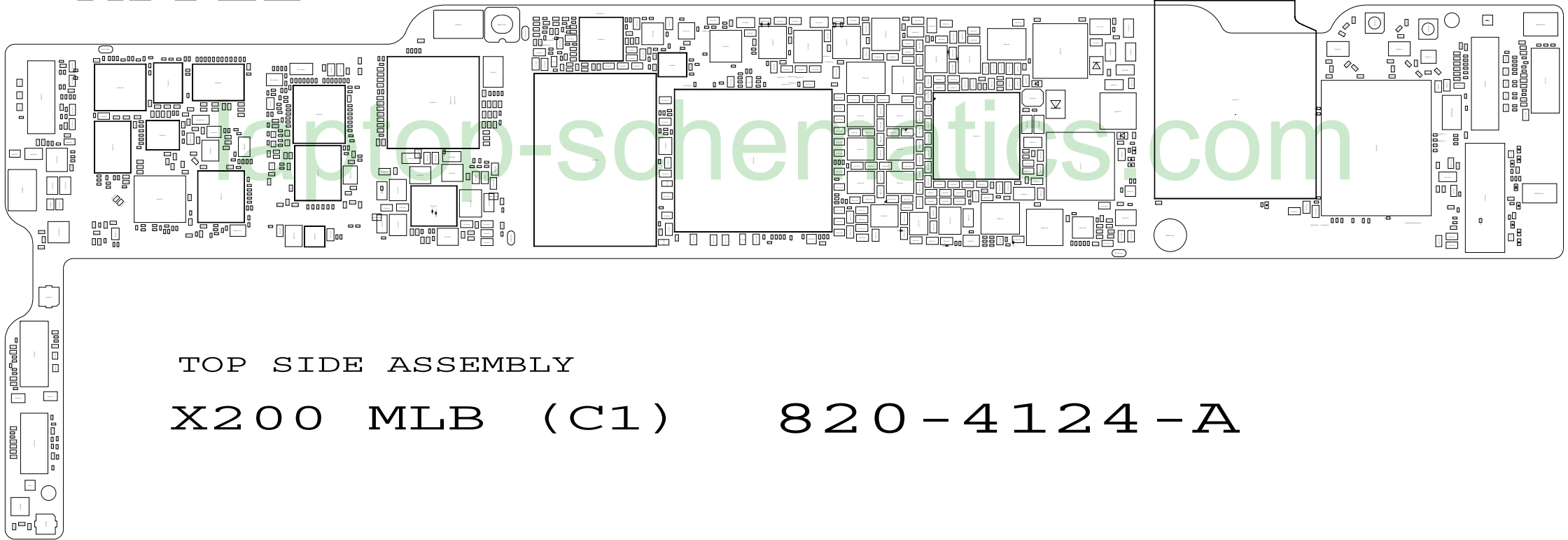


APPLE



# X200

## MLB-C1

LAST\_MODIFIED= Tue Oct 29 15:52:27 2013

PDF	CSA	CONTENTS	SYNC MASTER	DATE
1	1	TABLE OF CONTENTS	N/A	N/A
2	2	BLOCK DIAGRAM: SYSTEM	J85_MLB_I2	04/02/2013
3	4	BOM TABLES	J72_MLB_I1	26/2012
4	6	SOC: MAIN	N/A	04/18/2011
5	7	SOC: I/OS	N/A	05/05/2011
6	8	SOC: NAND	N/A	04/18/2011
7	9	SOC: DP,MIPI	MLB	05/04/2012
8	10	SOC: SRAM, IO PWRS	N/A	04/18/2011
9	11	SOC: VDD, SRAM, CPU, GPU PWRS	N/A	04/18/2011
10	12	SOC: MISC & ALIASES	N/A	04/11/2011
11	13	IO: TRISTAR	N/A	N/A
12	14	NAND STORAGE	MLB	05/04/2012
13	17	TOUCH: SUPPORT CKT & CONN	N/A	06/21/2010
14	18	AUDIO: HP FLEX CONN	N/A	03/31/2011
15	19	AUDIO: L81 CODEC	KAVITHA	01/18/2012
16	20	AUDIO: CS35L19A AMPS	KAVITHA	01/18/2012
17	21	BUTTON: CONN	N/A	N/A
18	22	VIDEO: EDP SUPPORT & CONN	J85_MLB_I2	05/2012
19	24	SENSOR: OSCAR	J72_MLB_I1	26/2012
20	26	CAMERA: FF-ALS CONN & FILTERS	J85_MLB_I2	03/2012

PDF	CSA	CONTENTS	SYNC MASTER	DATE
21	27	SENSOR: ACCEL, COMPASS, GYRO	N/A	N/A
22	28	SENSOR: PROX	J85_MLB_I2	05/12
23	29	CAMERA: REAR CONN & FILTERS	N/A	N/A
24	30	CELL:AP INTERFACE & DEBUG CONNECTORS	J85_MLB_I2	03/2013
25	32	CELL: BASEBAND PMU (1 OF 2)	RADIO_MLB_I1	08/2013
26	33	CELL: BASEBAND PMU (2 OF 2)	RADIO_MLB_I1	08/2013
27	34	CELL: BASEBAND (1 OF 2)	RADIO_MLB_I1	08/2013
28	35	CELL: BASEBAND (2 OF 2)	RADIO_MLB_I1	08/2013
29	36	CELL: RF TRANSCEIVER (1 OF 2)	RADIO_MLB_I1	08/2013
30	37	CELL: RF TRANSCEIVER (2 OF 2)	RADIO_MLB_I1	08/2013
31	38	CELL: RX MATCHING	RADIO_MLB_I1	08/2013
32	39	CELL: RF TRANSCEIVER (3 OF 4)	RADIO_MLB_I1	08/2013
33	40	CELL: PENTABAND PA	RADIO_MLB_I1	08/2013
34	41	CELL: BAND 2/3 PAD	RADIO_MLB_I1	08/2013
35	42	CELL: BAND 7/20 PAD	RADIO_MLB_I1	08/2013
36	43	CELL: BAND 5/8 PAD	RADIO_MLB_I1	08/2013
37	44	CELL: 2G PA	RADIO_MLB_I1	08/2013
38	45	CELL: PA DCDC CONVERTER	RADIO_MLB_I1	08/2013
39	46	CELL: ASM AND HB LTE FRONT-END	RADIO_MLB_I1	08/2013
40	47	CELL: RX DIVERSITY	RADIO_MLB_I1	08/2013
41	48	CELL: GPS	RADIO_MLB_I1	08/2013
42	49	CELL: ANTENNA FEEDS	RADIO_MLB_I1	08/2013
43	57	IO: FILTERS & HOTBAR CONN	N/A	04/18/2011
44	58	WIFI/BT: MODULE	WIFI_DEV05	20/2013
45	75	POWER: BATTERY CONNECTOR	N/A	N/A
46	81	PMU: ANYA PAGE 1	J72_MLB_I1	26/2012
47	82	PMU: ANYA PAGE 2	J85_MLB_I2	03/2012
48	83	PMU: ANYA PAGE 3	J72_MLB_I1	26/2012
49	84	PMU: ANYA PAGE 4	J72_MLB_I1	26/2012
50	85	POWER: PP1V8_SW	J85_MLB_I1	26/2012
51	90	SEP: EEPROM & SOC DEBUG	J72_MLB_I1	26/2012
52	93	TEST: TP/HOLES/FIDUCIALS	J85_MLB_I2	03/12
53	94	TEST: EE TP/PP	J72_MLB_I1	26/2012
54	121	POWER: ALIASES	J72_MLB_I1	26/2012

### SCH AND BOARD PART NUMBERS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
051-0886	1	SCH_MLB-C1,X200	SCH1	
820-4124	1	PCBF_MLB-C1,X200	PCB1	

DRAWING TITLE

SCH,MLB-C1,X200

Apple Inc.

DRAWING NUMBER

051-0886

SIZE

D

REVISION

A.0.0

BRANCH

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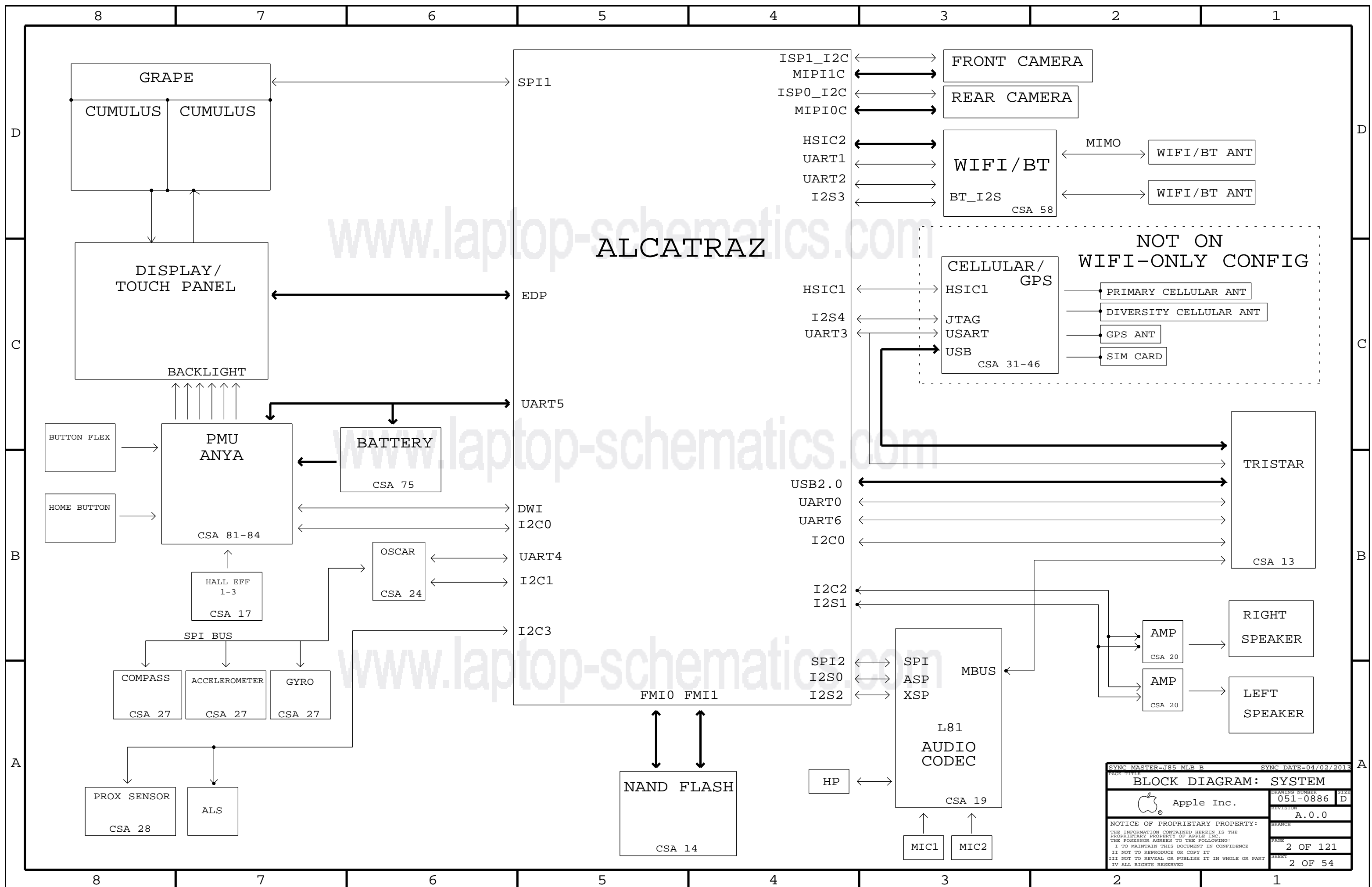
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SHEET

1 OF 54



Power aliases required by this page:  
(NONE)

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Signal aliases required by this page:  
(NONE)

---

BOM options provided by this page:

```
COMMON
ALTERNATE
16GB_PROD
32GB_PROD
64GB_PROD
128GB_PROD

DEVELOPMENT_JTAG_TAP
JTAG_DAP
MLB (WDOG TO PMU)
```

ANDGATE\_TI  
FERRITE\_TY  
FERRITE\_TDK

BOM GROUP	BOM OPTIONS
BASIC	COMMON, ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339S0223	339S0213		U5800	

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
806-6207	1	FENCE,TALL,MLB,X221	PD_FENCE_MLB	CRITICAL	
806-7613	1	FENCE,RADIO,MLB,C BRD,X221	PD_CAN_RADIO	CRITICAL	

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-7639	1	EEEE FOR 639-5393 (X200C1 GOOD)	FNJD	CRITICAL	EEEE_X200C_GOOD
825-7639	1	EEEE FOR 639-5394 (X200C1 BETTER)	FNJ5	CRITICAL	EEEE_X200C_BETTER
825-7639	1	EEEE FOR 639-5385 (X200C1 BEST)	FNJ9	CRITICAL	EEEE_X200C_BEST
825-7639	1	EEEE FOR 639-5386 (X200C1 BEST+)	FNJH	CRITICAL	EEEE_X200C_BEST+
825-7639	1	EEEE FOR 639-5387 (X200C1 ULTIMATE)	FNJ6	CRITICAL	EEEE_X200C_ULTIMATE
825-7639	1	EEEE FOR 639-5388 (X200C1 GOOD IVS)	FNJ8	CRITICAL	EEEE_X200C_GOOD_IVS
825-7639	1	EEEE FOR 639-5389 (X200C1 BETTER IVS)	FNJF	CRITICAL	EEEE_X200C_BETTER_IVS
825-7639	1	EEEE FOR 639-5390 (X200C1 BEST IVS)	FNJC	CRITICAL	EEEE_X200C_BEST_IVS
825-7639	1	EEEE FOR 639-5391 (X200C1 BEST+ IVS)	FNJ7	CRITICAL	EEEE_X200C_BEST+_IVS
825-7639	1	EEEE FOR 639-5392 (X200C1 ULTIMATE IVS)	FNJG	CRITICAL	EEEE_X200C_ULTIMATE_IVS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
338S1192	1	GYRO, ST MICRO	U2720	CRITICAL	GYRO_STMICRO
338S1218	1	GYRO, INVENSENSE	U2720	CRITICAL	GYRO_INVENSENSE
132S0391	1	CAP 0.01UF 25V 0201	C2726	CRITICAL	GYRO_STMICRO
132S0288	1	CAP 0.1UF 16V 0201	C2726	CRITICAL	GYRO_INVENSENSE

338S1158 OLD GYRO - ST MICRO  
OLDER INVENSENSE P/N 338S1135  
OLD INVENSENSE P/N 338S1200 (3/22/13)

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
338S1163	1	IC,ACCEL,3-AXIS,DIG,RMA282,LGA14	U2700	CRITICAL	
PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:	

338S1233 ST MICRO - DISQUAL'ED  
338S1114 OLD ACCEL - ST MICRO  
338S1191 OLD ACCEL - ST MICRO

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0207	1	H6P + 1GB ELPIDA	U0652	CRITICAL	

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339S0208	339S0207		U0652	HYNIX DDR

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
343S0656	1	IC,PMU,ANYA,D2089A1,OTPKX,FCCSP342	U8100	CRITICAL	


PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
335S0921	1	TOS,19NM,FPN1.5,C,DDP,16GB	U1400	16GB
335S0922	1	TOS,19NM,FPN1.5,C,QDP,32GB	U1400	32GB
335S0923	1	TOS,19NM,FPN1.5,C,ODP,64GB	U1400	64GB
335S0929	1	TOS,19NM,FPN1.5,C,12DP,64GB	U1400	96GB
335S0924	1	TOS,19NM,FPN1.5,C,16DP,128GB	U1400	128GB

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0930	335S0921	16GB	U1400	HYNIX 20NM PPN1.5 16G
335S0931	335S0922	32GB	U1400	HYNIX 20NM PPN1.5 32G
335S0932	335S0923	64GB	U1400	HYNIX 20NM PPN1.5 64G

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
353S4272	1	IC, SLC5AP1423V, PWR SW, GREENPFT3, 4A, TDFP8	U2200	

NOTE: FOLLOWING J72, U2200 USES 353S3672 FOOTPRINT (353S4272 HAS SMALLER PADS DUE TO NEW DFM RULES)

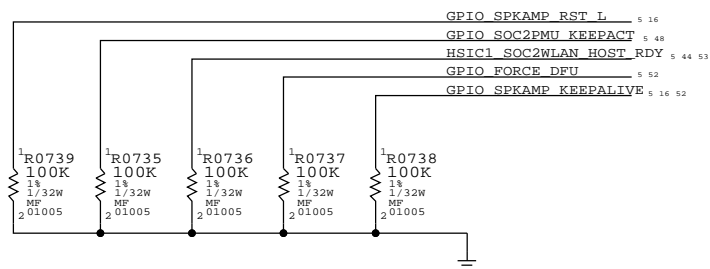
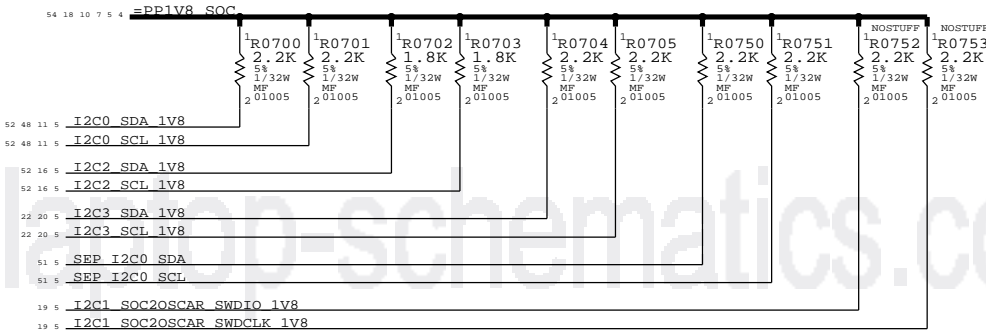
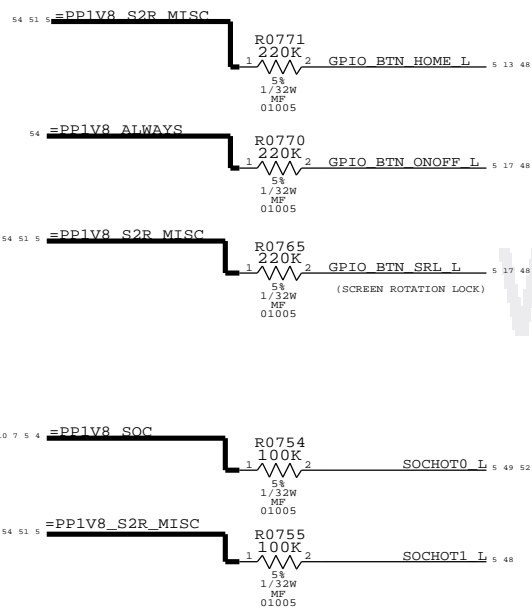
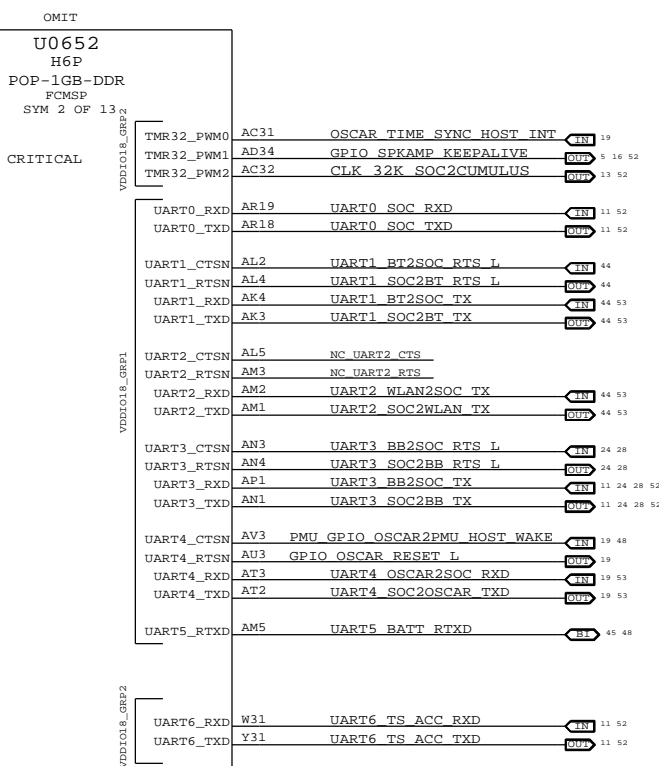
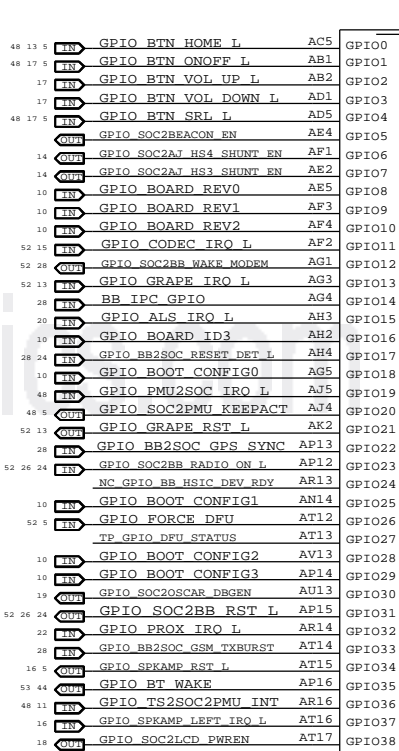
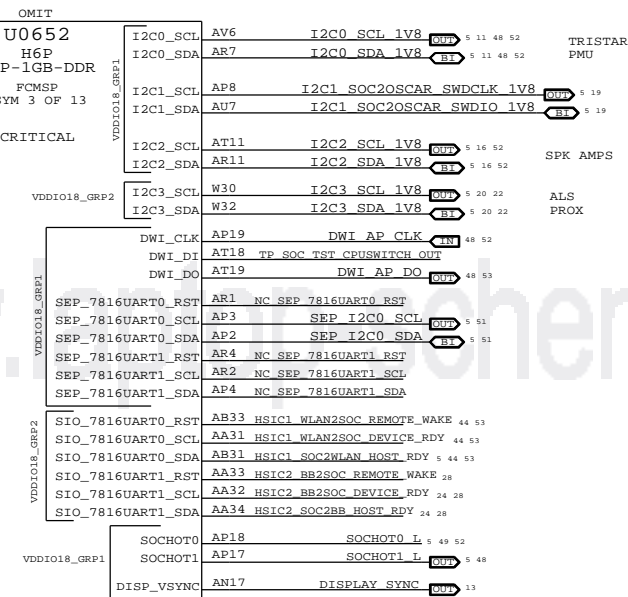
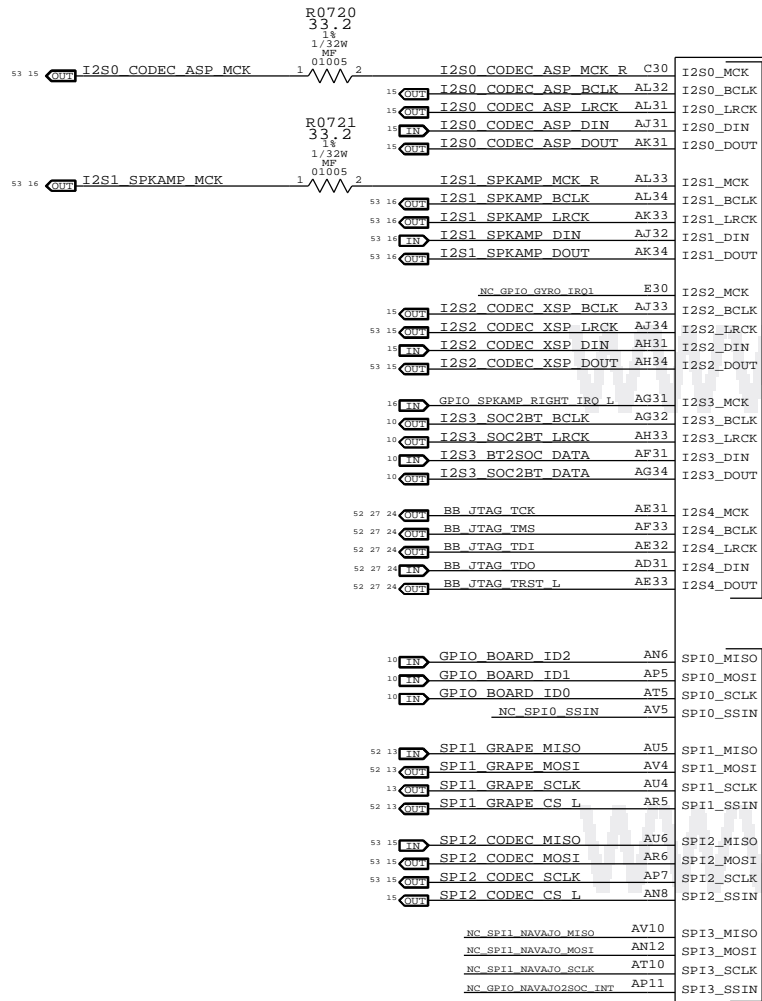
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## D

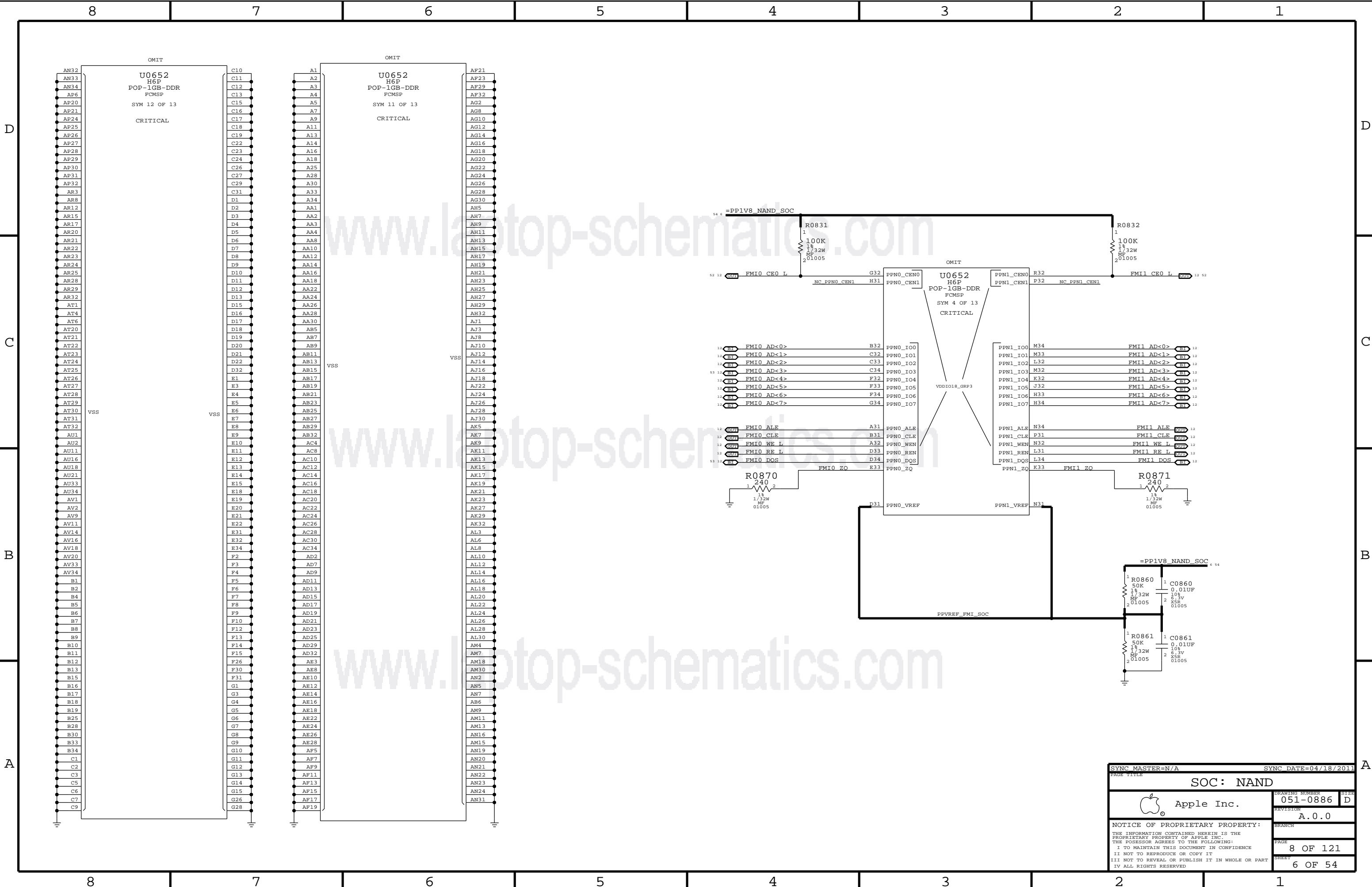
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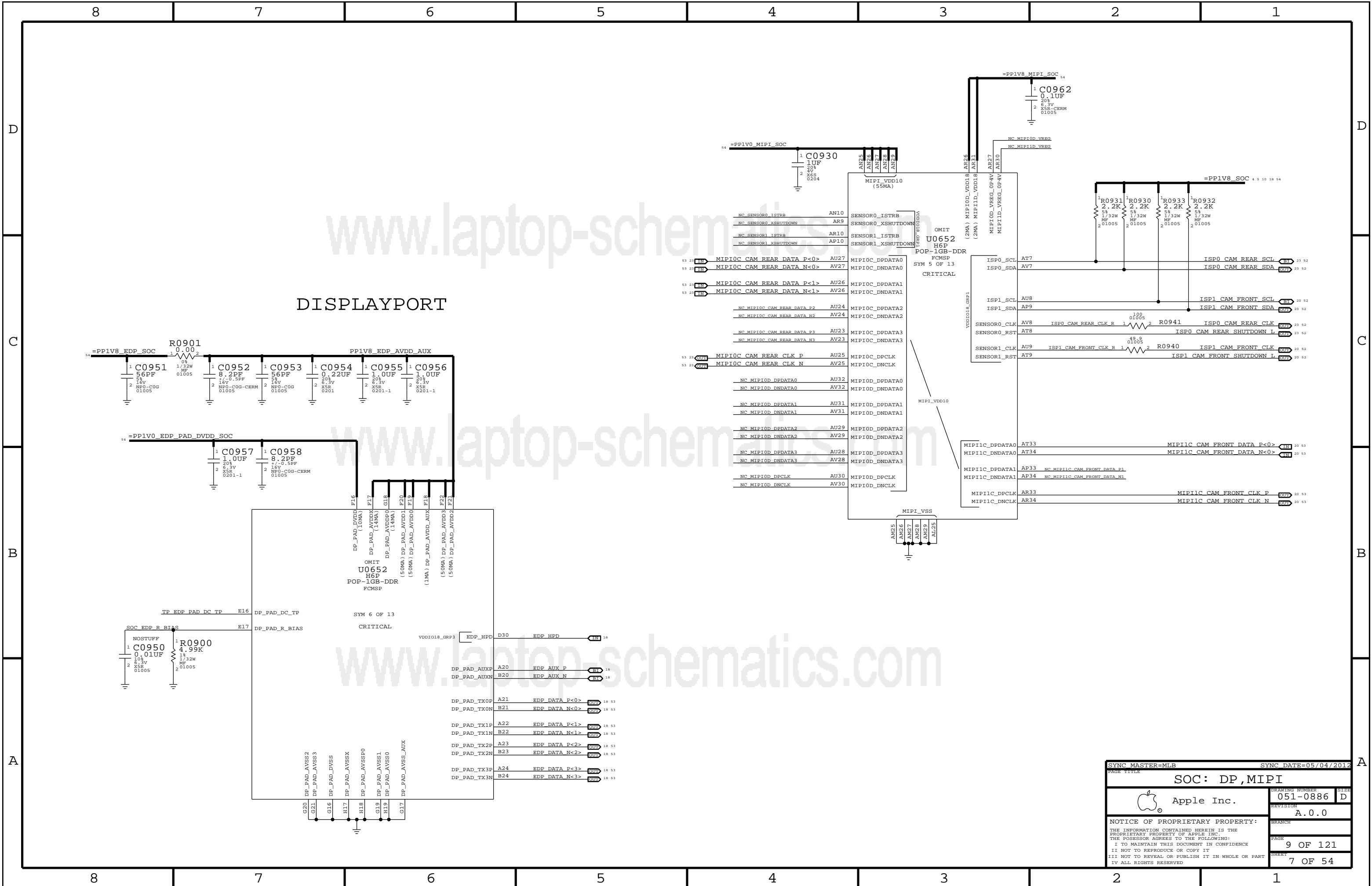
## SOC I/Os



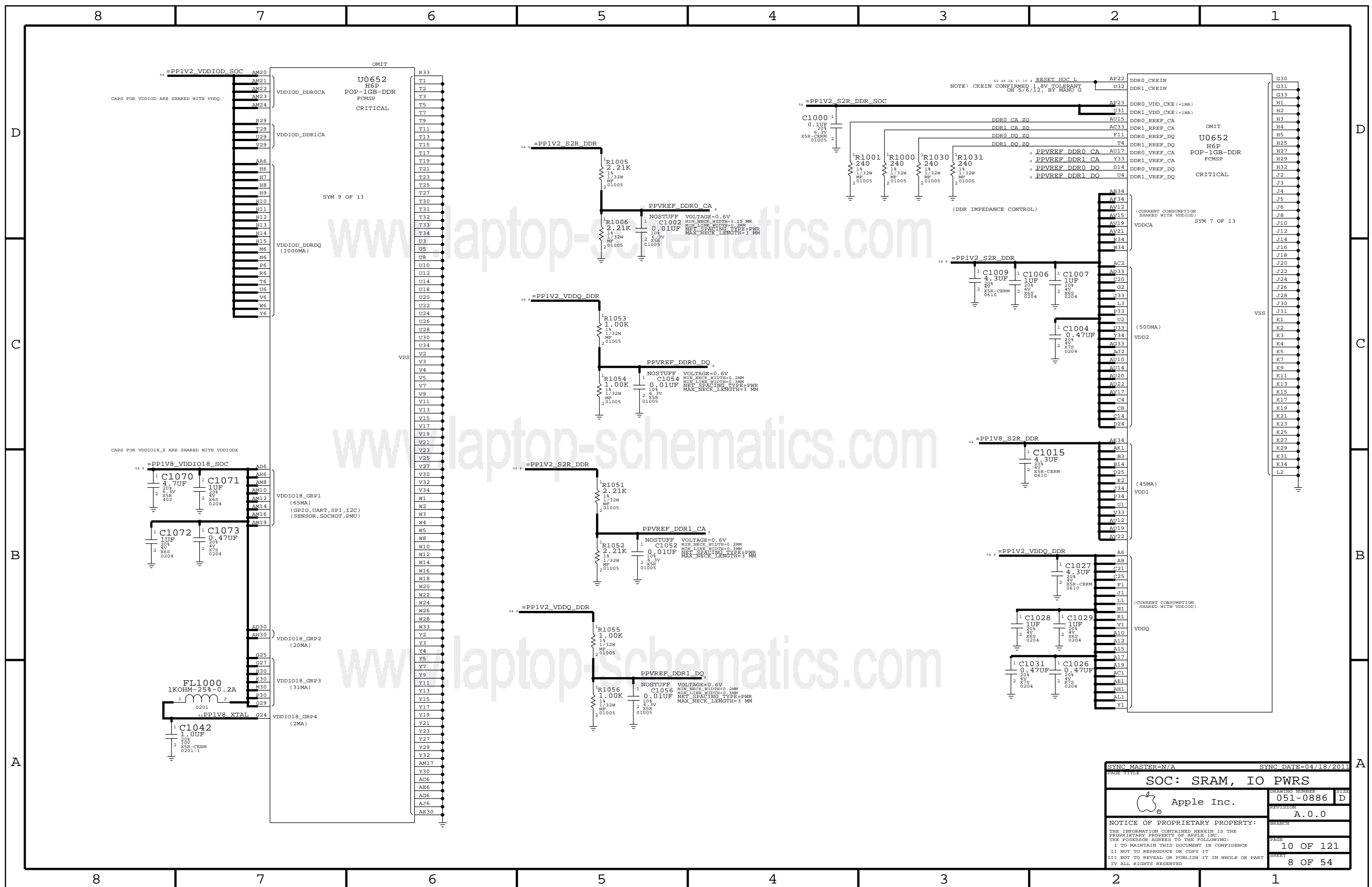
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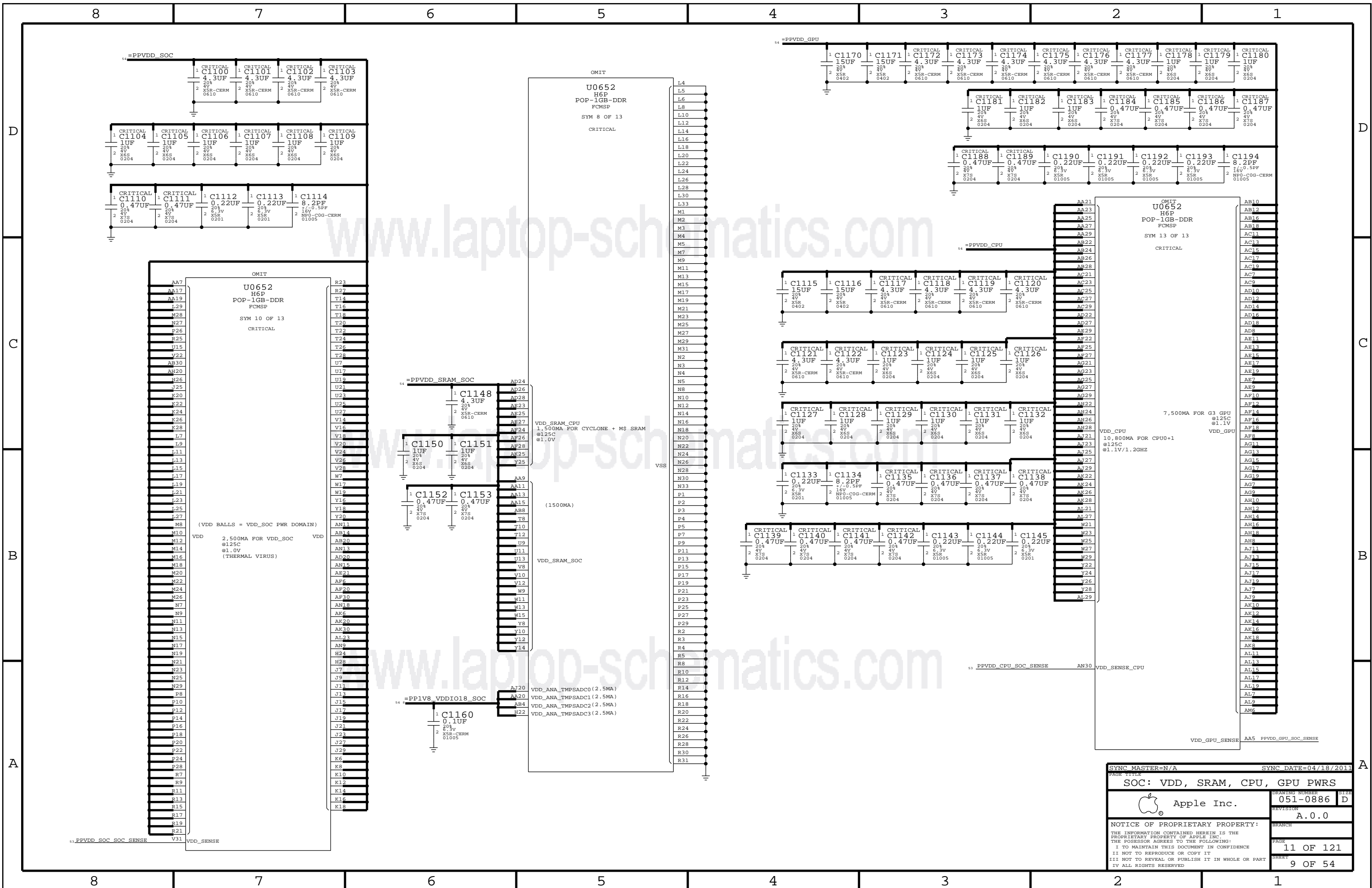


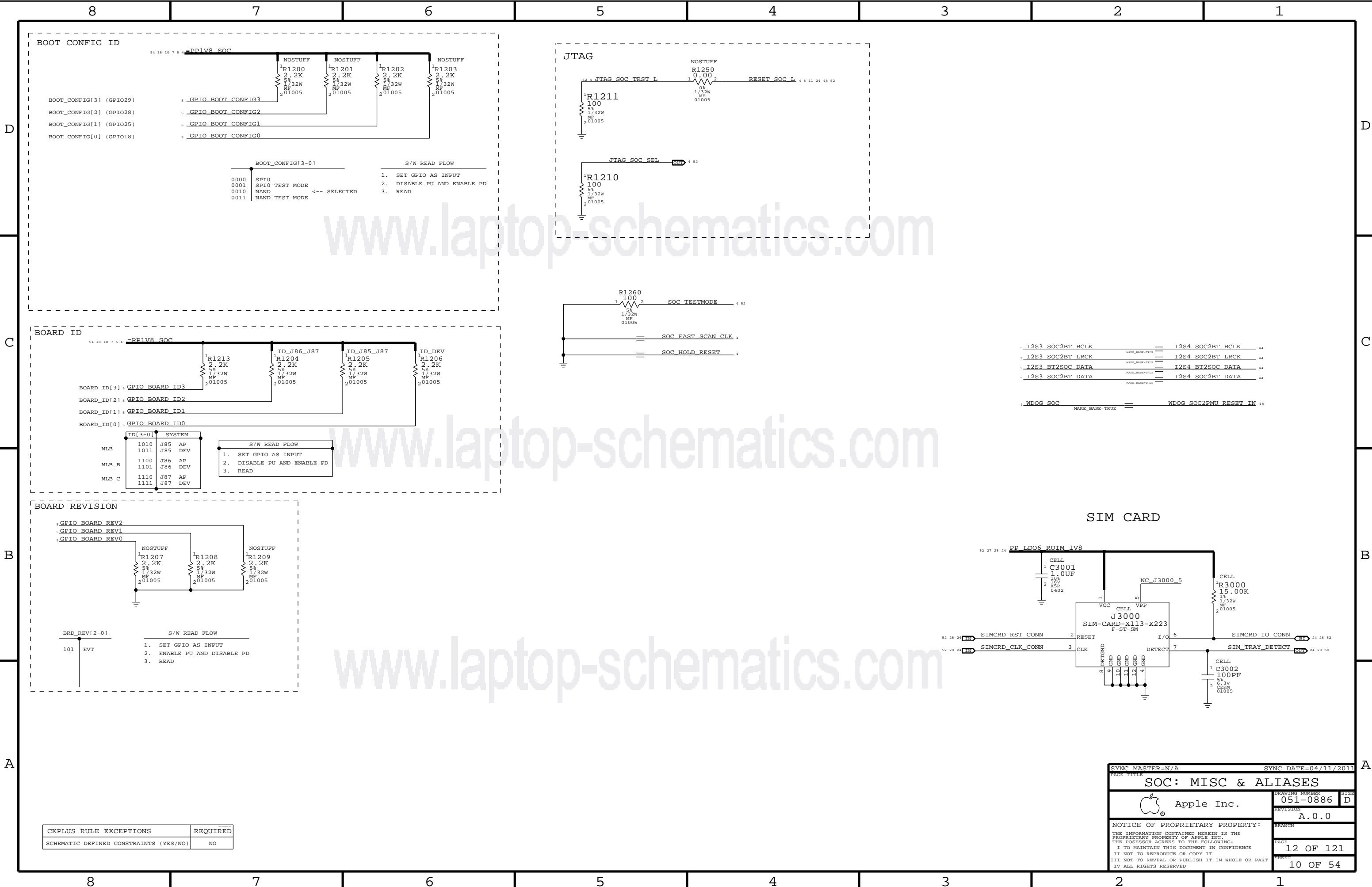






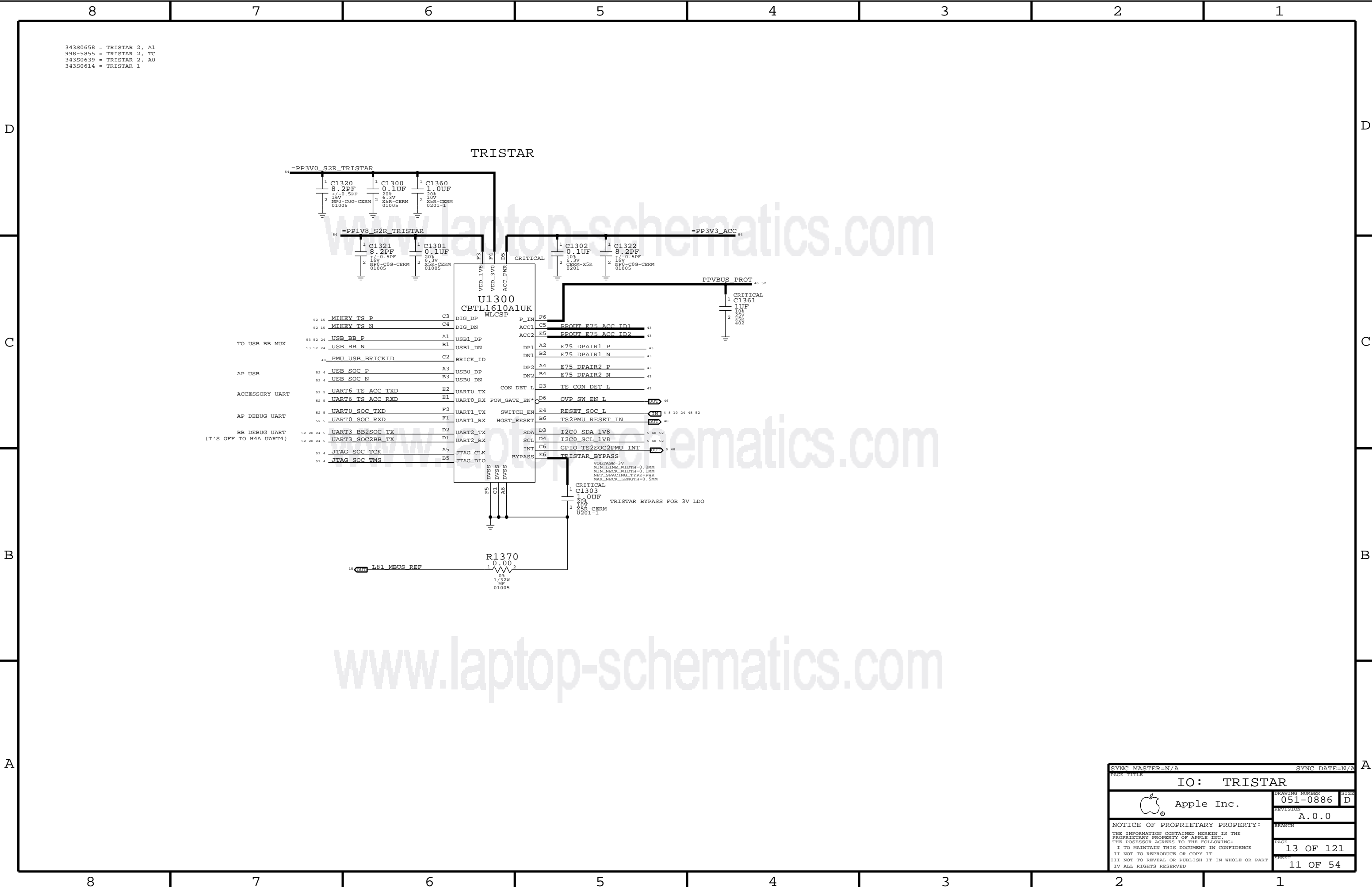


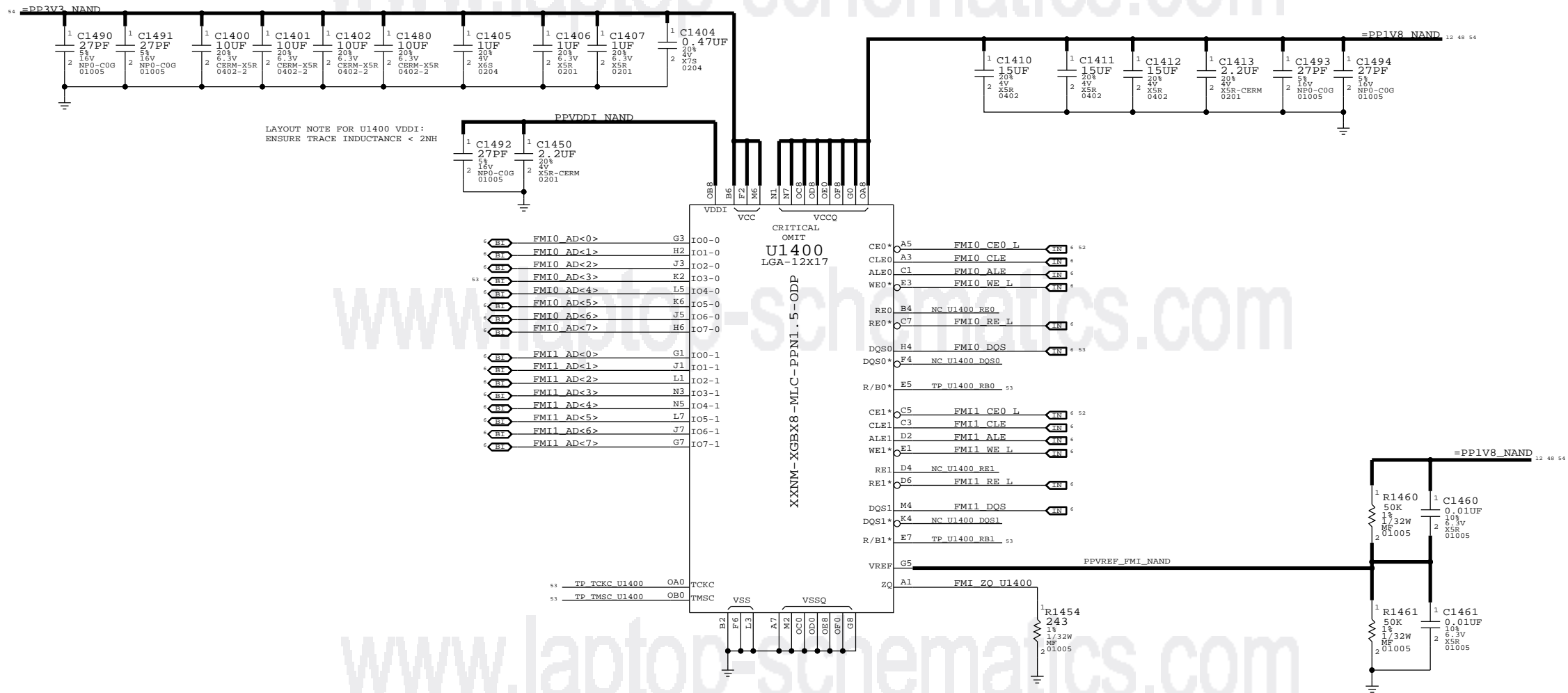




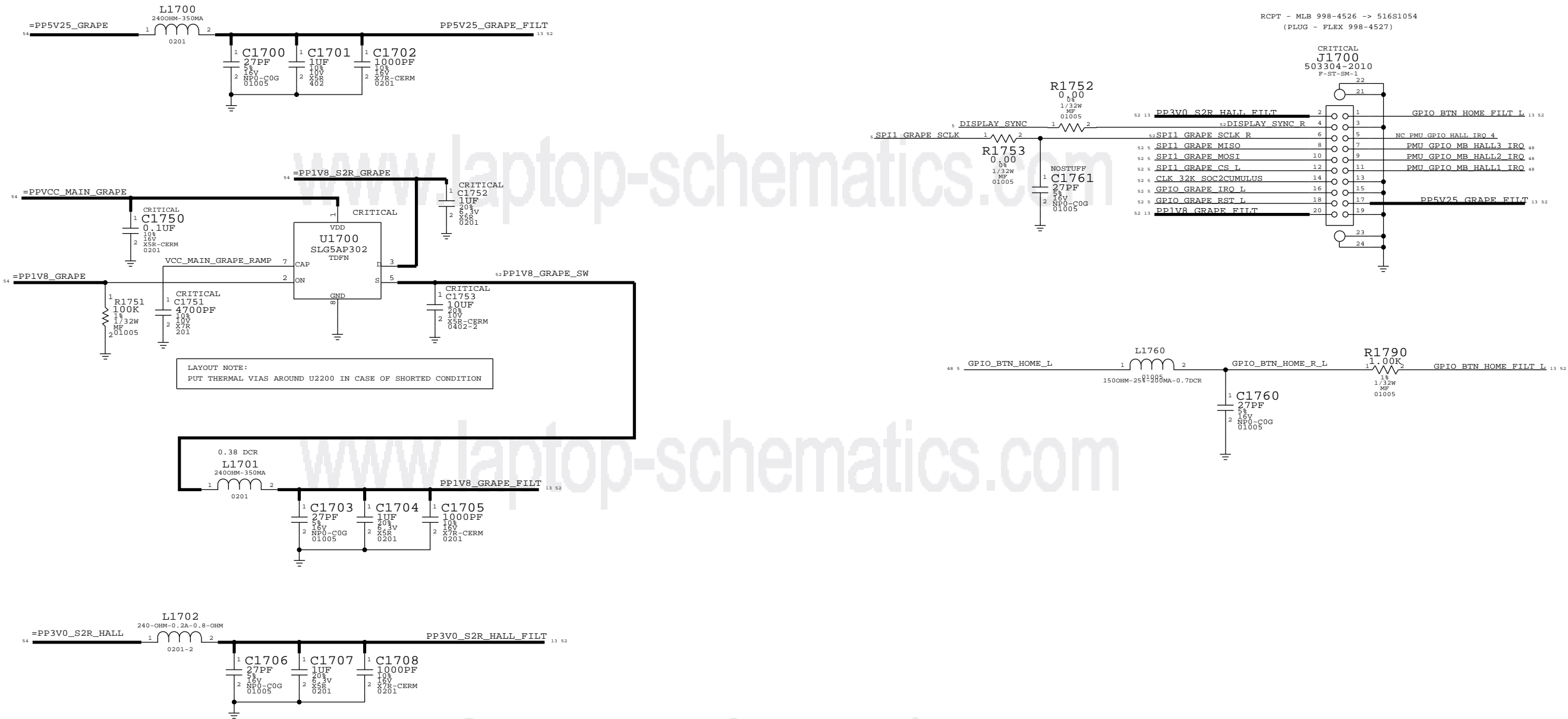
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
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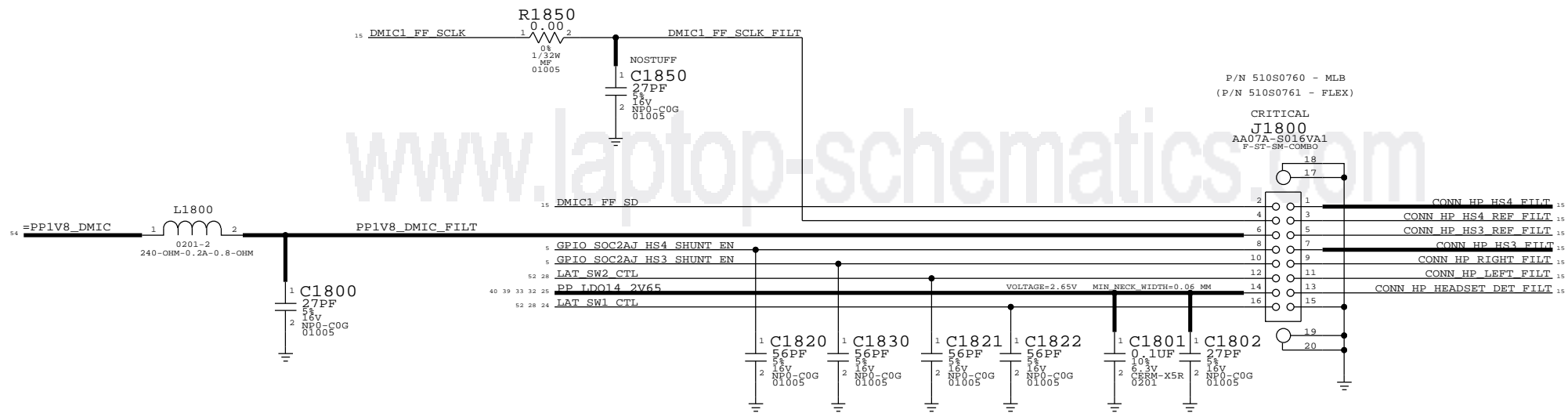


TOUCH SUBSYSTEM




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AUDIO\_JACK\_FLEX RET2  
AUDIO\_JACK\_FLEX MIC1  
AUDIO\_JACK\_FLEX MIC2  
AUDIO\_JACK\_FLEX RET1

PER DAVE BREECE

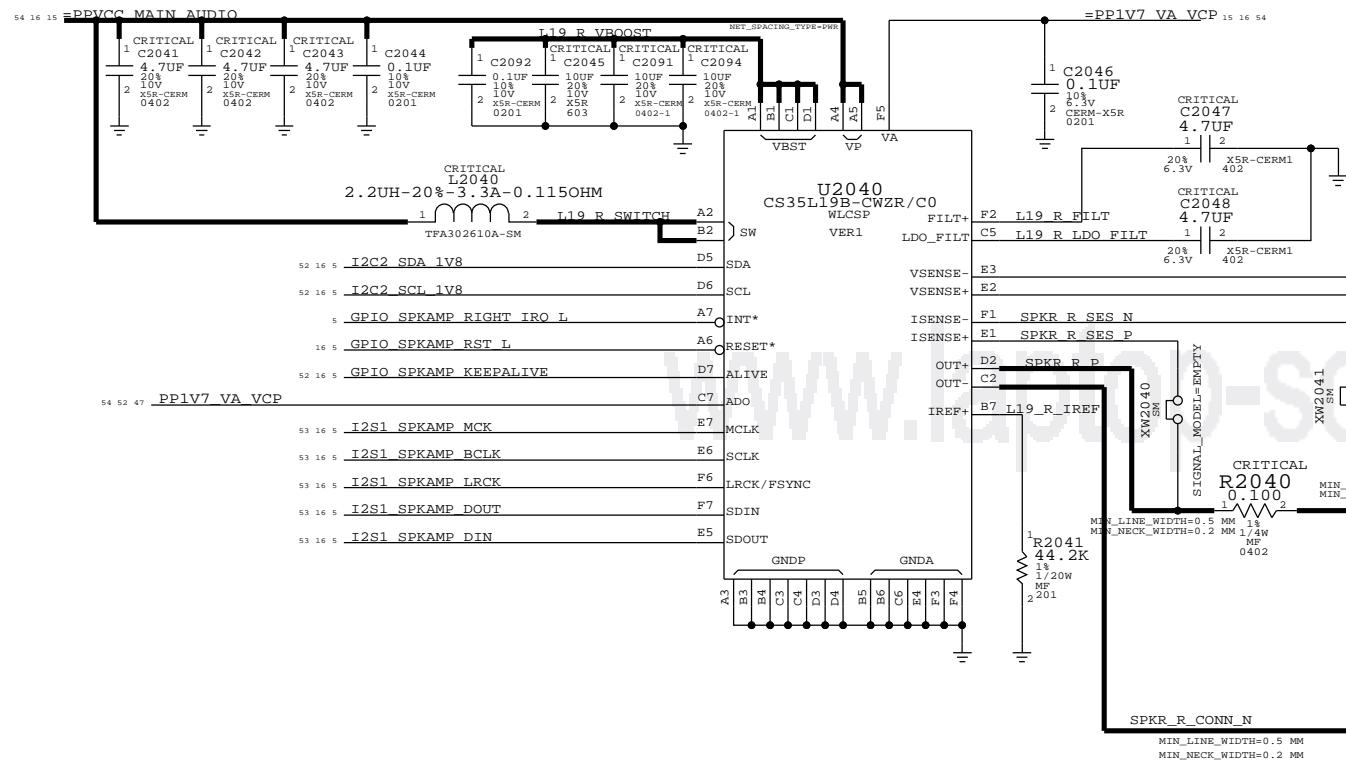
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		BRANCH	14 OF 54
		PAGE	18 OF 121
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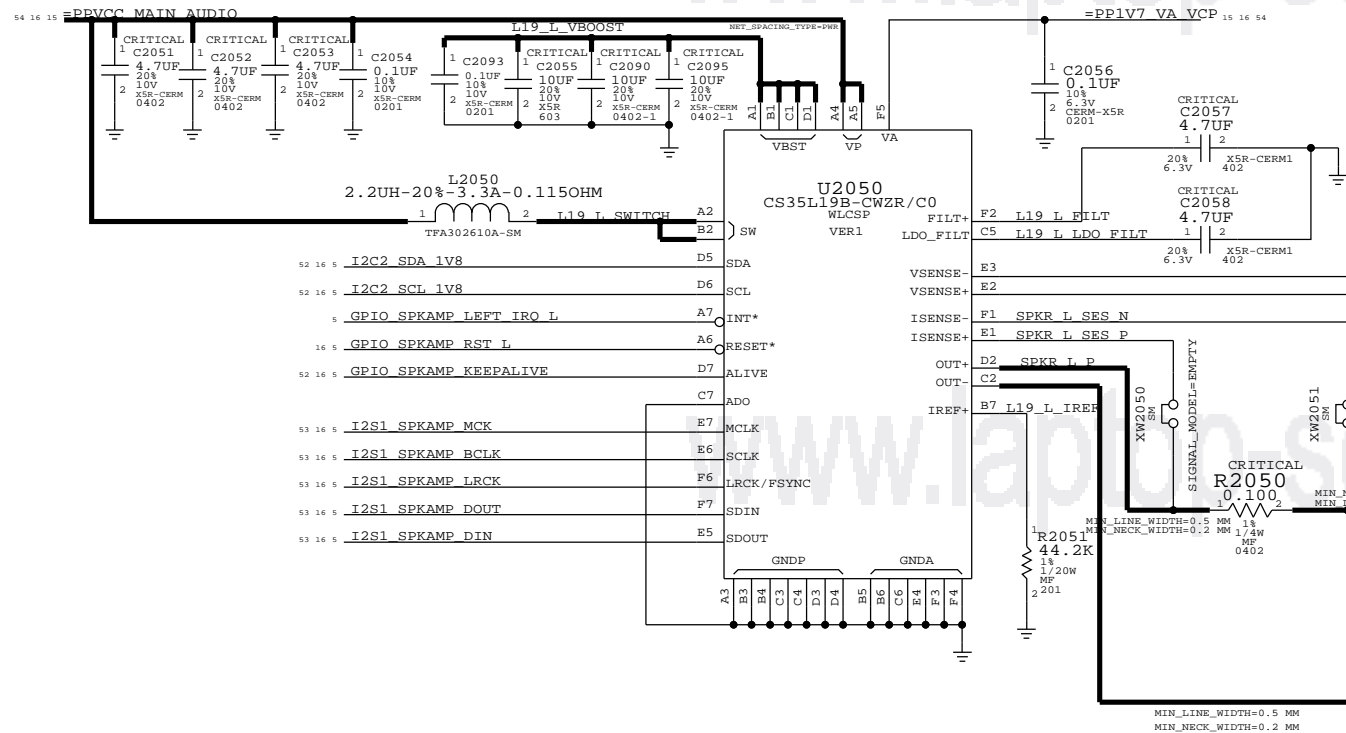
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# SPEAKER CONNECTOR

# LEFT SPEAKER AMP

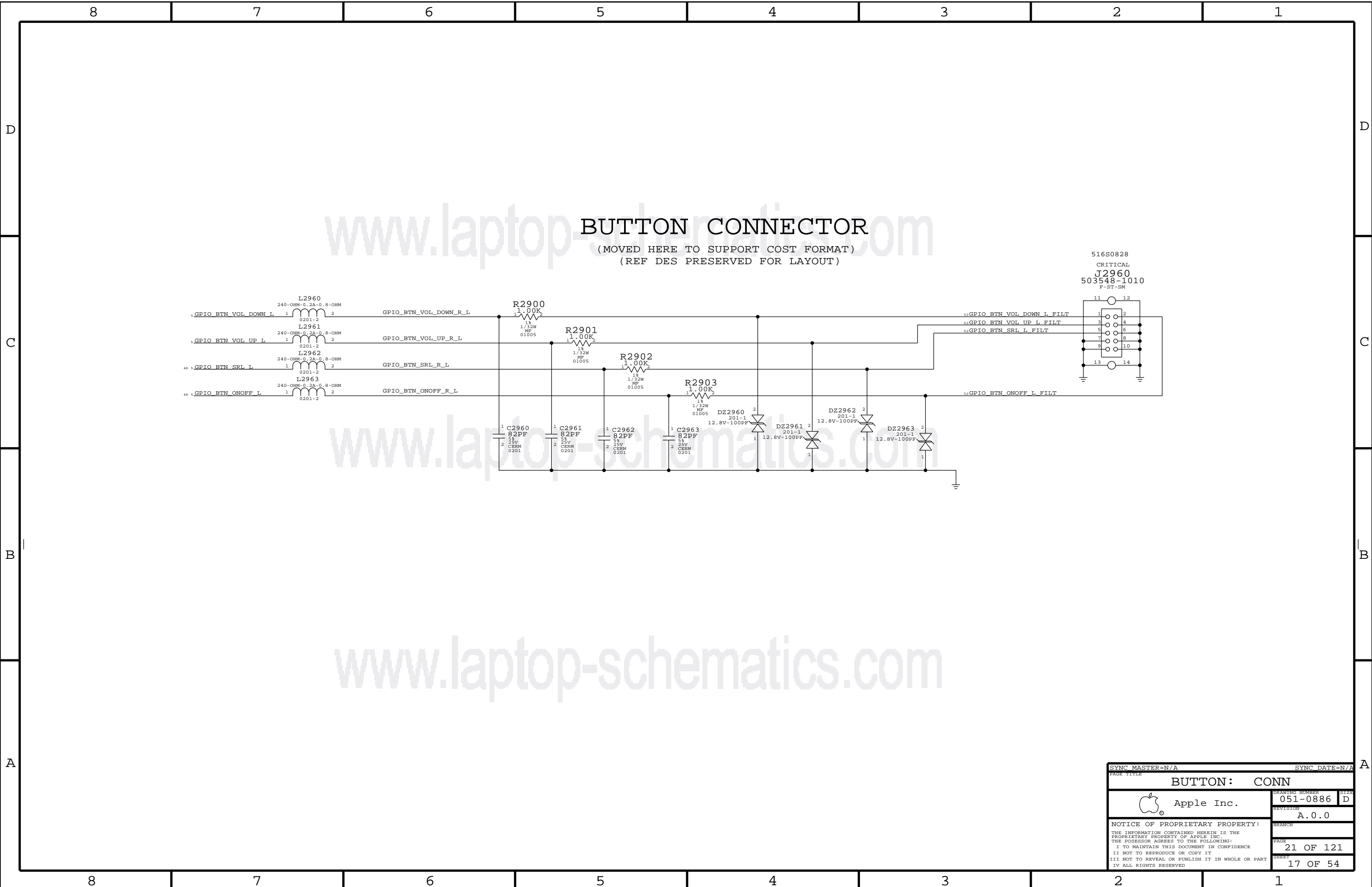
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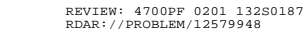
# UPDATED: DEC 13

1. ALL THE EMI/DESSENSE FILTER COMPONENTS HAVE BEEN REMOVED BASED ON PERFORMANCE ON J65
2. THE CURRENT VERSION OF L19 IS B0 AND WILL CHANGE TO C0 BY MARCH 2013. C0 FIXES PROCESS ISSUES.

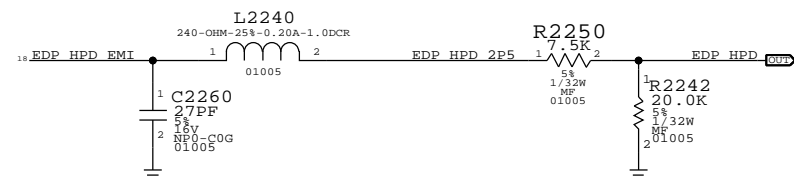
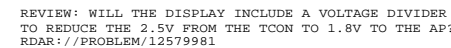
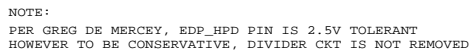
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PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
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NOTE:  
PER GREG DE MERCEY, EDP\_HPD PIN IS 2.5V TOLERANT  
HOWEVER TO BE CONSERVATIVE, DIVIDER CKT IS NOT REMOVED

D

C

B

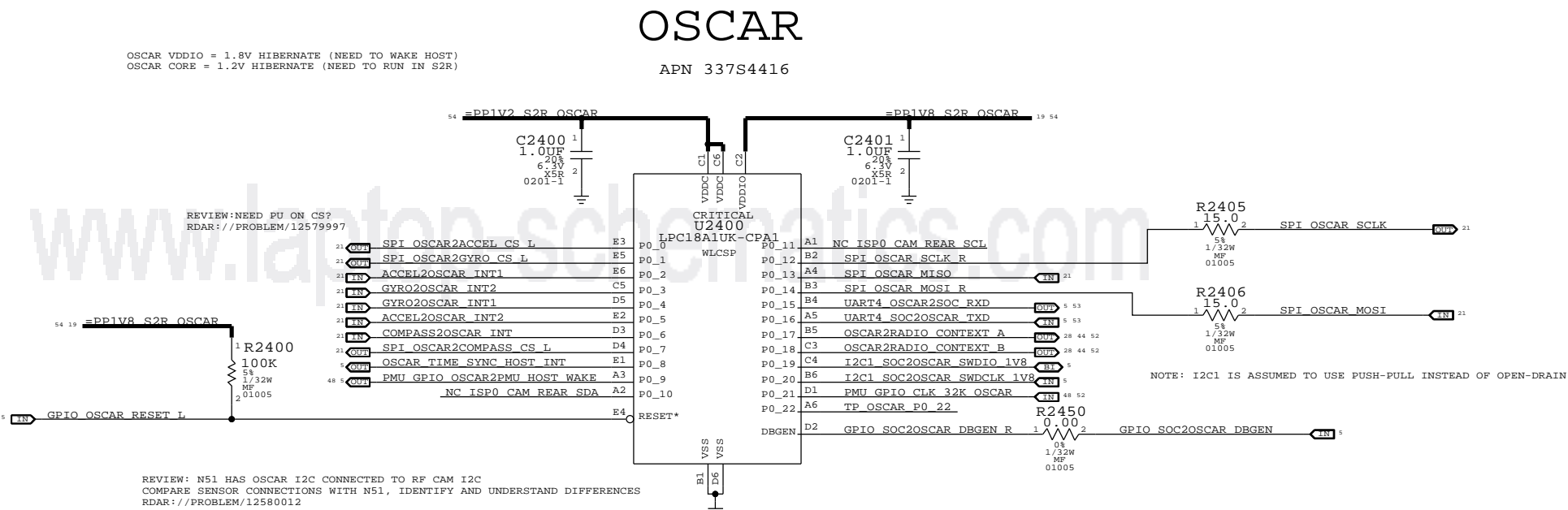
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D

C

B

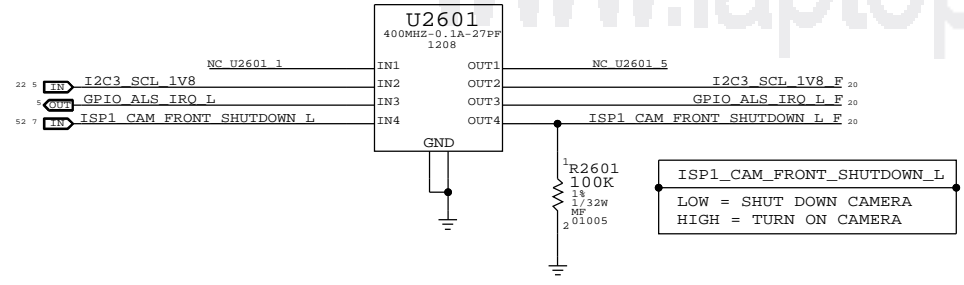
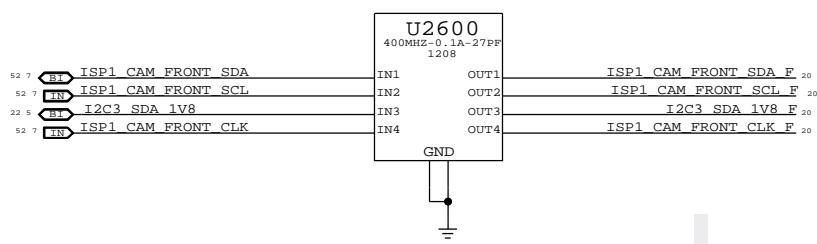
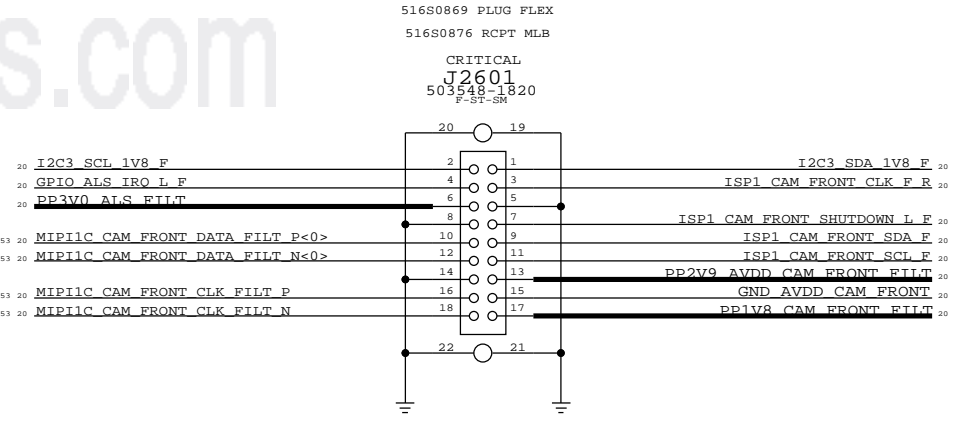
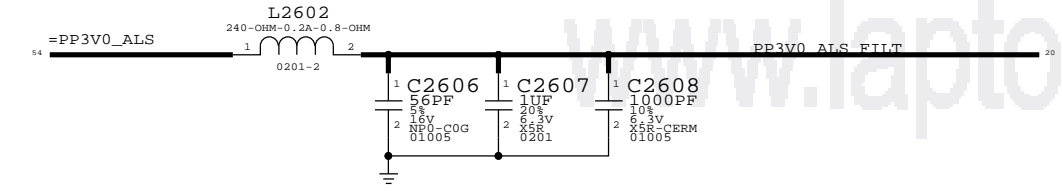
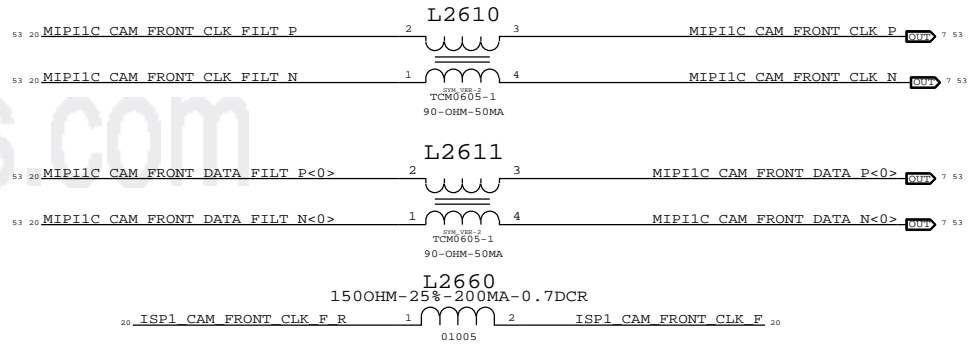
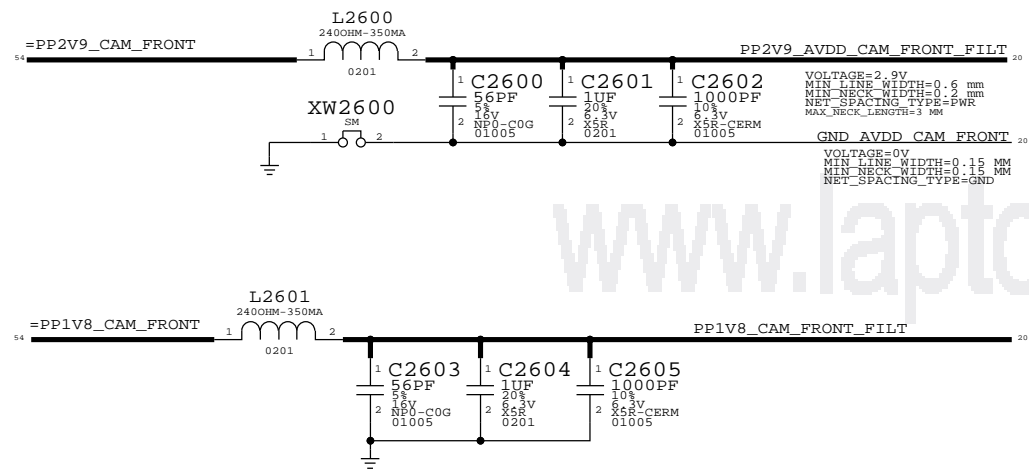
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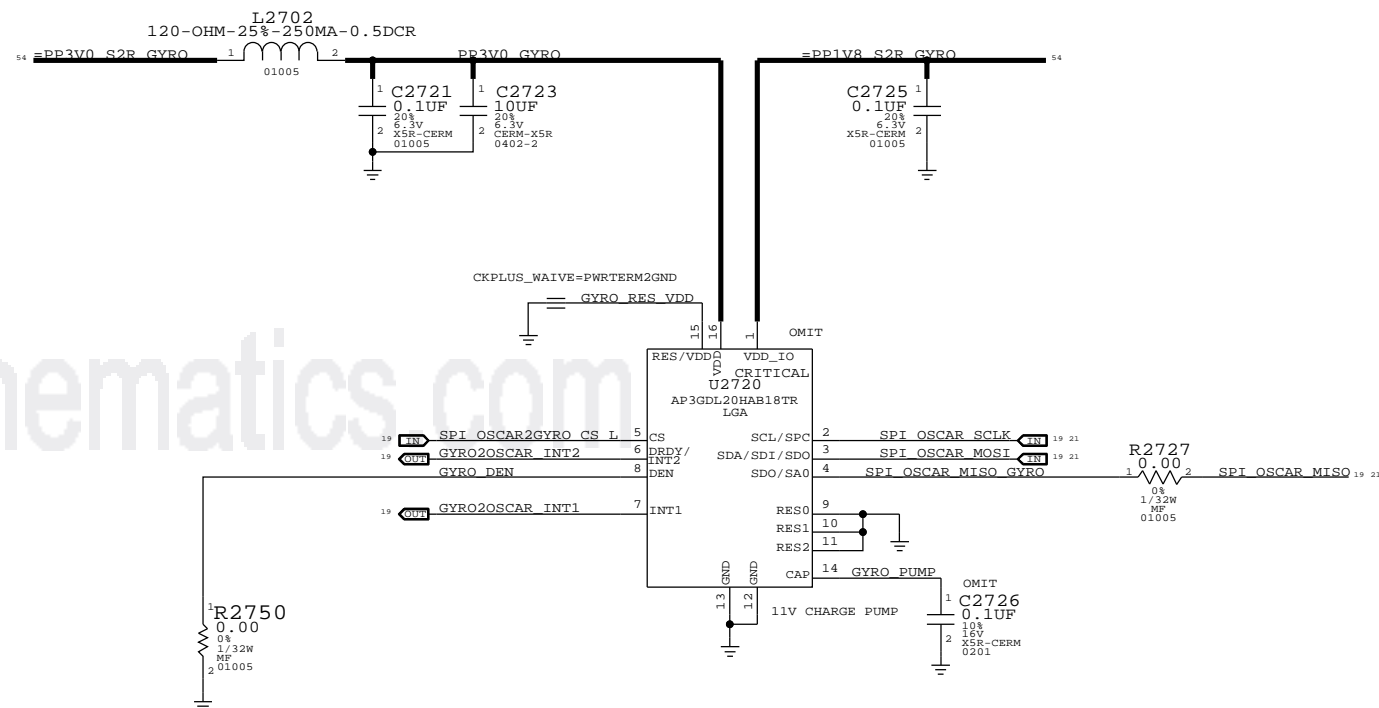
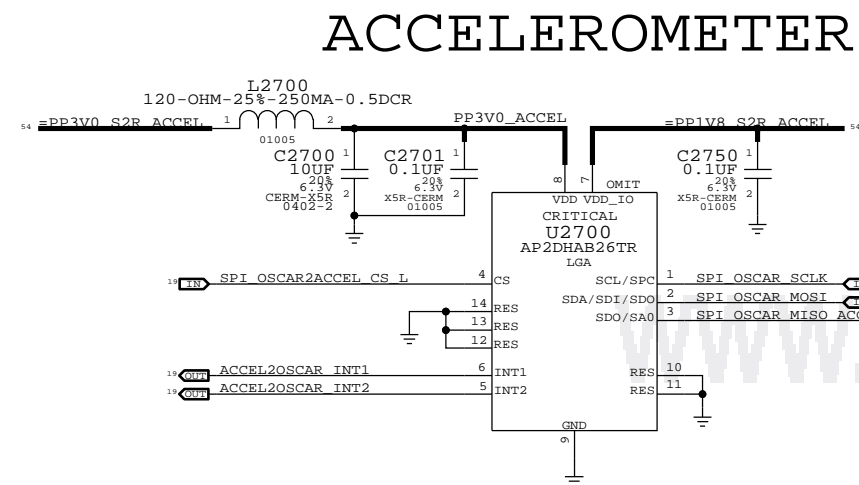


# VGA FRONT CAMERA CONNECTOR



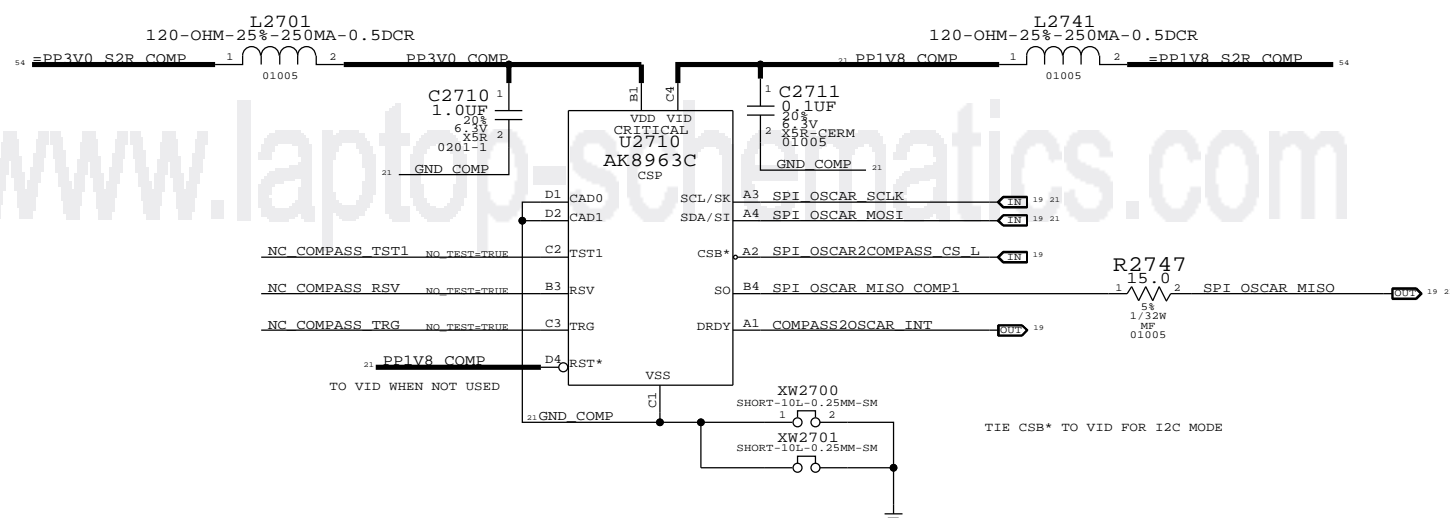
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## GYRO



# COMPASS

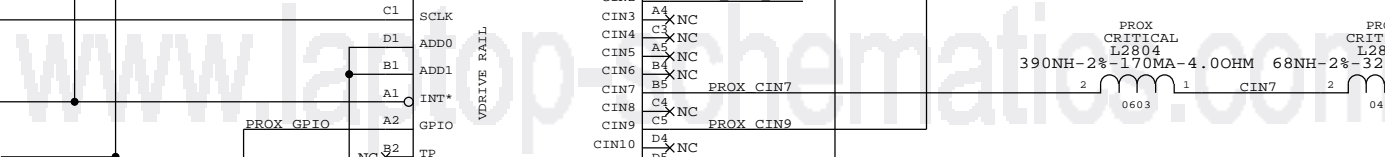
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PAGE 1		PAGE 1	
SENSOR: ACCEL, COMPASS, GYRO			
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		BRANCH	
		PAGE 27 OF 121	
		SHEET 21 OF 54	


VDRIVE FOR: I2C AND GPIO

PROX	1	PROX	1
C2804		C2805	
0.1uF		68pF	
6.3V		6.3V	
XSR-CR00	2	NPD-CUG	2
01005		01005	



CHOSE CIN NUMBERS FOR LAYOUT EASE

PCB: ENSURE ACSHIELD PLANE UNDER  
U3200, NO GND PLANE NEAR PROX\_CIN NETS..

SYNCH MASTER=J85 MLB C		SYNCH DATE=12/05/12	
PAGE TITLE			
SENSOR:		PROX	
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		SIZE	D
		REVISION	A.0.0
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# REAR CAMERA CONNECTOR

APN: 516S0973

PLUG: 516S0974

CRITICAL  
J2950  
AA07-S022VA1  
F-ST-SM

CAM REAR VSYNC

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GND AE AVDD

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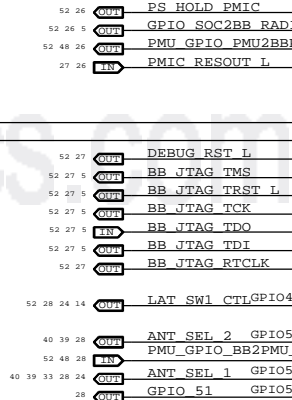
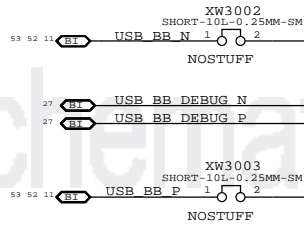
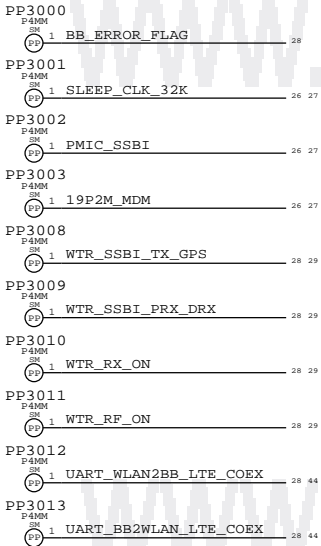
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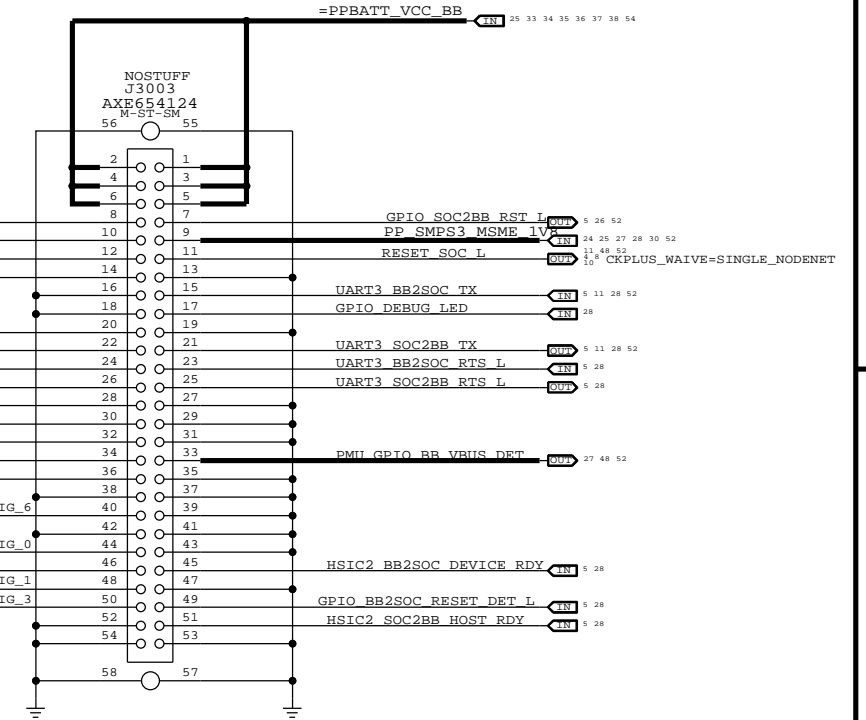
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AP INTERFACE & DEBUG CONNECTORS

PROBE POINTS

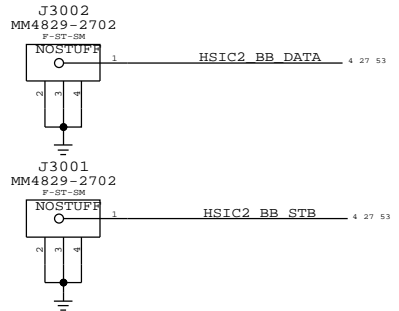
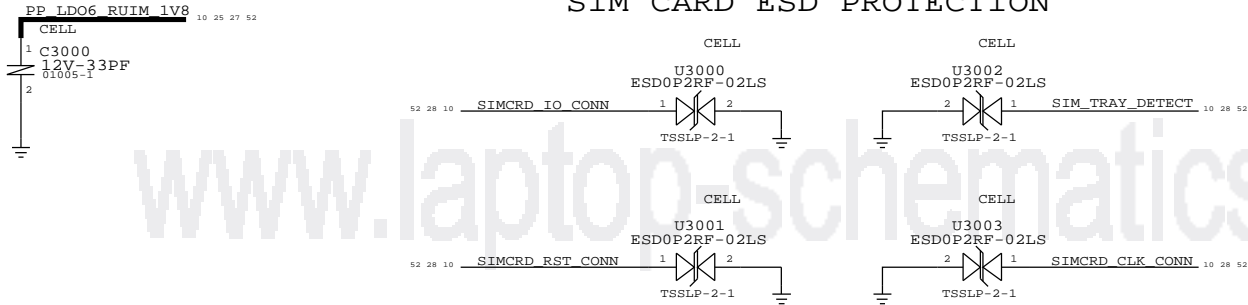


DEBUG CONNECTOR



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	X
BOOT_NAND_OPTION	0x01	X	1	0	0	0	0	0	1
BOOT_HSIC_OPTION	0x02	X	1	0	0	0	0	1	0
BOOT_USB_OPTION	0x03	X	1	0	0	0	0	1	1
ENABLE_SAHARA_PROTOCOL	0x08	X	1	0	0	1	0	X	X

SIM CARD ESD PROTECTION



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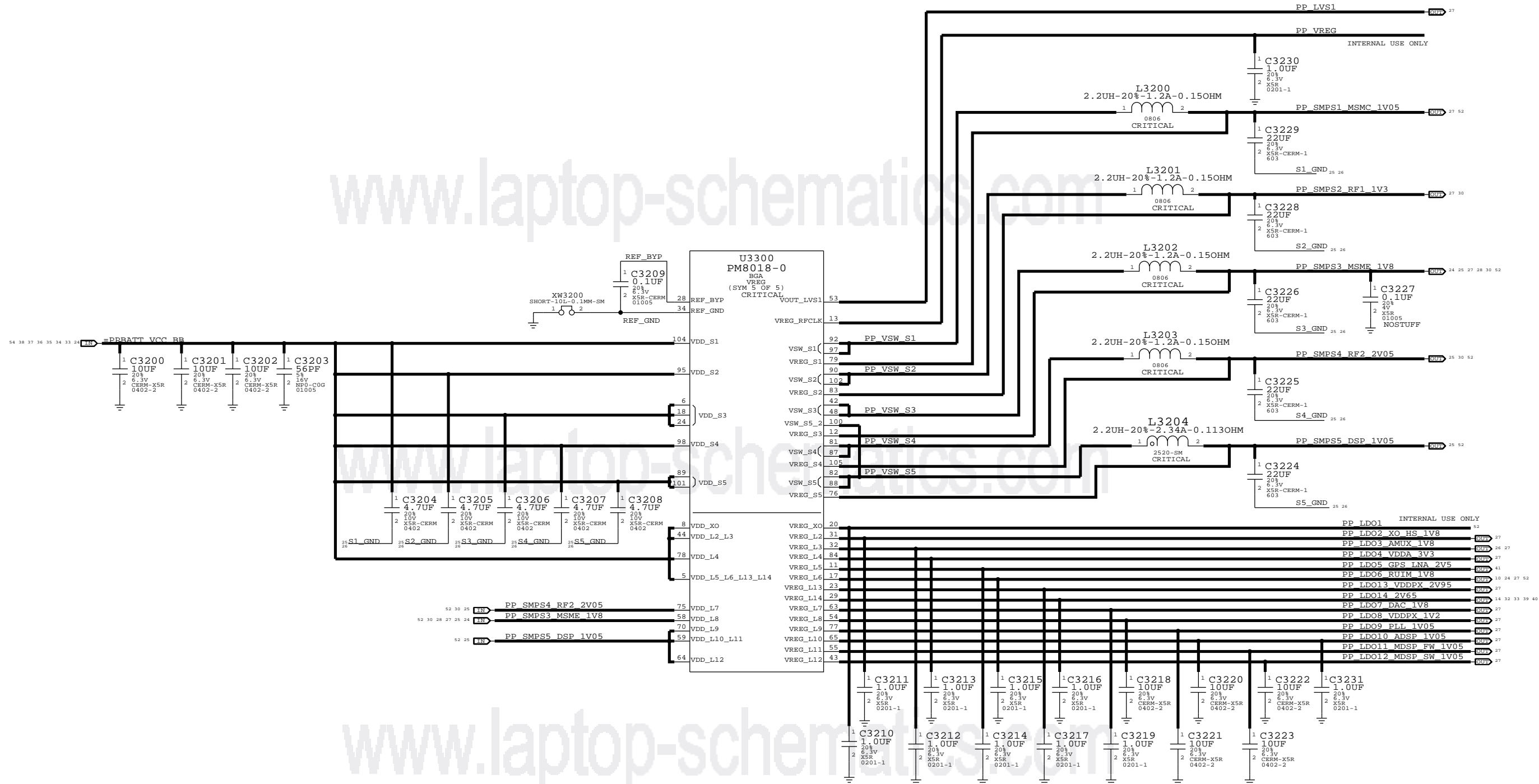
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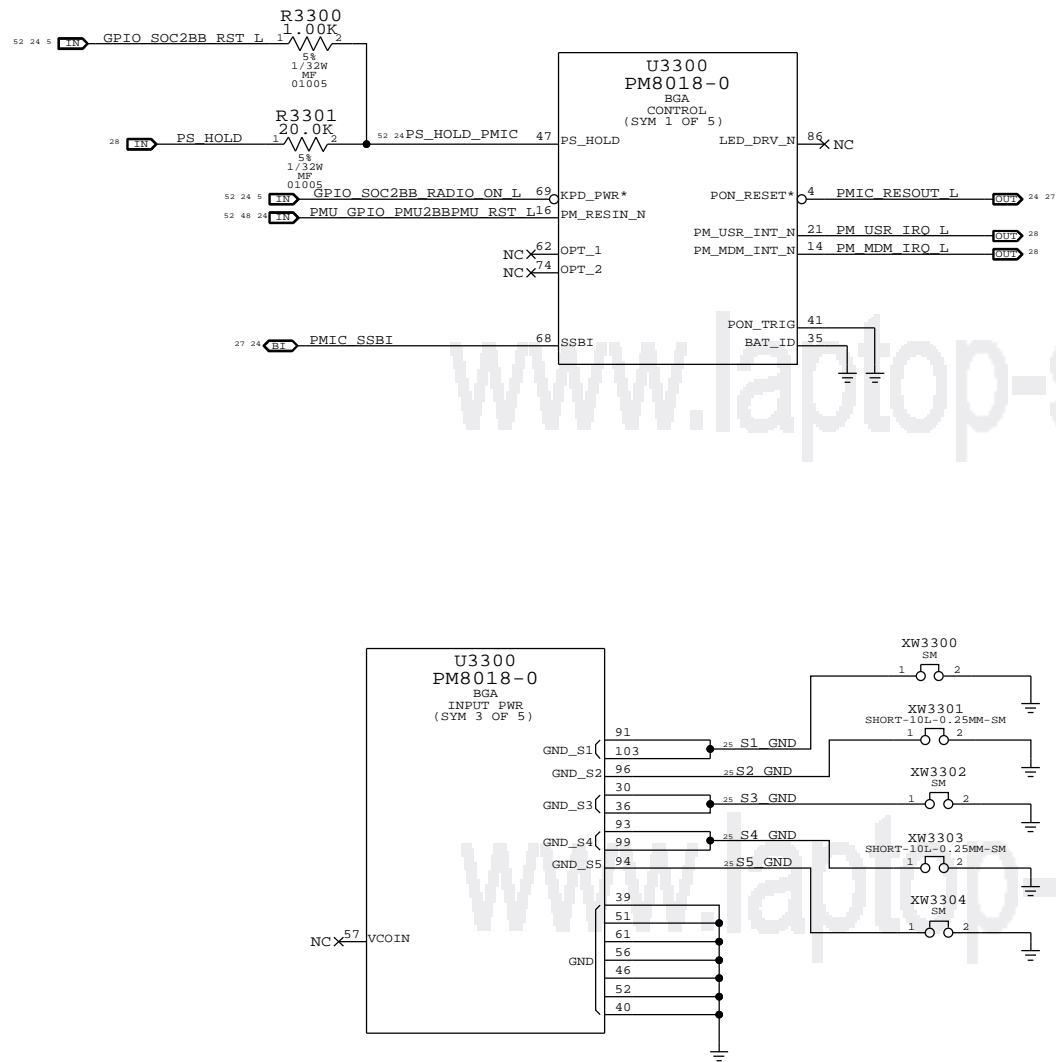
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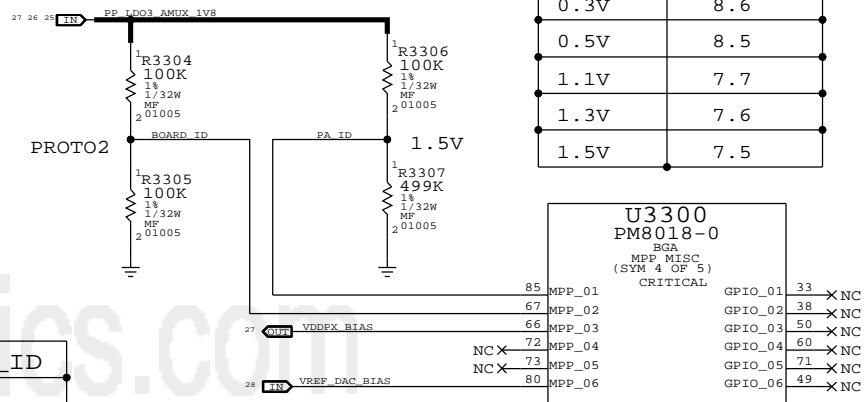


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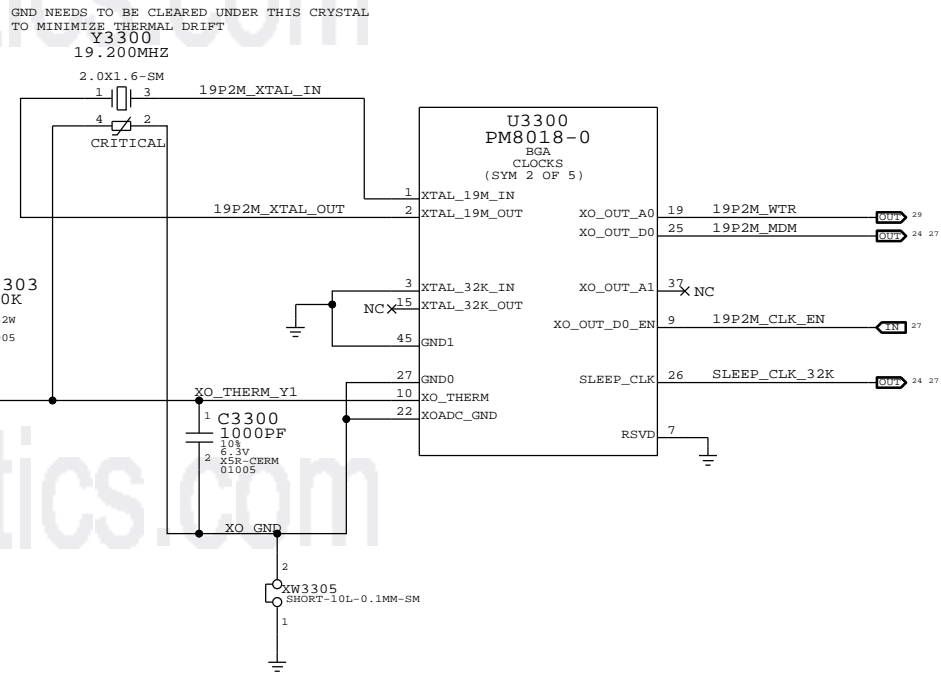
BOARD_ID	REVISION
0.7V	PROTO1
0.9V	PROTO2
1.1V	EVT1
1.3V	EVT2
1.5V	DVT
1.7V	PVT

BB GPIO_29	PRODUCT_ID
1 (1.8V)	JXX
0 (NC, PD)	NXX



PA_ID	MAV VER
0.1V	8.7
0.3V	8.6
0.5V	8.5
1.1V	7.7
1.3V	7.6
1.5V	7.5

U3300	PM8018-0
MPP_01	GPIO_01
MPP_02	GPIO_02
MPP_03	GPIO_03
MPP_04	GPIO_04
MPP_05	GPIO_05
MPP_06	GPIO_06



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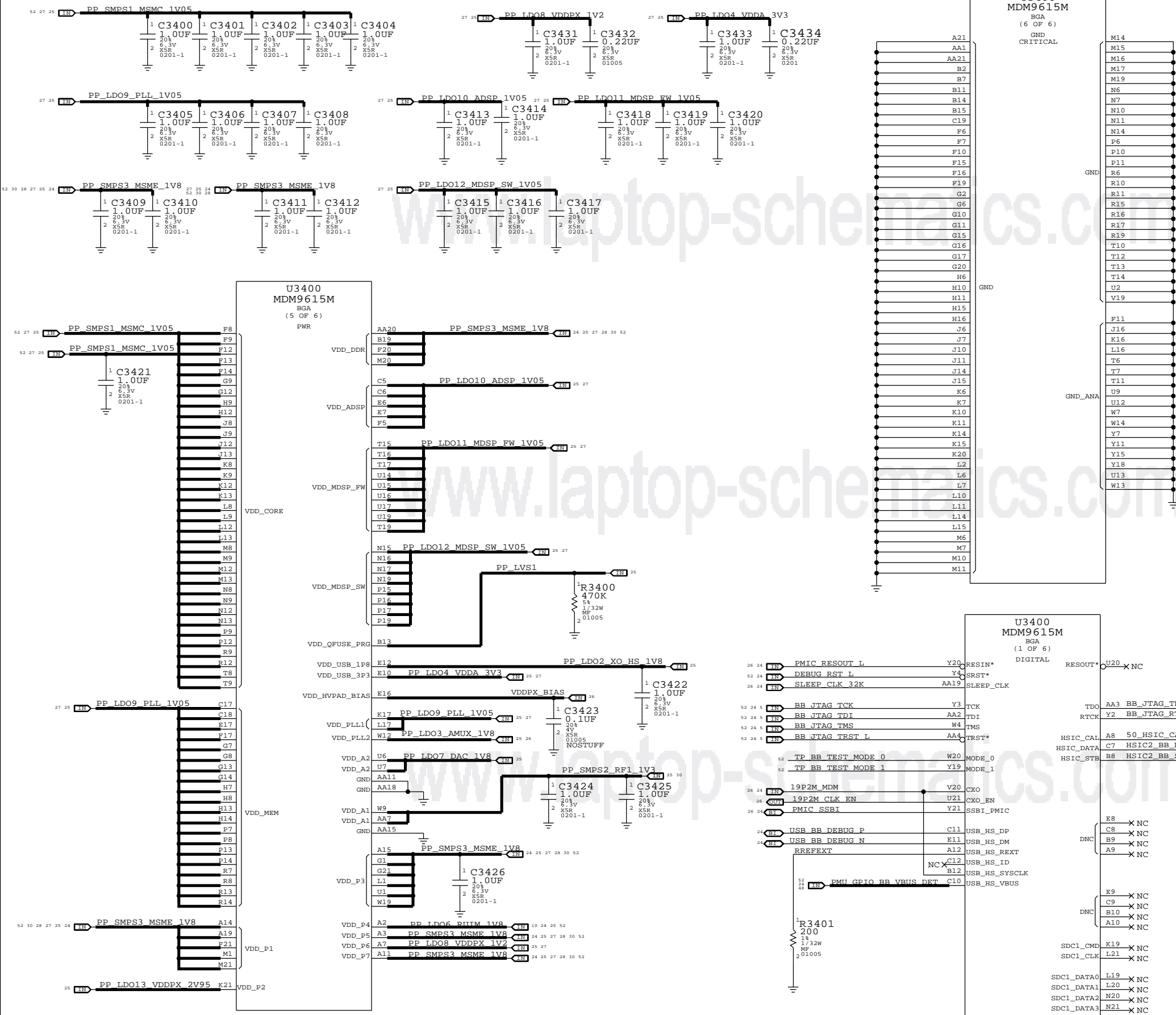
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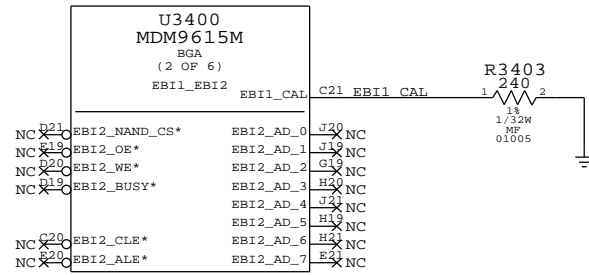
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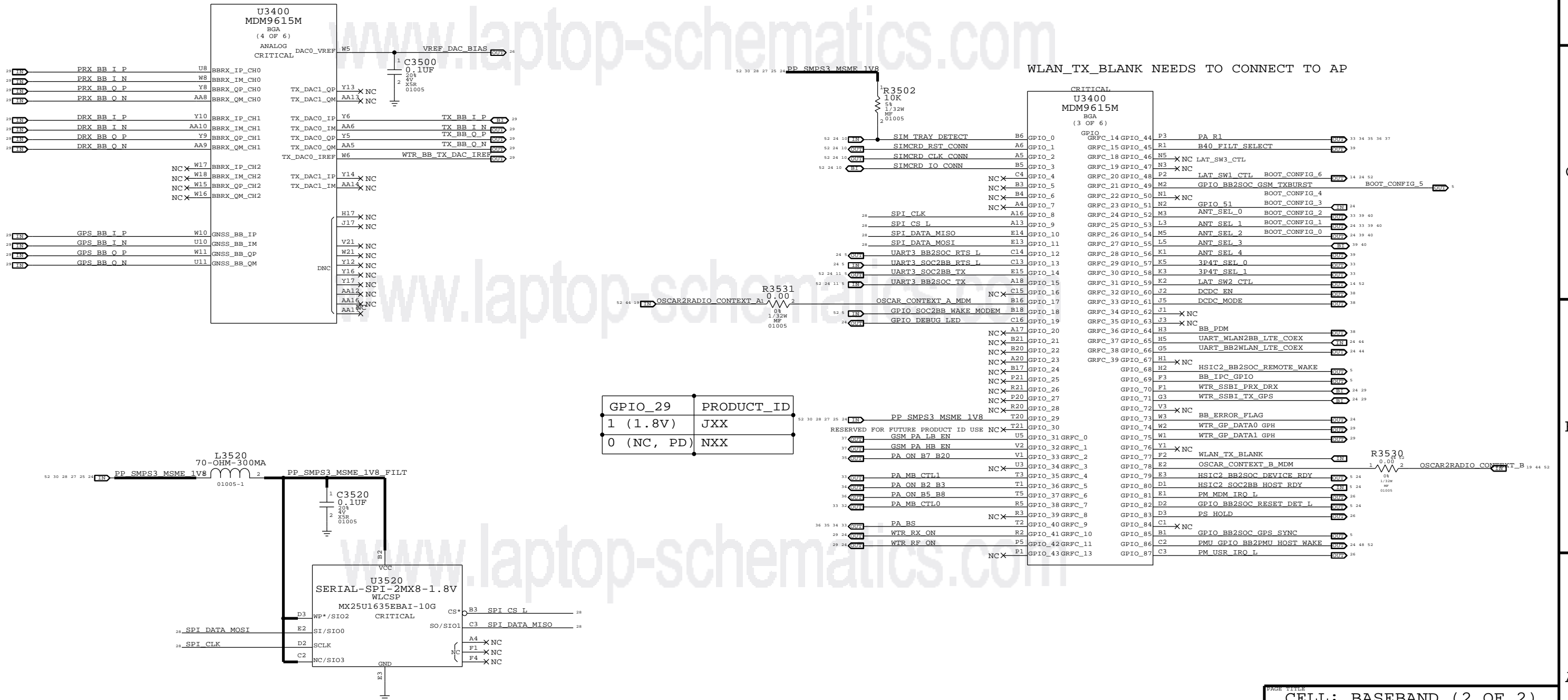
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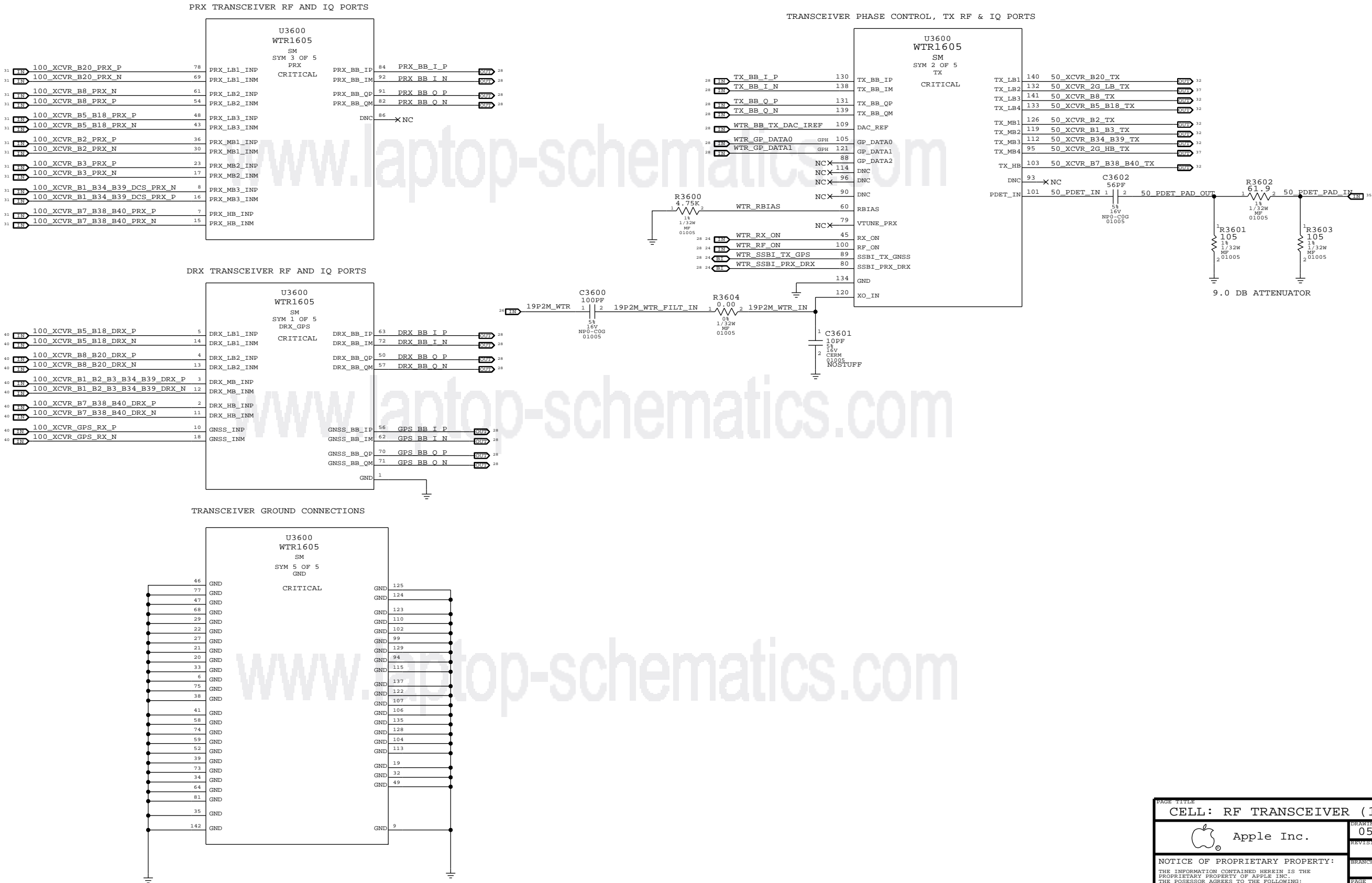
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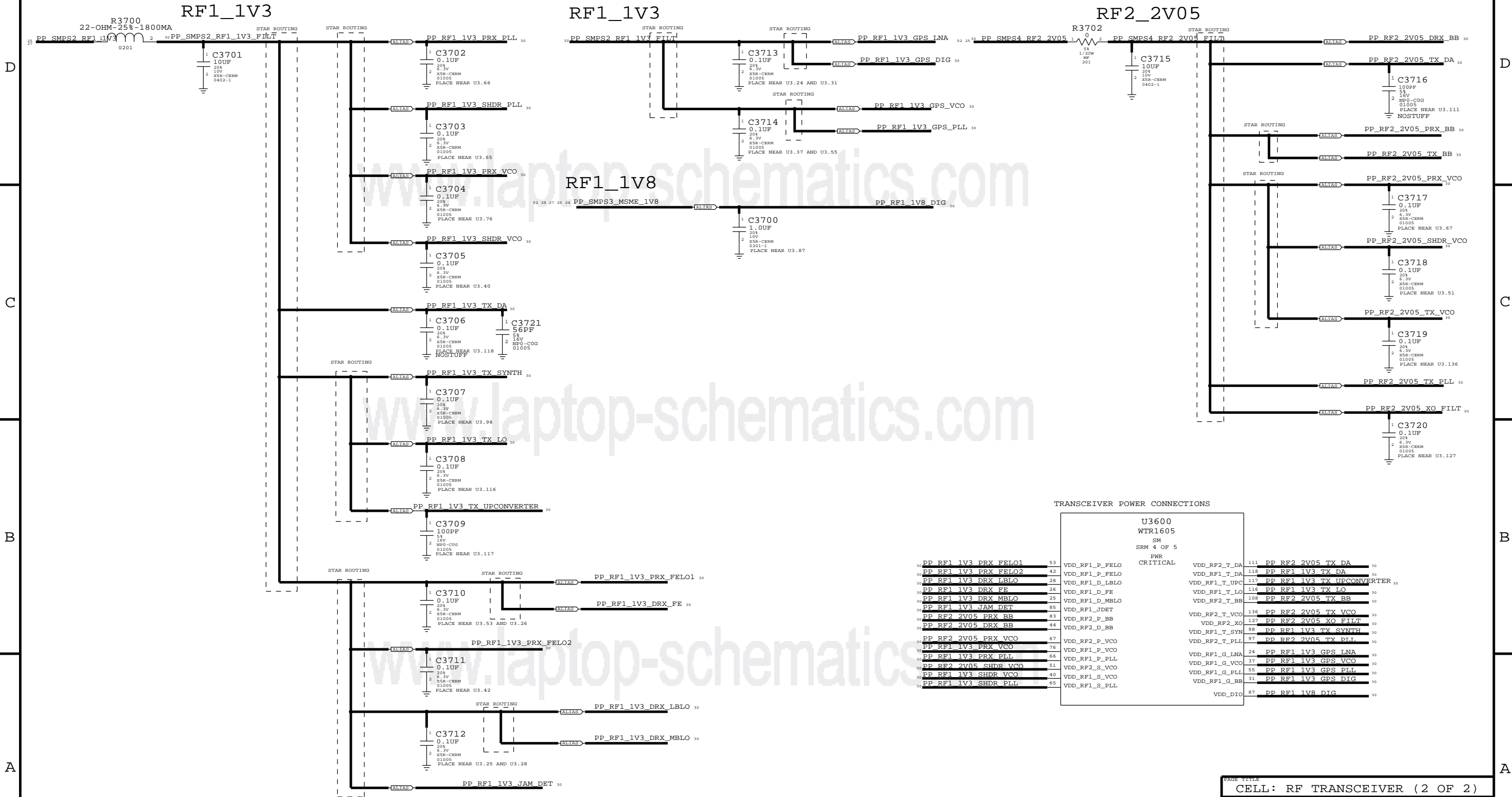
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RF TRANSCEIVER (1 OF 2)



RF TRANSCEIVER ( 2 OF 2 )

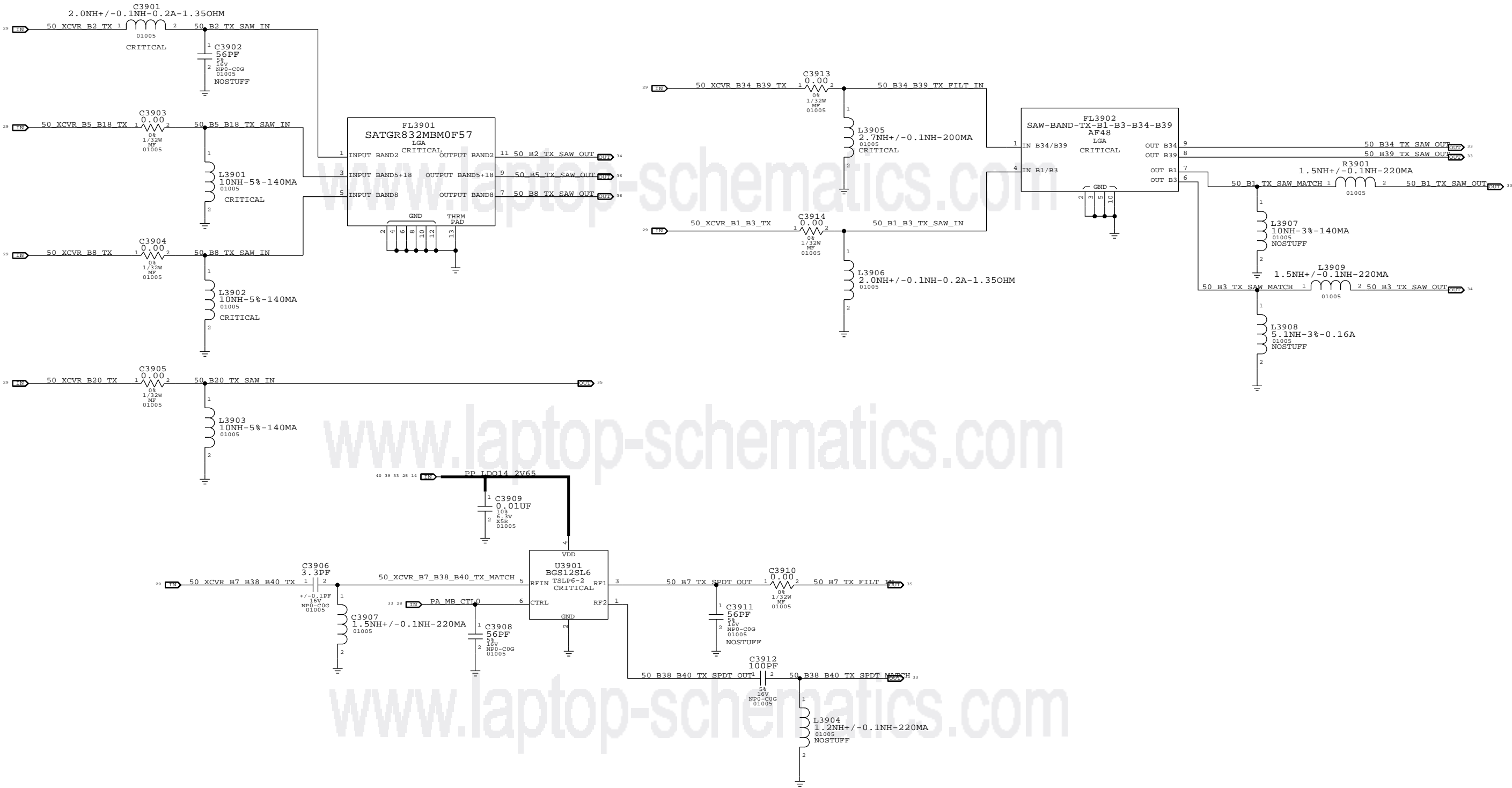


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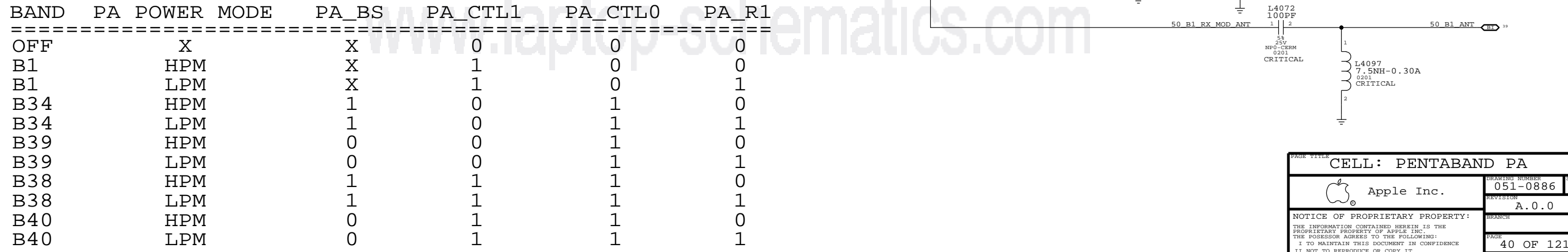



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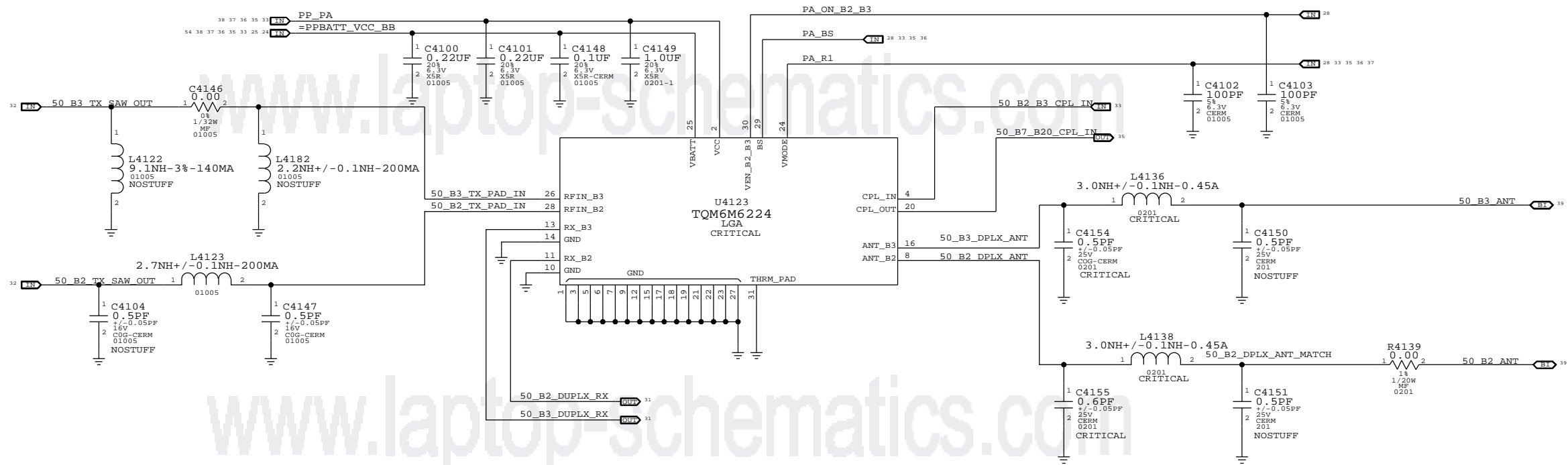
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BAND 2 / 3 PAD



BAND	PA	POWER	MODE	PA_BS	PA_ON_B2_B3	PA_R1
=====	=====	=====	=====	=====	=====	=====
OFF		X		X	0	X
B3		HPM		0	1	0
B3		LPM		0	1	1
B2		HPM		1	1	0
B2		LPM		1	1	1

CELL: BAND 2/3 PAD

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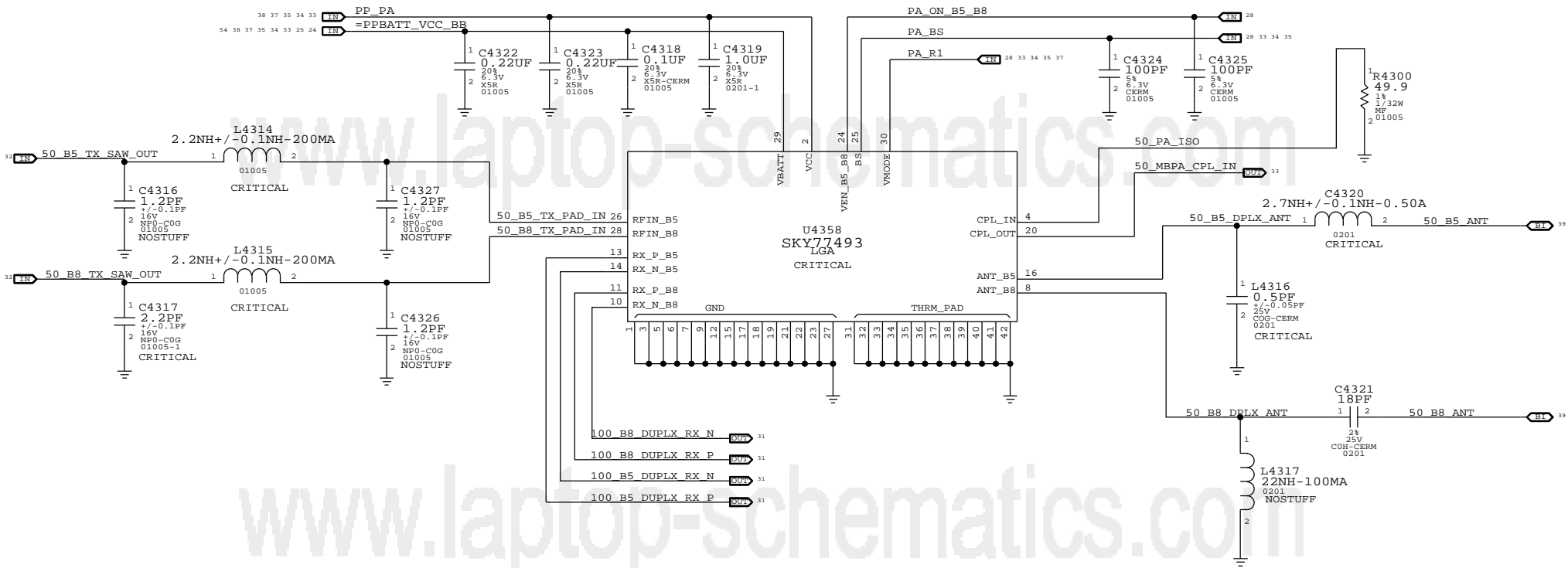
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BAND 5 / 8 PAD



BAND	PA	POWER	MODE	PA_BS	PA_ON_B5_B8	PA_R1
=====	=====	=====	=====	=====	=====	=====
OFF		X		X	0	X
B5		HPM		0	1	0
B5		LPM		0	1	1
B8		HPM		1	1	0
B8		LPM		1	1	1

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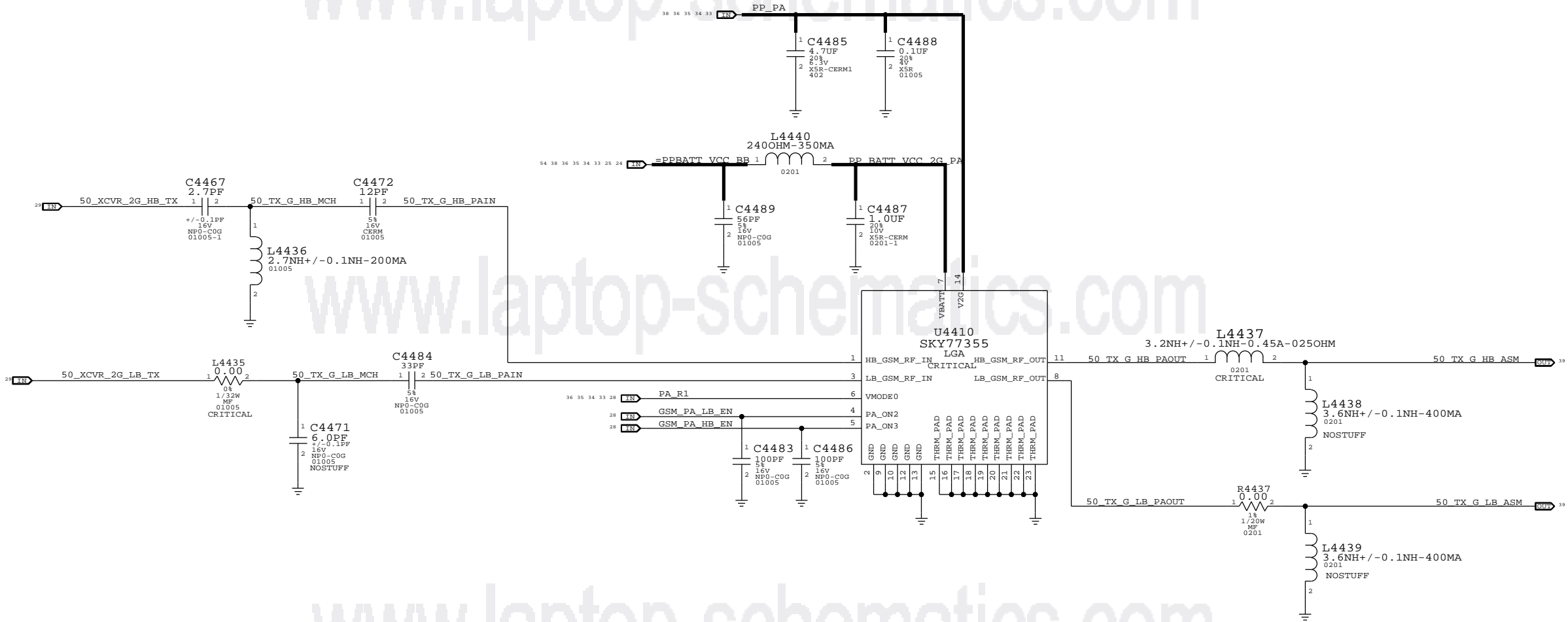
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# 2G PA

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## 2G PA GAIN MODES

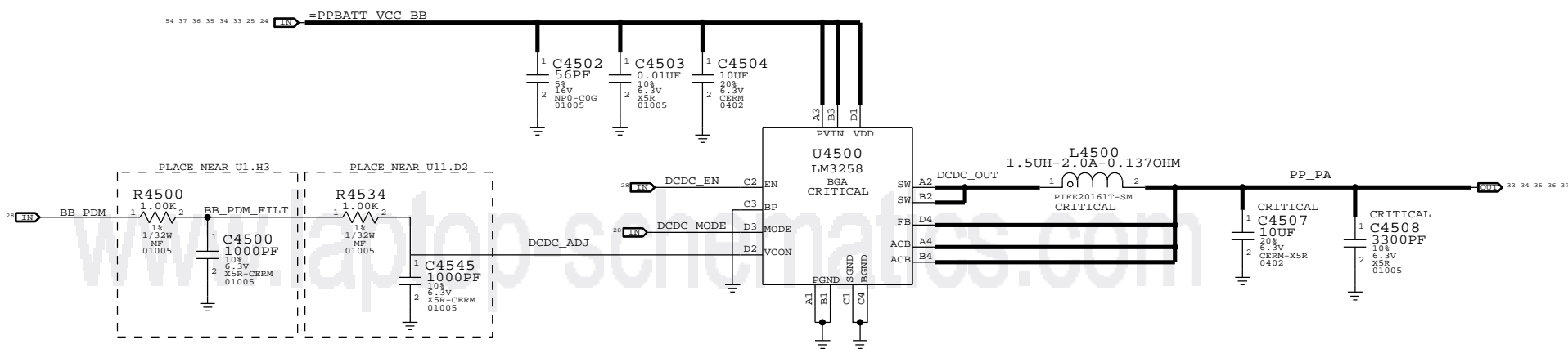
BAND	MODE	GAIN MODE	PA_R1	PCL RANGE
LOW BAND	GSM	ULTRA LOW	HIGH	16 TO 19
LOW BAND	GSM	LOW	HIGH	14 TO 15
LOW BAND	GSM	MEDIUM	LOW	7 TO 13
LOW BAND	GSM	HIGH	LOW	5 TO 6
HIGH BAND	GSM	ULTRA LOW	HIGH	10 TO 15
HIGH BAND	GSM	LOW	HIGH	7 TO 9
HIGH BAND	GSM	HIGH	LOW	0 TO 6
LOW BAND	EDGE	LOW	HIGH	15 TO 19
LOW BAND	EDGE	MEDIUM	LOW	10 TO 14
LOW BAND	EDGE	HIGH	LOW	8 TO 9
HIGH BAND	EDGE	LOW	HIGH	9 TO 15
HIGH BAND	EDGE	HIGH	LOW	2 TO 8




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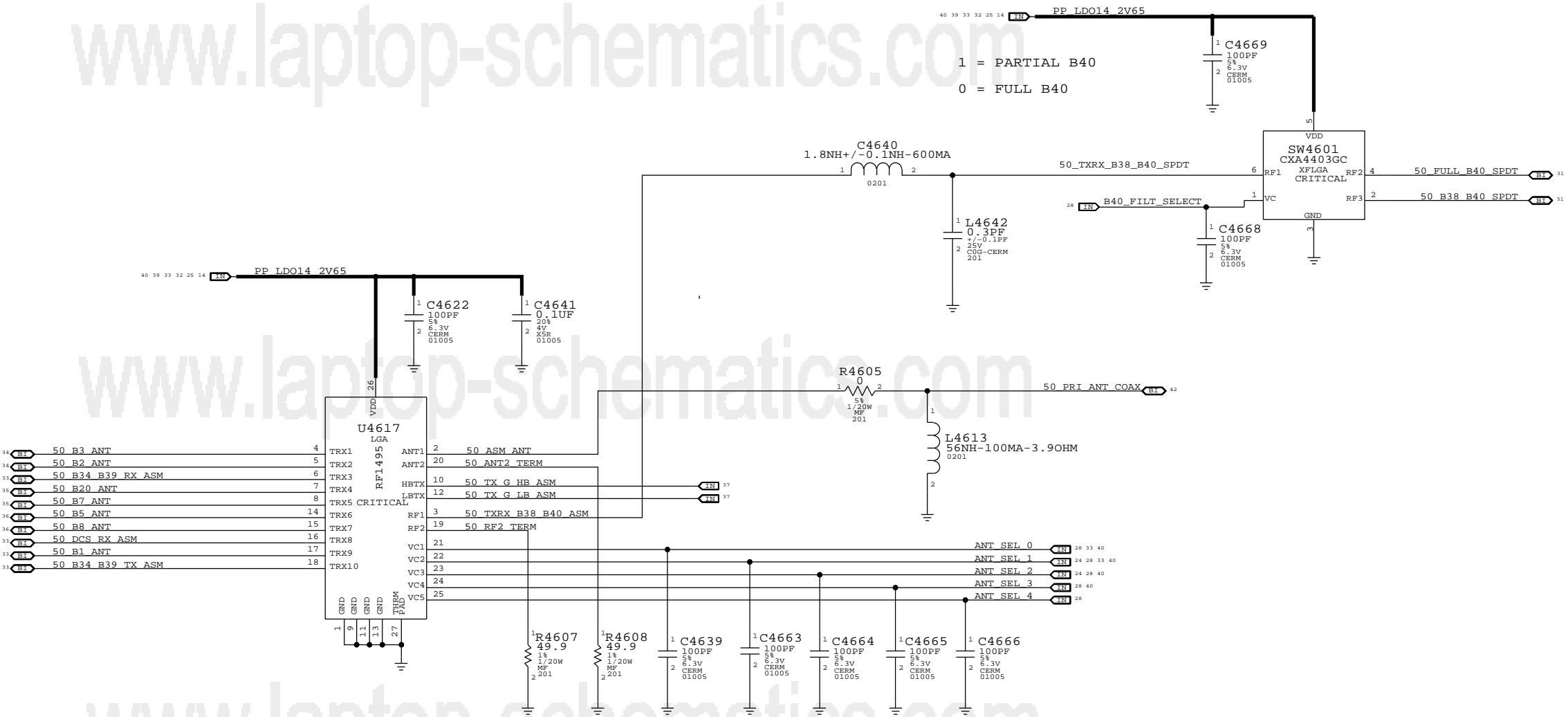
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PRIMARY ASM



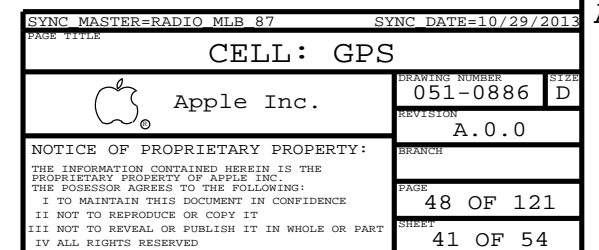
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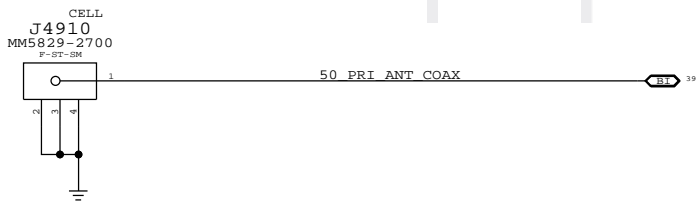
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
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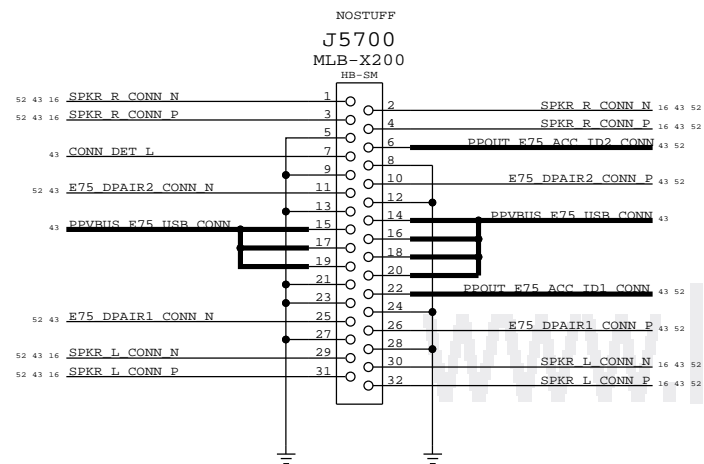
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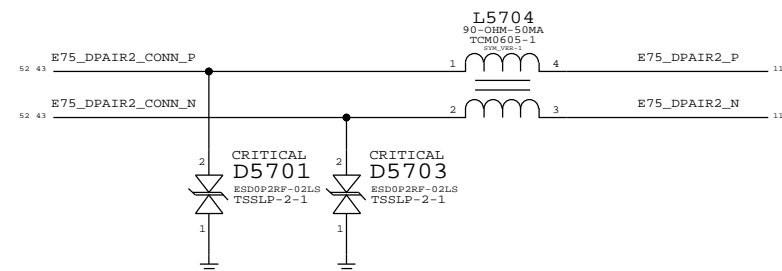
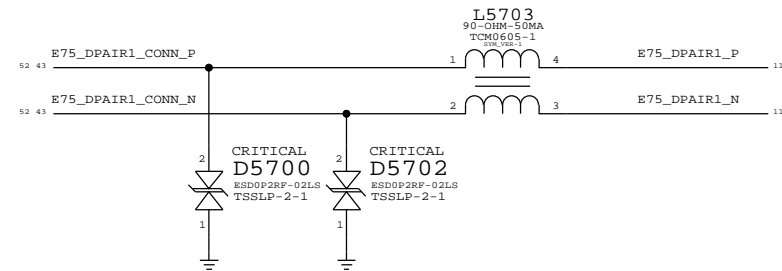
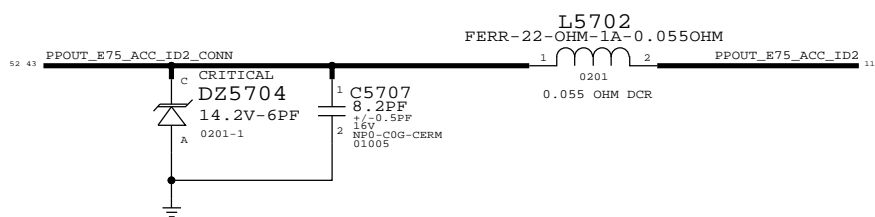
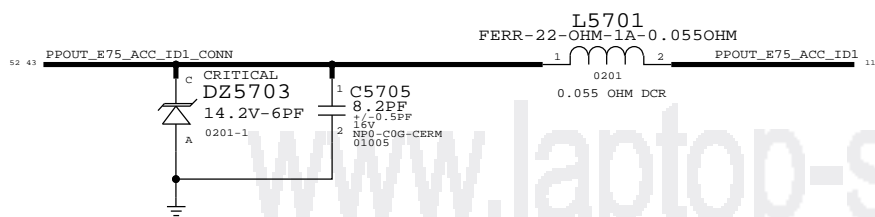
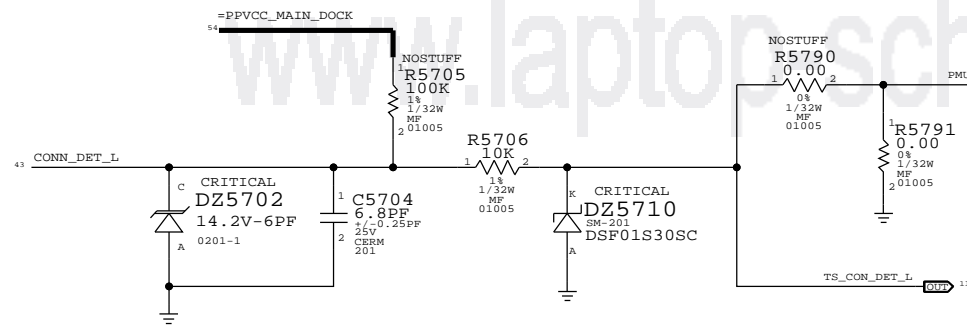
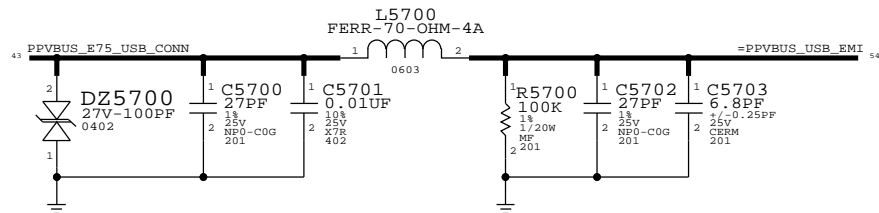
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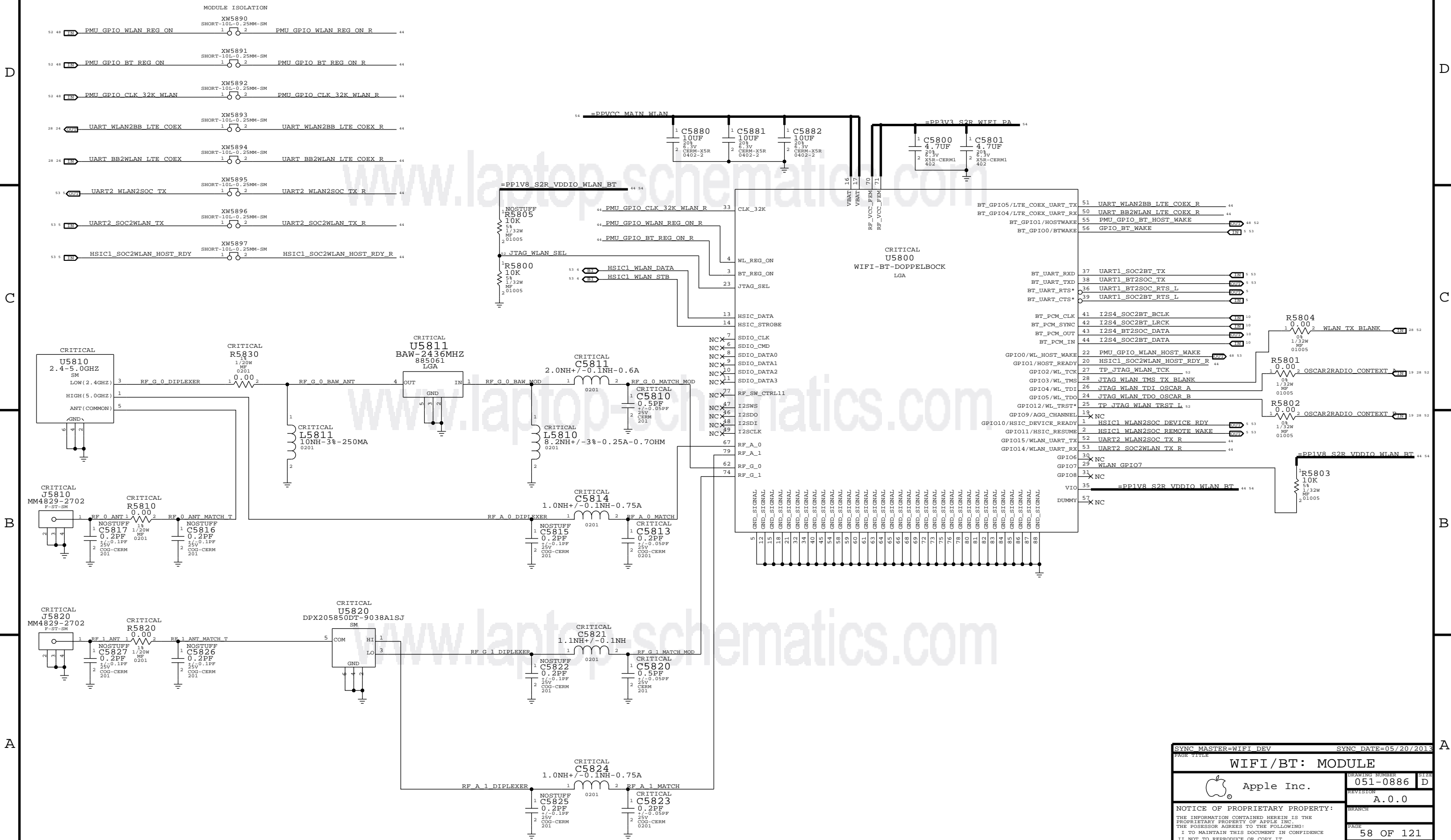



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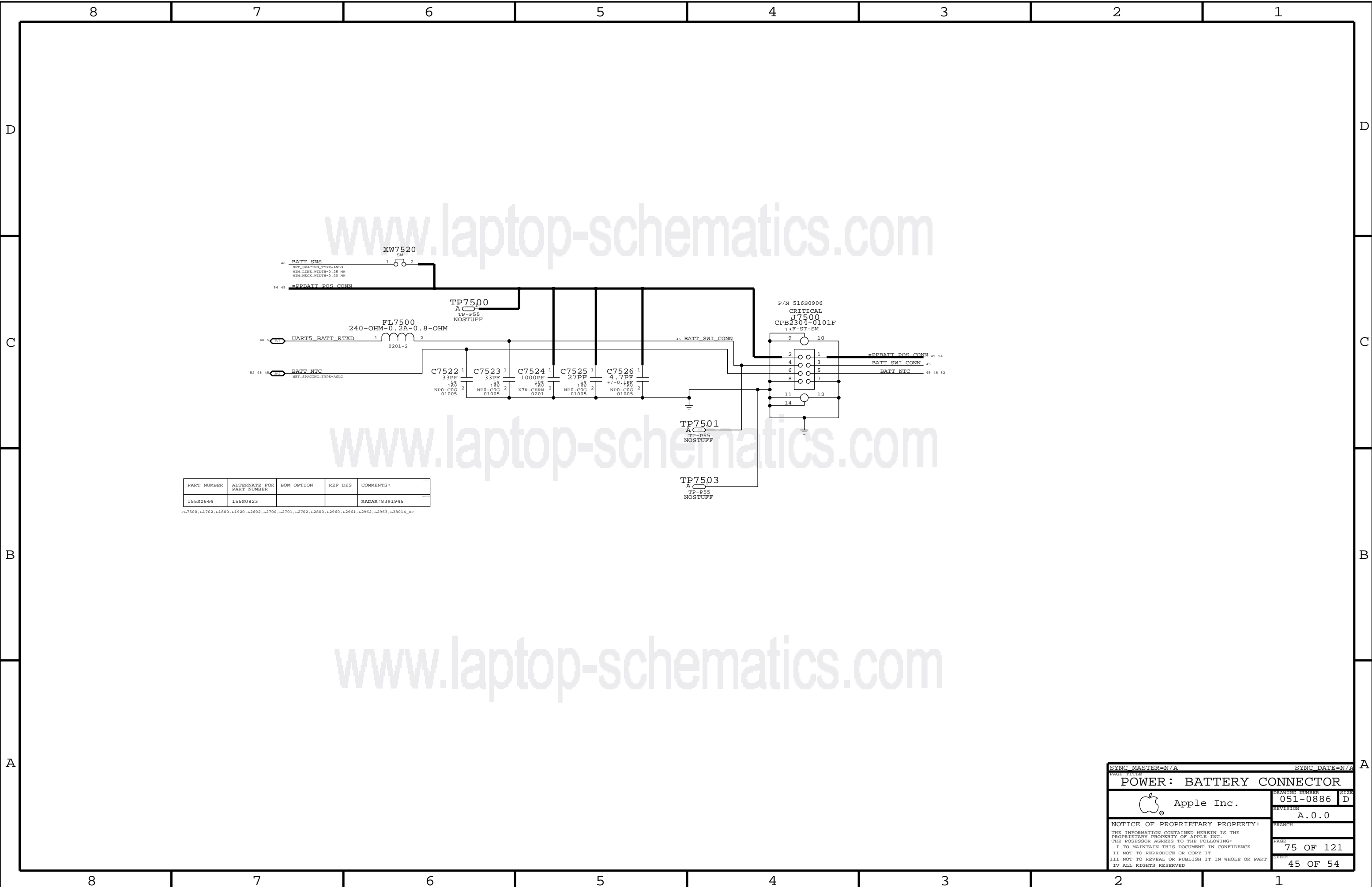


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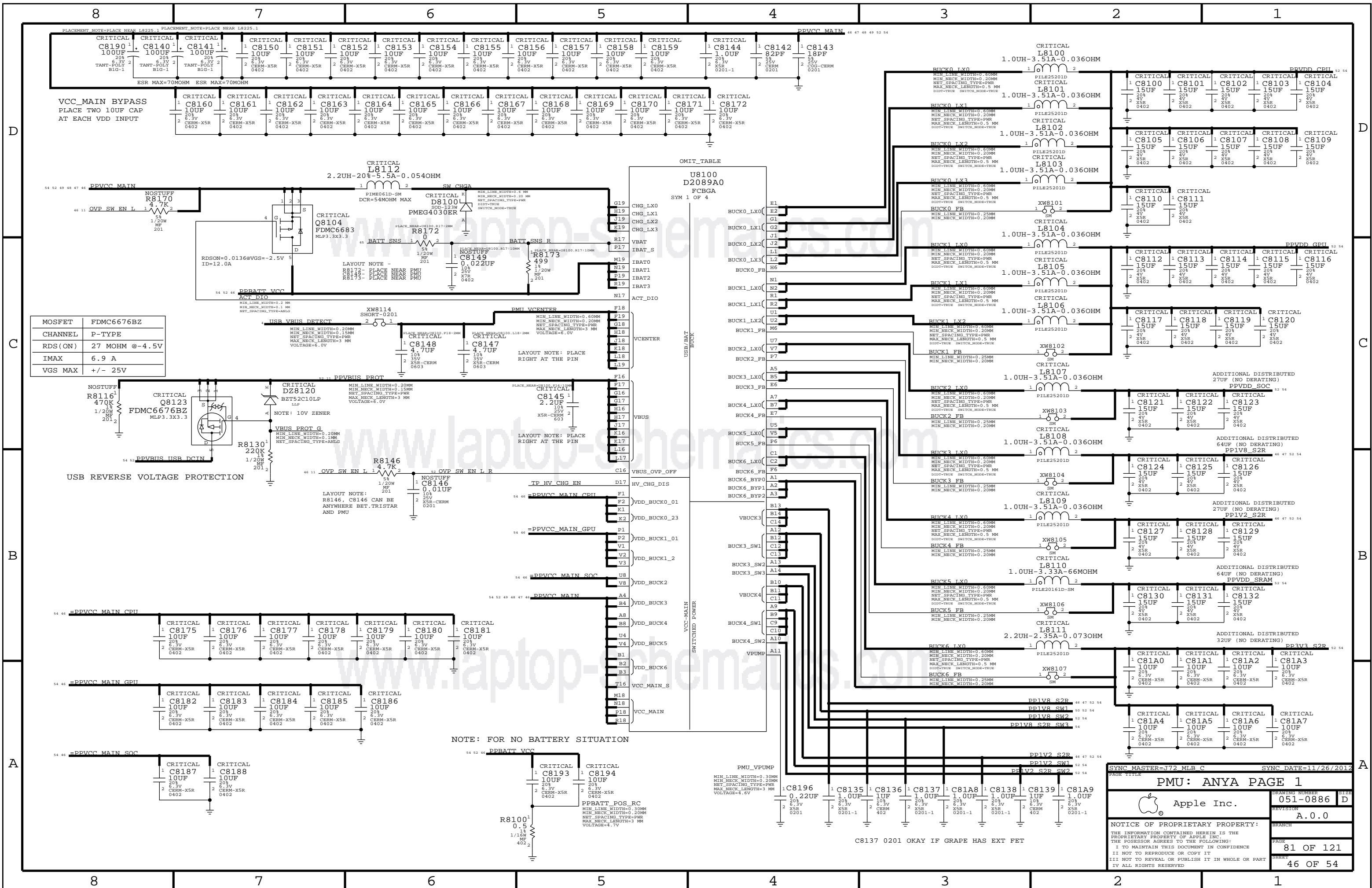
# WIFI/BT: MODULE



SYNC MASTER=WIFI DEV		SYNC DATE=05/20/2013	
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WIFI/BT: MODULE			
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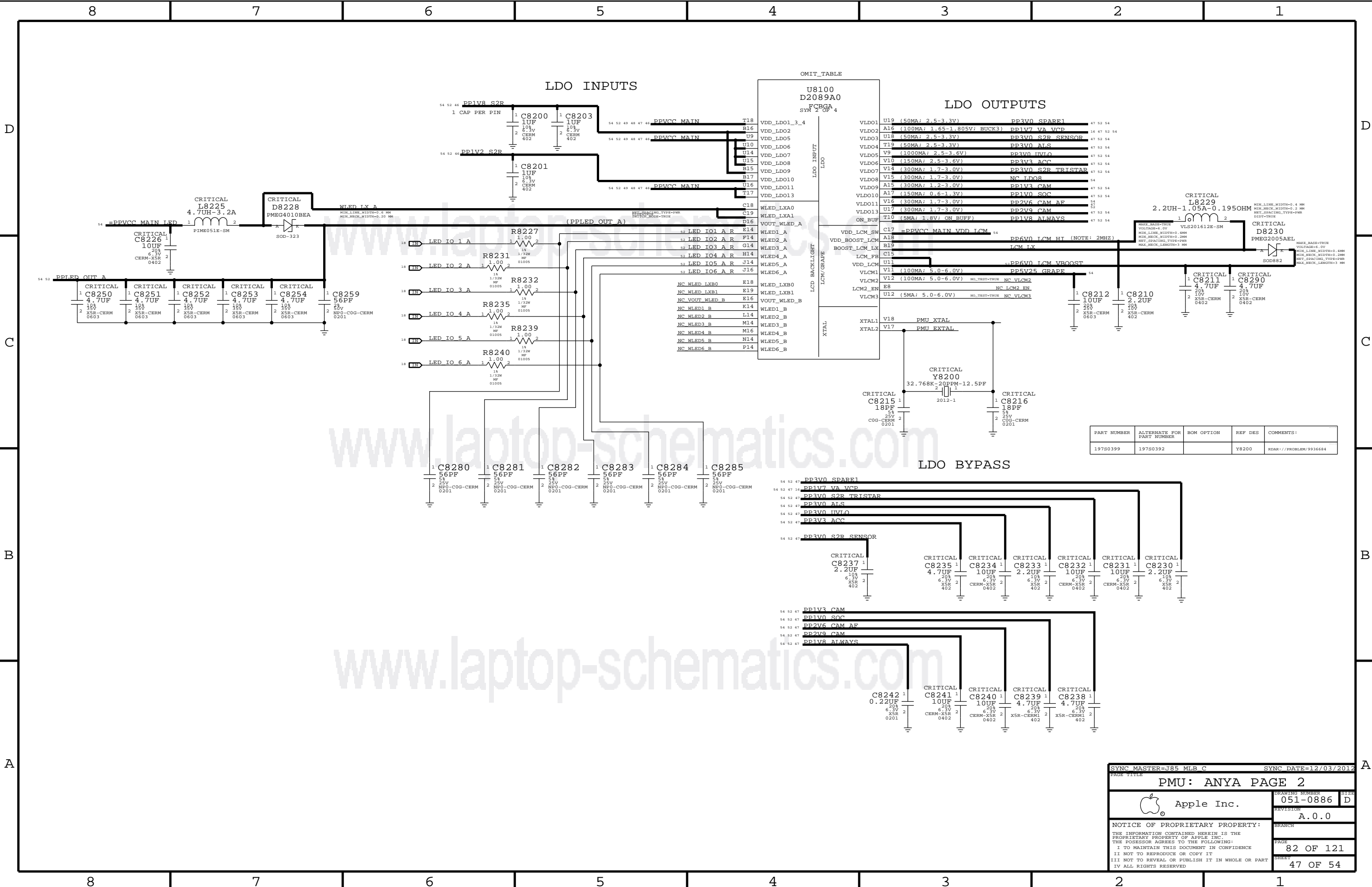
MOSFET	FDMC6676BZ
CHANNEL	P-TYPE
RDS(ON)	27 MOHM @-4.5V
IMAX	6.9 A
VGS MAX	+/- 25V

USB REVERSE VOLTAGE PROTECTION

NOTE: FOR NO BATTERY SITUATION

C8137 0201 OKAY IF GRAPE HAS EXT FET

SYNC MASTER=J72 MLB C		SYNC DATE=11/26/2012	
PAGE TITLE			
PMU: ANYA PAGE 1			
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		PAGE	81 OF 121
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PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
197S0399	197S0392		Y8200	RDAR:///PROBLEM/9936684

SYNC MASTER=J85 MLB C

SYNC DATE=12/03/2012

PAGE TITLE

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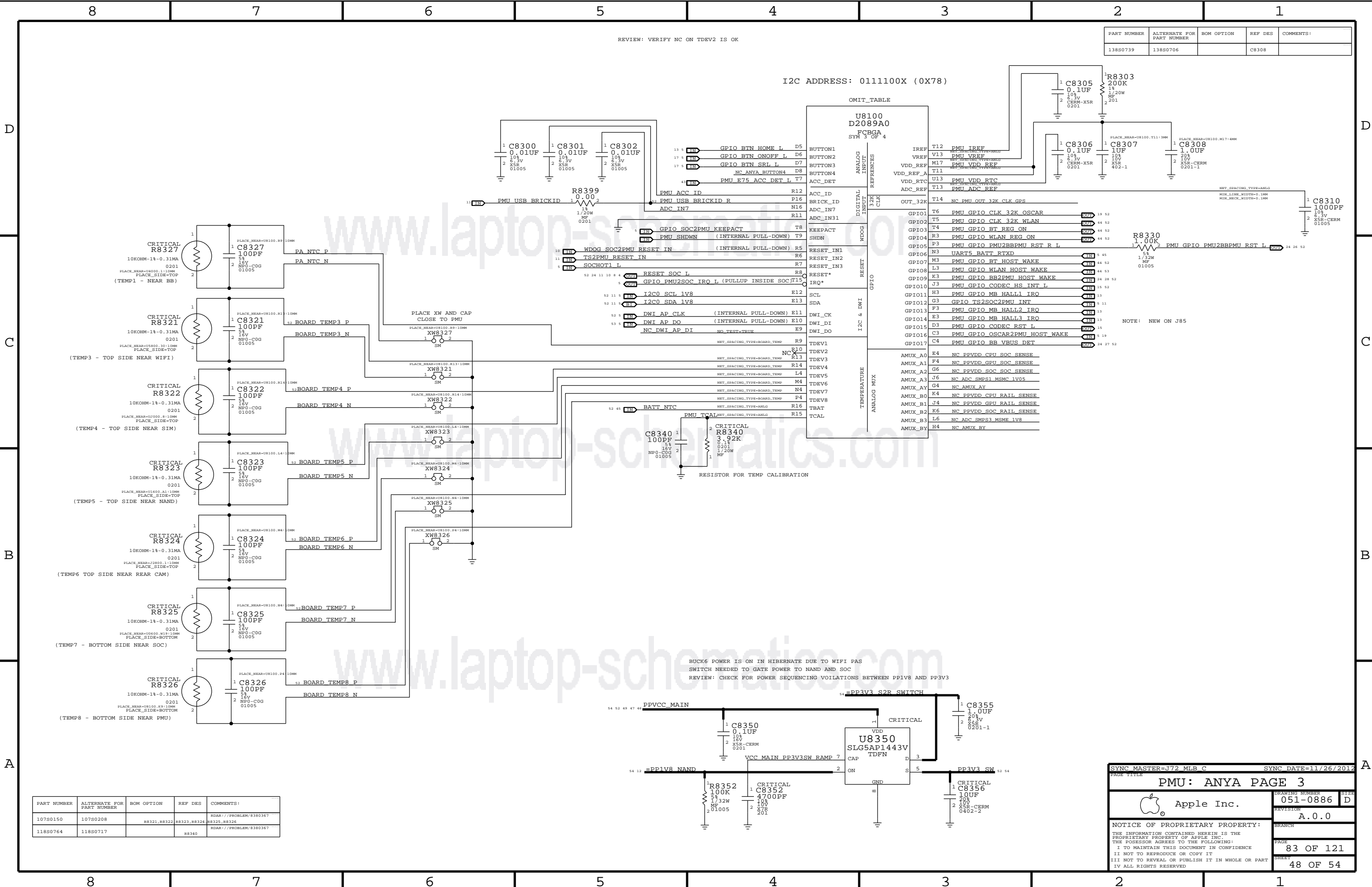
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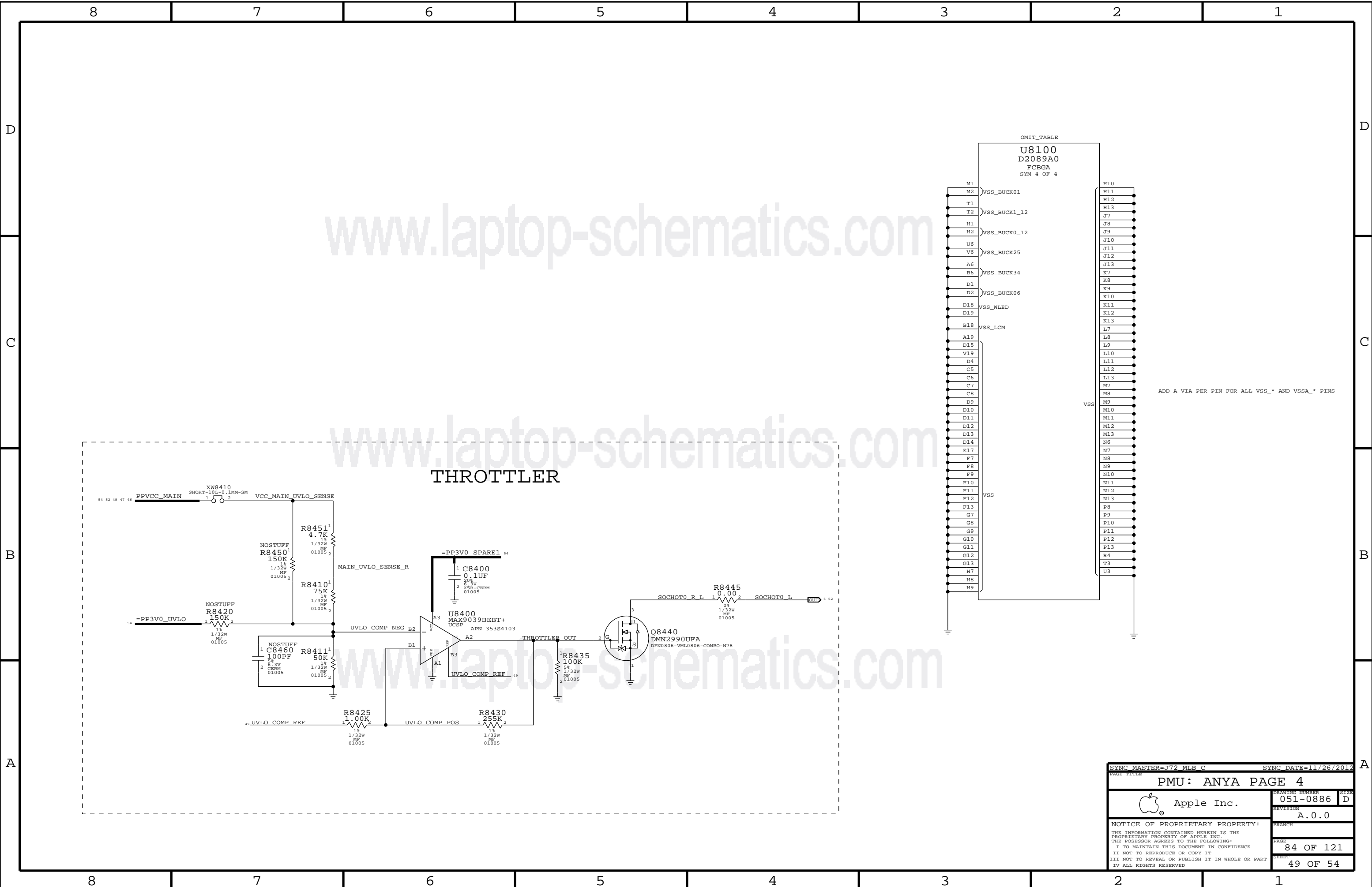
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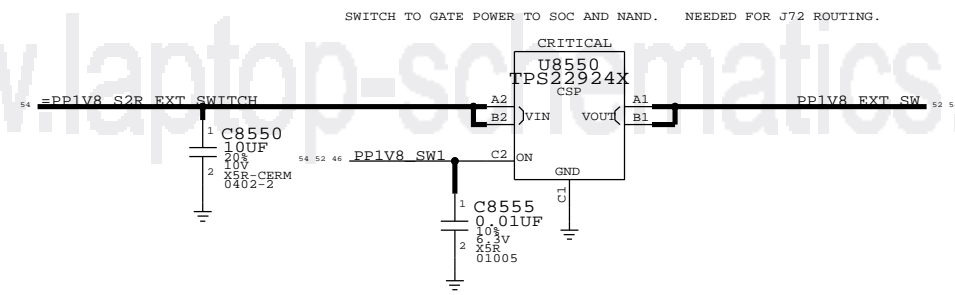
47 OF 54




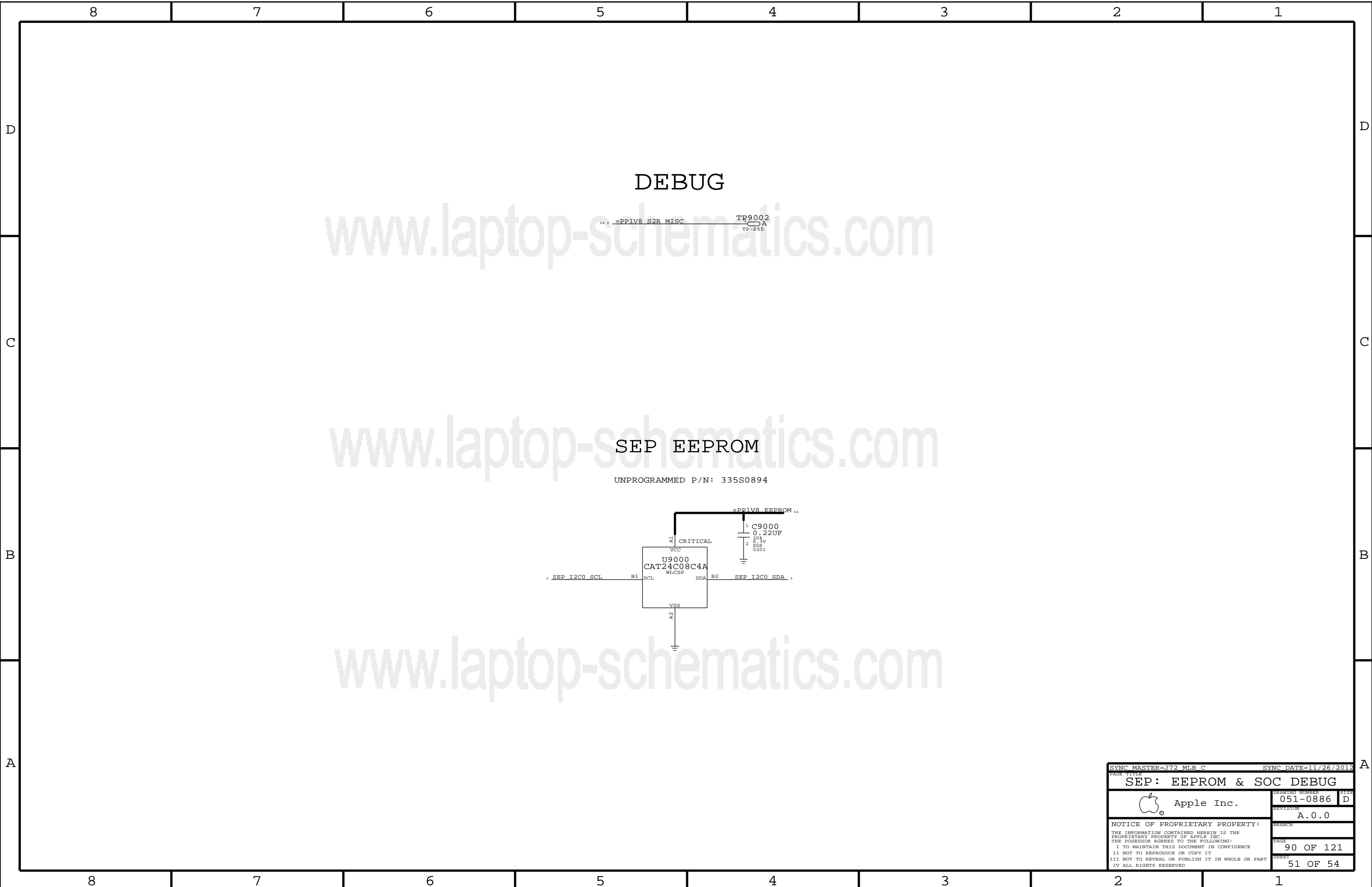
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118S0764	118S0717		R8340	RDAR: // PROBLEM/8380167

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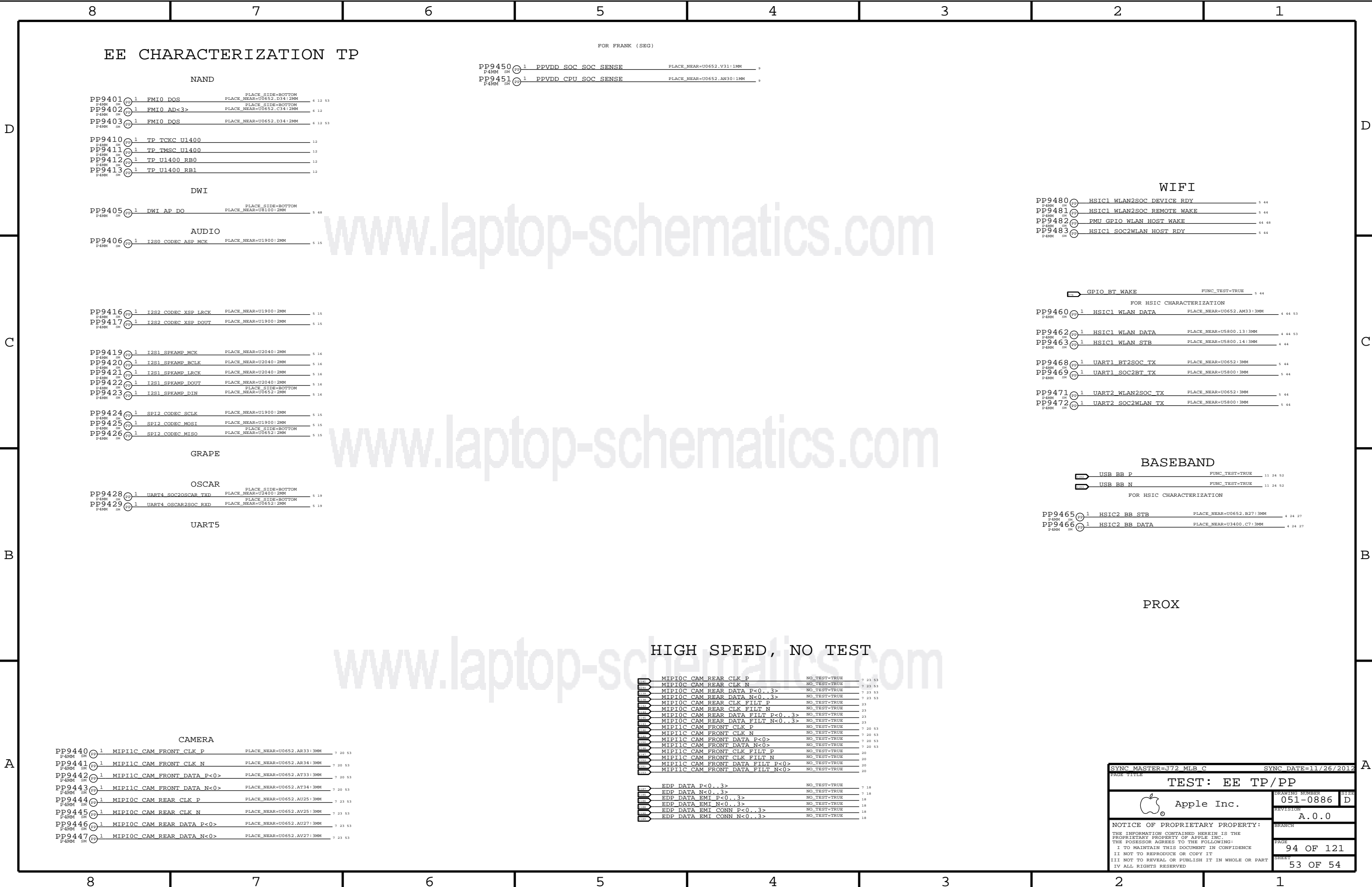
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POWER CONNECTIONS

BUCK0

52 46 PPVDD\_CPU == PPVDD\_CPU 9

BUCK1

52 46 PPVDD\_GPU == PPVDD\_GPU 9

BUCK2

52 46 PPVDD\_SOC == PPVDD\_SOC 9

BUCK3

52 47 46 PP1V8\_S2R == PP1V8\_S2R\_MISC 5 51  
== PP1V8\_S2R\_VDDIO\_WLAN\_BT 44  
== PP1V8\_S2R\_TRISTAR 11  
== PP1V8\_S2R\_DDR 8  
== PP1V8\_S2R\_GRAPE 13  
== PP1V8\_S2R\_EXT\_SWITCH 50  
== PP1V8\_S2R\_REAR\_CAMERA  
== PP1V8\_S2R\_MESA  
== PP1V8\_S2R\_VDD\_CORE\_GPS  
== PP1V8\_S2R\_VDD\_IO\_GPS

BUCK3\_SW

52 50 46 PP1V8\_SW1 == PP1V8\_AUDIO 15  
== PP1V8\_DMIC 14  
== PP1V8\_CAM\_FRONT 20  
== PP1V8\_CAM\_REAR 23  
== PP1V8\_PROX 22

PP1V8\_EXT SW

52 50 46 PP1V8\_EXT SW == PP1V8\_VDDIO18\_SOC 8 9  
== PP1V8\_SOC 4 5 7 10 18  
== PP1V8\_MIPI\_SOC 7  
== PP1V8\_EDP\_SOC 7  
== PP1V8\_NAND\_SOC 6  
== PP1V8\_NAND 12 48  
== PP1V8\_PLL\_SOC 4  
== PP1V8\_SPKRAMP  
== PP1V8\_EEPROM 51  
== PP1V8\_BEACON

PP1V8\_SW2

52 46 PP1V8\_SW2 == PP1V8\_GRAPE 13

PP1V8\_S2R\_SW3

46 PP1V8\_S2R\_SW3 == PP1V8\_S2R\_GYRO 21  
== PP1V8\_S2R\_ACCEL 21  
== PP1V8\_S2R\_OSCAR 19  
PP1V8\_S2R\_SW3 COMP 52 54

PP1V8\_S2R\_SW3 COMP

54 52 PP1V8\_S2R\_SW3 COMP == PP1V8\_S2R\_COMP 21

PP1V8\_S2R\_SW3 SHOULD BE ON IN HIBERNATE  
CURRENTLY POWERS OSCAR AND 1.8V RAIL ON SENSOR

BUCK4

52 47 46 PP1V2\_S2R == PP1V2\_S2R\_DDR 8  
== PP1V2\_S2R\_DDR\_SOC 8  
== PP1V2\_S2R\_CAM\_REAR

BUCK4\_SW

52 46 PP1V2\_SW1 == PP1V2\_VDDO\_DDR 8  
== PP1V2\_VDDIOD\_SOC 8  
== PP1V2\_HSIC\_SOC 4

PP1V2\_S2R\_SW2

52 46 PP1V2\_S2R\_SW2 == PP1V2\_S2R\_OSCAR 19

PP1V2\_S2R\_SW2 SHOULD BE ON IN HIBERNATE  
PROVIDE 1.2V TO OSCAR

BUCK5

52 46 PPVDD\_SRAM == PPVDD\_SRAM\_CPU  
== PPVDD\_SRAM\_SOC 9

BUCK6

52 46 PP3V3\_S2R == PP3V3\_S2R\_SWITCH 48  
== PP3V3\_S2R\_WIFI\_PA 44

PP3V3\_SW

52 48 PP3V3\_SW == PP3V3\_EDP\_PU  
== PP3V3\_NAND 12  
== PP3V3\_USB\_SOC 4

LDO1

52 47 PP3V0\_SPARE1 == PP3V0\_SPARE1 49

LDO2

52 47 16 PP1V7\_VA\_VCP == PP1V7\_VA\_VCP 15 16

LDO3

52 47 PP3V0\_S2R\_SENSOR == PP3V0\_S2R\_HALL 13  
== PP3V0\_S2R\_GYRO 21  
== PP3V0\_S2R\_ACCEL 21  
== PP3V0\_S2R\_COMP 21

LDO4

52 47 PP3V0\_ALS == PP3V0\_ALS 20  
== PP3V0\_PROX 22  
== PP3V0\_HP\_ALS  
== PP3V0\_IO\_ALS  
SHOULD IO ALS POWER HERE?

LDO5

52 47 PP3V0\_UVLO == PP3V0\_UVLO 49

LDO6

52 47 PP3V3\_ACC == PP3V3\_ACC 11

LDO7

52 47 PP3V0\_S2R\_TRISTAR == PP3V0\_S2R\_TRISTAR 11

LDO7 SHOULD BE ON IN HIBERNATE

LDO8

47 NC\_LDO8 NO\_TEST=TRUE == NC\_LDO8

LDO9

52 47 PP1V3\_CAM == PP1V3\_CAM\_FRONT  
== PP1V3\_CAM\_REAR 23

BACKUP RAIL. CAN BE BOOSTED TO MEET  
1.1V MIN ON CAMERA IF NEEDED.

LDO10

52 47 PP1V0\_SOC == PP1V0\_USB\_SOC 4  
== PP1V0\_MIPI\_SOC 7  
== PP1V0\_EDP\_PAD\_DVDD\_SOC 7

LDO11

52 47 PP2V6\_CAM\_AF == PP2V6\_CAM\_REAR\_AF 23

LDO13

52 47 PP2V9\_CAM == PP2V9\_CAM\_FRONT 20  
== PP2V9\_CAM\_REAR 23

VLCM1

47 PP5V25\_GRAPE == PP5V25\_GRAPE 13

CHARGER MAIN

52 49 48 47 46 PPVCC\_MAIN == PPVCC\_MAIN\_AUDIO 15 16  
== PPVCC\_MAIN\_LED 47  
== PPVCC\_MAIN\_DOCK 43  
== PPVCC\_MAIN\_DEV  
== PPVCC\_MAIN\_CPU 46  
== PPVCC\_MAIN\_GPU 46  
== PPVCC\_MAIN\_SOC 46  
== PPVCC\_MAIN\_GRAPE 13  
== PPVCC\_MAIN\_LCD 18  
== PPVCC\_MAIN\_NAVAJO  
== PPVCC\_MAIN\_VDD\_LCM 47  
== PPVCC\_MAIN\_WLAN 44  
== PPVCC\_MAIN\_GPS

BATTERY

52 46 PPBATT\_VCC == PPBATT\_POS\_CONN 45  
== PPBATT\_VCC\_BB 24 25 33 34 35 36 37 38  
== PPBATT\_AUDIO

USB POWER INPUT

52 46 PPVBUS\_USB\_DCIN == PPVBUS\_USB\_EMI 43

ON\_BUF

52 47 PP1V8\_ALWAYS == PP1V8\_ALWAYS 5

BACKLIGHT BOOST

52 47 PPLED\_OUT\_A == PPLED\_REG\_A 18

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