




8		7		6		5		4		3		2		1																																						
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.												REV	ECN	DESCRIPTION OF REVISION	APPD DATE																																					
												8	0006400877	ENGINEERING RELEASED	2016-06-14																																					
D10 MLB - DVT																																																				
LAST_MODIFICATION= Tue Jun 14 15:20:28 2016																																																				
PAGE <CSA> CONTENTS SYNC DATE				PAGE <CSA> CONTENTS SYNC DATE																																																
1	<CSA_PAGE1>	TABLE OF CONTENTS	<SYNC_MASTER1>	46	<CSA_PAGE46>	SMALL FORM FACTOR SPECIFIC	<SYNC_MASTER46>																																													
2	<CSA_PAGE2>	SYSTEM:BOM TABLES	<SYNC_MASTER2>	47	<CSA_PAGE47>	I2C MAP: AP, TOUCH, HOMER, I2C5	<SYNC_MASTER47>																																													
3	<CSA_PAGE3>	MLB SPECIFIC: BOM TABLE	<SYNC_MASTER3>	48	<CSA_PAGE48>	I2C MAP AOP	<SYNC_MASTER48>																																													
4	<CSA_PAGE4>	SYSTEM:MECHANICAL, TESTPOINTS	<SYNC_MASTER4>	49	<CSA_PAGE49>	I2C TABLE	<SYNC_MASTER49>																																													
5	<CSA_PAGE5>	SYSTEM:BOARDID	<SYNC_MASTER5>	50	<CSA_PAGE50>	spare	<SYNC_MASTER50>																																													
6	<CSA_PAGE6>	spare	<SYNC_MASTER6>	51	<CSA_PAGE51>	spare	<SYNC_MASTER51>																																													
7	<CSA_PAGE7>	SOC:JTAG,USB,XTAL	<SYNC_MASTER7>	52	<CSA_PAGE52>	MLB UNIQUE	<SYNC_MASTER52>																																													
8	<CSA_PAGE8>	SOC:PCIE	<SYNC_MASTER8>	53	<CSA_PAGE53>	CELL,WIFI,NFC	<SYNC_MASTER53>																																													
9	<CSA_PAGE9>	SOC:MIPI AND ISP	<SYNC_MASTER9>	54	<CSA_PAGE54>	WIFI_MLB SCHEMATIC	<SYNC_MASTER54>																																													
10	<CSA_PAGE10>	SOC:LPDP	<SYNC_MASTER10>	55	<CSA_PAGE55>	PERENNIAL	<SYNC_MASTER55>																																													
11	<CSA_PAGE11>	SOC:SERIAL	<SYNC_MASTER11>	56	<CSA_PAGE56>	WIFI FRONT-END [77]	<SYNC_MASTER56>																																													
12	<CSA_PAGE12>	SOC:GPIO & UART	<SYNC_MASTER12>	57	<CSA_PAGE57>	pagel	<SYNC_MASTER57>																																													
13	<CSA_PAGE13>	SOC:AOP	<SYNC_MASTER13>	58	<CSA_PAGE58>	NFC	<SYNC_MASTER58>																																													
14	<CSA_PAGE14>	SOC:POWER (1/3)	<SYNC_MASTER14>	59	<CSA_PAGE59>	pagel [1]	<SYNC_MASTER59>																																													
15	<CSA_PAGE15>	SOC:POWER (2/3)	<SYNC_MASTER15>	60	<CSA_PAGE60>	UAT MATCH AND TUNER CONNECTOR [2]	<SYNC_MASTER60>																																													
16	<CSA_PAGE16>	SOC:POWER (3/3)	<SYNC_MASTER16>	61	<CSA_PAGE61>	BOM LIST	<SYNC_MASTER61>																																													
17	<CSA_PAGE17>	NAND	<SYNC_MASTER17>	62	<CSA_PAGE62>	pagel	<SYNC_MASTER62>																																													
18	<CSA_PAGE18>	SYSTEM POWER:PMU (1/3)	<SYNC_MASTER18>	63	<CSA_PAGE63>	BOM_OMIT TABLE	<SYNC_MASTER63>																																													
19	<CSA_PAGE19>	SYSTEM POWER:PMU (2/3)	<SYNC_MASTER19>	64	<CSA_PAGE64>	PMU: CONTROL AND CLOCKS	<SYNC_MASTER64>																																													
20	<CSA_PAGE20>	SYSTEM POWER:PMU (3/3)	<SYNC_MASTER20>	65	<CSA_PAGE65>	PMU: SWITCHERS AND LDOS	<SYNC_MASTER65>																																													
21	<CSA_PAGE21>	SYSTEM POWER:CHARGER	<SYNC_MASTER21>	66	<CSA_PAGE66>	BASEBAND: POWER2	<SYNC_MASTER66>																																													
22	<CSA_PAGE22>	SYSTEM POWER:BATTERY CONN	<SYNC_MASTER22>	67	<CSA_PAGE67>	BASEBAND: CONTROL	<SYNC_MASTER67>																																													
23	<CSA_PAGE23>	SYSTEM POWER:BOOST	<SYNC_MASTER23>	68	<CSA_PAGE68>	BASEBAND GPIOs	<SYNC_MASTER68>																																													
24	<CSA_PAGE24>	SENSORS	<SYNC_MASTER24>	69	<CSA_PAGE69>	TRANSCEIVER0/1: POWER	<SYNC_MASTER69>																																													
25	<CSA_PAGE25>	B2B FILTERS: UTAH	<SYNC_MASTER25>	70	<CSA_PAGE70>	TRANSCEIVER0/1: TX PORTS	<SYNC_MASTER70>																																													
26	<CSA_PAGE26>	CAMERA:STROBE DRIVER	<SYNC_MASTER26>	71	<CSA_PAGE71>	TRANSCEIVER0/1: PRX PORTS	<SYNC_MASTER71>																																													
27	<CSA_PAGE27>	Accessory: Buck Circuit	<SYNC_MASTER27>	72	<CSA_PAGE72>	RECEIVE MATCHING	<SYNC_MASTER72>																																													
28	<CSA_PAGE28>	TRINITY: FF SPECIFIC	<SYNC_MASTER28>	73	<CSA_PAGE73>	LOWER ANTENNA & COUPLERS	<SYNC_MASTER73>																																													
29	<CSA_PAGE29>	B2B:FOREHEAD	<SYNC_MASTER29>	74	<CSA_PAGE74>	DIVERSITY RECEIVE ASM'S	<SYNC_MASTER74>																																													
30	<CSA_PAGE30>	spare	<SYNC_MASTER30>	75	<CSA_PAGE75>	DIVERSITY RECEIVE LNA'S	<SYNC_MASTER75>																																													
31	<CSA_PAGE31>	AUDIO:CALTRA CODEC (1/2)	<SYNC_MASTER31>	76	<CSA_PAGE76>	UPPER ANTENNA FEEDS	<SYNC_MASTER76>																																													
32	<CSA_PAGE32>	AUDIO:CALTRA CODEC (2/2)	<SYNC_MASTER32>	77	<CSA_PAGE77>	PMU: ET MODULATOR	<SYNC_MASTER77>																																													
33	<CSA_PAGE33>	AUDIO:SPEAKER AMP 2	<SYNC_MASTER33>	78	<CSA_PAGE78>	TEST POINTS & BOOT CONFIG	<SYNC_MASTER78>																																													
34	<CSA_PAGE34>	AUDIO:SPEAKER AMP 1	<SYNC_MASTER34>	79	<CSA_PAGE79>	TDD TRANSMIT	<SYNC_MASTER79>																																													
35	<CSA_PAGE35>	ARC:DRIVER	<SYNC_MASTER35>	80	<CSA_PAGE80>	FDD TRANSMIT	<SYNC_MASTER80>																																													
36	<CSA_PAGE36>	ARC:MAGGIE	<SYNC_MASTER36>	81	<CSA_PAGE81>	ICEFALL, SIM, DEBUG_CONN	<SYNC_MASTER81>																																													
37	<CSA_PAGE37>	DISPLAY & MESA:POWER	<SYNC_MASTER37>		<CSA_PAGE82>		<SYNC_MASTER82>																																													
38	<CSA_PAGE38>	B2B:ORB & MESA	<SYNC_MASTER38>		<CSA_PAGE83>		<SYNC_MASTER83>																																													
39	<CSA_PAGE39>	B2B FILTERS: DISPLAY & TOUCH	<SYNC_MASTER39>		<CSA_PAGE84>		<SYNC_MASTER84>																																													
40	<CSA_PAGE40>	TRISTAR 2	<SYNC_MASTER40>		<CSA_PAGE85>		<SYNC_MASTER85>																																													
41	<CSA_PAGE41>	B2B:DOCK FLEX	<SYNC_MASTER41>		<CSA_PAGE86>		<SYNC_MASTER86>																																													
42	<CSA_PAGE42>	spare	<SYNC_MASTER42>		<CSA_PAGE87>		<SYNC_MASTER87>																																													
43	<CSA_PAGE43>	spare	<SYNC_MASTER43>		<CSA_PAGE88>		<SYNC_MASTER88>																																													
44	<CSA_PAGE44>	B2B FILTERS: RIGHT BUTTON FLEX	<SYNC_MASTER44>		<CSA_PAGE89>		<SYNC_MASTER89>																																													
45	<CSA_PAGE45>	B2B: SMALL FF SPECIFIC	<SYNC_MASTER45>		<CSA_PAGE90>		<SYNC_MASTER90>																																													
TABLE OF CONTENTS																																																				
Schematic & PCB Callouts																																																				
<table><tr><td>PART#</td><td>QTY</td><td>DESCRIPTION</td><td>REFERENCE DESIGNATOR(S)</td><td>CRITICAL</td><td>BOM OPTION</td></tr><tr><td>051-00419</td><td>1</td><td>SCH,MLB,D10</td><td>SCH</td><td>CRITICAL</td><td>?</td></tr><tr><td>820-00188</td><td>1</td><td>PCBF,MLB,D10</td><td>PCB</td><td>CRITICAL</td><td>?</td></tr></table>																PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION	051-00419	1	SCH,MLB,D10	SCH	CRITICAL	?	820-00188	1	PCBF,MLB,D10	PCB	CRITICAL	?																			
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION																																															
051-00419	1	SCH,MLB,D10	SCH	CRITICAL	?																																															
820-00188	1	PCBF,MLB,D10	PCB	CRITICAL	?																																															
System Block Diagram: <rdar://problem/16684269>																																																				
SCH 051-00419 BRD 820-00188 MCO 056-01342																																																				
TABLE OF CONTENTS																																																				
<table><tr><td colspan="4">PAGE TITLE</td><td colspan="2">DRAWING NUMBER</td><td>SIZE</td></tr><tr><td colspan="4">spare</td><td colspan="2">051-00419</td><td>D</td></tr><tr><td colspan="4" rowspan="2"> Apple Inc.</td><td colspan="2">REVISION</td><td>8.0.0</td></tr><tr><td colspan="2">BRANCH</td><td></td></tr><tr><td colspan="4" rowspan="3">NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED</td><td colspan="2">PAGE</td><td>6 OF 53</td></tr><tr><td colspan="2">SHEET</td><td>6 OF 81</td></tr><tr><td colspan="2"></td><td></td></tr></table>																PAGE TITLE				DRAWING NUMBER		SIZE	spare				051-00419		D	 Apple Inc.				REVISION		8.0.0	BRANCH			NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED				PAGE		6 OF 53	SHEET		6 OF 81			
PAGE TITLE				DRAWING NUMBER		SIZE																																														
spare				051-00419		D																																														
 Apple Inc.				REVISION		8.0.0																																														
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				SHEET		6 OF 81																																														
8		7		6		5		4		3		2		1																																						

NAND BOM Options

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S00169	1	NAND, 8, 32GB, 16nm, MLC	U1701	CRITICAL	NAND_32G
335S00182	1	NAND, 8, 128GB, 16nm, TLC	U1701	CRITICAL	NAND_128G
335S00156	1	NAND, 8, 256GB, 3Dv3, TLC	U1701	CRITICAL	NAND_256G
138S0967	5	CAP, X5R, 100P, 16V, 4-3V, 0.65MM, MBTTL, 4402	C1748, C1713, C1716, C1721, C1733	CRITICAL	NAND_32G
138S00003	5	CAP, X5R, 150P, 20MV, 4-3V, 0.65MM, MBTTL, 4402	C1748, C1713, C1716, C1721, C1733	CRITICAL	NAND_128G
138S00003	5	CAP, X5R, 150P, 20MV, 4-3V, 0.65MM, MBTTL, 4402	C1748, C1713, C1716, C1721, C1733	CRITICAL	NAND_256G

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335800201	335800169	ALTERNATE	U1701	T, 15nm, MLC, 32GB
335800209	335800169	ALTERNATE	U1701	S, 16nm, MLC, 32GB
335800195	335800182	ALTERNATE	U1701	SS, 17nm, TLC, 128GB
335800180	335800182	ALTERNATE	U1701	T, 15nm, TLC, 128GB
335800179	335800182	ALTERNATE	U1701	SD, 15nm, TLC, 128GB
335800148	335800183	ALTERNATE	U1701	SD, 3Dv2, TLC, 256GB
335800190	335800183	ALTERNATE	U1701	SS, 3Dv3, TLC, 256GB

#22686038:See Radar

Magnesium Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
338S00173	338S00203	ALTERNATE	U2402	Larger Wafer (-29 flow) Magnesium

Carbon Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
338S00087	338S00226	ALTERNATE	U2401,U2404	Updated version of Carbon

UT LDO Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353800889	353800015	ALTERNATE	U2501	BY, LEO R80, 2-925V, CRP 0-6540-65

Mamba LDO Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353800932	353800576	ALTERNATE	U3801	ST, L50 REG, 2.75V

I2C5 Alternate

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S00234	335S00233	ALTERNATE	U1101	12C5 ALTERNATE

Active Diode Alternate

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
376S00106	376S00047	ALTERNATE	Q2101	DIODES INC. ACT DIODE

DDR PLL Alternate

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
155S00095	155S00068	ALTERNATE	FL1501	FEED RD, 1500MM, 25A, 150MM, 200M, 310G5

Power Inductor Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152800118	152800075	ALTERNATE	ALL	100_PWR_0002,1 00_3,0A,5,000,000,0014
152800077	152800397	ALTERNATE	ALL	100_PWR_0002,1 00_2,25A,0,100,000,0014
152800121	152800081	ALTERNATE	ALL	100_PWR_0002,5-47 00_3,10A,0,100,000,0012
152800123	15281936	ALTERNATE	ALL	100_PWR_0002,50 00_5,00A,5,000,000,0023
152800402	152800366	ALTERNATE	ALL	100_M017,100,1,2A,0,220,000,0002
152800297	15281843	ALTERNATE	ALL	CYTRIC 1012 100
152800365	152800297	ALTERNATE	ALL	CYTRIC 1012 100
152800398	152800204	ALTERNATE	ALL	100_PWR_5,220,010,4,7A,100000,0012
152800120	152800077	ALTERNATE	ALL	For Chestnut Indicator only
152800117	152800074	ALTERNATE	ALL	100_PWR_0002,5 00_3,0A,5,000,000,0014

updated 11/12

updated 11/12

reverted 11/13

For Chestnut inductor; so it doesn't interfere with PMU inducotr Buck 7 alts

Except BUCK5 LX (BUCK5 LX is Taiyo only)

Global R/C Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
11880764	11880717	ALTERNATE	ALL	RES, 3-92K, 0.1W, 0201
13880702	13880657	ALTERNATE	ALL	CAP, 85V, 4.3UF, 4V, 0610
138800006	13880835	ALTERNATE	ALL	CAP, 3-TERM, 4.2UF, 4V, 0403
138800005	138800003	ALTERNATE	ALL	CAP, 85V, 100UF, 1V, 4.5MM, 0.5MM, 0805
138800048	138800003	ALTERNATE	ALL	CAP, 85V, 100UF, 1V, 4.5MM, 0.5MM, 0805
13880648	13880652	ALTERNATE	ALL	CAP, 85V, 100UF, 1V, 4.5MM, 0.442, 76210
13280400	13280436	ALTERNATE	ALL	CAP, 25V, 100UF, 1V, 0.1005, 0805
138800024	13880986	ALTERNATE	ALL	CAP, 50V, 100UF, 1V, 4.5MM, 0.442, 76210
13880706	13880739	ALTERNATE	ALL	CAP, 50V, 100UF, 1V, 4.5MM, 0.442, 76210
13880945	13880739	ALTERNATE	ALL	CAP, 50V, 100UF, 1V, 4.5MM, 0.442, 76210
13280436	13280400	ALTERNATE	ALL	CAP, 50V, 100UF, 1V, 4.5MM, 0.442, 76210

Global Ferrite Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
155800067	15580581	ALTERNATE	ALL	FEER, 2400M, 6.300M DCR, 0201
15580581	155800067	ALTERNATE	ALL	FEER, 2400M, 6.300M DCR, 0201
155800012	155800168	ALTERNATE	ALL	FLTR, 65 OHMS, 0605
155800194	15580610	ALTERNATE	ALL	FEER RD, 1500HM, T06
155800220	15580610	ALTERNATE	ALL	FEER RD, 1500HM, TT
152800489	152800456	ALTERNATE	ALL	FEER RD, 0.470H, TT

Global Varistor Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
377S0168	377S0140	ALTERNATE	ALL	VARIATOR, 6.8V, 100PF, 01005

ACC BUCK CIRCUIT Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
371800087	371800064	ALTERNATE	D2700	DISC, BROUXT, JCV, NIMCO, 0201
152800558	152800557	ALTERNATE	L2700	D20, MLC, S, 470V, 2.5A, Romscha, 1608
376800166	376800164	ALTERNATE	D2700, Q2701	PFFET, LCV, C004
353801007	3538001039	ALTERNATE	U2710	IC, L0400, 8WTC6, MLCSP4

D10 EEEE CALLOUTS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-6838	1	EEEE CODE FOR 639-01754	EEEE_GXD5	CRITICAL	EEEE_BEST
825-6838	1	EEEE CODE FOR 639-01755	EEEE_GXD6	CRITICAL	EEEE_SUPREME
825-6838	1	EEEE CODE FOR 639-01756	EEEE_GXD7	CRITICAL	EEEE_EXTREME
825-6838	1	EEEE CODE FOR 639-02372	EEEE_H6TF	CRITICAL	EEEE_BEST_ROW
825-6838	1	EEEE CODE FOR 639-02373	EEEE_H6TG	CRITICAL	EEEE_SUPREME_ROW
825-6838	1	EEEE CODE FOR 639-02374	EEEE_H6TH	CRITICAL	EEEE_EXTREME_ROW

CAYMAN DDR Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339S00254	339S00253	ALTERNATE	ALL	DDR-H, 2G, B1
339S00255	339S00253	ALTERNATE	ALL	DDR-S, 2G, B1

Cap 2.2UF Alternates


PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00049	138S00032	ALTERNATE	(C2507,C2512)	CM_CBR_K53-2,207,206,4,3,201_K53DATA
138S0831	138S00032	ALTERNATE	ALL	CM_CBR_K53-2,207,206,4,3,201_K53DATA

D10x Specific BOM Callouts

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152800117	1	TAIYO,IND,PWR,SRLD,100,3.6A,0.0600M,2015	L1803	CRITICAL	B5LX_TAIYO
11750156	2	RES,NF,1K OHM, 5A, 1/32W, 01005	R4808,R4809	CRITICAL	UTAH_C

#24681501

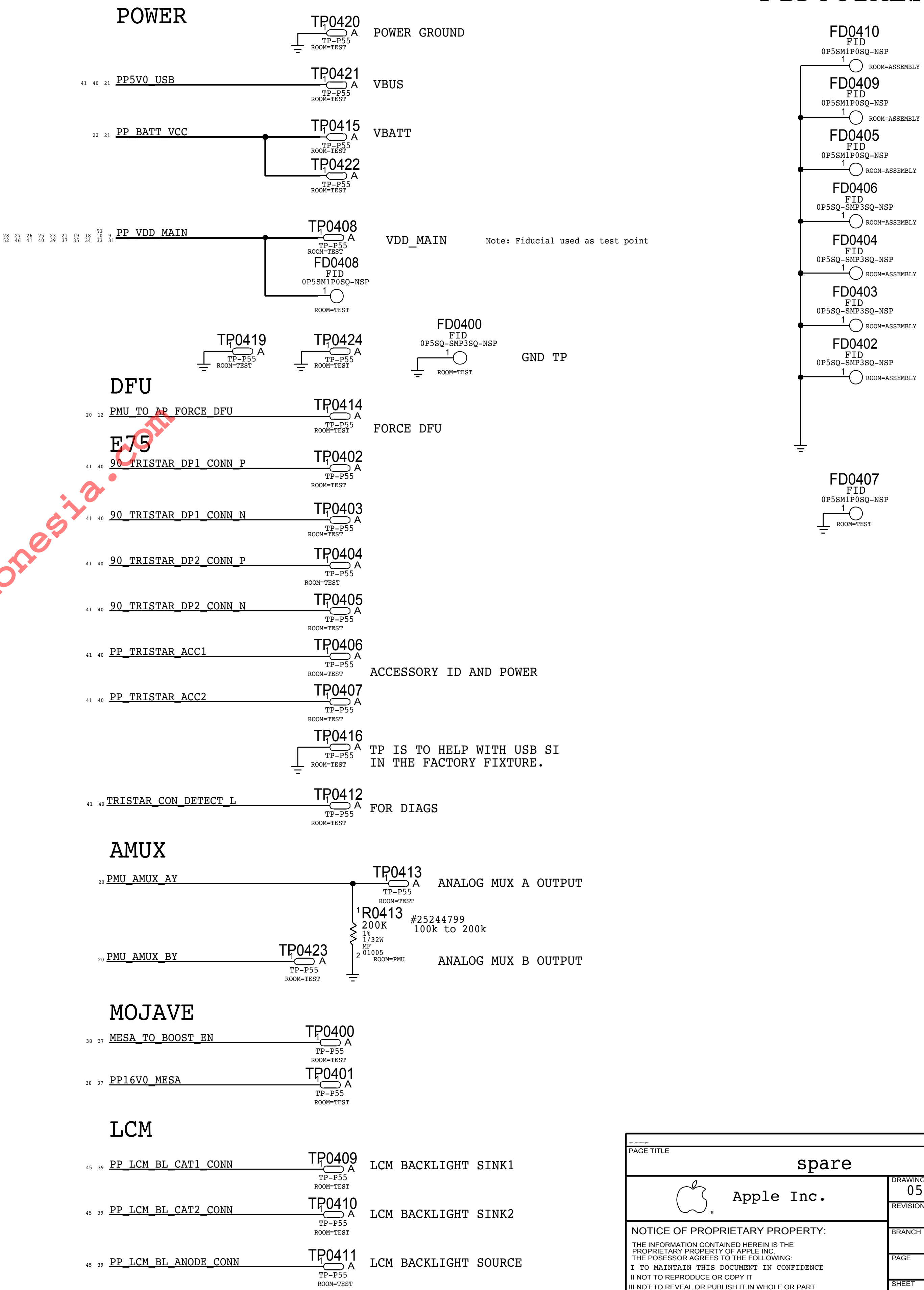
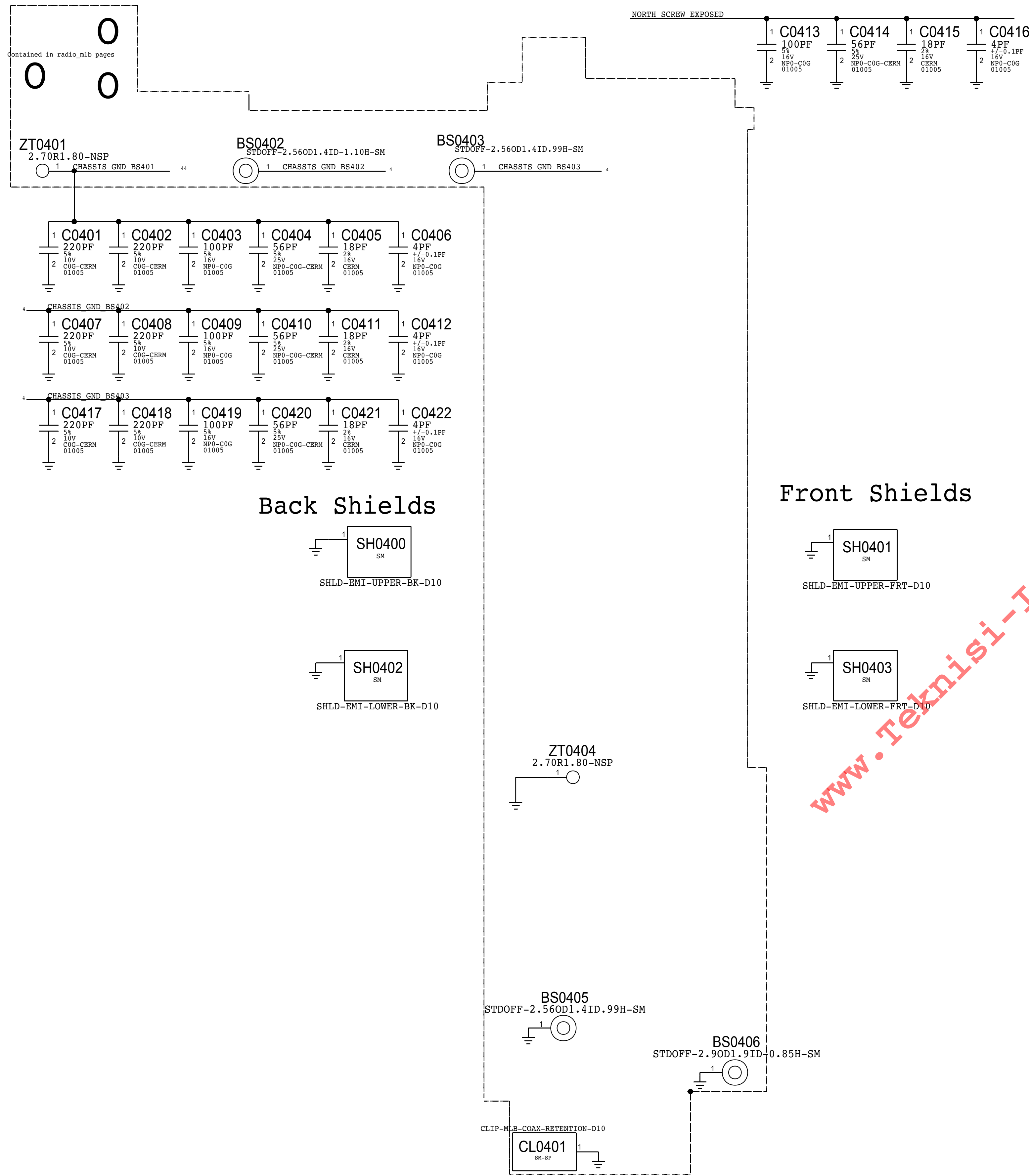
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		8.0.0		
		BRANCH		
		PAGE		
		6 OF 53		
		SHEET		
		6 OF 81		


Current as of D10 MCO 056-01342-78

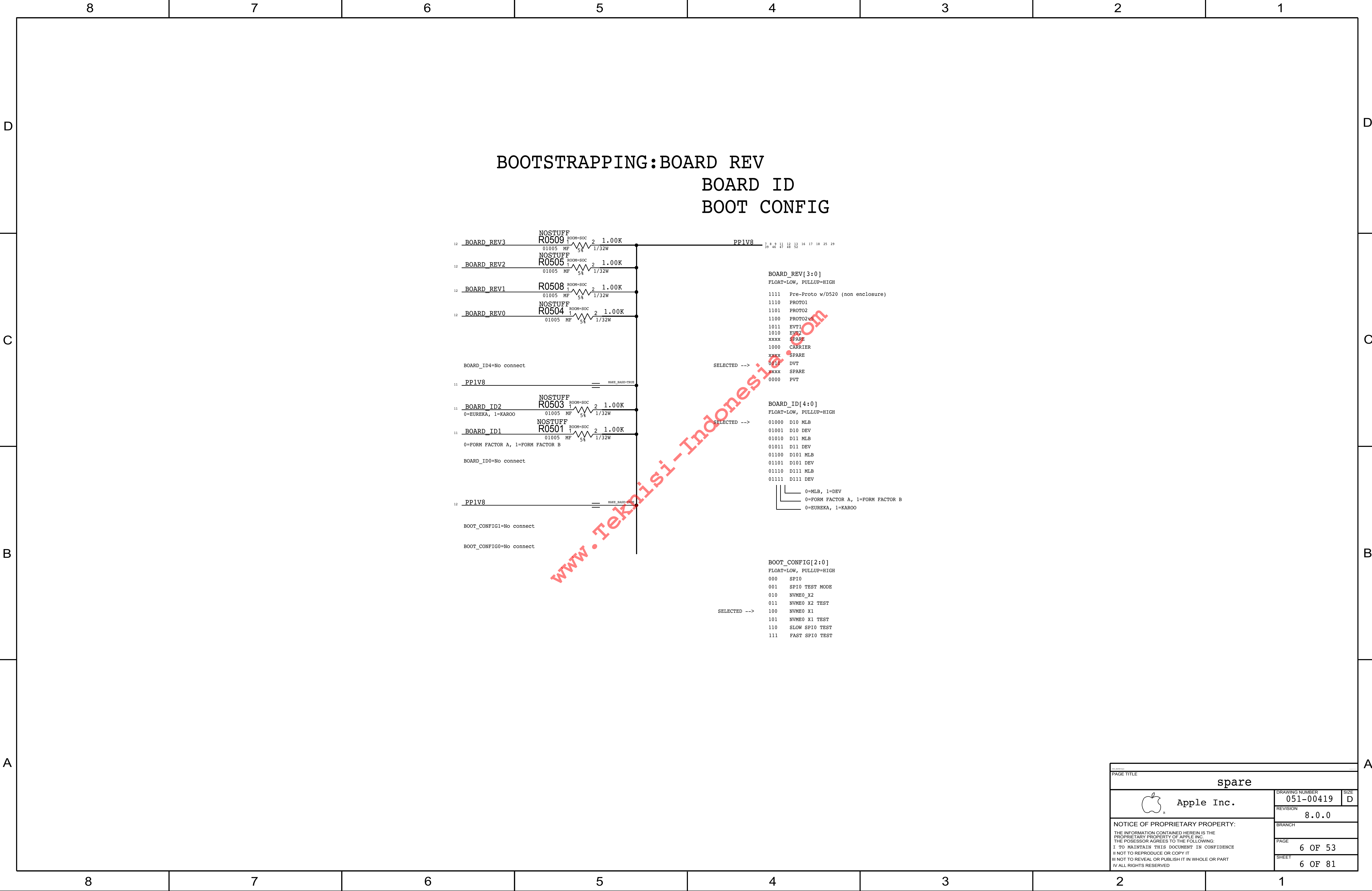
TESTPOINTS

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 Apple Inc.	DRAWING NUMBER	051-00419	SIZE
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BRANCH		PAGE	
		6 OF 53	
SHEET		6 OF 81	



12

BOARD_REV0

NOSTUFF

R0504

ROOM=SOC

01005 MF

1

2

1.00K

1/32W

BOARD_ID4=No connect

11

PPIV8

MAKE_BASE=TRUE

11

BOARD_ID2

NOSTUFF

R0503

ROOM=SOC

01005 MF

1

2

1.00K

1/32W

0=EUREKA, 1=KAROO

11

BOARD_ID1

NOSTUFF

R0501

ROOM=SOC

01005 MF

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 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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spare

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051-00419

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PAGE

6 OF 53

SHEET


6 OF 81

SIZE

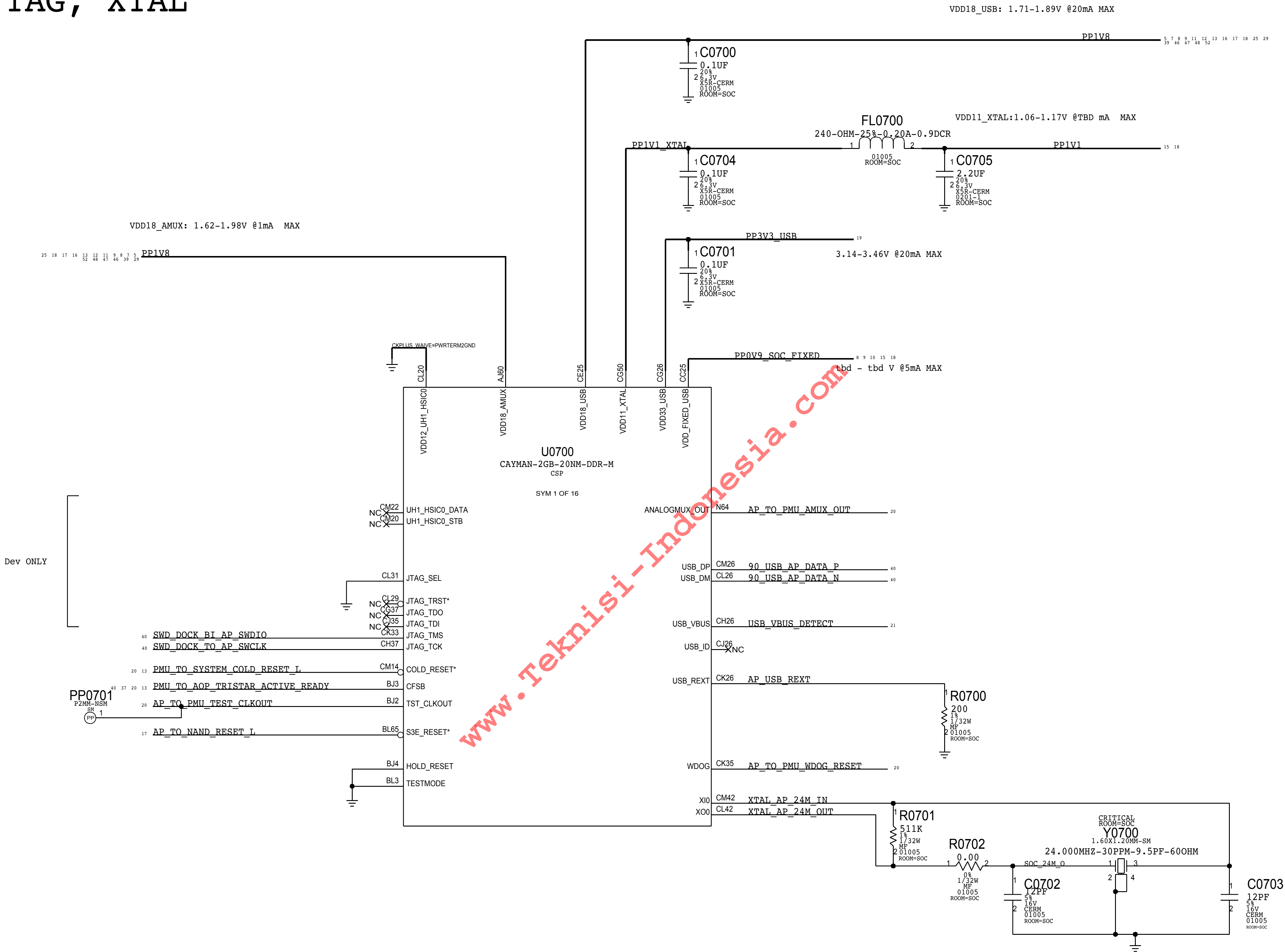
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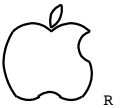
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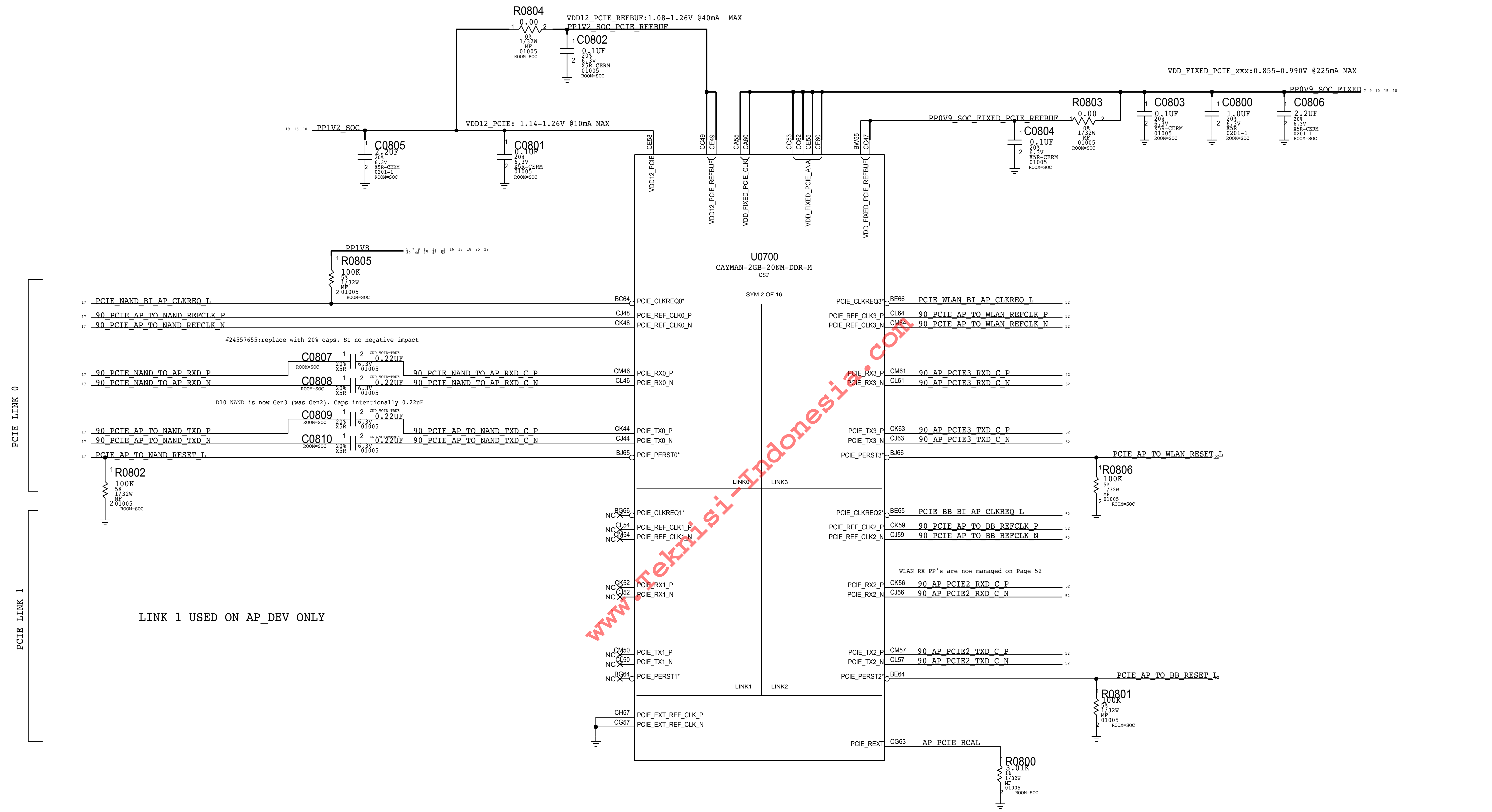
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	BRANCH	
	PAGE	6 OF 53
	SHEET	6 OF 81

SOC - USB, JTAG, XTAL



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PAGE		6 OF 53	
SHEET		6 OF 81	

SOC - PCIE INTERFACES



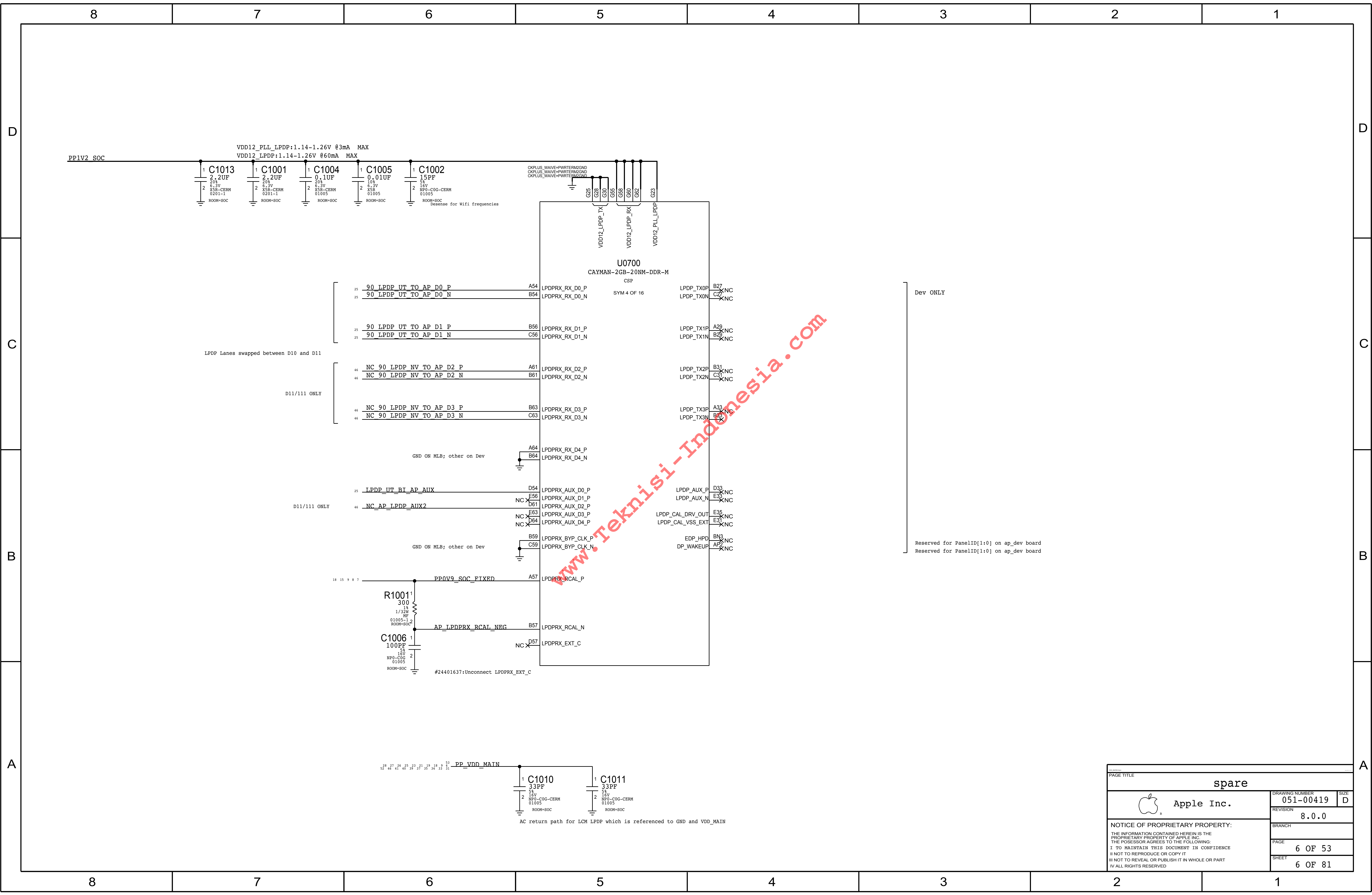
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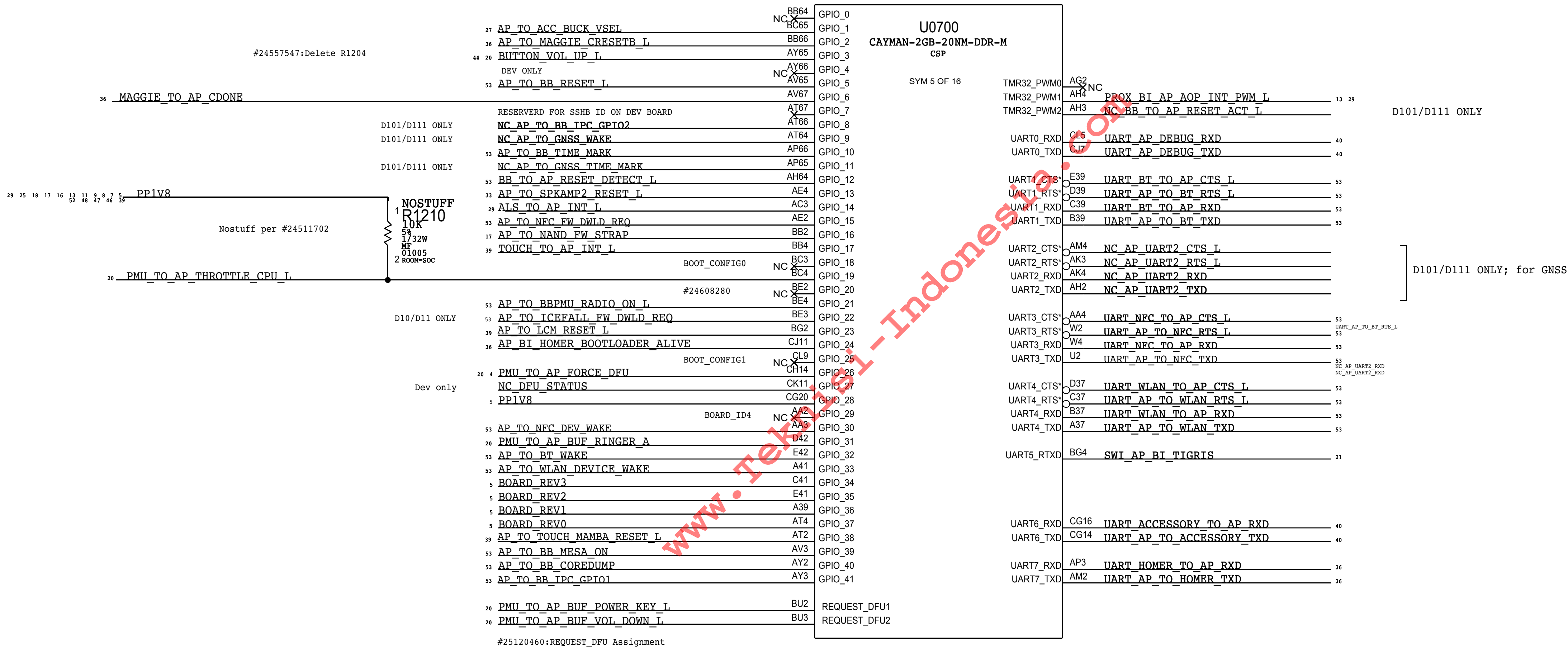


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		6 OF 53			
		SHEET			
		6 OF 81			

SOC - GPIO INTERFACES



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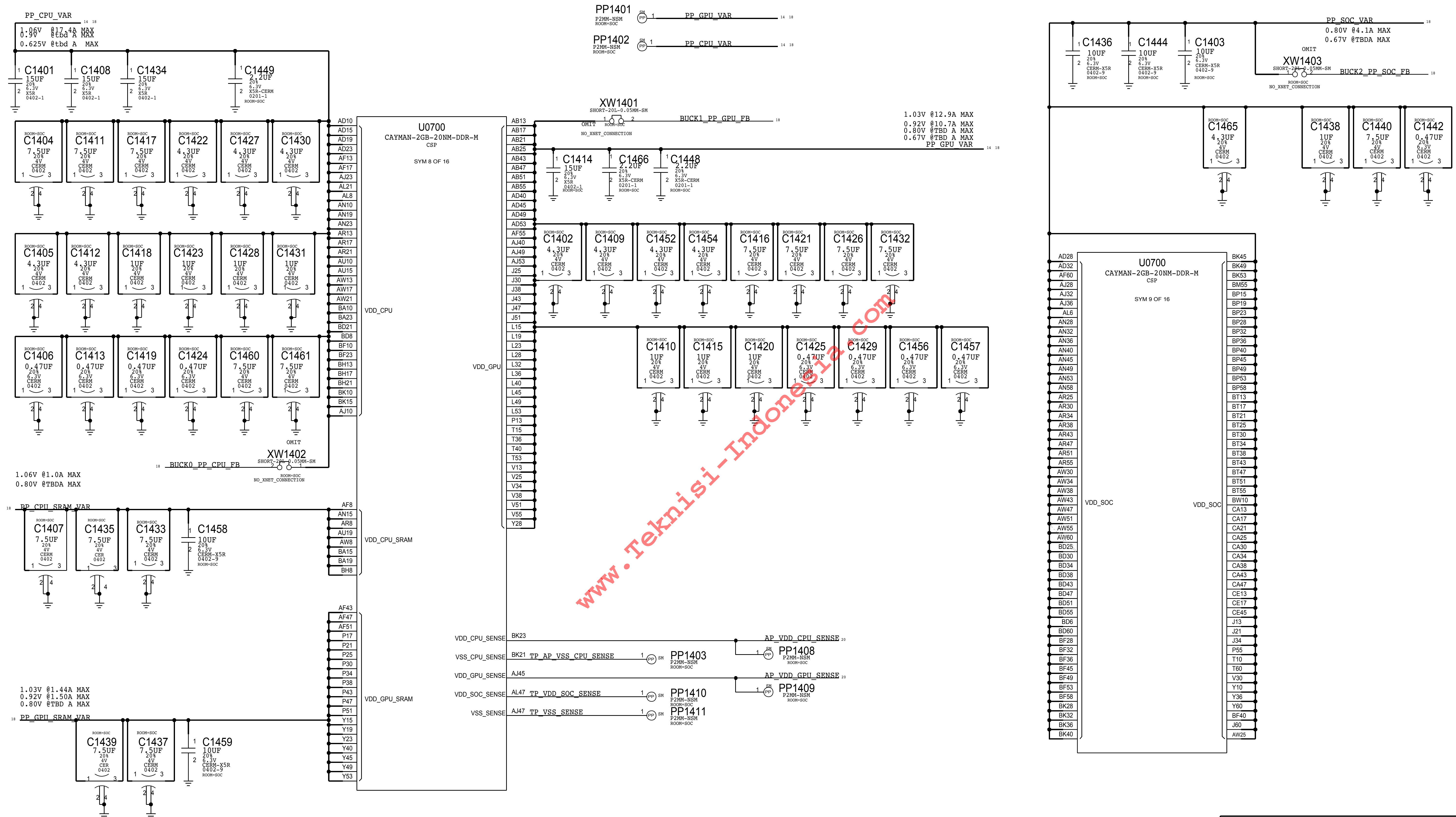
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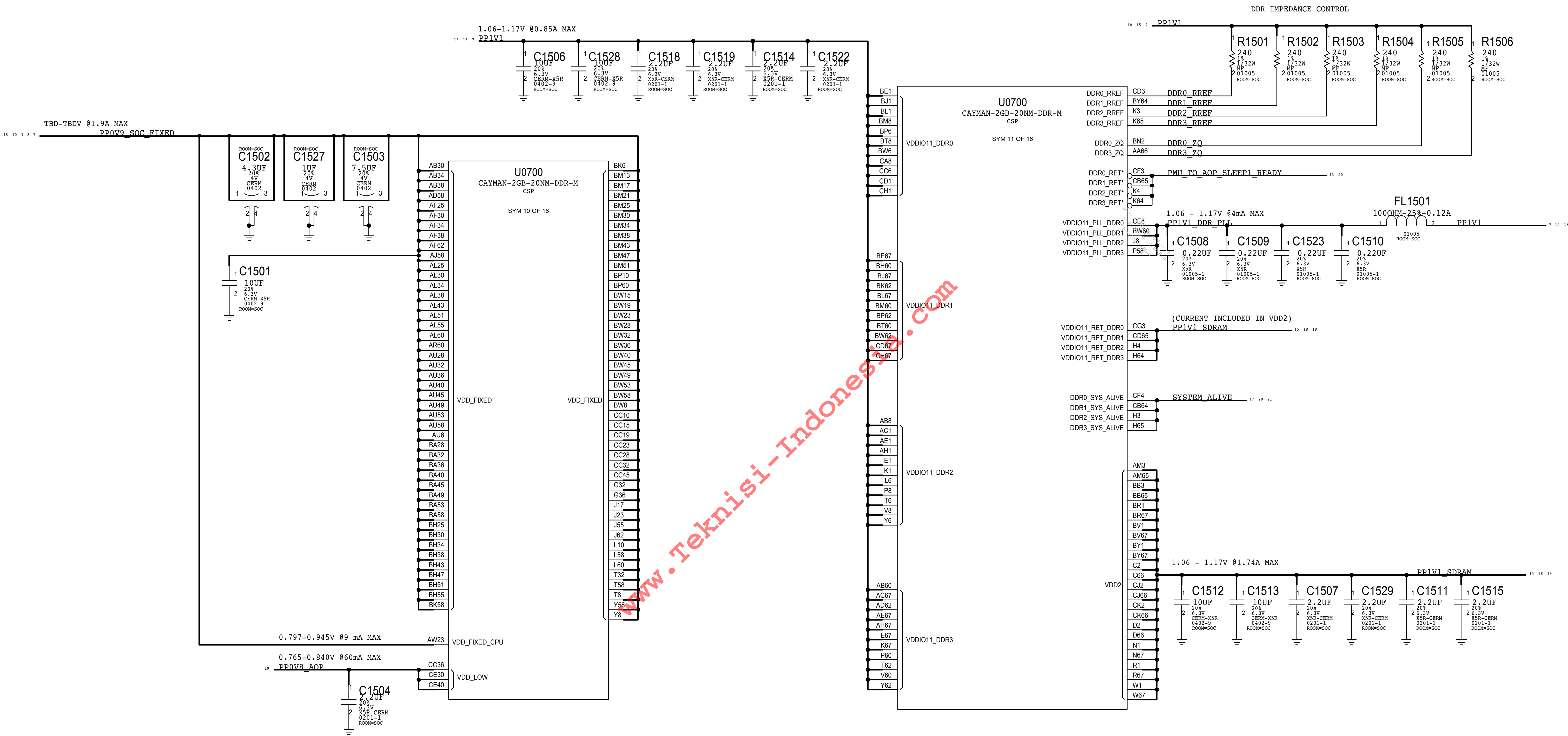
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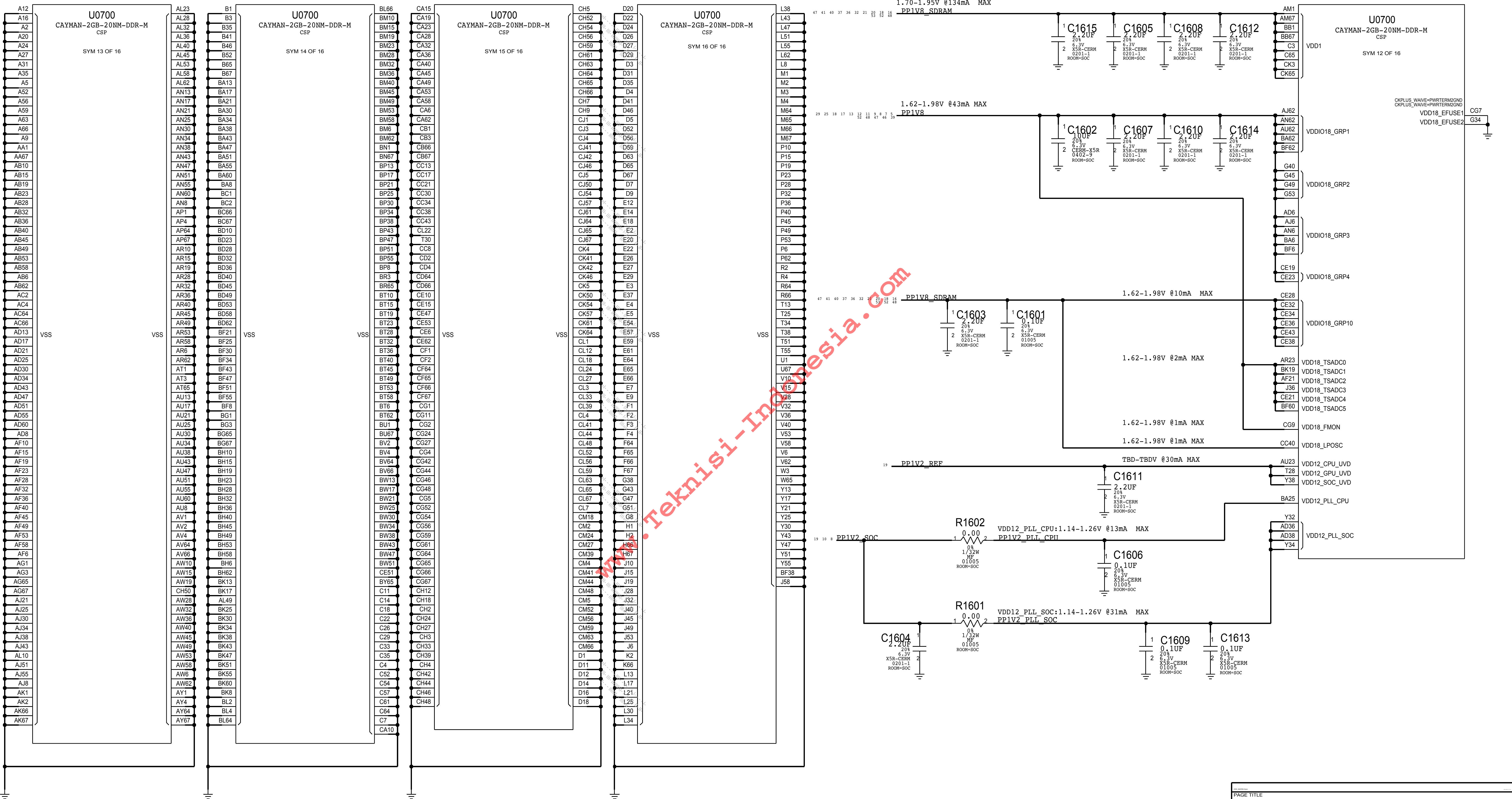
SOC - CPU, GPU & SOC RAILS

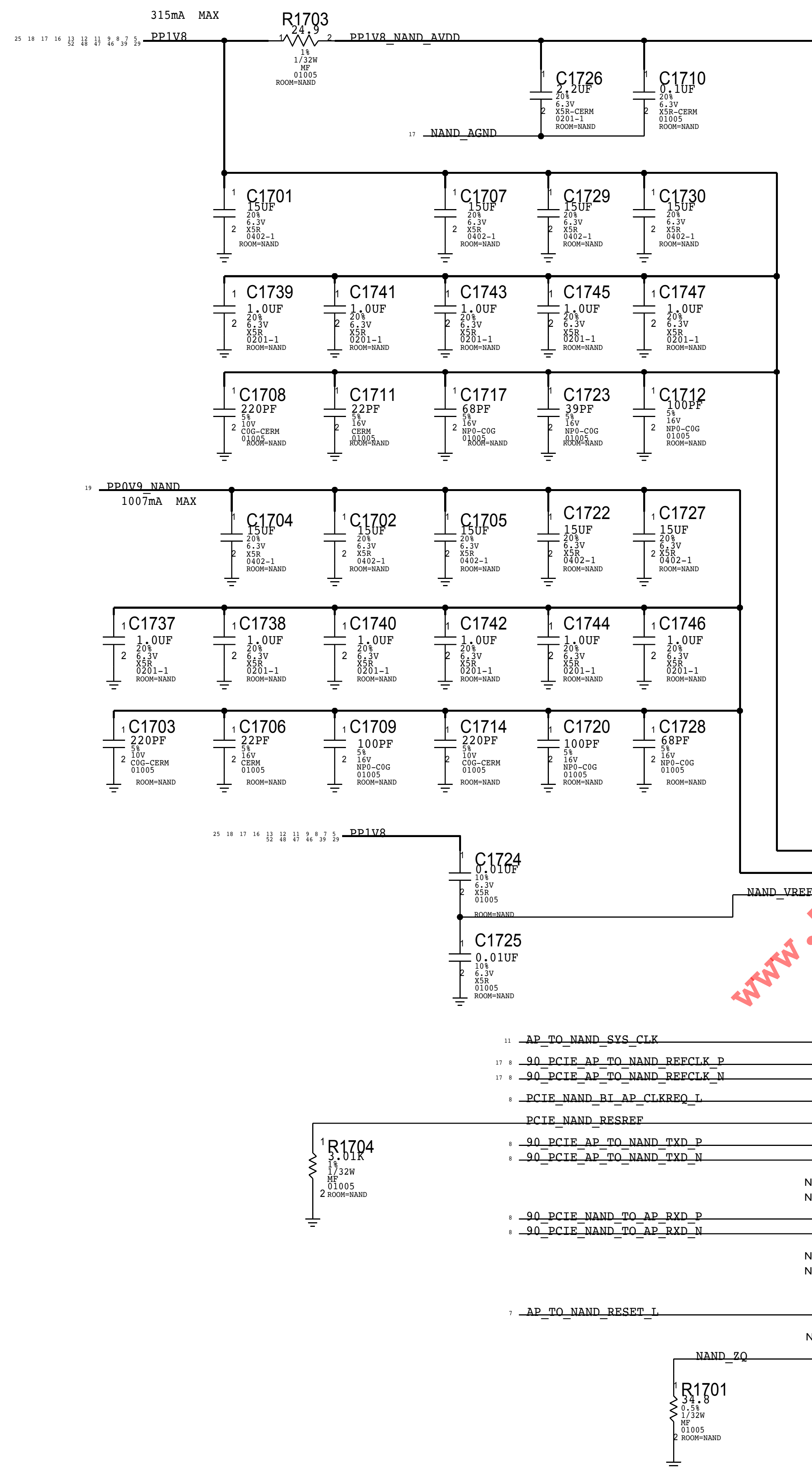


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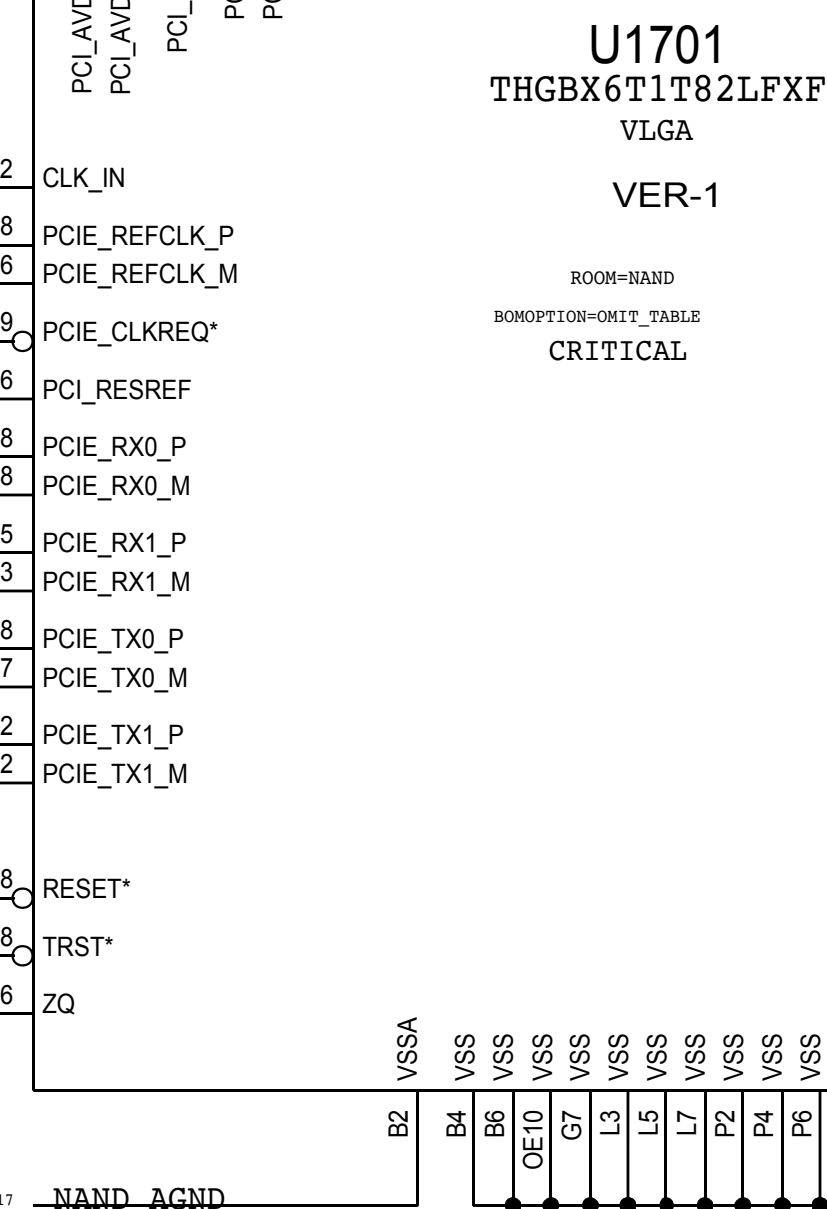
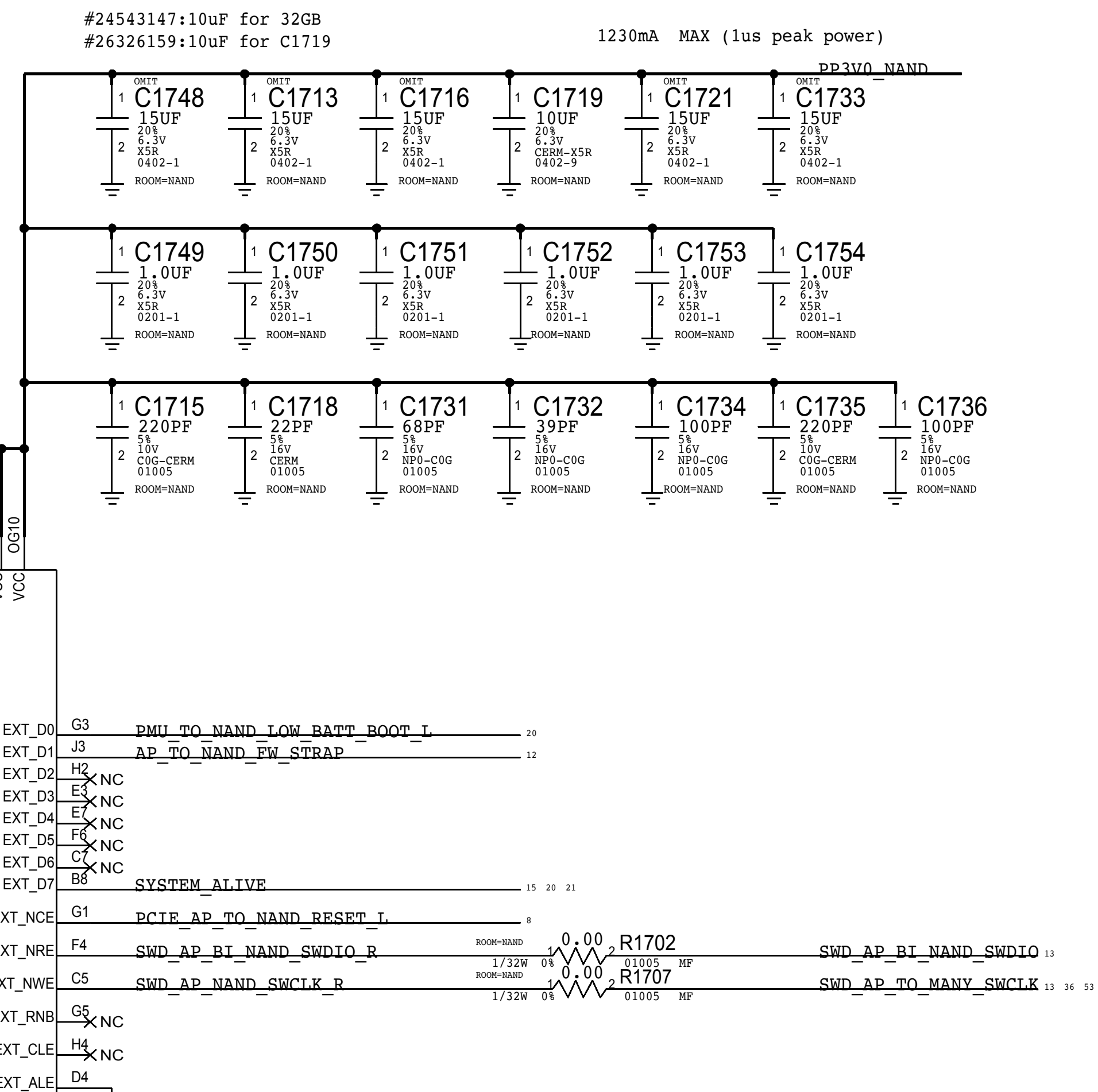
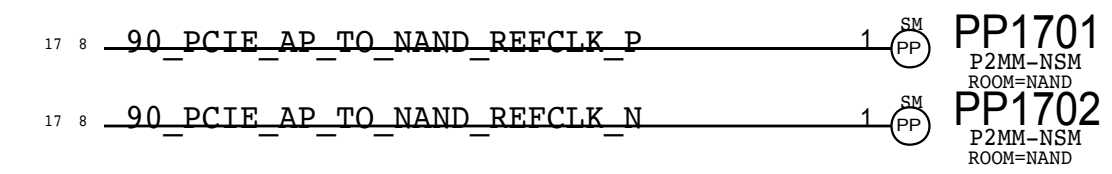



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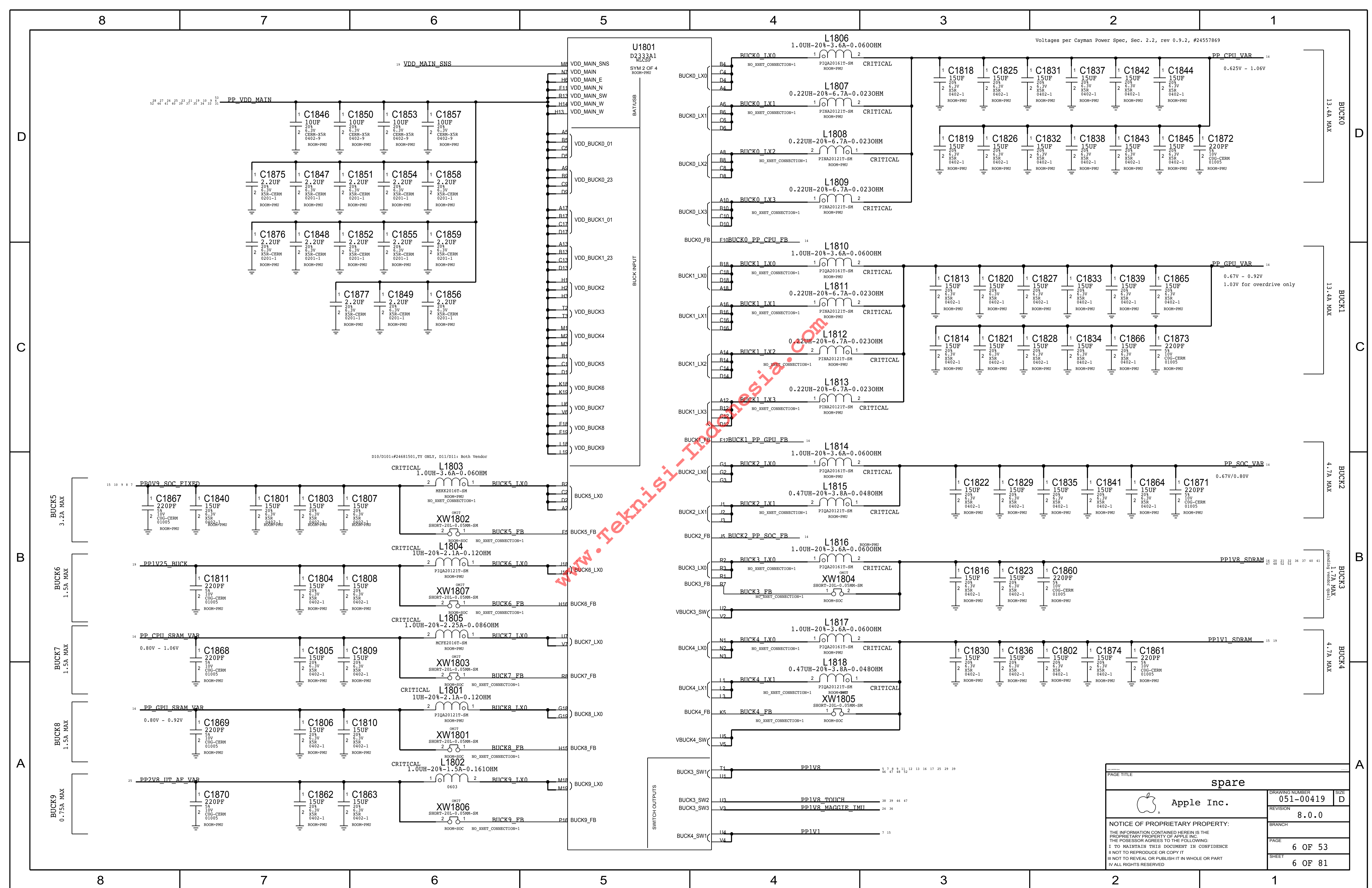


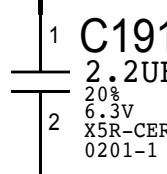
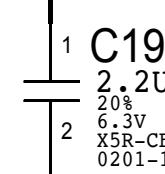
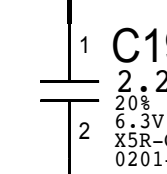
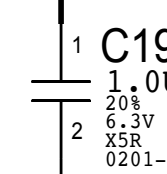
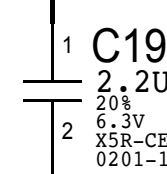
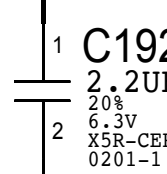
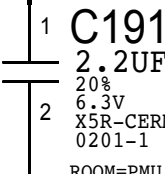
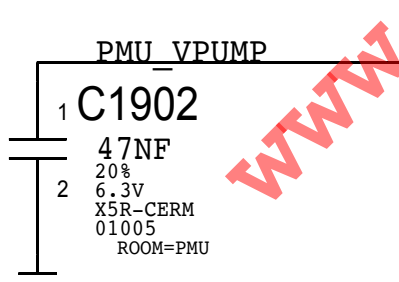
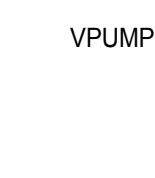
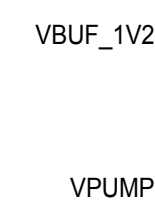
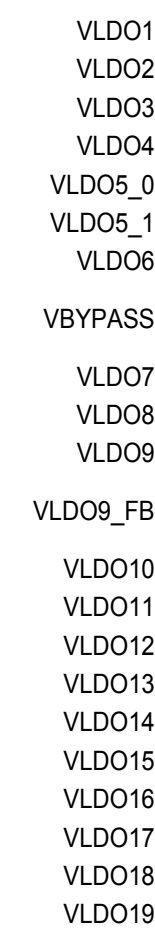
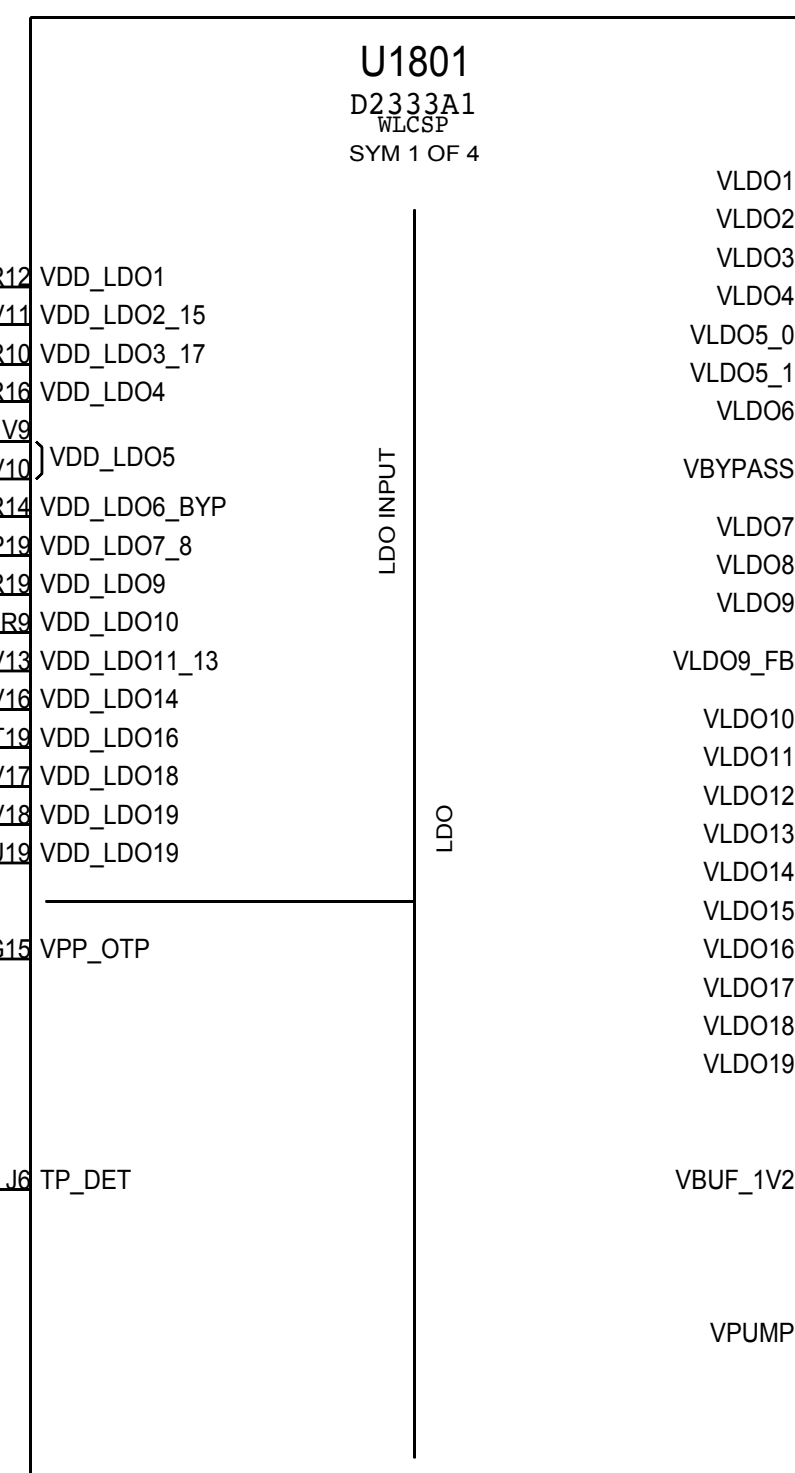
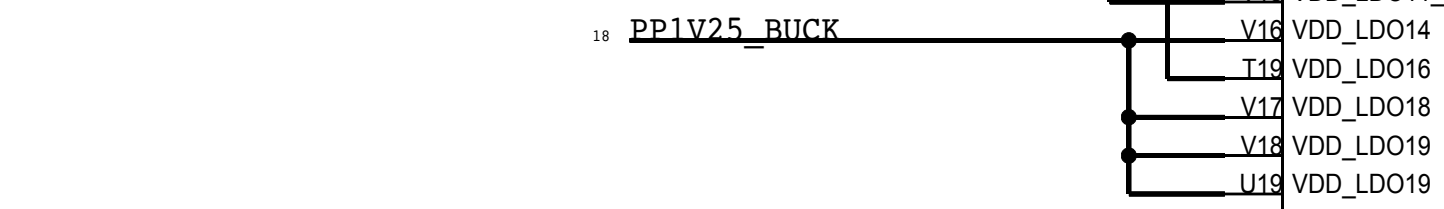
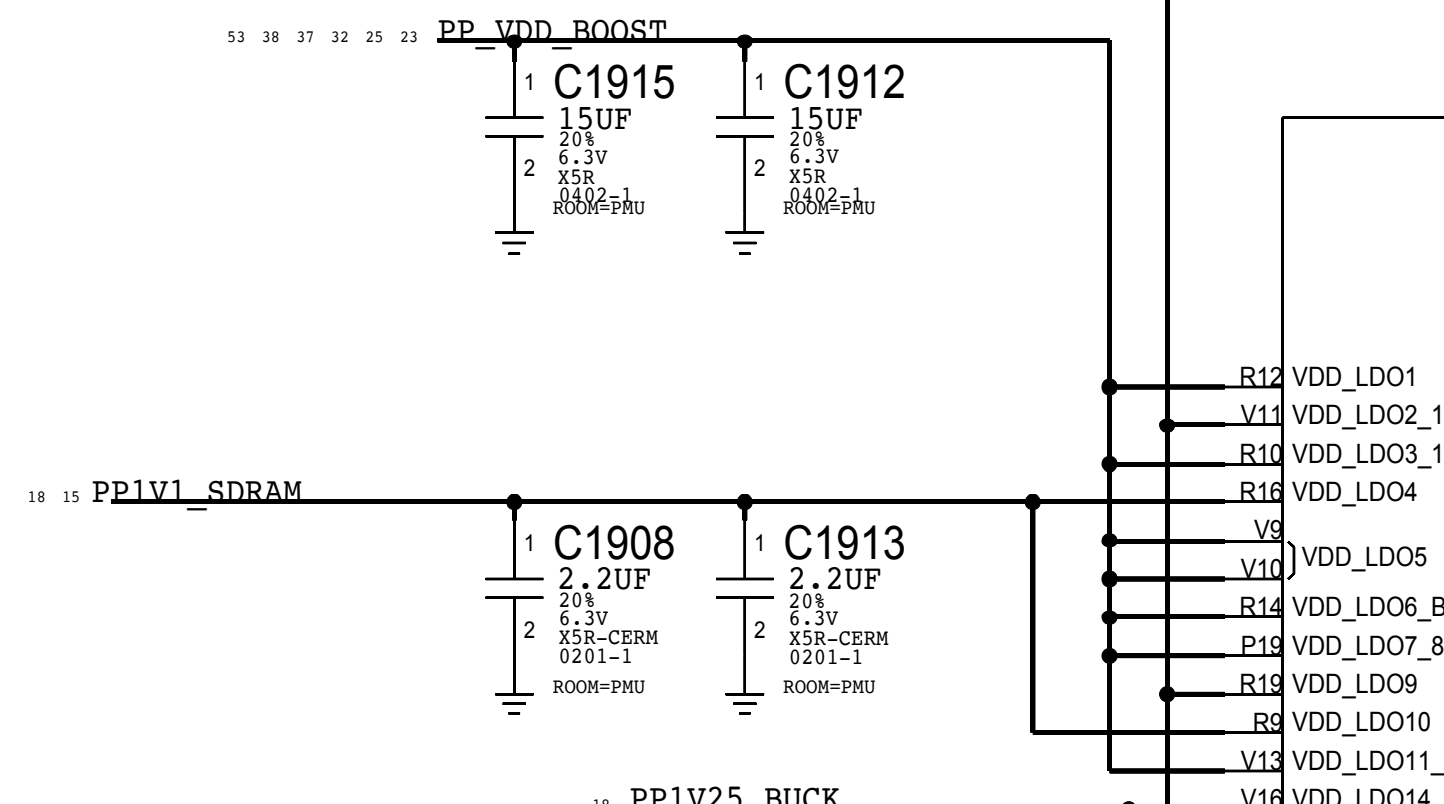
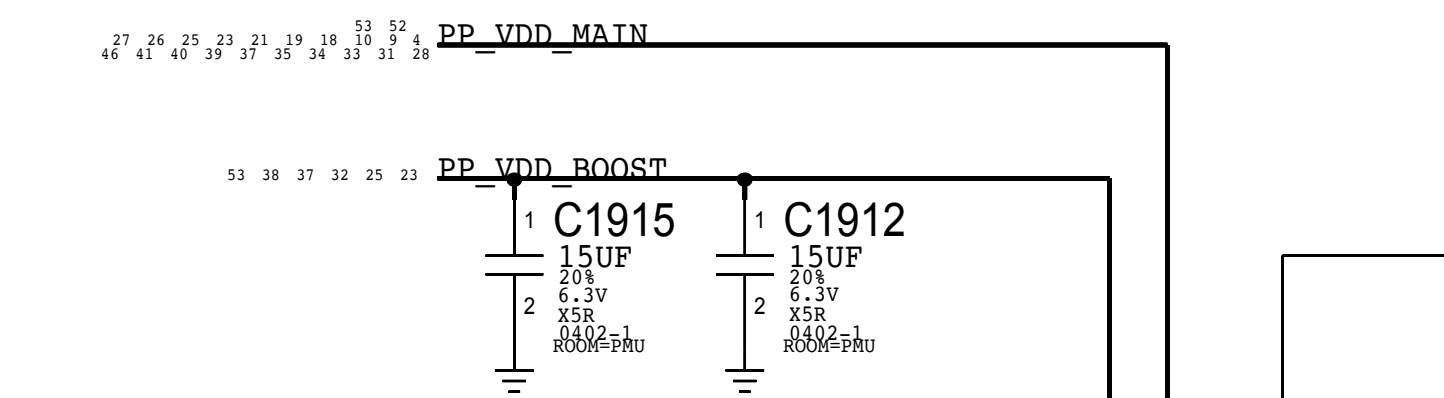
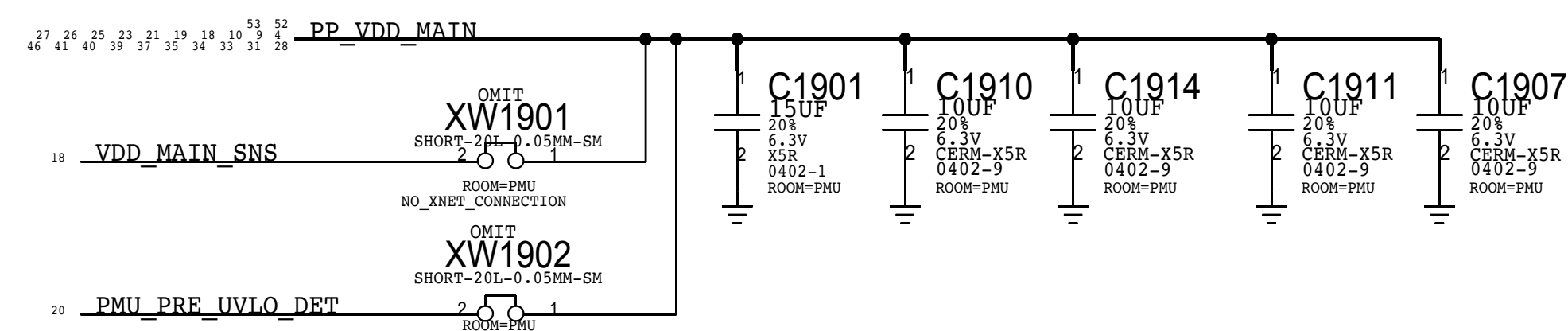


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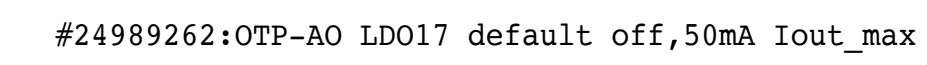
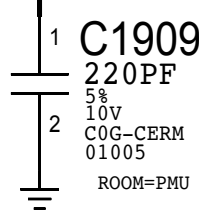
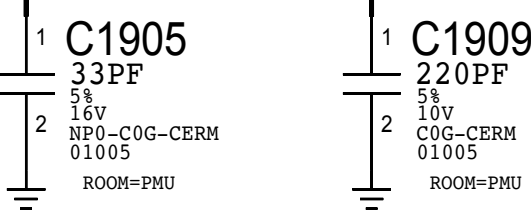
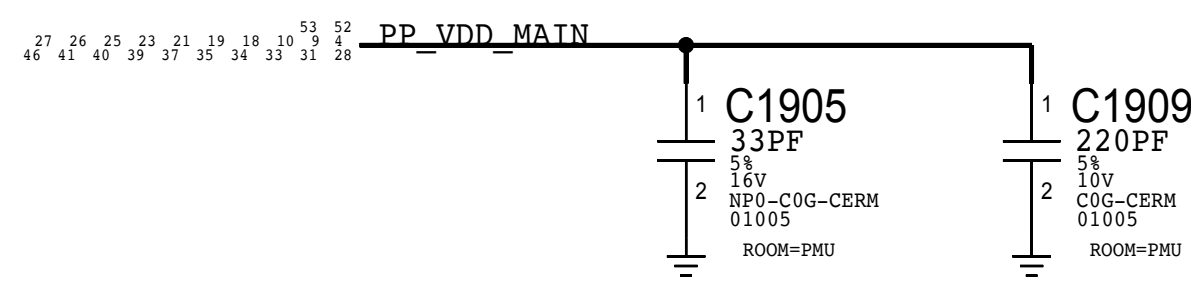
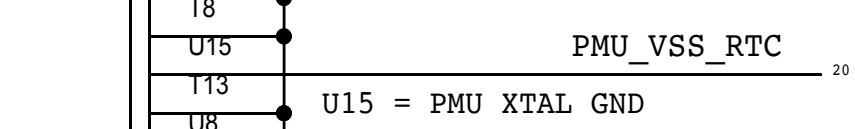
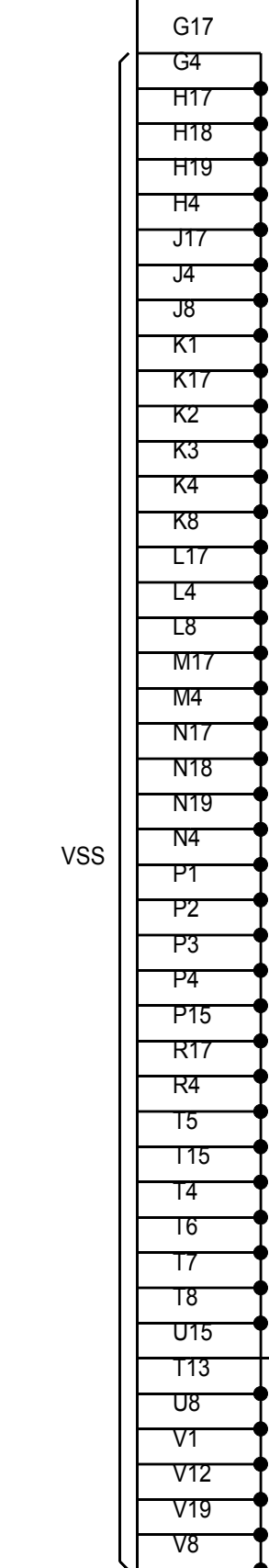
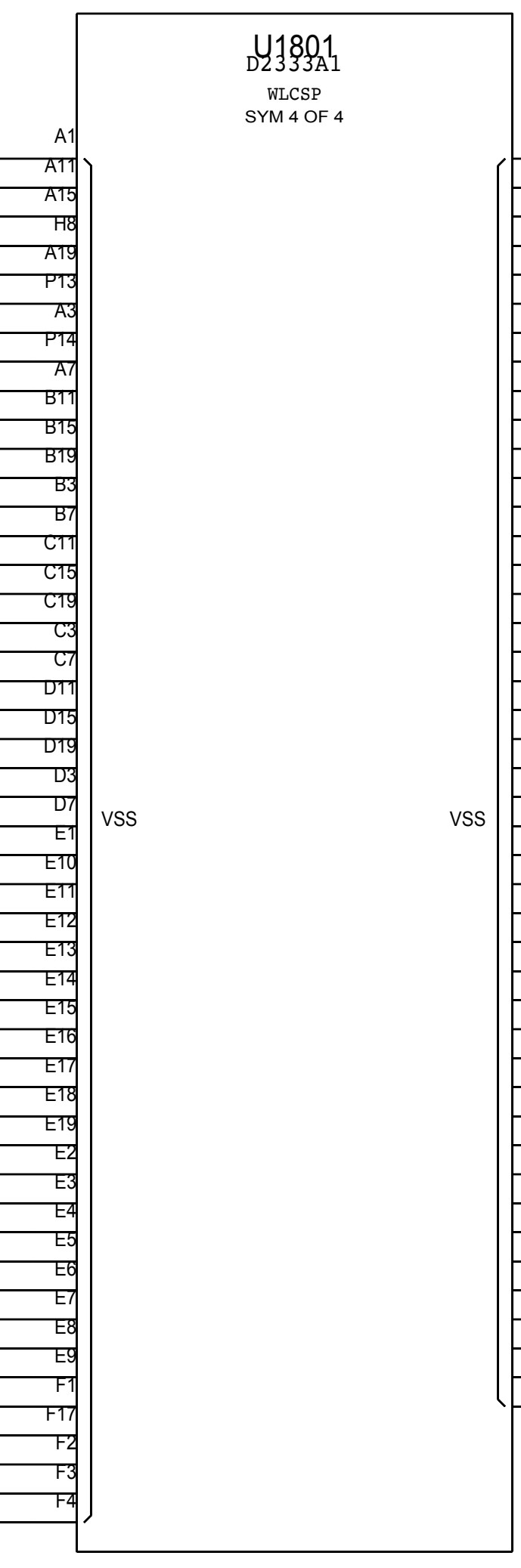
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		REVISION 8.0.0	
		BRANCH	
		PAGE 6 OF 53	
		SHEET 6 OF 81	







LDO#	ADJ. RANGE, LOW	ADJ. RANGE, HI	ACCURACY	MAX. CURRENT
LD01 (Ca)	1.2-2.475V	2.4-3.675V	+/-1.4%	50mA
LD02 (Ca)	1.2-2.475V	2.4-3.675V	+/-2.5%	50mA
LD03 (Ca)	1.2-2.475V	2.4-3.675V	+/-2.5%	50mA
LD04 (D)	0.7-1.2V		+/-2.5%	60mA
LD05 (F)	2.5-3.6V(tbc)		+/-75mV	1000mA
LD06 (Cb)	1.2-2.475V	2.4-3.675V	+/-2.5%	250mA (500/100mA in bypass)
LD07 (Cb)	1.2-2.475V	2.4-3.675V	+/-30mV	250mA
LD08 (Cb)	1.2-2.475V	2.4-3.675V	+/-30mV	250mA
LD09 (Cb)	1.2-2.475V	2.4-3.675V	+/-25mV	250mA
LD010 (Ga)	0.7-1.2V		+/-4.5%	1150mA

LDO#	ADJ. RANGE, LOW	ADJ. RANGE, HI	ACCURACY	MAX. CURRENT
LDO11 (Cb)	1.2-2.475V	2.4-3.675V	+/-30mV	250mA
LDO12 (E)	1.8V		+/-5%	10mA
LDO13 (Cb)	1.2-2.475V	2.4-3.675V	+/-30mV	250mA
LDO14 (Gb)	0.7-1.4V		+/-3.0%	400mA
LDO15 (Ca)	1.2-2.475V	2.4-3.675V	+/-2.5%	50mA
LDO16 (Cb)	1.2-2.475V	2.4-3.675V	+/-30mV	250mA
LDO17 (Ca)	1.2-2.475V	2.4-3.675V	+/-2.5%	50mA
LDO18 (Gb)	0.7-1.4V		+/-3.0%	400mA
LDO19 (Gb)	0.7-1.4V		+/-3.0%	400mA
LDO_RTC	2.5V		+/-2.0%	10mA
BUF_1V2	1.2V		+/-5.0%	10mA



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		PAGE		6 OF 53	
		SHEET		6 OF 81	



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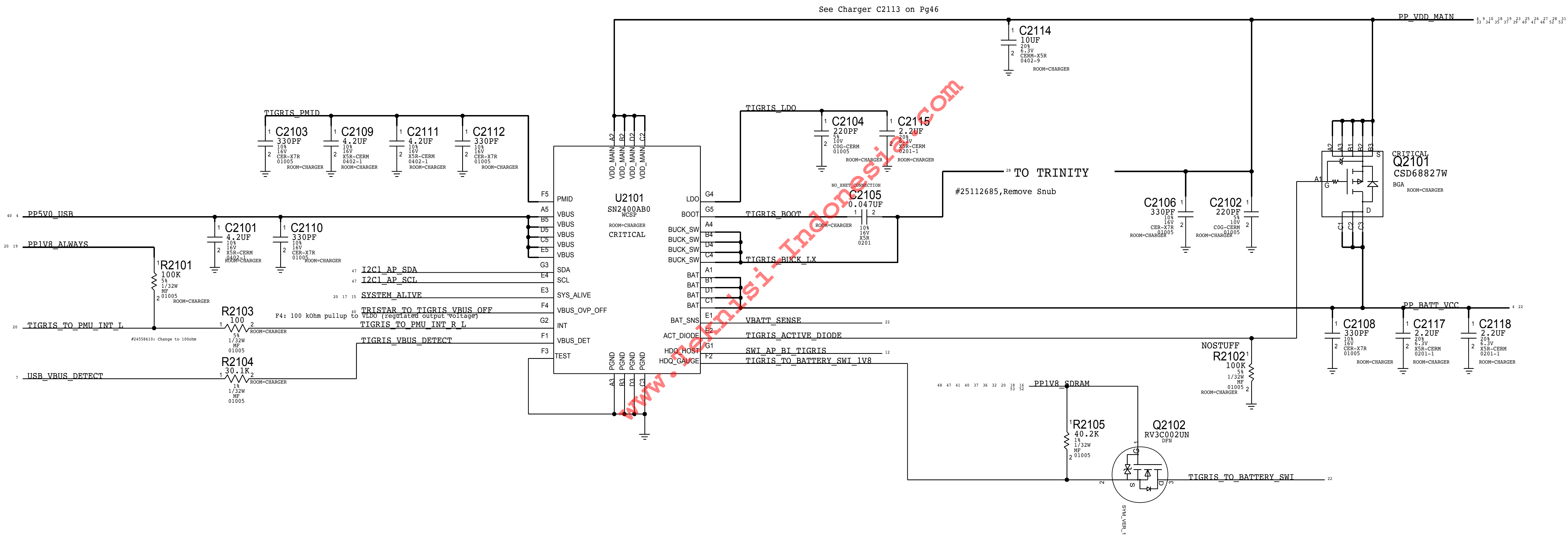
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SHEET	6 OF 81		

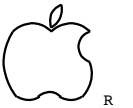
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PAGE	6 OF 53		
SHEET	6 OF 81		

BRANCH	
PAGE	6 OF 53
SHEET	6 OF 81

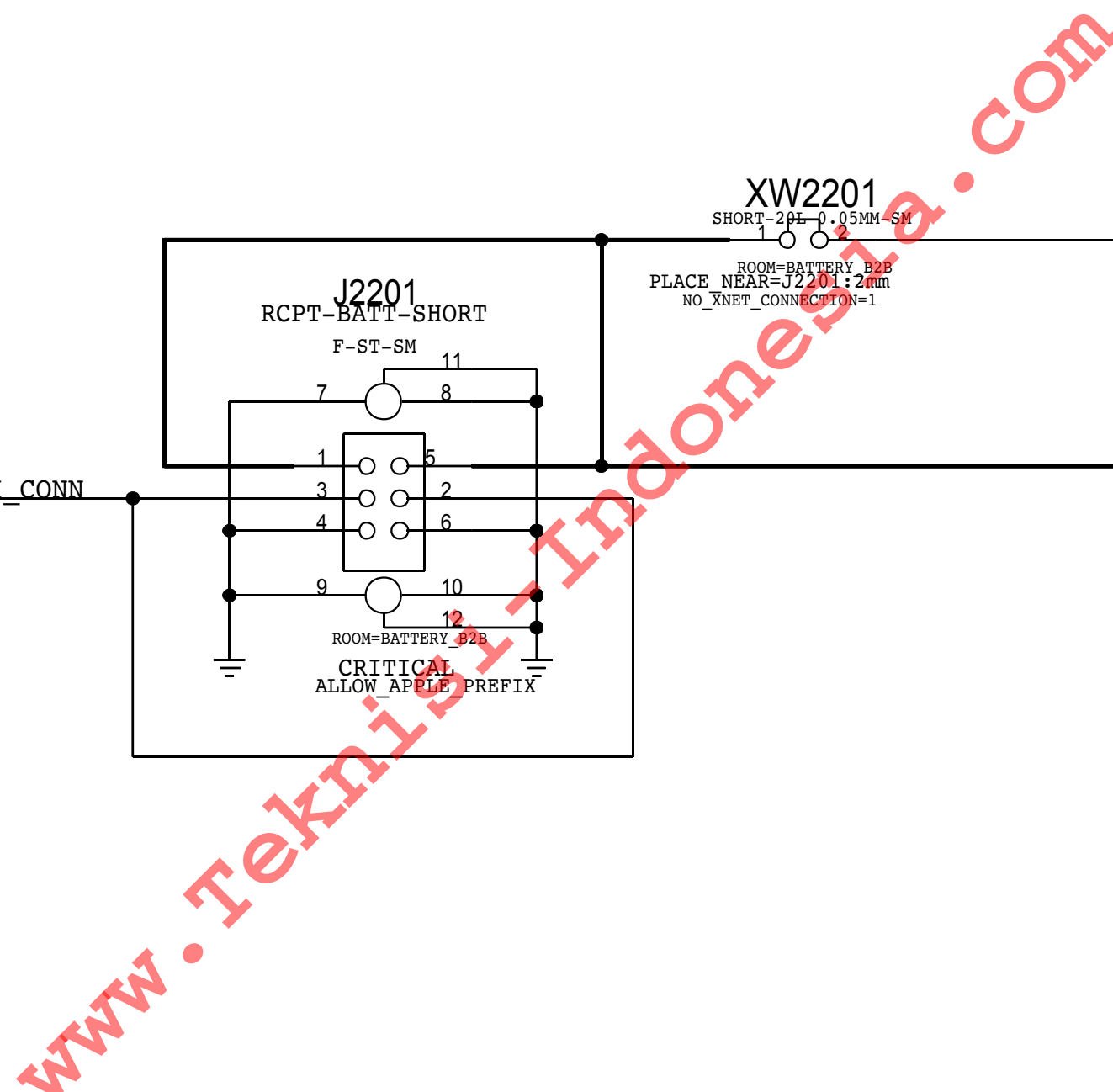
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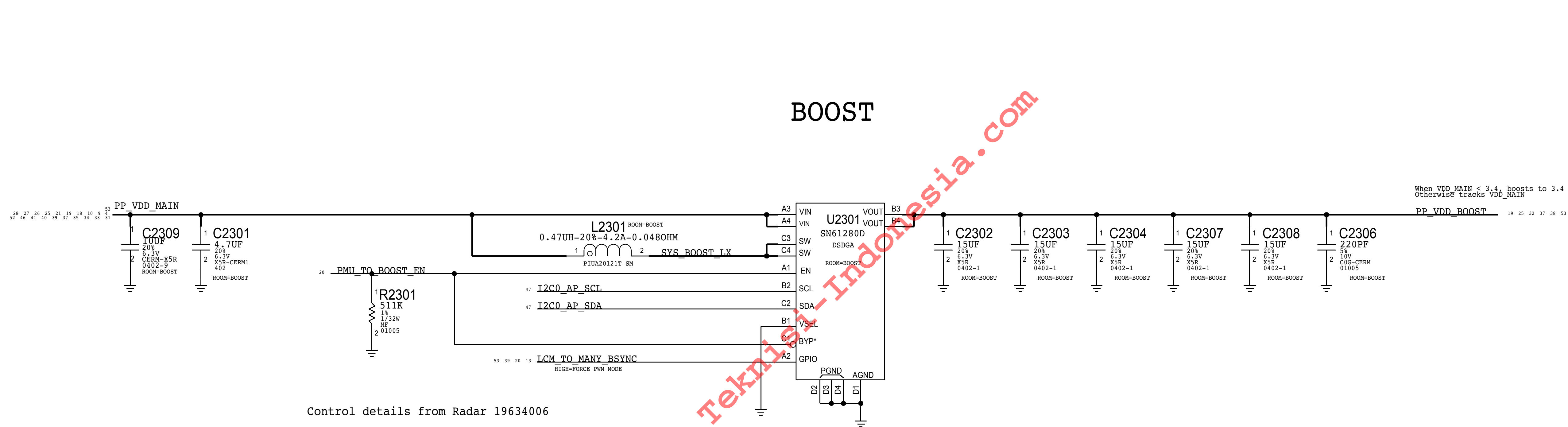


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BRANCH		PAGE
		6 OF 53
SHEET		6 OF 81

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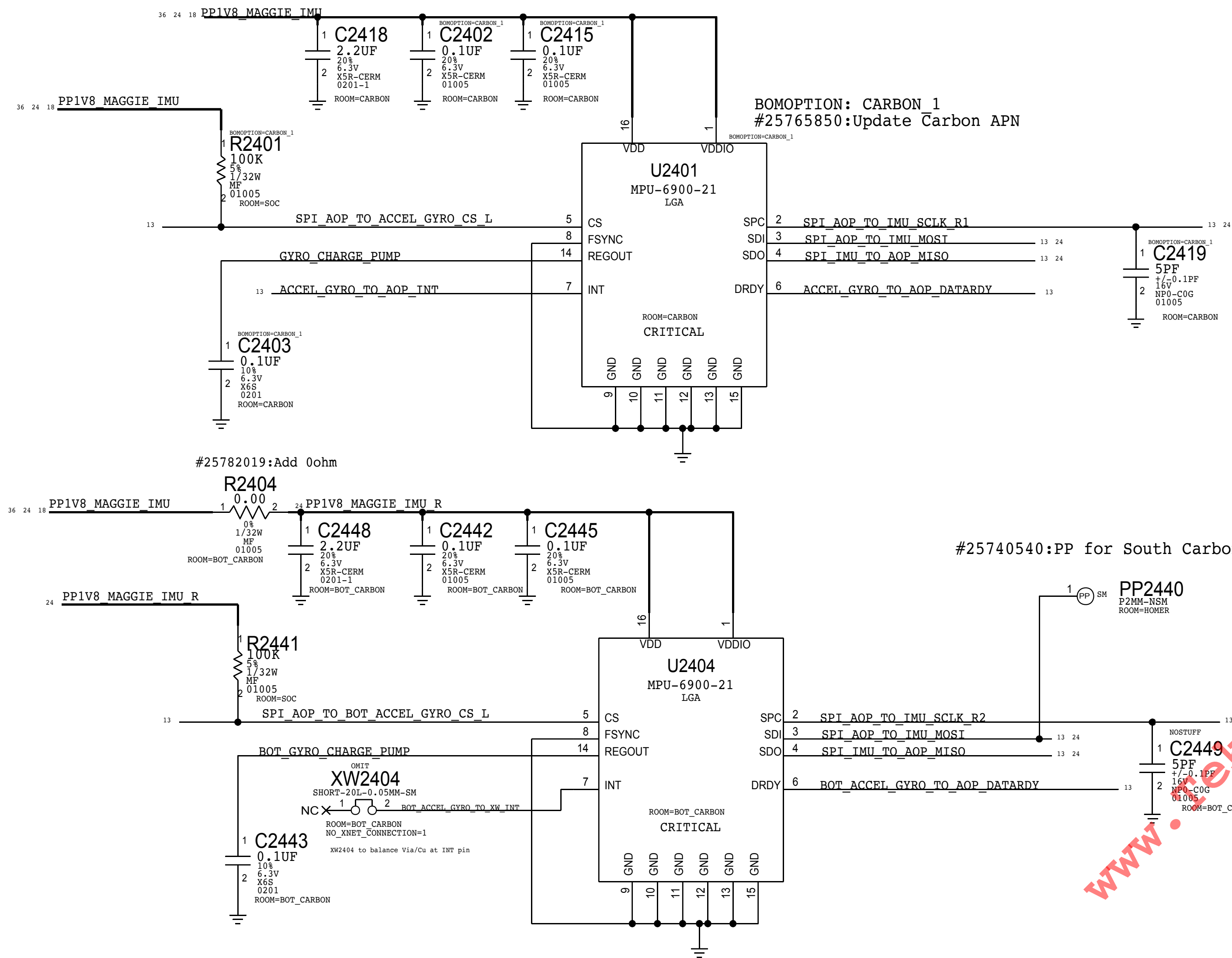


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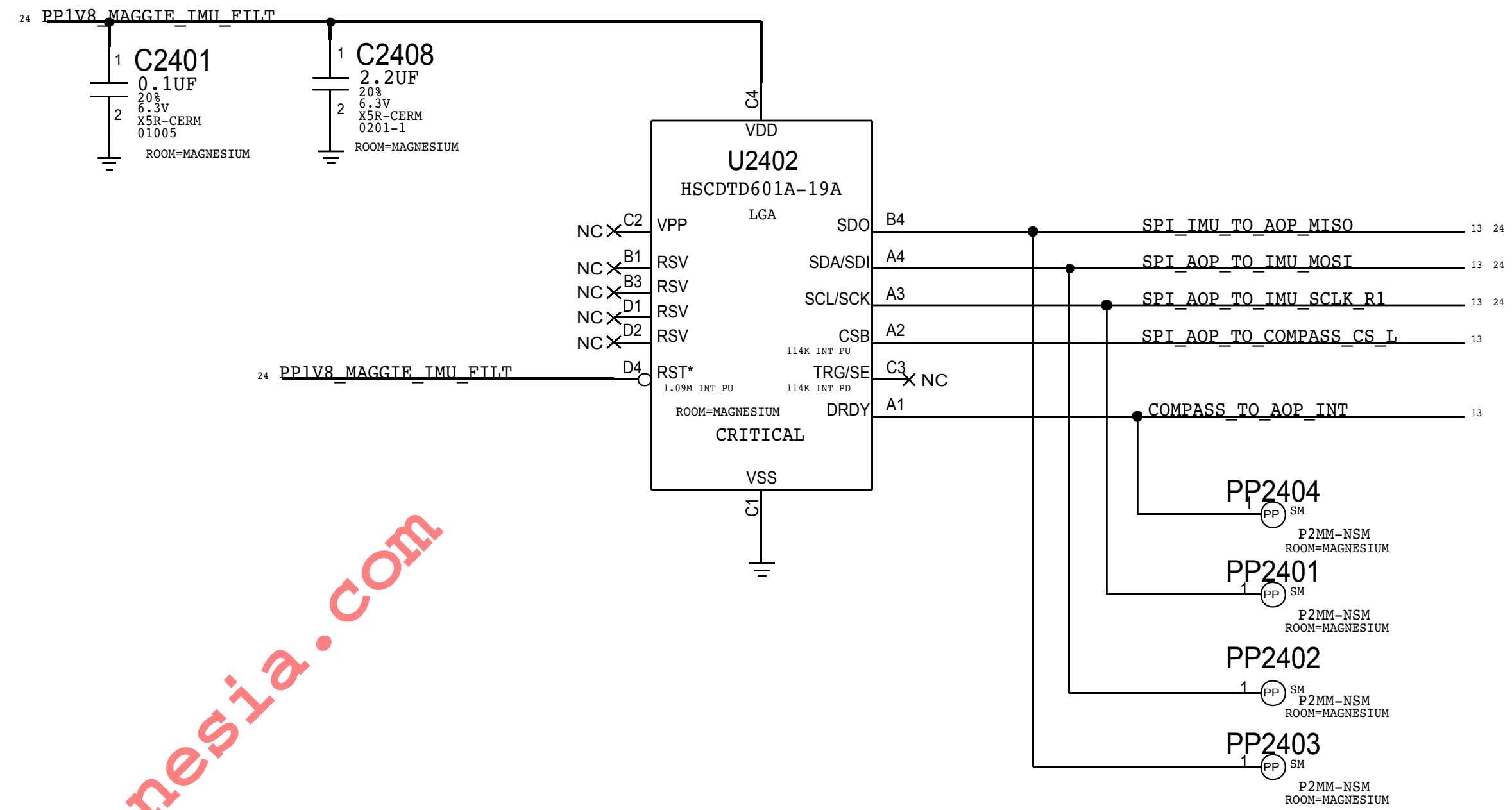


CARBON - ACCEL & GYRO

INVENSENSE, MPU-6800: C2403=0.1UF



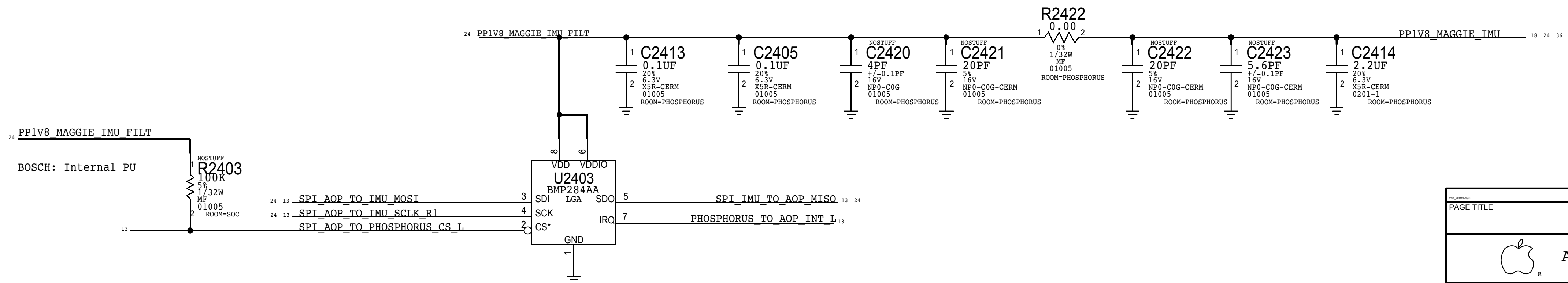
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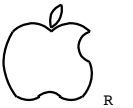


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#24593845, #25691124

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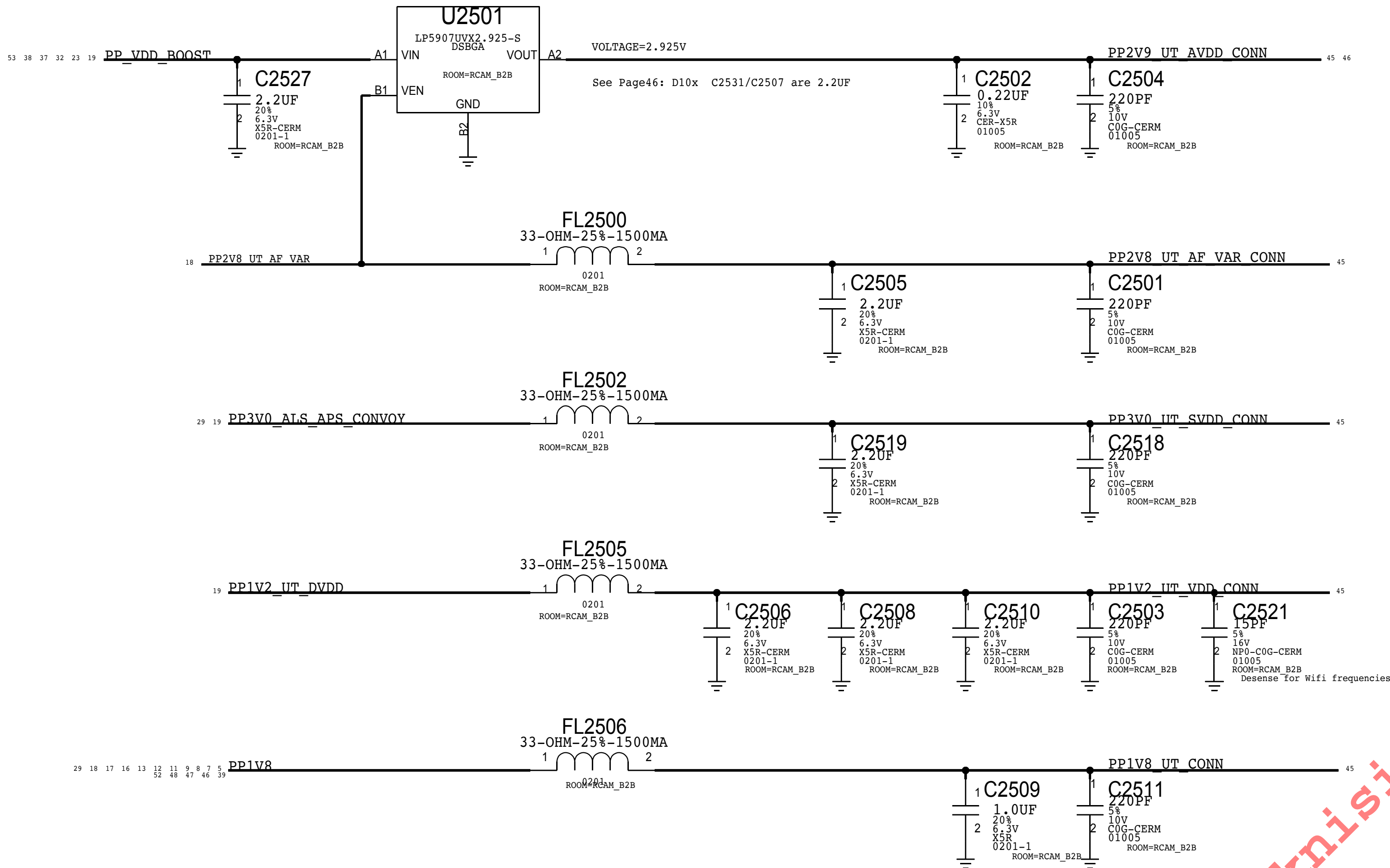


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PAGE	6 OF 53		
SHEET	6 OF 81		

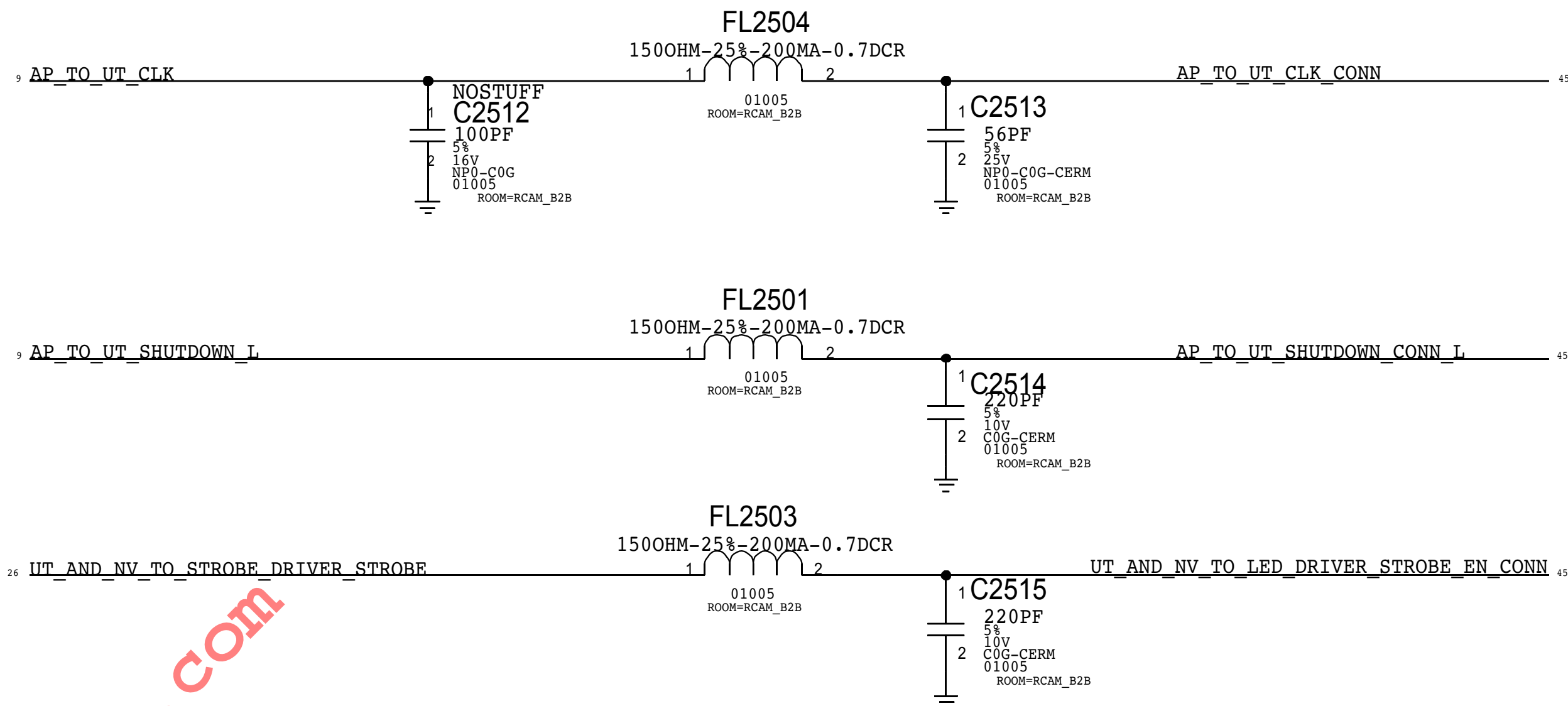
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NOTE: OUTPUT IMPEDANCE MUST BE >0.005-OHM
IN ORDER TO MEET CAP ESR REQUIREMENT PER LDO SPEC.
VENDOR ALSO RECOMMENDS CIN = COUT FOR STABILITY

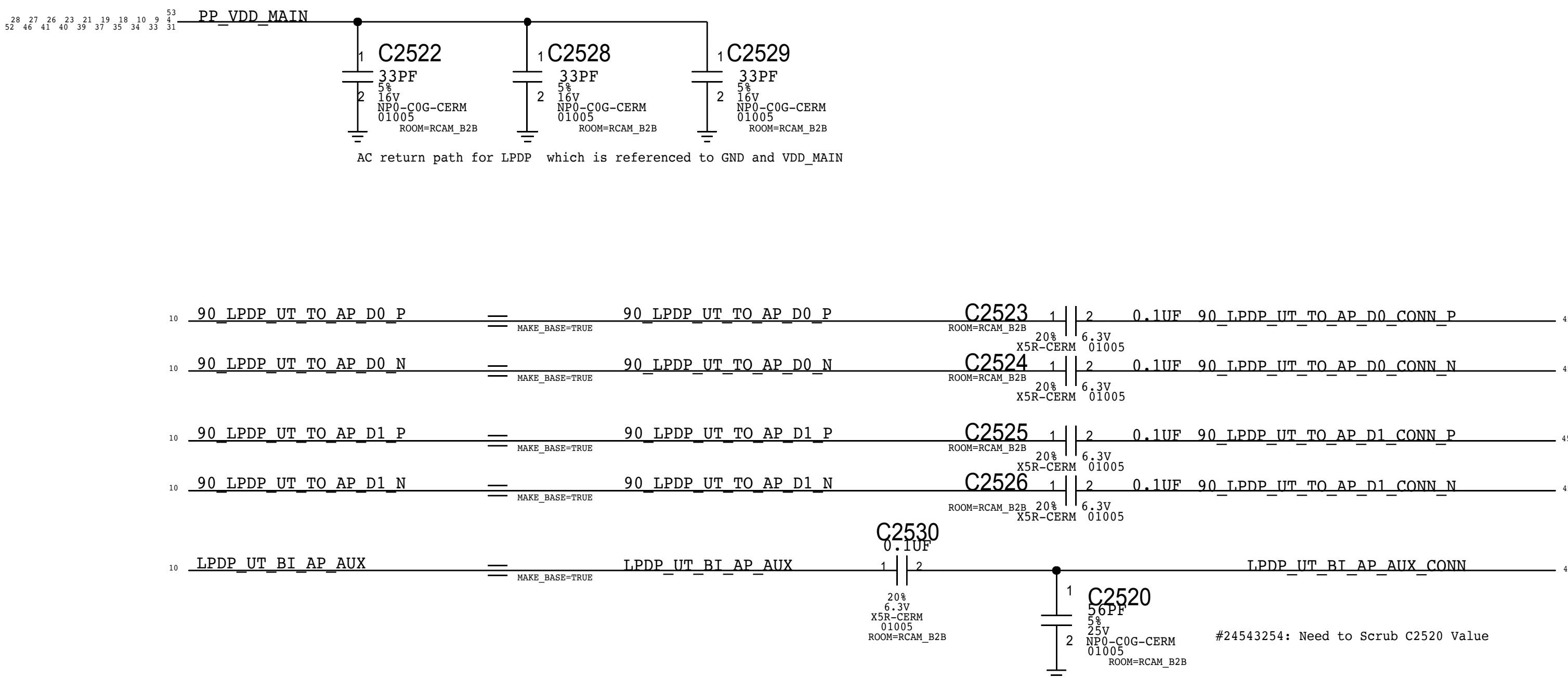
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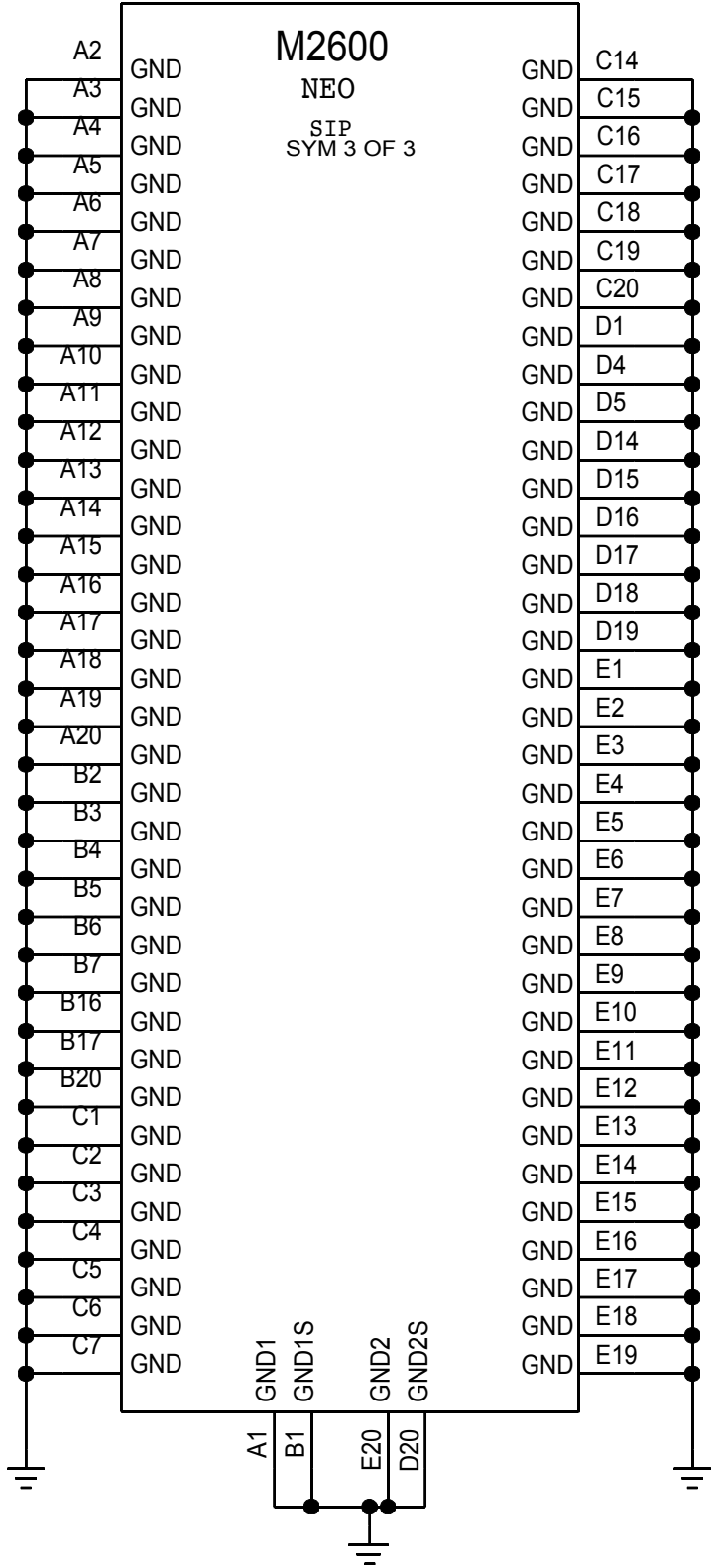
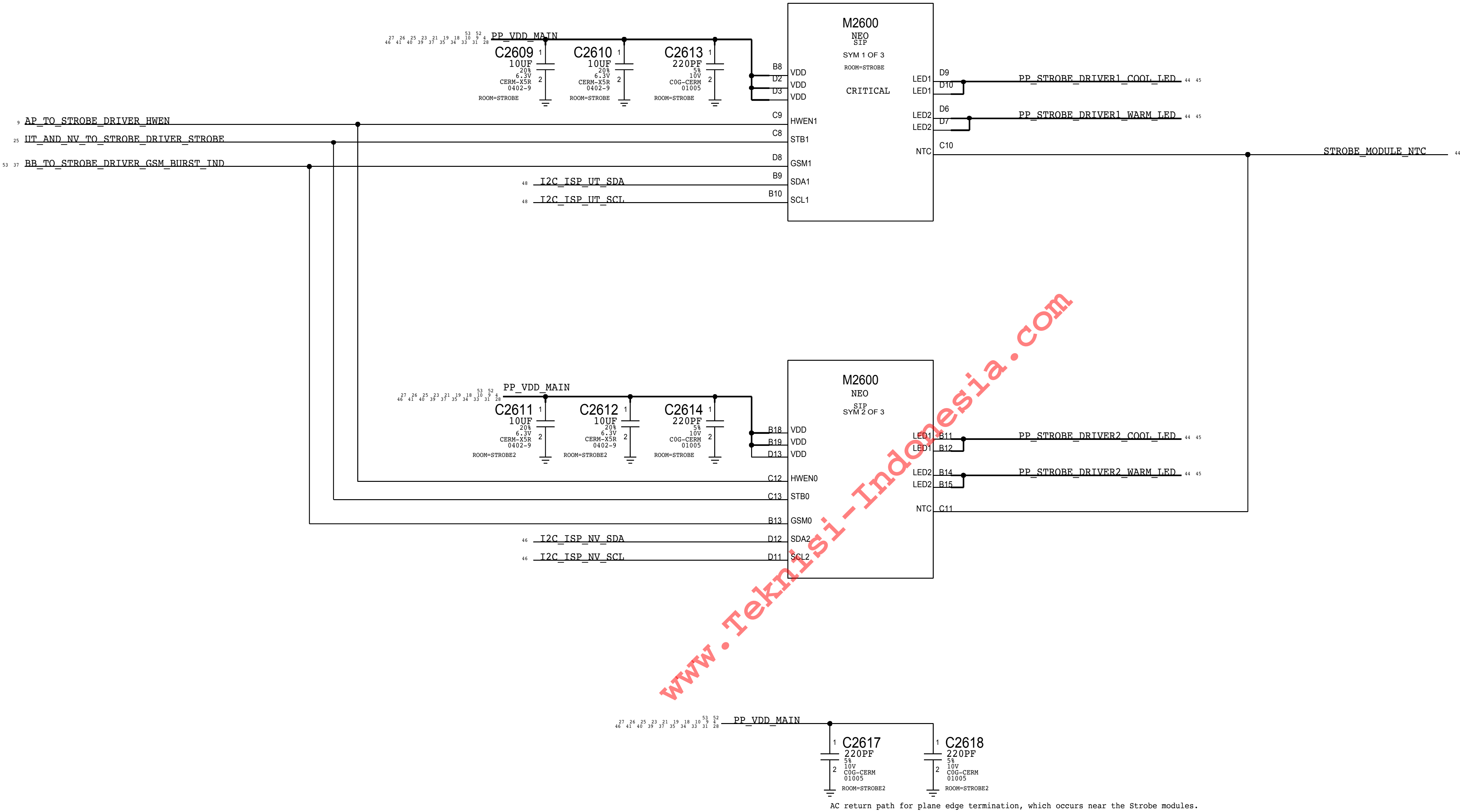
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	BRANCH		
	PAGE		6 OF 53
	SHEET		6 OF 81

STROBE DRIVERS INSIDE NEO SIP MODULE

D10/sip_neo



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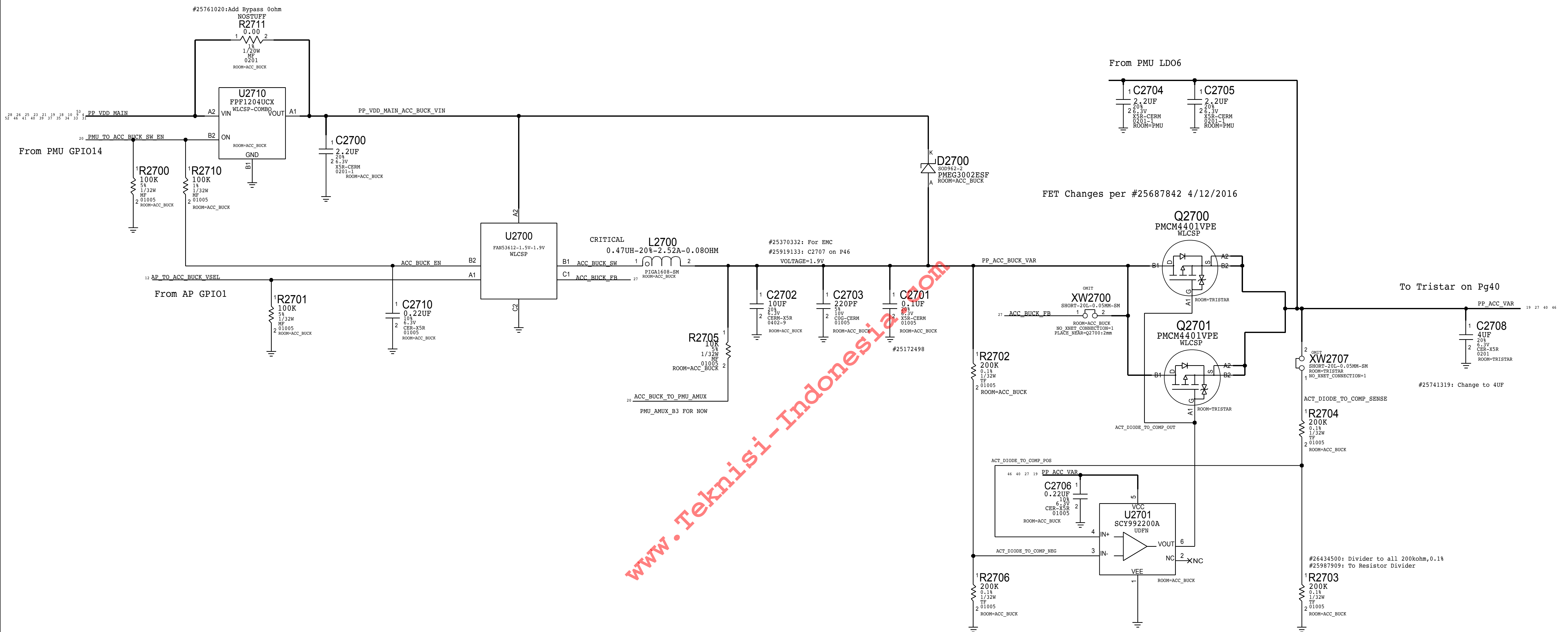
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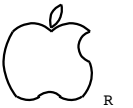
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ACCESSORY BUCK



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BRANCH	PAGE		
	6 OF 53		
SHEET	6 OF 81		

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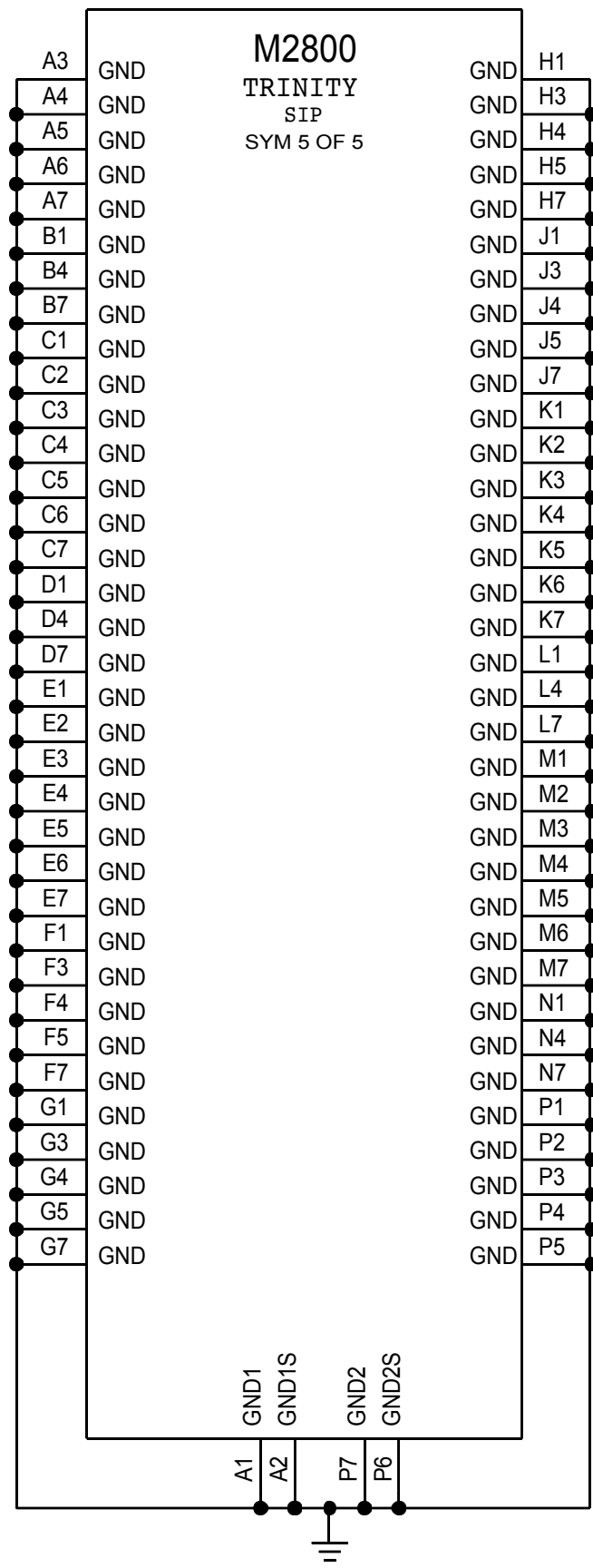
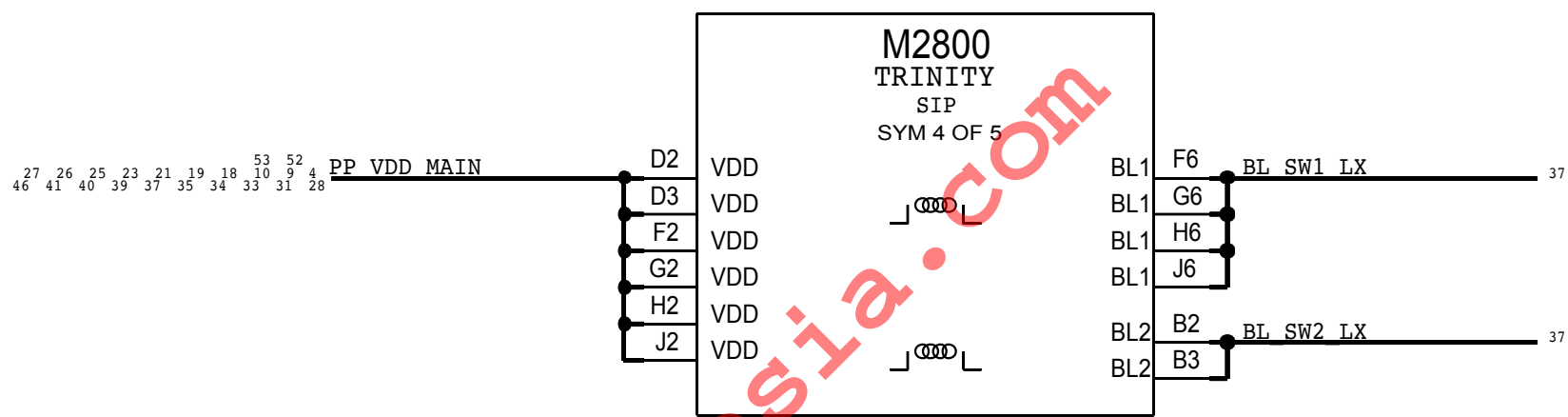
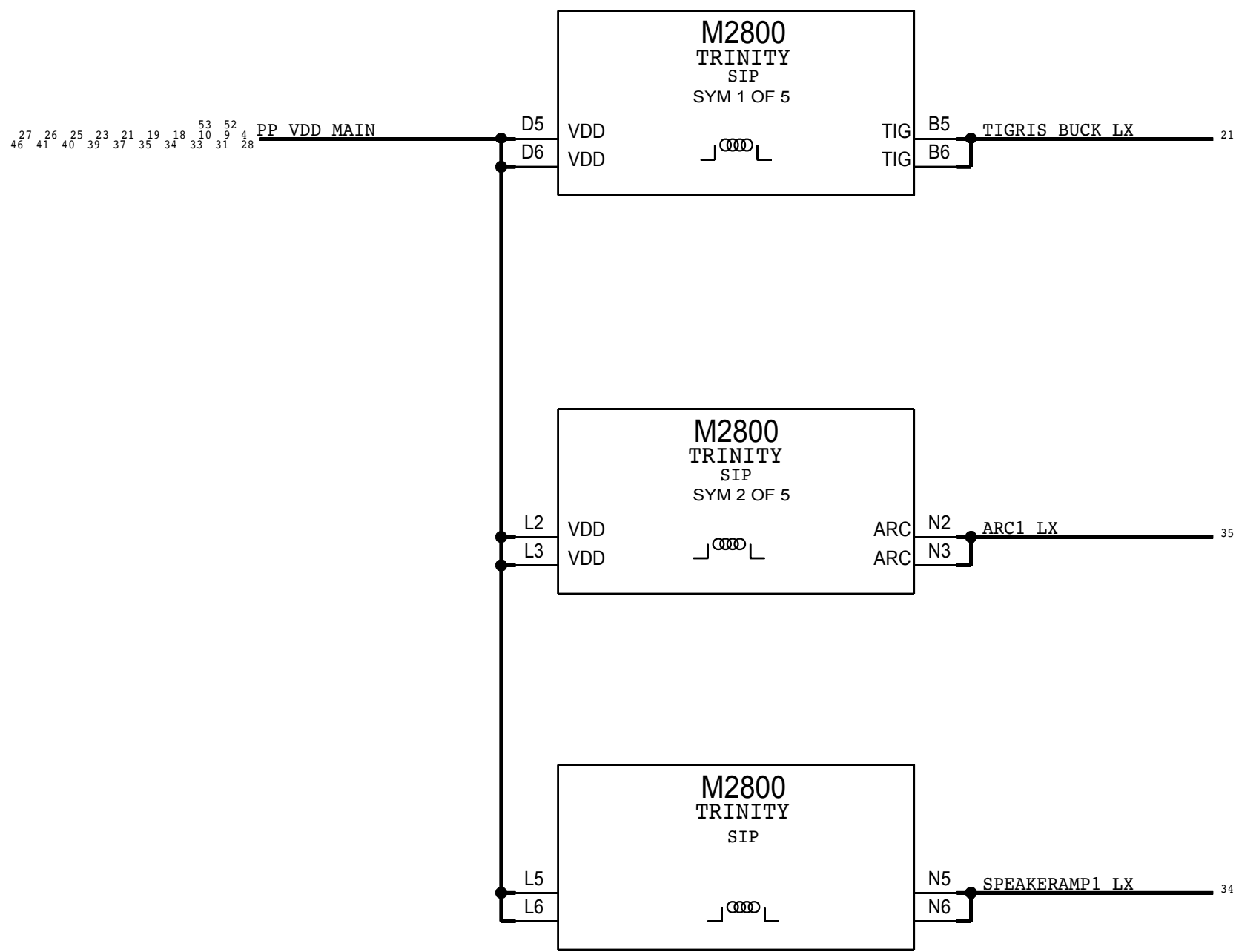
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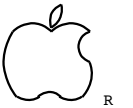
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PAGE		6 OF 53	
SHEET		6 OF 81	

8

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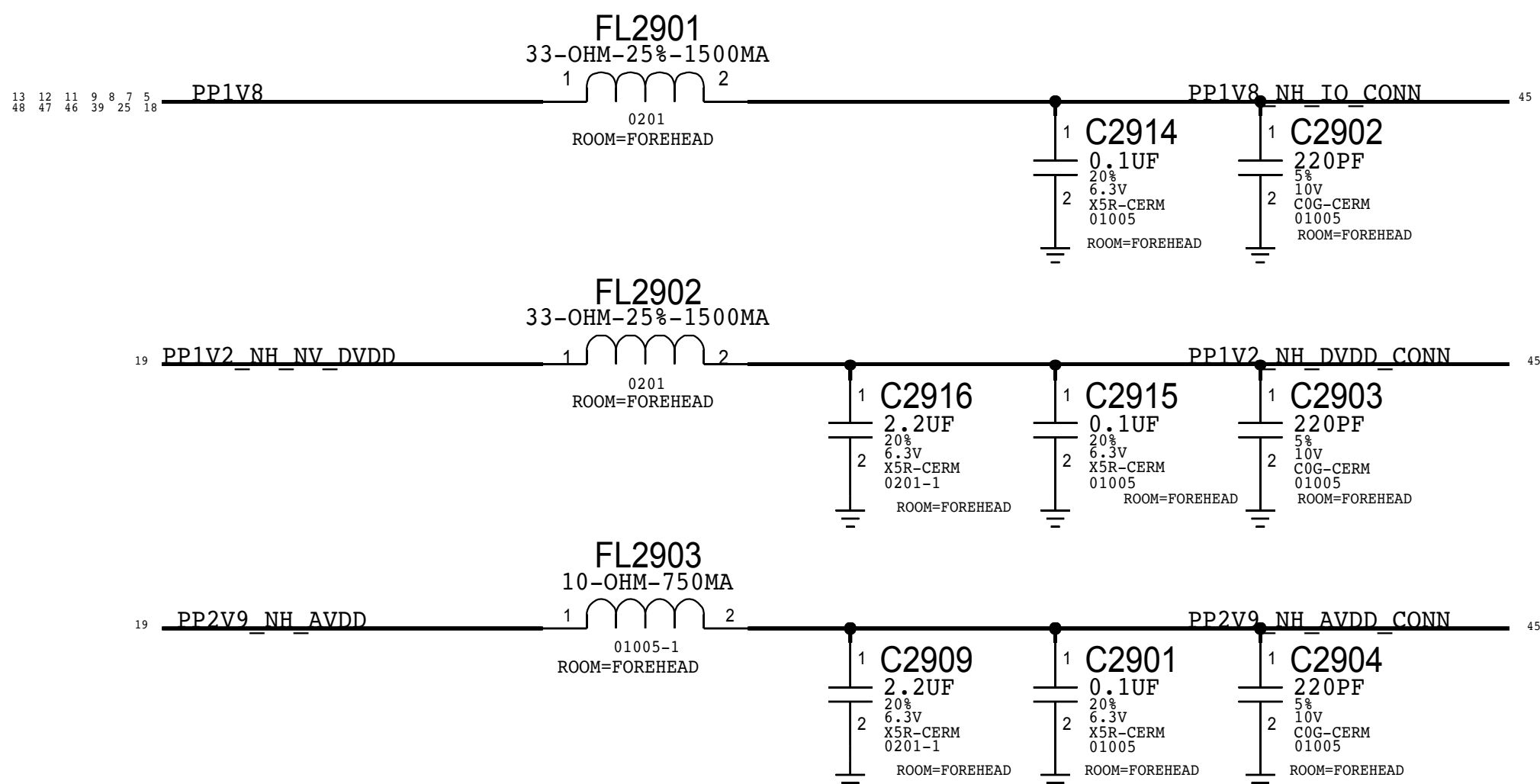
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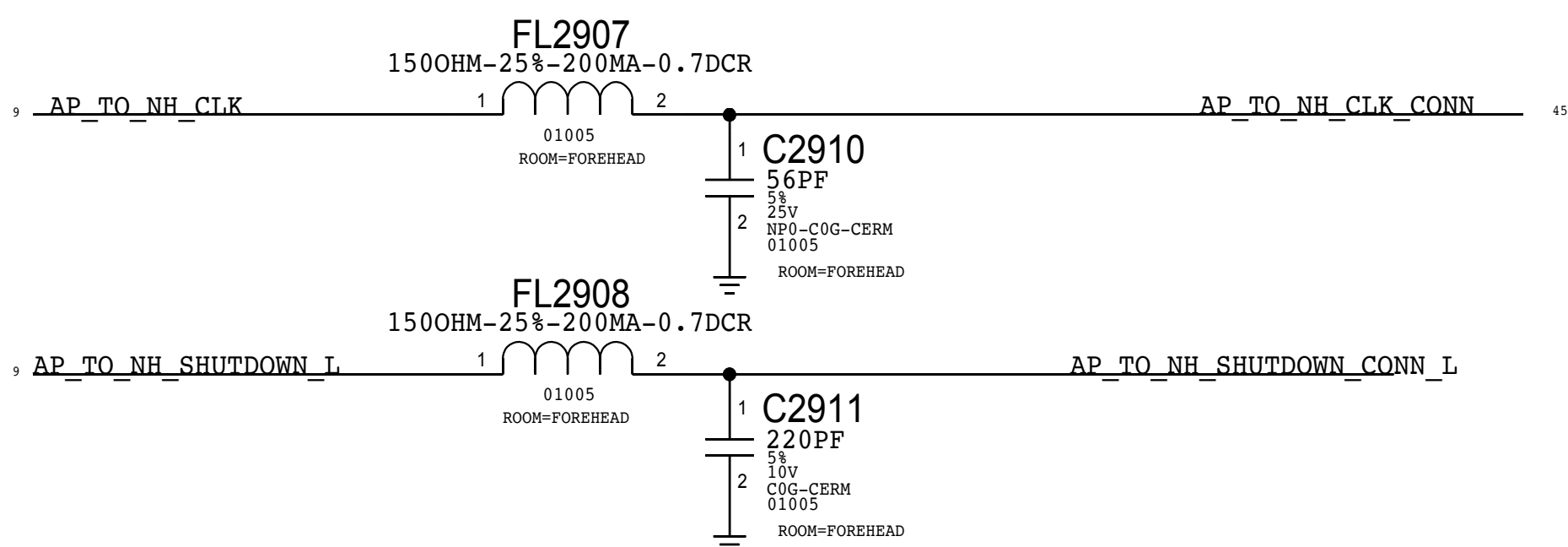
2

1

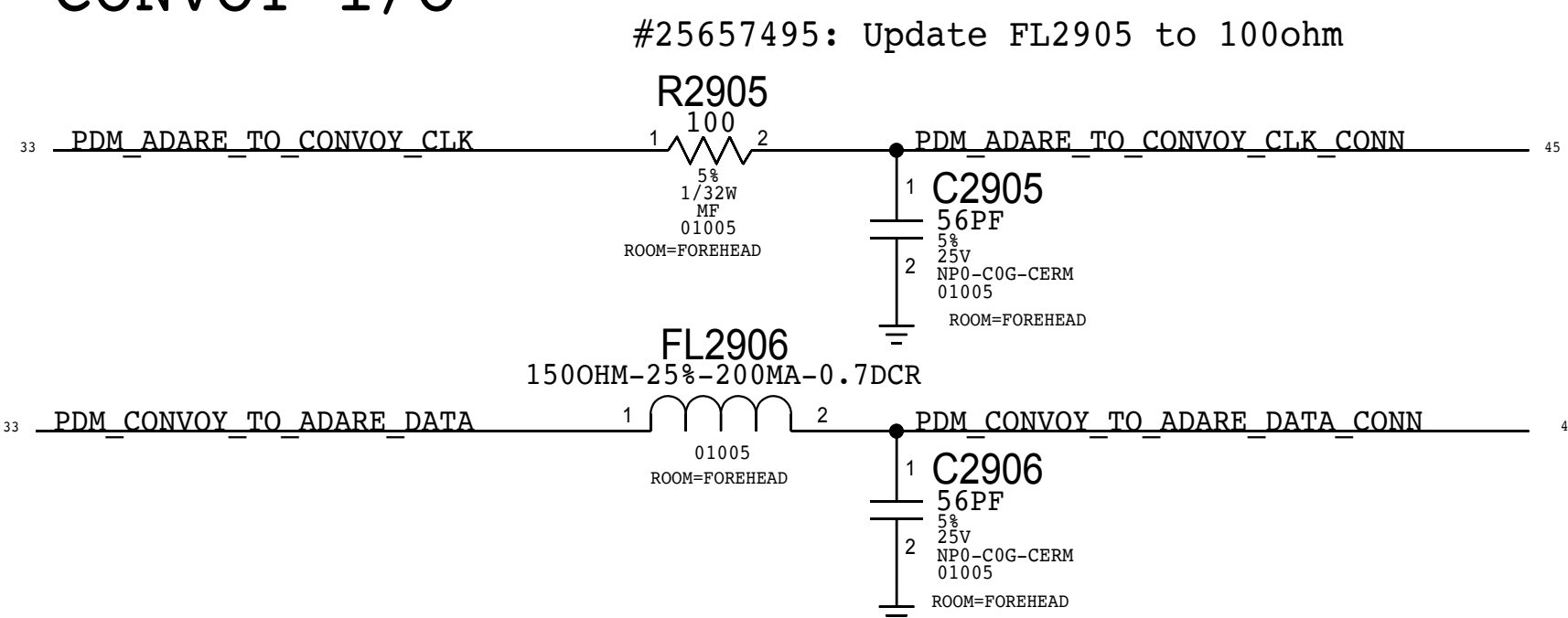
NEW HAMPSHIRE POWER



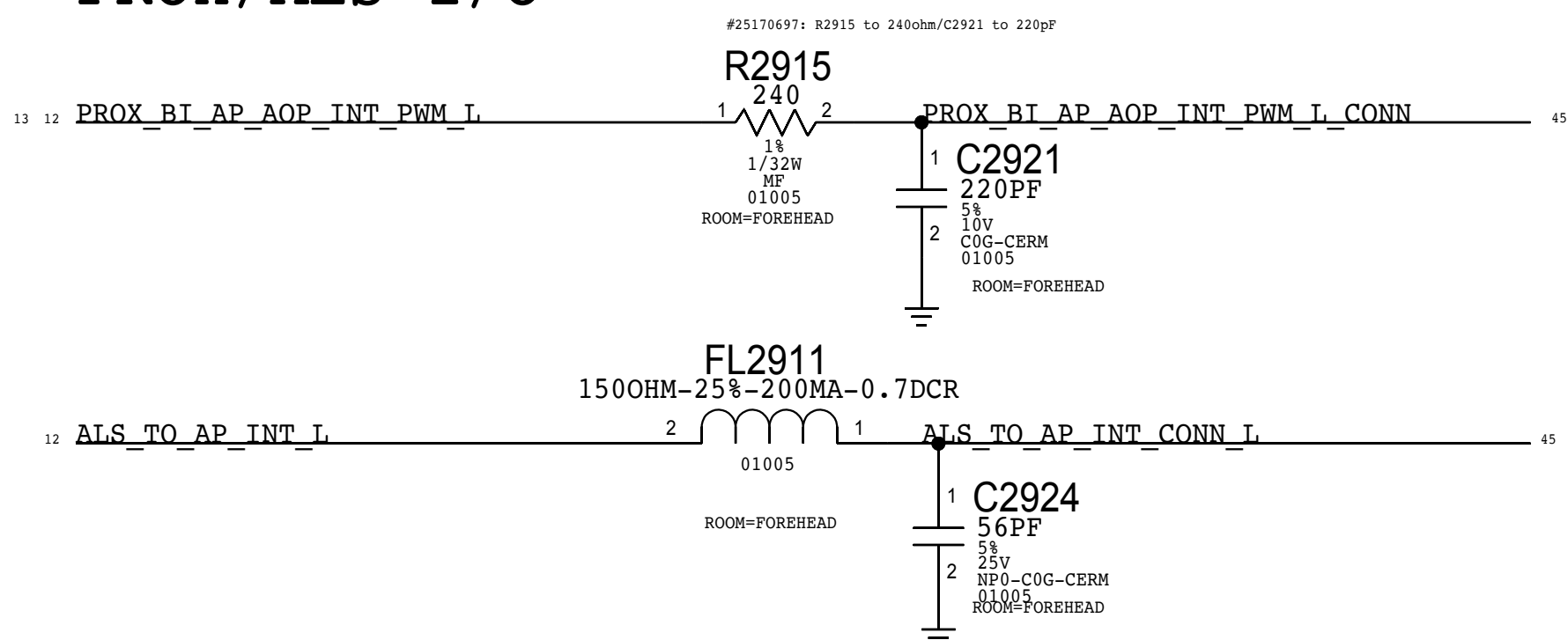
NEW HAMPSHIRE I/O



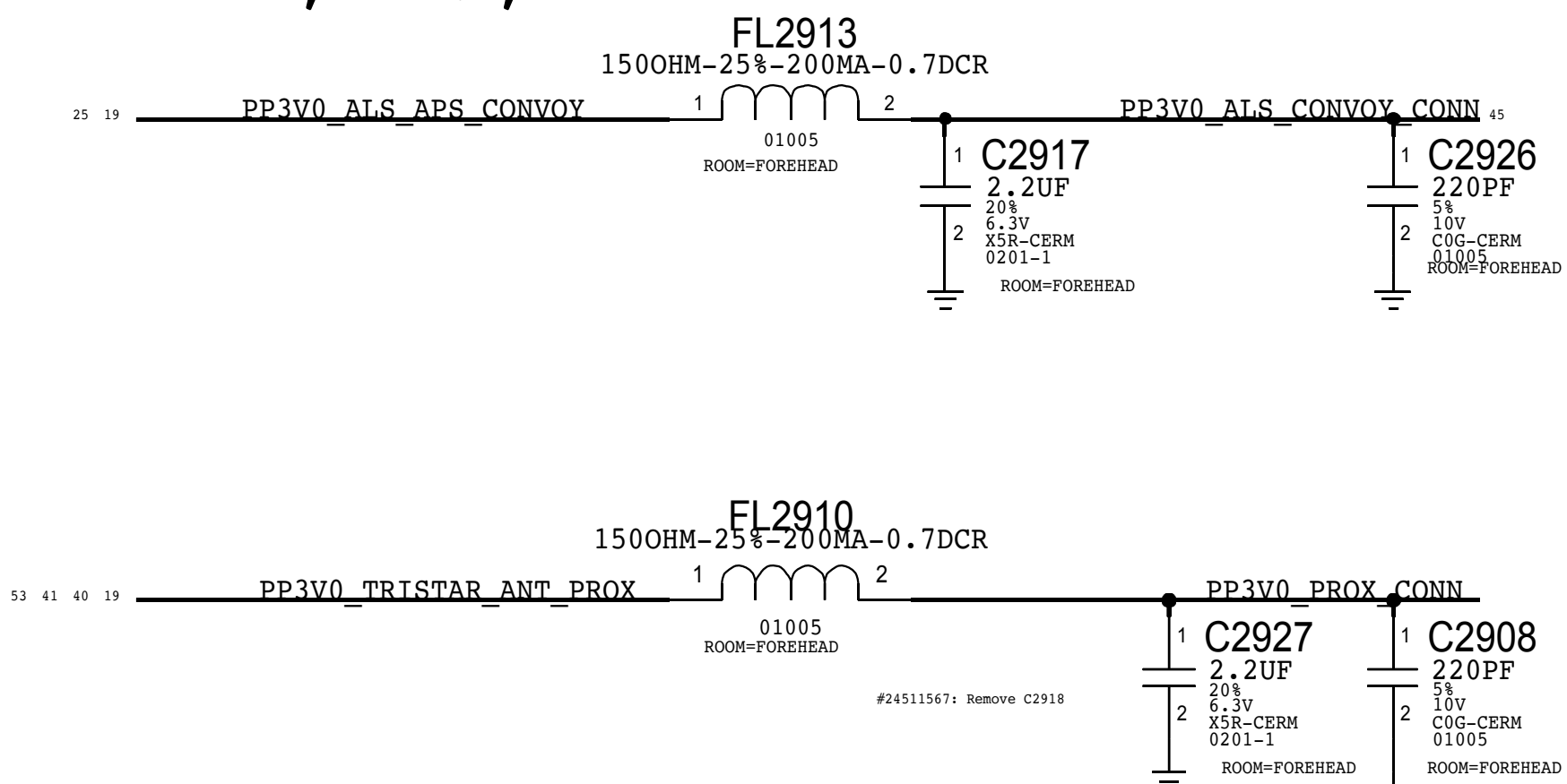
CONVOY I/O



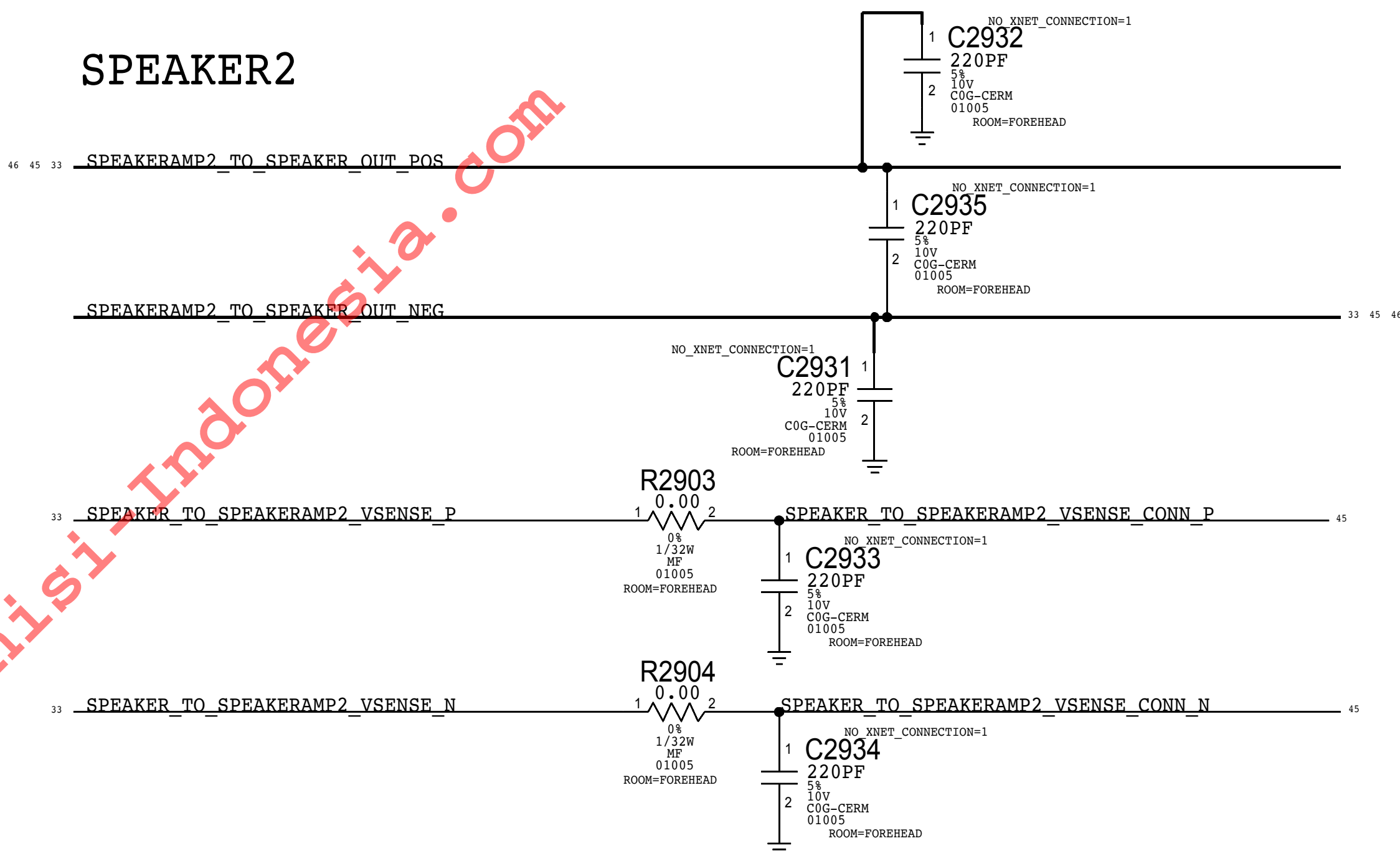
PROX/ALS I/O



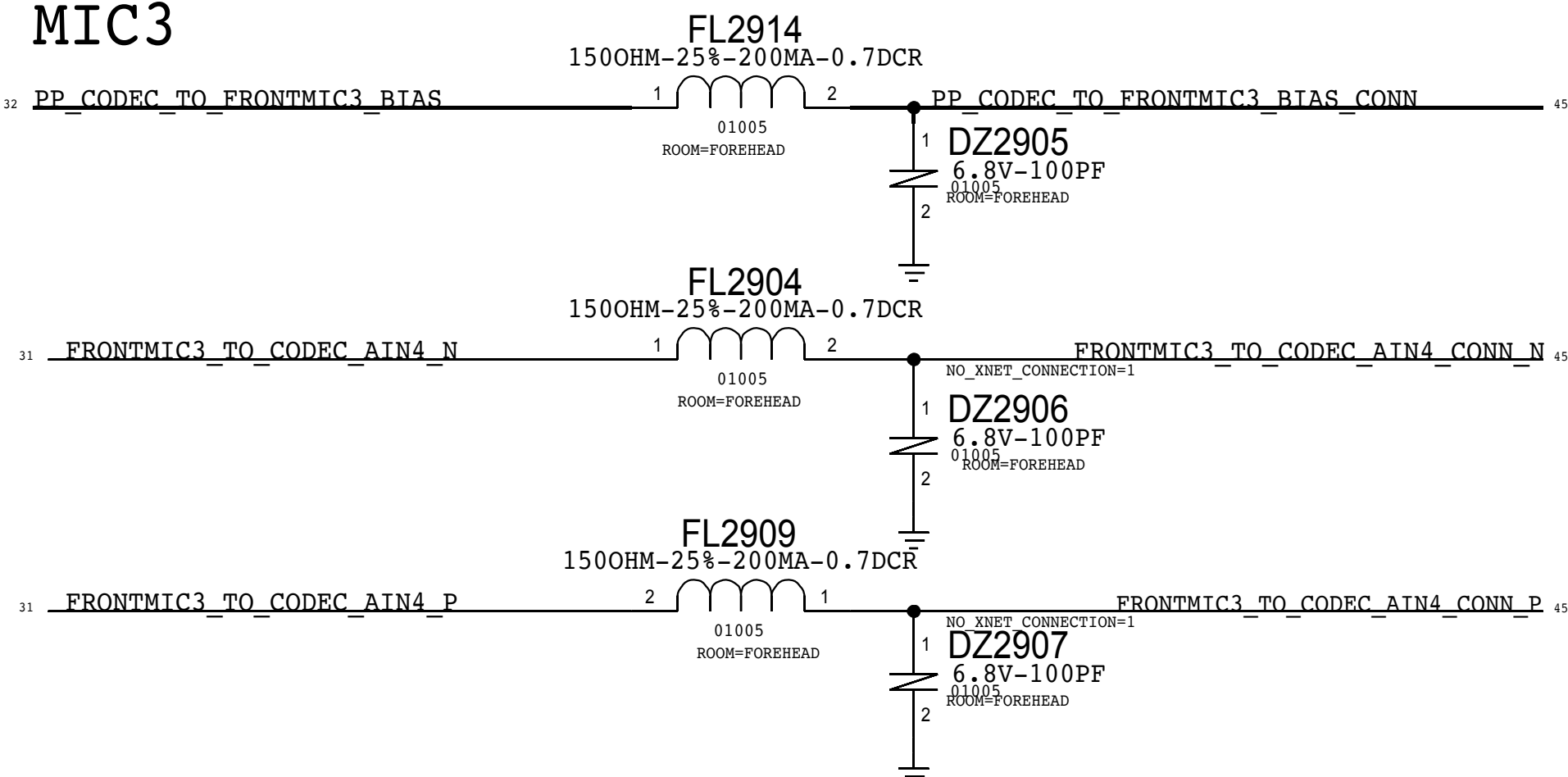
PROX, ALS, & CONVOY POWER



SPEAKER2



MIC3



PAGE TITLE			
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	051-00419		D
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	PAGE		6 OF 53
	SHEET		6 OF 81

8

7

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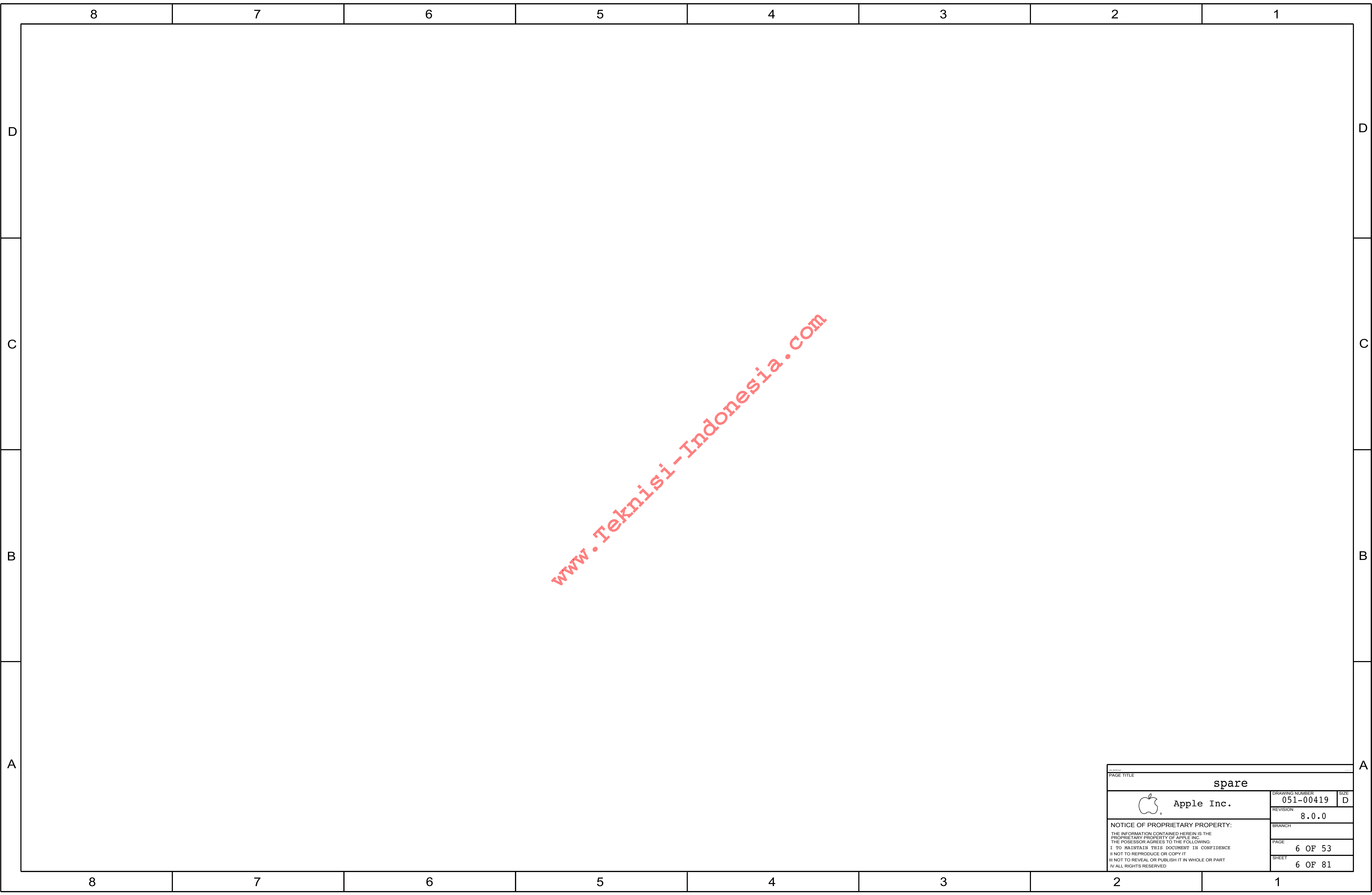
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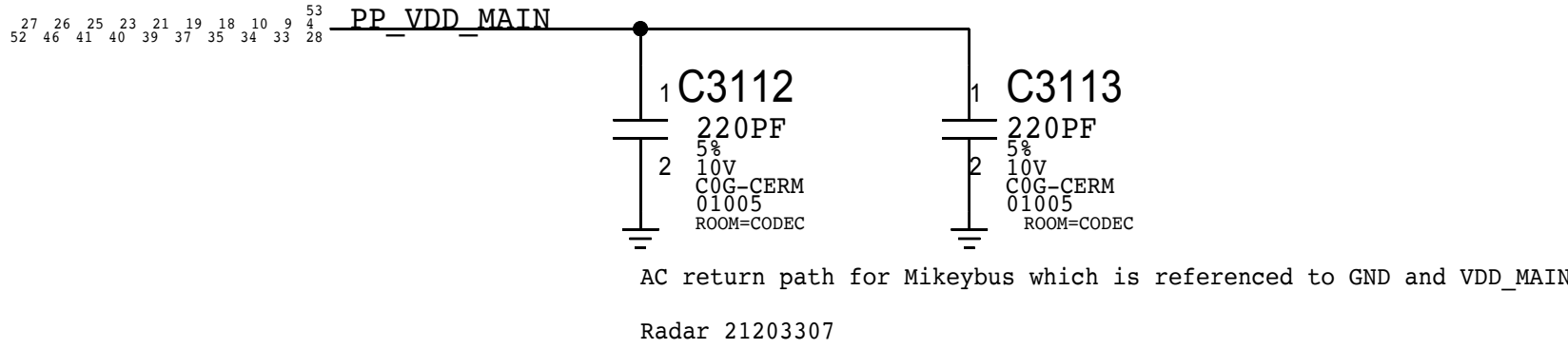
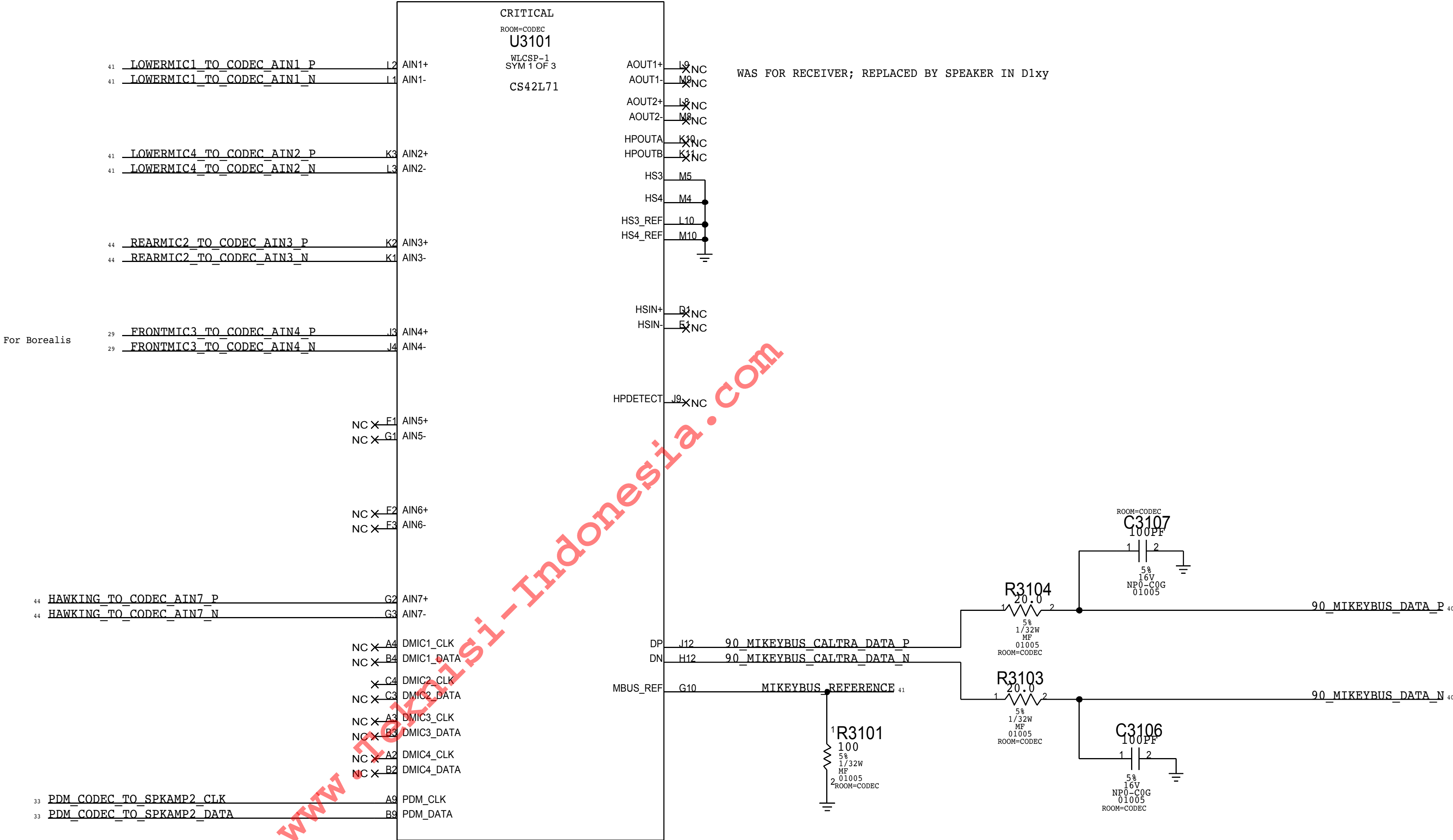
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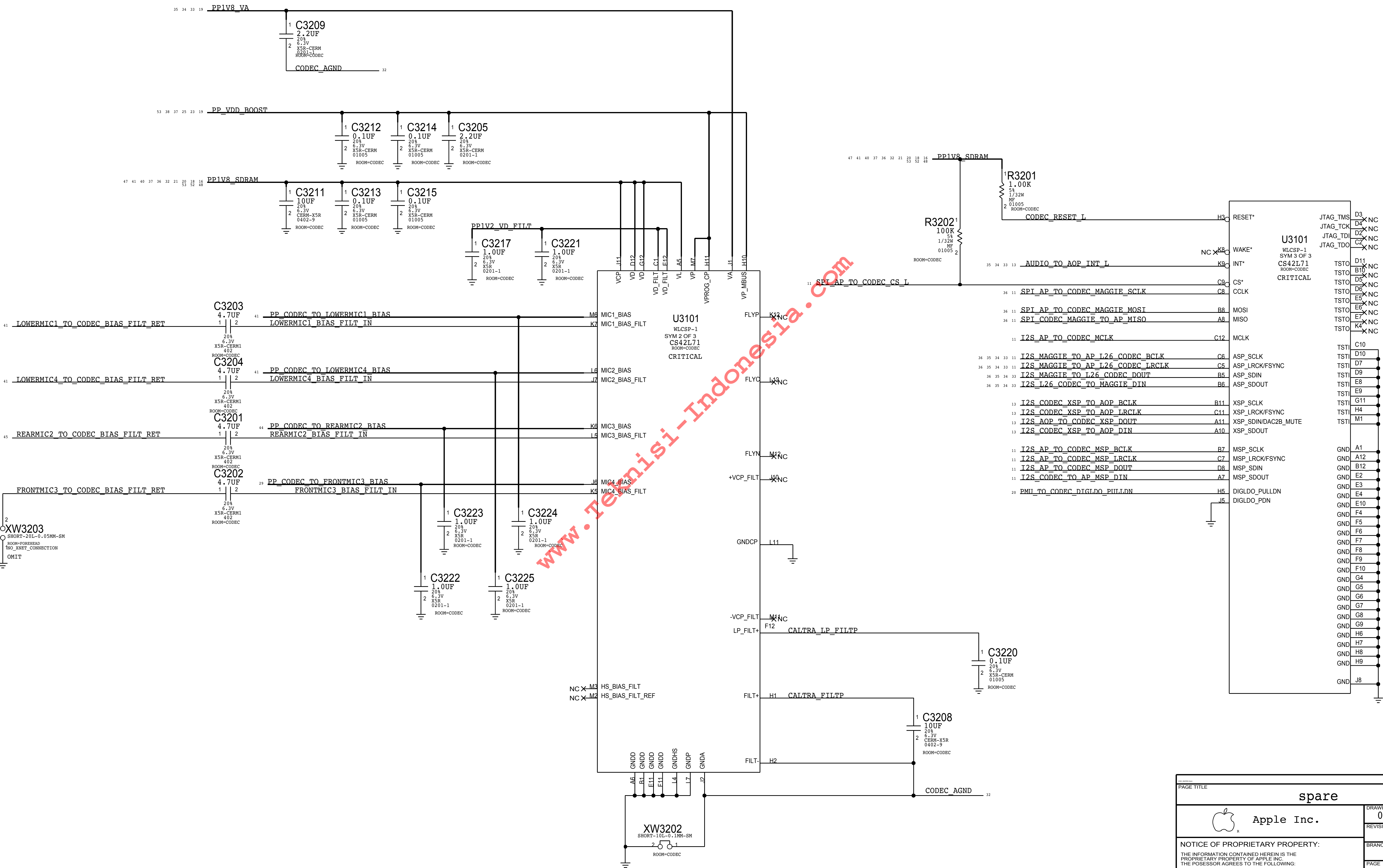
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	BRANCH	
	PAGE	6 OF 53
	SHEET	6 OF 81

CALTRA AUDIO CODEC (ANALOG INPUTS & OUTPUTS)

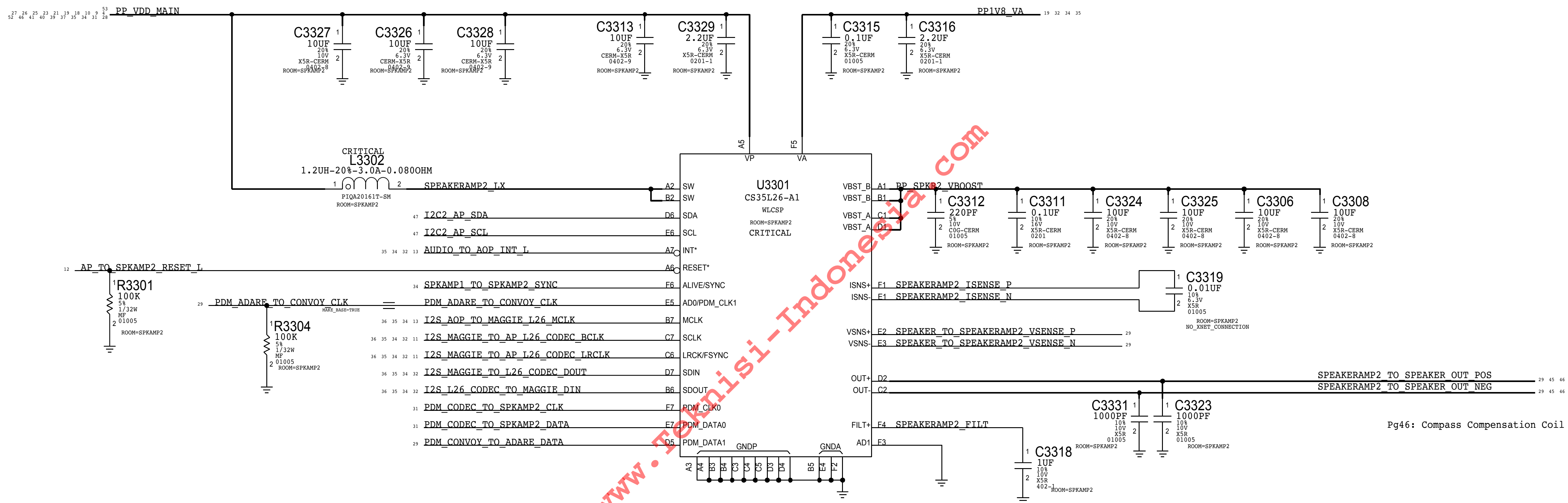


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	PAGE	6 OF 53
	SHEET	6 OF 81

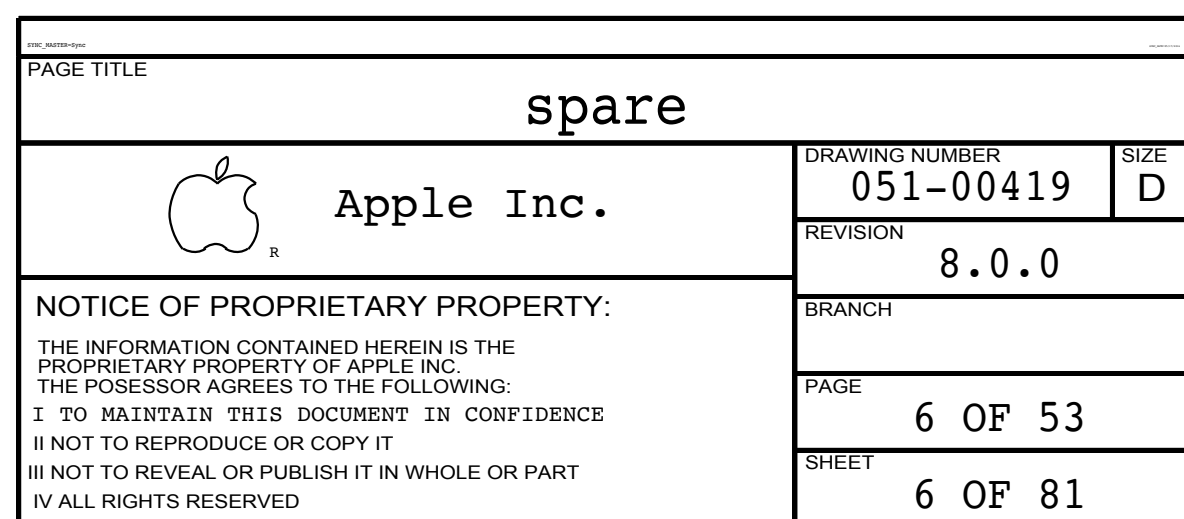
CALTRA AUDIO CODEC (POWER & I/O)



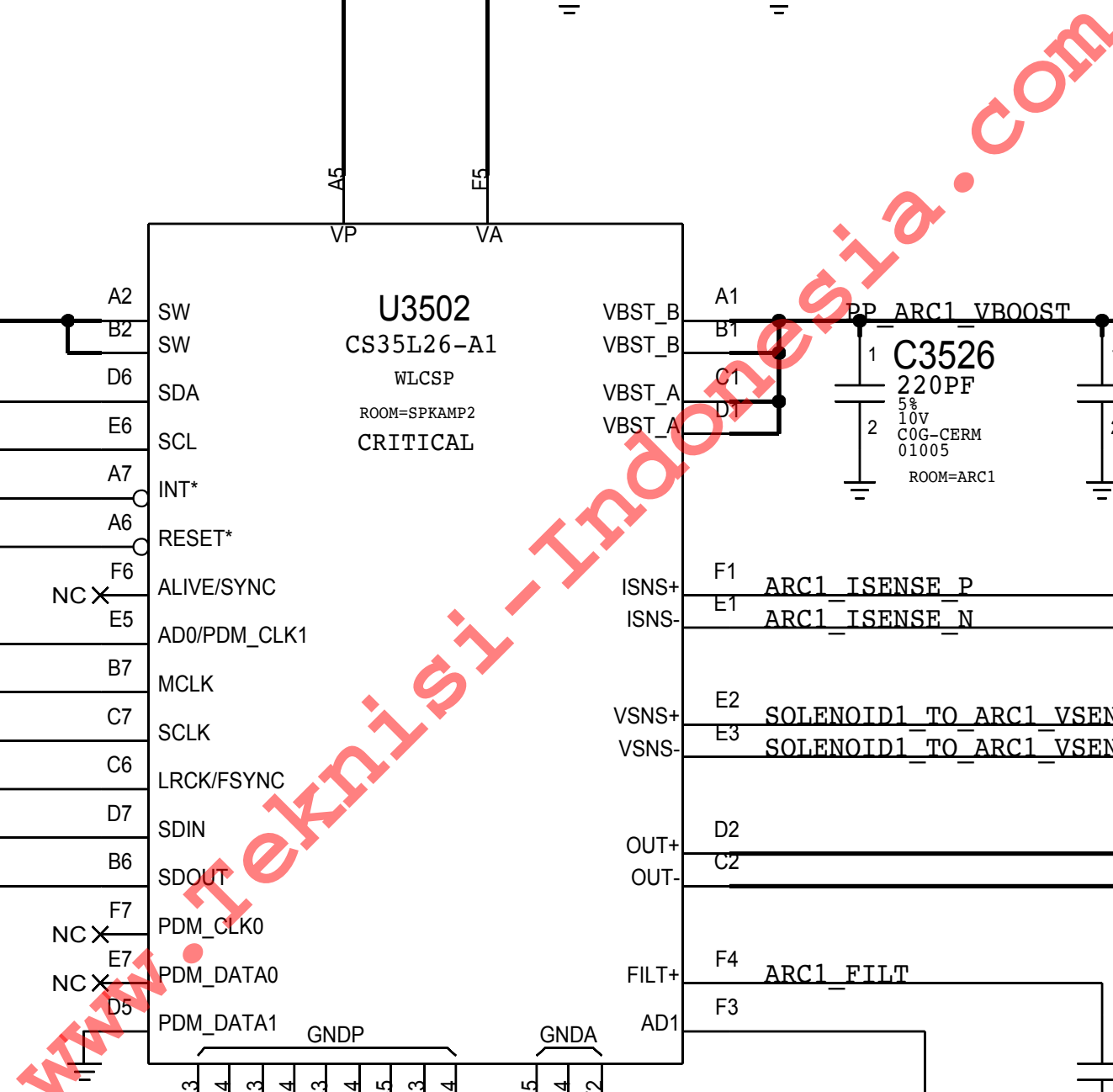
SPEAKER AMPLIFIER 2 (North)




8



ARC D



PAGE TITLE			
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	051-00419		D
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PAGE		6 OF 53	
SHEET		6 OF 81	

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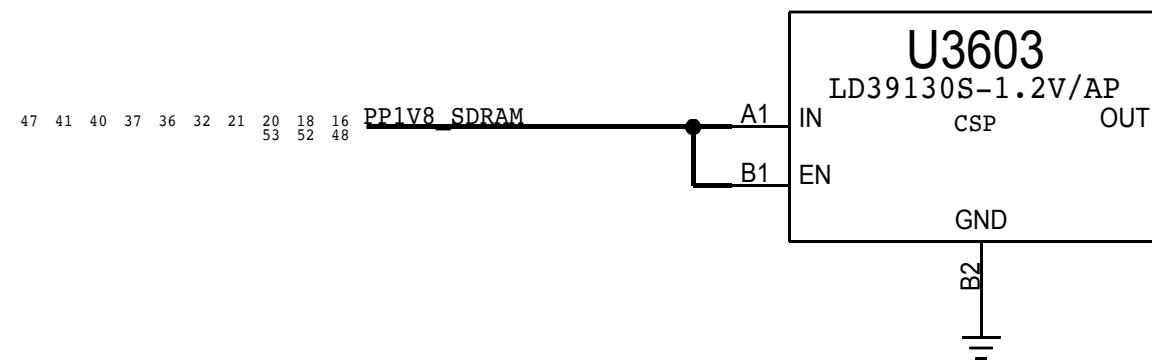
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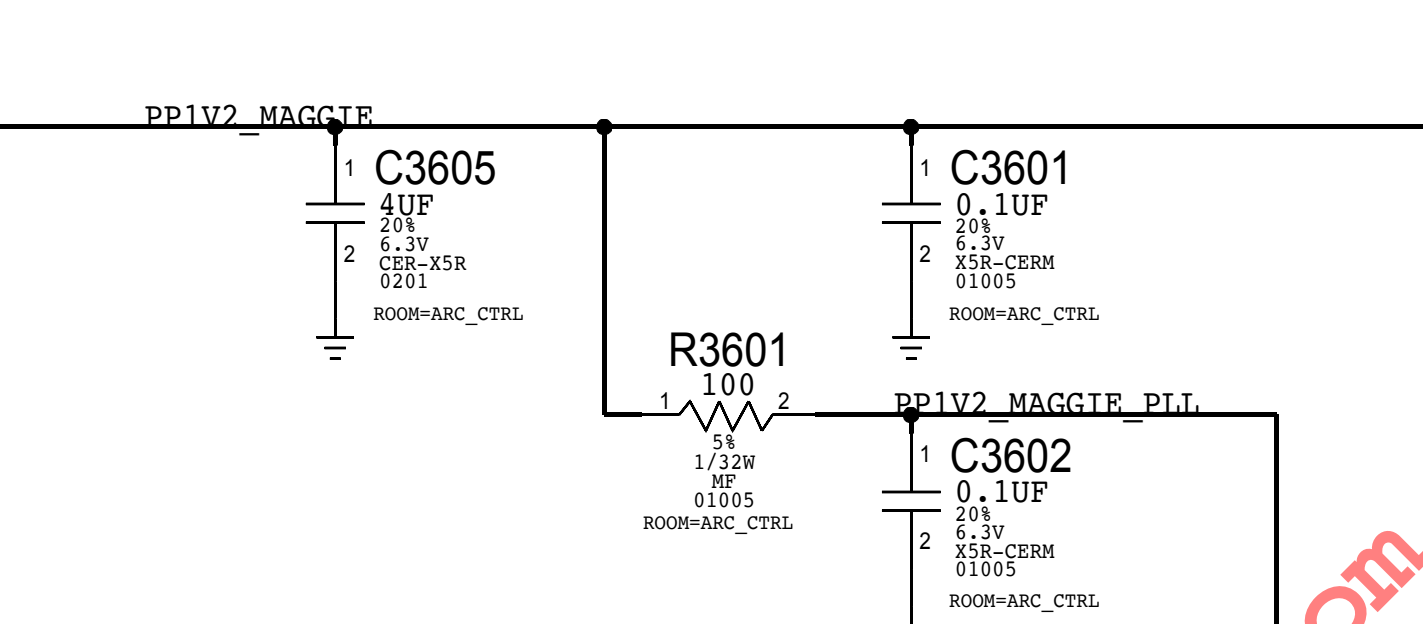
MAGGIE LDO

APN: 353S00842



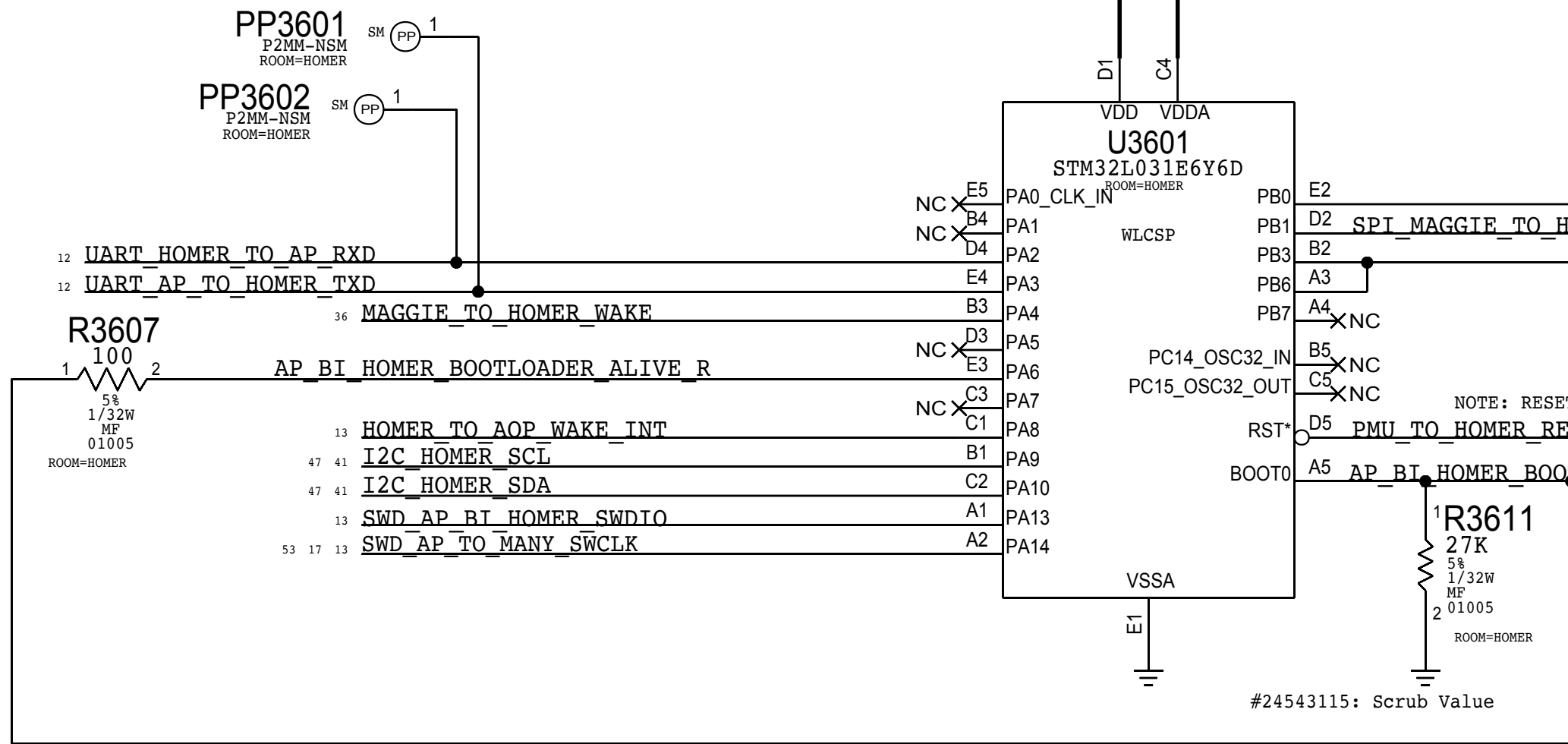
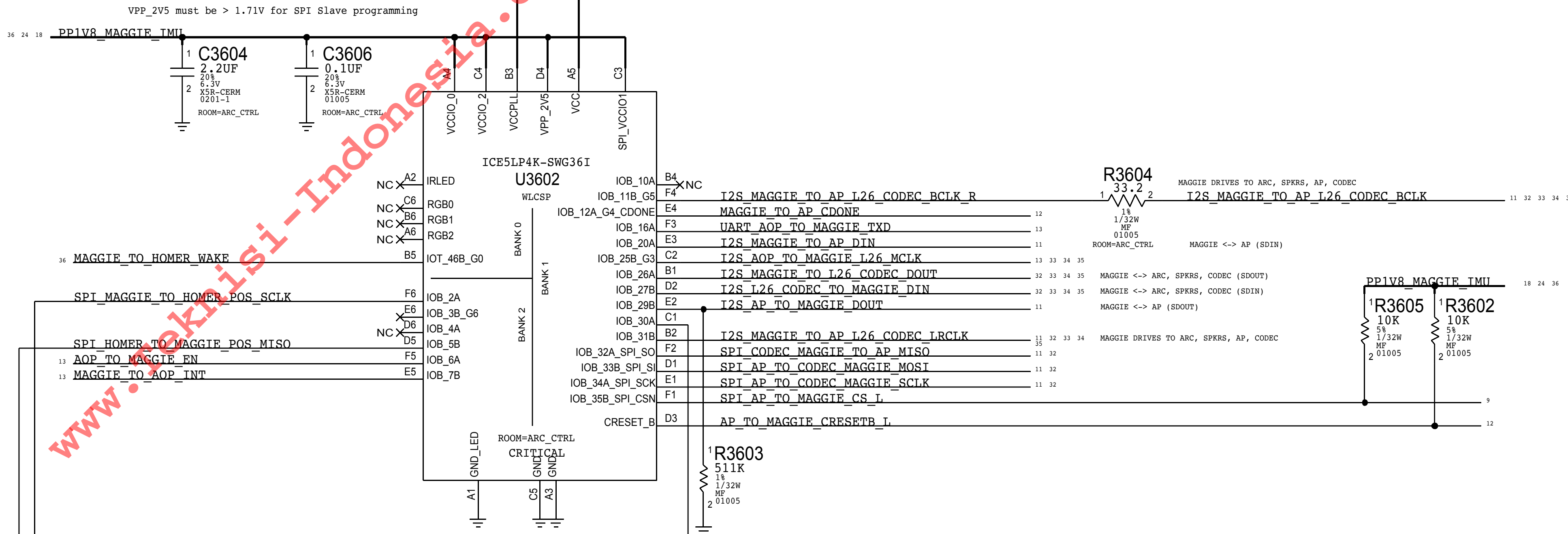
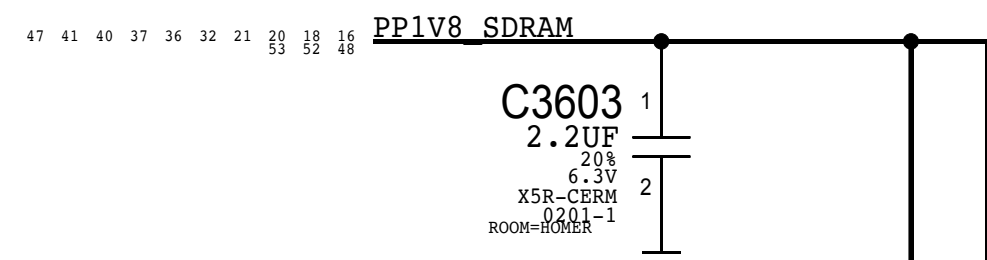
MAGGIE

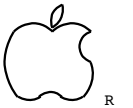
APN: 336S00020



HOMER STM32L0 MICRO

STM32L03 APN: 337S00231



PAGE TITLE			
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		REVISION	8.0.0
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		PAGE	6 OF 53
		SHEET	6 OF 81


D

C

B

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PAGE TITLE <div style="text-align: center; font-size: 2em; font-weight: bold;">spare</div>			
 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <div style="font-size: 1.5em; font-weight: bold;">Apple Inc.</div> <div style="font-size: 0.8em;">®</div> </div>	DRAWING NUMBER <div style="font-size: 1.5em; font-weight: bold;">051-00419</div>		SIZE <div style="font-size: 1.5em; font-weight: bold;">D</div>
	REVISION <div style="font-size: 1.5em; font-weight: bold;">8.0.0</div>		
	BRANCH <div style="font-size: 1.5em; font-weight: bold;">PAGE</div>		
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		SHEET <div style="font-size: 1.5em; font-weight: bold;">6 OF 81</div>	

MESA POWER

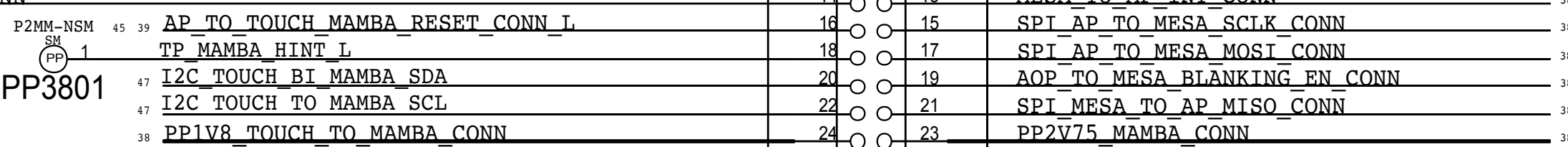
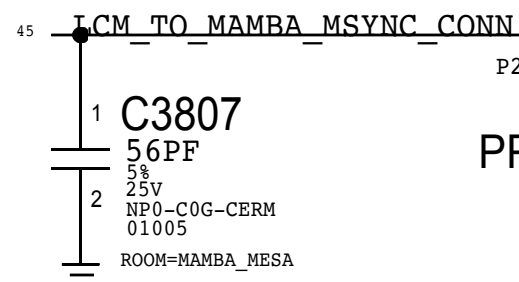
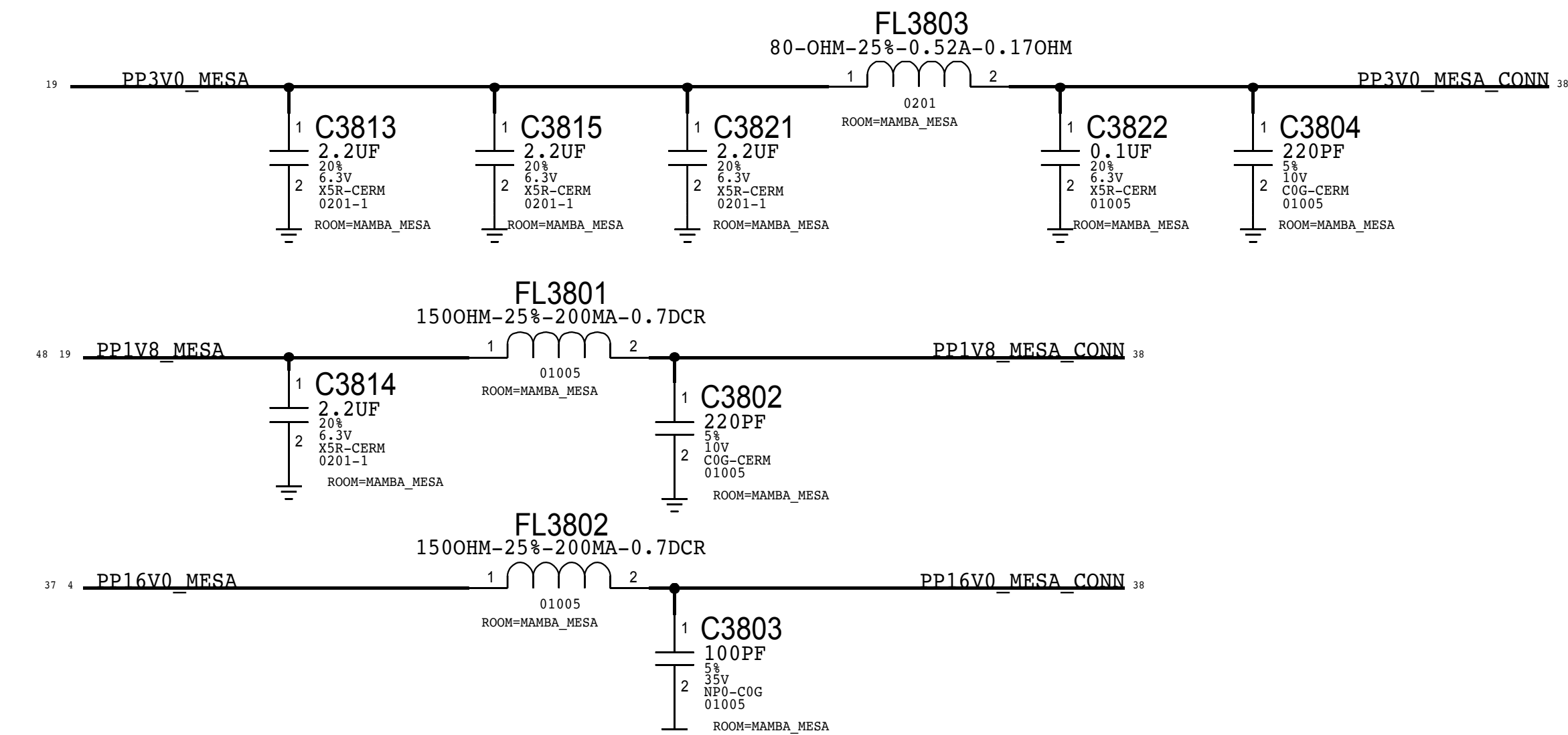
MAMBA AND MESA CONNECTOR

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

CRITICAL
J3801

BB35C-RA24-3A
F-ST-SM

Matches flex_x452_acf, schematic revision 1.5.0 pinout



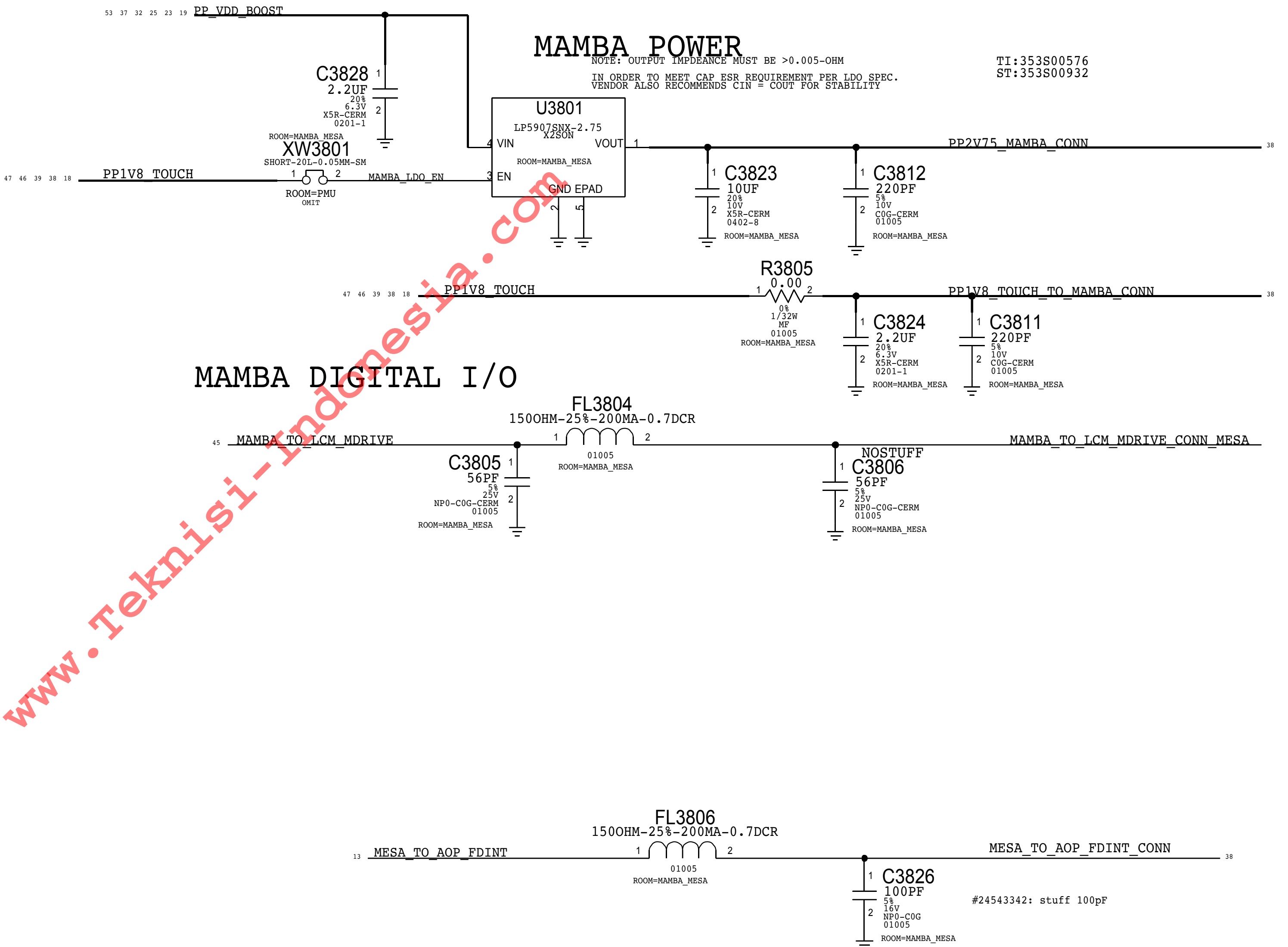
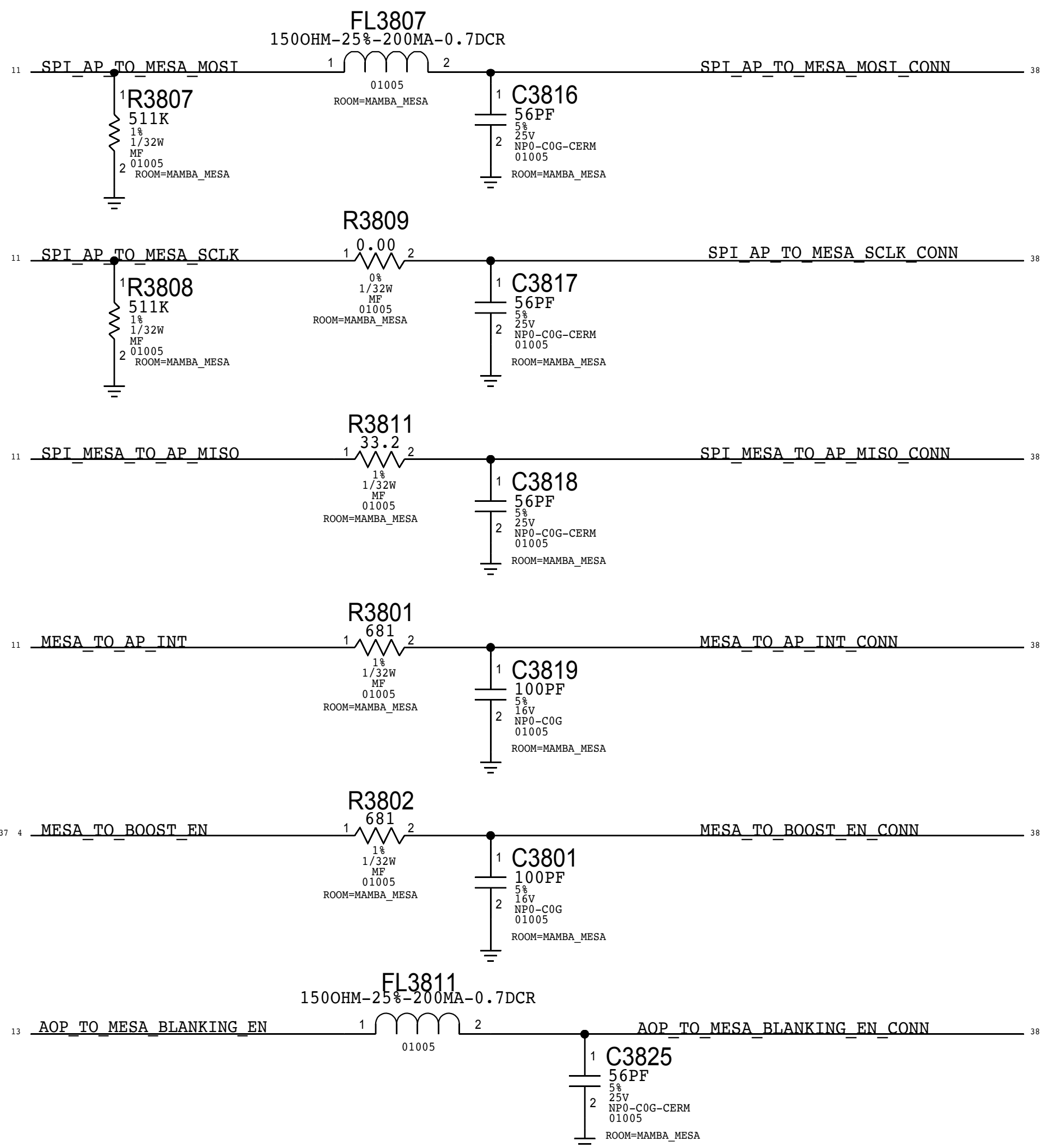
MAMBA POWER

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

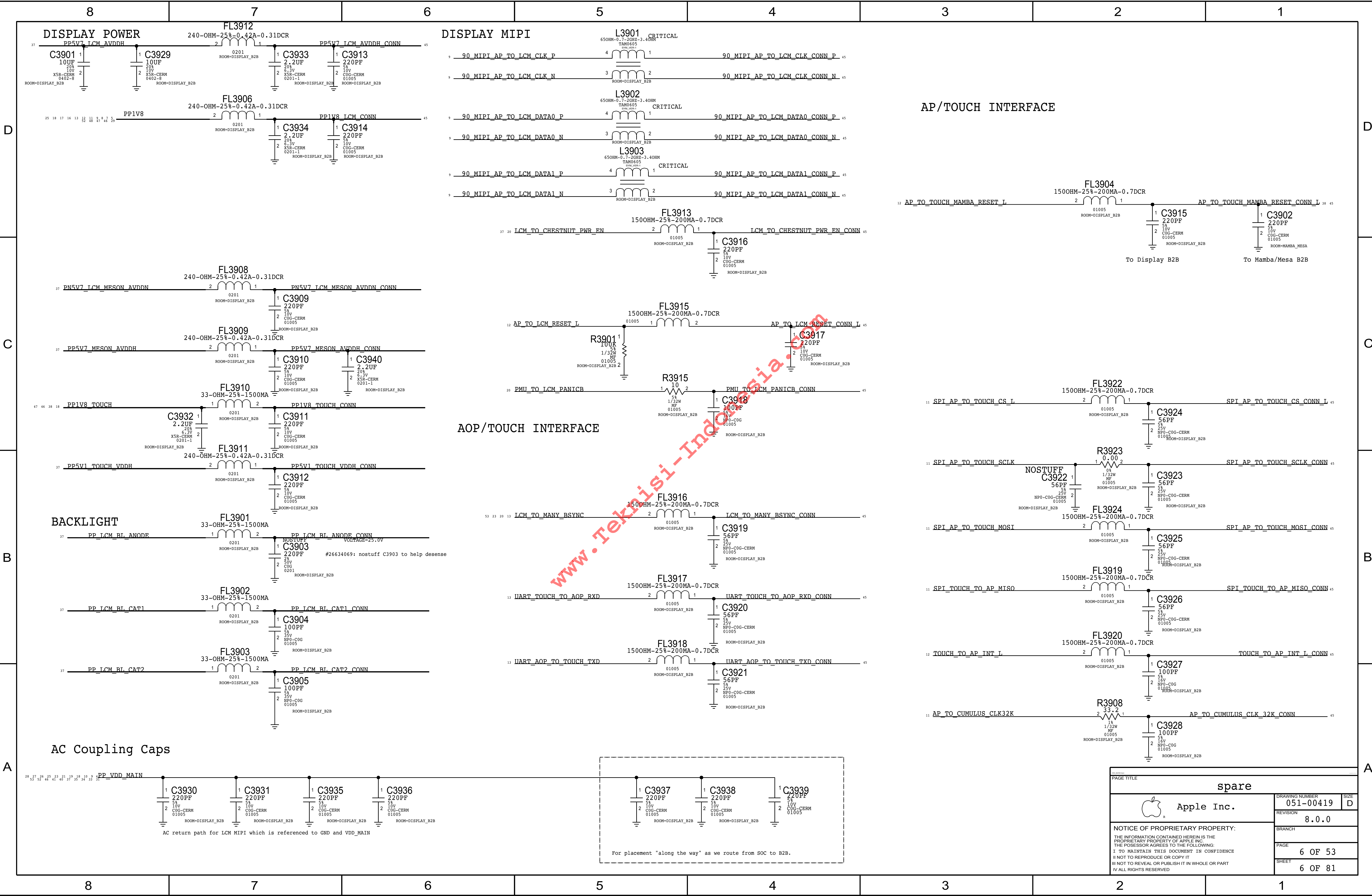
TI:353800576
ST:353800932

MESA DIGITAL I/O

MAMBA DIGITAL I/O



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spare			
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		REVISION	8.0.0
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		PAGE	6 OF 53
		SHEET	6 OF 81



D

C

B

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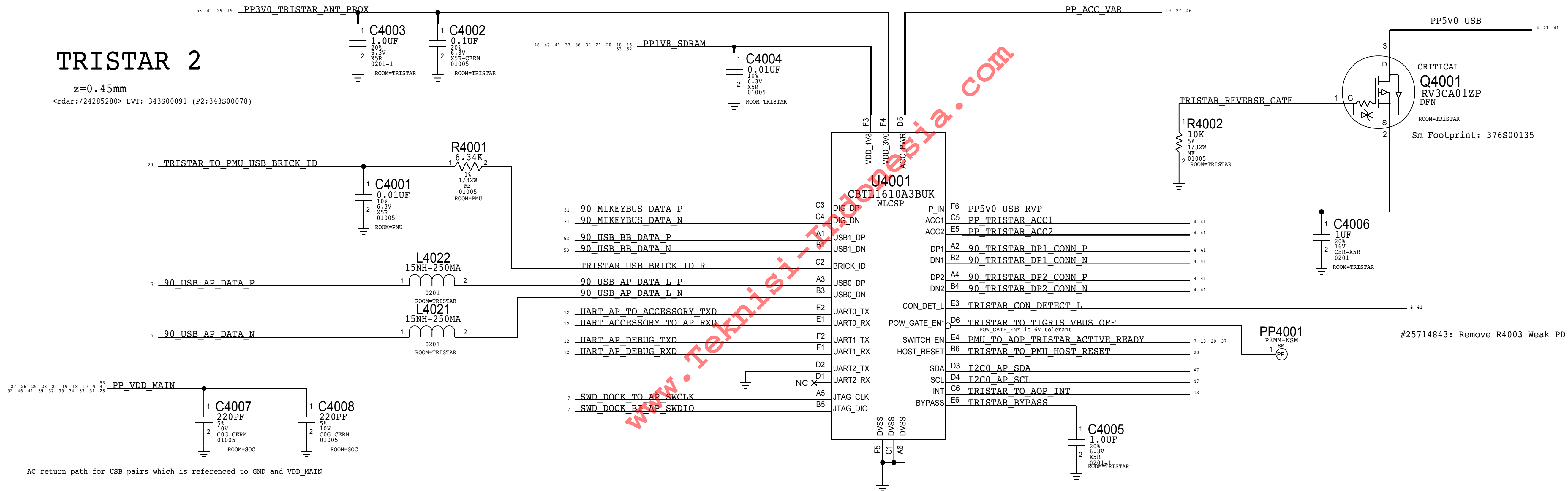
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TRISTAR 2

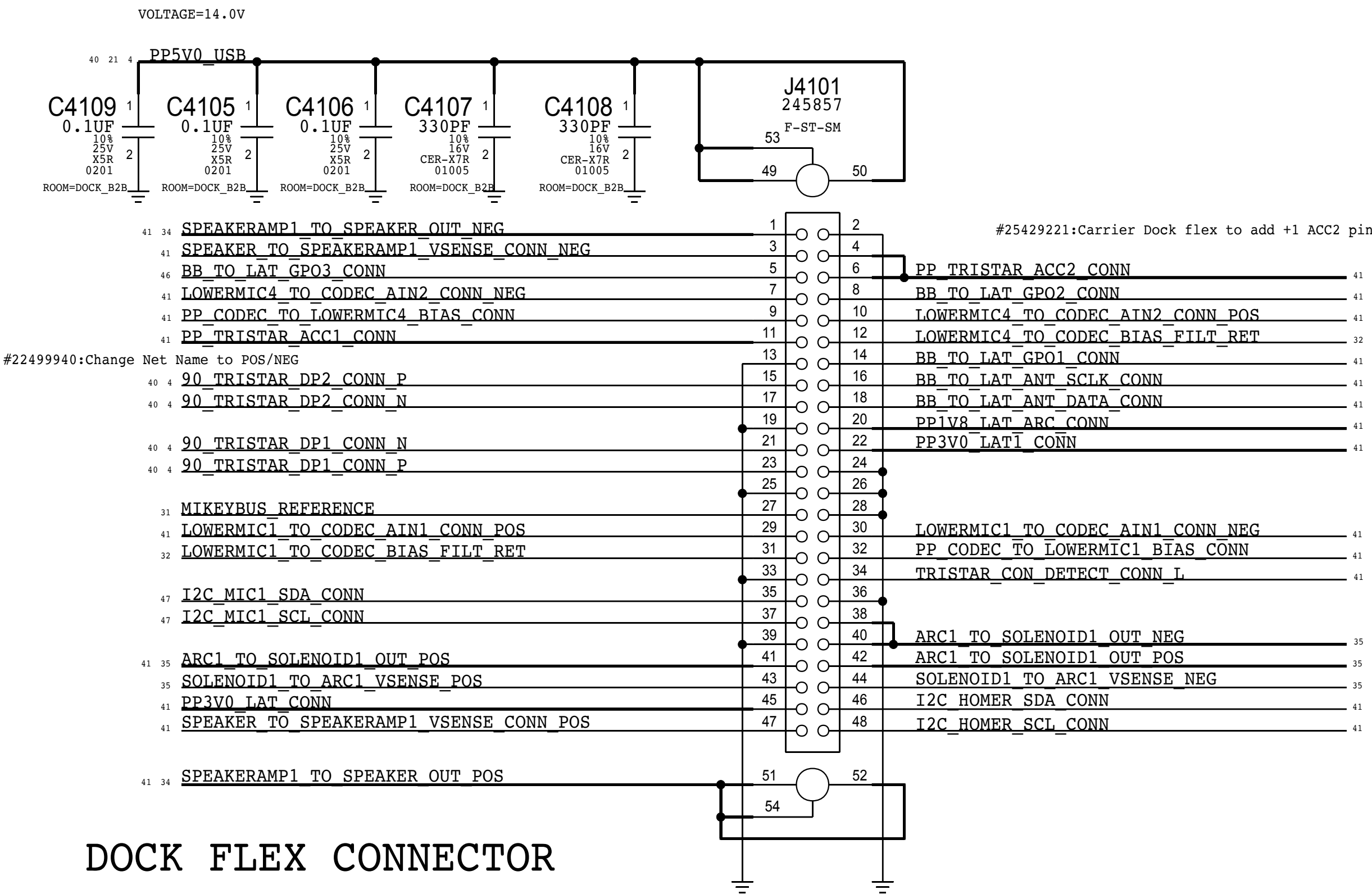
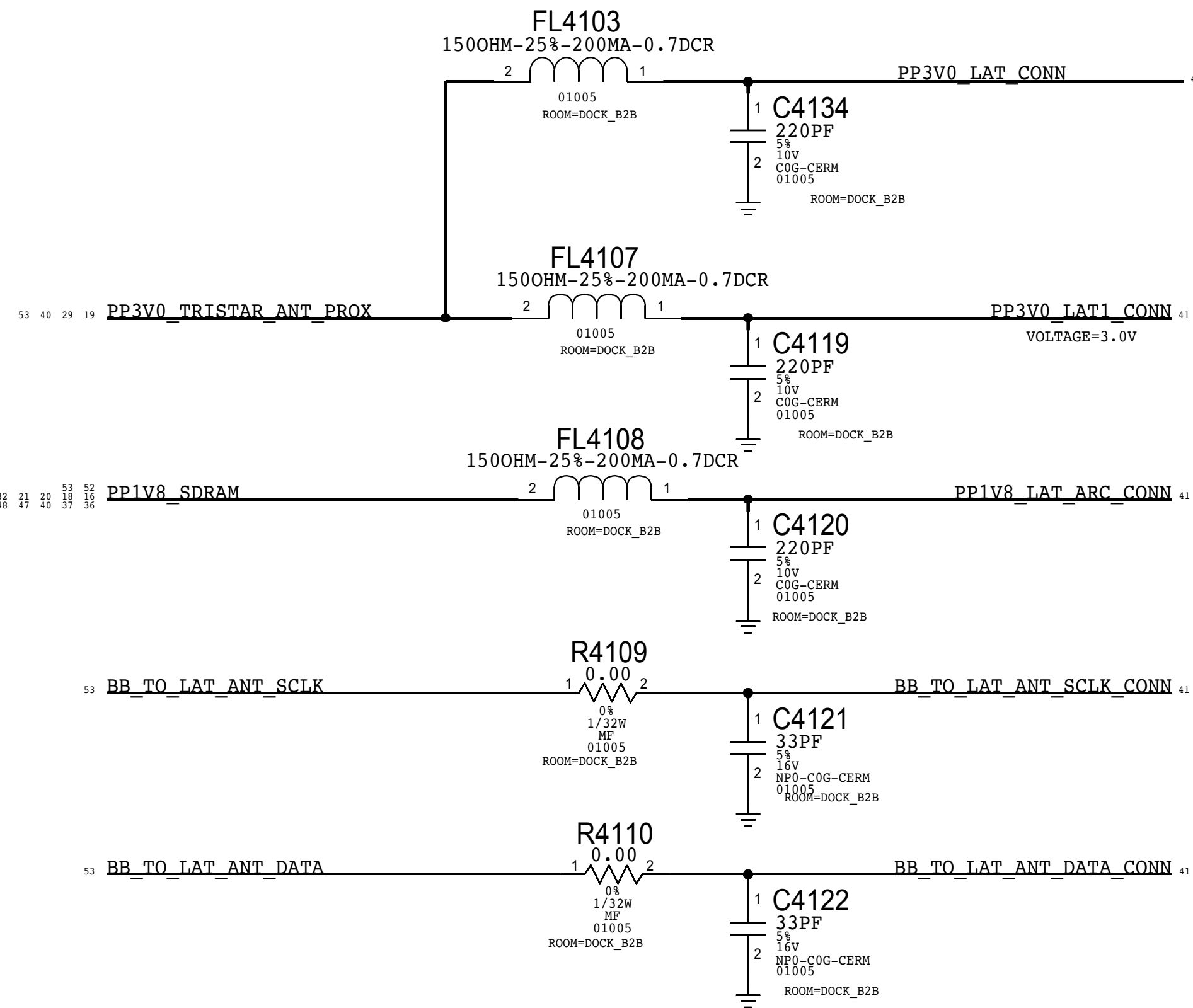
z=0.45mm
<rdar:24285280> EVT: 343S00091 (P2:343S00078)



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	PAGE	6 OF 53	
	SHEET	6 OF 81	

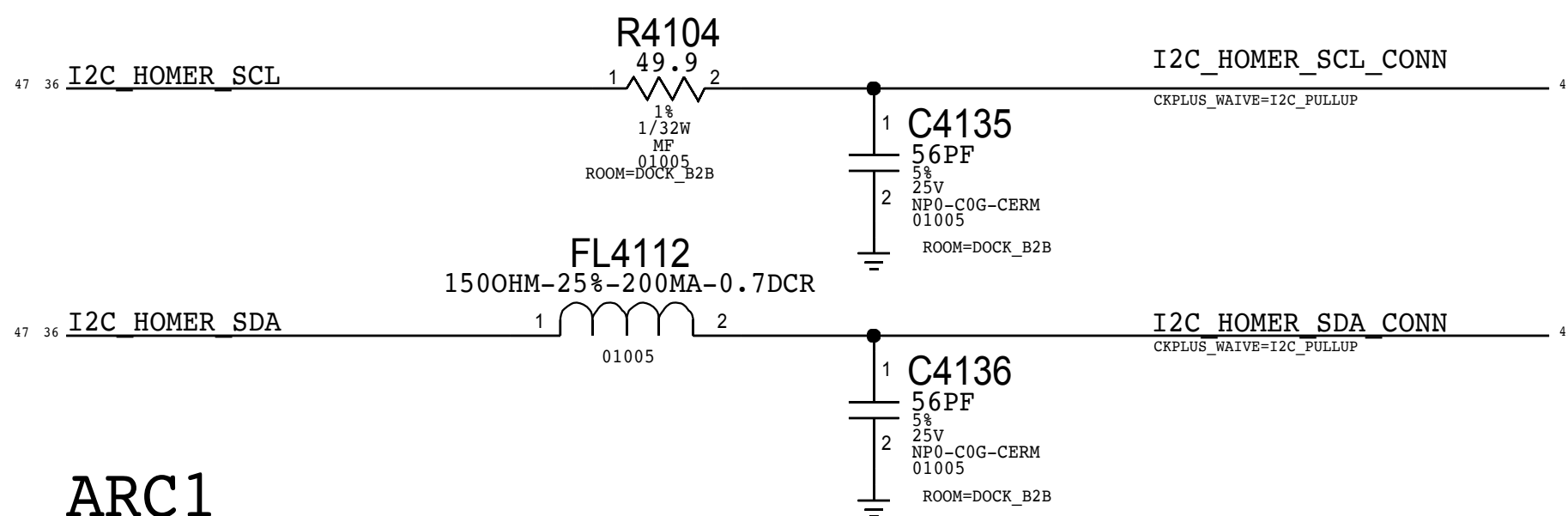
ANTENNA

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

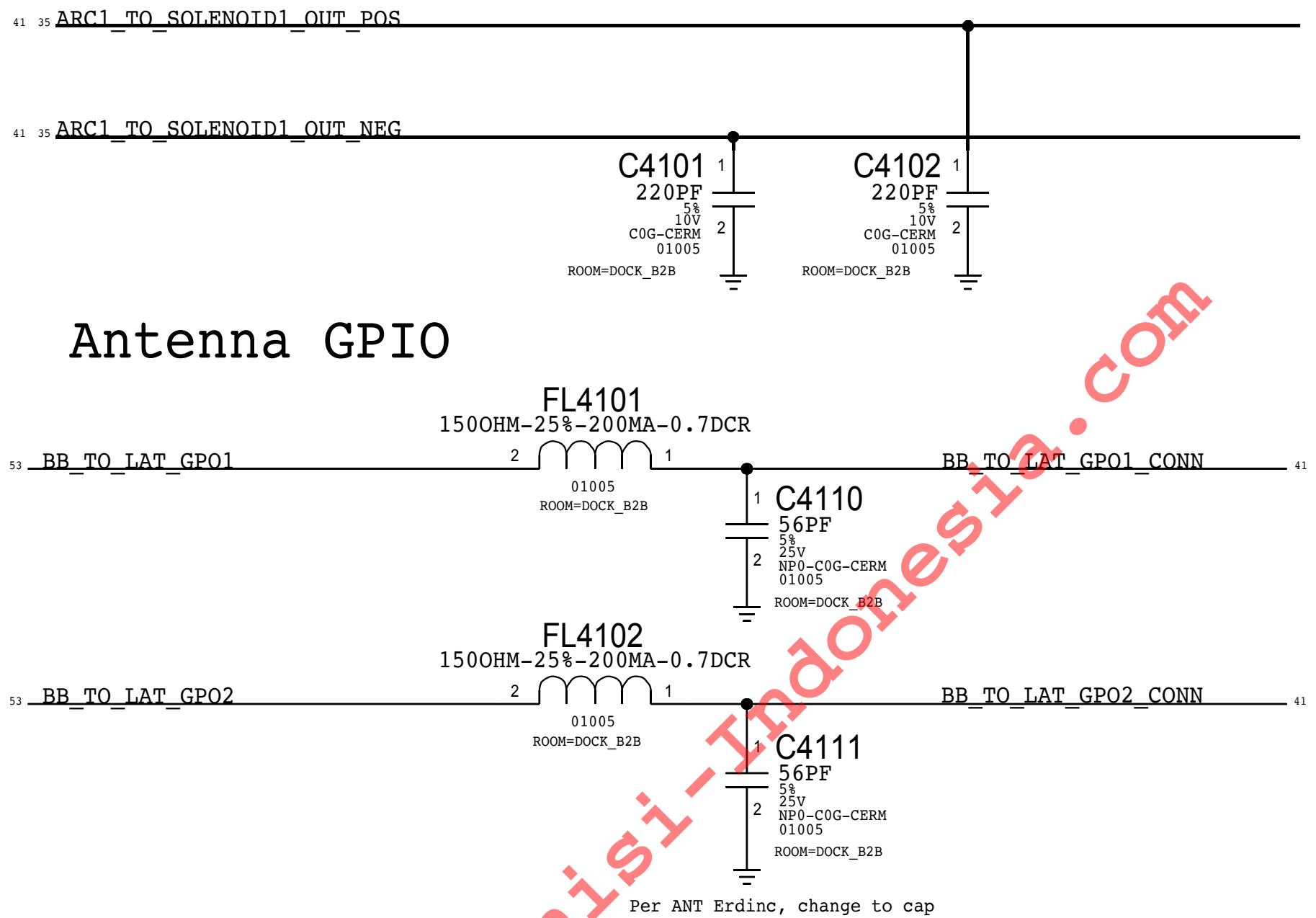


ARC CONTROL

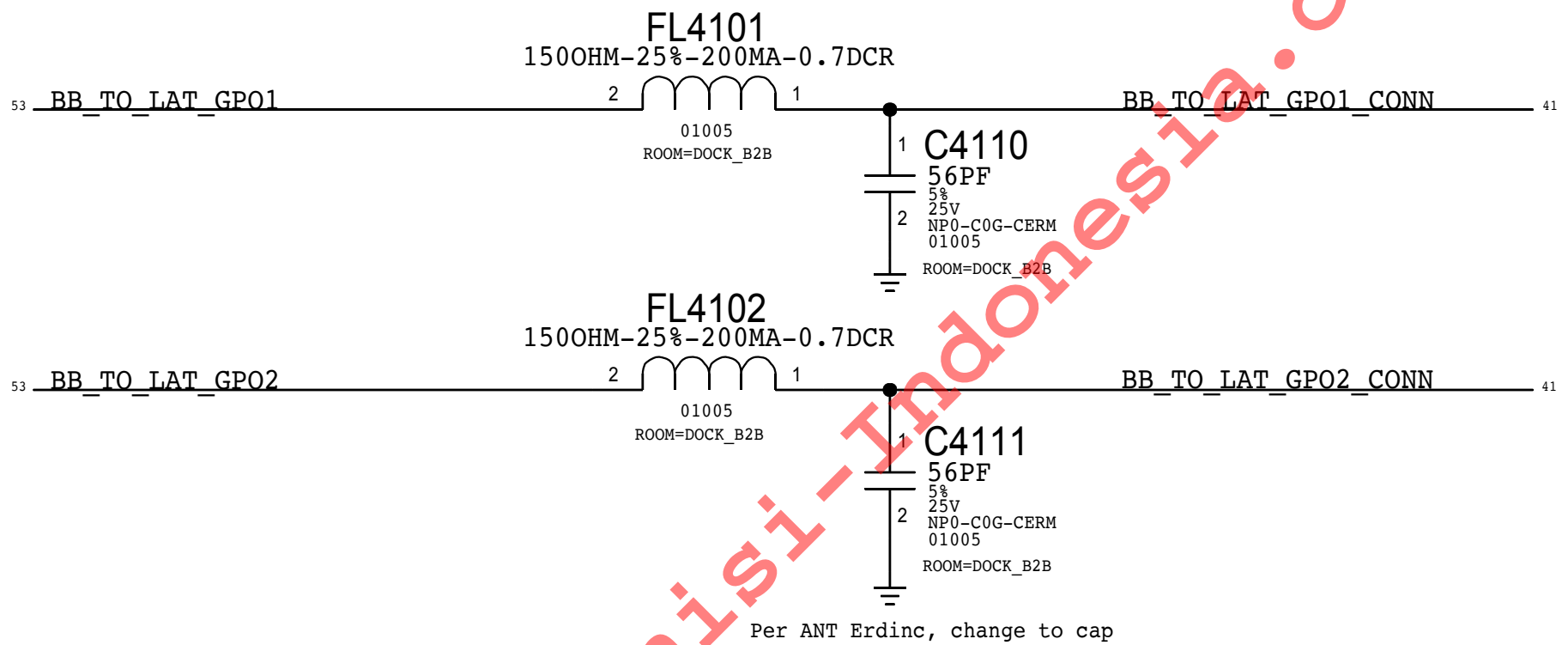
#26118161: Update FL4104 to 49.9ohm



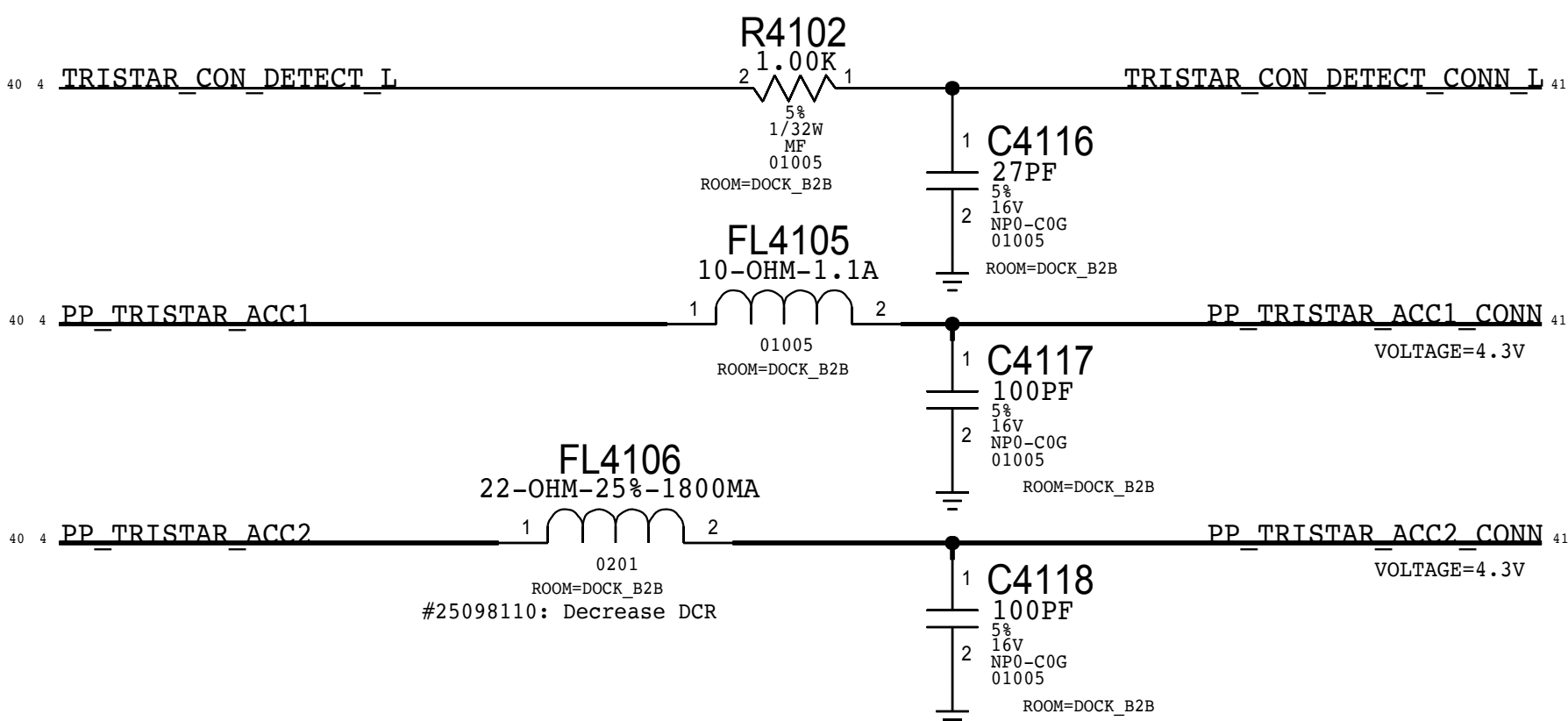
ARC1



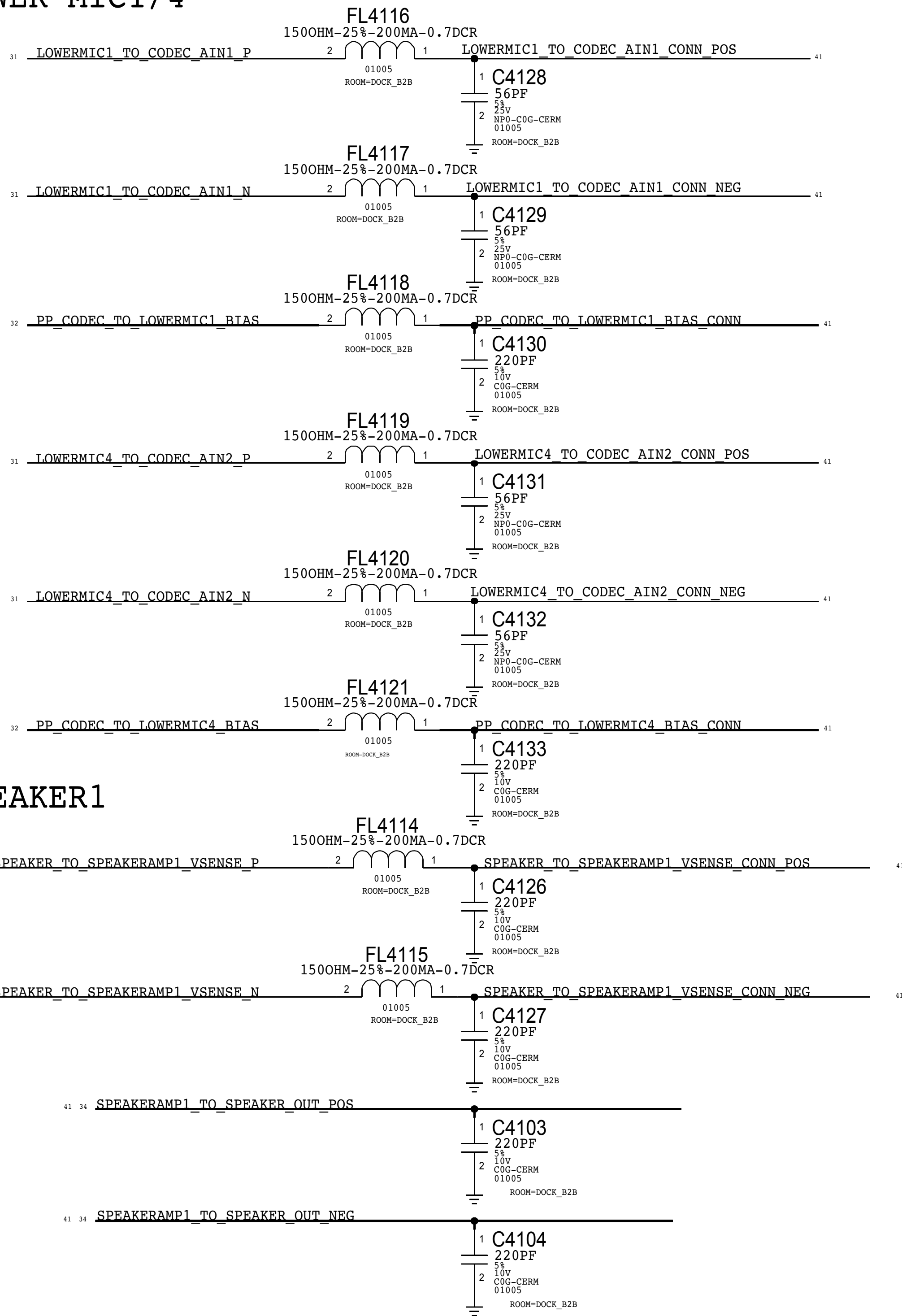
Antenna GPIO



TRISTAR



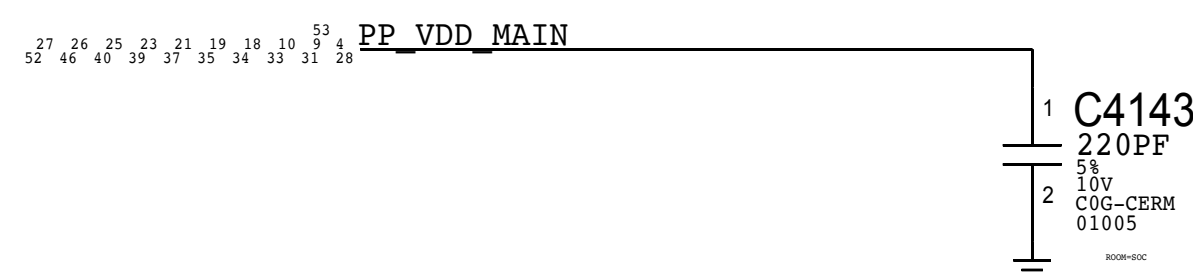
LOWER MIC1/4



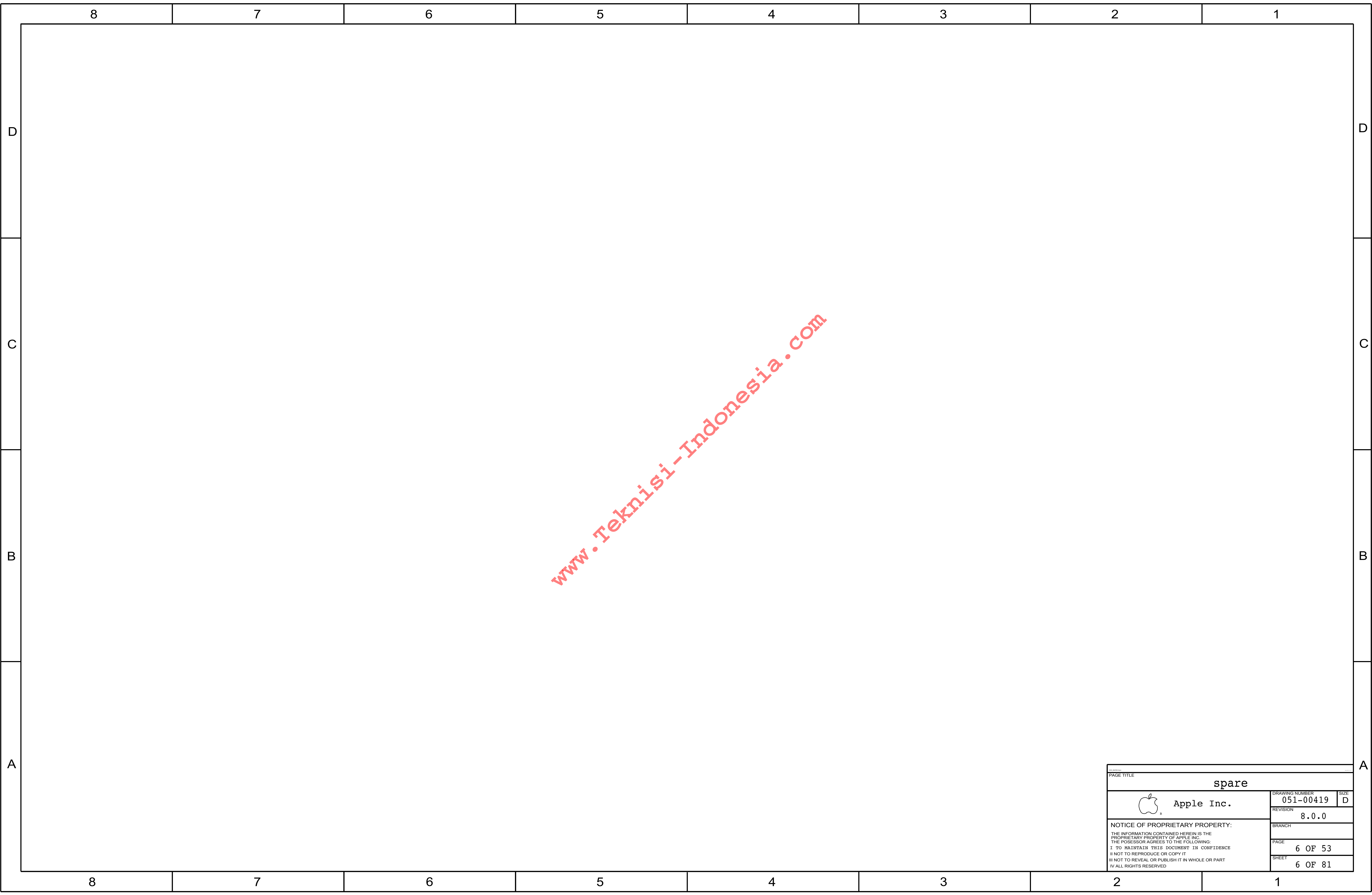
SPEAKER1

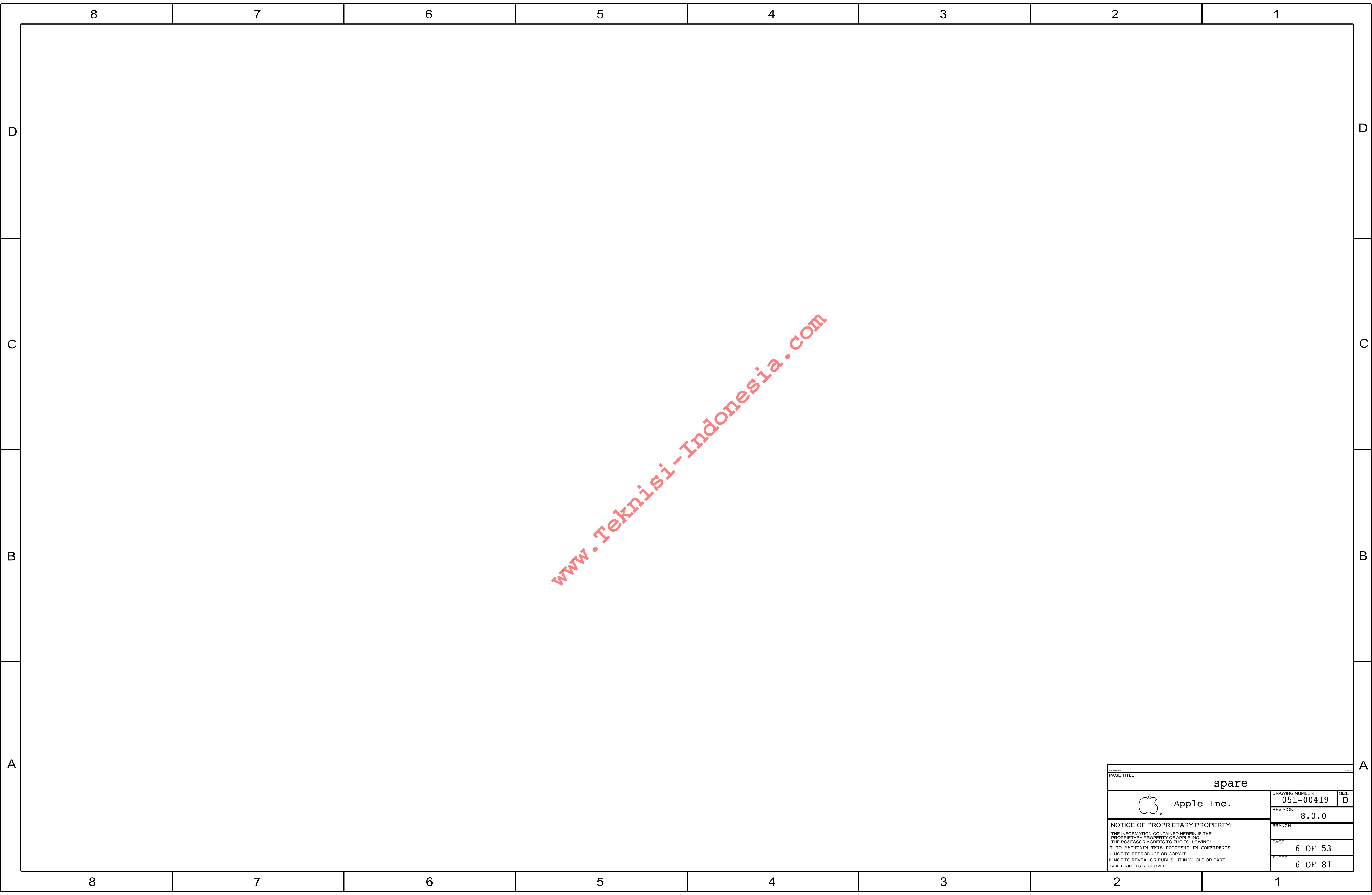
USB AC Coupling

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

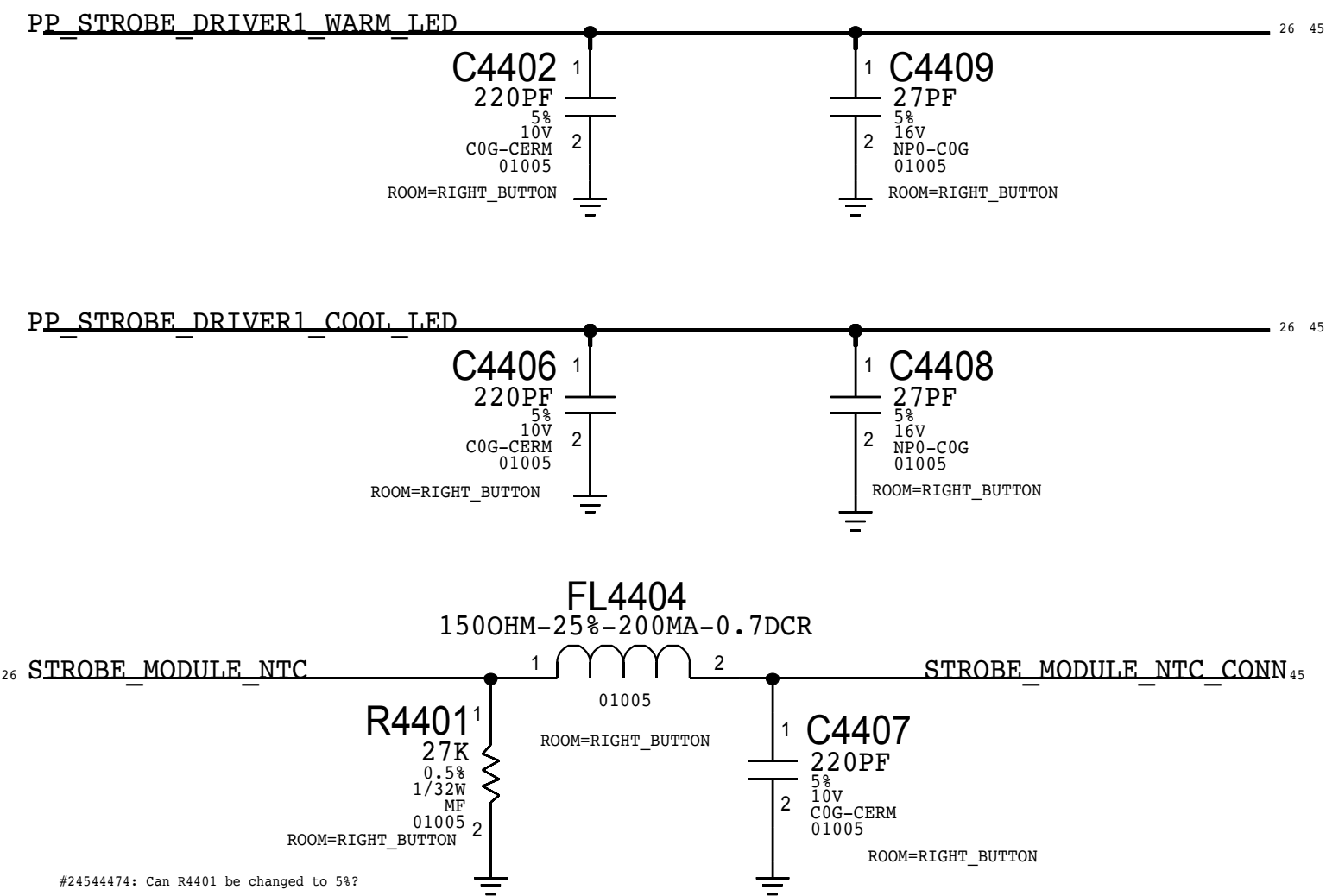


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PAGE	6 OF 53	
SHEET	6 OF 81	

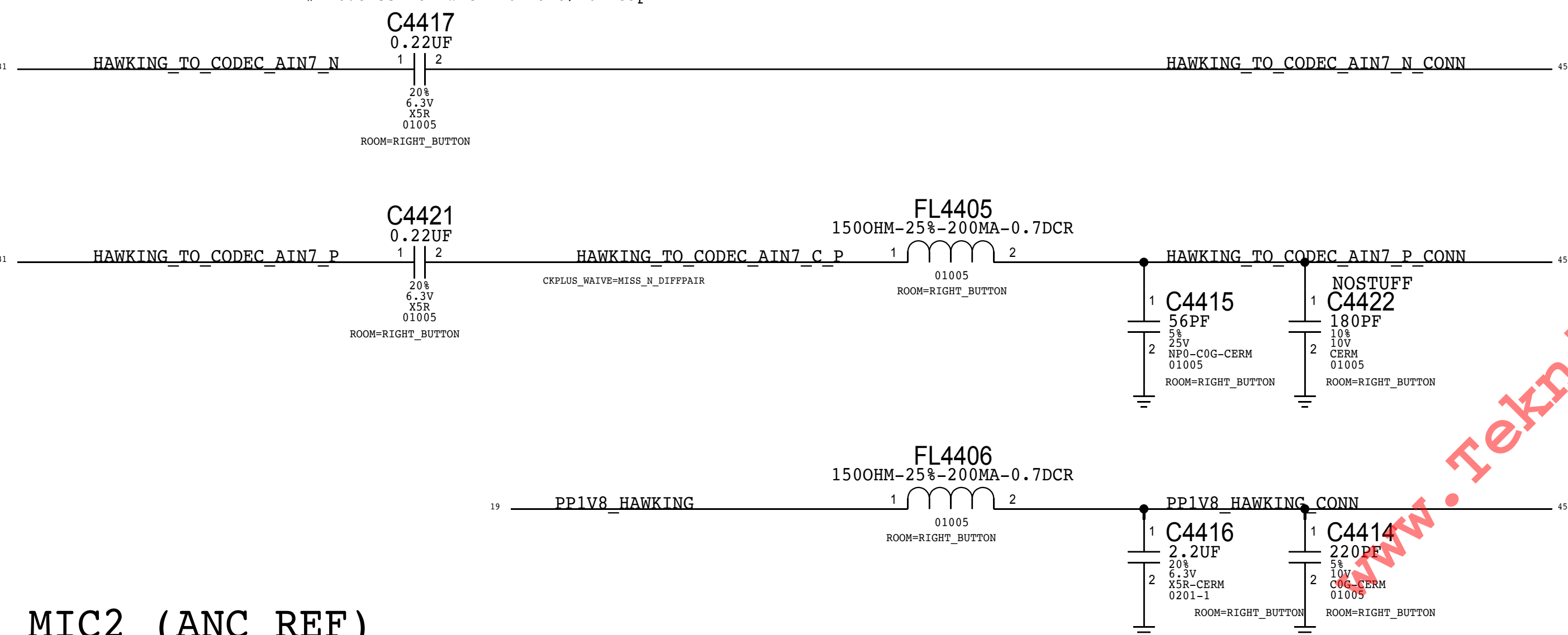




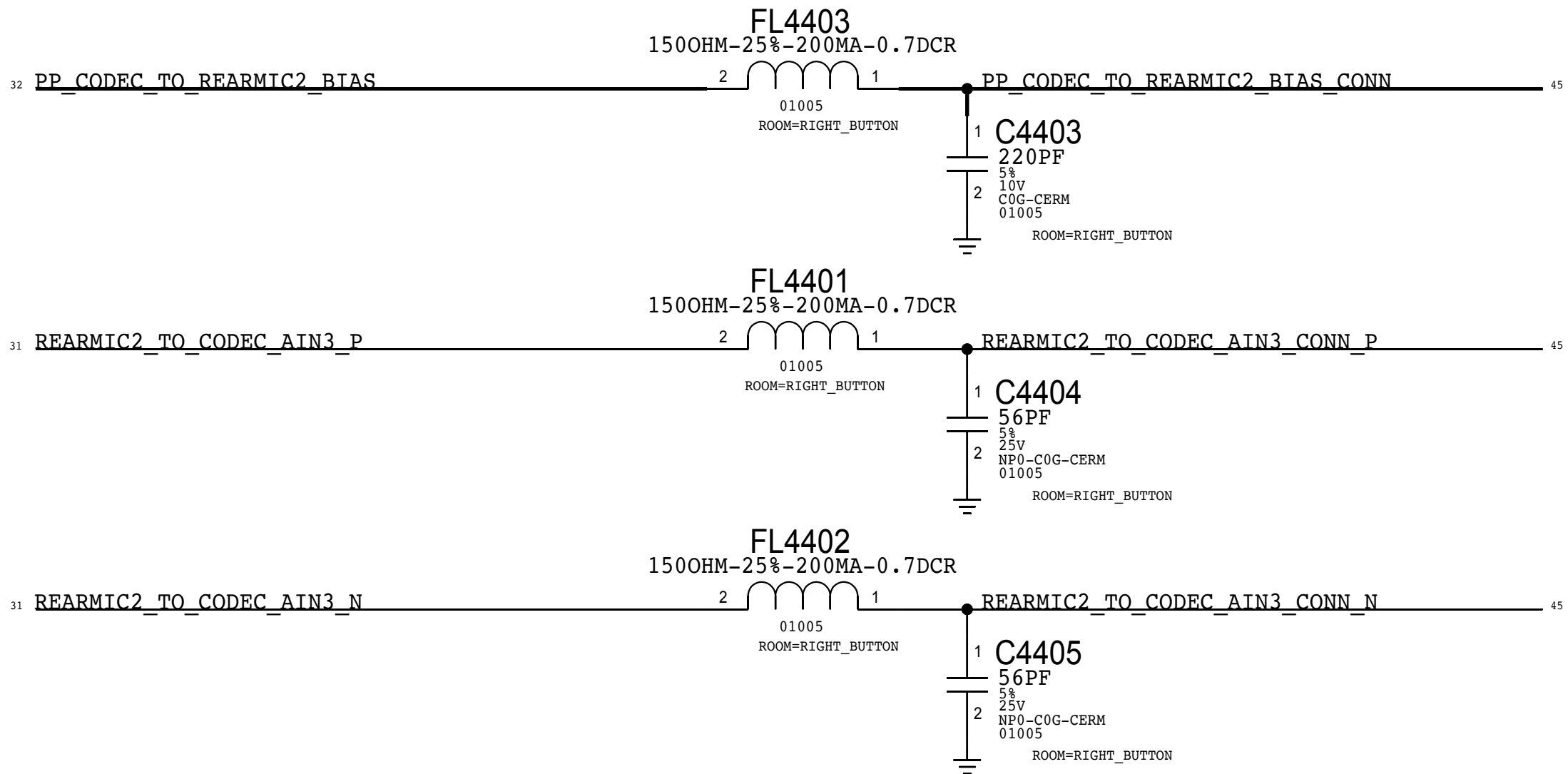
STROBE1



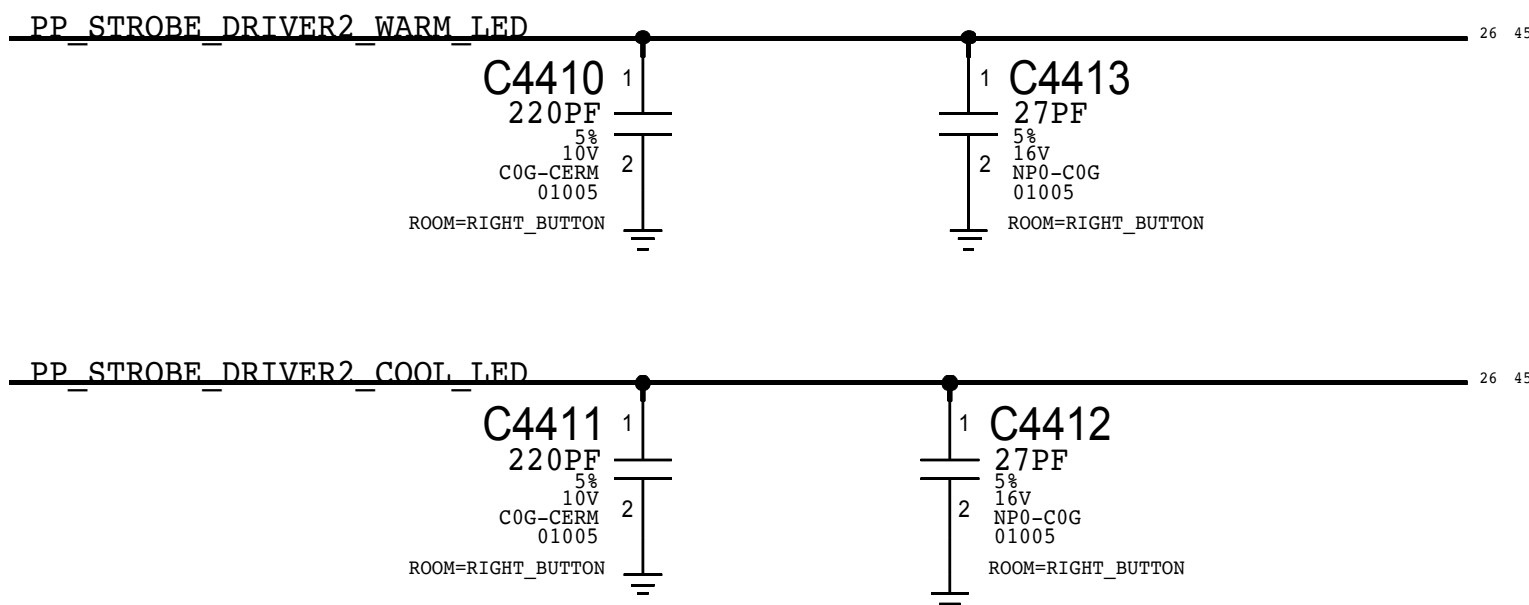
HAWKING



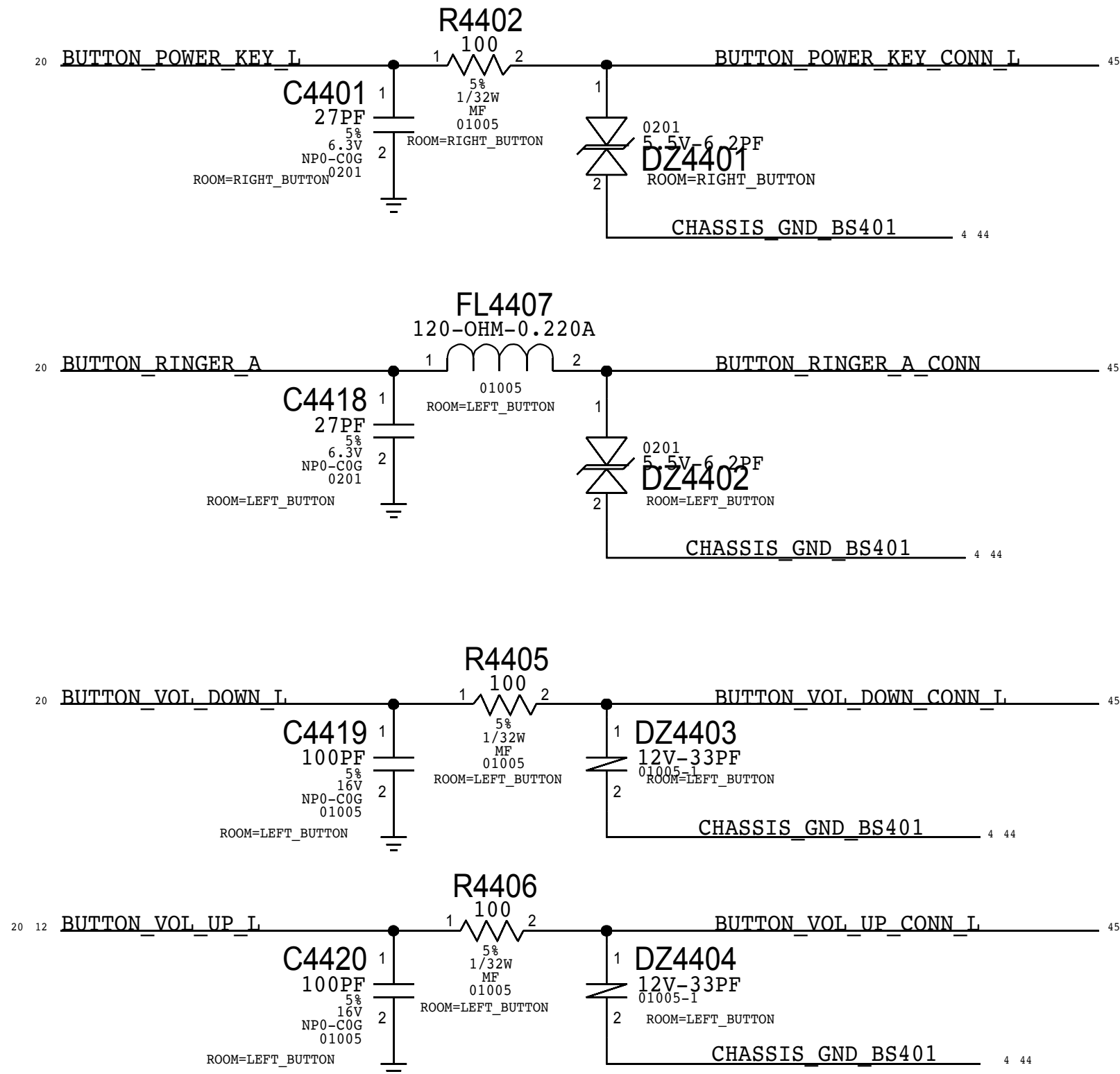
MIC2 (ANC REF)



STROBE2



BUTTONS

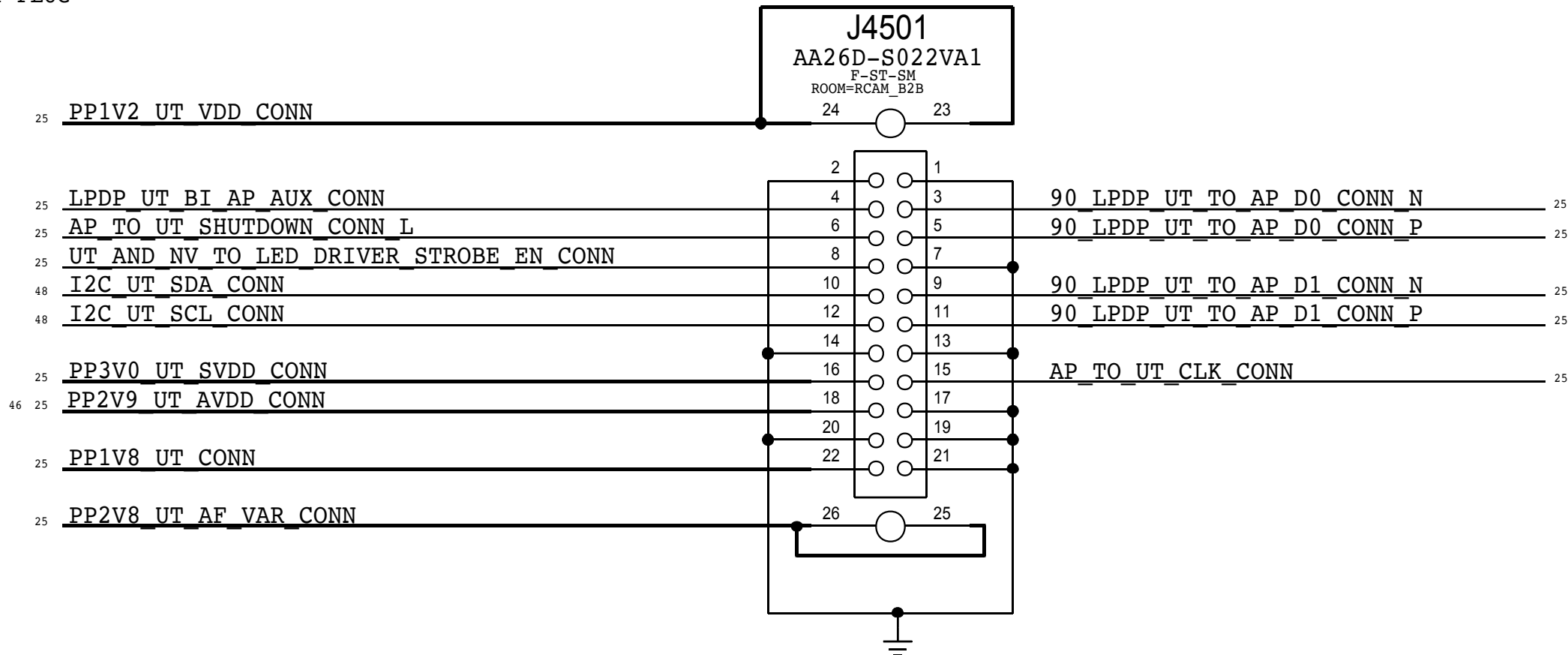


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		PAGE	6 OF 53
		SHEET	6 OF 81

87654321

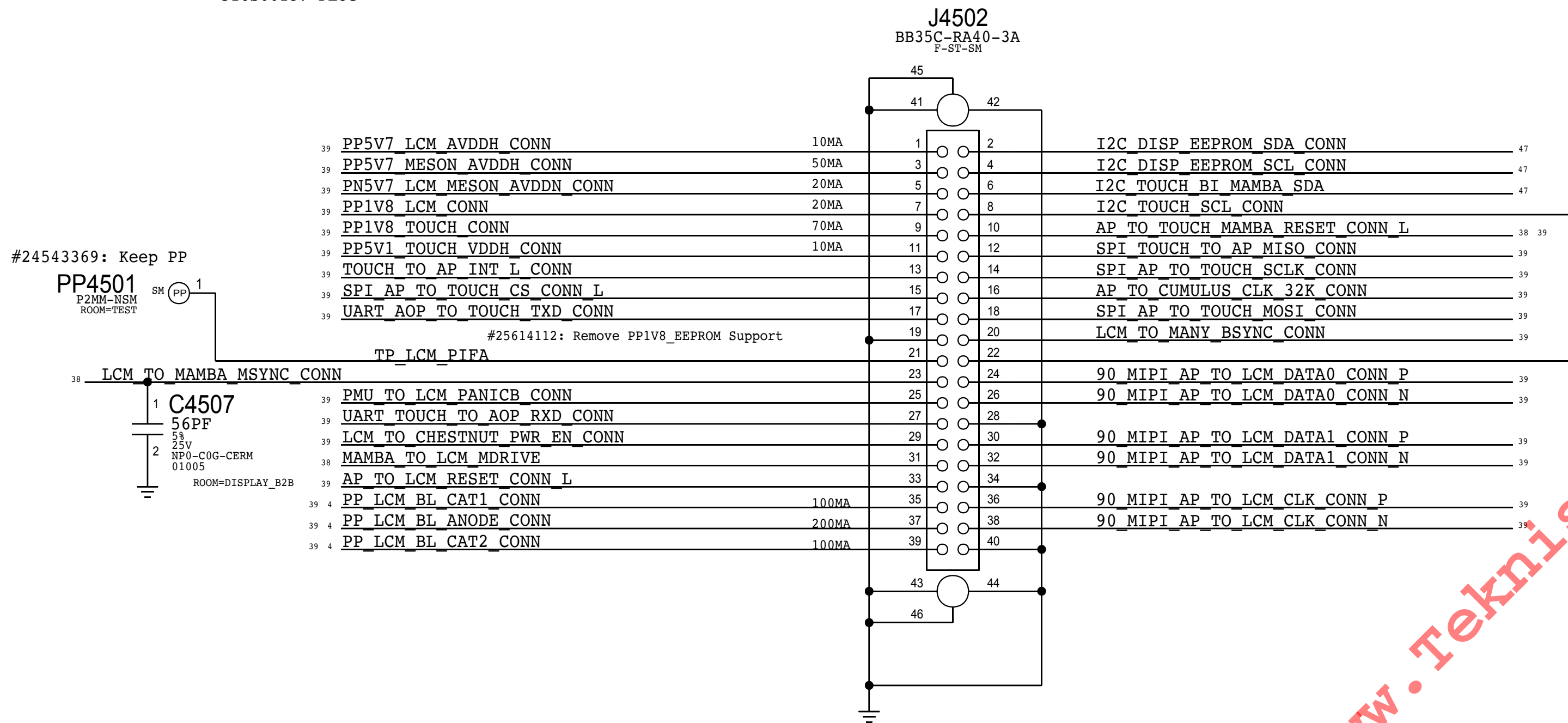
UTAH-C FLEX CONNECTOR

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



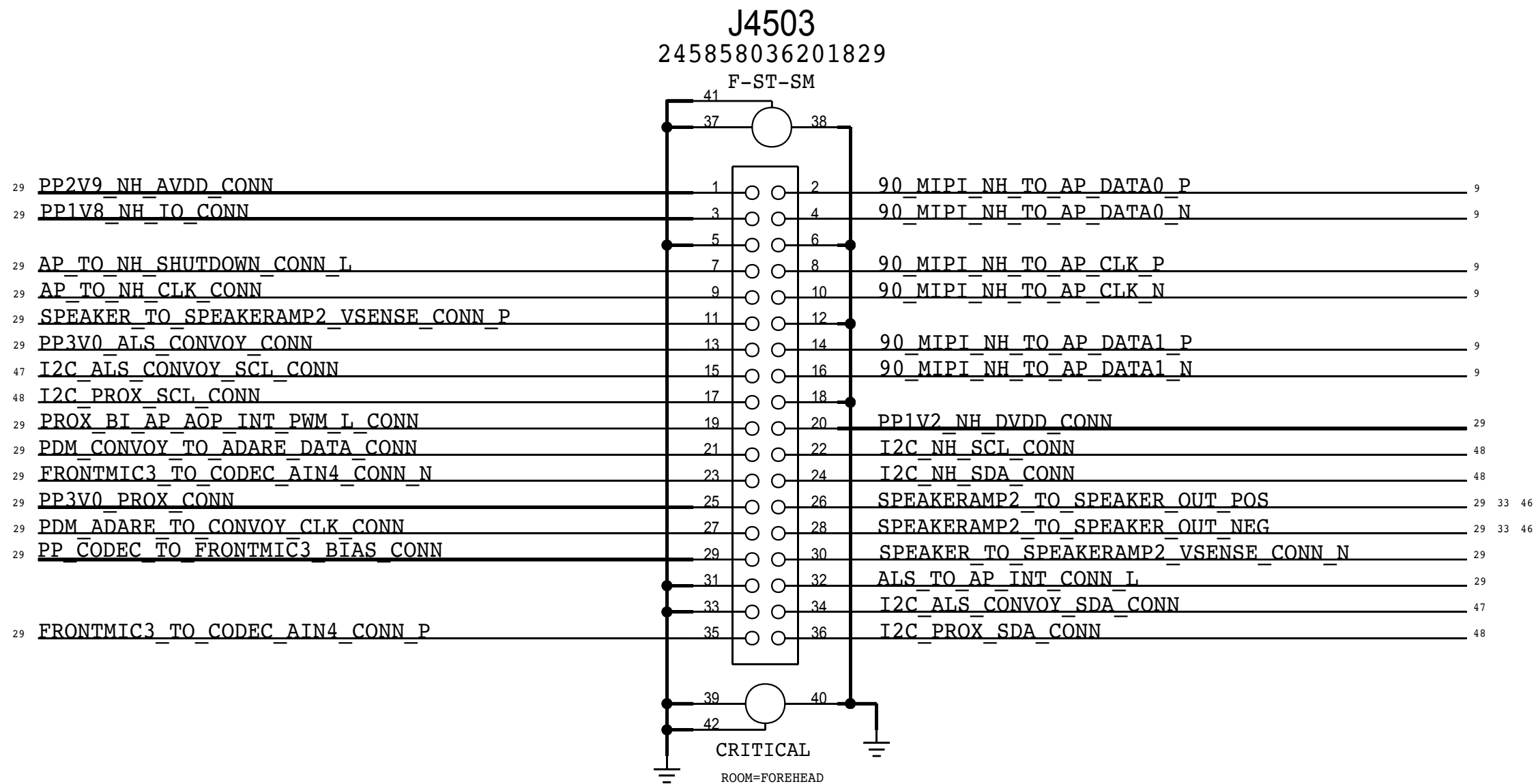
DISPLAY / TOUCH FLEX CONNECTOR

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



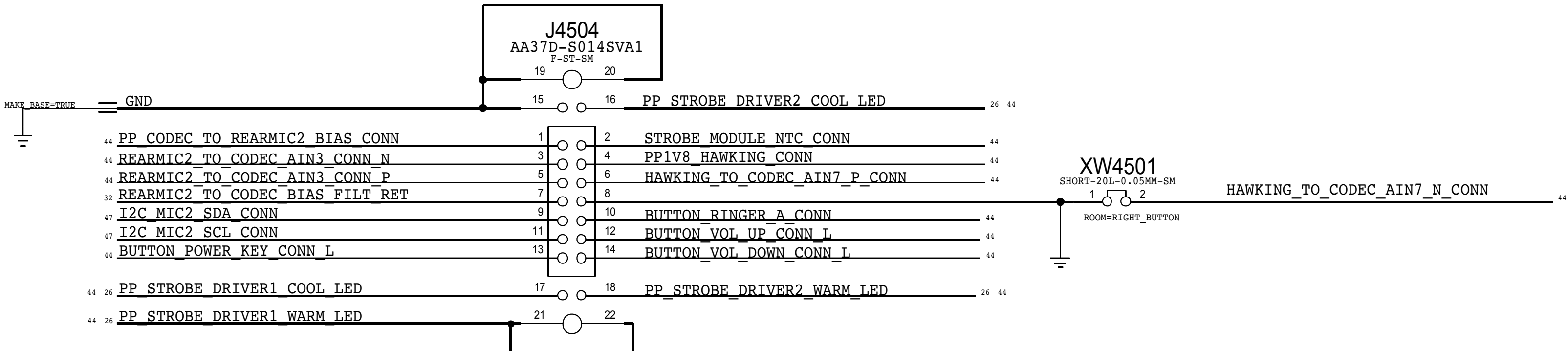
FOREHEAD FLEX CONNECTOR

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



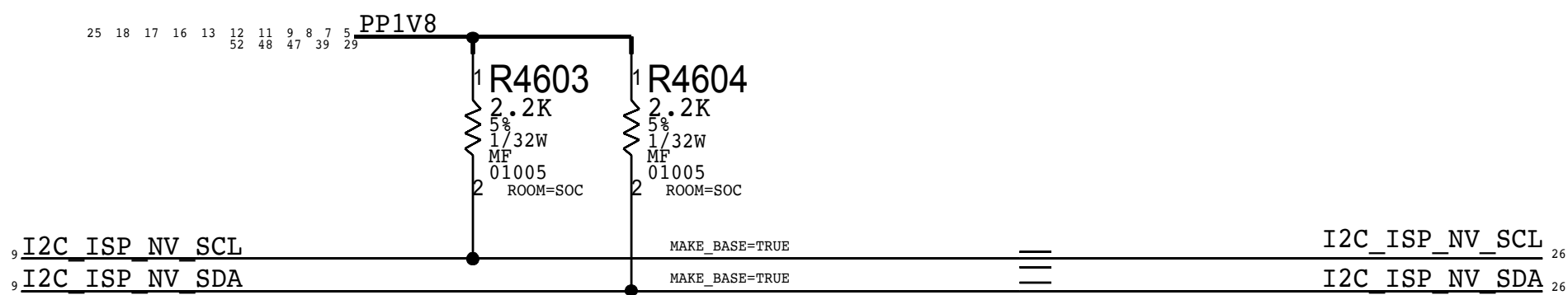
COMBINED BUTTON FLEX CONNECTOR

MLB APN: 516S00150
FLEX APN: 516S00149

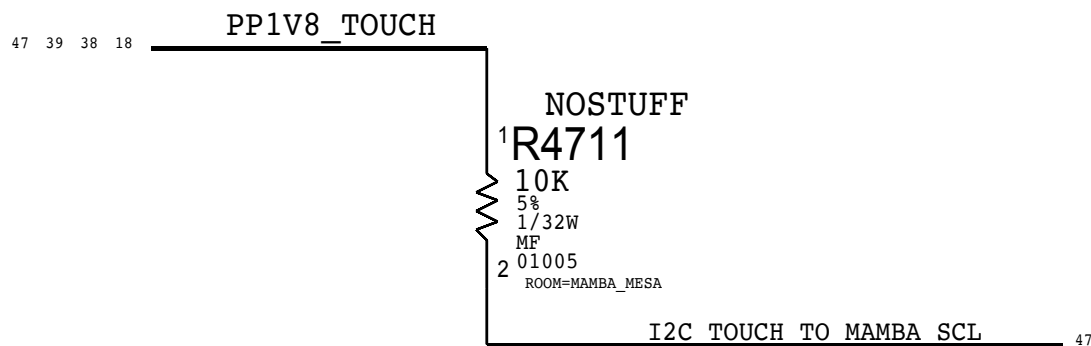


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		PAGE	6 OF 53
		SHEET	6 OF 81

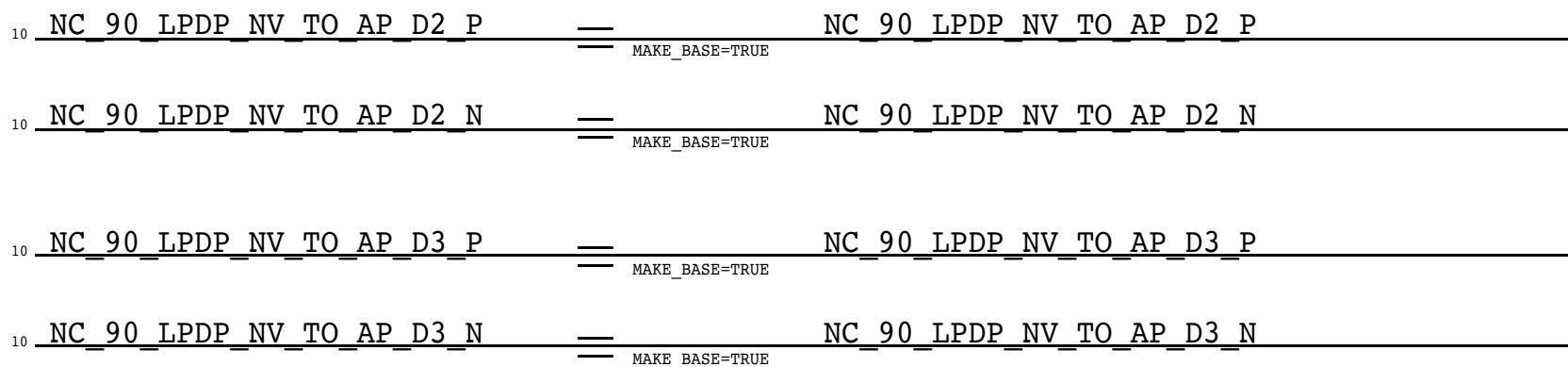
ISP I2C1



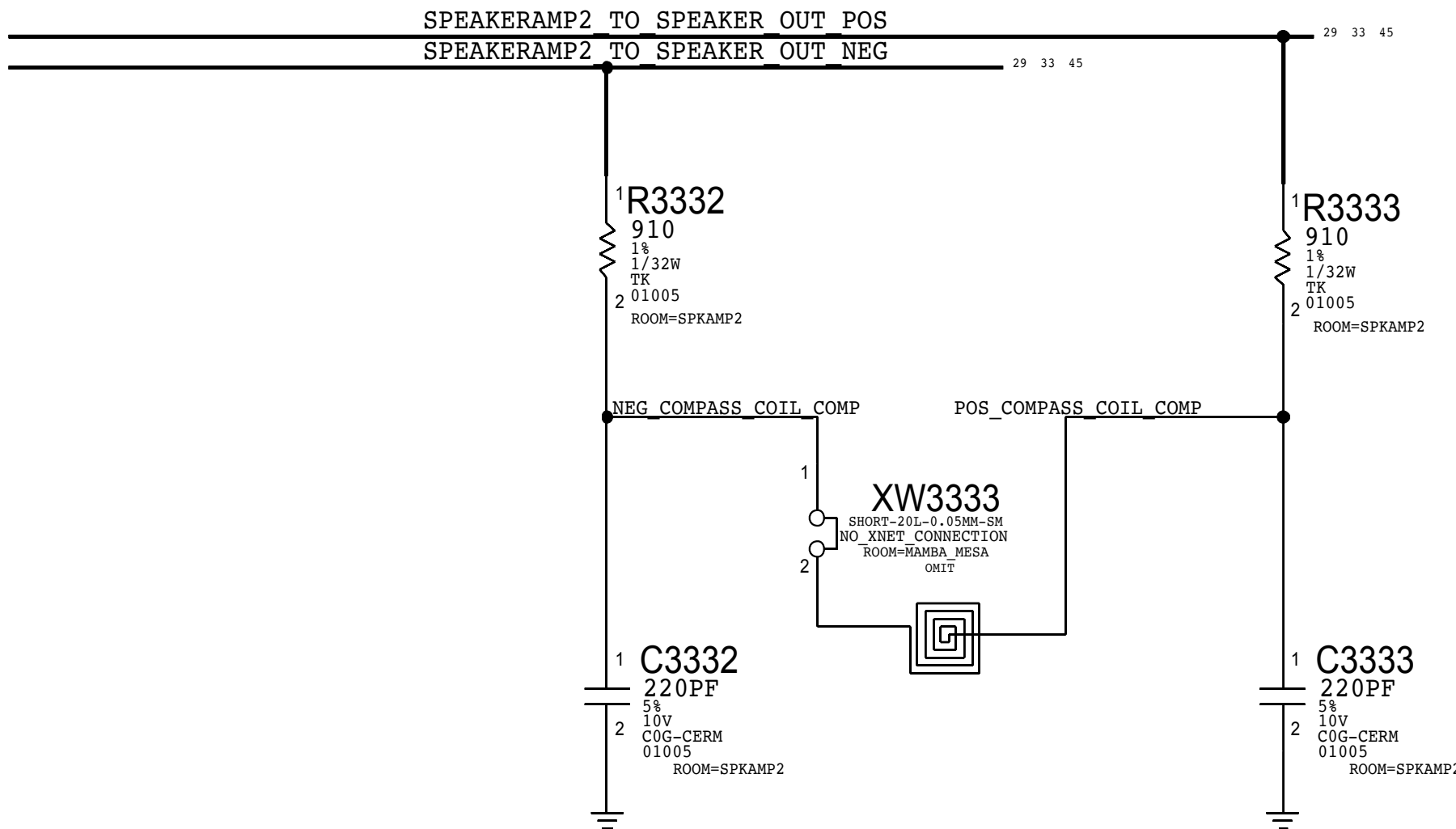
#26682438:Move to Page 46
TOUCH I2C



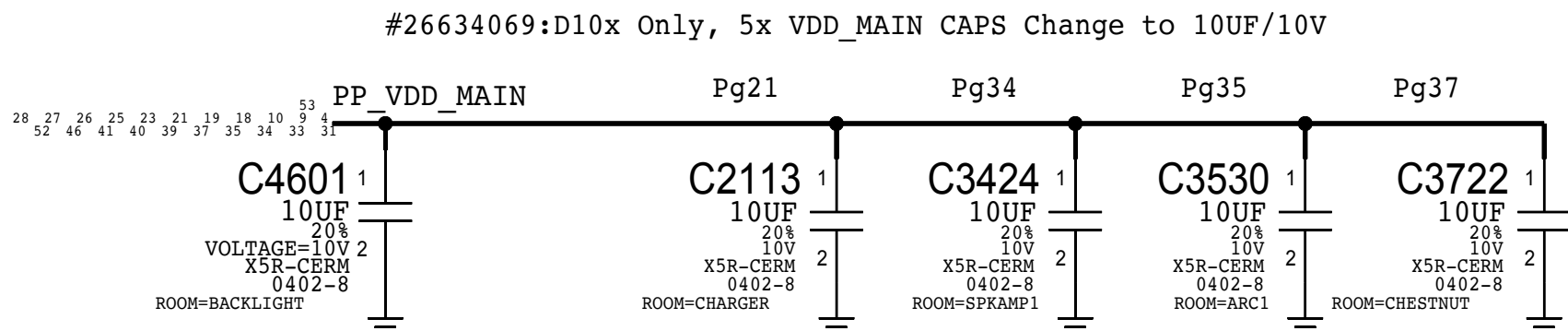
NC Nets in Small FF



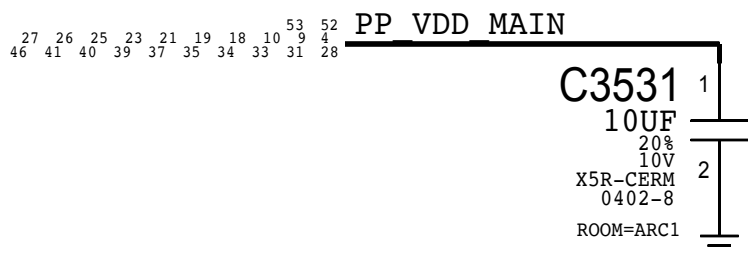
Top Speaker Compass Coil



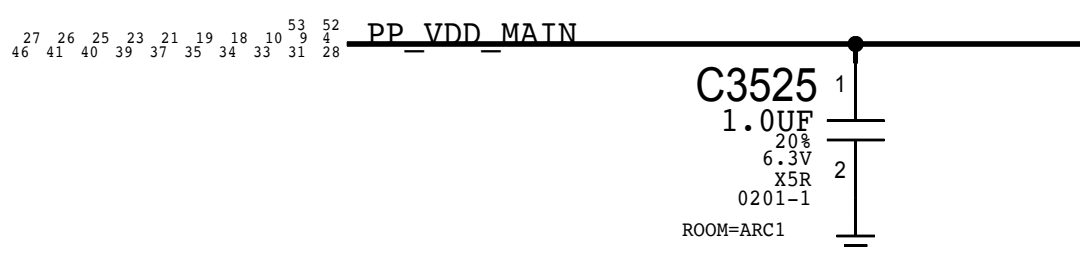
VDD_MAIN Cap



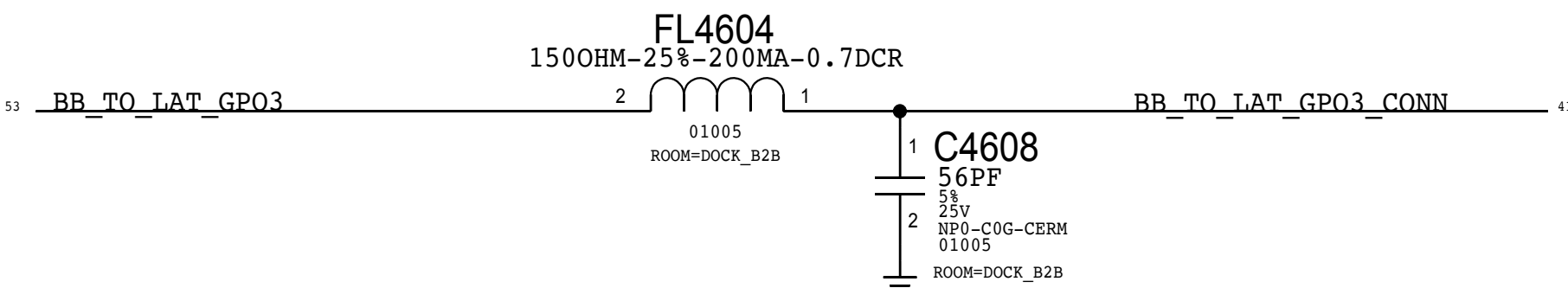
#25742582,Add back C3531 in layout at ARC



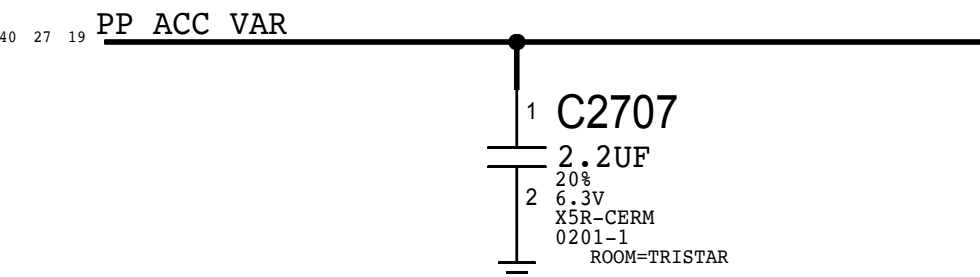
#26104509:C3525 Change to 1UF 0201 in DVT



Dock B2B (Pg 41)



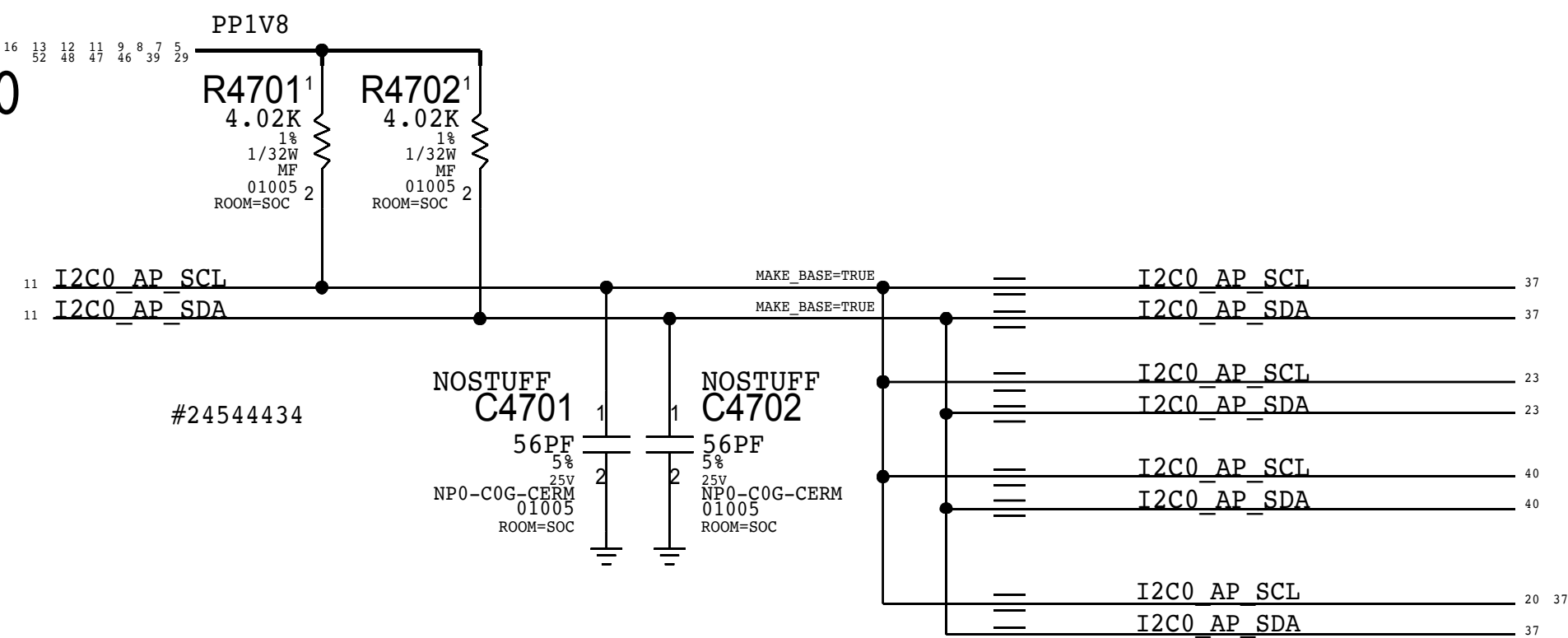
ACC Buck Caps



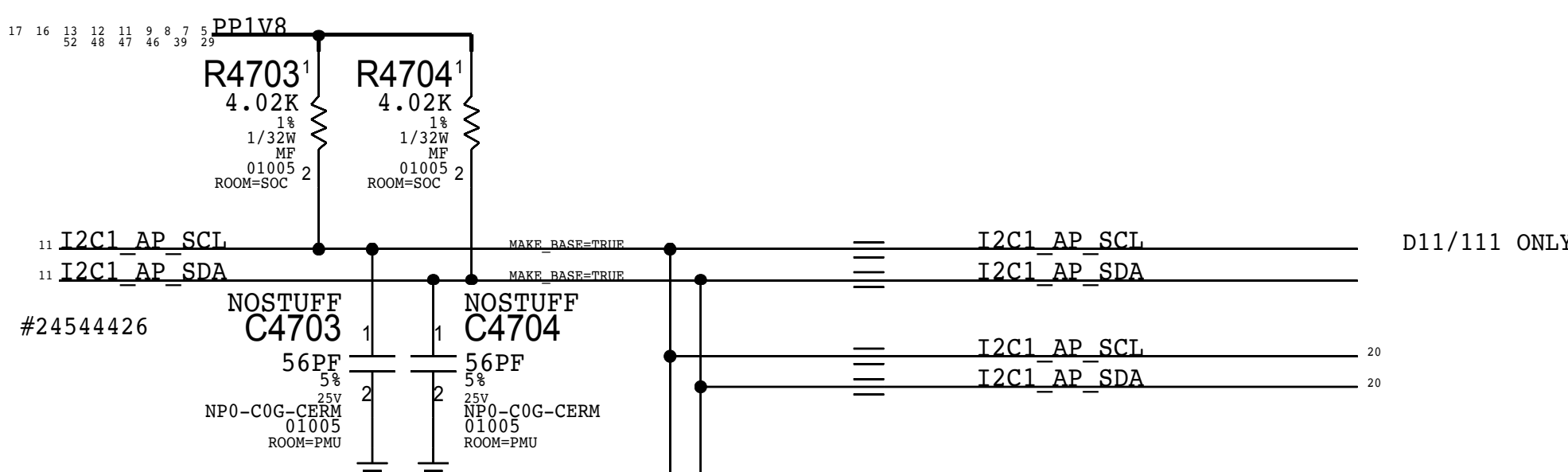
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	PAGE	6 OF 53
	SHEET	6 OF 81

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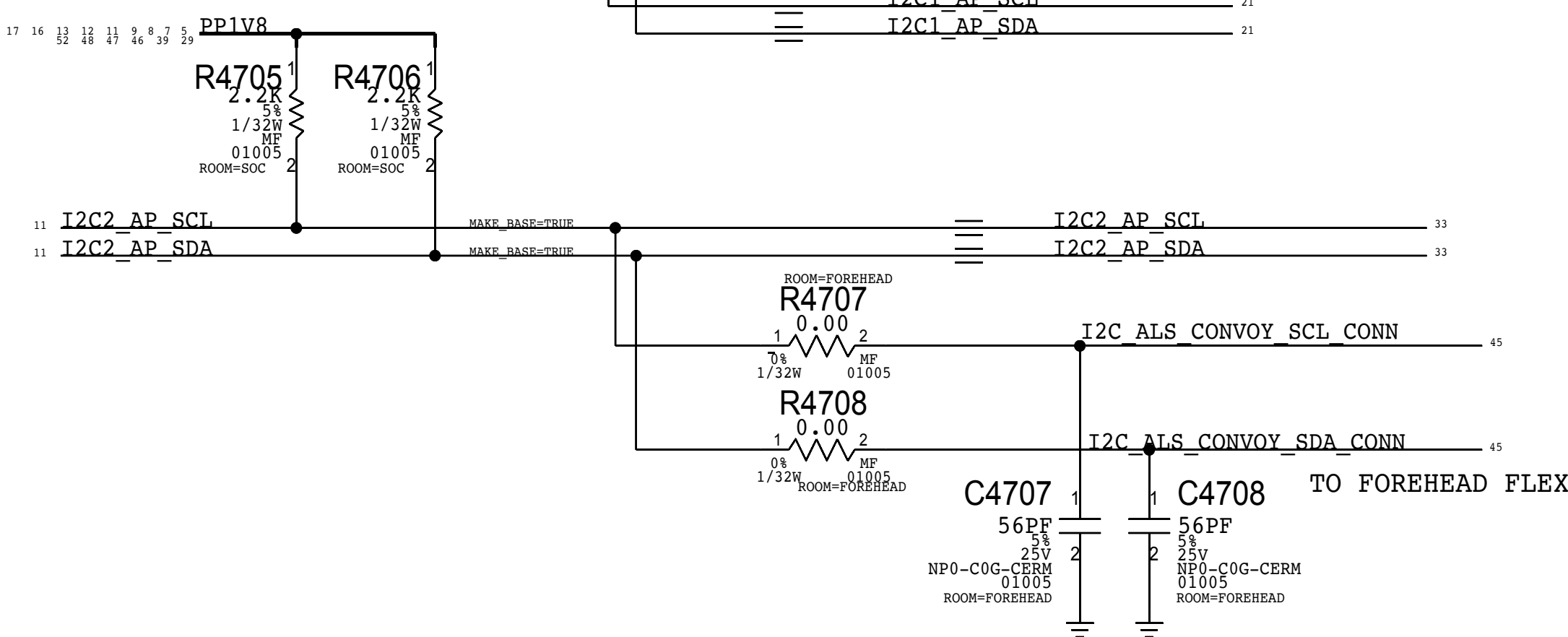
I2C0



I2C1

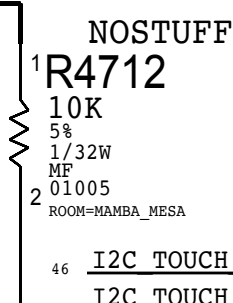


I2C2



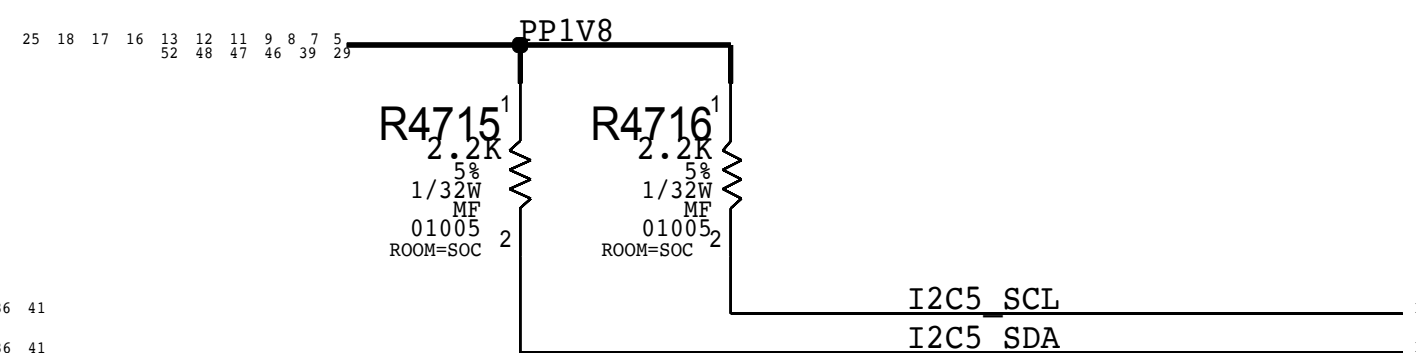
TOUCH

#26682438:Move to Page 46

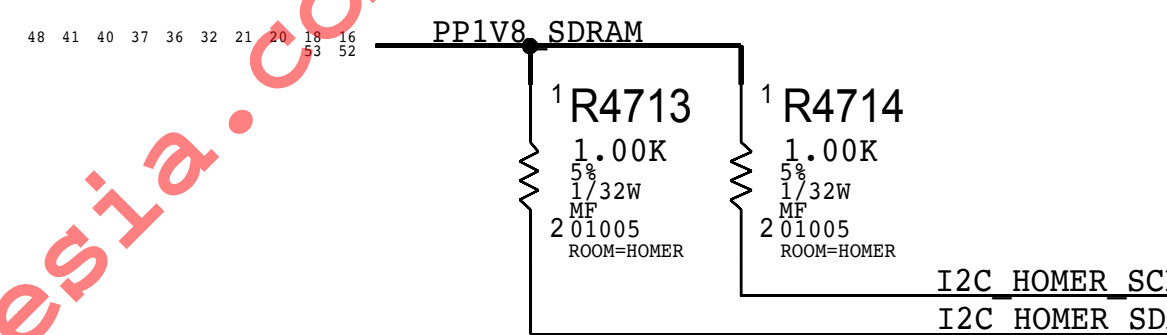


NOTE:MAMBA I2C 2.2K PULL-UPS TO PP1V8 TOUCH INSIDE GALILEO
ADDING R3803, R3804 AS OPTION FOR TWEAKING VALUE

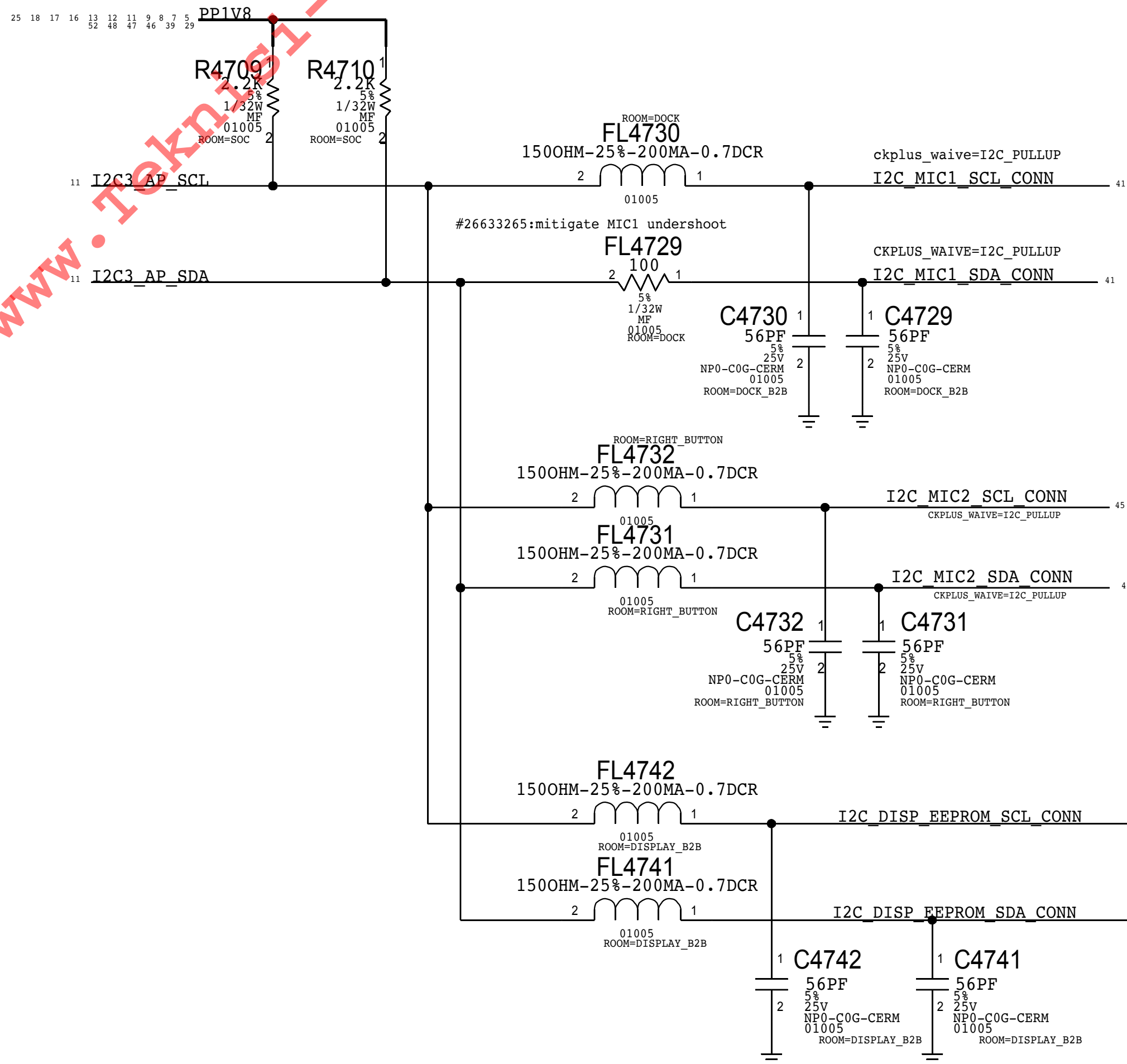
I2C5



HOMER



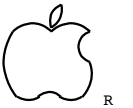
I2C3



TO DOCK FLEX

TO COMBINED BUTTON FLEX

TO DISPLAY FLEX

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		PAGE	6 OF 53
		SHEET	6 OF 81

AOP
I2C

ISP
I2C0

D

D

C

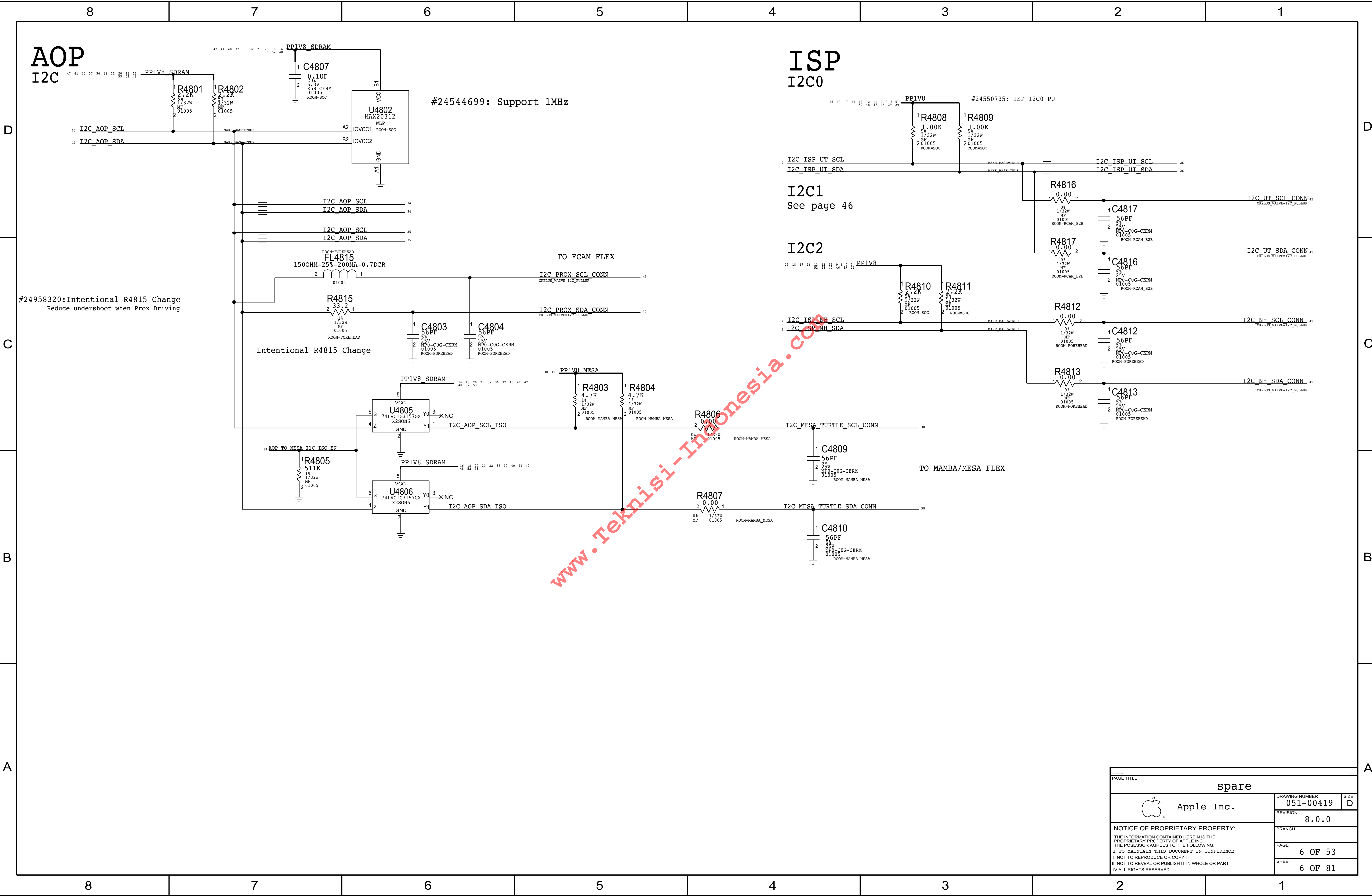
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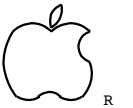
B

B

A

A

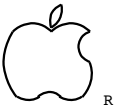


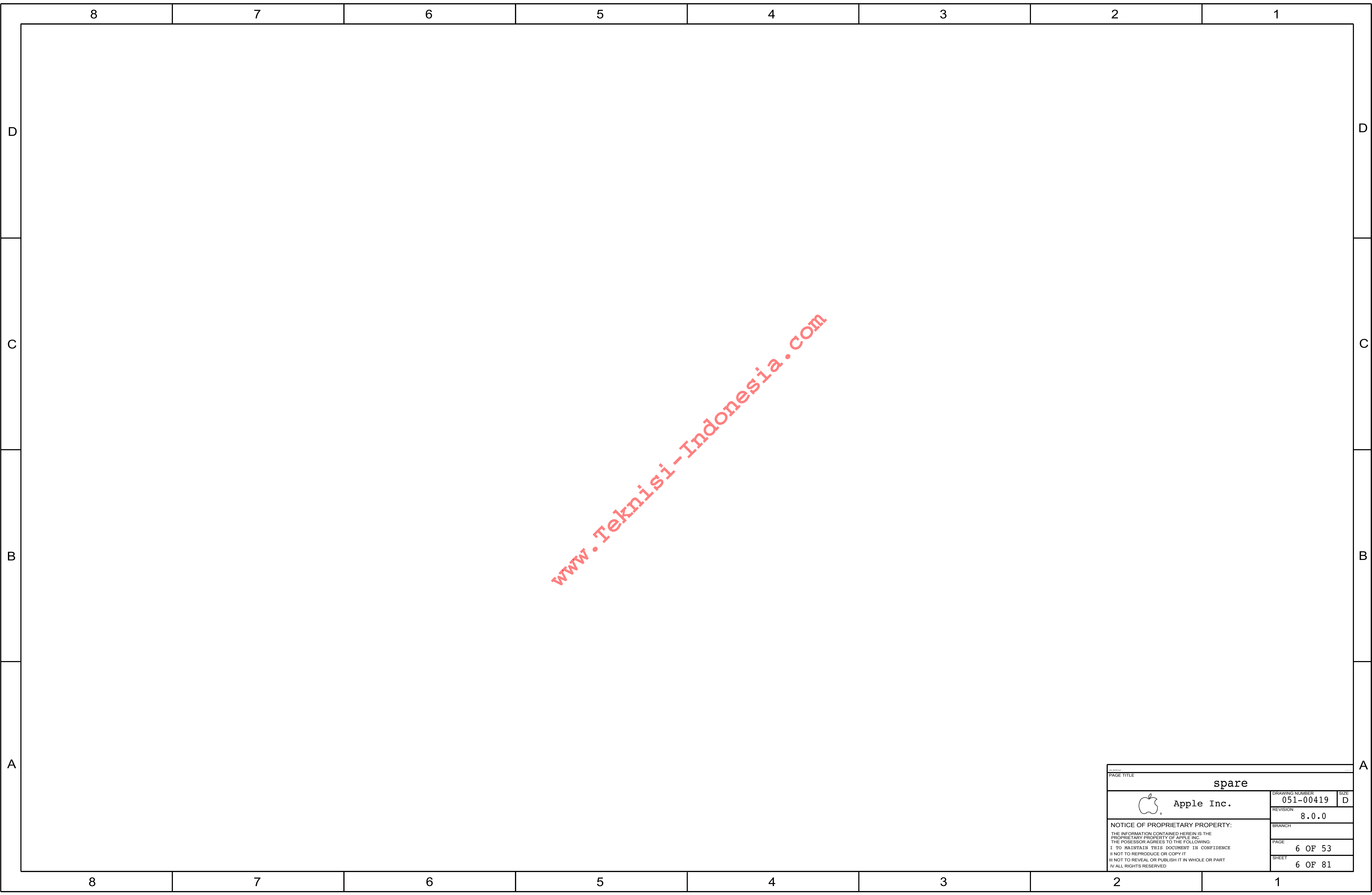
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BRANCH		PAGE	
		6 OF 53	
SHEET		6 OF 81	

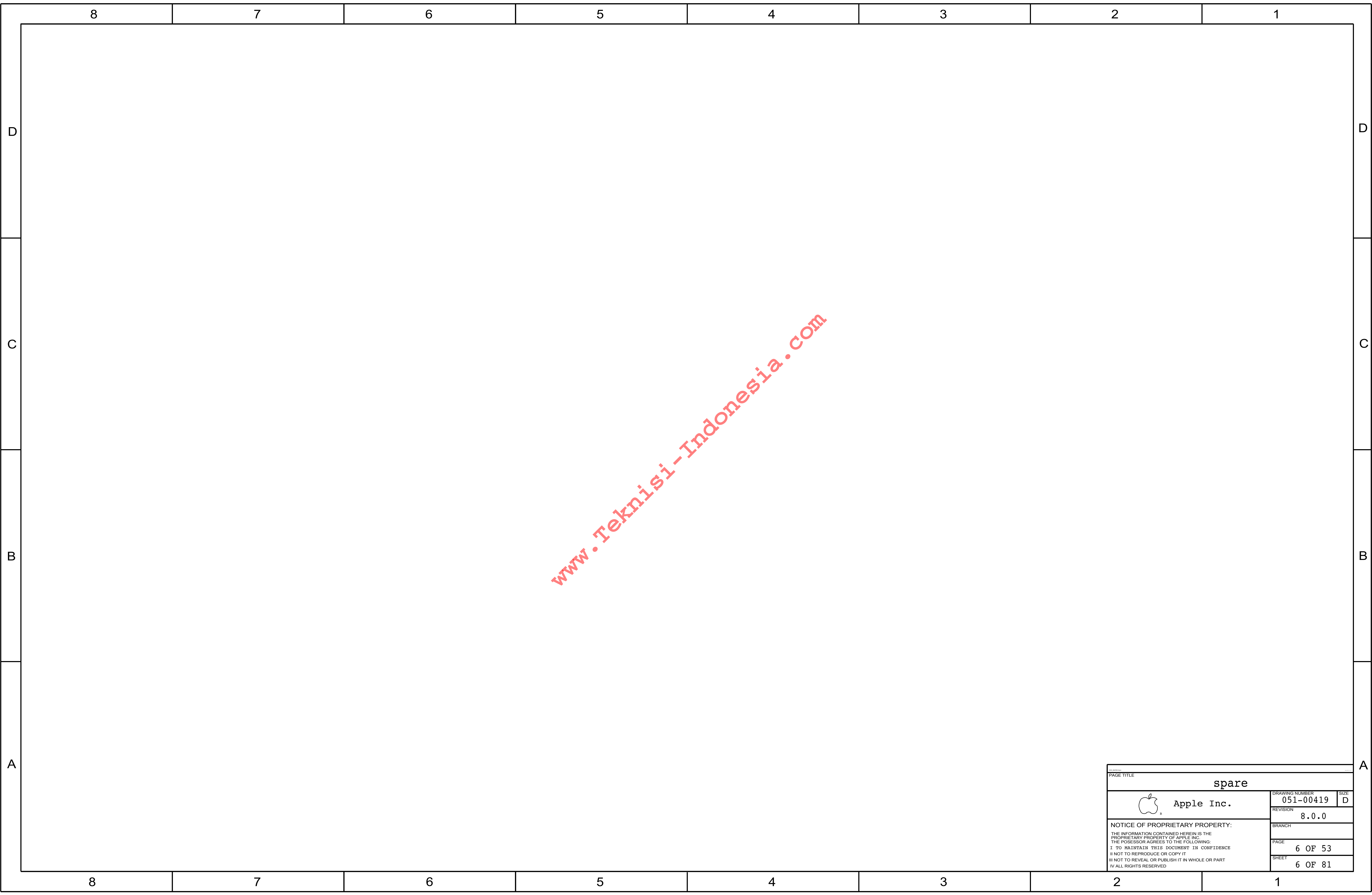
8	7	6	5	4	3	2	1
D							
C							
B							
A							
8	7	6	5	4	3	2	1

D1x I2C Table

Bus	Device	Binary	7-bit Address	8-bit Address	Max Speed
ISP I2C0 <i>1.8MHz</i>	SALT LAKE (PRIMARY)	0010000X	0x10	0x20	1 MHz
	SALT LAKE (SECONDARY)	0110000X	0x30	0x60	1 MHz
	GRUNBERG (STANDARD)	0011100X	0x10	0x38	1 MHz
	GRUNBERG (SPECIAL ABSOLUTE RW)	0011101X	0x10	0x3A	1 MHz
	GRUNBERG (SPECIAL DELTA READ)	0011110X	0x1E	0x3C	1 MHz
	STROBE 1	1100011X	0x63	0xC6	1 MHz
ISP I2C1 <i>1.8MHz</i>	LAS VEGAS (PRIMARY)	0100000X	0x20	0x40	1 MHz
	LAS VEGAS (SECONDARY)	0110000X	0x30	0x60	1 MHz
	EDWIN	1100011X	0x63	0xC6	1 MHz
	STROBE 2	0000110X	0x06	0x0C	1 MHz
ISP I2C2 <i>4.0MHz</i>	CONCORD	0010000X	0x10	0x20	1 MHz
ADP I2C <i>1.8MHz</i>	ARC DRIVER 1	100000YX	0x41	0x82	1 MHz
	PROX	1011000X	0x58	0xB0	1 MHz
	SPKAMP1 (L26)	100000YX	0x40	0x80	1 MHz
	TURTLE	0101100X	0x45	0x58	400 kHz
	MESA	1100001X	0x81	0xC2	400 kHz
Touch I2C <i>400kHz</i>	MAMBA	1100001X	0x80	0xC0	1 MHz
	MESON	1011000X	0x40	0x80	510 kHz
EEPROM I2C	EEPROM	1010001X	0x51	0xA2	400 kHz
AP I2C0 <i>4.0MHz</i>	BOOST	1110101X	0x75	0xEA	3.4 MHz
	TRISTAR	0011010X	0x1A	0x34	400 kHz
	BACKLIGHT 1	1100010X	0x62	0xC4	1 MHz
	CHESTNUT	0100111X	0x27	0x4E	400 kHz
AP I2C1 <i>4.0MHz</i>	ADELYN	1110100X	0x74	0xEB	400 kHz
	TIGRIS	1110101X	0x75	0xEA	400 kHz
	BACKLIGHT 2	1100010X	0x62	0xC4	1 MHz
AP I2C2 <i>4.0MHz</i>	ALS	0101001X	0x29	0x52	400 kHz
	CONVOY	0100001X	0x21	0x42	3.4 MHz
	SPKAMP 2 (L26)	0100010X	0x22	0x44	400 kHz
	SPKAMP 2 (L26)	100002YX	0x40	0x80	400 MHz
AP I2C3 <i>1.8MHz</i>	DOCK FLEX (MIC1)	1010100X	0x54	0xA8	1 MHz
	COMBINED BUTTON FLEX (MIC2)	1010100X	0x56	0xAC	1 MHz
	DISP EEPROM	1010001X	0x51	0xA2	400kHz
Homer I2C <i>1.8MHz</i>	SCHRODINGER (STANDARD)	0001110X	0xE	0x1C	1 MHz
	SCHRODINGER (CAL REG'S)	0001111X	0xF	0x1D	1 MHz
	EEPROM (STANDARD)	1010000X	0x50	0xA0	
	EEPROM (CONFIG)	1010000X	0x90	0xA0	

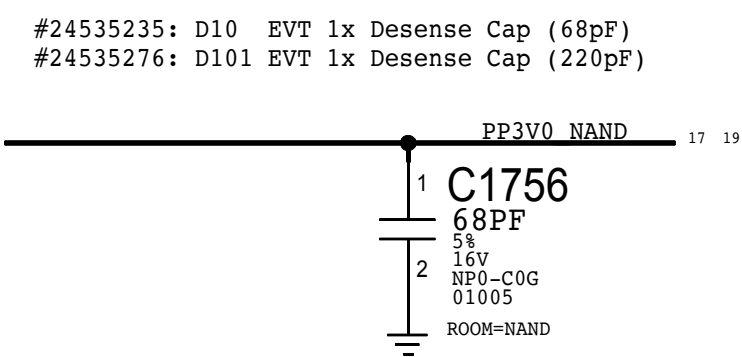
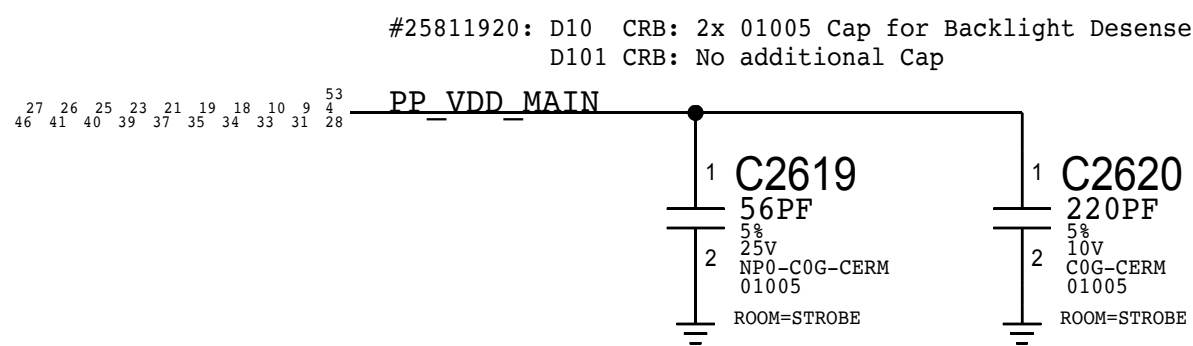
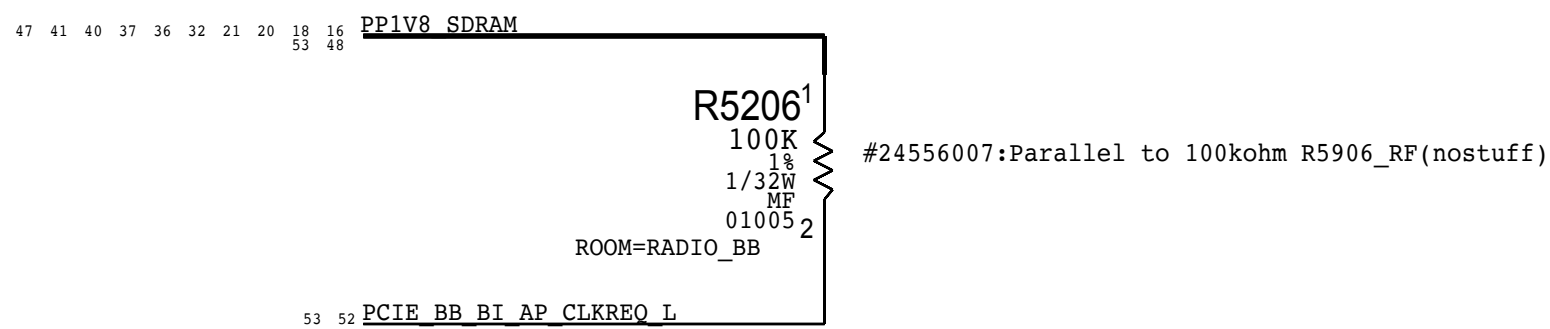
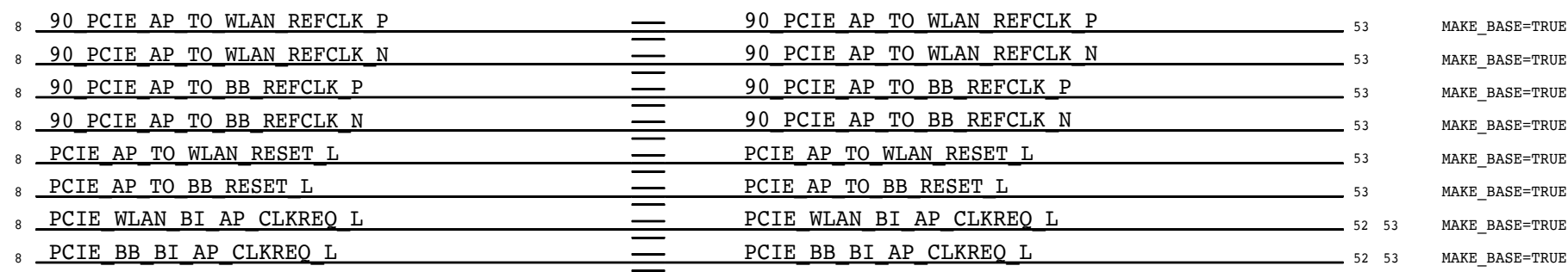
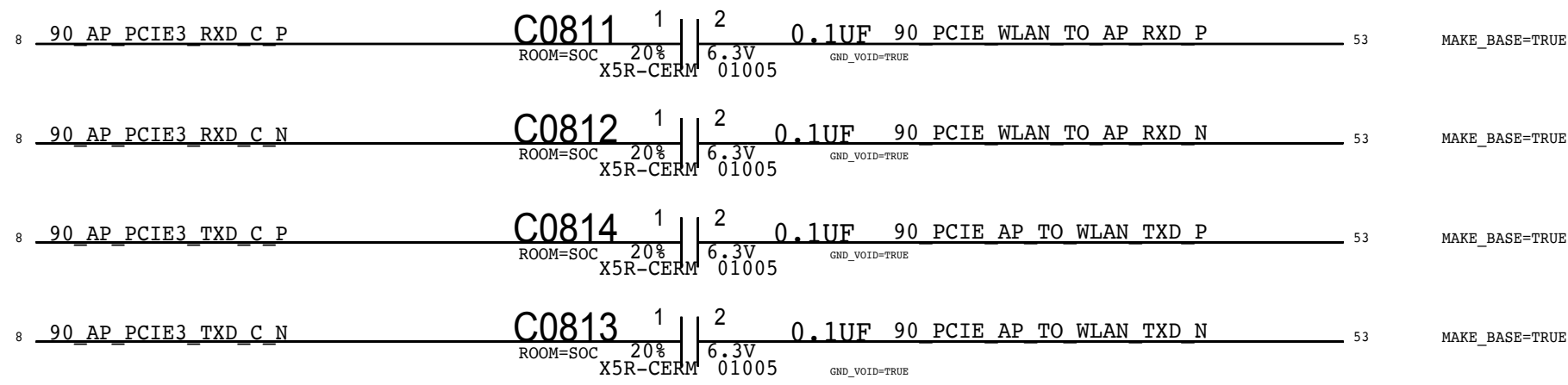
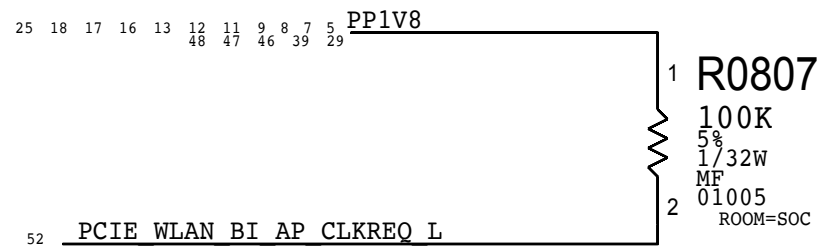
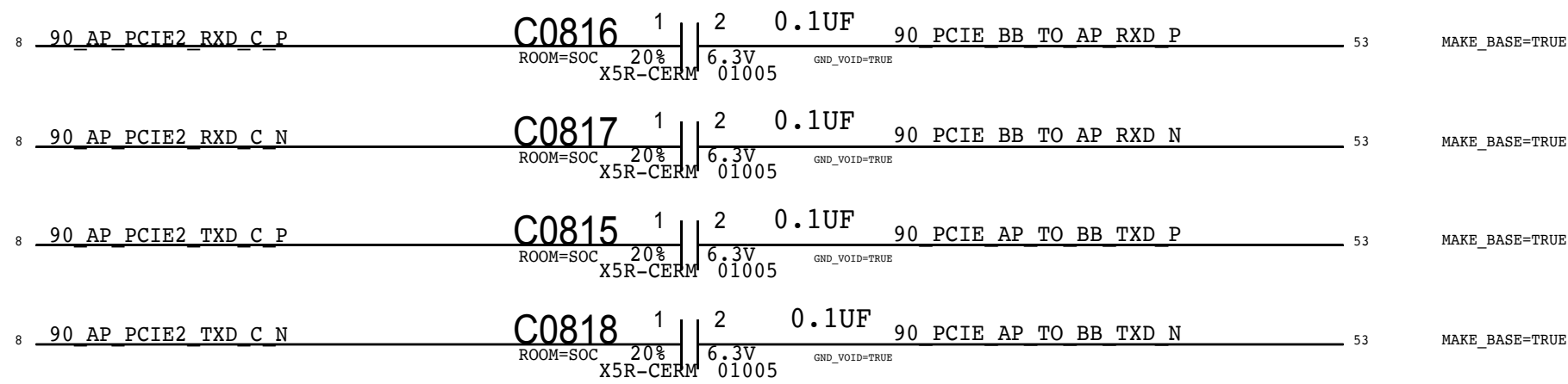
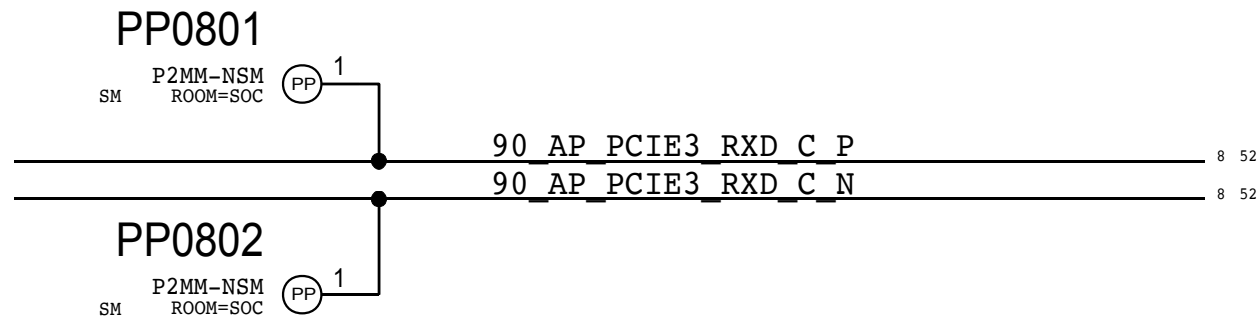
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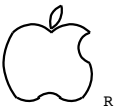


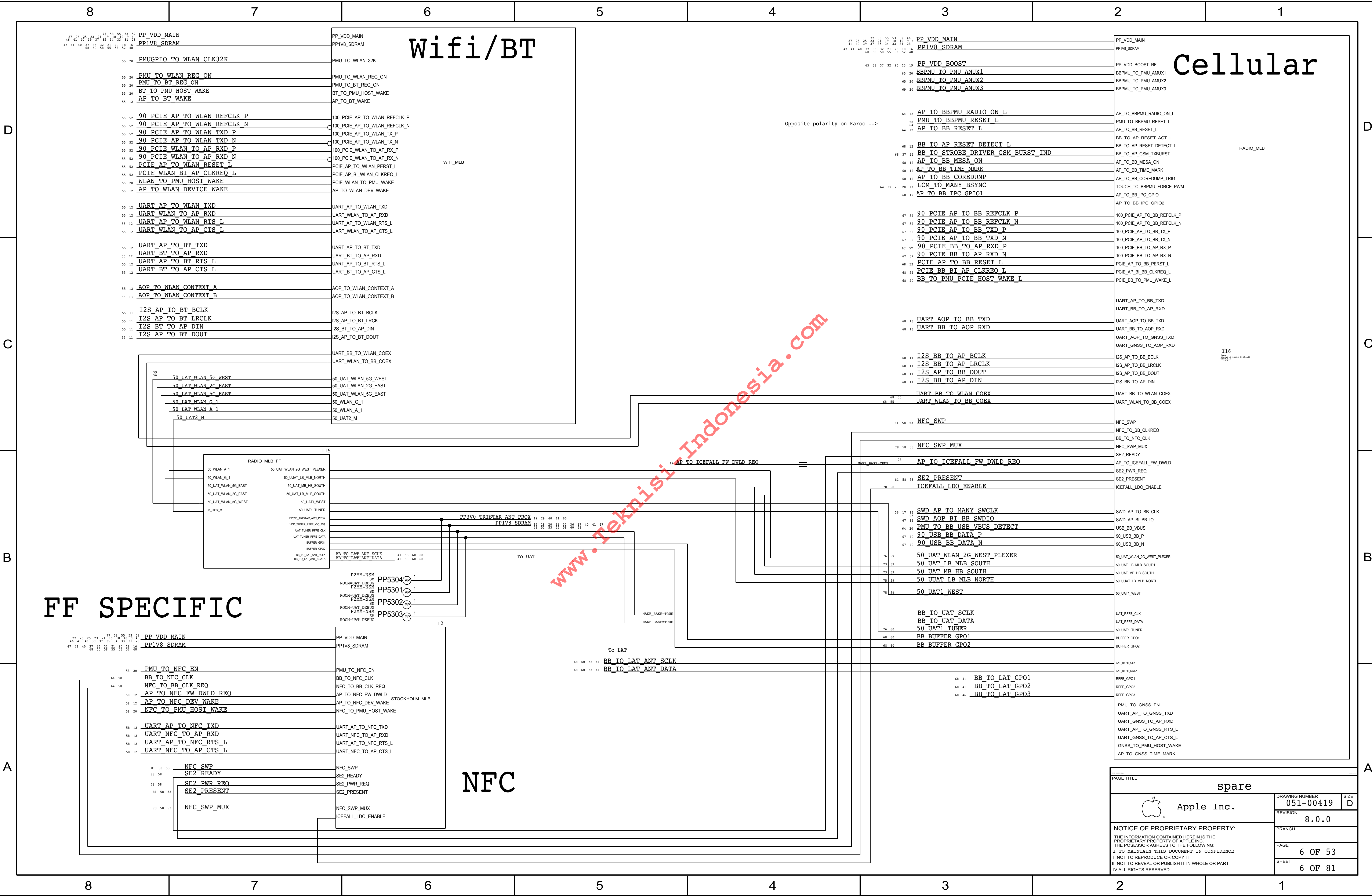


This page contains items which differ accross all MLB designs

PCIe lanes



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	PAGE	6 OF 53
	SHEET	6 OF 81

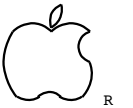


Wifi/BT

Cellular

FF SPECIFIC

NFC

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		PAGE	6 OF 53
		SHEET	6 OF 81

8		7		6		5		4		3		2		1	
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.												REV	ECN	DESCRIPTION OF REVISION	CK APPD DATE
												8	0006400877	ENGINEERING RELEASED	2016-06-14

D1X WIFI MLB (PERENNIAL)
FEBRUARY 1, 2016

PDF PAGE	CSA PAGE	CONTENTS
2	76	PERENNIAL
3	77	WIFI FRONT-END

BOM OPTIONS:

D10_JP:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
131S0648	1	CAP,CER,0.3PF,+/-0.05,01005	C7705_RF	CRITICAL	D10_JP
152S00029	1	IND,1.1NH,UH-Q,01005	R7703_RF	CRITICAL	D10_JP
131S0893	1	CAP,CER,0.2PF,+/-0.05,01005	C7706_RF	CRITICAL	D10_JP
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7711_RF	CRITICAL	D10_JP
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7702_RF	CRITICAL	D10_JP
152S1980	1	IND,1.0NH,UH-Q,01005	R7704_RF	CRITICAL	D10_JP
131S0404	1	CAP,3.9PF,+/-1.0PF,01005	R6711_RF	CRITICAL	D10_JP
152S2061	1	IND,7.5NH,UH-Q,01005	C6729_RF	CRITICAL	D10_JP
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7700_RF	CRITICAL	D10_JP
152S2043	1	IND,6.2NH,UH-Q,01005	C7702_RF	CRITICAL	D10_JP
152S1998	1	IND,0.8NH,UH-Q,01005	L7700_RF	CRITICAL	D10_JP
152S2043	1	IND,6.2NH,UH-Q,01005	L7701_RF	CRITICAL	D10_JP
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7701_RF	CRITICAL	D10_JP

NOSTUFF:C7729_RF,C7711_RF,C7709_RF,C7710_RF, C7707_RF, C7708_RF
C7700_RF, C7703_RF,C7704_RF

D10_ROW:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
131S0648	1	CAP,CER,0.3PF,+/-0.05,01005	C7705_RF	CRITICAL	D10_ROW
152S00029	1	IND,1.1NH,UH-Q,01005	R7703_RF	CRITICAL	D10_ROW
131S0893	1	CAP,CER,0.2PF,+/-0.05,01005	C7706_RF	CRITICAL	D10_ROW
117S0161	TRUE	RES,MF,0 OHM,1/32W,01005	R7711_RF	CRITICAL	D10_ROW
117S0161	TRUE	RES,MF,0 OHM,1/32W,01005	R7702_RF	CRITICAL	D10_ROW
152S1988	TRUE	IND,2.4NH,UH-Q,01005	R7704_RF	CRITICAL	D10_ROW
117S0161	TRUE	RES,MF,0 OHM,1/32W,01005	R6711_RF	CRITICAL	D10_ROW
152S1853	TRUE	IND,9.1NH,UH-Q,01005	C6729_RF	CRITICAL	D10_ROW
117S0161	TRUE	RES,MF,0 OHM,1/32W,01005	R7700_RF	CRITICAL	D10_ROW
152S2043	1	IND,6.2NH,UH-Q,01005	C7702_RF	CRITICAL	D10_ROW
152S1998	1	IND,0.8NH,UH-Q,01005	L7700_RF	CRITICAL	D10_ROW
152S2043	TRUE	IND,6.2NH,UH-Q,01005	L7701_RF	CRITICAL	D10_ROW
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7701_RF	CRITICAL	D10_ROW

NOSTUFF:C7729_RF,C7711_RF,C7709_RF,C7710_RF, C7707_RF, C7708_RF
C7700_RF, C7703_RF,C7704_RF

D101_WIFI:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
131S0648	1	CAP,CER,0.3PF,+/-0.05,01005	C7705_RF	CRITICAL	D101
152S00029	1	IND,1.1NH,UH-Q,01005	R7703_RF	CRITICAL	D101
131S0893	1	CAP,CER,0.2PF,+/-0.05,01005	C7706_RF	CRITICAL	D101
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7711_RF	CRITICAL	D101
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7702_RF	CRITICAL	D101
152S1988	TRUE	IND,2.4NH,UH-Q,01005	R7704_RF	CRITICAL	D101
131S0648	TRUE	CAP,CER,0.3PF,+/-0.05PF,01005	C7708_RF	CRITICAL	D101
118S0724	TRUE	RES,MF,0 OHM,1/20W,0201	R6711_RF	CRITICAL	D101
152S2054	TRUE	IND,9.1NH,UH-Q,0201	C6729_RF	CRITICAL	D101
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7700_RF	CRITICAL	D101
152S1853	1	IND,9.1NH,UH-Q,01005	L7701_RF	CRITICAL	D101
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7701_RF	CRITICAL	D101
131S0893	1	CAP,CER,0.2PF,+/-0.05PF,01005	C7705_RF	CRITICAL	D101
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7701_RF	CRITICAL	D101

NOSTUFF: C7729_RF,C7711_RF,C7709_RF,C7710_RF, C7707_RF, C7708_RF
C7700_RF, C7703_RF,C7704_RF

D11_JP:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S00273	TRUE	IND,0.6NH,UH-Q,01005	R7703_RF	CRITICAL	D11_JP
152S1976	TRUE	IND,0.7NH,UH-Q,01005	R7711_RF	CRITICAL	D11_JP
131S0400	TRUE	CAP,CER,3.5PF+/-0.1,01005	R7702_RF	CRITICAL	D11_JP
152S1986	TRUE	IND,FILM,2.2NH,UH-Q,01005	R7704_RF	CRITICAL	D11_JP
131S0648	TRUE	CAP,CER,0.3PF,+/-0.05PF,01005	C7708_RF	CRITICAL	D11_JP
131S0593	TRUE	CAP,3.9PF,+/-1.0PF,0201,H1-Q	R6711_RF	CRITICAL	D11_JP
152S2055	TRUE	IND,7.5NH,UH-Q,0201	C6729_RF	CRITICAL	D11_JP
117S0161	TRUE	RES,MF,0 OHM,1/32W,01005	R7700_RF	CRITICAL	D11_JP
117S0161	TRUE	RES,MF,0 OHM,1/32W,01005	L7700_RF	CRITICAL	D11_JP
152S1853	TRUE	IND,9.1NH,UH-Q,01005	L7701_RF	CRITICAL	D11_JP
117S0161	TRUE	RES,MF,0 OHM,1/32W,01005	R7701_RF	CRITICAL	D11_JP
131S0893	TRUE	CAP,CER,0.2PF,+/-0.05PF,01005	C7705_RF	CRITICAL	D11_JP
131S0893	1	CAP,CER,0.2PF,+/-0.05PF,01005	C7729_RF	CRITICAL	D11_JP

NOSTUFF:C7706_RF, C7711_RF,C7709_RF,C7710_RF, C7707_RF, C7708_RF
C7700_RF,C7702_RF, C7703_RF,C7704_RF

D11_ROW:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S00273	1	IND,0.6NH,UH-Q,01005	R7703_RF	CRITICAL	D11_ROW
152S1976	1	IND,0.7NH,UH-Q,01005	R7711_RF	CRITICAL	D11_ROW
131S0400	1	CAP,CER,3.5PF+/-0.1,01005	R7702_RF	CRITICAL	D11_ROW
152S1986	TRUE	IND,FILM,2.2NH,UH-Q,01005	R7704_RF	CRITICAL	D11_ROW
118S0724	TRUE	RES,MF,0 OHM,1/20W,0201	R6711_RF	CRITICAL	D11_ROW
152S2054	1	IND,9.1NH,UH-Q,0201	C6729_RF	CRITICAL	D11_ROW
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7700_RF	CRITICAL	D11_ROW
117S0161	1	RES,MF,0 OHM,1/32W,01005	L7700_RF	CRITICAL	D11_ROW
152S1853	1	IND,9.1NH,UH-Q,01005	L7701_RF	CRITICAL	D11_ROW
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7701_RF	CRITICAL	D11_ROW
131S0893	1	CAP,CER,0.2PF,+/-0.05PF,01005	C7705_RF	CRITICAL	D11_ROW
131S0893	1	CAP,CER,0.2PF,+/-0.05PF,01005	C7729_RF	CRITICAL	D11_ROW

NOSTUFF:C7706_RF,C7711_RF,C7709_RF,C7710_RF, C7707_RF, C7708_RF
C7700_RF,C7702_RF, C7703_RF,C7704_RF

D111_WIFI:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S00273	1	IND,0.6NH,UH-Q,01005	R7703_RF	CRITICAL	D111
152S1976	1	IND,0.7NH,UH-Q,01005	R7711_RF	CRITICAL	D111
131S0400	1	CAP,CER,3.5PF+/-0.1,01005	R7702_RF	CRITICAL	D111
152S1986	TRUE	IND,FILM,2.2NH,UH-Q,01005	R7704_RF	CRITICAL	D111
118S0724	TRUE	RES,MF,0 OHM,1/20W,0201	R6711_RF	CRITICAL	D111
152S2054	TRUE	IND,9.1NH,UH-Q,0201	C6729_RF	CRITICAL	D111
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7700_RF	CRITICAL	D111
117S0161	1	RES,MF,0 OHM,1/32W,01005	L7700_RF	CRITICAL	D111
152S1853	1	IND,9.1NH,UH-Q,01005	L7701_RF	CRITICAL	D111
117S0161	1	RES,MF,0 OHM,1/32W,01005	R7701_RF	CRITICAL	D111
131S0893	1	CAP,CER,0.2PF,+/-0.05PF,01005	C7705_RF	CRITICAL	D111
131S0893	1	CAP,CER,0.2PF,+/-0.05PF,01005	C7729_RF	CRITICAL	D111

NOSTUFF:C7706_RF,C7711_RF,C7709_RF,C7710_RF, C7707_RF, C7708_RF
C7700_RF,C7702_RF, C7703_RF,C7704_RF

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POWER

53 IN PP VDD MAIN

53 IN PPIV8 SDRAM

CLOCKS

53 IN PMUPIO_TO_WLAN_CLK32K

CONTROL

53 IN PMU_TO_WLAN_REG_ON

53 IN PMU_TO_BT_REG_ON

53 OUT BT_TO_PMU_HOST_WAKE

53 IN AP_TO_BT_WAKE

WLAN PCIE

53 IN 90_PCIE_AP_TO_WLAN_REFCLK_P

53 IN 90_PCIE_AP_TO_WLAN_REFCLK_N

53 IN 90_PCIE_AP_TO_WLAN_TXD_P

53 IN 90_PCIE_AP_TO_WLAN_TXD_N

53 OUT 90_PCIE_WLAN_TO_AP_RXD_P

53 OUT 90_PCIE_WLAN_TO_AP_RXD_N

53 IN PCIE_AP_TO_WLAN_RESET_L

53 IN PCIE_WLAN_BT_AP_CLKREQ_L

53 OUT WLAN_TO_PMU_HOST_WAKE

53 IN AP_TO_WLAN_DEVICE_WAKE

WLAN UART

53 OUT UART_WLAN_TO_AP_RXD

53 IN UART_AP_TO_WLAN_TXD

53 OUT UART_WLAN_TO_AP_CTS_L

53 IN UART_AP_TO_WLAN_RTS_L

BLUETOOTH UART

53 IN UART_AP_TO_BT_TXD

53 OUT UART_BT_TO_AP_RXD

53 IN UART_AP_TO_BT_RTS_L

53 OUT UART_BT_TO_AP_CTS_L

AOP

53 IN AOP_TO_WLAN_CONTEXT_A

53 IN AOP_TO_WLAN_CONTEXT_B

AUDIO

53 IN I2S_AP_TO_BT_BCLK

53 IN I2S_AP_TO_BT_LRCLK

53 OUT I2S_BT_TO_AP_DIN

53 IN I2S_AP_TO_BT_DOUT

COEX

53 IN UART_BB_TO_WLAN_COEX

53 OUT UART_WLAN_TO_BB_COEX

ANTENNA

53 IN 50_UAT_WLAN_5G_WEST

53 IN 50_UAT_WLAN_2G_EAST

53 IN 50_LAT_WLAN_5G_EAST

53 IN 50_LAT_WLAN_G_1

53 IN 50_LAT_WLAN_A_1

53 IN 50_UAT2_M

spare

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051-00419

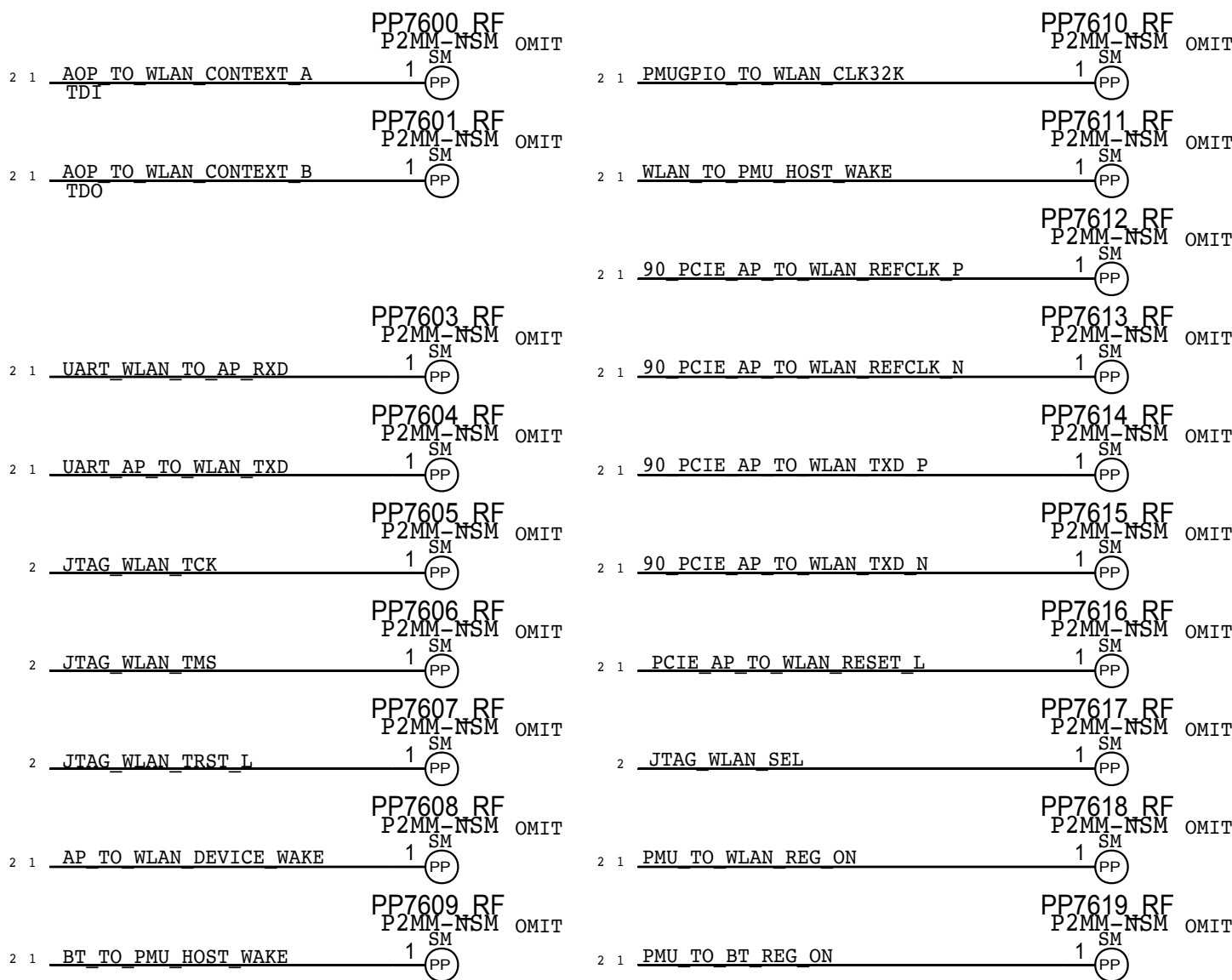
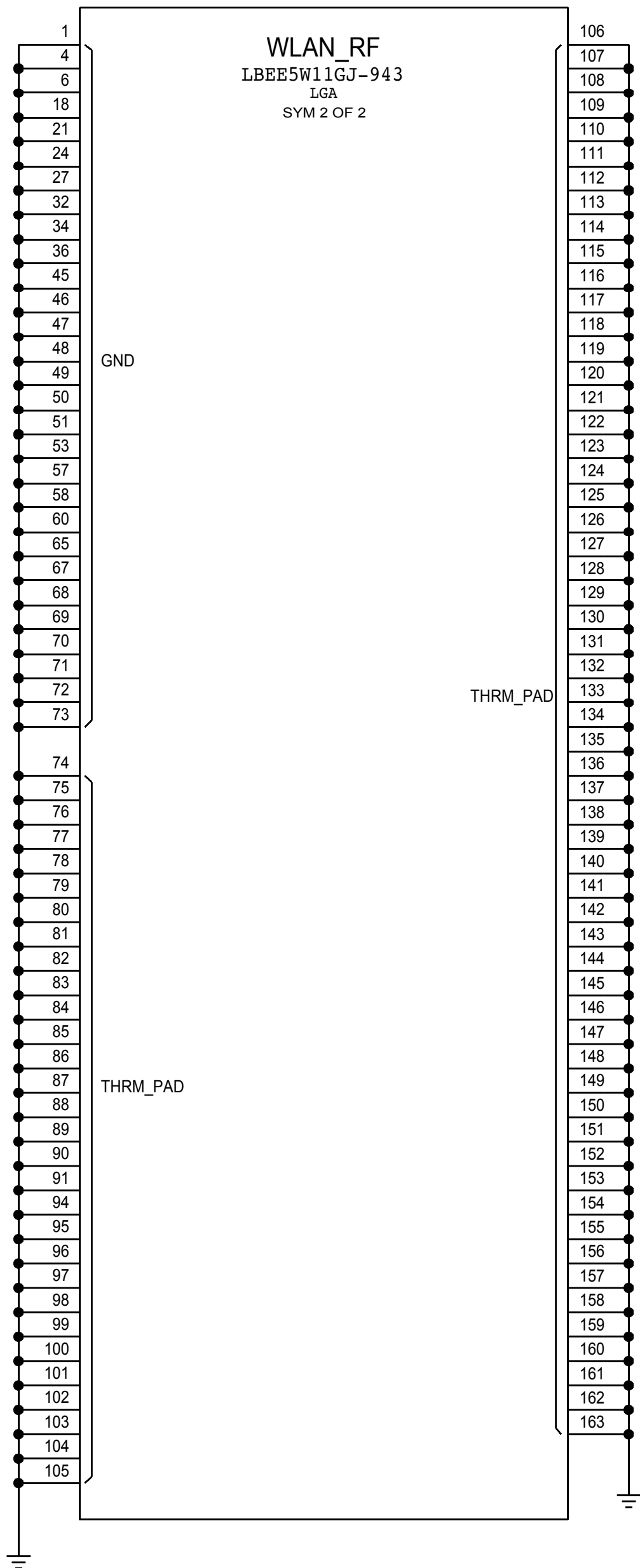
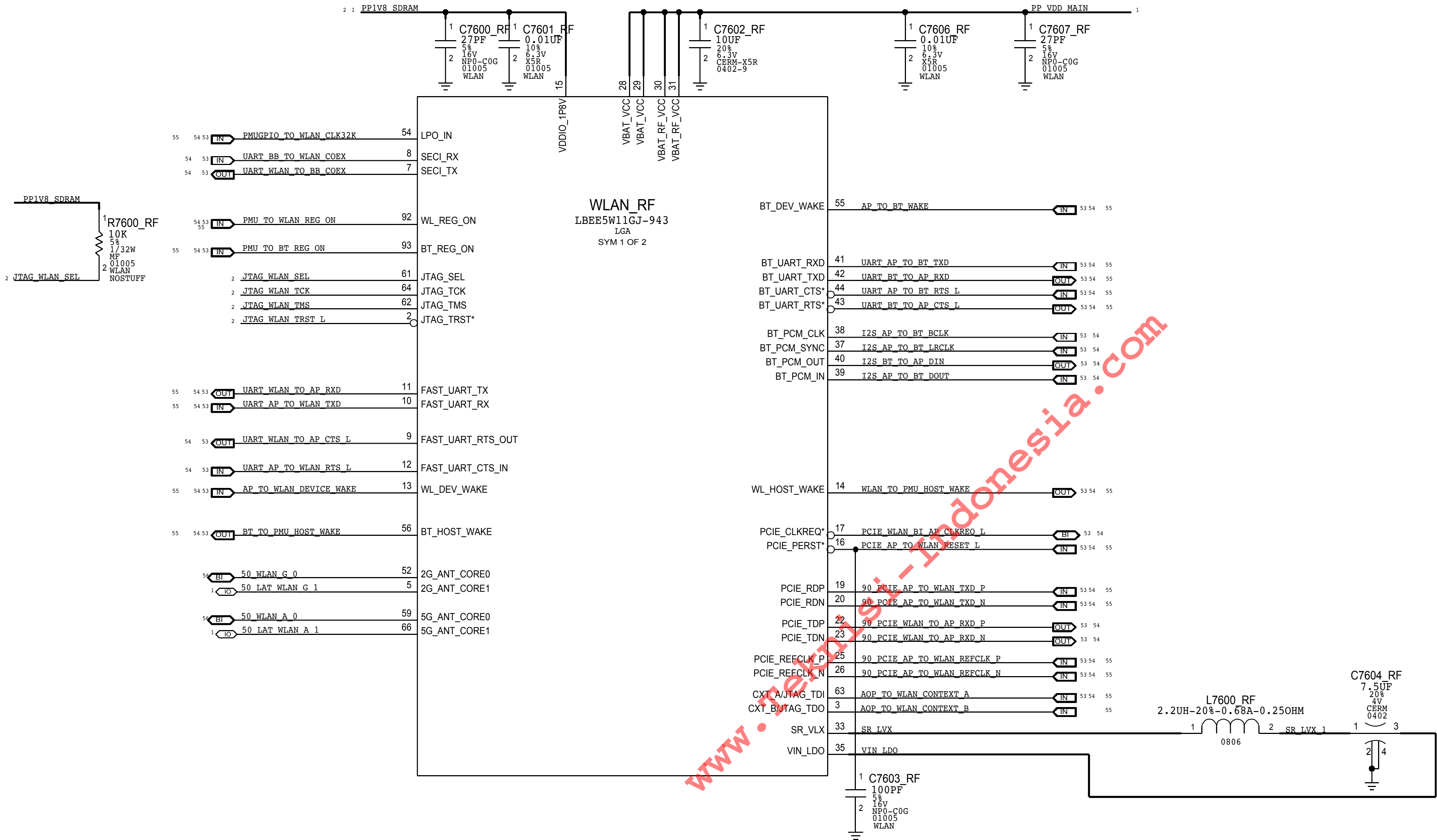
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6 OF 53

6 OF 81

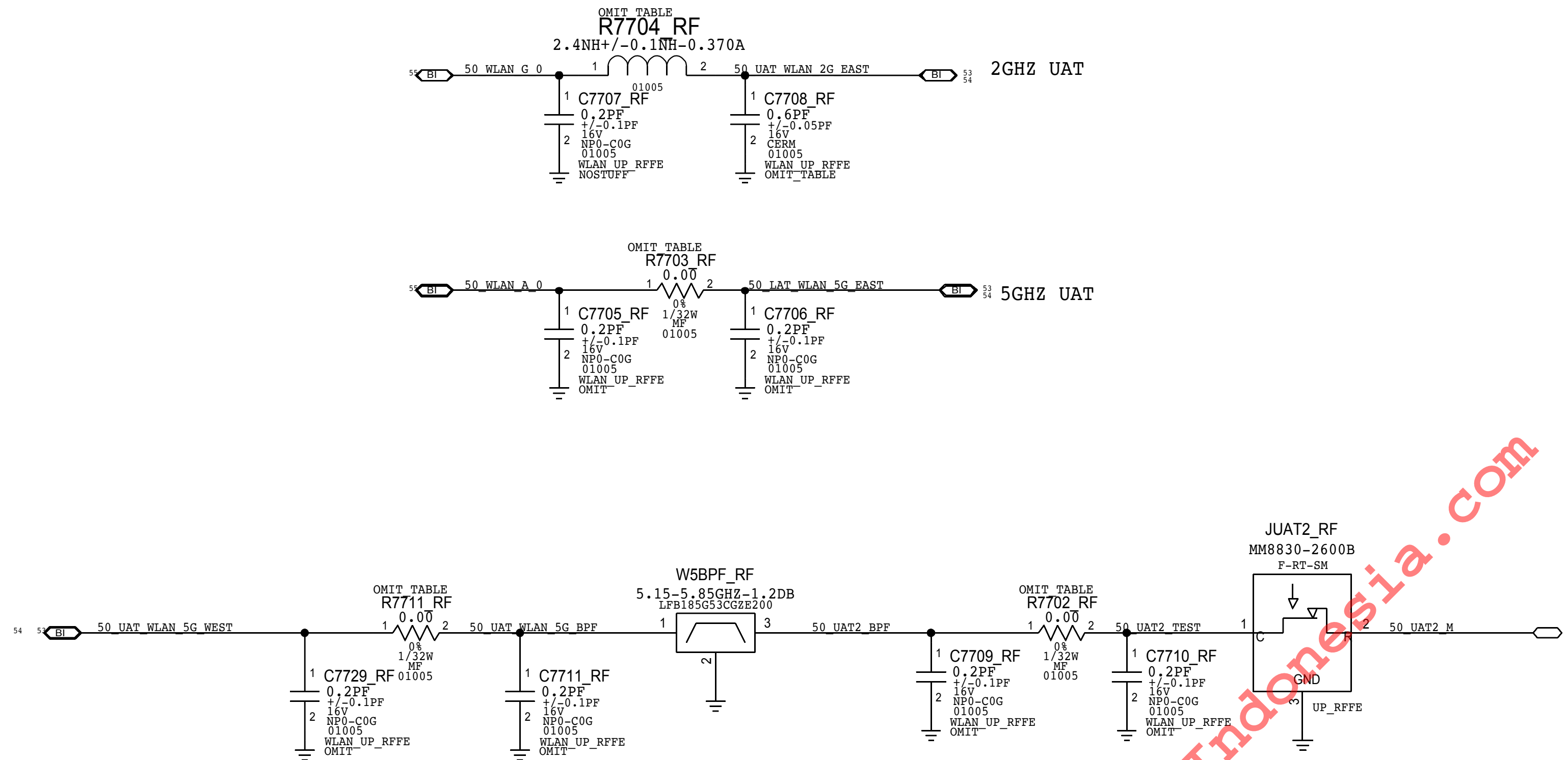
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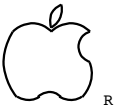


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339800201	339800199	ALTERNATE	WLAN_RF	ALT WIFI/BT MODULE

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BRANCH		PAGE 6 OF 53
SHEET		6 OF 81

WIFI UPPER ANTENNA FEEDS

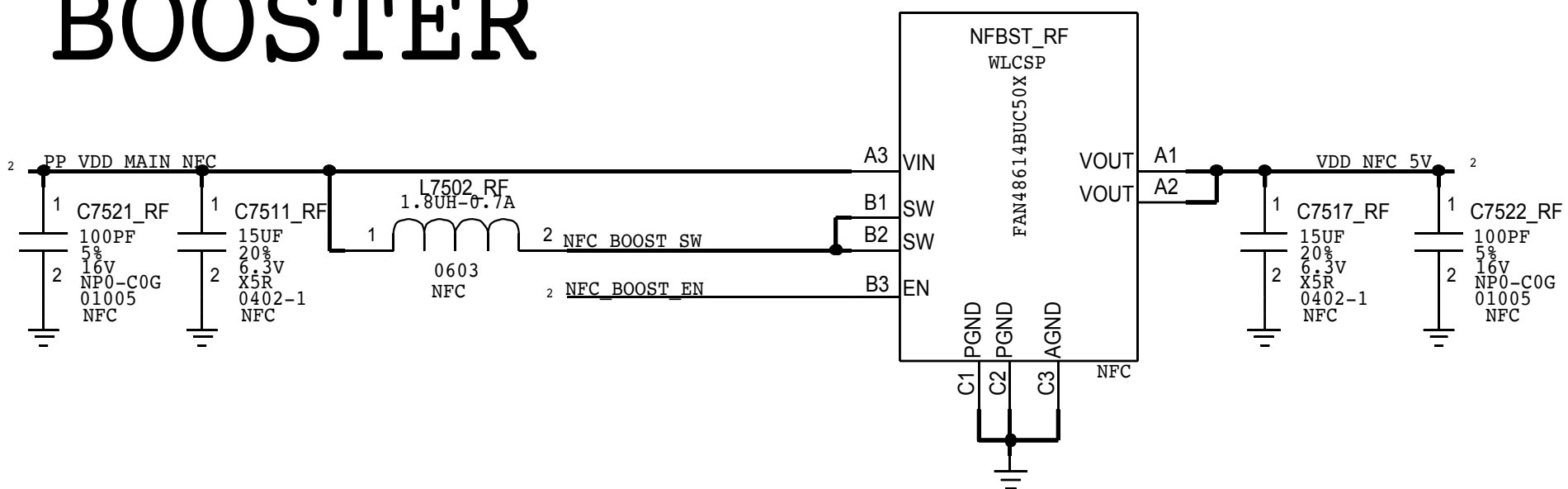


PAGE TITLE		
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 Apple Inc.	DRAWING NUMBER	051-00419
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	PAGE	6 OF 53
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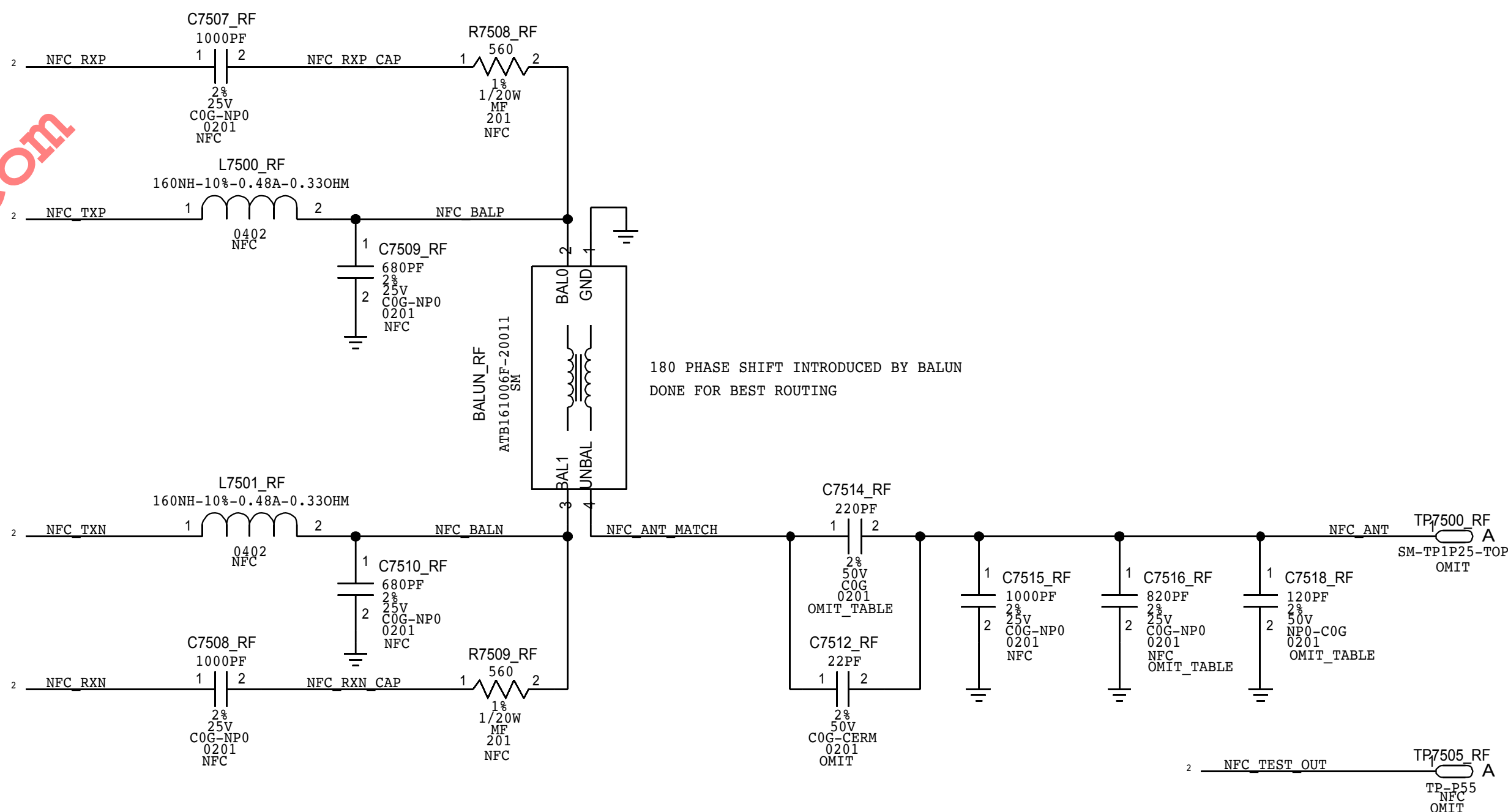
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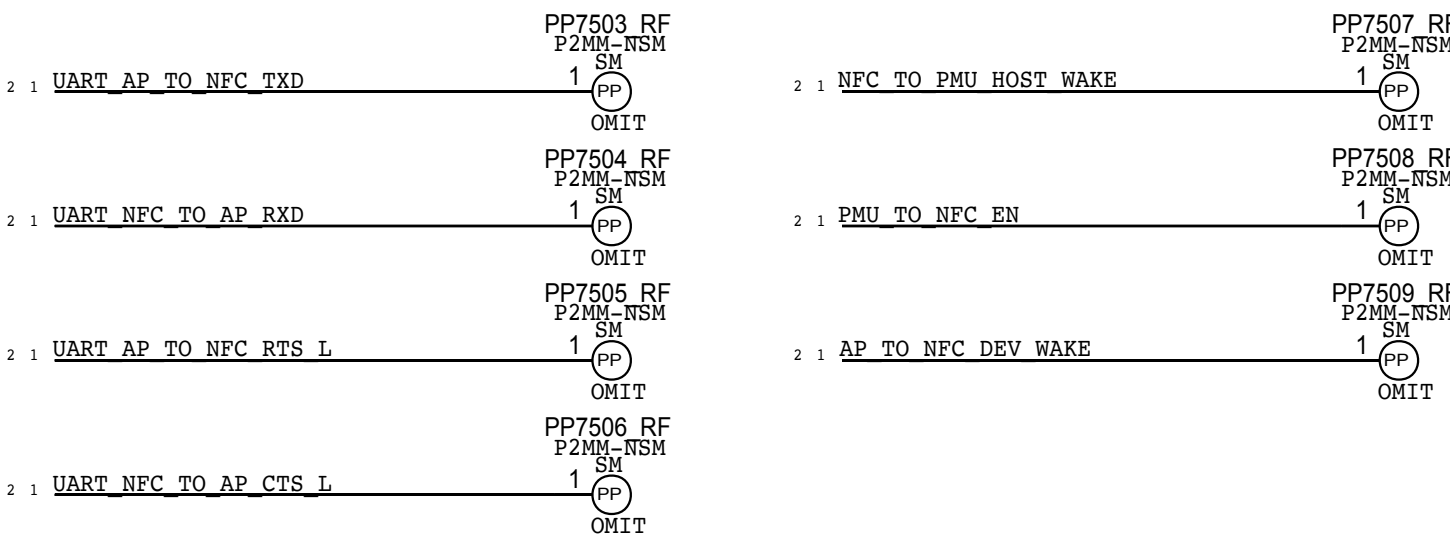
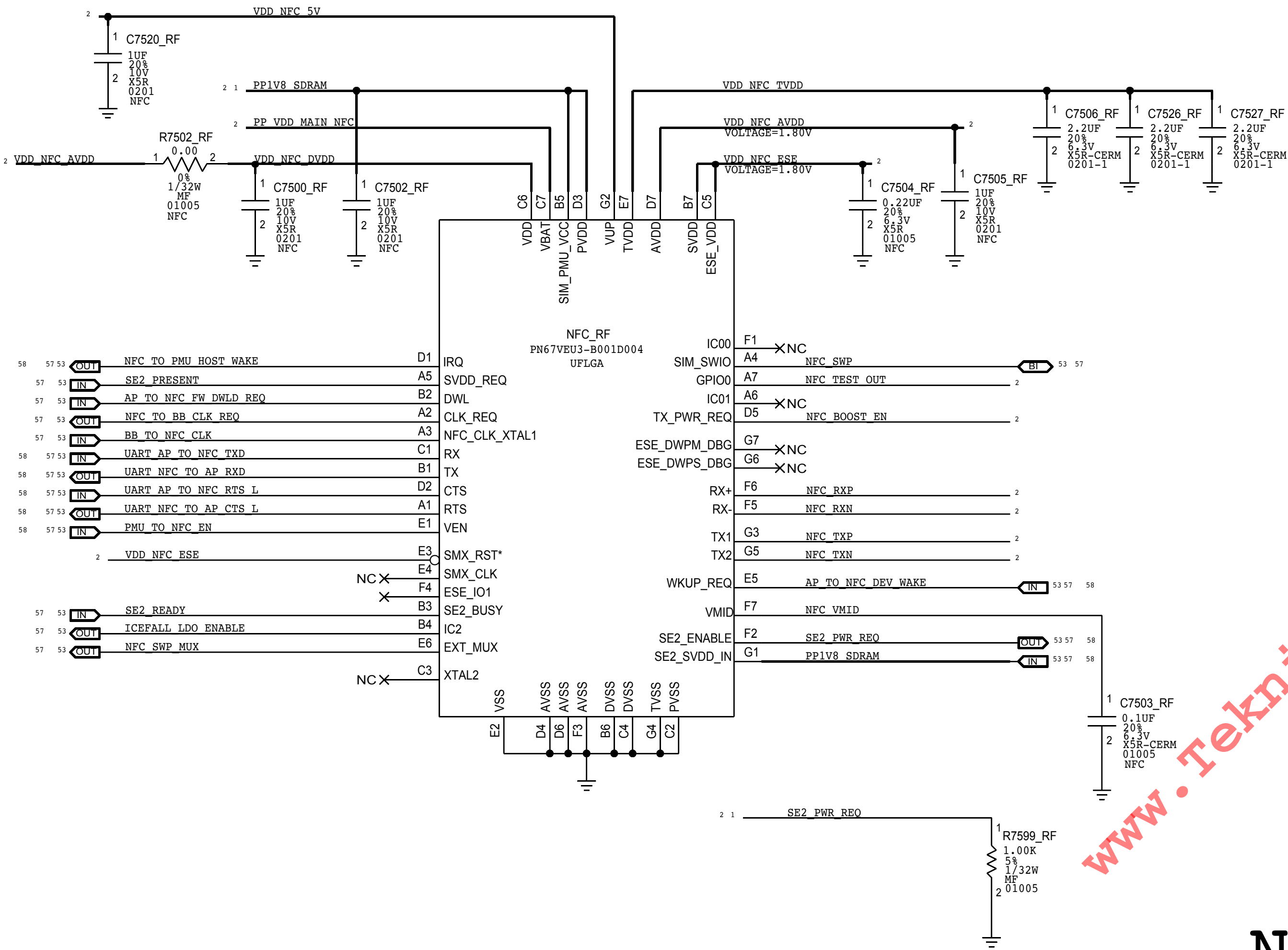
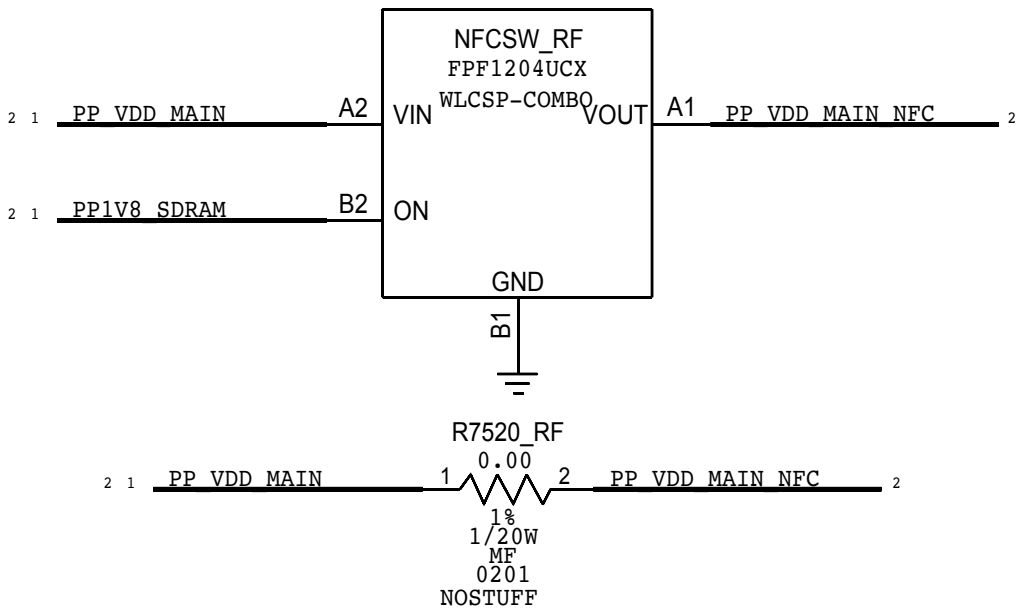
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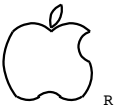


NFC FRONT END



NFC LOAD SWITCH



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		PAGE	6 OF 53
		SHEET	6 OF 81

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.

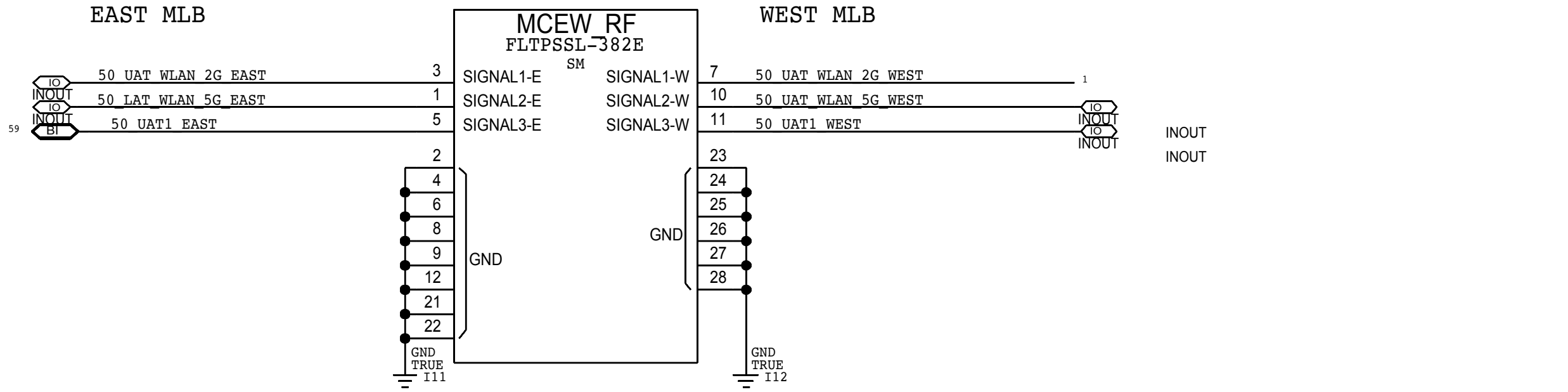
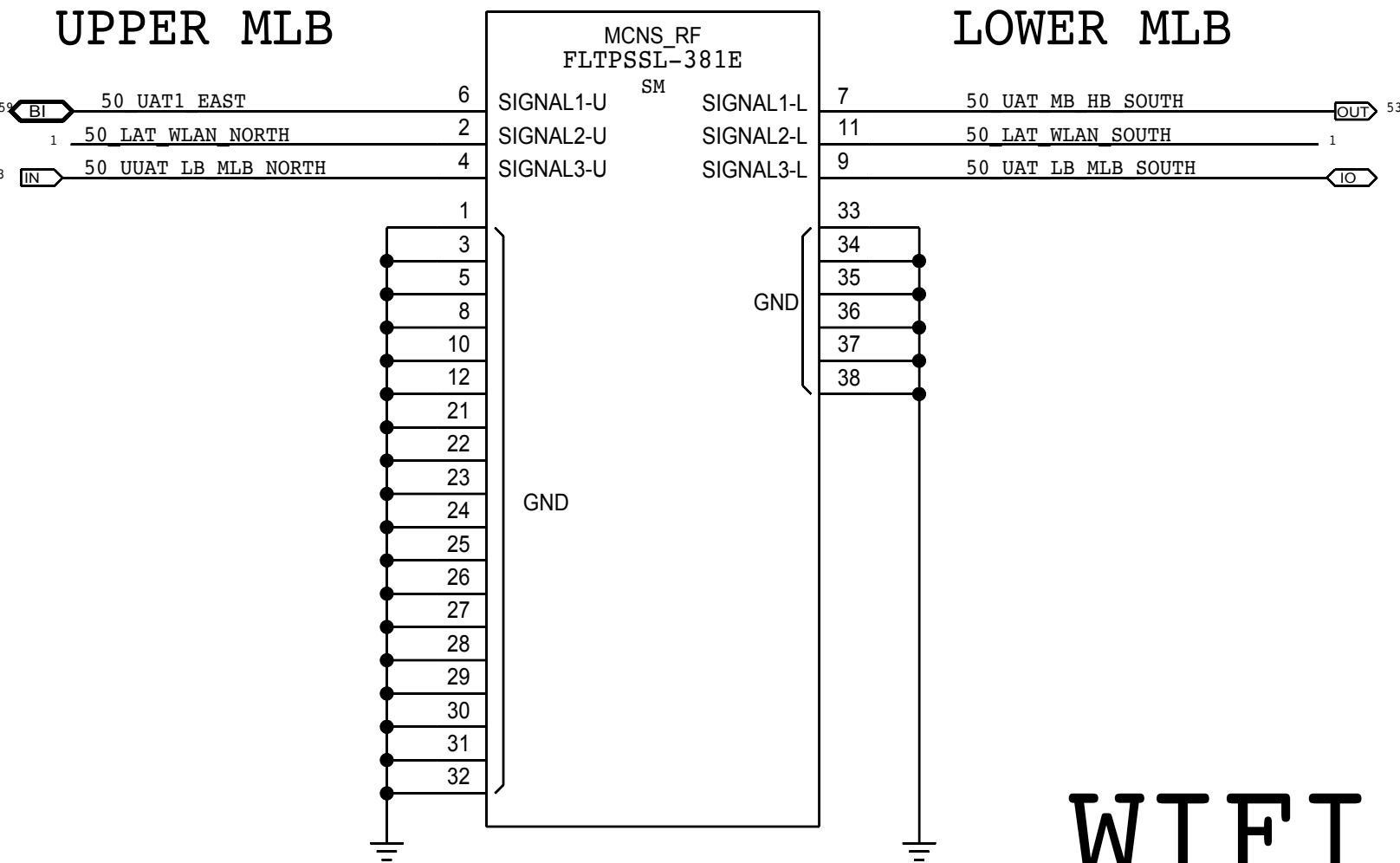
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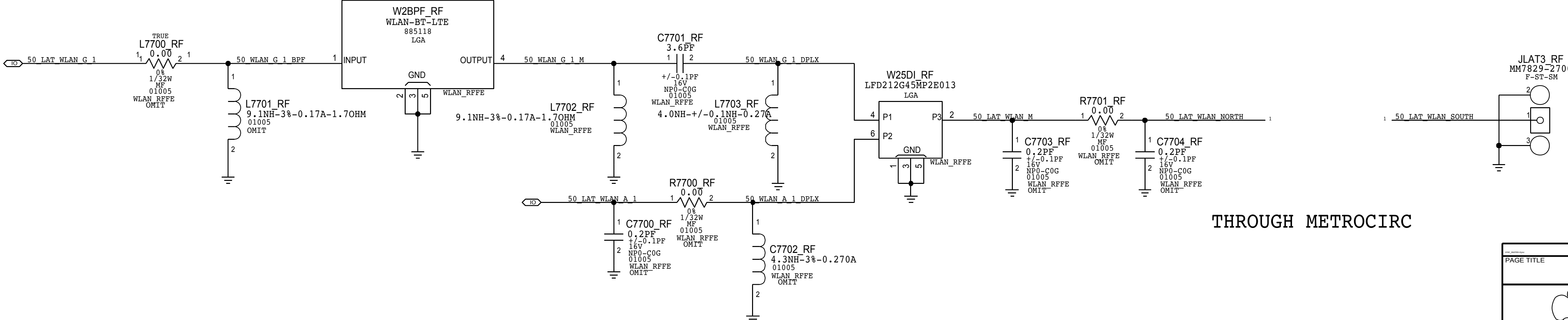
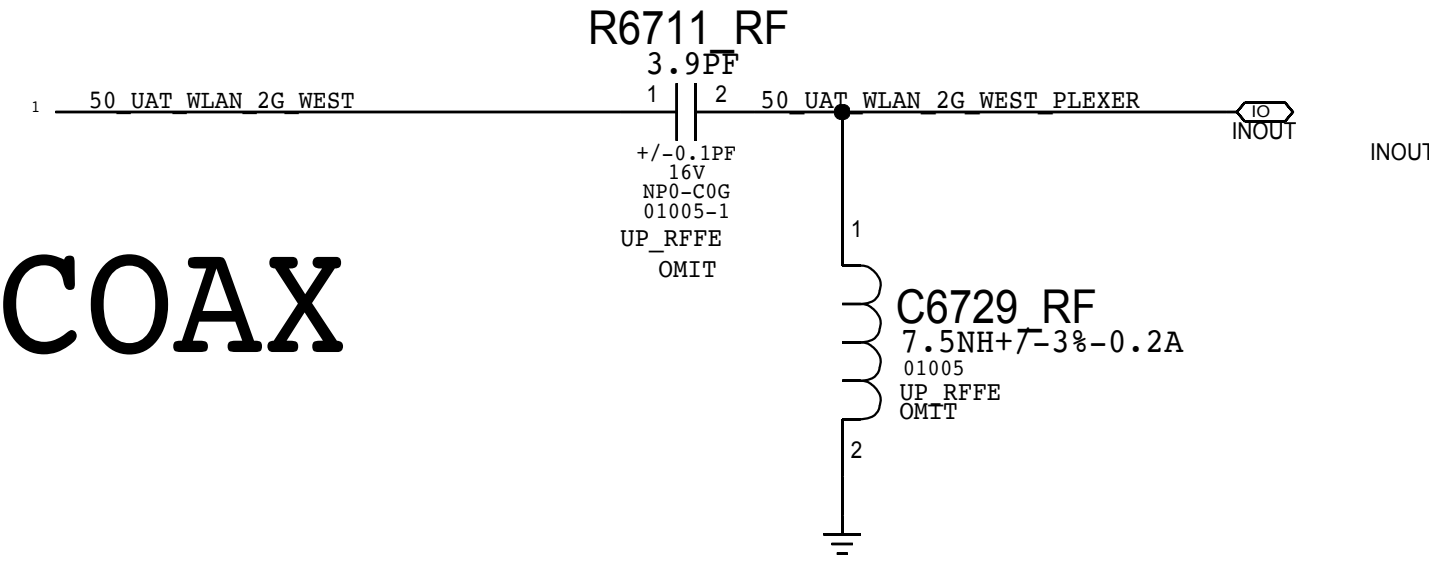
FEB 19, 2016

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D10 EAST-WEST METROCIRC
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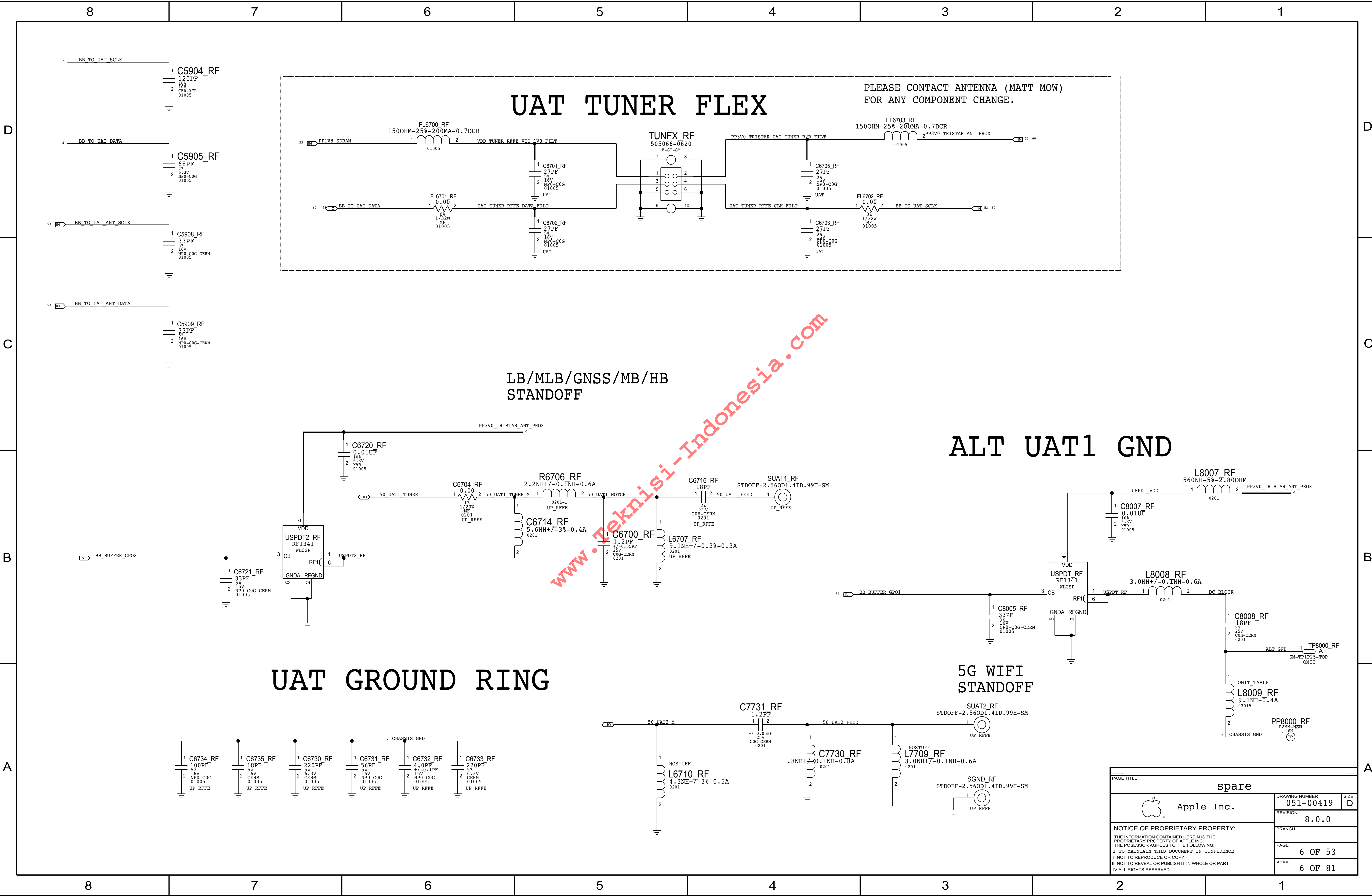


WIFI LOWER ANTENNA FEED



ADD REV ID FOR D10/D11 HERE

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		REVISION	8.0.0
		BRANCH	
		PAGE	6 OF 53
		SHEET	6 OF 81
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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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8		7		6		5		4		3		2		1	
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	NOLMBRF										

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												BRANCH							
												PAGE		6 OF 53					
												SHEET		6 OF 81					

| 8 | | 7 | | 6 | | 5 | | 4 | | 3 | | 2 | | 1 | |

MAV16 RADIO_MLB

LAST_MODIFICATION=Wed Jun 8 12:54:09 2016

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65	<CSA_PAGE4>	PMU: SWITCHERS AND LDOS	<SYNC_MASTER4>	<SYNC_DATE4>
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78	<CSA_PAGE17>	TEST POINTS & BOOT CONFIG	<SYNC_MASTER17>	<SYNC_DATE17>
79	<CSA_PAGE18>	TDD TRANSMIT	<SYNC_MASTER18>	<SYNC_DATE18>
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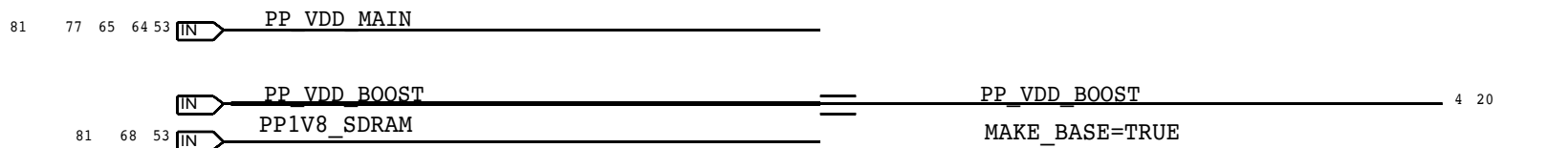
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19780598	19780593	ALTERNATE	Y5501_RF	19P2 MHZ XTAL
138800101	138800095	ALTERNATE	ALL	TRANSITION CAP
335800013	33580894	ALTERNATE	EPROM_RF	IC EEPROM
353800253	353800321	ALTERNATE	SWPMX_RF	IC SWITCH SPDT
155800235	155800234	ALTERNATE	UPPDI_RF	NOLMBRF

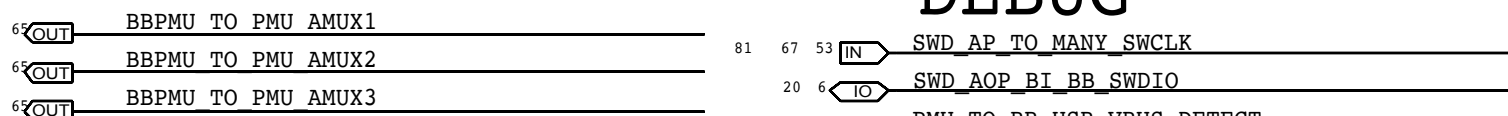
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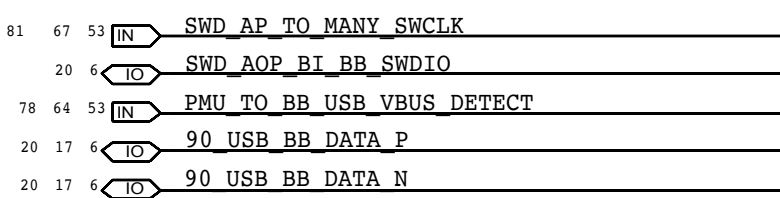
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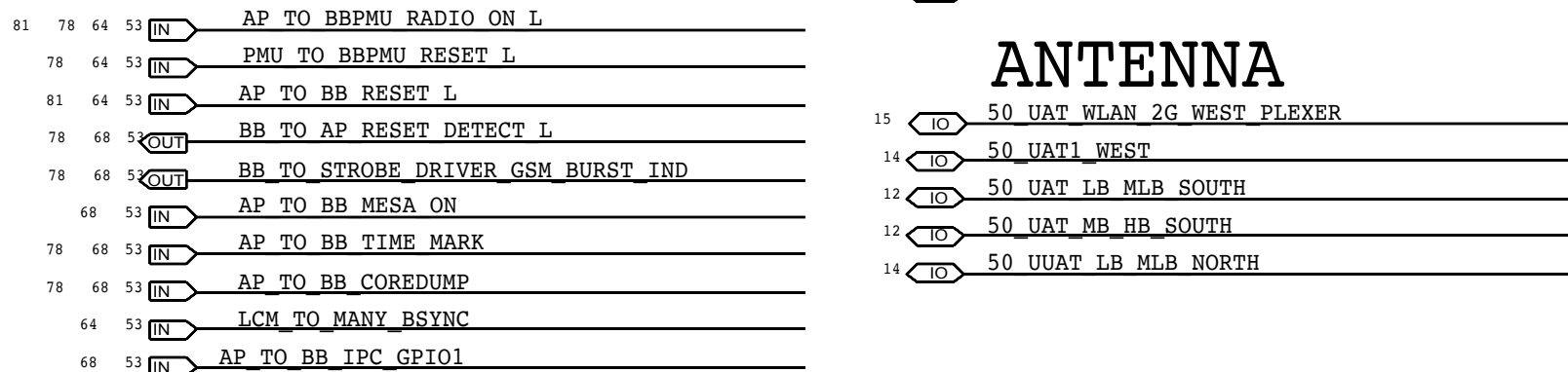
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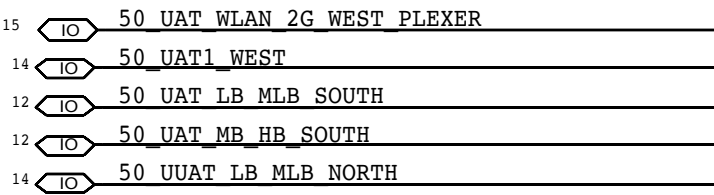
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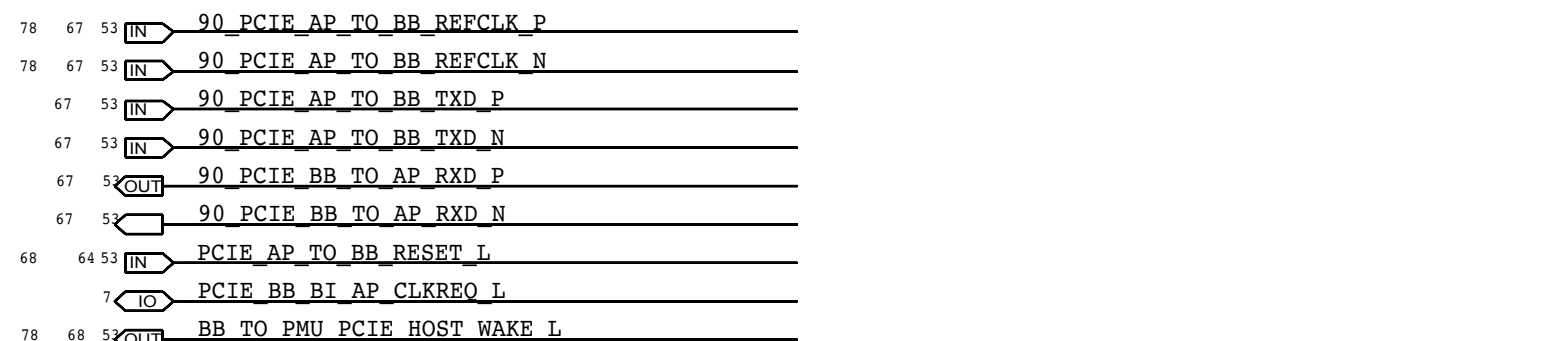
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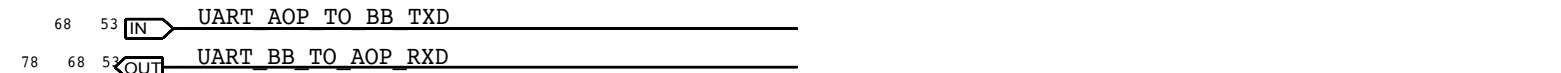
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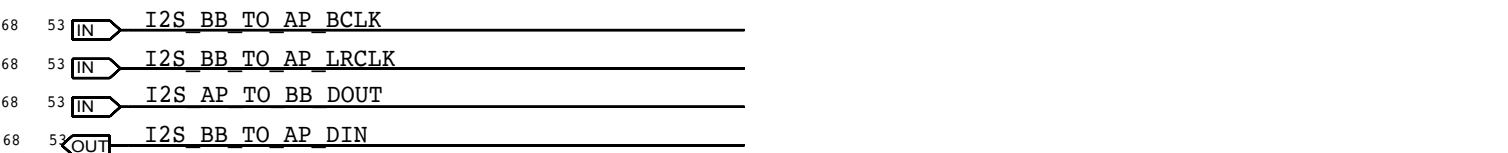
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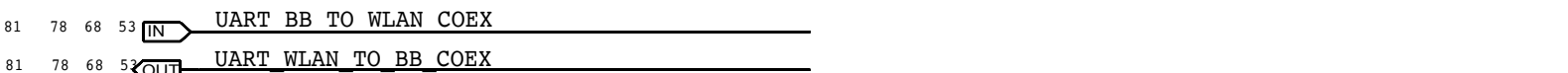
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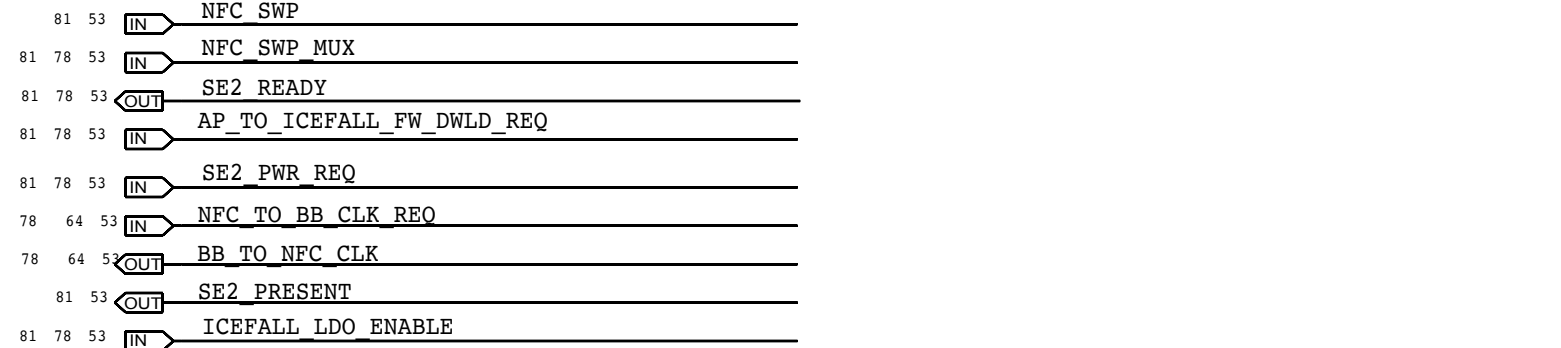
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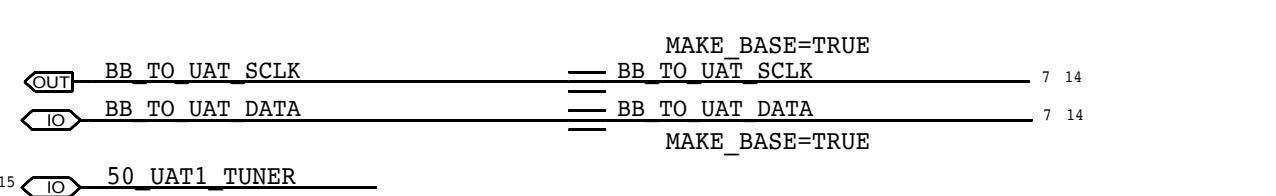
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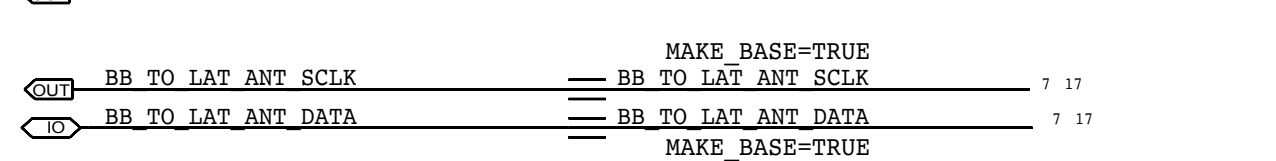
NFC



TUNER



DOCK



page1

PAGE TITLE			
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		BRANCH	
		PAGE	6 OF 53
		SHEET	6 OF 81

BOM OPTIONS:

LMBRF:

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
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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,RF,4.99K OHM,01005	R7506_RF	CRITICAL	LMBRF
155800193	1	FLTR,DIPLEXER,LA-MB-MB,DPX,SHIELD,0805	UATDI_RF	CRITICAL	LMBRF
155800158	1	FLTR,DIPLEXER,LA-MB/MB,MIRROR,0805	UPPDI_RF	CRITICAL	LMBRF
337880284	1	IC,SECURE ELEMENT,80KHZ/211,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,UH-Q,0201	I6322_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,UH-Q,0201	I6305_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,RF,00HM,1/20W,0201	R6703_RF	CRITICAL	LMBRF
11880724	1	RES,RF,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,UH-Q	R6605_RF	CRITICAL	LMBRF
13180337	1	CAP,1.5PF,+/-0.05PF,25V,0201,RQ	C6610_RF	CRITICAL	LMBRF
11880724	1	RES,RF,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,RF,1K OHM,1K,1/32W,01005	R5911_RF	CRITICAL	LMBRF
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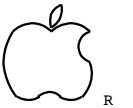
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15282020	1	DCS/PCS RX FILTER MATCH	I6320_RF	CRITICAL	NOLMBRF
155800149	1	DCS/PCS RX FILTER	GSMRX_RF	CRITICAL	NOLMBRF
15282005	1	DCS/PCS RX MATCH (DCS)	I6318_RF	CRITICAL	NOLMBRF
13180319	1	DCS/PCS RX MATCH (DCS)	C6332_RF	CRITICAL	NOLMBRF
13180630	1	DCS/PCS RX MATCH (DCS)	C6340_RF	CRITICAL	NOLMBRF
15282005	1	DCS/PCS RX MATCH (DCS)	I6319_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-MB,SHLD,0805	UATDI_RF	CRITICAL	NOLMBRF
155800234	1	FLTR,DPX,PASS THRU,LA-MB-MB,UNSHLD,0805	UPPDI_RF	CRITICAL	NOLMBRF
11880724	1	RES,RF,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,UH-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:

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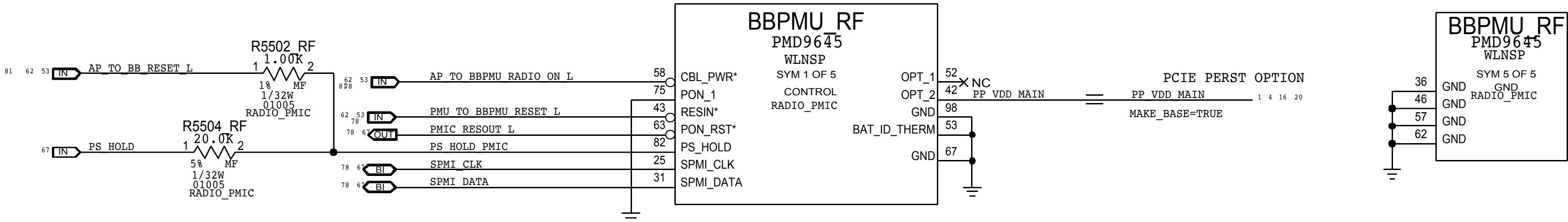
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PAGE TITLE			
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 Apple Inc.		DRAWING NUMBER	051-00419
		REVISION	8.0.0
		BRANCH	
		PAGE	6 OF 53
		SHEET	6 OF 81
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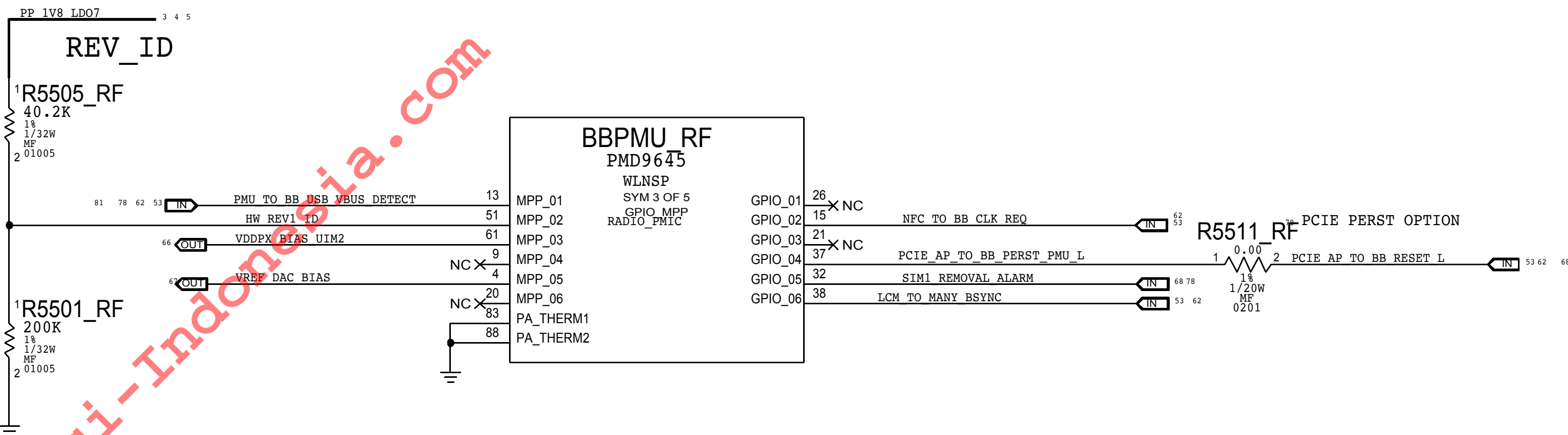
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RESET AND CONTROL: PMU

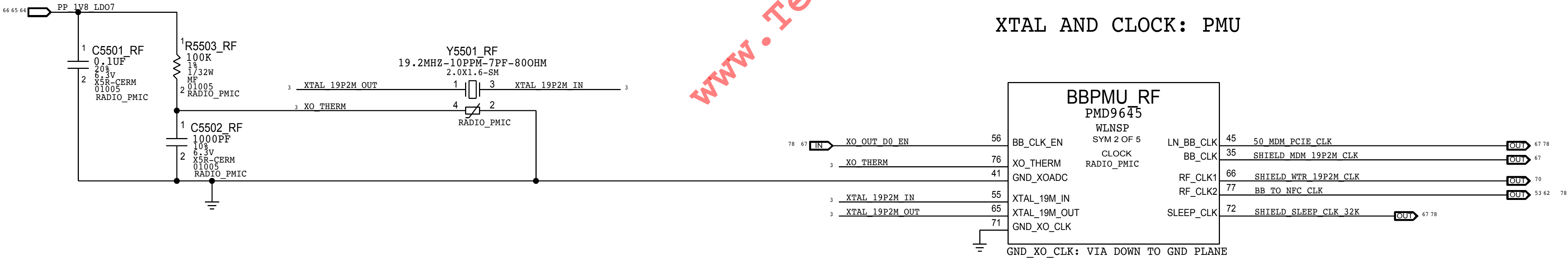
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0.20V	422K	51.1K	DEV2
0.30V	255K	51.1K	DEV 2.1
0.40V	180K	51.1K	DEV 3
0.50V	124K	51.1K	T181
0.60V	102K	51.1K	PP/P1
0.70V	82.5K	51.1K	DEV4
0.80V	63.4K	51.1K	P2
0.90V	51.1K	51.1K	DEV5
1.00V	51.1K	63.4K	EVT
1.10V	51.1K	82.5K	EVT DOE
1.20V	50.0K	100K	EVT 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



MPPS AND GPIOs: PMU

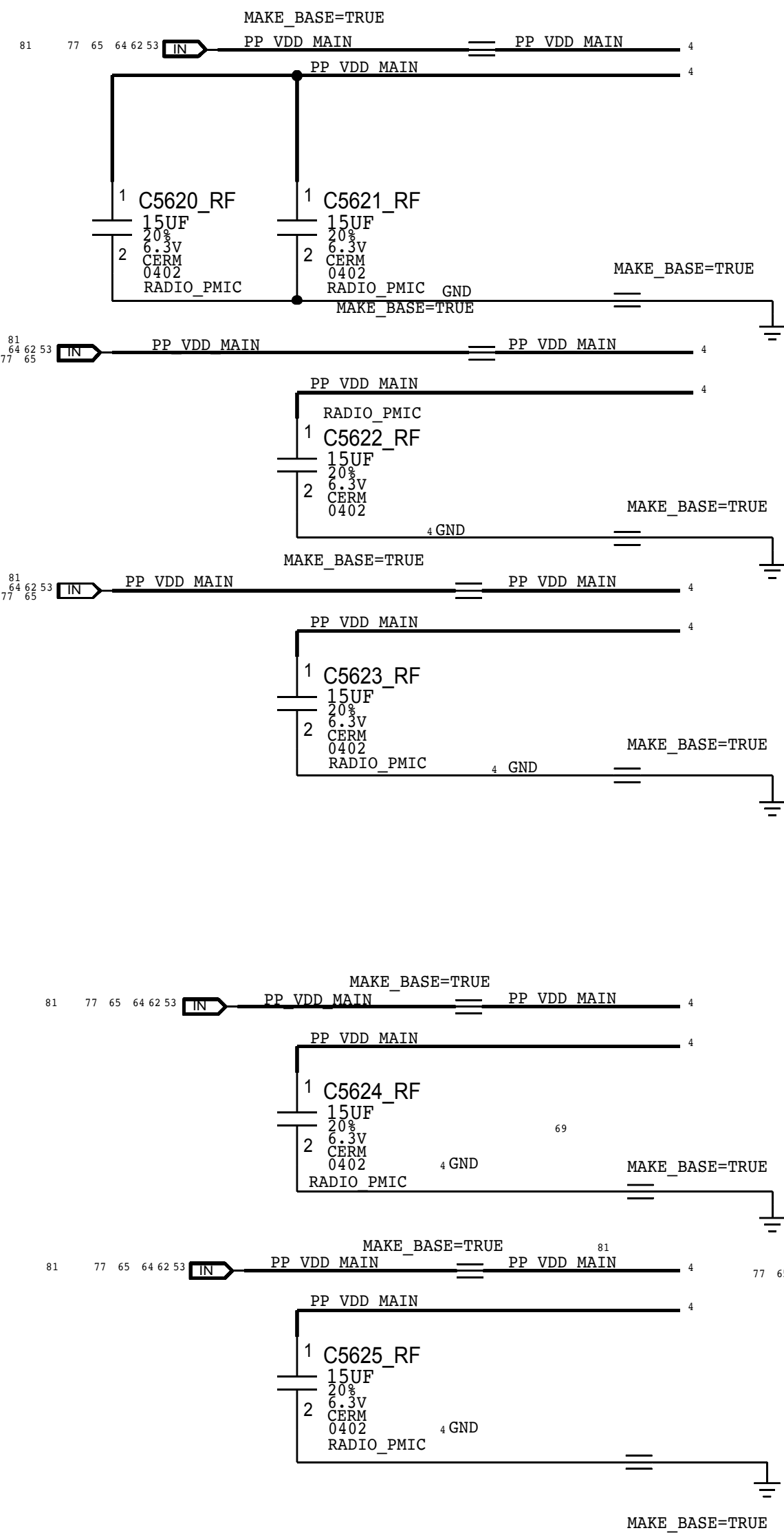


XTAL AND CLOCK: PMU

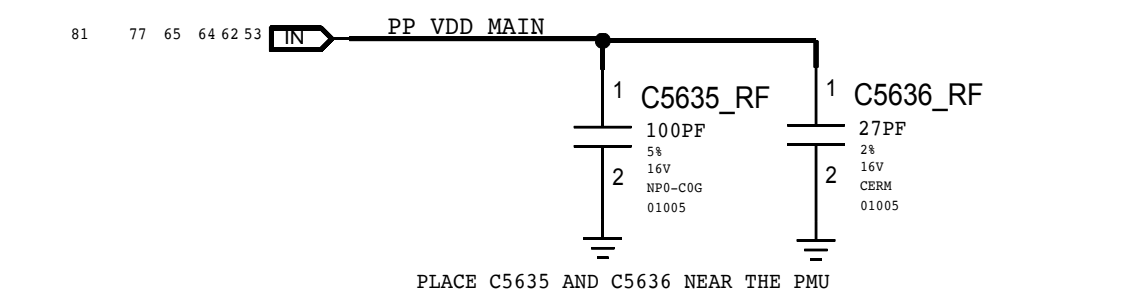


PMU: SWITCHERS AND LDOS

SWITCHERS BULK CAPS

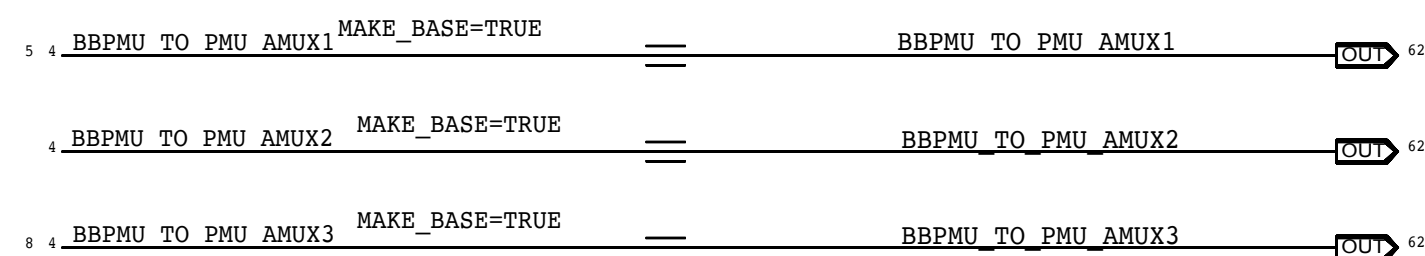
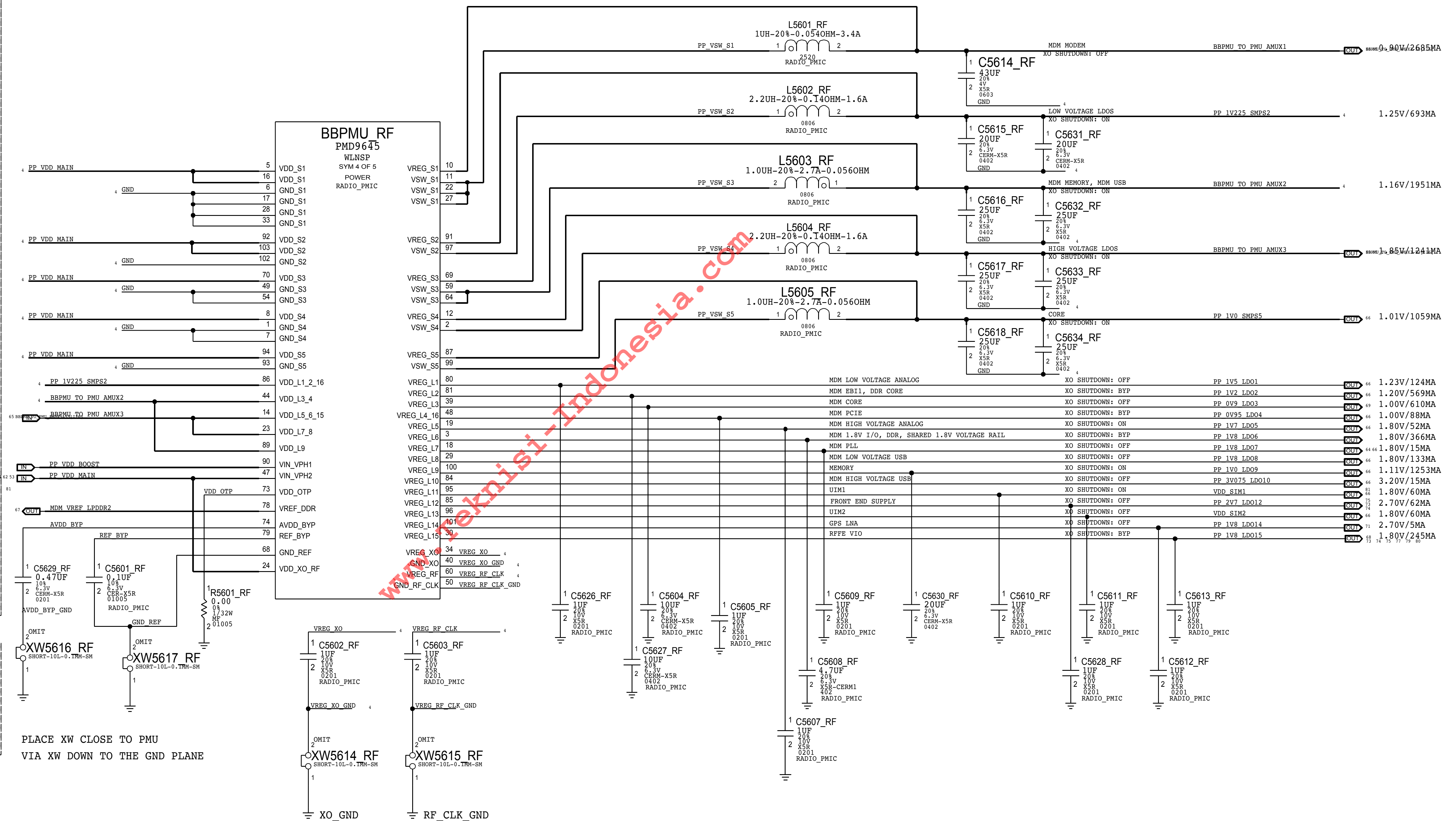



DESENSE CAPS



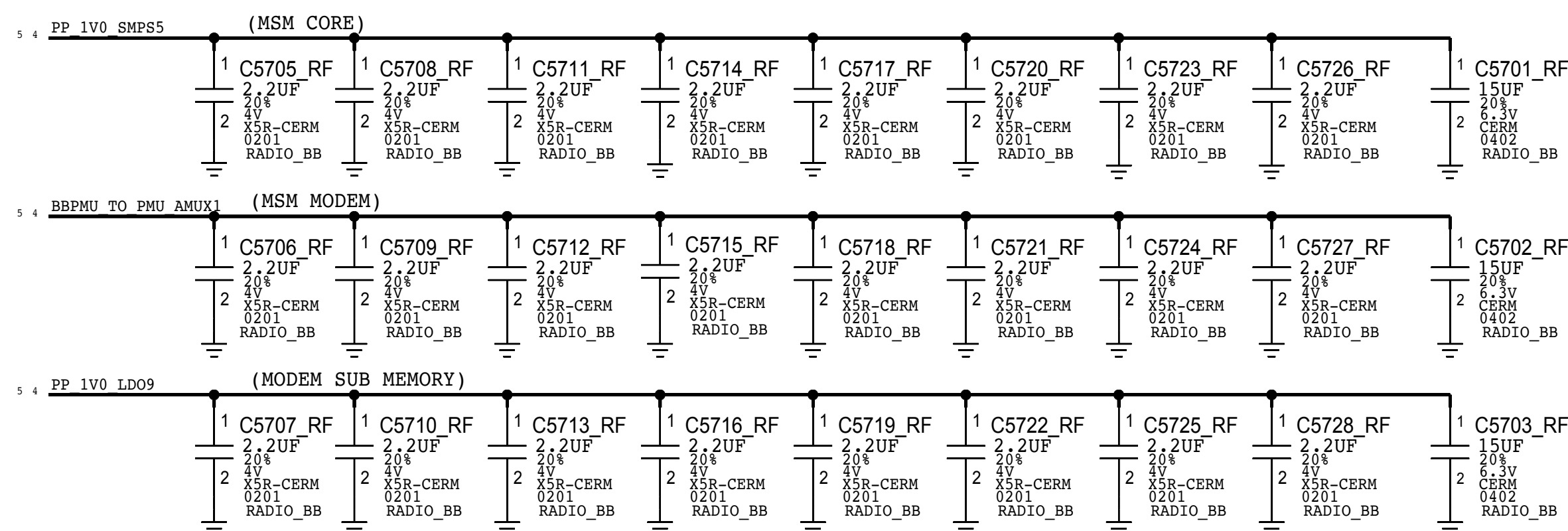
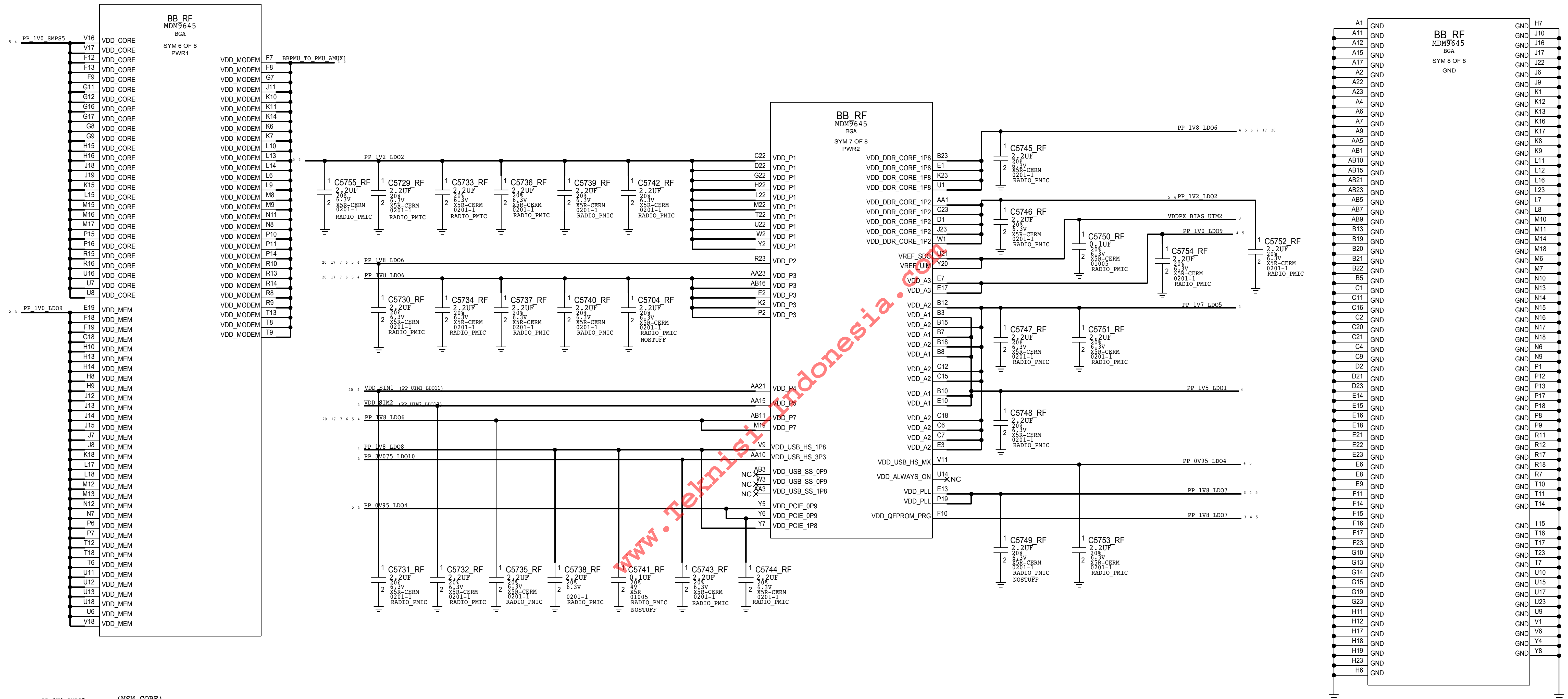
PLACE XW CLOSE TO PMU
VIA XW DOWN TO THE GND PLANE

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



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 Apple Inc.		051-00419		D	
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		SHEET		6 OF 81	

BASEBAND: POWER

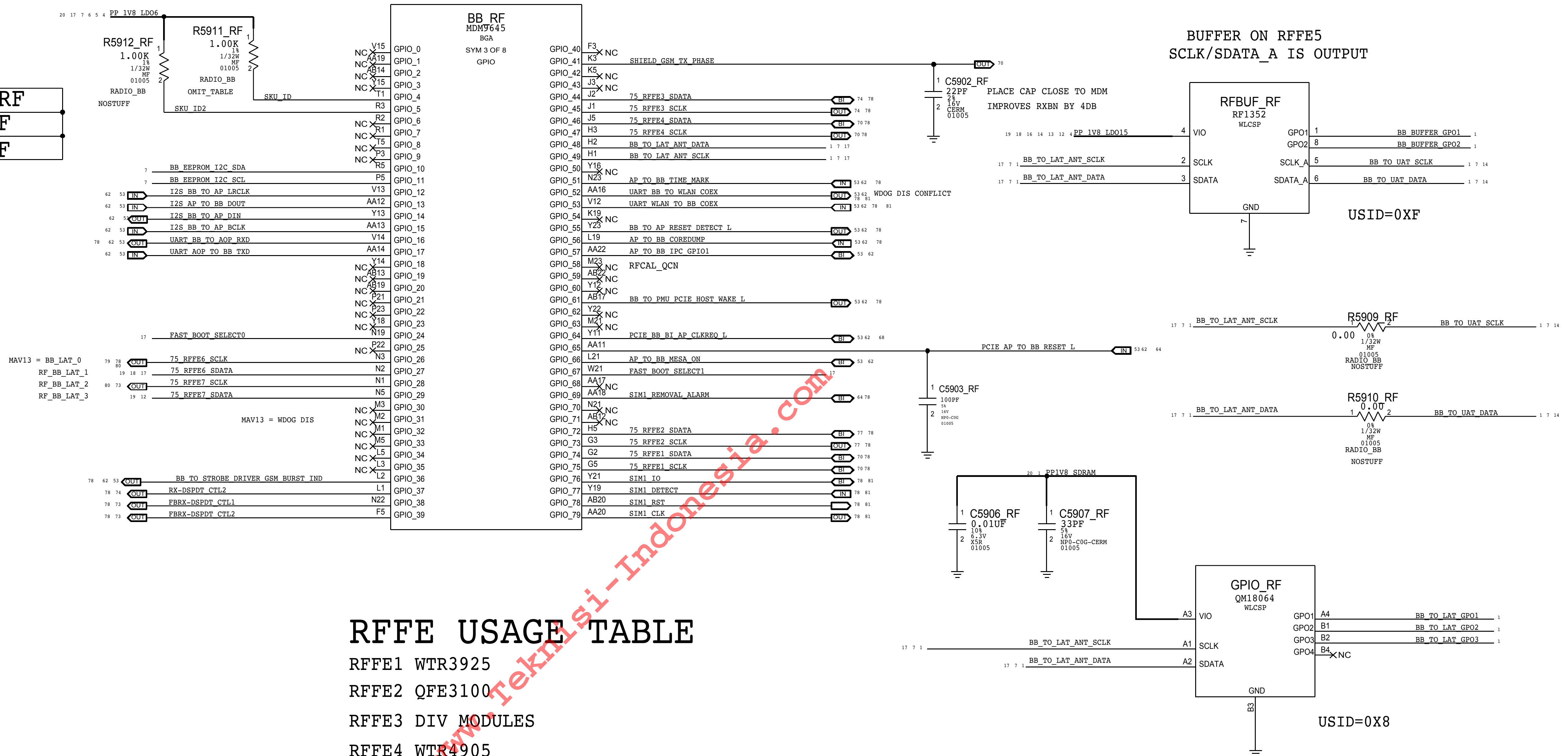


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BASEBAND: GPIOS

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JP	1.0 KOHM	NOSTUFF



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RFFE2 QFE3100

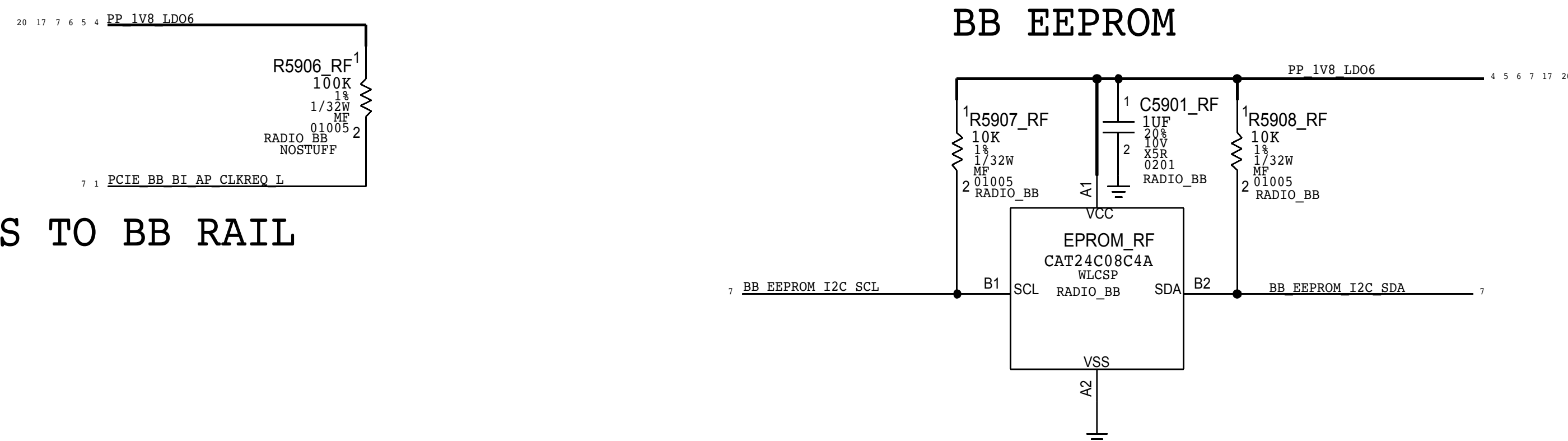
RFFE3 DIV MODULES

RFFE4 WTR4905

RFFE5 TUNERS + ELNAS


RFFE6 2G PA,MLB PA,MB/HB TDD PA,MB/HB FDD PA

RFFE7 LB PA, COUPLERS

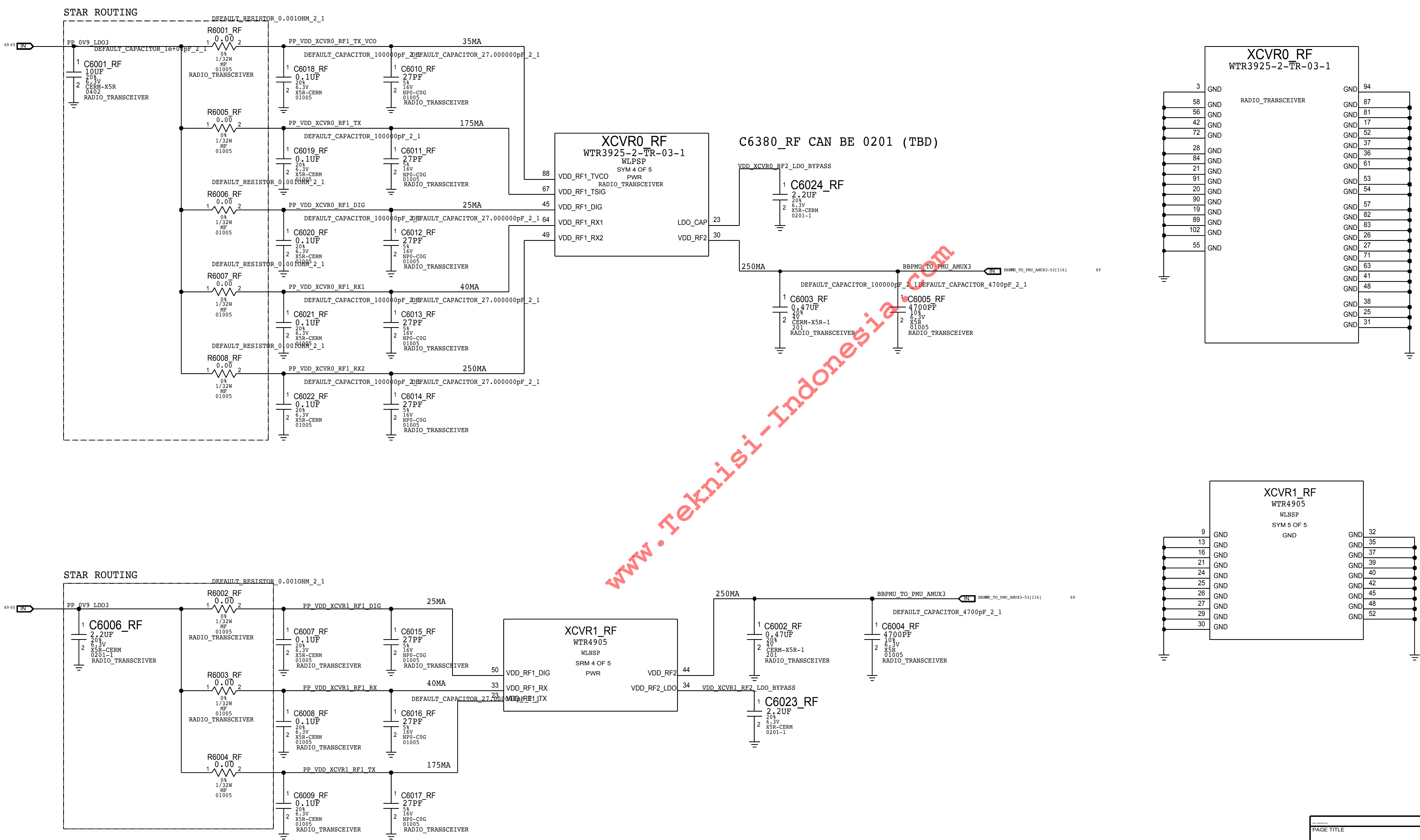


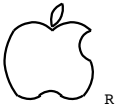
PCIE PULL-UPS TO BB RAIL

CONFIDENTIAL AND PROPRIETARY APPLE SYSTEM DESIGN. FOR REFERENCE PURPOSE ONLY - NOT A CHANGE REQUEST

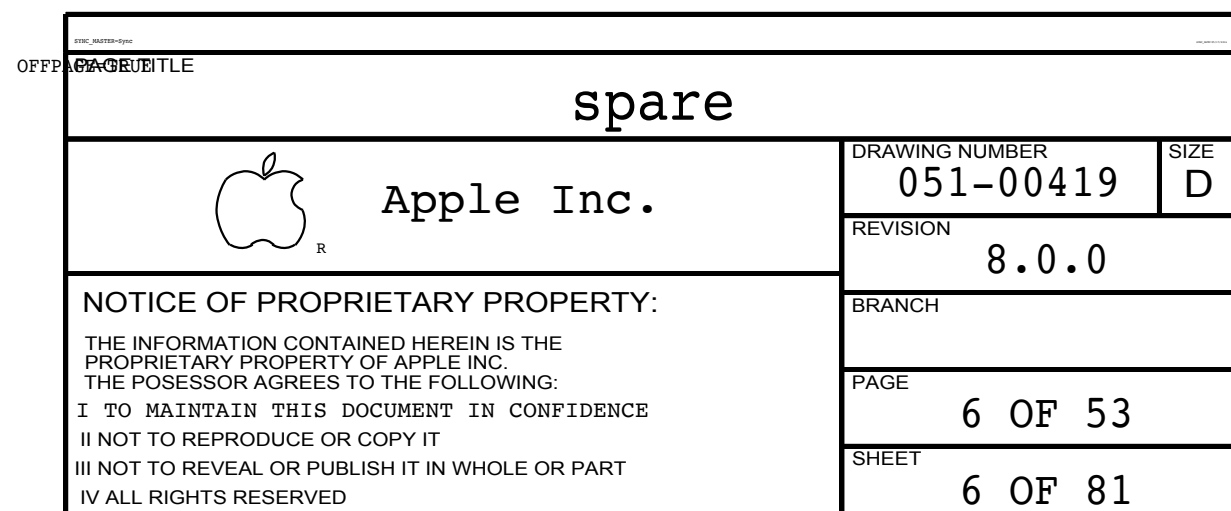
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BRANCH		6 OF 53	
PAGE		SHEET	
6 OF 53		6 OF 81	

TRANSCEIVER: POWER



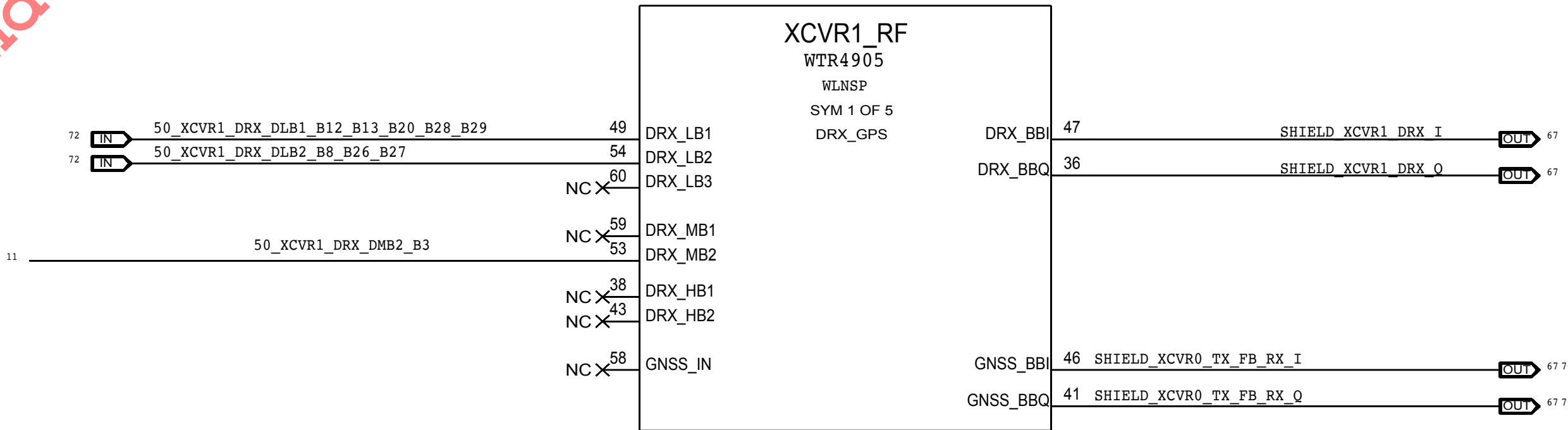
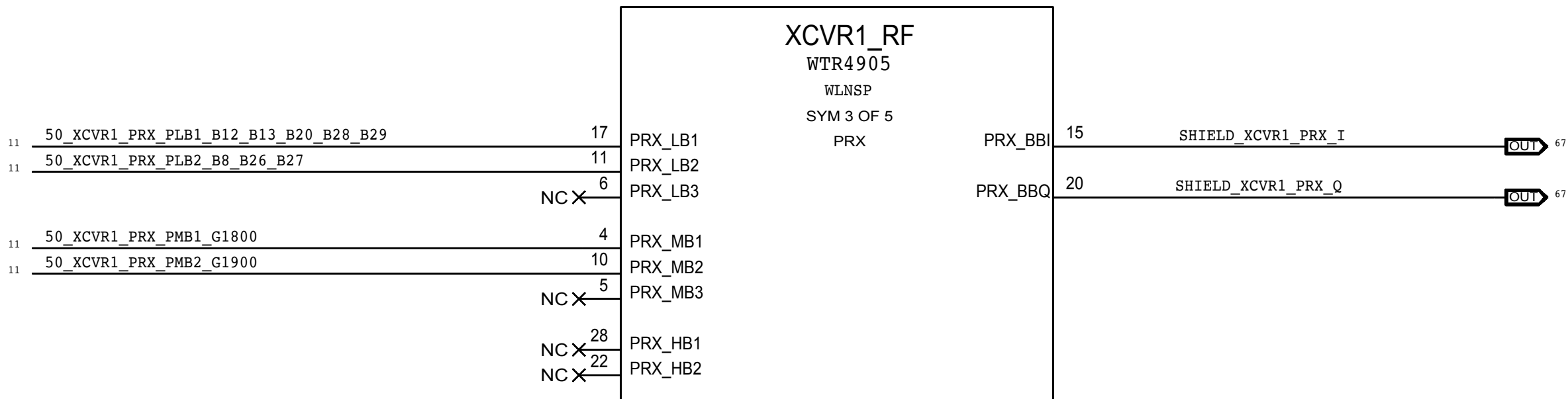
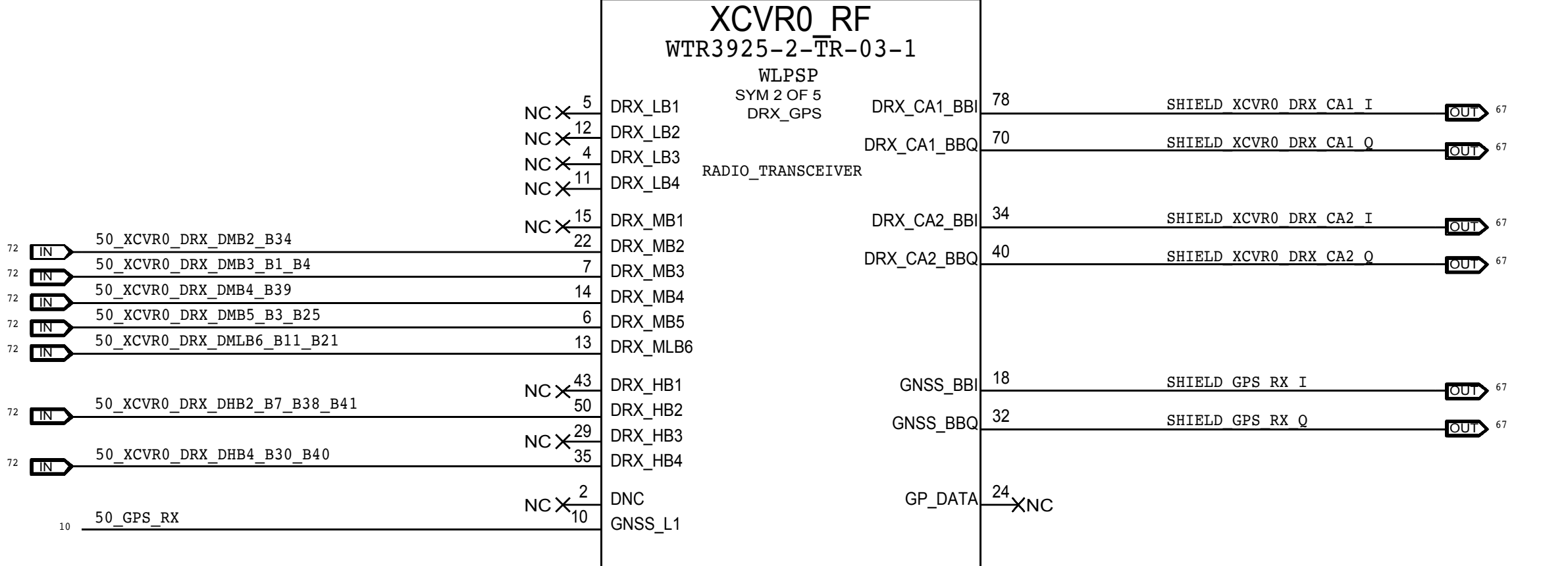
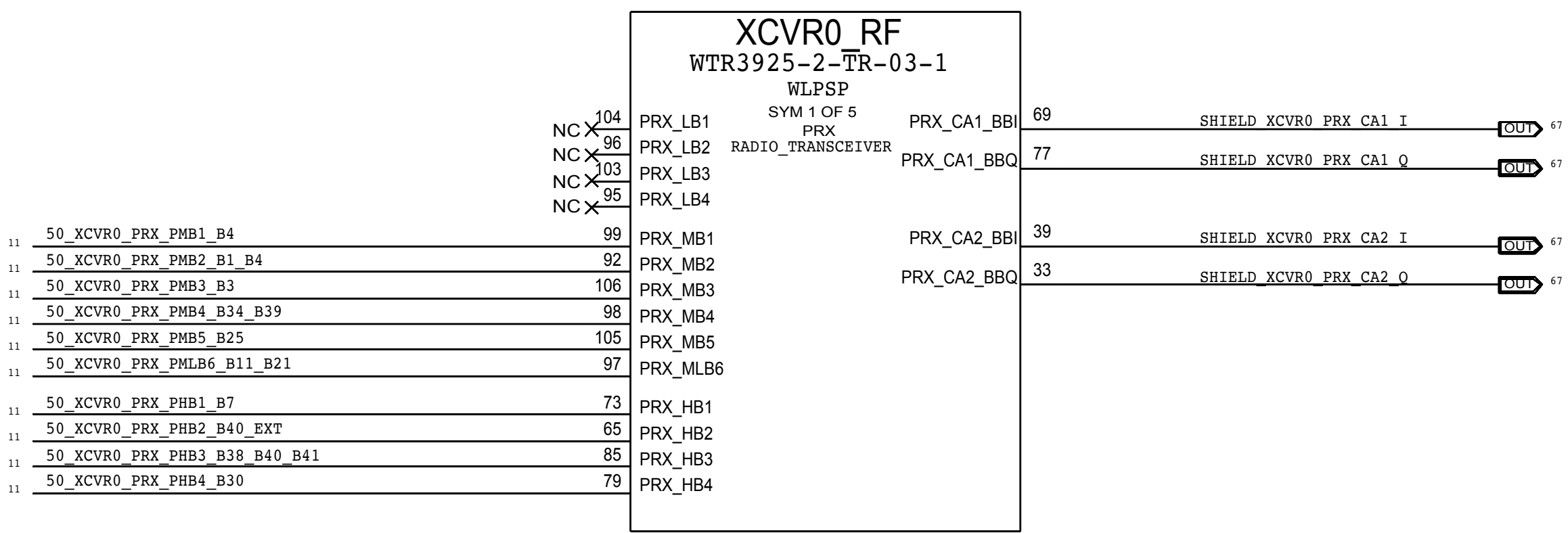
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	6 OF 53		
SHEET	6 OF 81		

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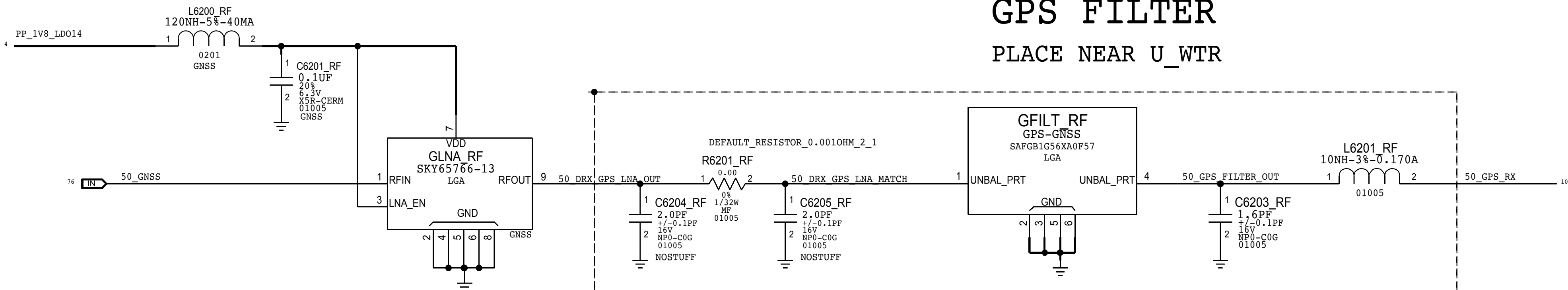


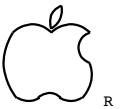
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TRANSCEIVER: PRX, DRX, & GPS PORTS



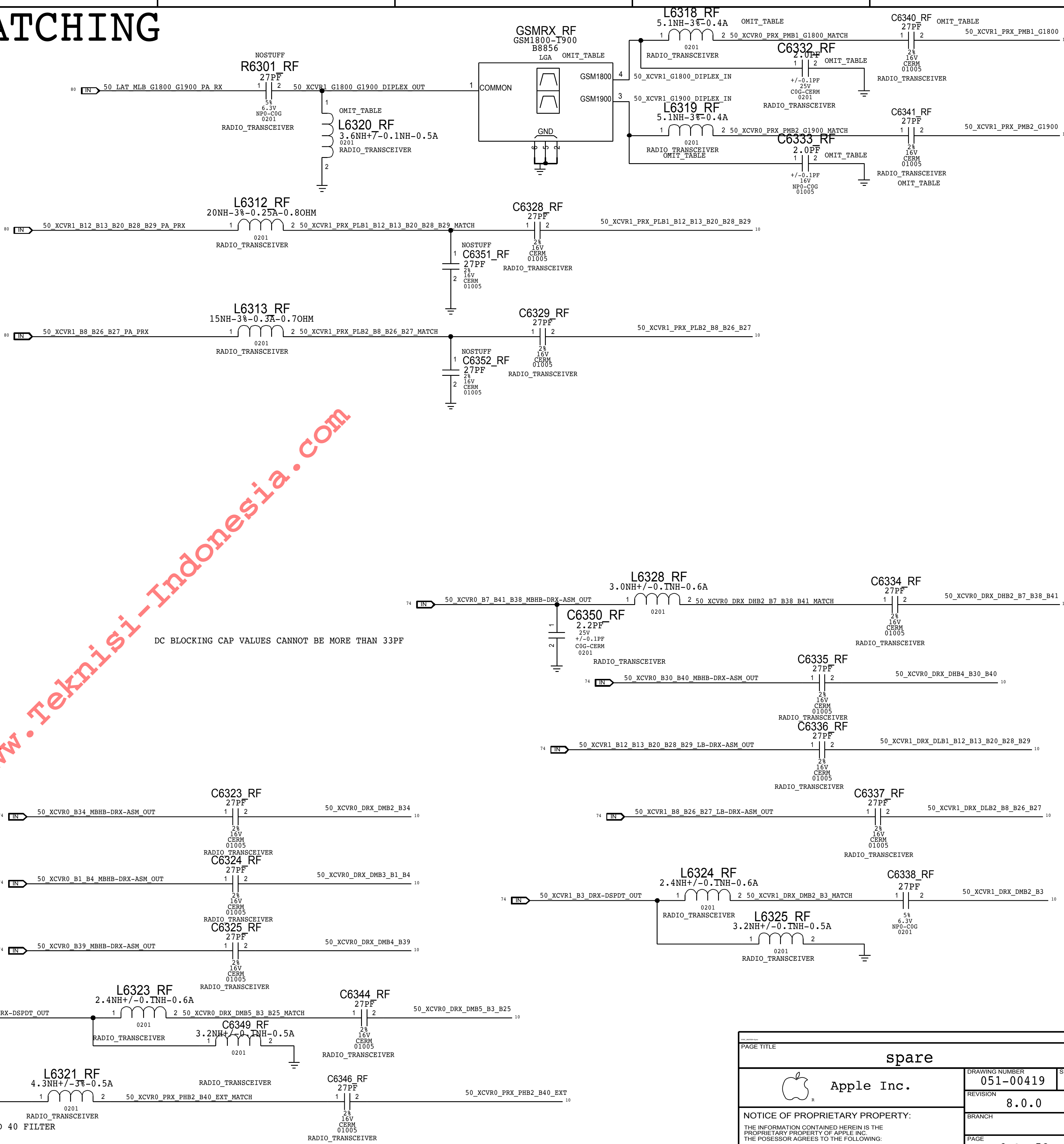
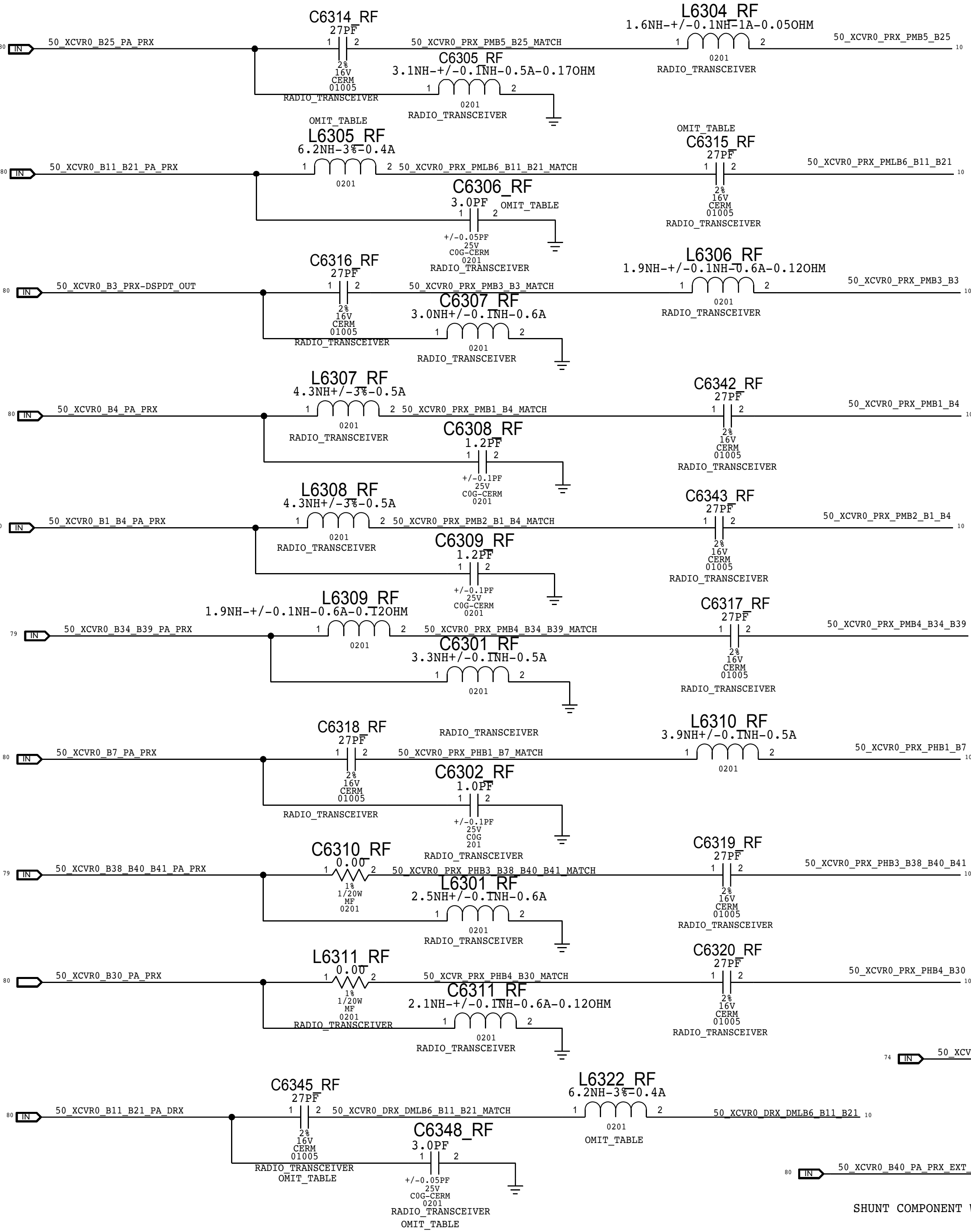
GPS FILTER
PLACE NEAR U_WTR



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PAGE		6 OF 53	
SHEET		6 OF 81	

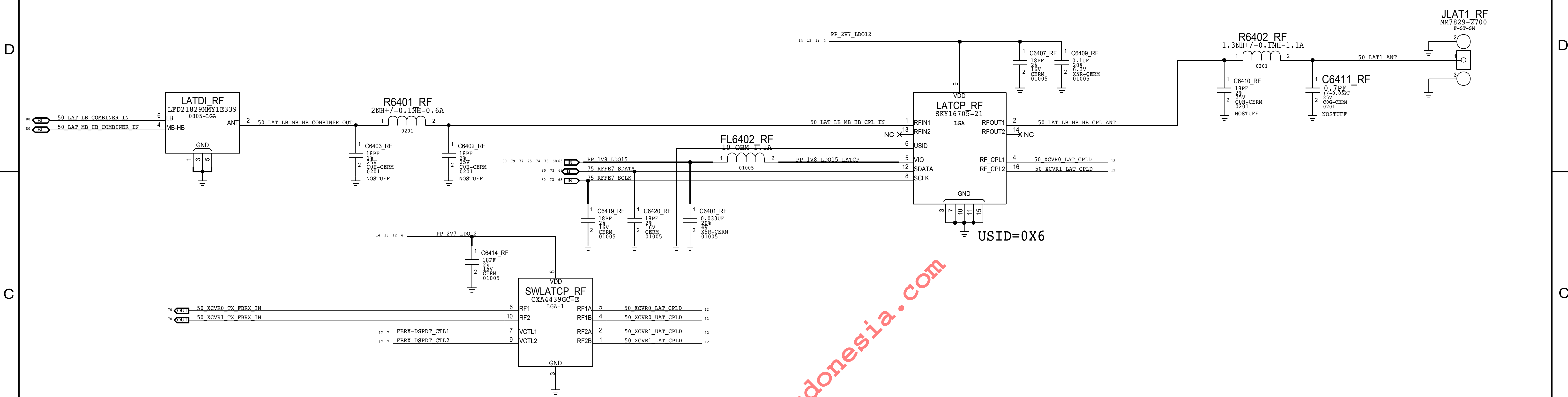
PRIMARY & DIVERSITY RECEIVE MATCHING

DC BLOCKING CAP VALUES CANNOT BE MORE THAN 33PF

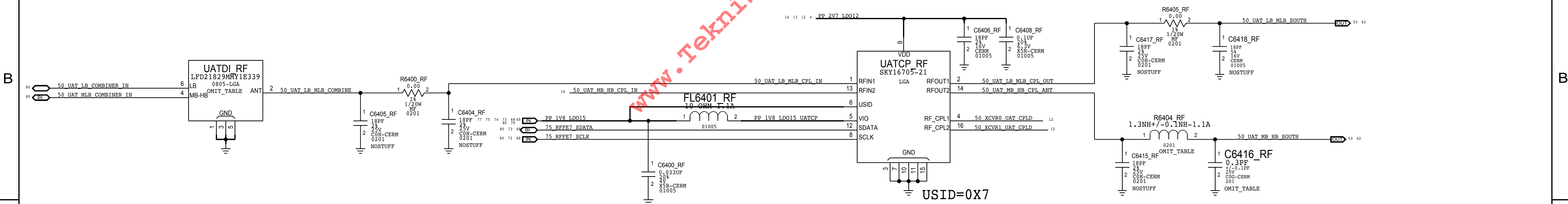


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		PAGE	
		6 OF 53	
		SHEET	
		6 OF 81	

LOWER ANTENNA AND COUPLER

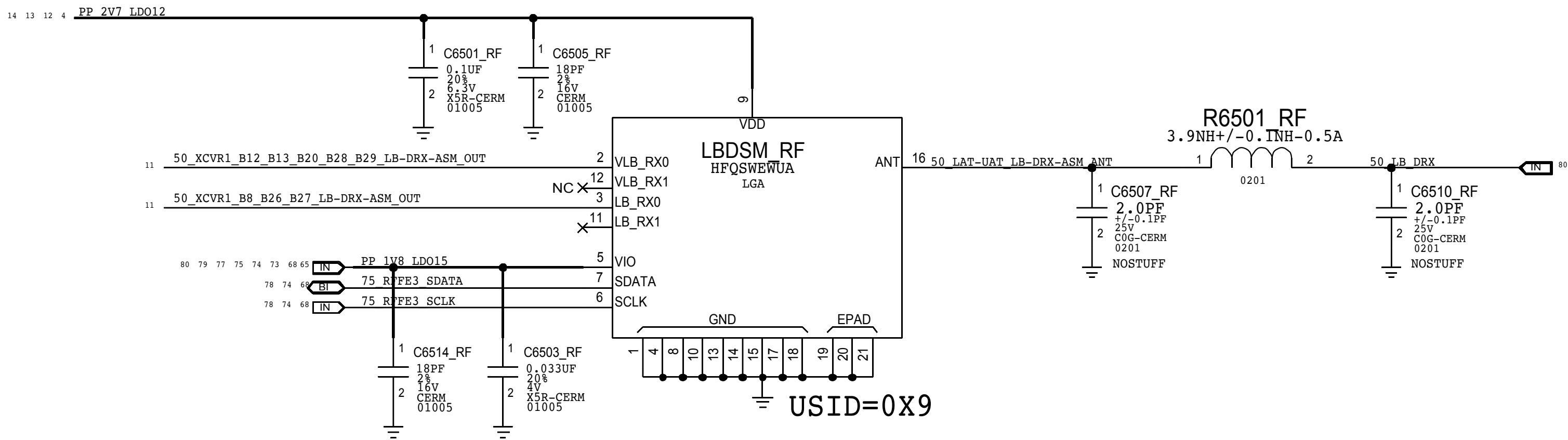


UPPER ANTENNA COUPLER

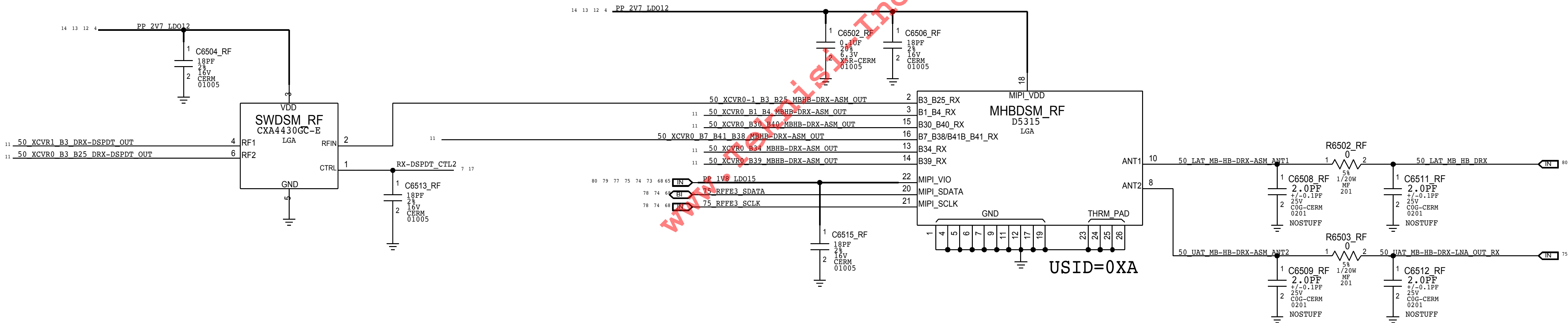


DIVERSITY RECEIVE

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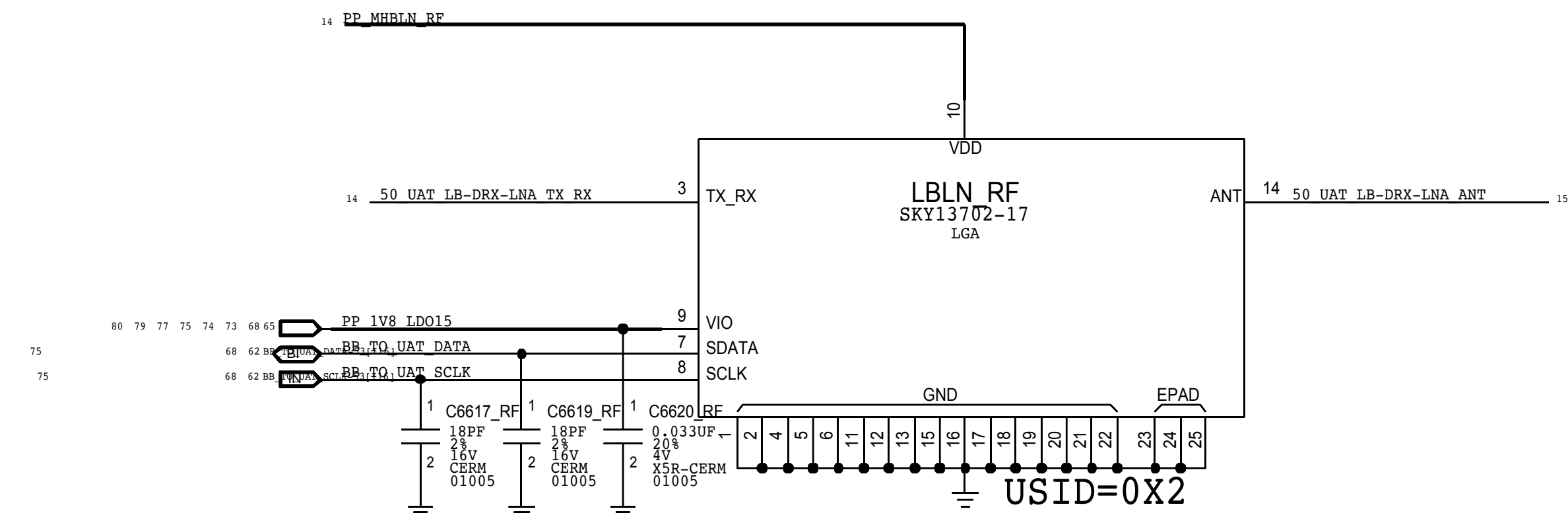


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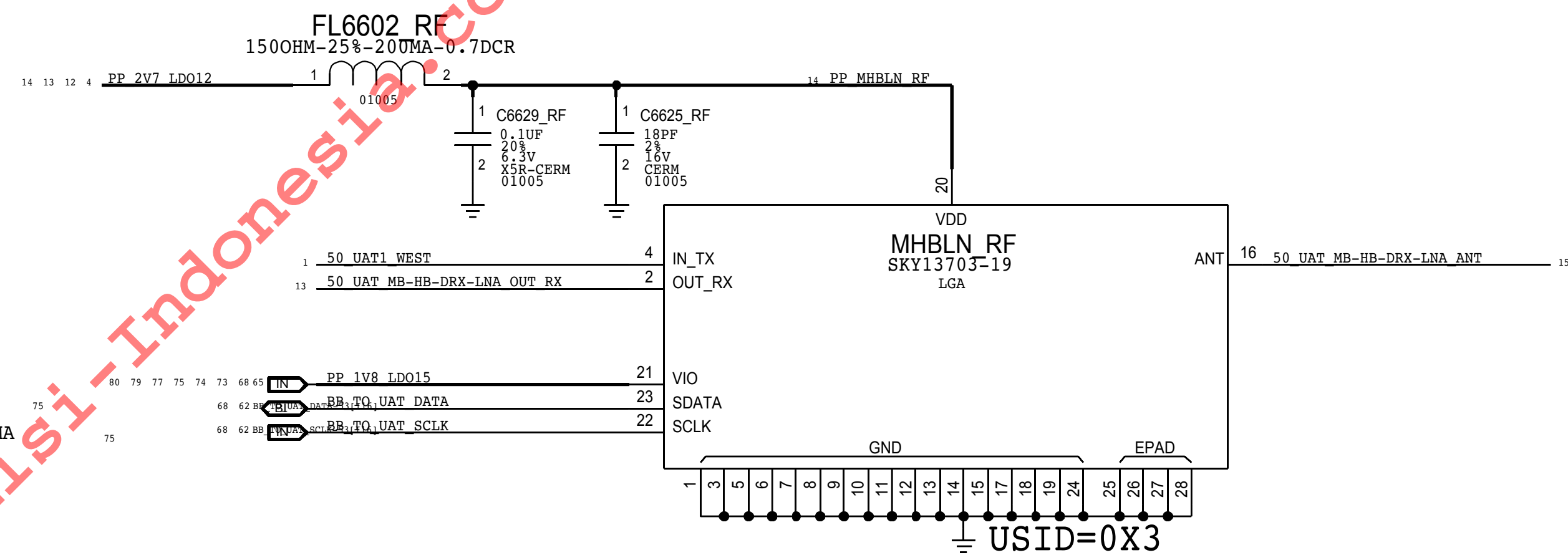


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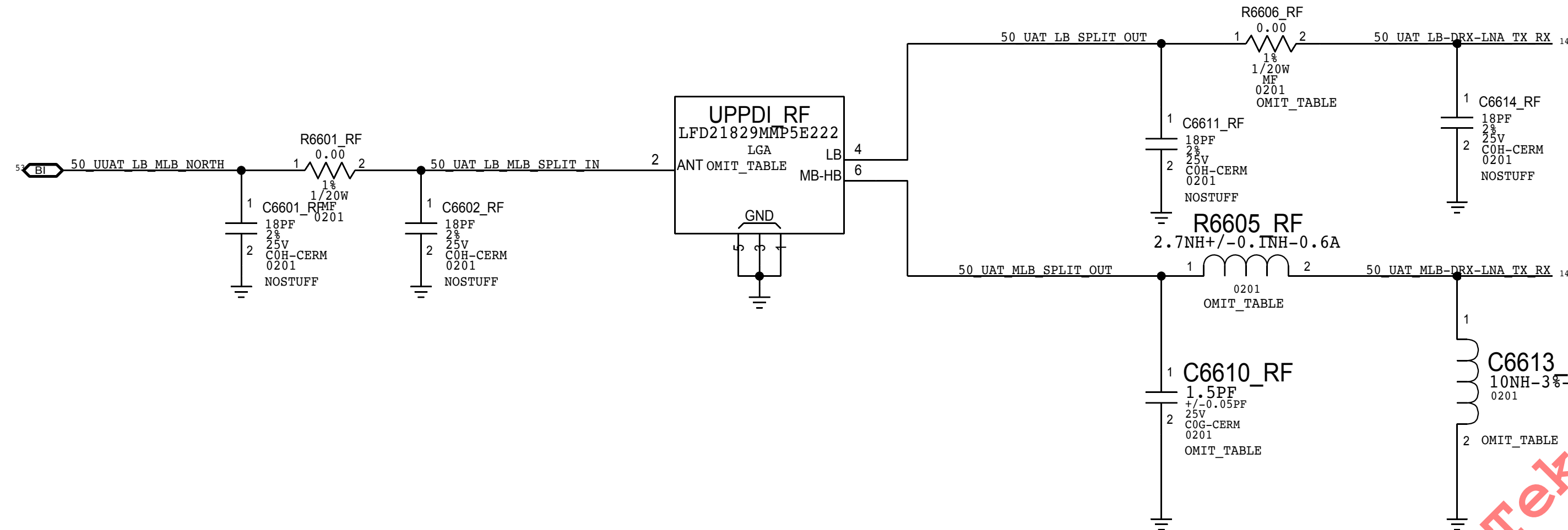
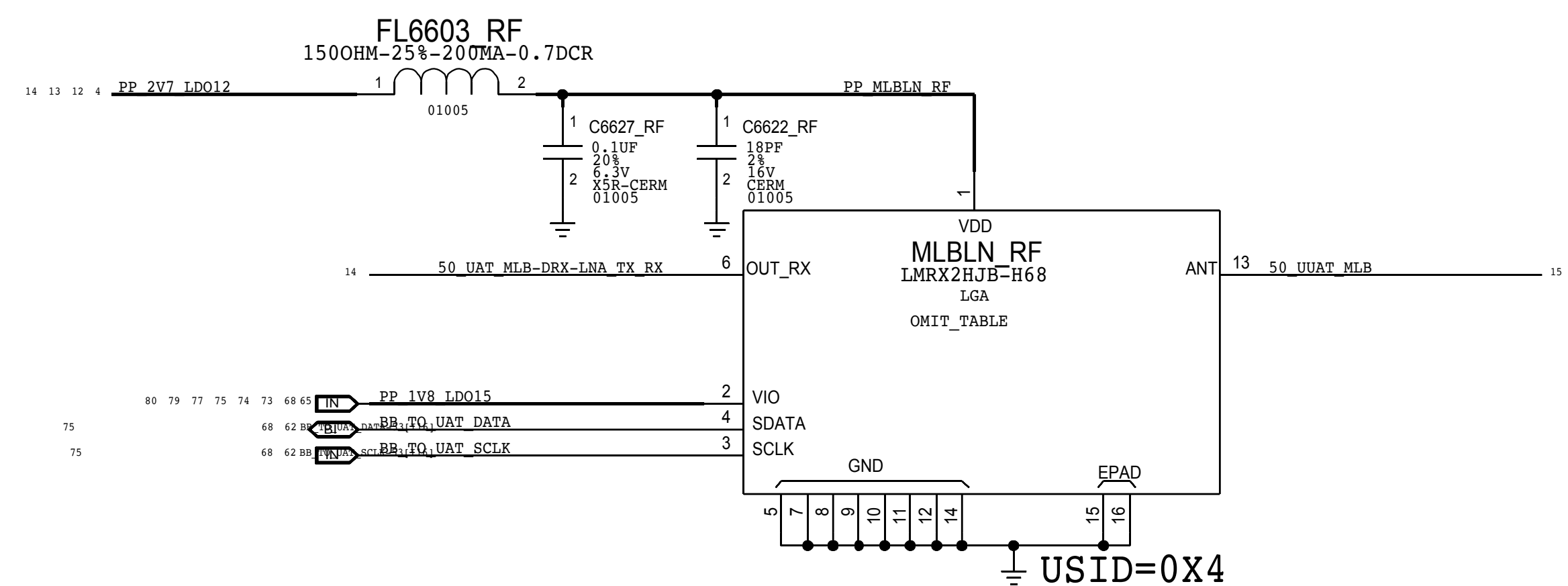
LB DRX LNA



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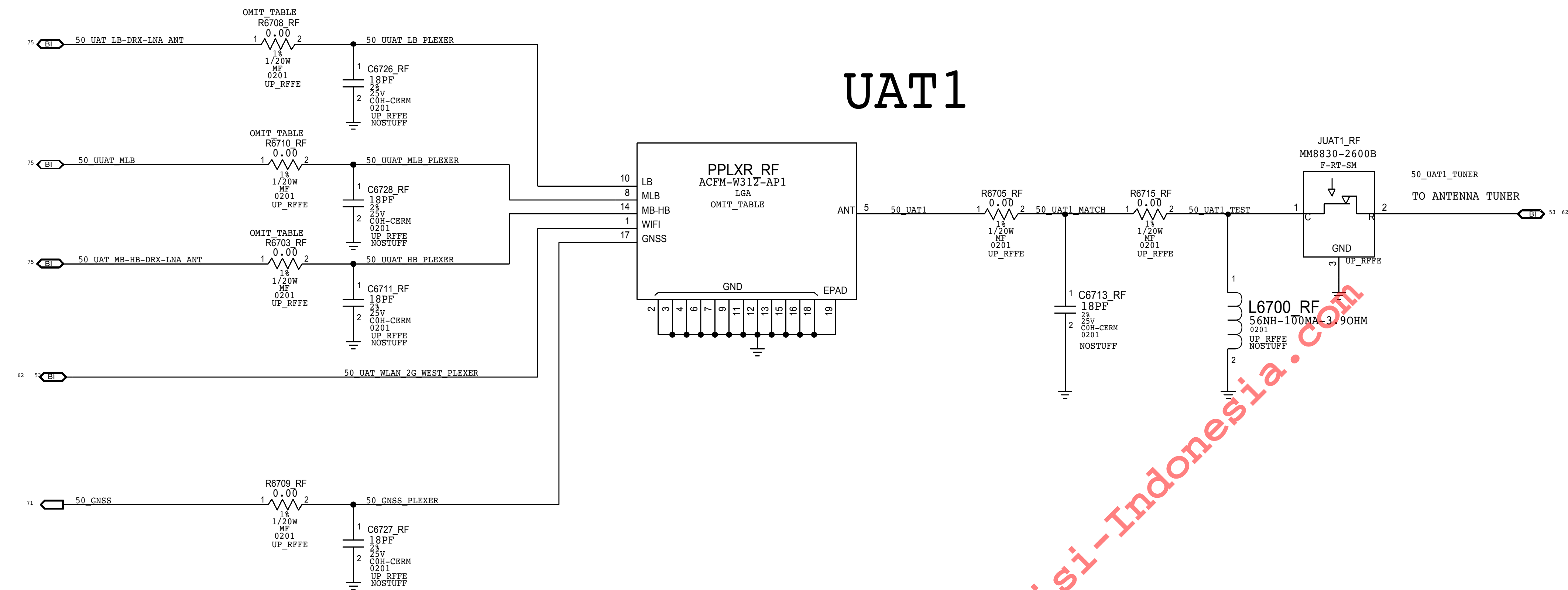


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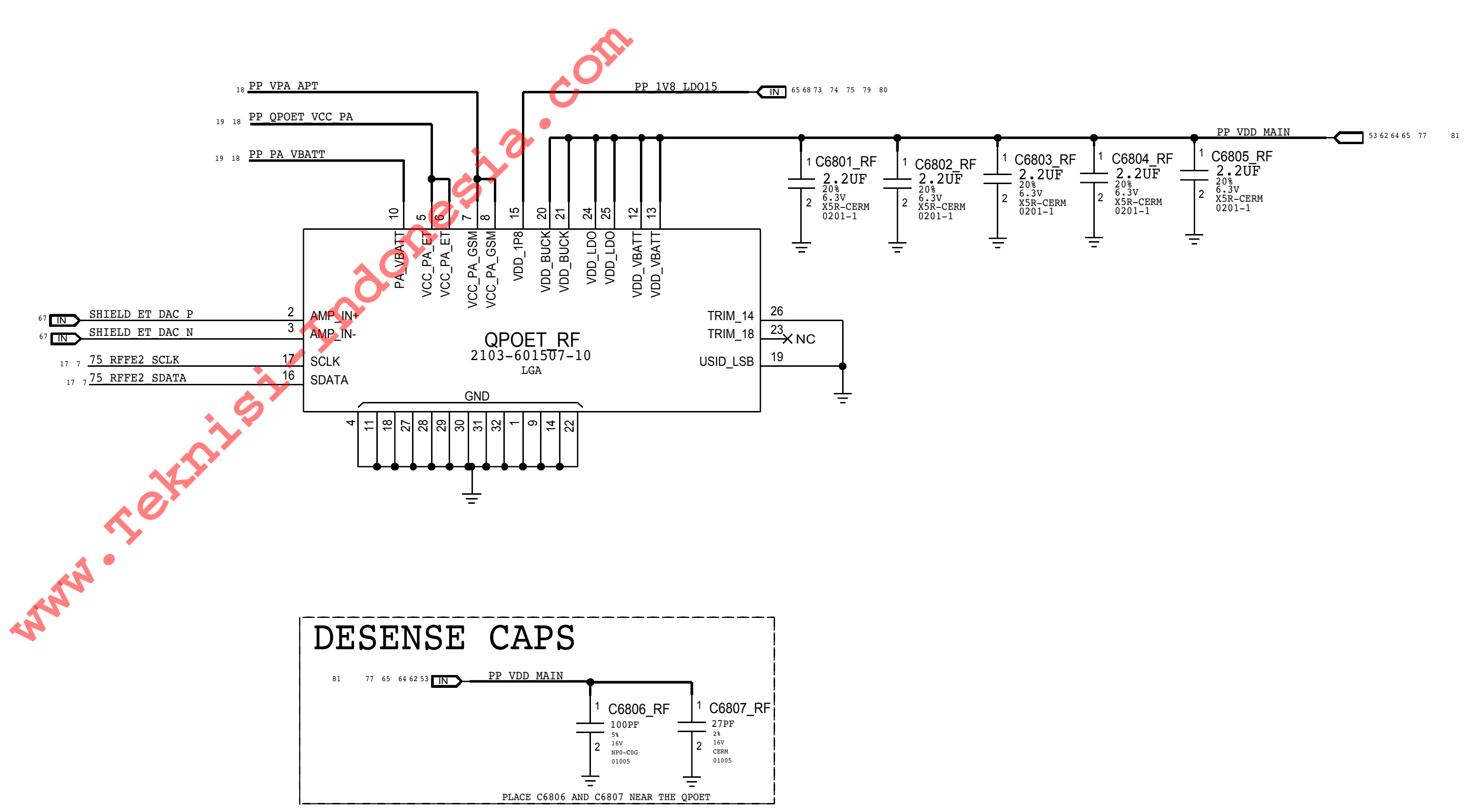


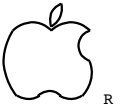
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UAT1



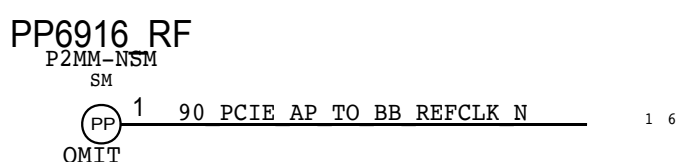
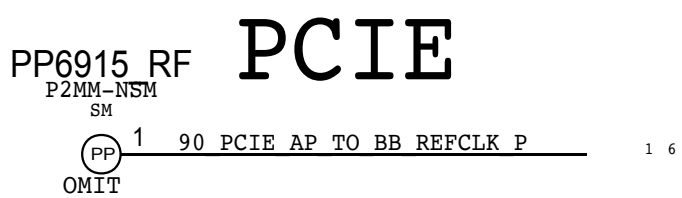
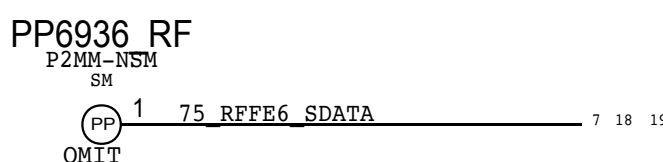
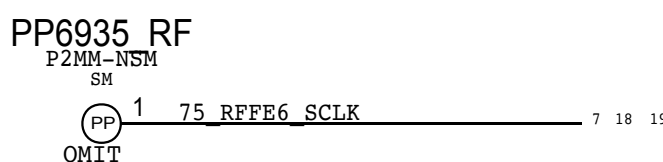
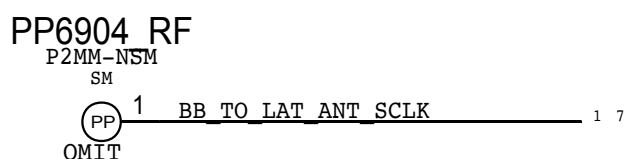
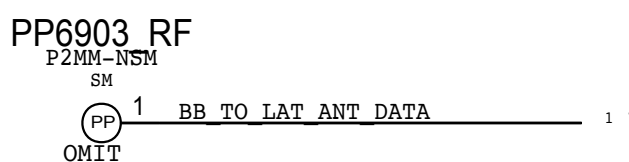
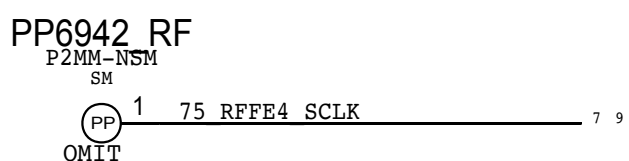
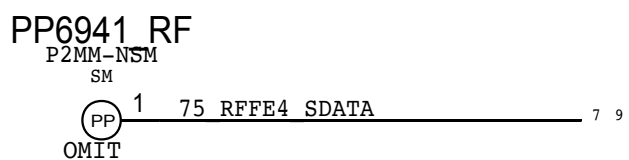
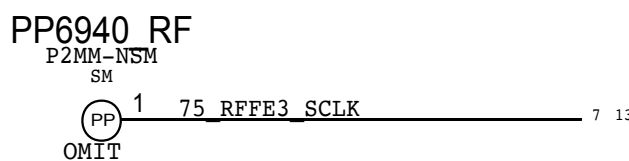
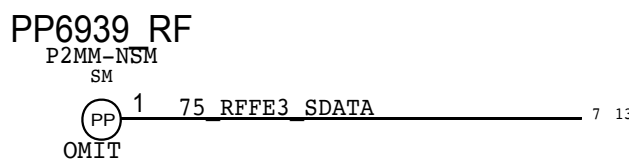
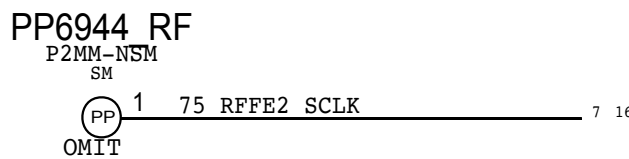
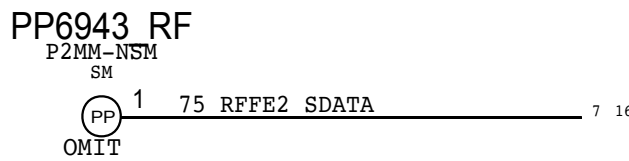
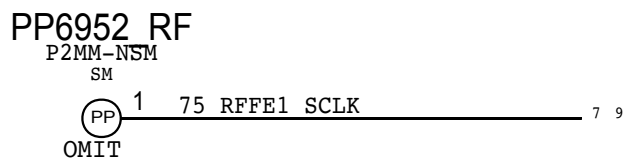
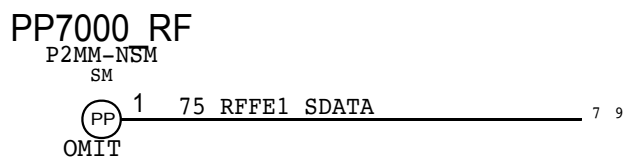
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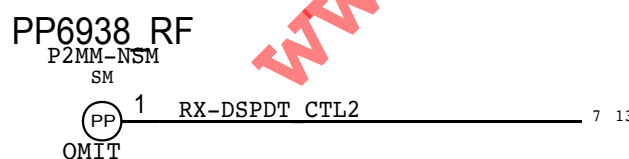
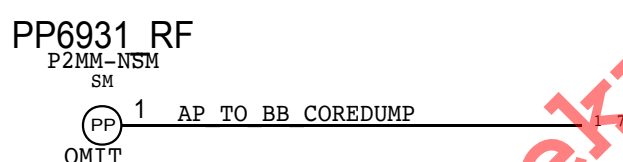
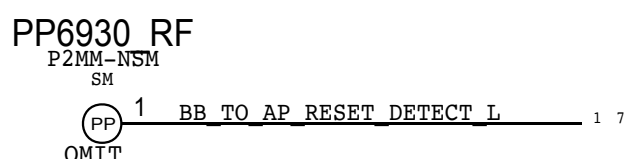
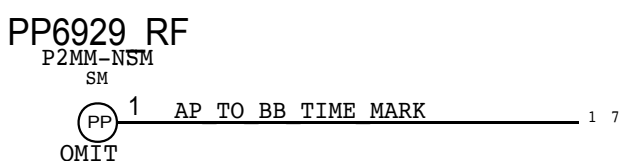
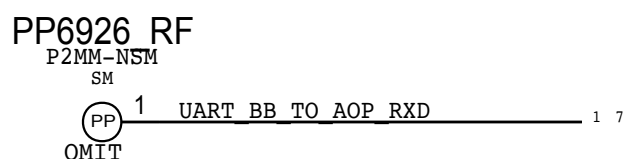
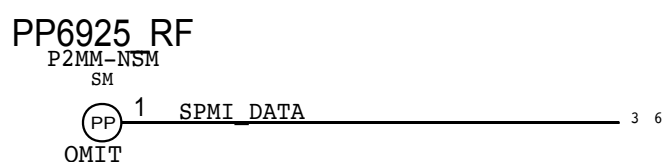
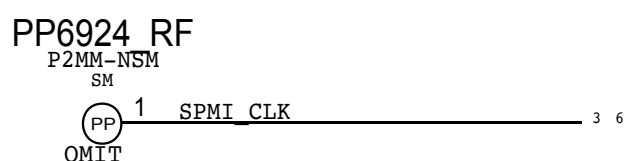
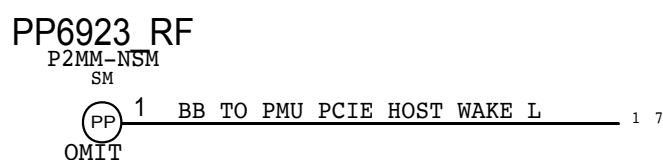
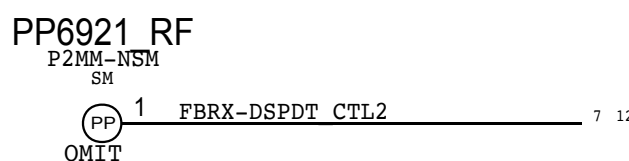
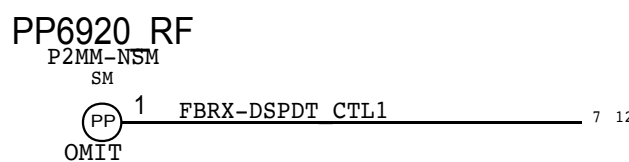
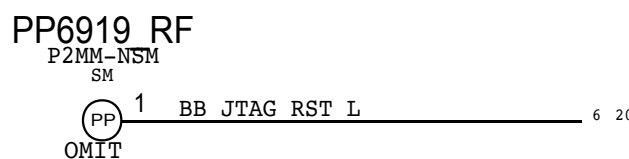
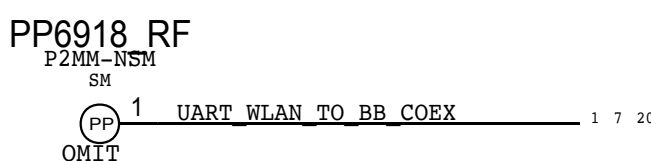
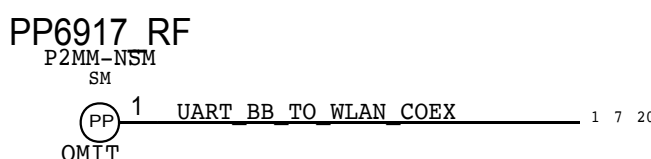
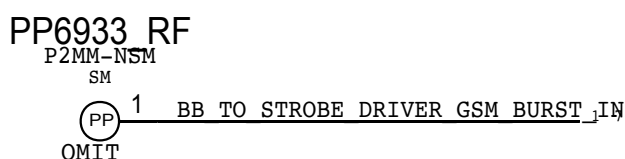
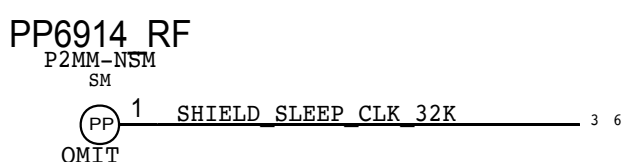
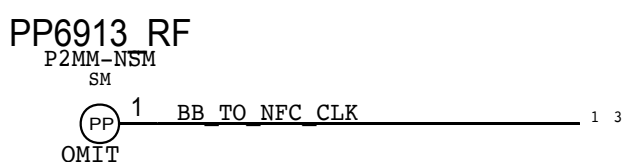
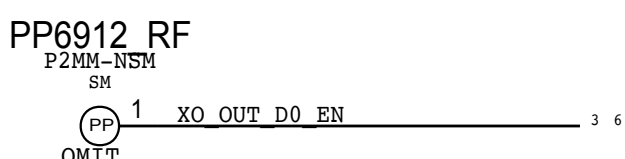
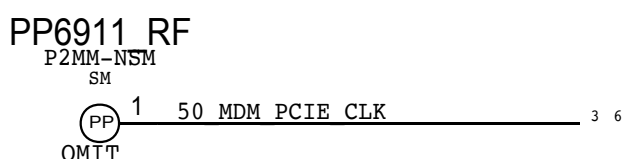
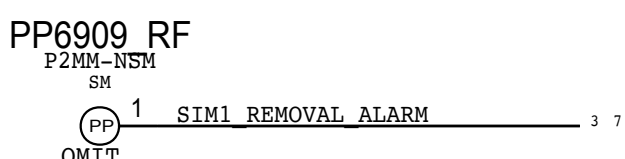
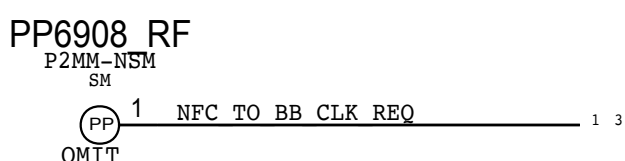
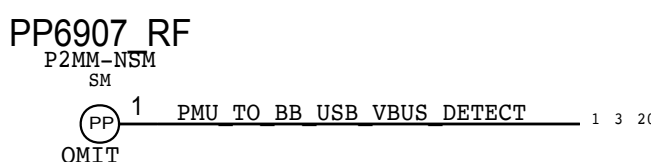
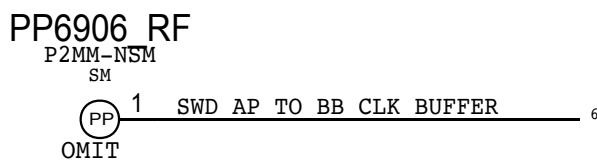
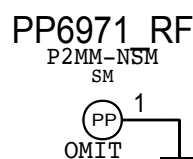
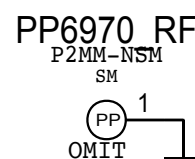
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PAGE		6 OF 53
SHEET		6 OF 81

MLB TEST POINTS

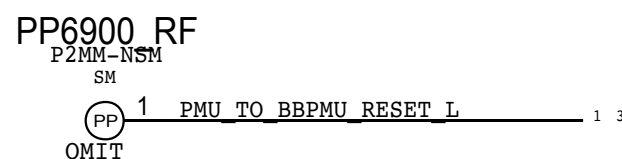
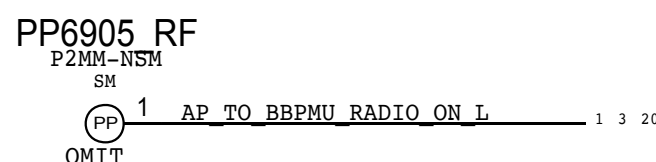
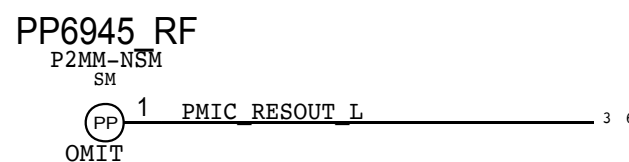
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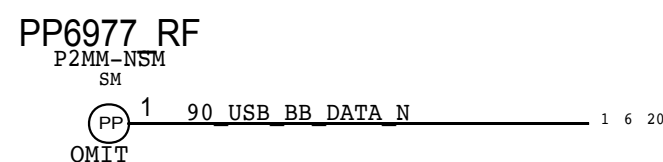
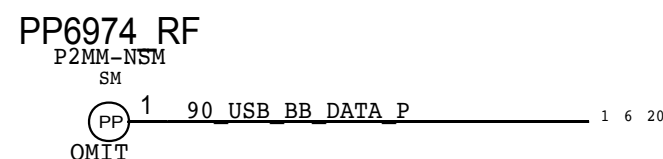
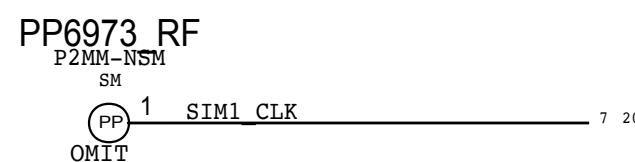
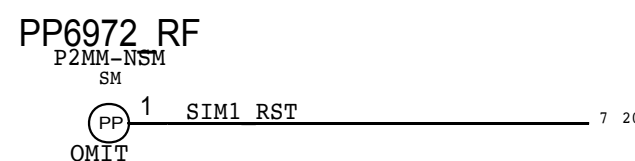
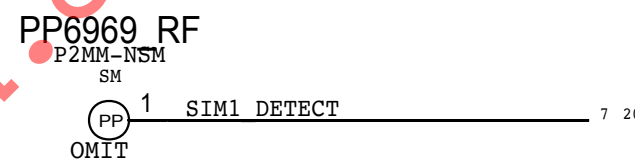
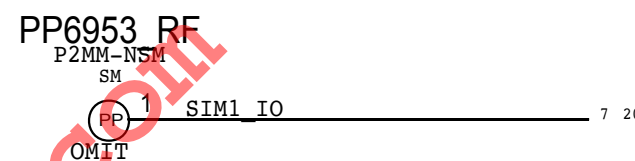
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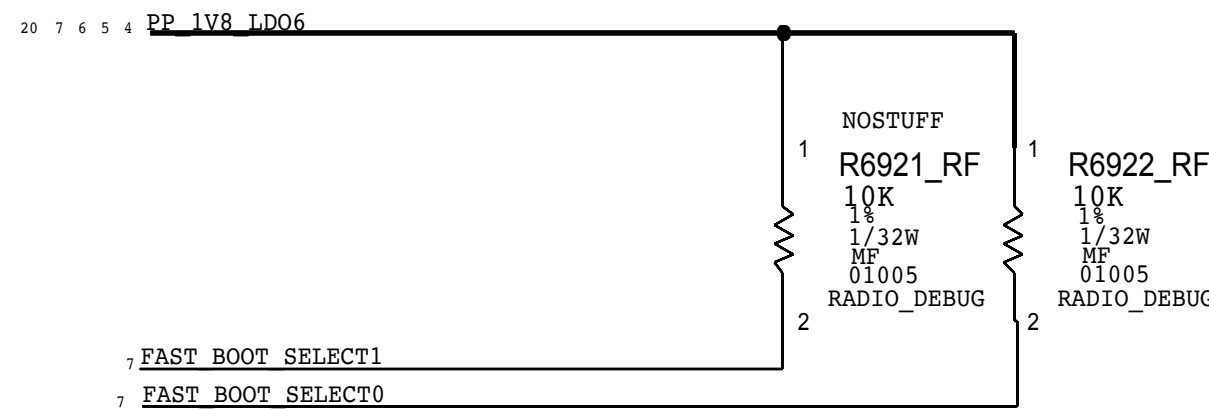


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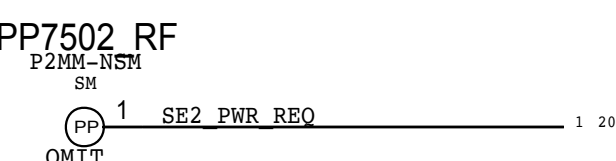
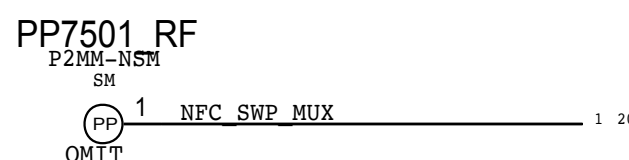
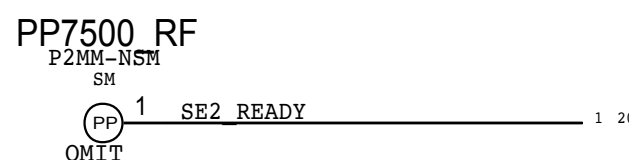
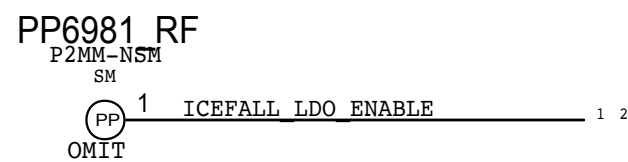
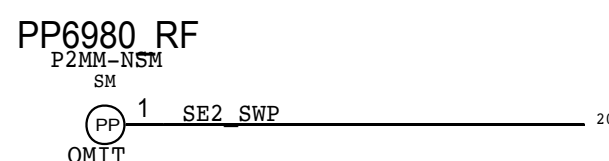
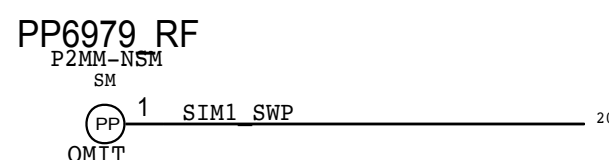
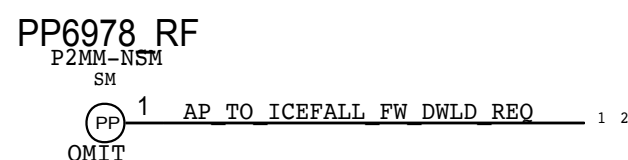



BOOT CONFIG

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USB = 0X2



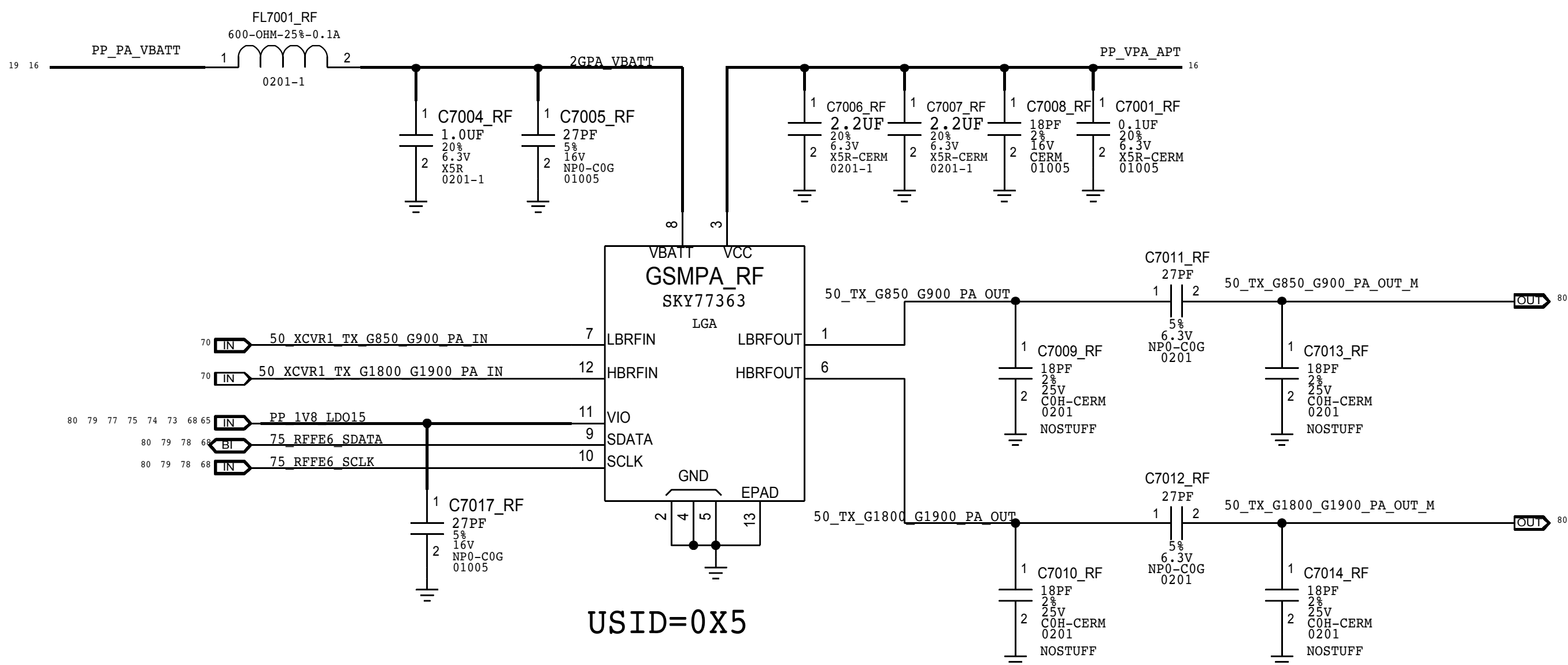
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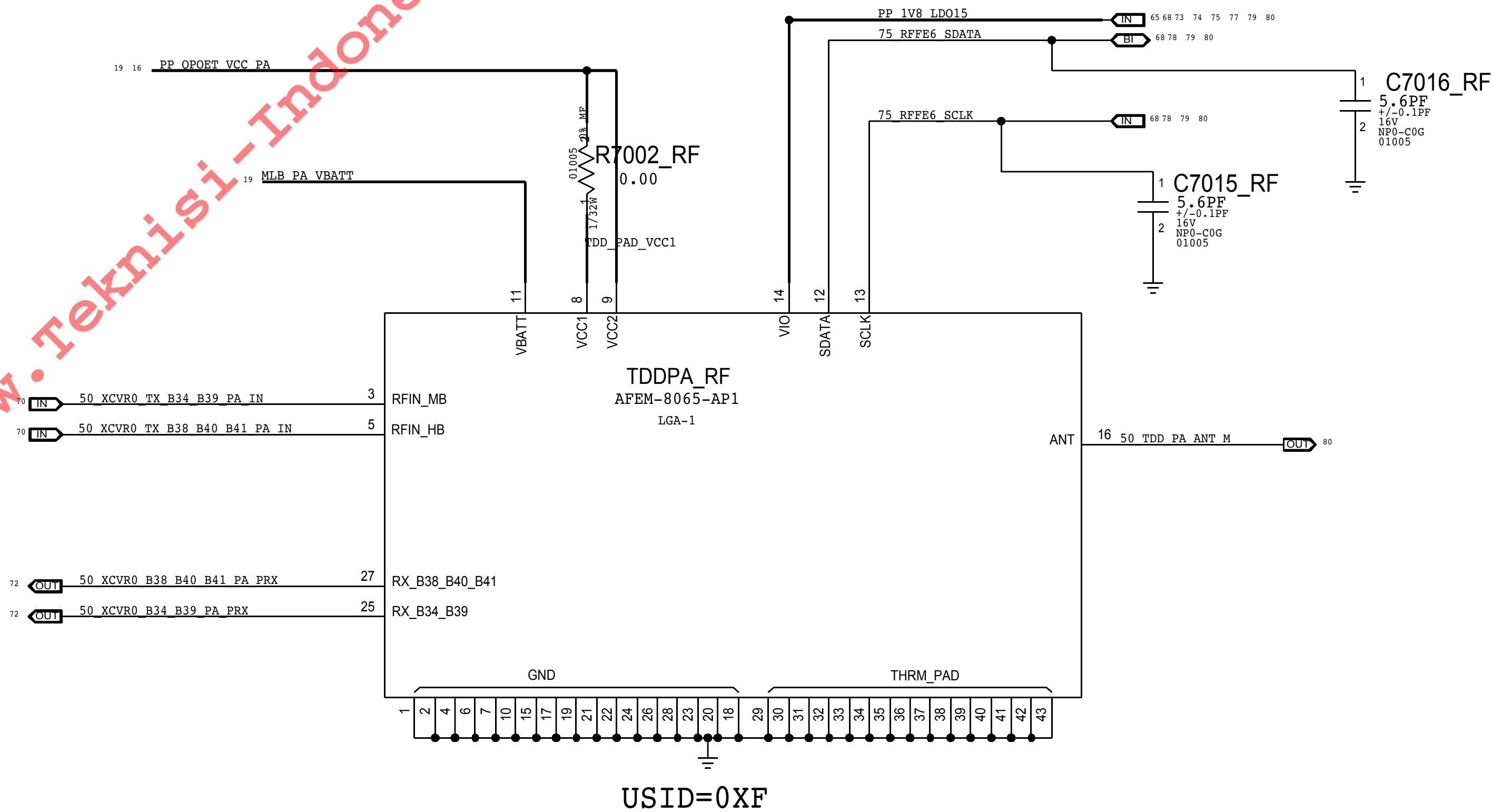
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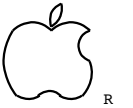
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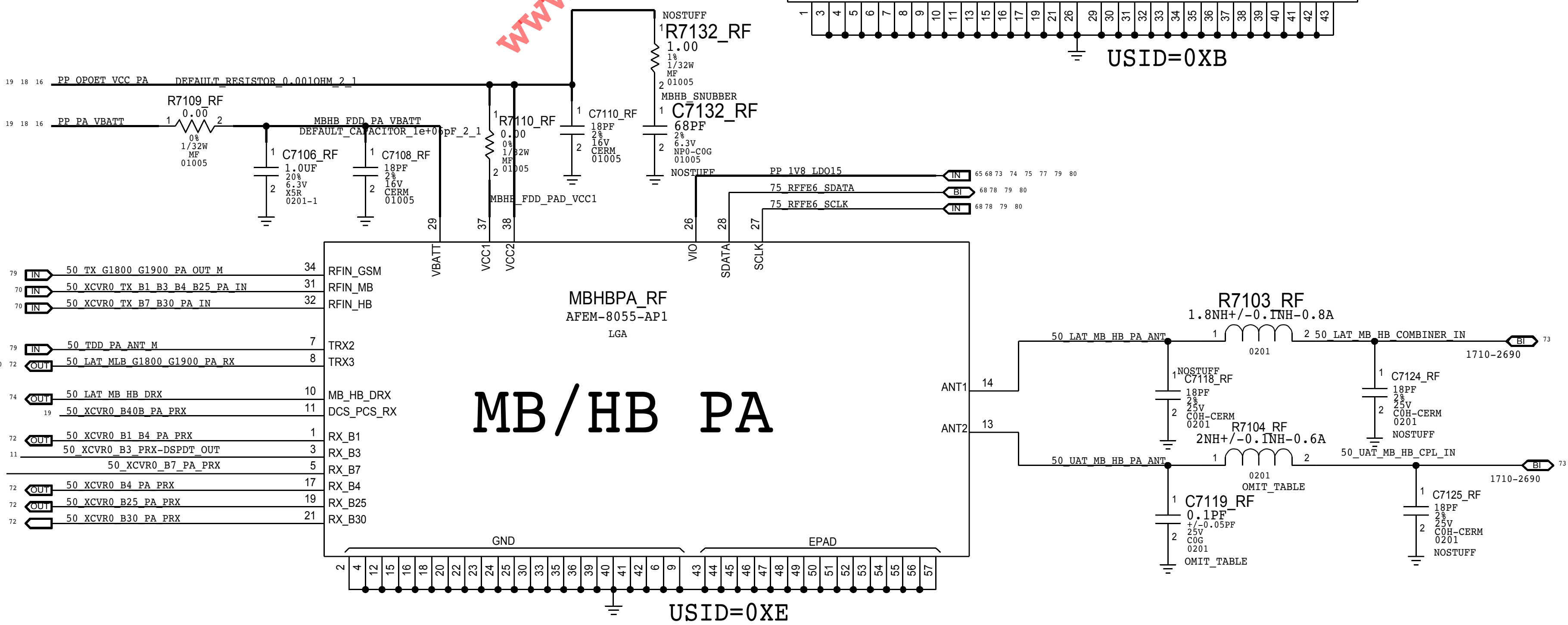
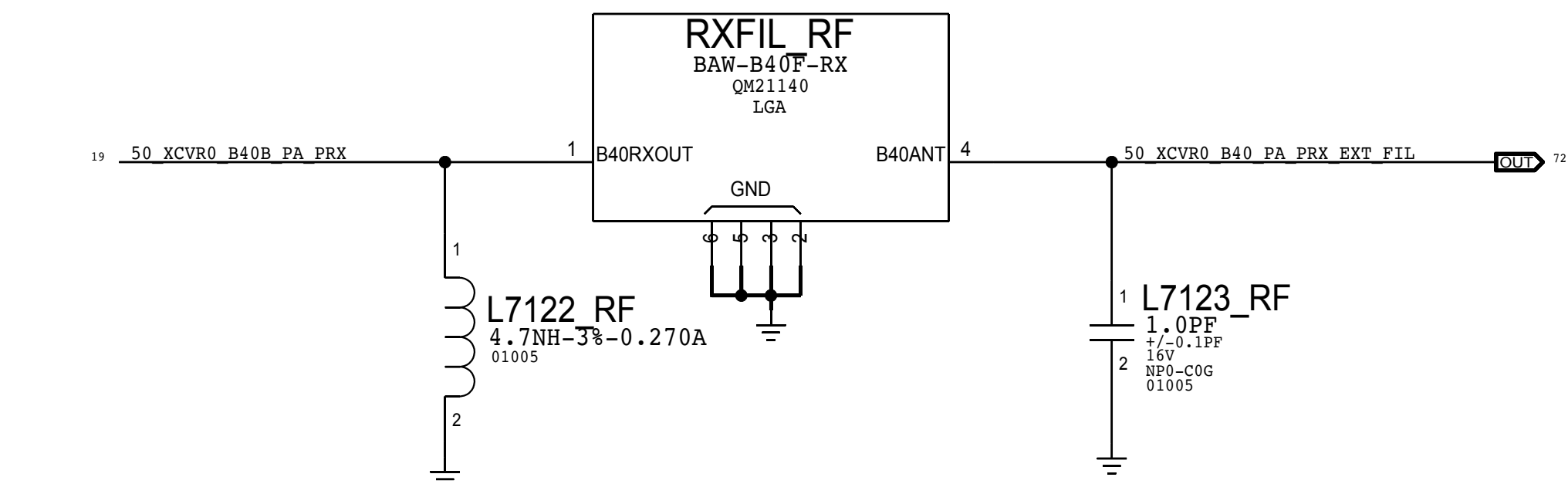
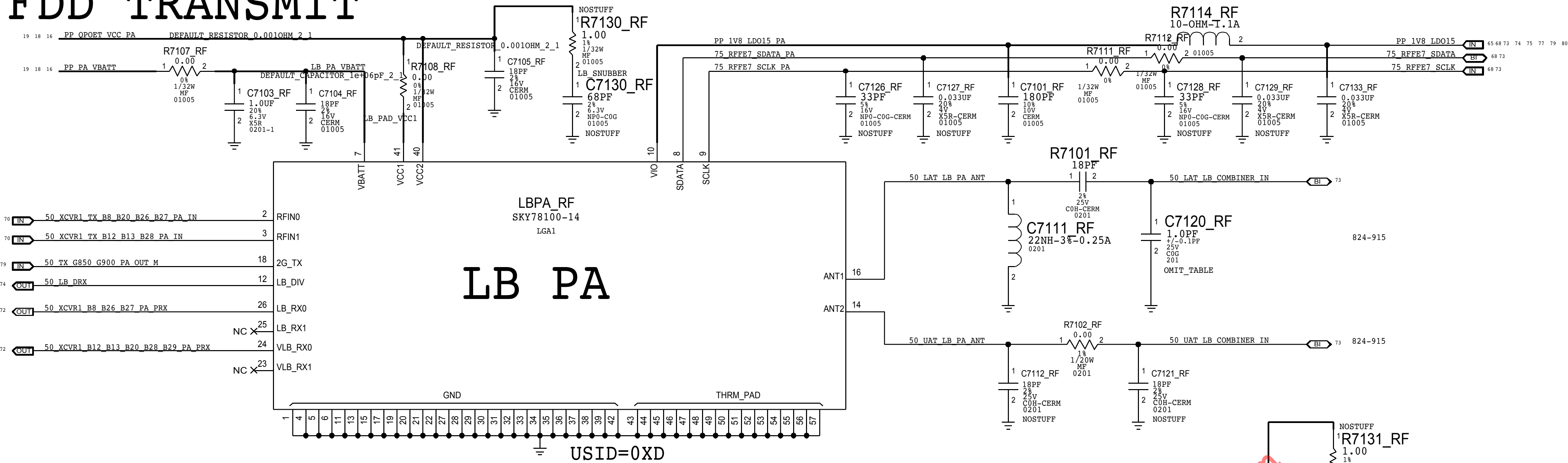


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