

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
16	0001519661	ENGINEERING RELEASED	2012-07-02

N41 SINGLE\_BRD PVT

Tue Jul 10 17:52:36 2012

PDF PAGE	CSA PAGE	CONTENTS	SYNC MASTER	DATE
2	2	H5P JTAG, USB ,PLL	N/A	N/A
3	3	H5P GPIO & CONTROL	N/A	N/A
4	4	H5P IO POWER	N/A	N/A
5	5	H5P SOC/CPU/SRAM PWR	N/A	N/A
6	6	H5P W/ NAND	N/A	N/A
7	7	H5P VIDEO	N/A	N/A
8	8	BUTTON CONNECTOR	N/A	N/A
9	9	CS42L65 AUDIO CODEC (1/2)	N/A	N/A
10	10	CS42L65 AUDIO CODEC (2/2)	N/A	N/A
11	11	CG FLEX CONNECTOR	N/A	N/A
12	12	AGATHA PMU(1/2)	N/A	N/A
13	13	AGATHA PMU(2/2)	N/A	N/A
14	14	ACCEL,GYRO,COMPASS,SPK AMP	N/A	N/A
15	15	TRISTAR	N/A	N/A
16	16	DOCK CONNECTOR	N/A	N/A
17	17	GRAPE & CONNECTOR	N/A	N/A
18	18	LCM CONNECTOR	N/A	N/A
19	19	STROBE & NEGATIVE RAIL	N/A	N/A
20	20	CAM0 CONNECTOR	N/A	N/A
21	21	BATTERY & RF INT.	N/A	N/A
22	22	TEST POINTS	N/A	N/A

SCH	051-9113				
BRD	820-3141				
MCO	056-5192				
BOM	639-3259	(16GB)	BTR	N41	
BOM	639-3420	(32GB)	BST	N41	
BOM	639-3421	(64GB)	ULT	N41	
BOM	639-2456	(16GB)	BTR	N42	
BOM	639-3858	(32GB)	BST	N42	
BOM	639-3839	(64GB)	ULT	N42	
BOM	639-4085	(16GB)	BTR	N42	
BOM	639-4084	(32GB)	BST	N42	
BOM	639-4083	(64GB)	ULT	N42	

## N41 BOM CALLOUTS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-9113	1	N41 SINGLE_BRD SCHEMATIC	SCH	Y	?
820-3141	1	N41 SINGLE_BRD PCB	PCB	Y	?
825-6838	1	LABEL FOR N41 639-3259	EEEE_DWJG	Y	EEEE_16G
825-6838	1	LABEL FOR N41 639-3420	EEEE_DY6Q	Y	EEEE_32G
825-6838	1	LABEL FOR N41 639-3421	EEEE_DY6R	Y	EEEE_64G
825-6838	1	LABEL FOR N42 639-2456	EEEE_DMVD	Y	EEEE_16G_N42
825-6838	1	LABEL FOR N41 639-3858	EEEE_F322	Y	EEEE_32G_N42
825-6838	1	LABEL FOR N41 639-3859	EEEE_F321	Y	EEEE_64G_N42
825-6838	1	LABEL FOR N41 639-4085	EEEE_F64R	Y	EEEE_16G_N42_SM
825-6838	1	LABEL FOR N41 639-4084	EEEE_F64Q	Y	EEEE_32G_N42_SM
825-6838	1	LABEL FOR N41 639-4083	EEEE_F64T	Y	EEEE_64G_N42_SM

N41 = BAND 17 COMP  
N42 = BAND 13 COMP

## NAND OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
341T0427	1	IC, PROGRAM FLASH, BETTER, N41	U4	?	NAND_16G
341T0428	1	IC, PROGRAM FLASH, BEST, N41	U4	?	NAND_32G
341T0429	1	IC, PROGRAM FLASH, ULT, N41	U4	?	NAND_64G

## RADIO\_MLB TDMA CAP OPTION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S0801	3	CAP,CER,10UF,20%,10V,X5R,HRTEL, 0402	C235_RF,C236_RF,C237_RF	Y	?
138S0801	2	CAP,CER,10UF,20%,10V,X5R,HRTEL, 0402	C1201_RF,C1801_RF	Y	?

INDUCTOR 607-XXXX SUBBOM GEN

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1547	4	IND,PWR,1.5UN,1.95A,111MOHM,2520	L10,L50,L14,L54	Y	CPU0_1_TDK_SUBBOM
152S1696	3	IND,PWR,2.2UN,1.45A,138MOHM,2520	L11,L12,L13	Y	SOC_CVNTC_SUBBOM
152S1695	4	IND,PWR,1.5UN,1.95A,111MOHM,2520	L10,L50,L14,L54	Y	CPU0_1_CVNTC_SUBBOM
152S1432	3	IND,PWR,2.2UN,1.45A,125MOHM,2520	L10,L12,L13	Y	SOC_TDK_SUBBOM

## INDUCTOR SUBBOM ADDITION


PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
607-9979	1	CPU0_1,PWR IND SUBBOM	CPU_IND	Y	?
607-9980	1	SOC,PWR IND SUBBOM	SOC_IND	Y	?

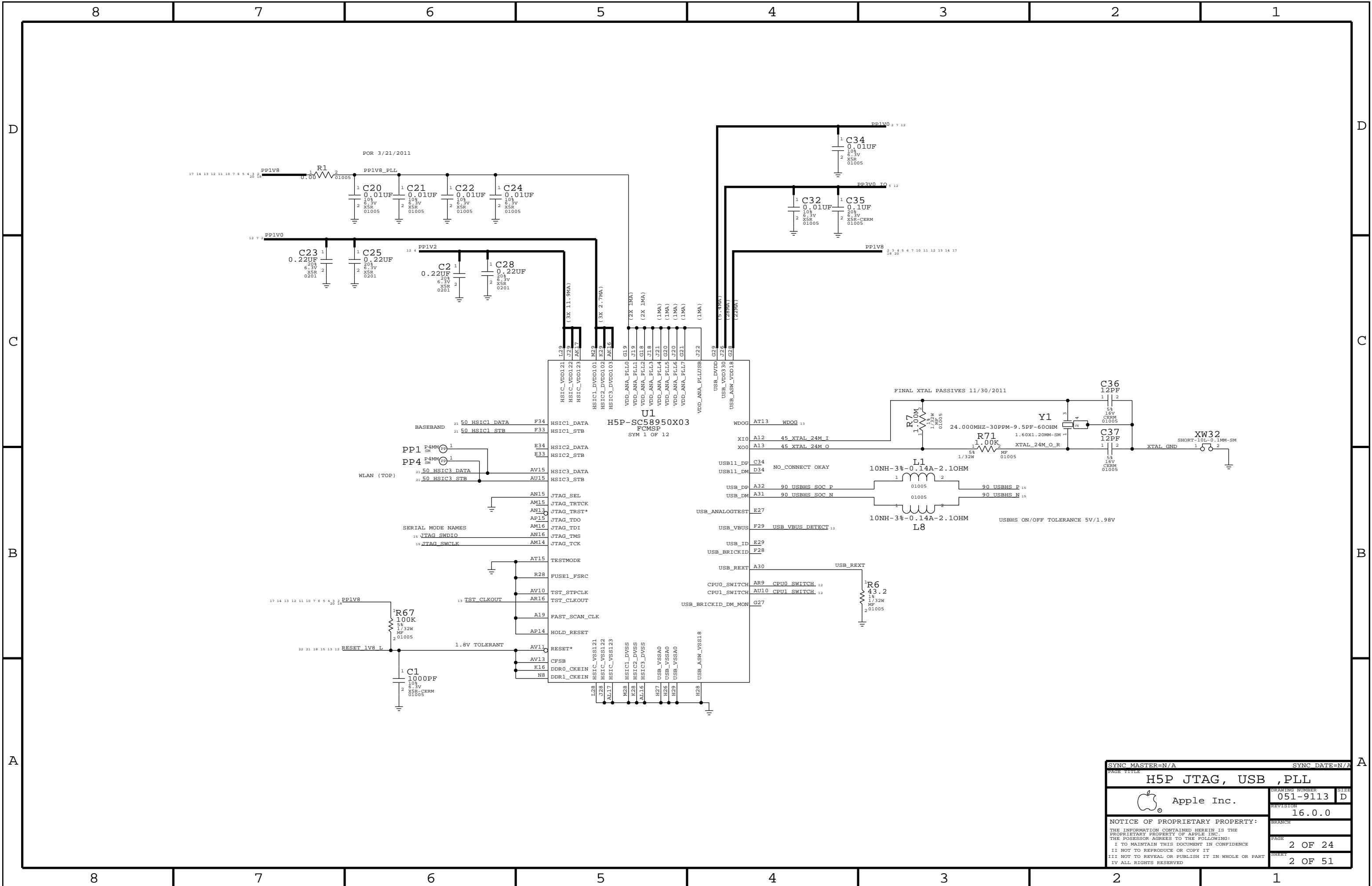
## ALTERNATES


PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S0648	138S0652	?	?	4.7UF CERM 0402 6.3V
138S0703	138S0648	?	?	4.7UF CERM 0402 6.3V
138S0702	138S0657	?	?	4.3UF CERM 0610 4V
138S0697	138S0695	?	?	1UF CERM 0204 4V
138S0746	138S0705	?	?	10UF CERM 0402 10V
138S0739	138S0706	?	?	1UF CERM 0201 10V
197S0369	197S0392	?	?	TXC 32KHZ XTAL ALT
197S0399	197S0392	?	?	NDK 32KHZ XTAL ALT
155S0667	155S0583	?	?	PANASONIC CMC
107S0146	107S0208	?	?	TDK 10K NTC ALT
152S1696	152S1432	?	L2	CYNTEC 2.2UH IND ALT
152S1602	152S1604	?	?	CYNTEC 2.2UH IND ALT
311S0591	311S0273	?	?	74LVC1G32 OR GATE ALT
311S0548	311S0398	?	?	74AUP1008 AND GATE ALT
311S0560	311S0515	?	?	74LV2G07 BUFFER ALT
339S0177	339S0176	?	?	H5P ALT
339S0178	339S0176	?	?	H5P ALT
155S0773	155S0453	?	?	TAIYO ALT FERRITE
127S0162	127S0160	?	?	VISHAY 1.0UF TANT
127S0164	127S0160	?	?	ROHM 1.0UF TANT
376S1120	376S0774	?	?	DIODES INC FET
376S1060	376S0882	?	?	DIODES INC FET

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0895	335S0874	?	U601_RF	WINBOND ALT
197S0437	197S0410	?	Y301_RF	KYOCERA 19.2MHZ XTAL ALT
197S0409	197S0410	?	Y301_RF	RAKON 19.2MHZ XTAL ALT

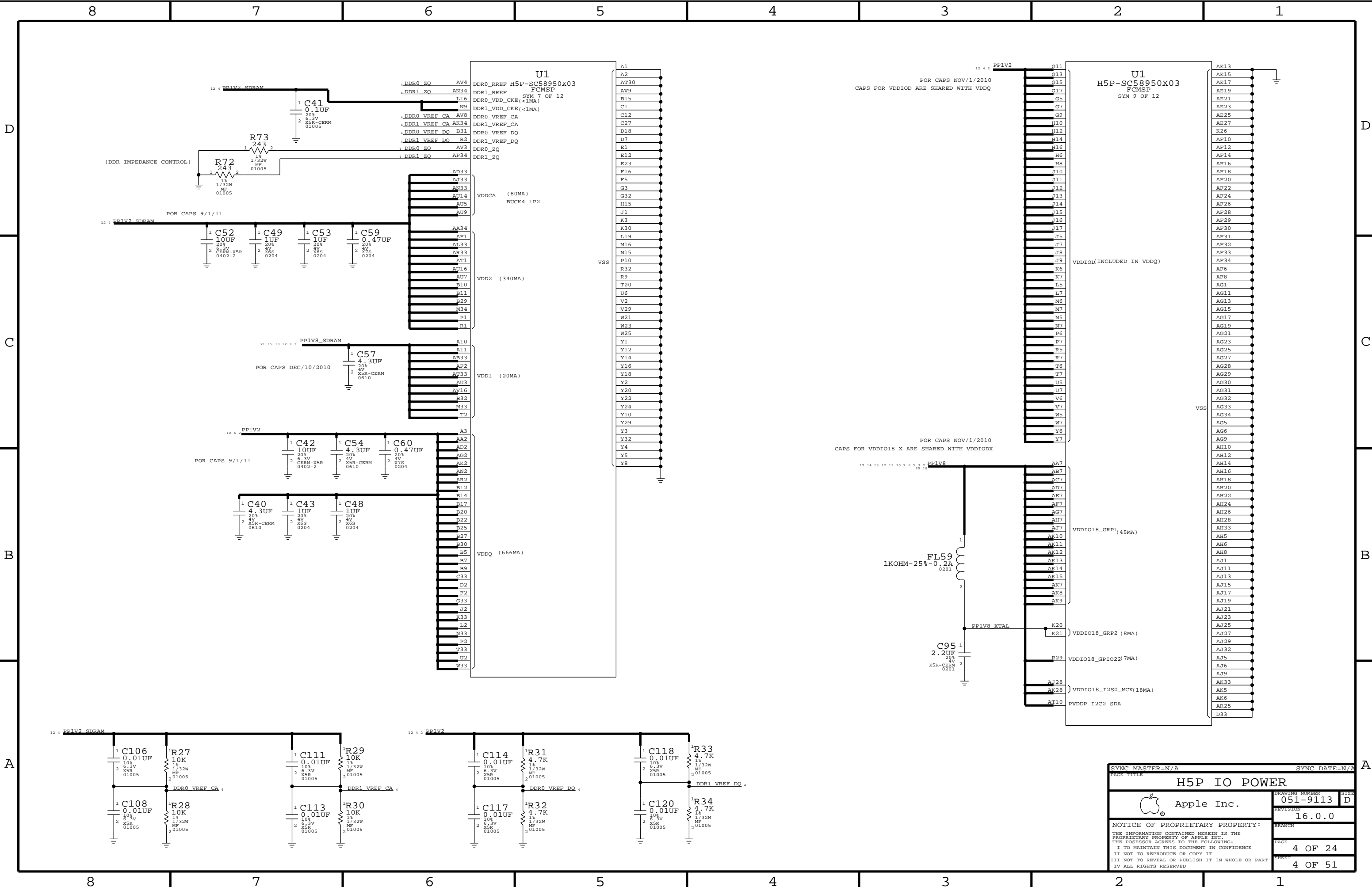
PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
607-9983	607-9979	?	CPU_IND	ALT CPU CYNTEC SUBBOM
607-9984	607-9980	?	SOC_IND	ALT SOC CYNTEC SUBBOM

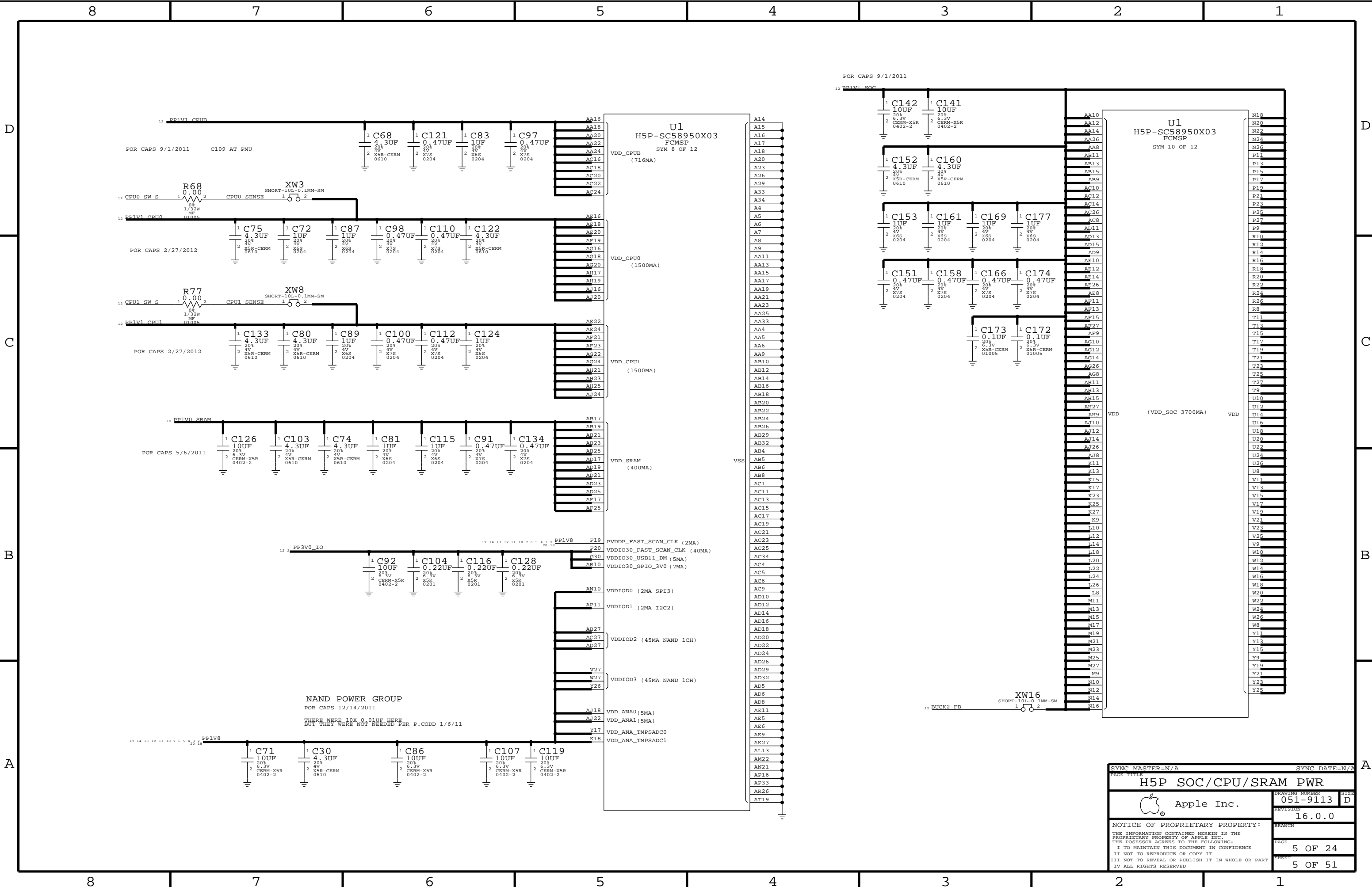
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SCHEM, MLB, N41		051-9113		D	
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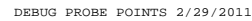
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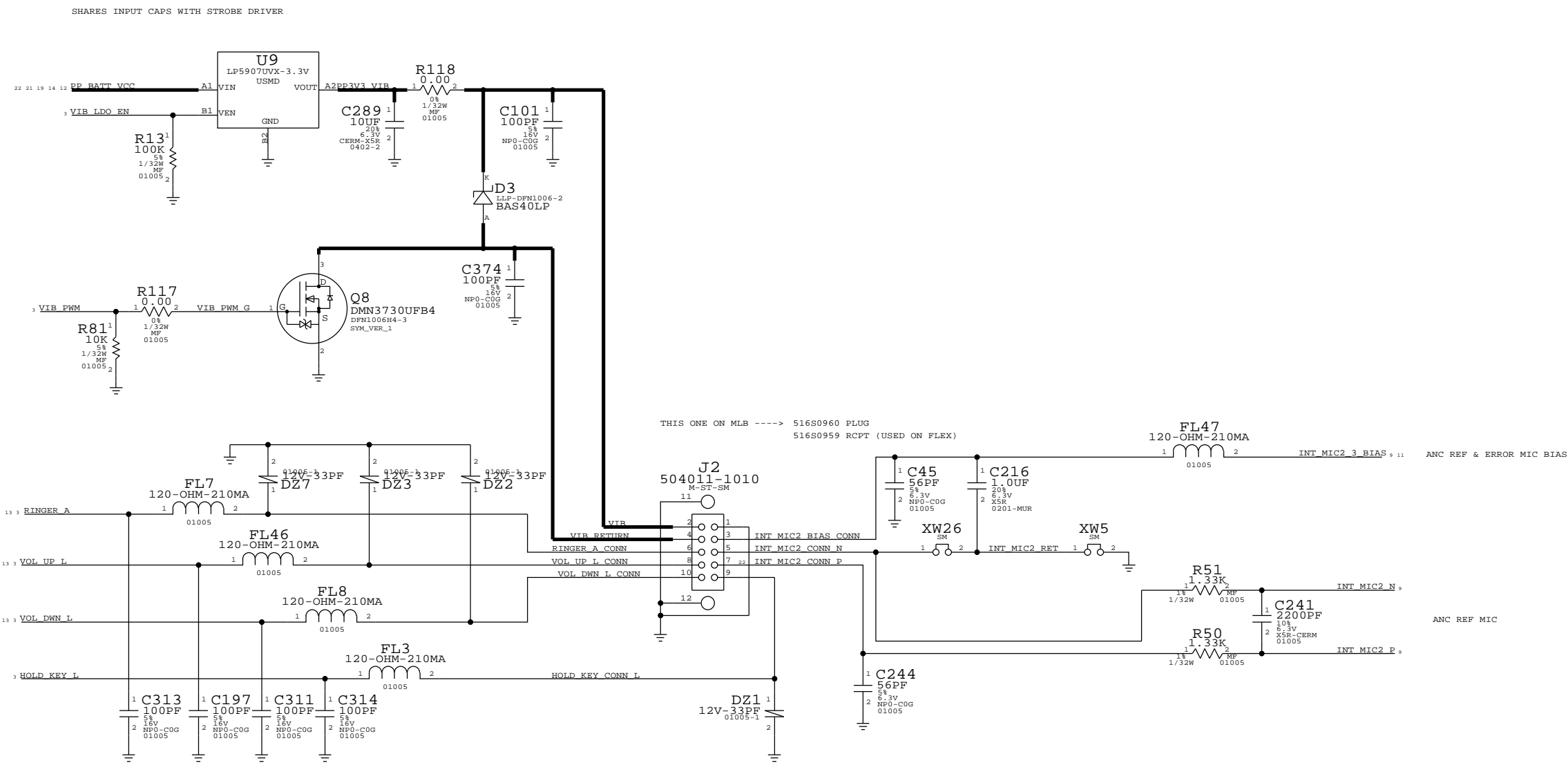
SUPPORT FOR PPN1.5 AND PPN1.0 W/ 1.8V IO ONLY




NOTE: NAND PADS SHOULD BE SHIELDED FROM TRACES WITH A GROUND PLANE

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H5P W/ NAND			
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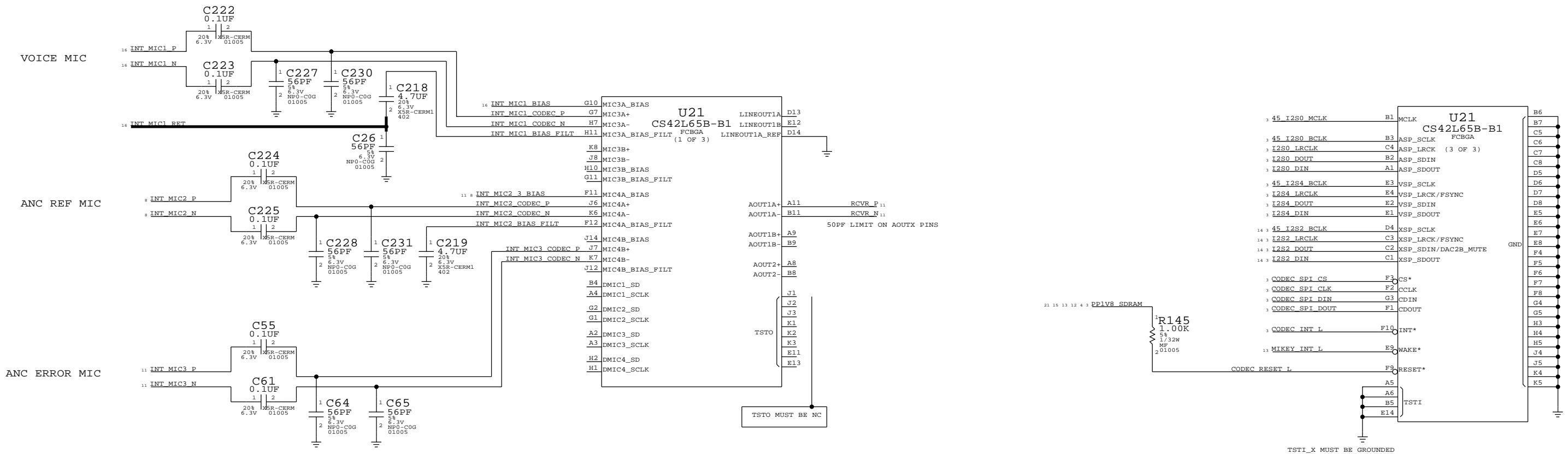




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BUTTON CONNECTOR			
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CS42L65 AUDIO CODEC



## D



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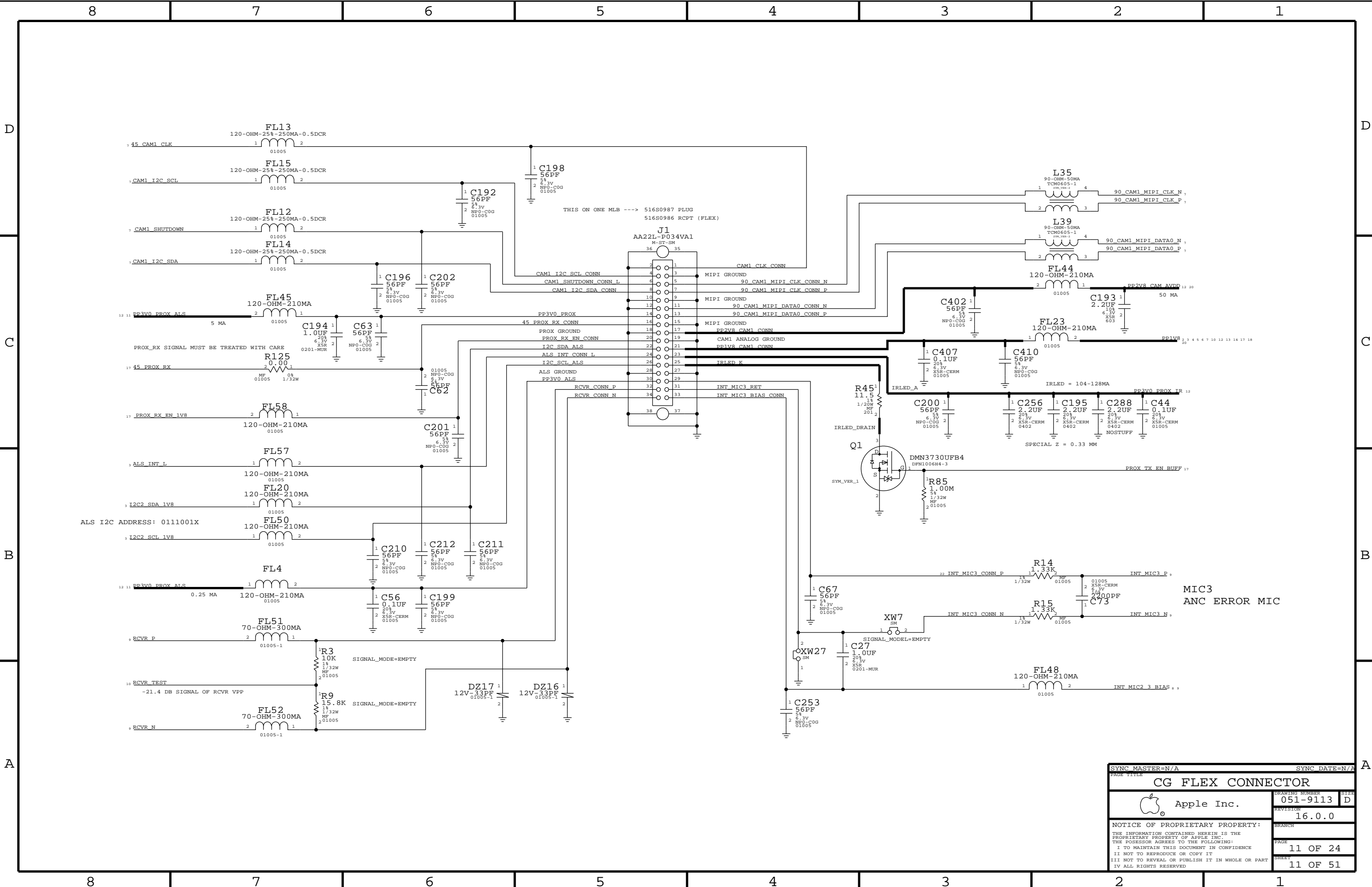
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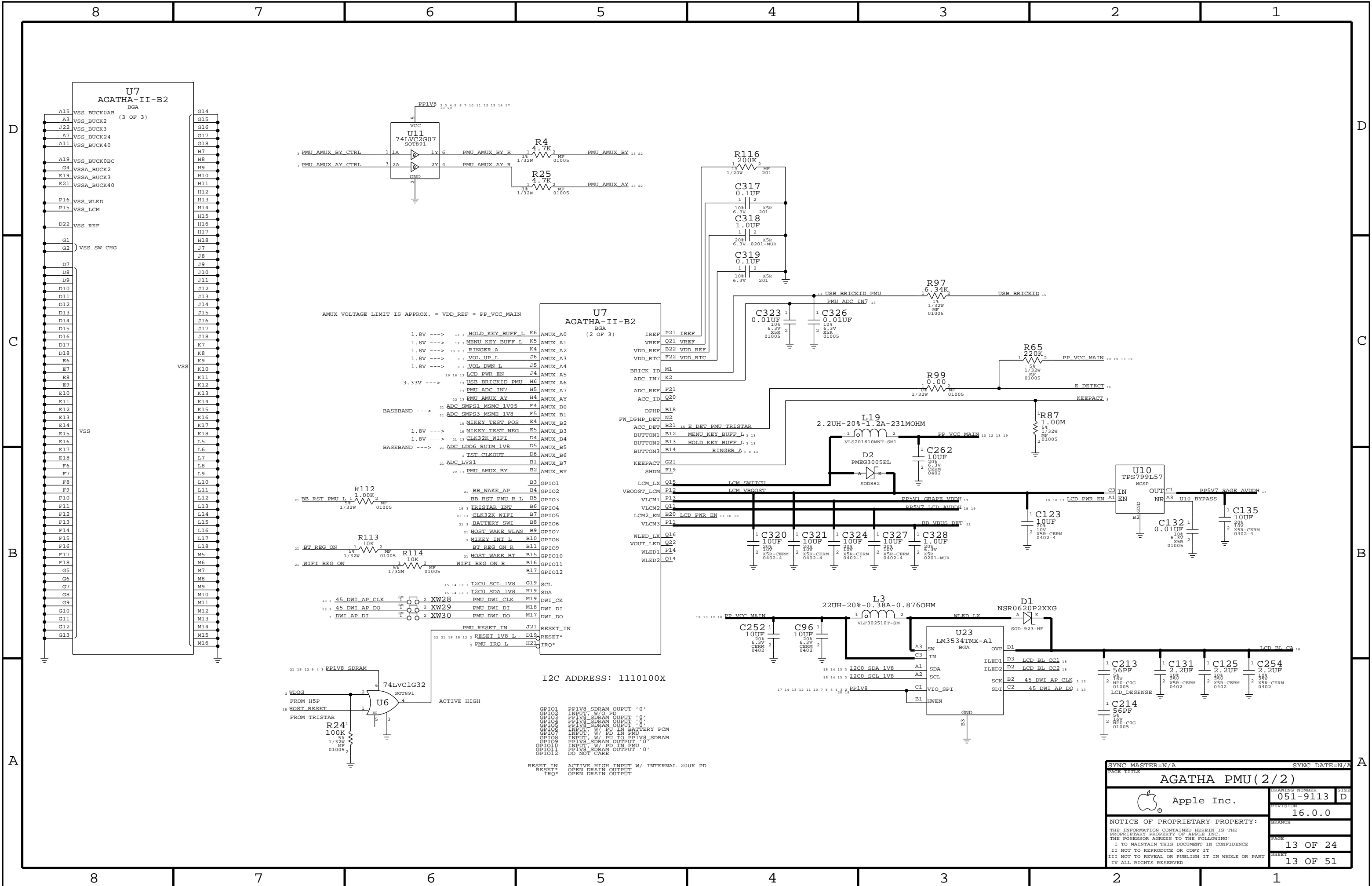
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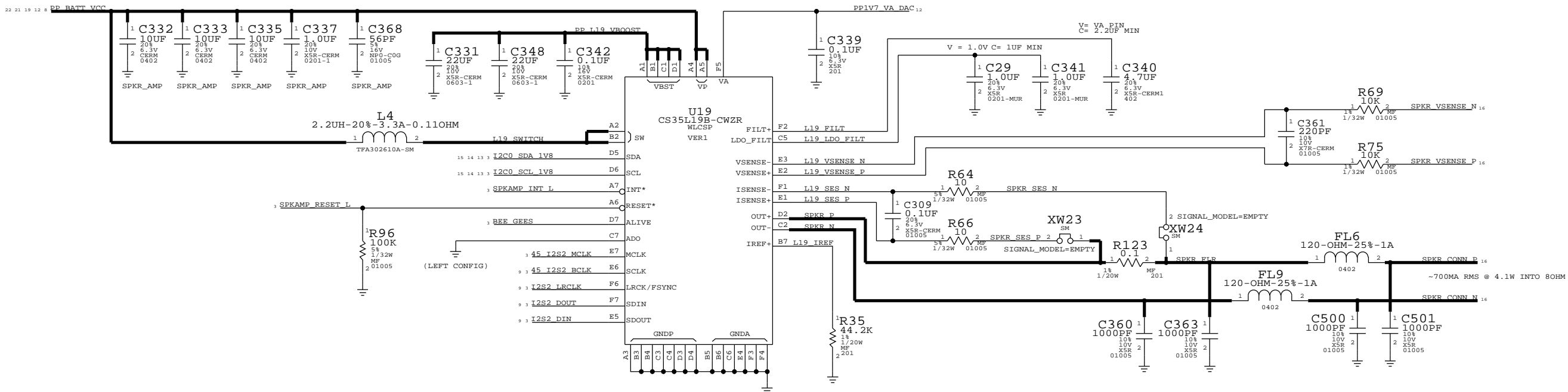
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CG FLEX CONNECTOR			
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# SPEAKER AMP

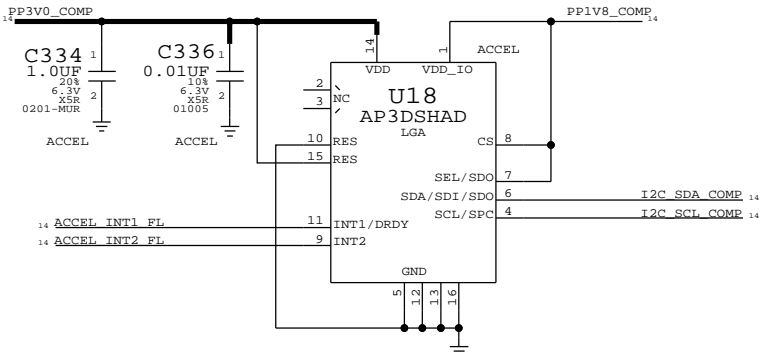
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THESE PARTS OUTSIDE OF SHIELD

## ACCELEROMETER

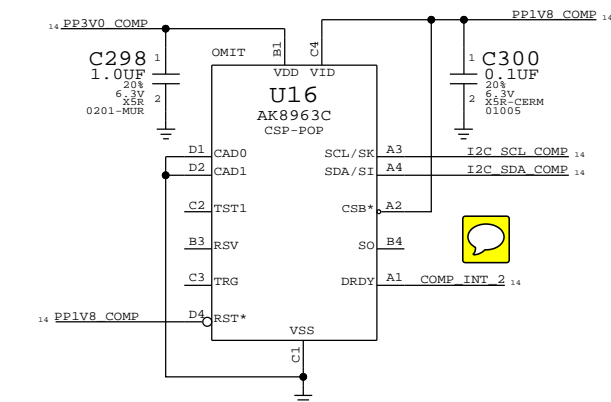
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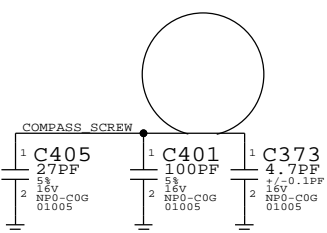
## COMPASS2

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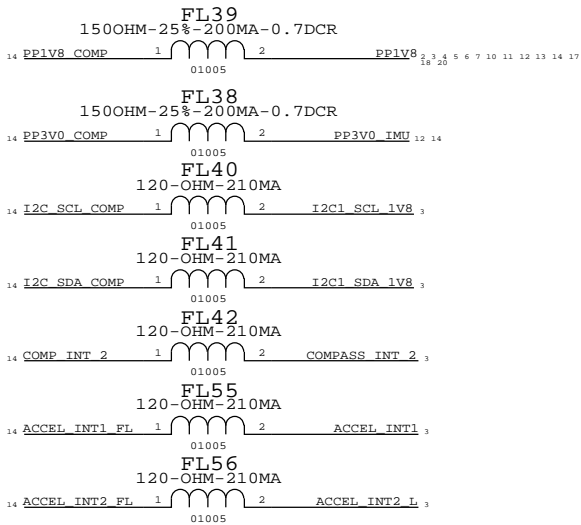
COMPASS POP FOOTPRINT: 998-5120  
COMPASS DEVICE: 338S1014



COMPASS SCREW IS RF GROUND

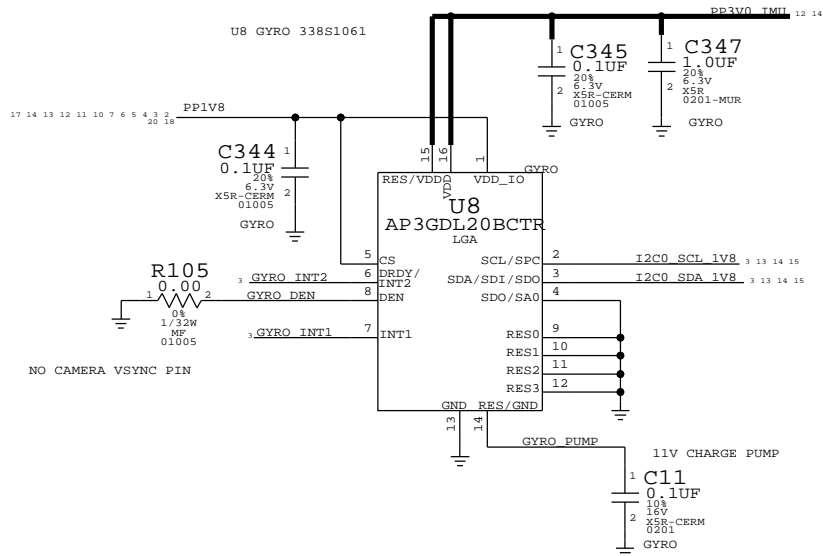


PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
639-4024	1	PCB,COMPASS POP,N41	U16	?

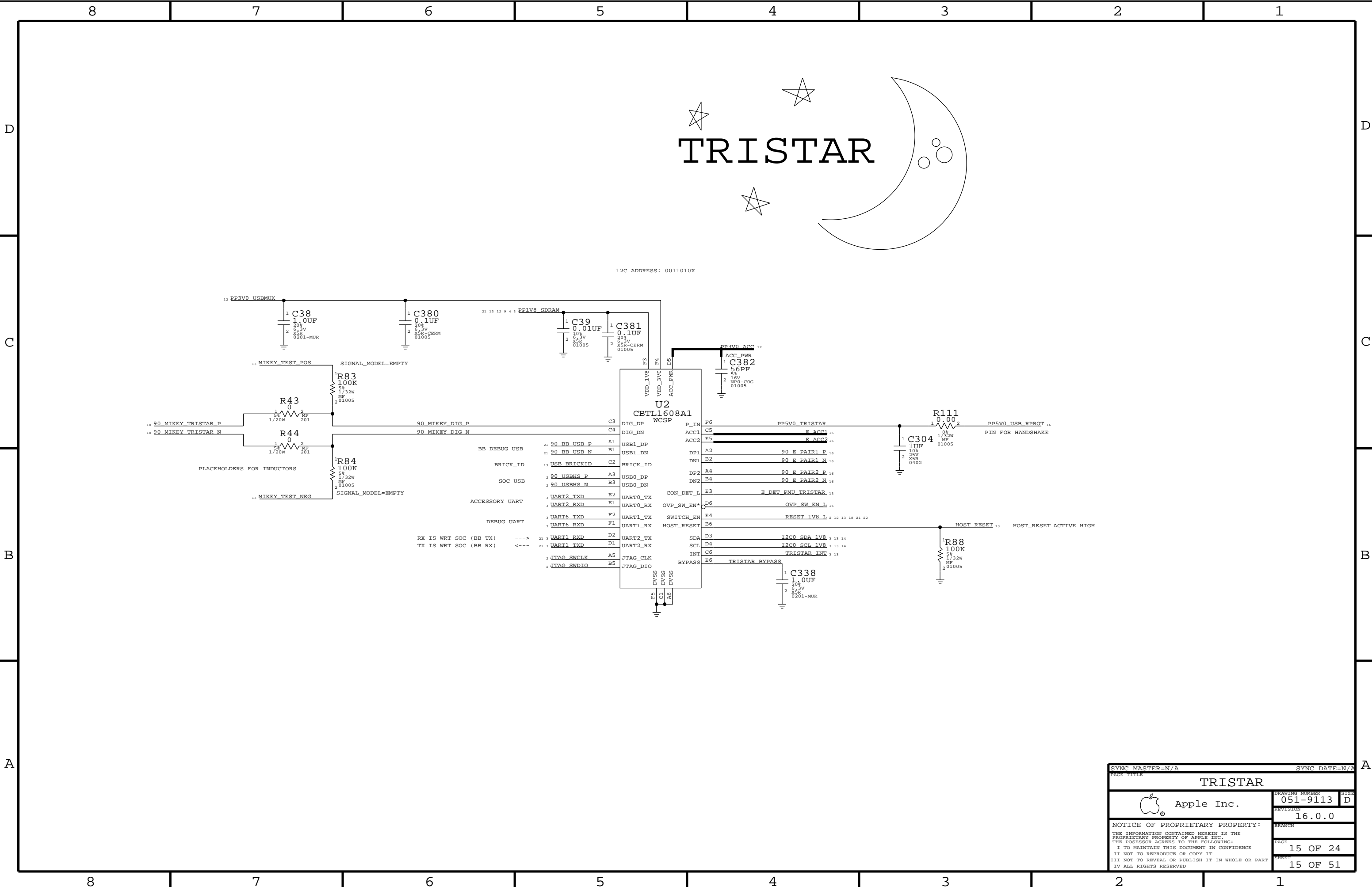


## GYRO 20KHZ

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ACCEL, GYRO, COMPASS, SPK AMP		DRAWING NUMBER	
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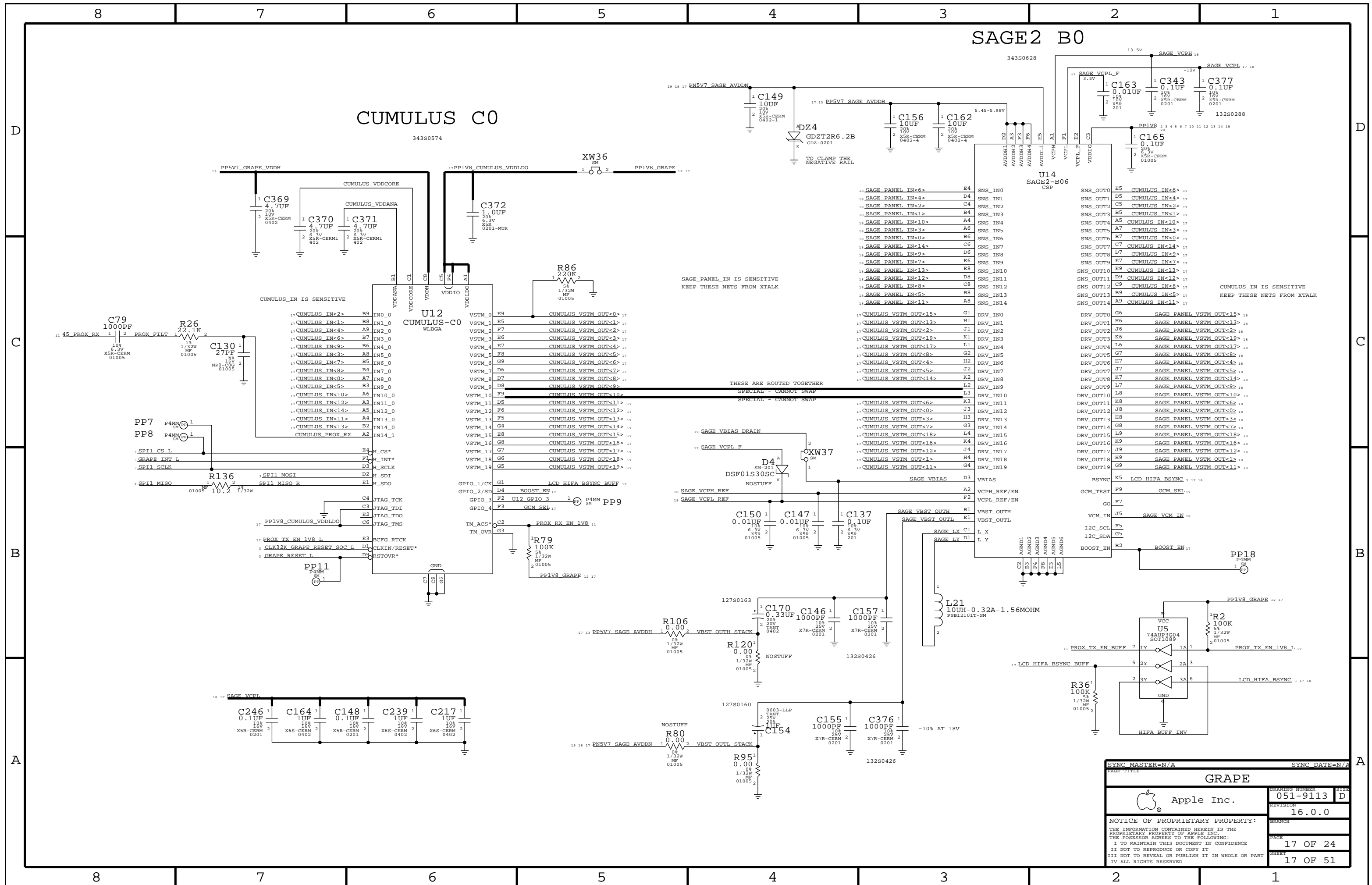
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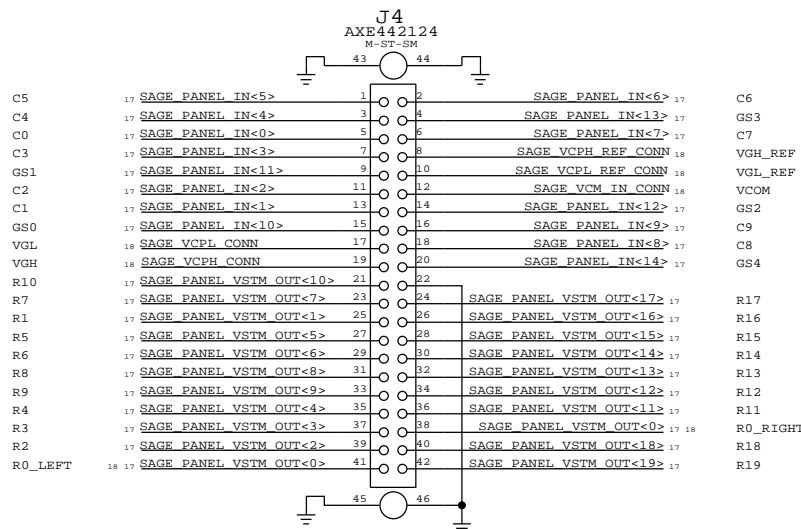
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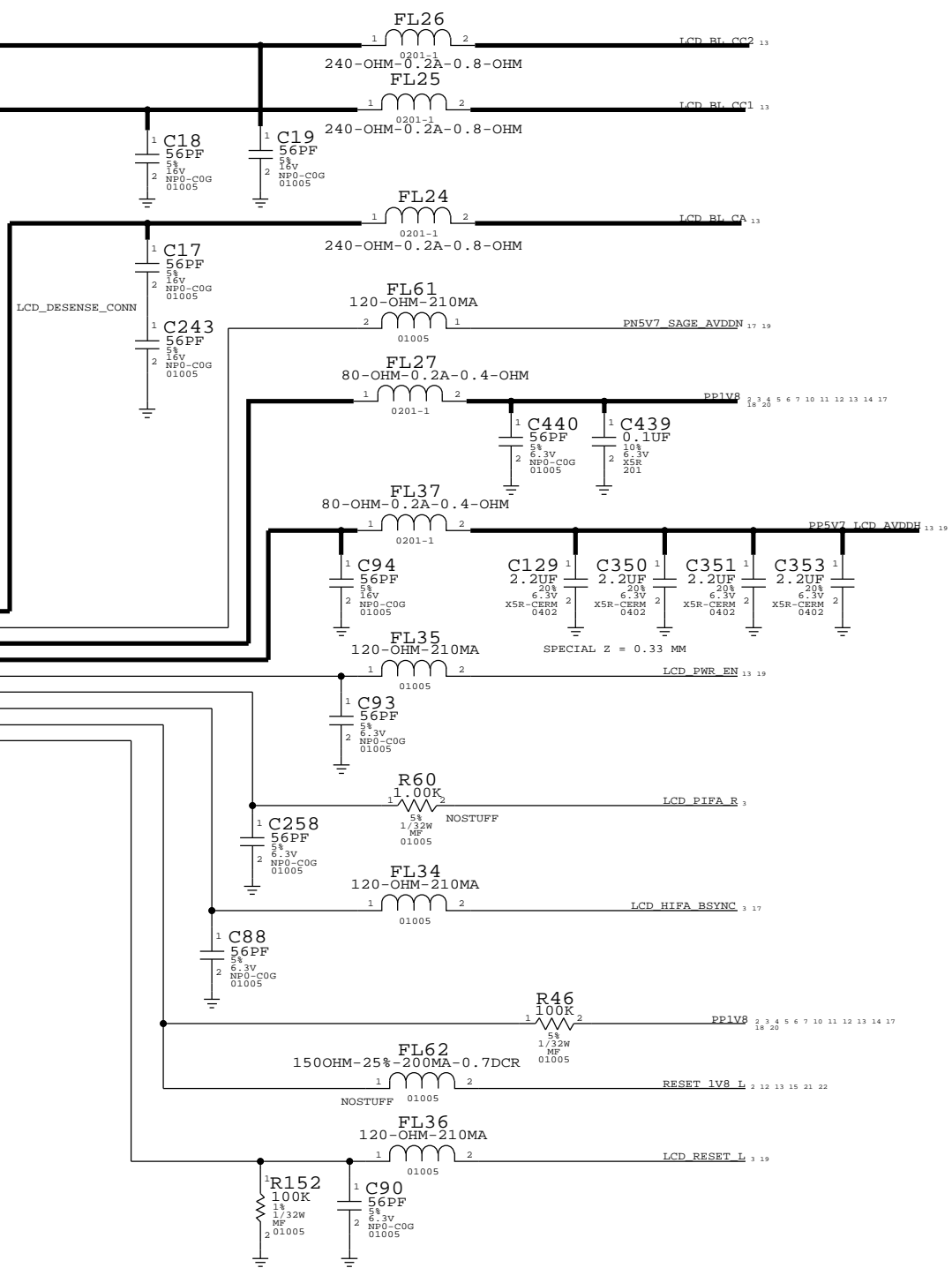
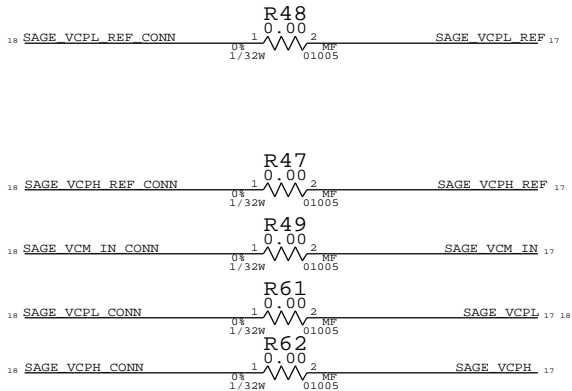
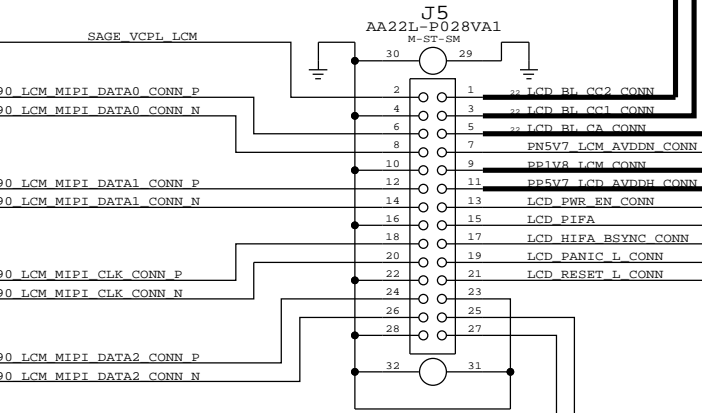
# GRAPE CONNECTOR

THIS ONE ON MLB ----> 516S0965 PLUG  
516S0966 RCPT (USED ON FLEX)

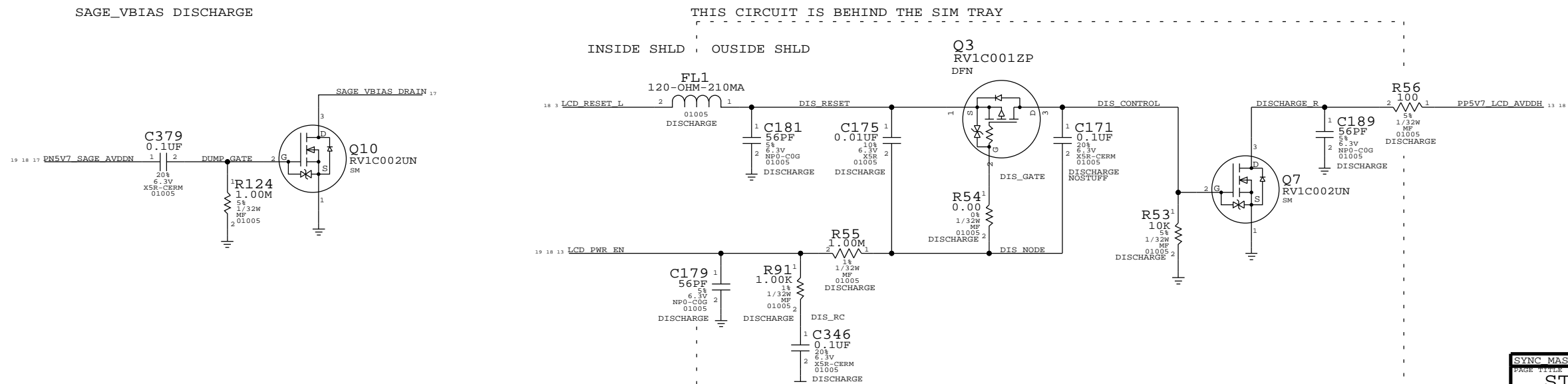
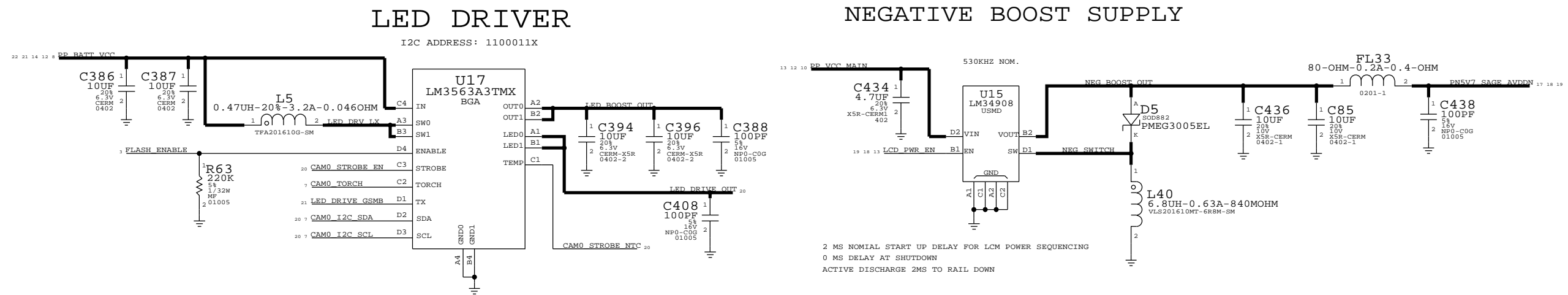



# LCM CONNECTOR

THIS ONE ON MLB ----> 516S0984 PLUG  
516S0983 RCPT (FLEX)



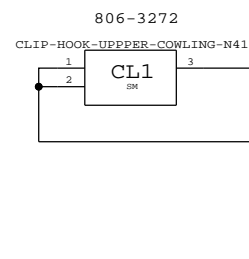
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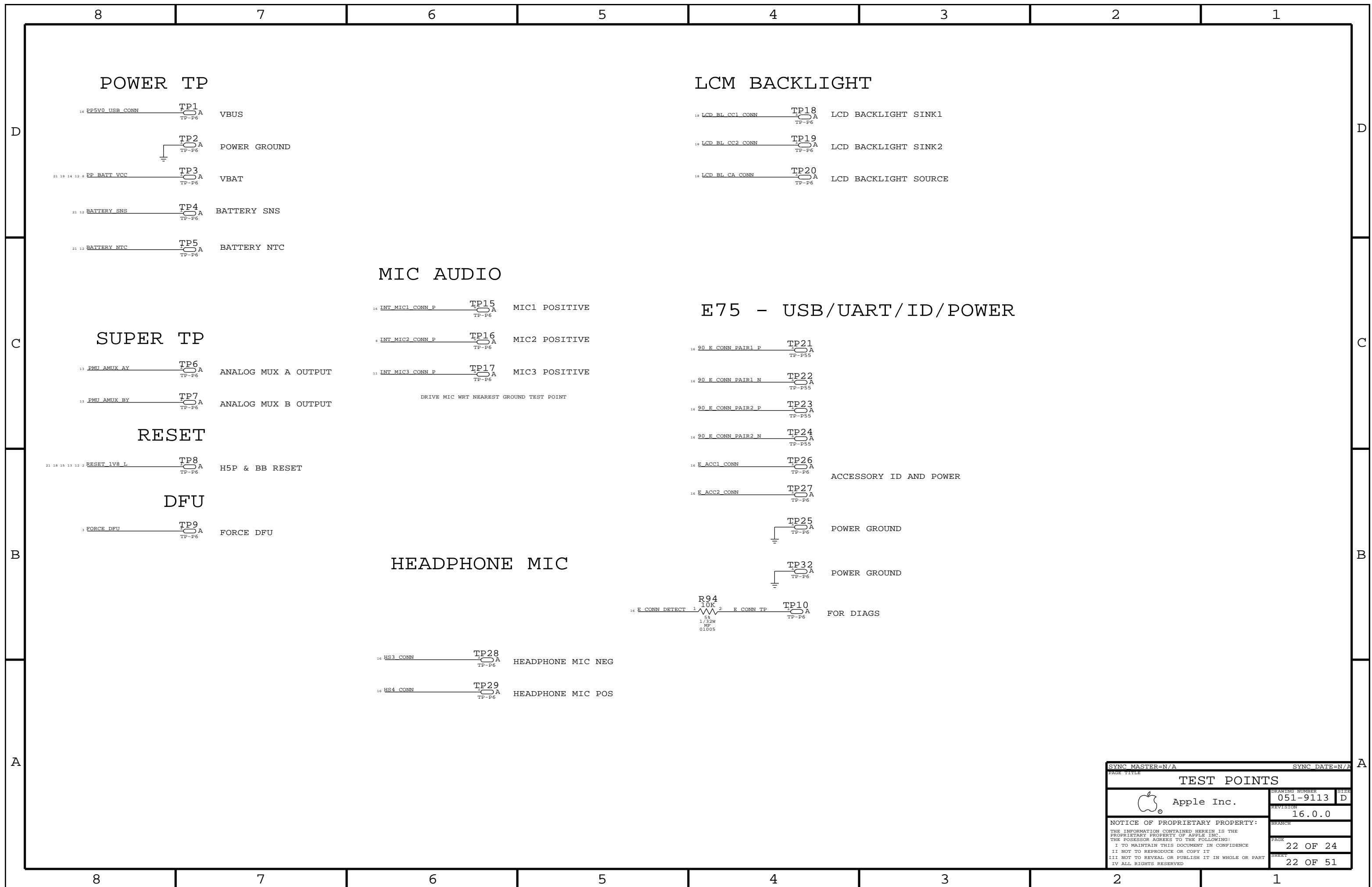
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## AP/RADIO INTERFACE

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# RADIO BOM OPTIONS

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

## HW\_ID PA\_ID BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
118S0685	1	PA_ID RES DIVIDER	R304_RF	Y	B4_17
118S0656	1	PA_ID RES DIVIDER	R304_RF	Y	B3_13
118S0719	1	PA_ID RES DIVIDER	R302_RF	Y	B4_17
118S0685	1	PA_ID RES DIVIDER	R302_RF	Y	B3_13

## SPI NOR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B4_17
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B3_13

## B5/B5E BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3415	1	SKY77487 BAND 5/8 PAD	U1001_RF	Y	B4_17
353S3568	1	SKY77491 BAND5E/8 PAD	U1001_RF	Y	B3_13
155S0552	1	BAND5 TX SAW	FL1001_RF	Y	B4_17
155S0742	1	BAND5/BC10 TX SAW	FL1001_RF	Y	B3_13
152S1563	1	1.5NH, INDUCTOR - MURATA	L1001_RF	Y	B4_17
152S1662	1	1.5NH, INDUCTOR - TDK	L1001_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1002_RF	Y	B4_17
152S1665	1	15NH, INDUCTOR - TDK	L1002_RF	Y	B3_13
152S1576	1	12NH, INDUCTOR - MURATA	L1003_RF	Y	B4_17
152S1664	1	12NH, INDUCTOR - TDK	L1003_RF	Y	B3_13
152S1570	1	4.7NH, INDUCTOR - MURATA	L1010_RF	Y	B4_17
152S1663	1	4.7NH, INDUCTOR - TDK	L1010_RF	Y	B3_13

## B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1328	1	4.3NH INDUCTOR - 0201	C1111_RF	Y	B4_17
152S1353	1	3.6NH INDUCTOR - 0201	C1111_RF	Y	B3_13
131S0198	1	1.8PF CAPACITOR - 0201	L1103_RF	Y	B4_17
118S0724	1	0 OHM JUMPER - 0201	C1112_RF	Y	B4_17
131S0204	1	22PF CAPACITOR - 0201	C1112_RF	Y	B3_13
118S0724	1	0 OHM JUMPER - 0201	L1105_RF	Y	B4_17
152S1443	1	2.0NH INDUCTOR - 0201	L1105_RF	Y	B3_13
152S1320	1	7.5NH INDUCTOR - 0201	C1113_RF	Y	B4_17
131S0166	1	39PF CAPACITOR - 0201	C1113_RF	Y	B3_13
131S0176	1	2.4PF CAPACITOR - 0201	C1117_RF	Y	B4_17

## DCDC BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B4_17
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B3_13
152S1564	1	2.4NH, INDUCTOR - MURATA	L1205_RF	Y	B4_17
152S1564	1	2.4NH, INDUCTOR - MURATA	L1205_RF	Y	B3_13

## WIFI BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B4_17
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B3_13
339S0175	1	WIFI MODULE - USI	U1801_RF	Y	B4_17
339S0175	1	WIFI MODULE - USI	U1801_RF	Y	B3_13

SINGING CAP BOM OPTIONS  
NEED TO COPY FROM AP TABLE  
WHEN STAN FINISHES

## B5/B5E BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
117S0002	1	0 OHM RESISTOR - 0201	C1023_RF	Y	B4_17
152S1343	1	12NH INDUCTOR - 0201	C1012_RF	Y	B4_17
131S0428	1	10PF CAPACITOR - 0201	L1004_RF	Y	B4_17
131S0457	1	100PF CAPACITOR - 0201	C1023_RF	Y	B3_13
131S0425	1	0.5PF CAPACITOR - 0201	C1012_RF	Y	B3_13
152S1336	1	8.2NH INDUCTOR - 0201	L1004_RF	Y	B3_13

## B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0620	1	BAND17 TX SAW	FL1101_RF	Y	B4_17
155S0619	1	BAND13 TX SAW	FL1101_RF	Y	B3_13
353S3567	1	BAND17 PAM - SKYWORKS	U1101_RF	Y	B4_17
353S3441	1	BAND13 PAM - AVAGO	U1101_RF	Y	B3_13
155S0709	1	BAND17 DUPLEXER - MURATA	U1102_RF	Y	B4_17
155S0738	1	BAND13 DUPLEXER - EPCOS	U1102_RF	Y	B3_13
152S1336	1	BAND17 INDUCTOR - 8.2NH	L1104_RF	Y	B4_17
152S1342	1	BAND13 INDUCTOR - 15NH	L1104_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1102_RF	Y	B4_17
152S1576	1	12NH, INDUCTOR - MURATA	L1102_RF	Y	B3_13

## B2 PAD BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3715	1	TQM666084 B2 TQS PAD	U1501_RF	Y	B4_17
353S3459	1	TQM666083 B2S TQS PAD	U1501_RF	Y	B3_13

## DIVERISTY MODULE BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3516	1	B17 MURATA DIVERSITY MODULE	U1601_RF	Y	B4_17
353S3562	1	B13/BC10 DIVERSITY MODULE	U1601_RF	Y	B3_13

## B3/DCS1800 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0596	1	DCS1800 RX FIL	FL1301_RF	Y	B4_17
155S0729	1	BAND3 RX FIL	FL1301_RF	Y	B3_13
155S0695	1	THRU LINE	FL1302_RF	Y	B4_17
155S0722	1	BAND13 TX LPF	FL1302_RF	Y	B3_13
152S1656	1	3.0NH INDUCTOR	R1301_RF	Y	B3_13
152S1742	1	1.6NH INDUCTOR	R1302_RF	Y	B4_17
118S0652	1	49.90HM RES	R1303_RF	Y	B3_13
118S0652	1	49.90HM RES	R1305_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR	L1304_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1304_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR	L1305_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1305_RF	Y	B3_13
152S1569	1	3.9NH INDUCTOR	L1301_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR	L1301_RF	Y	B3_13

## B3/B4 RX BOM OPTIONS


PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1570	1	4.7NH INDUCTOR - 01005	C1414_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1415_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1420_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR - 01005	L1416_RF	Y	B4_17
152S1571	1	5.6NH INDUCTOR - 01005	C1414_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1415_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1420_RF	Y	B3_13
152S1571	1	5.6NH INDUCTOR - 01005	L1416_RF	Y	B3_13
131S0219	1	10PF CAPACITOR - 01005	L1420_RF	Y	B4_17
131S0219	1	10PF CAPACITOR - 01005	L1421_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR - 01005	L1420_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR - 01005	L1421_RF	Y	B3_13
152S1328	1	4.3NH INDUCTOR - 0201	R1402_RF	Y	B4_17
152S1688	1	3.5NH INDUCTOR - 0201	C1416_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	R1402_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1416_RF	Y	B3_13

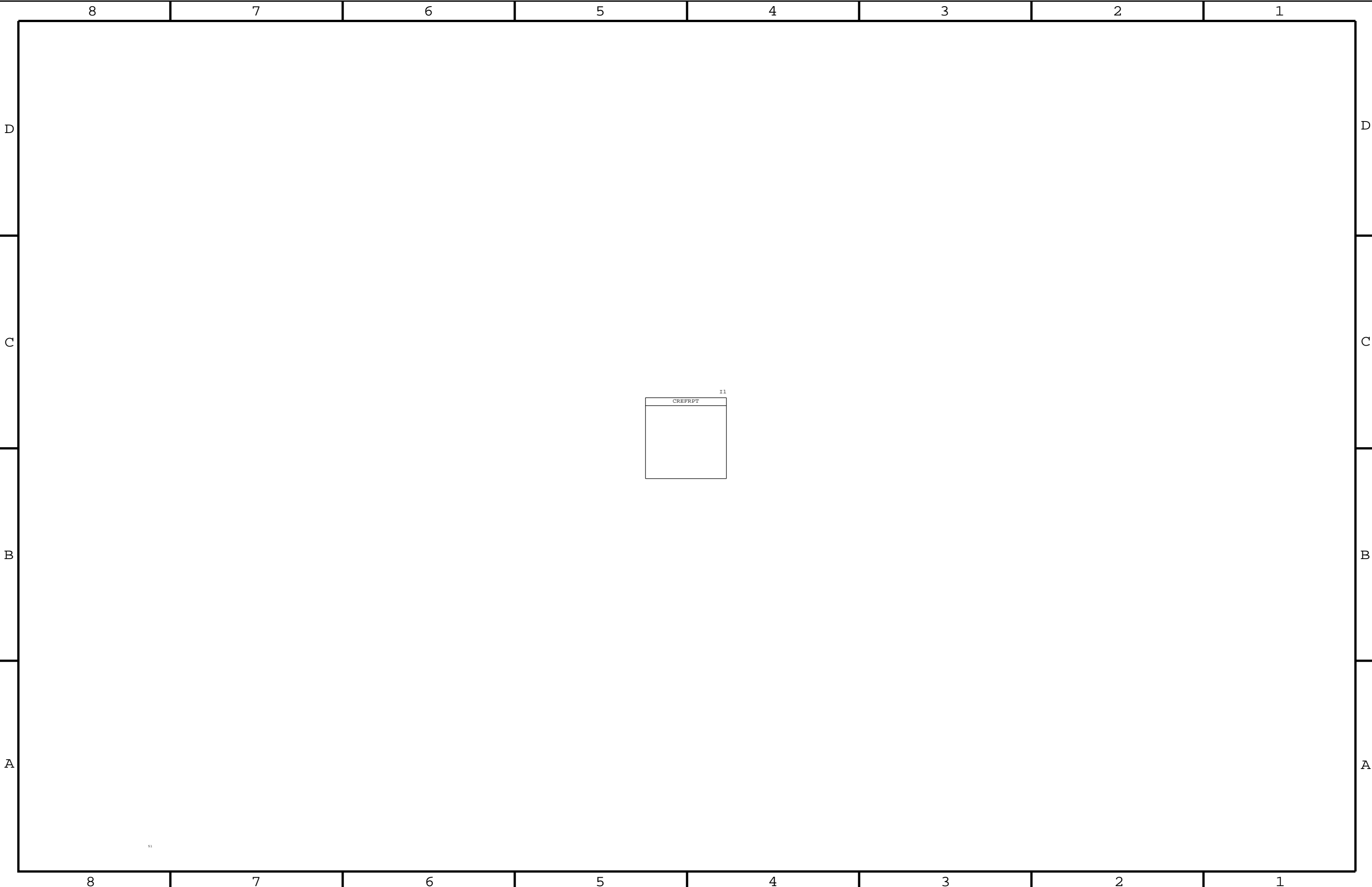
## B3/B4 TX BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
131S0215	1	22PF CAPACITOR - 01005	L1417_RF	Y	B4_17
152S1569	1	3.9NH INDUCTOR - 01005	L1417_RF	Y	B3_13
131S0369	1	0.5PF CAPACITOR - 01005	L1408_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B4_17
152S1221	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B4_17
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B3_13
152S1221	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B3_13
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B3_13

## B3/B4 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3255	1	B1/4 PAD - AVAGO	U1401_RF	Y	B4_17
353S3443	1	B1/3 PAD - AVAGO	U1401_RF	Y	B3_13
155S0590	1	B4 TX FIL	FL1402_RF	Y	B4_17
155S0712	1	B3 TX FIL	FL1402_RF	Y	B3_13

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87654321

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

16

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ENGINEERING RELEASED

2012-07-02

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N41 RADIO\_MLB SUBDESIGN

RADIO - 07/12/2012: SUBDESIGN

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BOM OPTION TABLES

PART#

QTY

DESCRIPTION

REFERENCE DESIGNATOR(S)

CRITICAL

BOM OPTION

051-9119

1

N41\_RADIO\_MLB

SCH

Y

825-2029

1

EEE FOR 639-2482

EEEE\_DNVM

Y

B4\_17

825-2029

1

EEE FOR 639-3241

EEEE\_DW3L

Y

B3\_13

SCH # : 051-9119

BOM (B4\_17) : 639-2482

BOM (B3\_13) : 639-3241

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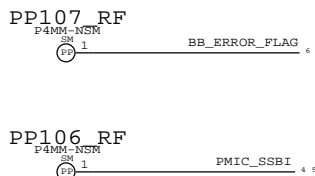
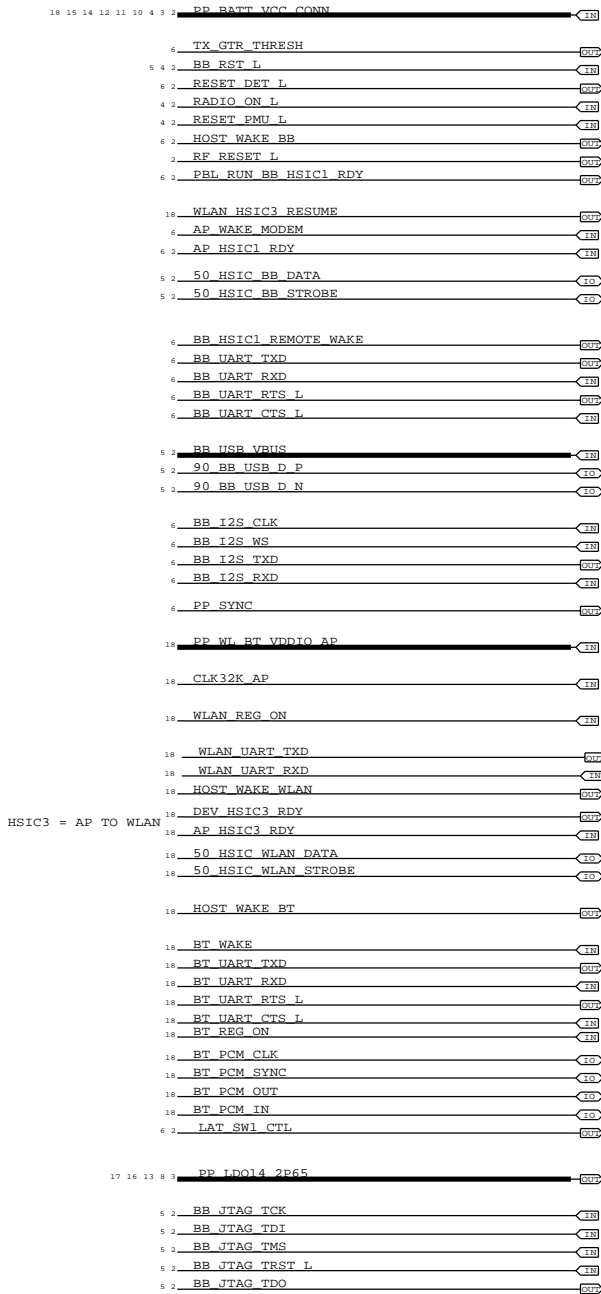
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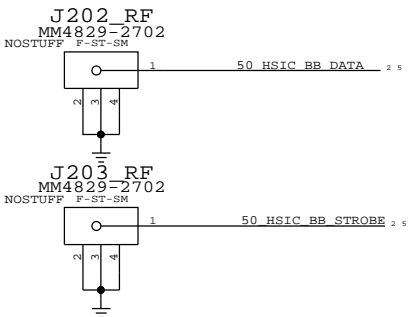
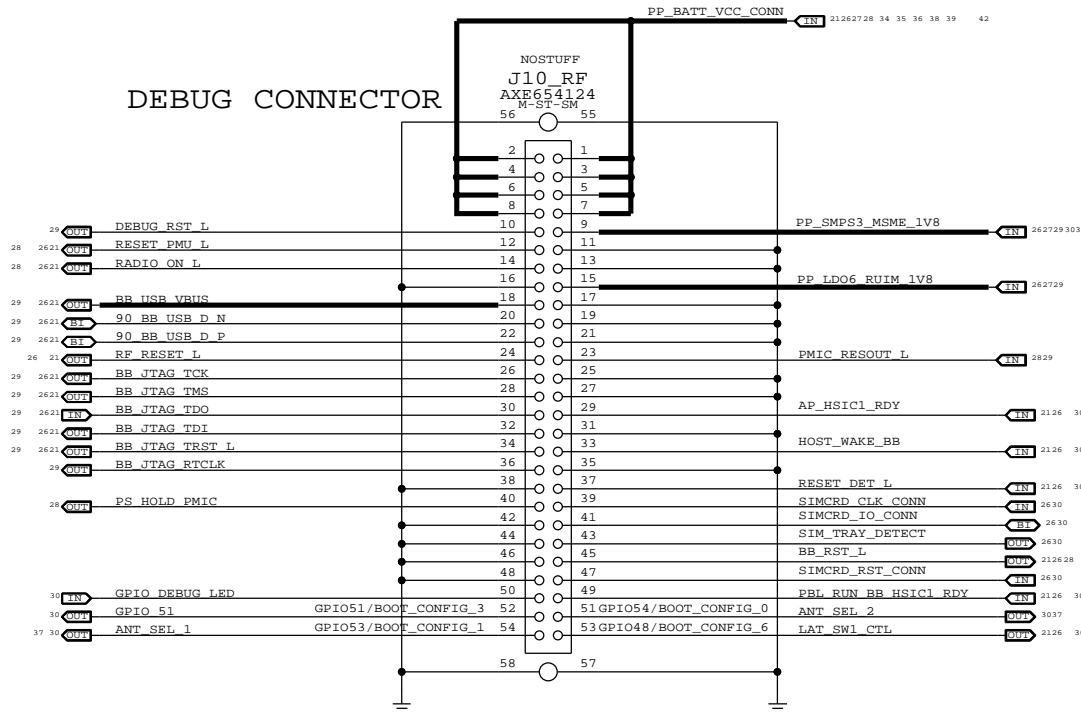
# AP INTERFACE & DEBUG CONNECTOR

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## AP CONNECTIONS

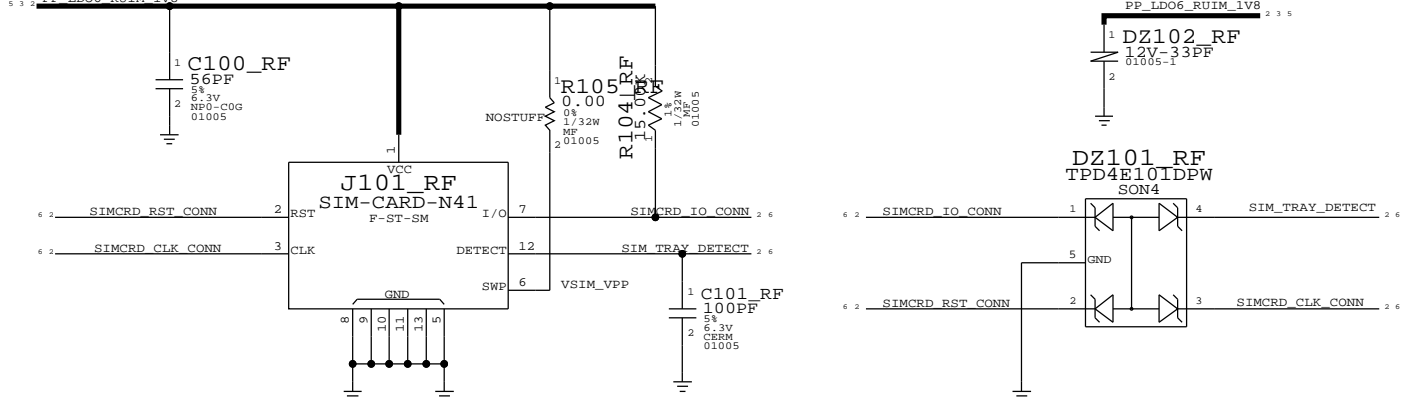


## DEBUG CONNECTOR




BOOT OPTIONS	BOOT_CONFIG SW REGISTER VALUE	GPIO/BOOT_CONFIG CONFIGURATION									
		6	5	4	3	2	1	0			
BOOT_DEFAULT_OPTION	0X00	X	0	0	0	0	0	0	0	X	
BOOT_NAND_OPTION	0X01	X	1	0	0	0	0	0	1	X	
BOOT_HSIC_OPTION	0X02	X	1	0	0	0	0	1	0	X	
BOOT_USB_OPTION	0X03	X	1	0	0	0	0	1	1	X	
ENABLE SAHARA PROTOCOL	0X08	X	1	0	0	1	0	X	X	X	

## SIM CARD CONNECTOR



R R105  
C C101  
XWXW206  
DZDZ101  
U U101

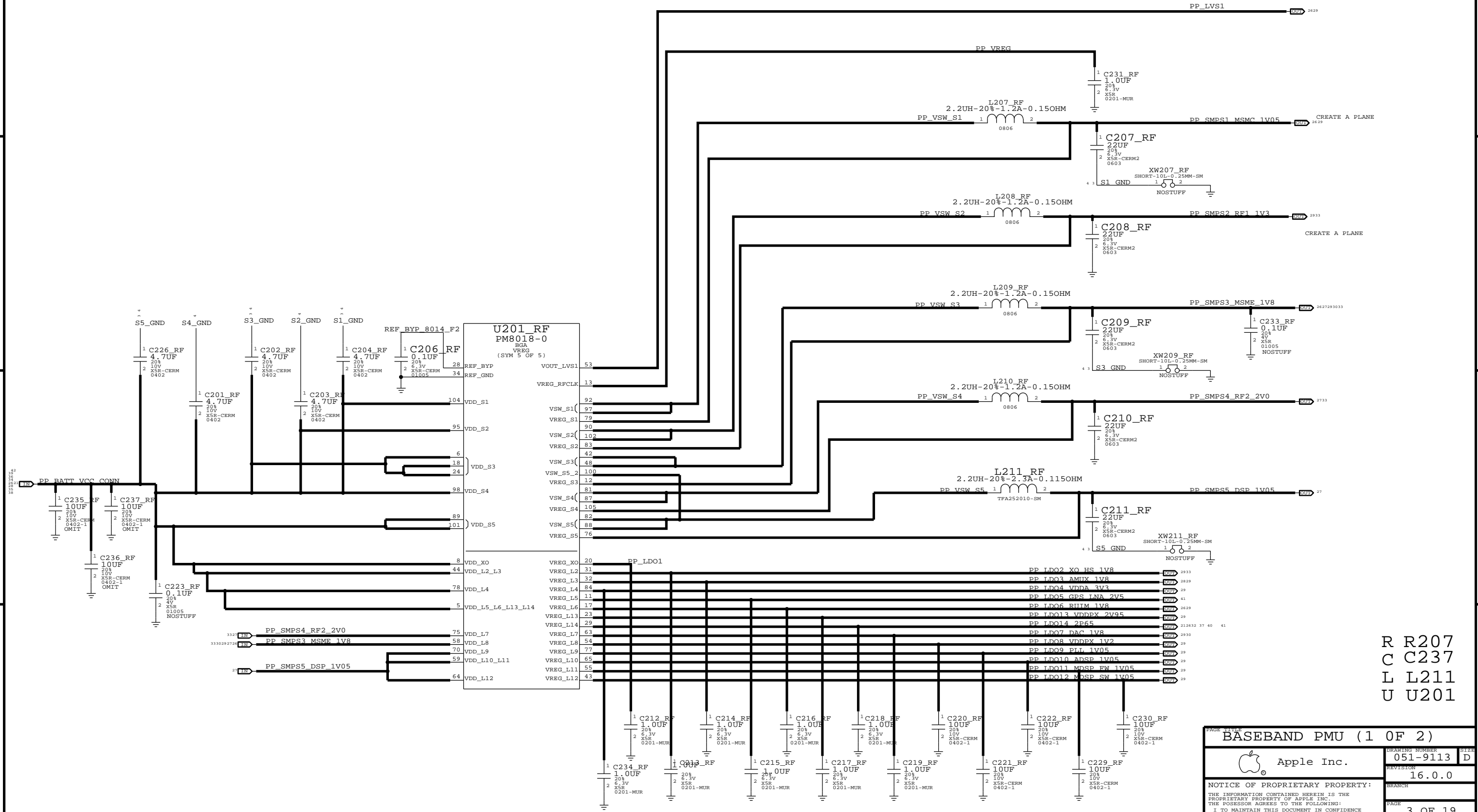
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BASEBAND PMU (1 OF 2)


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R R207  
C C237  
L L211  
U U201

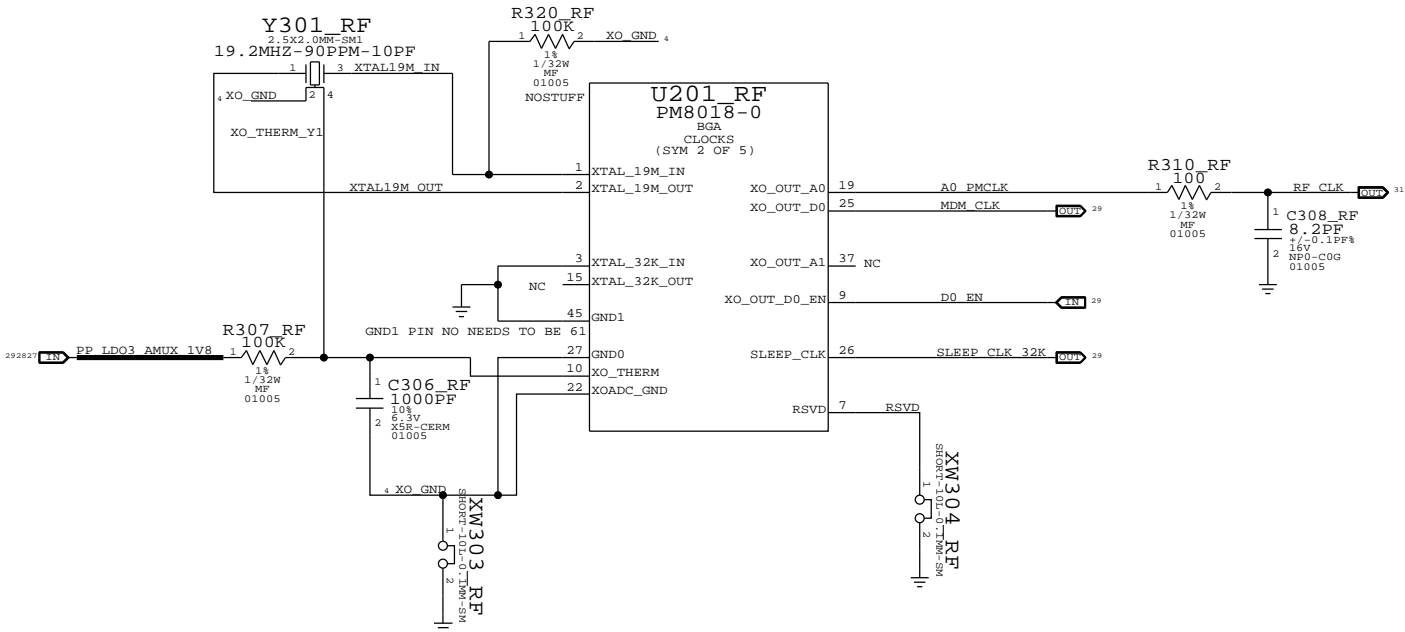
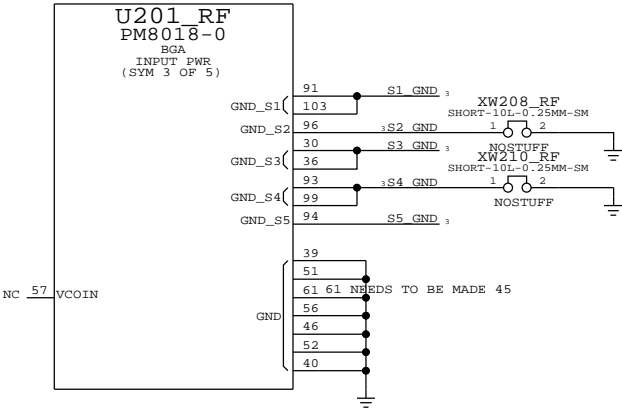
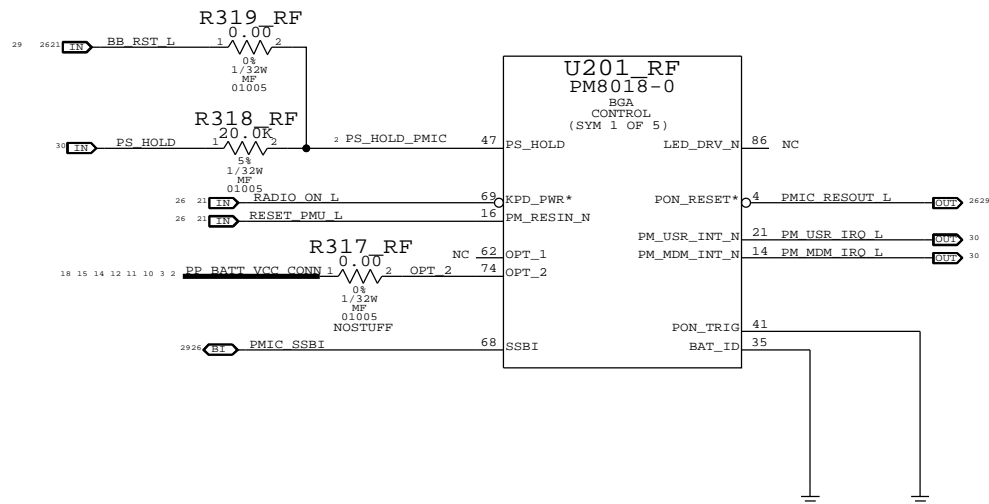
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BASEBAND PMU ( 2 OF 2 )


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BOARD_ID	REVISION
0.25V : >0.2V && <0.4V	PROTO1
0.50V : >0.4V && <0.6V	PROTO2
0.70V : >0.6V && <0.8V	PROTO3
0.90V : >0.8V && <1.0V	EVT1
1.10V : >1.0V && <1.2V	EVT2
1.30V : >1.2V && <1.4V	EVT3/PVT

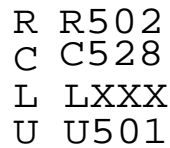
PA_ID	PA CONFIG
0.25V >0.2V && <0.4V	B4_17 MAIN
0.50V >0.4V && <0.6V	BUILD MATRIX
0.70V >0.6V && <0.8V	BUILD MATRIX
1.10V >1.0V && <1.2V	B3_13 MAIN
1.30V >1.2V && <1.4V	BUILD MATRIX
1.50V >1.4V && <1.6V	BUILD MATRIX



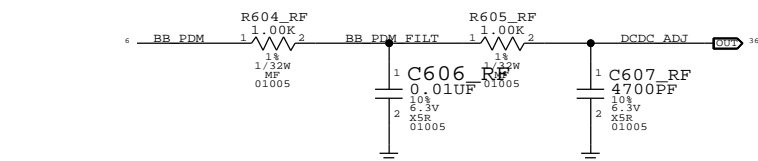
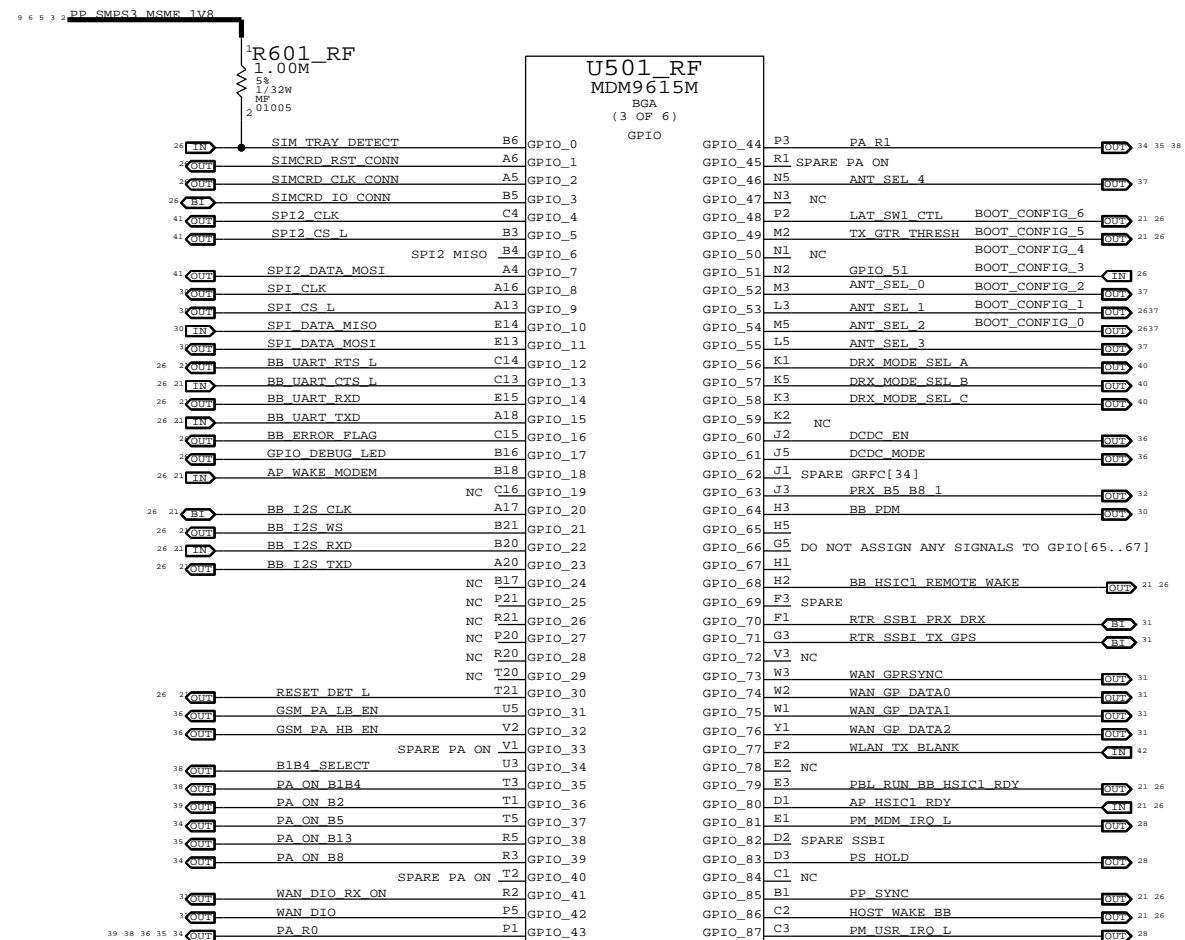
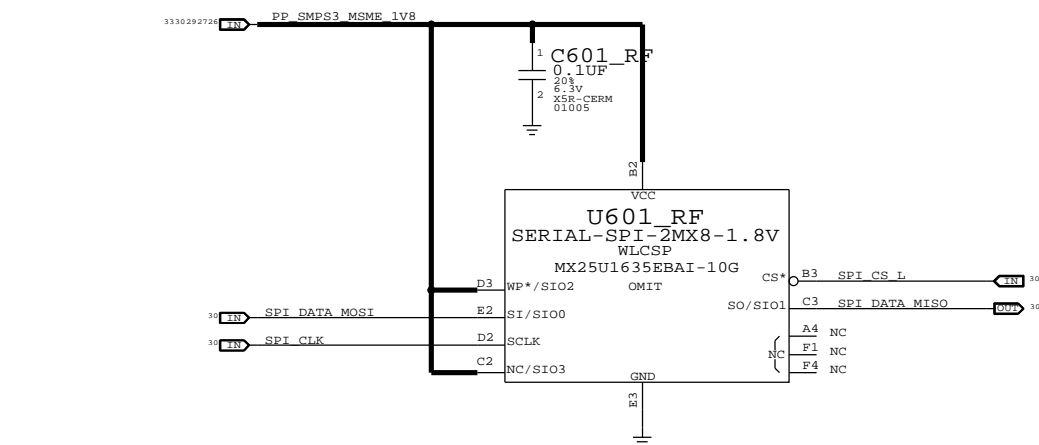
R R320  
C C309  
L LXXX  
U U301  
XW XW305


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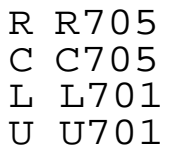


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# RF TRANSCEIVER SWITCHING NETWORKS ( 2 OF 3 )

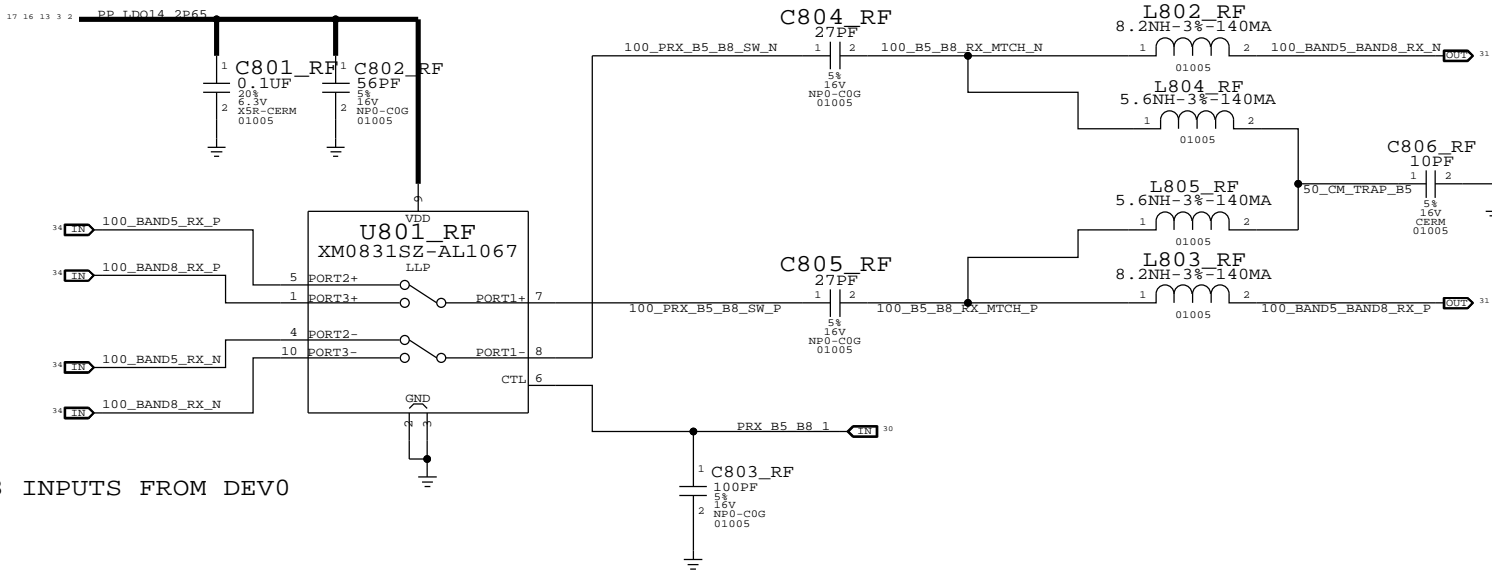
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BAND 5/BAND 8 PRX TRANSCEIVER SWITCH


XM0830SZ SWITCH LOGIC

PRX_B5_B8	ACTIVE BAND	PORT
=====	=====	=====
HIGH	8	PORT 1 TO PORT 3
LOW	5	PORT 1 TO PORT 2

SWAPPED BAND5 AND BAND8 INPUTS FROM DEV0



R RXXX  
C C806  
L L803  
U U801

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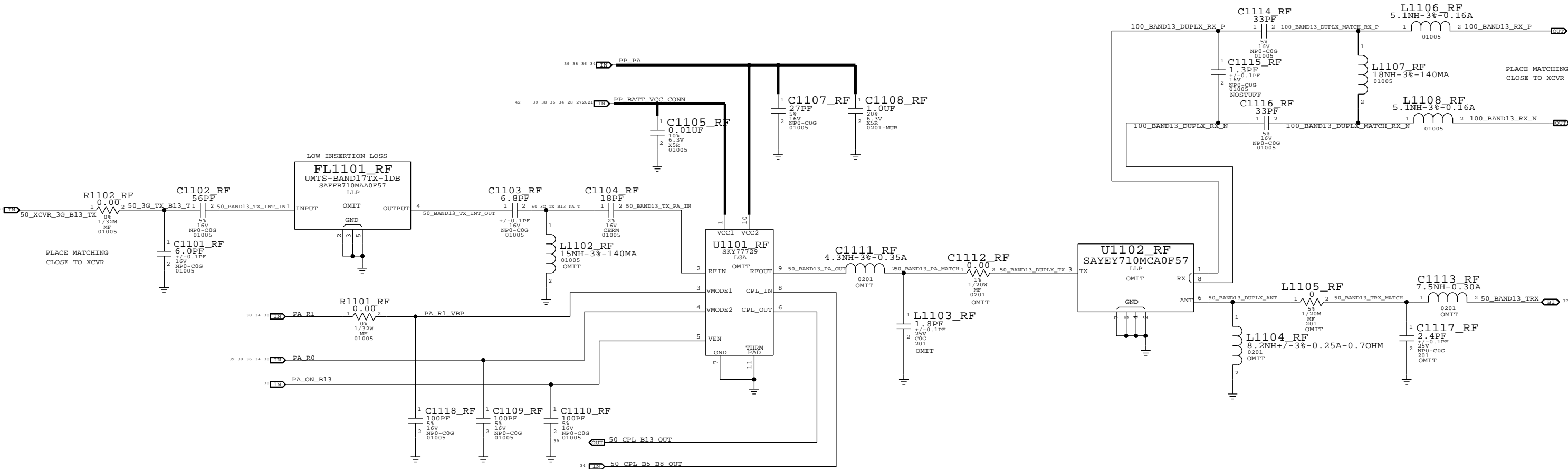
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# B13/17 INTERSTAGE, PA, AND DUPLER


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FLFL1101  
R R1102  
C C1118  
L L1108  
U U1102

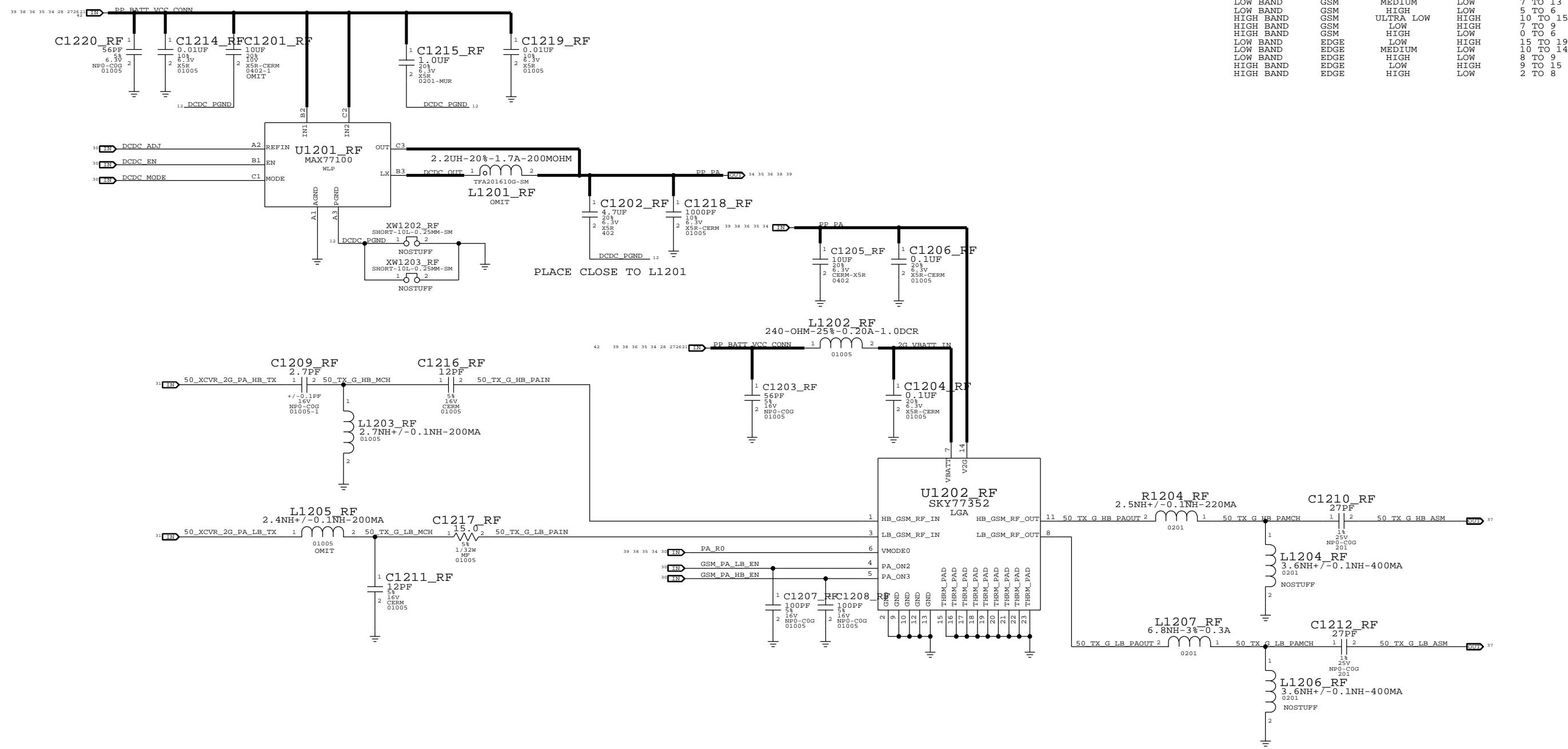
## PA POWER MODES

MODE	PA_R0	PA_R1
LOW	HIGH	HIGH
MEDIUM	LOW	HIGH
HIGH	LOW	LOW


BAND 13 PA		
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# 2G PA, PA DC/DC CONVERTER

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R R1209  
C C1220  
L L1207  
U U1202

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2G PA, DCDC CONVERTER		
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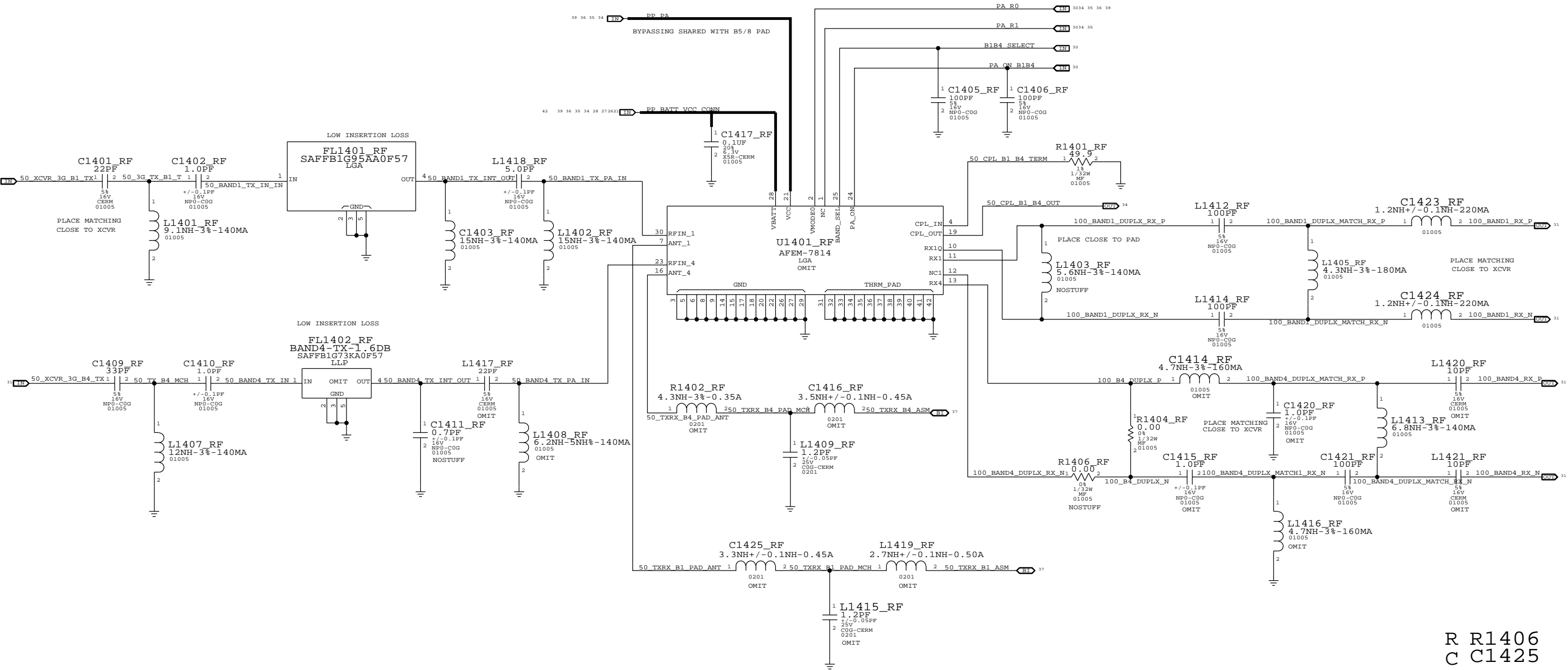
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# BAND 1/4 PAD

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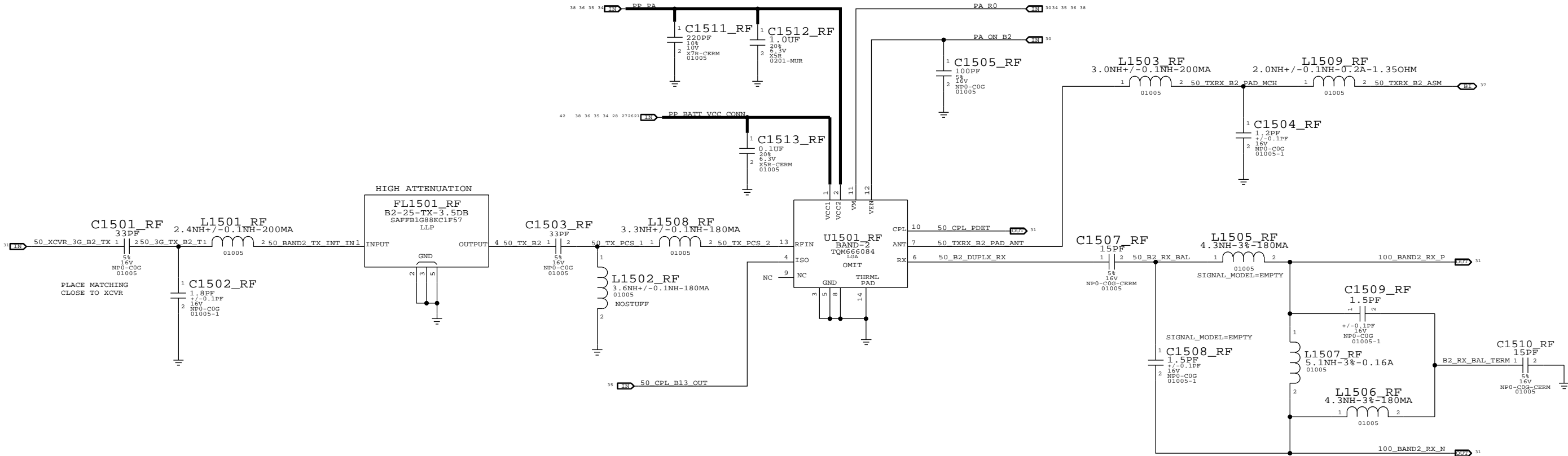


R R1406  
C C1425  
L L1422  
U U1401  
FL FL1101


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# BAND2 PAD

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R R1501  
C C1513  
L L1509  
U U1501  
FL FL1501

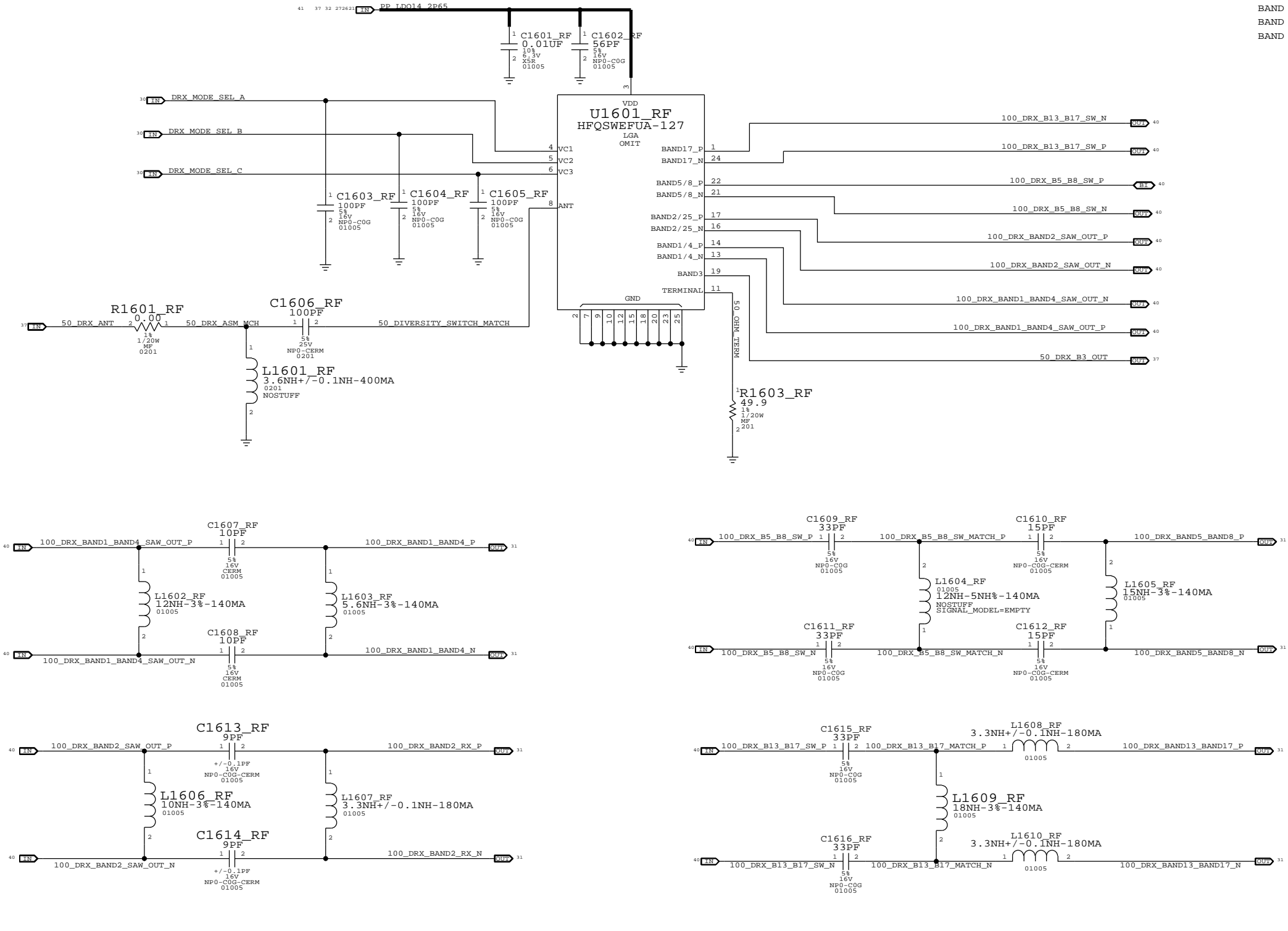
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# RX DIVERSITY


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## DIVERSITY MODULE LOGIC

BAND	VC1	VC2	VC3
=====			
BAND 1/4			
BAND 2			
BAND 5			
BAND 8			
BAND 13/17			

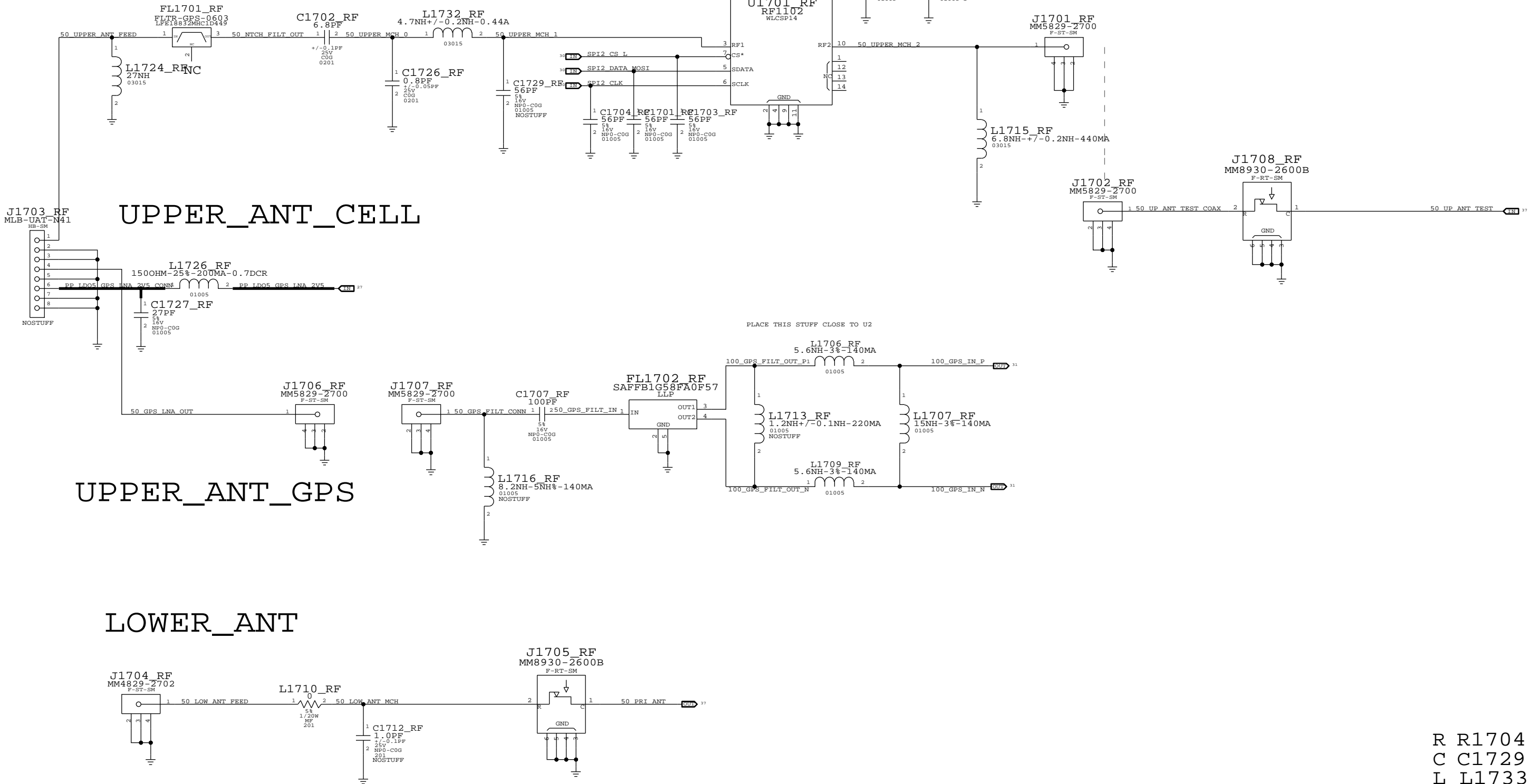


R R1603  
C C1616  
L L1610  
U U1601


PAGE TITLE		
RX DIVERSITY		
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# GPS



R R1704  
C C1729  
L L1733  
U U1703

GPS		
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## D

C

B


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# RADIO BOM OPTIONS

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## HW\_ID PA\_ID BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
118S0685	1	PA_ID RES DIVIDER	R304_RF	Y	B4_17
118S0656	1	PA_ID RES DIVIDER	R304_RF	Y	B3_13
118S0719	1	PA_ID RES DIVIDER	R302_RF	Y	B4_17
118S0685	1	PA_ID RES DIVIDER	R302_RF	Y	B3_13

## SPI NOR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B4_17
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B3_13

## B5/B5E BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3415	1	SKY77487 BAND 5/8 PAD	U1001_RF	Y	B4_17
353S3568	1	SKY77491 BAND5E/8 PAD	U1001_RF	Y	B3_13
155S0552	1	BAND5 TX SAW	FL1001_RF	Y	B4_17
155S0742	1	BAND5/BC10 TX SAW	FL1001_RF	Y	B3_13
152S1563	1	1.5NH, INDUCTOR - MURATA	L1001_RF	Y	B4_17
152S1662	1	1.5NH, INDUCTOR - TDK	L1001_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1002_RF	Y	B4_17
152S1665	1	15NH, INDUCTOR - TDK	L1002_RF	Y	B3_13
152S1576	1	12NH, INDUCTOR - MURATA	L1003_RF	Y	B4_17
152S1664	1	12NH, INDUCTOR - TDK	L1003_RF	Y	B3_13
152S1570	1	4.7NH, INDUCTOR - MURATA	L1010_RF	Y	B4_17
152S1663	1	4.7NH, INDUCTOR - TDK	L1010_RF	Y	B3_13

## B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1328	1	4.3NH INDUCTOR - 0201	C1111_RF	Y	B4_17
152S1353	1	3.6NH INDUCTOR - 0201	C1111_RF	Y	B3_13
131S0198	1	1.8PF CAPACITOR - 0201	L1103_RF	Y	B4_17
118S0724	1	0 OHM JUMPER - 0201	C1112_RF	Y	B4_17
131S0204	1	22PF CAPACITOR - 0201	C1112_RF	Y	B3_13
118S0724	1	0 OHM JUMPER - 0201	L1105_RF	Y	B4_17
152S1443	1	2.0NH INDUCTOR - 0201	L1105_RF	Y	B3_13
152S1320	1	7.5NH INDUCTOR - 0201	C1113_RF	Y	B4_17
131S0166	1	39PF CAPACITOR - 0201	C1113_RF	Y	B3_13
131S0176	1	2.4PF CAPACITOR - 0201	C1117_RF	Y	B4_17

## DCDC BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B4_17
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B3_13
152S1564	1	2.4NH, INDUCTOR - MURATA	L1205_RF	Y	B4_17
152S1564	1	2.4NH, INDUCTOR - MURATA	L1205_RF	Y	B3_13

## WIFI BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B4_17
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B3_13
339S0175	1	WIFI MODULE - USI	U1801_RF	Y	B4_17
339S0175	1	WIFI MODULE - USI	U1801_RF	Y	B3_13

SINGING CAP BOM OPTIONS  
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WHEN STAN FINISHES

## B5/B5E BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
117S0002	1	0 OHM RESISTOR - 0201	C1023_RF	Y	B4_17
152S1343	1	12NH INDUCTOR - 0201	C1012_RF	Y	B4_17
131S0428	1	10PF CAPACITOR - 0201	L1004_RF	Y	B4_17
131S0457	1	100PF CAPACITOR - 0201	C1023_RF	Y	B3_13
131S0425	1	0.5PF CAPACITOR - 0201	C1012_RF	Y	B3_13
152S1336	1	8.2NH INDUCTOR - 0201	L1004_RF	Y	B3_13

## B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0620	1	BAND17 TX SAW	FL1101_RF	Y	B4_17
155S0619	1	BAND13 TX SAW	FL1101_RF	Y	B3_13
353S3567	1	BAND17 PAM - SKYWORKS	U1101_RF	Y	B4_17
353S3441	1	BAND13 PAM - AVAGO	U1101_RF	Y	B3_13
155S0709	1	BAND17 DUPLEXER - MURATA	U1102_RF	Y	B4_17
155S0738	1	BAND13 DUPLEXER - EPCOS	U1102_RF	Y	B3_13
152S1336	1	BAND17 INDUCTOR - 8.2NH	L1104_RF	Y	B4_17
152S1342	1	BAND13 INDUCTOR - 15NH	L1104_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1102_RF	Y	B4_17
152S1576	1	12NH, INDUCTOR - MURATA	L1102_RF	Y	B3_13

## B2 PAD BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3715	1	TQM666084 B2 TQS PAD	U1501_RF	Y	B4_17
353S3459	1	TQM666083 B25 TQS PAD	U1501_RF	Y	B3_13

## DIVERISTY MODULE BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3516	1	B17 MURATA DIVERSITY MODULE	U1601_RF	Y	B4_17
353S3562	1	B13/BC10 DIVERSITY MODULE	U1601_RF	Y	B3_13

## B3/DCS1800 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0596	1	DCS1800 RX FIL	FL1301_RF	Y	B4_17
155S0729	1	BAND3 RX FIL	FL1301_RF	Y	B3_13
155S0695	1	THRU LINE	FL1302_RF	Y	B4_17
155S0722	1	BAND13 TX LPF	FL1302_RF	Y	B3_13
152S1656	1	3.0NH INDUCTOR	R1301_RF	Y	B3_13
152S1742	1	1.6NH INDUCTOR	R1302_RF	Y	B4_17
118S0652	1	49.9OHM RES	R1303_RF	Y	B3_13
118S0652	1	49.9OHM RES	R1305_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR	L1304_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1304_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR	L1305_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1305_RF	Y	B3_13
152S1569	1	3.9NH INDUCTOR	L1301_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR	L1301_RF	Y	B3_13

## B3/B4 RX BOM OPTIONS


PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1570	1	4.7NH INDUCTOR - 01005	C1414_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1415_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1420_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR - 01005	L1416_RF	Y	B4_17
152S1571	1	5.6NH INDUCTOR - 01005	C1414_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1415_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1420_RF	Y	B3_13
152S1571	1	5.6NH INDUCTOR - 01005	L1416_RF	Y	B3_13
131S0219	1	10PF CAPACITOR - 01005	L1420_RF	Y	B4_17
131S0219	1	10PF CAPACITOR - 01005	L1421_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR - 01005	L1420_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR - 01005	L1421_RF	Y	B3_13
152S1328	1	4.3NH INDUCTOR - 0201	R1402_RF	Y	B4_17
152S1688	1	3.5NH INDUCTOR - 0201	C1416_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	R1402_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1416_RF	Y	B3_13

## B3/B4 TX BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
131S0215	1	22PF CAPACITOR - 01005	L1417_RF	Y	B4_17
152S1569	1	3.9NH INDUCTOR - 01005	L1417_RF	Y	B3_13
131S0369	1	0.5PF CAPACITOR - 01005	L1408_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B4_17
152S1221	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B4_17
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B3_13
152S1221	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B3_13
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B3_13

## B3/B4 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3255	1	B1/4 PAD - AVAGO	U1401_RF	Y	B4_17
353S3443	1	B1/3 PAD - AVAGO	U1401_RF	Y	B3_13
155S0590	1	B4 TX FIL	FL1402_RF	Y	B4_17
155S0712	1	B3 TX FIL	FL1402_RF	Y	B3_13

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8			7			6			5			4			3			2			1		
D	CUMULUS_IN<4>	CUMULUS_IN<4> - @single_brd_lib.SINGLE_BRD	17C7	17D2	E_ACC2_CONN	E_ACC2_CONN - @single_brd_lib.SINGLE_BRD	16B4	22B4	HS4_CONTROL_CONN	HS4_CONTROL_CONN - @single_brd_lib.SINGLE_BRD	16C5	INT_MIC3_N	@single_brd_lib.SINGLE_BRD	INT_MIC3_N - @single_brd_lib.SINGLE_BRD	9B7	11B2	D						
	CUMULUS_IN<5>	CUMULUS_IN<5> - @single_brd_lib.SINGLE_BRD	17C2	17C7	E_CONN_DETECT	E_CONN_DETECT - @single_brd_lib.SINGLE_BRD	16C4	22B5	HS4_REF	HS4_REF - @single_brd_lib.SINGLE_BRD	10A4	16D8	INT_MIC3_P	INT_MIC3_P - @single_brd_lib.SINGLE_BRD	9B7	11B2							
	CUMULUS_IN<6>	CUMULUS_IN<6> - @single_brd_lib.SINGLE_BRD	17C7	17D2	E_CONN_TP	E_CONN_TP - @single_brd_lib.SINGLE_BRD	22B4		HS4_REF_CONN	HS4_REF_CONN - @single_brd_lib.SINGLE_BRD	16C4	16D5	INT_MIC3_RET	INT_MIC3_RET - @single_brd_lib.SINGLE_BRD	11C4								
	CUMULUS_IN<7>	CUMULUS_IN<7> - @single_brd_lib.SINGLE_BRD	17C2	17C7	E_DETECT	E_DETECT - @single_brd_lib.SINGLE_BRD	13C2	16B2	I2C0_SCL_V8	I2C0_SCL_V8 - @single_brd_lib.SINGLE_BRD	3D2	13A4	13B6	14B1	14D6								
	CUMULUS_IN<8>	CUMULUS_IN<8> - @single_brd_lib.SINGLE_BRD	17C2	17C7	E_DET_PFMU_TRISTAR	E_DET_PFMU_TRISTAR - @single_brd_lib.SINGLE_BRD	13C4	15B4	I2C0_SDA_V8	I2C0_SDA_V8 - @single_brd_lib.SINGLE_BRD	15B4	3D2	13A4	13B6	14B1	14D6							
	CUMULUS_IN<9>	CUMULUS_IN<9> - @single_brd_lib.SINGLE_BRD	17C2	17C7	FLASH_ENABLE	FLASH_ENABLE - @single_brd_lib.SINGLE_BRD	3B5	19C7	I2C1_SCL_V8	I2C1_SCL_V8 - @single_brd_lib.SINGLE_BRD	15B4	3D2	14A4										
	CUMULUS_IN<10>	CUMULUS_IN<10> - @single_brd_lib.SINGLE_BRD	17C7	17D2	FMIO_ALE	FMIO_ALE - @single_brd_lib.SINGLE_BRD	6B7	6C3	I2C1_SDA_V8	I2C1_SDA_V8 - @single_brd_lib.SINGLE_BRD	3D2	14A4	JTAG_SWCLK	JTAG_SWCLK - @single_brd_lib.SINGLE_BRD	2B6	15B5							
	CUMULUS_IN<11>	CUMULUS_IN<11> - @single_brd_lib.SINGLE_BRD	17C2	17C7	FMIO_CEN0	FMIO_CEN0 - @single_brd_lib.SINGLE_BRD	6C3	6C8	I2C2_SCL_V8	I2C2_SCL_V8 - @single_brd_lib.SINGLE_BRD	3D2	11B8	JTAG_SWDIO	JTAG_SWDIO - @single_brd_lib.SINGLE_BRD	2B6	15B5							
	CUMULUS_IN<12>	CUMULUS_IN<12> - @single_brd_lib.SINGLE_BRD	17C2	17C7	FMIO_CLE	FMIO_CLE - @single_brd_lib.SINGLE_BRD	6B7	6C3	I2C2_SDA_V8	I2C2_SDA_V8 - @single_brd_lib.SINGLE_BRD	3D2	11B8	KEEPACT	KEEPACT - @single_brd_lib.SINGLE_BRD	3B7	13C2							
	CUMULUS_IN<13>	CUMULUS_IN<13> - @single_brd_lib.SINGLE_BRD	17C2	17C7	FMIO_DQVREF	FMIO_DQVREF - @single_brd_lib.SINGLE_BRD	6B3	6B6	16B7	6B7	6C5	11C5	L19_FILT	L19_FILT - @single_brd_lib.SINGLE_BRD	14D4								
C	CUMULUS_IN<14>	CUMULUS_IN<14> - @single_brd_lib.SINGLE_BRD	17C2	17C7	FMIO_I0<0>	FMIO_I0<0> - @single_brd_lib.SINGLE_BRD	6B6	6C4	6C8	I2C_SCL_COMP	I2C_SCL_COMP - @single_brd_lib.SINGLE_BRD	14A5	14A7	14B6	L19_IREF	L19_IREF - @single_brd_lib.SINGLE_BRD	14C4						
	CUMULUS_PROX_RX	CUMULUS_PROX_RX - @single_brd_lib.SINGLE_BRD	17C7		FMIO_I0<1>	FMIO_I0<1> - @single_brd_lib.SINGLE_BRD	6C4	6C8	I2C_SDA_ALS	I2C_SDA_ALS - @single_brd_lib.SINGLE_BRD	11C5		L19_LDO_FILT	L19_LDO_FILT - @single_brd_lib.SINGLE_BRD	14D4								
	CUMULUS_VDDANA	CUMULUS_VDDANA - @single_brd_lib.SINGLE_BRD	17D7		FMIO_I0<2>	FMIO_I0<2> - @single_brd_lib.SINGLE_BRD	6C4	6C8	I2C_SDA_COMP	I2C_SDA_COMP - @single_brd_lib.SINGLE_BRD	14A5	14A7	14B6	L19_SES_N	L19_SES_N - @single_brd_lib.SINGLE_BRD	14D4							
	CUMULUS_VDDCORE	CUMULUS_VDDCORE - @single_brd_lib.SINGLE_BRD	17D7		FMIO_I0<3>	FMIO_I0<3> - @single_brd_lib.SINGLE_BRD	6C4	6C8	I2S0_DIN	I2S0_DIN - @single_brd_lib.SINGLE_BRD	3D4	9C2	L19_SES_P	L19_SES_P - @single_brd_lib.SINGLE_BRD	14D4								
	CUMULUS_VSTM_OUT<0>	CUMULUS_VSTM_OUT<0> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FMIO_I0<4>	FMIO_I0<4> - @single_brd_lib.SINGLE_BRD	6C4	6C8	I2S0_DOUT	I2S0_DOUT - @single_brd_lib.SINGLE_BRD	3D4	9C2	L19_SWITCH	L19_SWITCH - @single_brd_lib.SINGLE_BRD	14D6								
	CUMULUS_VSTM_OUT<1>	CUMULUS_VSTM_OUT<1> - @single_brd_lib.SINGLE_BRD	17B3	17C5	FMIO_I0<5>	FMIO_I0<5> - @single_brd_lib.SINGLE_BRD	6C4	6C8	I2S0_LRCLK	I2S0_LRCLK - @single_brd_lib.SINGLE_BRD	3D4	9C2	L19_VSENSE_N	L19_VSENSE_N - @single_brd_lib.SINGLE_BRD	14D4								
	CUMULUS_VSTM_OUT<2>	CUMULUS_VSTM_OUT<2> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FMIO_I0<6>	FMIO_I0<6> - @single_brd_lib.SINGLE_BRD	6C4	6C8	I2S1_DIN	I2S1_DIN - @single_brd_lib.SINGLE_BRD	3D4	21C4	L19_VSENSE_P	L19_VSENSE_P - @single_brd_lib.SINGLE_BRD	14D4								
	CUMULUS_VSTM_OUT<3>	CUMULUS_VSTM_OUT<3> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FMIO_I0<7>	FMIO_I0<7> - @single_brd_lib.SINGLE_BRD	6C4	6C8	BB_I2S_TXD	BB_I2S_TXD - @single_brd_lib.RADIO_MLB(i594_page 19)	26C8	30B4	L65_FILT+	L65_FILT+ - @single_brd_lib.SINGLE_BRD	10B4								
	CUMULUS_VSTM_OUT<4>	CUMULUS_VSTM_OUT<4> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FMIO_WE_L	FMIO_WE_L - @single_brd_lib.SINGLE_BRD	6B7	6C3	BB_I2S_RXD	BB_I2S_RXD - @single_brd_lib.RADIO_MLB(i594_page 19)	26C8	30B4	L65_VCCPFLT+	L65_VCCPFLT+ - @single_brd_lib.SINGLE_BRD	10C4								
	CUMULUS_VSTM_OUT<5>	CUMULUS_VSTM_OUT<5> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_ALE	FM11_ALE - @single_brd_lib.SINGLE_BRD	6B6	6C3	I2S1_DOUT	I2S1_DOUT - @single_brd_lib.SINGLE_BRD	3D4	21C4	L65_VCCPFLT-	L65_VCCPFLT- - @single_brd_lib.SINGLE_BRD	10C4								
B	CUMULUS_VSTM_OUT<6>	CUMULUS_VSTM_OUT<6> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_CEN0	FM11_CEN0 - @single_brd_lib.SINGLE_BRD	6C3	6C6	I2S1_LRCLK	I2S1_LRCLK - @single_brd_lib.SINGLE_BRD	3D4	21C4	LAT_SW1_CTL	LAT_SW1_CTL - @single_brd_lib.SINGLE_BRD	16C5	21A4							
	CUMULUS_VSTM_OUT<7>	CUMULUS_VSTM_OUT<7> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_CLE	FM11_CLE - @single_brd_lib.SINGLE_BRD	6B6	6C3	BB_I2S_WS	BB_I2S_WS - @single_brd_lib.RADIO_MLB(i594_page 19)	26C8	30B4	LCD_BL_CA	LCD_BL_CA - @single_brd_lib.SINGLE_BRD	13B1	18D1							
	CUMULUS_VSTM_OUT<8>	CUMULUS_VSTM_OUT<8> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_I0<0>	FM11_I0<0> - @single_brd_lib.SINGLE_BRD	6C5		I2S2_DIN	I2S2_DIN - @single_brd_lib.SINGLE_BRD	3D4	9B2	14C5	LCD_BL_CA_CONN	LCD_BL_CA_CONN - @single_brd_lib.SINGLE_BRD	18C4	22D4						
	CUMULUS_VSTM_OUT<9>	CUMULUS_VSTM_OUT<9> - @single_brd_lib.SINGLE_BRD	17C5		FM11_I0<1>	FM11_I0<1> - @single_brd_lib.SINGLE_BRD	6C5		I2S2_DOUT	I2S2_DOUT - @single_brd_lib.SINGLE_BRD	3D4	9C2	14C5	LCD_BL_CC1	LCD_BL_CC1 - @single_brd_lib.SINGLE_BRD	13A2	18D1						
	CUMULUS_VSTM_OUT<10>	CUMULUS_VSTM_OUT<10> - @single_brd_lib.SINGLE_BRD	17C5		FM11_I0<2>	FM11_I0<2> - @single_brd_lib.SINGLE_BRD	6C5		I2S2_LRCLK	I2S2_LRCLK - @single_brd_lib.SINGLE_BRD	3D4	9C2	14C5	LCD_BL_CC1_CONN	LCD_BL_CC1_CONN - @single_brd_lib.SINGLE_BRD	18C4	22D4						
	CUMULUS_VSTM_OUT<11>	CUMULUS_VSTM_OUT<11> - @single_brd_lib.SINGLE_BRD	17B3	17C5	FM11_I0<3>	FM11_I0<3> - @single_brd_lib.SINGLE_BRD	6C5		I2S3_DIN	I2S3_DIN - @single_brd_lib.SINGLE_BRD	3C4	21B4	LCD_BL_CC2	LCD_BL_CC2 - @single_brd_lib.SINGLE_BRD	13A2	18D1							
	CUMULUS_VSTM_OUT<12>	CUMULUS_VSTM_OUT<12> - @single_brd_lib.SINGLE_BRD	17B3	17C5	FM11_I0<4>	FM11_I0<4> - @single_brd_lib.SINGLE_BRD	6C5		BT_PCM_OUT	BT_PCM_OUT - @single_brd_lib.RADIO_MLB(i594_page 19)	26B8	42B3	LCD_BL_CC2_CONN	LCD_BL_CC2_CONN - @single_brd_lib.SINGLE_BRD	18C4	22D4							
	CUMULUS_VSTM_OUT<13>	CUMULUS_VSTM_OUT<13> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_I0<5>	FM11_I0<5> - @single_brd_lib.SINGLE_BRD	6C5		I2S3_DOUT	I2S3_DOUT - @single_brd_lib.SINGLE_BRD	3C4	21B4	LCD_DESENSE	LCD_DESENSE - @single_brd_lib.SINGLE_BRD	13A2								
	CUMULUS_VSTM_OUT<14>	CUMULUS_VSTM_OUT<14> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_I0<6>	FM11_I0<6> - @single_brd_lib.SINGLE_BRD	6C5		LCD_DESENSE_CONN	LCD_DESENSE_CONN - @single_brd_lib.SINGLE_BRD	18D4		LCD_HIFA_BSYNC	LCD_HIFA_BSYNC - @single_brd_lib.SINGLE_BRD	3B7	17A1	17B2	18B1					
	CUMULUS_VSTM_OUT<15>	CUMULUS_VSTM_OUT<15> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_I0<7>	FM11_I0<7> - @single_brd_lib.SINGLE_BRD	6C5		LCD_HIFA_BSYNC_BUFF	LCD_HIFA_BSYNC_BUFF - @single_brd_lib.SINGLE_BRD	17A3	17B5	LCD_HIFA_BSYNC_CONN	LCD_HIFA_BSYNC_CONN - @single_brd_lib.SINGLE_BRD	18C4								
A	CUMULUS_VSTM_OUT<16>	CUMULUS_VSTM_OUT<16> - @single_brd_lib.SINGLE_BRD	17C3	17C5	FM11_WE_L	FM11_WE_L - @single_brd_lib.SINGLE_BRD	6B6	6C3	I2S4_DIN	I2S4_DIN - @single_brd_lib.SINGLE_BRD	3C4	9C2	LCD_PANIC_L_CONN	LCD_PANIC_L_CONN - @single_brd_lib.SINGLE_BRD	18C4								
	CUMULUS_VSTM_OUT<17>	CUMULUS_VSTM_OUT<17> - @single_brd_lib.SINGLE_BRD	17B5	17C3	FORCE_DFU	FORCE_DFU - @single_brd_lib.SINGLE_BRD	3A7	22B8	I2S4_DOUT	I2S4_DOUT - @single_brd_lib.SINGLE_BRD	3C4	9C2	LCD_PIFA	LCD_PIFA - @single_brd_lib.SINGLE_BRD	18C4								
	CUMULUS_VSTM_OUT<18>	CUMULUS_VSTM_OUT<18> - @single_brd_lib.SINGLE_BRD	17B5	17C3	GCM_SEL	GCM_SEL - @single_brd_lib.SINGLE_BRD	17B2	17B5	I2S4_LRCLK	I2S4_LRCLK - @single_brd_lib.SINGLE_BRD	3C4	9C2	LCD_PIFA_R	LCD_PIFA_R - @single_brd_lib.SINGLE_BRD	3C4	18B1							
	CUMULUS_VSTM_OUT<19>	CUMULUS_VSTM_OUT<19> - @single_brd_lib.SINGLE_BRD	17B5	17C3	GRAPE_INT_L	GRAPE_INT_L - @single_brd_lib.SINGLE_BRD	3B7	17B8	ID_M42	ID_M42 - @single_brd_lib.SINGLE_BRD	3C4	3C8	LCD_PWR_EN	LCD_PWR_EN - @single_brd_lib.SINGLE_BRD	13B2	13B4	13C6	18C1	19A6				
	DDR0_VREF_CA	DDR0_VREF_CA - @single_brd_lib.SINGLE_BRD	4A7	4D6	GRAPE_RESET_L	GRAPE_RESET_L - @single_brd_lib.SINGLE_BRD	3A7	17B7	INT_MIC1_BIAS	INT_MIC1_BIAS - @single_brd_lib.SINGLE_BRD	9C6	16C2	LCD_PWR_EN_CONN	LCD_PWR_EN_CONN - @single_brd_lib.SINGLE_BRD	18C4								
	DDR0_VREF_DQ																						

8			7			6			5			4			3			2			1		
D	NAND_VDDI	NAND_VDDI - @single_brd_lib.SINGLE_BRD	6D4	PP2V5_CAM0_AF_GROUND	PP2V5_CAM0_AF_GROUND - @single_brd_lib.SINGLE_BRD	12A3 20B5	SAGE_PANEL_IN<11>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_IN<11> -	17C3 18A8	UART1_CTS_L	UART1_CTS_L - @single_brd_lib.SINGLE_BRD	3B5 21C4											
	NEG_BOOST_OUT	NEG_BOOST_OUT - @single_brd_lib.SINGLE_BRD	19D3	PP2V8_CAM0_CONN	PP2V8_CAM0_CONN - @single_brd_lib.SINGLE_BRD	20C5	SAGE_PANEL_IN<12>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_IN<12> -	17C3 18A6	UART1_RTS_L	UART1_RTS_L - @single_brd_lib.SINGLE_BRD	26C8 30C4											
	NEG_SWITCH	NEG_SWITCH - @single_brd_lib.SINGLE_BRD	19D3	PP2V8_CAM1_CONN	PP2V8_CAM1_CONN - @single_brd_lib.SINGLE_BRD	11C4	SAGE_PANEL_IN<13>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_IN<13> -	17C3 18A6	UART1_RXD	UART1_RXD - @single_brd_lib.SINGLE_BRD	3B5 21C4											
	NTC_CAM_N	NTC_CAM_N - @single_brd_lib.SINGLE_BRD	12A6	PP2V8_CAM_AVDD	PP2V8_CAM_AVDD - @single_brd_lib.SINGLE_BRD	11C2 12B5 20B7	SAGE_PANEL_IN<14>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_IN<14> -	17C3 18A6	UART1_TXD	UART1_TXD - @single_brd_lib.SINGLE_BRD	3B5 15B5 21C4											
	NTC_CAM_P	NTC_CAM_P - @single_brd_lib.SINGLE_BRD	12A6 12B7	PP3V0_ACC	PP3V0_ACC - @single_brd_lib.SINGLE_BRD	12B4 15C4	SAGE_PANEL_VSTM_OUT<0>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<0> -	17C1 18A6 18A8	UART2_RXD	UART2_RXD - @single_brd_lib.SINGLE_BRD	26C8 30C4											
	NTC_FOREHEAD_N	NTC_FOREHEAD_N - @single_brd_lib.SINGLE_BRD	12A8	PP3V0_ALS	PP3V0_ALS - @single_brd_lib.SINGLE_BRD	11C5	SAGE_PANEL_VSTM_OUT<1>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<1> -	17B1 18A8	UART2_TXD	UART2_TXD - @single_brd_lib.SINGLE_BRD	3B5 15B5											
	NTC_FOREHEAD_P	NTC_FOREHEAD_P - @single_brd_lib.SINGLE_BRD	12A7 12B7	PP3V0_COMP	PP3V0_COMP - @single_brd_lib.SINGLE_BRD	14A5 14A8 14B8	SAGE_PANEL_VSTM_OUT<2>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<2> -	17C1 18A8	UART3_CTS_L	UART3_CTS_L - @single_brd_lib.SINGLE_BRD	3B5 21B4											
	NTC_H5P_N	NTC_H5P_N - @single_brd_lib.SINGLE_BRD	12A5	PP3V0_IMU	PP3V0_IMU - @single_brd_lib.SINGLE_BRD	12B5 14A4 14B1	SAGE_PANEL_VSTM_OUT<3>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<3> -	17C1 18A8	UART3_RTS_L	UART3_RTS_L - @single_brd_lib.SINGLE_BRD	26B8 42B3											
	NTC_H5P_P	NTC_H5P_P - @single_brd_lib.SINGLE_BRD	12A5 12B7	PP3V0_IO	PP3V0_IO - @single_brd_lib.SINGLE_BRD	2D3 5B7 12B5	SAGE_PANEL_VSTM_OUT<4>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<4> -	17C1 18A8	UART3_RXD	UART3_RXD - @single_brd_lib.SINGLE_BRD	26B8 42C3											
	NTC_PA_N	NTC_PA_N - @single_brd_lib.SINGLE_BRD	12A4	PP3V0_NAND	PP3V0_NAND - @single_brd_lib.SINGLE_BRD	6D1 12B5	SAGE_PANEL_VSTM_OUT<5>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<5> -	17C1 18A8	UART4_RXD	UART4_RXD - @single_brd_lib.SINGLE_BRD	3A5 21B4											
C	NTC_PA_P	NTC_PA_P - @single_brd_lib.SINGLE_BRD	12A4 12B7	PP3V0_NAND_XW	PP3V0_NAND_XW - @single_brd_lib.SINGLE_BRD	6D3	SAGE_PANEL_VSTM_OUT<6>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<6> -	17C1 18A8	UART4_TXD	UART4_TXD - @single_brd_lib.SINGLE_BRD	3A5 21C4											
	OSC32I	OSC32I - @single_brd_lib.SINGLE_BRD	12B6	PP3V0_PROX	PP3V0_PROX - @single_brd_lib.SINGLE_BRD	11C5	SAGE_PANEL_VSTM_OUT<7>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<7> -	17C1 18A8	UART6_RXD	UART6_RXD - @single_brd_lib.SINGLE_BRD	3A5 15B5											
	OSC32O	OSC32O - @single_brd_lib.SINGLE_BRD	12A6	PP3V0_PROX_ALS	PP3V0_PROX_ALS - @single_brd_lib.SINGLE_BRD	11B8 11C8 12B5	SAGE_PANEL_VSTM_OUT<8>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<8> -	17C1 18A8	UART6_TXD	UART6_TXD - @single_brd_lib.SINGLE_BRD	3A5 15B5											
	OVF_GATE	OVF_GATE - @single_brd_lib.SINGLE_BRD	16B7	PP3V0_PROX_IR	PP3V0_PROX_IR - @single_brd_lib.SINGLE_BRD	11C2 12B5	SAGE_PANEL_VSTM_OUT<9>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<9> -	17C1 18A8	USB_BRICKID	USB_BRICKID - @single_brd_lib.SINGLE_BRD	13C2 15B5											
	OVF_SW_EN_L	OVF_SW_EN_L - @single_brd_lib.SINGLE_BRD	15B4 16B8	PP3V0_USBMUX	PP3V0_USBMUX - @single_brd_lib.SINGLE_BRD	12B5 15C7	SAGE_PANEL_VSTM_OUT<10>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<10> -	17C1 18A8	USB_BRICKID_PMU	USB_BRICKID_PMU - @single_brd_lib.SINGLE_BRD	13C4 13C6											
	PBL_RUN_BB_HSIIC1_RDY	PBL_RUN_BB_HSIIC1_RDY - @single_brd_lib.RADIO_MLB(i594_page 19)	3A7 21D4	PP3V2_CODEC	PP3V2_CODEC - @single_brd_lib.SINGLE_BRD	10D3	SAGE_PANEL_VSTM_OUT<11>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<11> -	17B1 18A6	USB_CONN_SNUB	USB_CONN_SNUB - @single_brd_lib.SINGLE_BRD	16B5											
	PMU_ADC_IN7	PMU_ADC_IN7 - @single_brd_lib.SINGLE_BRD	13C3 13C6	PP3V3_VIB	PP3V3_VIB - @single_brd_lib.SINGLE_BRD	8C6	SAGE_PANEL_VSTM_OUT<12>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<12> -	17B1 18A6	USB_REXT	USB_REXT - @single_brd_lib.SINGLE_BRD	2B4											
	PMU_AMUX_AY	PMU_AMUX_AY - @single_brd_lib.SINGLE_BRD	13C6 13D5 22C8	PP5V0_TRISTAR	PP5V0_TRISTAR - @single_brd_lib.SINGLE_BRD	15C4	SAGE_PANEL_VSTM_OUT<13>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<13> -	17C1 18A6	USB_VBUS_DETECT	USB_VBUS_DETECT - @single_brd_lib.SINGLE_BRD	2B4 12C8											
	PMU_AMUX_AY_CTRL	PMU_AMUX_AY_CTRL - @single_brd_lib.SINGLE_BRD	3C5 13D7	PP5V0_USB_CONN	PP5V0_USB_CONN - @single_brd_lib.SINGLE_BRD	16C5 22D8	SAGE_PANEL_VSTM_OUT<14>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<14> -	17C1 18A6	VBST_OUTH_STACK	VBST_OUTH_STACK - @single_brd_lib.SINGLE_BRD	17B4											
	PMU_AMUX_AY_R	PMU_AMUX_AY_R - @single_brd_lib.SINGLE_BRD	13D6	PP5V0_USB_PROTECT	PP5V0_USB_PROTECT - @single_brd_lib.SINGLE_BRD	12C8 16B8	SAGE_PANEL_VSTM_OUT<15>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<15> -	17C1 18A6	VBST_OUTL_STACK	VBST_OUTL_STACK - @single_brd_lib.SINGLE_BRD	17A4											
B	PMU_AMUX_BY	PMU_AMUX_BY - @single_brd_lib.SINGLE_BRD	13B6 13D5 22C8	PP5V0_USB_RPROT	PP5V0_USB_RPROT - @single_brd_lib.SINGLE_BRD	15C2 16B8	SAGE_PANEL_VSTM_OUT<16>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<16> -	17C1 18A6	VCENTER	VCENTER - @single_brd_lib.SINGLE_BRD	12C7											
	PMU_AMUX_BY_CTRL	PMU_AMUX_BY_CTRL - @single_brd_lib.SINGLE_BRD	3B5 13D7	PP5V1_GRAPE_VDDH	PP5V1_GRAPE_VDDH - @single_brd_lib.SINGLE_BRD	13B3 17D7	SAGE_PANEL_VSTM_OUT<17>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<17> -	17C1 18A6	VDD_REF	VDD_REF - @single_brd_lib.SINGLE_BRD	13C5											
	PMU_AMUX_BY_R	PMU_AMUX_BY_R - @single_brd_lib.SINGLE_BRD	13D6	PP5V7_LCD_AVDDH	PP5V7_LCD_AVDDH - @single_brd_lib.SINGLE_BRD	13B3 18C1 19B2	SAGE_PANEL_VSTM_OUT<18>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<18> -	17C1 18A6	VDD_RTC	VDD_RTC - @single_brd_lib.SINGLE_BRD	13C5											
	PMU_DWI_CLK	PMU_DWI_CLK - @single_brd_lib.SINGLE_BRD	13B6	PP5V7_LCD_AVDDH_CONN	PP5V7_LCD_AVDDH_CONN - @single_brd_lib.SINGLE_BRD	18C4	SAGE_PANEL_VSTM_OUT<19>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<19> -	17C1 18A6	VHP_FLYC	VHP_FLYC - @single_brd_lib.SINGLE_BRD	10C4											
	PMU_DWI_DI	PMU_DWI_DI - @single_brd_lib.SINGLE_BRD	13B6	PP5V7_SAGE_AVDDH	PP5V7_SAGE_AVDDH - @single_brd_lib.SINGLE_BRD	13B1 17B5 17D4	SAGE_PANEL_VSTM_OUT<20>	@single_brd_lib.SINGLE_BRD SAGE_PANEL_VSTM_OUT<20> -	17C1 18A6	VHP_FLYN	VHP_FLYN - @single_brd_lib.SINGLE_BRD	10C4											
	PMU_DWI_DO	PMU_DWI_DO - @single_brd_lib.SINGLE_BRD	13B6	PPN_ZQ	PPN_ZQ - @single_brd_lib.SINGLE_BRD	6B3	SAGE_VBIAS	@single_brd_lib.SINGLE_BRD SAGE_VBIAS -	17B3	VIB	VIB - @single_brd_lib.SINGLE_BRD	8B5											
	PMU_IRQ_L	PMU_IRQ_L - @single_brd_lib.SINGLE_BRD	3B7 13B6	PP_BATT_VCC	PP_BATT_VCC - @single_brd_lib.SINGLE_BRD	8C7 12D8 14D7 19D7 21C5	SAGE_VBIAS_DRAIN	@single_brd_lib.SINGLE_BRD SAGE_VBIAS_DRAIN -	17C4 19B6	VIB_LDO_EN	VIB_LDO_EN - @single_brd_lib.SINGLE_BRD	3B5 8C7											
	PMU_RESET_IN	PMU_RESET_IN - @single_brd_lib.SINGLE_BRD	13B6	PP_L19_VBOOST	PP_L19_VBOOST - @single_brd_lib.SINGLE_BRD	21C7 21D4 22D8	SAGE_VBST_OUTH	@single_brd_lib.SINGLE_BRD SAGE_VBST_OUTH -	17B3	VIB_PWM	VIB_PWM - @single_brd_lib.SINGLE_BRD	3B5 8C7											
	PMU_RESET_IN7	PMU_RESET_IN7 - @single_brd_lib.SINGLE_BRD	13B6	PP_LD014_2P65	PP_LD014_2P65 - @single_brd_lib.SINGLE_BRD	26D1 26D8 27B8 28C8 34C5	SAGE_VBST_OUTL	@single_brd_lib.SINGLE_BRD SAGE_VBST_OUTL -	17B3	VIB_PWM_G	VIB_PWM_G - @single_brd_lib.SINGLE_BRD	8C7											
	PMN5V7_LCM_AVDDN_CONN	PMN5V7_LCM_AVDDN_CONN - @single_brd_lib.SINGLE_BRD	18C4	PP_LD014_2P65	PP_LD014_2P65 - @single_brd_lib.SINGLE_BRD	42D7	SAGE_VBST_OUTL	@single_brd_lib.SINGLE_BRD SAGE_VBST_OUTL -	17B3	VIB_RETURN	VIB_RETURN - @single_brd_lib.SINGLE_BRD	8B5											
A	PMN5V7_SAGE_AVDDN	PMN5V7_SAGE_AVDDN - @single_brd_lib.SINGLE_BRD	17A5 17D4 18D1 19B8 19D1	PP_LD014_2P65	PP_LD014_2P65 - @single_brd_lib.SINGLE_BRD	41D5	SAGE_VBST_OUTL	@single_brd_lib.SINGLE_BRD SAGE_VBST_OUTL -	17B3	VOL_DWN_L	VOL_DWN_L - @single_brd_lib.SINGLE_BRD	3B7 8B7 13C6											
	PP1V0	PP1V0 - @single_brd_lib.SINGLE_BRD	2C7 2D3 7B4 7D5 12A4	PP_VCC_MAIN	PP_VCC_MAIN - @single_brd_lib.SINGLE_BRD	10D1 12C8 12D8 13B4 13C2	SAGE_VCPH	@single_brd_lib.SINGLE_BRD SAGE_VCPH -	17D2 18A4	VOL_DWN_L_CONN	VOL_DWN_L_CONN - @single_brd_lib.SINGLE_BRD	8B5											
	PP1V0_SRAM	PP1V0_SRAM - @single_brd_lib.SINGLE_BRD	5C7 12A4	PROX_FILT	PROX_FILT - @single_brd_lib.SINGLE_BRD	13C3 19D4	SAGE_VCPH_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_CONN -	18A5 18A8	VOL_UP_L	VOL_UP_L - @single_brd_lib.SINGLE_BRD	3B7 8B7 13C6											
	PP1V1_CPU0	PP1V1_CPU0 - @single_brd_lib.SINGLE_BRD	5D8 12D5	PROX_RX_EN_LV8	PROX_RX_EN_LV8 - @single_brd_lib.SINGLE_BRD	17C8	SAGE_VCPH_REF	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF -	17B5 18A4	VOL_UP_L_CONN	VOL_UP_L_CONN - @single_brd_lib.SINGLE_BRD	8B5											
	PP1V1_CPU0_FET	PP1V1_CPU0_FET - @single_brd_lib.SINGLE_BRD	12D4	PROX_RX_EN_CONN	PROX_RX_EN_CONN - @single_brd_lib.SINGLE_BRD	11C8 17B5	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	VPUMP	VPUMP - @single_brd_lib.SINGLE_BRD	12D5											
	PP1V1_CPU1	PP1V1_CPU1 - @single_brd_lib.SINGLE_BRD	5C8 12D3	PROX_TX_EN_LV8_L	PROX_TX_EN_LV8_L - @single_brd_lib.SINGLE_BRD	17B1 17B7	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	VREF	VREF - @single_brd_lib.SINGLE_BRD	13C5											
	PP1V1_CPU1_FET	PP1V1_CPU1_FET - @single_brd_lib.SINGLE_BRD	12D2	PROX_TX_EN_BUFF	PROX_TX_EN_BUFF - @single_brd_lib.SINGLE_BRD	11B2 17B2	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	VSW_CHG	VSW_CHG - @single_brd_lib.SINGLE_BRD	12C7											
	PP1V1_CPUB	PP1V1_CPUB - @single_brd_lib.SINGLE_BRD	5D8 12D1	RADIO_ON_L	RADIO_ON_L - @single_brd_lib.SINGLE_BRD	3A7 21D4	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	WDOG	WDOG - @single_brd_lib.SINGLE_BRD	2C4 13A7											
	PP1V1_SOC	PP1V1_SOC - @single_brd_lib.SINGLE_BRD	5D4 12C2	RADIO_ON_L	RADIO_ON_L - @single_brd_lib.SINGLE_BRD	26D3 26D8 28C8	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	WIFI_REG_ON	WIFI_REG_ON - @single_brd_lib.SINGLE_BRD	13B7 21C4											
	PP1V2	PP1V2 - @single_brd_lib.SINGLE_BRD	2C6 4A6 4C7 4D3 12B5	RCVR_CONN_N	RCVR_CONN_N - @single_brd_lib.SINGLE_BRD	11C5	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	WIFI_REG_ON_R	WIFI_REG_ON_R - @single_brd_lib.SINGLE_BRD	13B6											
	PP1V2_CAM0_CONN	PP1V2_CAM0_CONN - @single_brd_lib.SINGLE_BRD	20B5	RCVR_CONN_P	RCVR_CONN_P - @single_brd_lib.SINGLE_BRD	11C5	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	WLAN_HSIC3_RESUME	WLAN_HSIC3_RESUME - @single_brd_lib.SINGLE_BRD	3B7 21A4											
	PP1V2_SDRAM	PP1V2_SDRAM - @single_brd_lib.SINGLE_BRD	4A8 4D7 4D8 12B7 12C1	RCVR_N	RCVR_N - @single_brd_lib.SINGLE_BRD	9C4 11A8	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	WLAN_HSIC3_RESUME	WLAN_HSIC3_RESUME - @single_brd_lib.SINGLE_BRD	26D8 42B5											
	PP1V7_VA_DAC	PP1V7_VA_DAC - @single_brd_lib.SINGLE_BRD	12B4 14D4	RCVR_P	RCVR_P - @single_brd_lib.SINGLE_BRD	9C4 11A8	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	WLED_LX	WLED_LX - @single_brd_lib.SINGLE_BRD	13B3											
	PP1V8	PP1V8 - @single_brd_lib.SINGLE_BRD	2B7 2C3 2D7 3C7 3C7 3D2	RCVR_TEST	RCVR_TEST - @single_brd_lib.SINGLE_BRD	10C6 11A8	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	XTAL_24M_O_R	XTAL_24M_O_R - @single_brd_lib.SINGLE_BRD	2C3											
	PP1V8_ALWAYS	PP1V8_ALWAYS - @single_brd_lib.SINGLE_BRD	3D2 4B3 5A7 5B5 6B6 6B7	RESET_LV8_L	RESET_LV8_L - @single_brd_lib.SINGLE_BRD	2B7 12B2 13B6 15B4 18B1	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6	XTAL_GND	XTAL_GND - @single_brd_lib.SINGLE_BRD	2B2											
	PP1V8_CAM0_CONN	PP1V8_CAM0_CONN - @single_brd_lib.SINGLE_BRD	20C5	RF_RESET_L	RF_RESET_L - @single_brd_lib.SINGLE_BRD	21D4 22B8	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6														
	PP1V8_CAM0_REG	PP1V8_CAM0_REG - @single_brd_lib.SINGLE_BRD	20B7	REVERSE_GATE	REVERSE_GATE - @single_brd_lib.SINGLE_BRD	26C3 26D8	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18A5 18A6														
	PP1V8_CAM1_CONN	PP1V8_CAM1_CONN - @single_brd_lib.SINGLE_BRD	11C4	RINGER_A	RINGER_A - @single_brd_lib.SINGLE_BRD	3B8 8B7 13B4 13C6	SAGE_VCPH_REF_CONN	@single_brd_lib.SINGLE_BRD SAGE_VCPH_REF_CONN -	18														









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8			7			6			5			4			3			2			1																									
D	L1609_RF	IND_01005	radio_mlb[40A3]single_brd[21]	C	R70	RES_01005	single_brd[12C7]	B	TP6	TP_TP-P6	single_brd[22C7]	A	XW31	SHORT_SM	single_brd[20B6]																															
	L1610_RF	IND_01005	radio_mlb[40A3]single_brd[21]		R71	RES_01005	single_brd[2B3]		TP7	TP_TP-P6	single_brd[22C7]		XW32	SHORT10LP1_WITH_ALTS	single_brd[2B1]																															
	L1706_RF	IND_01005	radio_mlb[41C4]single_brd[21]		R72	RES_01005	single_brd[4D7]		TP8	TP_TP-P6	single_brd[22B7]		XW33	SHORT10LP1_WITH_ALTS	single_brd[12A3]																															
	L1707_RF	IND_01005	radio_mlb[41C4]single_brd[21]		R73	RES_01005	single_brd[4D7]		TP9	TP_TP-P6	single_brd[22B7]																																			
	L1709_RF	IND_01005	radio_mlb[41B4]single_brd[21]		R74	RES_01005	single_brd[6C2]		TP10	TP_TP-P6	single_brd[22B4]		XW36	SHORT_SM	single_brd[17D5]																															
	L1710_RF	RES_201	radio_mlb[41A7]single_brd[21]		R75	RES_01005	single_brd[14D2]		TP15	TP_TP-P6	single_brd[22C6]																																			
	L1713_RF	IND_01005	radio_mlb[41C4]single_brd[21]		R76	RES_01005	single_brd[3C7]		TP16	TP_TP-P6	single_brd[22C6]		XW37	SHORT_SM	single_brd[17B4]																															
	L1715_RF	IND_03015	radio_mlb[41D3]single_brd[21]		R77	RES_01005	single_brd[5C7]		TP17	TP_TP-P6	single_brd[22C6]		XW38	SHORT_SM	single_brd[16C3]																															
	L1716_RF	IND_01005	radio_mlb[41B6]single_brd[21]		R78	RES_01005	single_brd[6C7]		TP18	TP_TP-P6	single_brd[22D4]		XW201_RF	SHORT10LP1_WITH_ALTS	radio_mlb[26D5]single_brd[21]																															
	L1724_RF	IND_03015	radio_mlb[41D8]single_brd[21]		R79	RES_01005	single_brd[17B5]		TP19	TP_TP-P6	single_brd[22D4]		XW202_RF	SHORT10LP1_WITH_ALTS	radio_mlb[26D5]single_brd[21]																															
L1726_RF	FILTER_2P_01005	radio_mlb[41C7]single_brd[21]	R80	RES_01005	single_brd[17A5]	TP20	TP_TP-P6	single_brd[22D4]																																						
L1732_RF	IND_03015	radio_mlb[41D6]single_brd[21]	R81	RES_01005	single_brd[8C7]	TP21	TP_TP-P55	single_brd[22C4]	XW204_RF	SHORT10LP1_WITH_ALTS	radio_mlb[26D5]single_brd[21]																																			
L1812_RF	IND_0201	radio_mlb[42D5]single_brd[21]	R82	RES_01005	single_brd[6C6]	TP22	TP_TP-P55	single_brd[22C4]																							XW206_RF	SHORT10LP1_WITH_ALTS	radio_mlb[26C5]single_brd[21]													
PP1	PROBEPOINT_SM	single_brd[2B6]	R83	RES_01005	single_brd[15C7]	TP23	TP_TP-P55	single_brd[22C4]	XW207_RF	SHORT10LP25_WITH_ALT	radio_mlb[27C2]single_brd[21]																																			
PP2	PROBEPOINT_SM	single_brd[6B7]	R84	RES_01005	single_brd[15B7]	TP24	TP_TP-P55	single_brd[22C4]																							XW208_RF	SHORT10LP25_WITH_ALT	radio_mlb[28B6]single_brd[21]													
PP3	PROBEPOINT_SM	single_brd[6B7]	R85	RES_01005	single_brd[11B3]	TP25	TP_TP-P6	single_brd[22B4]	XW209_RF	SHORT10LP25_WITH_ALT	radio_mlb[27B2]single_brd[21]																																			
PP4	PROBEPOINT_SM	single_brd[2B6]	R86	RES_01005	single_brd[17C5]	TP26	TP_TP-P6	single_brd[22B4]																							XW210_RF	SHORT10LP25_WITH_ALT	radio_mlb[28B6]single_brd[21]													
PP5	PROBEPOINT_SM	single_brd[6B4]	R87	RES_01005	single_brd[13C2]	TP27	TP_TP-P6	single_brd[22B4]	XW211_RF	SHORT10LP25_WITH_ALT	radio_mlb[27B2]single_brd[21]																																			
PP6	PROBEPOINT_SM	single_brd[6B4]	R88	RES_01005	single_brd[15B3]	TP28	TP_TP-P6	single_brd[22A6]																							XW303_RF	SHORT10LP1_WITH_ALTS	radio_mlb[28A4]single_brd[21]													
PP7	PROBEPOINT_SM	single_brd[17C7]	R89	RES_01005	single_brd[18C6]	TP29	TP_TP-P6	single_brd[22A6]	XW304_RF	SHORT10LP1_WITH_ALTS	radio_mlb[28A3]single_brd[21]																																			
PP8	PROBEPOINT_SM	single_brd[17C7]	R90	THERMISTTER_0201	single_brd[12A4]	TP32	TP_TP-P6	single_brd[22B4]																							XW901_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33D6]single_brd[21]													
PP9	PROBEPOINT_SM	single_brd[17B5]	R91	RES_01005	single_brd[19A5]	U1	H5P_FCMPSP	single_brd[2C5]	XW902_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33D6]single_brd[21]																																			
PP10	PROBEPOINT_SM	single_brd[6B7]	R92	RES_01005	single_brd[12B3]	U1	H5P_FCMPSP	single_brd[3D4 3B7]																							XW903_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33D6]single_brd[21]													
PP11	PROBEPOINT_SM	single_brd[17B7]	R93	RES_01005	single_brd[3D2]	U1	H5P_FCMPSP	single_brd[4D2 4D6]	XW904_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33D4]single_brd[21]																																			
PP14	PROBEPOINT_SM	single_brd[3D2]	R94	RES_01005	single_brd[22B4]	U1	H5P_FCMPSP	single_brd[5D2 5D5]																							XW905_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33D4]single_brd[21]													
PP16	PROBEPOINT_SM	single_brd[3D2]	R95	RES_01005	single_brd[17A4]	U1	H5P_FCMPSP	single_brd[6C7]	XW906_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33D4]single_brd[21]																																			
PP18	PROBEPOINT_SM	single_brd[17B1]	R96	RES_01005	single_brd[14C6]	U1	H5P_FCMPSP	single_brd[7B4 7D7 7D8 7D4]																							XW907_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33C7]single_brd[21]													
PP102_RF	PROBEPOINT_SM	radio_mlb[42A4]single_brd[21]	R97	RES_01005	single_brd[13C3]	U2	CRTL1608AL_WCSP	single_brd[15C5]	XW908_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33B7]single_brd[21]																																			
PP106_RF	PROBEPOINT_SM	radio_mlb[26C6]single_brd[21]	R98	RES_01005	single_brd[10D6]	U3	74AUP2G34_SOT1115	single_brd[3A3]																							XW909_RF	SHORT10LP1_WITH_ALTS	radio_mlb[33A7]single_brd[21]													
PP107_RF	PROBEPOINT_SM	radio_mlb[26C6]single_brd[21]	R99	RES_01005	single_brd[13C3]	U4	FLASH_XG28_60LGA_LGA	single_brd[6C4]	XW1202_RF	SHORT10LP25_WITH_ALT	radio_mlb[36C7]single_brd[21]																																			
PP1801_RF	PROBEPOINT_SM	radio_mlb[42B4]single_brd[21]	R100	RES_01005	single_brd[10B6]	U5	74AUP3G04_SOT1089	single_brd[17B2]																							XW1203_RF	SHORT10LP25_WITH_ALT	radio_mlb[36C7]single_brd[21]													
PP1802_RF	PROBEPOINT_SM	radio_mlb[42A3]single_brd[21]	R101	RES_01005	single_brd[10B4]	U6	74LVC1G32GP_SOT891	single_brd[13A6]	XW1801_RF	SHORT_SHORT-01005	radio_mlb[42C8]single_brd[21]																																			
PP1803_RF	PROBEPOINT_SM	radio_mlb[42A3]single_brd[21]	R102	RES_01005	single_brd[10C2]	U7	AGATHA_II_BGA	single_brd[12D6]																							XW1802_RF	SHORT_SHORT-0201	radio_mlb[42D7]single_brd[21]													
PP1804_RF	PROBEPOINT_SM	radio_mlb[42A3]single_brd[21]	R103	RES_01005	single_brd[10C2]	U7	AGATHA_II_BGA	single_brd[13D8 13C5]	Y1	CRYSTAL_4PIN1_1.60X1	single_brd[2C2]																																			
PP1805_RF	PROBEPOINT_SM	radio_mlb[42A3]single_brd[21]	R104	RES_01005	single_brd[10A4]	U8	AP3GDL20_LGA	single_brd[14B2]																							Y2	CRYSTAL_2012-1	single_brd[12A7]													
PP1806_RF	PROBEPOINT_SM	radio_mlb[42A3]single_brd[21]	R104_RF	RES_01005	radio_mlb[26A5]single_brd[21]	U9	LREG_P5907_USMD	single_brd[8C7]	Y301_RF	CRYSTAL_4PIN1_2.5X2.2	radio_mlb[28B4]single_brd[21]																																			
PP1807_RF	PROBEPOINT_SM	radio_mlb[42A3]single_brd[21]	R105	RES_01005	radio_mlb[26A5]single_brd[21]	U9	LREG_P5907_USMD	single_brd[8C7]																																						
Q1	TRA_MOSFET_NCHN_3P3_	single_brd[11B3]	R105_RF	RES_01005	single_brd[17B5]	U10	LREG_TPT799_WCSP	single_brd[13B2]																																						
Q2	TRA_DUAL_CMNSRC_PCH_	single_brd[16B7 16B6]	R106	RES_01005	single_brd[12B7]	U11	74LVC2G07_SOT891	single_brd[13D6]																																						
Q3	TRA_MOSFET_PCHN_3P9_	single_brd[19B4]	R107	RES_01005	single_brd[16D7]	U12	CUMULUS_BGA63_WLBGA	single_brd[17C6]																																						
Q4	TRA_MOSFET_PCHN_9P_	single_brd[12C8]	R108	THERMISTTER_0201	single_brd[12A8]	U13	LREG_P5908_USMD	single_brd[20B6]																																						
Q5	TRA_MOSFET_NCHN_6P3_	single_brd[12D5]	R109	RES_0201	single_brd[12B8]	U14	SAGE2_1_CSP	single_brd[17D3]																																						
Q6	TRA_MOSFET_NCHN_6P3_	single_brd[12D2]	R110	THERMISTTER_0201	single_brd[12A7]	U15	DCDC_LM34908_USMD	single_brd[19D4]																																						
Q7	TRA_MOSFET_NCHN_3P11	single_brd[19B3]	R111	RES_01005	single_brd[15C3]	U16	AK8963C_CSP-POP	single_brd[14A8]																																						
Q8	TRA_MOSFET_NCHN_3P3_	single_brd[8C6]	R112	RES_01005	single_brd[13B6]	U17	LM3563_BGA	single_brd[19D6]																																						
Q10	TRA_MOSFET_NCHN_3P11	single_brd[19B7]	R113	RES_01005	single_brd[13B6]	U18	AP3080AD_LGA	single_brd[14B7]																																						
R1	RES_01005	single_brd[2D7]	R114	RES_01005	single_brd[13B6]	U19	CS35L19B_WLCSP	single_brd[14D5]																																						
R2	RES_01005	single_brd[17B1]	R115	RES_01005	single_brd[3D2]	U20	LREG_P5907_USMD	single_brd[10D2]																																						
R3	RES_01005	single_brd[11A7]	R116	RES_201	single_brd[13D4]	U21	CS42L65B_FCBGA	single_brd[9C2 9C5]																																						
R4	RES_01005	single_brd[13D5]	R117	RES_01005	single_brd[8C7]	U22	CS42L65B_FCBGA	single_brd[10C5]																																						
R5	RES_01005	single_brd[3D5]	R118	RES_01005	single_brd[8C6]	U23	TPS22924_CSP	single_brd[12B2]																																						
R6	RES_01005	single_brd[2B3]	R119	RES_01005	single_brd[16B3]	U23	LM3534_BGA	single_brd[13B3]																																						
R7	RES_01005	single_brd[2C3]	R120	RES_01005	single_brd[17A4]	U201_RF	PM8018_WLNSP105_BGA	radio_mlb[27C5]single_brd[21]																																						
R8	RES_01005	single_brd[6B2]	R123	RES_201	single_brd[14C3]	U201_RF	PM8018_WLNSP105_BGA	radio_mlb[28D3 28B7 28B4 28C7]single_brd[21]																																						
R9	RES_01005	single_brd[11A7]	R124	RES_01005	single_brd[19A7]	U501_RF	MODEM_MM9615M_BGA	radio_mlb[29D4 29B4 29C7 29D2]single_brd[21]																																						
R10	RES_01005	single_brd[16B2]	R125	RES_01005	single_brd[11C7]	U501_RF	MODEM_MM9615M_BGA	radio_mlb[30D7 30C3]single_brd[21]																																						
R11	RES_01005	single_brd[10D2]	R127	RES_01005	single_brd[16C2]	U601_RF	FLASH_MX25U1635E_WLC	radio_mlb[30B7]single_brd[21]																																						
R12	RES_01005	single_brd[3C7]	R128	RES_01005	single_brd[16C2]	SP																																								
R13	RES_01005	single_brd[8C7]	R134	RES_01005	single_brd[16B7]	U701_RF	TRANSCIEVER_BGA196_B	radio_mlb[31D3 31D6]single_brd[21]																																						
R14	RES_01005	single_brd[11B2]	R136	RES_01005	single_brd[17B7]	GA196																																								
R15	RES_01005	single_brd[11B2]	R137	RES_01005	single_brd[6C5]	U701_RF	TRANSCIEVER_BGA196_B	radio_mlb[33D2 33B2]single_brd[21]																																						
R16	RES_01005	single_brd[3D5]	R141	RES_01005	single_brd[20C5]	GA196																																								
R17	RES_01005	single_brd[3D3]	R143	RES_01005	single_brd[6C5]	U801_RF	SWI_XM08303S_LLP	radio_mlb[32C5]single_brd[21]																																						
R18	RES_01005	single_brd[3D3]	R145	RES_01005	single_brd[9B3]	U1001_RF	AMP_SKY77487_LGA	radio_mlb[34C5]single_brd[21]																																						
R19	RES_01005	single_brd[3D5]	R150	RES_01005	single_brd[10A7]	U1101_RF	AMP_ACMF117_LGA	radio_mlb[35C5]single_brd[21]																																						
R20	RES_01005	single_brd[3A4]	R151	RES_01005	single_brd[10B7]	U1102_RF	FILTER_SAW_SAYEY710M	radio_mlb[35C2]single_brd[21]																																						
R21	RES_01005	single_brd[3D2]	R152	RES_01005	single_brd[18B3]	CAOF57_LLP																																								
R22	RES_01005	single_brd[3A4]	R301_RF	RES_01005	radio_mlb[28D4]single_brd[21]	U1201_RF	MAX77100_WLP	radio_mlb[36D7]single_brd[21]																																						
R23	RES_01005	single_brd[16D2]	R302_RF	RES_01005	radio_mlb[28D3]single_brd[21]	U1202_RF	SKY77352_LGA	radio_mlb[36C4]single_brd[21]																																						
R24	RES_01005	single_brd[13A6]	R303_RF	RES_01005	radio_mlb[28D4]single_brd[21]	U1301_RF	LMSP3NQPD06_LGA	radio_mlb[37C3]single_brd[21]																																						
R25	RES_01005	single_brd[13D5]	R304_RF	RES_01005	radio_mlb[28D3]single_brd[21]	U1401_RF	AMP_SKY77486_LGA	radio_mlb[38C5]single_brd[21]																																						
R26	RES_01005	single_brd[17C7]	R307_RF	RES_01005	radio_mlb[28B4]single_brd[21]	U1501_RF	AMP_TQM666084_LGA	radio_mlb[39C5]single_brd[21]																																						
R27	RES_01005	single_brd[4A8]	R310_RF	RES_01005	radio_mlb[28B2]single_brd[21]	U1601_RF	SWI_HPQSMFUAL127_LGA	radio_mlb[40D5]single_brd[21]																																						
R28	RES_01005	single_brd[4A8]	R317_RF	RES_01005	radio_mlb[28C7]single_brd[21]	U1701_RF	RF1102_1_2_WLCSP14	radio_mlb[41D5]single_brd[21]																																						
R29	RES_01005	single_brd[4A6]	R318_RF	RES_01005	radio_mlb[28C8]single_brd[21]	R1801_RF	LBBS52HTW501_LGA	radio_mlb[42C6]single_brd[21]																																						
R30	RES_01005	single_brd[4A6]	R319_RF	RES_01005	radio_mlb[28C8]single_brd[21]	U1802_RF	74AUP1G08_SOT891	radio_mlb[42A7]single_brd[21]																																						
R31	RES_01005	single_brd[4A5]	R320_RF	RES_01005	radio_mlb[28B4]single_brd[21]	U1804_RF	FIL_DIPLEXER_HILCOCM	radio_mlb[42D2]single_brd[21]																																						
R32	RES_01005	single_brd[4A5]	R501_RF	RES_01005	radio_mlb[29A5]single_brd[21]																																									
R33	RES_01005	single_brd[4A4]	R502_RF	RES_01005	radio_mlb[29B2]single_brd[21]																																									
R34	RES_01005	single_brd[4A4]	R504_RF	RES_01005	radio_mlb[29B4]single_brd[21]																																									
R35	RES_201	single_brd[14C4]	R505_RF	RES_01005	radio_mlb[29B6]single_brd[21]																																									
R36	RES_01005	single_brd[17A2]	R601_RF	RES_01005	radio_mlb[30C4]single_brd[21]																																									
R37	RES_01005	single_brd[7D2]	R604_RF	RES_01005	radio_mlb[30A4]single_brd[21]																																									
R38	RES_01005	single_brd[7C2]	R605_RF	RES_01005	radio_mlb[30A3]single_brd[21]																																									
R39	RES_01005	single_brd[7D2]	R608_RF	RES_01005	radio_mlb[29D1]single_brd[21]																																									
R40	RES_01005	single_brd[7C2]	R701_RF	RES_01005	radio_mlb[31D7]single_brd[21]																																									
R41	RES_01005	single_brd[7D2]	R703_RF	RES_01005	radio_mlb[31C8]single_brd[21]																																									
R42	RES_01005	single_brd[7D2]	R704_RF	RES_01005	radio_mlb[31D8]single_brd[21]																																									
R43	RES_201	single_brd[15C7]	R705_RF	RES_01005	radio_mlb[31C7]single_brd[21]																																									
R44	RES_201	single_brd[15C7]	R1002_RF	RES_201	radio_mlb[34B2]single_brd[21]																																									
R45	RES_201	single_brd[11C3]	R1101_RF	RES_01005	radio_mlb[35C7]single_brd[21]																																									
R46	RES_01005	single_brd[18B2]	R1102_RF	RES_01005	radio_mlb[35C8]single_brd[21]																																									
R47	RES_01005	single_brd[18A5]	R1204_RF	IND_0201	radio_mlb[36B3]single_brd[21]																																									
R48	RES_01005	single_brd[18A5]	R1301_RF	RES_01005	radio_mlb[37B5]single_brd[21]																																									
R49	RES_01005	single_brd[18A5]	R1302_RF	RES_01005	radio_mlb[37C5]single_brd[21]																																									
R50	RES_01005	single_brd[8B3]	R1303_RF	RES_01005	radio_mlb[37B5]single_brd[21]																																									
R51	RES_01005	single_brd[8B3]	R1304_RF	RES_201	radio_mlb[37B2]single_brd[21]																																									
R52	RES_01005	single_b																																												