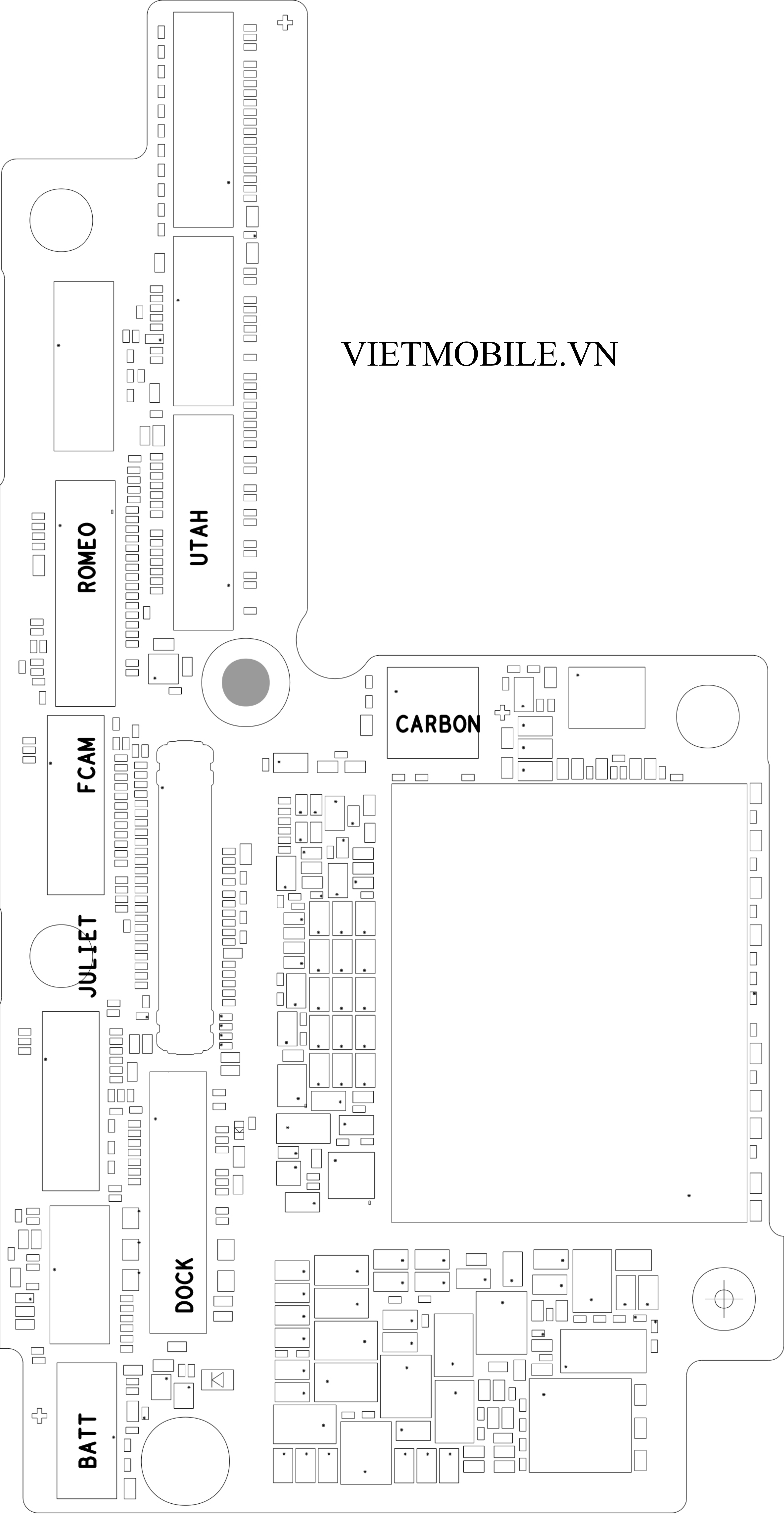
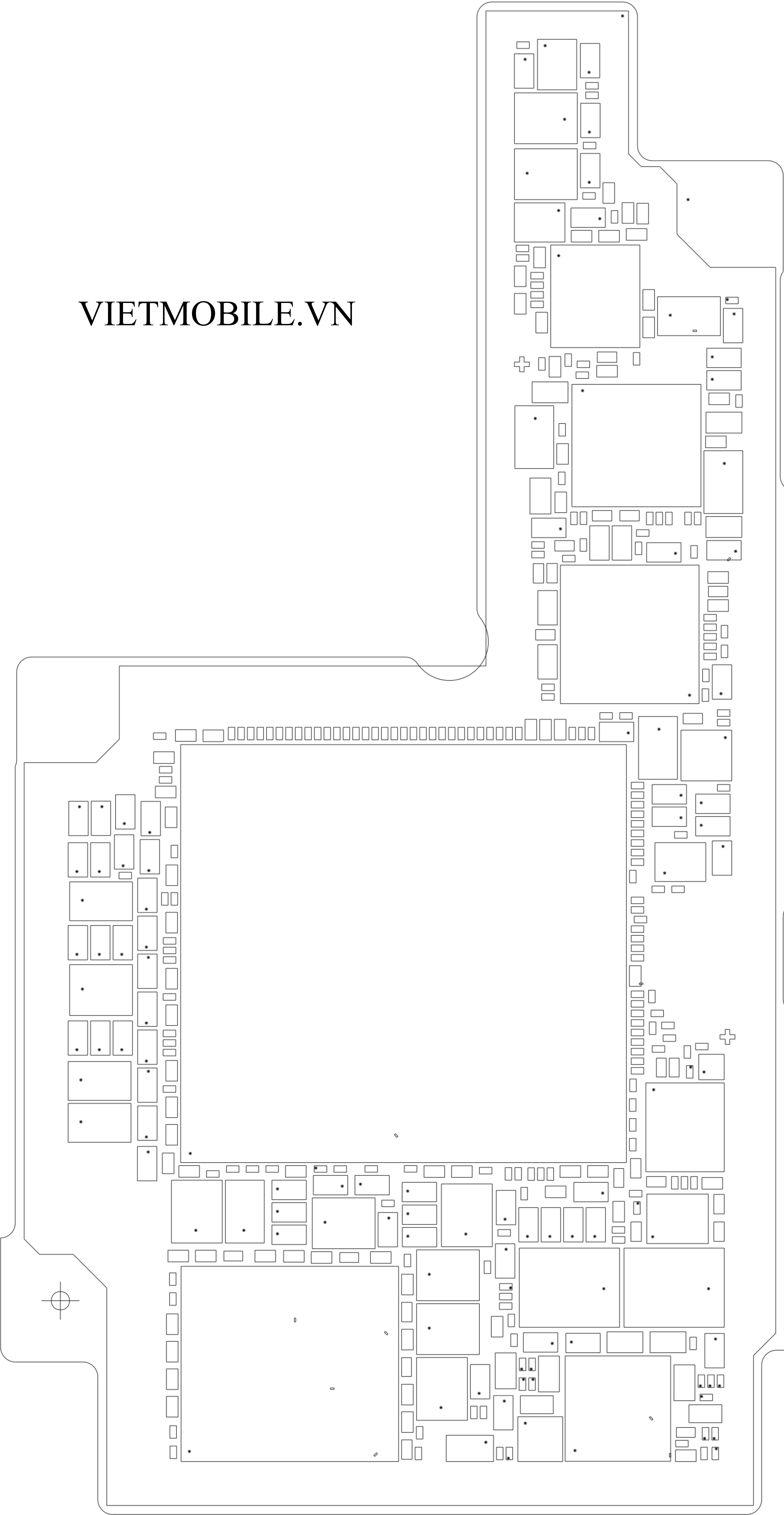
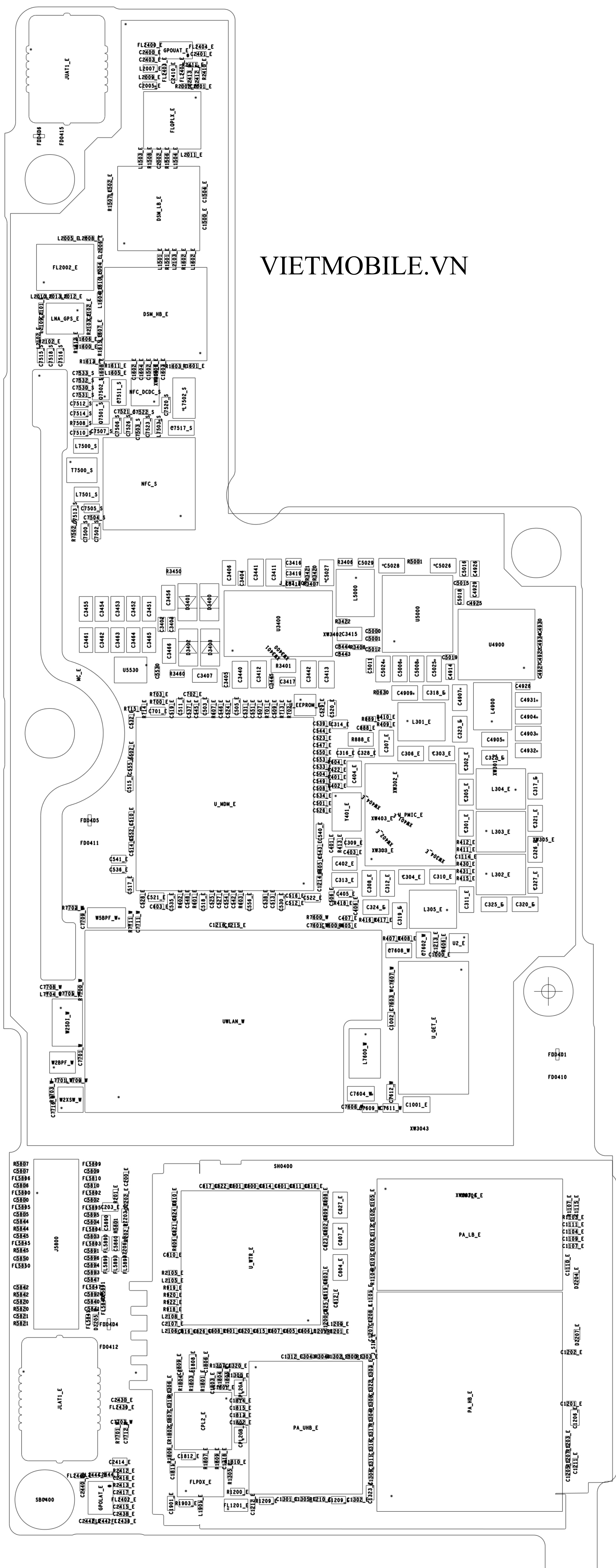


VIETMOBILE.VN

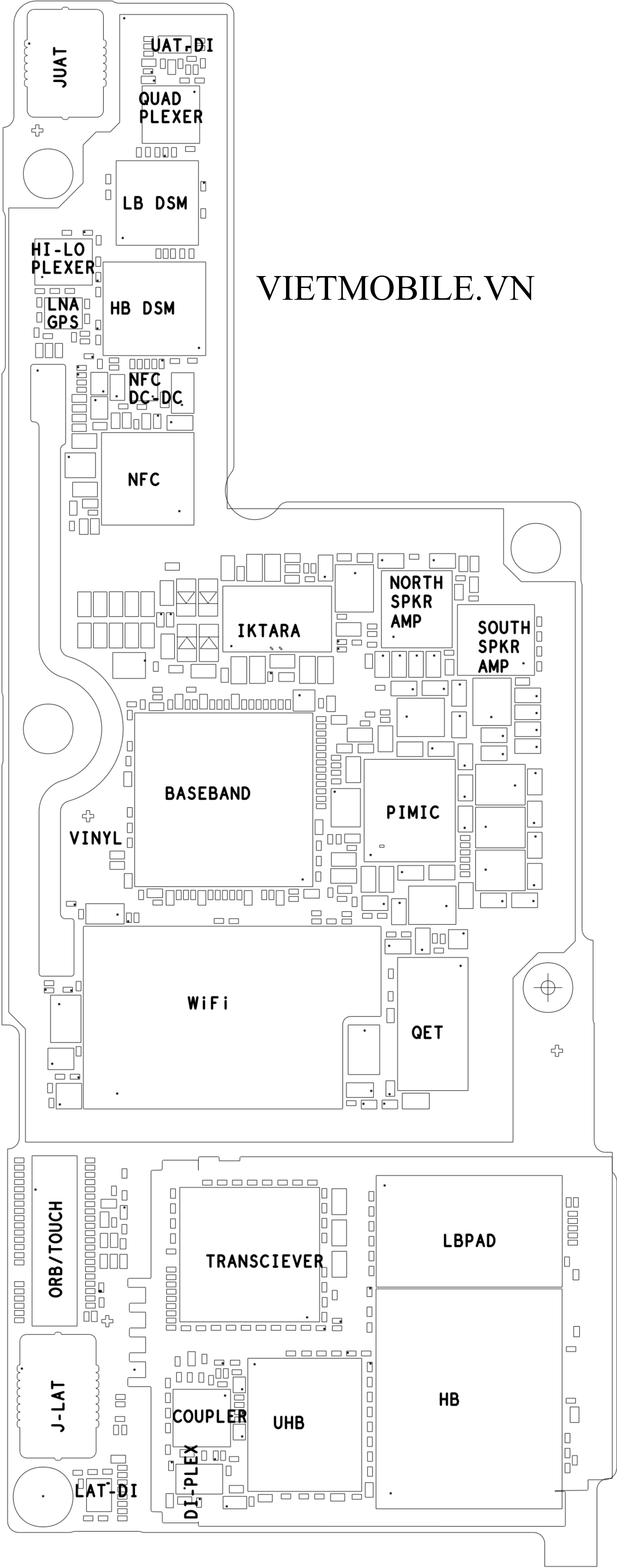


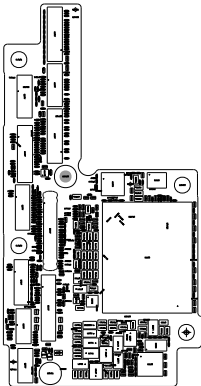
VIETMOBILE.VN





VIETMOBILE.VN



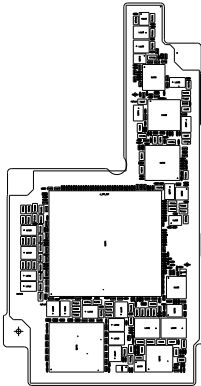


VIETMOBILE.VN

TOP SIDE ASSEMBLY

APPLE				TITLE PCBF, X891 TOP MLB	
THIS IS THE PROPERTY OF APPLE AND IT MUST BE RETURNED					
ORIG DIV	DESIGNER KEN KIPLINGER	DATE 03/31/17	SCALE 1:1	DRAWING NUMBER 820-00863-09	
NOTES: ARTWORK VIEWED FROM COMPONENT SIDE. PCB SHALL CONFORM TO STANDARDS AS DEFINED IN APPLE SPECIFICATION 080-2265 (FLEXIBLE PRINTED CIRCUIT BOARDS) OR 062-0073 (MULTI-LAYER BOARDS) AS APPLICABLE.					

VIETMOBILE.VN



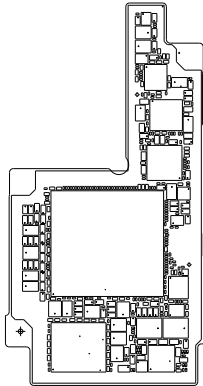
BOTTOM SIDE ASSEMBLY

TITLE		APPLE			
PCBF, X801 TOP MLB		THIS IS THE PROPERTY OF APPLE AND IT MUST BE RETURNED			
DRAWING NUMBER		SCALE	DATE	DESIGNER	ORIG DIV
850-00803-00		1:1	03/31/17	KEN KIPLINGER	
NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF APPLE 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		NOTES: 065-0073 (MULTI-LAYER BOARDS) AS APPLICABLE. 080-5505 (FLEXIBLE PRINTED CIRCUIT BOARDS) OR TO STANDARDS AS DEFINED IN APPLE SPECIFICATION ARTWORK VIEWED FROM COMPONENT SIDE. PCB SHALL CONFORM			

VIETMOBILE.VN

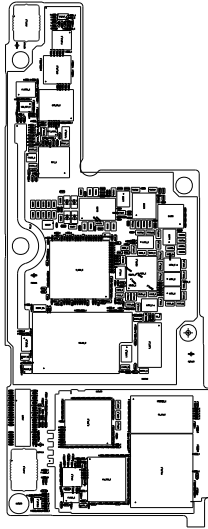
APPLE				TITLE PCBF, X891 TOP MLB	
THIS IS THE PROPERTY OF APPLE AND IT MUST BE RETURNED				DRAWING NUMBER 820-00863-09	
ORIG DIV	DESIGNER KEN KIJPLINGER	DATE 03/31/17	SCALE 1:1		
NOTES: ARTWORK VIEWED FROM COMPONENT SIDE. PCB SHALL CONFORM TO STANDARDS AS DEFINED IN APPLE SPECIFICATION 080-2265 (FLEXIBLE PRINTED CIRCUIT BOARDS) OR 062-0073 (MULTI- LAYER BOARDS) AS APPLICABLE.				NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE 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	

VIETMOBILE.VN



BOTTOM SIDE ASSEMBLY

TITLE		APPLE			
PCBF, X801 TOP MLB		THIS IS THE PROPERTY OF APPLE AND IT MUST BE RETURNED			
DRAWING NUMBER		SCALE	DATE	DESIGNER	ORIG DIV
850-00803-00		1:1	03\31\17	KEN KIPLINGER	
(I) TO MAINTAIN THIS DOCUMENT IN CONFIDENCE (II) NOT TO REPRODUCE OR COPY IT (III) NOT TO REVEAL OR PUBLISH IT NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF APPLE THE POSSESSOR AGREES TO THE FOLLOWING		NOTES: 005-0073 (MULTI-LAYER BOARDS) AS APPLICABLE. 080-5505 (FLEXIBLE PRINTED CIRCUIT BOARDS) OR TO STANDARDS AS DEFINED IN APPLE SPECIFICATION WORKVIEWED FROM COMPONENT SIDE. PCB SHALL CONFORM			

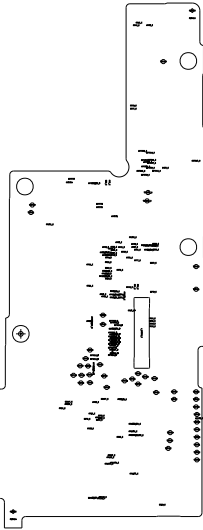


VIETMOBILE.VN

TOP SIDE ASSEMBLY

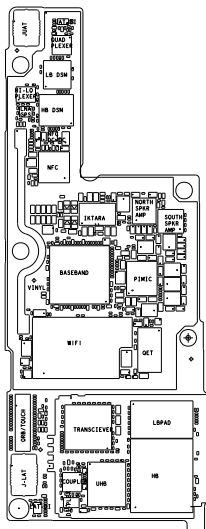
APPLE				TITLE	PCBF , X891 BOTTOM MLB
THIS IS THE PROPERTY OF APPLE AND IT MUST BE RETURNED				DRAWING NUMBER	820-00864-06
ORIG DIV	DESIGNER GERA DANILOV	DATE 04/05/17	SCALE 1:1		
NOTES: ARTWORK VIEWED FROM COMPONENT SIDE. PCB SHALL CONFORM TO STANDARDS AS DEFINED IN APPLE SPECIFICATION 080-2265 (FLEXIBLE PRINTED CIRCUIT BOARDS) OR 062-0073 (MULTI- LAYER BOARDS) AS APPLICABLE.				NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE 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	

VIETMOBILE.VN



BOTTOM SIDE ASSEMBLY


TITLE		APPLE			
BOTTOM MLB PCBF, X801		THIS IS THE PROPERTY OF APPLE AND IT MUST BE RETURNED			
DRAWING NUMBER		SCALE	DATE	DESIGNER	ORIG DIV
850-00804-00		1:1	04\05\17	GERA DANILOV	
NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF APPLE 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		NOTES: 065-0073 (MULTI-LAYER BOARDS) AS APPLICABLE. 800-SS02 (FLEXIBLE PRINTED CIRCUIT BOARDS) OR TO STANDARDS AS DEFINED IN APPLE SPECIFICATION ARTWORK VIEWED FROM COMPONENT SIDE. PCB SHALL CONFORM			



VIETMOBILE.VN-

TOP SIDE ASSEMBLY

APPLE				TITLE	PCBF , X891 BOTTOM MLB
THIS IS THE PROPERTY OF APPLE AND IT MUST BE RETURNED					
ORIG DIV	DESIGNER	DATE	SCALE	DRAWING NUMBER	820-00864-06
	GERA DANILOV	04/05/17	1:1		
NOTES: ARTWORK VIEWED FROM COMPONENT SIDE. PCB SHALL CONFORM TO STANDARDS AS DEFINED IN APPLE SPECIFICATION 080-2265 (FLEXIBLE PRINTED CIRCUIT BOARDS) OR 062-0073 (MULTI- LAYER BOARDS) AS APPLICABLE.				NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE 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	

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
												9	0008409760	ENGINEERING RELEASED	2017-04-05
X891/X893 MLB Top: EVT															
LAST_MODIFICATION=Mon Apr 3 13:03:06 2017															
PAGE CSA		CONTENTS		SYNC		DATE		PAGE CSA		CONTENTS		SYNC		DATE	
1	1	TABLE OF CONTENTS						46	61	I/O: Accessory Buck		test_mlb	10/17/2016		
2	2	SYSTEM:BOM Tables		test_mlb	10/13/2016		47	62	I/O: USB PD		test_mlb	10/13/2016			
3	4	SYSTEM: Mechanical Components						48	63	I/O: Hydra		test_mlb	10/13/2016		
4	5	SYSTEM: Testpoints (Top)		test_mlb	10/13/2016		49	64	I/O: B2B Dock		test_mlb	10/13/2016			
5	6	BOOTSTRAPPING		test_mlb	10/13/2016		50	65	I/O: Interposer (Bottom)		test_mlb	10/13/2016			
6	10	SOC: JTAG,USB,XTAL		test_mlb	10/17/2016		51	80	RADIOS		06/04/2015				
7	11	SOC: PCIE		test_mlb	10/17/2016										
8	12	SOC: MIPI & ISP		test_mlb	10/13/2016										
9	13	SOC: LPDP		test_mlb	10/13/2016										
10	14	SOC: Serial		test_mlb	10/17/2016										
11	15	SOC: GPIO & UART		test_mlb	10/13/2016										
12	16	SOC: AOP		test_mlb	10/17/2016										
13	17	SOC: Power (1/3)		test_mlb	10/17/2016										
14	18	SOC: Power (2/3)		test_mlb	10/17/2016										
15	19	SOC: Power (3/3)		test_mlb	10/17/2016										
16	26	NAND		test_mlb	10/13/2016										
17	27	SYSTEM POWER: PMU Bucks (1/4)		test_mlb	10/13/2016										
18	28	SYSTEM POWER: PMU Bucks (2/4)		test_mlb	10/13/2016										
19	29	SYSTEM POWER: PMU LDOs (3/4)		test_mlb	10/13/2016										
20	30	SYSTEM POWER: PMU (4/4)		test_mlb	11/01/2016										
21	31	SYSTEM POWER: Boost		test_mlb	10/13/2016										
22	32	SYSTEM POWER: B2B Battery		test_mlb	10/13/2016										
23	33	SYSTEM POWER: Charger		test_mlb	10/13/2016										
24	34	SYSTEM POWER: Iktara													
25	35	SYSTEM POWER: B2B Cyclone + Button		test_mlb	10/13/2016										
26	36	SENSORS		test_mlb	10/13/2016										
27	37	CAMERA: PMU (1/2)		test_mlb	10/13/2016										
28	38	CAMERA: PMU (2/2)		test_mlb	10/13/2016										
29	39	CAMERA: B2B Wide (WY)		test_mlb	10/13/2016										
30	40	CAMERA: B2B Tele (MT)		test_mlb	10/13/2016										
31	41	CAMERA: Strobe Drivers		test_mlb	10/13/2016										
32	42	CAMERA: B2B FCAM		test_mlb	10/13/2016										
33	43	CAMERA: B2B Strobe + Hold Button		test_mlb	10/13/2016										
34	44	PEARL: Power		test_mlb	10/13/2016										
35	45	PEARL: B2B Romeo + Juliet		test_mlb	10/13/2016										
36	46	PEARL: B2B Rosaline + Misc		test_mlb	10/13/2016										
37	47	AUDIO: CODEC (1/2)		test_mlb	10/13/2016										
38	48	AUDIO: CODEC (2/2)		test_mlb	10/13/2016										
39	49	AUDIO: Speaker Amp Bottom				08/25/2015									
40	50	AUDIO: Speaker Amp Top				08/25/2015									
41	51	ARC: Driver		test_mlb	10/13/2016										
42	56	CG: Power Supplies - Touch & Display		test_mlb	10/13/2016										
43	57	CG: B2B Display		test_mlb	10/13/2016										
44	58	CG: B2B Orb & Touch				08/25/2015									
45	59	I/O: Overvoltage Cut-Off Circuit		sync	01/10/2017										
BOM:639-04583 (Ultimate) BOM:639-03409 (Extreme) MCO:056-04077															
PART#		QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION									
051-02221		1	SCH,MLB_TOP,X891	SCH	NO	COMMON									
820-00863		1	PCB,MLB_TOP,X891	PCB	NO	COMMON									
8		7		6		5		4		3		2		1	
TABLE OF CONTENTS															
DRAWING TITLE												SCH,MLB,TOP,X891			
 Apple Inc.										DRAWING NUMBER		SIZE			
										051-02221		D			
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										REVISION		9.0.0			
										BRANCH		evt-1			
										PAGE		1 OF 80			
										SHEET		1 OF 51			

EEEE Codes

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-7691	1	EEEE FOR (MLB_TOP,639-04583,ULTIMATE)	EEEE_U2WJ	NO	ULTIMATE
825-7691	1	EEEE FOR (MLB_TOP,639-03409,EXTREME)	EEEE_HP26	NO	EXTREME

SOC

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S00358	1	SKYE+3GB, B0, M, DEV	U1000	CRITICAL	COMMON

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339S00359	339S00358	BOM_TABLE_ALTS	U1000	DDR-H,3G, B0
339S00360	339S00358	BOM_TABLE_ALTS	U1000	DDR-S-20,3G, B0
339S00361	339S00358	BOM_TABLE_ALTS	U1000	DDR-S-18,3G, B0

NAND

Ultimate

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S00287	1	HYNIX, 3DV3, ULTIMATE	U2600	CRITICAL	ULTIMATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S00284	335S00287	BOM_TABLE_ALTS	U2600	TOSHIBA, 1Z, ULTIMATE
335S00285	335S00287	BOM_TABLE_ALTS	U2600	TOSHIBA, B1C3, ULTIMATE
335S00286	335S00287	BOM_TABLE_ALTS	U2600	SANDISK, B1C3, ULTIMATE
335S00288	335S00287	BOM_TABLE_ALTS	U2600	SAMSUNG, 3DV4, ULTIMATE

Extreme

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S00240	1	HYNIX, 3DV3, EXTREME	U2600	CRITICAL	EXTREME

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S00228	335S00240	BOM_TABLE_ALTS	U2600	TOSHIBA, B1C3, EXTREME
335S00247	335S00240	BOM_TABLE_ALTS	U2600	SANDISK, B1C3, EXTREME
335S00276	335S00240	BOM_TABLE_ALTS	U2600	SAMSUNG, 3DV4, EXTREME

Global Capacitors

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00148	138S00149	BOM_TABLE_ALTS	ALL	0402-3T,10.5uF@1V, Kyocera
138S00150	138S00149	BOM_TABLE_ALTS	ALL	0402-3T,10.5uF@1V, SEMKO
138S00151	138S00149	BOM_TABLE_ALTS	ALL	0402-3T,10.5uF@1V, TY

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00143	138S00144	BOM_TABLE_ALTS	ALL	0402,16uF@1V, Kyocera
138S00163	138S00144	BOM_TABLE_ALTS	ALL	0402,16uF@1V, Taiyo

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00138	138S00139	BOM_TABLE_ALTS	ALL	0201,3uF@1V, Kyocera
138S00164	138S00139	BOM_TABLE_ALTS	ALL	0201,3uF@1V, Taiyo

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00145	138S00146	BOM_TABLE_ALTS	ALL	0402,5.1uF@3V, Kyocera
138S00165	138S00146	BOM_TABLE_ALTS	ALL	0402,5.1uF@3V, Taiyo

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00140	138S00141	BOM_TABLE_ALTS	ALL	0201,1.1uF@3V, Kyocera
138S00142	138S00141	BOM_TABLE_ALTS	ALL	0201,1.1uF@3V, SEMKO
138S00166	138S00141	BOM_TABLE_ALTS	ALL	0201,1.1uF@3V, Taiyo

CRITICAL PART#	COMMENT
138S00149	0402-3T,10.5uF@1V

CRITICAL PART#	COMMENT
138S00144	0402,16uF@1V

CRITICAL PART#	COMMENT
138S00139	0201,3uF@1V

CRITICAL PART#	COMMENT
138S00146	0402,5.1uF@3V

CRITICAL PART#	COMMENT
138S00141	0201,1.1uF@3V

Global Ferrites

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
155S00194	155S0610	BOM_TABLE_ALTS	ALL	FERR BD, 1500HM, TDE
155S00200	155S0610	BOM_TABLE_ALTS	ALL	FERR BD, 1500HM, TY

CRITICAL PART#	COMMENT
155S0610	FERR BD, 1500HM, 01005

Global R/C Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
118S0764	118S0717	BOM_TABLE_ALTS	ALL	RES, 3.92K, 0.1%, E001
138S0648	138S0652	BOM_TABLE_ALTS	ALL	CAP,XSR,4.7UF,4.3V,5.03MM,0101,TOSHCO
138S0739	138S0706	BOM_TABLE_ALTS	ALL	CAP,CER,XSR,0.22UF,20%,6.3V,20%
132S0436	132S0400	BOM_TABLE_ALTS	ALL	CAP,CER,XSR,0.22UF,20%,6.3V,01005
138S00049	138S0831	BOM_TABLE_ALTS	ALL	CAP,CER,XSR,2.2UF,20%,6.3V,0201

CRITICAL PART#	COMMENT
118S0717	RES, 3.92K, 0.1%, 0201
138S0652	CAP,XSR,4.7UF,6.3V,0.65MM,0402
138S0706	CAP,CER,XSR,0.22UF,20%,6.3V,20%
132S0400	CAP,CER,XSR,0.22UF,20%,6.3V,01005
138S0831	CAP,CER,XSR,2.2UF,20%,6.3V,0201

Global Inductors

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152S00710	152S00617	BOM_TABLE_ALTS	ALL	IND,MLD,0.1UH,20%,6.1A,2990HM,H=65,1608
152S00712	152S00620	BOM_TABLE_ALTS	ALL	IND,MLD,0.1UH,20%,7.2A,1790HM,H=0.8,2012
152S00713	152S00621	BOM_TABLE_ALTS	ALL	IND,MLD,0.47UH,20%,3.5A,53MM,H=65,2012
152S00714	152S00622	BOM_TABLE_ALTS	ALL	IND,MLD,1.0UH,20%,2.1A,100MM,H=65,2012
152S00716	152S00626	BOM_TABLE_ALTS	ALL	IND,MLD,1.5UH,20%,1.1A,160MM,H=65,2012
152S00717	152S00631	BOM_TABLE_ALTS	ALL	IND,MLD,1.5UH,20%,2.5A,78MM,H=0.8,2012
152S00718	152S00632	BOM_TABLE_ALTS	ALL	IND,MLD,1.0UH,20%,1.2A,60MM,H=0.8,2016
152S00720	152S00640	BOM_TABLE_ALTS	ALL	IND,MLD,0.47UH,3.8A,55MM,H=0.65MM,2012
152S00721	152S00641	BOM_TABLE_ALTS	ALL	IND,MLD,0.47UH,4A,48MM,H=0.8MM,2012
152S00715	152S00623	BOM_TABLE_ALTS	ALL	IND,MLD,1UH,3.6A,60MM,H=0.8MM,2016
152S00653	152S00651	BOM_TABLE_ALTS	ALL	IND,1.2OH,3A,2016,0.65Z
152S00649	152S00650	BOM_TABLE_ALTS	L3340,L3341	IND,0.47UH,6.6A,3225,0.8Z

CRITICAL PART#	COMMENT
152S00617	IND,MLD,0.1UH,20%,6.1A,2990HM,H=65,1608
152S00620	IND,MLD,0.1UH,20%,7.2A,1790HM,H=0.8,2012
152S00621	IND,MLD,0.47UH,20%,3.5A,53MM,H=65,2012
152S00622	IND,MLD,1.0UH,20%,2.1A,100MM,H=65,2012
152S00626	IND,MLD,1.5UH,20%,1.1A,160MM,H=65,2012
152S00631	IND,MLD,1.0UH,20%,2.5A,78MM,H=0.8,2012
152S00632	IND,MLD,1.0UH,20%,3.2A,60MM,H=0.8,2016
152S00640	IND,MLD,0.47UH,3.8A,55MM,H=0.65MM,2012
152S00641	IND,MLD,0.47UH,4A,48MM,H=0.8MM,2012
152S00623	IND,MLD,1UH,3.6A,60MM,H=0.8MM,2016
152S00651	IND,1.2OH, 3A, 2016, 0.65Z
152S00650	IND,0.47UH,6.6A,3225,0.8Z

XTAL Alternate

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
197S0612	197S0446	BOM_TABLE_ALTS	Y1000	XTAL, 24M, 1612

CRITICAL PART#	COMMENT
197S0446	XTAL, 24M, 1612

Multi-Vendor Criticals

CRITICAL PART#	COMMENT
377S0106	SUPPR,TRANS,VARIATOR,12V,33PF,01005
197S0446	XTAL,24MHZ,30PPM,9.5PF,60 OHM MAX,1612
155S0576	FERR BD,10 OHM,50A,750MA,0.07 DCR,01005
155S00168	FLTR,NOISE,65 OHMZ,3.4OHM,0.7-2GHZ,0605
138S0979	CAP,CER,XSR,10UF,20%,10V,0402,H=0.65MM
138S0692	CAP,CER,XSR,1UF,20%,6.3V,0201
138S0683	CAP,CER,XSR,1UF,10%,25V,0402
138S0652	CAP,CER,XSR,4.7UF,20%,6.3V,H=0.65MM,0402
138S00070	CAP,XSR,4.7UF,20%,25V,0402
138S00014	CAP,CER,1UF,20%,16V,XSR,0201,H=0.39MM
132S0664	CAP,CER,0.047UF,10%,25V,XSR,0201
132S0663	CAP,CER,XSR,1UF,10%,25V,0402
132S0534	CAP,CER,XSR,0.1UF,10%,25V,0201
132S0436	CAP,CER,XSR,0.22UF,20%,6.3V,01005
132S0396	CAP,CER,XSR,1000PF,10%,10V,01005
132S0316	CAP,CER,XSR,0.1UF,20%,6.3V,01005
132S0304	CAP,CER,XSR,0.22UF,20%,6.3V,0201
132S0296	CAP,CER,XSR,1000PF,10%,6.3V,01005
132S0318	CAP,CER,XSR,820PF,10%,10V,01005

CRITICAL PART#	COMMENT
132S0288	CAP,CER,XSR,0.1UF,10%,16V,0201
132S0275	CAP,CER,XSR,470PF,10%,10V,01005
132S0249	CAP,CER,X7R,220PF,10%,10V,01005
132S0245	CAP,CER,XSR,0.01UF,10%,6.3V,01005
132S00093	CAP,XSR,0.022UF,20%,6.3V,01005
132S00025	CAP,CER,XSR,0.047UF,20%,6.3V,01005
132S00008	CAP,CER,0.1UF,10%,50V,X7R,0402
131S0883	CAP,CER,NP0/COG,220PF,2A,50V,0201
131S0804	CAP,CER,27PF,5A,COG,25V,0201
131S0307	CAP,CER,NP0/COG,100PF,5A,16V,01005
131S0225	CAP,CER,NP0/COG,15PF,5A,16V,01005
131S0223	CAP,CER,NP0/COG,27PF,5A,16V,01005
131S0220	CAP,CER,NP0/COG,12PF,5A,16V,01005
131S0216	CAP,CER,NP0/COG,47PF,5A,16V,01005
131S00053	CAP,CER,COG,220PF,5A,10V,01005
116S00068	RES,NF,1.3 MOHM,14,200PF,1/20W,0201
117S0055	RES,NF,1/20W,2K OHM,5,0201,SMD
107S0257	THERMISTOR,NTC,10K OHM,1A,B=3435,01005

Soft-Term Cap Sub BOMs

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
68S-00155	1	SUBBOM,MLB_TOP,CAP,TYPICAL,XB91	SUBBOM_CAP	CRITICAL	COMMON

Agnes Input

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	4	CAP,SOFT-TERM,2.2UF,6.3V,0201,KYOCERA	C2970,C2971,C2980,C2981	CRITICAL	SOFT_CAP
138S0831	4	CAP,TYPICAL,2.2UF,6.3V,0201,NEBRATA	C2970,C2971,C2980,C2981	CRITICAL	TYPICAL_CAP

Agnes Output

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	9	CAP,SOFT-TERM,2.2UF,6.3V,0201,KYOCERA	C3602,C3622	CRITICAL	SOFT_CAP
138S0831	9	CAP,TYPICAL,2.2UF,6.3V,0201,NEBRATA	C3602,C3622	CRITICAL	TYPICAL_CAP

Sensors

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	2	CAP,SOFT-TERM,2.2UF,6.3V,0201,KYOCERA	C3602,C3622	CRITICAL	SOFT_CAP
138S0831	2	CAP,TYPICAL,2.2UF,6.3V,0201,NEBRATA	C3602,C3622	CRITICAL	TYPICAL_CAP

RCAM B2Bs

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	3	CAP,SOFT-TERM,2.2UF,6.3V,0201,KYOCERA	C3909,C3925,C4025	CRITICAL	SOFT_CAP
138S0831	3	CAP,TYPICAL,2.2UF,6.3V,0201,NEBRATA	C3909,C3925,C4025	CRITICAL	TYPICAL_CAP

Strobe B2B

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	1	CAP,SOFT-TERM,2.2UF,6.3V,0201,KYOCERA	C4303	CRITICAL	SOFT_CAP
138S0831	1	CAP,TYPICAL,2.2UF,6.3V,0201,NEBRATA	C4303	CRITICAL	TYPICAL_CAP

Audio

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	2	CAP,SOFT-TERM,2.2UF,6.3V,0201,KYOCERA	C4809,C4805	CRITICAL	SOFT_CAP
138S0831	2	CAP,TYPICAL,2.2UF,6.3V,0201,NEBRATA	C4809,C4805	CRITICAL	TYPICAL_CAP

Pearl B2B

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	1	CAP,SOFT-TERM,2.2UF,6.3V,0201,KYOCERA	C4613	CRITICAL	SOFT_CAP
138S0831	1	CAP,TYPICAL,2.2UF,6.3V,0201,NEBRATA	C4613	CRITICAL	TYPICAL_CAP

Acorn

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00160	2	CAP,SOFT-TERM,10UF,10V,0402,NEBRATA	C5641,C5653	CRITICAL	SOFT_CAP
138S0979	2	CAP,TYPICAL,10UF,10V,0402,NEBRATA	C5641,C5653	CRITICAL	TYPICAL_CAP


CODEC

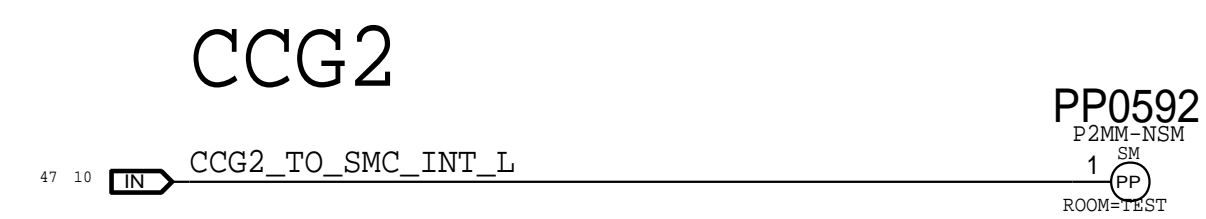
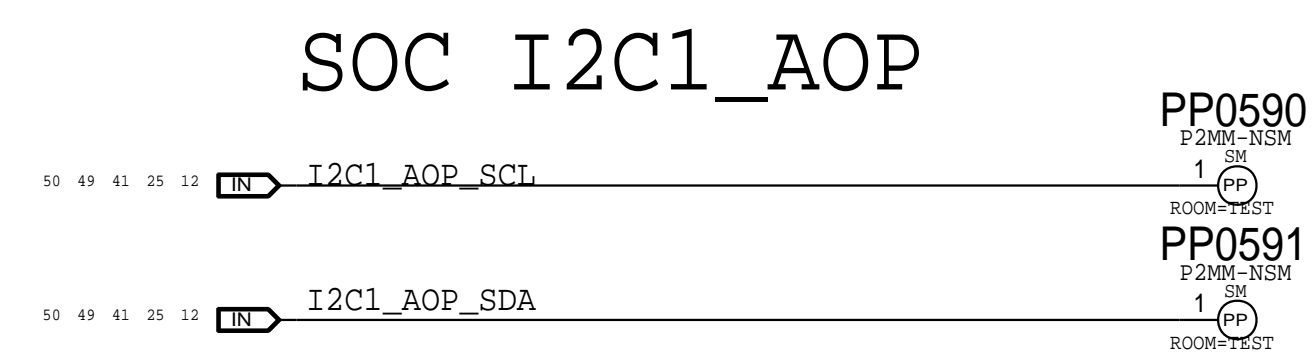
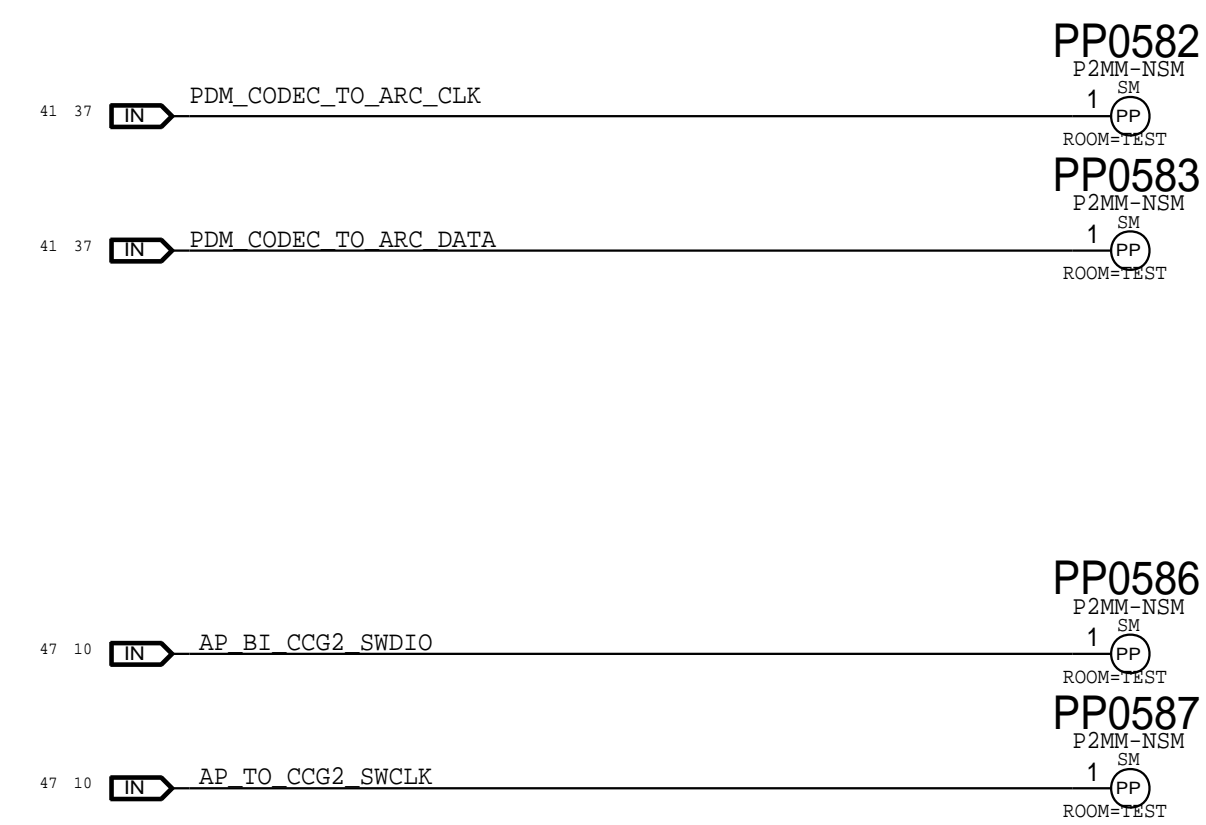
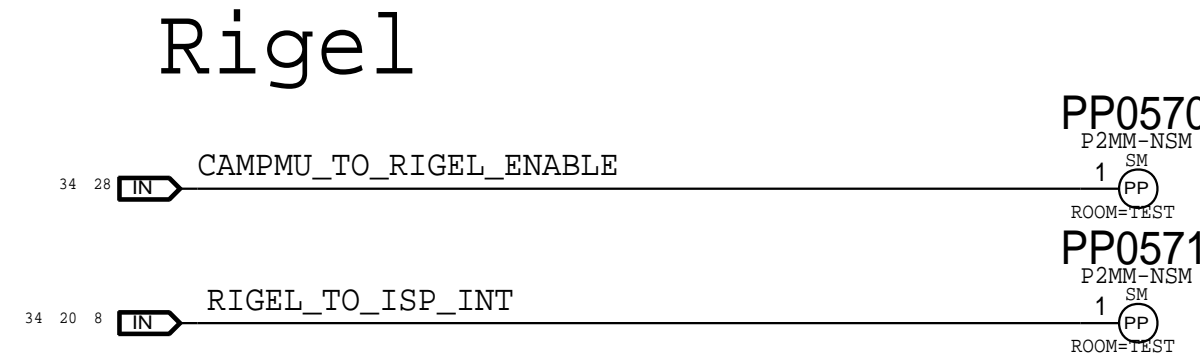
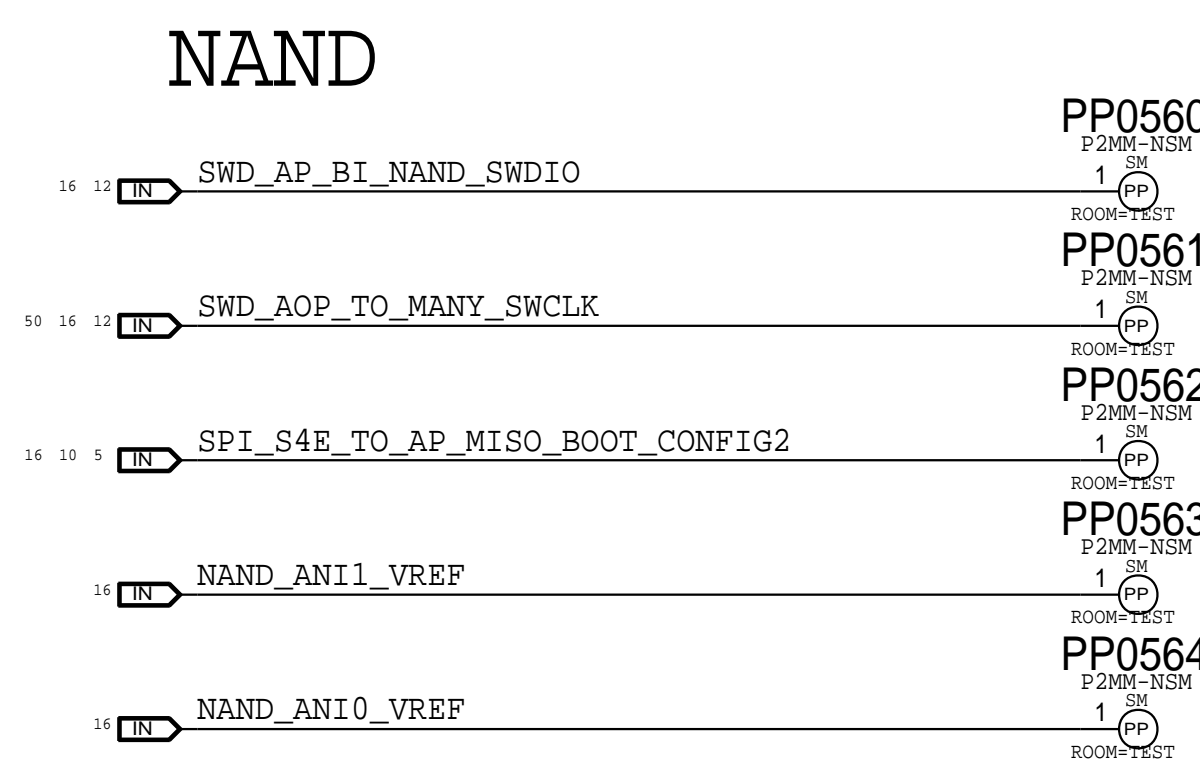
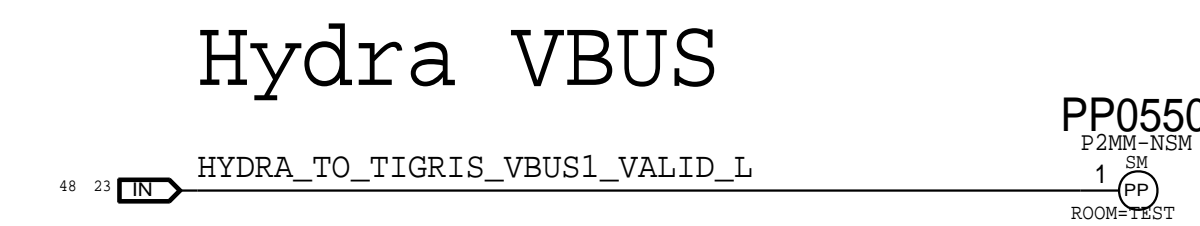
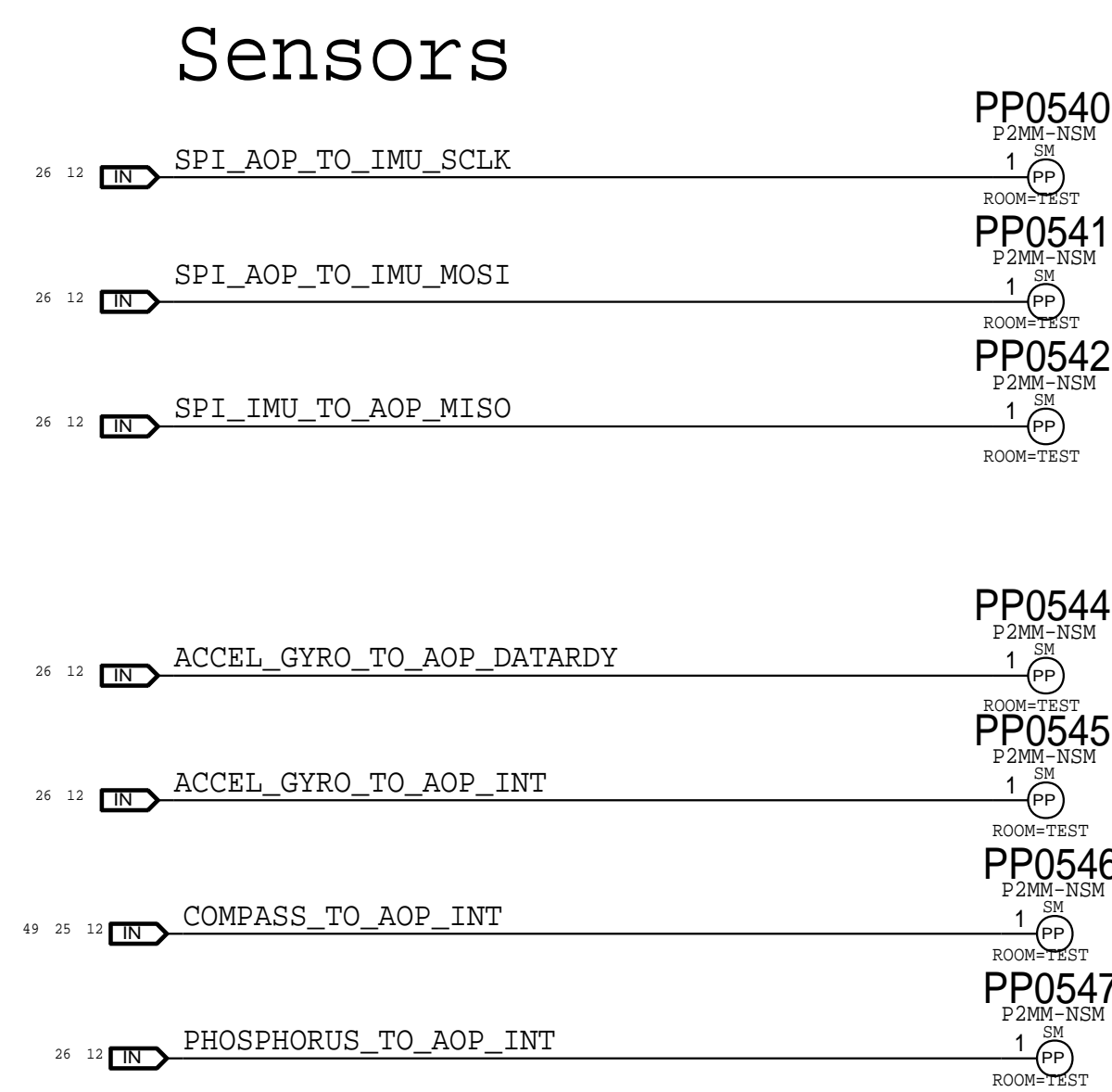
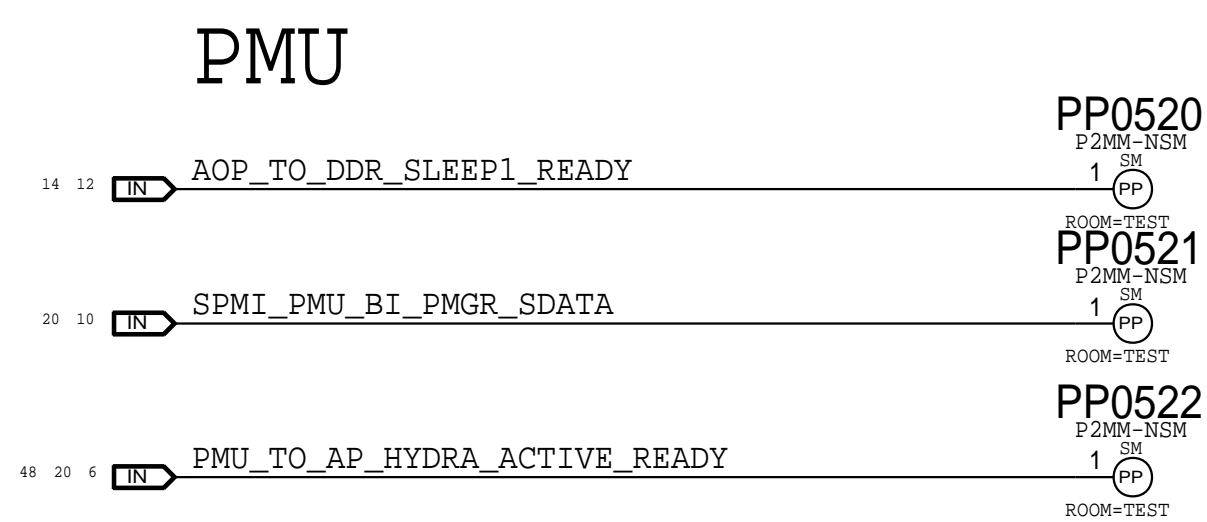
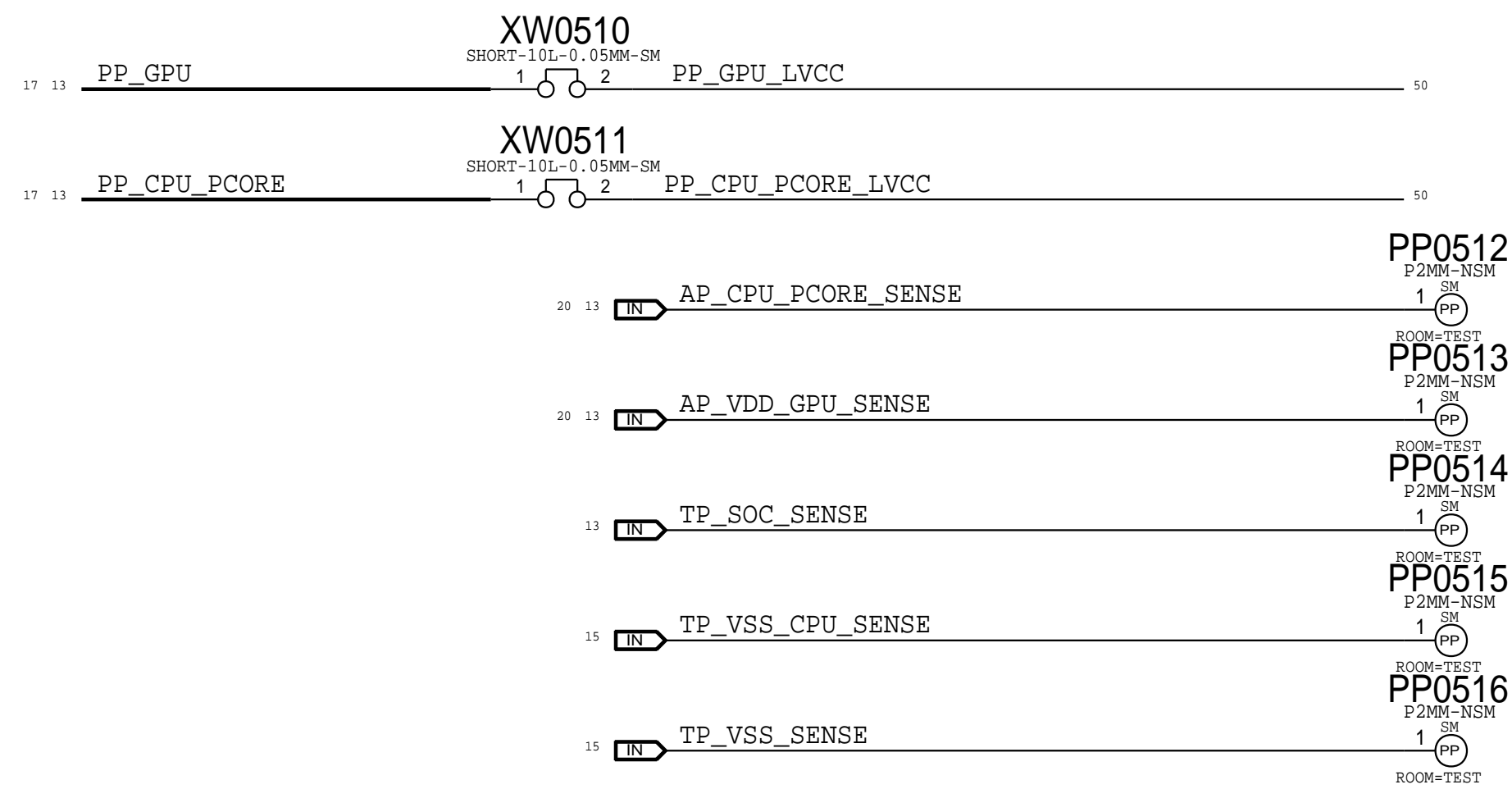
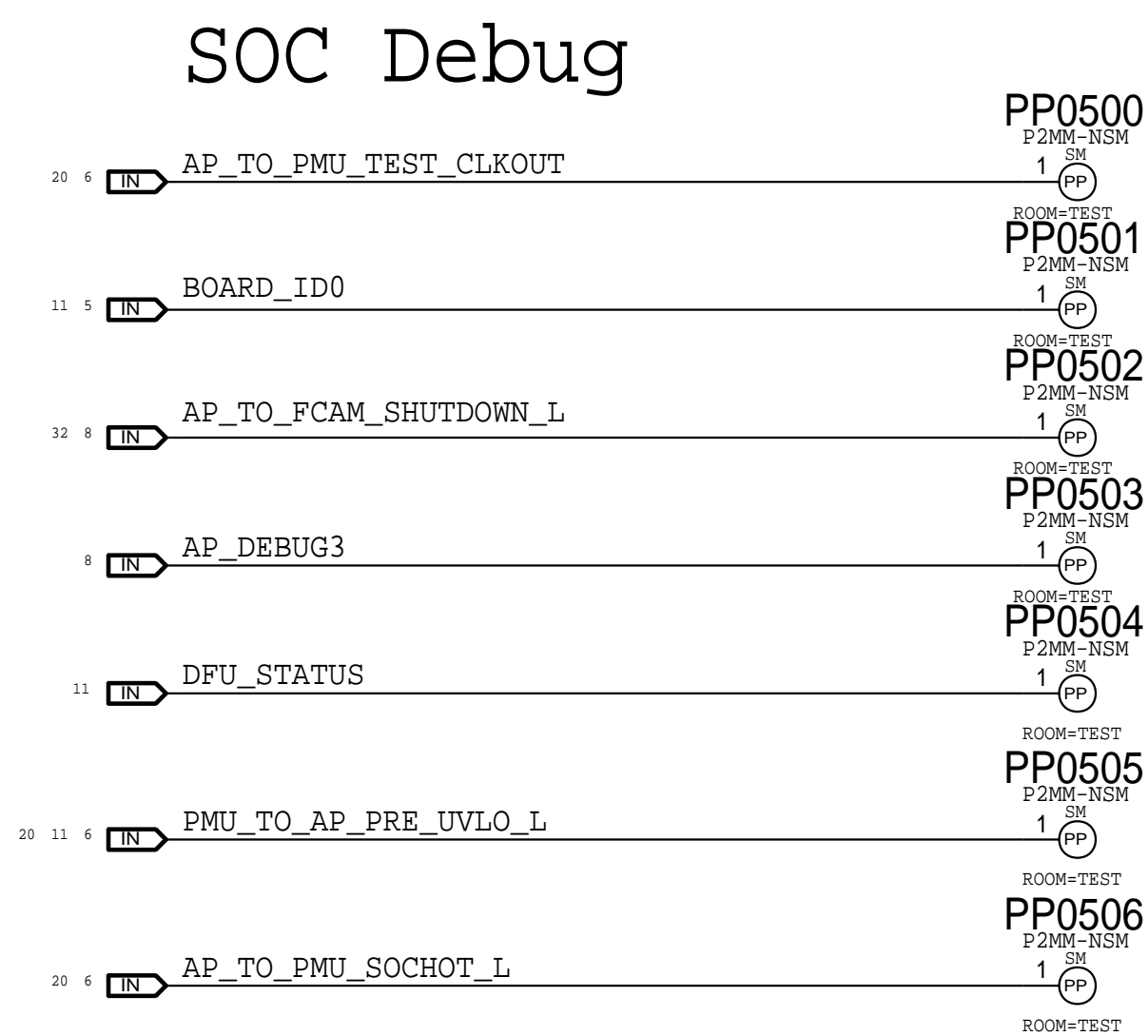
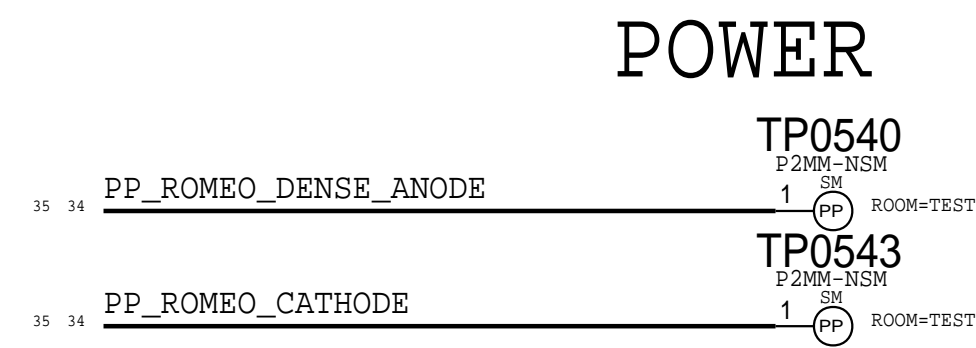
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00160	2	CAP,SOFT-TERM,10UF,10V,0402,NEBRATA	C4811,C4808	CRITICAL	SOFT_CAP
138S0979	2	CAP,TYPICAL,10UF,10V,0402,NEBRATA	C4811,C4808	CRITICAL	TYPICAL_CAP


Ansel

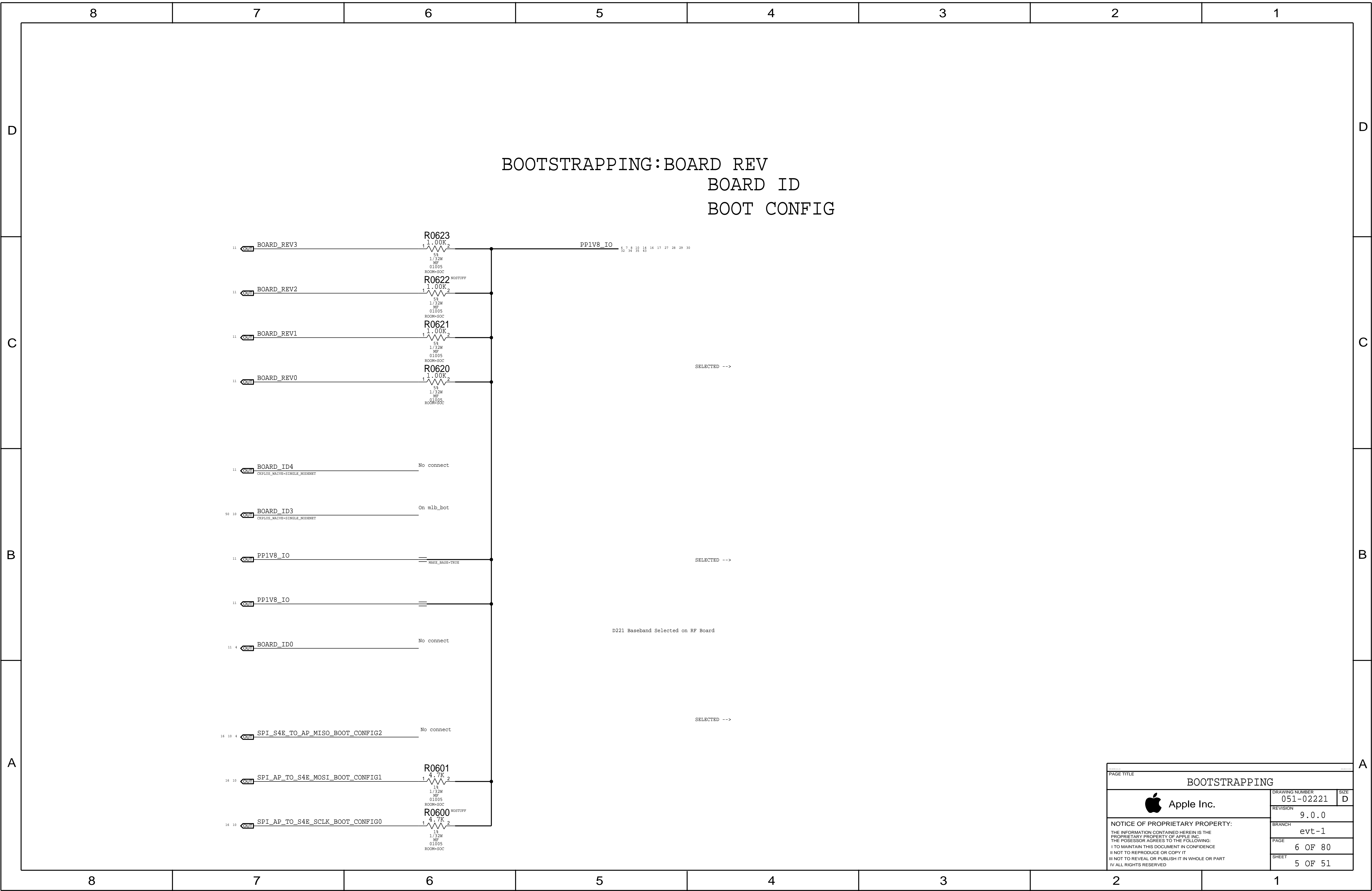
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00160	1	CAP,SOFT-TERM,10UF,10V,0402,NEBRATA	C3710	CRITICAL	SOFT_CAP
138S0979	1	CAP,TYPICAL,10UF,10V,0402,NEBRATA	C3710	CRITICAL	TYPICAL_CAP


PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
68S-00156	68S-00155	BOM_TABLE_ALTS	SUBBOM_CAP	SUBBOM,MLB_TOP,CAP,SOFT,XB91

PAGE TITLE			
SYSTEM:BOM Tables			
 Apple Inc.		DRAWING NUMBER	051-02221
		REVISION	9.0.0
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 I NOT TO REPRODUCE OR COPY IT I NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		BRANCH	evt-1
		PAGE	2 OF 80
		SHEET	2 OF 51

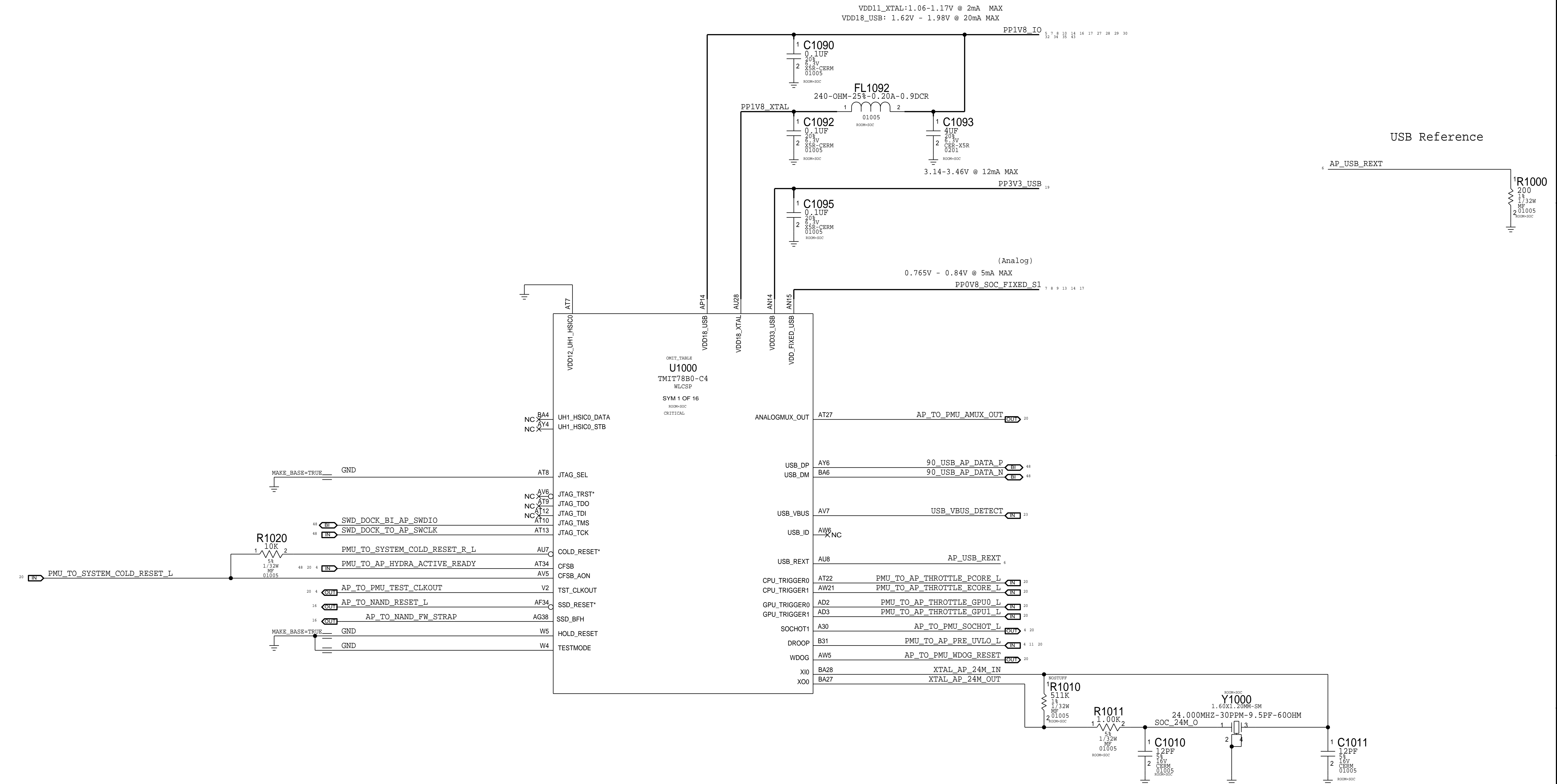



PAGE TITLE			
SYSTEM: Testpoints (Top)			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02221		D
	REVISION		
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		9.0.0	
		BRANCH	
		evt-1	
		PAGE	
		5 OF 80	
		SHEET	
		4 OF 51	



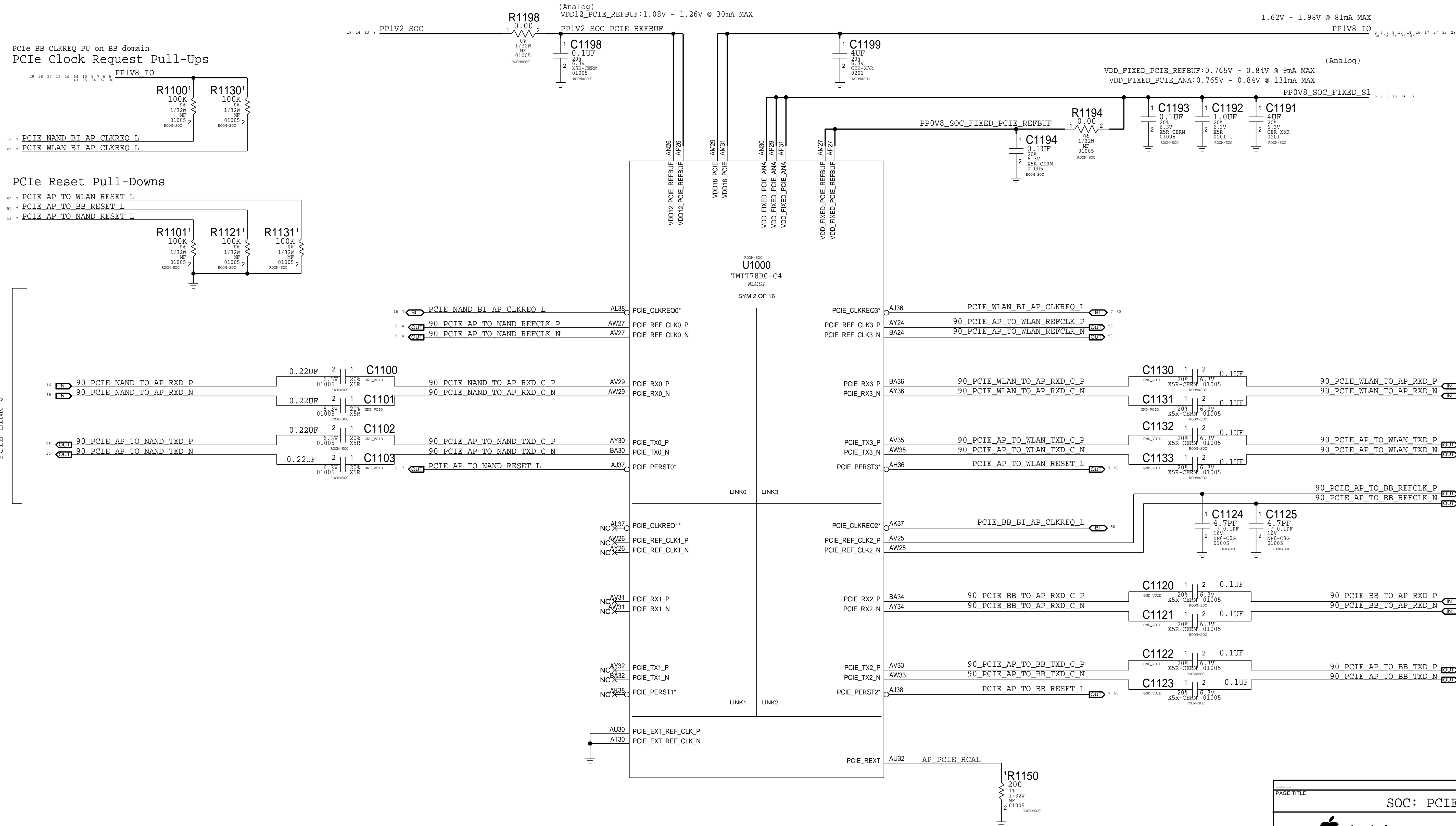
PAGE TITLE		
BOOTSTRAPPING		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
	BRANCH	evt-1
	PAGE	6 OF 80
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		SHEET 5 OF 51


SOC - USB, JTAG, XTAL



PAGE TITLE			
SOC: JTAG,USB,XTAL			
 Apple Inc.	DRAWING NUMBER 051-02221		SIZE D
	REVISION 9.0.0		
	BRANCH evt-1		
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 10 OF 80	
		SHEET 6 OF 51	

SOC - PCIE INTERFACES



PAGE TITLE		DRAWING NUMBER		SIZE
 Apple Inc.		051-02221		D
		REVISION		
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		DRAWING NUMBER		
		051-02221		
		REVISION		
		DRAWING NUMBER		
		051-02221		
		REVISION		
		DRAWING NUMBER		
		051-02221		
		REVISION		

This diagram illustrates the SOC - MIPI & ISP interfaces, showing the connection between the SOC and the ISP, including the MIPI Reference and the MIPI Lane & Polarity Swapping.

MIPI Lane & Polarity Swapping

The diagram shows the connection between the SOC and the ISP, including the MIPI Reference and the MIPI Lane & Polarity Swapping. The SOC is connected to the ISP via the MIPI interface, and the MIPI Reference is used to ensure proper signal levels and timing.

MIPI Reference

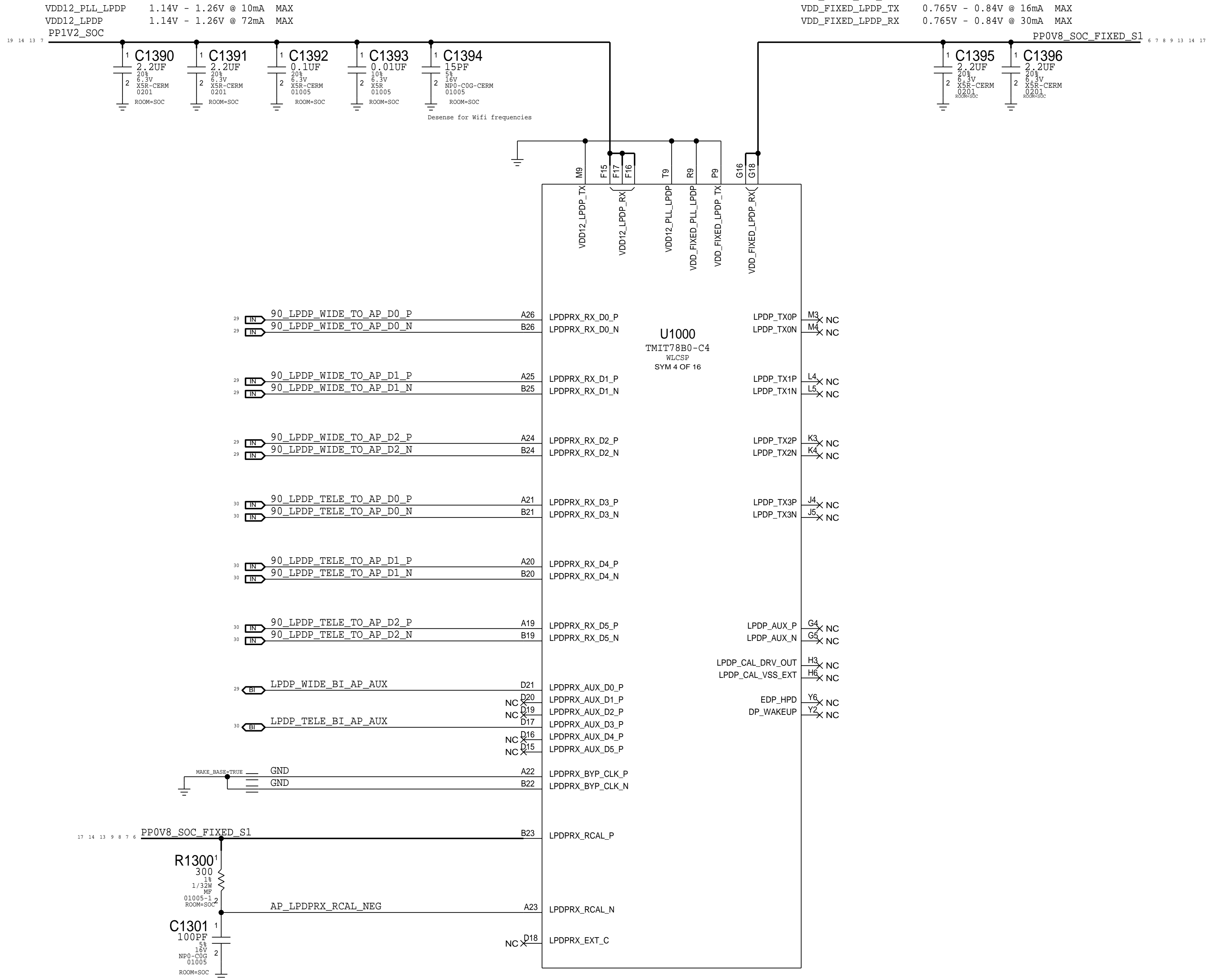
The MIPI Reference section shows the connection between the SOC and the ISP, including the MIPI Reference and the MIPI Lane & Polarity Swapping. The SOC is connected to the ISP via the MIPI interface, and the MIPI Reference is used to ensure proper signal levels and timing.


MIPI Lane & Polarity Swapping

The diagram shows the connection between the SOC and the ISP, including the MIPI Reference and the MIPI Lane & Polarity Swapping. The SOC is connected to the ISP via the MIPI interface, and the MIPI Reference is used to ensure proper signal levels and timing.

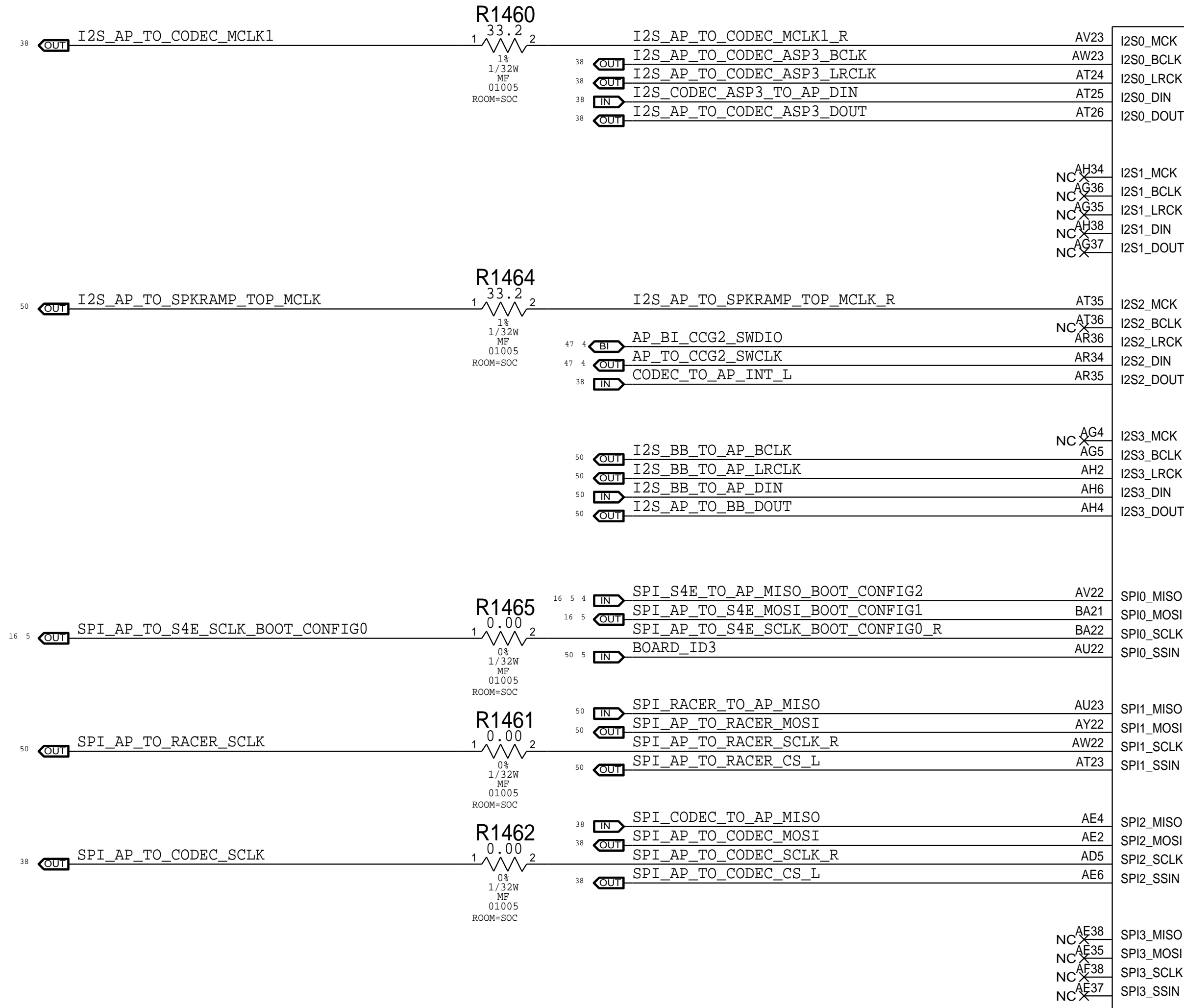
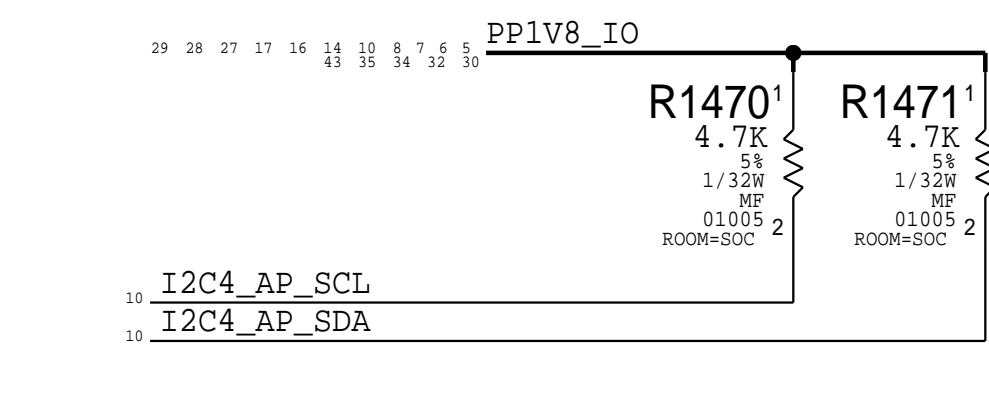
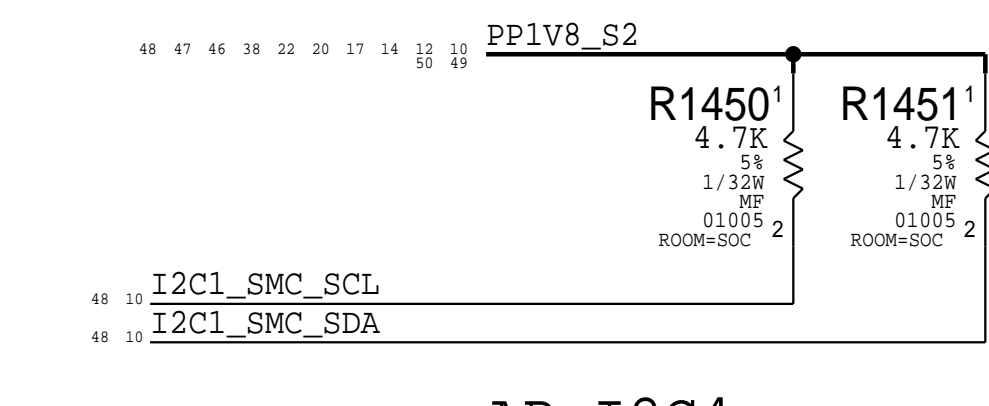
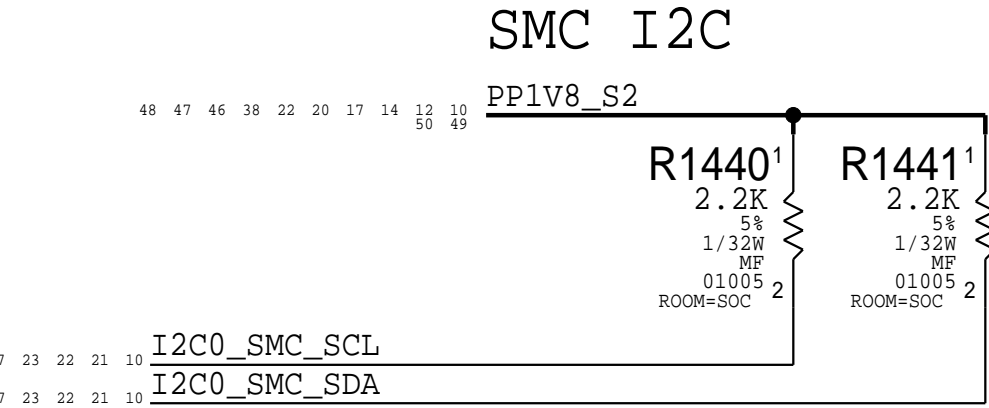
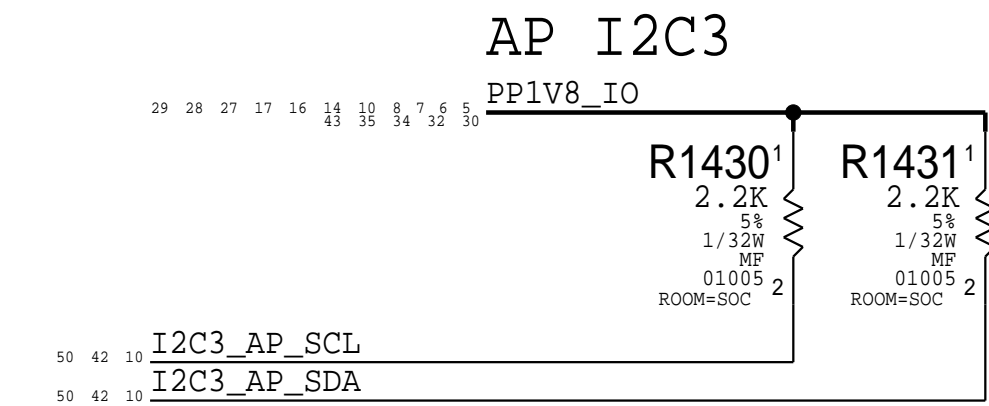
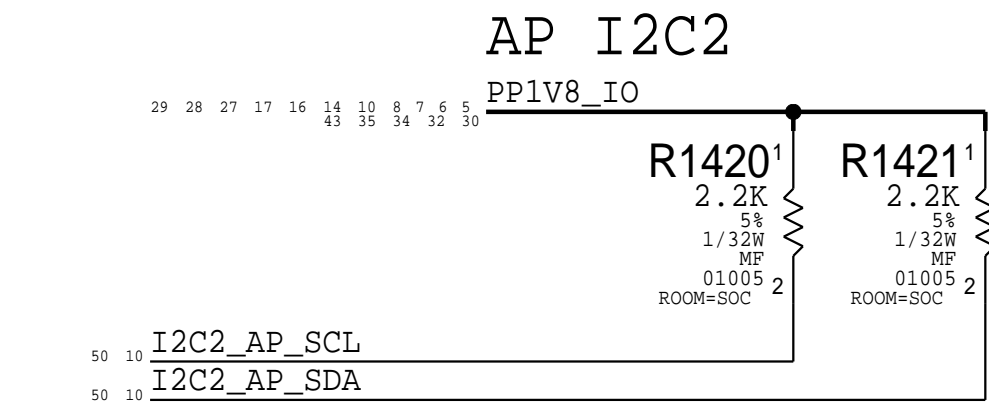
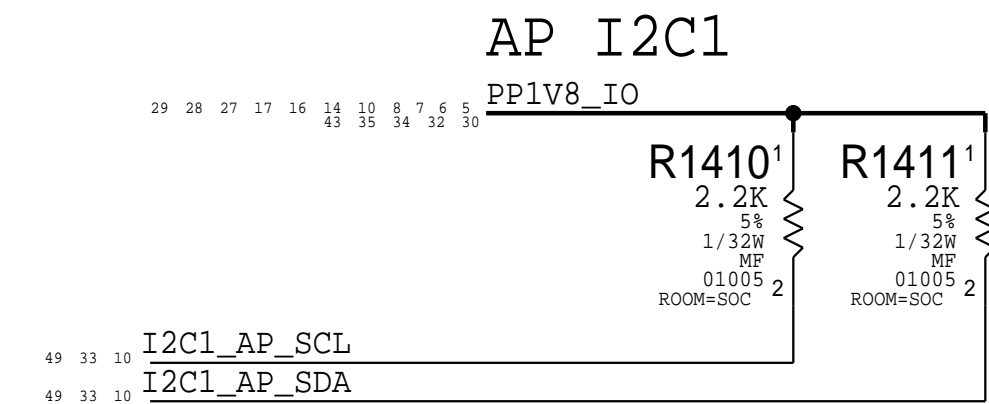
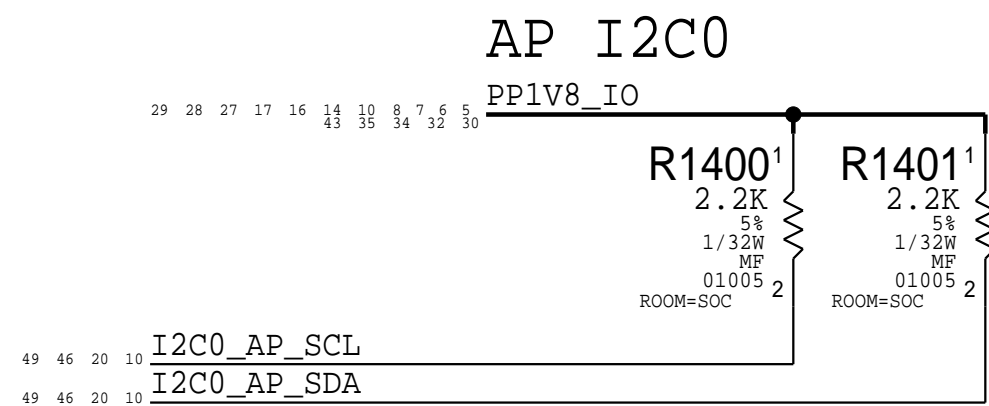
PDF Watermark Remover DEMO : Purchase from www.PDFWatermarkRemover.com to remove the watermark

SOC - LPDP

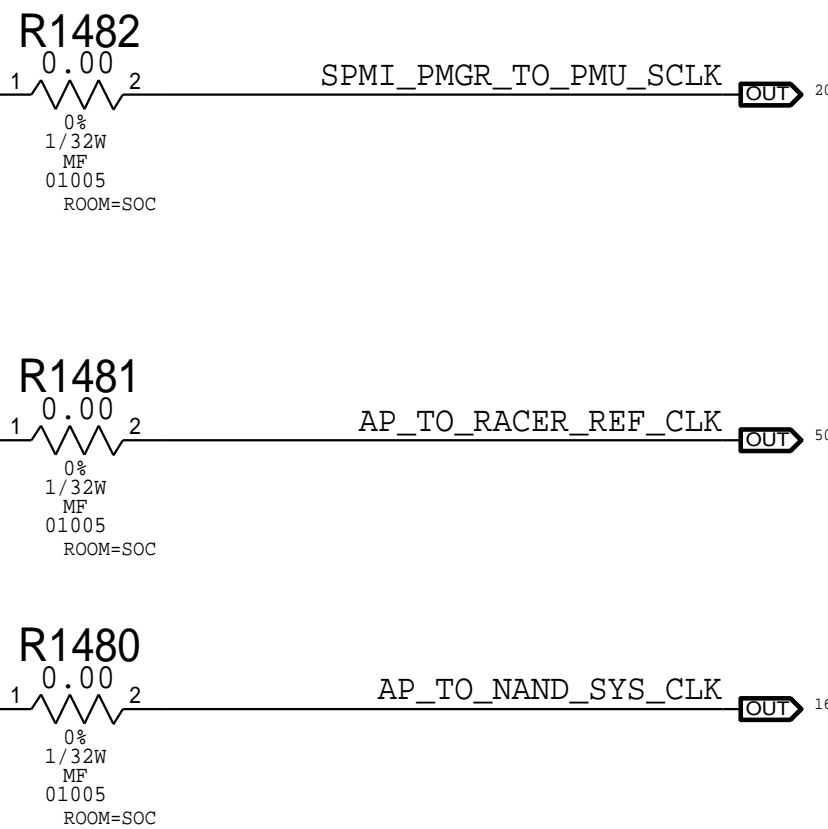
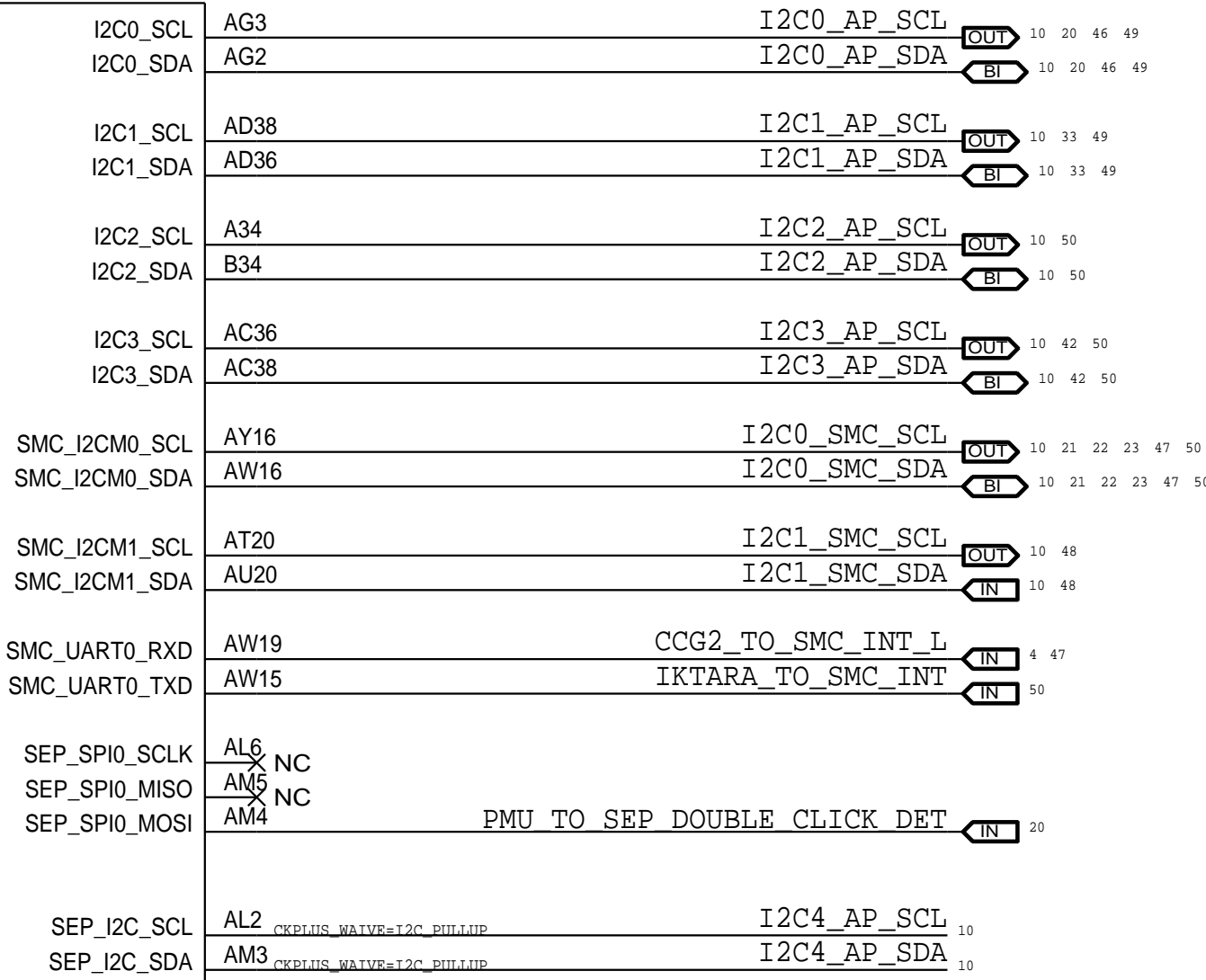


<div>Page Number</div>												<div>Revision Number</div>															
PAGE TITLE																											
SOC: LPDP																											
<div> Apple Inc.</div>												DRAWING NUMBER								SIZE							
												051-02221								D							
<div>NOTICE OF PROPRIETARY PROPERTY:</div> <div>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</div>												REVISION															
												9.0.0															
												BRANCH								evt-1							
												PAGE								13 OF 80							
												SHEET								9 OF 51							

SOC - SERIAL INTERFACES

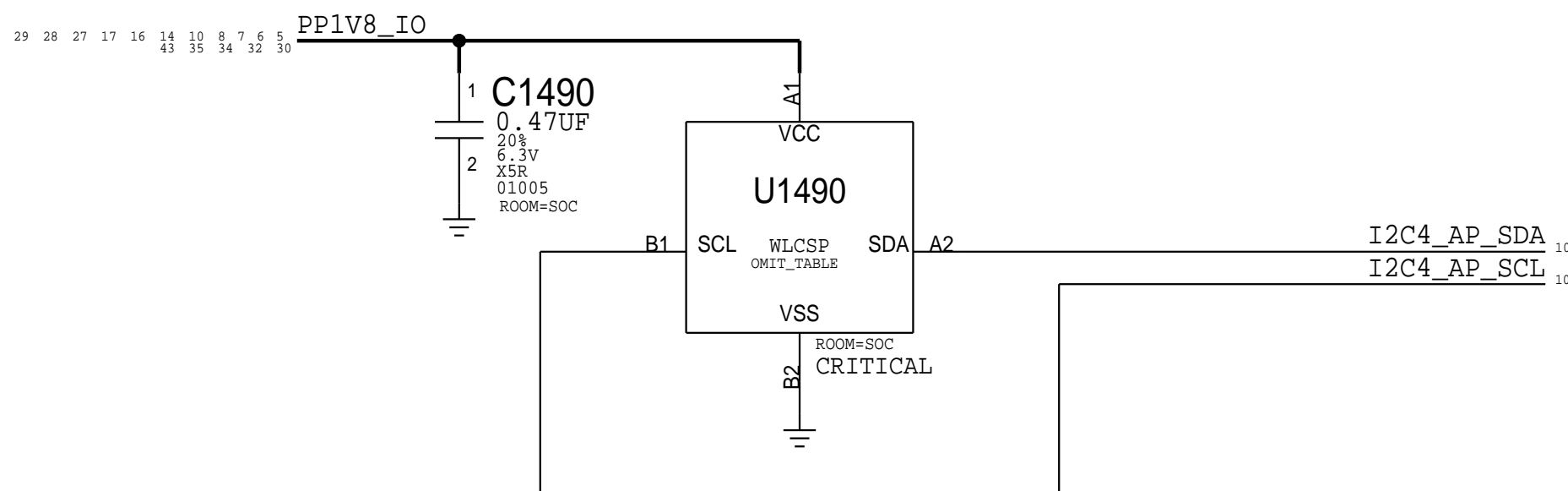


U1000
TMIT78B0-C4
WLCSP
SYM 6 OF 16
ROOM=SOC




SPI: Route as Daisy-Chain. No T's Allowed

Place series terminations close to SoC Pins



PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S00234	1	WLCSP	U1490	CRITICAL	COMMON

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S00233	335S00234	BOM_TABLE_ALTS	U1490	U1490

PAGE TITLE		
SOC: Serial		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
	BRANCH	evt-1
	PAGE	14 OF 80
NOTICE OF PROPRIETARY PROPERTY:		SHEET
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE I NOT TO REPRODUCE OR COPY IT I NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART I ALL RIGHTS RESERVED		10 OF 51

D



C

B

A

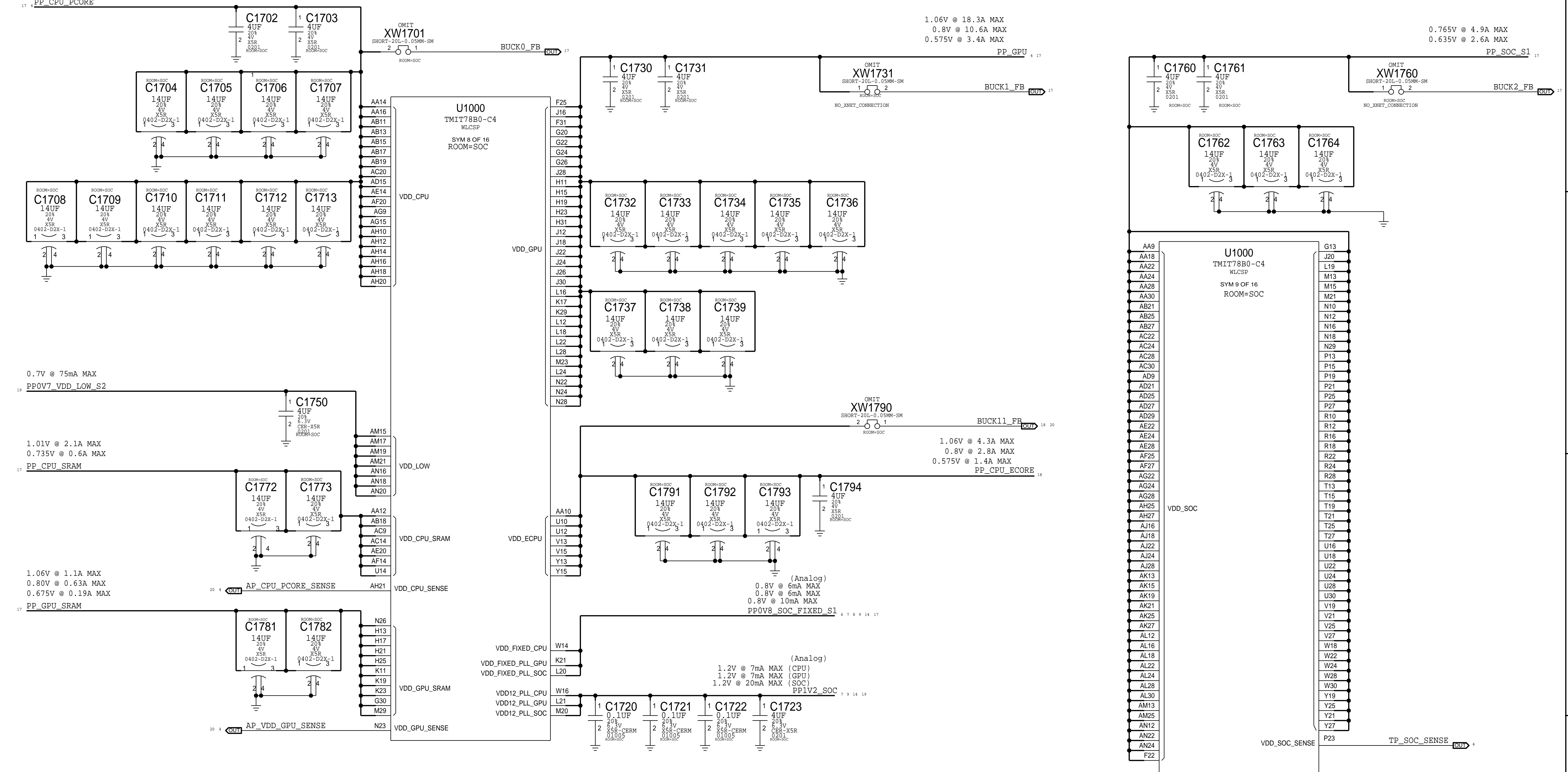
A

D

D

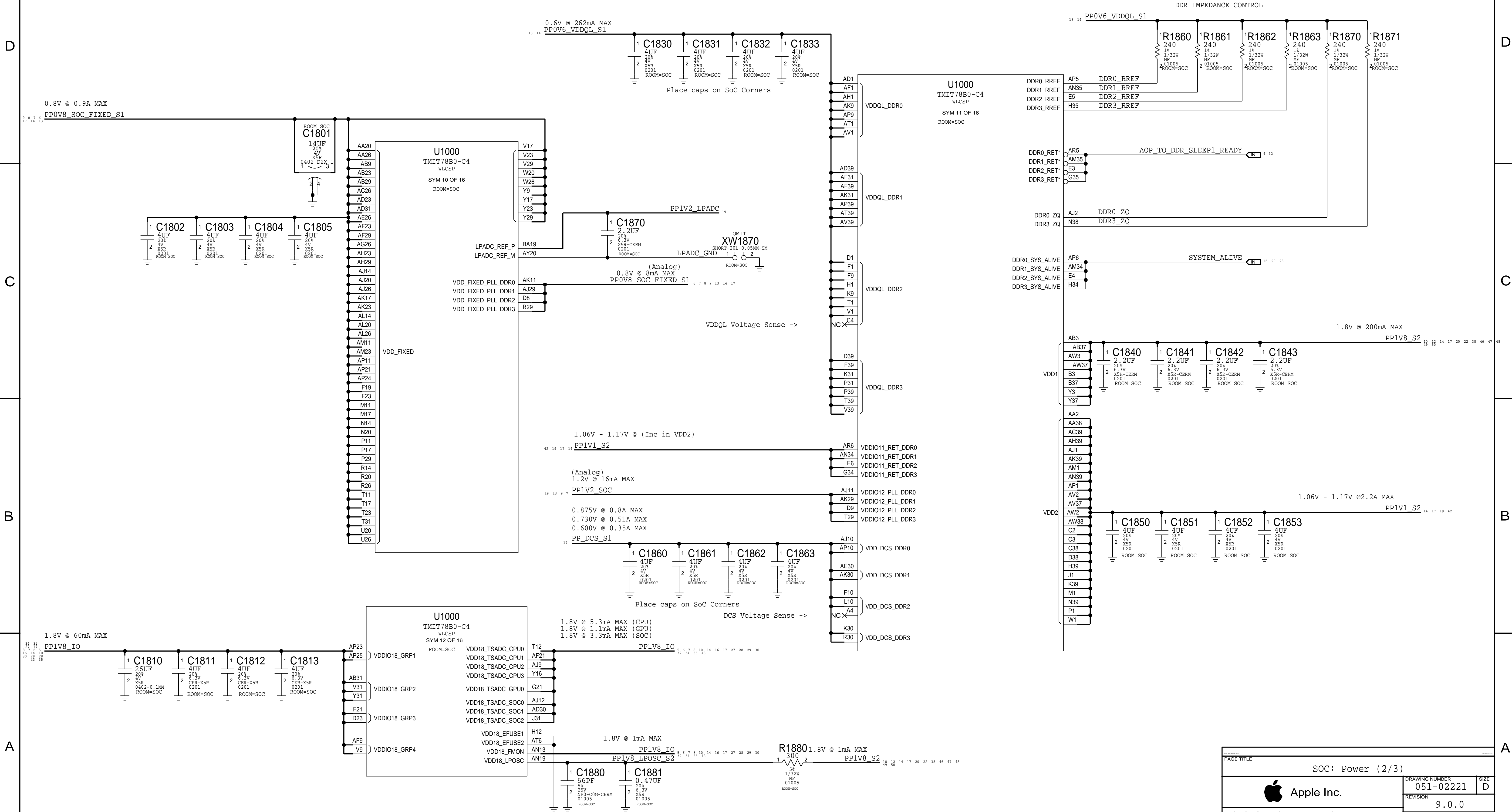
SOC - CPU, GPU & SOC RAILS

1.06V @ 11.0A MAX
0.8V @ 6A MAX
0.575V @ 2.7A MAX

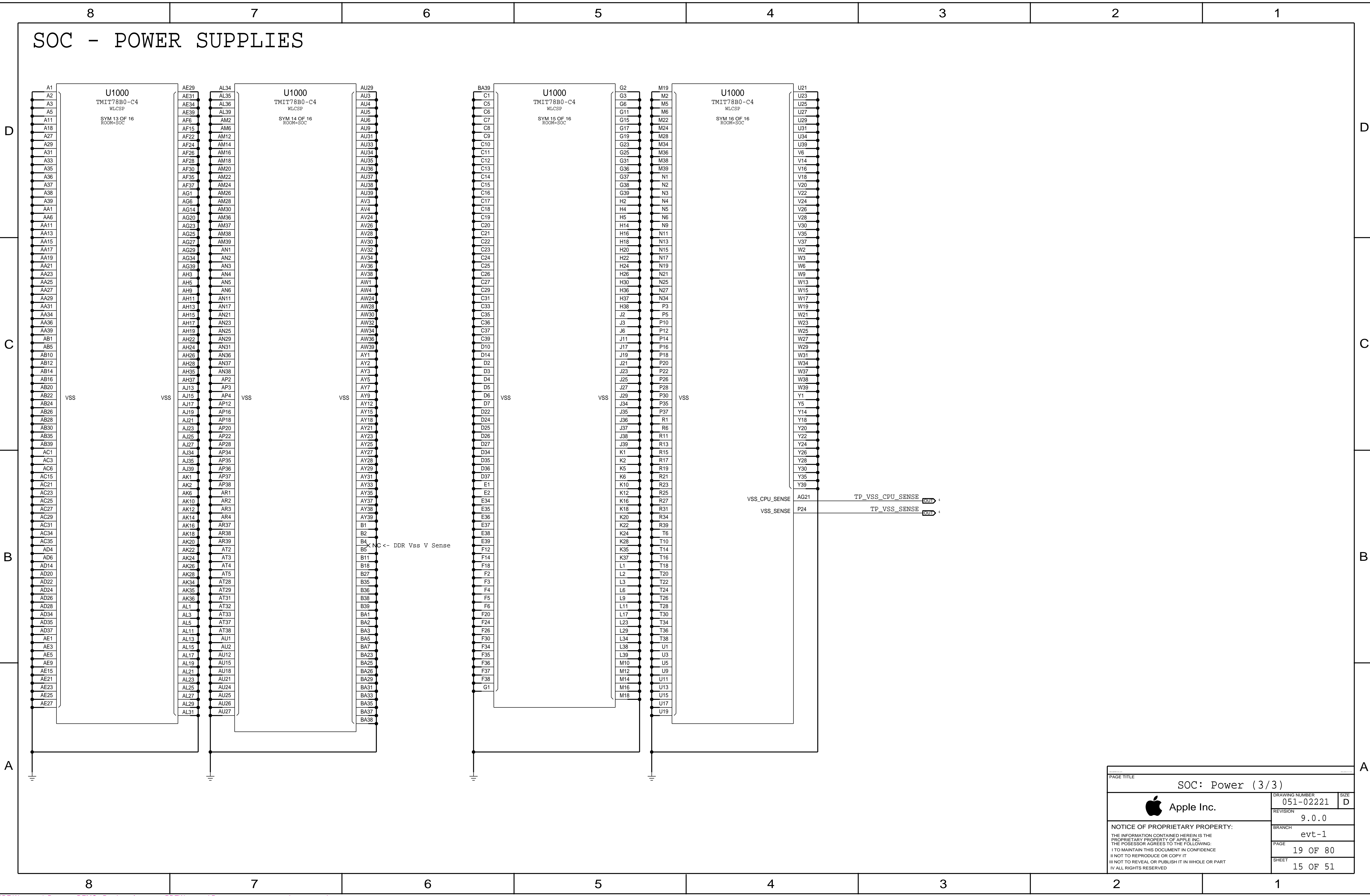



PAGE TITLE		
SOC: Power (1/3)		
	DRAWING NUMBER	051-02221
	REVISION	9.0.0
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE I NOT TO REPRODUCE OR COPY IT I NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	BRANCH	evt-1
	PAGE	17 OF 80
	SHEET	13 OF 51

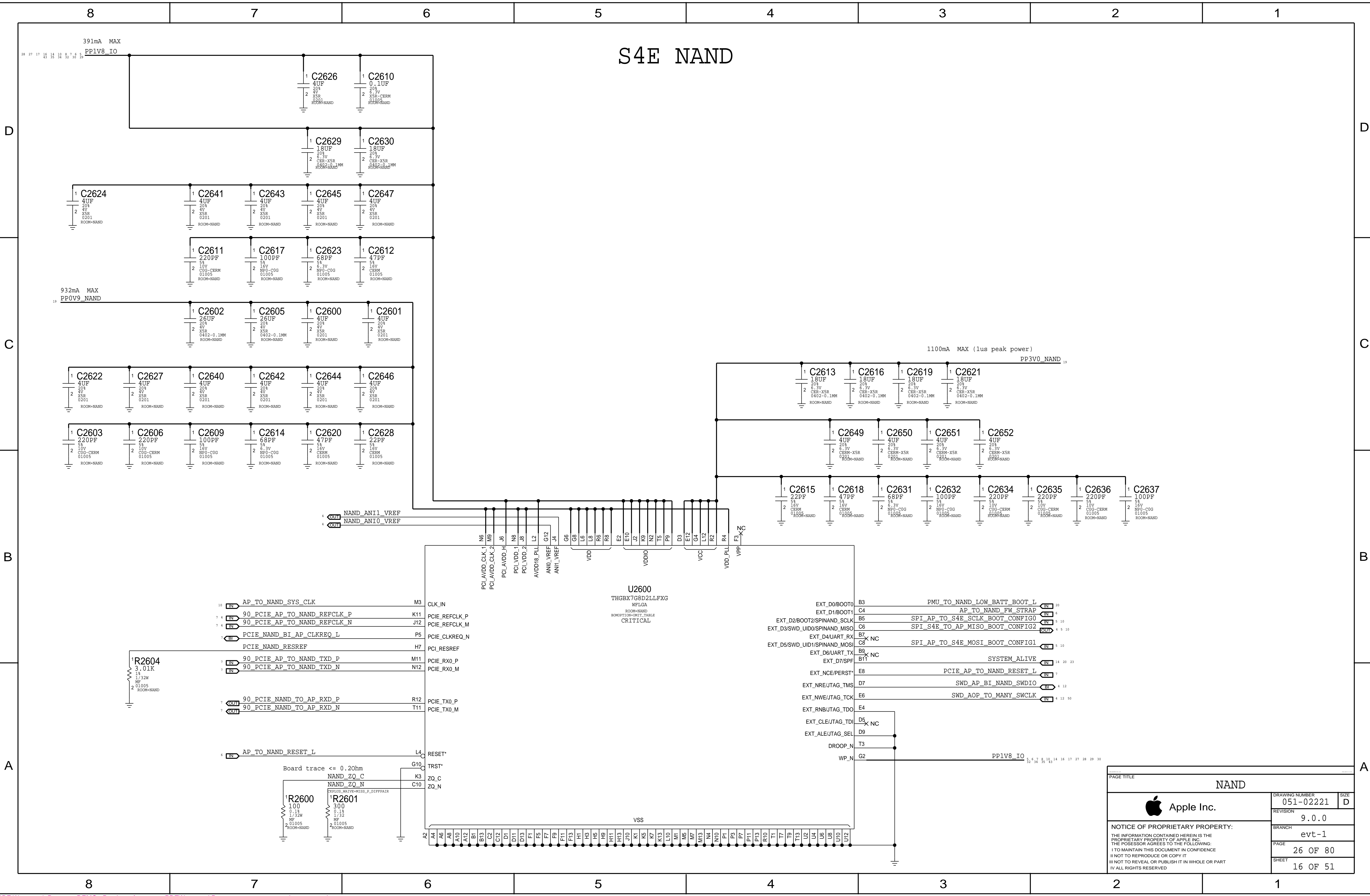
SOC - POWER SUPPLIES



SOC - POWER SUPPLIES



PAGE TITLE		
SOC: Power (3/3)		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
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	BRANCH	evt-1
	PAGE	19 OF 80
	SHEET	15 OF 51



PAGE TITLE		
NAND		
	DRAWING NUMBER	051-02221
	REVISION	9.0.0
	BRANCH	evt-1
	PAGE	26 OF 80
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		
SHEET		16 OF 51



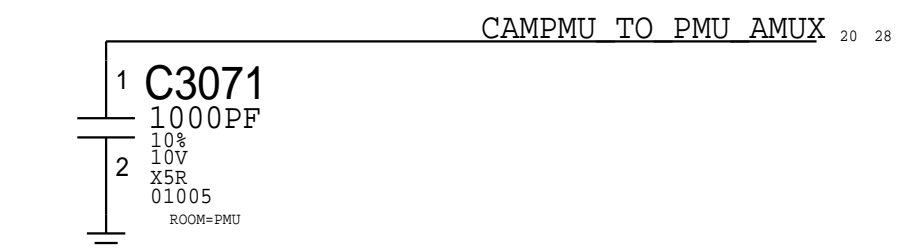
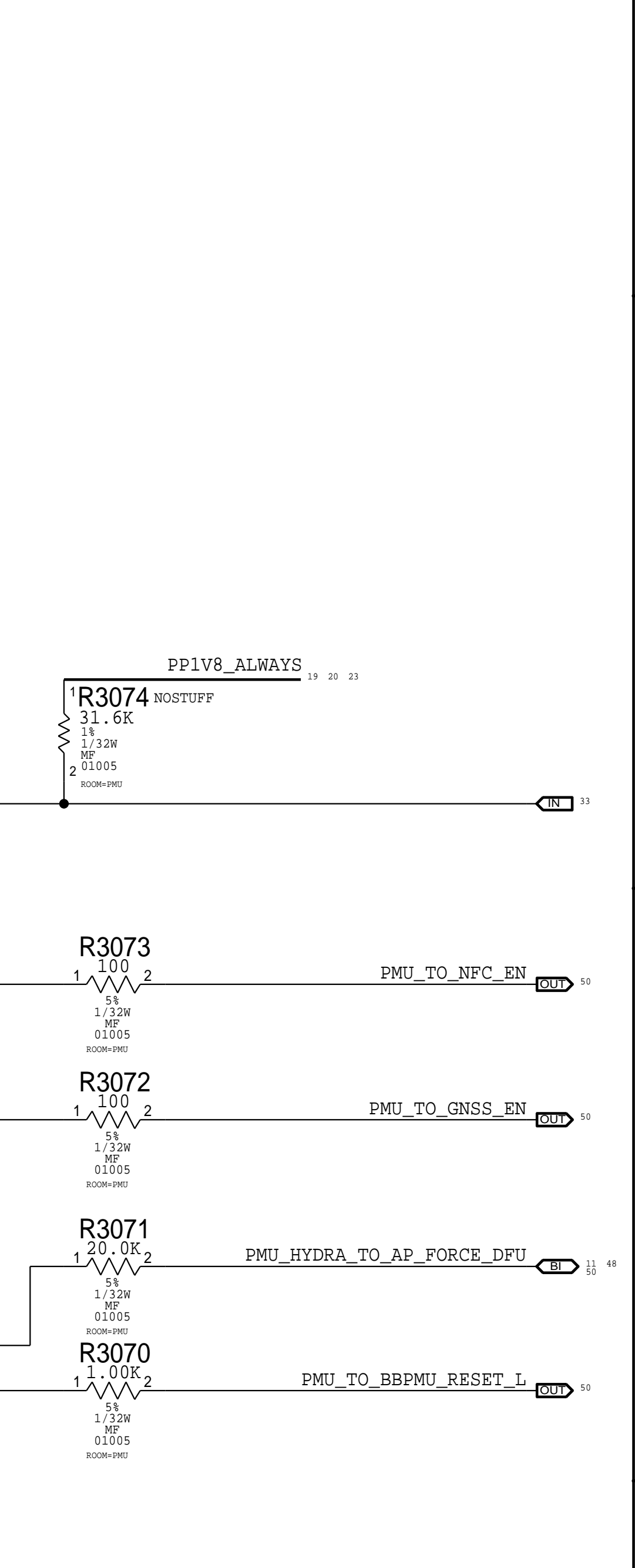
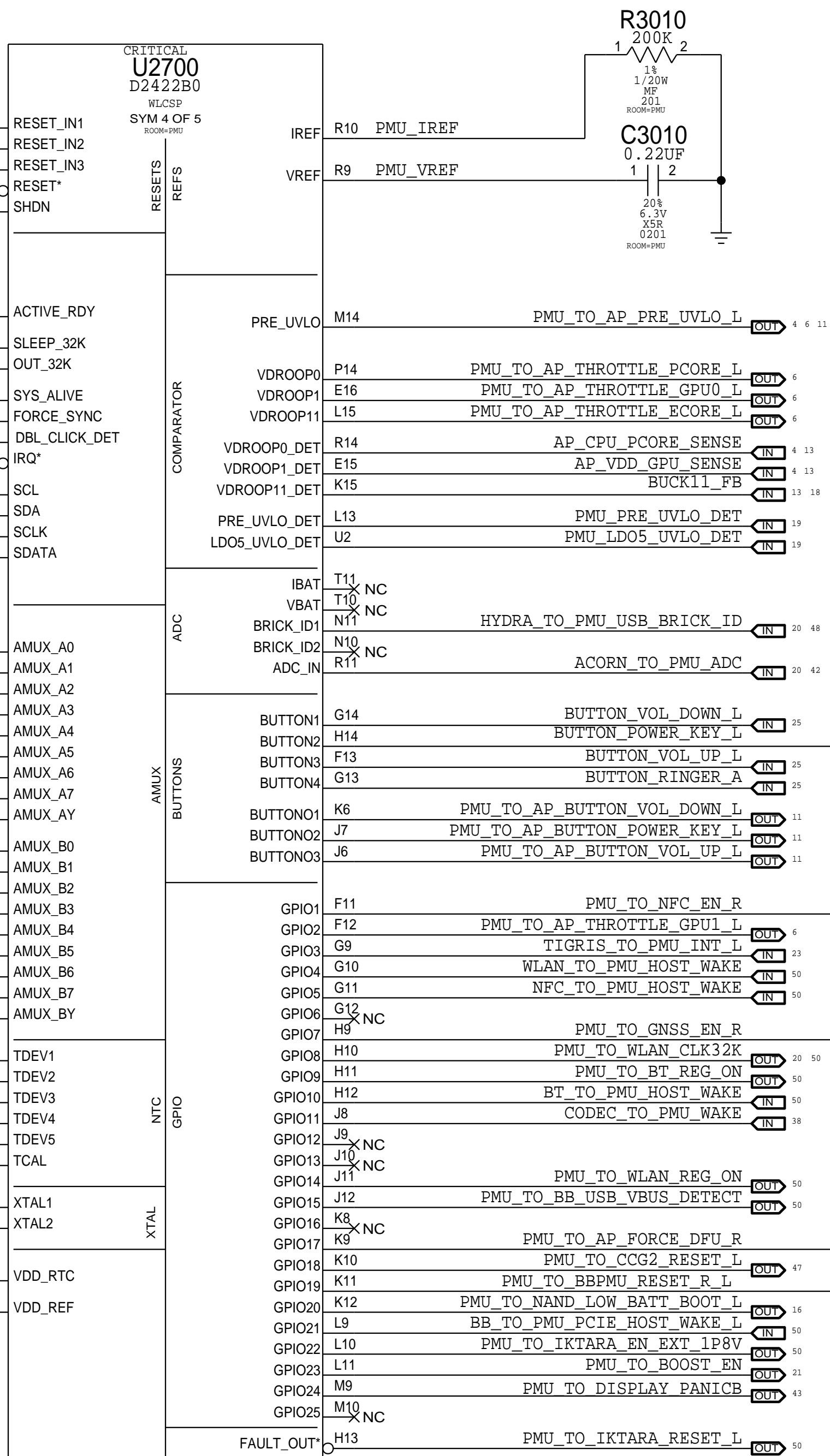
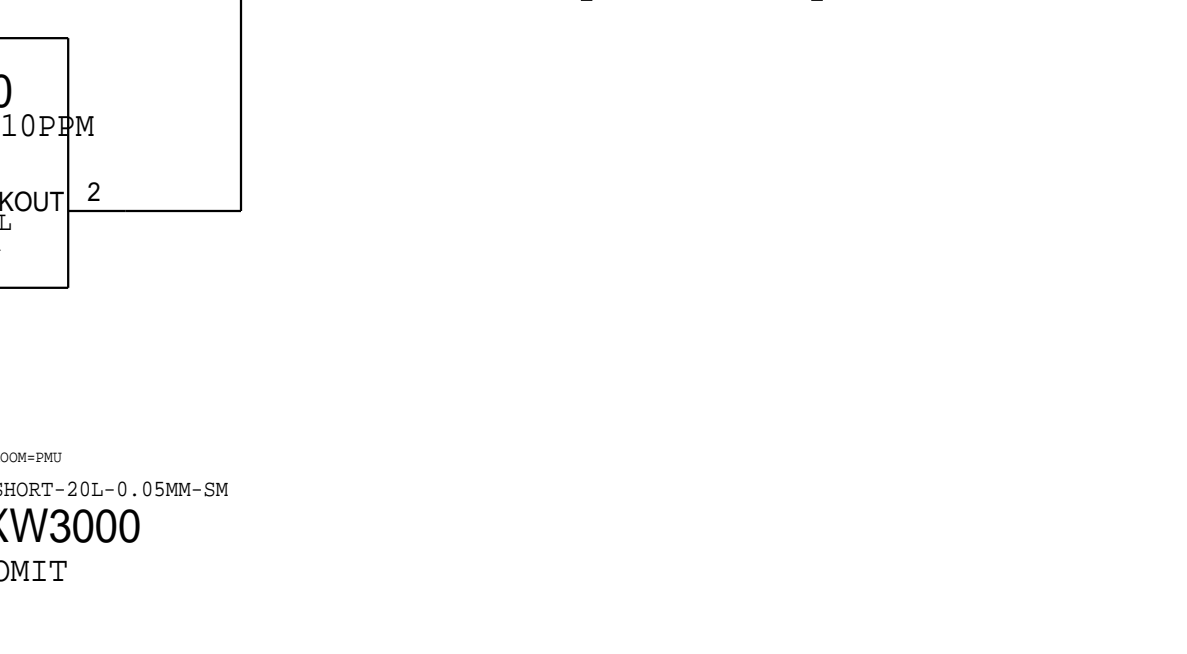
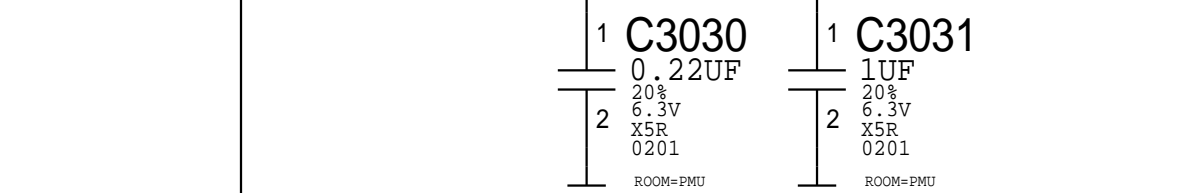
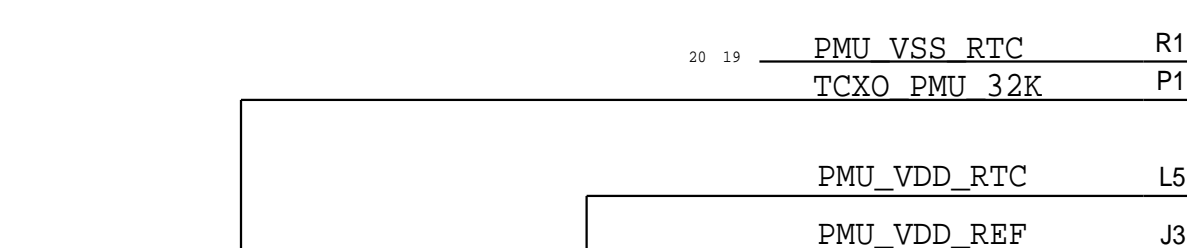
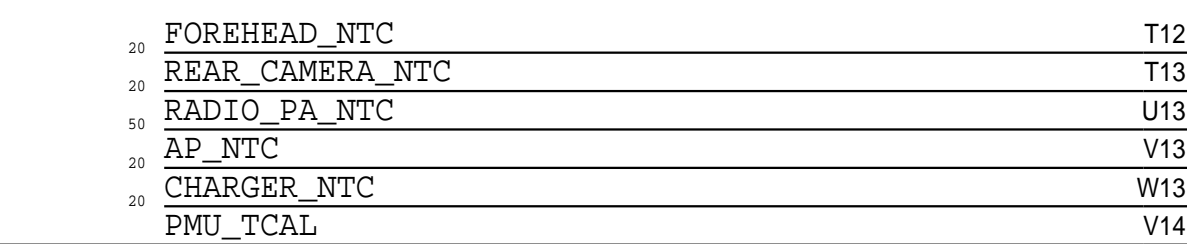
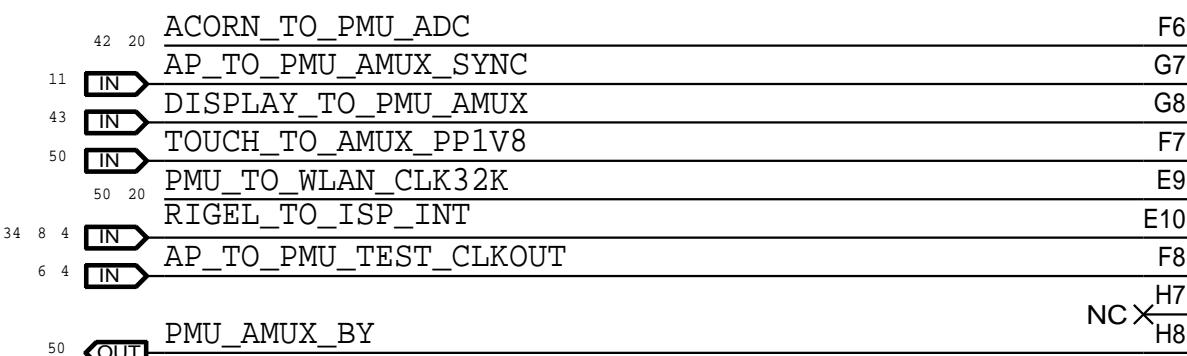
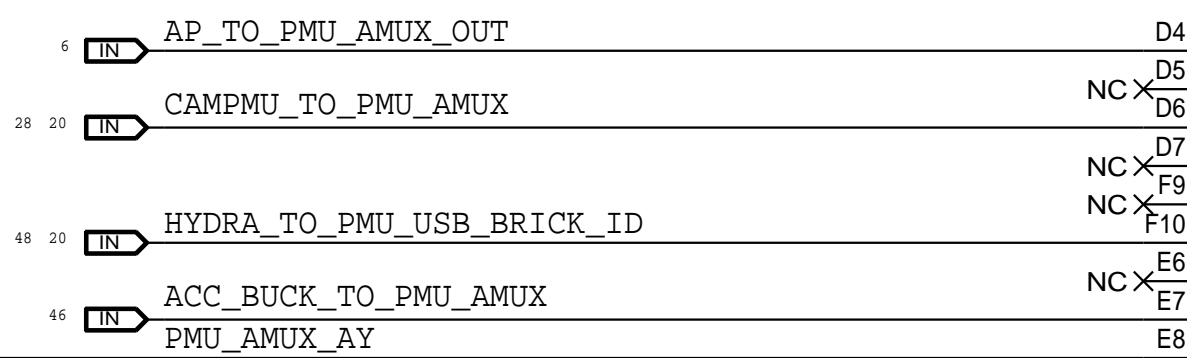
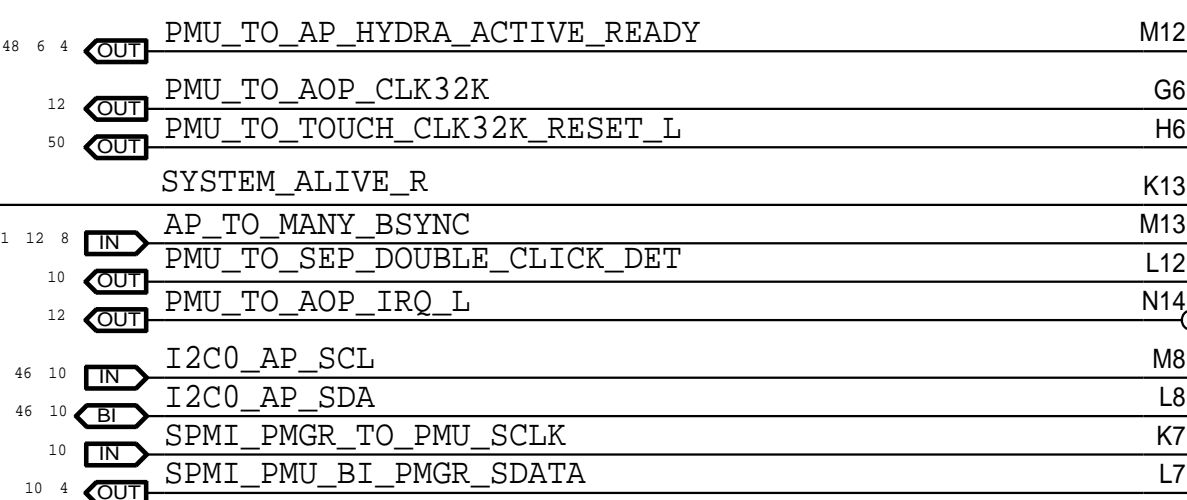
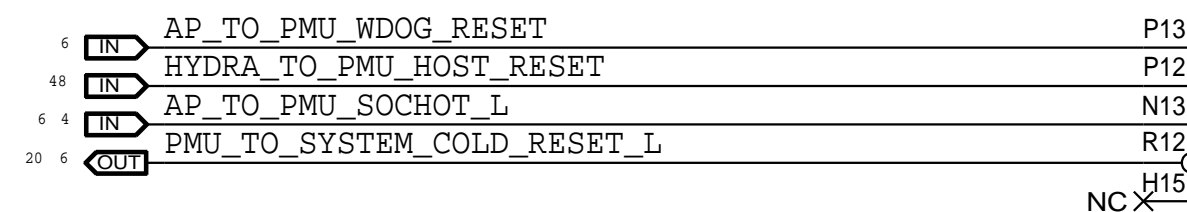
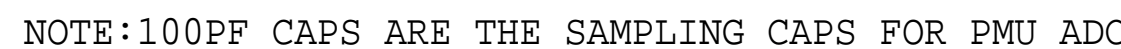

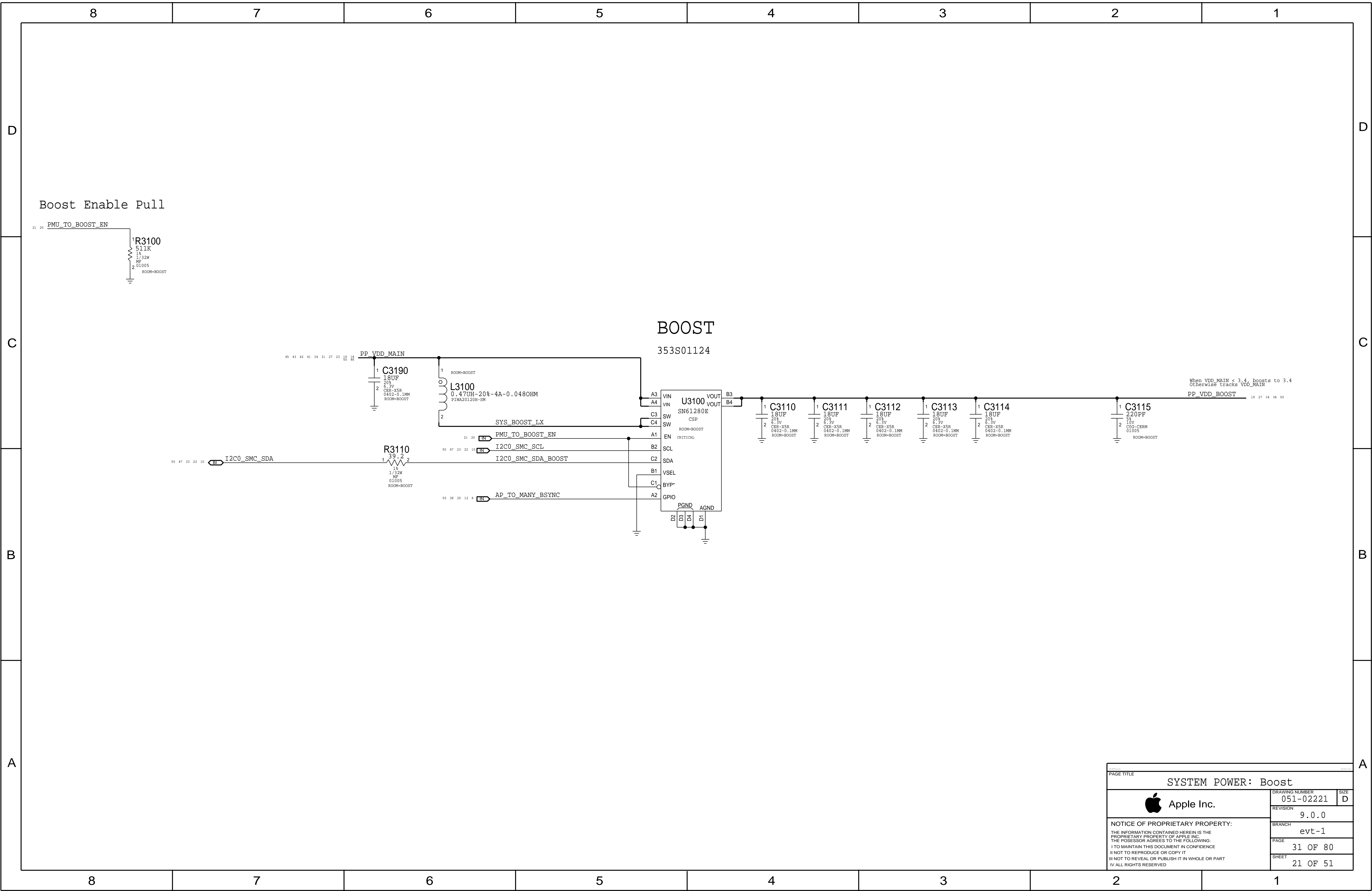



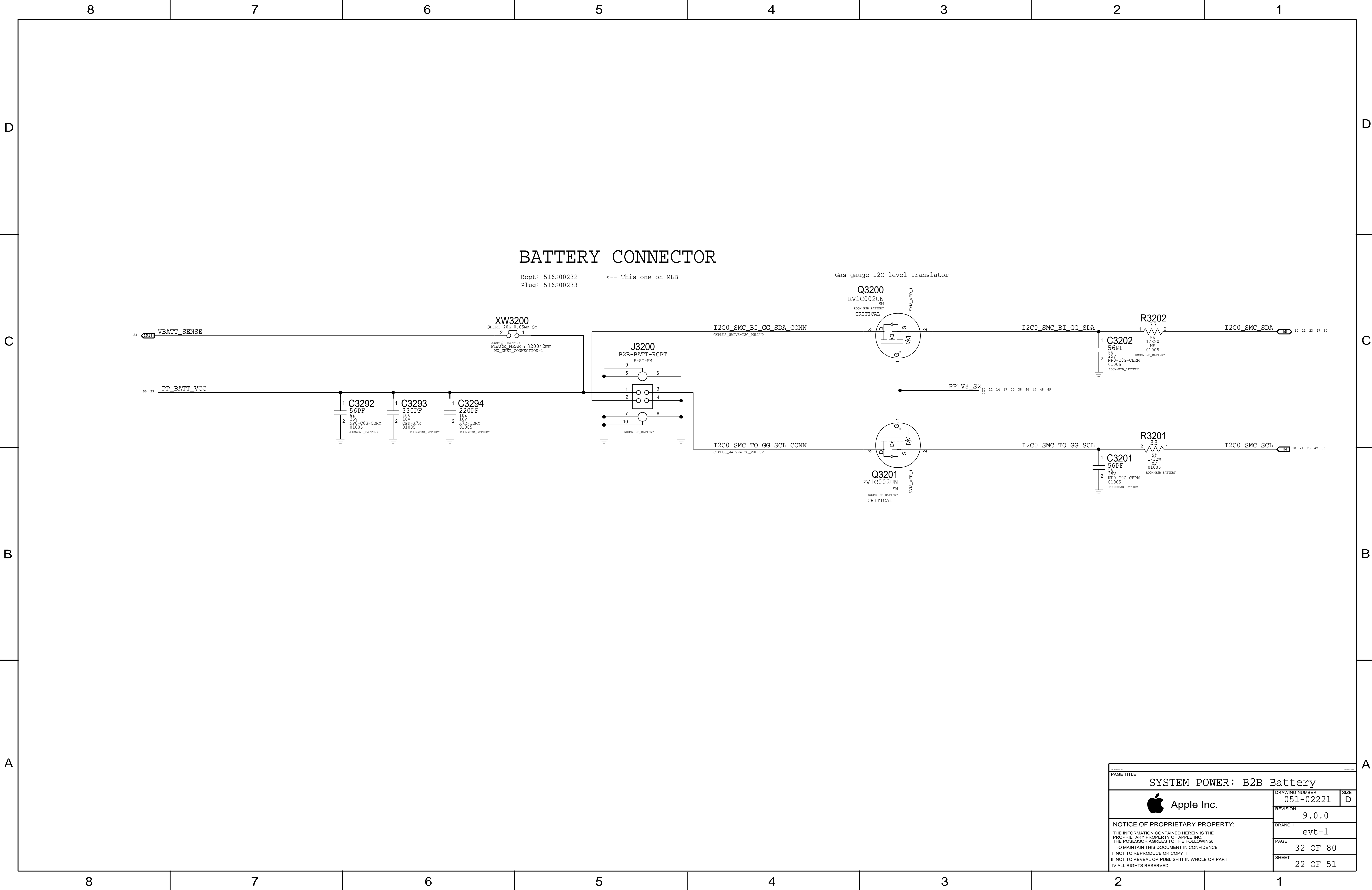
Diagram illustrating the PMU reset circuit. The circuit consists of two resistors, 1R3061 (100K), connected to the PMU_V8_S2 pin. The first resistor is connected to the SYSTEM_ALIVE signal (pin 14), and the second resistor is connected to the PMU_TO_SYSTEM_COLD_RESET_L signal (pin 16). Both resistors are connected to the PMU_V8_S2 pin, which is also connected to a common ground (pin 10).



PAGE TITLE			
SYSTEM POWER: PMU (4/4)			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02221		D
	REVISION		
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	9.0.0		
	BRANCH		
	evt-1		
	PAGE		
	30 OF 80		
	SHEET		
	20 OF 51		



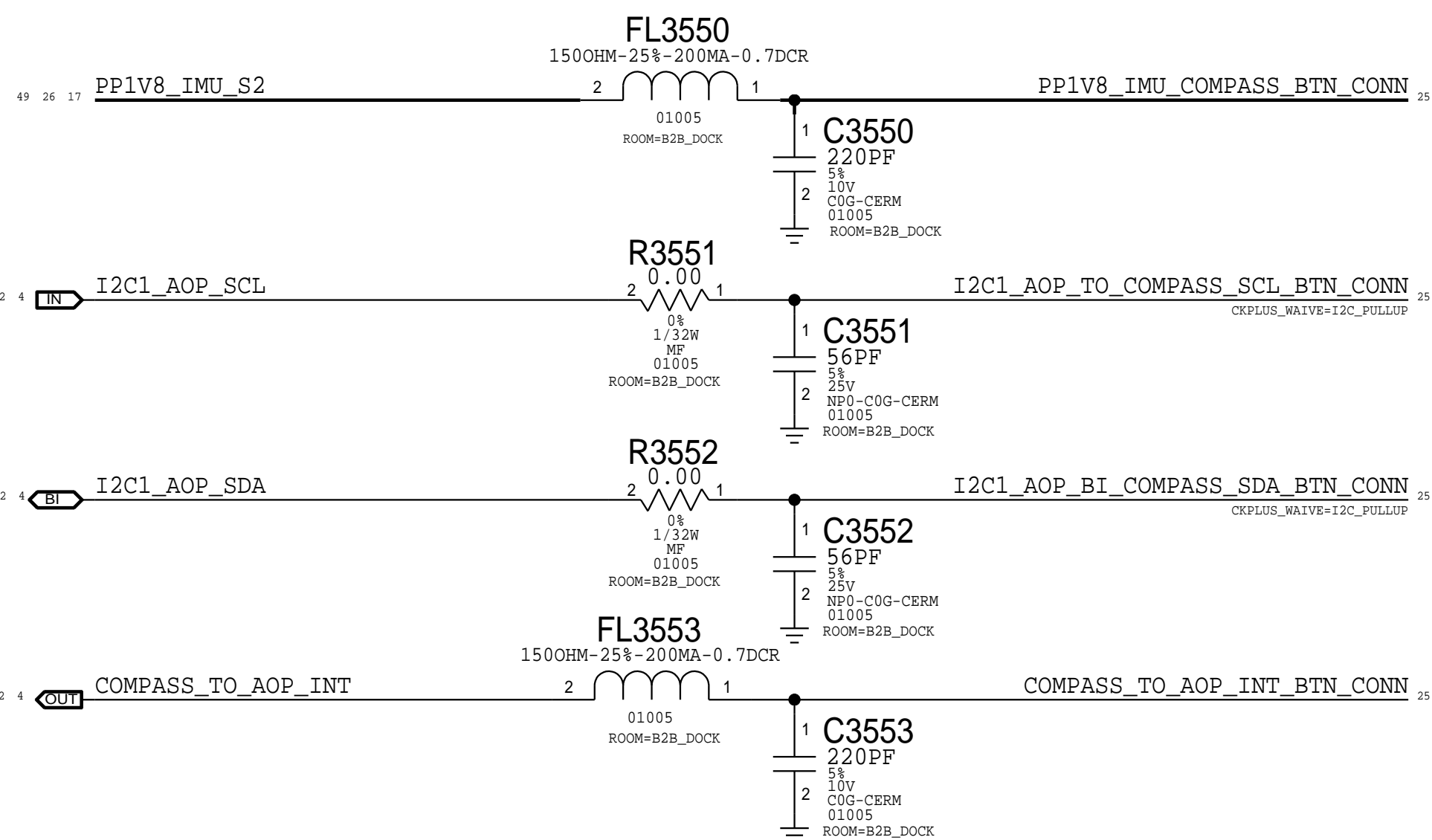
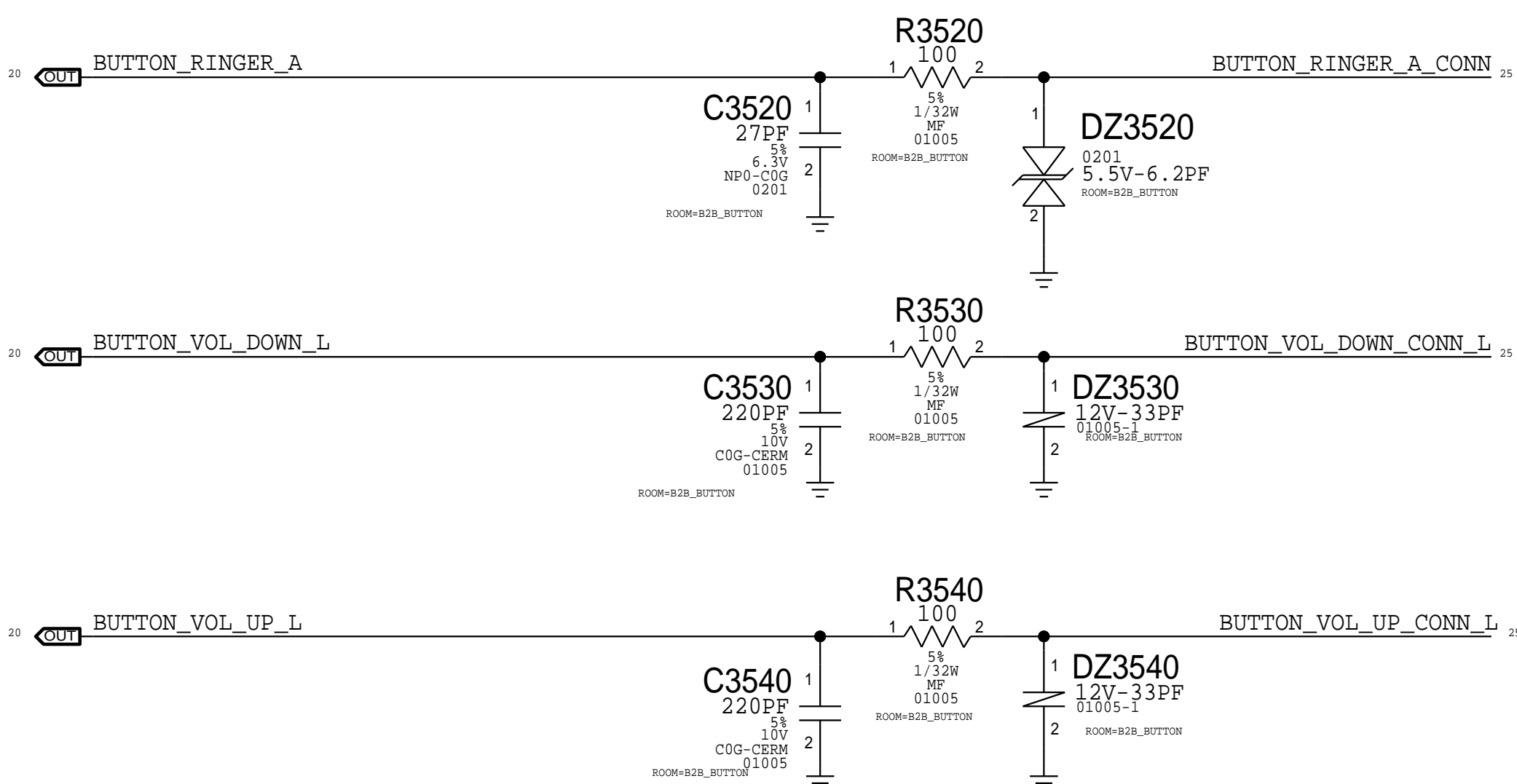
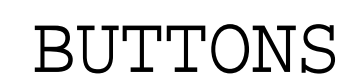
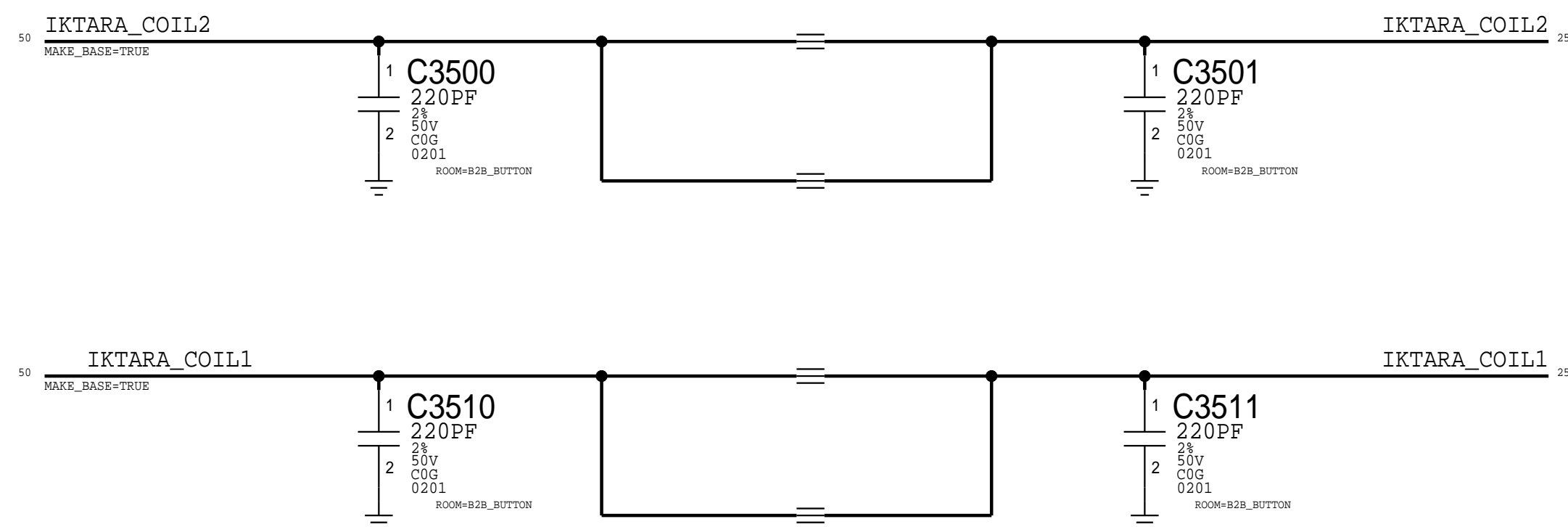
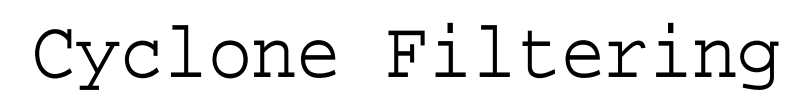
PAGE TITLE		
SYSTEM POWER: Boost		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	BRANCH	evt-1
	PAGE	31 OF 80
	SHEET	21 OF 51



D

A

PDF Watermark Remover DEMO : Purchase from www.PDFWatermarkRemover.com to remove the watermark

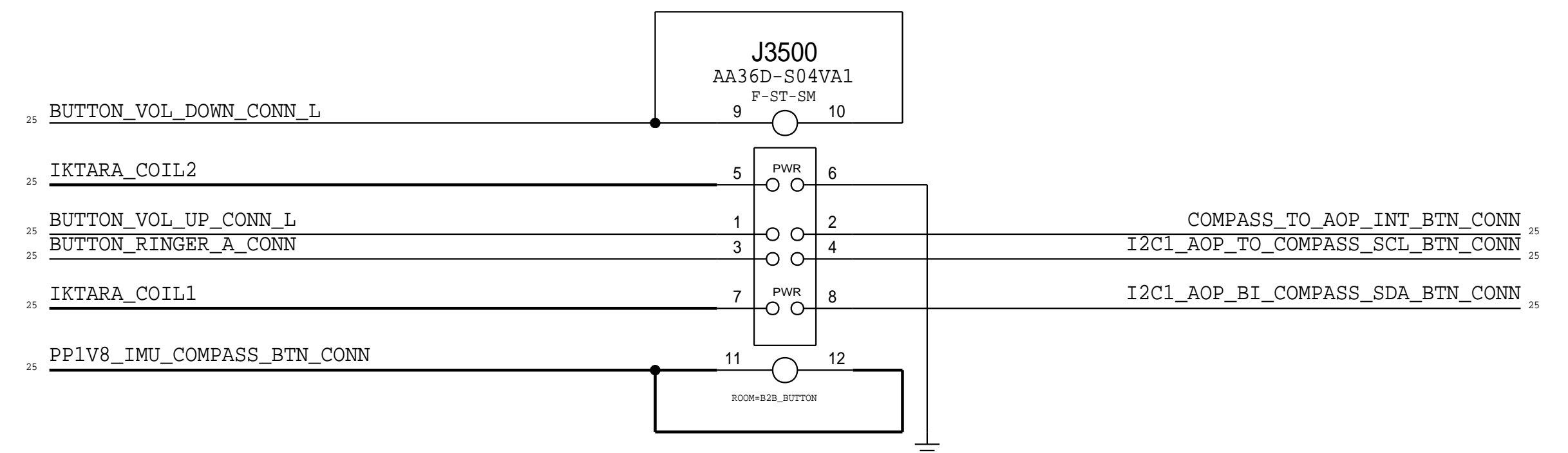


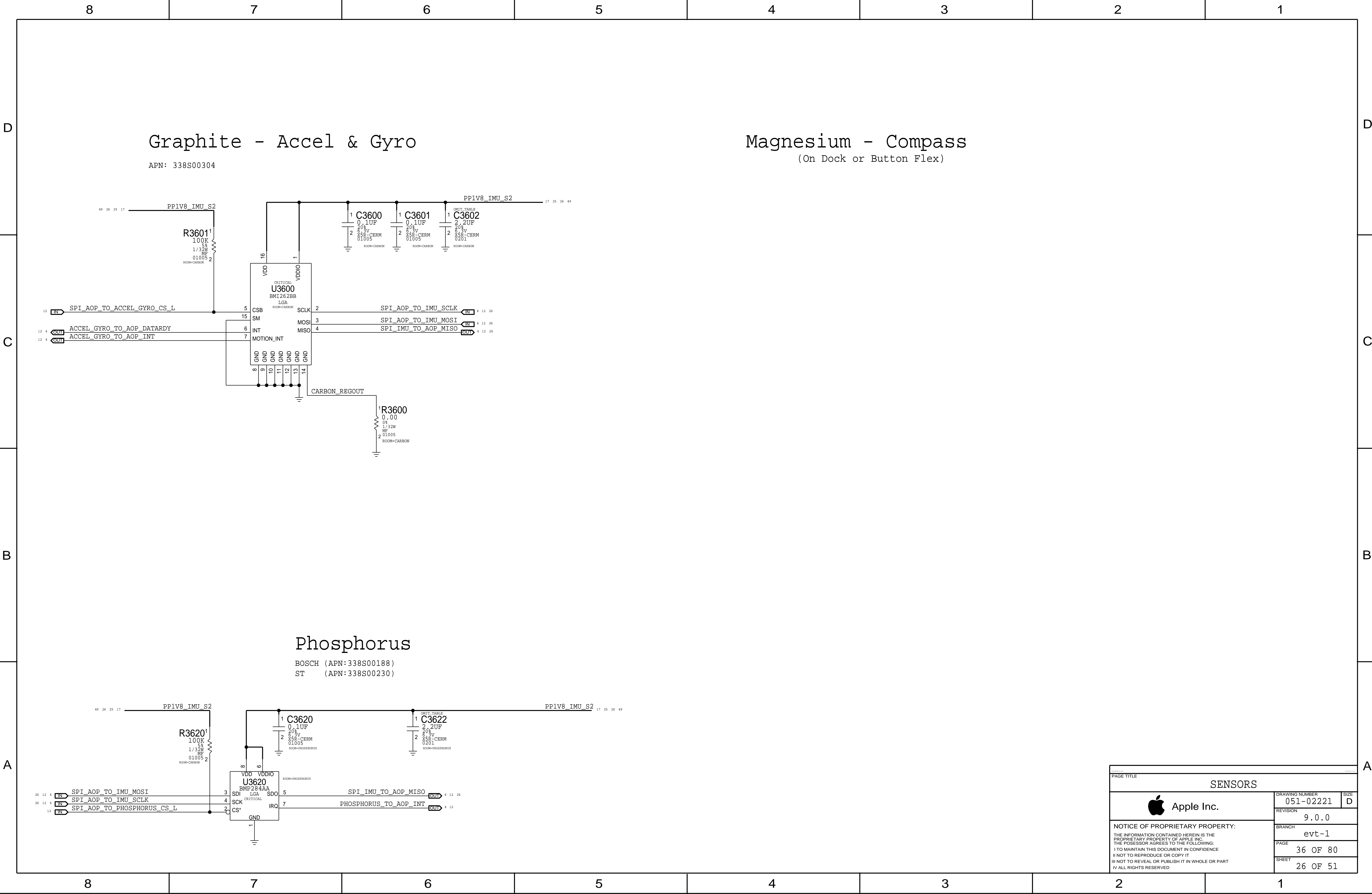
```

Rcpt: 516S00289
Plug: 516S00290

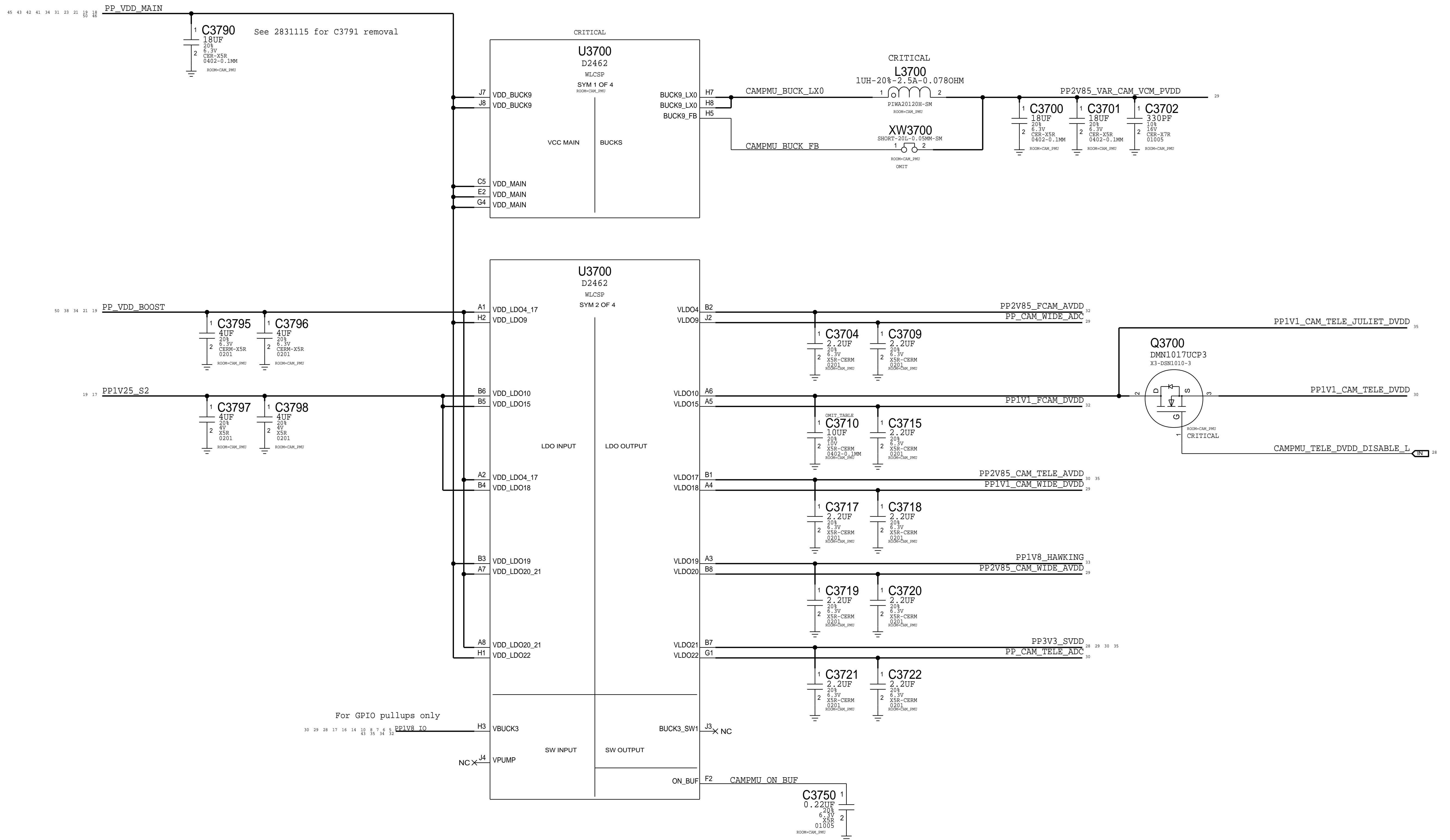
```


```
<-- This one on MLB
```

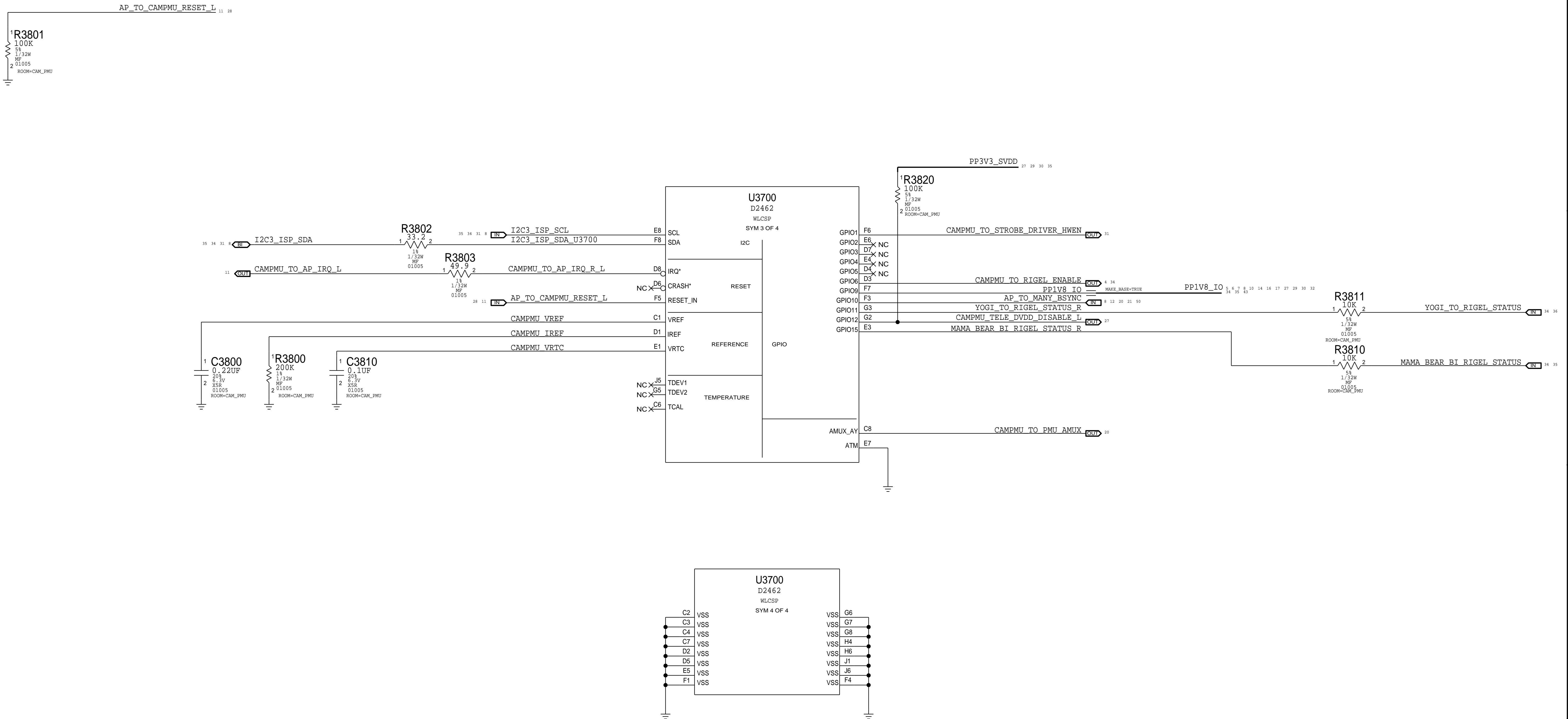





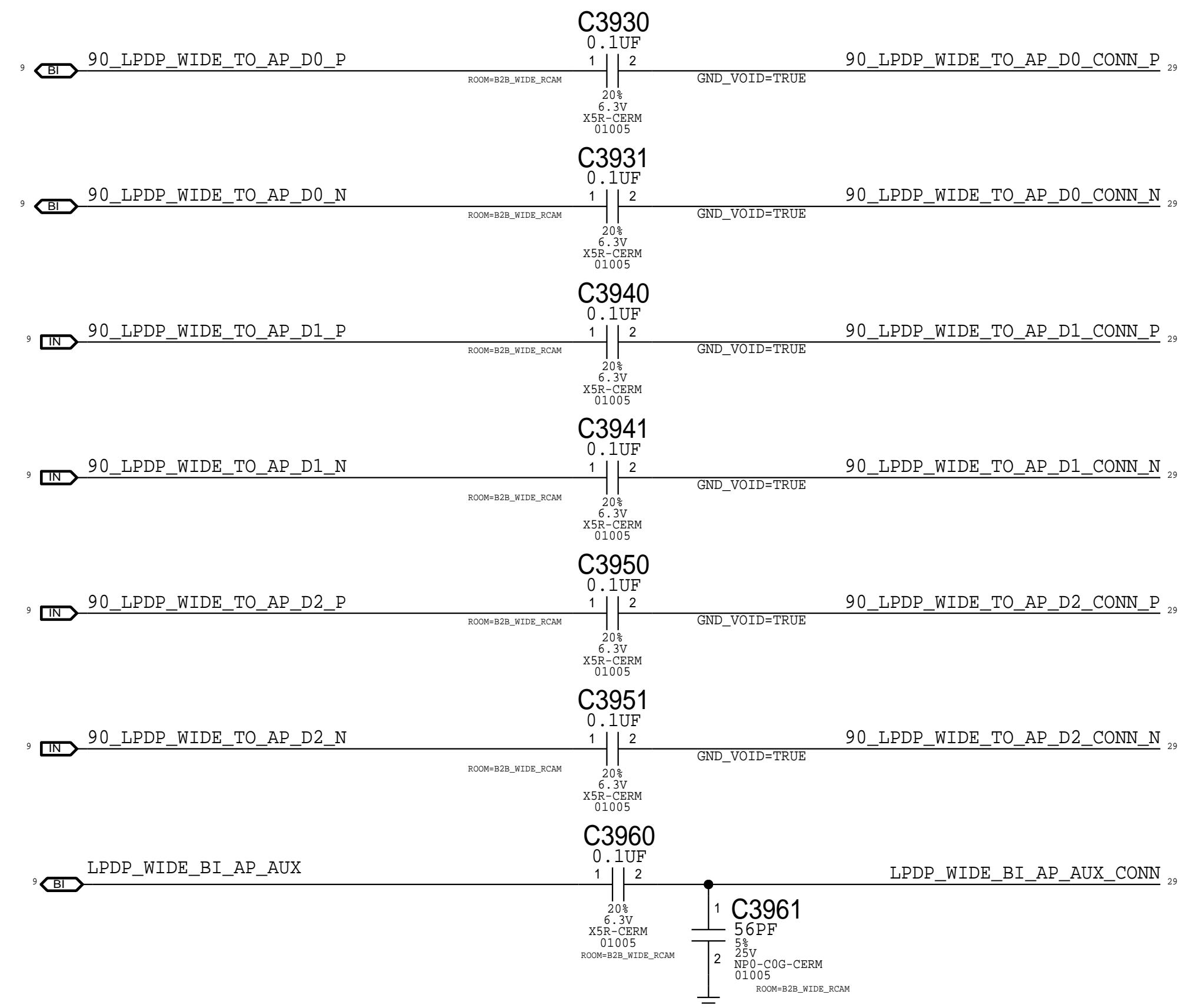
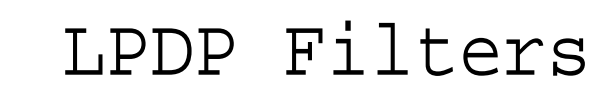
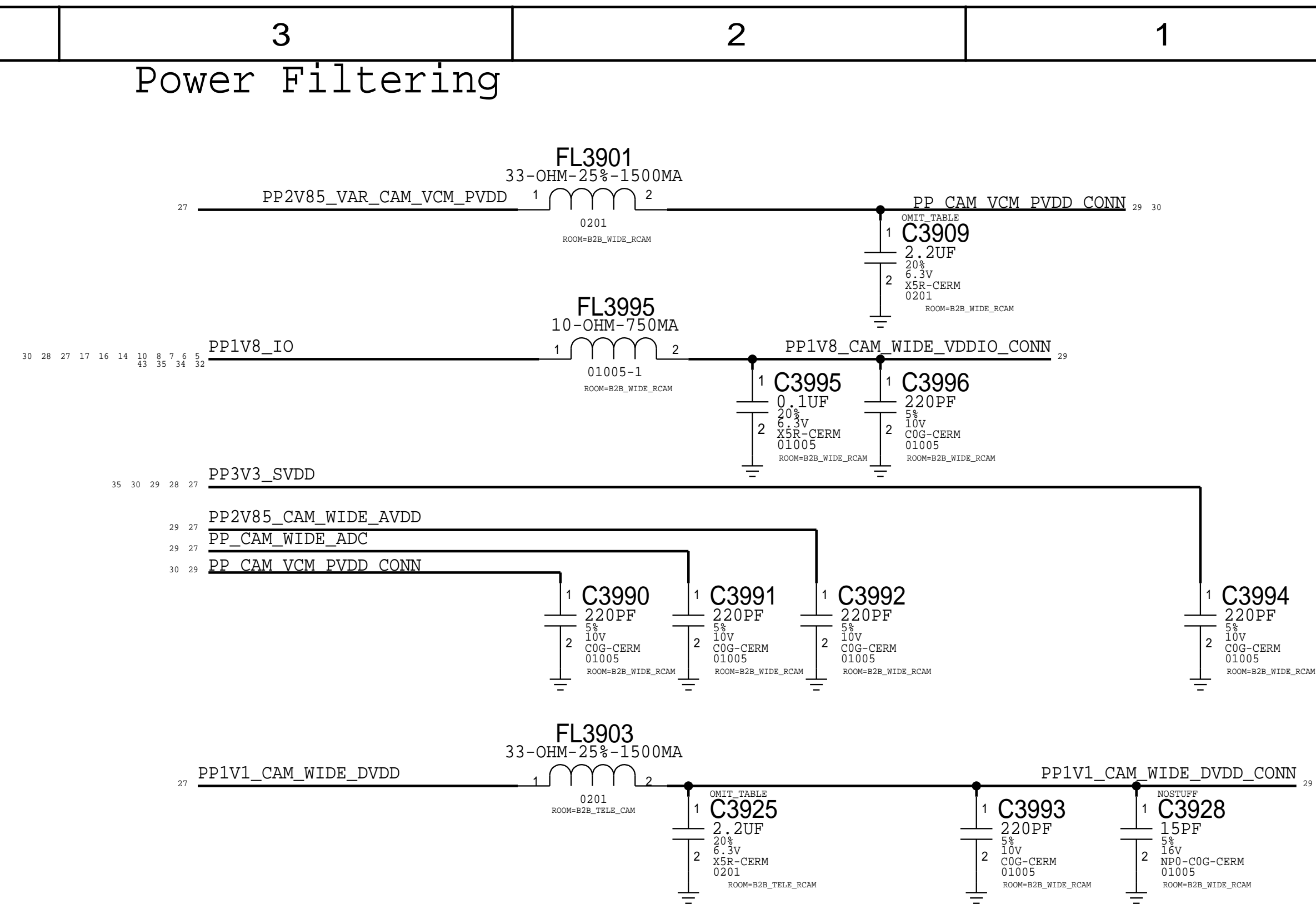
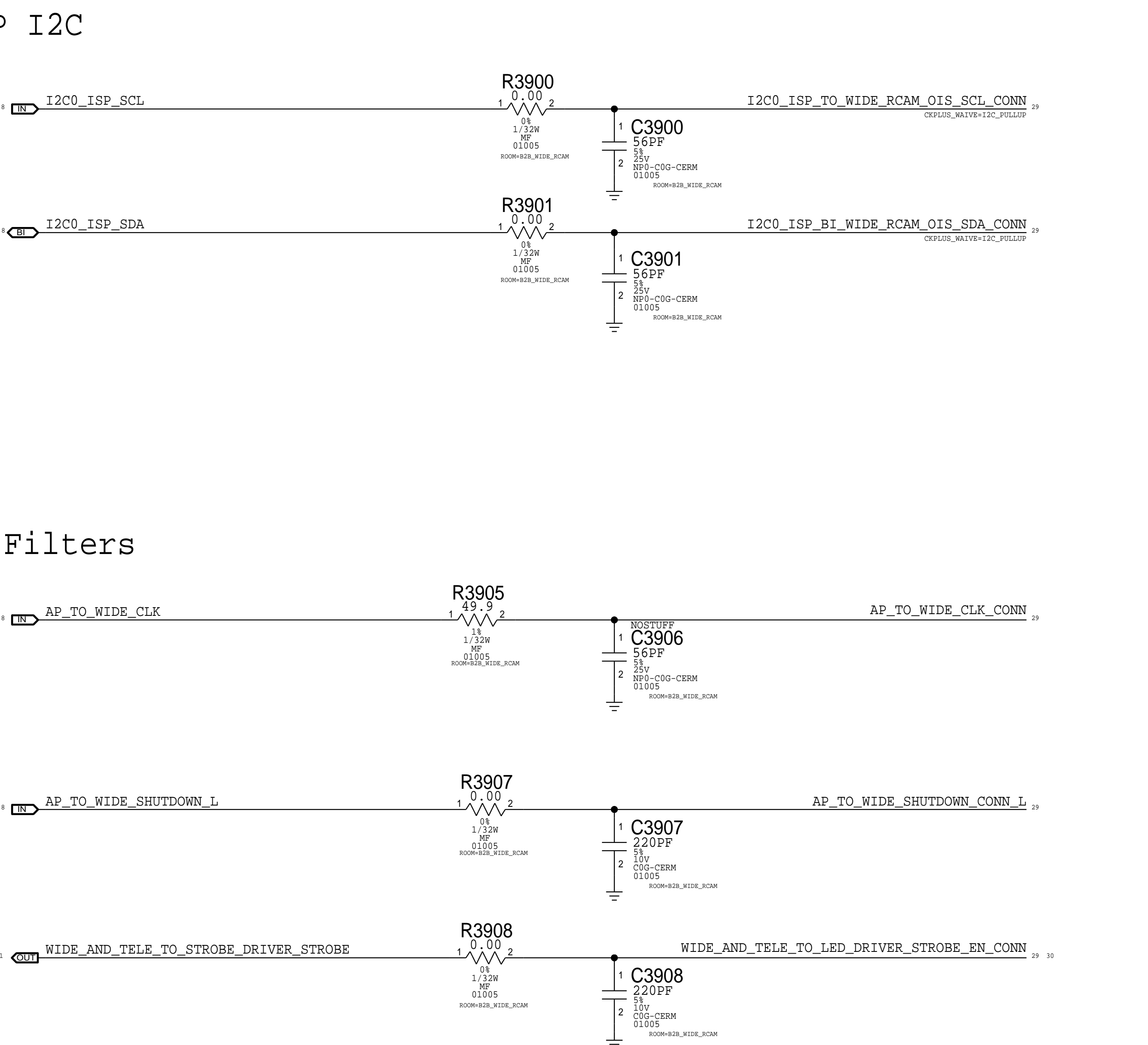
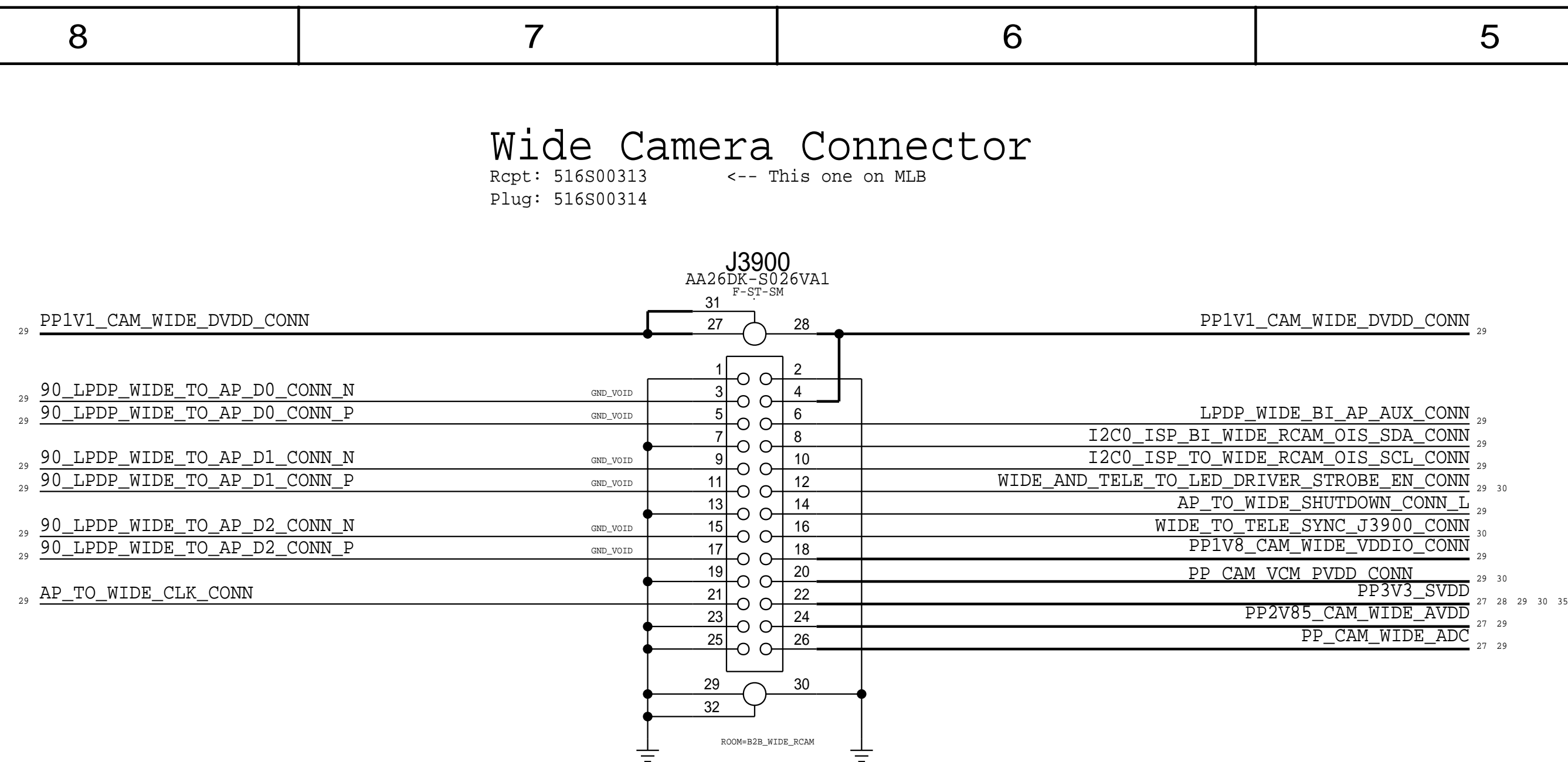
Camera PMU




PAGE TITLE			
CAMERA: PMU (1/2)			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02221		D
	REVISION		
	9.0.0		
NOTICE OF PROPRIETARY PROPERTY:		BRANCH	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING:		evt-1	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		PAGE	
II NOT TO REPRODUCE OR COPY IT		37 OF 80	
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART		SHEET	
IV ALL RIGHTS RESERVED		27 OF 51	



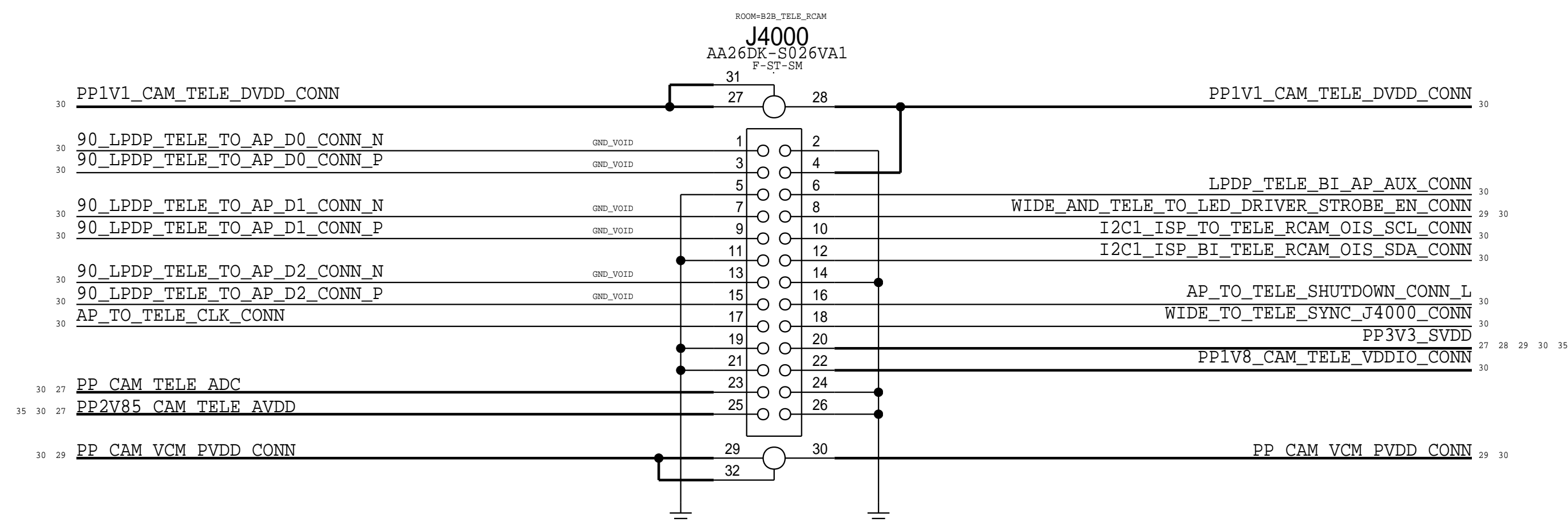
PAGE TITLE			
CAMERA: PMU (2/2)			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02221		D
	REVISION		
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	9.0.0		
	BRANCH		
	evt-1		
	PAGE		
	38 OF 80		
	SHEET		
	28 OF 51		



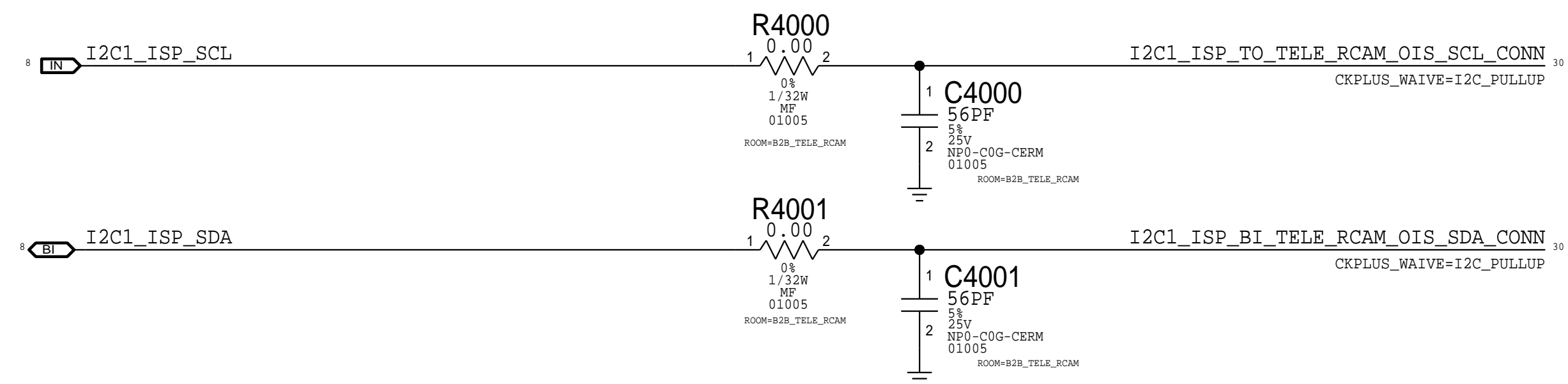
PAGE TITLE		
CAMERA: B2B Wide (WY)		
 Apple Inc.	DRAWING NUMBER	SIZE
	051-02221	D
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	REVISION	
	9.0.0	
	BRANCH	
	evt-1	
	PAGE	
	39 OF 80	
	SHEET	
	29 OF 51	



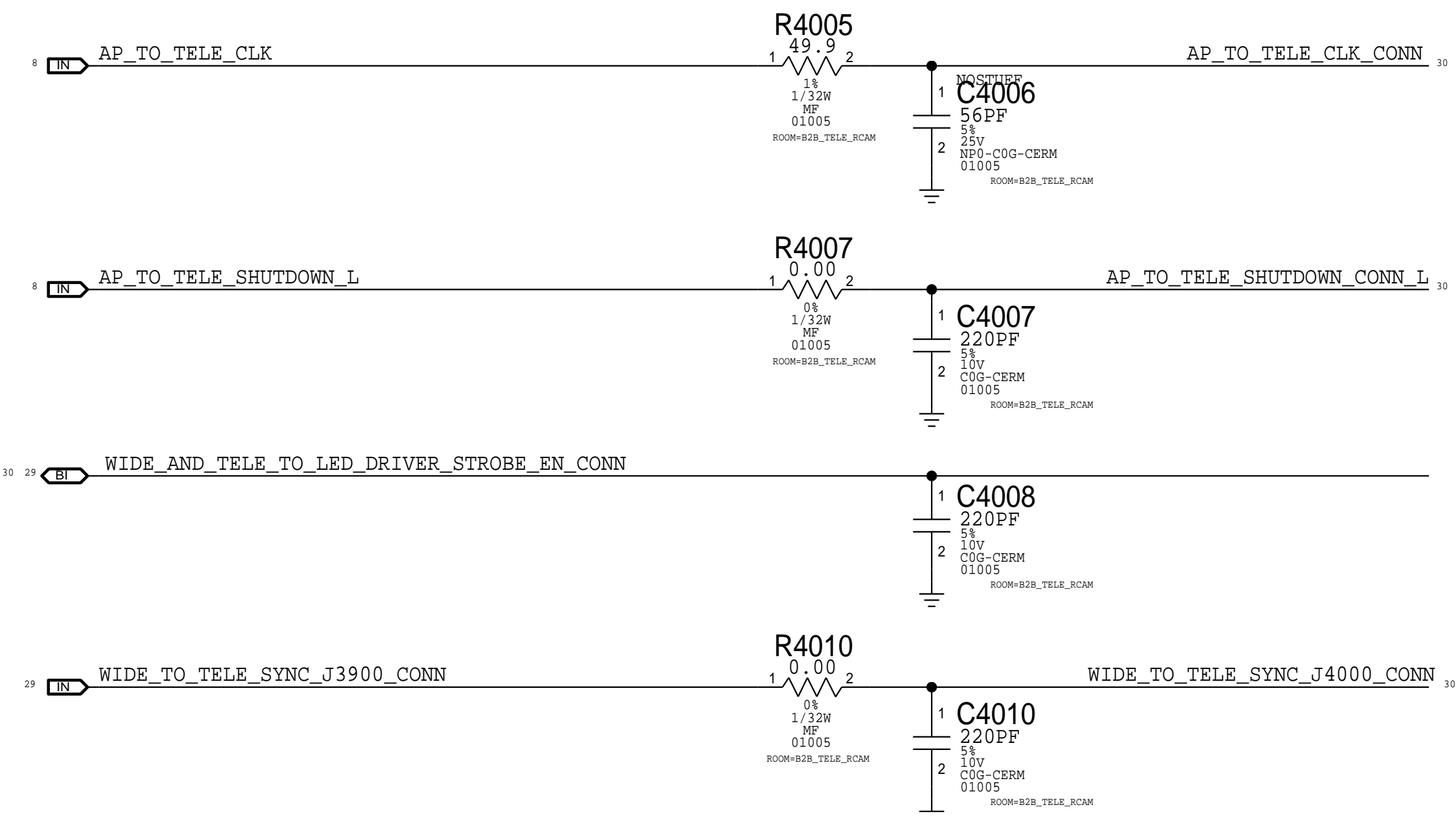
```
Rcpt: 516S00313      <-- This one on MLB
Plug: 516S00314
```



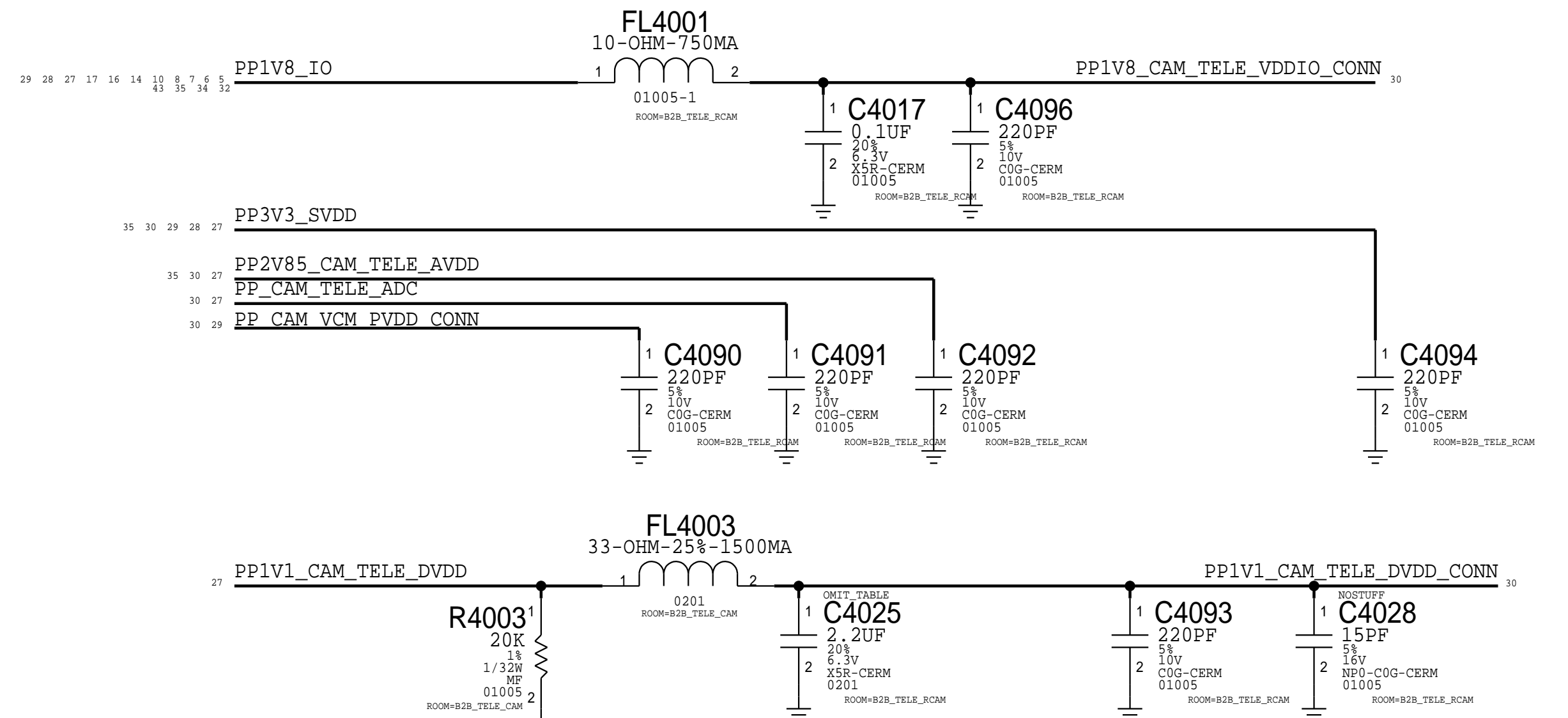
ISP I2C



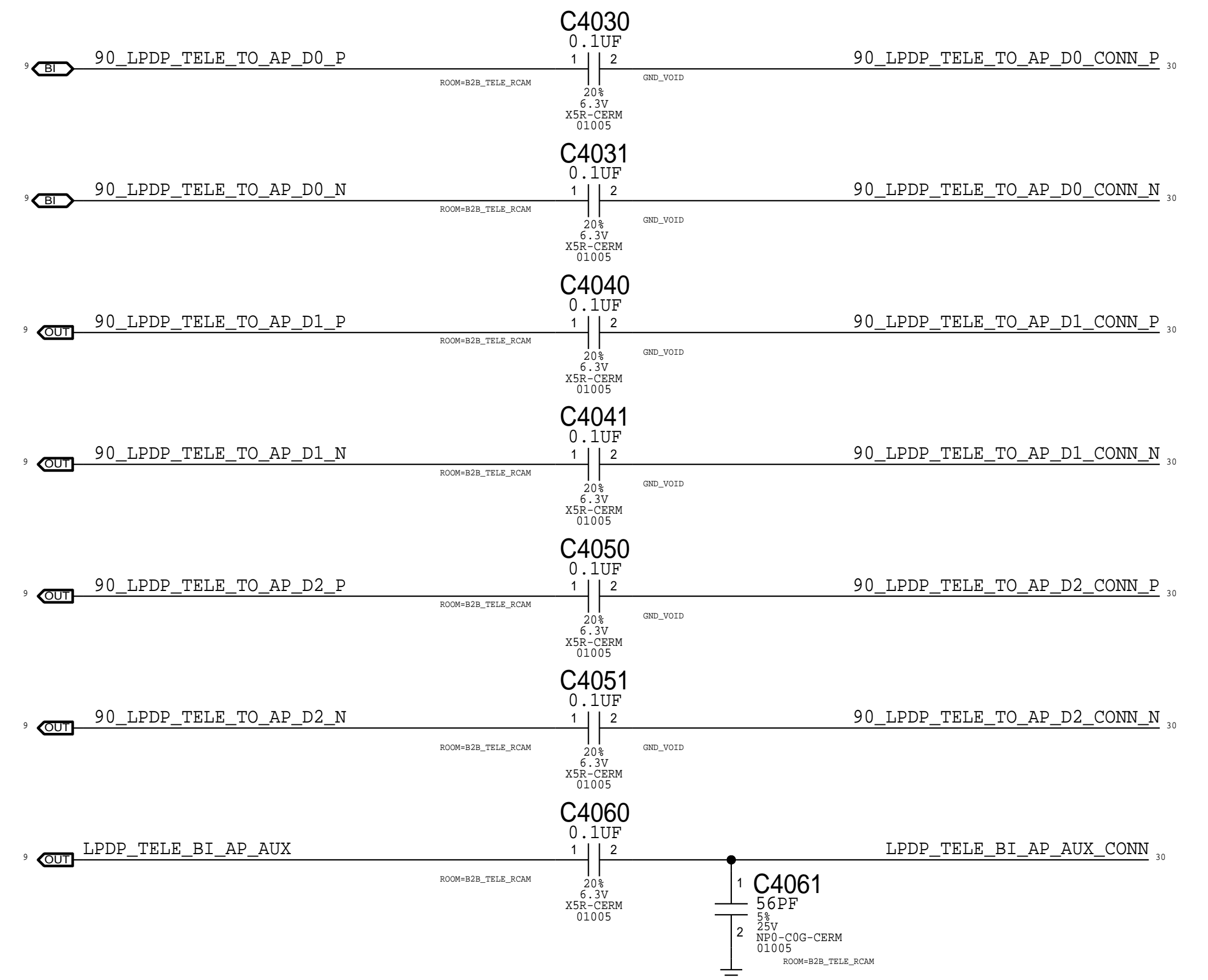
IO Filters




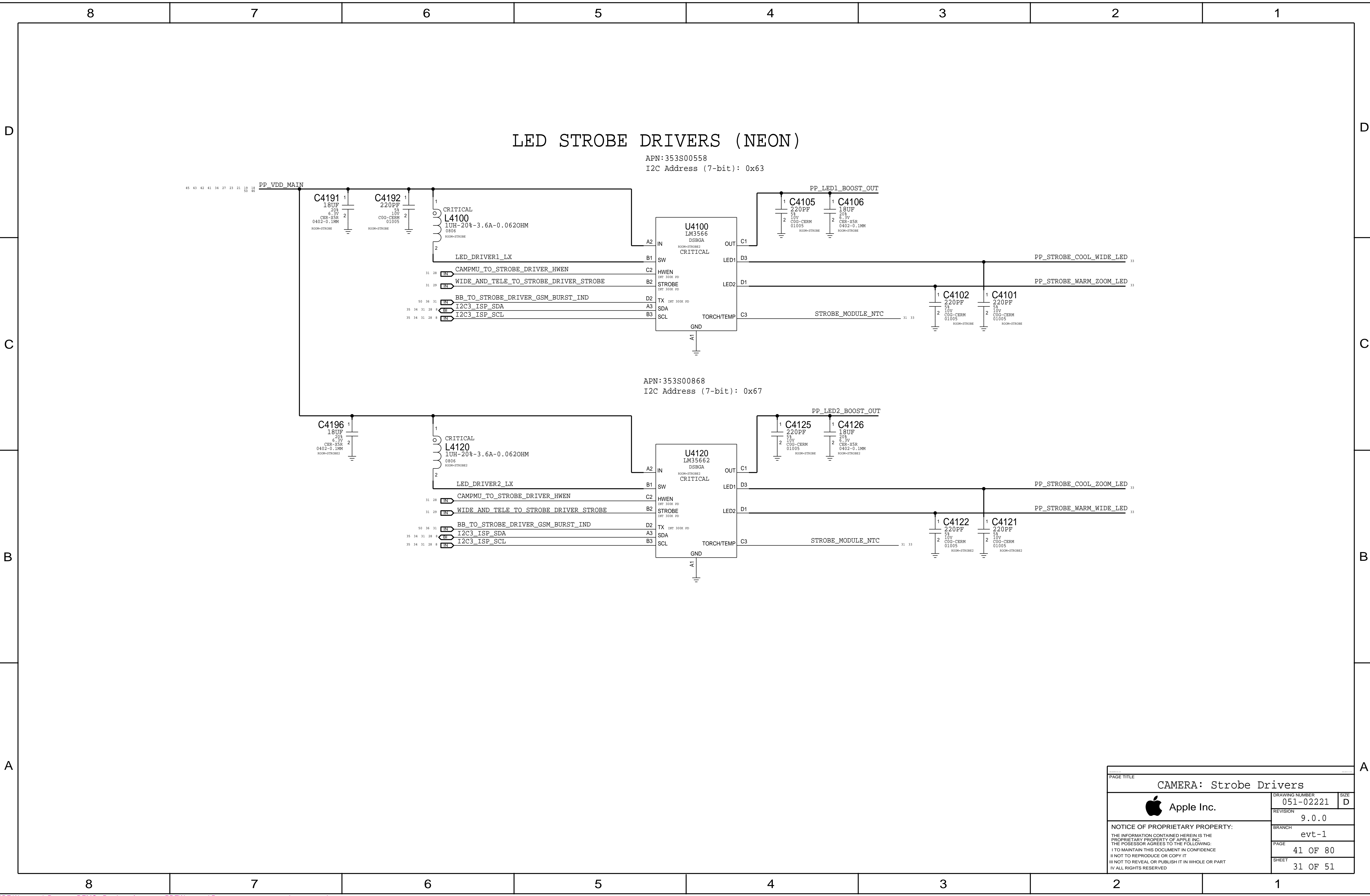
Power Filtering



LPDP



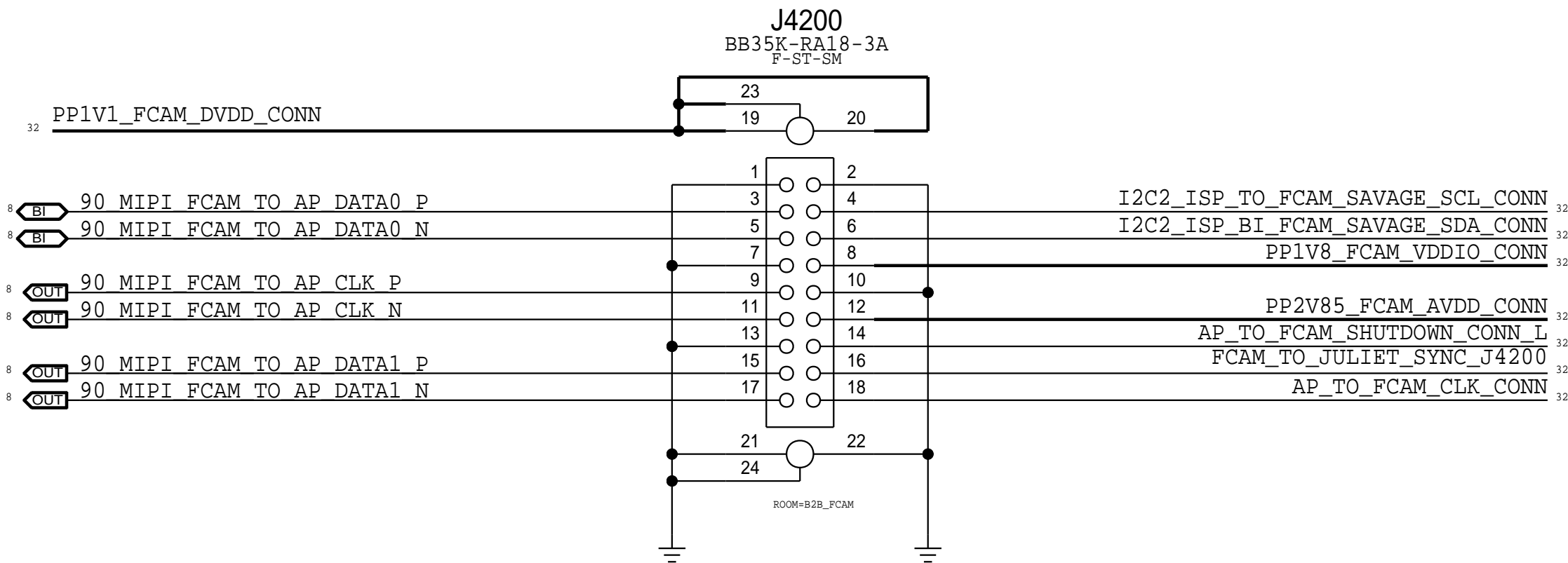
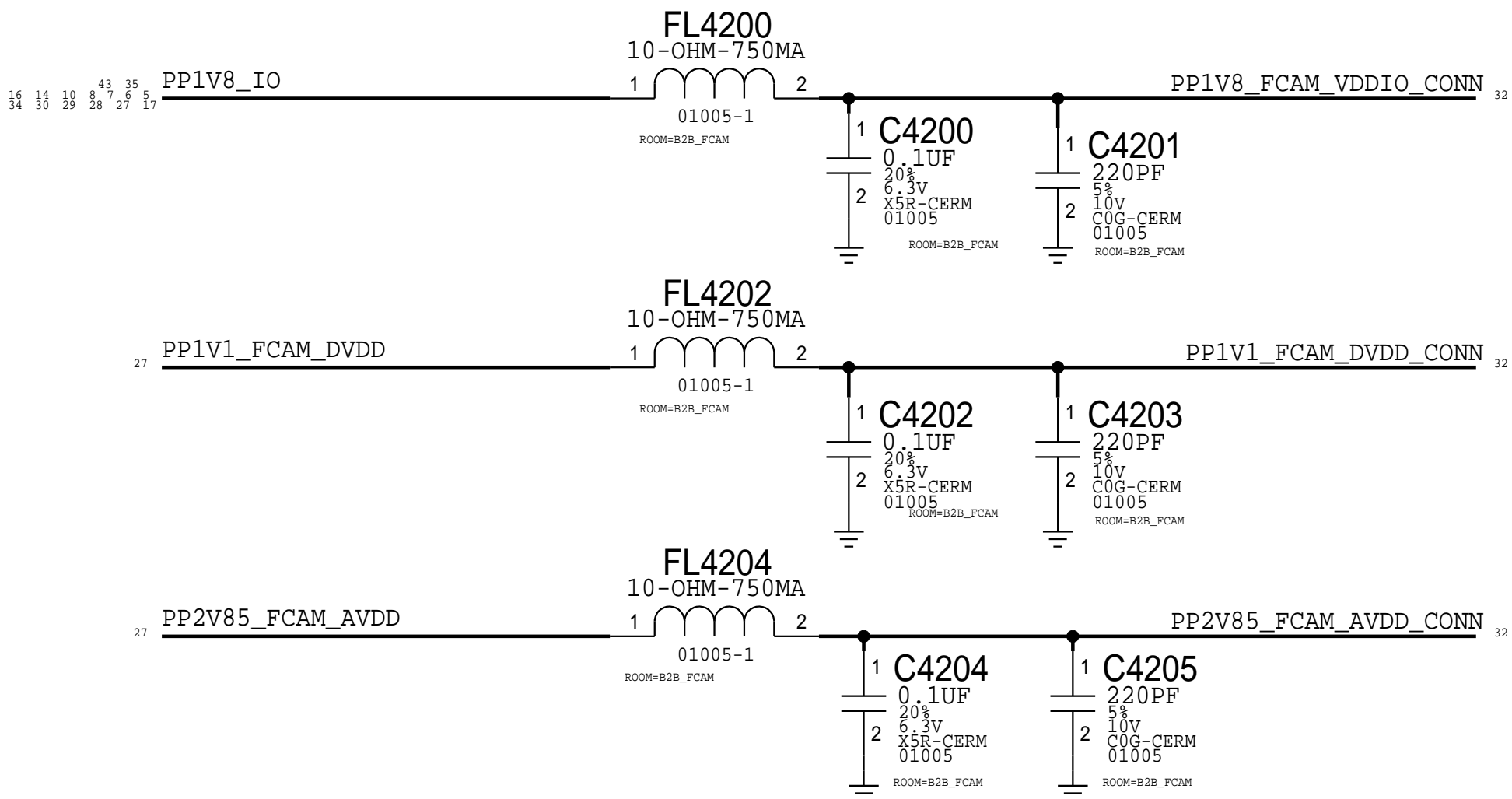
PAGE TITLE		DRAWING NUMBER 051-02221		SIZE D
CAMERA: B2B Tele (MT)		REVISION 9.0.0		
 Apple Inc.		BRANCH evt-1		
NOTICE OF PROPRIETARY PROPERTY:		PAGE 40 OF 80		
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		SHEET 30 OF 51		



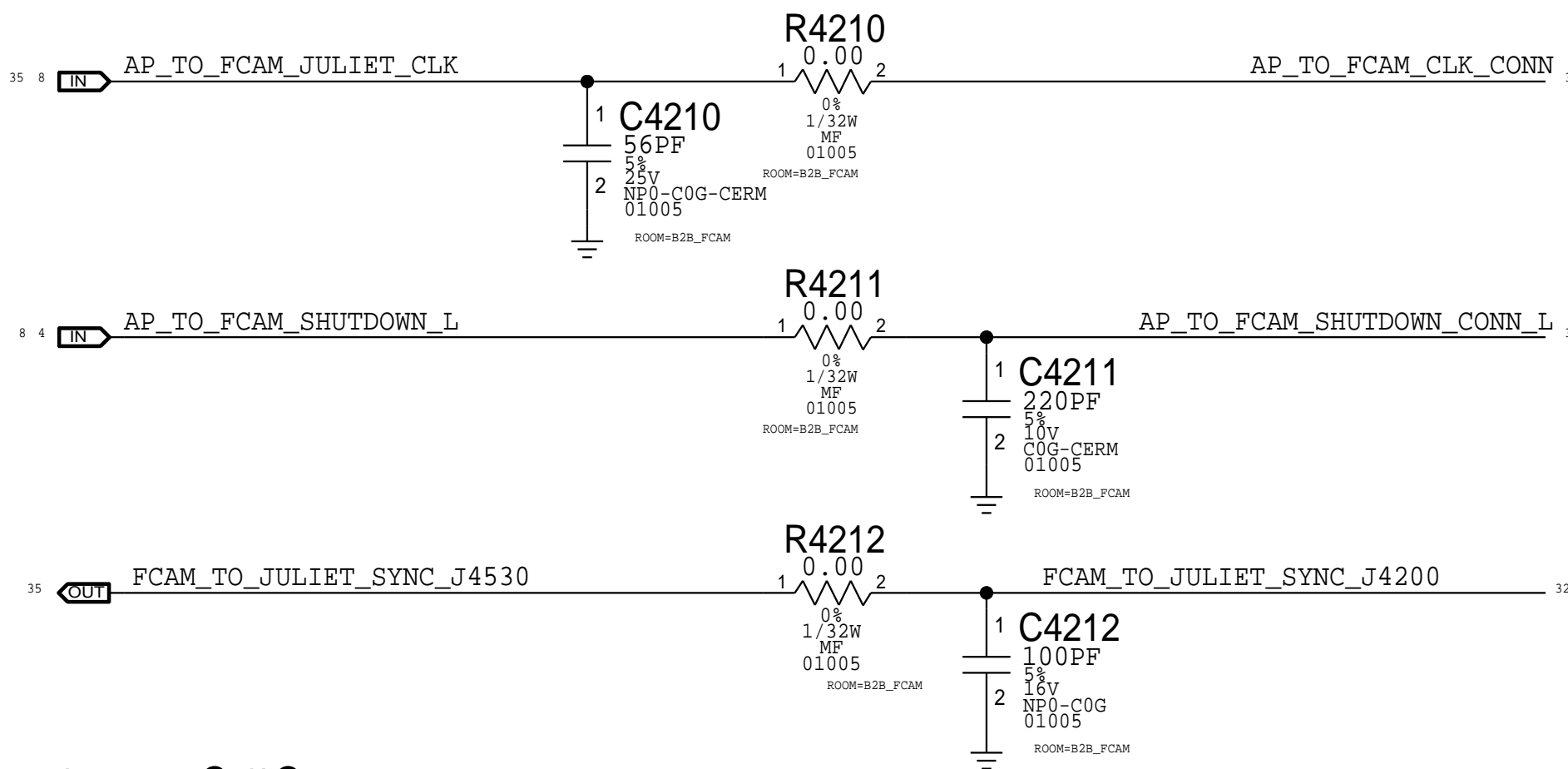
NEW HAMPSHIRE POWER

FCAM Connector

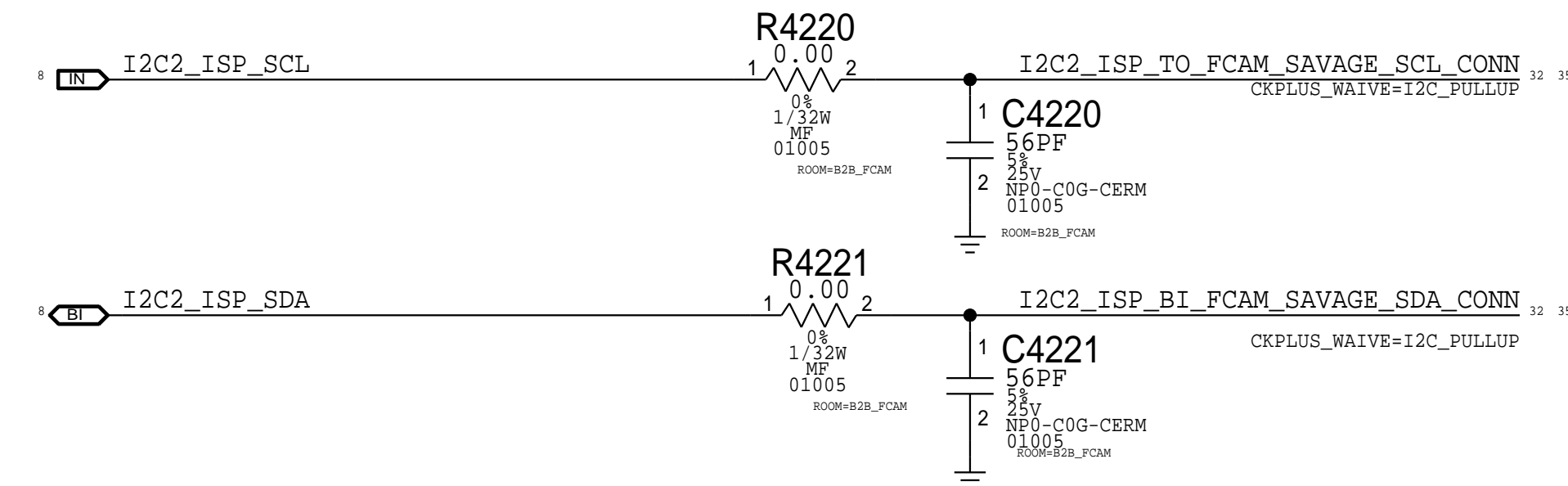
Rcpt: 516S00244 <-- This one on MLB
Plug: 516S00245




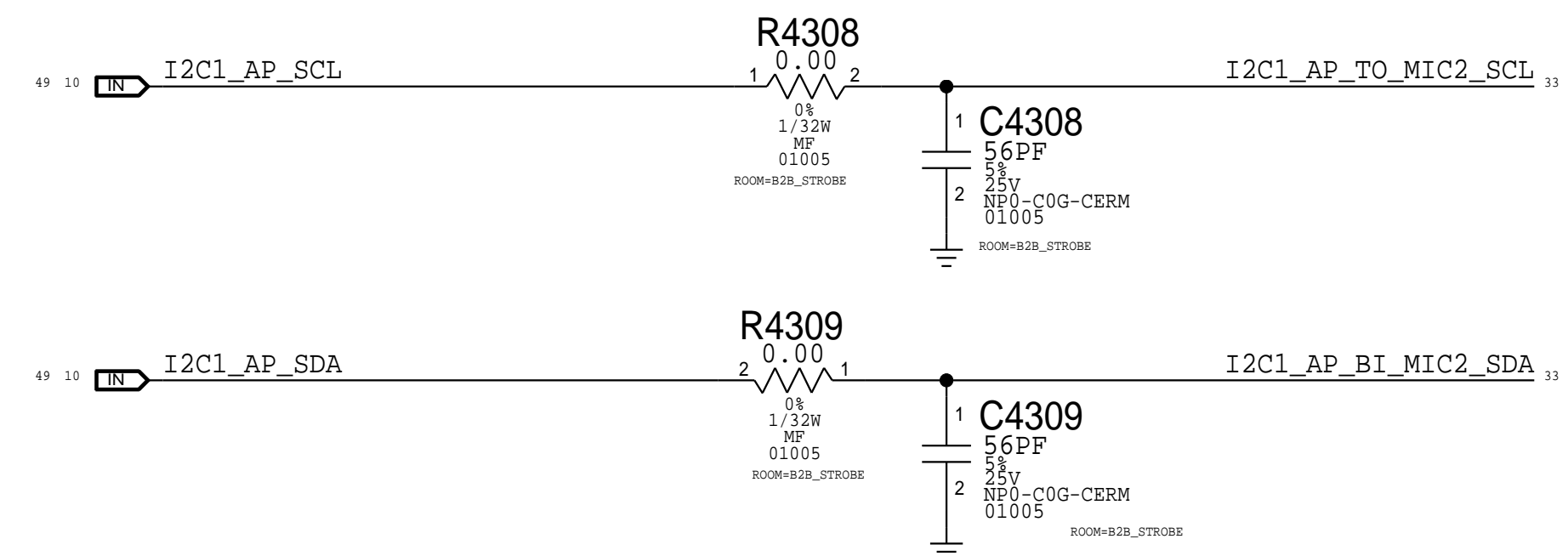
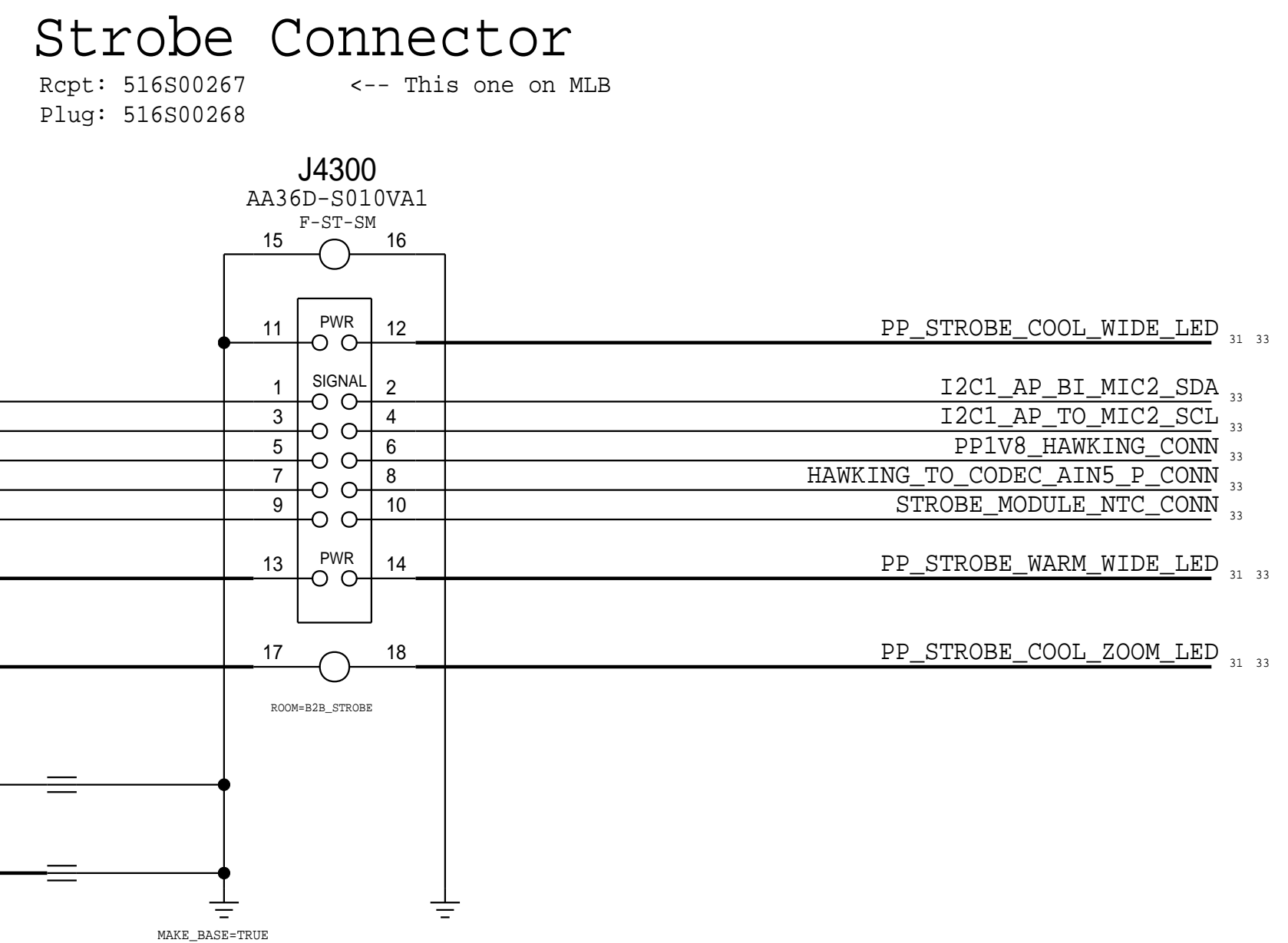
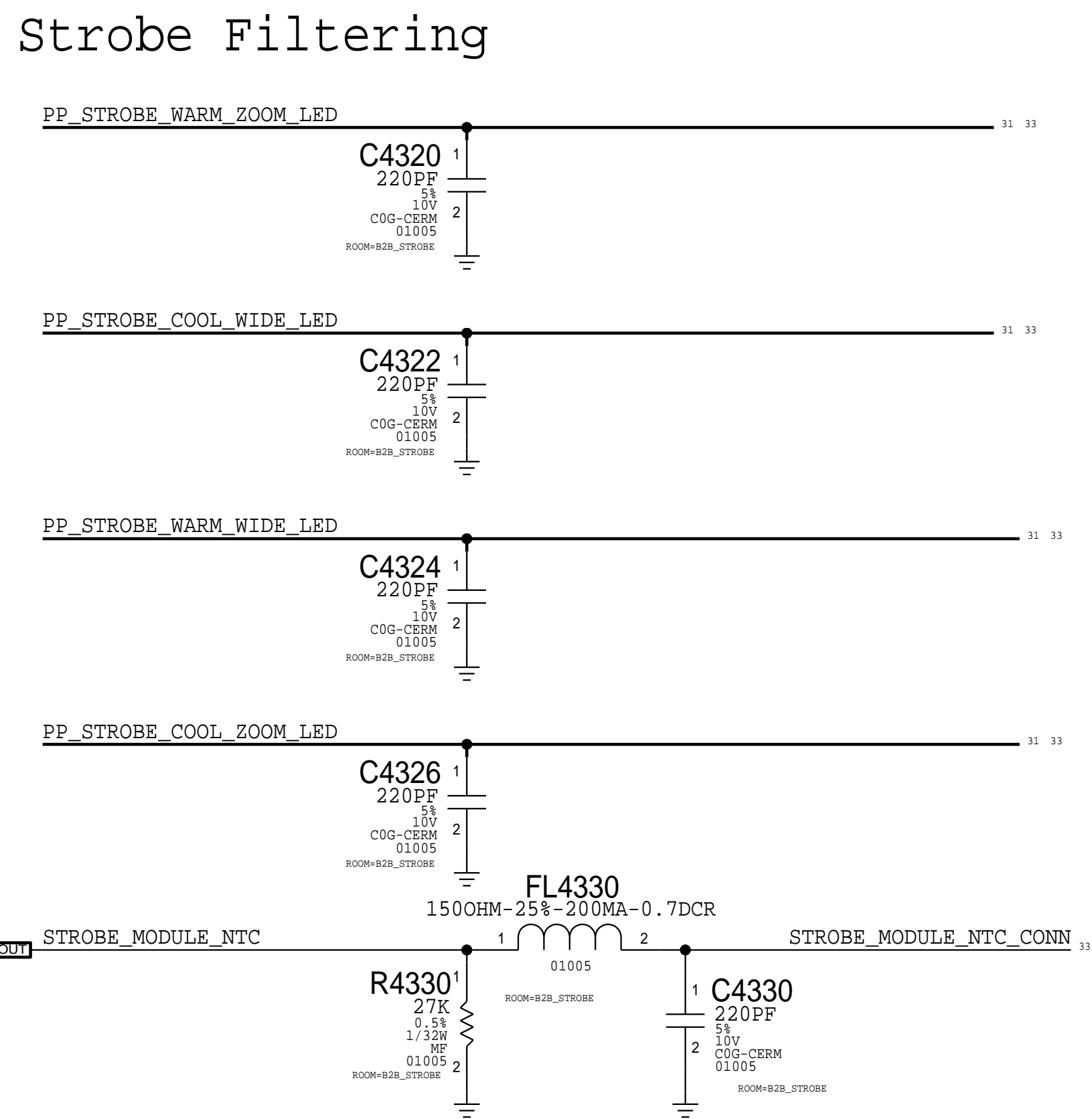
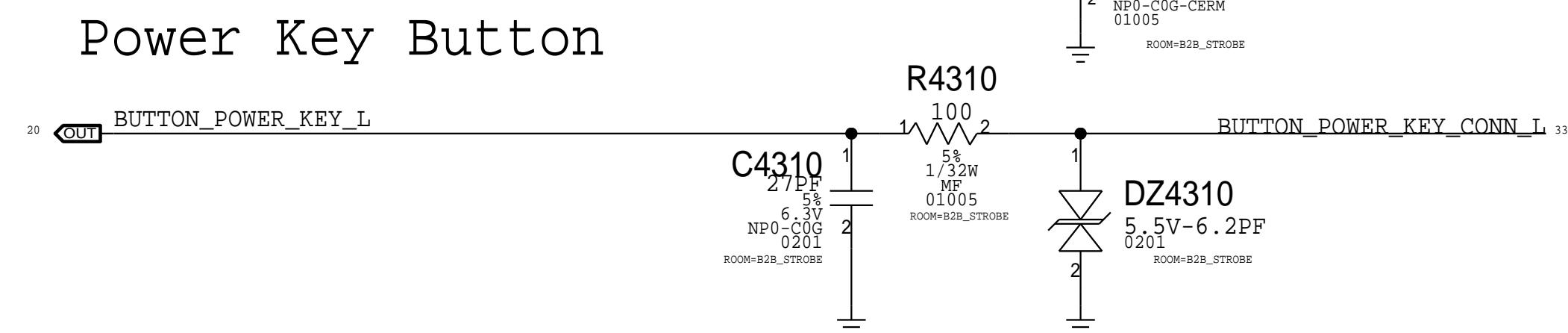
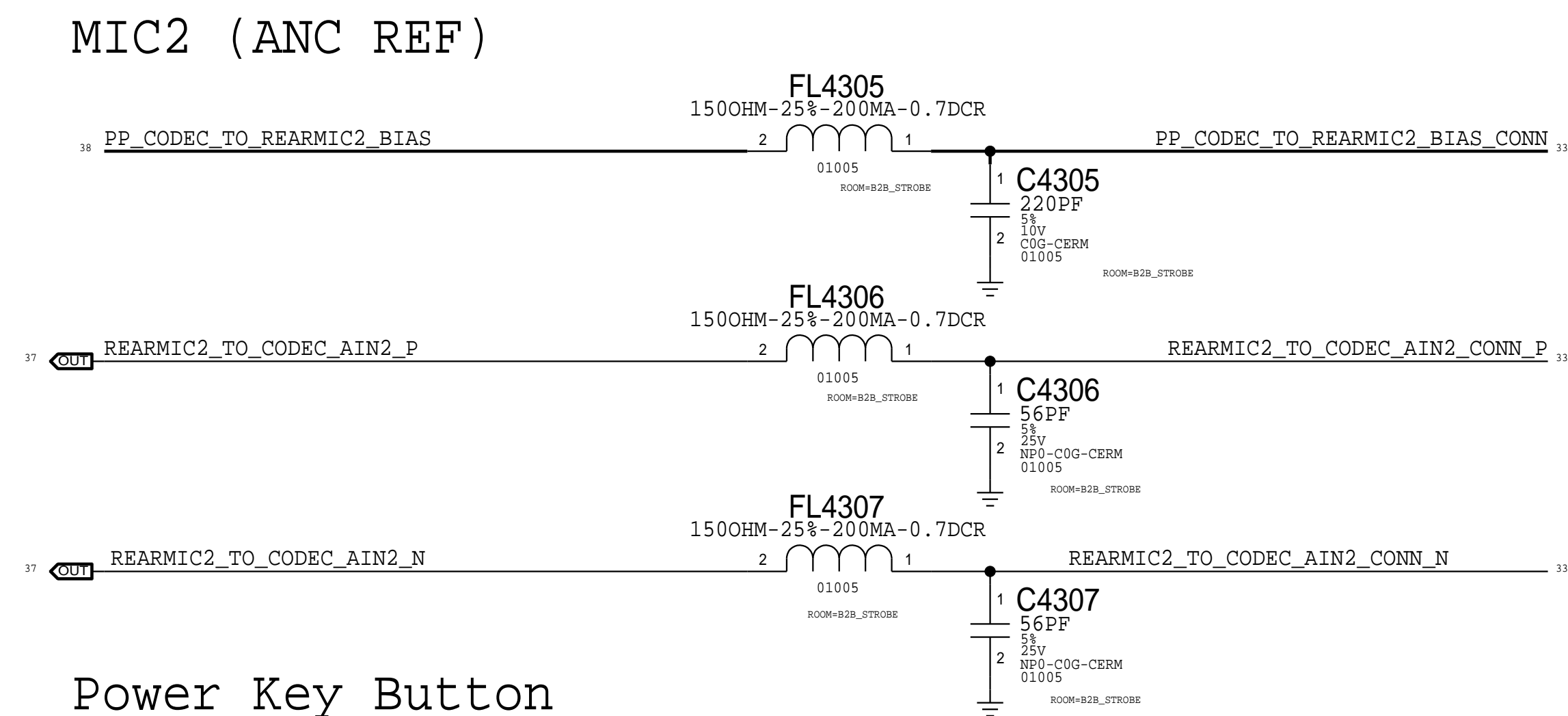
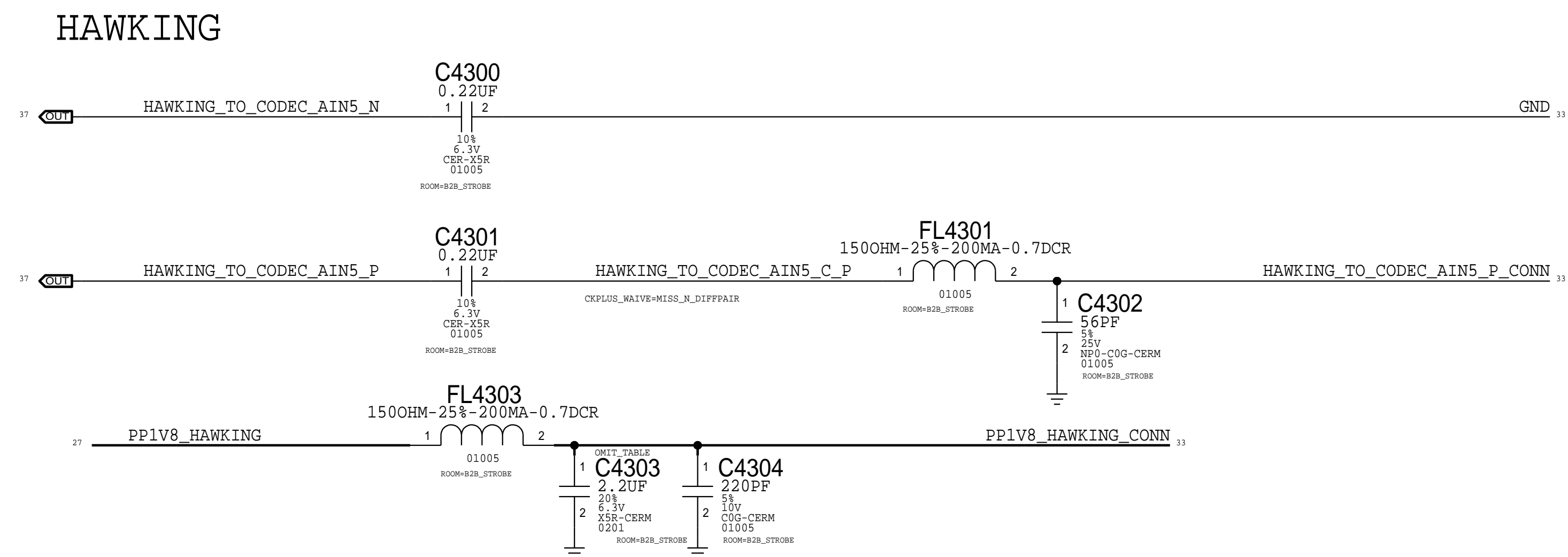
FCAM I/O




ISP I2C2



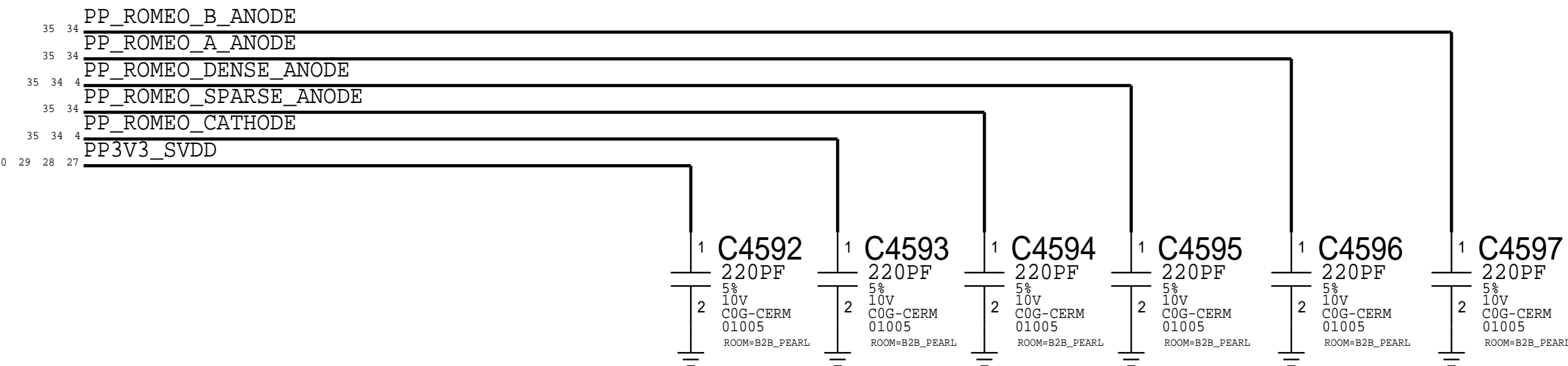
PAGE TITLE		
CAMERA: B2B FCAM		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	BRANCH	evt-1
	PAGE	42 OF 80
	SHEET	32 OF 51



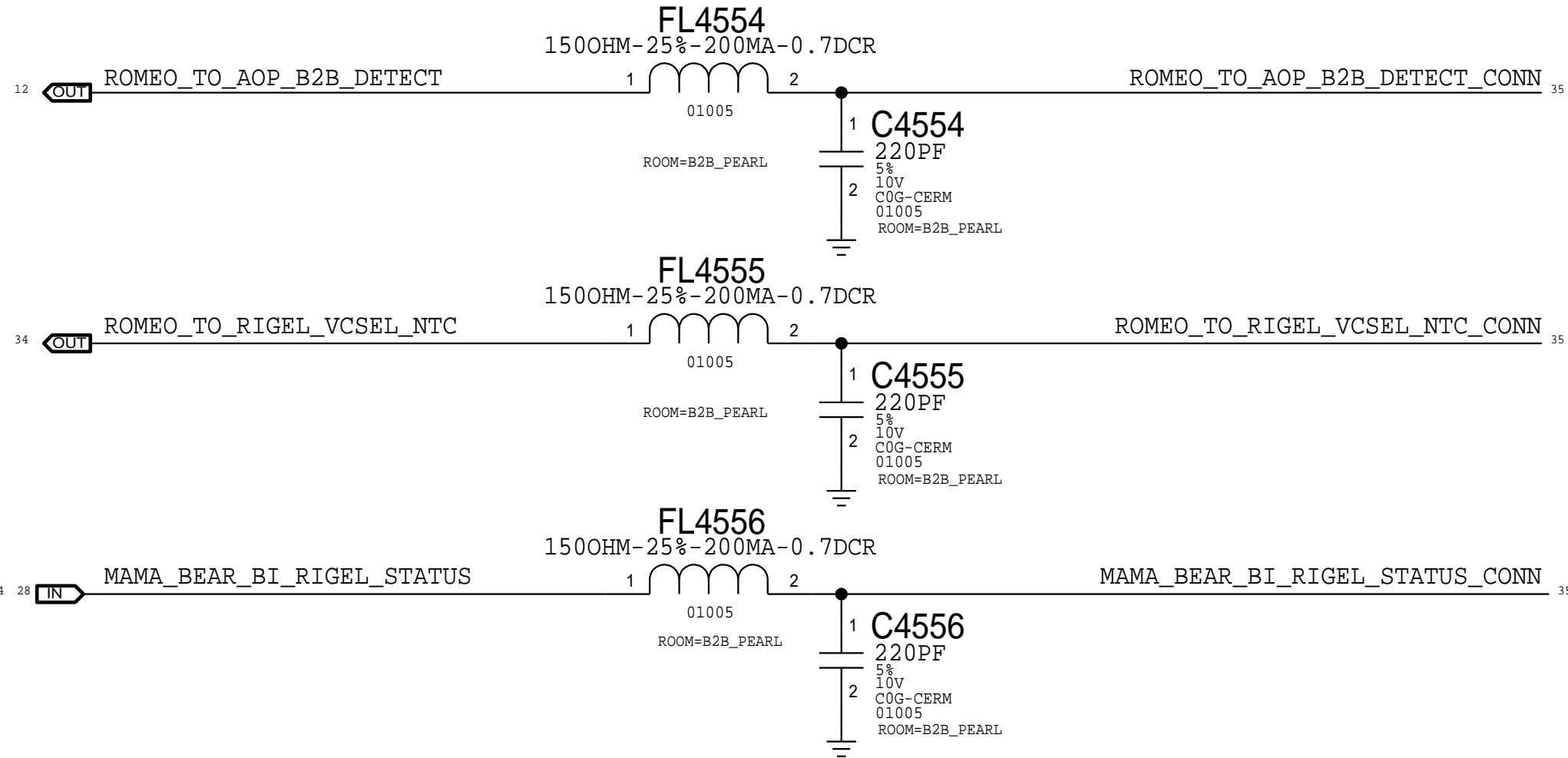
PAGE TITLE		DRAWING NUMBER		SIZE
CAMERA: B2B Strobe + Hold Button		051-02221		D
 Apple Inc.		REVISION		
		9.0.0		
		BRANCH		evt-1
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT 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		43 OF 80
		SHEET		33 OF 51

A

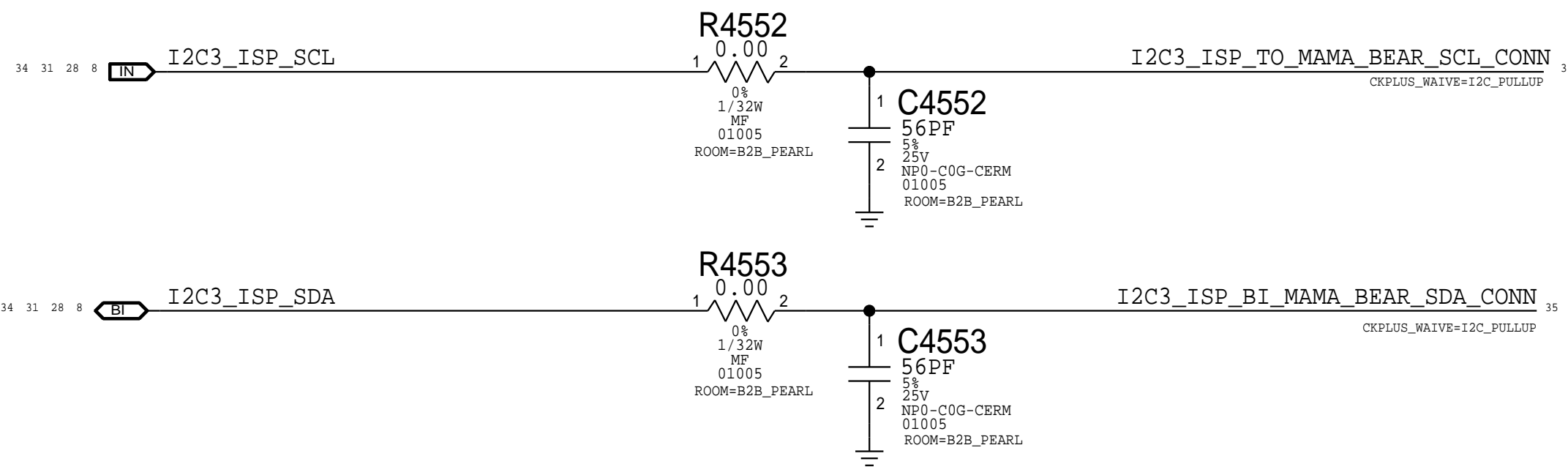
Romeo Power Filtering



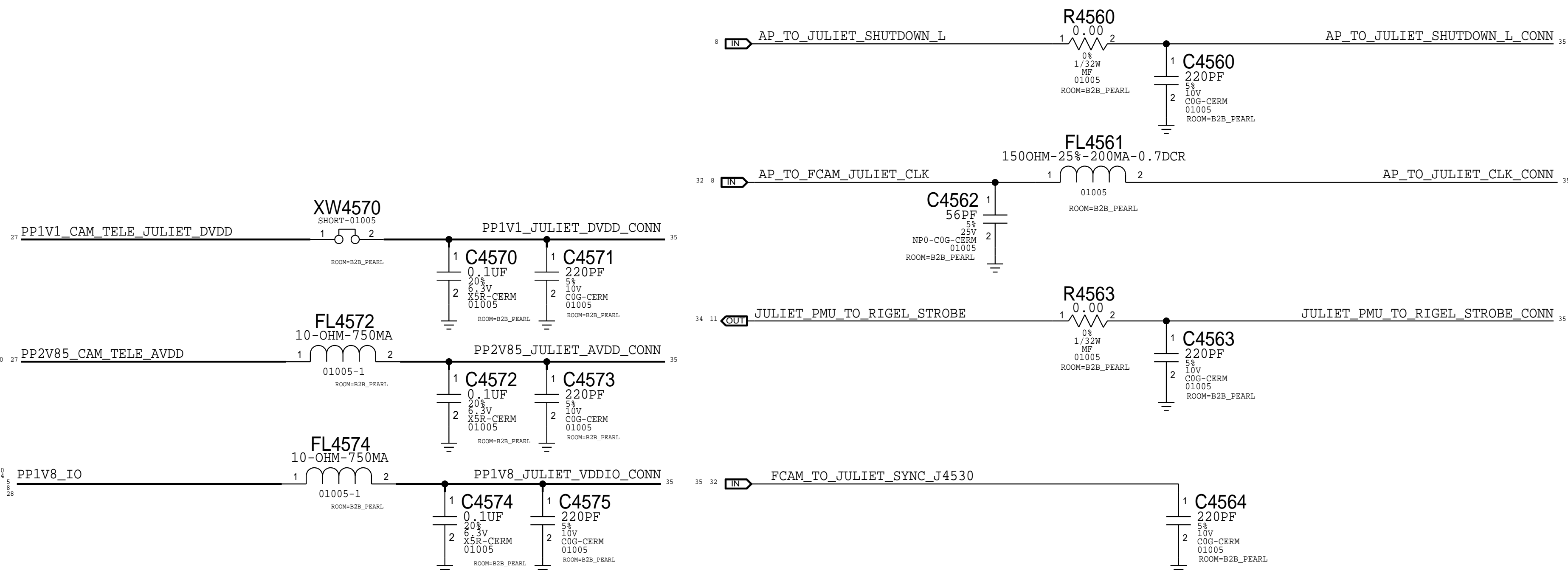
Romeo I/O



ISP I2C3

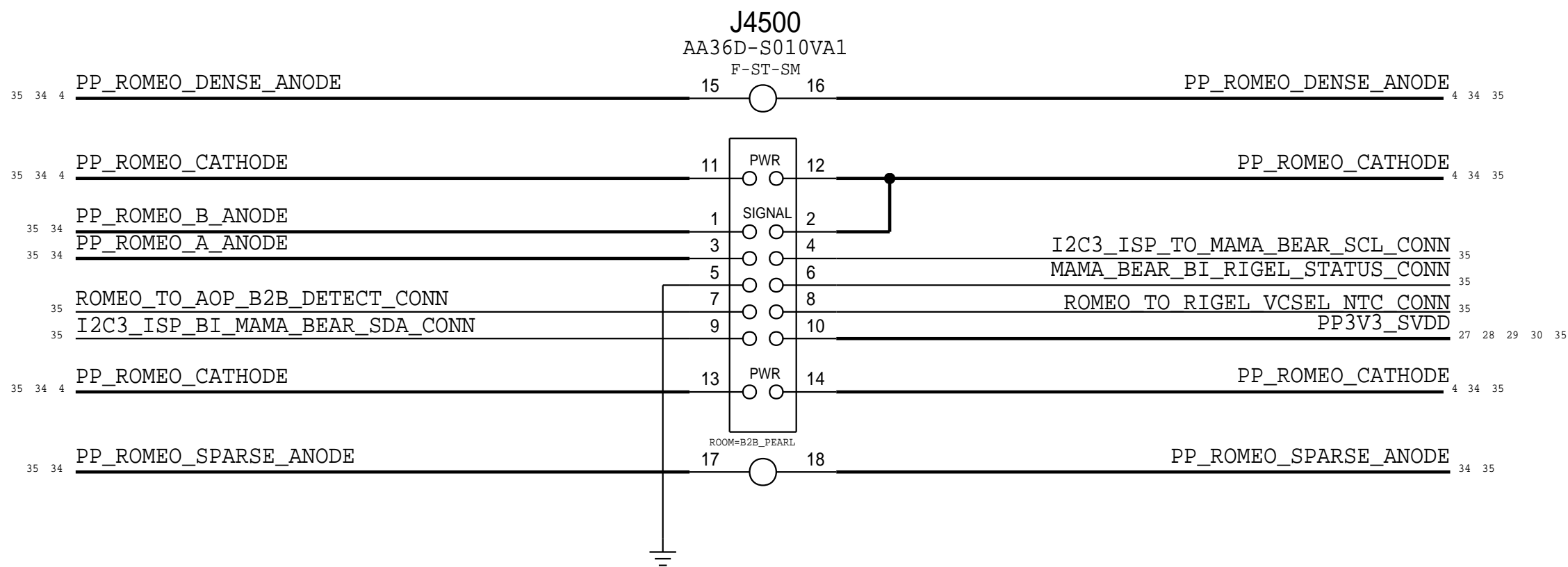


Juliet Power and I/O



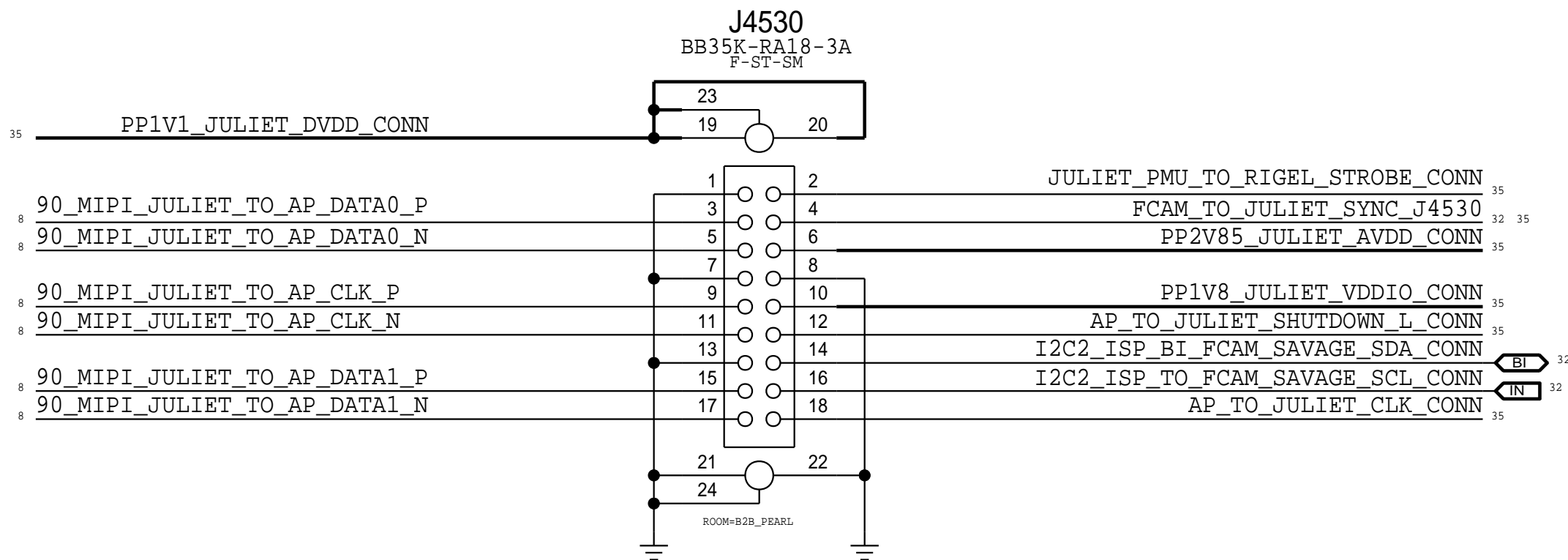
Romeo Connector

Rcpt: 516S00267 <-- This one on MLB
Plug: 516S00268

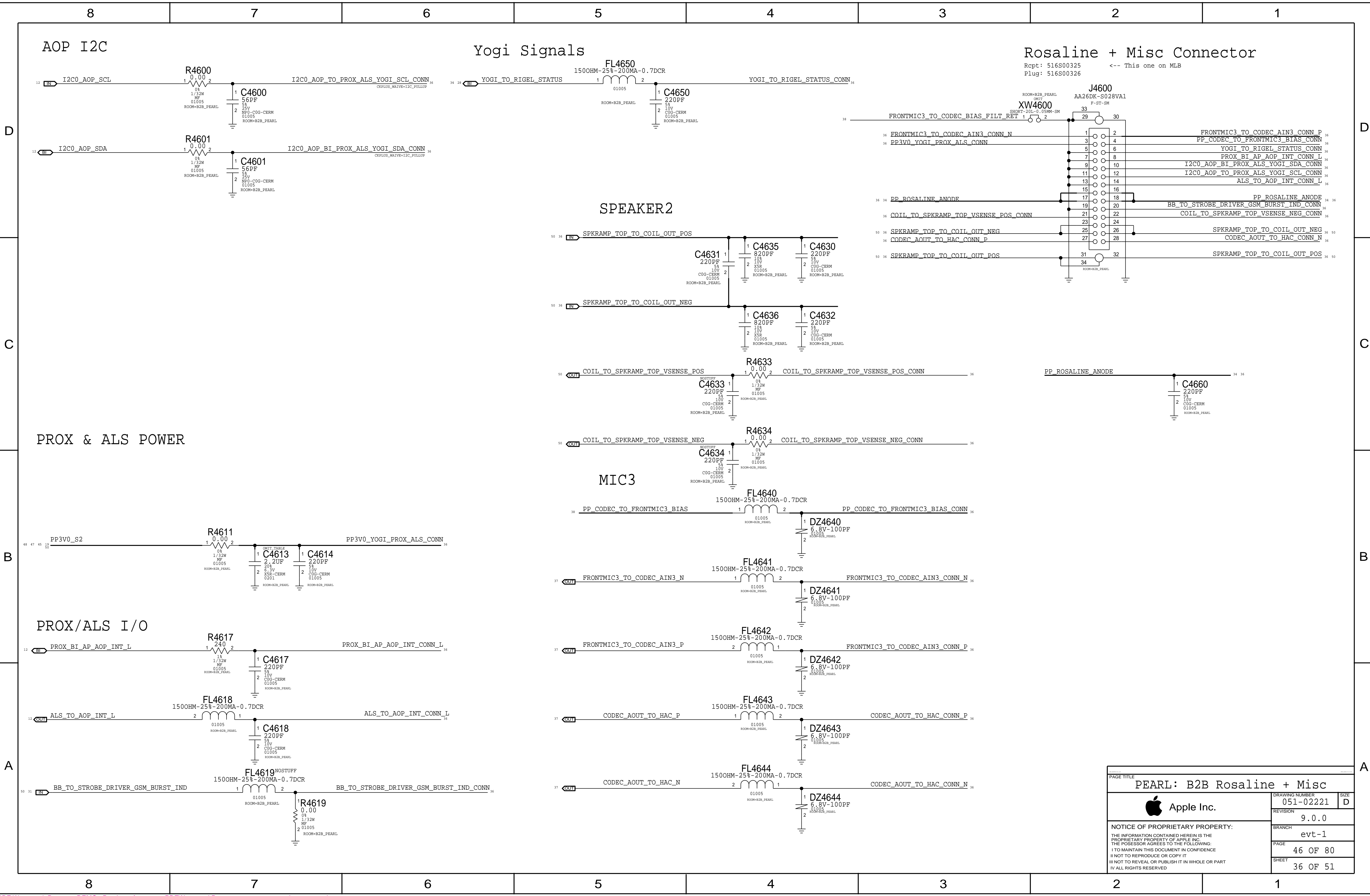


Juliet Connector

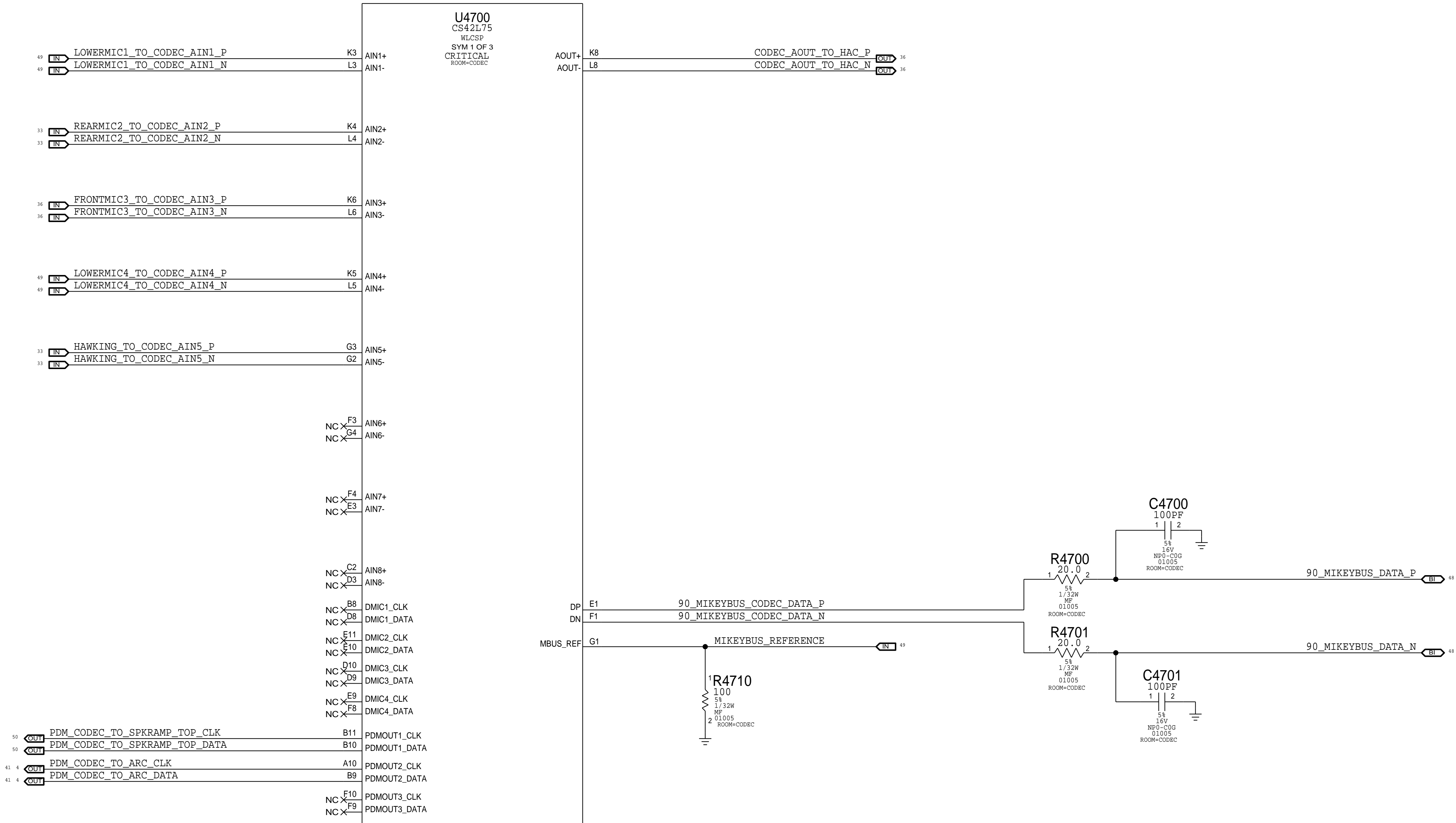
Rcpt: 516S00244 <-- This one on MLB
Plug: 516S00245




PAGE TITLE		
PEARL: B2B Romeo + Juliet		
	DRAWING NUMBER	051-02221
	REVISION	9.0.0
NOTICE OF PROPRIETARY PROPERTY:		BRANCH
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		evt-1
		PAGE
		45 OF 80
		SHEET
		35 OF 51

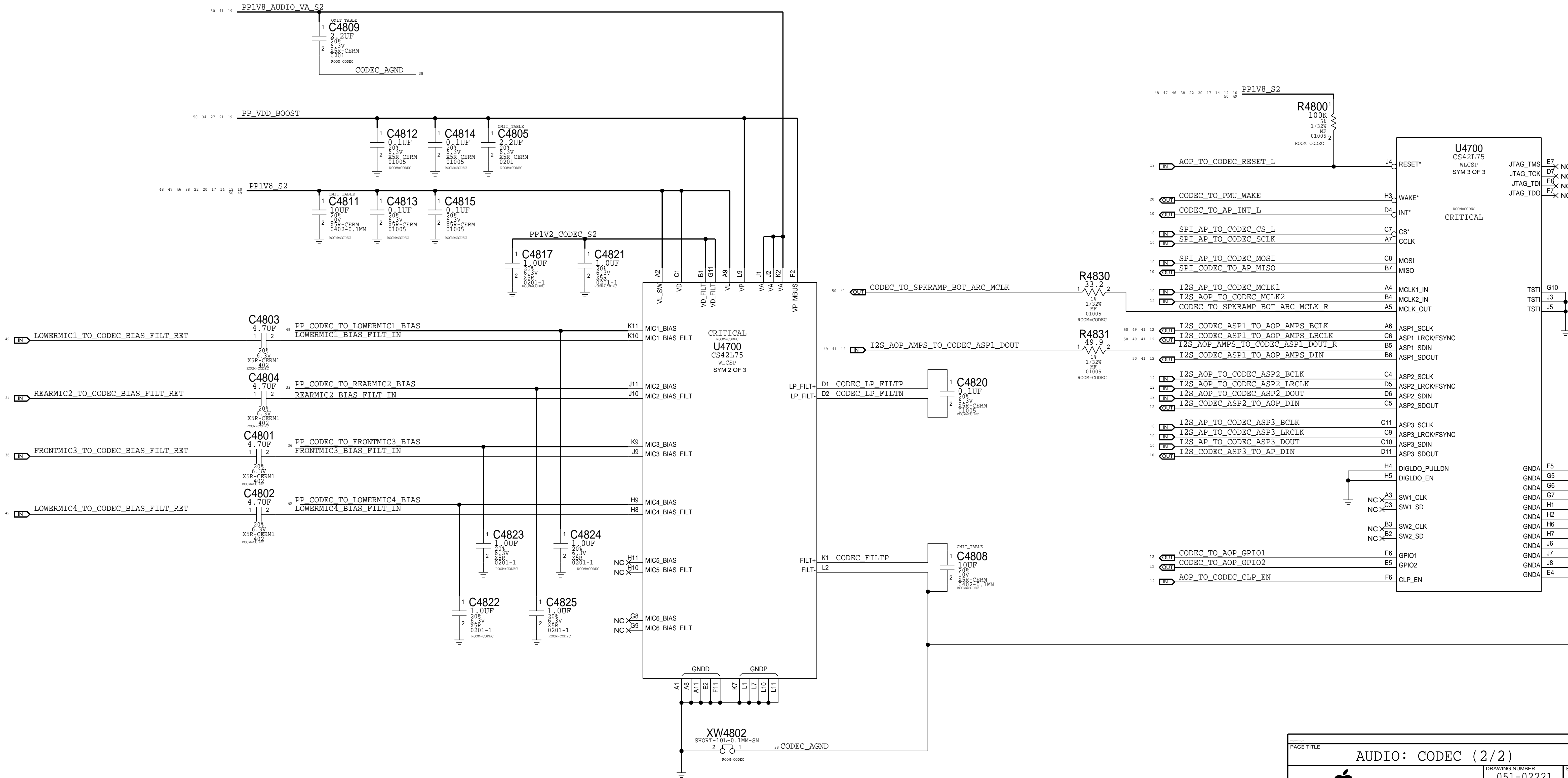



CALLAN AUDIO CODEC (ANALOG INPUTS & OUTPUTS)



PAGE TITLE		
AUDIO: CODEC (1/2)		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
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	BRANCH	evt-1
	PAGE	47 OF 80
	SHEET	37 OF 51

CALLAN AUDIO CODEC (POWER & I/O)




PAGE TITLE		
AUDIO: CODEC (2/2)		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
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	BRANCH	evt-1
	PAGE	48 OF 80
	SHEET	38 OF 51

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

South Speaker Amplifier on MLB Bottom

PAGE TITLE			AUDIO: Speaker Amp Bottom			DRAWING NUMBER			051-02221			SIZE			D		
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			REVISION			9.0.0			BRANCH			evt-1					
			PAGE			49 OF 80			SHEET			39 OF 51					

South Speaker Amplifier on MLB Bottom


PAGE TITLE		AUDIO: Speaker Amp Bottom		SYNC_DATE=08/25/2015	
 Apple Inc.		DRAWING NUMBER		SIZE	
		051-02221		D	
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		REVISION		9.0.0	
		BRANCH		evt-1	
		PAGE		49 OF 80	
		SHEET		39 OF 51	

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

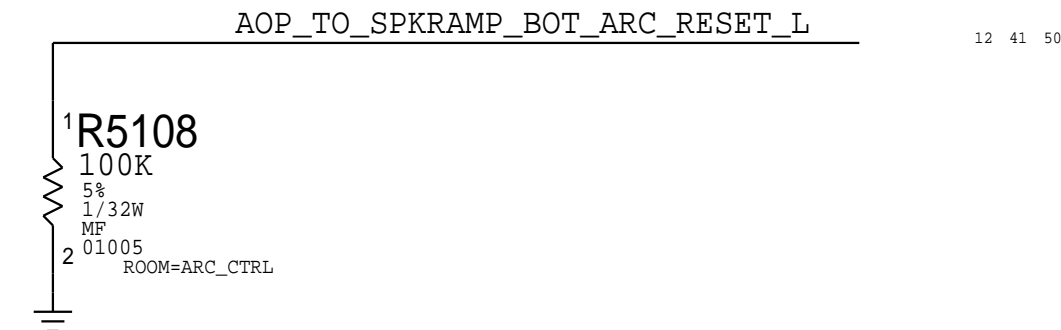
North Speaker Amplifier on MLB Bottom

PAGE TITLE			AUDIO: Speaker Amp Top			DRAWING NUMBER			051-02221			SIZE			D					
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			REVISION			9.0.0			BRANCH			evt-1			PAGE			50 OF 80		
			SHEET			40 OF 51														

North Speaker Amplifier on MLB Bottom

PAGE TITLE			SYNC_DATE=08/25/2015		
AUDIO: Speaker Amp Top					
 Apple Inc.		DRAWING NUMBER		SIZE	
		051-02221		D	
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		REVISION			
		9.0.0			
		BRANCH			
		evt-1			
		PAGE			
		50 OF 80			
		SHEET			
		40 OF 51			

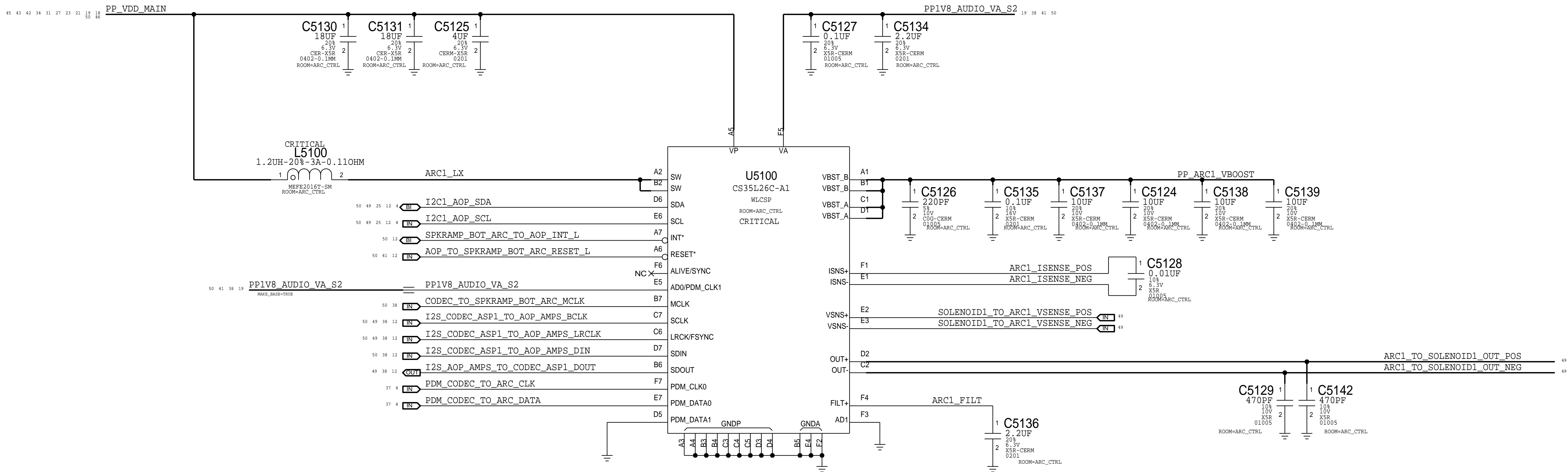
Pull Downs




ARC DRIVER

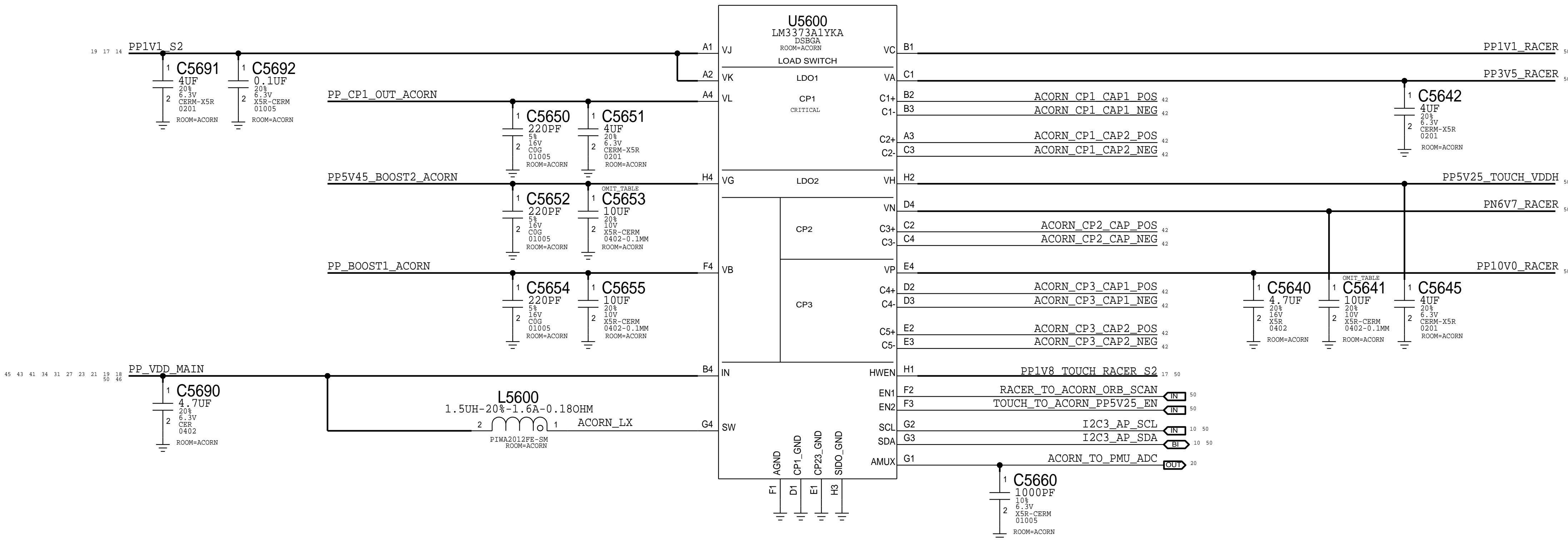
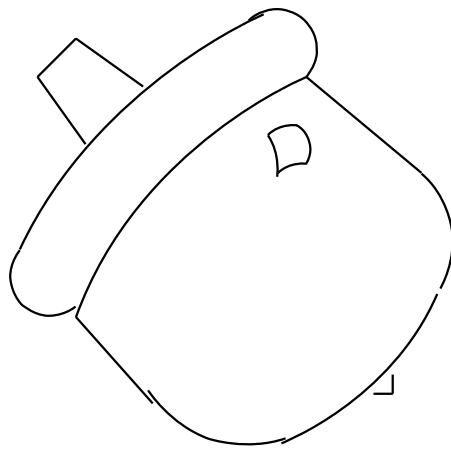
APN: 338S00296

I2C ADDRESS: 1000 001x
0x82

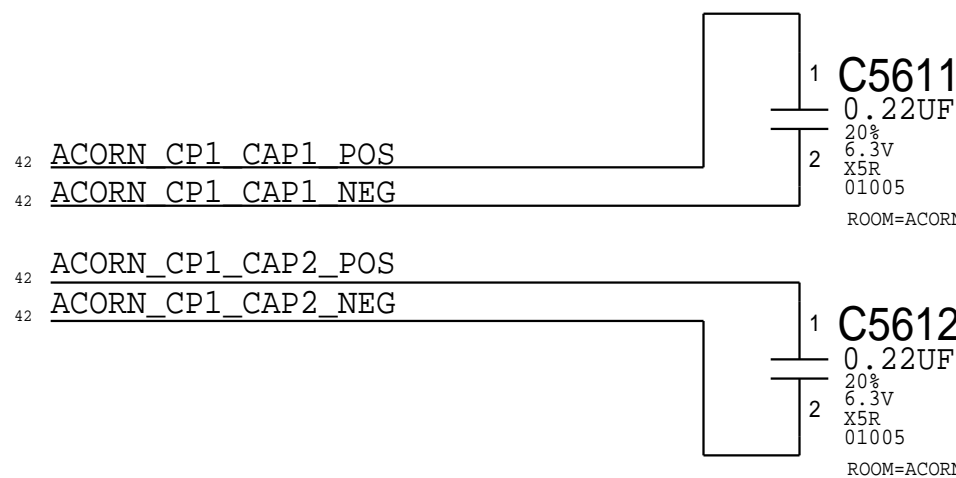


PAGE TITLE		
ARC: Driver		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
	BRANCH	evt-1
	PAGE	51 OF 80
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		SHEET 41 OF 51

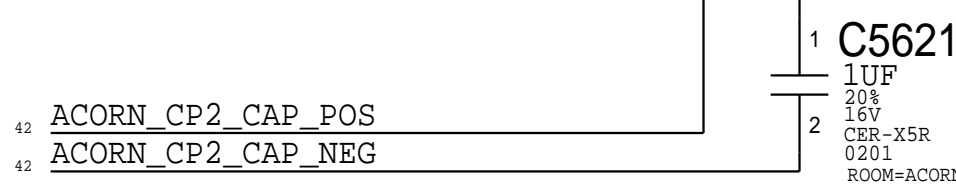
Acorn PMU



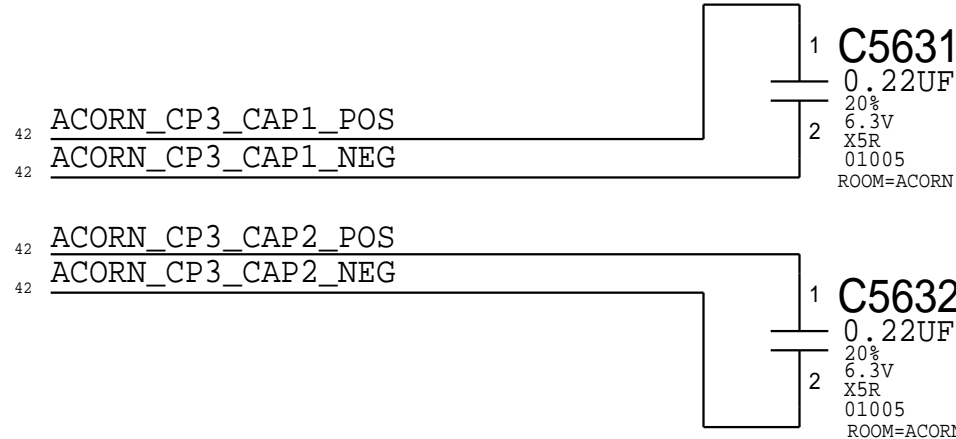
Charge Pump 1 Caps



Charge Pump 2 Caps

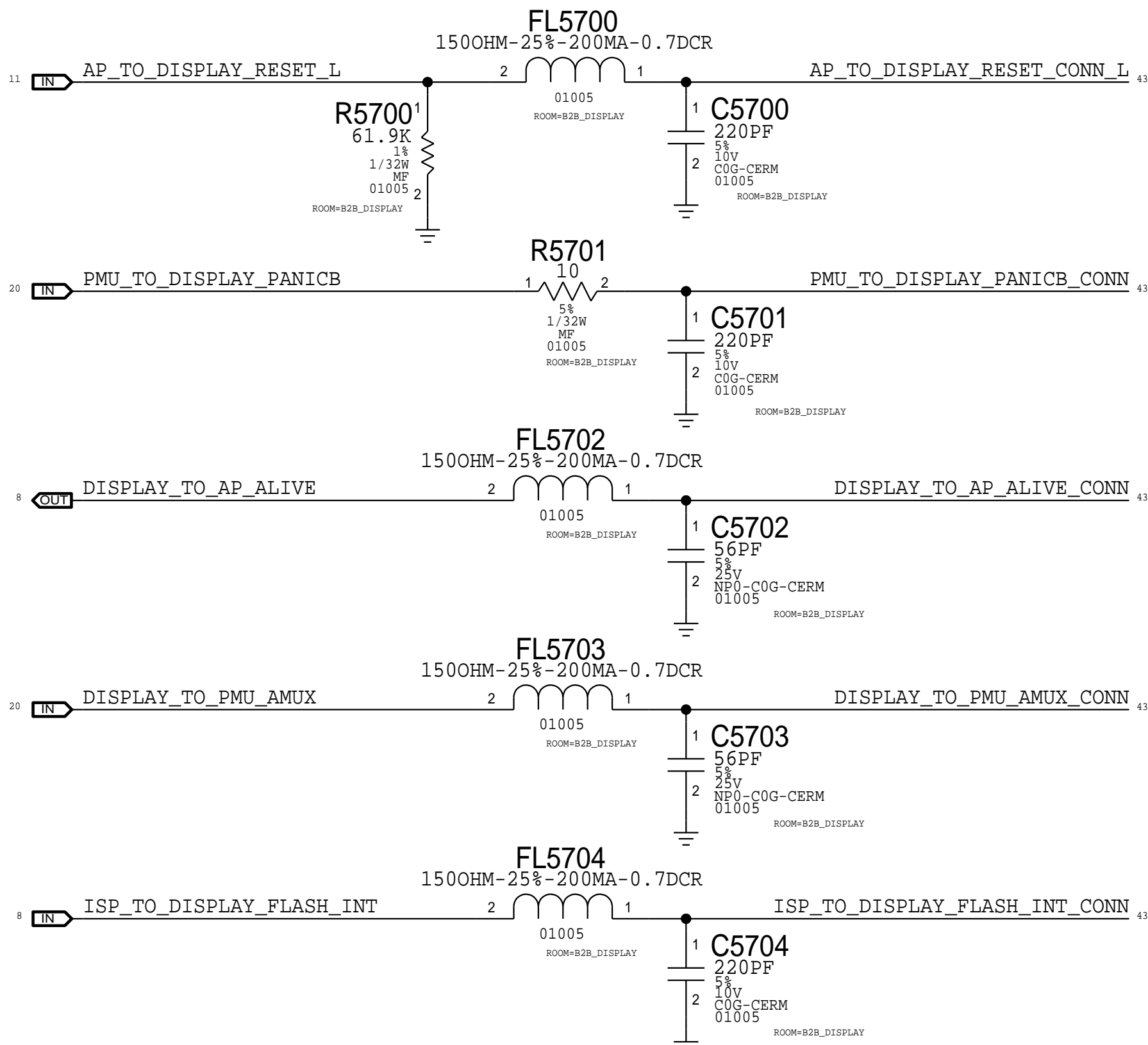


Charge Pump 3 Caps

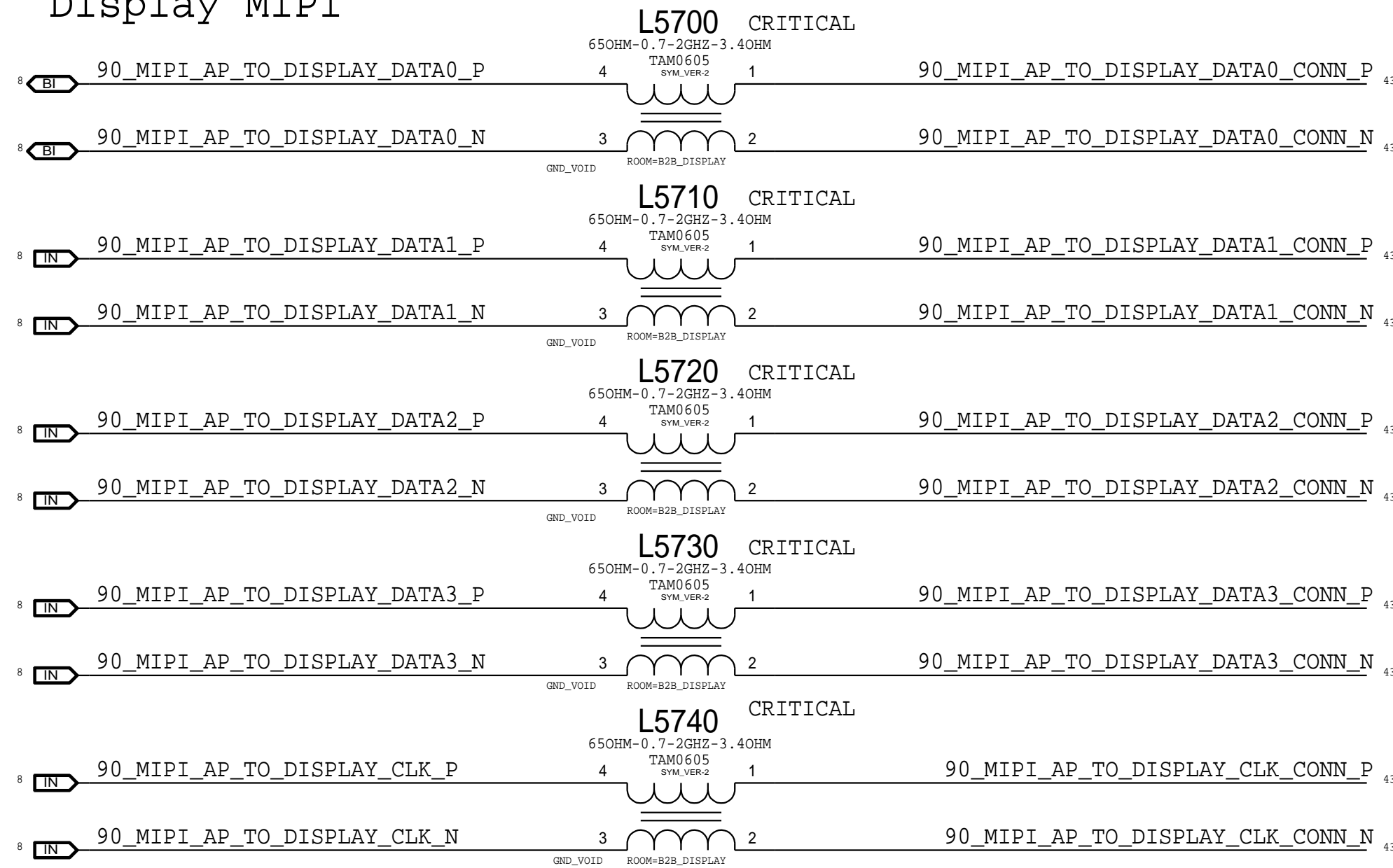


PAGE TITLE		
CG: Power Supplies - Touch & Display		
	DRAWING NUMBER	051-02221
	REVISION	9.0.0
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	BRANCH	evt-1
	PAGE	56 OF 80
	SHEET	42 OF 51

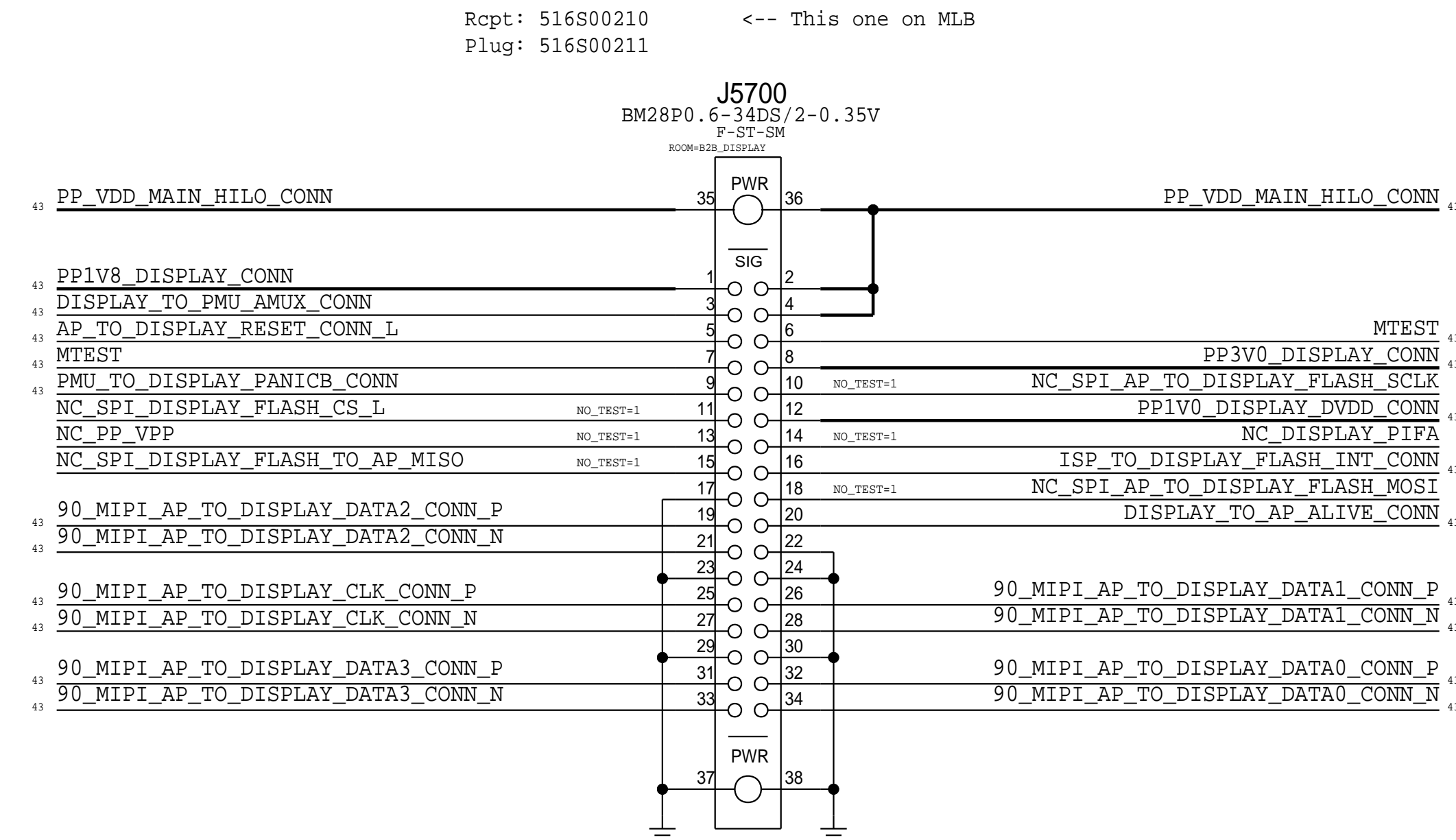
Display Control Signals



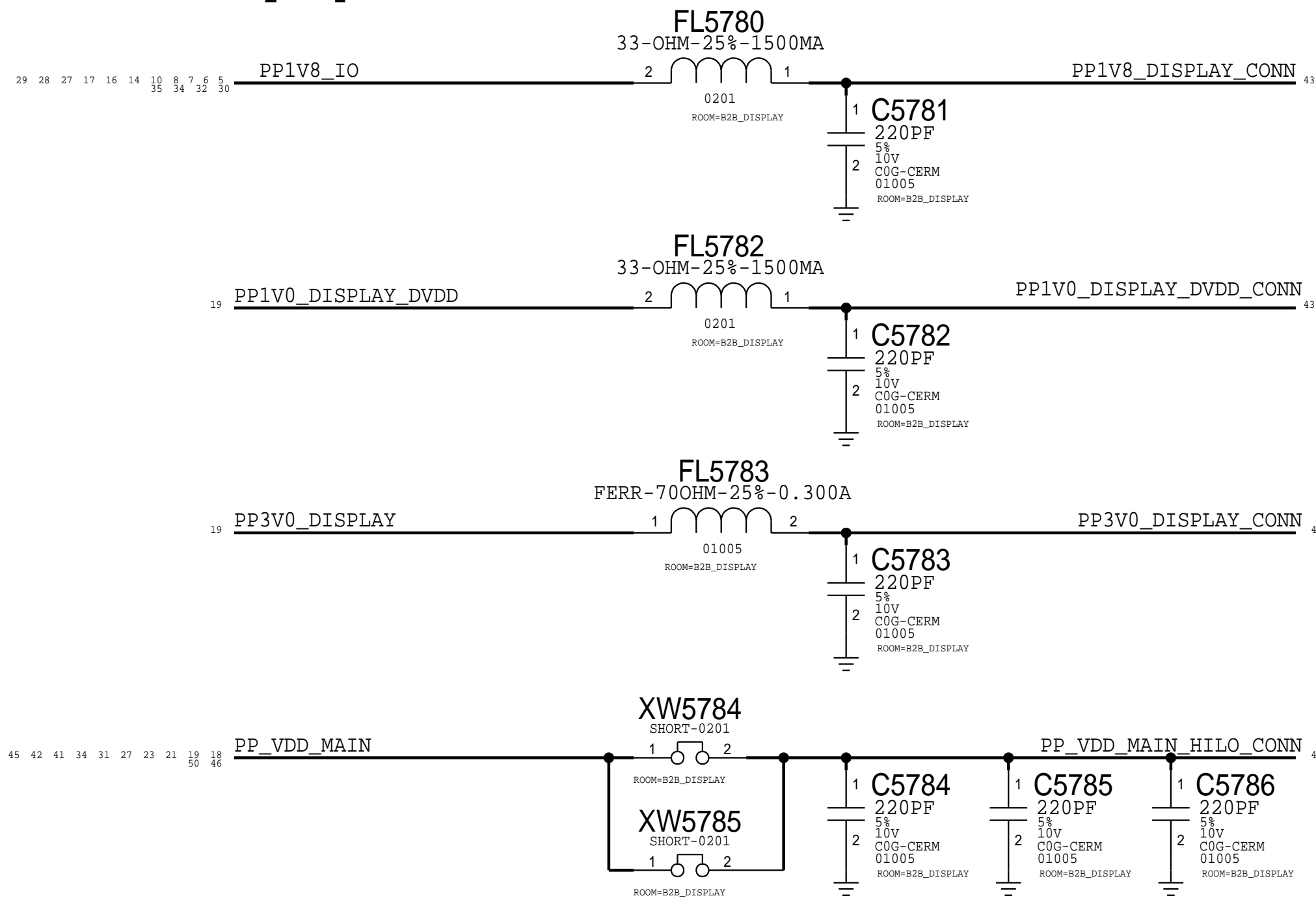
Display MIPI




Display Flex Connector



Display Power



PAGE TITLE		
CG: B2B Display		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
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	BRANCH	evt-1
	PAGE	57 OF 80
	SHEET	43 OF 51

8		7		6		5		4		3		2		1	
D														D	
C														C	
B		Orb + Touch Connector on MLB Bottom												B	
A														A	
8		7		6		5		4		3		2		1	

CG: B2B Orb & Touch

Apple Inc.

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

DRAWING NUMBER
051-02221

REVISION
9.0.0

BRANCH
evt-1

PAGE
58 OF 80

SHEET
44 OF 51


SIZE
D

PAGE TITLE

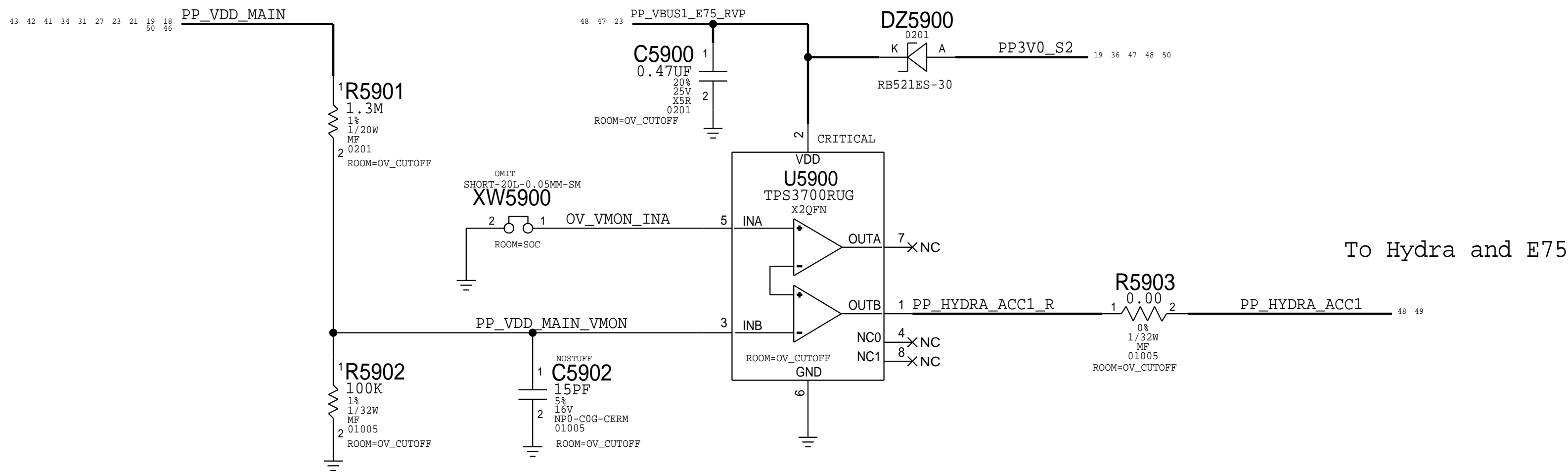
CG: B2B Orb & Touch


SYNC_DATE=08/25/2015

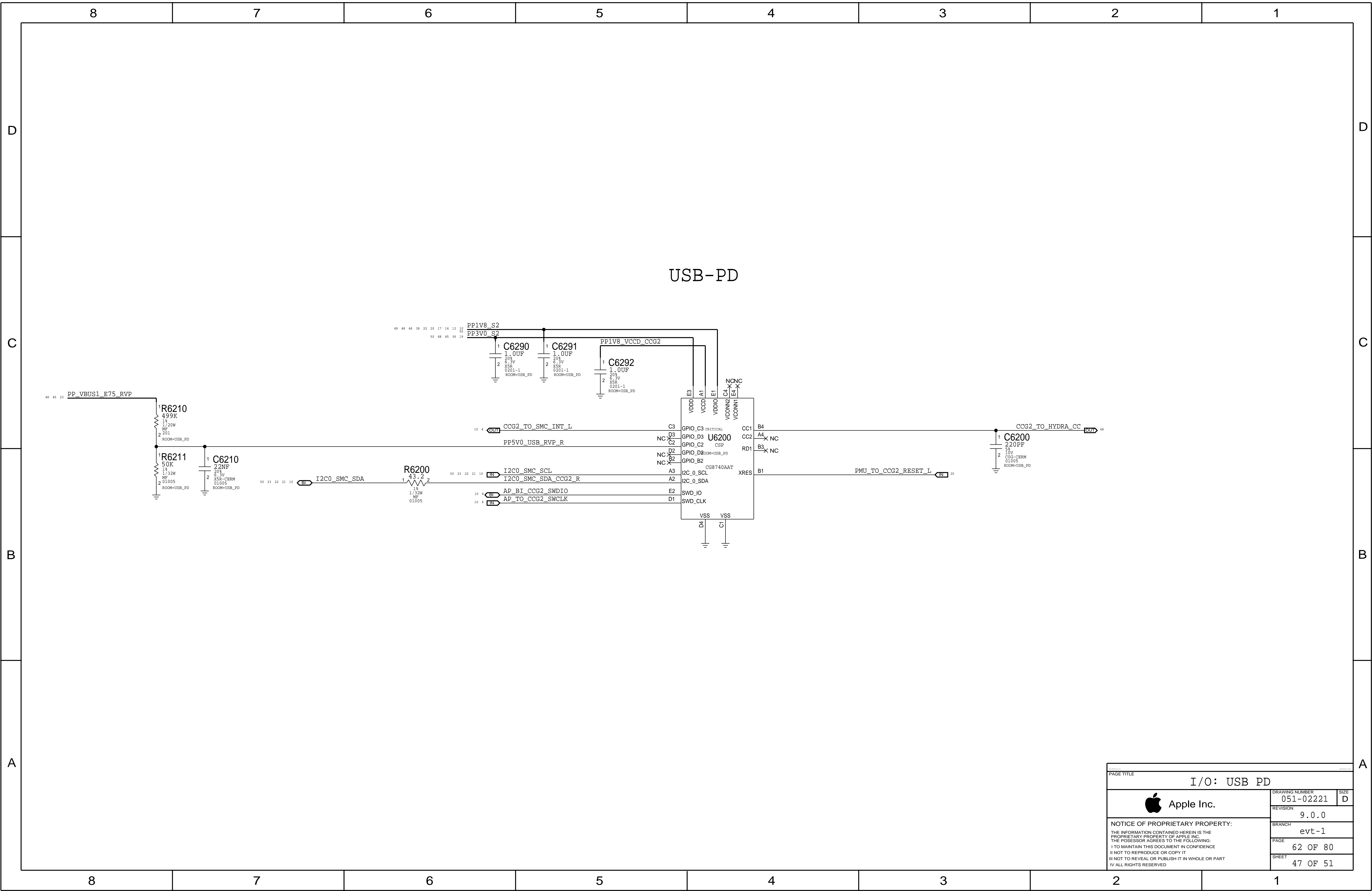
Orb + Touch Connector on MLB Bottom


PAGE TITLE			SYNC_DATE=08/25/2015		
CG: B2B Orb & Touch					
 Apple Inc.	DRAWING NUMBER		051-02221		SIZE D
	REVISION		9.0.0		
	BRANCH		evt-1		
	PAGE		58 OF 80		
	SHEET		44 OF 51		
	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				

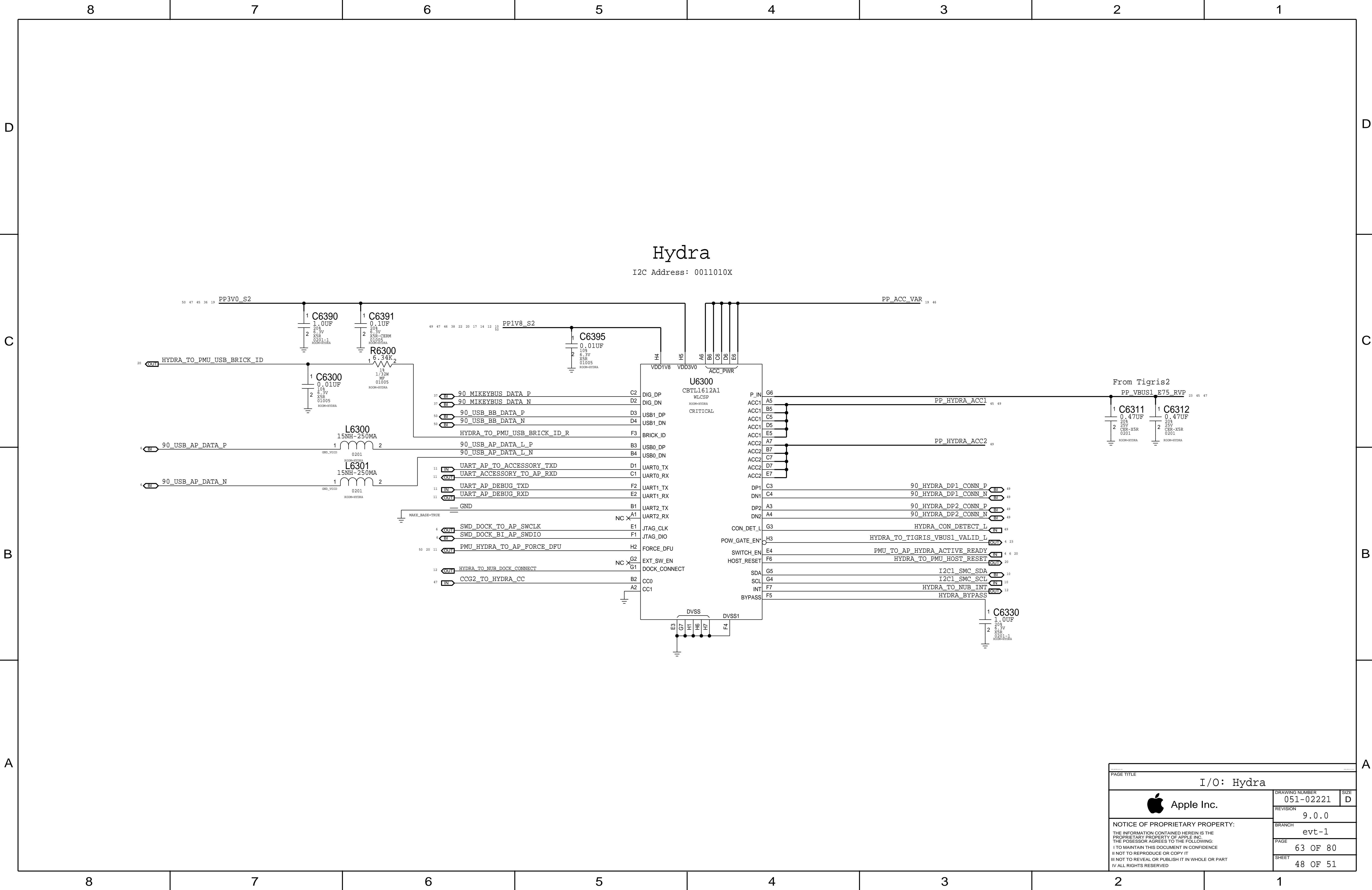
VDD_MAIN OV CUT-OFF CIRCUIT



PAGE TITLE		
I/O: Overvoltage Cut-Off Circuit		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
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	BRANCH	evt-1
	PAGE	59 OF 80
	SHEET	45 OF 51



PAGE TITLE		
I/O: USB PD		
 Apple Inc.	DRAWING NUMBER	051-02221
	REVISION	9.0.0
	BRANCH	evt-1
	PAGE	62 OF 80
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		SHEET 47 OF 51



8

7

6

5

4

3

2

1

D

C

B

A

I/O: Hydra

Apple Inc.

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

DRAWING NUMBER

051-02221

SIZE

D

REVISION

9.0.0

BRANCH

evt-1

PAGE

63 OF 80

SHEET

48 OF 51

8

7

6

5

4

3

2

1

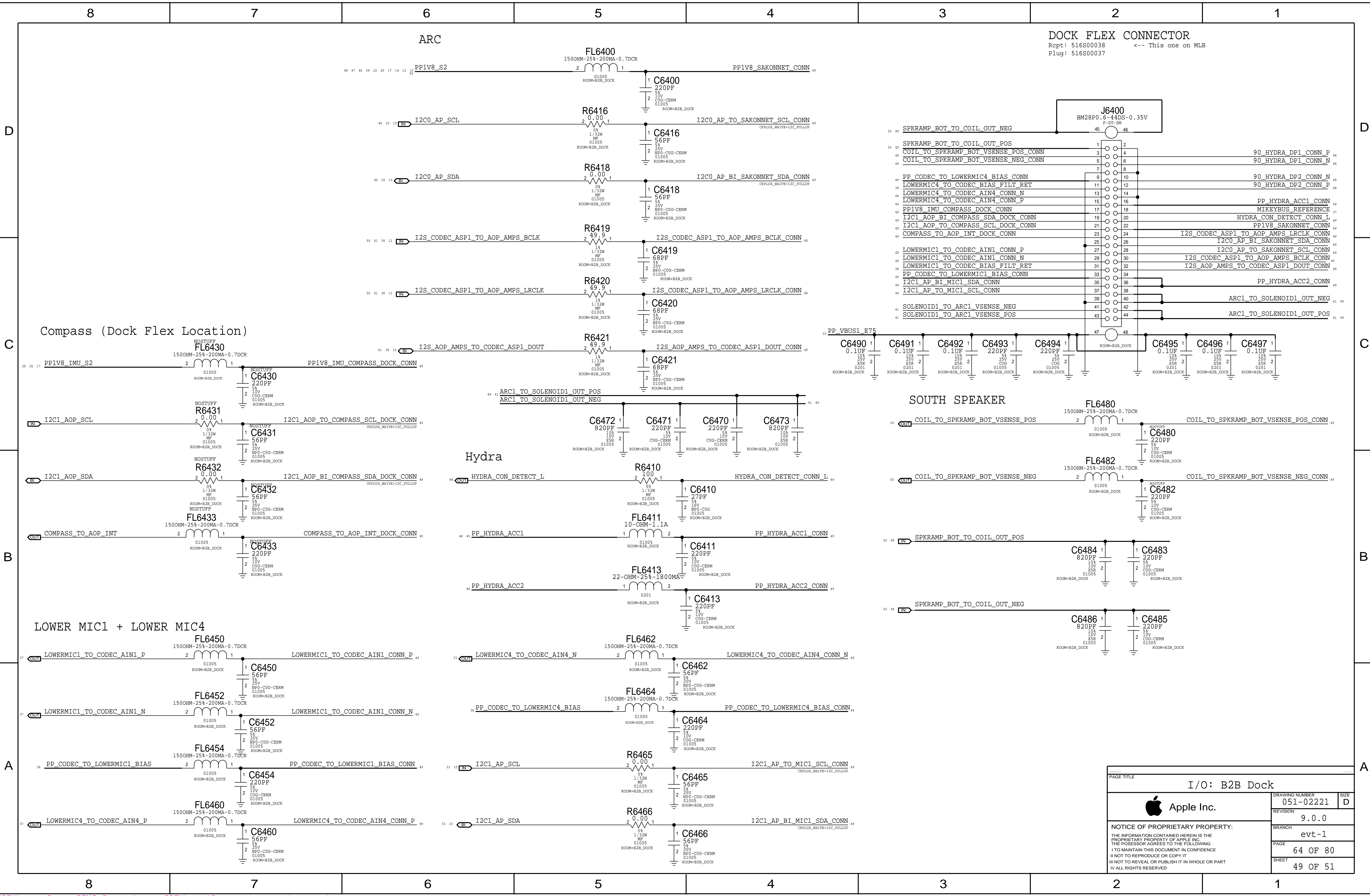
D

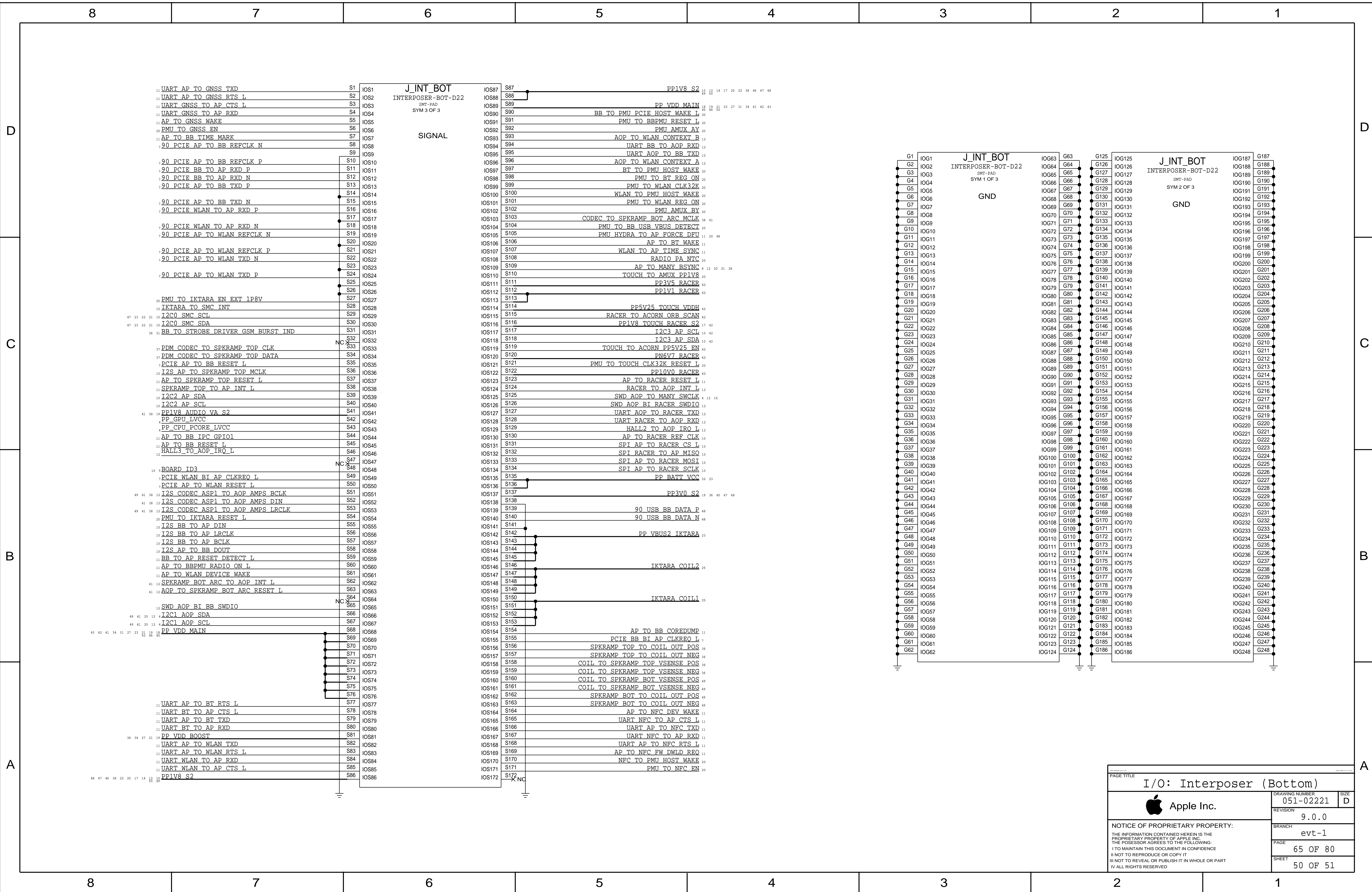
C

B

A

PDF Watermark Remover DEMO : Purchase from www.PDFWatermarkRemover.com to remove the watermark






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

Radios on MLB Bottom

Radios on MLB Bottom

PAGE TITLE		RADIO		SYNC_DATE=06/04/2015	
 Apple Inc.		DRAWING NUMBER		051-02221	
		REVISION		9.0.0	
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		BRANCH		evt-1	
		PAGE		80 OF 80	
		SHEET		51 OF 51	

EEEE Codes

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-7691	1	EEEE FOR (MLB_BOT, 639-03410, JPN)	EEEE_HP27	NO	JPN
825-7691	1	EEEE FOR (MLB_BOT, 639-03222, ROW)	EEEE_HL49	NO	ROW

Global Capacitors

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00148	138S00149	BOM_TABLE_ALTS	ALL	0402-3T,10.5uF@1V, Kyocera
138S00150	138S00149	BOM_TABLE_ALTS	ALL	0402-3T,10.5uF@1V, SEMCO
138S00151	138S00149	BOM_TABLE_ALTS	ALL	0402-3T,10.5uF@1V, TY

CRITICAL PART#	COMMENT
138S00149	0402-3T,10.5uF@1V

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00143	138S00144	BOM_TABLE_ALTS	ALL	0402.16uF±1V, Kyocera
138S00163	138S00144	BOM_TABLE_ALTS	ALL	0402.16uF±1V, Taiyo

CRITICAL PART#	COMMENT
138S00144	0402,16uF@1V

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00138	138S00139	BOM_TABLE_ALTS	ALL	0201,3uPw1V, Kyocera
138S00164	138S00139	BOM_TABLE_ALTS	ALL	0201,3uPw1V, Taiyo

CRITICAL PART#	COMMENT
138S00139	0201,3uF@1V

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00145	138S00146	BOM_TABLE_ALTS	ALL	0402,5.1uF#3V, Kyocera
138S00165	138S00146	BOM_TABLE_ALTS	ALL	0402,5.1uF#3V, Taiyo

CRITICAL PART#	COMMENT
138S00146	0402, 5.1uF@3V

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S00140	138S00141	BOM_TABLE_ALTS	ALL	0201.1.1uF03V, Kyocera
138S00142	138S00141	BOM_TABLE_ALTS	ALL	0201.1.1uF03V, SMC
138S00166	138S00141	BOM_TABLE_ALTS	ALL	0201.1.1uF03V, Taiyo

CRITICAL PART#	COMMENT
138S00141	0201,1.1uF@3V

Global Ferrites

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152800558	152800557	BOM_TABLE_ALTS	ALL	2XD_MLD_5_4TUN_204_2_5A_60M0_1608
155800194	15580610	BOM_TABLE_ALTS	ALL	FEED NO.153 (MID_215_320M0_0_7_5CM_0105)
155800200	15580610	BOM_TABLE_ALTS	ALL	FEED NO.153 (MID_215_320M0_0_7_5CM_0105)

CRITICAL PART#	COMMENT
152S00557	IND,MLD,0.47UH,20%,2.5A,80MO,1608
155S0610	FERR BD,150 OHM,25%,200MA,0.7 DCR,01005

Global R/C Alternates

[illegible]

CRITICAL PART#	COMMENT
138S0652	CAP, X5R, 4.7UF, 6.3V, 0.65MM, Q402, TAIYO
138S0986	CAP, CER, 3-TERM, 7.5UF, 20V, 4V, Q402, TAIYO/TDK
138S0739	CAP, CER, 1UF, 20V, 10V, X5R, Q201, MURATA

138S0706	CAP,CER,X5R,0.22UF,20%,6.3V,20%
132S0400	CAP,CER,X5R,0.22UF,20%,6.3V,01005
138S0831	CAP,CER,X5R,2.2UF,20%,6.3V,0201

Global Inductors

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152S00653	152S00651	BOM_TABLE_ALTS	ALL	IND.1.2UH,3A,2016,0.652
152S00654	152S00652	BOM_TABLE_ALTS	ALL	IND.1.2UH,3A,2016,0.82

CRITICAL PART#	COMMENT
152S00651	IND, 1.2UH, 3A, 2016, 0.65Z
152S00652	IND, 1.2UH, 3A, 2016, 0.8Z

Multi-Vendor Criticals

CRITICAL PART#	COMMENT	CRITICAL PART#	COMMENT
138S0979	CAP,CER,X5R,10UF,204,10V,0402,H=0.65MM	132S0008	CAP,CER,0.1UF,10A,50V,X7R,0402
138S0683	CAP,CER,X5R,1UF,104,25V,0402	131S0804	CAP,CER,27PF,5A,C0G,020,25V,0201
132S0663	CAP,CER,X5R,1UF,104,25V,0402	131S0307	CAP,CER,NPO/COG,100PF,5A,16V,01005
132S0288	CAP,CER,X5R,0.1UF,104,16V,0201	131S0053	CAP,CER,C0G,220PF,5A,10V,01005
132S0275	CAP,CER,X5R,470PF,104,10V,01005	117S0055	RES,NF,1/20W,2M OHM,5,0201,SMD
132S0245	CAP,CER,X5R,0.01UF,104,6.3V,01005	107S0257	THERMISTOR,NTC,10K OHM,18,B=3435,01005

Iktara

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
132S00021	8	CAP,CER,0.082UF,10k,50V,X7R,0402	C3451,C3452,C3453,C3454,C3455,C3456,C3457,C3458,C3459,C3460	NO	COMMON
132S0423	2	CAP,CER,0.022UF,50V,X7R,10k,0402	C3455,C3465	CRITICAL	COMMON
132S0423	2	CAP,CER,0.022UF,50V,X7R,10k,0402	C3456,C3466	CRITICAL	NOSTUFF

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
685-00183	685-00182	BOM_TABLE_ALTS	SUBBOM_DS	ERRMSG_MLG_NOT_CODED, ORIENT_1, K991

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
685-00182	1	SUBBOM_MLB,BOT,DIODES,DIODES,X891	SUBBOM_DS	CRITICAL	COMMON
371S00133	4	DIODES,SHOTKEY DIODE,30V,2A,0603	D3400,D3401,D3402,D3403	CRITICAL	DIODES_DS
371S00132	4	ONSEMI,SHOTKEY DIODE,30V,2A,0603	D3400,D3401,D3402,D3403	CRITICAL	ONSEMI_DS


Soft-Term Cap Sub BOMs

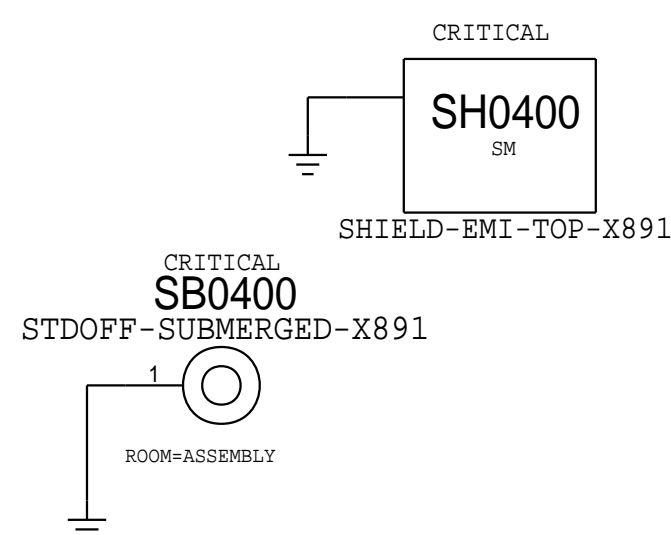
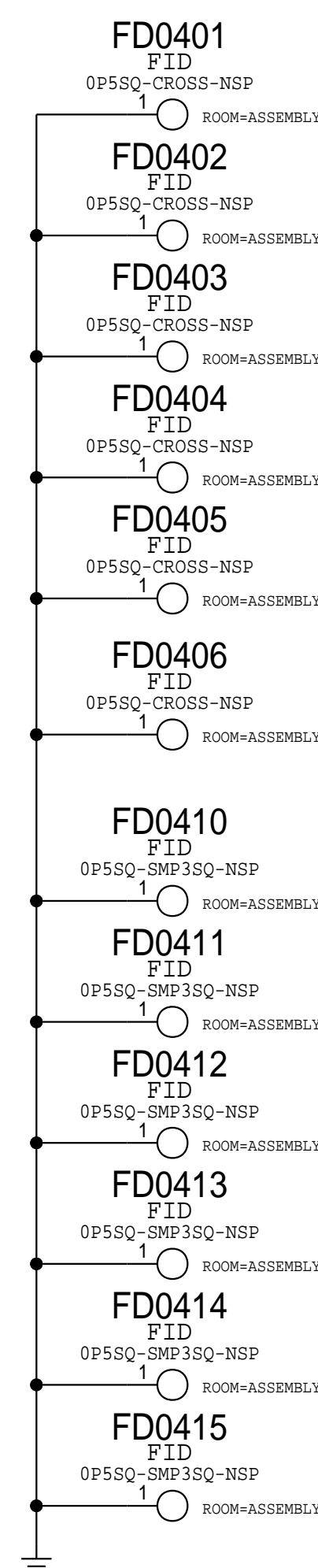
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
685-00157	1	SUBBOM,MLB,BOT,CAP,TYPICAL,X891	SUBBOM_CAP	CRITICAL	COMMON


Touch/Luna B2B

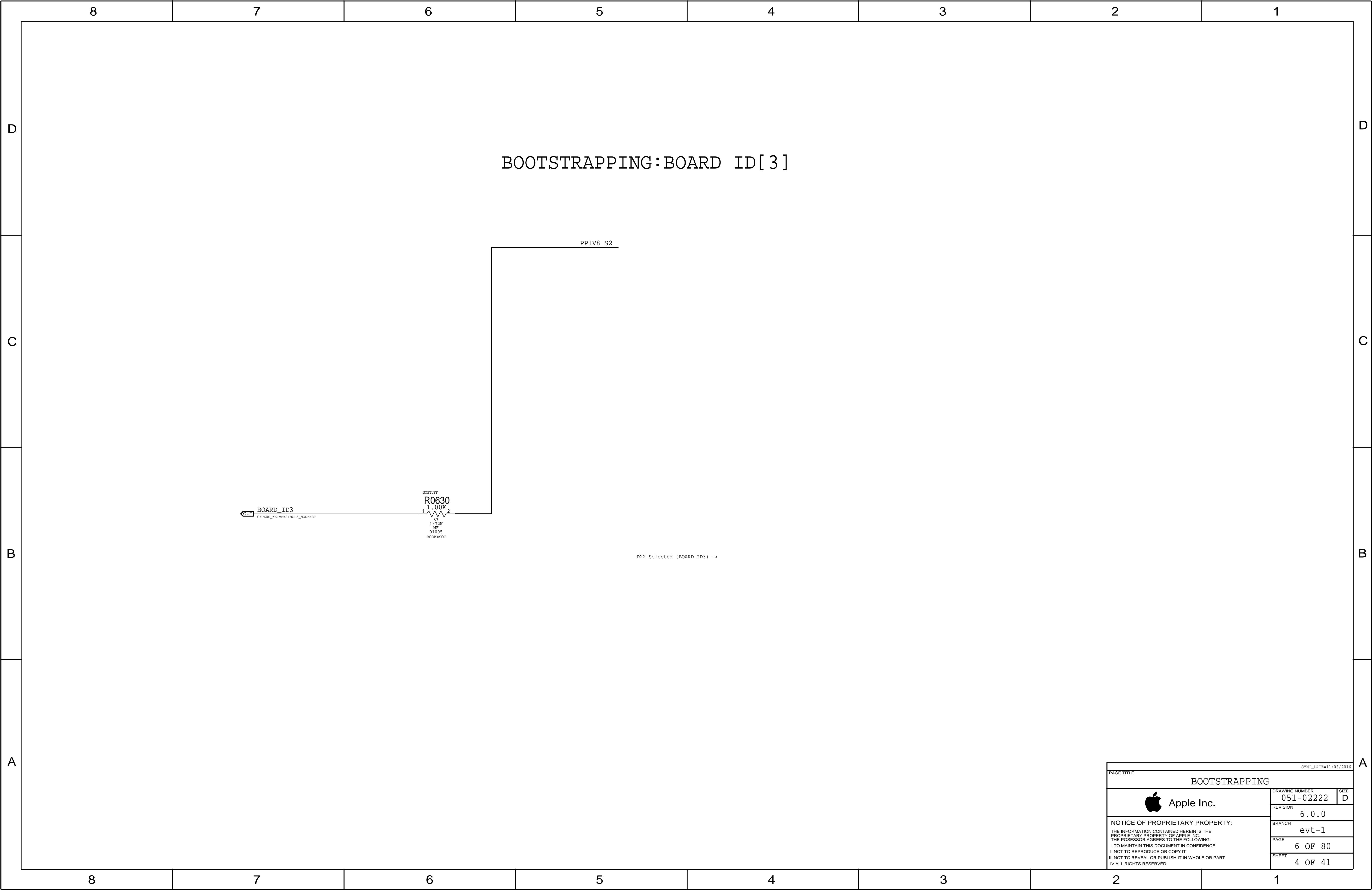
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S00159	1	CAP,S0FT-180M,2.2UF,6.3V,0201,KYOCERA	C5890	CRITICAL	SOFT_CAP
138S0831	1	CAP,TYPICAL,2.2UF,6.3V,0201,NEURA	C5890	CRITICAL	TYPICAL_CAP


PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
685-00158	685-00157	BOM_TABLE_ALTS	SUBBOM_CAP	SUBBOM_MLS,BUT,CAP,SOFT,X991

SYNCH MASTER=		SYNCH DATE=11/03/2016	
PAGE TITLE			
SYSTEM: BOM Tables			
 Apple Inc.		DRAWING NUMBER 051-02222	
		SIZE D	
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		REVISION 6.0.0	
		BRANCH evt-1	
		PAGE 2 OF 80	
		SHEET 2 OF 41	



PAGE TITLE		SYNC_DATE=11/03/2016	
SYSTEM: Mechanical Components			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02222		D
	REVISION		
		6.0.0	
NOTICE OF PROPRIETARY PROPERTY:		BRANCH	
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		evt-1	
		PAGE	
		4 OF 80	
		SHEET	
		3 OF 41	

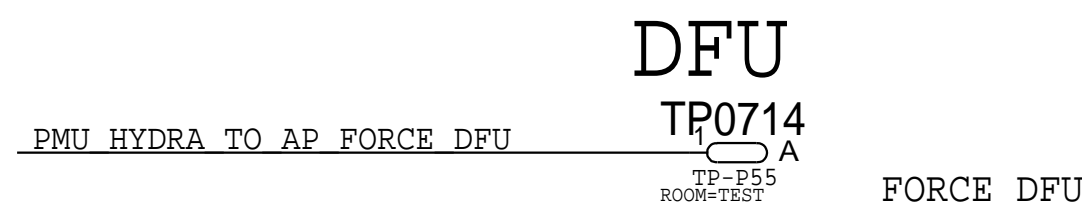
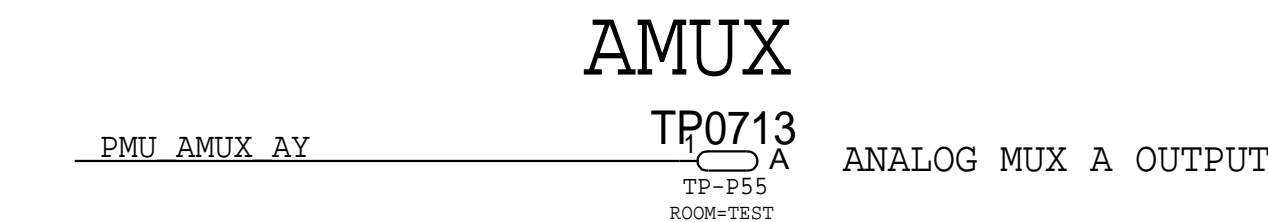
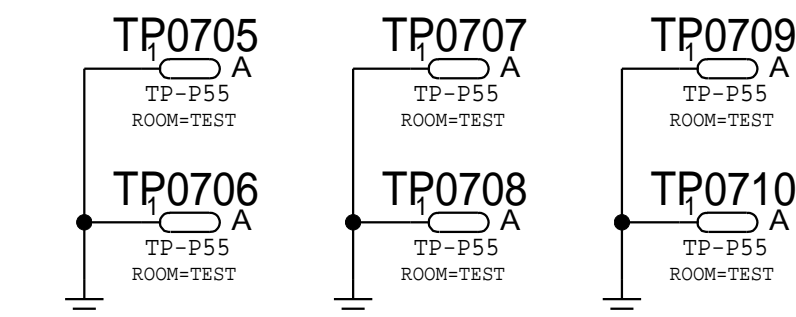
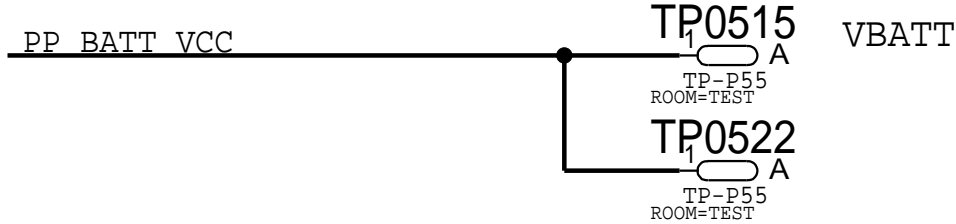
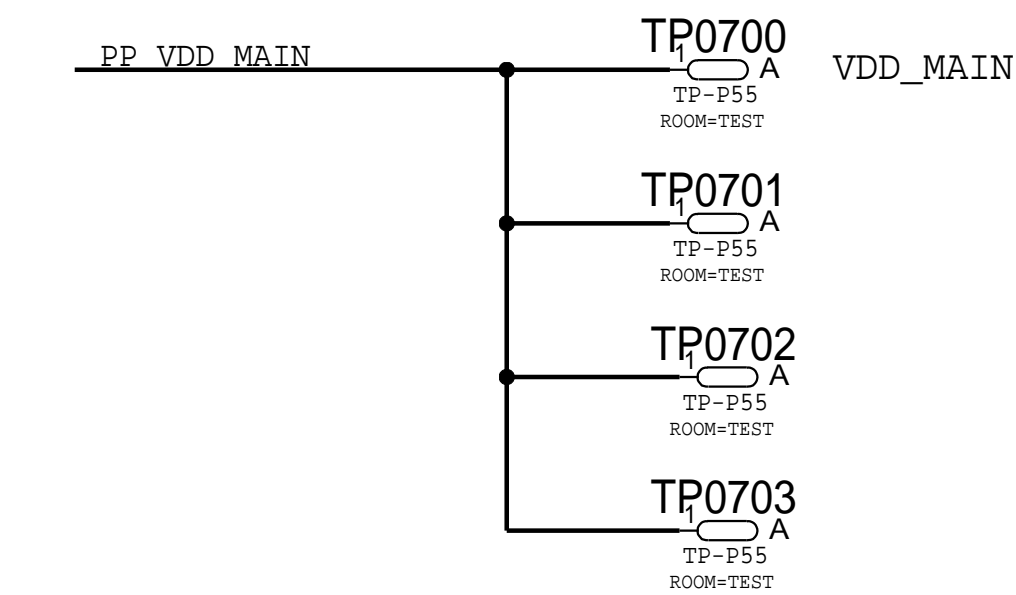


PAGE TITLE			SYNC_DATE=11/03/2016	
BOOTSTRAPPING				
 Apple Inc.	DRAWING NUMBER	051-02222	SIZE	D
	REVISION	6.0.0		
	BRANCH	evt-1		
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT 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 80	
		SHEET	4 OF 41	

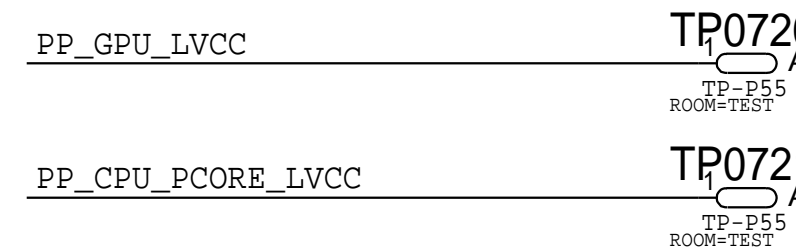
Test Points

Probe Points

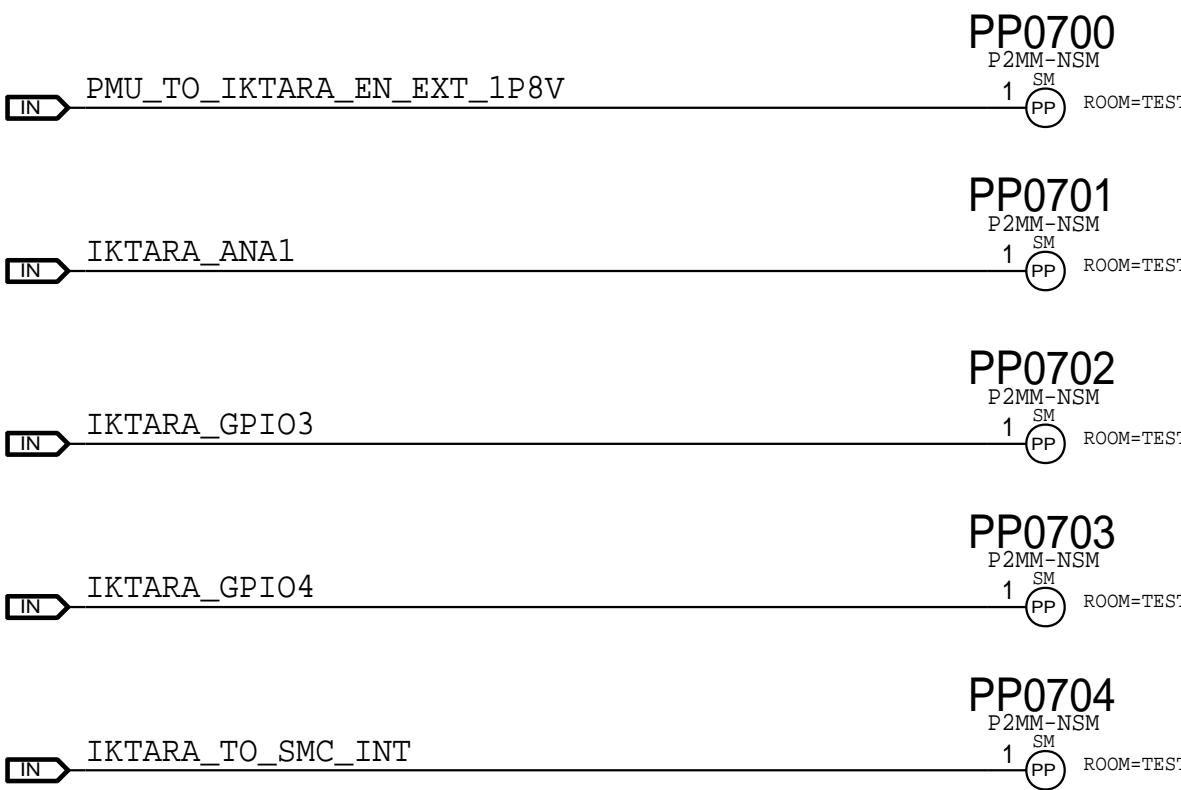
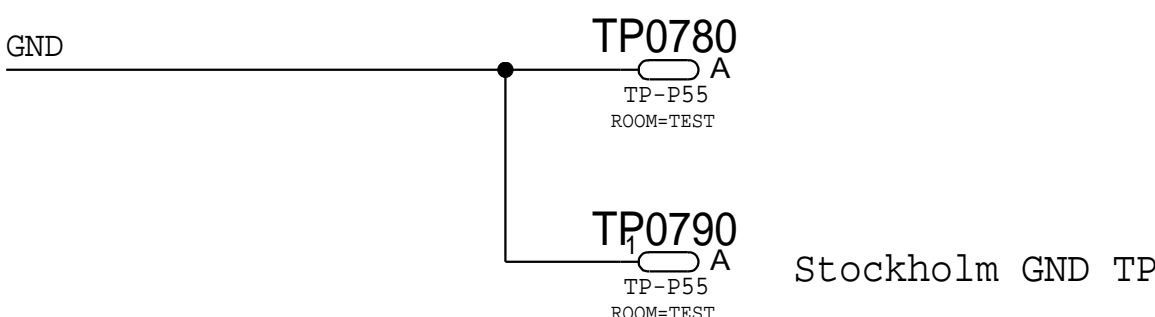
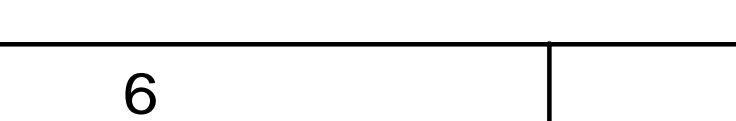
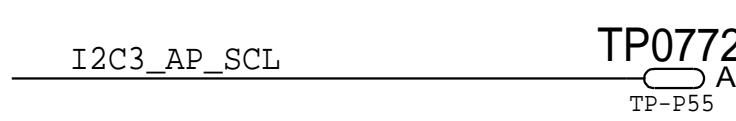
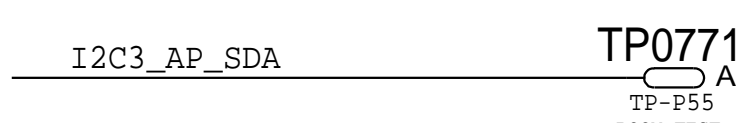
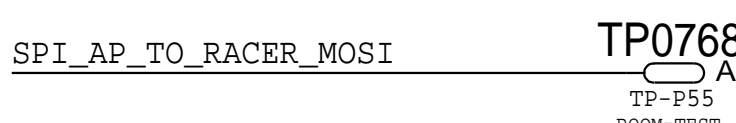
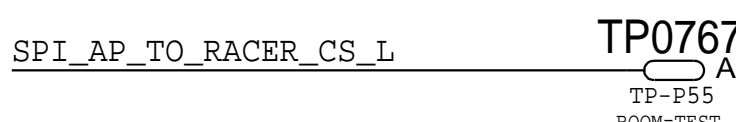
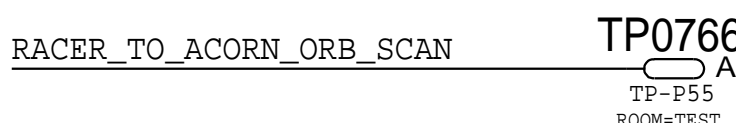
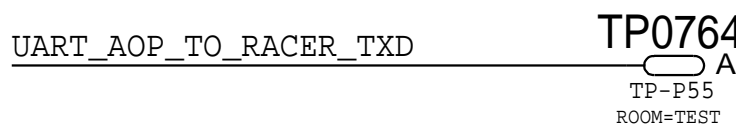
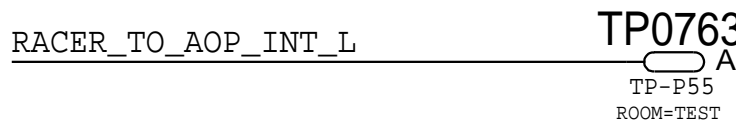
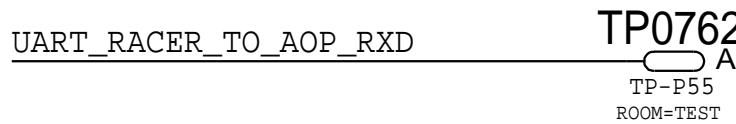
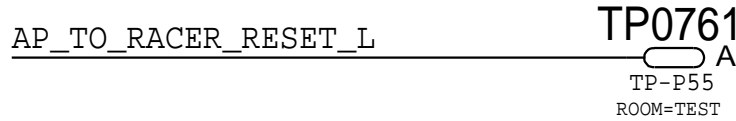
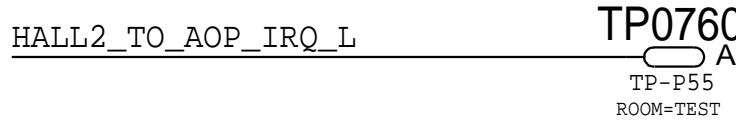
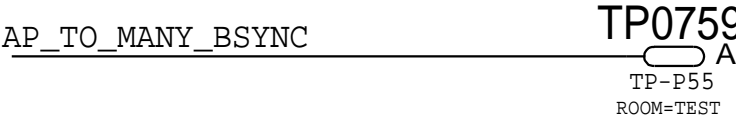
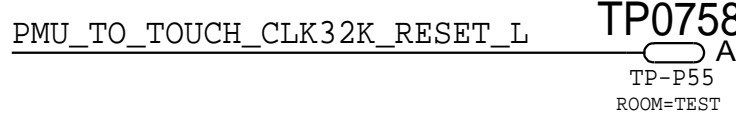
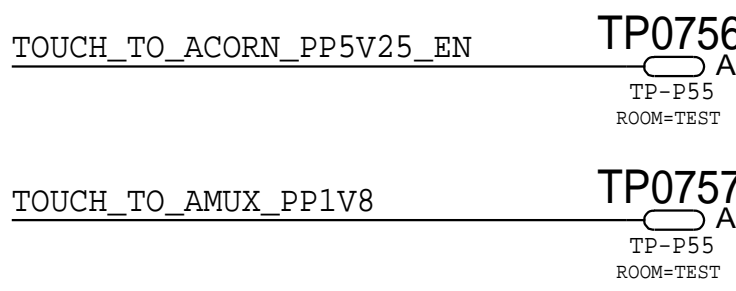
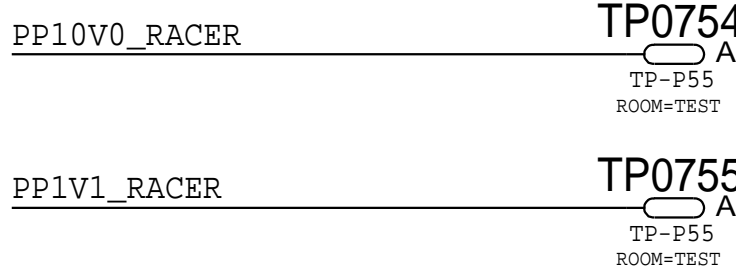
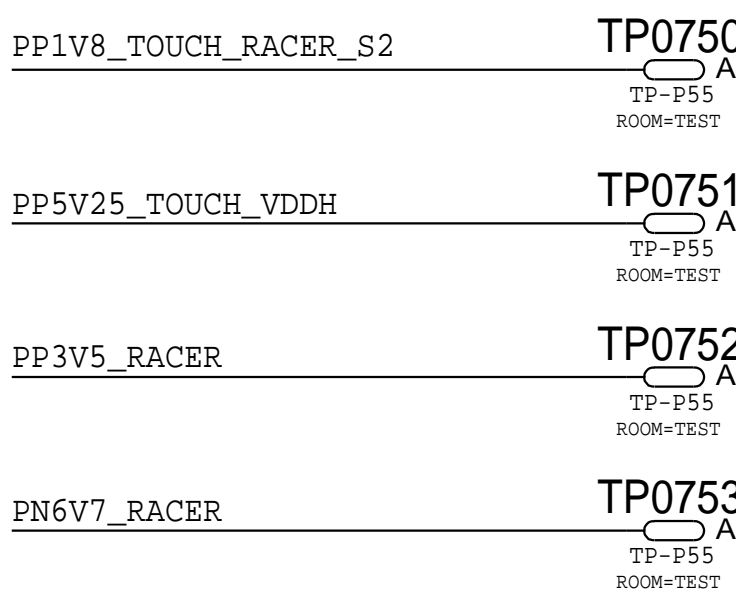
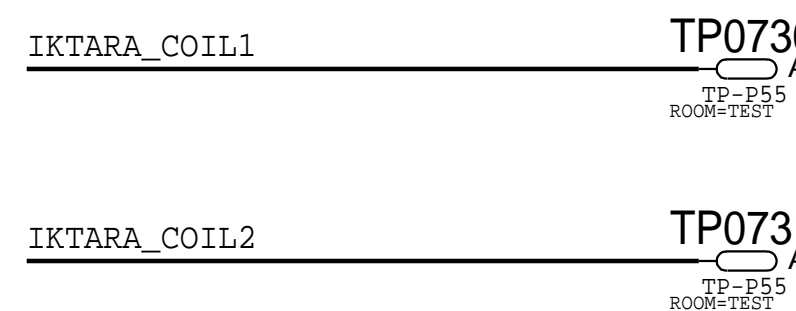
Iktara Debug



LVCC

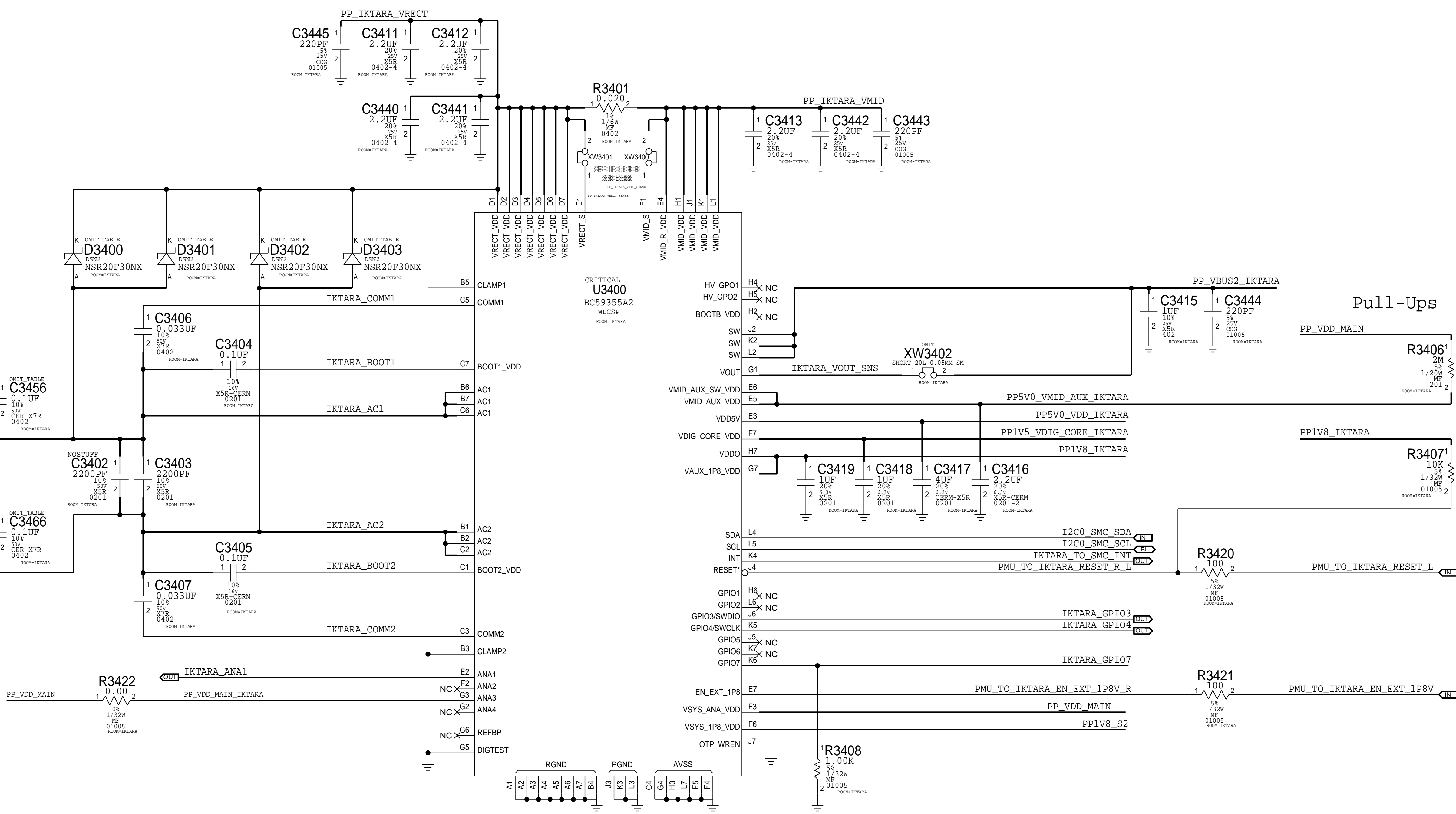



COIL



SYSTEM: Testpoints (Bottom)		
Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
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	BRANCH	evt-1
	PAGE	7 OF 80
	SHEET	5 OF 41

Iktara

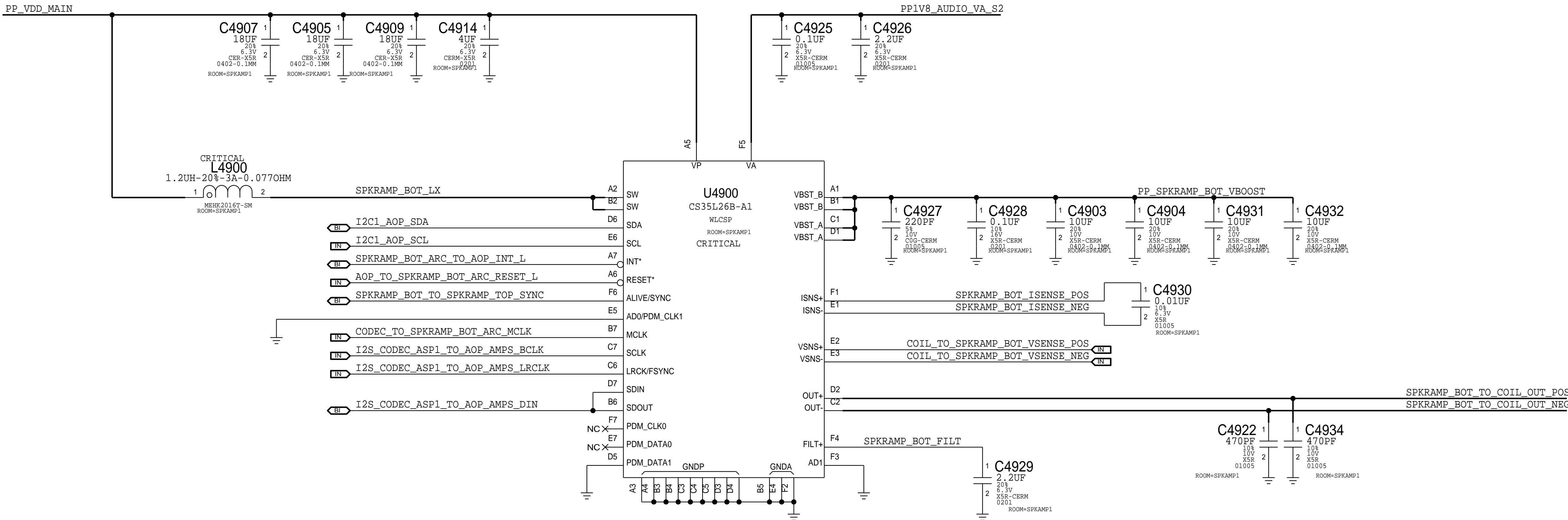


PAGE TITLE		
SYSTEM POWER: Iktara		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
	PAGE	34 OF 80
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE I NOT TO REPRODUCE OR COPY IT I NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		SHEET 6 OF 41

South Speaker Amplifier

APN: 338S00295

I2C ADDRESS: 1000 000x
0x80



PAGE TITLE		
AUDIO: Speaker Amp Bottom		
	DRAWING NUMBER	051-02222
	REVISION	6.0.0
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	BRANCH	evt-1
	PAGE	49 OF 80
	SHEET	7 OF 41



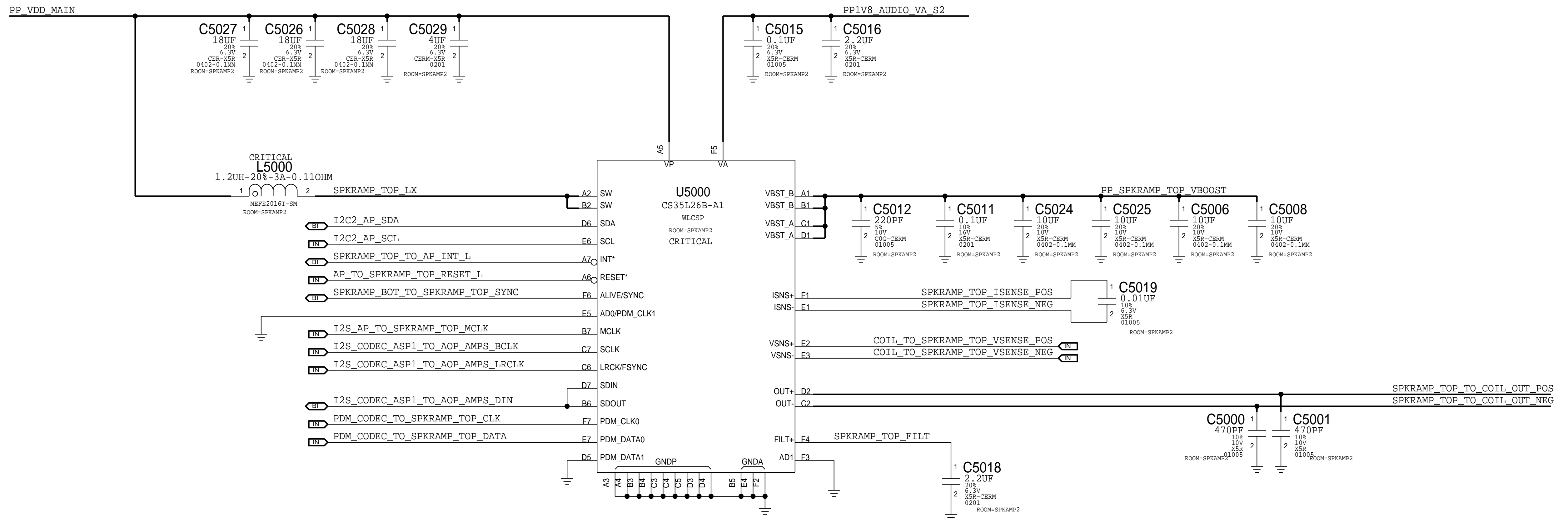
AP_TO_SPKRAMP_TOP_RESET_L


North Speaker Amplifier

APN: 338S00295

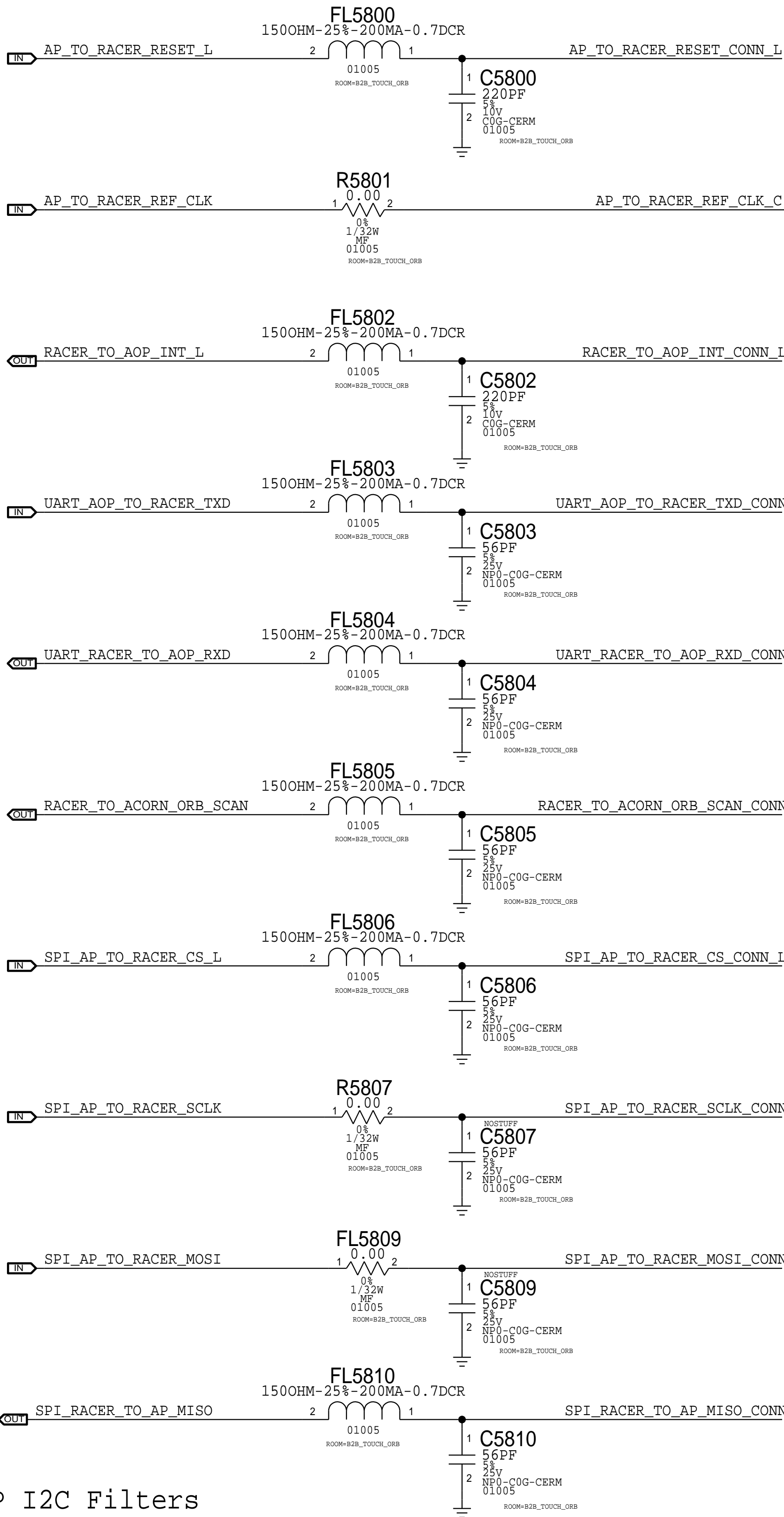
I2C ADDRESS: 1000 000x

0x80

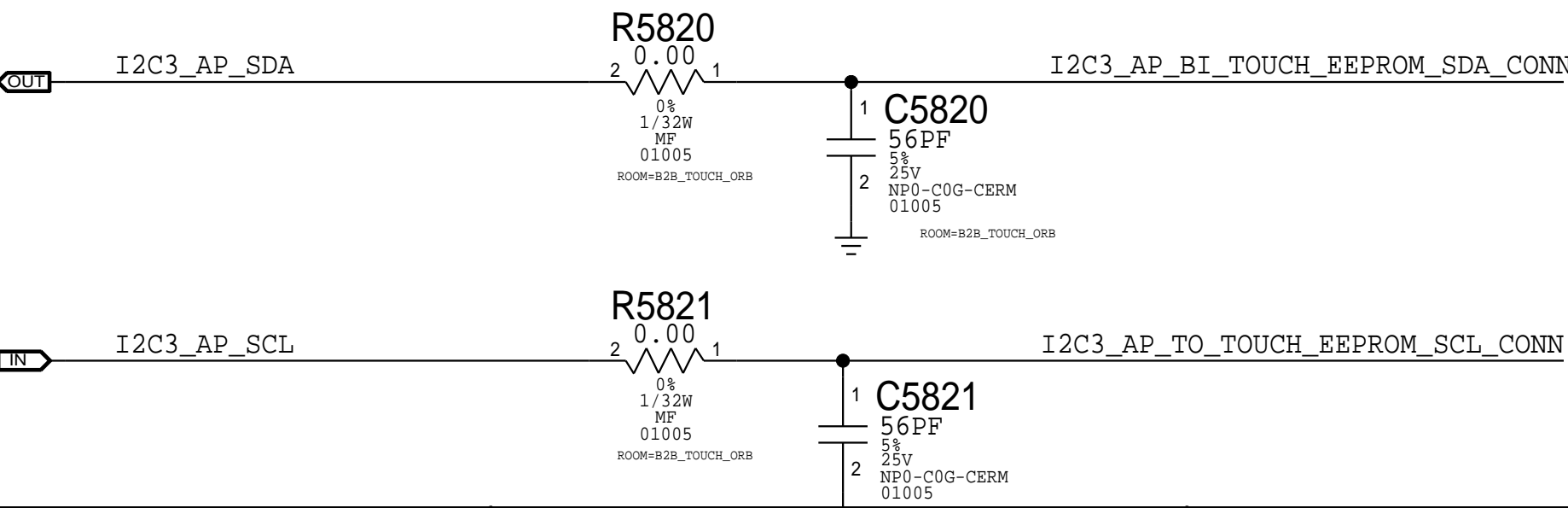


P&H-0000000-0001-000		P&H-0001-11/01/00	
PAGE TITLE			
AUDIO: Speaker Amp Top			
 Apple Inc.	DRAWING NUMBER	051-02222	
	REVISION	6.0.0	
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS 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	BRANCH	evt-1	
	PAGE	50 OF 80	
	SHEET	8 OF 41	

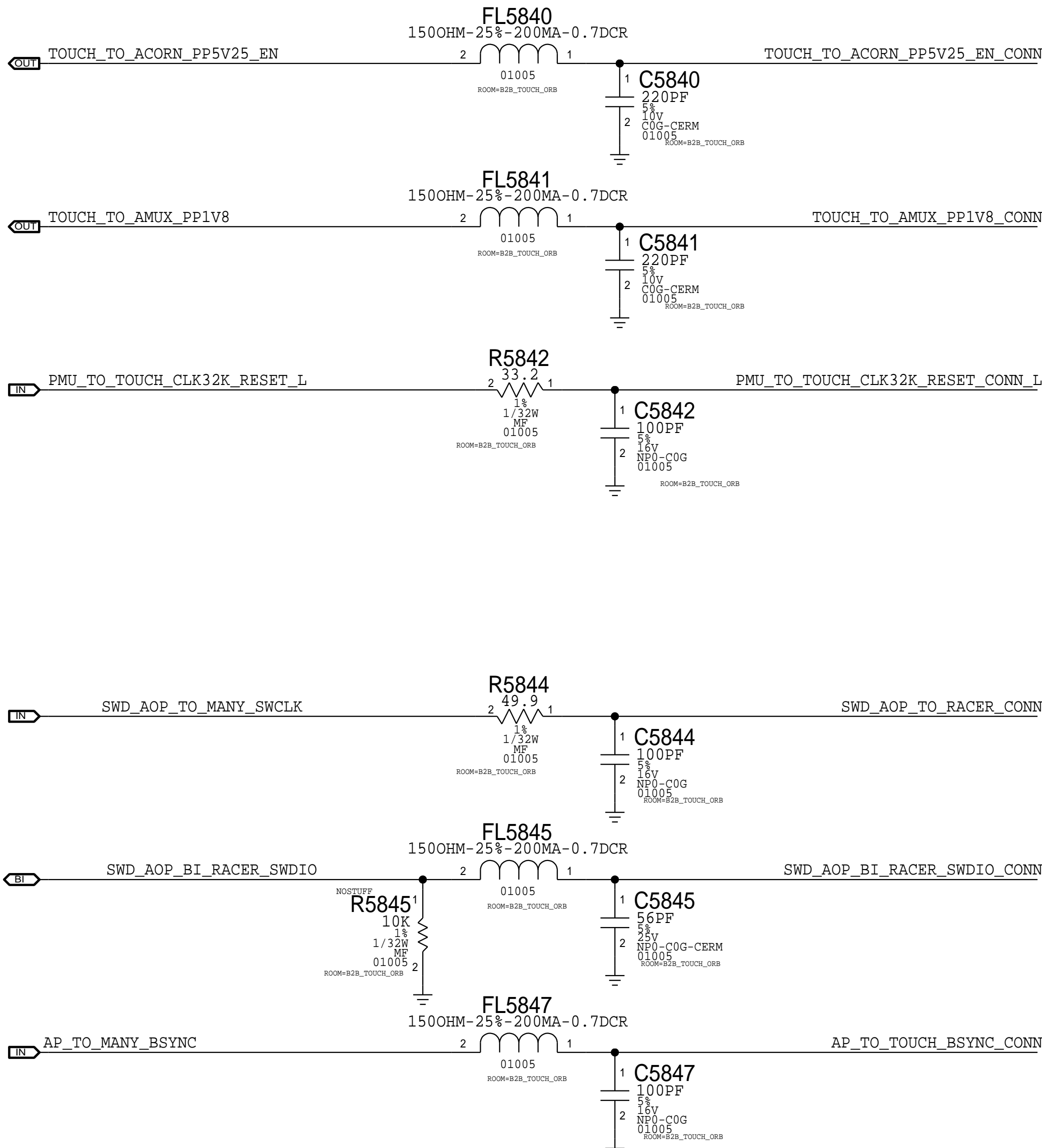
Racer I/O



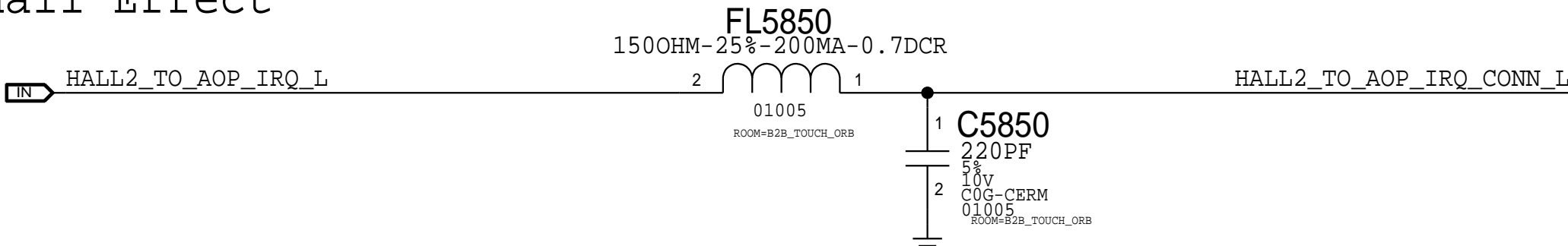
AP I2C Filters



Touch and Misc I/O



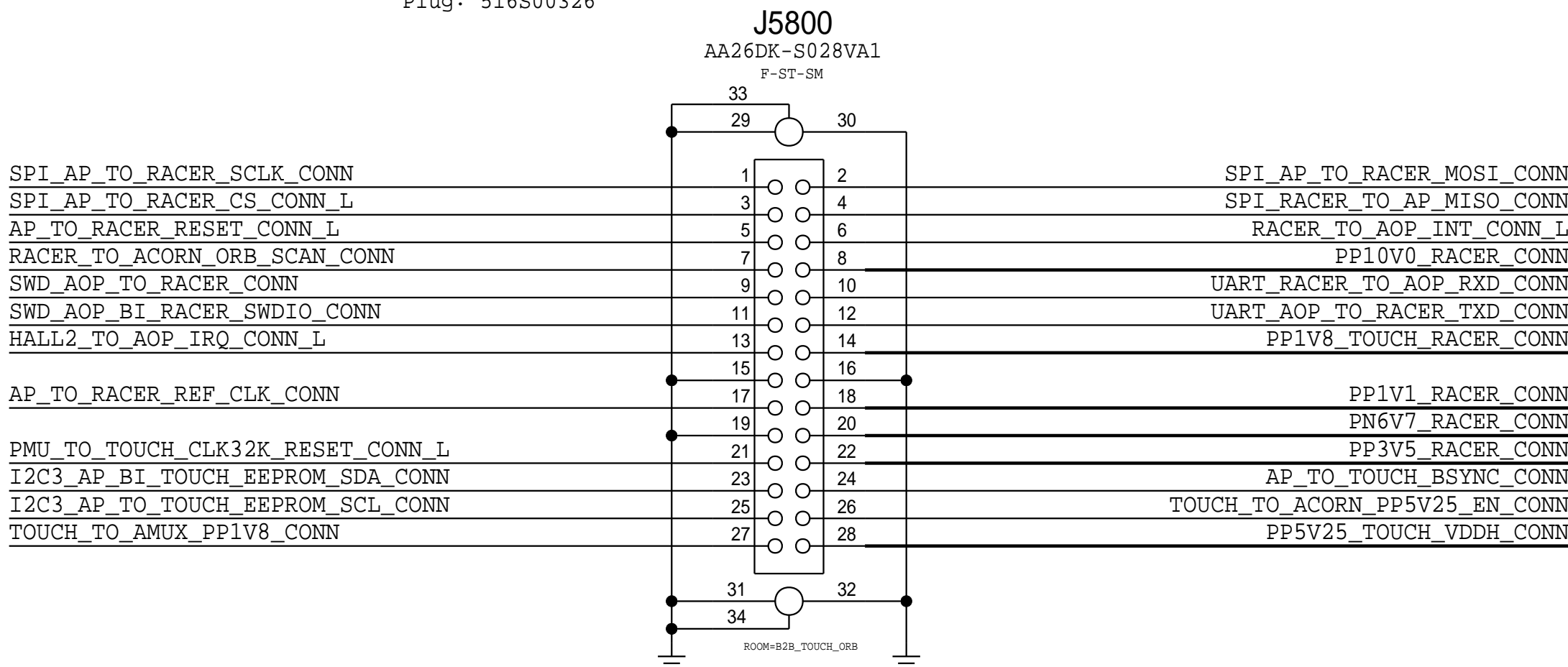
Hall Effect



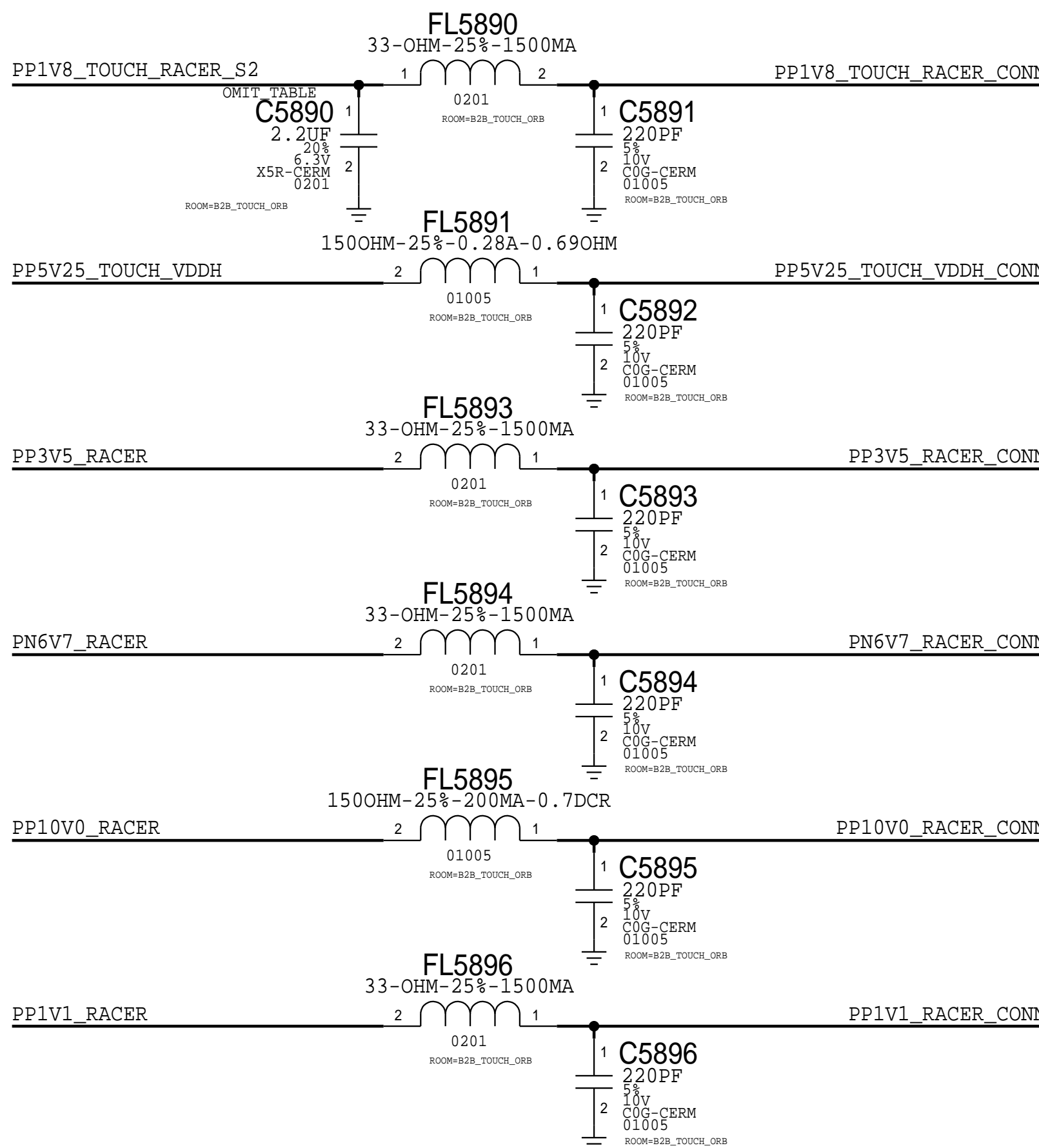
Luna + Touch Connector

Rcpt: 516S00325
Plug: 516S00326

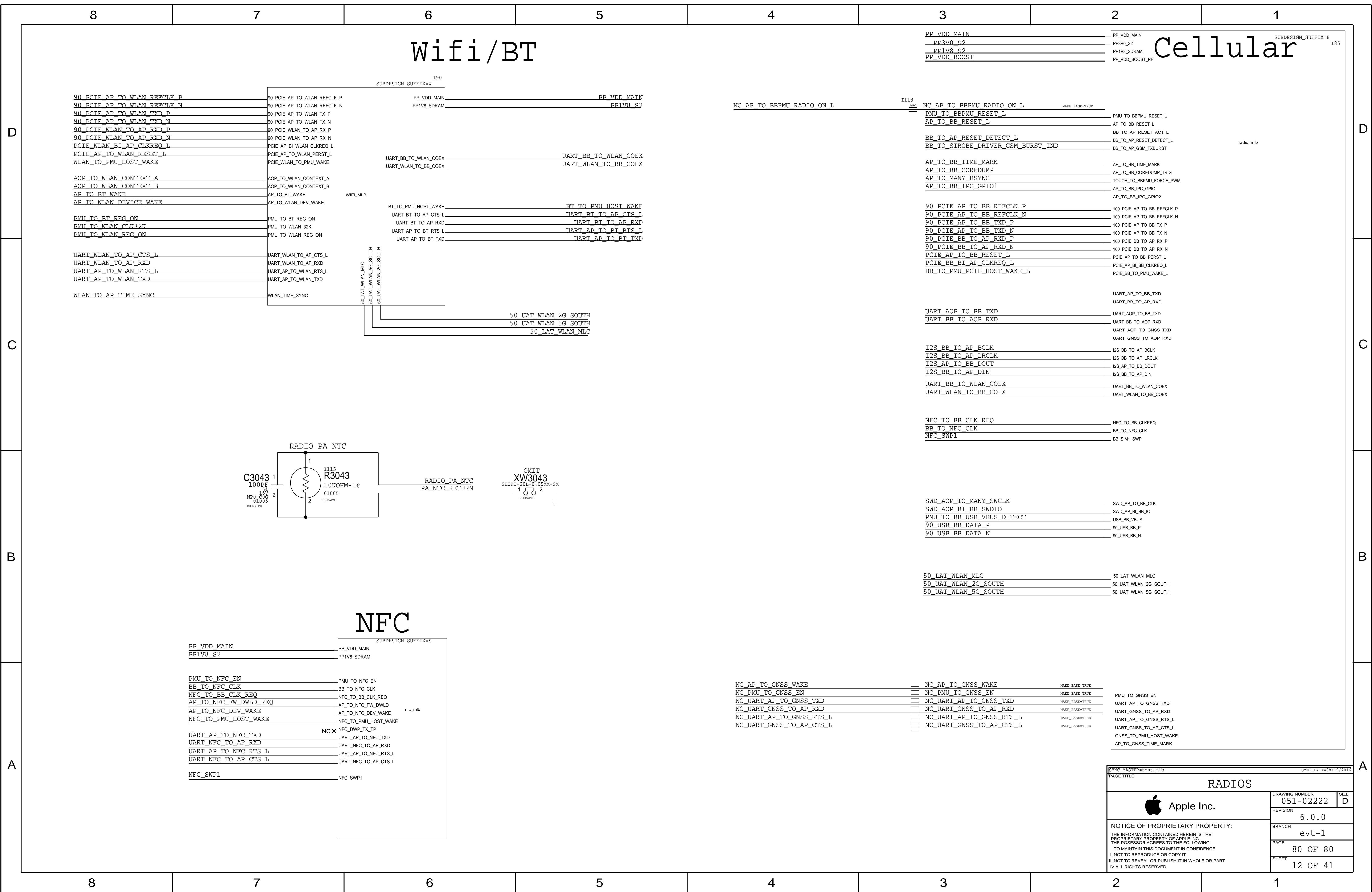
<-- This one on MLB



Touch And Racer Power



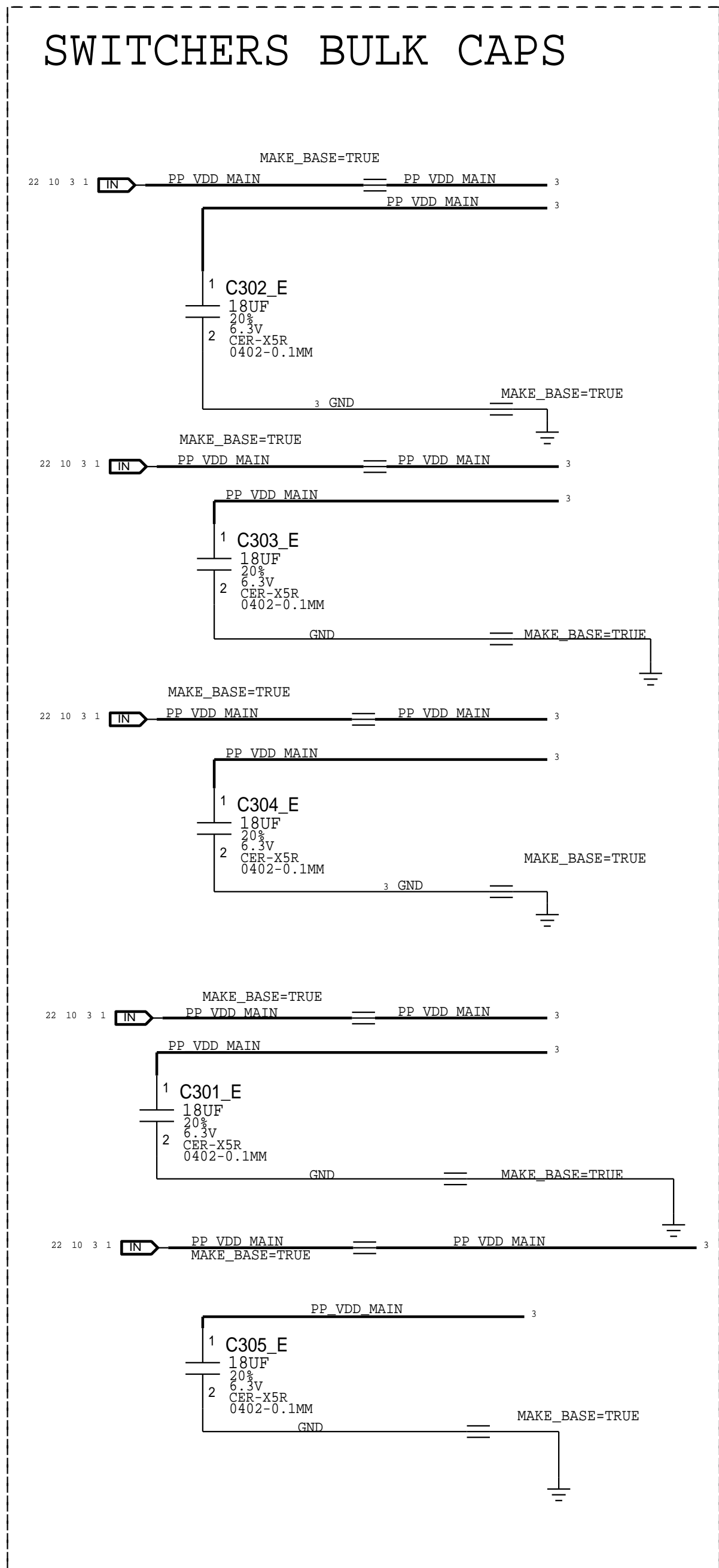
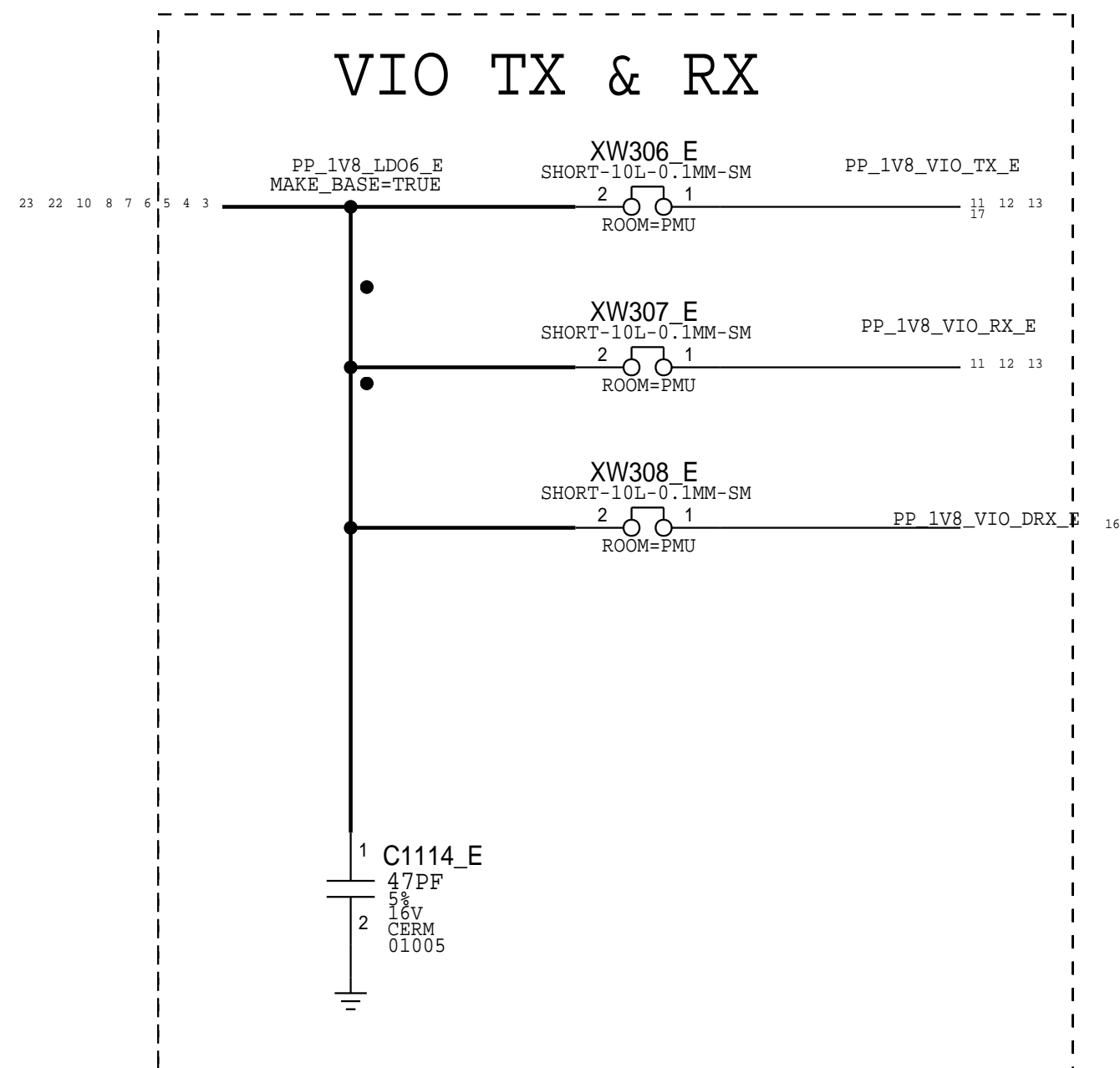
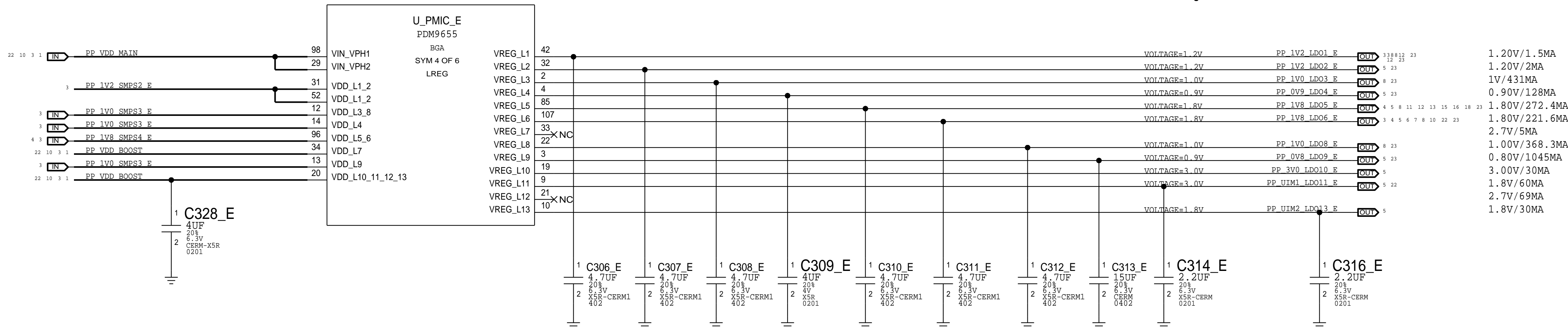
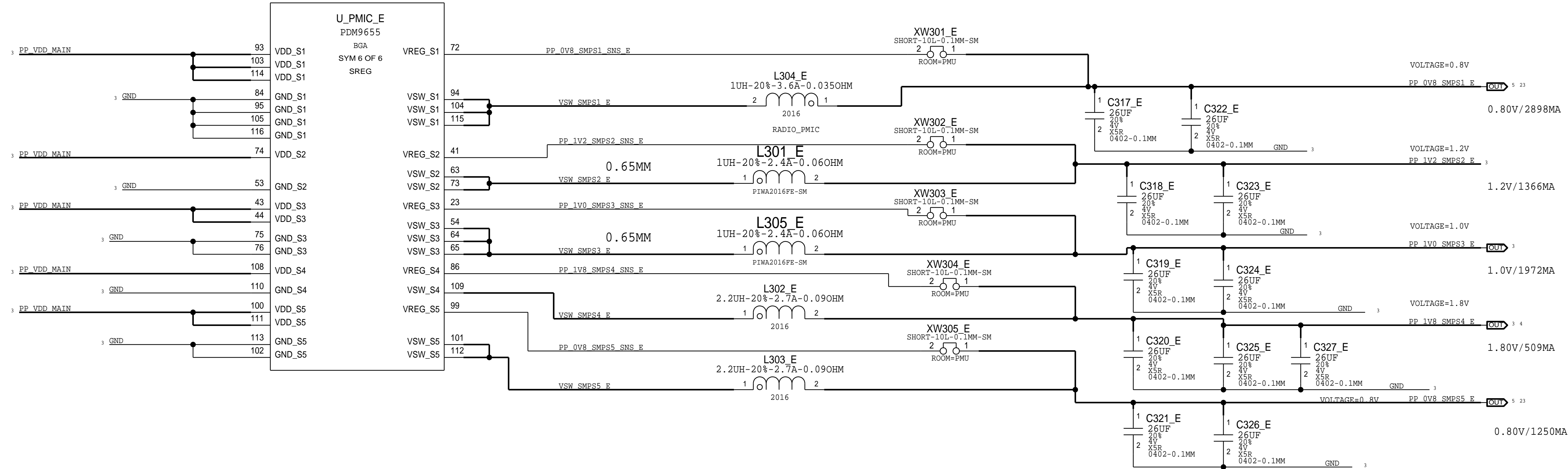
CG: B2B Luna & Touch		
Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE I NOT TO REPRODUCE OR COPY IT I NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART I ALL RIGHTS RESERVED	BRANCH	evt-1
	PAGE	58 OF 80
	SHEET	10 OF 41




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

RF PMIC: SWITCHERS & LDOS

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



PAGE TITLE			
PMIC: BUCKS & LDOS			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02222		D
	REVISION		
	6.0.0		
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			
BRANCH		evt-1	
PAGE		3 OF 24	
SHEET		15 OF 41	

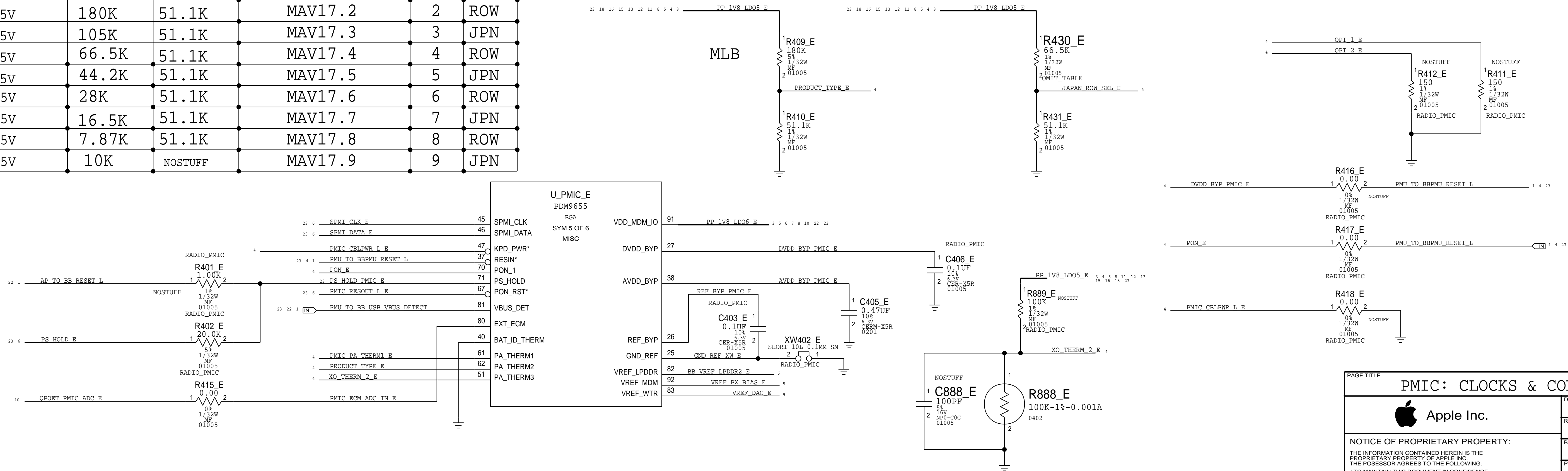
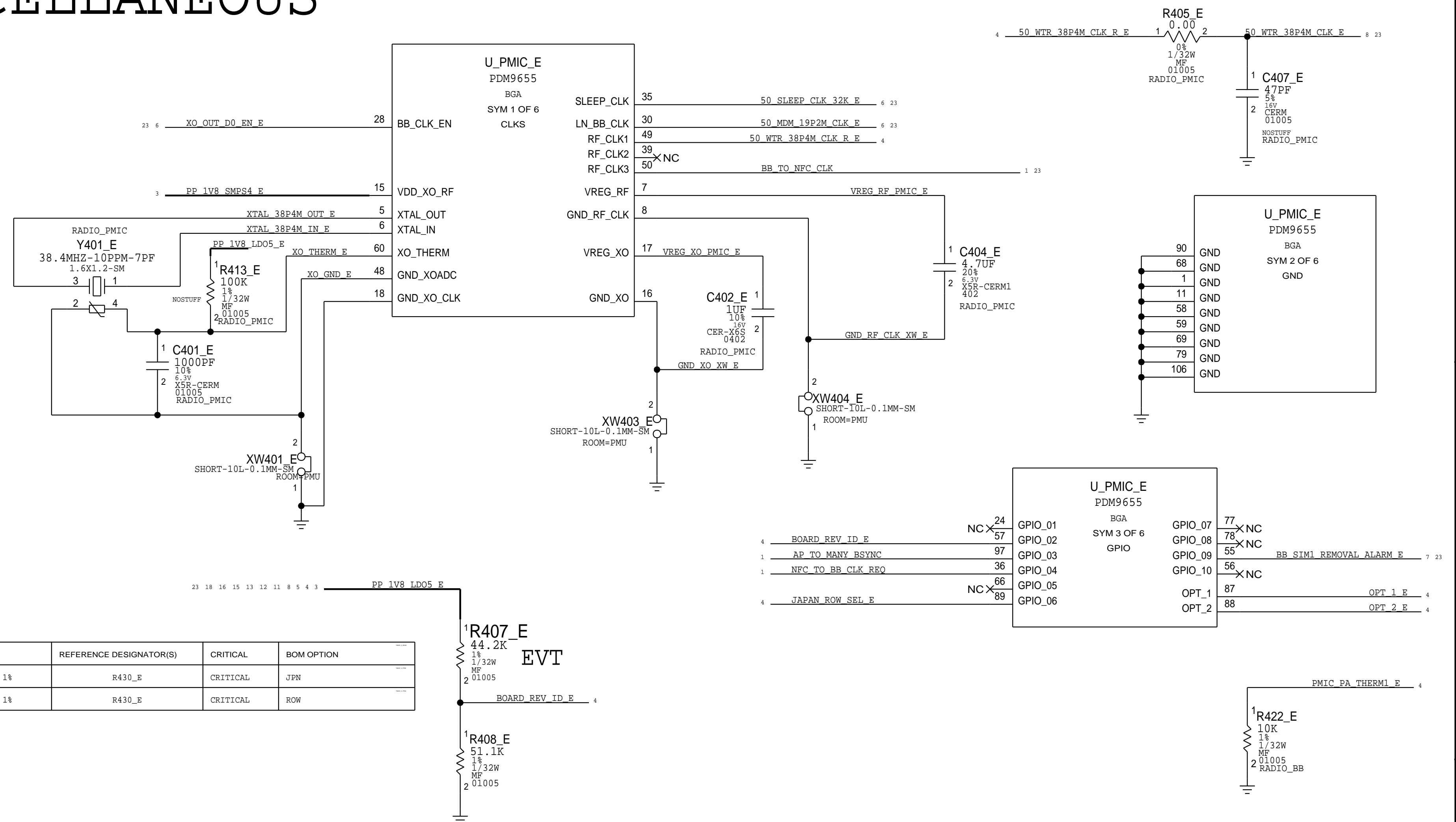
RF PMIC: XTAL, CLOCKS AND MISCELLANEOUS


HW_REV_ID	R407	R408	MLB/RADIO_DEV
<0.10V	NOSTUFF	51.1K	T500/DEV1
0.15V-0.25V	422K	51.1K	PROTO1.5
0.35V-0.45V	180K	51.1K	PROTO2.5/DEV2
0.55V-0.65V	105K	51.1K	PROTO1/DEV3
0.75V-0.85V	66.5K	51.1K	PROTO2/DEV4
0.95V-1.05V	44.2K	51.1K	EVT
1.15V-1.25V	28K	51.1K	CARRIER/DEV5
1.35V-1.45V	16.5K	51.1K	DVT/DEV6
1.55V-1.65V	7.87K	51.1K	PVT/DEV7
1.75V-1.85V	10K	NOSTUFF	PROTO3

PA_THERM2	R409	R410	PRODUCT TYPE	Y
0.00V-0.10V	NOSTUFF	51.1K	RADIO DEV	1
0.15V-0.25V	422K	51.1K	3RD TYPE	2
0.35V-0.45V	180K	51.1K	POR MLB (FF)	3
0.55V-0.65V	105K	51.1K	SPARE	4
0.75V-0.85V	66.5K	51.1K	SPARE	5
0.95V-1.05V	44.2K	51.1K	SPARE	6
1.15V-1.25V	28K	51.1K	SPARE	7
1.35V-1.45V	16.5K	51.1K	SPARE	8
1.55V-1.65V	7.87K	51.1K	SPARE	9
1.75V-1.85V	10K	NOSTUFF	SPARE	A

JPN_ROW_SEL	R430	R431	MAV PLATFORM	Y	SKU
<0.10V	NOSTUFF	51.1K	MAV17.0	0	ROW
0.15V-0.25V	422K	51.1K	MAV17.1	1	JPN
0.35V-0.45V	180K	51.1K	MAV17.2	2	ROW
0.55V-0.65V	105K	51.1K	MAV17.3	3	JPN
0.75V-0.85V	66.5K	51.1K	MAV17.4	4	ROW
0.95V-1.05V	44.2K	51.1K	MAV17.5	5	JPN
1.15V-1.25V	28K	51.1K	MAV17.6	6	ROW
1.35V-1.45V	16.5K	51.1K	MAV17.7	7	JPN
1.55V-1.65V	7.87K	51.1K	MAV17.8	8	ROW
1.75V-1.85V	10K	NOSTUFF	MAV17.9	9	JPN

NOTE XTAL SYMBOL MIRRORED
COMPARED TO PREVIOUS SCH



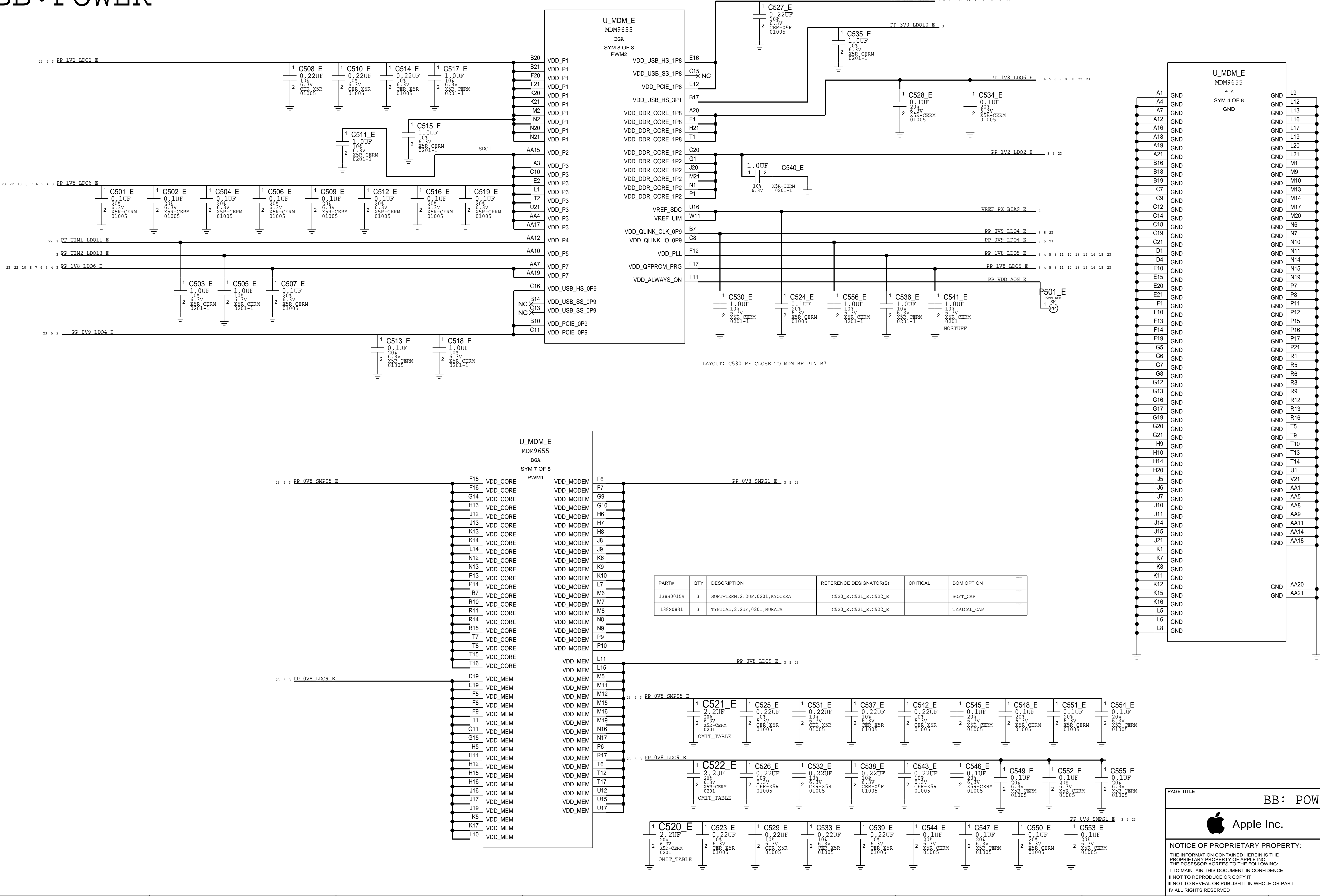
PAGE TITLE		
PMIC: CLOCKS & CONTROL		
 Apple Inc.	DRAWING NUMBER	SIZE
	051-02222	D
	REVISION	
	6.0.0	
NOTICE OF PROPRIETARY PROPERTY:	BRANCH	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC.		evt-1
THE POSSESSOR AGREES TO THE FOLLOWING:	PAGE	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		4 OF 24
II NOT TO REPRODUCE OR COPY IT	SHEET	
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART		16 OF 41
IV ALL RIGHTS RESERVED		

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

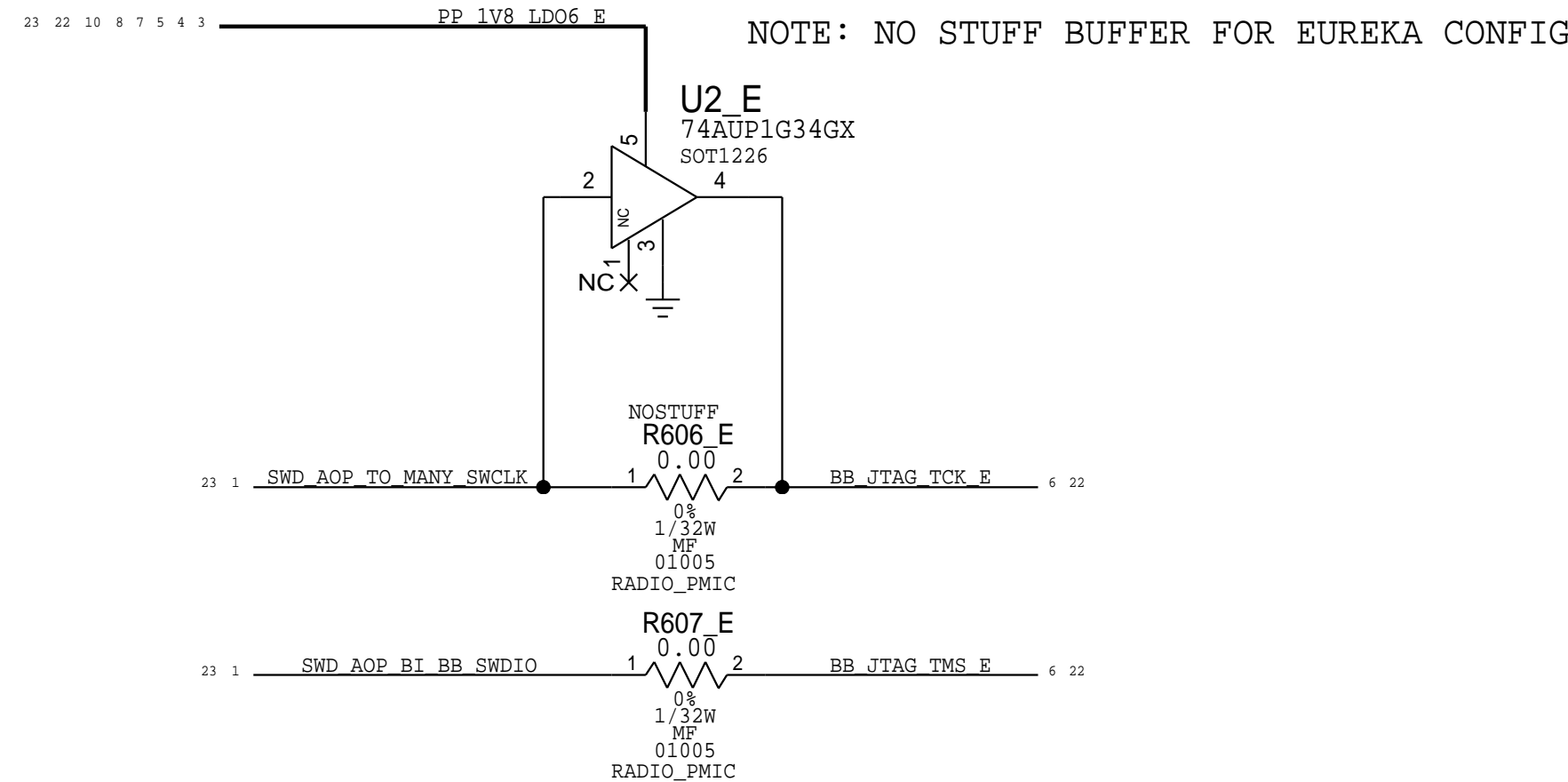
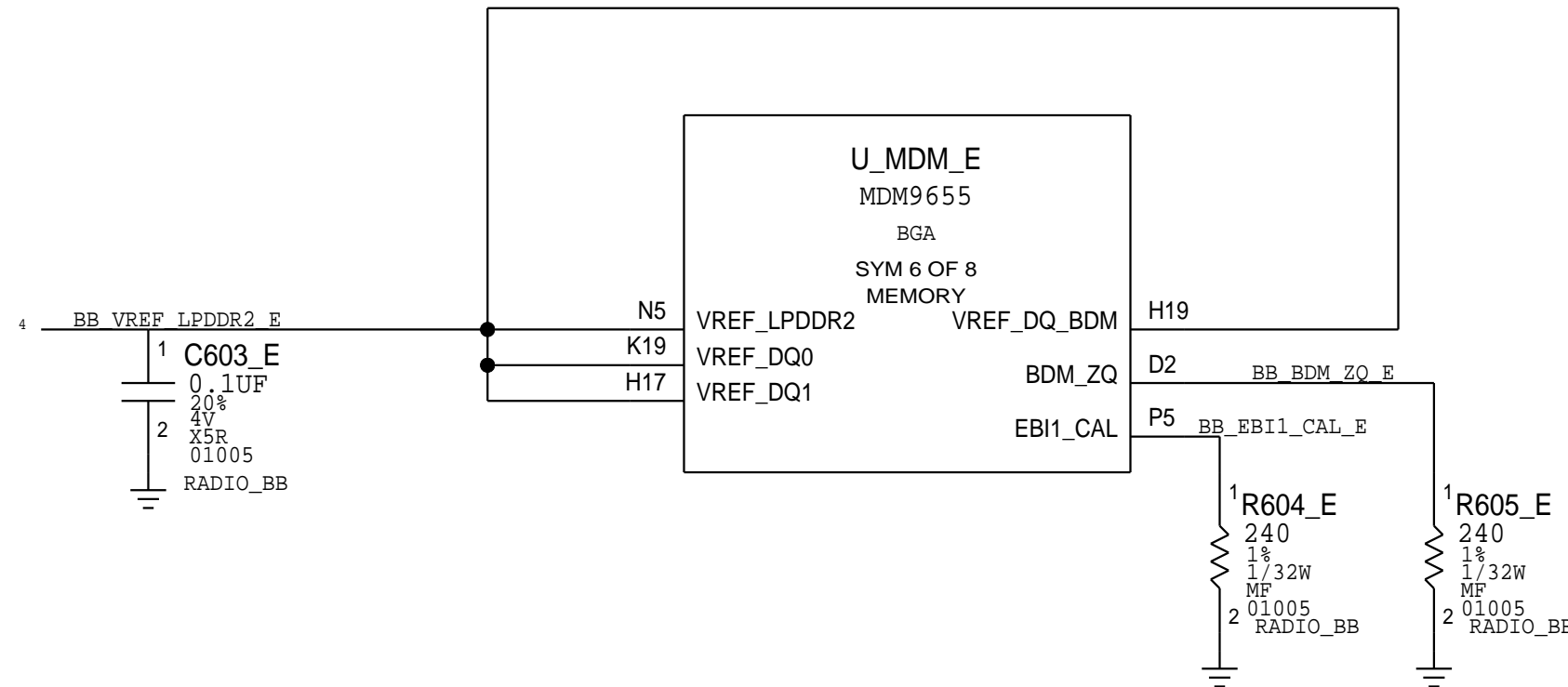
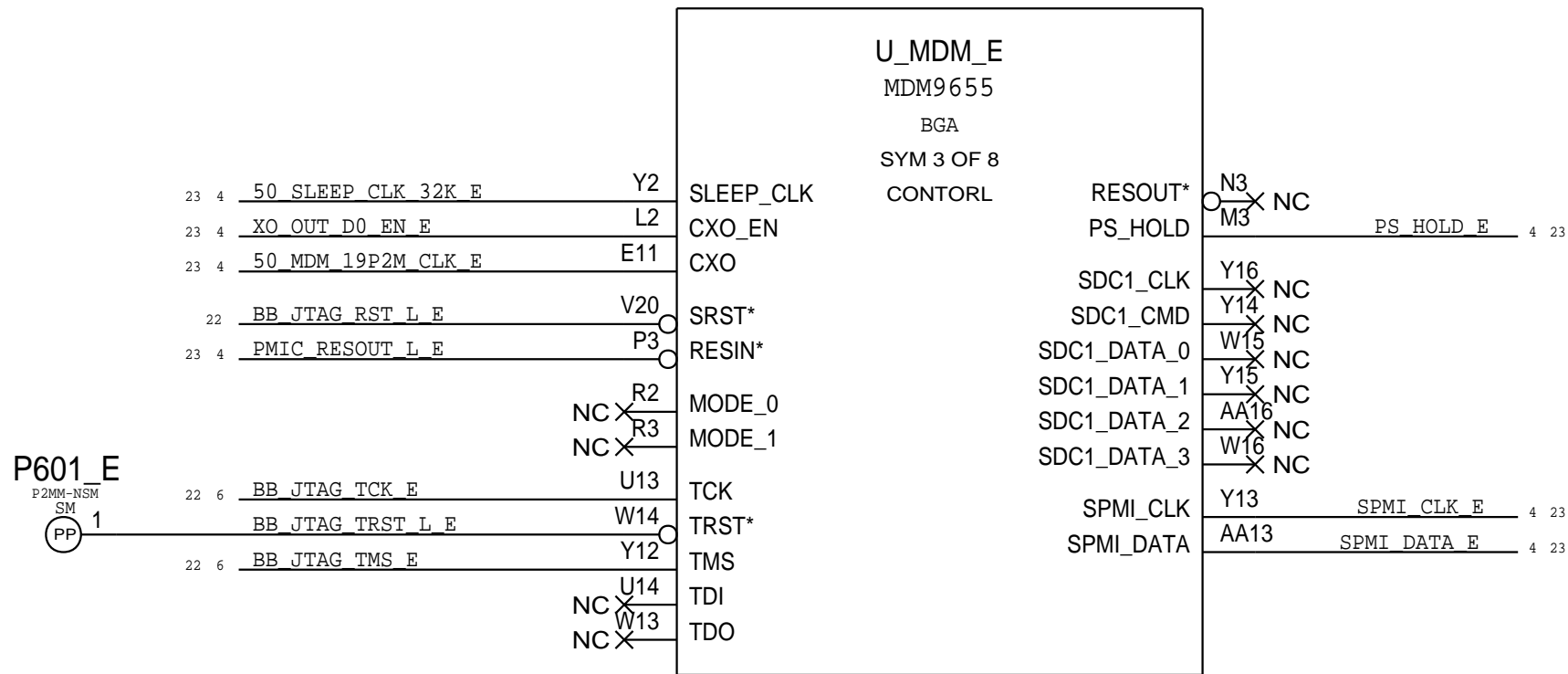
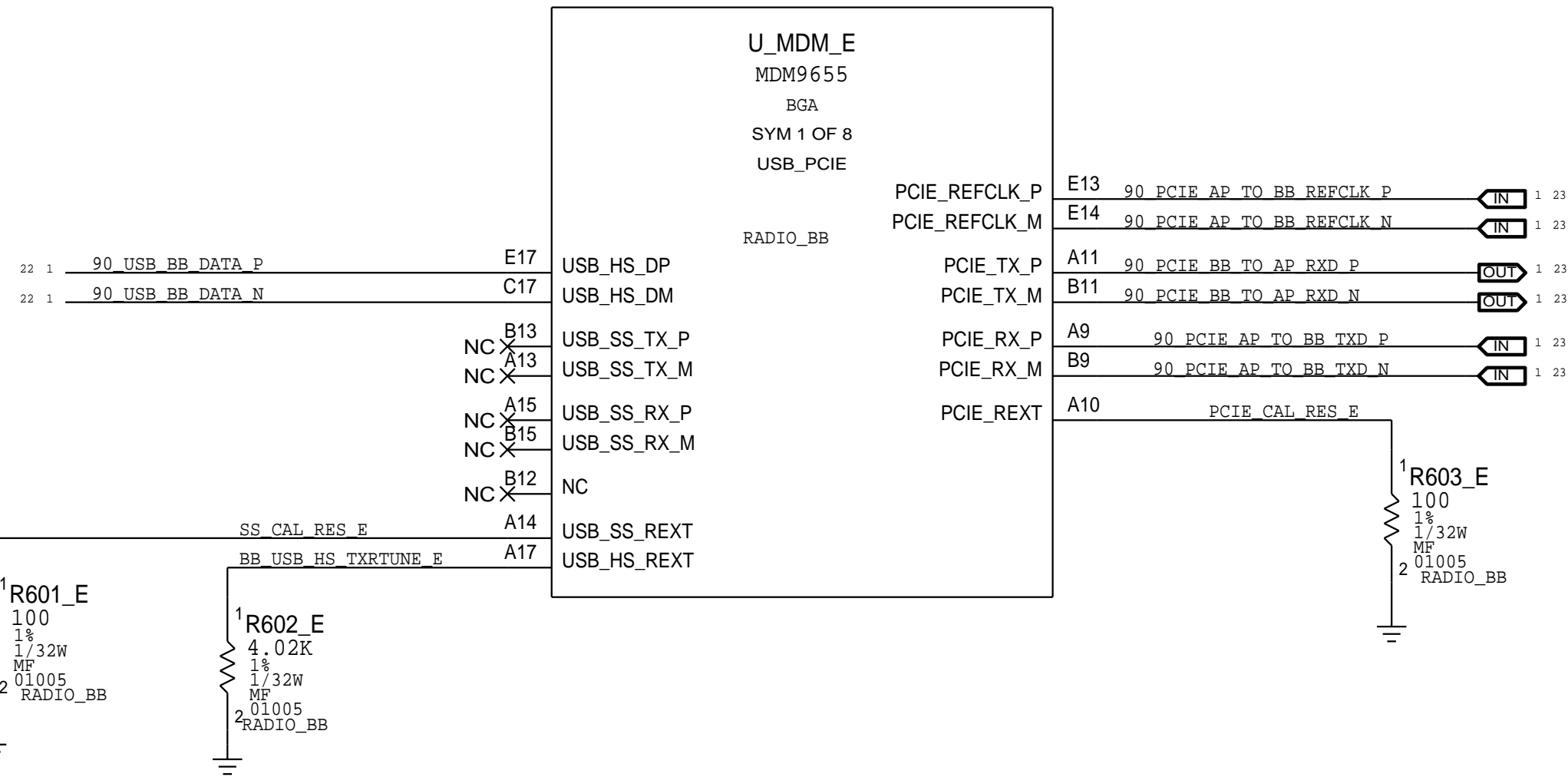
OPT CONFIG

BB: POWER


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



BB:CONTROL & HS PERIPHERALS

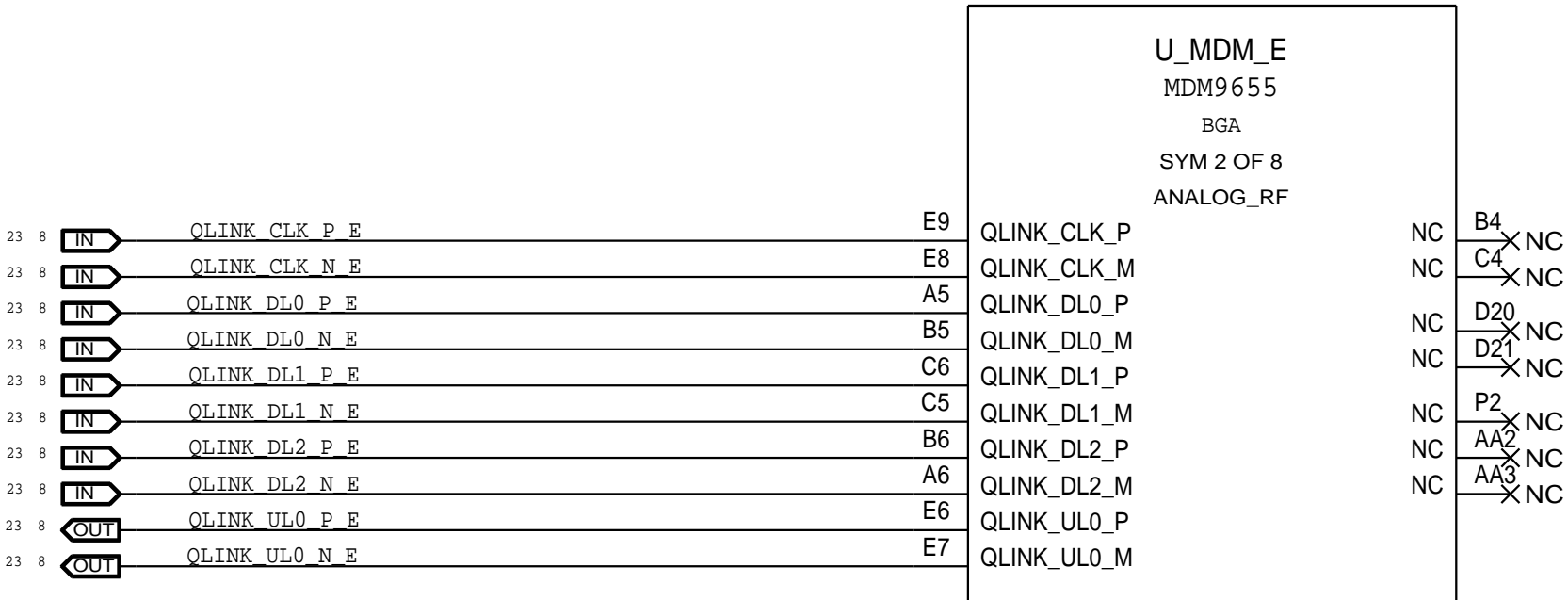
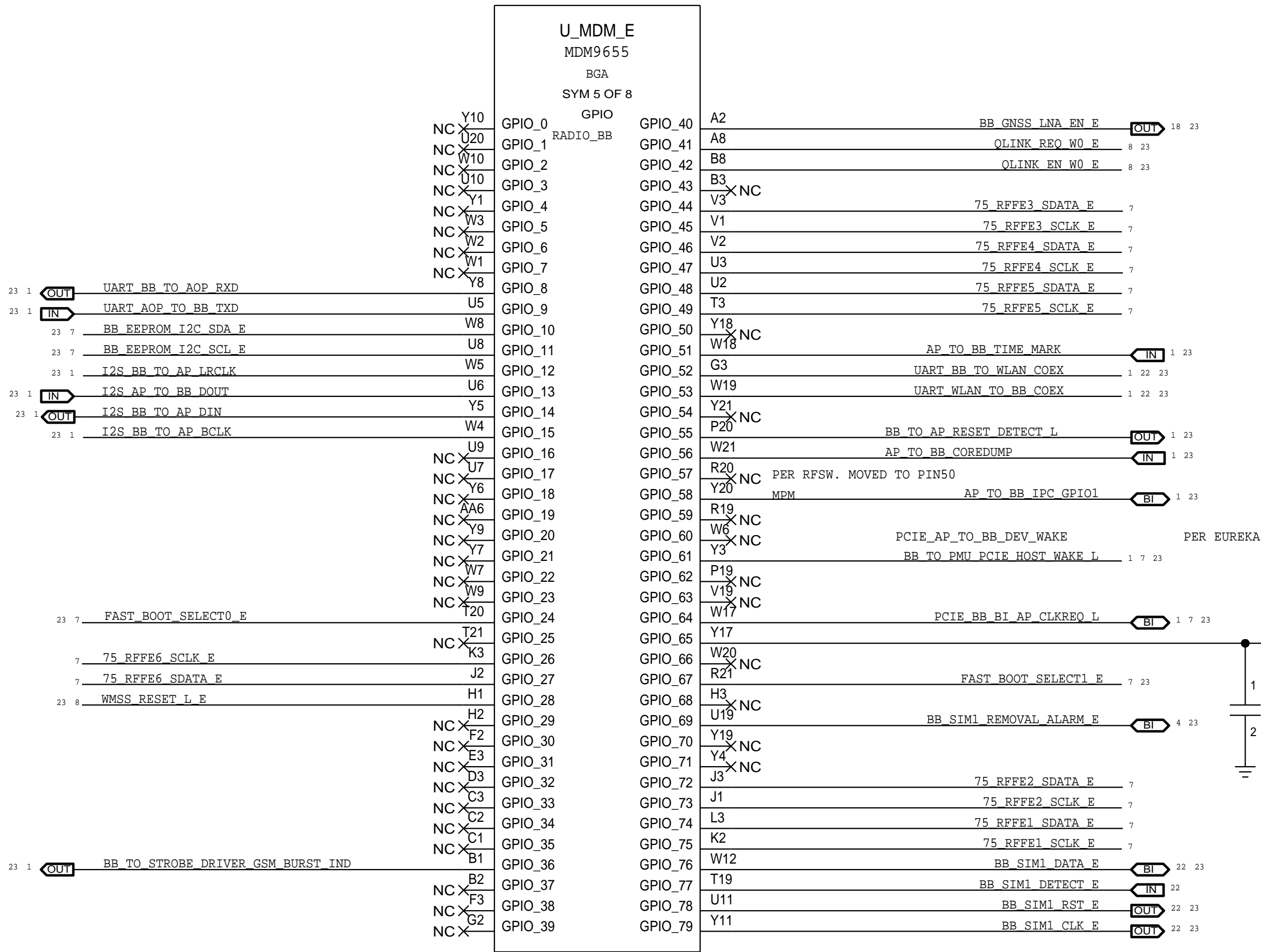


CONFIDENTIAL AND PROPRIETARY APPLE SYSTEM DESIGN. FOR REFERENCE ONLY - NOT A CHANGE REQUEST

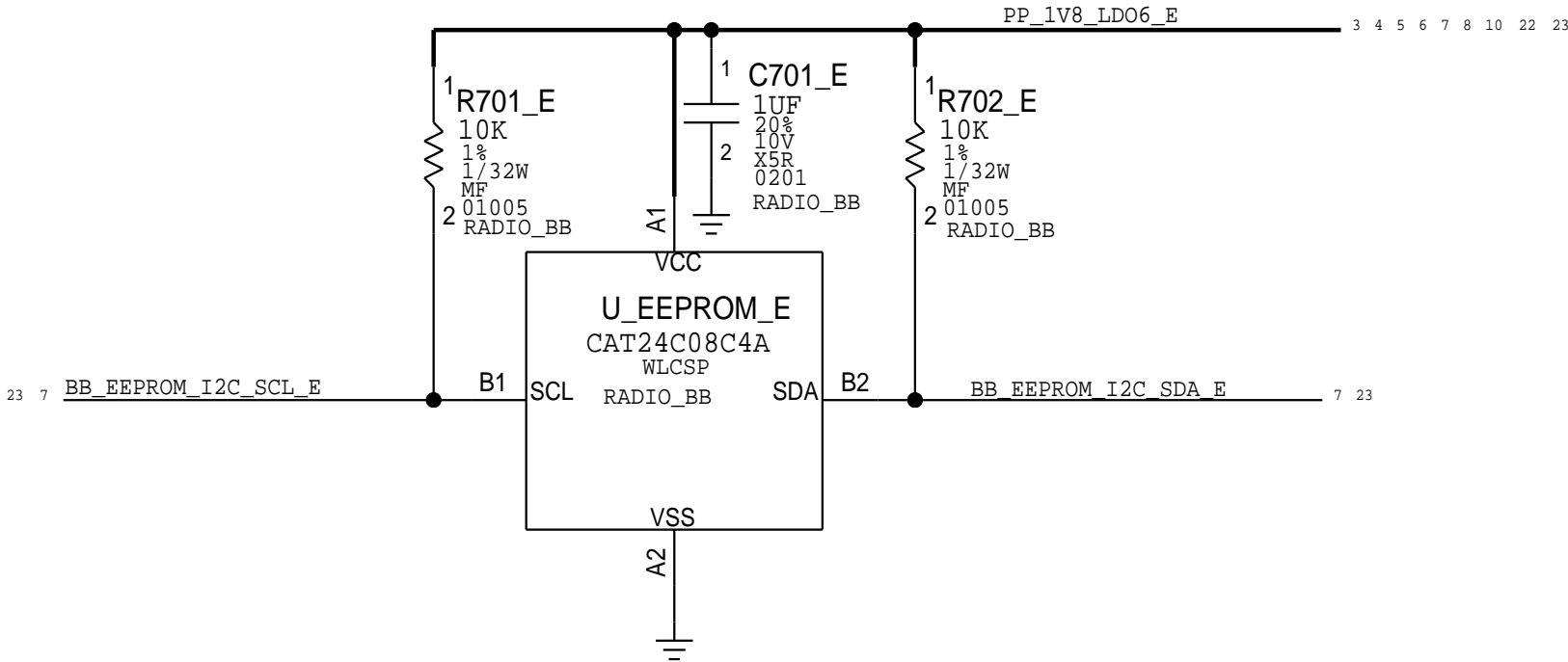
PAGE TITLE		
BB: CONTROL & HS PERIPHERALS		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
	PAGE	6 OF 24
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	SHEET	18 OF 41

BB:GPIOS & QLINK

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

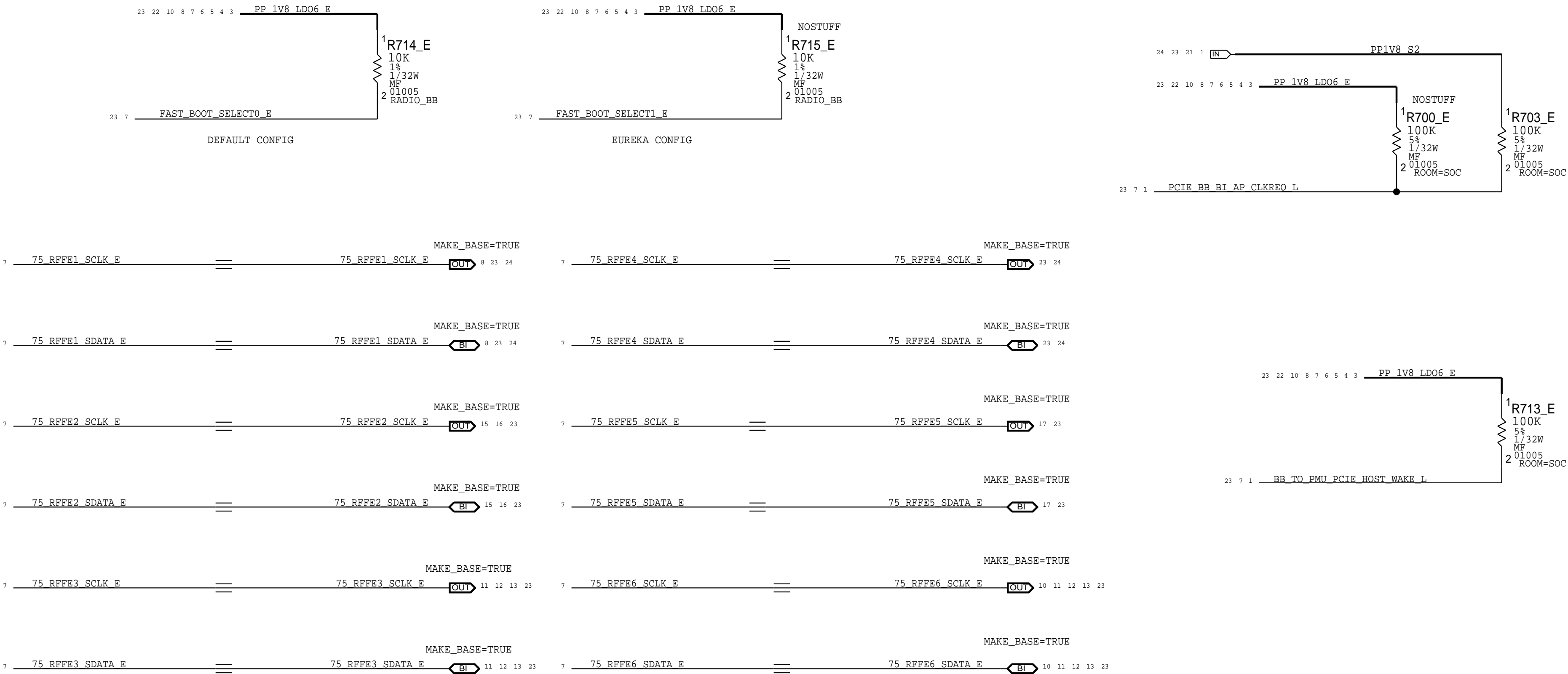


BB EEPROM



RFFE MAP

- RFFE1 - WTR, LATGPO, LATUNE
- RFFE2 - HB DSM, LB DSM
- RFFE3 - UHB, HB, LB PAD LNA
- RFFE4 - UATGPO, UATUNE
- RFFE5 - CPL
- RFFE6 - QET, 2G PA/UHB, HB, LA PAD



PAGE TITLE		
BB: GPIOS & QLINK		
	DRAWING NUMBER	051-02222
	REVISION	6.0.0
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 I NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		
BRANCH		
evt-1		
PAGE		
7 OF 24		
SHEET		
19 OF 41		

D



A

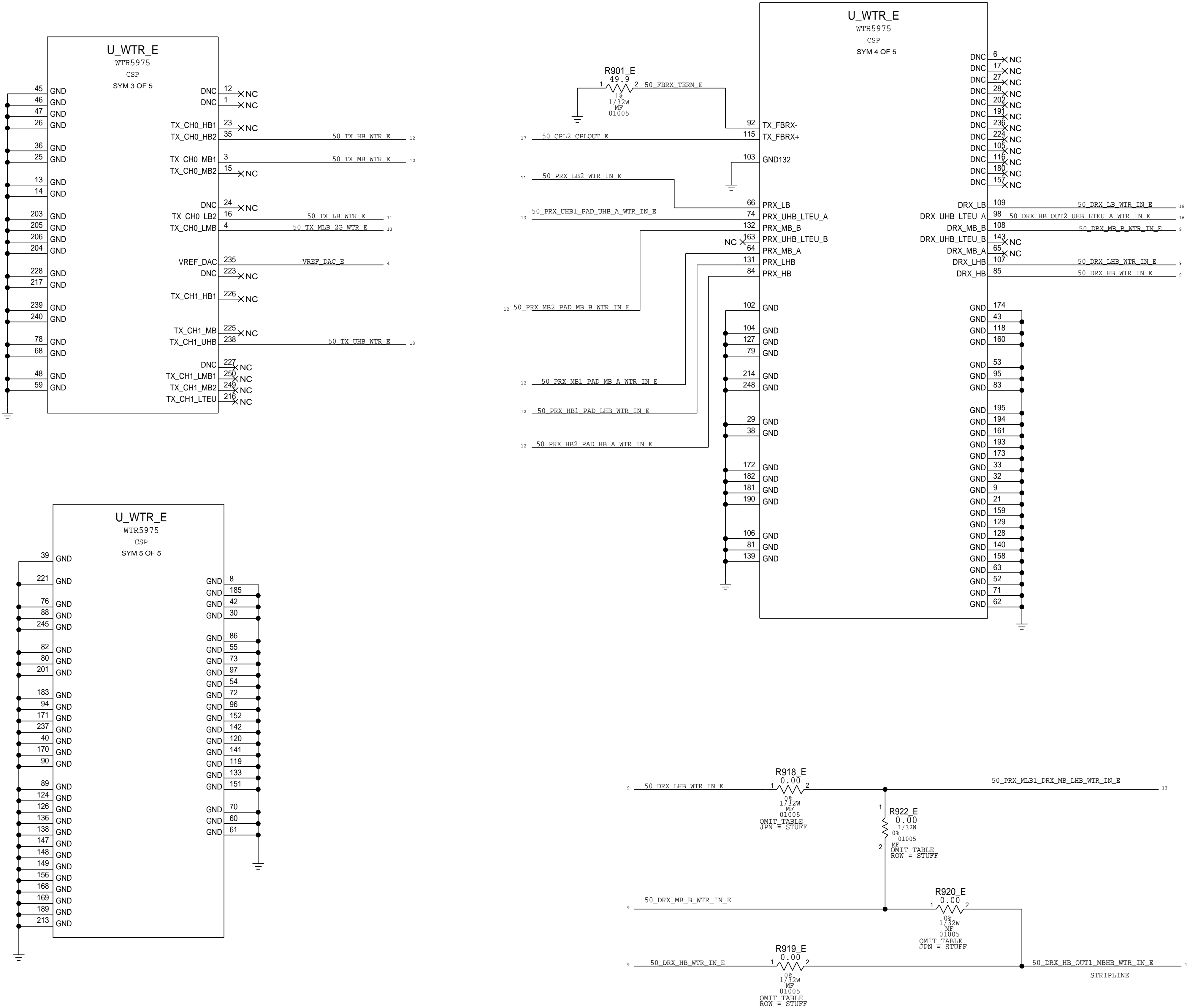
A


TRANSCEIVER: TX & RX

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

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
11780161	1	01005 0R	R919_E	CRITICAL	ROW
11780161	1	01005 0R	R922_E	CRITICAL	ROW

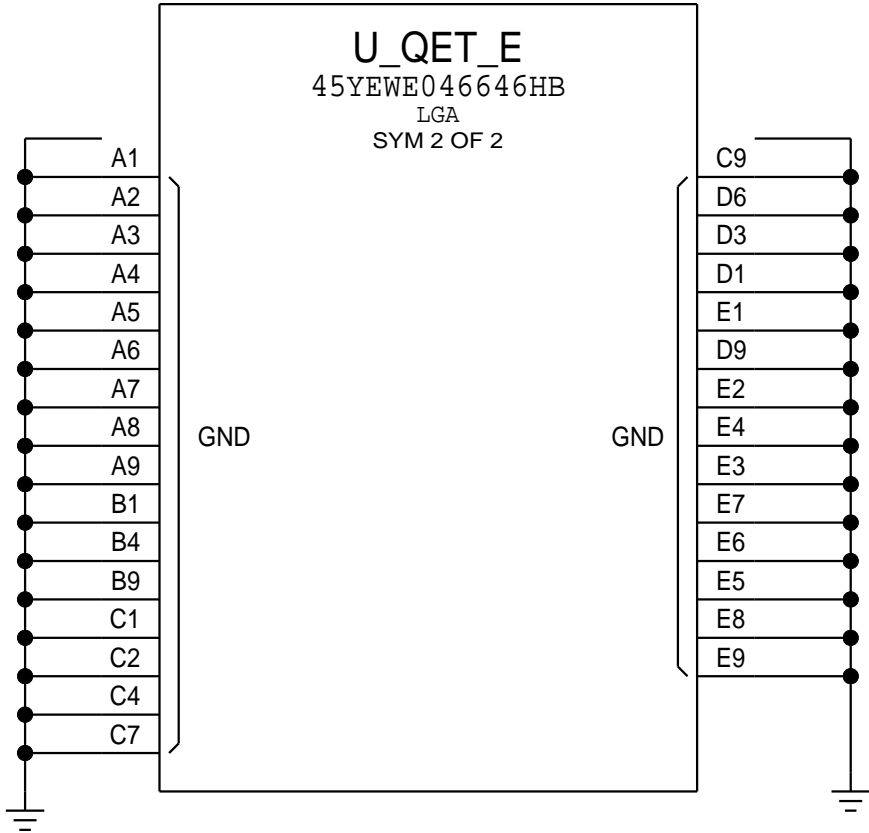
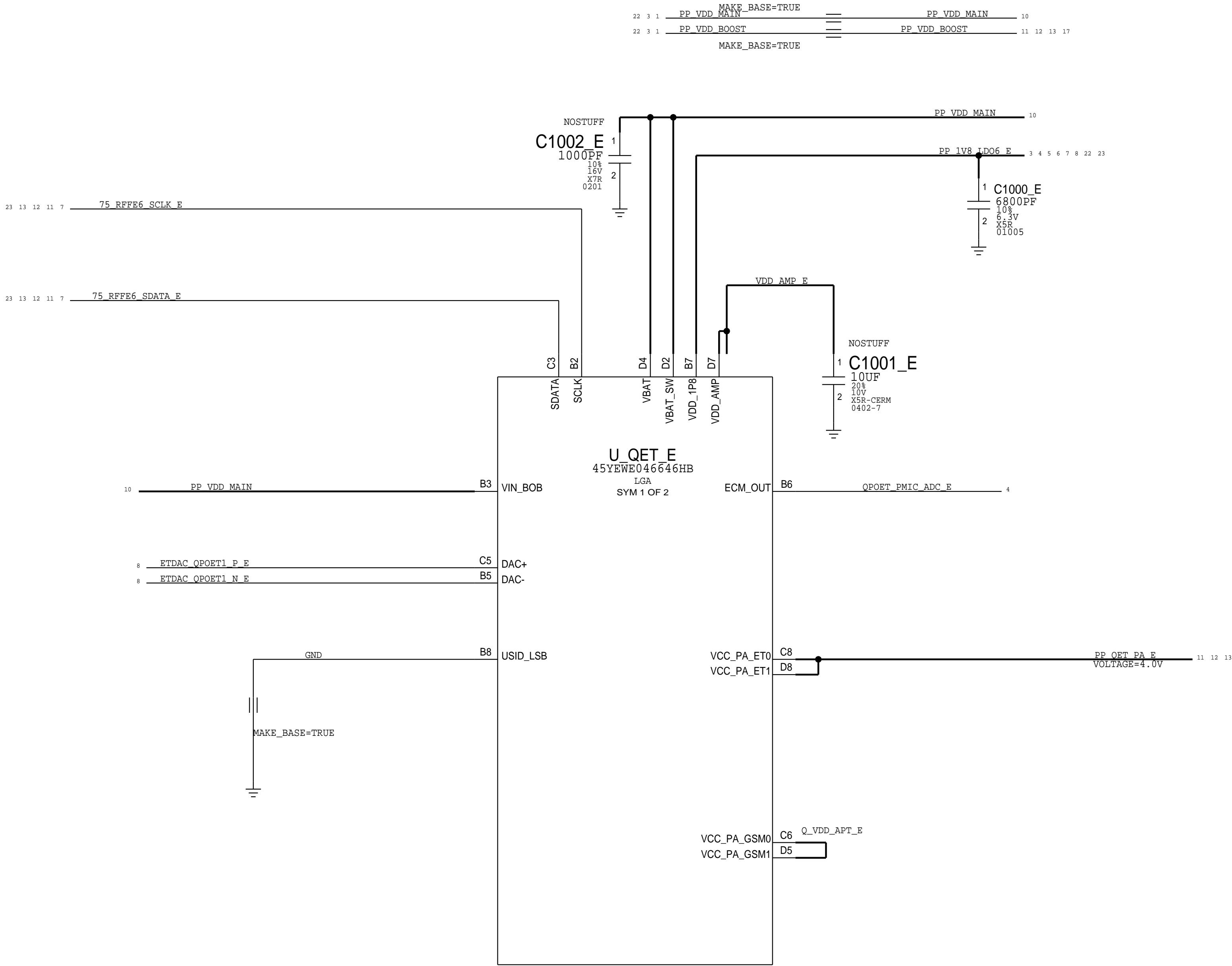
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
11780161	1	01005 0R	R918_E	CRITICAL	JPN
11780161	1	01005 0R	R920_E	CRITICAL	JPN




PAGE TITLE		
XCVR		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
	PAGE	9 OF 24
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		SHEET 21 OF 41

QET:MODULE

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



PAGE TITLE		
QPOET MODULE		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
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	10 OF 24
	SHEET	22 OF 41

LB PAD

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

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S00316	1	2G CPLB JPN	CPL2GB_E	CRITICAL	JPN

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
-------	-----	-------------	-------------------------	----------	------------

D

C

B

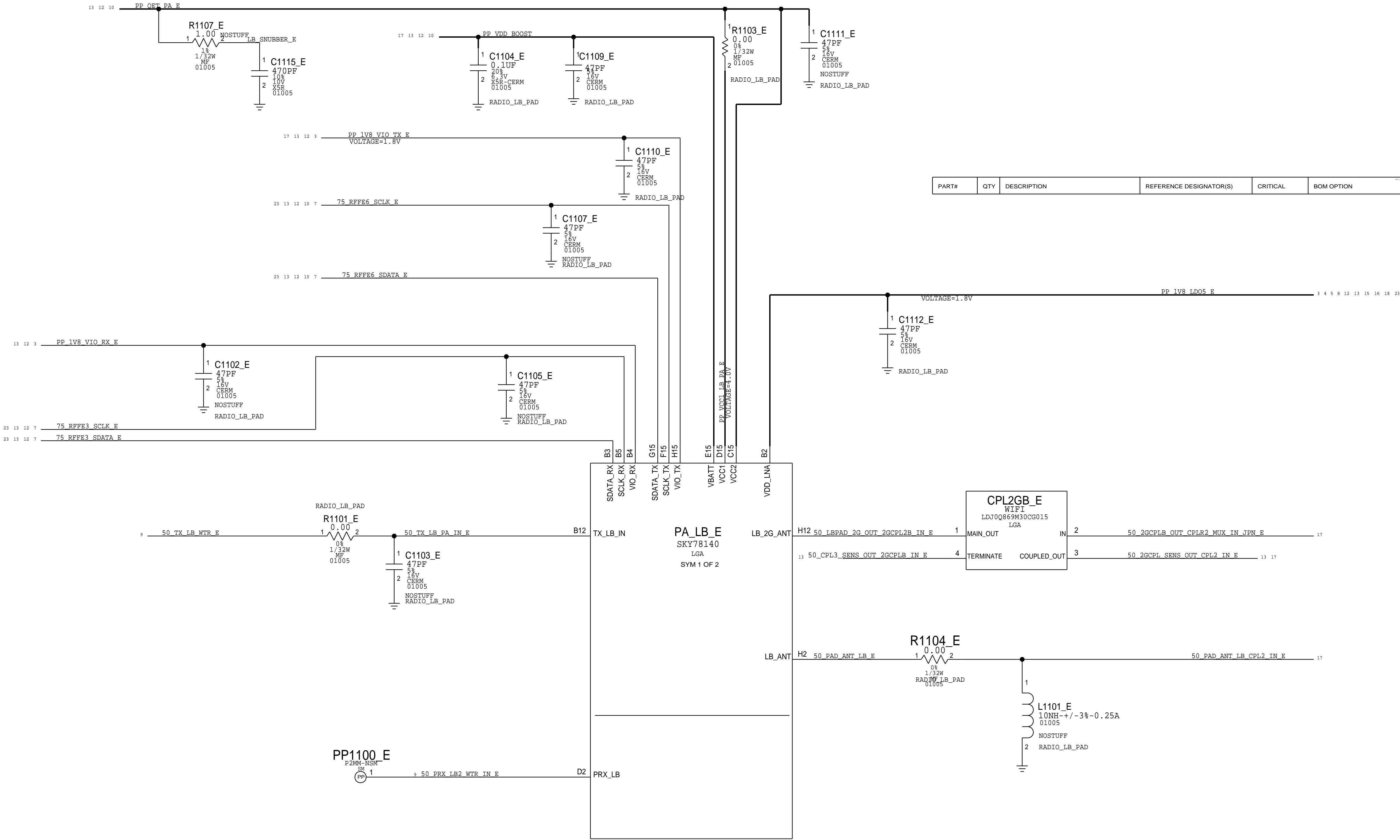
A


D

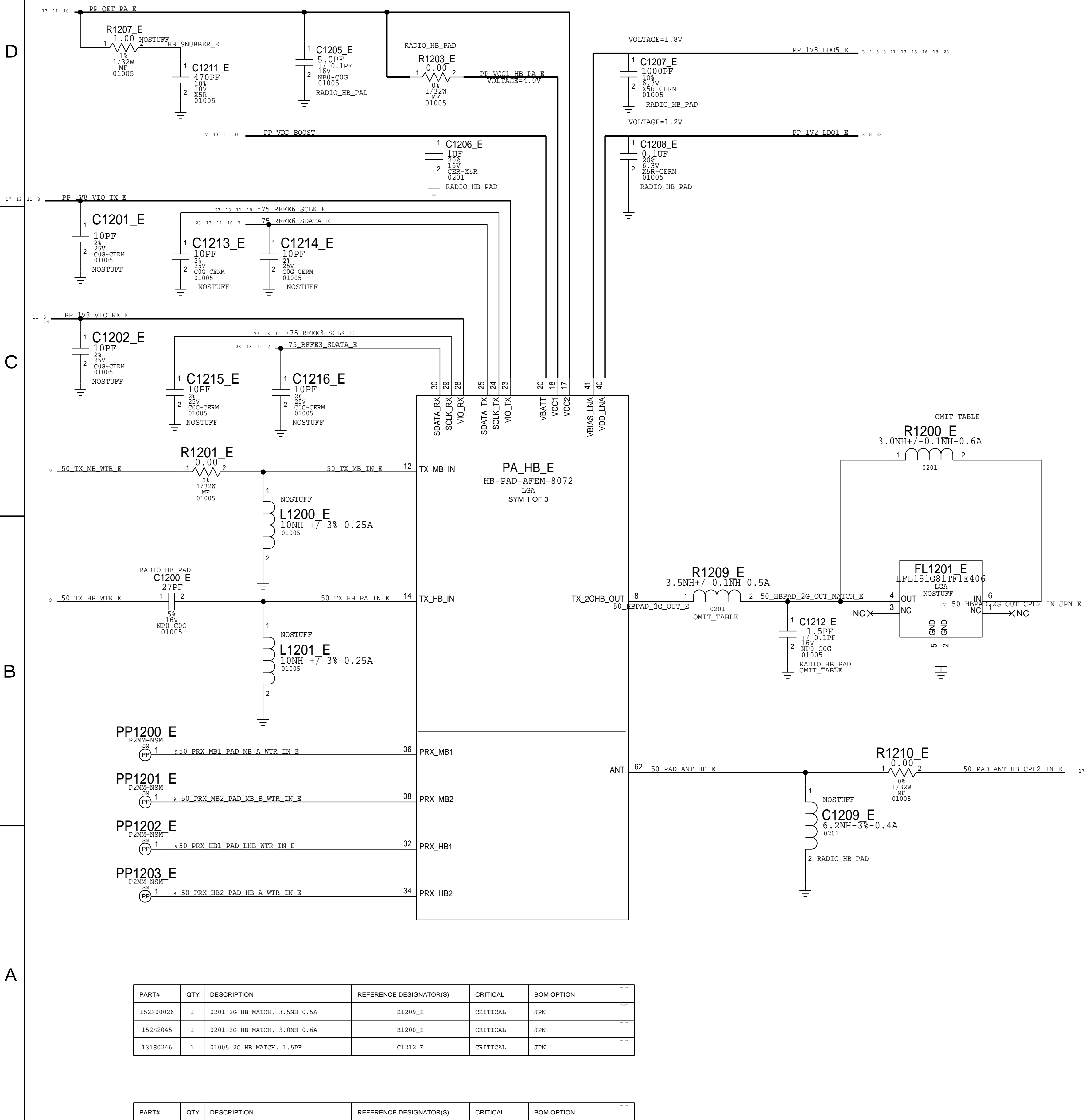
C

B

A

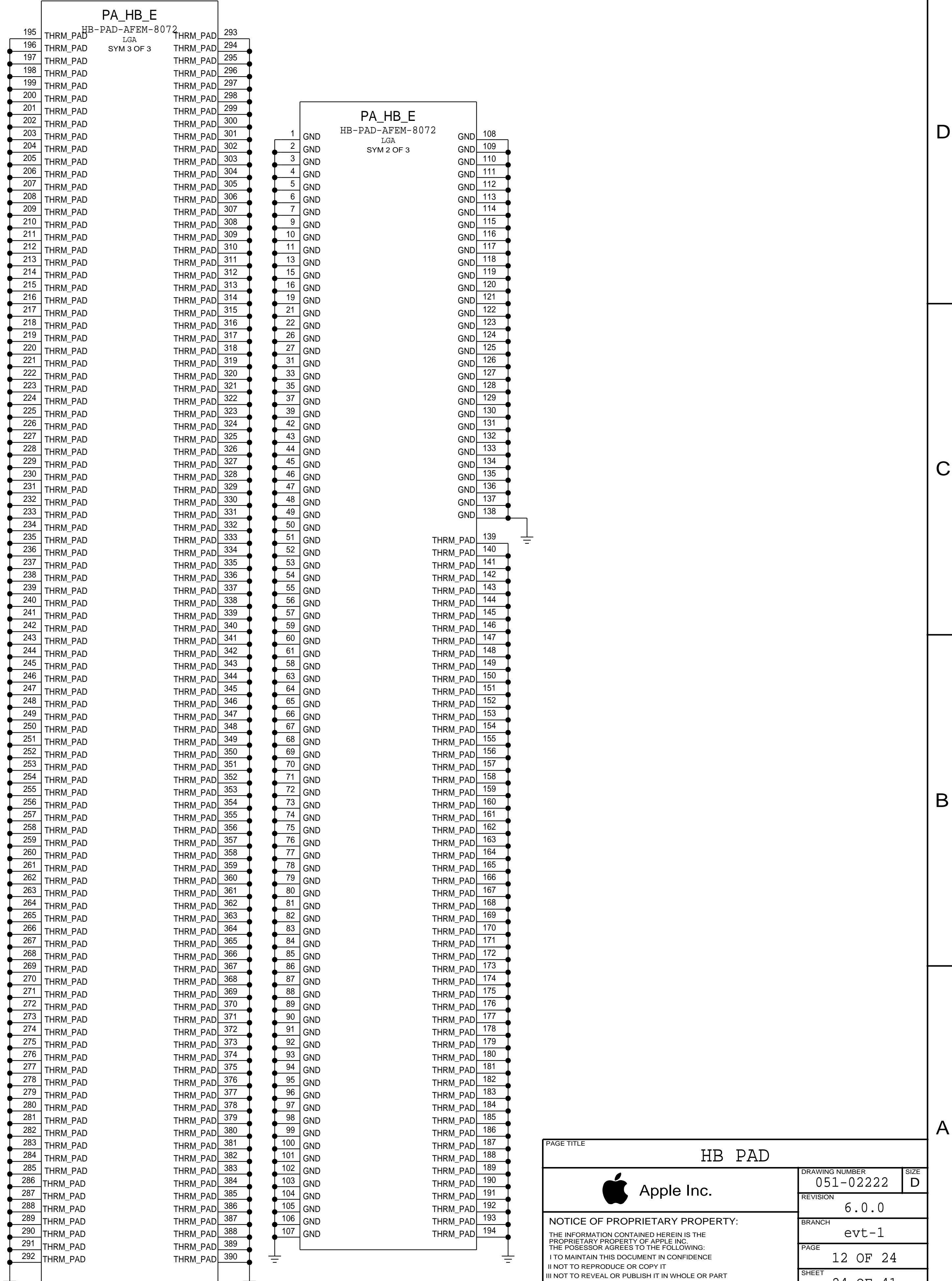


PAGE TITLE		
LB PAD		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
	PAGE	11 OF 24
NOTICE OF PROPRIETARY PROPERTY:		SHEET
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		23 OF 41



PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S00026	1	0201 2G HB MATCH, 3.5NH 0.5A	R1209_E	CRITICAL	JPN
152S2045	1	0201 2G HB MATCH, 3.0NH 0.6A	R1200_E	CRITICAL	JPN
131S0246	1	01005 2G HB MATCH, 1.5PF	C1212_E	CRITICAL	JPN

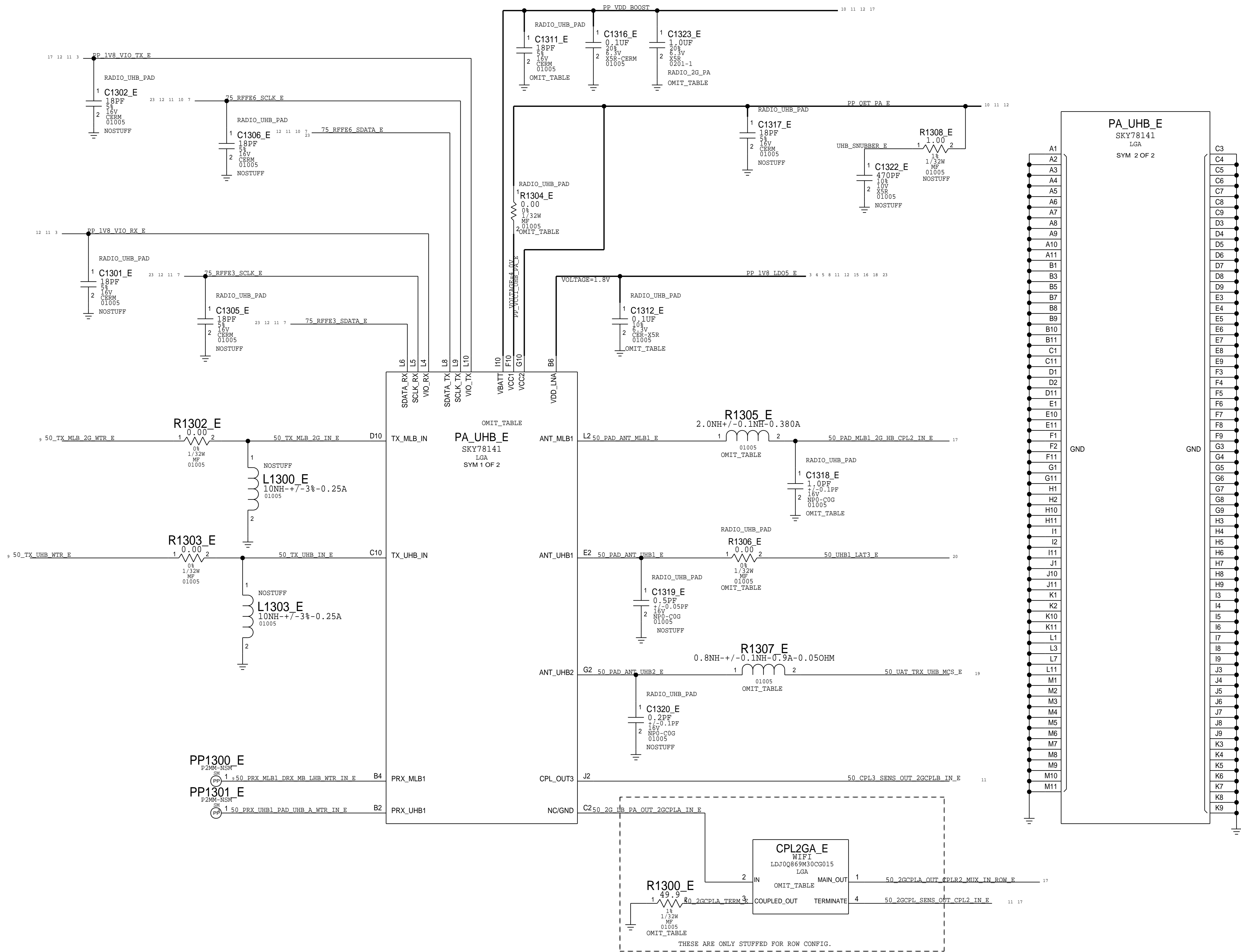
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
-------	-----	-------------	-------------------------	----------	------------




8	7	6
---	---	---

	4	3	2
--	---	---	---

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353801243	1	UHB PAD MP	PA_UHB_E	CRITICAL	JPN
117S0161	1	MLB/2GTX IN MCH2, 0 OHMS	R1302_E	CRITICAL	JPN
117S0161	1	UHB INPUT MCH1, 0 OHMS	R1303_E	CRITICAL	JPN
117S0161	1	MLB/2G MB OUT MCH1 01005 0R	R1305_E	CRITICAL	JPN
117S0161	1	UHB1 OUTPUT MCH1, 0 OHMS	R1306_E	CRITICAL	JPN
152800494	1	UHB2 OUT/DRX BP MCH1, 0.8NH 0.9A	R1307_E	CRITICAL	JPN
13280683	1	UHB LNA DECOUPLING, 0.1UF 6.3V 10%	C1312_E	CRITICAL	JPN
131S0214	1	VBAT DECOUPLING,18PF	C1311_E	CRITICAL	JPN
138S0692	1	VBAT DECOUPLING, 1UF	C1323_E	CRITICAL	JPN
117S0161	1	VCC2/VCC1 RESISTOR OPTION, 0 OHM	R1304_E	CRITICAL	JPN
131S0375	1	MLB OUTPUT MCH UAT, 01005 1.0PF	C1318_E	CRITICAL	JPN




PAGE TITLE		UHB PAD		DRAWING NUMBER		SIZE	
 Apple Inc.		051-02222		D			
		REVISION		6.0.0			
		BRANCH		evt-1			
NOTICE OF PROPRIETARY PROPERTY:		PAGE		13 OF 24			
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		SHEET		25 OF 41			

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S01247	1	2G PA MP	PA_UHB_E	CRITICAL	ROW
117S0161	1	MLB/2GTX IN MCH2, 0 OHMS	R1302_E	CRITICAL	ROW
117S0161	1	UHB INFUT MCH1, 0 OHMS	R1303_E	CRITICAL	ROW
152S1917	1	01005 2.0NH 0.6A	R1305_E	CRITICAL	ROW
117S0161	1	UHB2 OUT/DRX BP MCH1, 0 OHMS	R1307_E	CRITICAL	ROW
131S0214	1	VBAT DECOUPLING,18PF	C1311_E	CRITICAL	ROW
138S0692	1	VBAT DECOUPLING, 1UF	C1323_E	CRITICAL	ROW
117S0161	1	VCC2/VCC1 RESISTOR OPTION, 0 OHM	R1304_E	CRITICAL	ROW
155S00316	1	ROW CLPA	CPL2GA_E	CRITICAL	ROW
118S0652	1	01005 49.9R	R1300_E	CRITICAL	ROW

PAGE TITLE

2G PA

 Apple Inc.

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

DRAWING NUMBER

051-02222

REVISION

6.0.0

BRANCH

evt-1

PAGE

14 OF 24

SHEET

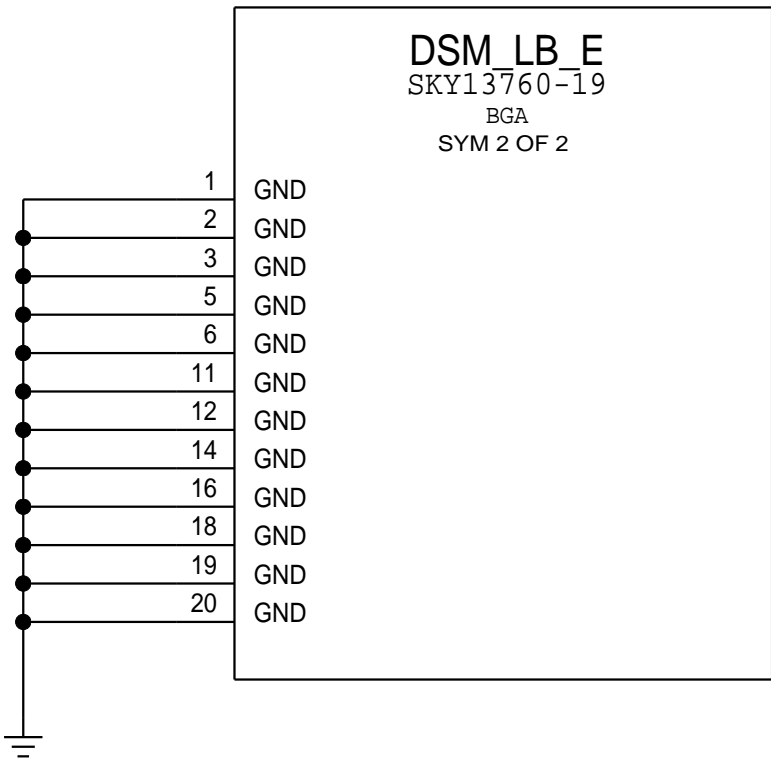
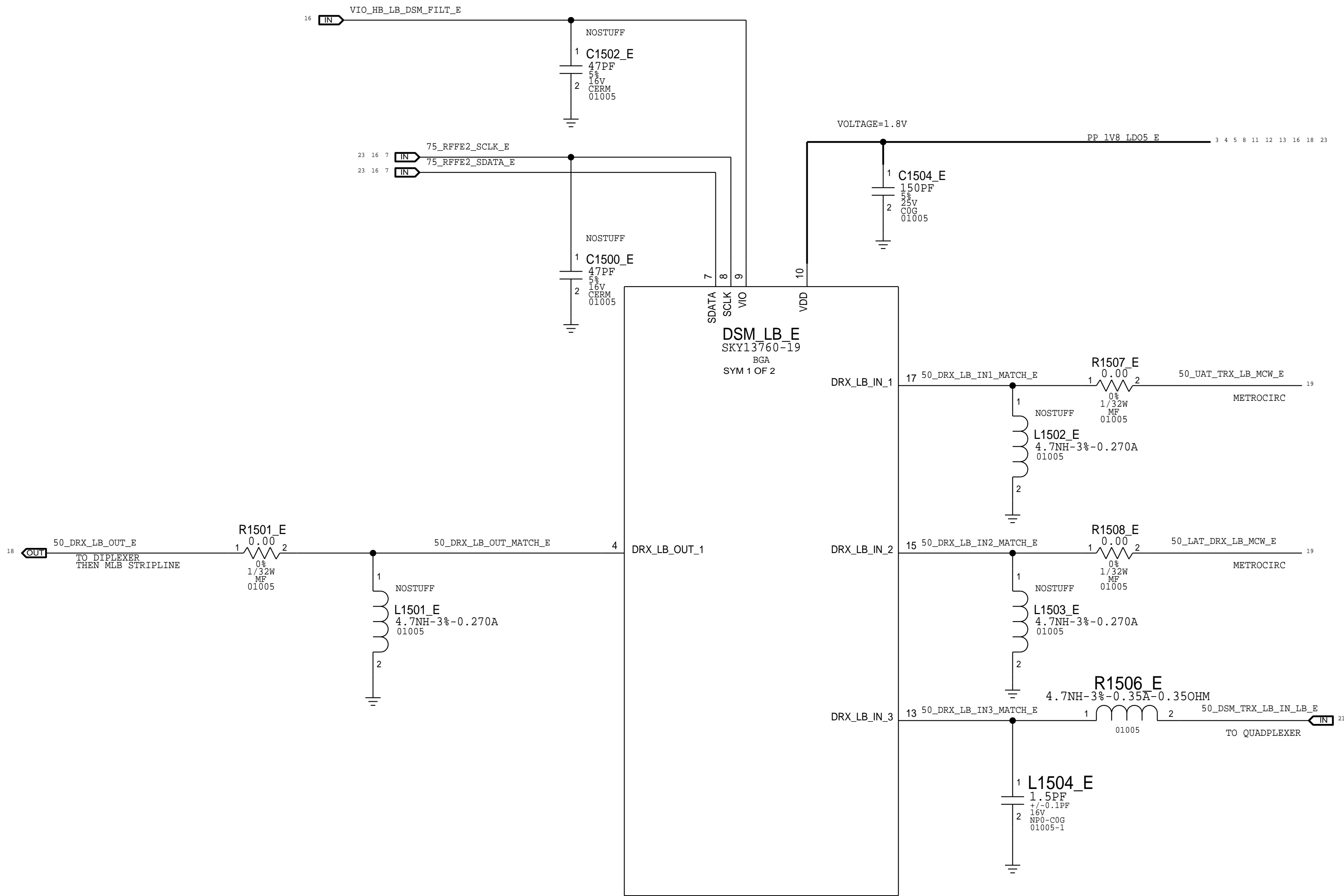
26 OF 41


SIZE

D

LB DSM

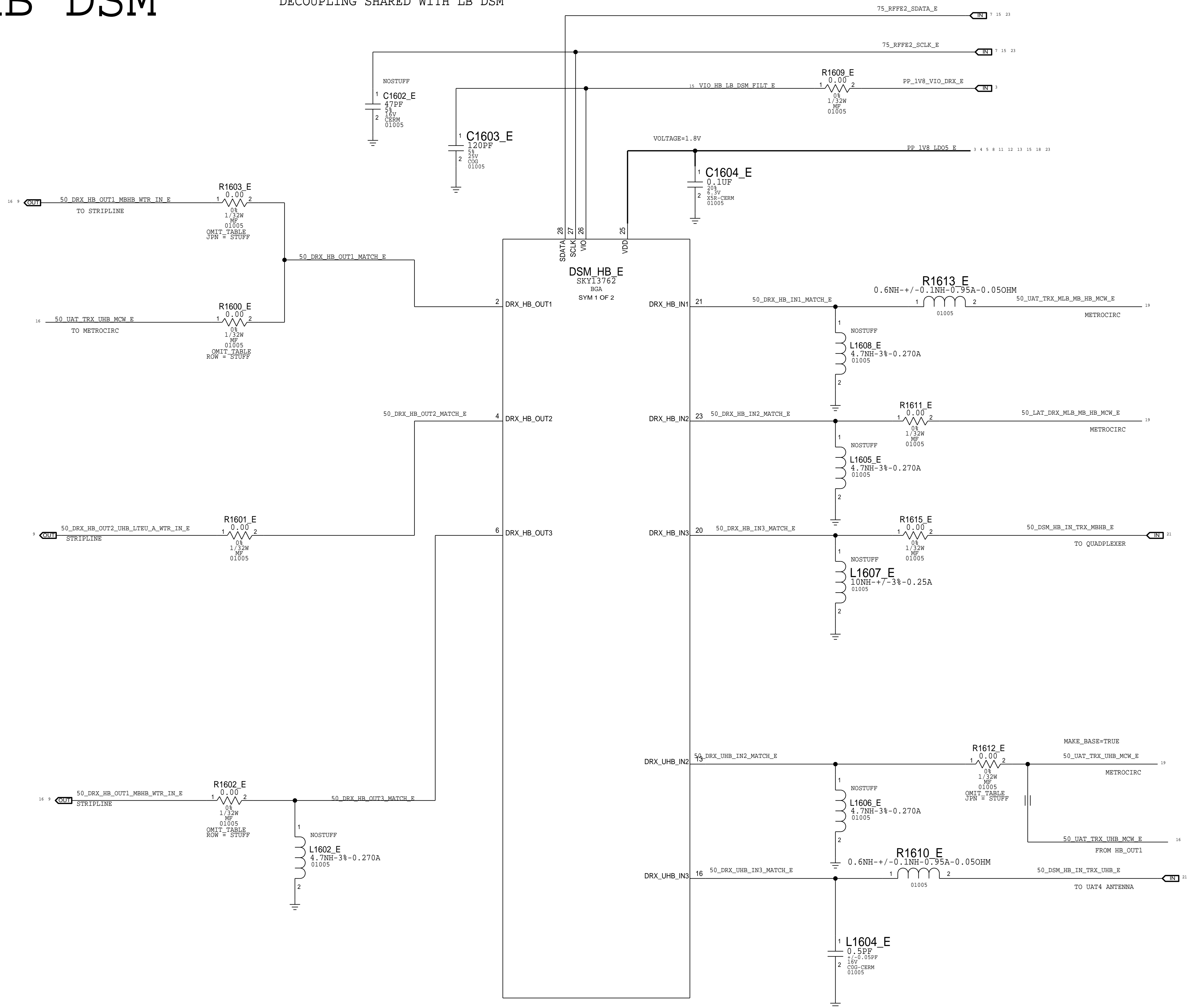
CONFIDENTIAL AND PROPRIETARY APPLE SYSTEM DESIGN. FOR REFERENCE ONLY - NOT A CHANGE REQUEST



PAGE TITLE		
LB DSM		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
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	15 OF 24
	SHEET	27 OF 41
	SIZE	D

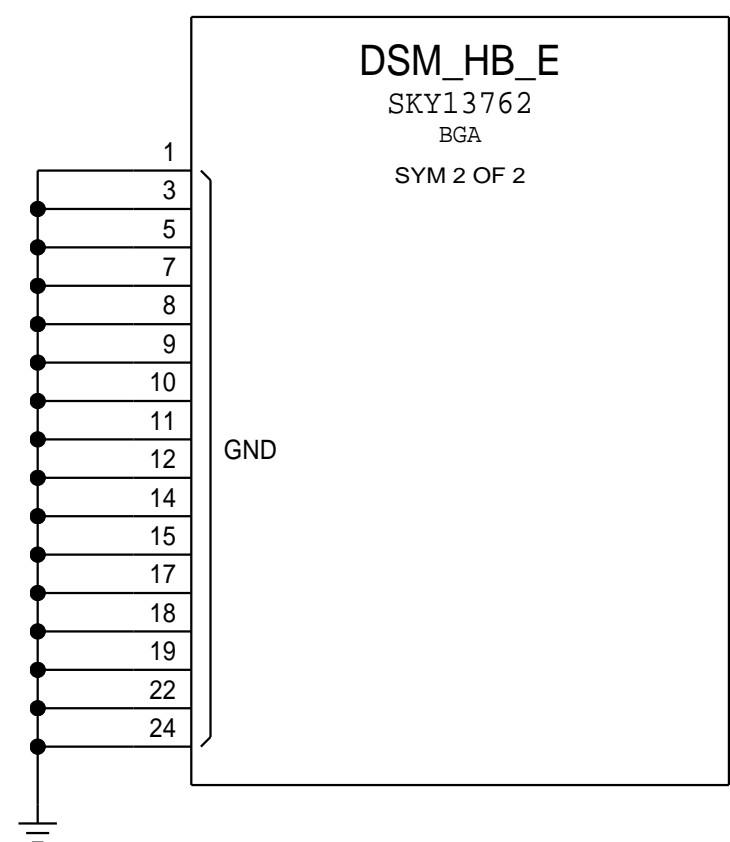
HB DSM


DECOUPLING SHARED WITH LB DSM



PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
117S0161	1	01005 0R	R1600_B	CRITICAL	ROW
117S0161	1	01005 0R	R1602_B	CRITICAL	ROW

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
117S0161	1	01005 0R	R1603_E	CRITICAL	JPN
117S0161	1	01005 0R	R1612_E	CRITICAL	JPN



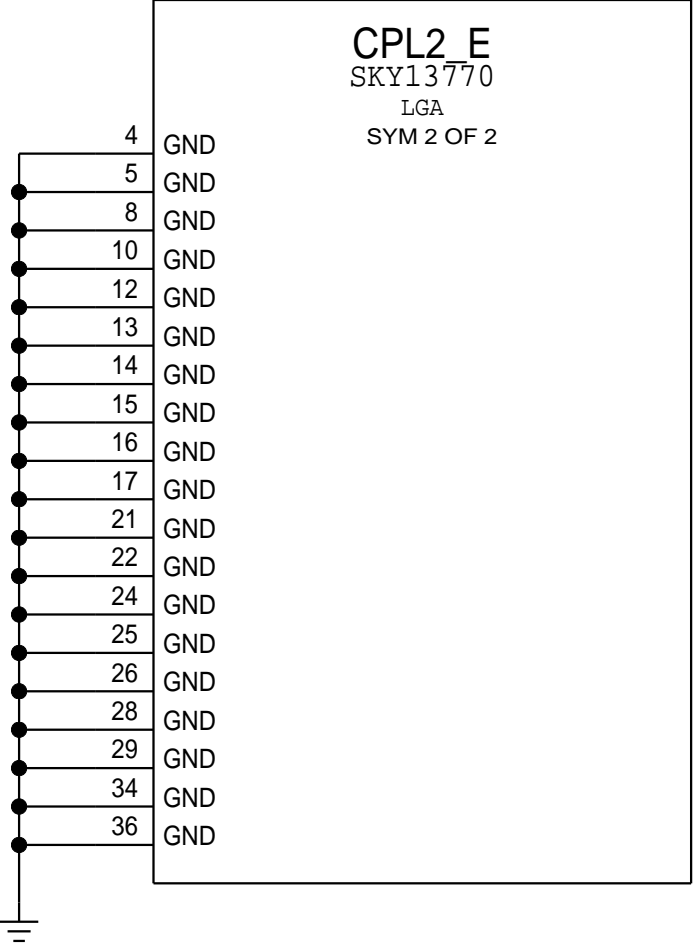
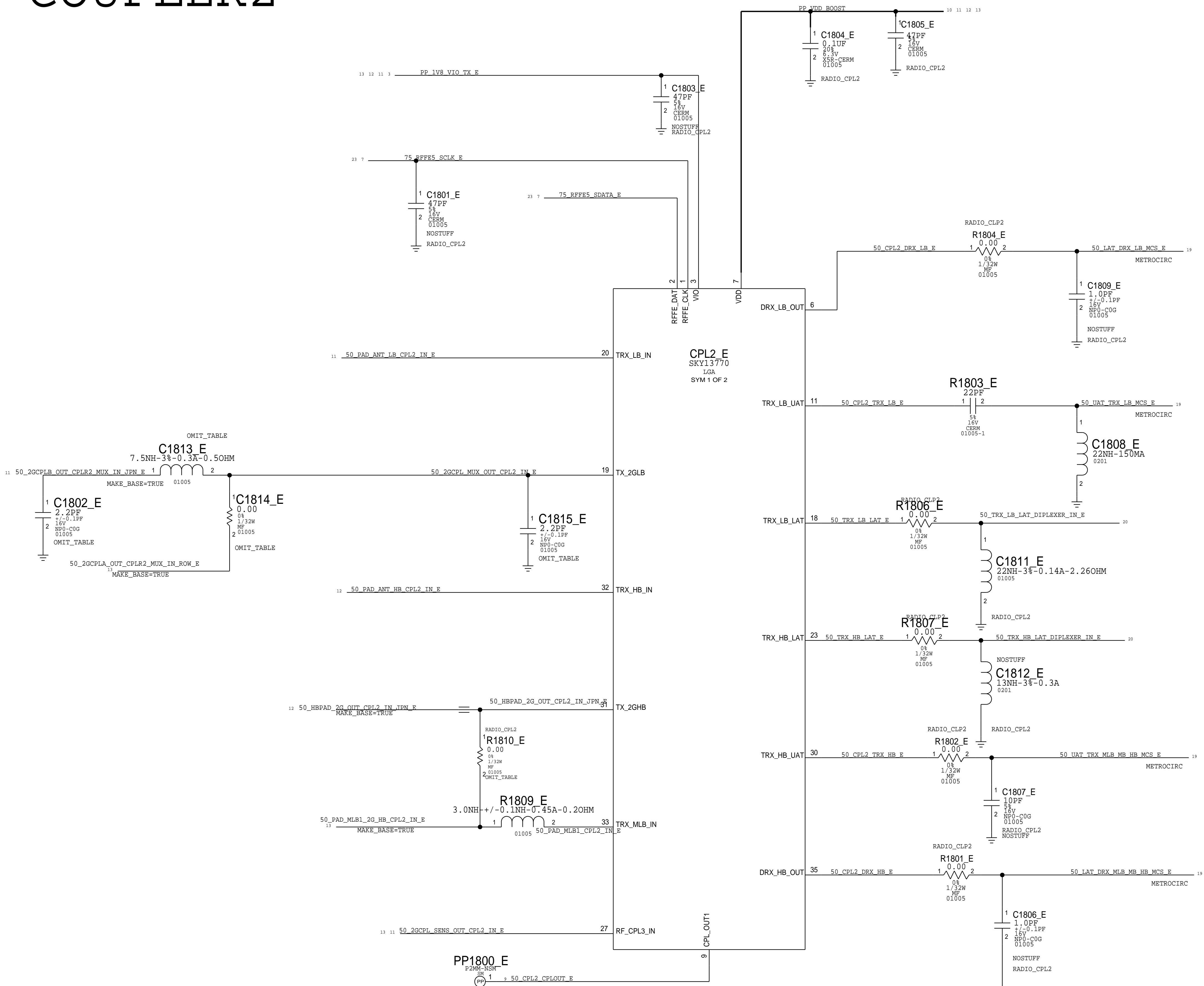
PAGE TITLE			HB DSM	
 Apple Inc.	DRAWING NUMBER		051-02222	
	REVISION		6.0.0	
	BRANCH		evt-1	
	PAGE		16 OF 24	
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		SHEET		28 OF 41


COUPLER 2

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

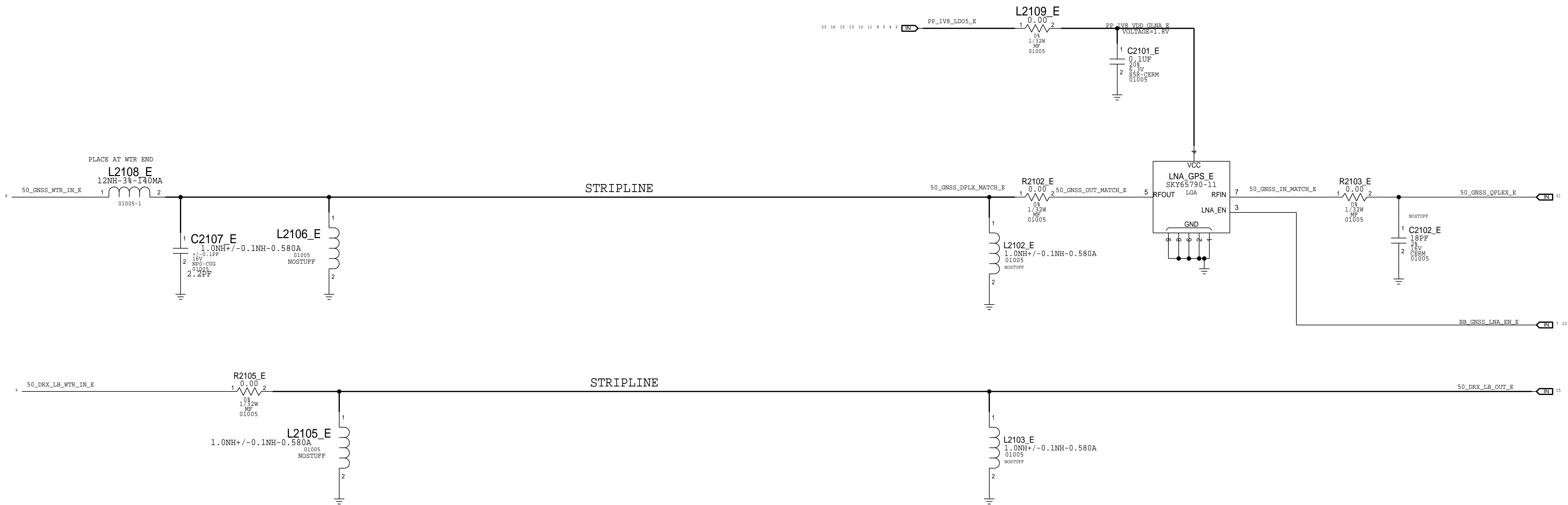
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S00504	1	01005 3.0NH 0.45A	R1809_E	CRITICAL	JPN
152S00524	1	01005 7HS5 300MA	C1813_E	CRITICAL	JPN
131S0249	1	01005 2.2PF 0.1FF	C1815_E	CRITICAL	JPN
131S0249	1	01005 2.2PF 0.1FF	C1802_E	CRITICAL	JPN


PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
11750161	1	01005 0R	R1810_E	CRITICAL	ROW
11750161	1	01005 0R	C1814_E	CRITICAL	ROW



PAGE TITLE		
COUPLER2		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
	PAGE	17 OF 24
	SHEET	29 OF 41
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		

GPS & GPS/LB DIPLEXER

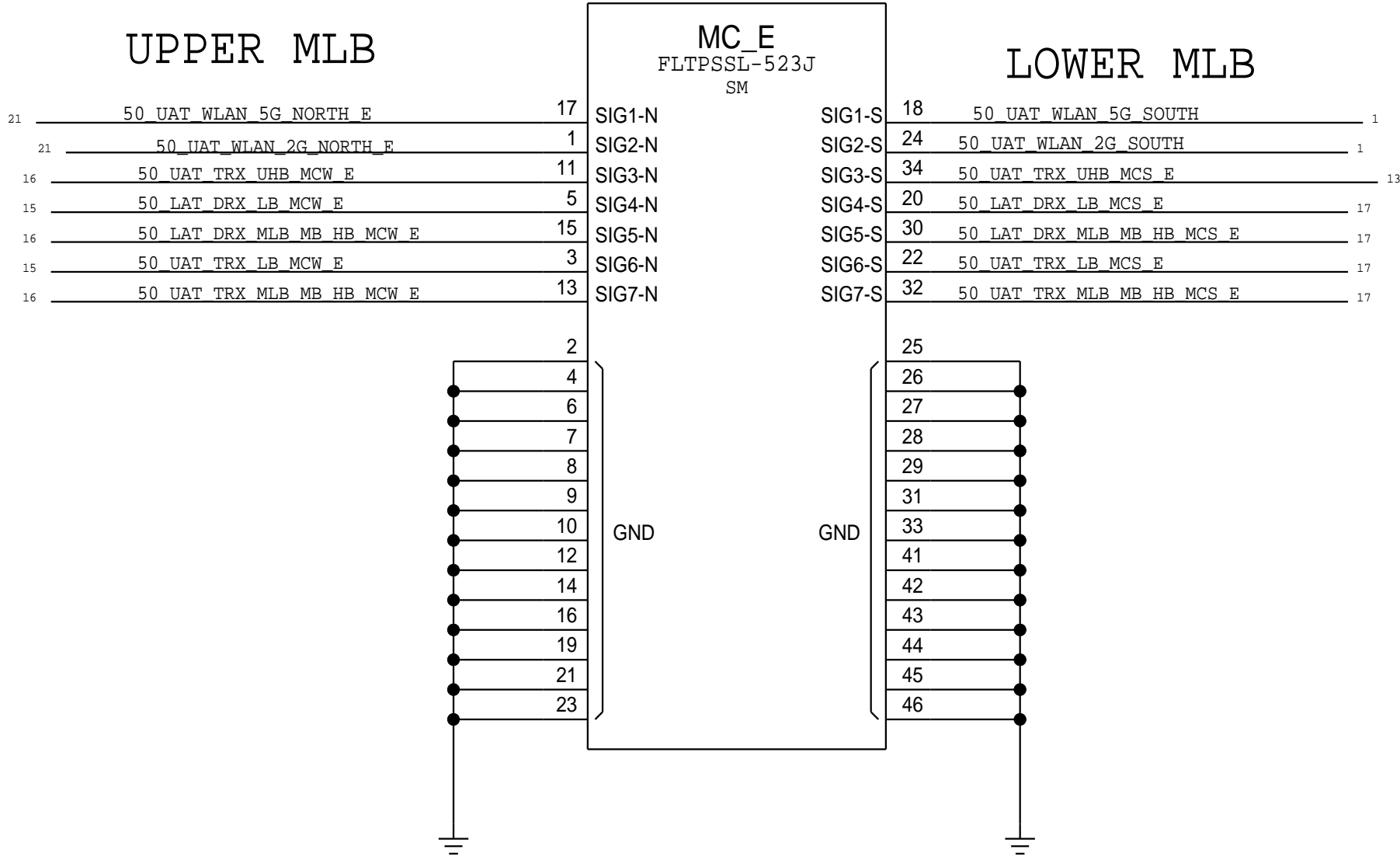



PAGE TITLE		
GNSS		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
	PAGE	18 OF 24
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		SHEET 30 OF 41

METROCIRC

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

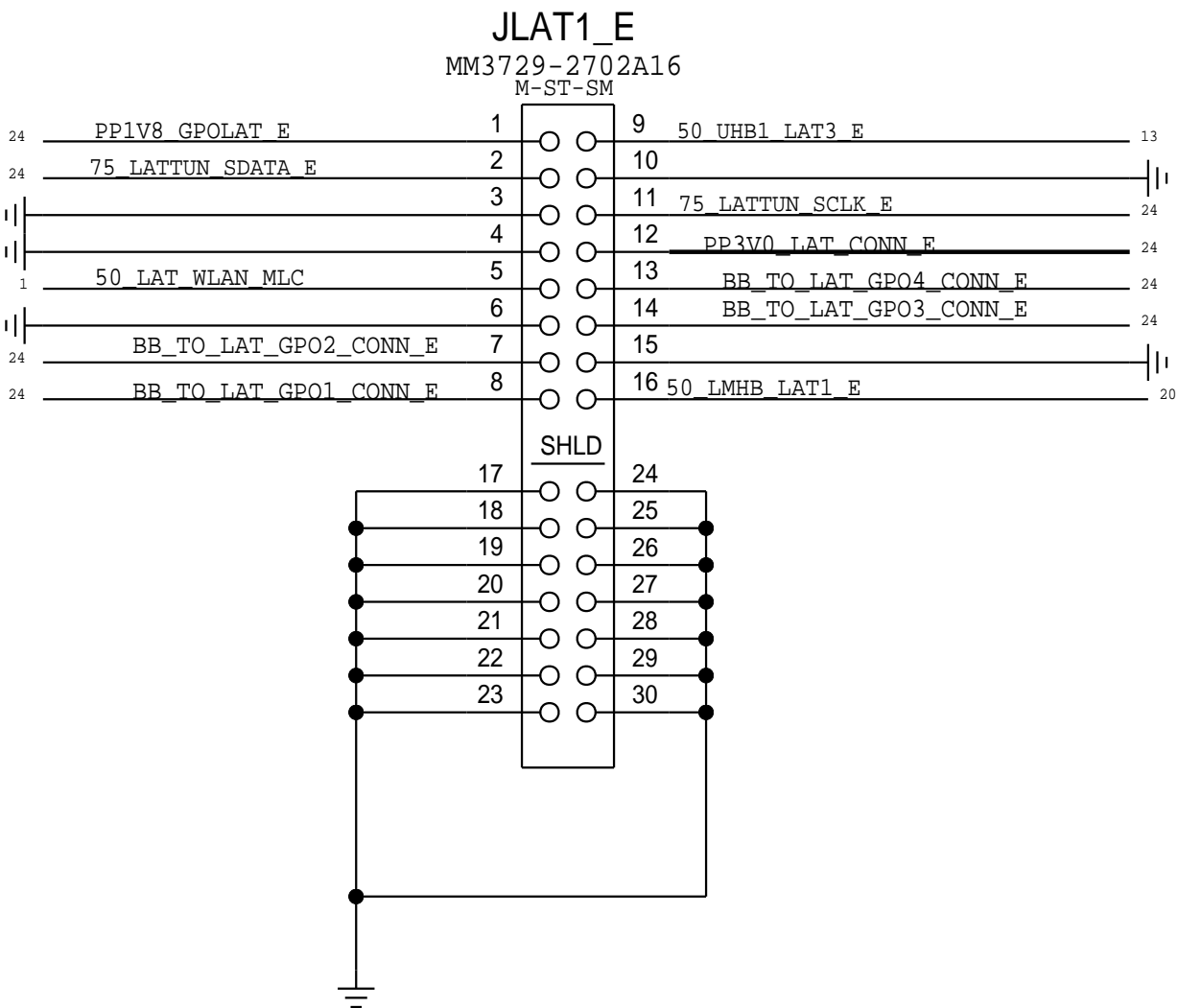
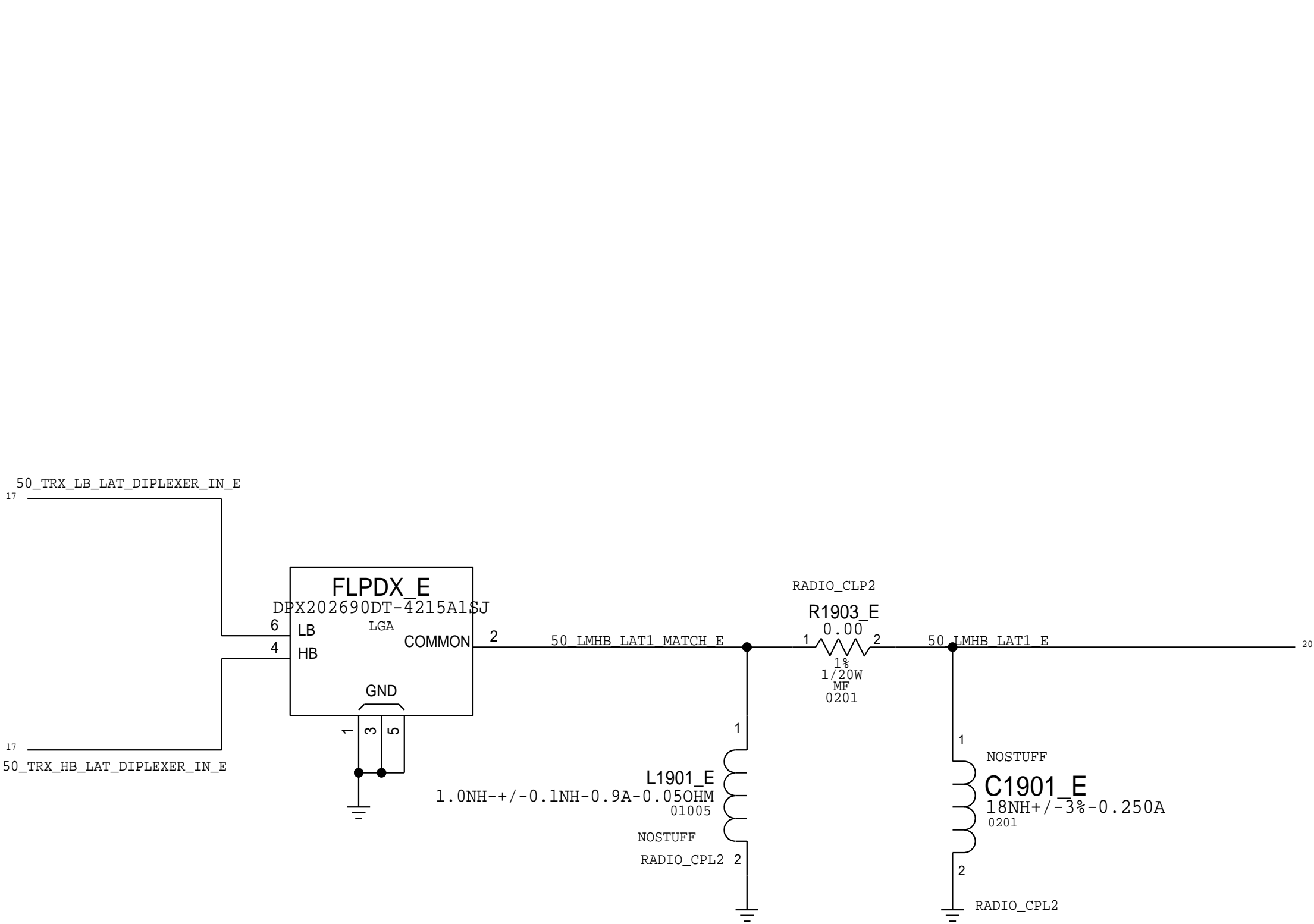
METROCIRC




PAGE TITLE		
METROCIRC		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
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	BRANCH	evt-1
	PAGE	19 OF 24
	SHEET	31 OF 41

LOWER ANTENNA

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

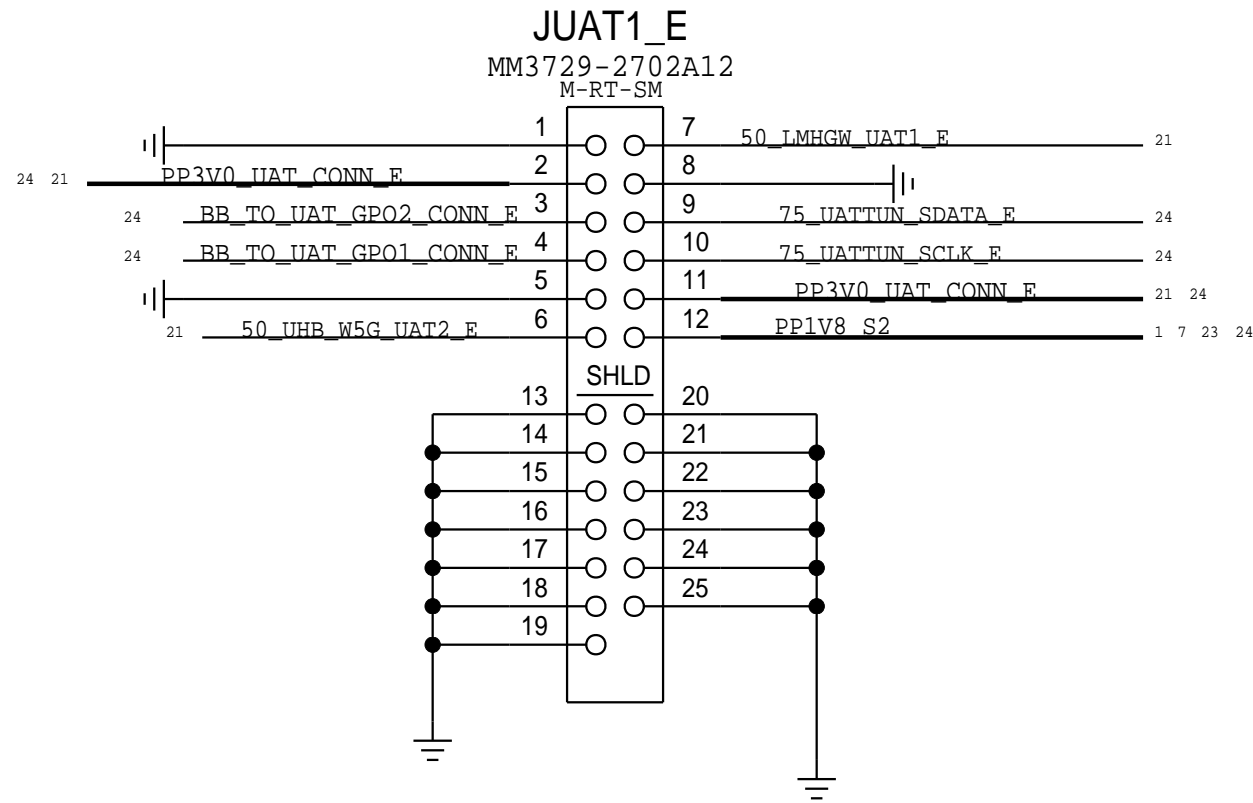
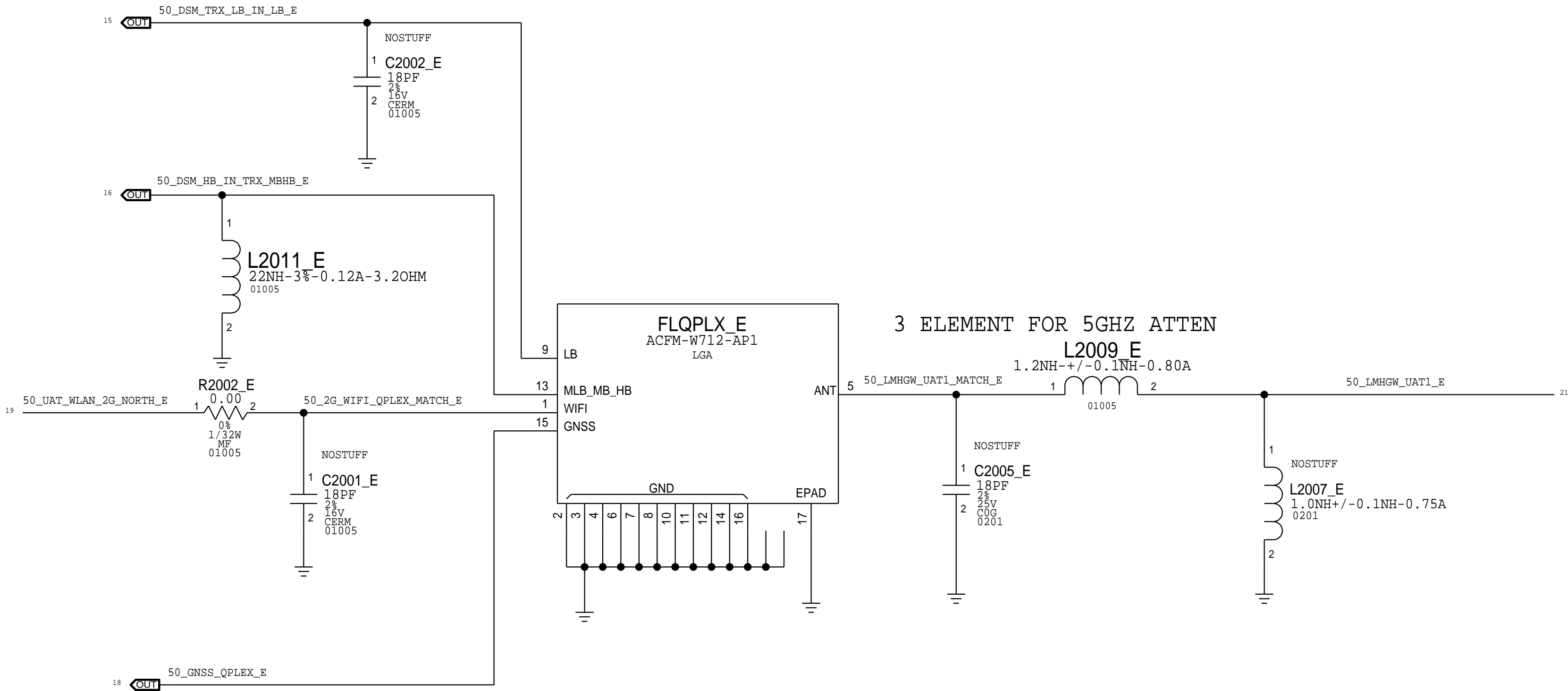



PAGE TITLE		
LOWER ANTENNA		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	PAGE	20 OF 24
	SHEET	32 OF 41

UAT & LB/UHB DIPLEXER

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

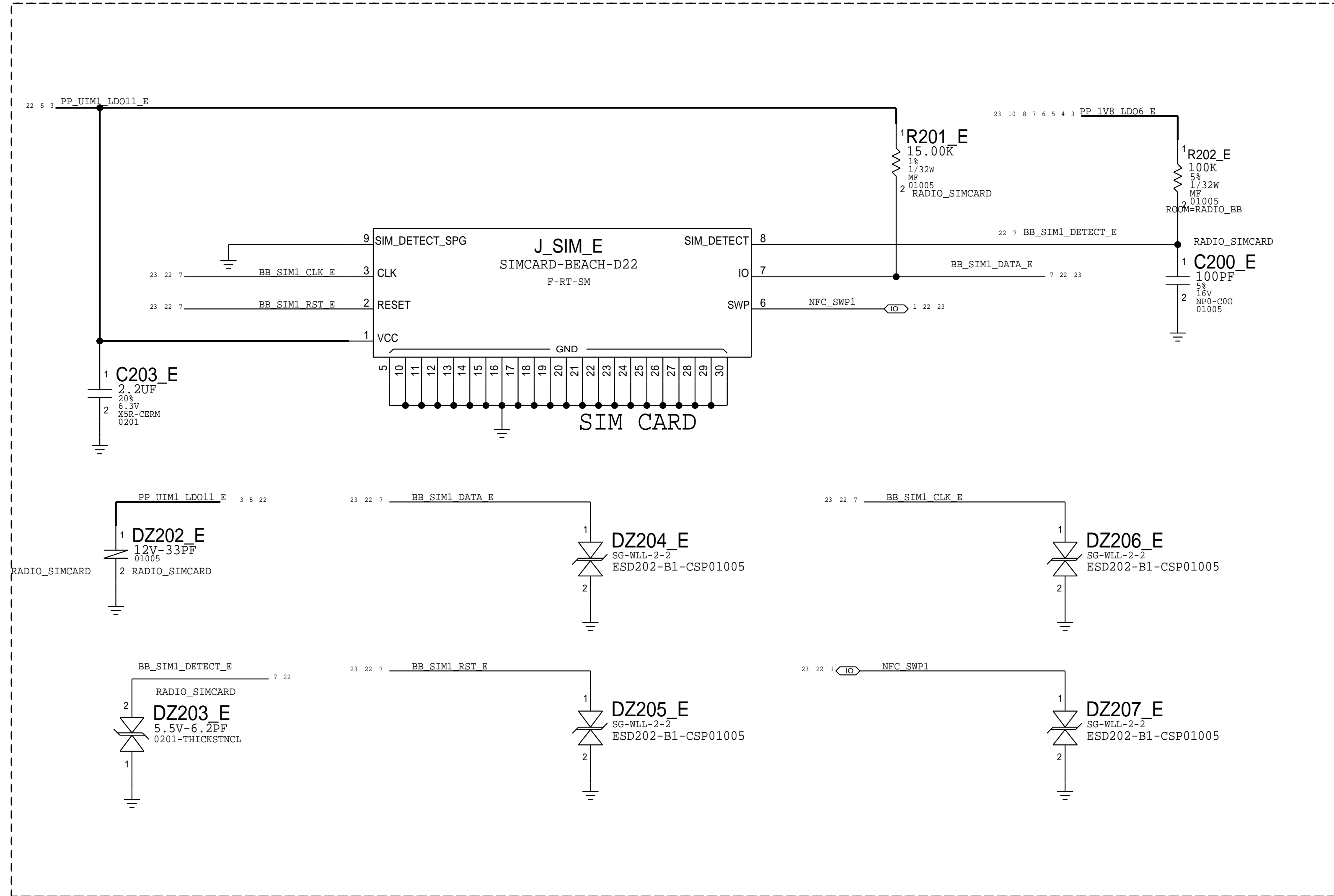
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S00280	1	B42_WIF15_DPX	FL2002_R	CRITICAL	JFN
155S00290	1	B42_WIF15_DPX_PASSTHRU	FL2002_R	CRITICAL	ROW



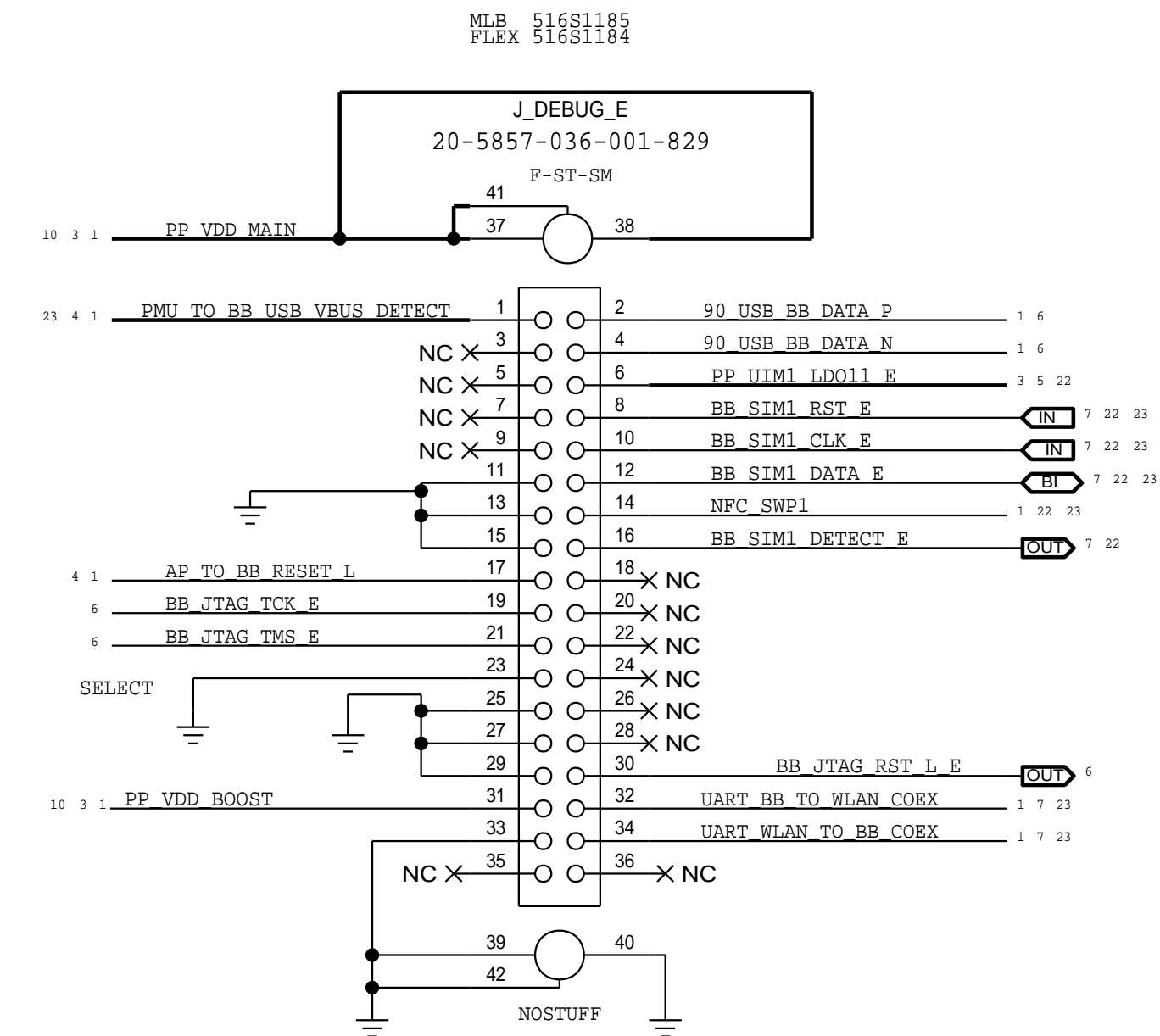
PAGE TITLE		
UPPER ANTENNA		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	BRANCH	evt-1
	PAGE	21 OF 24
	SHEET	33 OF 41


SIM CONN EUICC & DEBUG CONN

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

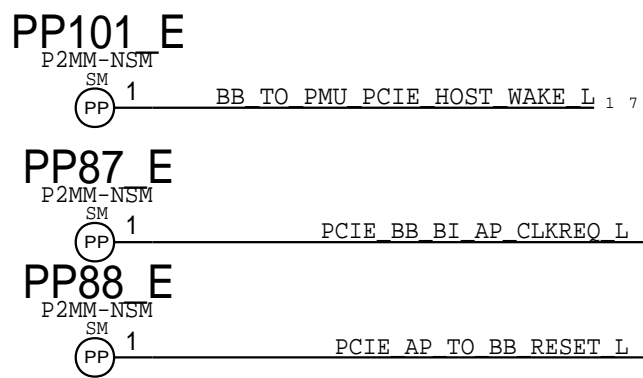


DEBUG CONNECTOR



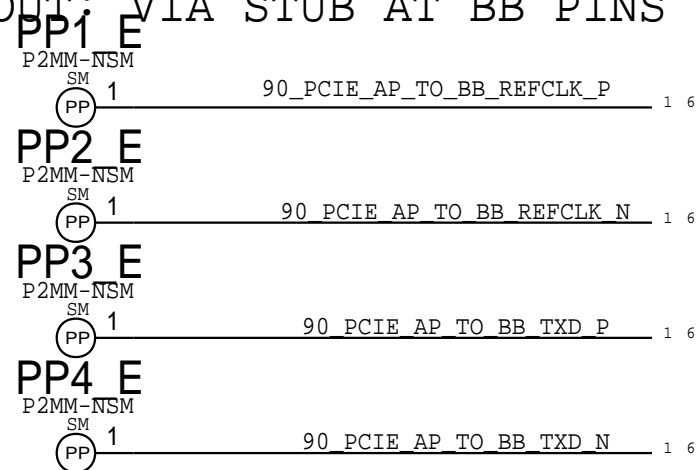
SYNC_MASTER-SIM TRAY		SYNC_DATE=07/05/2016	
PAGE TITLE			
SIM, EUICC, DEBUG CONN			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02222		D
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	REVISION		
	6.0.0		
	BRANCH		
	evt-1		
PAGE			22 OF 24
SHEET			34 OF 41

BB PROBE POINTS

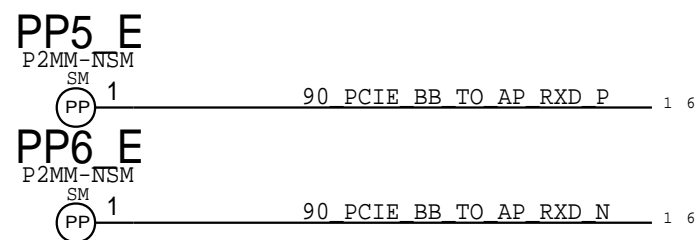


PCIE

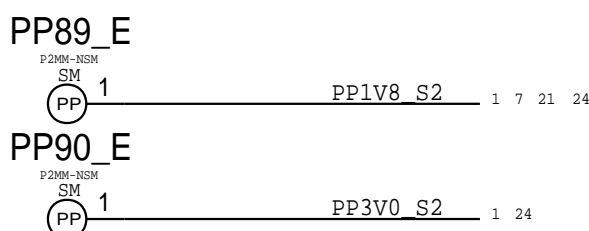
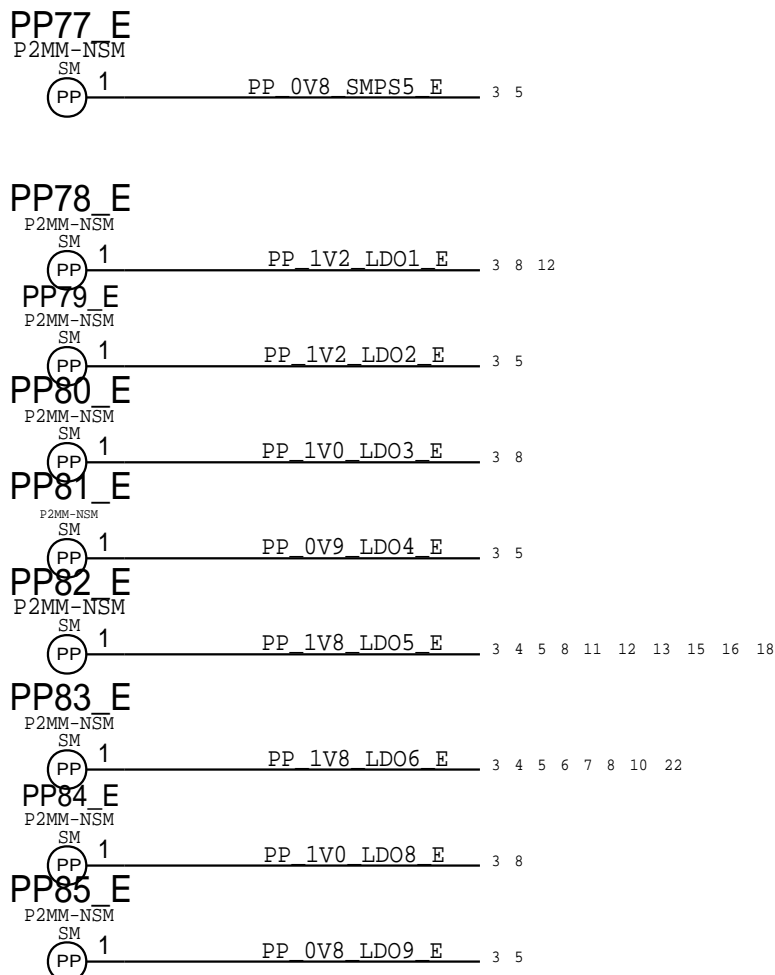
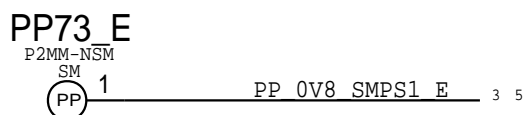
LAYOUT: VIA STUB AT BB PINS



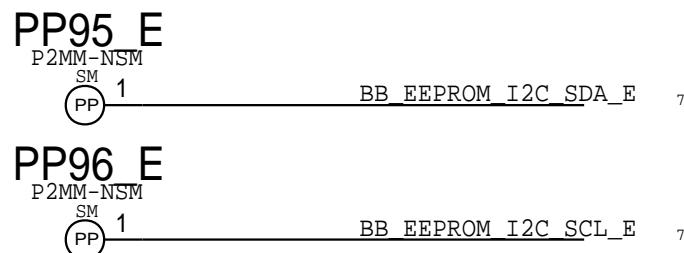
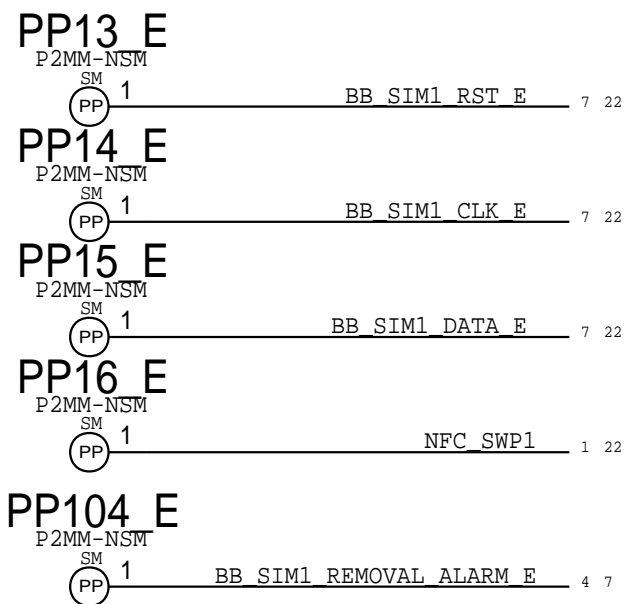
LAYOUT: VIA STUB AT PADS



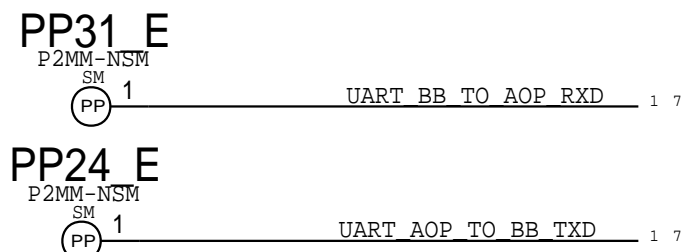
PWR



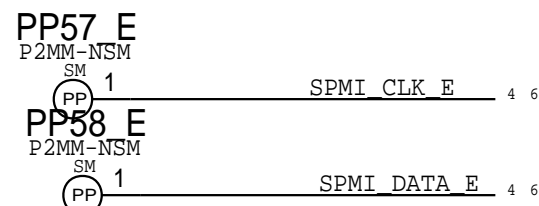
SIM



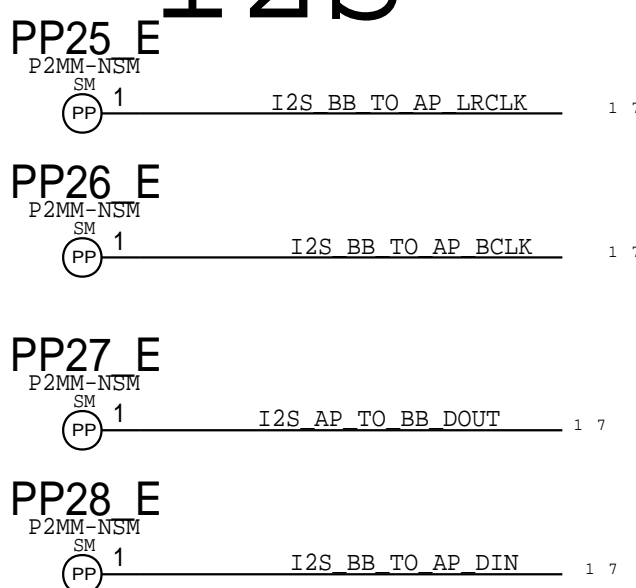
UART



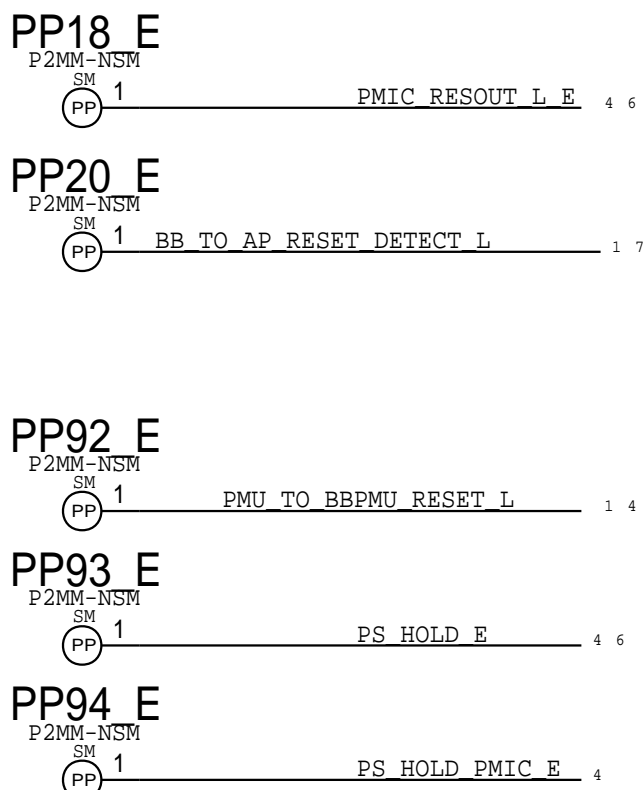
SPMI



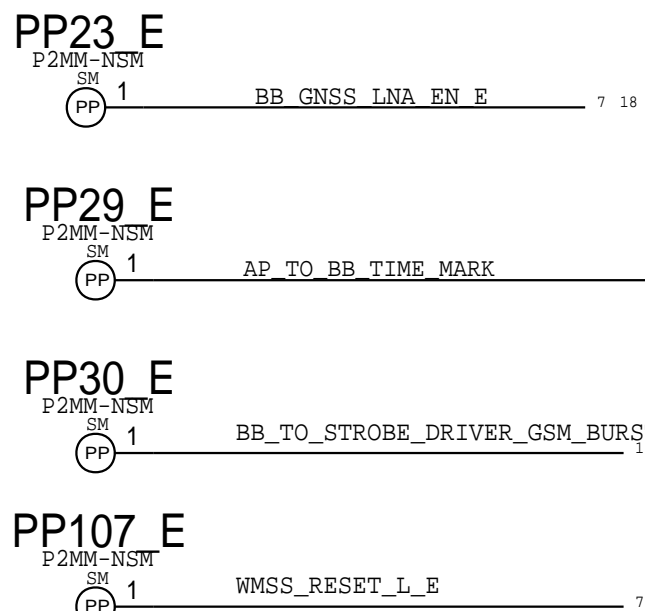
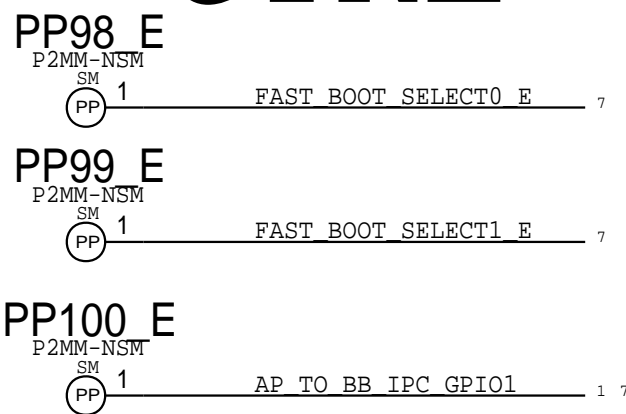
I2S



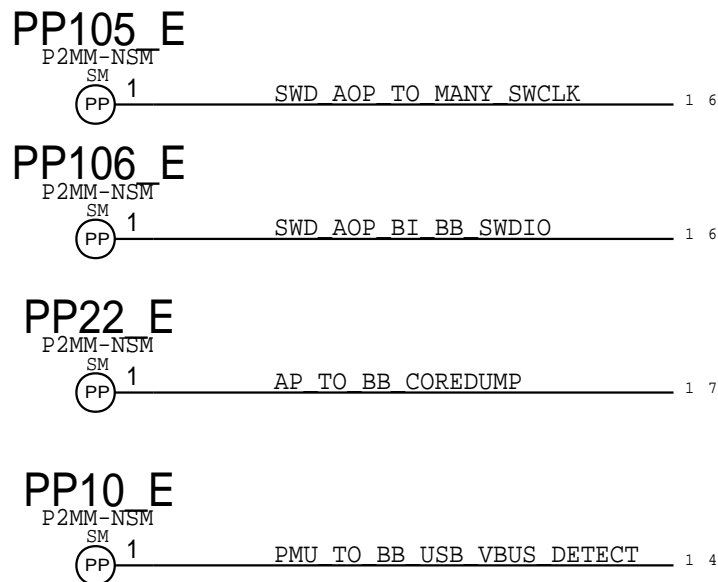
PWR SEQ



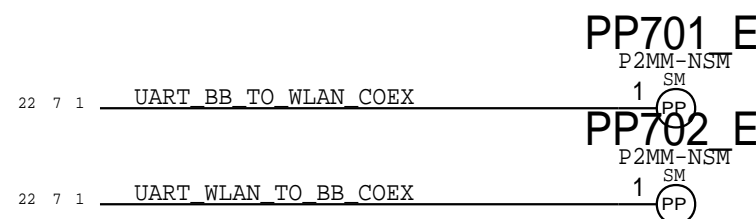
CTRL



DEBUG

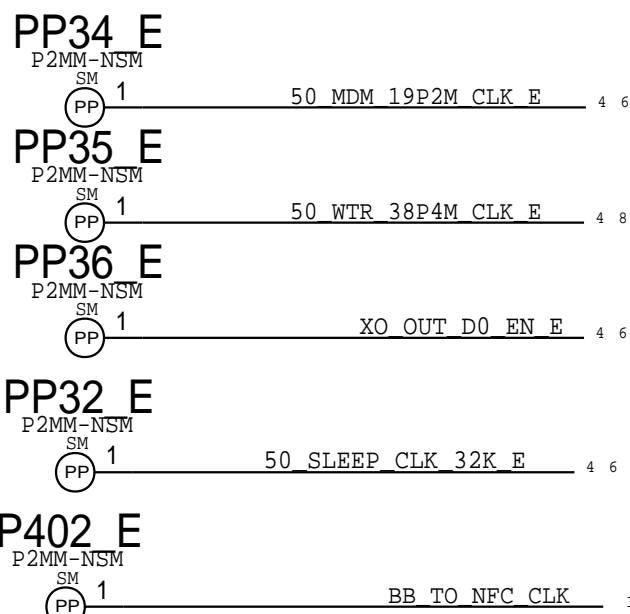


COEX

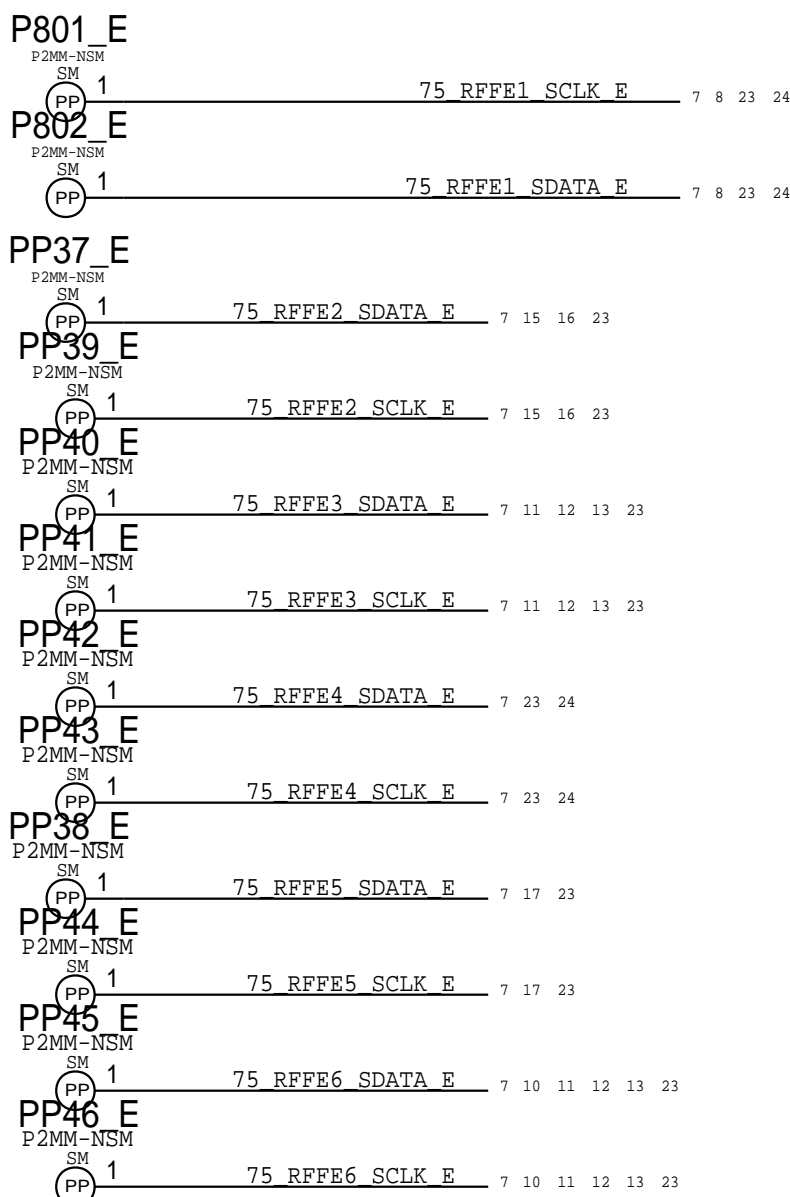


BASEBAND

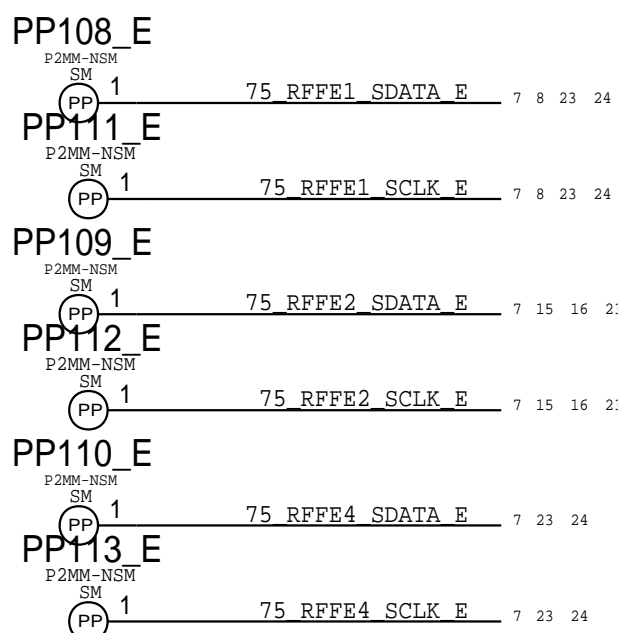
CLK



RFFE

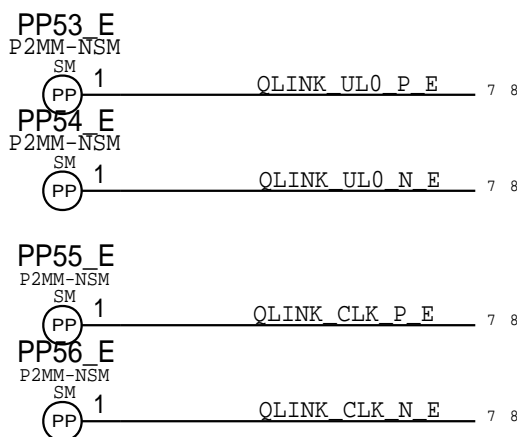


RFFE BB

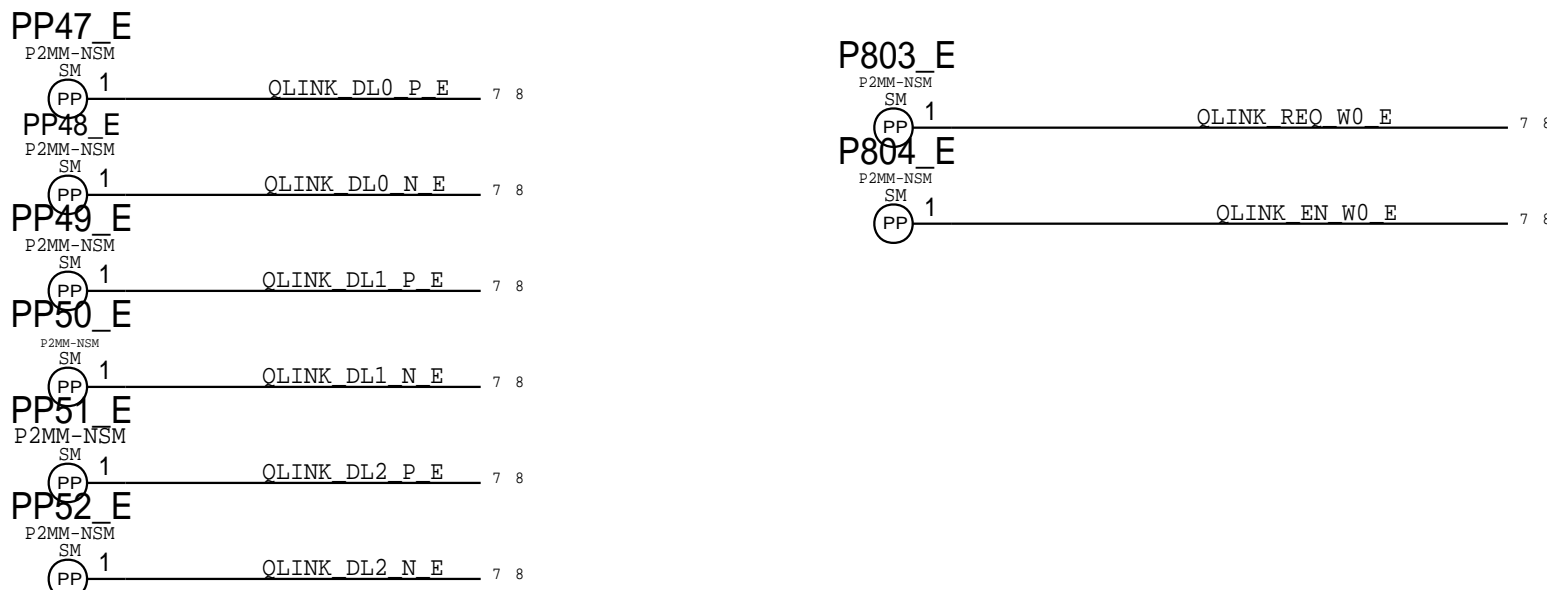


QLINK

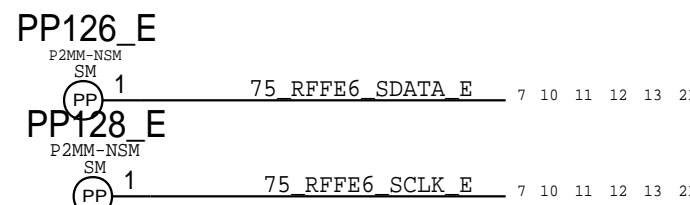
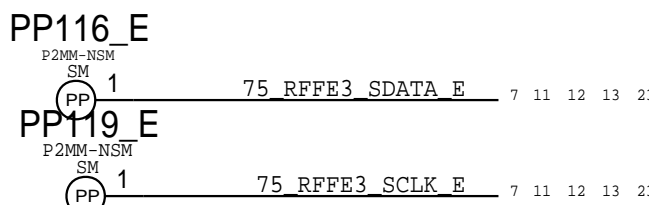
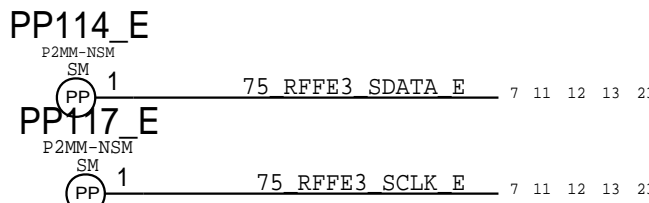
LAYOUT: VIA STUB AT WTR PINS



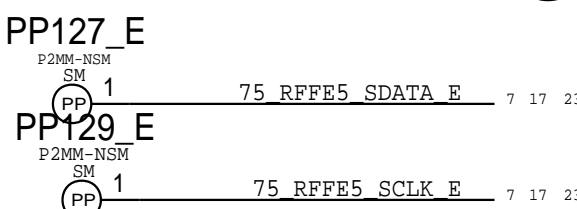
LAYOUT: VIA STUB AT BB PINS




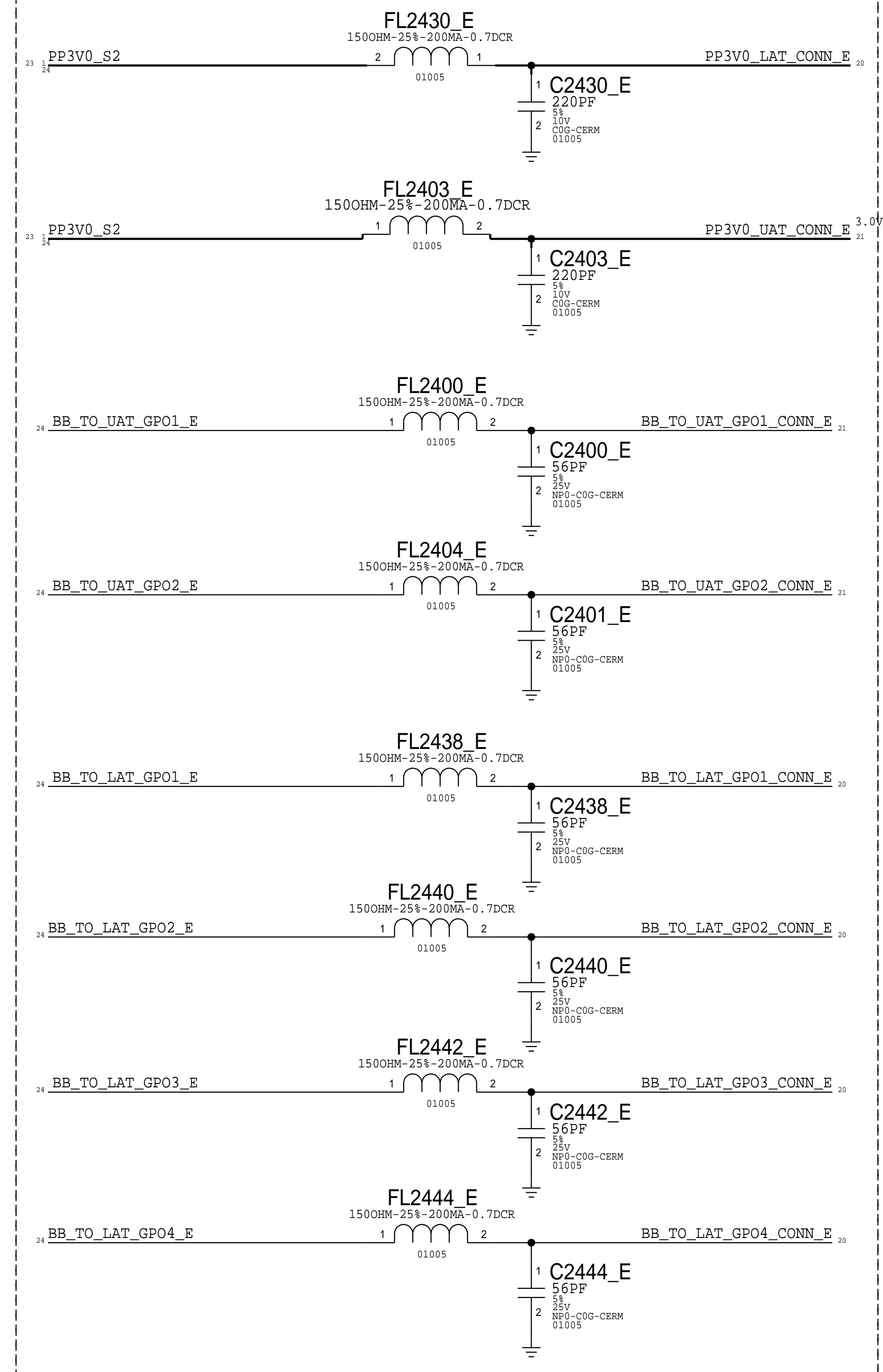
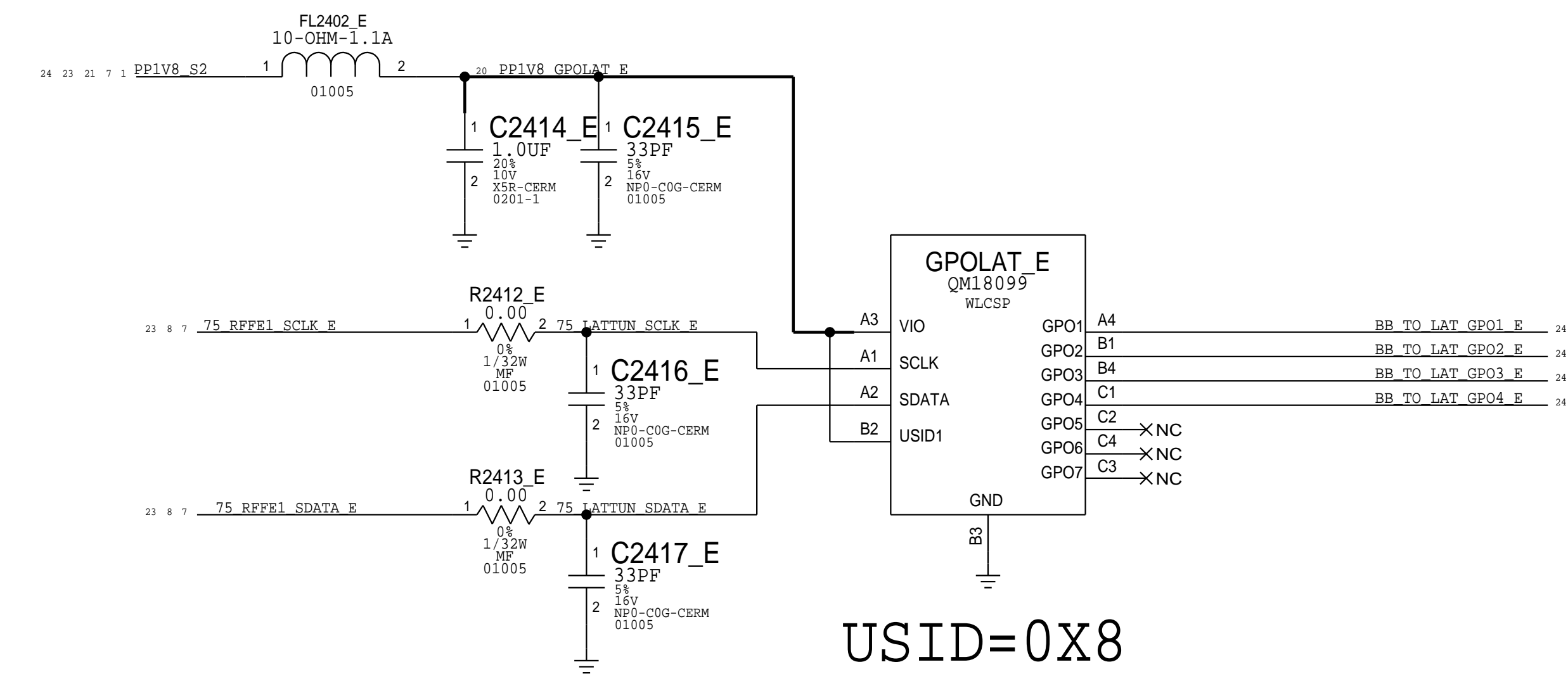
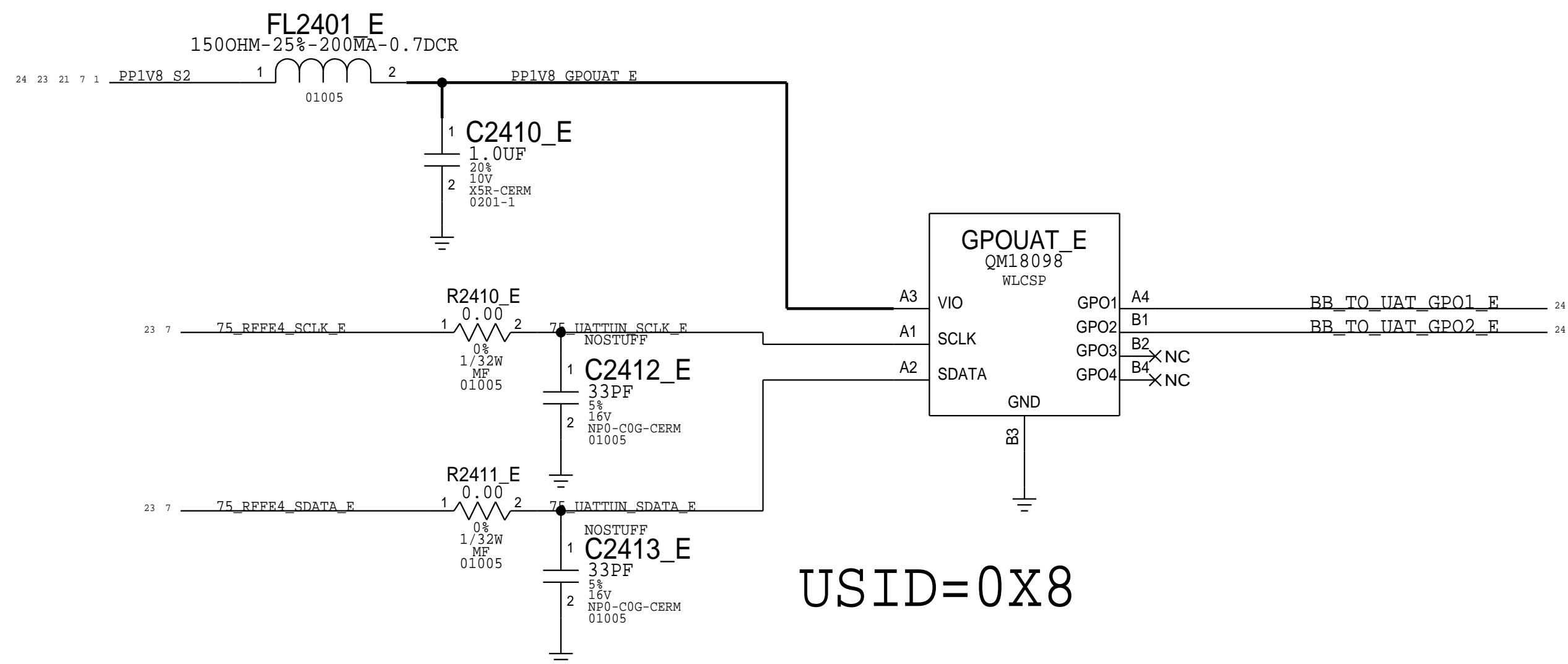
RFFE PA/LNA




RFFE CPL



SYNC_MASTER=PROBE_POINTS			SYNC_DATE=07/06/2016			
PAGE TITLE						
TEST POINTS						
 Apple Inc.			DRAWING NUMBER		SIZE	
			051-02222		D	
			REVISION			
			6.0.0			
NOTICE OF PROPRIETARY PROPERTY:			BRANCH			
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			evt-1			
			PAGE			
			23 OF 24			
			SHEET			
			35 OF 41			

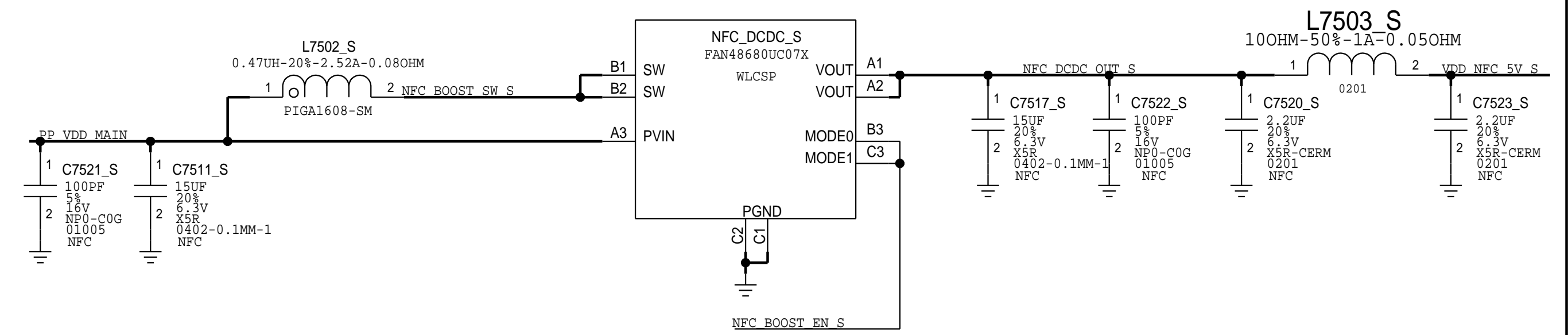
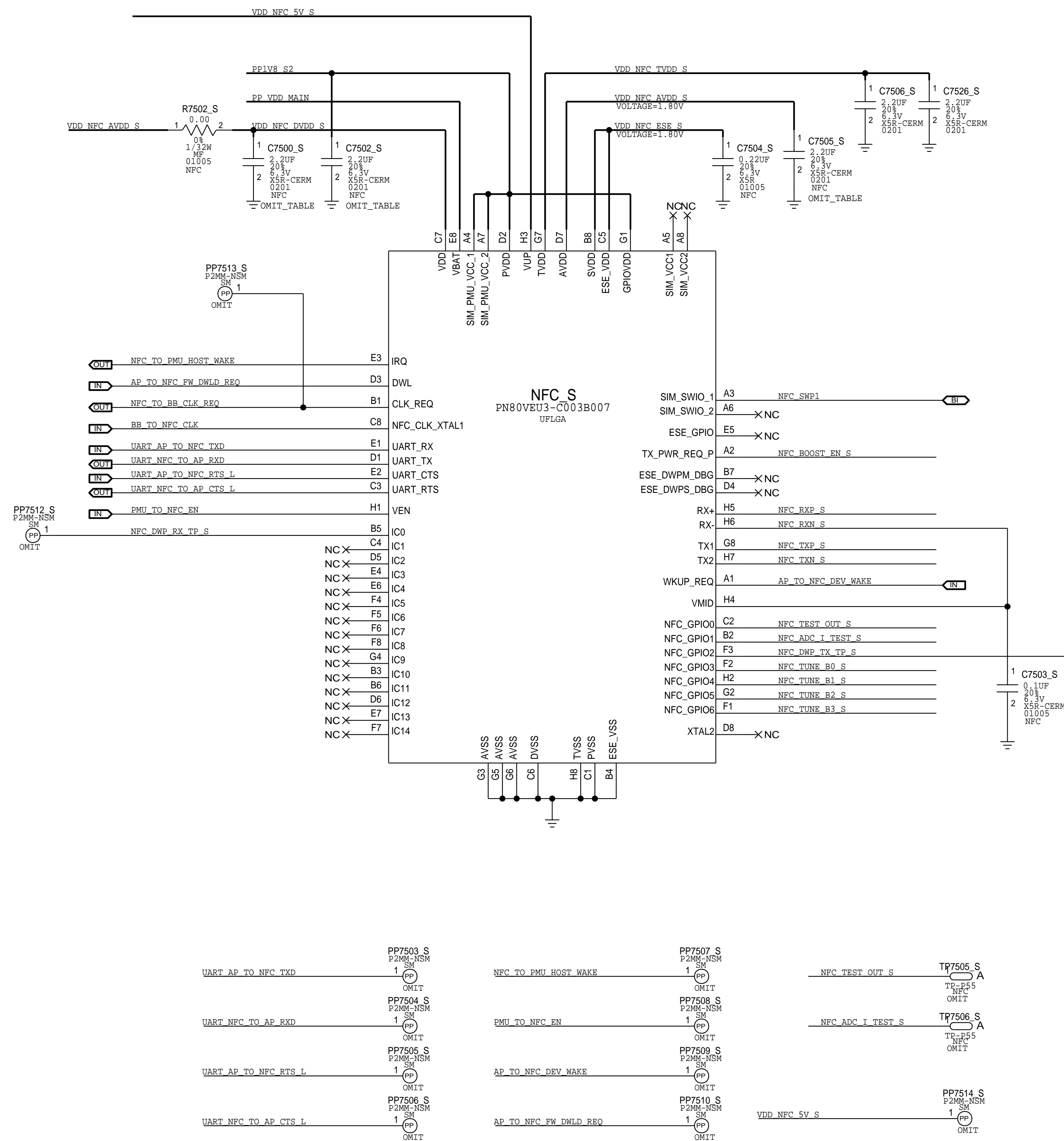


PAGE TITLE			
RFFE TO GPO TRANSLATOR			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-02222		D
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	REVISION		
	6.0.0		
	BRANCH		
	evt-1		
	PAGE	24 OF 24	
	SHEET	36 OF 41	

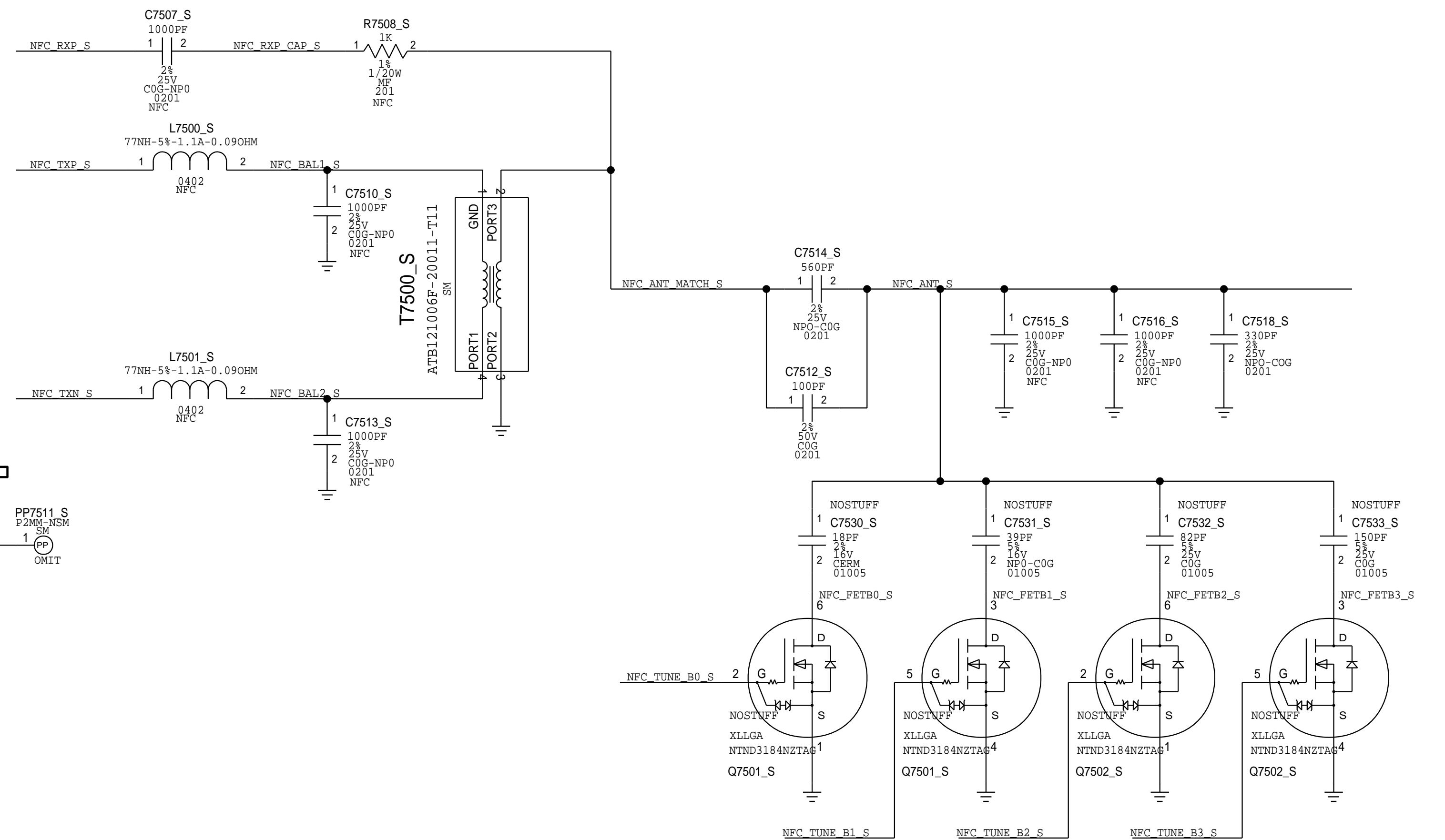
STOCKHOLM


5V BOOSTER

NFC CONTROLLER



NFC FRONT END



PAGE TITLE		NFC	
 Apple Inc.	DRAWING NUMBER	051-02222	SIZE D
	REVISION 6.0.0		
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	BRANCH evt-1		
	PAGE 75 OF 75		
	SHEET 38 OF 41		

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

8

7

6

5

4

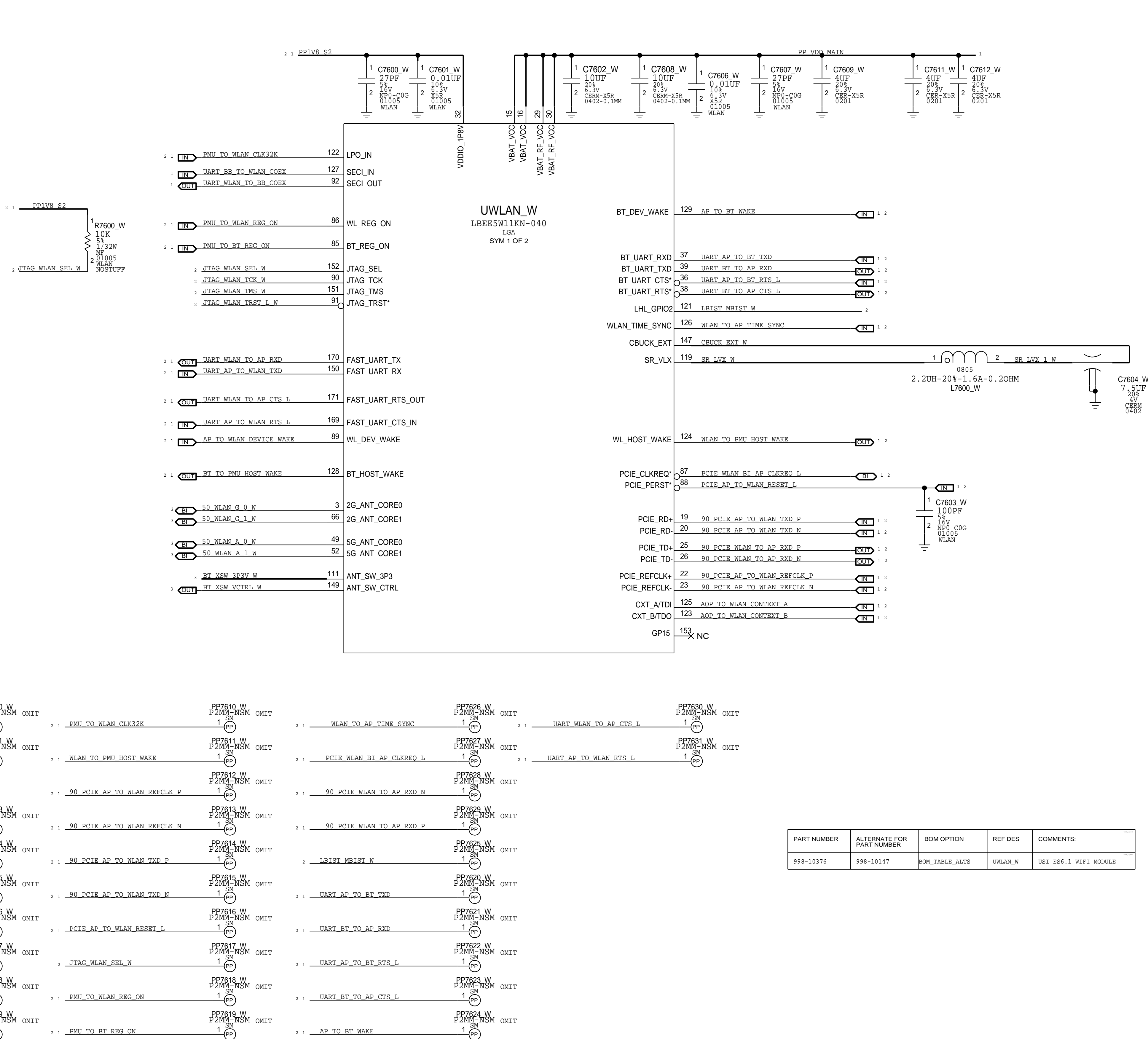
3

2

1

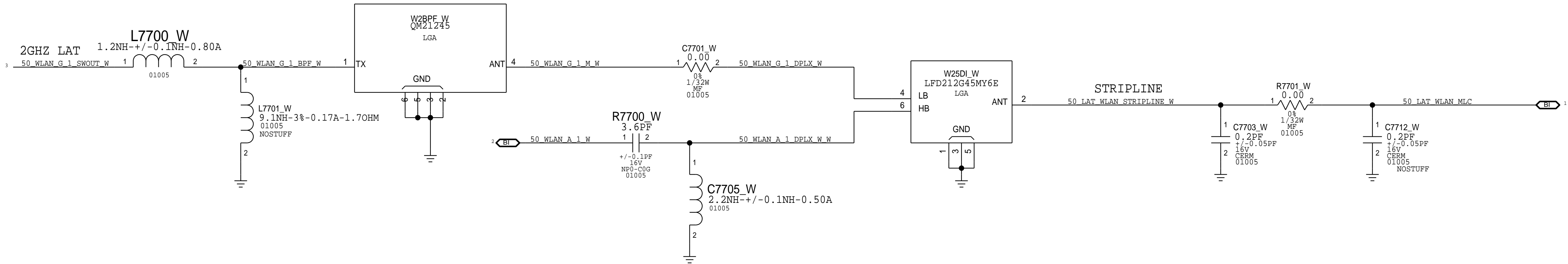
PDF Watermark Remover DEMO : Purchase from www.PDFWatermarkRemover.com to remove the watermark

WIFI/BT

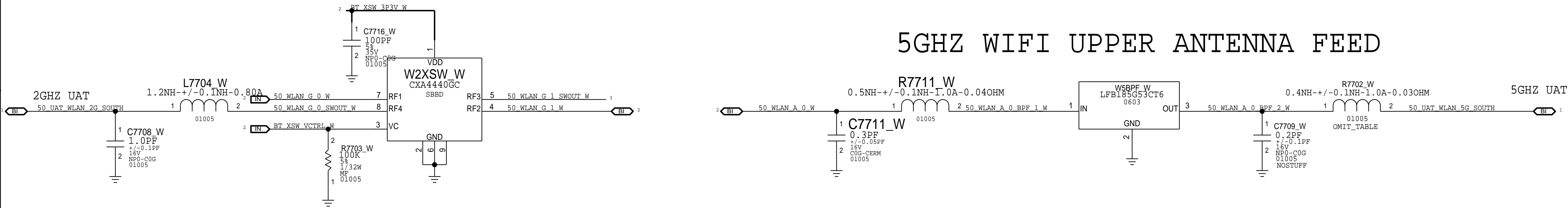


SYNC_MASTER=WIFI		SYNC_DATE=01/30/2014	
PAGE TITLE			
Guinness		DRAWING NUMBER	051-02222
Apple Inc.		REVISION	6.0.0
NOTICE OF PROPRIETARY PROPERTY:		BRANCH	evt-1
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE	4 OF 5
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET	40 OF 41
II NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART			
IV ALL RIGHTS RESERVED			


WIFI LOWER ANTENNA FEED



5GHZ WIFI UPPER ANTENNA FEED



PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
11750161	1	5GHZ CO BPF OUTPUT MATCH	R7702_W	CRITICAL	D221
152500498	1	5GHZ CO BPF OUTPUT MATCH	R7702_W	CRITICAL	ROW
152500498	1	5GHZ CO BPF OUTPUT MATCH	R7702_W	CRITICAL	UPN

PAGE TITLE		
WiFiANTFeeds		
 Apple Inc.	DRAWING NUMBER	051-02222
	REVISION	6.0.0
	BRANCH	evt-1
	PAGE	5 OF 5
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		SHEET 41 OF 41