339S00110



ADD REV ID FOR D10/D11 HERE



UAT TUNER FLEX

PLEASE CONTACT ANTENNA (MATT MOW)
FOR ANY COMPONENT CHANGE.

LB/MLB/GNSS/MB/HB
STANDOFF

ALT UAT1 GND

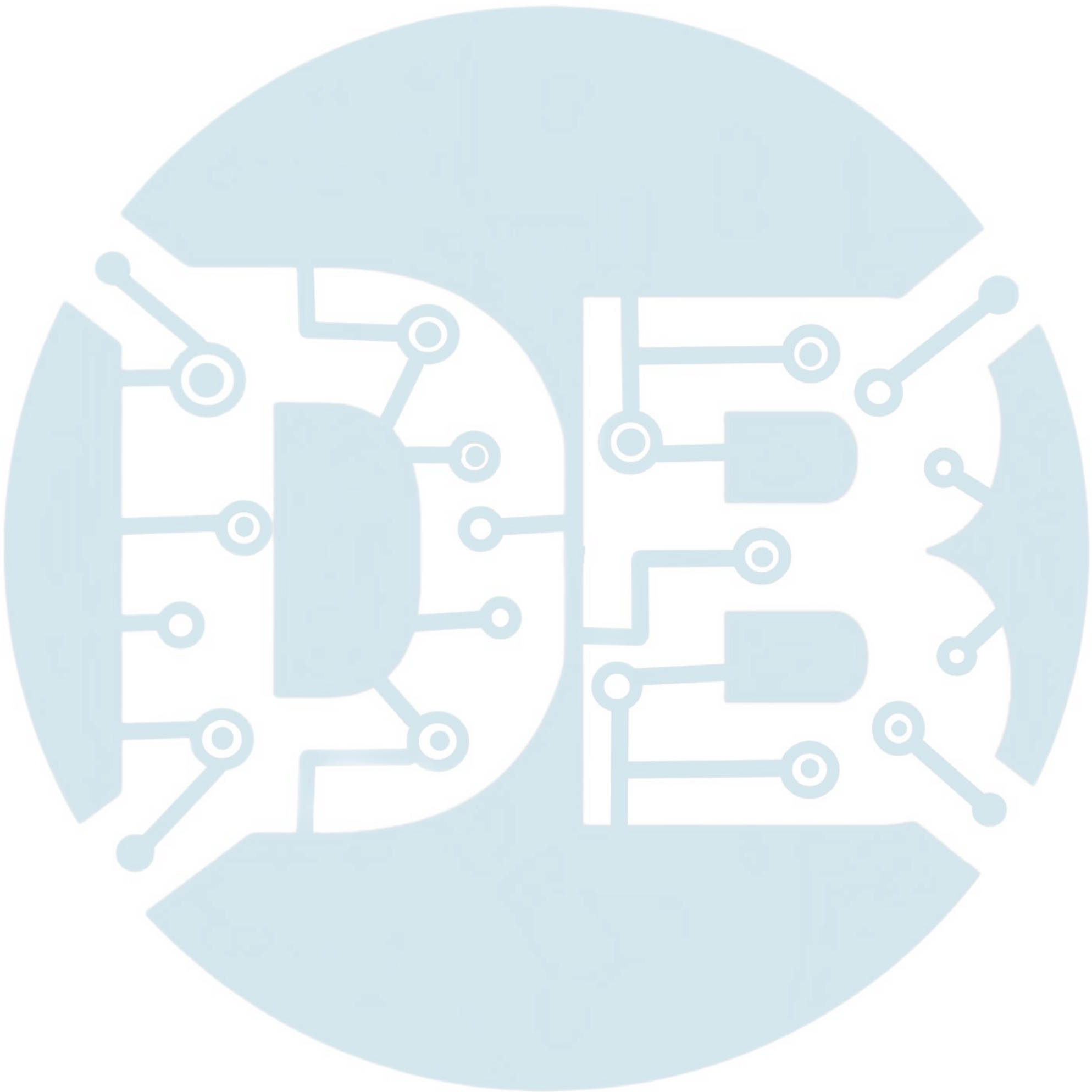
UAT GROUND RING

5G WIFI
STANDOFF


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BOM LIST

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1860	1	LONGER PATH INDUCTOR	L8009_RF	CRITICAL	LMBRF
152S0570	1	3.0 NH,03015	L8009_RF	CRITICAL	NOIMBRF



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87654321

81ICEFALL, SIM, DEBUG CONN

1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.

2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.

3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

MAV16 RADIO_MLB

LAST_MODIFICATION=Wed Jun 8 12:54:09 2016

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64	<CSA_PAGE3>	PMU: CONTROL AND CLOCKS	<SYNC_MASTER3>	<SYNC_DATE3>
65	<CSA_PAGE4>	PMU: SWITCHERS AND LDOS	<SYNC_MASTER4>	<SYNC_DATE4>
66	<CSA_PAGE5>	BASEBAND: POWER2	<SYNC_MASTER5>	<SYNC_DATE5>
67	<CSA_PAGE6>	BASEBAND: CONTROL	<SYNC_MASTER6>	<SYNC_DATE6>
68	<CSA_PAGE7>	BASEBAND GPIOs	<SYNC_MASTER7>	<SYNC_DATE7>
69	<CSA_PAGE8>	TRANSCEIVER0/1: POWER	<SYNC_MASTER8>	<SYNC_DATE8>
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76	<CSA_PAGE15>	UPPER ANTENNA FEEDS	<SYNC_MASTER15>	<SYNC_DATE15>
77	<CSA_PAGE16>	PMU: ET MODULATOR	<SYNC_MASTER16>	<SYNC_DATE16>
78	<CSA_PAGE17>	TEST POINTS & BOOT CONFIG	<SYNC_MASTER17>	<SYNC_DATE17>
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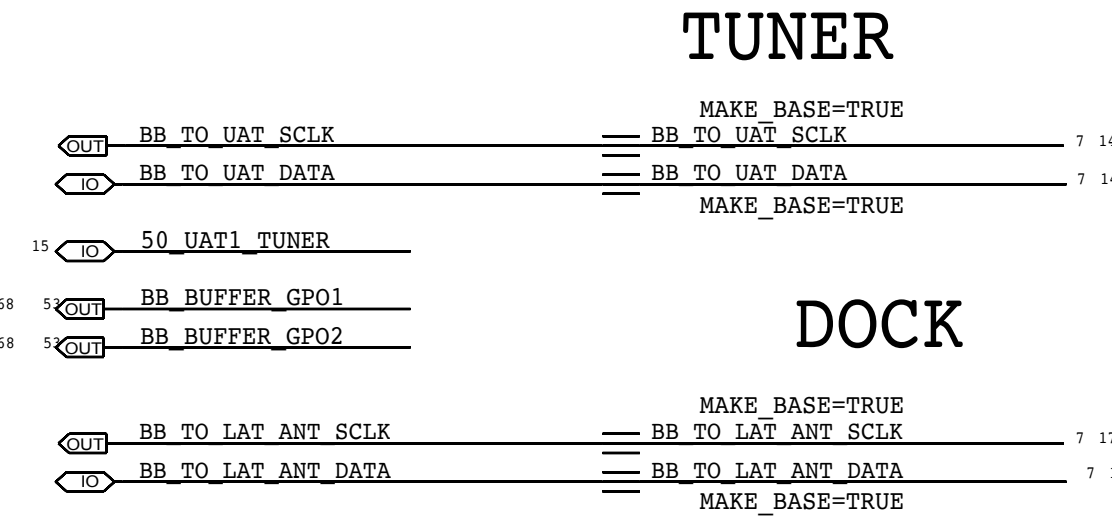
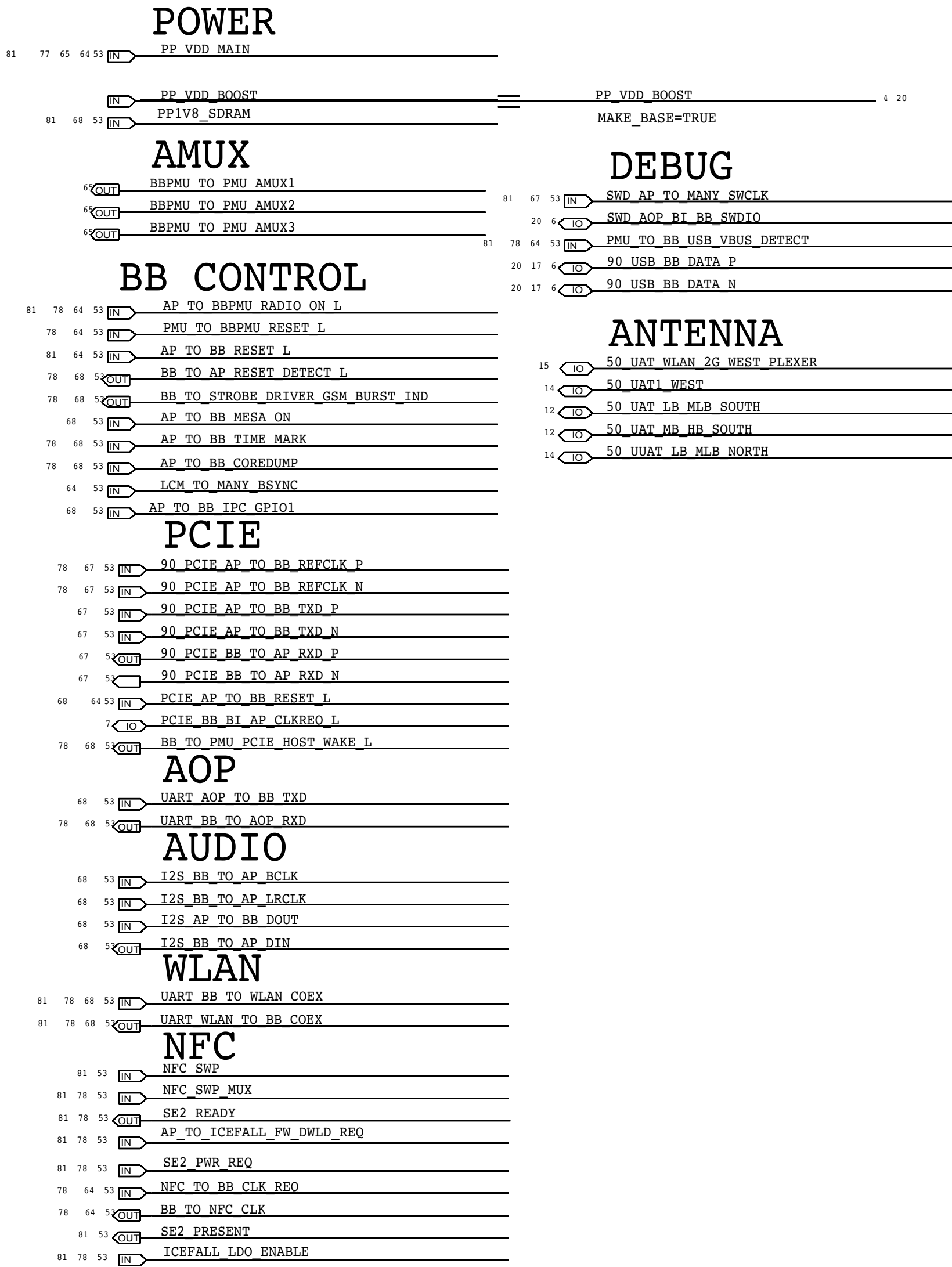
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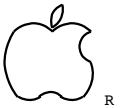
ALTERNATES

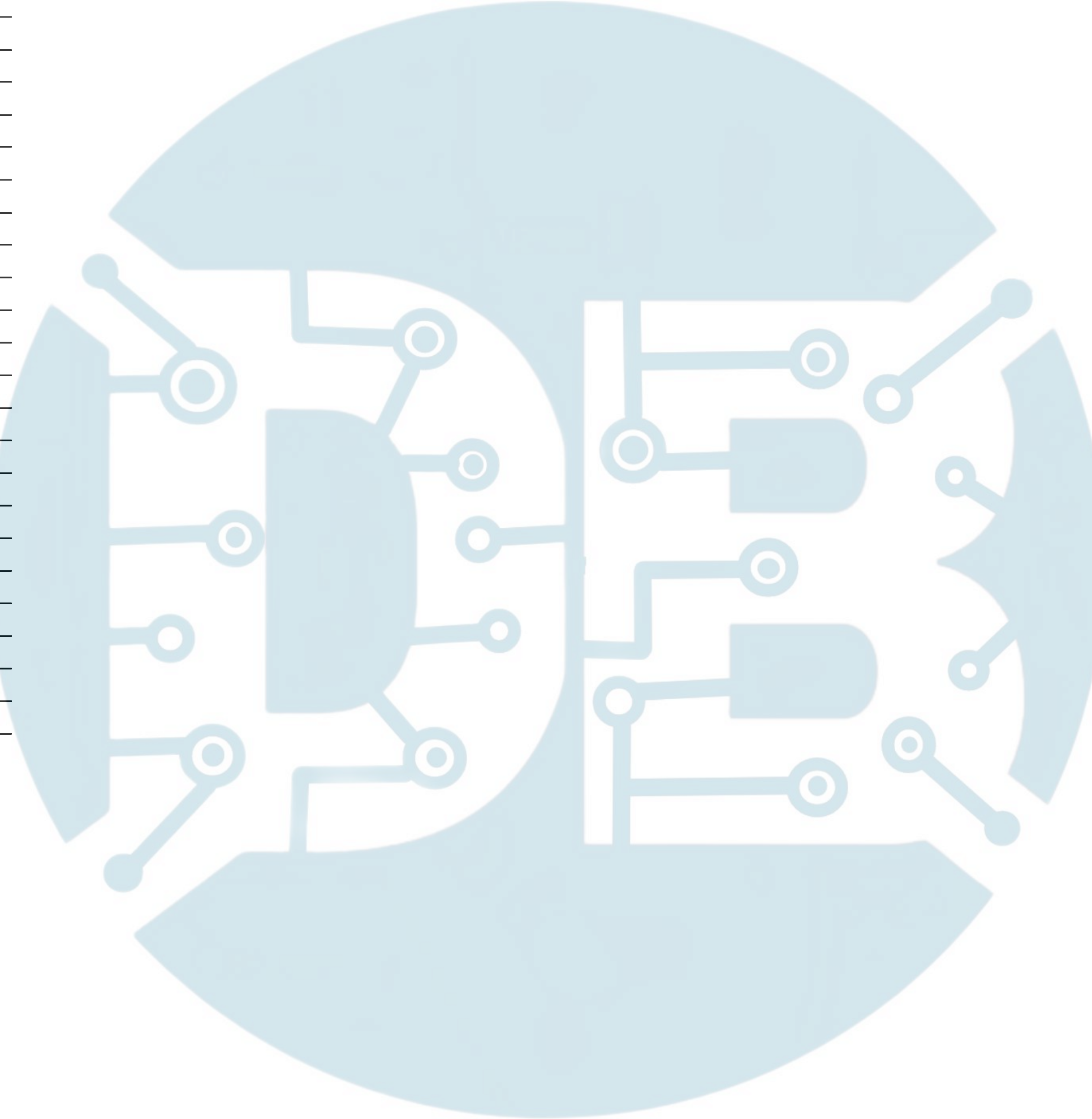
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19780565	19780593	ALTERNATE	Y501_RF	19P2 MHZ XTAL
19780598	19780593	ALTERNATE	Y501_RF	19P2 MHZ XTAL
138800101	138800095	ALTERNATE	ALL	TRANSITION CAP
335800013	33580894	ALTERNATE	EPROM_RF	IC EEPROM
353800253	353800321	ALTERNATE	SWPMX_RF	IC SWITCH SPDT
155800235	155800234	ALTERNATE	UPPDI_RF	NOLMBRF

ALL:C5616_RF-C5618_RF,C5632_RF-C5634_RF

AP CONNECTIONS



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BOM OPTIONS:

LMBRF:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353800723	1	MLB PAD	MLBPA_RF	CRITICAL	LMBRF
11780002	1	MLB PAD LAT OUTPUT MATCH	R7105_RF	CRITICAL	LMBRF
15282042	1	MLB PAD UAT OUTPUT MATCH	R7106_RF	CRITICAL	LMBRF
353800627	1	MLB LNA	MLBLN_RF	CRITICAL	LMBRF
11780002	1	MLB LNA OUTPUT MATCH	R6710_RF	CRITICAL	LMBRF
155800139	1	PENTAPLEXER	PPLXR_RF	CRITICAL	LMBRF
11880643	1	RES,NF,4.99K OHM,01005	R7506_RF	CRITICAL	LMBRF
155800193	1	FLTR,DIPLEXER,LA-MB-HB,DPX,SHIELD,0805	UATDI_RF	CRITICAL	LMBRF
155800158	1	FLTR,DIPLEXER,LA-MB/HB,MIRROR,0805	UPPDI_RF	CRITICAL	LMBRF
337880284	1	IC,SECURE ELEMENT,BQMG0211,ML80A25	SE2_RF	CRITICAL	LMBRF
13880739	1	CAP,1UF,0201	C7201_RF	CRITICAL	LMBRF
13880739	1	CAP,1UF,0201	C7528_RF	CRITICAL	LMBRF
13280316	1	CAP,0.1UF,01005	C7501_RF	CRITICAL	LMBRF
13880739	1	CAP,1UF,0201	C7523_RF	CRITICAL	LMBRF
13880739	1	CAP,1UF,0201	C7524_RF	CRITICAL	LMBRF
138800032	1	CAP,2.2UF,0201	C7529_RF	CRITICAL	LMBRF
138800032	1	CAP,2.2UF,0201	C7530_RF	CRITICAL	LMBRF
13180217	1	CAP,100PF,01005	C7531_RF	CRITICAL	LMBRF
11880627	1	RES,10KOHM,01005	R7512_RF	CRITICAL	LMBRF
353800026	1	LDO,REGA,2X2	SE2LDO_RF	CRITICAL	LMBRF
13180630	1	CAP,CER,NPO/COG,27PF,2k,16V,01005	C6345_RF	CRITICAL	LMBRF
13180341	1	CAP,CER,COG,3.0PF,+/-0.05,25V,0201,BI-Q	C6348_RF	CRITICAL	LMBRF
15282006	1	IND,FILM,6.2NH,3k,400MA,US-Q,0201	L6322_RF	CRITICAL	LMBRF
13180630	1	CAP,CER,NPO/COG,27PF,2k,16V,01005	C6315_RF	CRITICAL	LMBRF
15282006	1	IND,FILM,6.2NH,3k,400MA,US-Q,0201	L6305_RF	CRITICAL	LMBRF
13180341	1	CAP,CER,COG,3.0PF,+/-0.05PF,25V,0201,BI-Q	C6306_RF	CRITICAL	LMBRF
13180630	1	CAP,CER,NPO/COG,27PF,2k,16V,01005	C6106_RF	CRITICAL	LMBRF
15282051	1	IND,1.3NH,1.1A,0201	R6404_RF	CRITICAL	LMBRF
15282000	1	IND,2.0NH,600MA,0201	R7104_RF	CRITICAL	LMBRF
131800001	1	CAP,CER,0.1PF,25V,0201	C7119_RF	CRITICAL	LMBRF
11880724	1	RES,NF,00HM,1/20W,0201	R6703_RF	CRITICAL	LMBRF
11880724	1	RES,NF,00HM,1/20W,0201	R6708_RF	CRITICAL	LMBRF
13180363	1	CAP,CER,COG,RQ,0.6PF,+/-0.05PF,25V,0201	C7123_RF	CRITICAL	LMBRF
15282002	1	IND,2.7NH,+/-0.1NH,600MA,0201,US-Q	R6605_RF	CRITICAL	LMBRF
13180337	1	CAP,1.5PF,+/-0.05PF,25V,0201,RQ	C6610_RF	CRITICAL	LMBRF
11880724	1	RES,NF,00HM,1/20W,0201	R6606_RF	CRITICAL	LMBRF
13180275	1	CAP,CER,COG,0.3PF,+/-0.1PF,25V,0201,RQ	C6416_RF	CRITICAL	LMBRF
11880608	1	RES,NF,1K OHM,1k,1/32W,01005	R5911_RF	CRITICAL	LMBRF
15281356	1	IND,10NH,3k,250MA,BI-Q,0201	C6613_RF	CRITICAL	LMBRF

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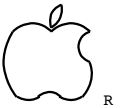
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15282020	1	DCS/PCS RX FILTER MATCH	L6320_RF	CRITICAL	NOLMBRF
155800149	1	DCS/PCS RX FILTER	GSMRX_RF	CRITICAL	NOLMBRF
15282005	1	DCS/PCS RX MATCH (DCS)	L6318_RF	CRITICAL	NOLMBRF
13180319	1	DCS/PCS RX MATCH (DCS)	C6332_RF	CRITICAL	NOLMBRF
13180630	1	DCS/PCS RX MATCH (DCS)	C6340_RF	CRITICAL	NOLMBRF
15282005	1	DCS/PCS RX MATCH (DCS)	L6319_RF	CRITICAL	NOLMBRF
13180385	1	DCS/PCS RX MATCH (DCS)	C6333_RF	CRITICAL	NOLMBRF
13180630	1	DCS/PCS RX MATCH (DCS)	C6341_RF	CRITICAL	NOLMBRF
155800163	1	QUADPLEXER	PPLXR_RF	CRITICAL	NOLMBRF
155800199	1	FLTR,DPX,PASS THRU,LA-MB-HB,SHLD,0805	UATDI_RF	CRITICAL	NOLMBRF
155800234	1	FLTR,DPX,PASS THRU,LA-MB-HB,UNSHLD,0805	UPPDI_RF	CRITICAL	NOLMBRF
11880724	1	RES,NF,00HM,1/20W,0201	R6404_RF	CRITICAL	NOLMBRF
15282044	1	IND,2.2NH,+/-0.1NH,600MA,0201	R7104_RF	CRITICAL	NOLMBRF
152800157	1	1.2NH,+/-0.05NH,1.1A,US-Q,0201	R6703_RF	CRITICAL	NOLMBRF
13180549	1	18PF,0201,25V	R6708_RF	CRITICAL	NOLMBRF
13180445	1	CAP,CER,12PF,5k,25V,0201,BI-Q	R6606_RF	CRITICAL	NOLMBRF

D10 SPECIFIC:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
13180278	1	CAP,CER,COG,1PF,+/-0.1PF,25V,0201,BI-Q	C7120_RF	CRITICAL	D10

D11 SPECIFIC:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
13180425	1	CAP,CER,COG,0.5PF,+/-0.05PF,25V,0201,BI-Q	C7120_RF	CRITICAL	D11

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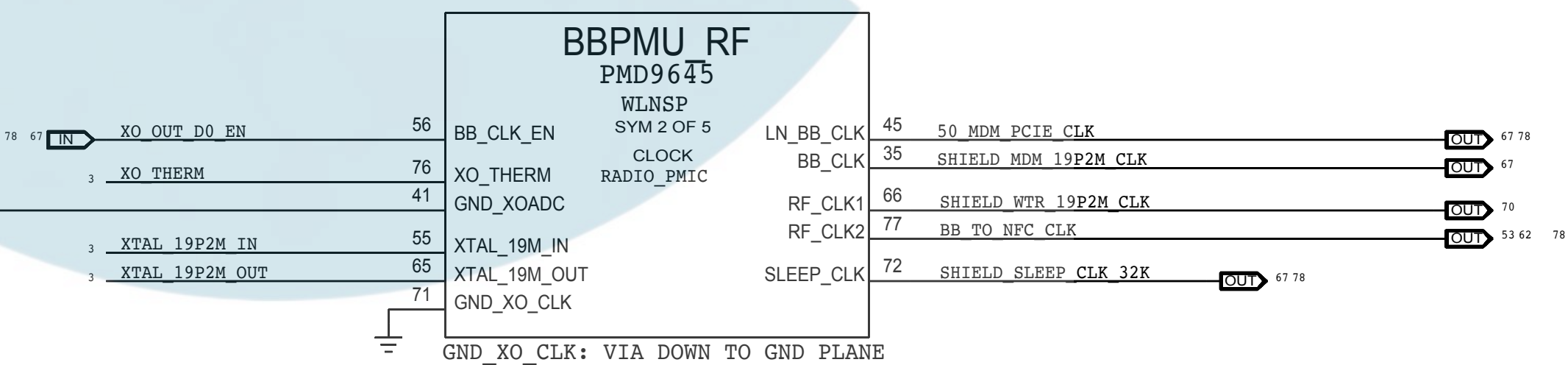
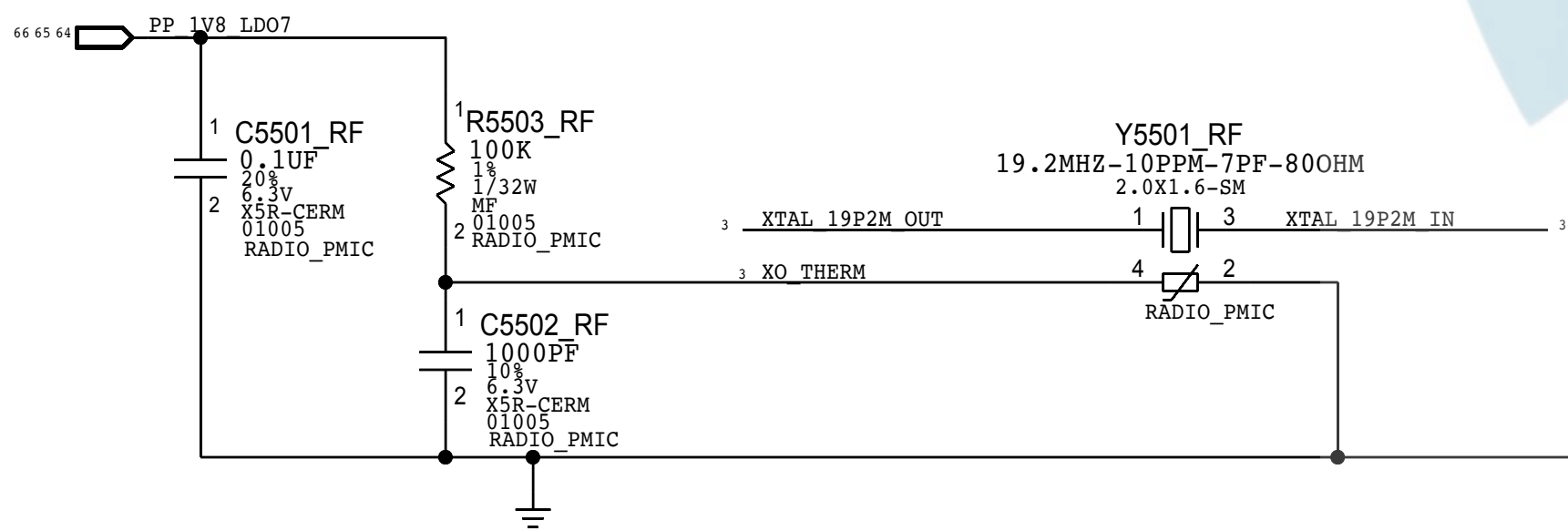
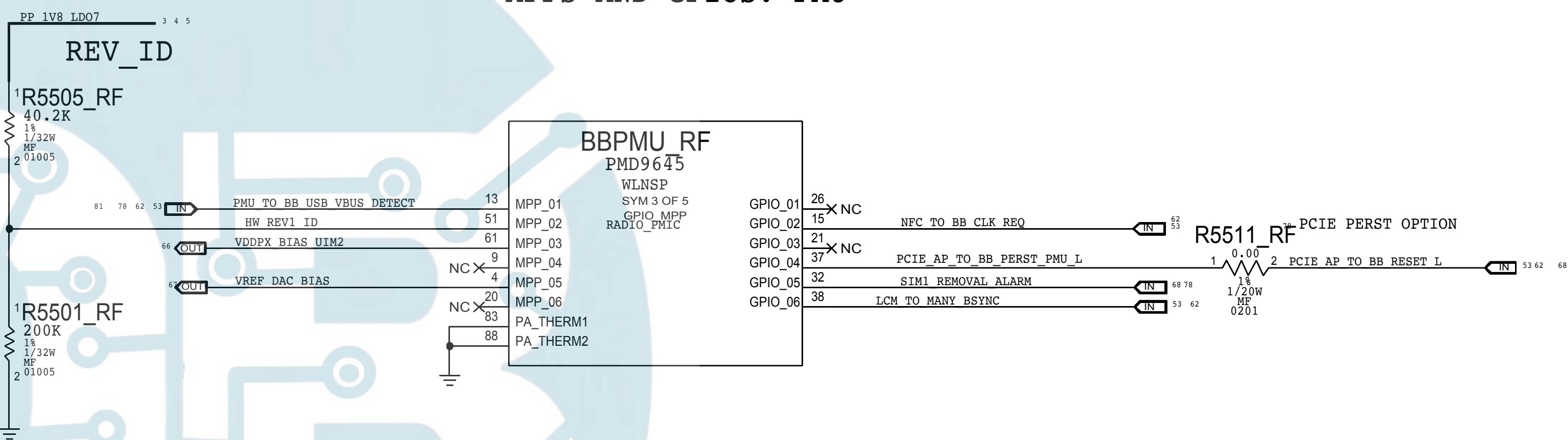
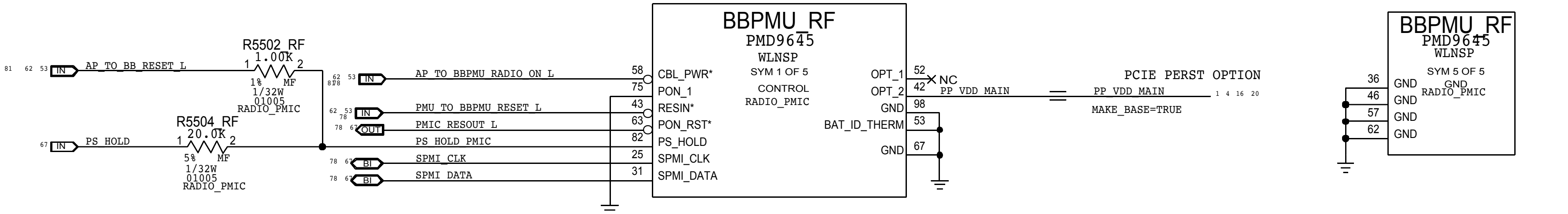
PMU: CONTROL AND CLOCKS

RESET AND CONTROL: PMU

MPPS AND GPIOs: PMU

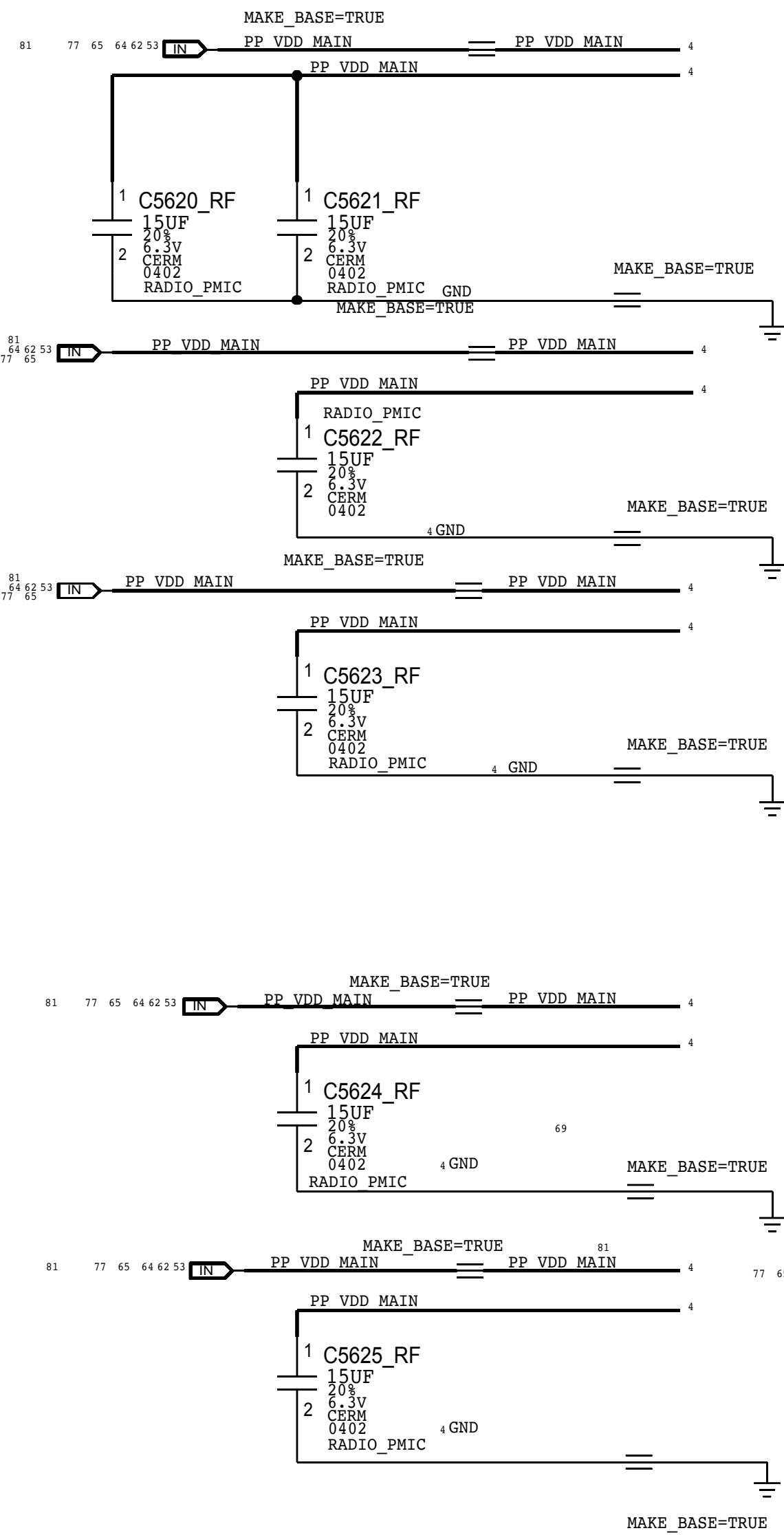
XTAL AND CLOCK: PMU

HW REV ID	R5505	R5501	REVISION
0.10V	887K	51.1K	DEV1
0.20V	422K	51.1K	DEV2
0.30V	255K	51.1K	DEV 2.1
0.40V	180K	51.1K	DEV 3
0.50V	124K	51.1K	T181
0.60V	102K	51.1K	PP/P1
0.70V	82.5K	51.1K	DEV4
0.80V	63.4K	51.1K	P2
0.90V	51.1K	51.1K	DEV5
1.00V	51.1K	63.4K	EVT
1.10V	51.1K	82.5K	EVT DOE
1.20V	50.0K	100K	EVT ALT/CARBON
1.30V	39.0K	100K	DEV6
1.40V	14.7K	51.1K	CARRIER
1.50V	40.2K	200K	DVT
1.60V	6.34K	51.1K	PVT

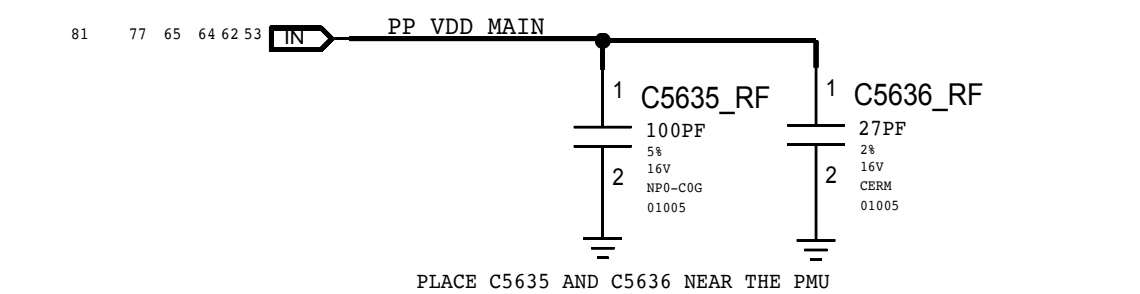


PMU: SWITCHERS AND LDOS

SWITCHERS BULK CAPS

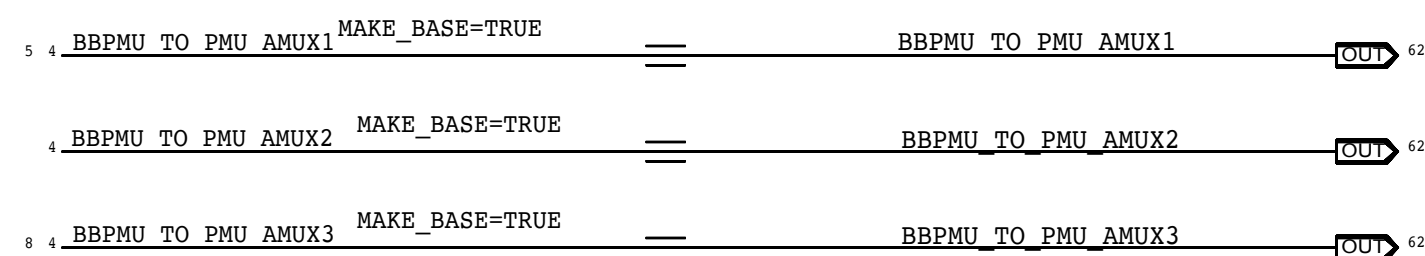
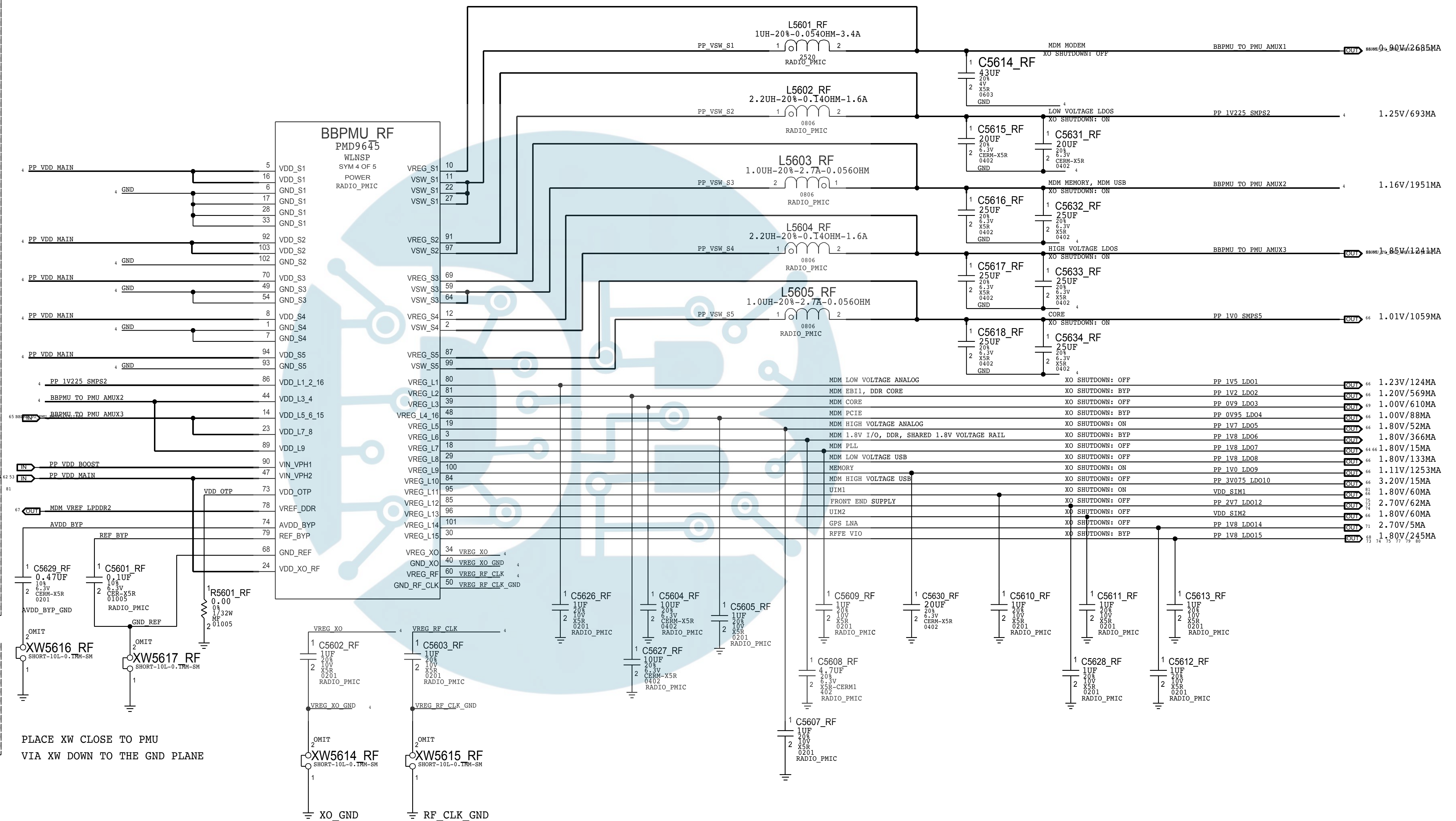



DESENSE CAPS



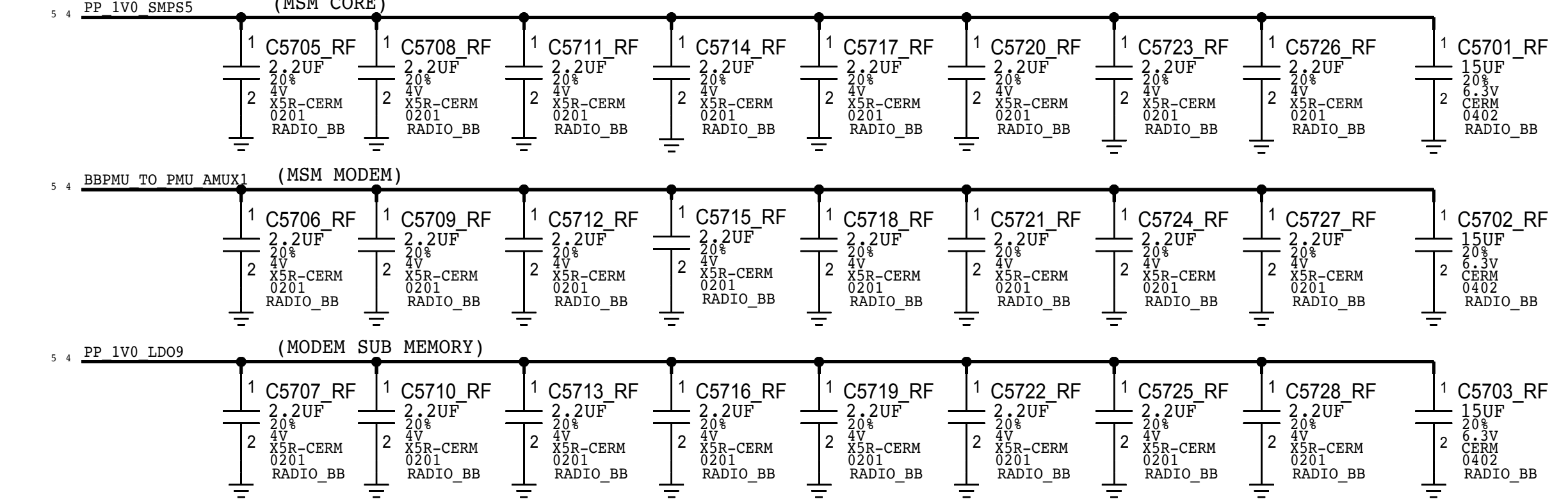
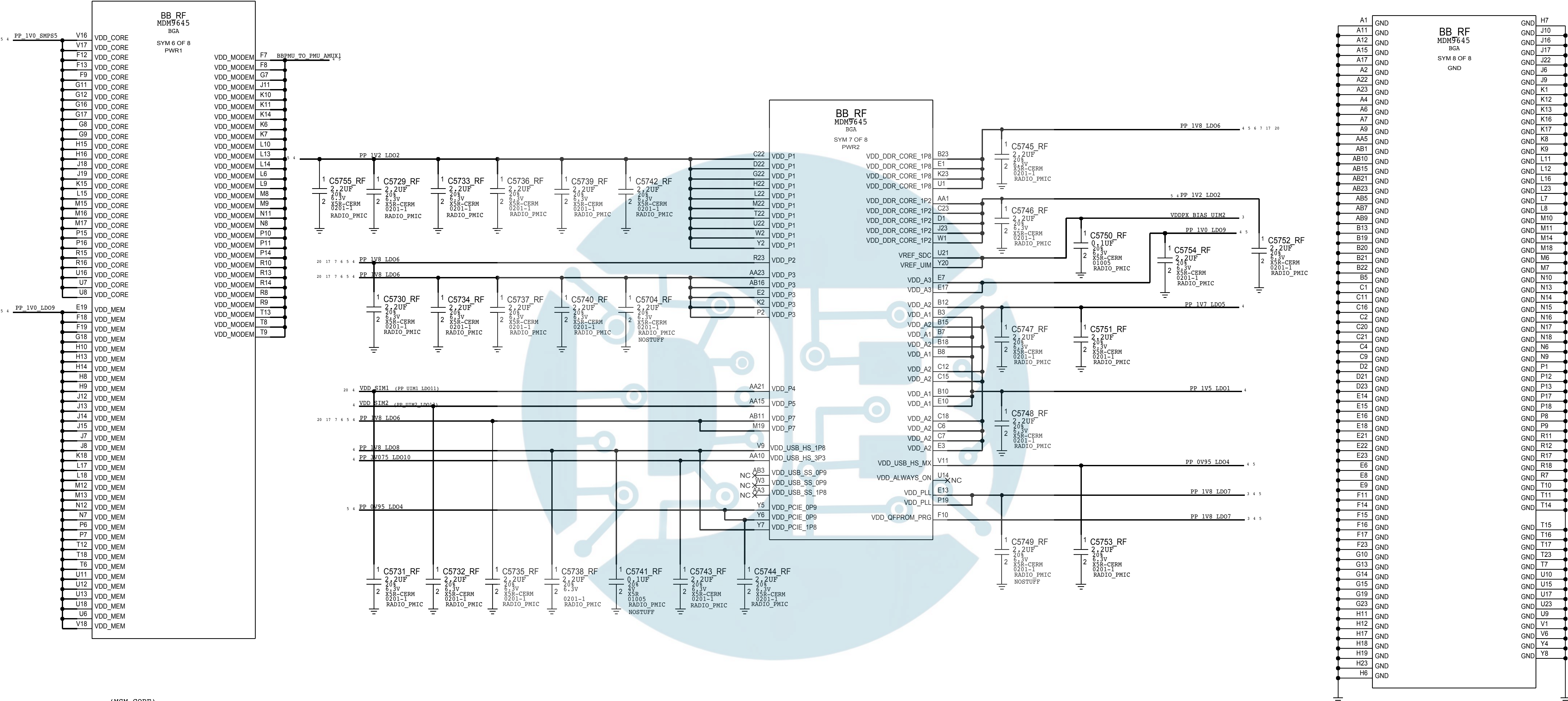
PLACE XW CLOSE TO PMU
VIA XW DOWN TO THE GND PLANE

PLACE XW CLOSE TO PMU
VIA XW DOWN TO THE GND PLANE



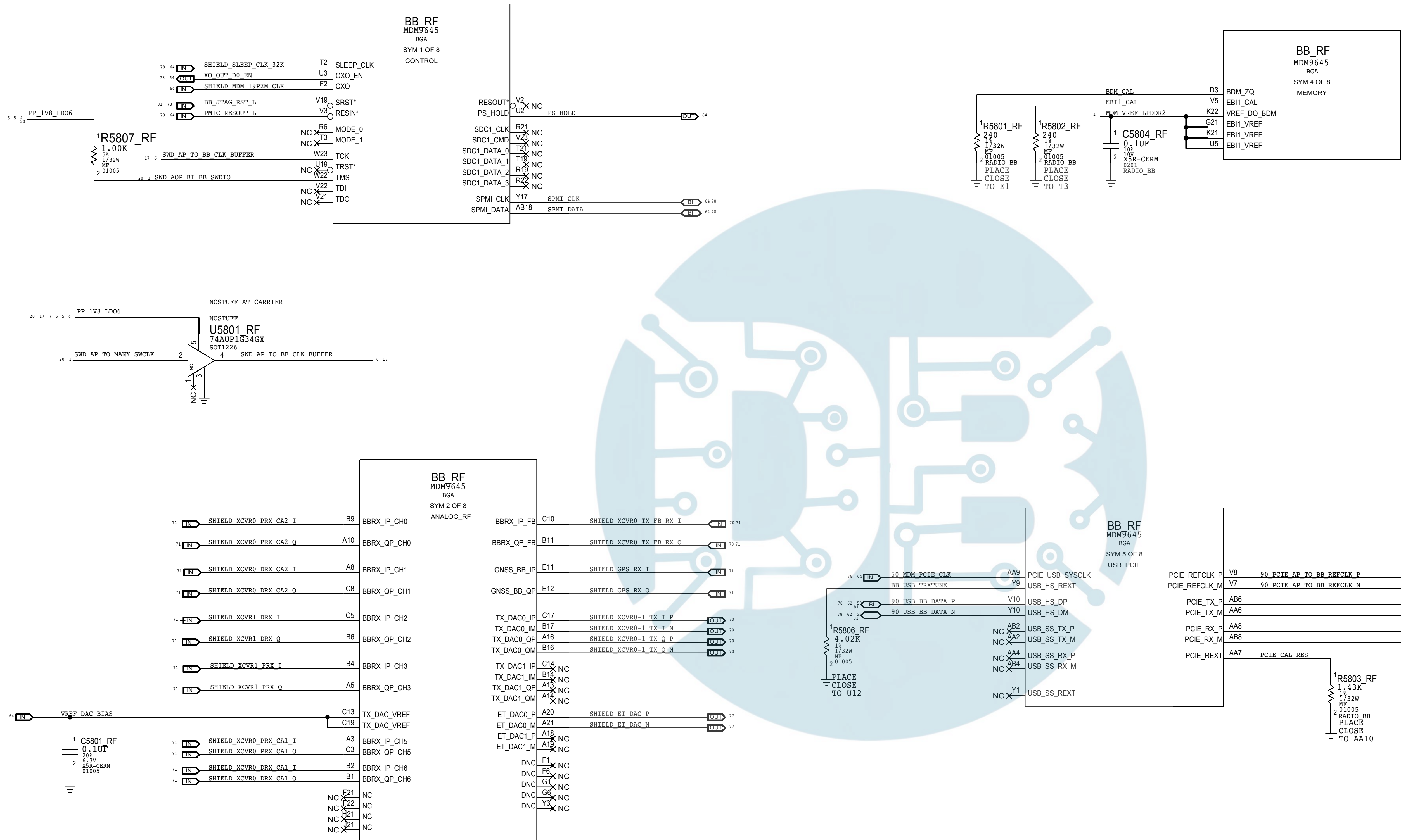
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		PAGE		
		6 OF 53		
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BASEBAND: POWER



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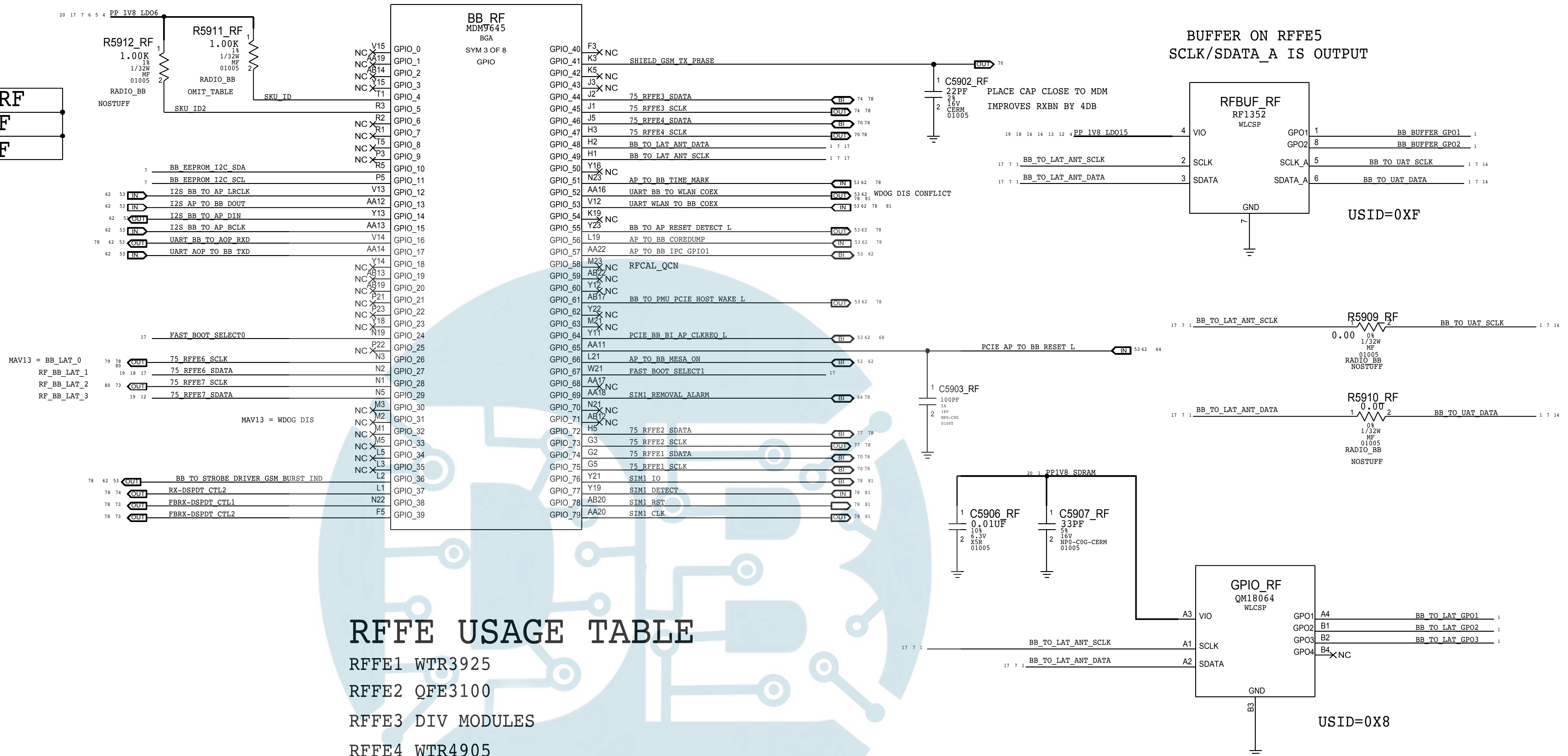
BASEBAND: CONTROL AND INTERFACES



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		051-00419	SIZE D
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6 OF 81			

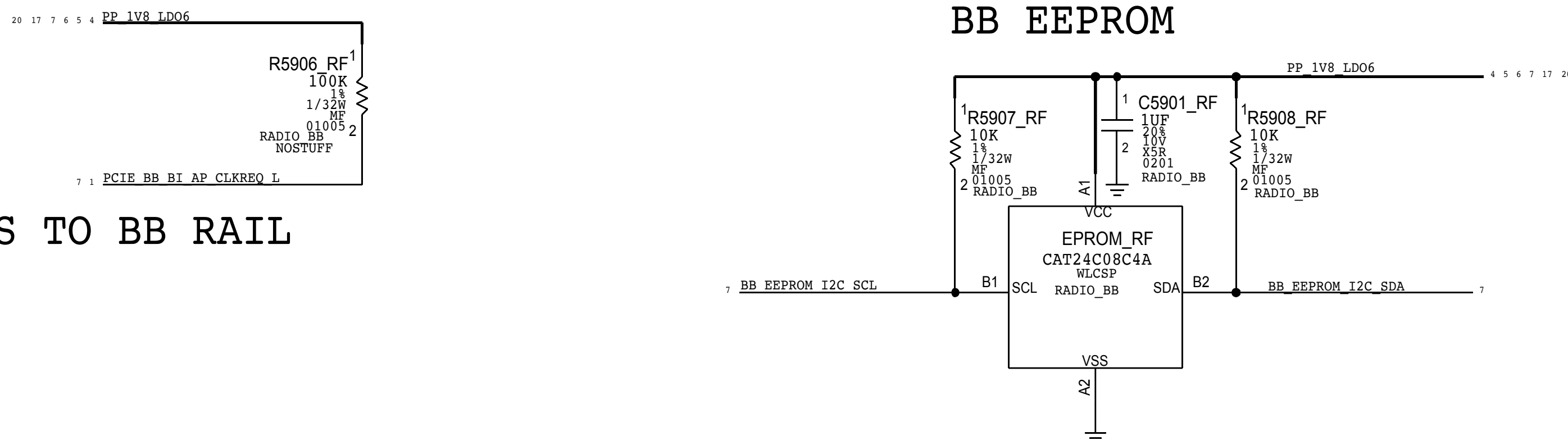
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ROW	NOSTUFF	NOSTUFF
JP	1.0 KOHM	NOSTUFF

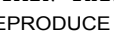


RFFE USAGE TABLE

RFFE1 WTR3925
RFFE2 QFE3100
RFFE3 DIV MODULES
RFFE4 WTR4905
RFFE5 TUNERS + ELNAS
RFFE6 2G PA,MLB PA,MB/HB TDD PA,MB/HB FDD PA
RFFE7 LB PA, COUPLERS

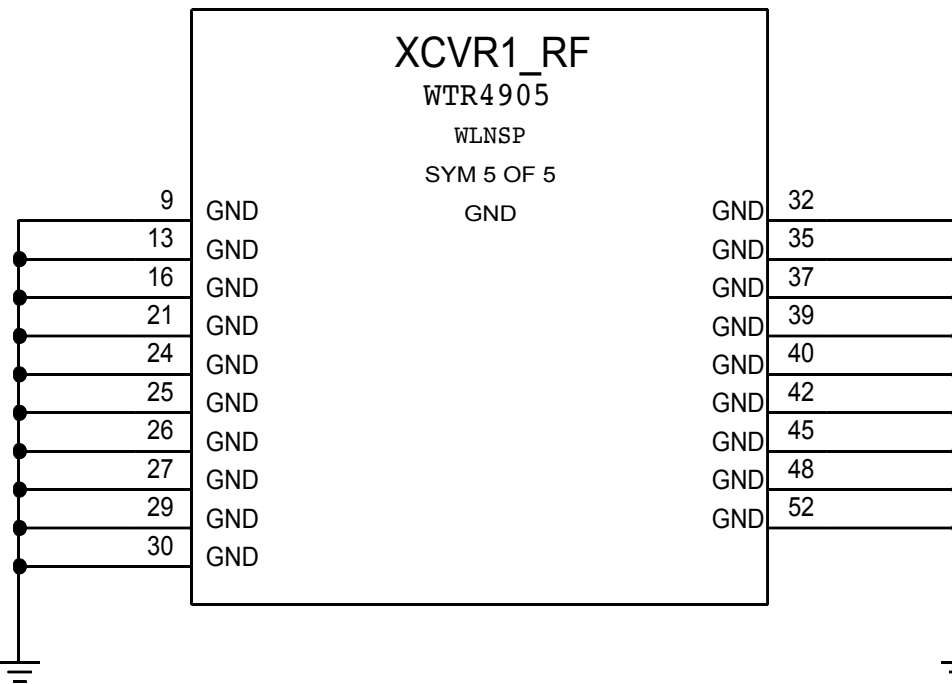
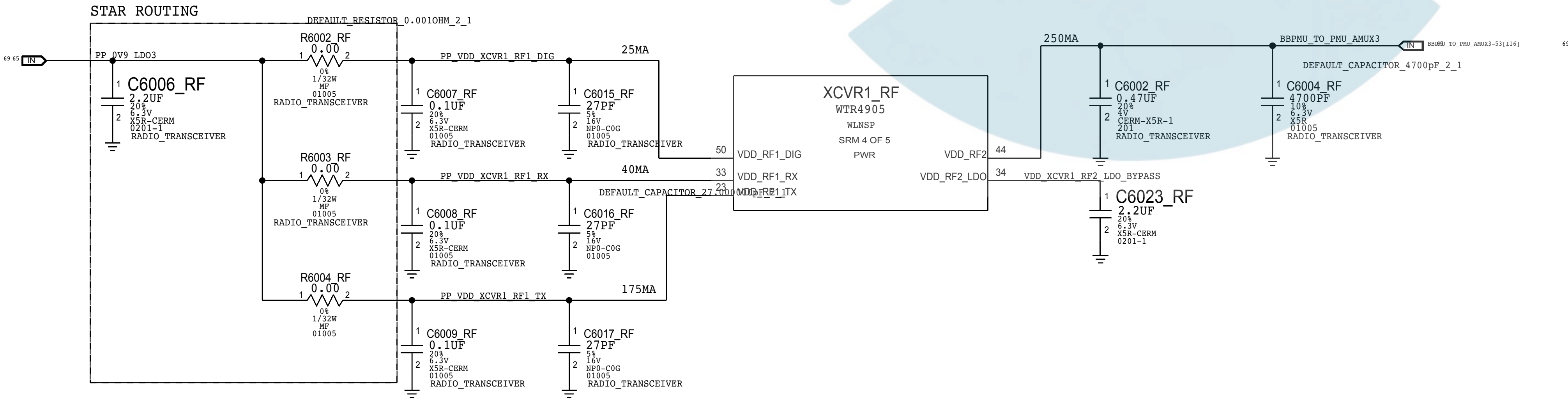
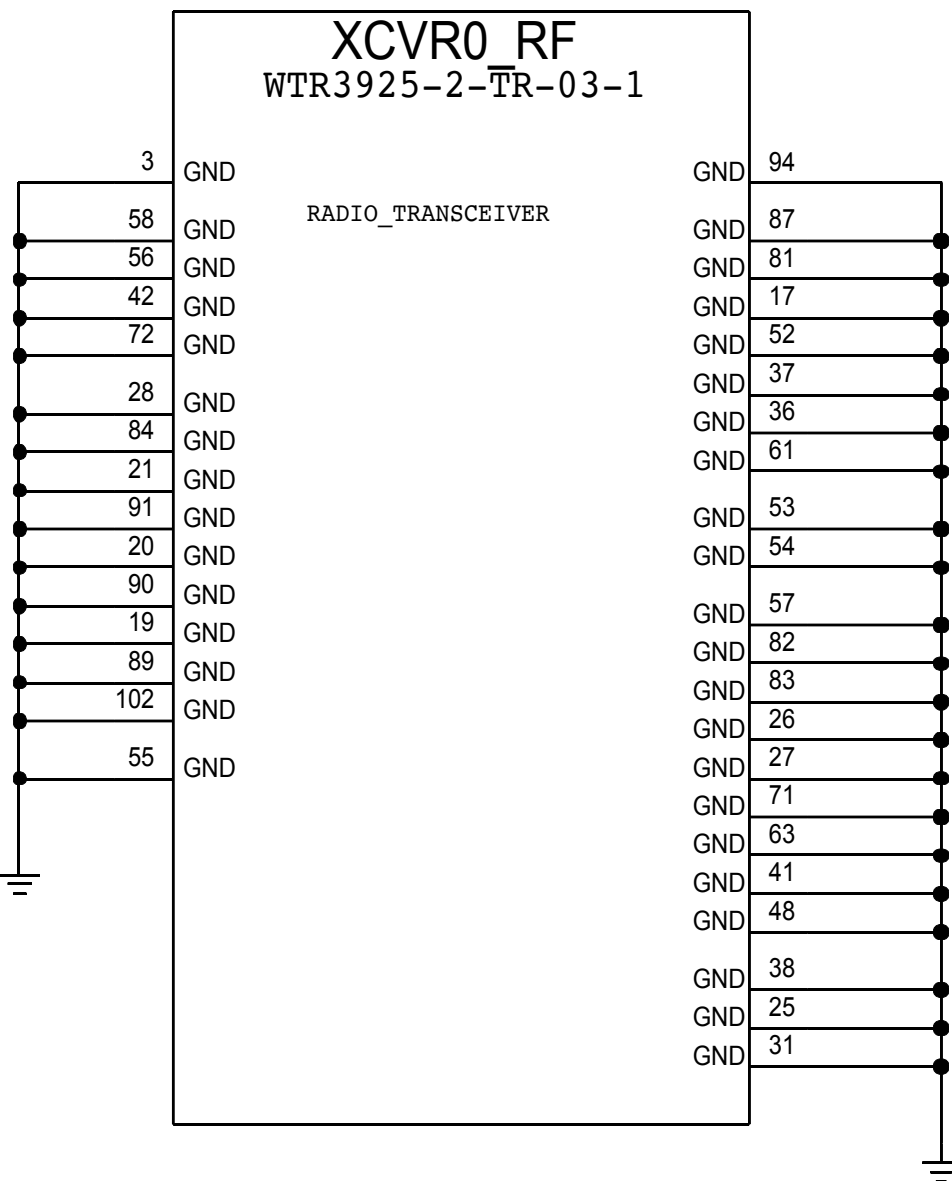
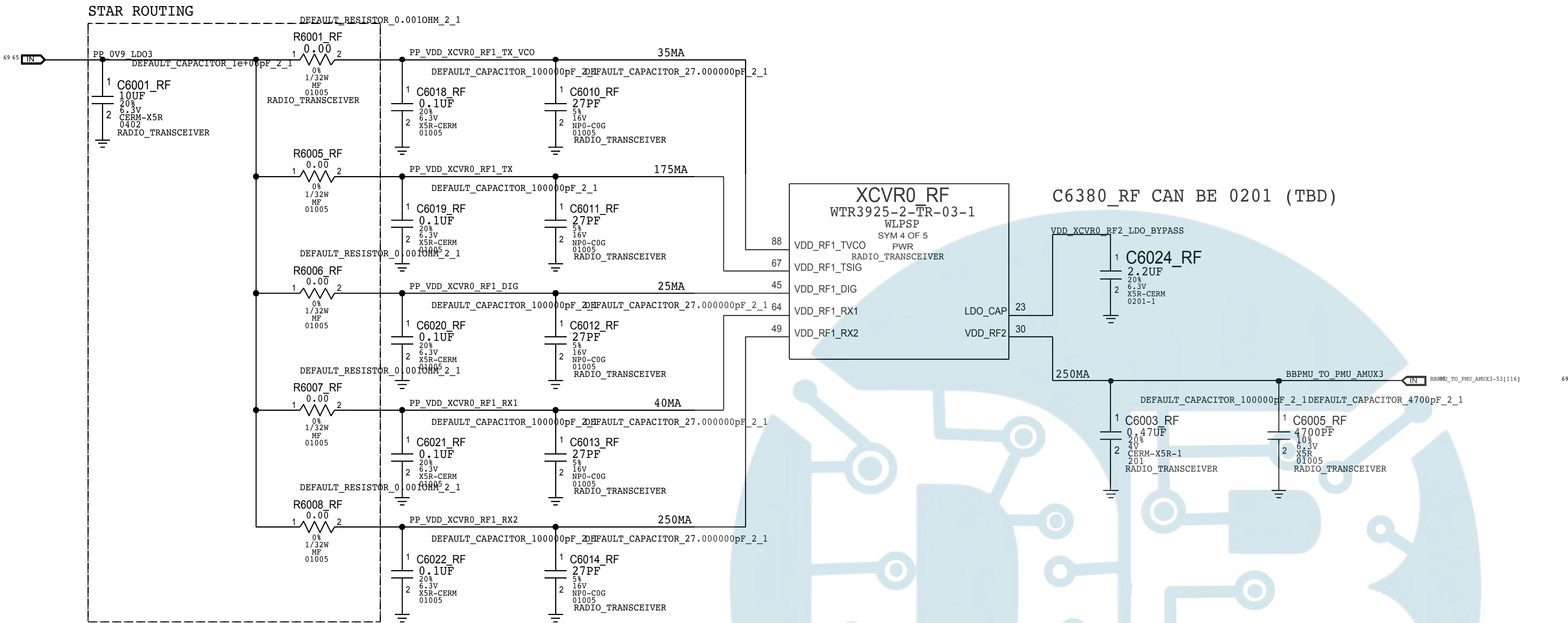


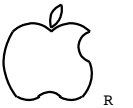
PCIE PULL-UPS TO BB RAIL

<small>FORM NO. 10-108</small>			
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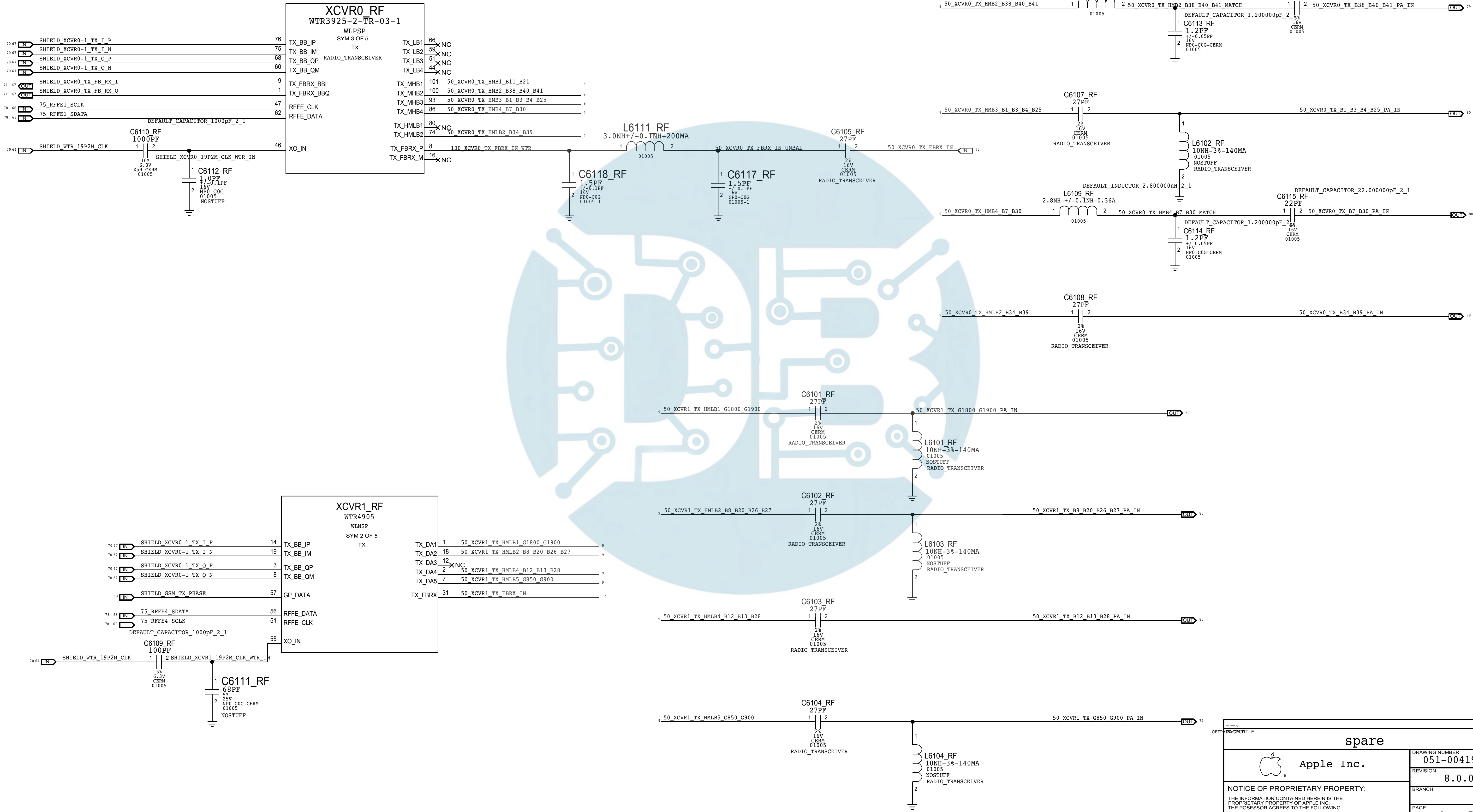
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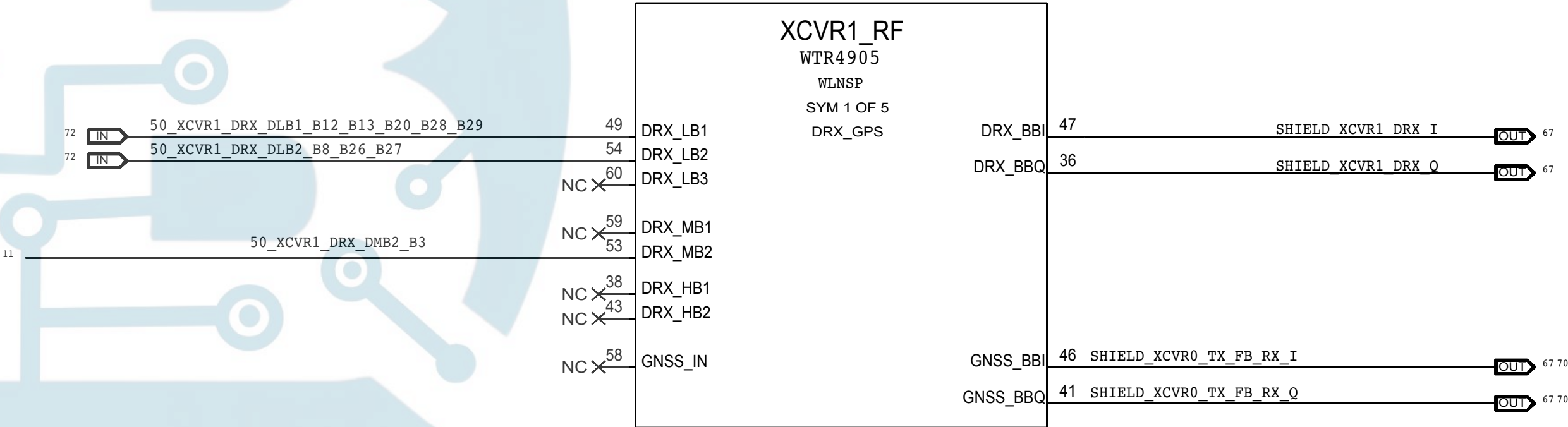
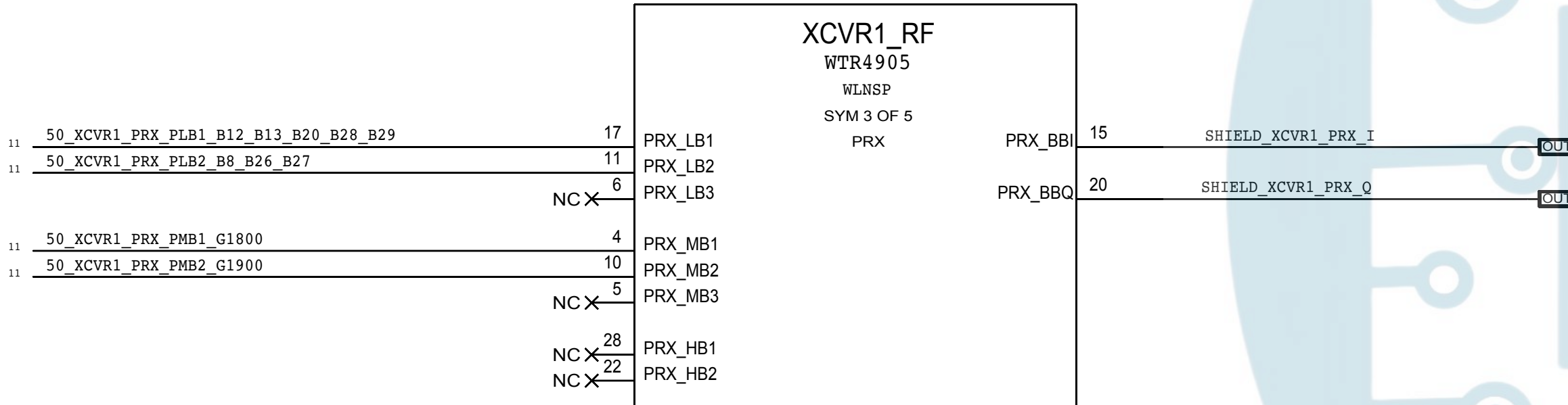
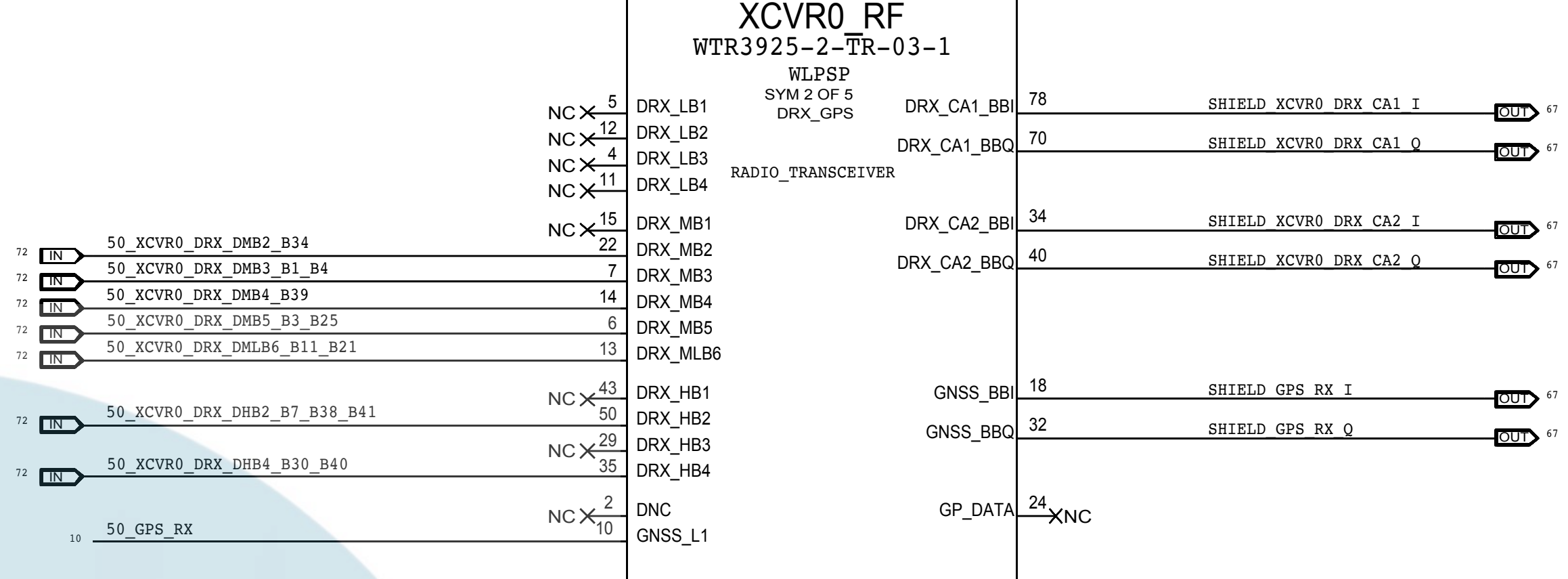
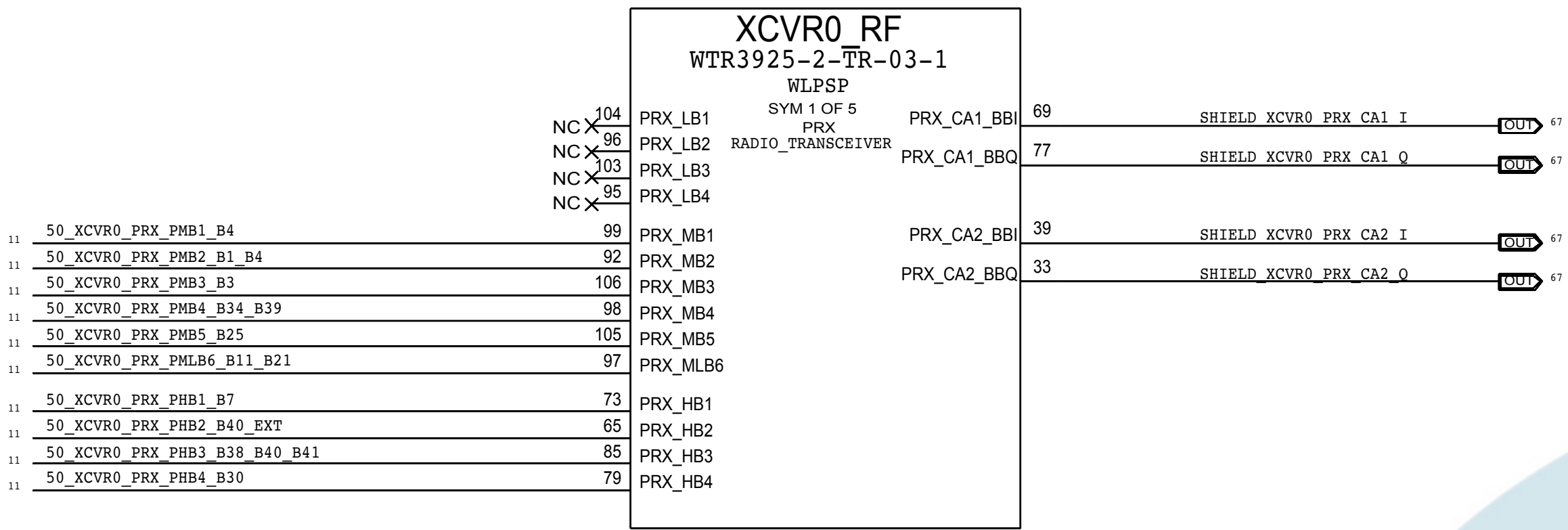


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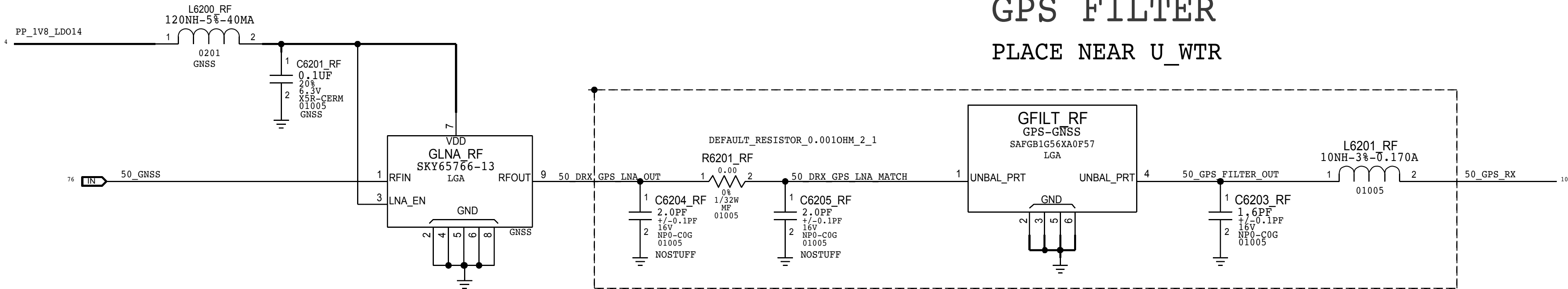
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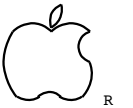


TRANSCEIVER: PRX, DRX, & GPS PORTS



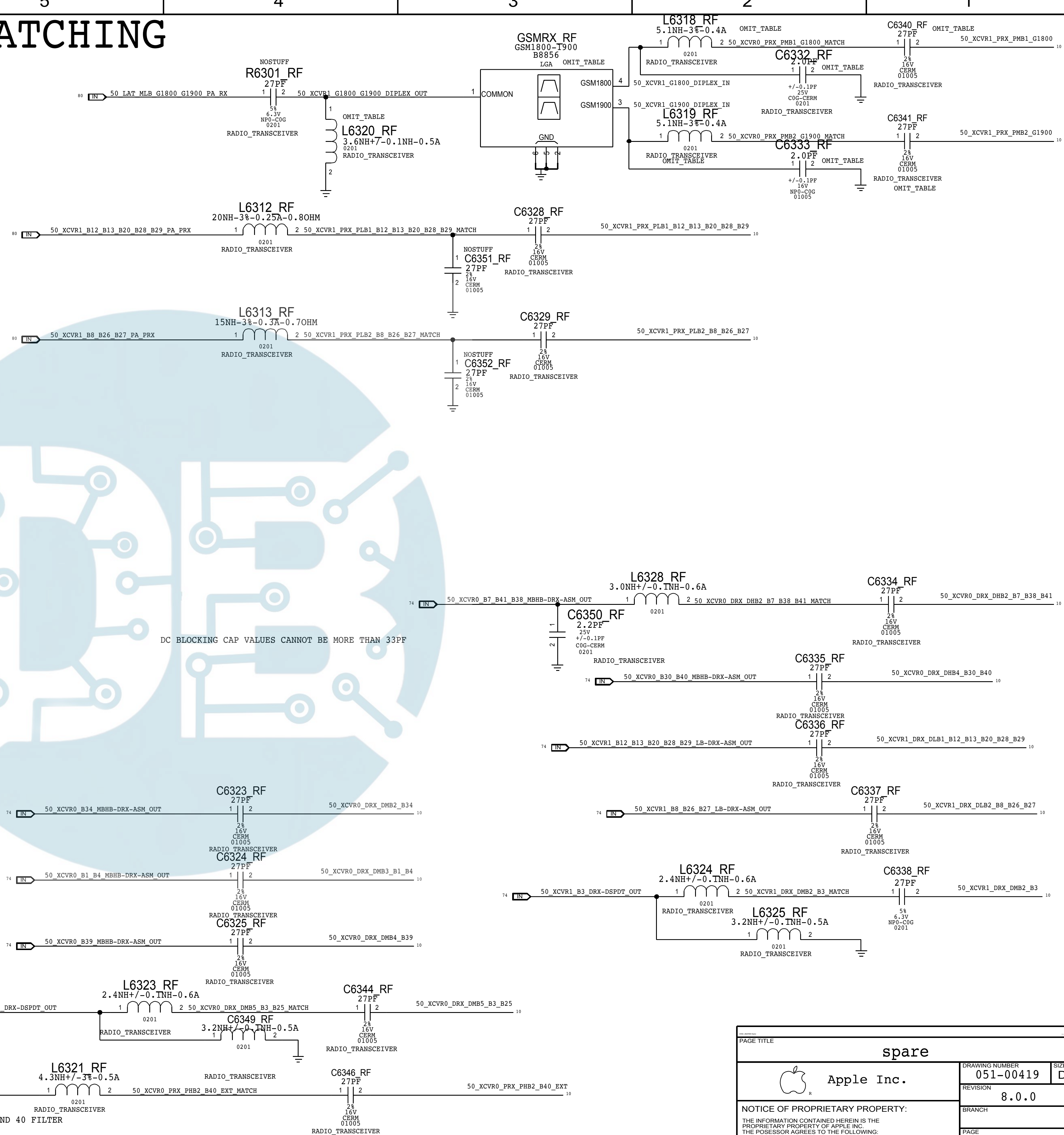
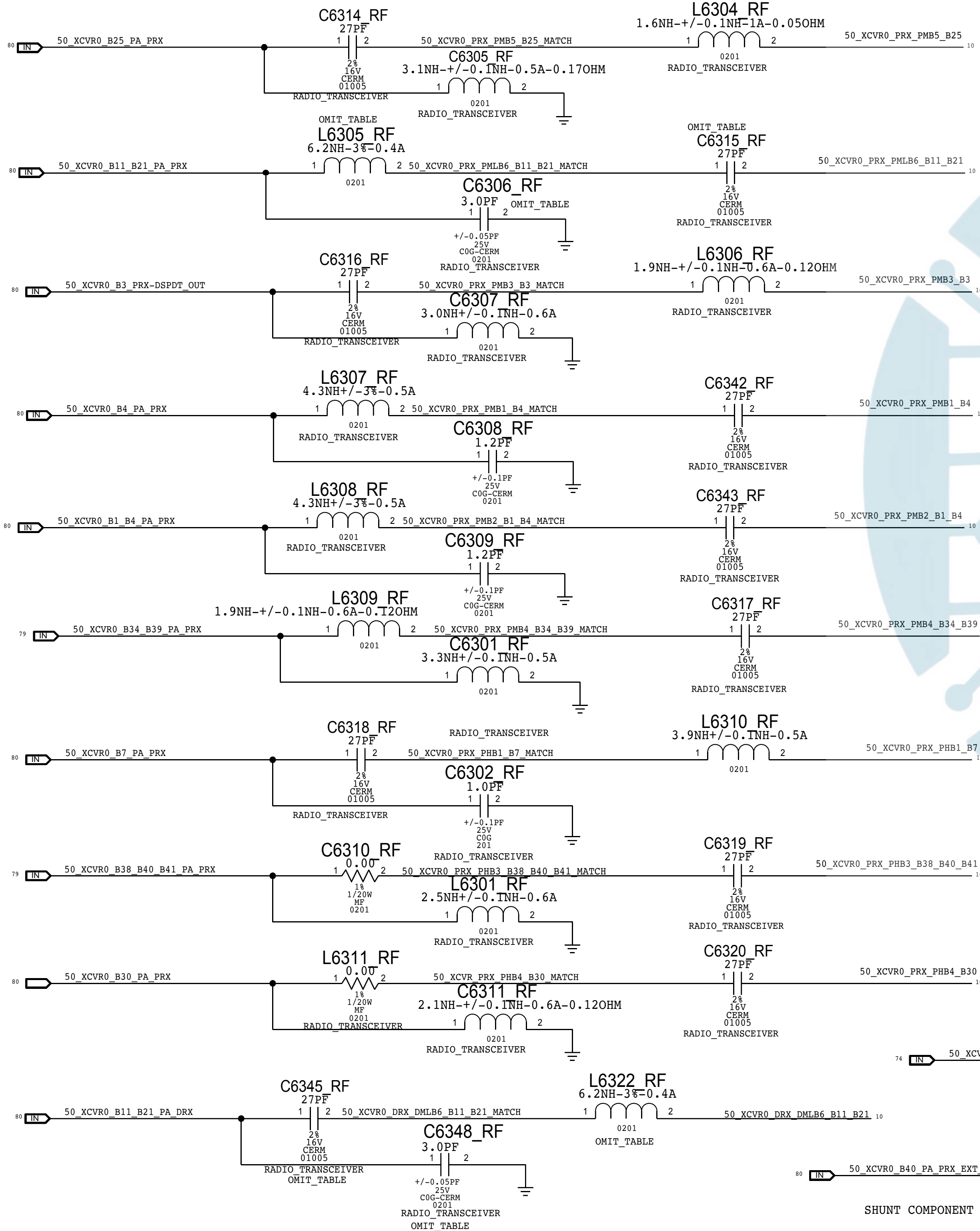
GPS FILTER
PLACE NEAR U_WTR




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PRIMARY & DIVERSITY RECEIVE MATCHING

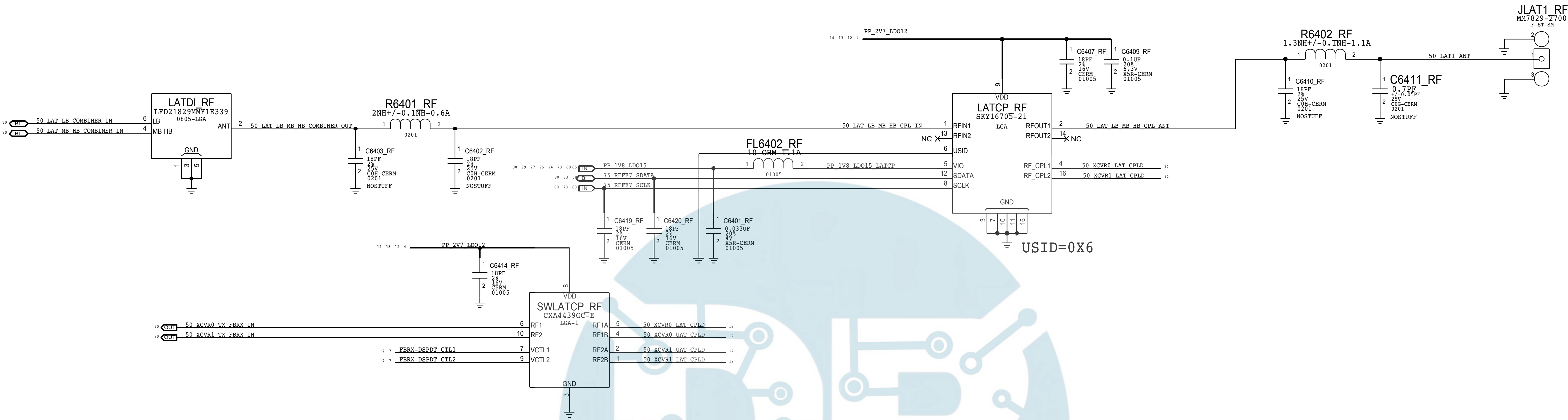
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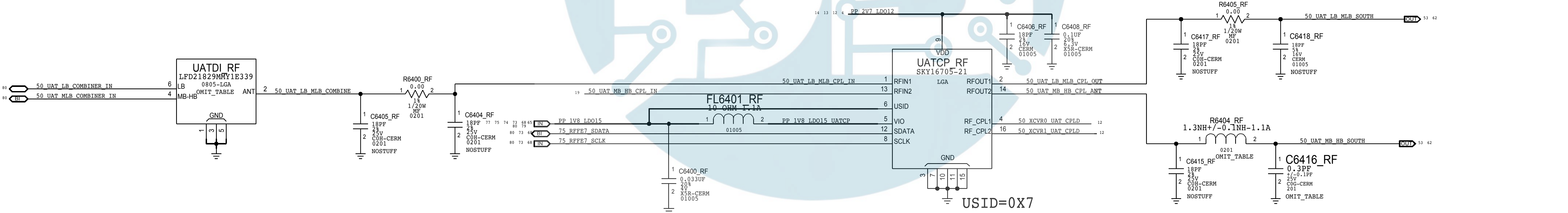
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		BRANCH			
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LOWER ANTENNA AND COUPLER

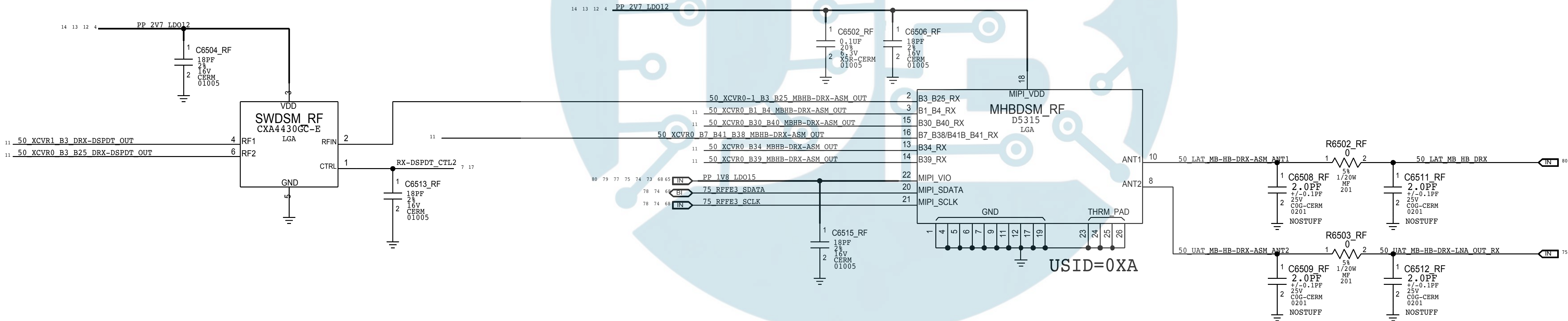
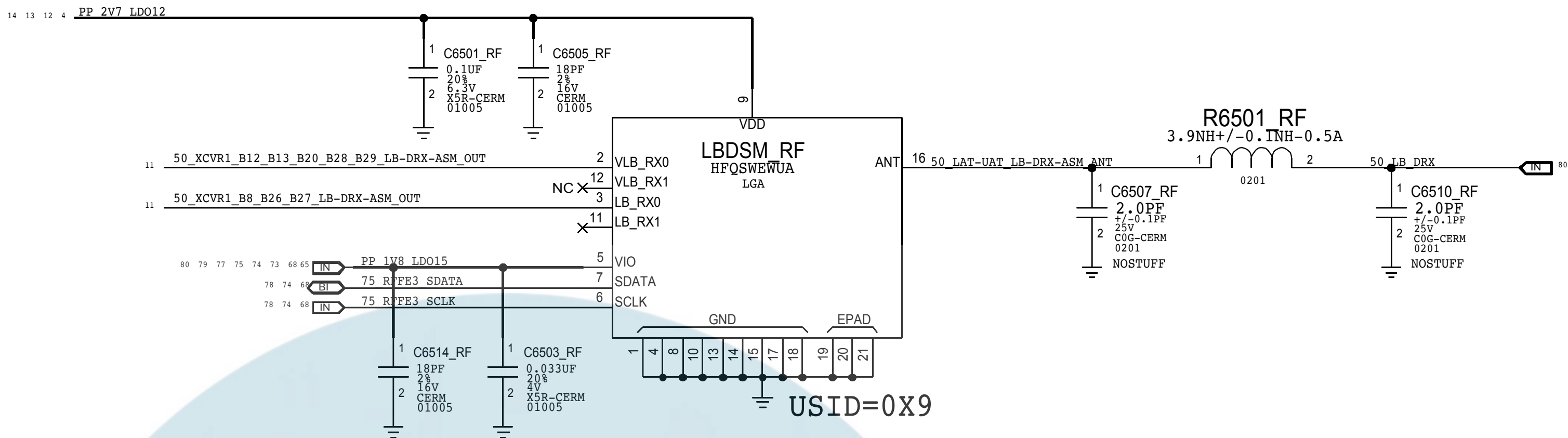


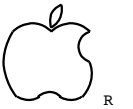
UPPER ANTENNA COUPLER



DIVERSITY RECEIVE

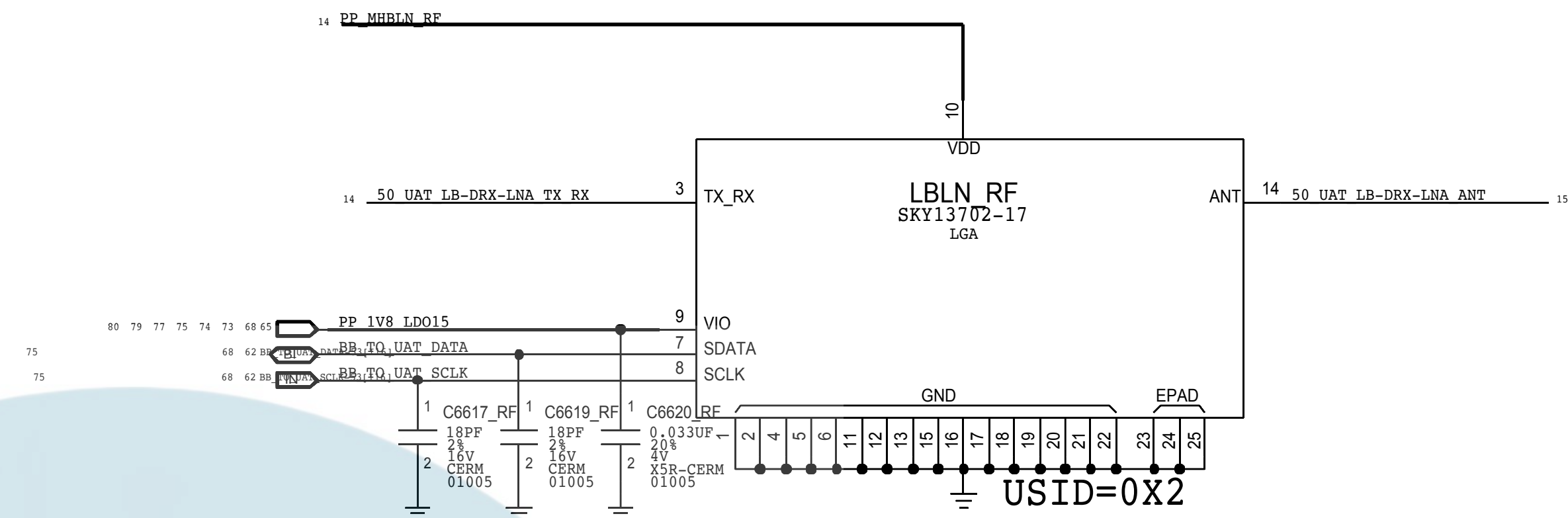
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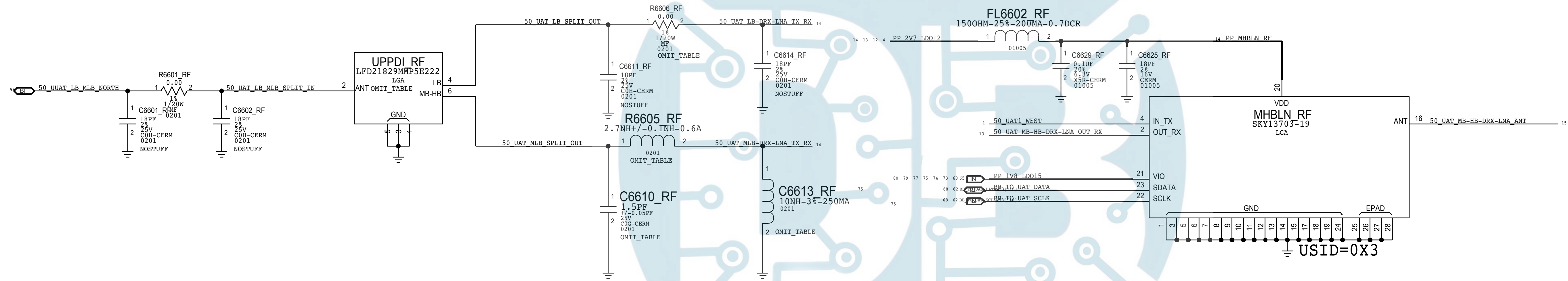
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				PAGE	6 OF 53
				SHEET	6 OF 81

DIVERSITY RECEIVE LNAS

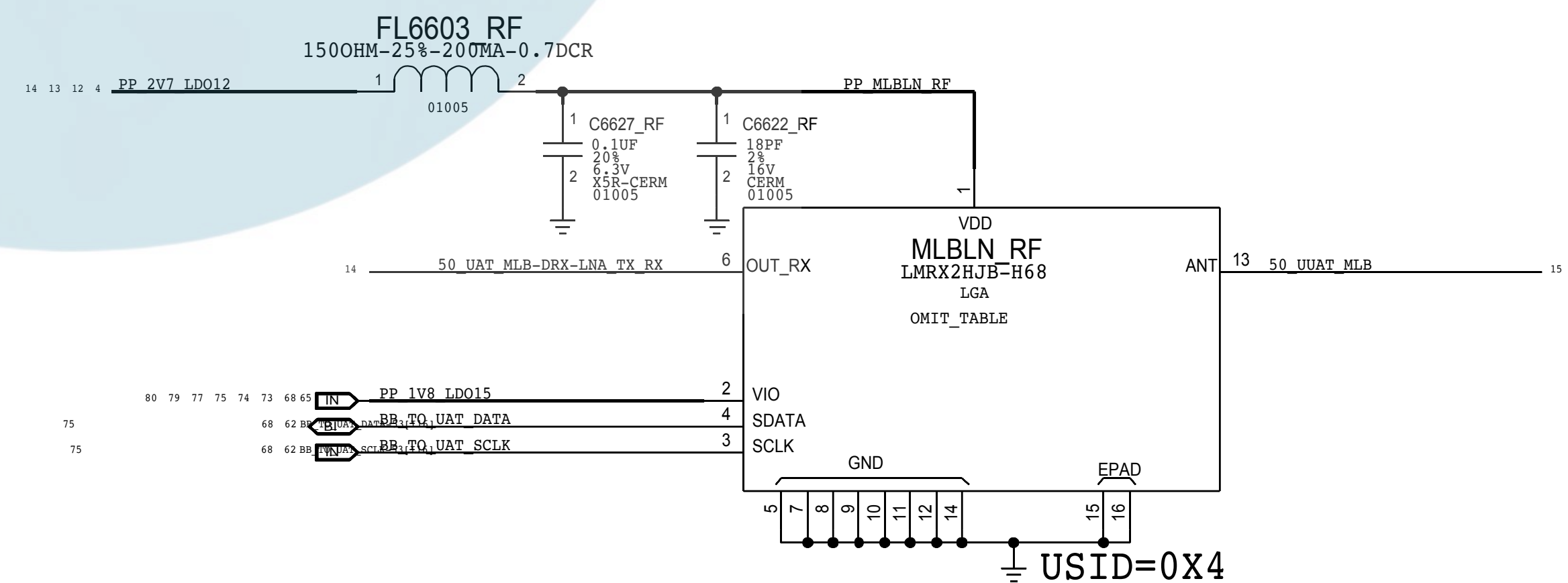
LB DRX LNA




MB/HB DRX LNA



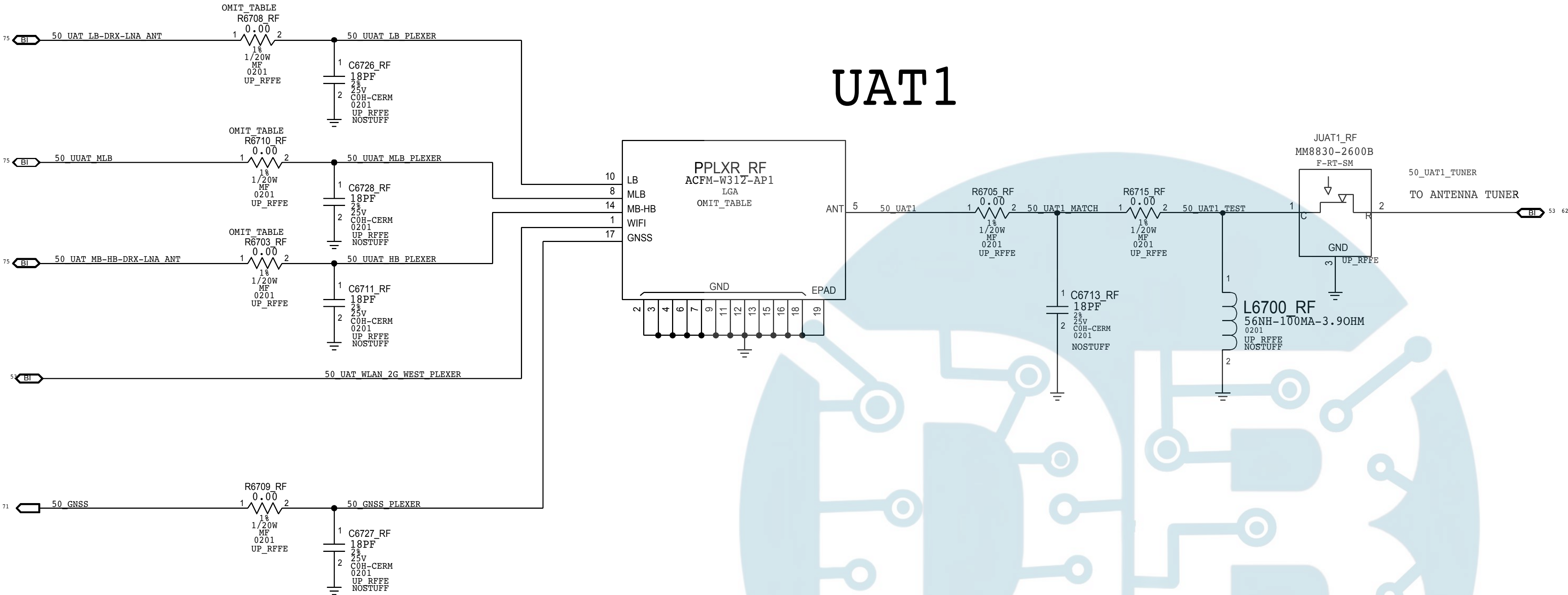
MLB DRX LNA



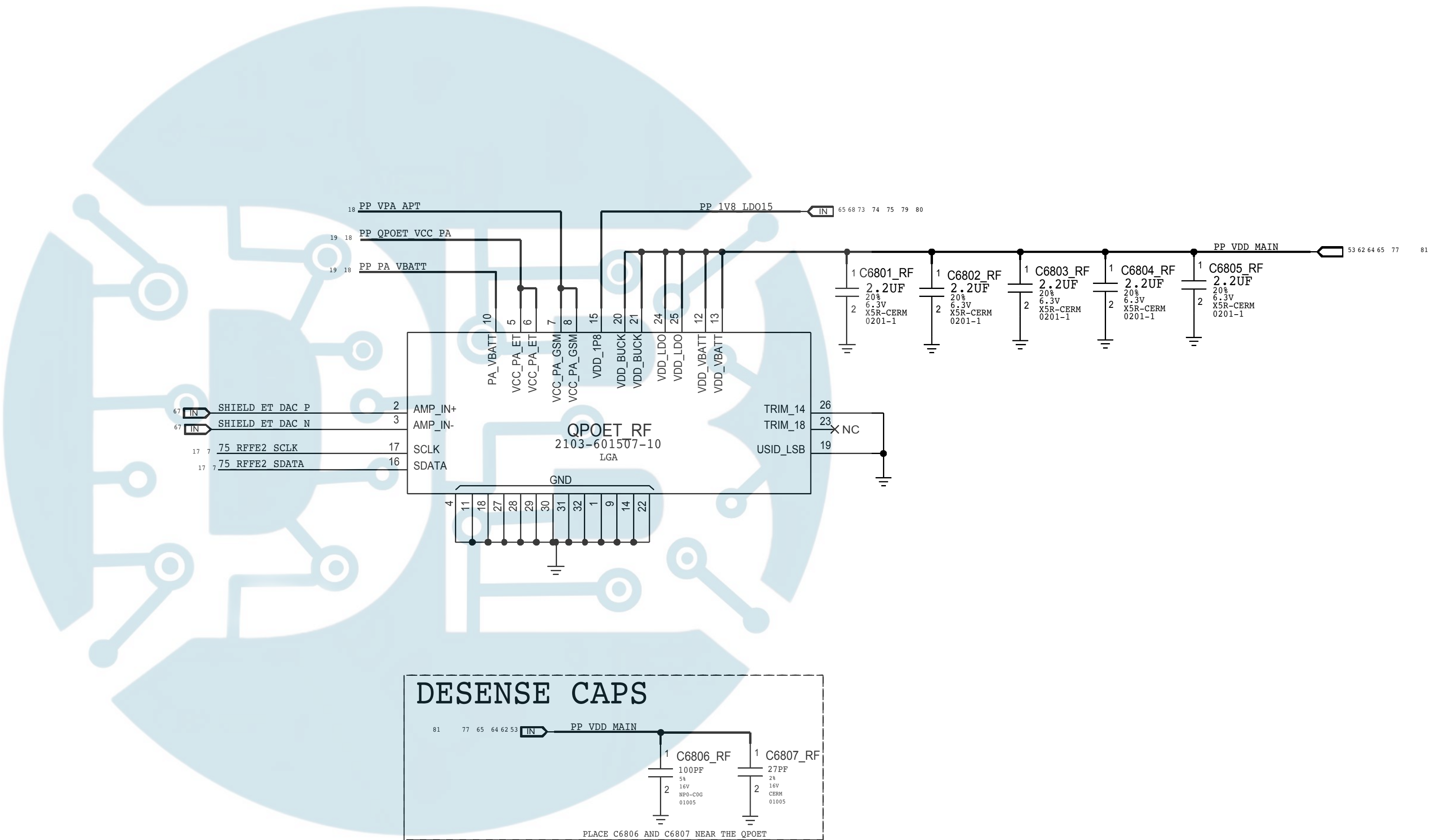
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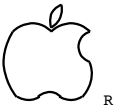
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UAT1



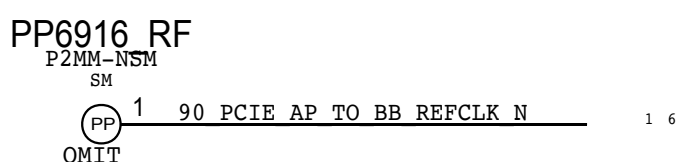
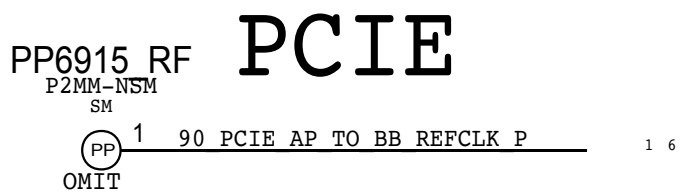
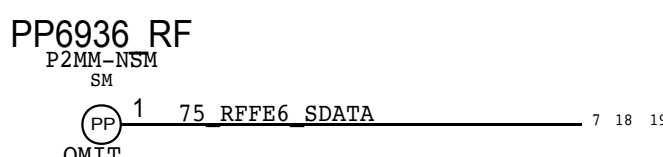
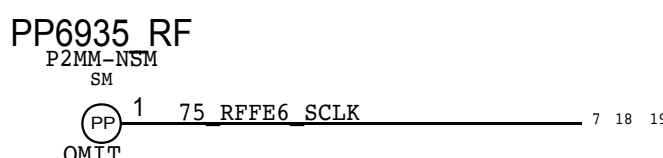
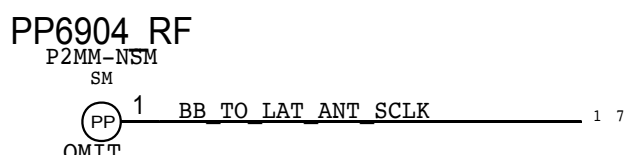
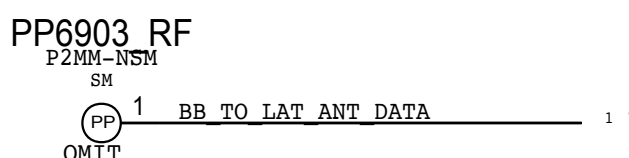
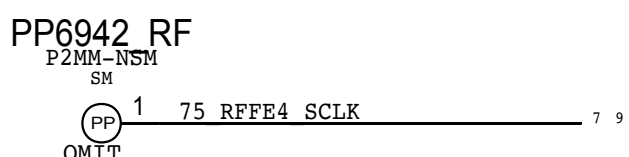
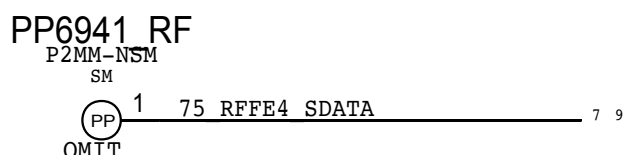
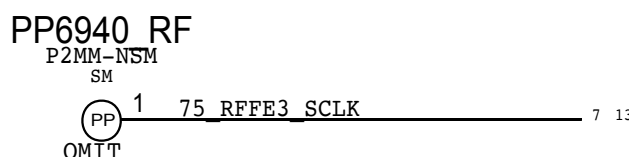
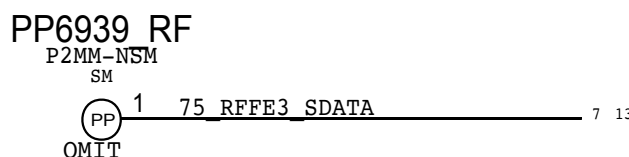
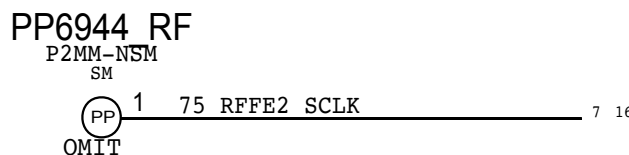
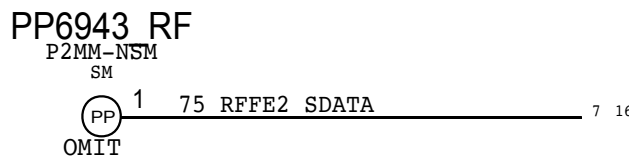
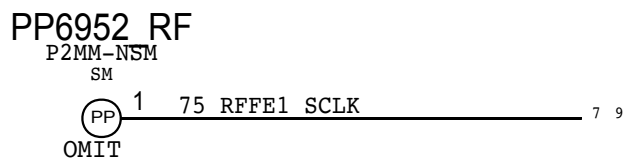
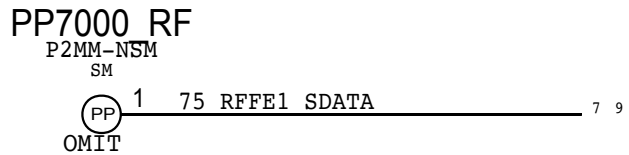
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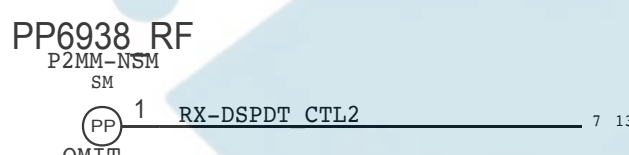
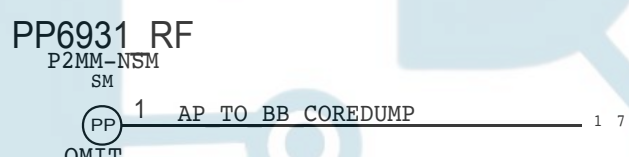
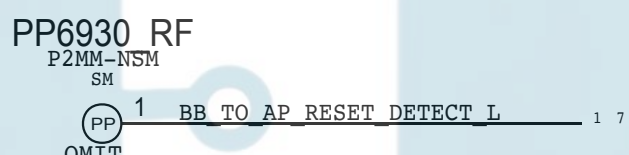
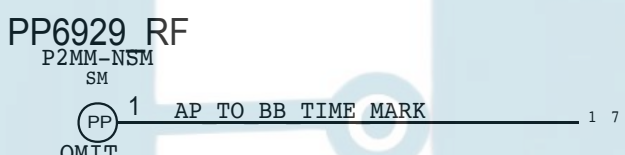
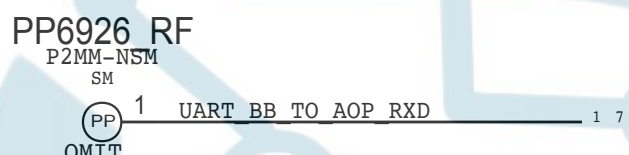
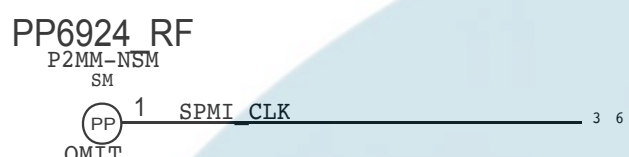
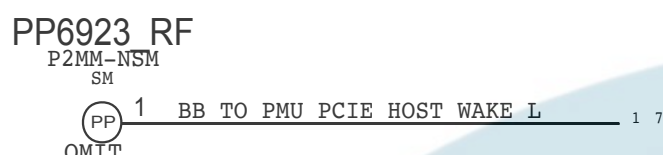
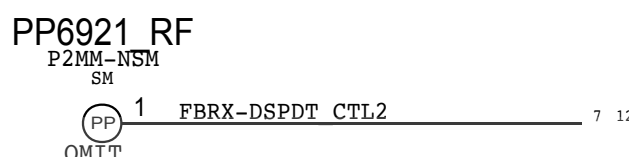
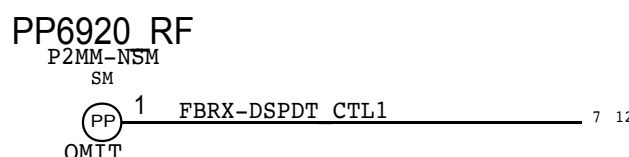
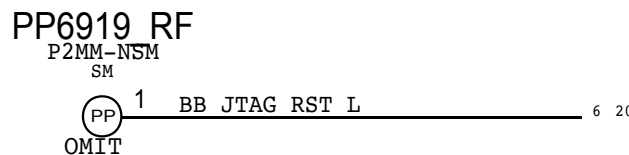
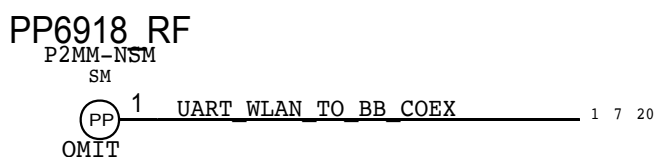
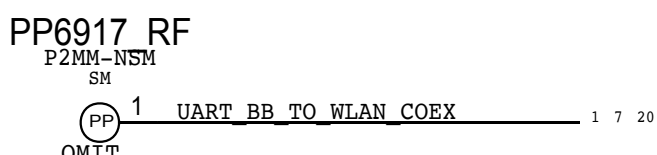
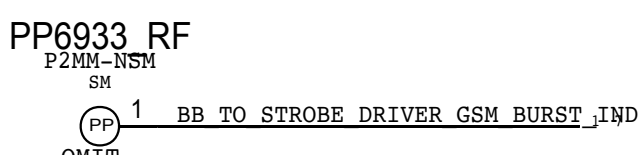
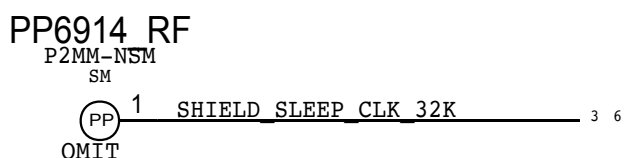
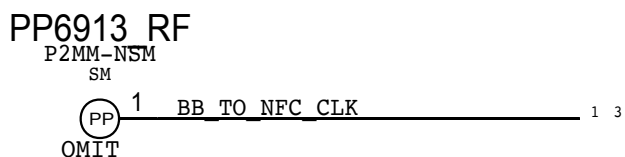
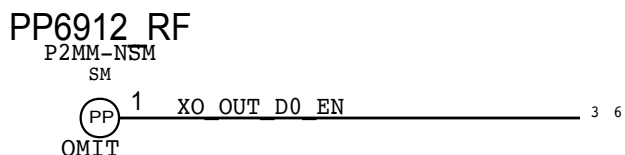
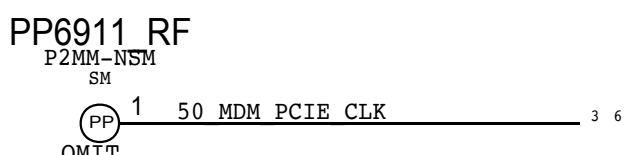
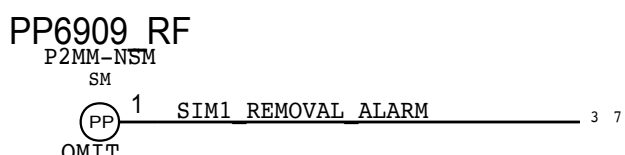
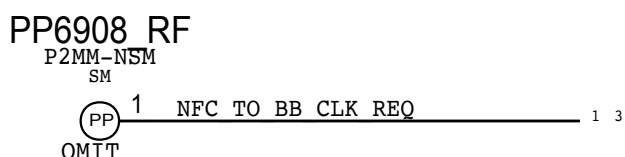
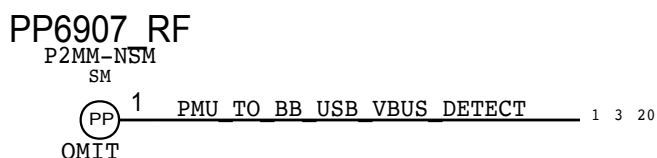
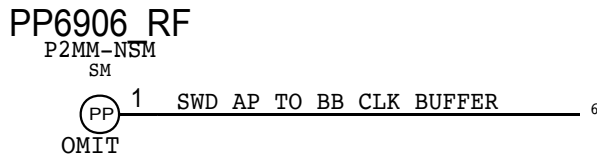
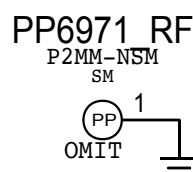
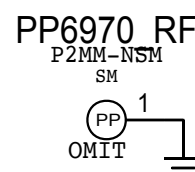
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MLB TEST POINTS

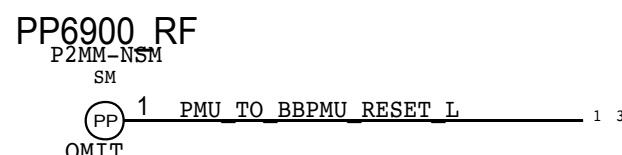
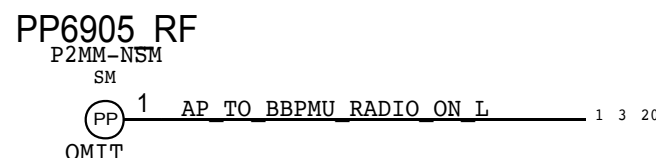
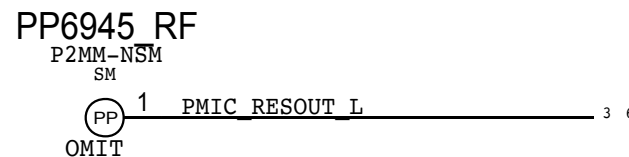
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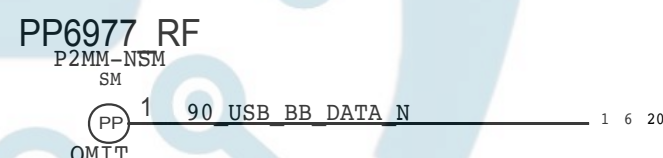
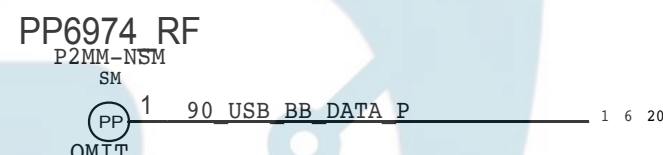
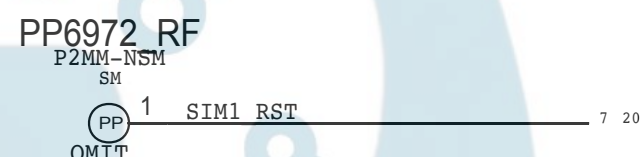
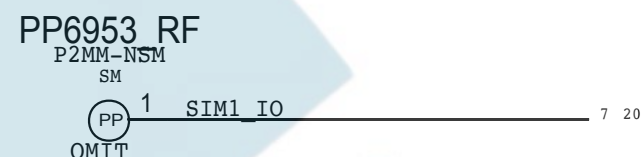
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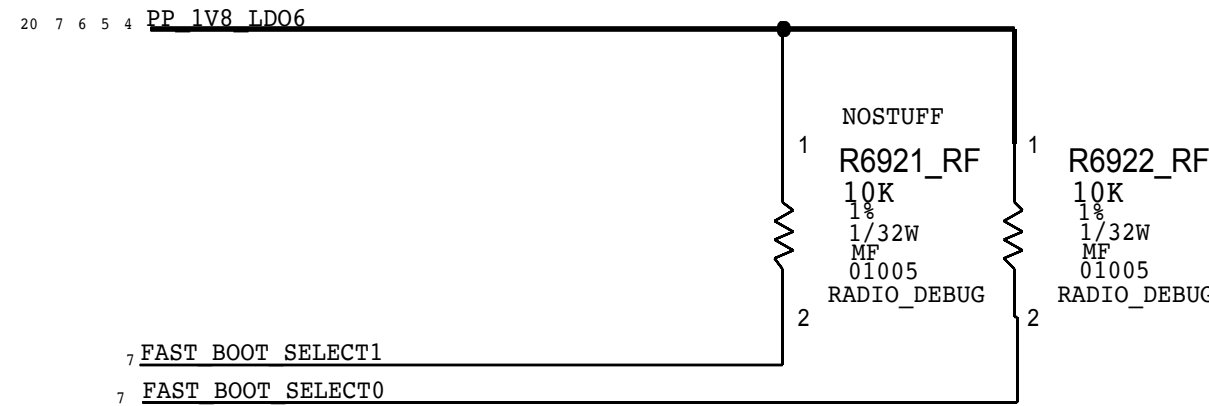
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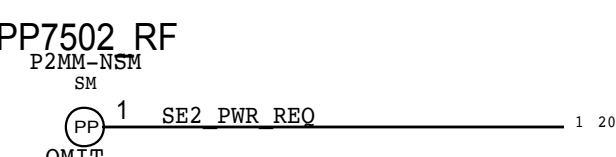
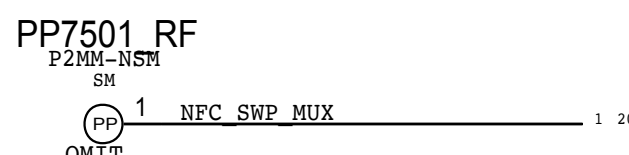
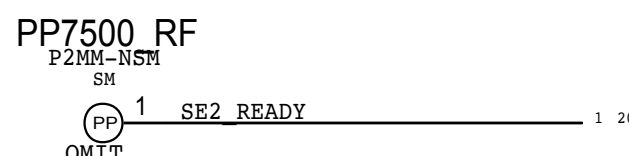
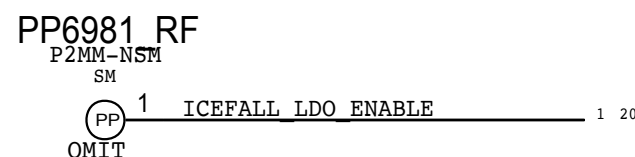
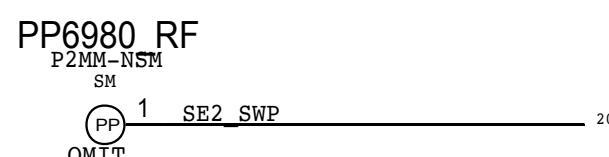
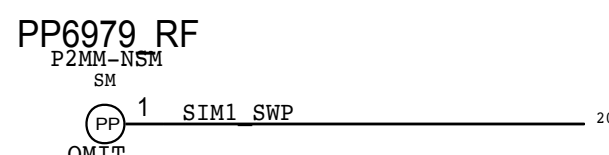
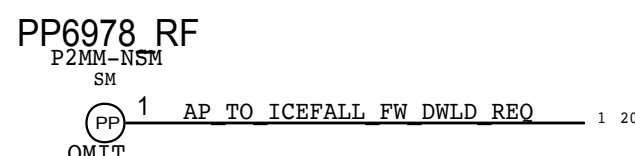
SIM




BOOT CONFIG
DEFAULT FAST_BOOT[2:0]
USB = 0X2



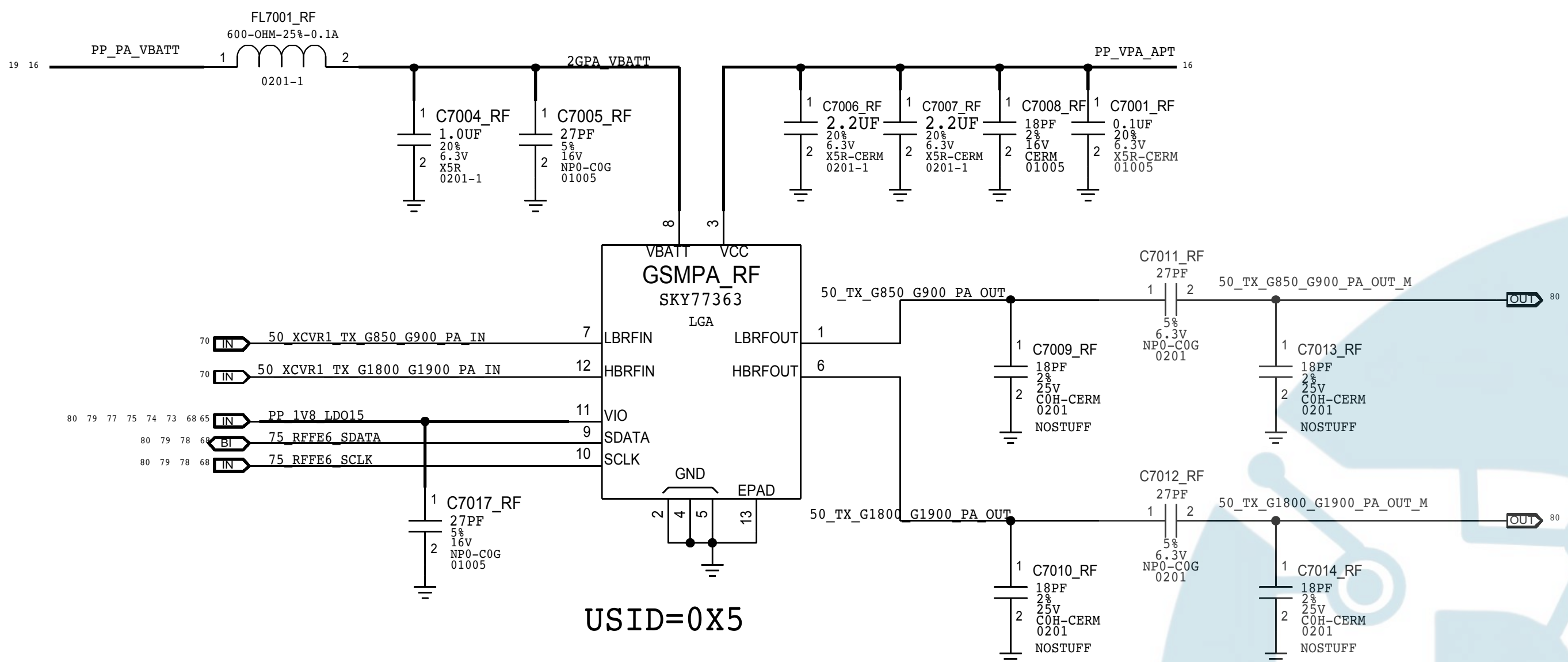
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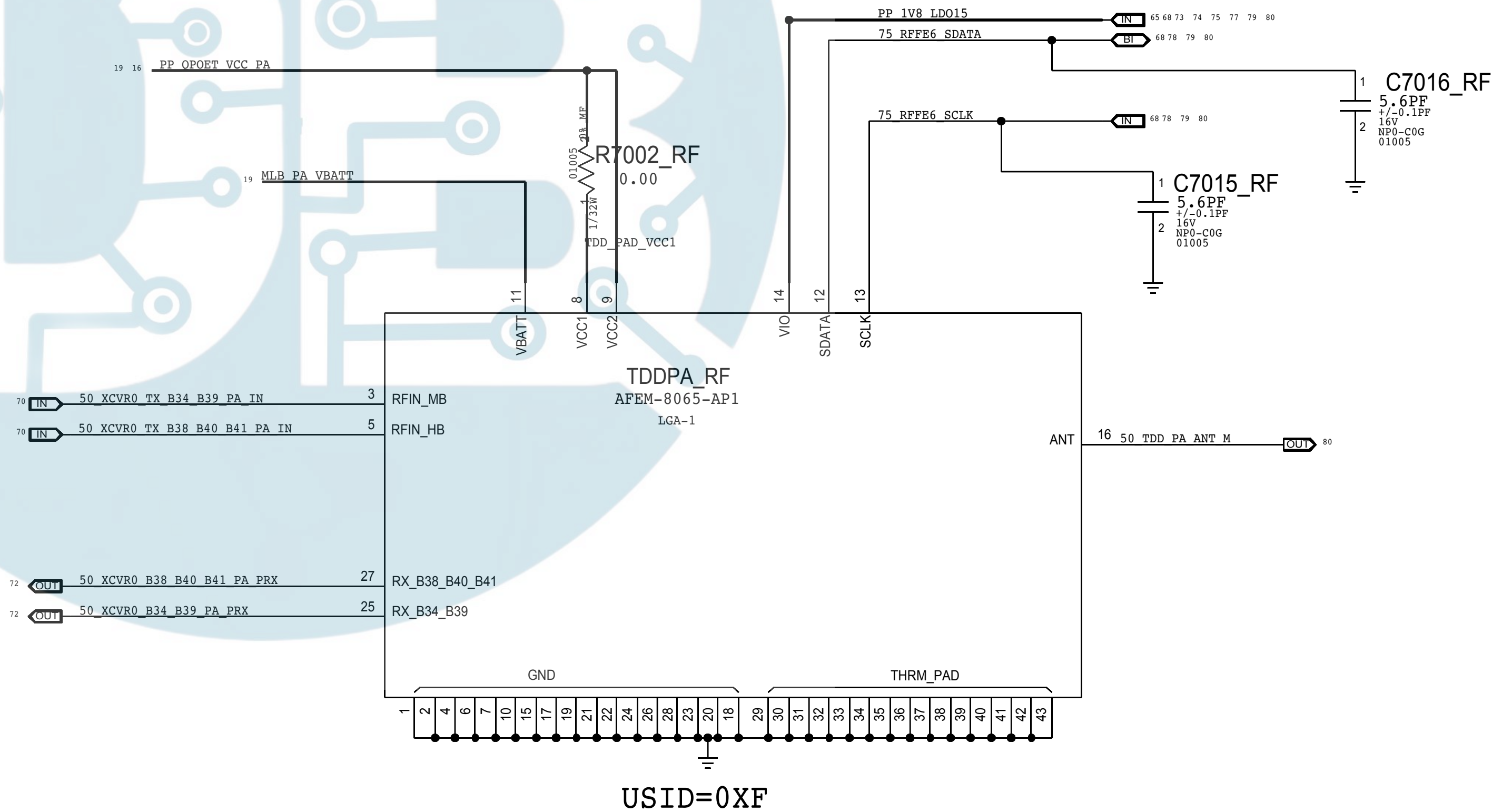
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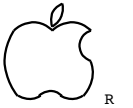
TDD TRANSMIT

2G PA



MB HB TDD PA



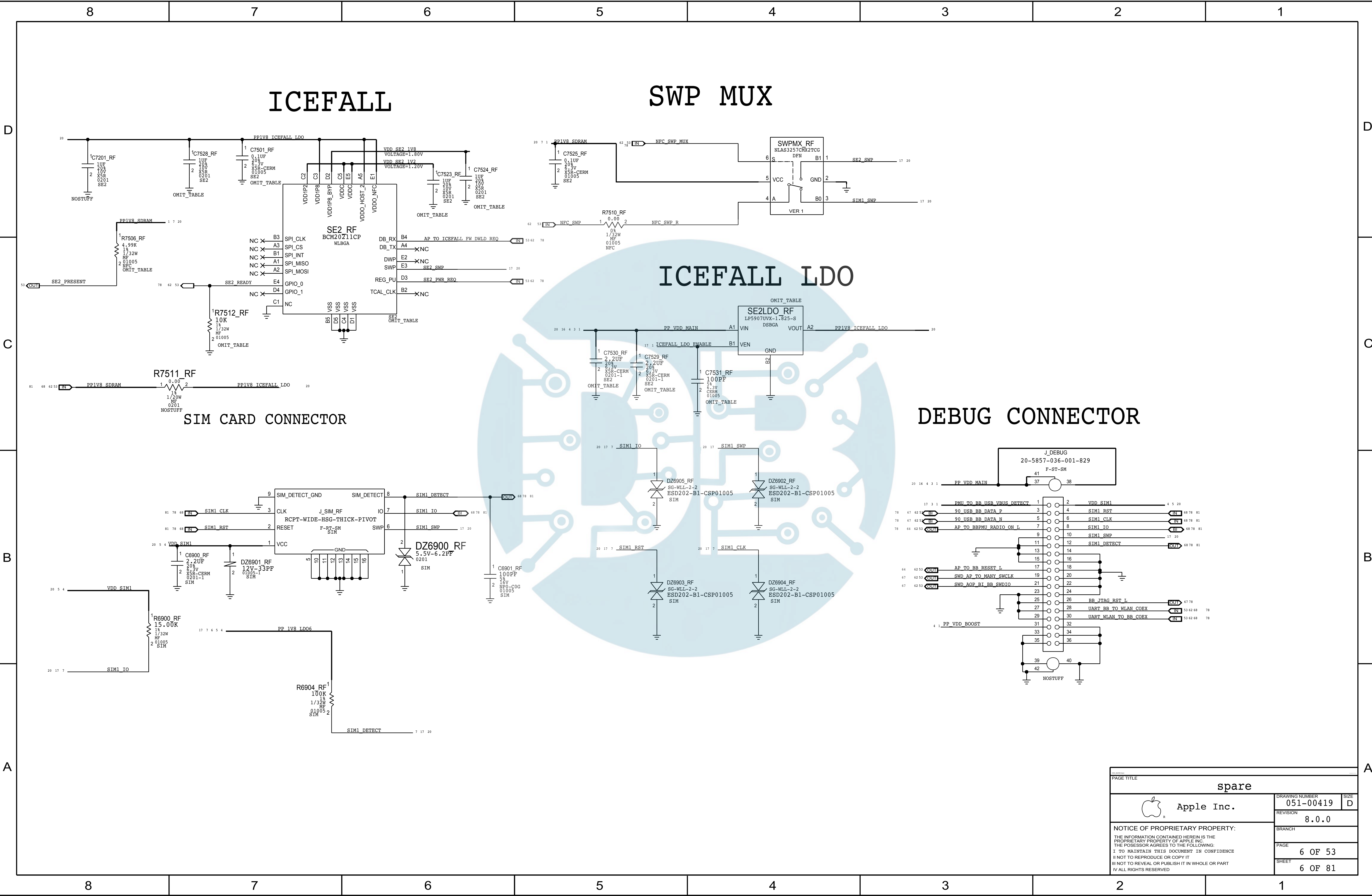
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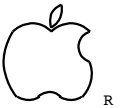
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