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.

Tue Dec 21 17:27:23 2010

REV	ECN	DESCRIPTION OF REVISION	CK APPD / DATE
			2010-12-22

N92 SINGLE_BRD(MLB) REV C

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-8296	1	N92_SCHEMATIC_TOP	SCH	Y	?
820-2766	1	N92_SINGLE_BOARD	PCB	Y	?

N92 EEE BOM LABELS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-2029	1	EEE FOR 639-0558 (32G+SEMCO)	EEE_DC47	Y	SEM_FLASH_32GB
825-2029	1	EEE FOR 639-0559 (16G+SEMCO)	EEE_DC48	Y	SEM_FLASH_16GB
825-2029	1	EEE FOR 639-1195 (64G+SEMCO)	EEE_DD7Y	Y	SEM_FLASH_64GB
825-2029	1	EEE FOR 639-1200 (64G+MURATA)	EEE_DD90	Y	MUR_FLASH_64GB
825-2029	1	EEE FOR 639-1201 (32G+MURATA)	EEE_DD91	Y	MUR_FLASH_32GB
825-2029	1	EEE FOR 639-1202 (16G+MURATA)	EEE_DD92	Y	MUR_FLASH_16GB

BOARD - 820-2766
SCHEMATIC - 051-8296
MCO - 056-3382

BOM - 639-0558(32GB+SEMCO)
BOM - 639-0559(16GB+SEMCO)
BOM - 639-1195(64GB+SEMCO)
BOM - 639-1200(64GB+MURATA)
BOM - 639-1201(32GB+MURATA)
BOM - 639-1202(16GB+MURATA)

RADIO SUB-DESIGN ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
157S0068	157S0072	?	FL4_RF	PCS RX BALUN
197S0381	197S0361	?	G1_RF	WIFI/BT TCXO

RF COAX CONNECTOR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
518S0750	1	IPEX RF COAXIAL CONNECTOR	J3_RF	Y	RF_COAX_ALL
518S0750	1	IPEX RF COAXIAL CONNECTOR	J5_RF	Y	RF_COAX_ALL

POWER INDUCTOR ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152S1172	152S0928	?	L2_PMU	IND ALTERNATE
152S1173	152S0979	?	L9	IND ALTERNATE
152S1051	152S0927	?	L7_PMU	IND ALTERNATE

WIFI BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0145	1	SEMCO MODULE	U12_RF	Y	SEMCO
339S0111	1	MURATA MODULE	U12_RF	Y	MURATA

PMU BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
338S0867	1	PMU-A4	U48_PMU	Y	PMU_A4
338S0876	1	PMU-A5	U48_PMU	Y	PMU_A5

BB MEMORY BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
341T0324	1	BASEBAND MEMORY SUB-ASSEMBLY	U2_RF	Y	BB_MEMORY_ALL

H3 BOM OPTION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0123	1	APPLICATION PROCESSOR WITH ELPIDA DDR	U52	Y	H3_ALL

RADIO RESET BUFFER BOM OPTION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
311S0545	1	BUFFER FOR RADIO RESET	U11_RF	Y	RADIO_BUFFER_ALL

RADIO RESET BUFFER ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
311S0546	311S0545	?	U11_RF	TI ALTERNATE

VIDEO BUFFER ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353S2684	353S2493	?	U9	INTERSIL ALTERNATE

PMU CRYSTAL ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
197S0329	197S0299	?	Y1_PMU	ITTI CRYSTAL
197S0369	197S0299	?	Y1_PMU	TXC CRYSTAL

LCD BL DRIVER ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
376S0769	376S0768	?	Q1_PMU	LCD BL FET DRIVER

POWER INDUCTORS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
607-6809	1	POWER INDUCTORS	L1_PMU	Y	PMU_INDUCTORS
607-6809	1	POWER INDUCTORS	L3_PMU	Y	PMU_INDUCTORS
607-6809	1	POWER INDUCTORS	L16_PMU	Y	PMU_INDUCTORS
607-6809	1	POWER INDUCTORS	L18_PMU	Y	PMU_INDUCTORS

POWER INDUCTOR ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
607-6810	607-6809	?	L1_PMU	DIRECTIONAL ALTERNATES
607-6810	607-6809	?	L3_PMU	DIRECTIONAL ALTERNATES
607-6810	607-6809	?	L16_PMU	DIRECTIONAL ALTERNATES
607-6810	607-6809	?	L18_PMU	DIRECTIONAL ALTERNATES

DDR ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339S0126	339S0123	?	U52	HYNIX 46NM
339S0136	339S0123	?	U52	SEC 54NM

CHOKE ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
155S0623	155S0310	?	L1	90 OHM CMC
155S0623	155S0310	?	L2	90 OHM CMC

32K ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
197S0392	197S0299	?	Y1_PMU	32K ALTERNATE

THERMISTOR ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
107S0146	107S0117	?	R4_PMU	THERMISTOR ALTERNATE
107S0146	107S0117	?	R7_PMU	THERMISTOR ALTERNATE
107S0146	107S0117	?	R5_PMU	THERMISTOR ALTERNATE
107S0146	107S0117	?	R2_PMU	THERMISTOR ALTERNATE
107S0150	107S0117	?	R4_PMU	THERMISTOR ALTERNATE
107S0150	107S0117	?	R7_PMU	THERMISTOR ALTERNATE
107S0150	107S0117	?	R5_PMU	THERMISTOR ALTERNATE
107S0150	107S0117	?	R2_PMU	THERMISTOR ALTERNATE

10UF CAP ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S0678	138S0679	?	C17	10UF CAP ALTNERATE
138S0678	138S0679	?	C78	10UF CAP ALTNERATE

90-OHM CMC ATERNATE

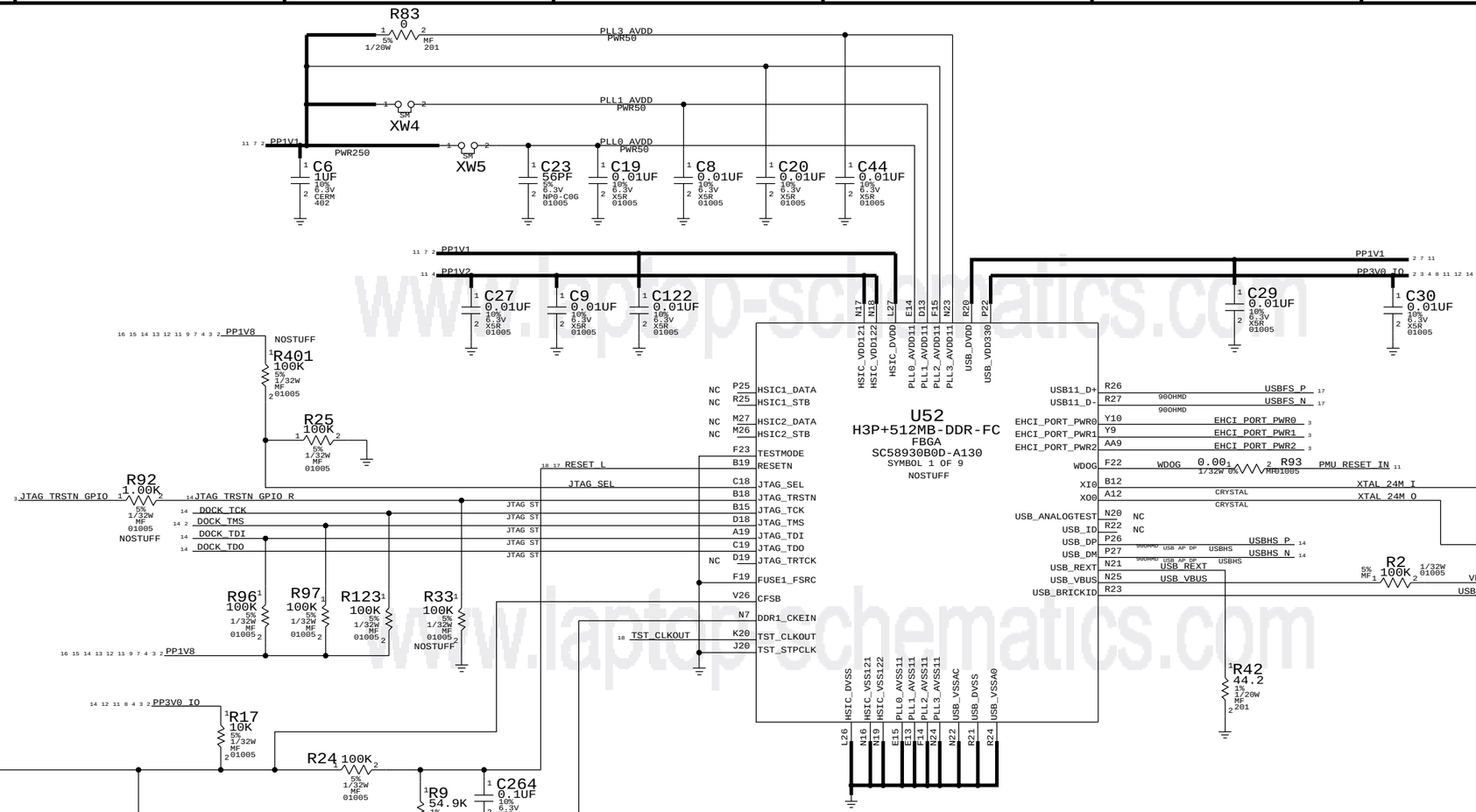
PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
155S0460	155S0583	?	L7	90-OHM CMC ALT
155S0460	155S0583	?	L13	90-OHM CMC ALT
155S0460	155S0583	?	L14	90-OHM CMC ALT
155S0460	155S0583	?	L15	90-OHM CMC ALT
155S0460	155S0583	?	L16	90-OHM CMC ALT

SYNC MASTER=N/A SYNC DATE=N/A

DRAWING TITLE: TABLE OF CONTENTS

Apple Inc.

DRAWING NUMBER: 051-8296 SIZE: D
REVISION: A.6.0
BRANCH:
PAGE: 1 OF 18
SHEET: 1 OF 33



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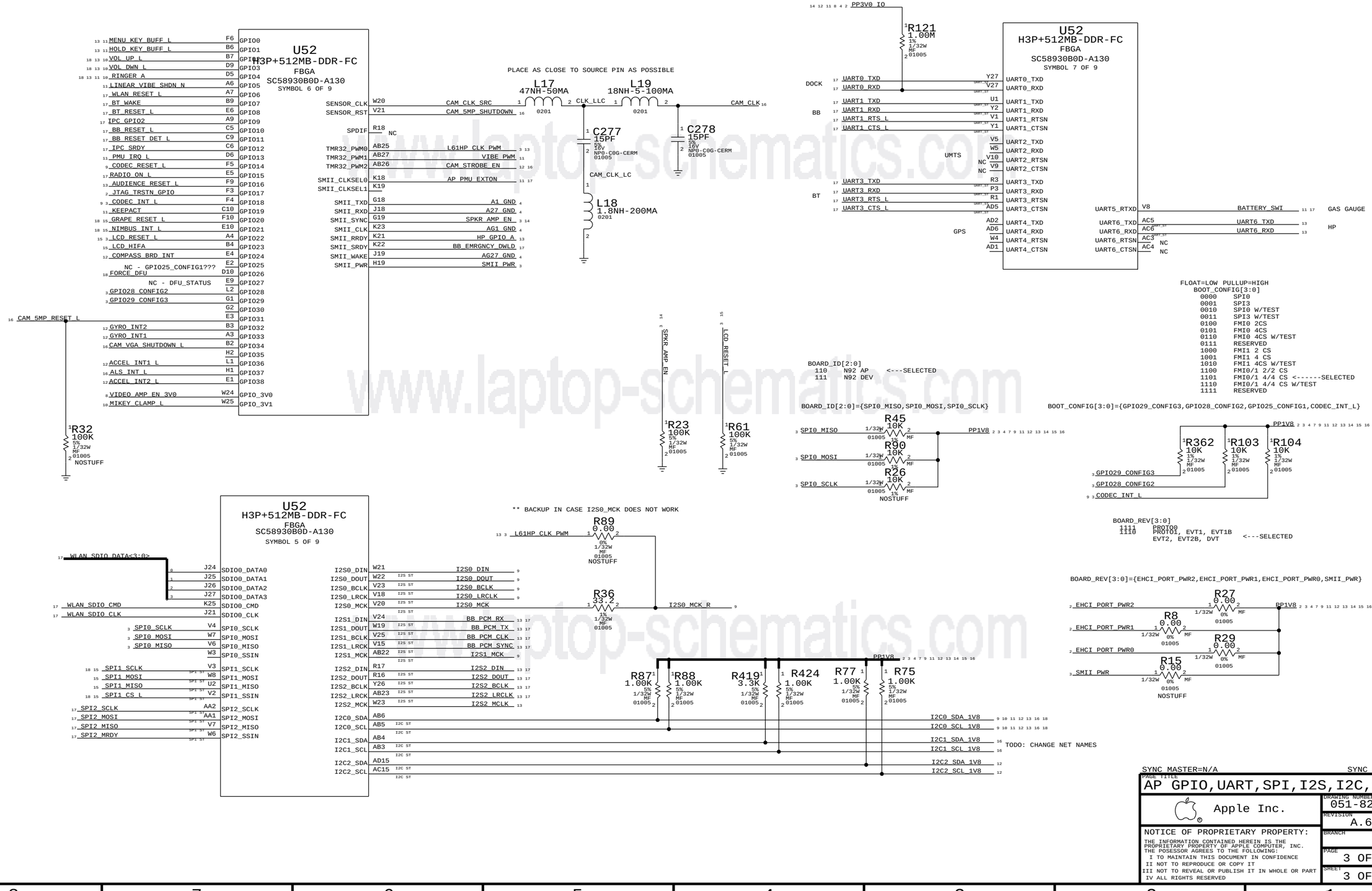
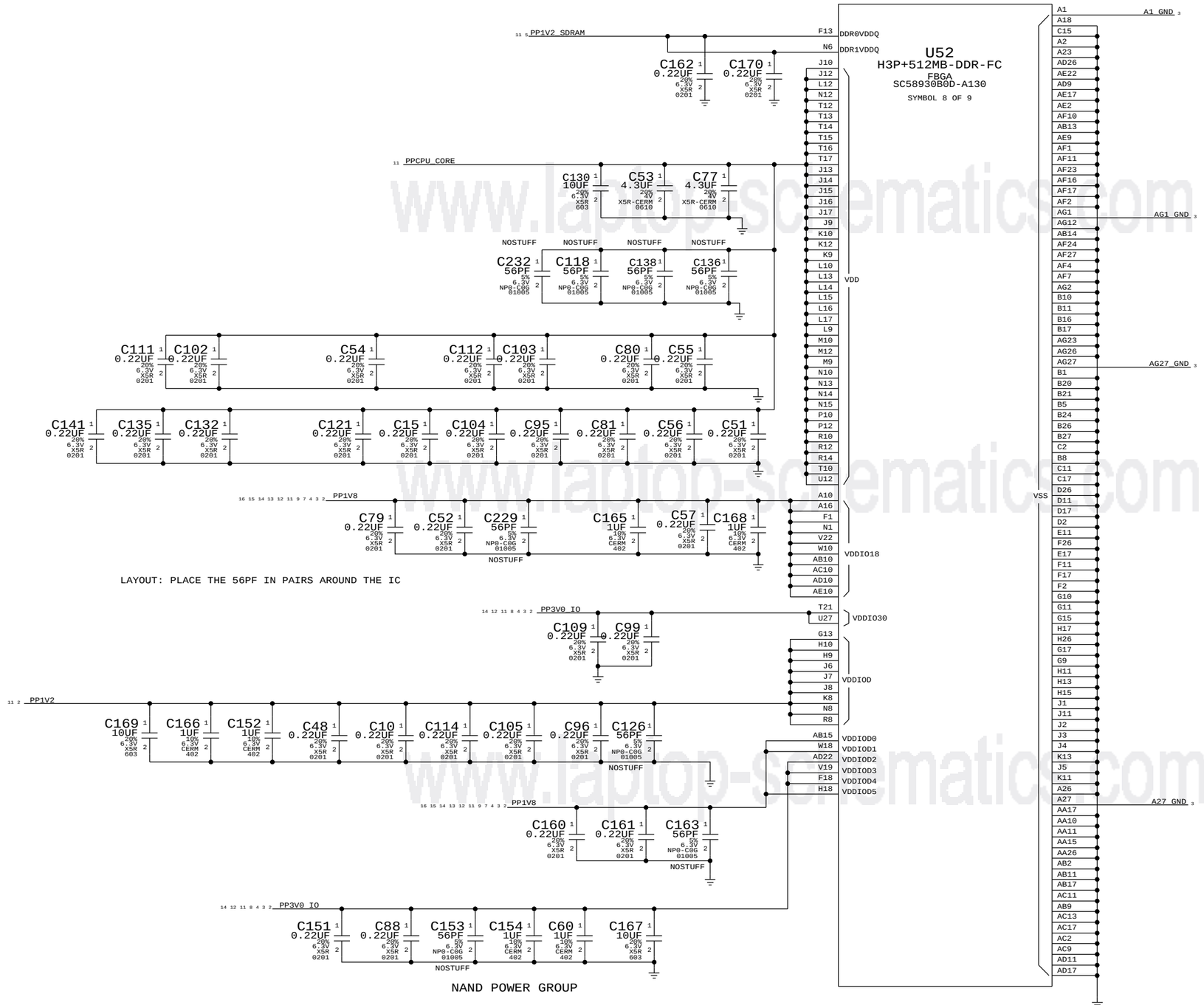
Apple Inc.

DRAWING NUMBER 051-8296 SIZE D
REVISION A.6.0
BRANCH
PAGE 2 OF 18
SHEET 2 OF 33





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PAGE TITLE: AP PWR

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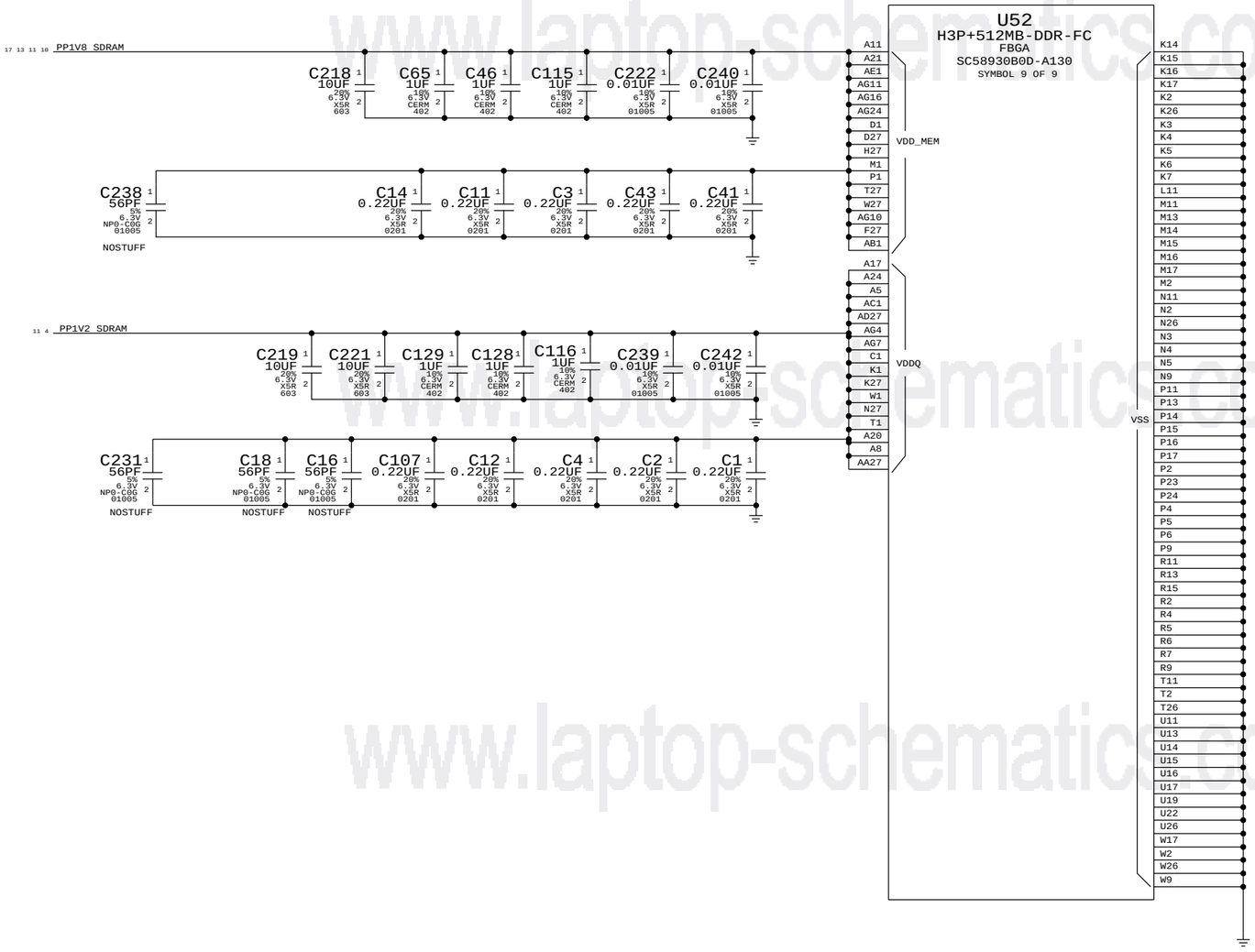
REVISION: A.6.0

BRANCH:

PAGE: 4 OF 18

SHEET: 4 OF 33

PLACE THE 56PF IN PAIRS AROUND THE IC



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Apple Inc.

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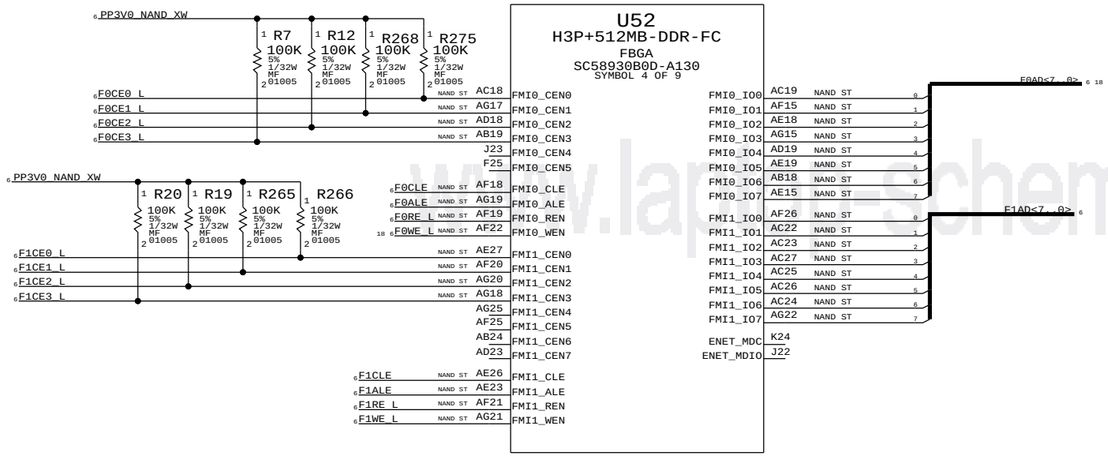
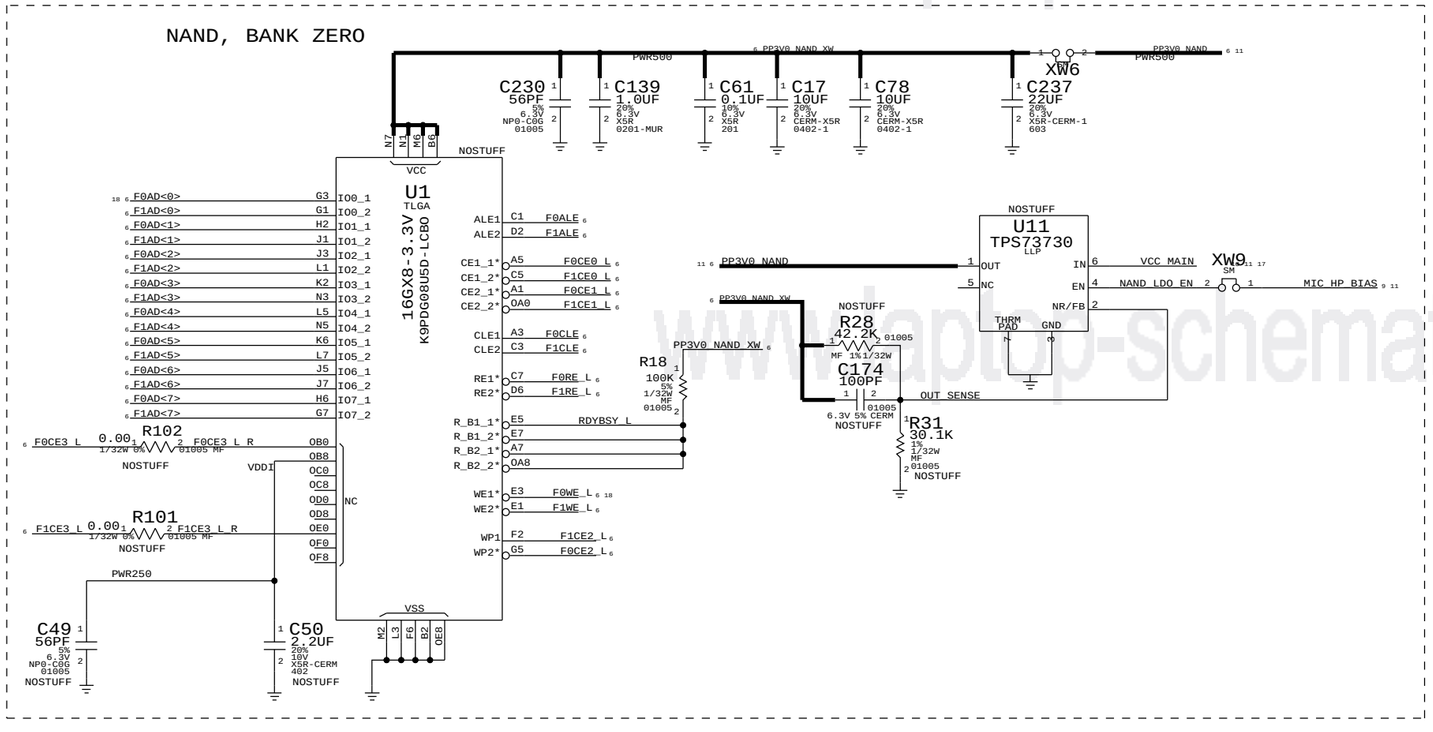
REVISION: A.6.0

BRANCH:

PAGE: 5 OF 18

SHEET: 5 OF 33





NAND BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
607-7990	1	SUBBOM 16G RAW	SUB1	Y	FLASH_16GB
607-7989	1	SUBBOM 32G RAW	SUB1	Y	FLASH_32GB
607-7998	1	SUBBOM 64G RAW LDO	SUB1	Y	FLASH_64GB

NAND ALTERNATE SUBBOMS

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
607-7995	607-7990	NOSTUFF	SUB1	16G PPN LDO ALT
607-7997	607-7989	NOSTUFF	SUB1	32G PPN LDO ALT
607-7996	607-7998	NOSTUFF	SUB1	64G PPN LDO ALT
607-7992	607-7990		SUB1	16G PPN ALT
607-7993	607-7989		SUB1	32G PPN ALT
607-7994	607-7998	NOSTUFF	SUB1	64G PPN ALT
607-7999	607-7990	NOSTUFF	SUB1	16G RAW LDO ALT
607-8000	607-7989	NOSTUFF	SUB1	32G RAW LDO ALT
607-7991	607-7998	NOSTUFF	SUB1	64G RAW ALT

===NOTES===
-ALL SUB-BOMS THAT ARE NOT USED ARE DESIGNATED WITH BOMOPTION "NOSTUFF"

-TO ADD ADDITIONAL NAND DEVICES OR TO CHANGE A NAND CONFIG USE THE "NAND BOM" SUBDESIGN TO MANAGE THE 607- APNS LISTED ABOVE

-THIS TABLE SHOULD NOT BE MODIFIED OTHER THAN TO ADD/REMOVE THE "NOSTUFF" PROPERTY.

SYNC MASTER=N/A SYNC DATE=N/A

PAGE TITLE: NAND & NOR

Apple Inc.

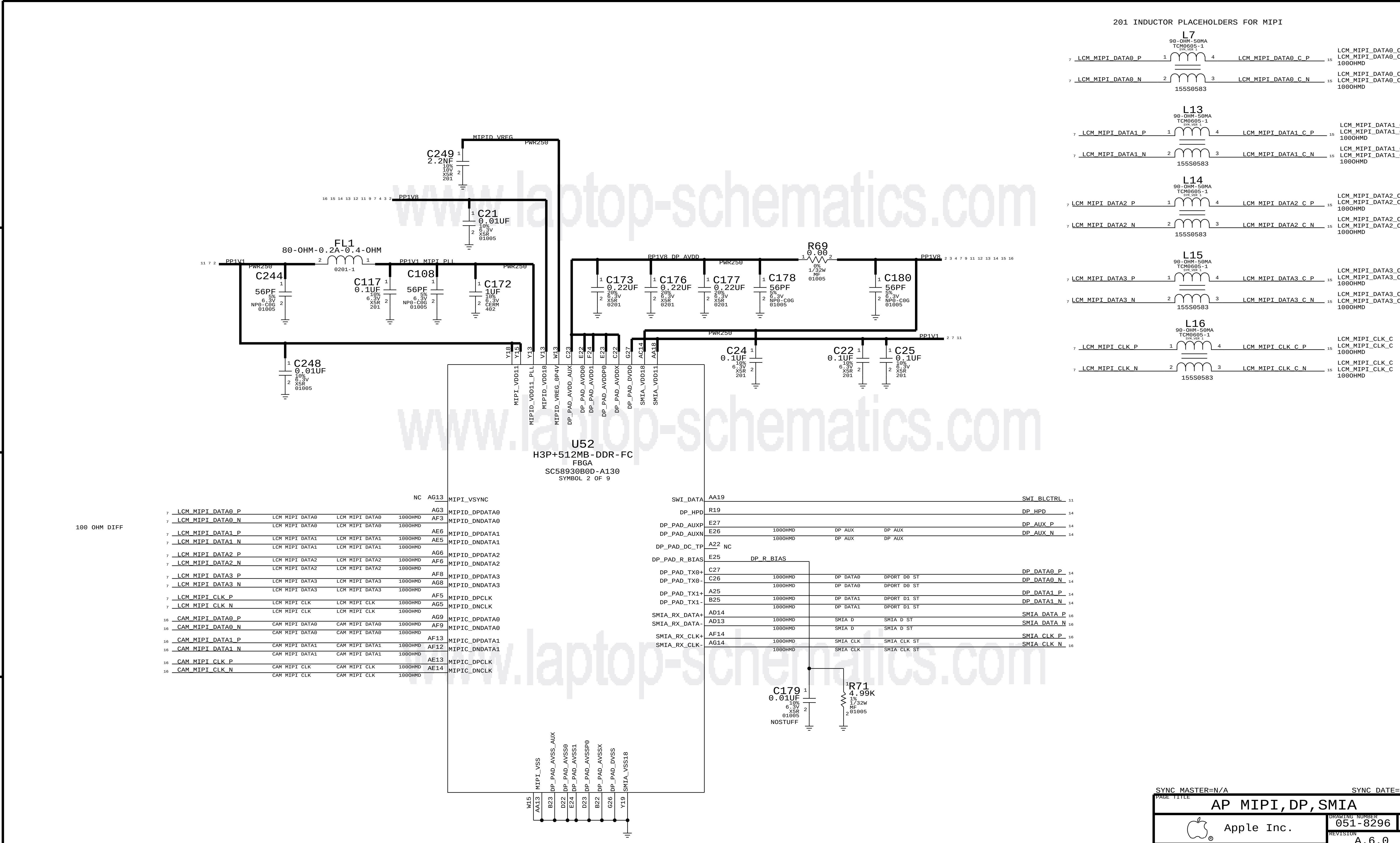
DRAWING NUMBER: 051-8296 SIZE: D

REVISION: A.6.0

BRANCH:

PAGE: 6 OF 18

SHEET: 6 OF 33



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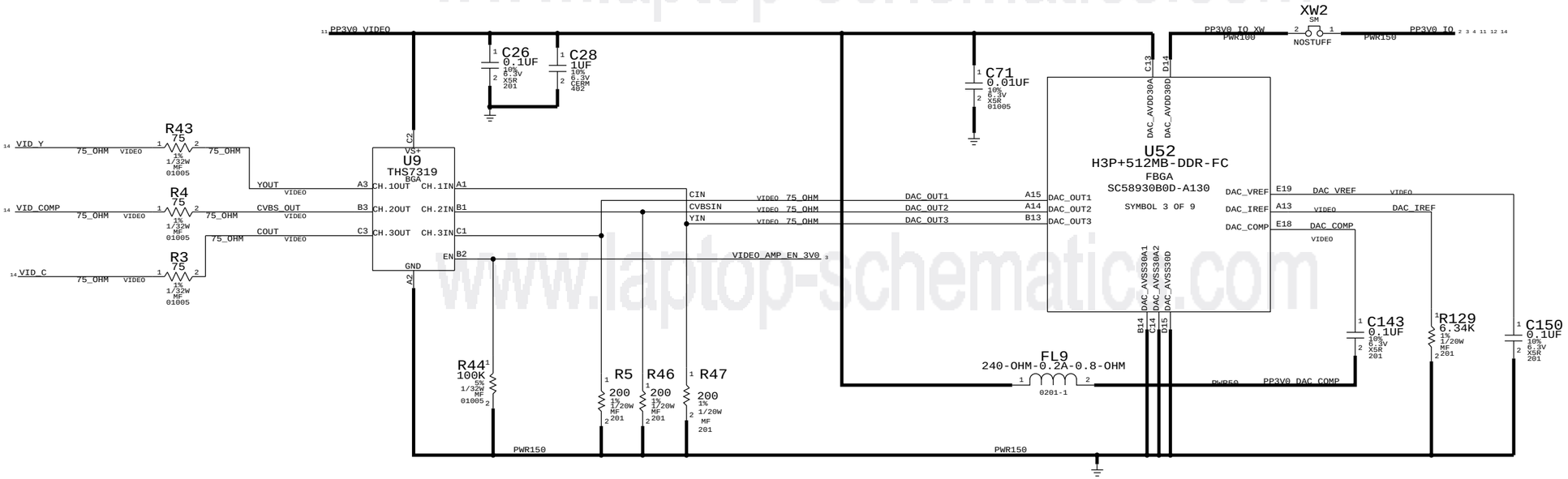
Apple Inc.

DRAWING NUMBER: 051-8296 SIZE: D

REVISION: A.6.0

BRANCH



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PAGE TITLE
AP TVOUT, COMPASS

Apple Inc.

DRAWING NUMBER 051-8296 SIZE D
REVISION A.6.0
BRANCH
PAGE 8 OF 18
SHEET 8 OF 33

L61 AUDIO INTERFACE

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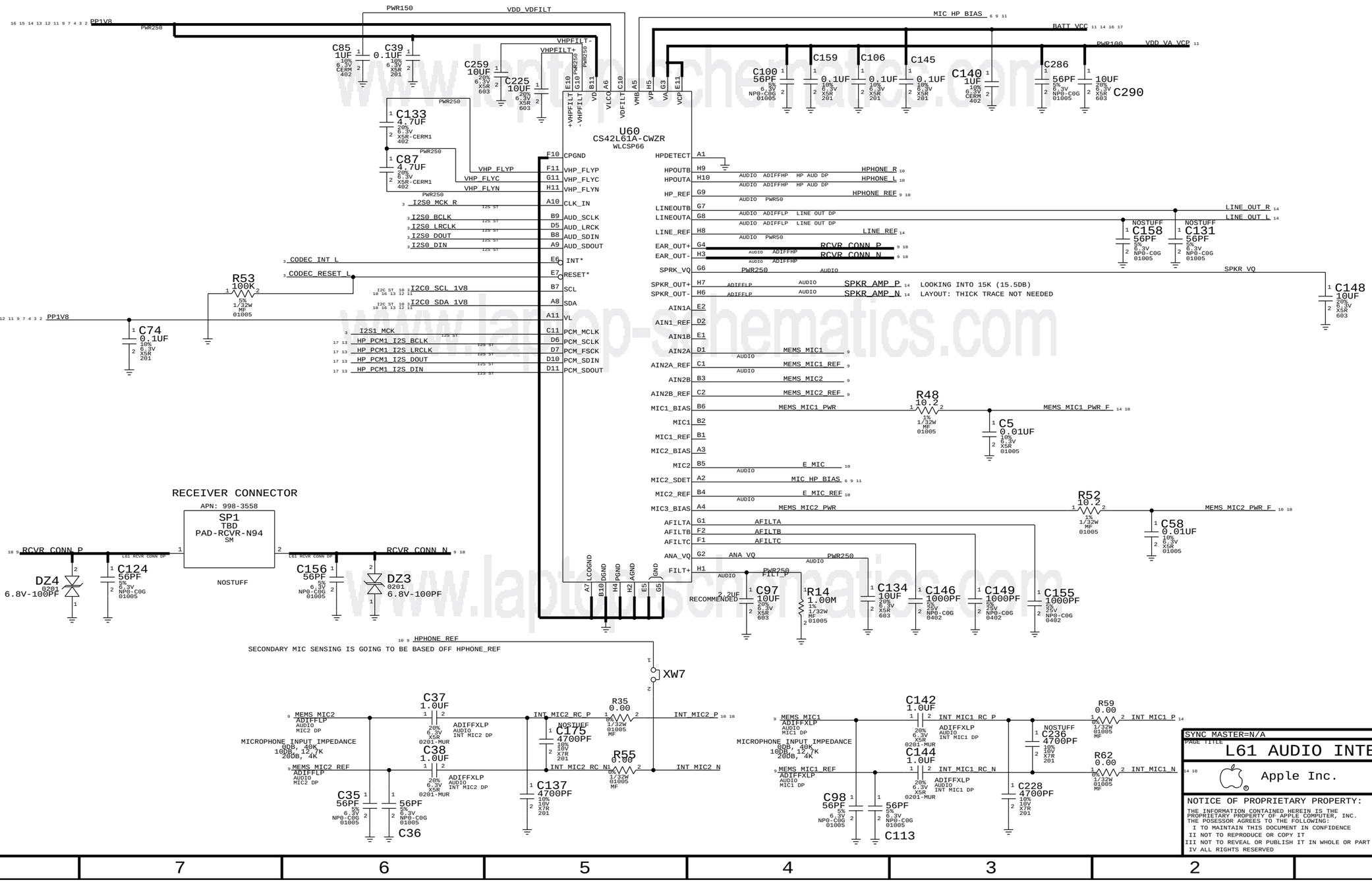

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PAGE TITLE: L61 AUDIO INTERFACE

Apple Inc.

DRAWING NUMBER: 051-8296 SIZE: D

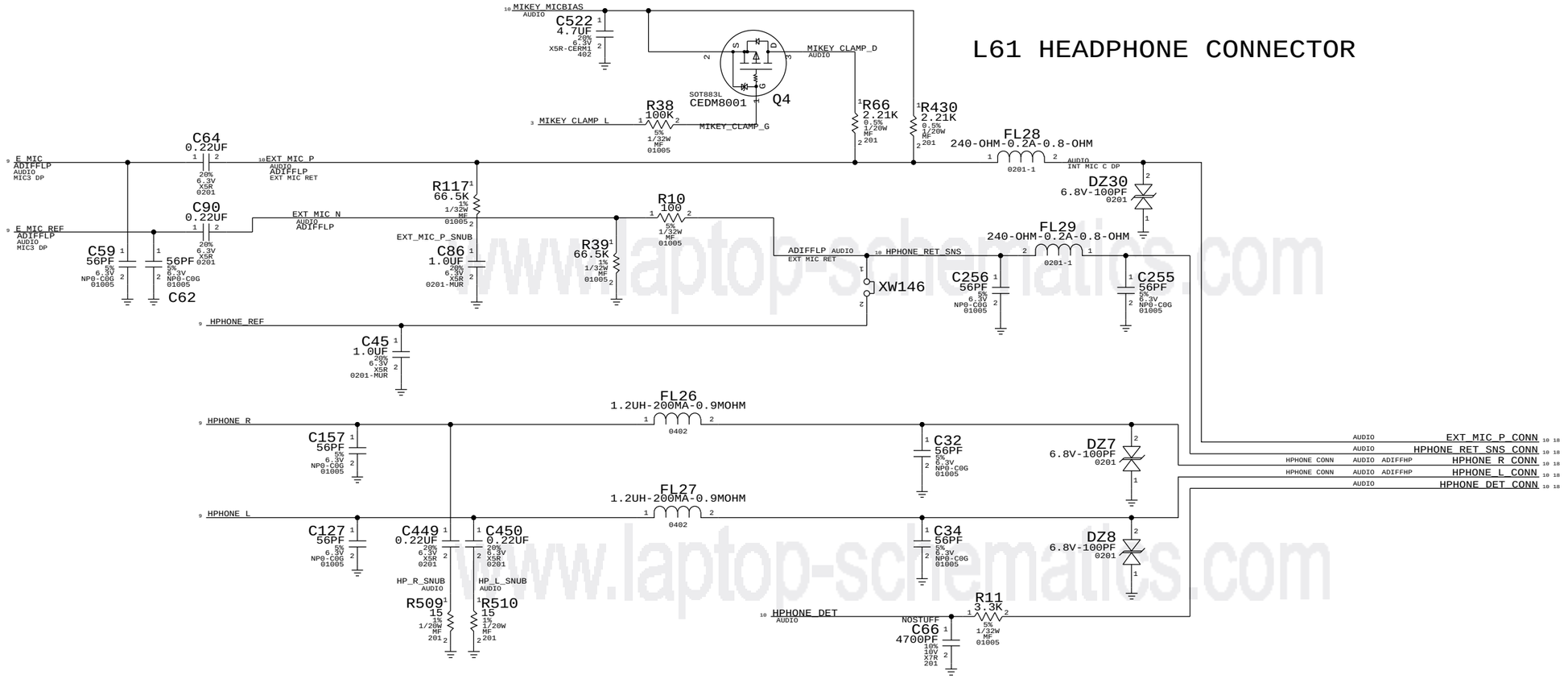
REVISION: A.6.0

BRANCH:

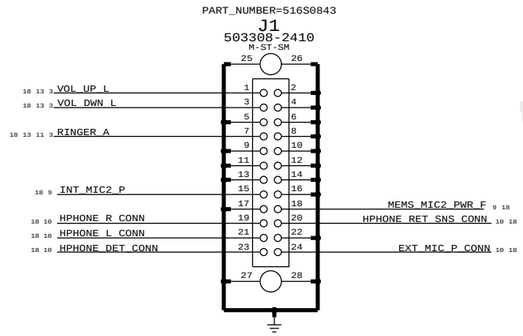
PAGE: 9 OF 18

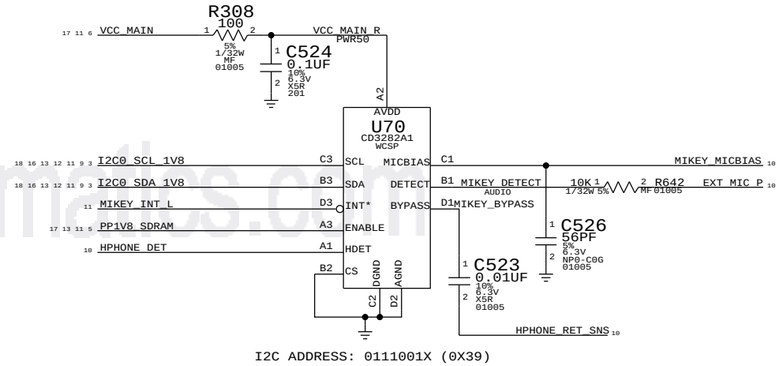
SHEET: 9 OF 33

L61 HEADPHONE CONNECTOR



BUTTON FLEX CONNECTOR





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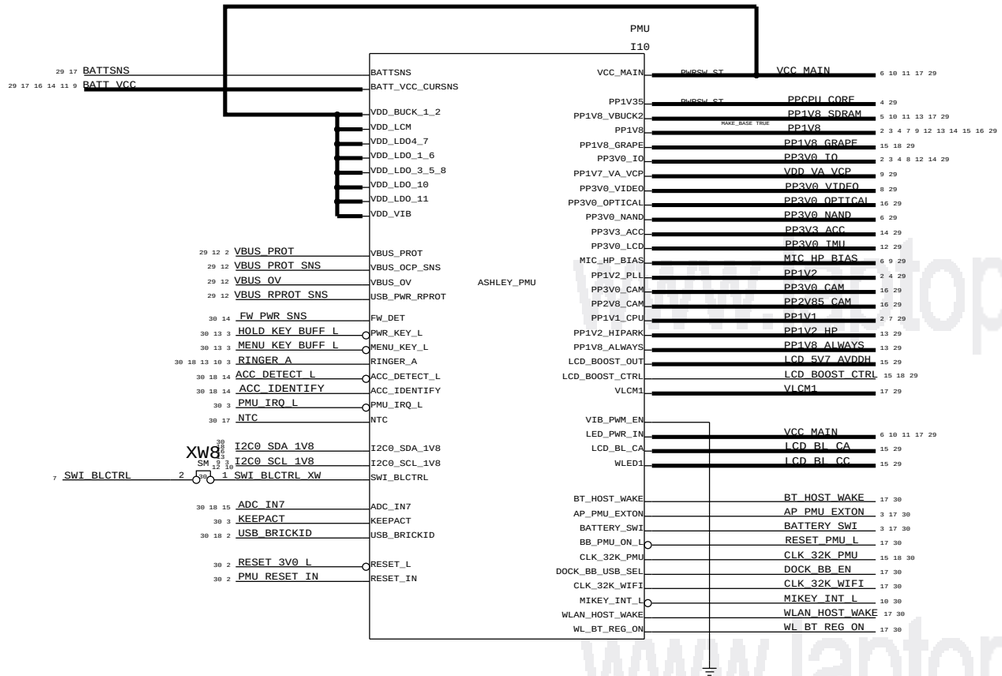
SYNC MASTER=N/A SYNC DATE=N/A

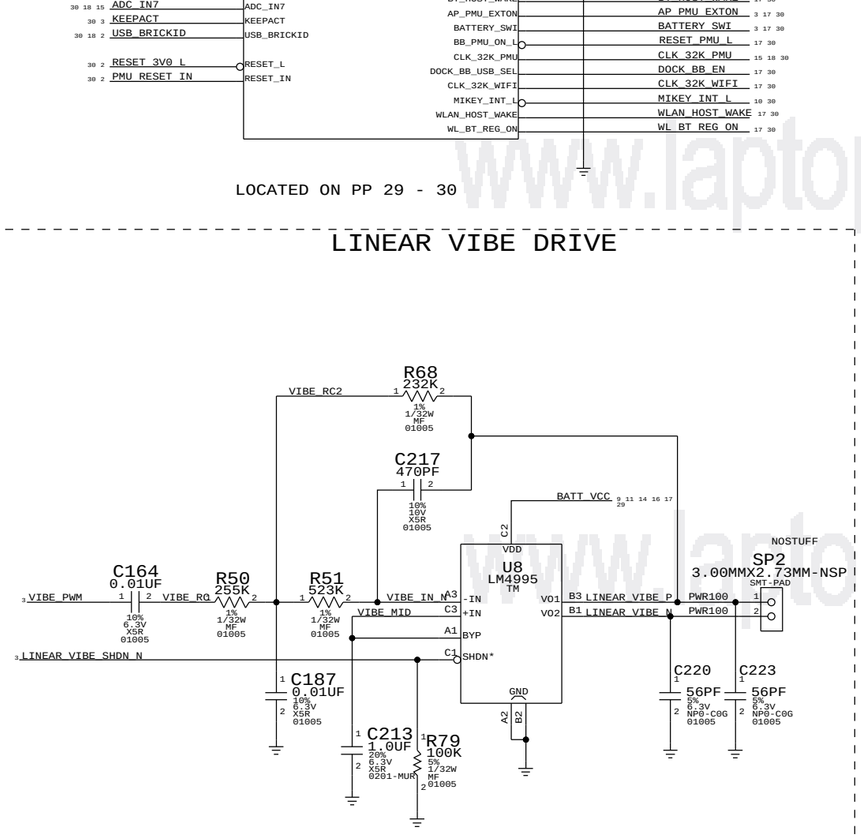
PAGE TITLE
HEADPHONE FILTERS, MIKEY

Apple Inc.

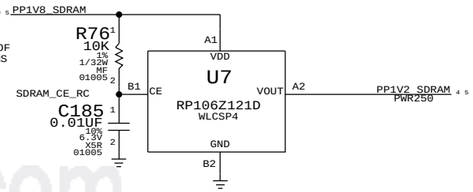
DRAWING NUMBER 051-8296 SIZE D
REVISION A.6.0
BRANCH
PAGE 10 OF 18
SHEET 10 OF 33



LOCATED ON PP 29 - 30



NOTE: THIS DELAYS STARTUP OF PP1V2_SDRAM BY 0.1MS



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PAGE TITLE: ASHLEY PMU

Apple Inc.

DRAWING NUMBER: 051-8296 SIZE: D

REVISION: A.6.0

BRANCH:

PAGE: 11 OF 18

SHEET: 11 OF 33

ACCELEROMETER

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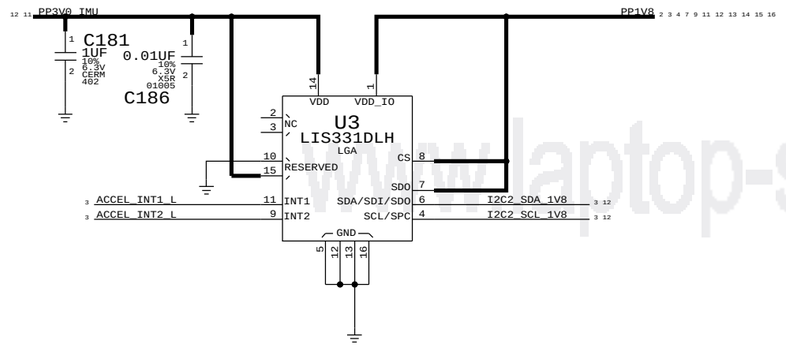
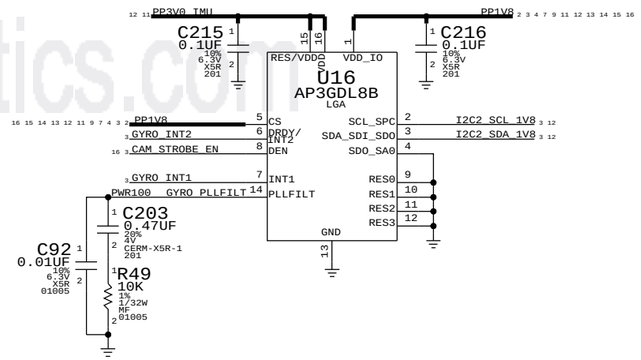


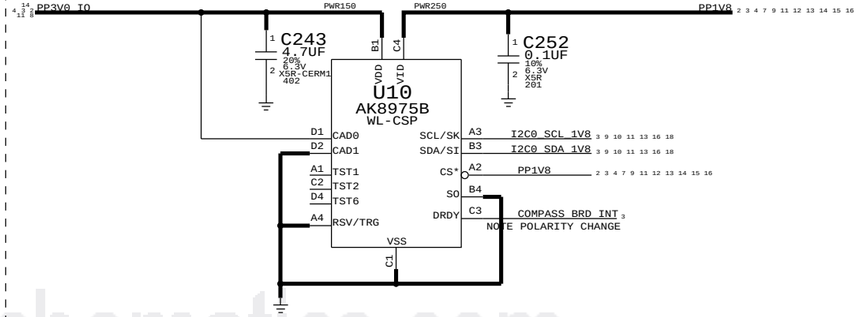
GYRO



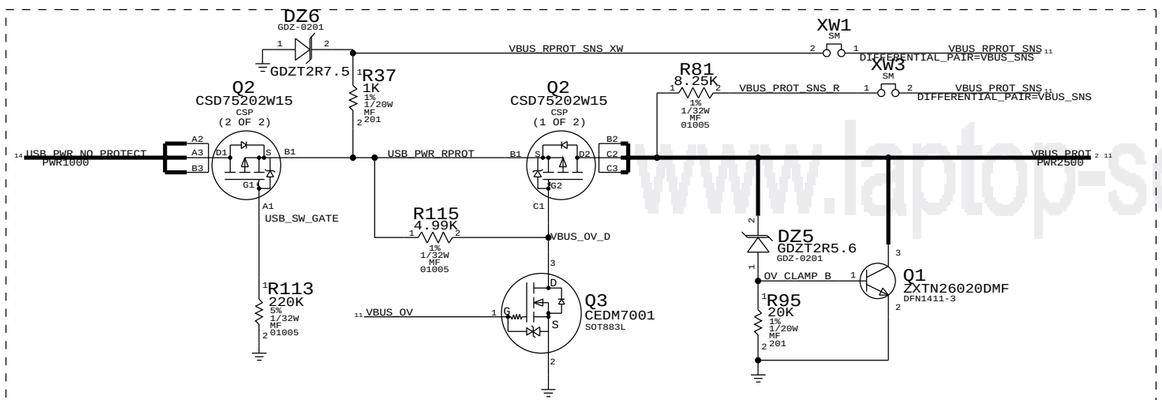
COMPASS 1

NOTE I2C ADDRESS CHANGE

I2C ADDR: 0001110X (0X0D)



USB OVER/REVERSE VOLTAGE PROTECITON



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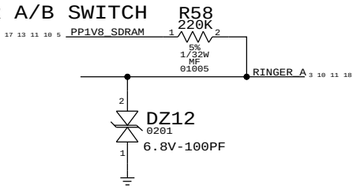
Apple Inc.	DRAWING NUMBER 051-8296 · SIZE D
	REVISION A.6.0
	BRANCH
	PAGE 12 OF 18
	SHEET 12 OF 33

VOLUME SWITCHES

RINGER A/B SWITCH



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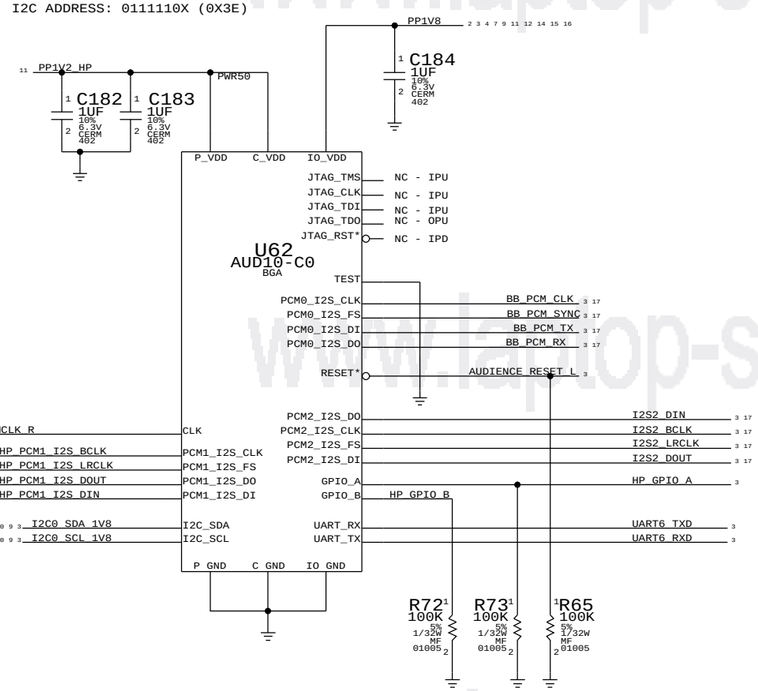
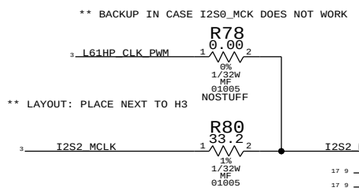
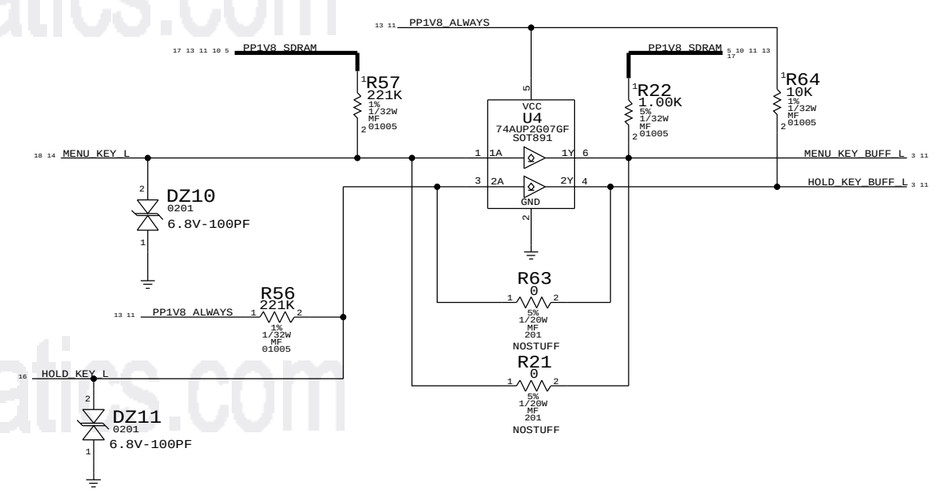


** BACKUP IN CASE I2S0_MCK DOES NOT WORK



POWER/HOLD KEY MENU KEY



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PAGE TITLE: HIGHLAND PARK, SWITCHES

Apple Inc.

DRAWING NUMBER: 051-8296 SIZE: D

REVISION: A.6.0

BRANCH:

PAGE: 13 OF 18

SHEET: 13 OF 33

DOCK CONNECTOR

SPKR PREAMP

SYNC MASTER=N/A	SYNC DATE=N/A
PAGE TITLE	DOCK
Apple Inc.	DRAWING NUMBER 051-8296 · SIZE D
	REVISION A.6.0
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NIMBUS

U19
F761586GZCKR
BGA

GRAPE ST 15 NIMBUS_PANEL_IN<0> B4 IN[0]
GRAPE ST 15 NIMBUS_PANEL_IN<1> A3 IN[1]
GRAPE ST 15 NIMBUS_PANEL_IN<2> B3 IN[2]
GRAPE ST 15 NIMBUS_PANEL_IN<3> A2 IN[3]
GRAPE ST 15 NIMBUS_PANEL_IN<4> A1 IN[4]
GRAPE ST 15 NIMBUS_PANEL_IN<5> B2 IN[5]
GRAPE ST 15 NIMBUS_PANEL_IN<6> B1 IN[6]
GRAPE ST 15 NIMBUS_PANEL_IN<7> C2 IN[7]
GRAPE ST 15 NIMBUS_PANEL_IN<8> C1 IN[8]
GRAPE ST 15 NIMBUS_PANEL_IN<9> C3 IN[9]
NC A4 IR_IN
18 15 GRAPE_LDO_IN A6 LDO_IN
B7 CPY0
B8 CPX0
A7 CPY1
A8 CPX1
C5 BOOT_CFG[0]
C4 BOOT_CFG[1]
D4 JTAG_TMS
D5 JTAG_TDI
D2 JTAG_TCK
E4 JTAG_TDO
D6 JTAG_RTCK/TM[0]
D3 TM1
18 2 GRAPE_RESET_L E3 RESET*
18 11 CLK_32K_PMU E8 CLK_IN

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VSTM[3] F1 NIMBUS_VSTM_OUT<3> 15 GRAPE ST
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VSTM[13] G5 NIMBUS_VSTM_OUT<13> GRAPE ST 15
VSTM[14] H5 NIMBUS_VSTM_OUT<14> GRAPE ST 15
INT*/GPIO[0] H6 NIMBUS_INT_L 3 18
GO/GPIO[1] E7
I2C/GPIO[2] F7
I2C/GPIO[3] F8
SYNC_GPIO[4] F6
IR_DRV_GPIO[5] C6
A_CS*/GPIO[6] F4 GRAPE ST NIMBUS_PANEL_CONFIG 15
A_SCLLK_GPIO[7] E6 NIMBUS_PRODUCT_CONFIG, NC=IPHONE
A_SDO_GPIO[8] F5
A_SDI_GPIO[9] E5
H_CS* G7 SPI1_CS_L 3 18
H_SCLK G8 SPI1_SCLK 3 18
H_SDI H7 SPI1_MOSI 3
H_SDO H8 SPI1_MISO_R
3.3V_OUT D7 NC

A5 GND
D1 GND
D8 GND
G6 GND
B5 VDD_ANA
B6 VDD_CORE
C7 VDD_IO
C8 VDD_H

R16 0.1 1% 1/20W MF 201
C205 4.7UF 20% 6.3V X5R-CERM1 402
C206 4.7UF 20% 6.3V X5R-CERM1 402
C198 4.7UF 20% 6.3V X5R-CERM1 402
C200 0.47UF 20% 4V CERM-X5R-1 201
C208 4.7UF 20% 6.3V X5R-CERM1 402
C212 4.7UF 20% 6.3V X5R-CERM1 402
R119 1.00M 1% 1/32W MF 01005
R120 510K 5% 1/32W MF 01005
R30 10 1% 1/20W MF 201
C210 4.7UF 20% 6.3V X5R-CERM1 402
C211 0.47UF 20% 4V CERM-X5R-1 201
R74 10.2 1% 1/32W MF 01005

PP1V8_GRAPE
VDD_ANA
PWR500
PWR500 VDD_H
VDD_GRAPE_CORE
GRAPE_VDD_IO
PWR250
ADC_IN7
SPI1_MISO
GRAPE_LDO_IN

GRAPE CONNECTOR
NIMBUS CONNECTOR

J5
AA03-S030VA1
F-ST-SM

(POUR GND ON UPPER &LOWER LAYER)
(GUARDED BY GND ON SAME LAYER)

15 NIMBUS_VSTM_OUT<0> 1
15 NIMBUS_VSTM_OUT<3> 3
15 NIMBUS_VSTM_OUT<2> 5
15 NIMBUS_VSTM_OUT<5> 7
15 NIMBUS_VSTM_OUT<4> 9
15 NIMBUS_VSTM_OUT<6> 11
15 NIMBUS_VSTM_OUT<9> 13
15 NIMBUS_VSTM_OUT<7> 15
15 NIMBUS_VSTM_OUT<8> 17
15 NIMBUS_VSTM_OUT<10> 19
15 NIMBUS_VSTM_OUT<11> 21
15 NIMBUS_VSTM_OUT<12> 25
15 NIMBUS_VSTM_OUT<13> 27
15 NIMBUS_VSTM_OUT<14> 29
2 NIMBUS_PANEL_IN<0> 15
4 NIMBUS_PANEL_IN<1> 15
6 NIMBUS_PANEL_IN<2> 15
8 NIMBUS_PANEL_IN<3> 15
10 NIMBUS_PANEL_IN<4> 15
12 NIMBUS_PANEL_IN<5> 15
14 NIMBUS_PANEL_IN<6> 15
16 NIMBUS_PANEL_IN<7> 15
18 NIMBUS_PANEL_IN<8> 15
20 NIMBUS_PANEL_IN<9> 15
22 NIMBUS_VSTM_OUT<1> 15
24 NIMBUS_PANEL_CONFIG 15

LCD CONNECTOR

J4
AXE426124
M-ST-SM

7 LCM_MIPI_DATA0_C_P
7 LCM_MIPI_DATA0_C_N
7 LCM_MIPI_DATA1_C_P
7 LCM_MIPI_DATA1_C_N
7 LCM_MIPI_CLK_C_P
7 LCM_MIPI_CLK_C_N
7 LCM_MIPI_DATA2_C_P
7 LCM_MIPI_DATA2_C_N
LCM_MIPI_DATA3_C_P 7
LCM_MIPI_DATA3_C_N 7

18 LCD_BL_CA_F
18 LCD_BL_CC_F
LCD_5V7_B2B_AVDDH 15 18
LCD_BOOST_CTRL 11 18
* STSTB
LCD_HIFA 3
LCD_PIFA 18
LCD_RESET_B2B_L
LCD_RESET_L 3

FL4 0201-1 240-OHM-0.2A-0.8-OHM
FL3 0201-1 240-OHM-0.2A-0.8-OHM
FL7 80-OHM-0.2A-0.4-OHM 0201-1
FL36 80-OHM-0.2A-0.4-OHM 0201-1
FL35 120-OHM-210MA 01005

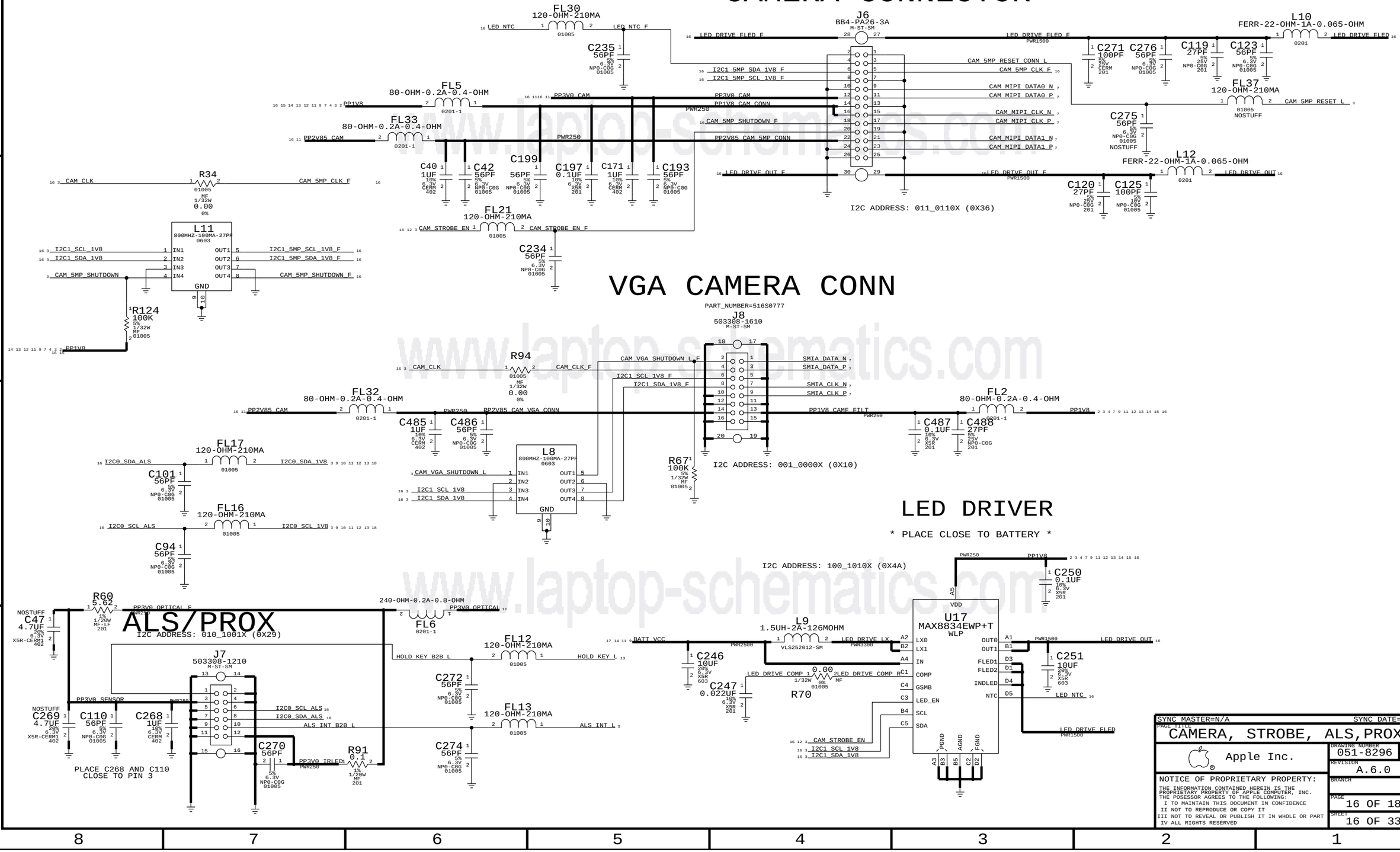
C273 100PF 5% 25V CERM 201
C93 100PF 5% 25V CERM 201
C405 56PF 5% 6.3V NP0-C0G 01005
C33 56PF 5% 6.3V NP0-C0G 01005
C258 56PF 5% 6.3V NP0-C0G 01005
C265 56PF 5% 6.3V NP0-C0G 01005
C204 0.1UF 10% 6.3V X5R 201
C245 56PF 5% 6.3V NP0-C0G 01005
C266 56PF 5% 6.3V NP0-C0G 01005

LCD_5V7_B2B_AVDDH
C68 1.0UF 20% 6.3V X5R 0201-MUR
C70 1.0UF 20% 6.3V X5R 0201-MUR
C76 1.0UF 20% 6.3V X5R 0201-MUR
C83 1.0UF 20% 6.3V X5R 0201-MUR
C89 1.0UF 20% 6.3V X5R 0201-MUR
C267 56PF 5% 6.3V NP0-C0G 01005
C82 1.0UF 20% 6.3V X5R 0201-MUR
LCD_5V7_AVDDH 11
C69 1.0UF 20% 6.3V X5R 0201-MUR
C75 1.0UF 20% 6.3V X5R 0201-MUR
C84 1.0UF 20% 6.3V X5R 0201-MUR
C91 1.0UF 20% 6.3V X5R 0201-MUR

** THESE 10 CAPS ARE TO REPLACE 1 4.7 UF CAP IN ORDER TO REDUCE HEIGHT IN THE FORHEAD AREA

SYNC_MASTER=N/A SYNC_DATE=N/A
PAGE TITLE: NIMBUS, GRAPE, LCD CONN.
Apple Inc.
DRAWING NUMBER 051-8296 SIZE D
REVISION A.6.0
BRANCH
PAGE 15 OF 18
SHEET 15 OF 33

5MP CAMERA CONNECTOR



VGA CAMERA CONN

LED DRIVER

* PLACE CLOSE TO BATTERY *

ALS/PROX

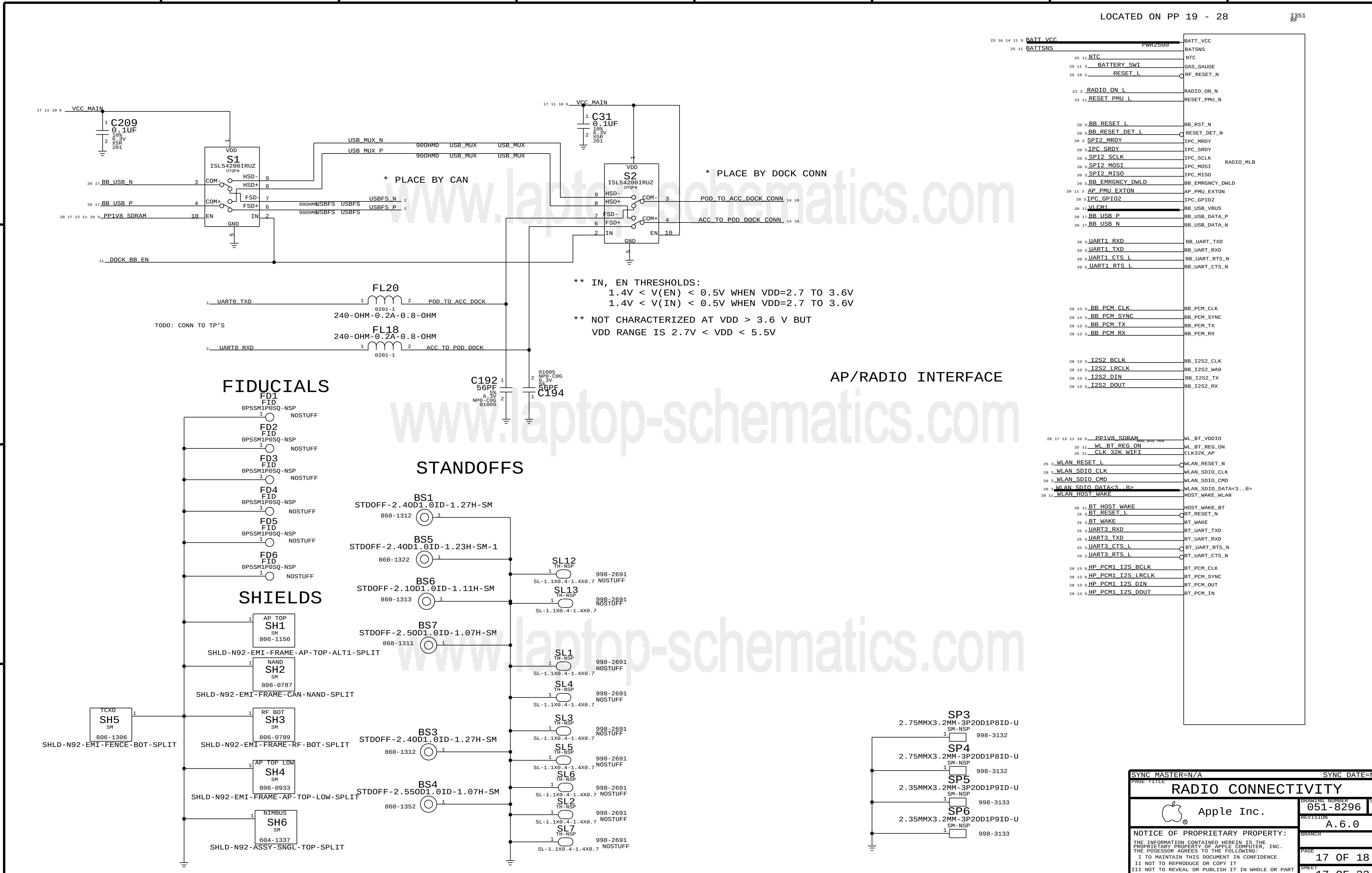
I2C ADDRESS: 010_1001X (0X29)

SYNC MASTER=N/A SYNC DATE=N/A

PAGE TITLE
CAMERA, STROBE, ALS,PROX

Apple Inc.

DRAWING NUMBER 051-8296 SIZE D
REVISION A.6.0
BRANCH
PAGE 16 OF 18
SHEET 16 OF 33


LOCATED ON PP 19 - 28
I351
RF
RADIO_MLB
VCC_MAIN
C209
0.1UF
10%
6.3V
X5R
201
S1
ISL54200IRUZ
UTQFN
VDD
COM-
COM+
HSD-
HSD+
FSD-
FSD+
EN
IN
GND
BB_USB_N
BB_USB_P
PP1V8_SDRAM
DOCK_BB_EN
USB_MUX_N
USB_MUX_P
90OHMD USB_MUX USB_MUX
90OHMD USBFS USBFS
USBFS_N
USBFS_P
* PLACE BY CAN
C31
0.1UF
S2
ISL54200IRUZ
* PLACE BY DOCK CONN
POD_TO_ACC_DOCK_CONN
ACC_TO_POD_DOCK_CONN
** IN, EN THRESHOLDS:
1.4V < V(EN) < 0.5V WHEN VDD=2.7 TO 3.6V
1.4V < V(IN) < 0.5V WHEN VDD=2.7 TO 3.6V
** NOT CHARACTERIZED AT VDD > 3.6 V BUT
VDD RANGE IS 2.7V < VDD < 5.5V
FL20
UART0_TXD
POD_TO_ACC_DOCK
0201-1
240-OHM-0.2A-0.8-OHM
TODO: CONN TO TP'S
FL18
240-OHM-0.2A-0.8-OHM
UART0_RXD
ACC_TO_POD_DOCK
0201-1
C192
56PF
5%
6.3V
NP0-C0G
01005
C194
56PF
AP/RADIO INTERFACE
BATT_VCC
PWR2500
BATTSNS
NTC
BATTERY_SWI
GAS_GAUGE
RESET_L
RF_RESET_N
RADIO_ON_L
RADIO_ON_N
RESET_PMU_L
RESET_PMU_N
BB_RESET_L
BB_RST_N
BB_RESET_DET_L
RESET_DET_N
SPI2_MRDY
IPC_MRDY
IPC_SRDY
SPI2_SCLK
IPC_SCLK
SPI2_MOSI
IPC_MOSI
SPI2_MISO
IPC_MISO
BB_EMRGNCY_DWLD
AP_PMU_EXTON
IPC_GPIO2
VLCM1
BB_USB_VBUS
BB_USB_DATA_P
BB_USB_DATA_N
UART1_RXD
BB_UART_TXD
UART1_TXD
BB_UART_RXD
UART1_CTS_L
BB_UART_RTS_N
UART1_RTS_L
BB_UART_CTS_N
BB_PCM_CLK
BB_PCM_SYNC
BB_PCM_TX
BB_PCM_RX
I2S2_BCLK
BB_I2S2_CLK
I2S2_LRCLK
BB_I2S2_WA0
I2S2_DIN
BB_I2S2_TX
I2S2_DOUT
BB_I2S2_RX
WL_BT_VDDIO
MAKE_BASE TRUE
WL_BT_REG_ON
CLK_32K_WIFI
CLK32K_AP
WLAN_RESET_L
WLAN_RESET_N
WLAN_SDIO_CLK
WLAN_SDIO_CMD
WLAN_SDIO_DATA<3..0>
WLAN_HOST_WAKE
HOST_WAKE_WLAN
BT_HOST_WAKE
HOST_WAKE_BT
BT_RESET_L
BT_RESET_N
BT_WAKE
UART3_RXD
BT_UART_TXD
UART3_TXD
BT_UART_RXD
UART3_CTS_L
BT_UART_RTS_N
UART3_RTS_L
BT_UART_CTS_N
HP_PCM1_I2S_BCLK
BT_PCM_CLK
HP_PCM1_I2S_LRCLK
BT_PCM_SYNC
HP_PCM1_I2S_DIN
BT_PCM_OUT
HP_PCM1_I2S_DOUT
BT_PCM_IN
FIDUCIALS
FD1 FID 0P5SM1P0SQ-NSP NOSTUFF
FD2 FID 0P5SM1P0SQ-NSP NOSTUFF
FD3 FID 0P5SM1P0SQ-NSP NOSTUFF
FD4 FID 0P5SM1P0SQ-NSP NOSTUFF
FD5 FID 0P5SM1P0SQ-NSP NOSTUFF
FD6 FID 0P5SM1P0SQ-NSP NOSTUFF
SHIELDS
AP TOP SH1 SM 806-1156
SHLD-N92-EMI-FRAME-AP-TOP-ALT1-SPLIT
NAND SH2 SM 806-0787
SHLD-N92-EMI-FRAME-CAN-NAND-SPLIT
TCXO SH5 SM 806-1306
SHLD-N92-EMI-FENCE-BOT-SPLIT
RF BOT SH3 SM 806-0789
SHLD-N92-EMI-FRAME-RF-BOT-SPLIT
AP TOP LOW SH4 SM 806-0933
SHLD-N92-EMI-FRAME-AP-TOP-LOW-SPLIT
NIMBUS SH6 SM 604-1337
SHLD-N92-ASSY-SNGL-TOP-SPLIT
STANDOFFS
BS1 STDOFF-2.4OD1.0ID-1.27H-SM 860-1312
BS5 STDOFF-2.4OD1.0ID-1.23H-SM-1 860-1322
BS6 STDOFF-2.1OD1.0ID-1.11H-SM 860-1313
BS7 STDOFF-2.5OD1.0ID-1.07H-SM 860-1311
BS3 STDOFF-2.4OD1.0ID-1.27H-SM 860-1312
BS4 STDOFF-2.55OD1.0ID-1.07H-SM 860-1352
SL12 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL13 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL1 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL4 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL3 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL5 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL6 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL2 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SL7 TH-NSP SL-1.1X0.4-1.4X0.7 998-2691 NOSTUFF
SP3 2.75MMX3.2MM-3P2OD1P8ID-U SM-NSP 998-3132
SP4 2.75MMX3.2MM-3P2OD1P8ID-U SM-NSP 998-3132
SP5 2.35MMX3.2MM-3P2OD1P9ID-U SM-NSP 998-3133
SP6 2.35MMX3.2MM-3P2OD1P9ID-U SM-NSP 998-3133

SYNC MASTER=N/A SYNC DATE=N/A

PAGE TITLE

RADIO CONNECTIVITY

Apple Inc.

DRAWING NUMBER 051-8296 SIZE D

REVISION A.6.0

BRANCH

TEST POINTS

GPIO

FORCE_DFU — TP421 — TP-P6 — NOSTUFF
HOLD_KEY_B2B_L — TP412 — TP-P6 — NOSTUFF
MENU_KEY_L — TP423 — TP-P6 — NOSTUFF
RINGER_A — TP424 — TP-P6 — NOSTUFF
VOL_UP_L — TP415 — TP-P6 — NOSTUFF
VOL_DWN_L — TP425 — TP-P6 — NOSTUFF

TEST

TST_CLKOUT — TP8 — TP-P6 — NOSTUFF

TODO: CONN TO TP'S

RESET

RESET_L — TP6 — TP-P6 — NOSTUFF

ACCESSORY DETECT

ACC_DETECT_L — TP474 — TP-P6 — NOSTUFF
ACC_IDENTIFY — TP475 — TP-P6 — NOSTUFF

UART

POD_TO_ACC_DOCK_CONN — TP449 — TP-P6 — NOSTUFF
ACC_TO_POD_DOCK_CONN — TP450 — TP-P6 — NOSTUFF

USB

USB_DP_DOCK — TP451 — TP-P6 — NOSTUFF
USB_DM_DOCK — TP452 — TP-P6 — NOSTUFF

POWER

ADC_IN7 — TP457 — TP-P6 — NOSTUFF
DOCK_3_3V — TP4 — TP-P6 — NOSTUFF
USB_POWR_NO_PROTECT_CONN — TP455 — TP-P6 — NOSTUFF
USB_POWR_NO_PROTECT_CONN — TP11 — TP-P6 — NOSTUFF

SIGNAL GND(SENSE)

TP443 — TP-P6 — NOSTUFF

USB_BRICKID — TP5 — TP-P6 — NOSTUFF

HEADPHONE

EXT_MIC_P_CONN — TP438 — TP-P6 — NOSTUFF
HPHONE_RET_SNS_CONN — TP12 — TP-P6 — NOSTUFF
HPHONE_R_CONN — TP440 — TP-P6 — NOSTUFF
HPHONE_L_CONN — TP441 — TP-P6 — NOSTUFF
HPHONE_DET_CONN — TP442 — TP-P6 — NOSTUFF

POWER GND

TP444 — TP-1P0-TOP — NOSTUFF
TP447 — TP-1P0-TOP — NOSTUFF
TP7 — TP-1P0-TOP — NOSTUFF
TP9 — TP-1P0-TOP — NOSTUFF

GRAPE

NIMBUS_INT_L — PP8 P4MM SM
SPI1_SCLK (SPI ST) — PP9 P4MM SM
CLK_32K_PMU — TP477 — TP-P6 — NOSTUFF

AUDIO

SPEAKER

SPKR_CONN_P — TP429 — TP-P6 — NOSTUFF
SPKR_CONN_N — TP430 — TP-P6 — NOSTUFF

RECEIVER

RCVR_CONN_P — TP413 — TP-P6 — NOSTUFF
RCVR_CONN_N — TP431 — TP-P6 — NOSTUFF

MIC

INT_MIC1_P_CONN — TP432 — TP-P6 — NOSTUFF
INT_MIC1_N — TP433 — TP-P6 — NOSTUFF
INT_MIC2_P — TP10 — TP-P6 — NOSTUFF
MEMS_MIC1_PWR_F — TP14 — TP-P6 — NOSTUFF
MEMS_MIC2_PWR_F — TP15 — TP-P6 — NOSTUFF

LINE OUT

LINE_OUT_L_CONN — TP1 — TP-P6 — NOSTUFF
LINE_OUT_R_CONN — TP2 — TP-P6 — NOSTUFF
LINE_RET_SENSE_CONN (PWR50 AUDIO) — TP3 — TP-P6 — NOSTUFF

PROBE POINTS

GRAPE

SPI1_CS_L — PP10 P4MM SM
GRAPE_VDD_IO — PP18 P4MM SM
GRAPE_LDO_IN — PP16 P4MM SM
PP1V8_GRAPE — PP17 P4MM SM
GRAPE_RESET_L — PP3 P4MM SM

NAND

F0AD<0> — PP6 P4MM SM
F0WE_L — PP7 P4MM SM

I2C0_SDA_1V8 — PP1 P4MM SM
I2C0_SCL_1V8 — PP2 P4MM SM

LCM

LCD_BL_CC_F — TP465 — TP-P6 — NOSTUFF
LCD_BL_CA_F — TP466 — TP-P6 — NOSTUFF
LCD_5V7_B2B_AVDDH — TP468 — TP-P6 — NOSTUFF
LCD_BOOST_CTRL — TP469 — TP-P6 — NOSTUFF
LCD_PIFA — TP13 — TP-P6

SYNC_MASTER=N/A SYNC_DATE=N/A
PAGE TITLE: TEST POINTS

Apple Inc.

DRAWING NUMBER: 051-8296 SIZE: D
REVISION: A.6.0
BRANCH:
PAGE: 18 OF 18
SHEET: 18 OF 33

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
			2010-12-22

N92 RADIO_MLB (PHOENIX)
RADIO_MLB - 12/17/10:SUBDESIGN

PAGE	CONTENTS
02	BASEBAND
03	BASEBAND MEMORY
04	BASEBAND POWER
05	POWER1: CONTROL
06	POWER2: DIGITAL, ANALOG, RF
07	AP INTERFACE AND DEBUG CONNECTOR
08	RX DIVERSITY & GPS LNA
09	RX & TX RF CHAIN
10	WIFI/BLUETOOTH RADIO

DRAWING TITLE: N92 RADIO MLB (PHOENIX)

Apple Inc.

DRAWING NUMBER: 051-8296 | SIZE: D

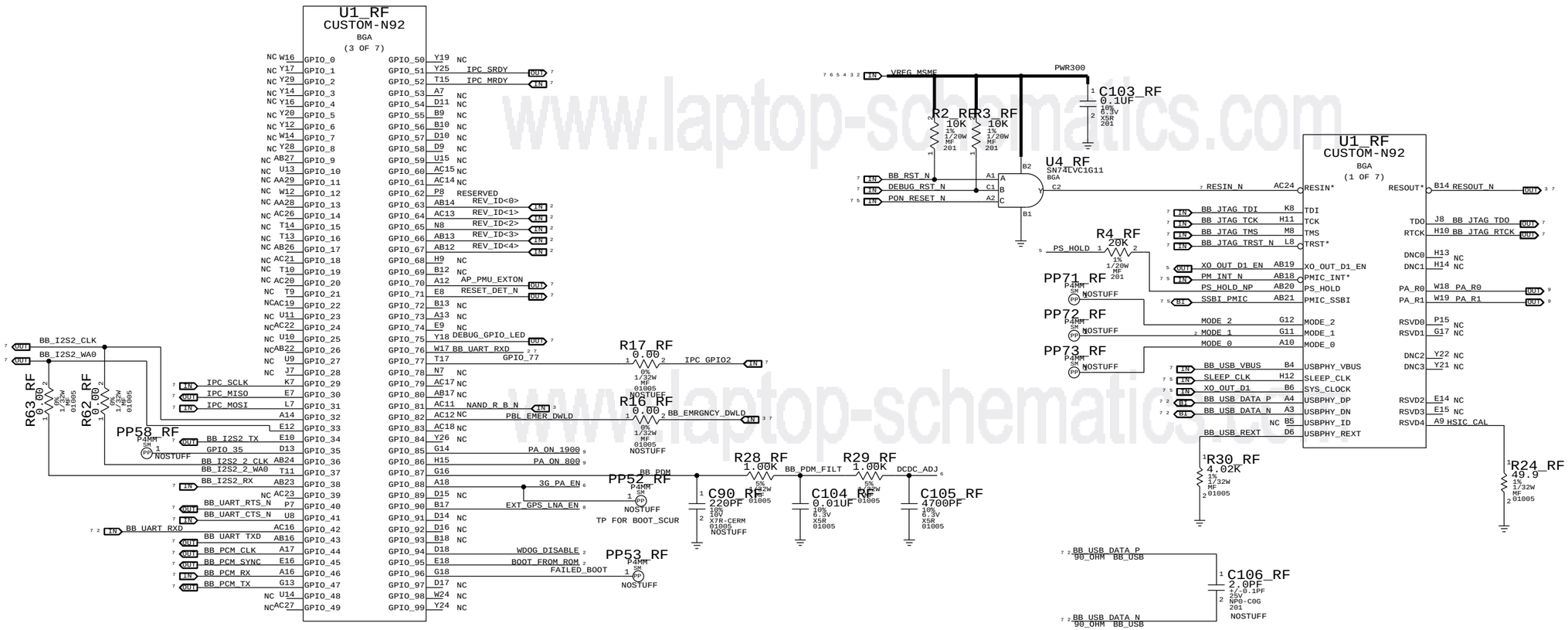
REVISION: A.6.0

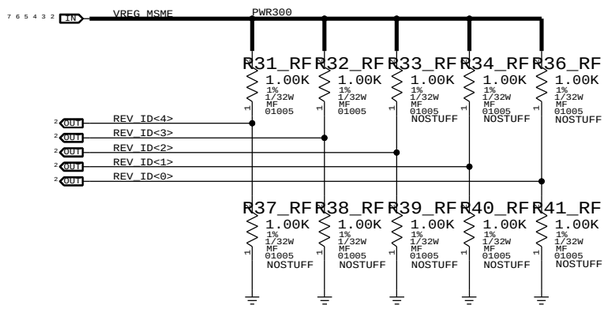
BRANCH:

PAGE: 1 OF 13

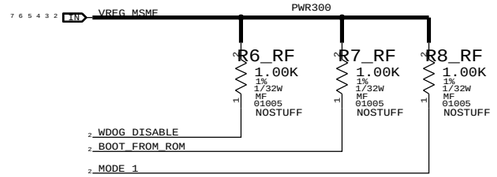
SHEET: 19 OF 33

BASEBAND





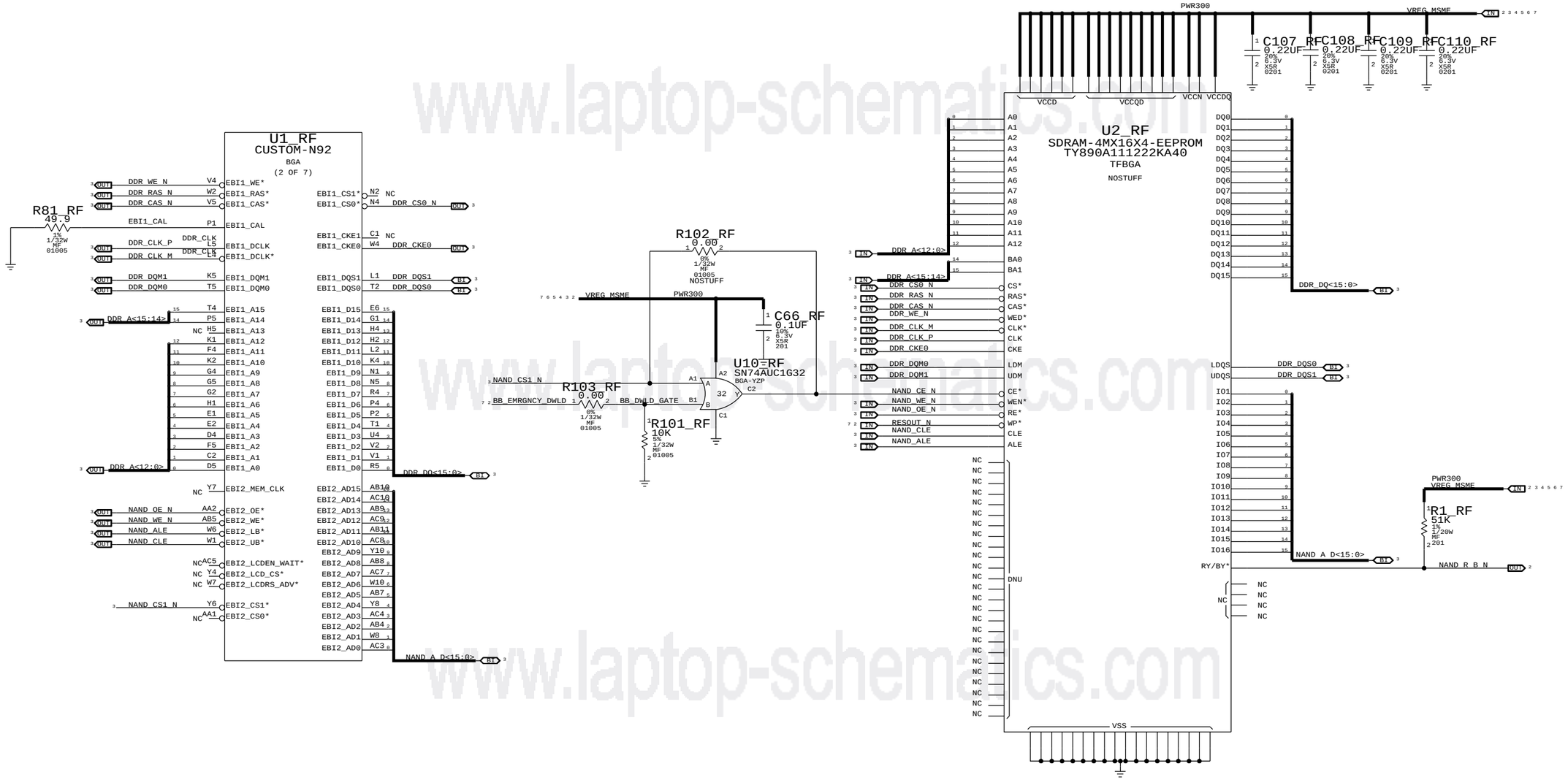
REV_ID<4>			HB PA SELECT
0			TQM
1			SKY
NST			ANAD
REV_ID<3>			LB PA SELECT
0			TQM
1			SKY
NST			ANAD
REV_ID<2..0>			
0	0	0	DEV 1
0	0	1	DEV 2
0	1	0	DEV 3
NST	0	0	DEV 4
NST	0	1	DEV 4B
NST	1	0	DEV 5
NST	1	1	RESERVED
0	1	1	PROTO0
1	0	0	PROTO1
1	0	1	EVT1
1	1	0	EVT2
1	1	1	EVT3
1	1	NST	DVT
NST	NST	NST	PVT/MP (REV. B)
NST	NST	0	RESERVED



	MODE_1
NST	NATIVE MODE
1	ETM MODE

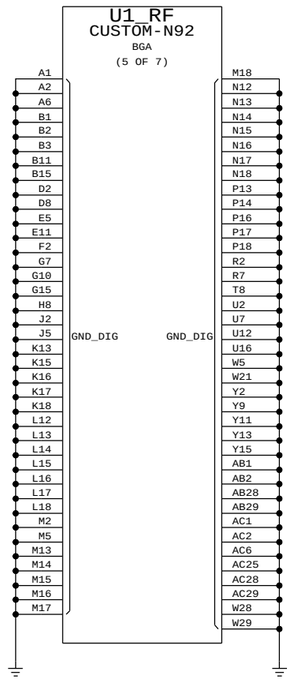
PAGE 2

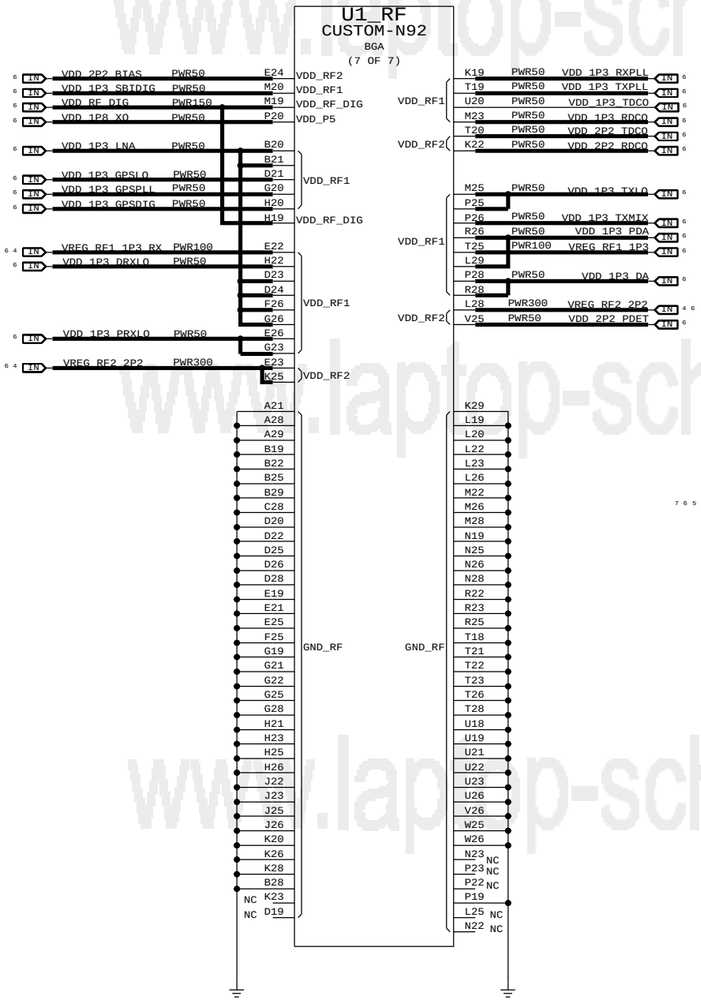
BASEBAND MEMORY

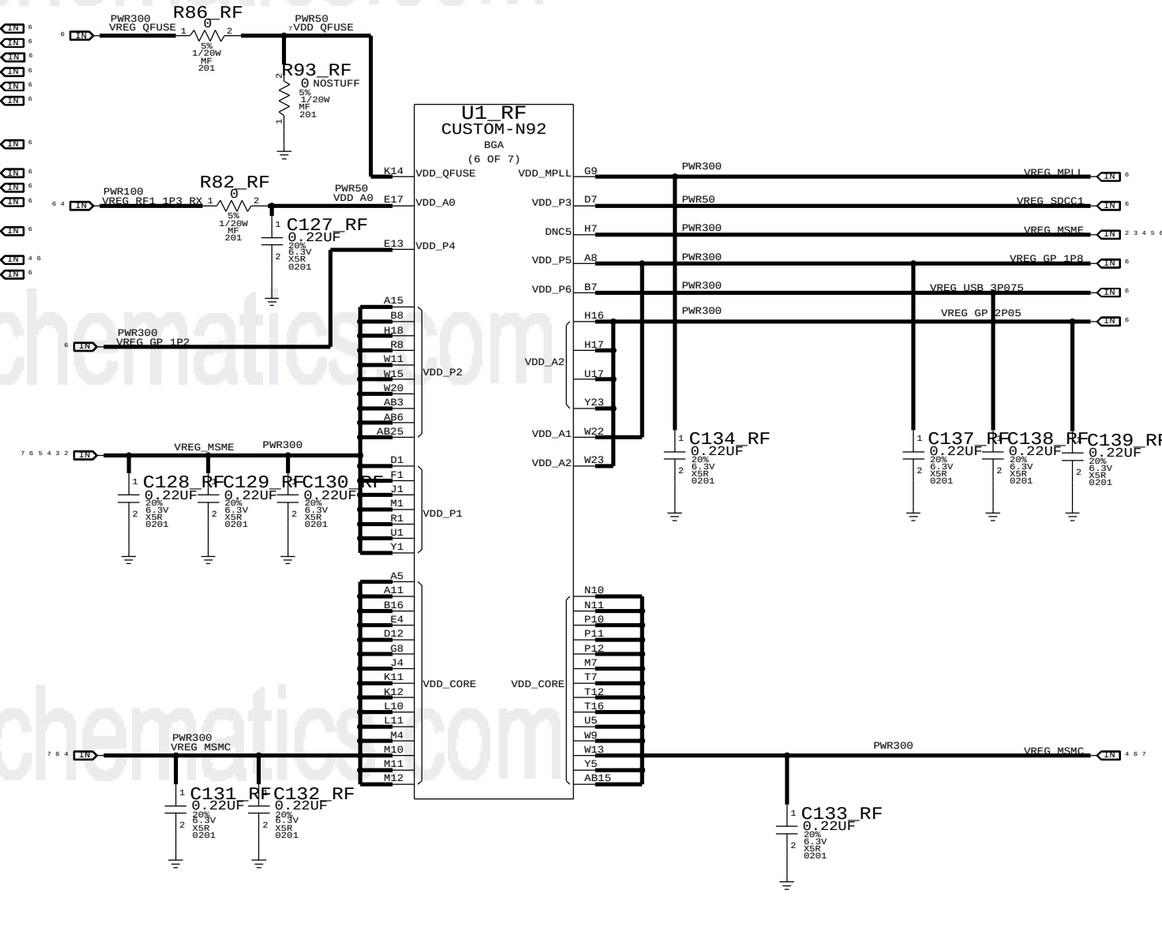


PAGE 3

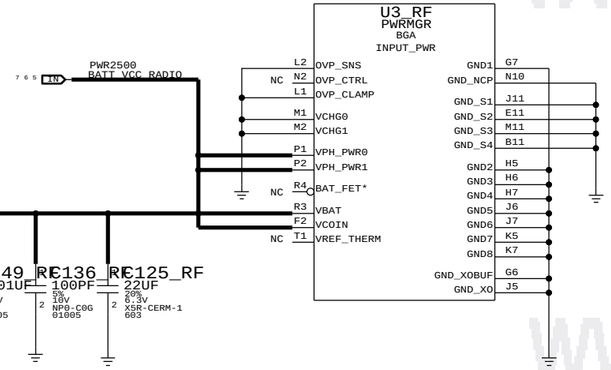
BASEBAND POWER

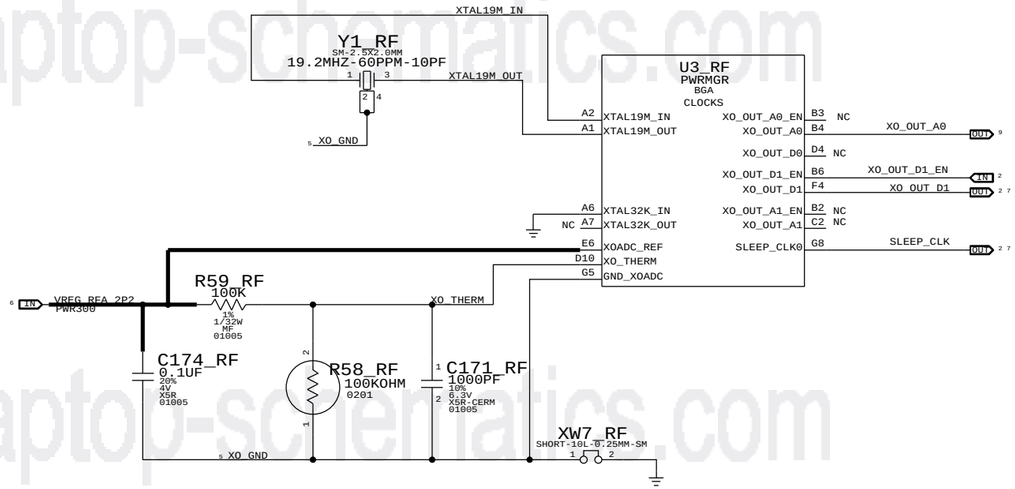


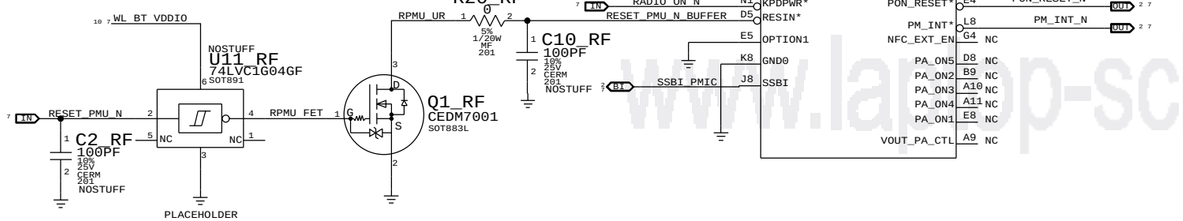


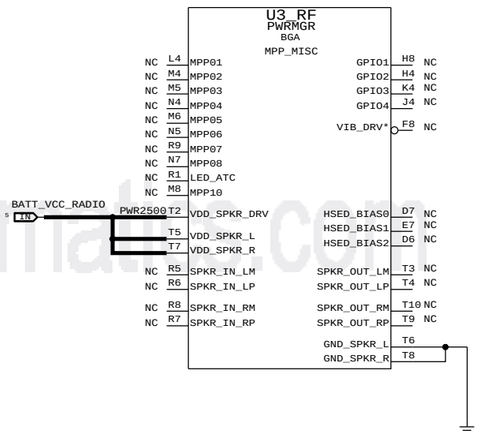


POWER1: CONTROL









POWER2: DIGITAL, ANALOG, RF

1.3V RX POWER GRID

VREG_RF1_1P3_RX PWR100
C56_RF 10UF 20% 6.3V CERM-X5R 0402
L31_RF 10NH-150MA 0201
PWR50 VDD_1P3_RXPLL
C124_RF 220PF 10% 10V X7R-CERM 01005
C201_RF 1UF 10% 10V X5R 402-1
L50_RF 10NH-150MA 0201
PWR50 VDD_1P3_GPSPLL
C122_RF 100PF 5% 10V NP0-C0G 01005
R49_RF 0 5% 1/20W MF 201
PWR50 VDD_1P3_LNA
C117_RF 100PF 5% 10V NP0-C0G 01005
L28_RF FERR-47-OHM-0.5A-0.1OHM 0201
PWR50 VDD_1P3_RDCO
C118_RF 100PF 5% 10V NP0-C0G 01005
C204_RF 4.7UF 20% 6.3V X5R-CERM1 402
L26_RF 68NH-5%-80MA 0201
PWR50 VDD_1P3_GPSLO
C179_RF 180PF 10% 10V CERM 01005
L29_RF FERR-47-OHM-0.5A-0.1OHM 0201
PWR50 VDD_1P3_DRXLO
C183_RF 220PF 10% 10V X7R-CERM 01005
L30_RF FERR-47-OHM-0.5A-0.1OHM 0201
PWR50 VDD_1P3_PRXLO
C184_RF 220PF 10% 10V X7R-CERM 01005
C180_RF 27PF 5% 25V NP0-C0G 201
L37_RF 47NH-50MA 0201
PWR50 VDD_1P3_GPSDIG
C189_RF 0.47UF 20% 4V CERM-X5R-1 201

1.3V TX POWER GRID

VREG_RF1_1P3 PWR100
C57_RF 10UF 20% 6.3V CERM-X5R 0402
L25_RF 10NH-150MA 0201
PWR50 VDD_1P3_TXPLL
C121_RF 220PF 10% 10V X7R-CERM 01005
C202_RF 4.7UF 20% 6.3V X5R-CERM1 402
R55_RF 10NH-150MA 0201
PWR50 VDD_1P3_DA
C23_RF 100PF 5% 10V NP0-C0G 01005
C203_RF 1UF 10% 10V X5R 402-1
R51_RF 10NH-150MA 0201
PWR50 VDD_1P3_PDA
C119_RF 100PF 5% 10V NP0-C0G 01005
C205_RF 1UF 10% 10V X5R 402-1
L36_RF 7NH+/-0.3NH-150MA 0201
PWR50 VDD_1P3_TXLO
C120_RF 180PF 10% 10V CERM 01005
L27_RF 10NH-150MA 0201
PWR50 VDD_1P3_TDCO
C181_RF 220PF 10% 10V X7R-CERM 01005
C200_RF 4.7UF 20% 6.3V X5R-CERM1 402
R98_RF 0 5% 1/20W MF 201
PWR50 VDD_1P3_SBIDIG
C182_RF 0.22UF 20% 6.3V X5R 0201
R97_RF 0 5% 1/20W MF 201
PWR50 VDD_1P3_TXMIX
C188_RF 100PF 5% 10V NP0-C0G 01005

1.8V POWER GRID

PWR300 VREG_GP_1P8
R43_RF 0 5% 1/20W MF 201
PWR50 VDD_1P8_XO
C111_RF 0.1UF 10% 6.3V X5R 201
C206_RF 4.7UF 20% 6.3V X5R-CERM1 402
PWR300 VREG_MSME
R44_RF 0 5% 1/20W MF 201
PWR150 VDD_RF_DIG
C112_RF 0.1UF 10% 6.3V X5R 201

2.2V POWER GRID

PWR300 VREG_RF2_2P2
R45_RF 0 5% 1/20W MF 201
PWR50 VDD_2P2_PDET
C113_RF 100PF 5% 25V CERM 201
R46_RF 0 5% 1/20W MF 201
PWR50 VDD_2P2_TDCO
C114_RF 2.2UF 20% 6.3V CERM 402-LF
R47_RF 0 5% 1/20W MF 201
PWR50 VDD_2P2_RDCO
C115_RF 2.2UF 20% 6.3V CERM 402-LF
R48_RF 0 5% 1/20W MF 201
PWR50 VDD_2P2_BIAS
C116_RF 100PF 5% 25V CERM 201

U3_RF PWRMGR BGA VREG

REF_BYP: C140_RF 0.1UF 10% 6.3V X5R 201
PWR2500 BATT_VCC_RADIO
C141_RF 10UF 20% 6.3V X5R 603 — S1_GND
C142_RF 10UF 20% 6.3V X5R 603 — S2_GND
C143_RF 10UF 20% 6.3V X5R 603 — S3_GND
C144_RF 10UF 20% 6.3V X5R 603 — S4_GND

C141-C144 SHOULD BE TIED DIRECTLY TO PINS VDD_S1-S4

PWR2500 BATT_VCC_RADIO — C145_RF 1UF 10% 6.3V CERM 402
PWR300 VREG_MSME — C146_RF 0.1UF 10% 6.3V X5R 201
PWR2500 BATT_VCC_RADIO — C147_RF 0.1UF 10% 6.3V X5R 201

U3_RF pin	signal
H2	REF_BYP
K6	REF_GND
L11	VDD_S1
G11	VDD_S2
P11	VDD_S3
D11	VDD_S4
T11	VDD_L4_NCP
C10	VDD_SMPS
G1	VDD_L1_L11_L13
K1	VDD_L9_L14_L15
D1	VDD_L2_L8_L10_L16_L17
A5	VDD_L3_L5_L7
A8	VDD_L6_L12
G10	VDD_L18
J10	VDD_L19
K11	VSW_S1
K10	VREG_S1 PWR250
F11	VSW_S2
F10	VREG_S2 PWR250
N11	VSW_S3
L10	VREG_S3 PWR250
C11	VSW_S4
E10	VREG_S4 PWR250
R11	NCP_CTC1 NC
P10	NCP_CTC2 NC
M10	VREG_NCP NC
N8	NCP_FB NC
R10	VREG_L4 NC
G2	VREG_L1
H1	VREG_L11
F1	VREG_L13
J1	VREG_L9
J2	VREG_14 NC
K2	VREG_15 NC
E2	VREG_L2 NC
E1	VREG_L8 NC
D2	VREG_L10
C1	VREG_L16 L16
B1	VREG_L17 L17
A4	VREG_L3
A3	VREG_L5 NC
B5	VREG_L7
B10	VREG_L6
B8	VREG_L12 NC
H10	VREG_L18
H11	VREG_L19 NC

U5_RF MAX8839L WLP

R5_RF 0 5% 1/16W MF-LF 402
3G_PA1_DCDC_IN PWR1000
C148_RF 4.7UF 20% 6.3V X5R-CERM1 402
C3, C4, D3
VCC, IN1, IN2
3G_PA_EN — B2 PAEN
C2 RFEN1
B3 RFEN2
DCDC_ADJ — A3 REFIN
AGND, PGND1, PGND2
PAOUT D4 — PWR1000 DC_DC_LX1
LX1 B4 NC
LX2 D2 NC
REFBP A1 NC
OUT2 C1 NC
LDO B1 NC
L5_RF 2.2UH-1.5A VLS3012-SM-HF
C150_RF 10UF 20% 6.3V X5R 603
C151_RF 0.01UF 10% 10V X5R 201
C126_RF 22UF 20% 6.3V X5R-CERM-1 603
BATT_VCC PWR2500
R60_RF 0 5% 1/20W MF 201 — 3G_PA_VCC1 PWR250
R9_RF 0 5% 1/20W MF 201 — 3G_PA_VCCX1 PWR1000 — 3G_PA_VCC PWR1000

L61_RF 4.7UH-0.7A-336MOHM VLS2012E-SM
C152_RF 10UF 20% 6.3V X5R 603 — S1_GND
XW2_RF SM NOSTUFF
L62_RF 4.7UH-0.7A-336MOHM VLS2012E-SM
C154_RF 22UF 20% 6.3V X5R-CERM-1 603 — S2_GND
XW3_RF SM NOSTUFF
L63_RF 4.7UH-0.7A-336MOHM VLS2012E-SM
C157_RF 10UF 20% 6.3V X5R 603 — S3_GND
XW4_RF SM NOSTUFF
L64_RF 4.7UH-0.7A-336MOHM VLS2012E-SM
C159_RF 22UF 20% 6.3V X5R-CERM-1 603 — S4_GND
XW5_RF SM NOSTUFF

FL11_RF 120OHM-25%-0.45A-0.24DCR 0402 — S1 PWR300 — PWR300 VREG_MSMC
C135_RF 10UF 20% 6.3V CERM-X5R 0402
FL12_RF 240-OHM-25%-400MA 0402 — S2 PWR300 — PWR100 VREG_RF1_1P3_RX
FL13_RF 120OHM-25%-0.45A-0.24DCR 0402 — PWR100 VREG_RF1_1P3
FL14_RF 120OHM-25%-0.45A-0.24DCR 0402 — S3 PWR300 — PWR300 VREG_MSME
FL15_RF 120OHM-25%-0.45A-0.24DCR 0402 — S4 PWR300 — PWR300 VREG_RF2_2P2

R68_RF 0 5% 1/20W MF 201 — L1 PWR300 — PWR300 VREG_GP_2P05
PWR300 VREG_QFUSE
R69_RF 0 5% 1/20W MF 201 — L13 PWR300 — PWR300 VREG_RFA_2P2
R70_RF 0 5% 1/20W MF 201 — L9 PWR300 — PWR150 VREG_RF_SW
R72_RF 0 5% 1/20W MF 201 — L10 PWR300 — PWR300 VREG_USB_3P075
PWR300 VREG_GP_1P2
R83_RF 0 5% 1/20W MF 201 — PWR300 L7 — PWR300 VREG_MPLL
PWR50 VREG_SDCC1
R76_RF 0 5% 1/20W MF 201 — PWR300 L18 — PWR300 VREG_GP_1P8

C178_RF 2.2UF 20% 6.3V CERM 402-LF
C161_RF 4.7UF 20% 6.3V X5R-CERM1 402
C162_RF 4.7UF 20% 6.3V X5R-CERM1 402
C163_RF 4.7UF 20% 6.3V X5R-CERM1 402
C167_RF 4.7UF 20% 6.3V X5R-CERM1 402
C166_RF 2.2UF 20% 6.3V CERM 402-LF
C168_RF 2.2UF 20% 6.3V CERM 402-LF
C169_RF 4.7UF 20% 6.3V X5R-CERM1 402
C170_RF 4.7UF 20% 6.3V X5R-CERM1 402
C172_RF 4.7UF 20% 6.3V X5R-CERM1 402
C160_RF 4.7UF 20% 6.3V X5R-CERM1 402

SYSTEM CONNECTORS

AP CONNECTIONS

BATT_VCC
BATSNS
NTC
GAS_GAUGE
RF_RESET_N

RADIO_ON_N
RESET_PMU_N

BB_RST_N
RESET_DET_N
IPC_MRDY
IPC_SRDY
IPC_SCLK
IPC_MOSI
IPC_MISO
BB_EMRGNCY_DWLD
AP_PMU_EXTON
IPC_GPIO2
BB_USB_VBUS
BB_USB_DATA_P
BB_USB_DATA_N

BB_UART_TXD
BB_UART_RXD
BB_UART_RTS_N
BB_UART_CTS_N

BB_PCM_CLK
BB_PCM_SYNC
BB_PCM_TX
BB_PCM_RX

BB_I2S2_CLK
BB_I2S2_WA0
BB_I2S2_TX
BB_I2S2_RX

WL_BT_VDDIO
WL_BT_REG_ON
CLK32K_AP 2X

WLAN_RESET_N
WLAN_SDIO_CLK
WLAN_SDIO_CMD
WLAN_SDIO_DATA<3..0>
HOST_WAKE_WLAN

HOST_WAKE_BT
BT_RESET_N
BT_WAKE
BT_UART_TXD
BT_UART_RXD
BT_UART_RTS_N
BT_UART_CTS_N

BT_PCM_CLK
BT_PCM_SYNC
BT_PCM_OUT
BT_PCM_IN

WLAN

PP14_RF P4MM SM — WLAN_CLK_REQ — NOSTUFF
PP7_RF P4MM SM — WLAN_TRST_N — NOSTUFF
PP8_RF P4MM SM — WLAN_TCK — NOSTUFF
PP9_RF P4MM SM — WLAN_TMS — NOSTUFF
PP10_RF P4MM SM — WLAN_TDO — NOSTUFF
PP11_RF P4MM SM — WLAN_TDI — NOSTUFF
PP12_RF P4MM SM — WL_BT_REG_ON — NOSTUFF
PP13_RF P4MM SM — CLK32K_AP — NOSTUFF

DIGITAL AUDIO

PP1_RF P4MM SM — BB_PCM_CLK — NOSTUFF
PP2_RF P4MM SM — BB_PCM_SYNC — NOSTUFF
PP3_RF P4MM SM — BB_PCM_TX — NOSTUFF
PP4_RF P4MM SM — BB_PCM_RX — NOSTUFF

PMIC

PP15_RF P4MM SM — SLEEP_CLK — NOSTUFF
PP16_RF P4MM SM — PM_INT_N — NOSTUFF
PP17_RF P4MM SM — SSBI_PMIC — NOSTUFF
PP18_RF P4MM SM — XO_OUT_D1 — NOSTUFF

TP33_RF TP-P6 NOSTUFF — BATT_VCC
TP34_RF TP-P6 NOSTUFF
TP1_RF TP-P6 NOSTUFF — NTC_CONN

J14_RF WB22453-1401-7F F-ST-SM
FL6_RF 240-OHM-0.2A-0.8-OHM 0201-1 — NTC
FL9_RF 600-OHM-25%-0.15A 0201 — GAS_GAUGE
NTC_CONN
GAS_GAUGE_CONN
C18_RF 100PF 5% 25V CERM 201
C81_RF 100PF 5% 25V CERM 201
C82_RF 100PF 5% 25V CERM 201
C83_RF 27PF 5% 25V NP0-C0G 201
NOSTUFF
XW1_RF SM — BATSNS
PWR2500 — BATT_VCC

U13_RF FPF1039 CSP
BATT_VCC — A2, B2 — VIN
VOUT — A1, B1 — BATT_VCC_RADIO
GND — C1
R19_RF 470K 5% 1/32W MF 01005 — RESET_PMU_N — RESET_PMU_N_FET
C1_RF 1.0UF 20% 6.3V X5R 0201-MUR — C2 ON

DEBUG CONNECTOR

NOSTUFF
J1_RF AXE640124 M-ST-SM
BATT_VCC

BB_EMRGNCY_DWLD	2	1	
DEBUG_RST_N	4	3	
RESET_PMU_N	6	5	BT_WAKE
RADIO_ON_N	8	7	BT_RESET_N
	10	9	WL_BT_REG_ON
BB_USB_VBUS	12	11	BT_UART_TXD
BB_USB_DATA_P	14	13	BT_UART_RXD
BB_USB_DATA_N	16	15	BT_UART_RTS_N
RF_RESET_N	18	17	BT_UART_CTS_N
	20	19	WLAN_RESET_N
	22	21	BB_JTAG_TCK
	24	23	BB_JTAG_TMS
	26	25	BB_JTAG_TDO
	28	27	BB_JTAG_TDI
	30	29	BB_JTAG_TRST_N
	32	31	BB_JTAG_RTCK
	34	33	BB_UART_TXD
	36	35	BB_UART_RXD
	38	37	BB_UART_RTS_N
DEBUG_GPIO_LED	40	39	BB_UART_CTS_N
	44	43	

CONTROL

TP8_RF TP-P6 NOSTUFF — RADIO_ON_N
TP22_RF TP-P6 NOSTUFF — BB_RST_N
TP7_RF TP-P6 NOSTUFF — RESET_PMU_N
PP30_RF P4MM SM NOSTUFF — BB_USB_DATA_N
TP11_RF TP-P6 NOSTUFF — BB_UART_TXD
TP12_RF TP-P6 NOSTUFF — BB_UART_RXD
TP13_RF TP-P6 NOSTUFF — BB_UART_CTS_N
TP14_RF TP-P6 NOSTUFF — BB_UART_RTS_N
PP31_RF P4MM SM NOSTUFF — RESIN_N

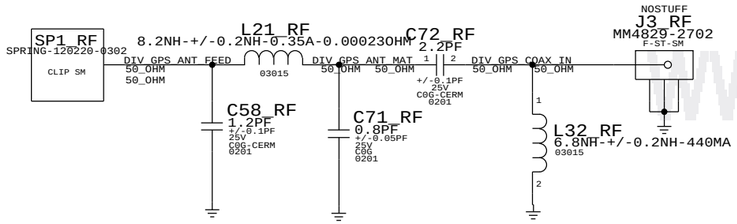
PP40_RF P4MM SM NOSTUFF — BB_JTAG_TCK
PP41_RF P4MM SM NOSTUFF — BB_JTAG_TMS
PP42_RF P4MM SM NOSTUFF — BB_JTAG_TDO
PP43_RF P4MM SM NOSTUFF — BB_JTAG_TDI
PP44_RF P4MM SM NOSTUFF — BB_JTAG_TRST_N
PP45_RF P4MM SM NOSTUFF — BB_JTAG_RTCK
PP46_RF P4MM SM NOSTUFF — BB_USB_VBUS
PP47_RF P4MM SM NOSTUFF — PON_RESET_N

GAS GAUGE

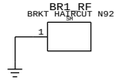
TP24_RF P4MM SM NOSTUFF — RESET_DET_N
PP25_RF P4MM SM NOSTUFF — BB_USB_DATA_P
PP26_RF P4MM SM NOSTUFF — RESOUT_N
TP2_RF TP-P6 NOSTUFF — 3G_PA_VCC
TP3_RF TP-P6 NOSTUFF — VREG_MSME
TP4_RF TP-P6 NOSTUFF — VREG_MSMC
TP5_RF TP-P6 NOSTUFF — PWR50 VDD_OFUSE
TP10_RF TP-P6 NOSTUFF — GAS_GAUGE_CONN

RX DIVERSITY & GPS LNA

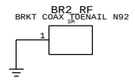
UPPER ANTENNA SPRING

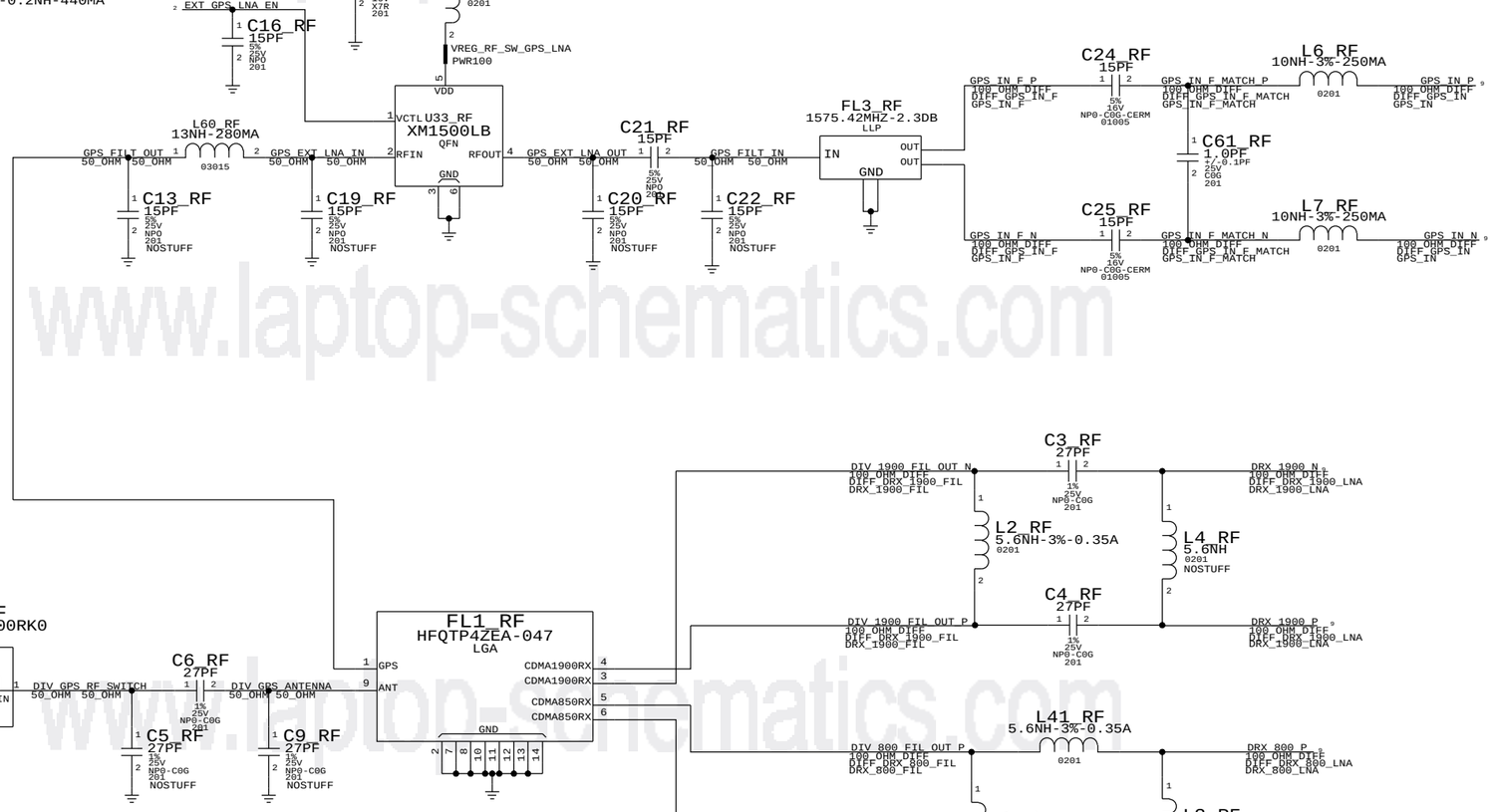


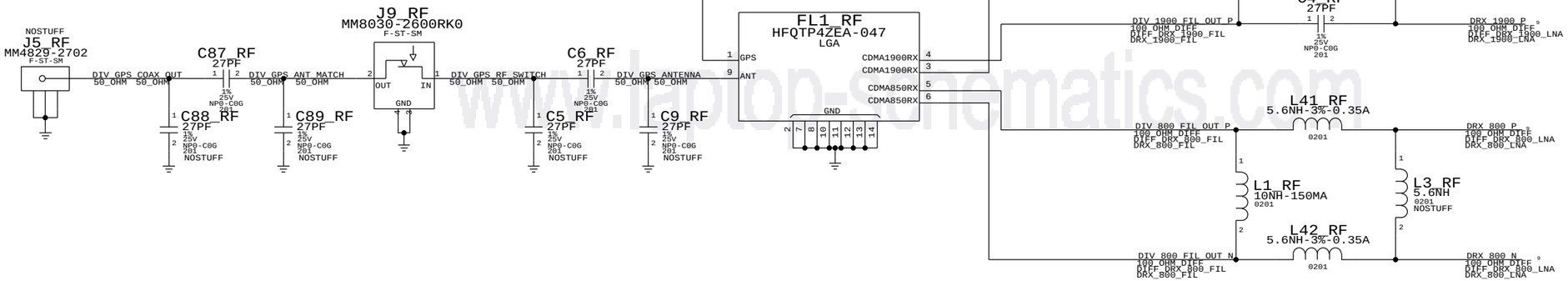
UPPER COAX CABLE STRAIN RELIEF



LOWER COAX CABLE STRAIN RELIEF





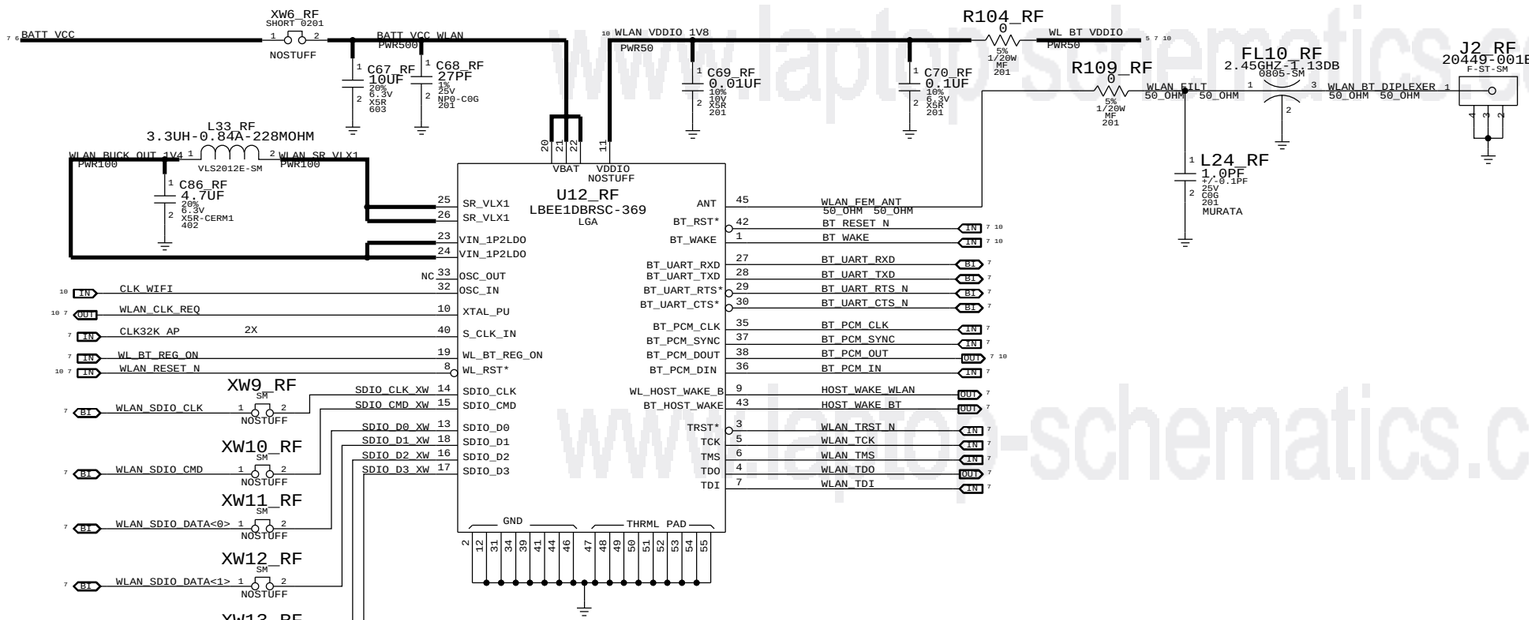


RX & TX RF CHAIN

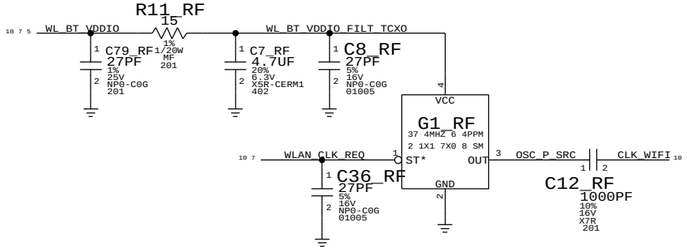
WLAN/BLUETOOTH RADIO

RF FILTER, CONNECTOR, ANTENNA MATCH AND FEED

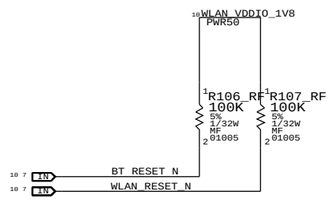
PLACE R19/C70 FILTER OUTSIDE WLAN CAN
NEAR SOURCE OF WL_BT_VDDIO ON AP SIDE



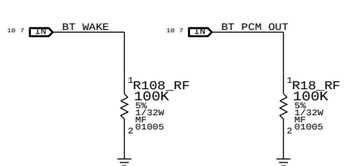
REFERENCE OSCILLATOR TCXO



PULL UP RESISTORS



PULL DOWN RESISTORS



Title: Basenet Report
Design: radio_mlb
Date: Dec 17 16:28:43 2010

Base nets and synonyms for
radio_mlb_lib.RADIO_MLB(@radio_mlb_lib.radio_mlb(sch_1))

Base Signal	Synonyms	Location([Zone][dir])
3G_PA1_DCDC_IN	3G_PA1_DCDC_IN - @radio_mlb_lib.RADIO_MLB	6D3
3G_PA_EN	3G_PA_EN - @radio_mlb_lib.RADIO_MLB	2B6 6D4
3G_PA_VCC	3G_PA_VCC - @radio_mlb_lib.RADIO_MLB	6D1 7B4 9C4 9D4
3G_PA_VCC1	3G_PA_VCC1 - @radio_mlb_lib.RADIO_MLB	6D1 9C7 9D6
3G_PA_VCCX	3G_PA_VCCX - @radio_mlb_lib.RADIO_MLB	6D2
800_DPX_ANT	800_DPX_ANT - @radio_mlb_lib.RADIO_MLB	9C4
800_DPX_TX	800_DPX_TX - @radio_mlb_lib.RADIO_MLB	9C5
800_INT_FILT_IN	800_INT_FILT_IN - @radio_mlb_lib.RADIO_MLB	9C8
800_INT_FILT_OUT	800_INT_FILT_OUT - @radio_mlb_lib.RADIO_MLB	9C7
800_PA_IN	800_PA_IN - @radio_mlb_lib.RADIO_MLB	9C6
800_PA_OUT	800_PA_OUT - @radio_mlb_lib.RADIO_MLB	9C5
1900_DPX_ANT	1900_DPX_ANT - @radio_mlb_lib.RADIO_MLB	9D4
1900_DPX_TX	1900_DPX_TX - @radio_mlb_lib.RADIO_MLB	9D4
1900_INT_FILT_IN	1900_INT_FILT_IN - @radio_mlb_lib.RADIO_MLB	9D8
1900_INT_FILT_OUT	1900_INT_FILT_OUT - @radio_mlb_lib.RADIO_MLB	9D7
1900_PA_CPL_BLK	1900_PA_CPL_BLK - @radio_mlb_lib.RADIO_MLB	9D6
1900_PA_CPL_IN	1900_PA_CPL_IN - @radio_mlb_lib.RADIO_MLB	9D6
1900_PA_CPL_OUT	1900_PA_CPL_OUT - @radio_mlb_lib.RADIO_MLB	9B7 9C5
1900_PA_IN	1900_PA_IN - @radio_mlb_lib.RADIO_MLB	9D6
1900_PA_OUT	1900_PA_OUT - @radio_mlb_lib.RADIO_MLB	9D5
AP_PMU_EXTON	AP_PMU_EXTON - @radio_mlb_lib.RADIO_MLB	2C6 7C8
BATSNS	BATSNS - @radio_mlb_lib.RADIO_MLB	7A5 7D8
BATT_VCC	BATT_VCC - @radio_mlb_lib.RADIO_MLB	6D2 7A5 7B5 7D2 7D3 7D8 10D8
BATT_VCC_RADIO	BATT_VCC_RADIO - @radio_mlb_lib.RADIO_MLB	5B4 5C8 6A7 6B7 6B7 7D2
BATT_VCC_WLAN	BATT_VCC_WLAN - @radio_mlb_lib.RADIO_MLB	10D7
BB_DWLD_GATE	BB_DWLD_GATE - @radio_mlb_lib.RADIO_MLB	3C5
BB_EMRGNCY_DWLD	BB_EMRGNCY_DWLD - @radio_mlb_lib.RADIO_MLB	2C5 3C6 7C4 7C8
BB_I2S2_2_CLK	BB_I2S2_2_CLK - @radio_mlb_lib.RADIO_MLB	2B8
BB_I2S2_2_WA0	BB_I2S2_2_WA0 - @radio_mlb_lib.RADIO_MLB	2B8
BB_I2S2_CLK	BB_I2S2_CLK - @radio_mlb_lib.RADIO_MLB	2C8 7C8
BB_I2S2_RX	BB_I2S2_RX - @radio_mlb_lib.RADIO_MLB	2B8 7C8
BB_I2S2_TX	BB_I2S2_TX - @radio_mlb_lib.RADIO_MLB	2C8 7C8
BB_I2S2_WA0	BB_I2S2_WA0 - @radio_mlb_lib.RADIO_MLB	2C8 7C8
BB_JTAG_RTCK	BB_JTAG_RTCK - @radio_mlb_lib.RADIO_MLB	2C2 7A1 7C2
BB_JTAG_TCK	BB_JTAG_TCK - @radio_mlb_lib.RADIO_MLB	2C3 7B1 7C2
BB_JTAG_TDI	BB_JTAG_TDI - @radio_mlb_lib.RADIO_MLB	2C3 7B1 7C2
BB_JTAG_TDO	BB_JTAG_TDO - @radio_mlb_lib.RADIO_MLB	2C2 7B1 7C2
BB_JTAG_TMS	BB_JTAG_TMS - @radio_mlb_lib.RADIO_MLB	2C3 7B1 7C2
BB_JTAG_TRST_N	BB_JTAG_TRST_N - @radio_mlb_lib.RADIO_MLB	2C3 7B1 7C2
BB_PCM_CLK	BB_PCM_CLK - @radio_mlb_lib.RADIO_MLB	2B8 7C5 7C8
BB_PCM_RX	BB_PCM_RX - @radio_mlb_lib.RADIO_MLB	2B8 7B5 7C8
BB_PCM_SYNC	BB_PCM_SYNC - @radio_mlb_lib.RADIO_MLB	2B8 7C5 7C8
BB_PCM_TX	BB_PCM_TX - @radio_mlb_lib.RADIO_MLB	2B8 7C5 7C8
BB_PDM	BB_PDM - @radio_mlb_lib.RADIO_MLB	2B6
BB_PDM_FILT	BB_PDM_FILT - @radio_mlb_lib.RADIO_MLB	2B5
BB_RST_N	BB_RST_N - @radio_mlb_lib.RADIO_MLB	2C5 7B2 7D8
BB_UART_CTS_N	BB_UART_CTS_N - @radio_mlb_lib.RADIO_MLB	2B8 7A2 7C2 7C8
BB_UART_RTS_N	BB_UART_RTS_N - @radio_mlb_lib.RADIO_MLB	2B8 7A2 7C2 7C8
BB_UART_RXD	BB_UART_RXD - @radio_mlb_lib.RADIO_MLB	2B8 2C6 7A2 7C2 7C8
BB_UART_TXD	BB_UART_TXD - @radio_mlb_lib.RADIO_MLB	2B8 7B2 7C2 7C8
BB_USB_DATA_N	BB_USB_DATA_N - @radio_mlb_lib.RADIO_MLB	2B4 2C3 7B2 7C4 7C8
BB_USB_DATA_P	BB_USB_DATA_P - @radio_mlb_lib.RADIO_MLB	2B4 2C3 7B4 7C4 7C8
BB_USB_REXT	BB_USB_REXT - @radio_mlb_lib.RADIO_MLB	2C3
BB_USB_VBUS	BB_USB_VBUS - @radio_mlb_lib.RADIO_MLB	2C3 7A1 7C4 7C8
BOOT_FROM_ROM	BOOT_FROM_ROM - @radio_mlb_lib.RADIO_MLB	2A5 2B6
BT_PCM_CLK	BT_PCM_CLK - @radio_mlb_lib.RADIO_MLB	7B8 10C5
BT_PCM_IN	BT_PCM_IN - @radio_mlb_lib.RADIO_MLB	7B8 10C5
BT_PCM_OUT	BT_PCM_OUT - @radio_mlb_lib.RADIO_MLB	7B8 10A3 10C5
BT_PCM_SYNC	BT_PCM_SYNC - @radio_mlb_lib.RADIO_MLB	7B8 10C5
BT_RESET_N	BT_RESET_N - @radio_mlb_lib.RADIO_MLB	7B8 7C2 10A5 10C5
BT_UART_CTS_N	BT_UART_CTS_N - @radio_mlb_lib.RADIO_MLB	7B8 7C2 10C5
BT_UART_RTS_N	BT_UART_RTS_N - @radio_mlb_lib.RADIO_MLB	7B8 7C2 10C5
BT_UART_RXD	BT_UART_RXD - @radio_mlb_lib.RADIO_MLB	7B8 7C2 10C5
BT_UART_TXD	BT_UART_TXD - @radio_mlb_lib.RADIO_MLB	7B8 7C2 10C5
BT_WAKE	BT_WAKE - @radio_mlb_lib.RADIO_MLB	7B8 7C2 10A4 10C5
CELLULAR_RF_ANT	CELLULAR_RF_ANT - @radio_mlb_lib.RADIO_MLB	9D1
CELLULAR_RF_ANT_MATCH	CELLULAR_RF_ANT_MATCH - @radio_mlb_lib.RADIO_MLB	9D2
CELLULAR_RF_MATCH	CELLULAR_RF_MATCH - @radio_mlb_lib.RADIO_MLB	9C2
CELLULAR_RF_SWITCH	CELLULAR_RF_SWITCH - @radio_mlb_lib.RADIO_MLB	9C2
CELL_RF_ANT_MATCH_IN	CELL_RF_ANT_MATCH_INT - @radio_mlb_lib.RADIO_MLB	9D2
CLK32K_AP	CLK32K_AP - @radio_mlb_lib.RADIO_MLB	7B8 7C5 10C8
CLK_WIFI	CLK_WIFI - @radio_mlb_lib.RADIO_MLB	10A6 10C8
DCDC_ADJ	DCDC_ADJ - @radio_mlb_lib.RADIO_MLB	2B4 6D4
DC_DC_LX1	DC_DC_LX1 - @radio_mlb_lib.RADIO_MLB	6D3
DDR_A<12..0>	DDR_A<12..0> - @radio_mlb_lib.RADIO_MLB	3B8 3C4
DDR_A<15..14>	DDR_A<15..14> - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DDR_CAS_N	DDR_CAS_N - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DDR_CKE0	DDR_CKE0 - @radio_mlb_lib.RADIO_MLB	3C4 3C6
DDR_CLK_M	DDR_CLK_M - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DDR_CLK_P	DDR_CLK_P - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DDR_CS0_N	DDR_CS0_N - @radio_mlb_lib.RADIO_MLB	3C4 3C6
DDR_DQ<15..0>	DDR_DQ<15..0> - @radio_mlb_lib.RADIO_MLB	3B6 3C2
DDR_DQM0	DDR_DQM0 - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DDR_DQM1	DDR_DQM1 - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DDR_DQS0	DDR_DQS0 - @radio_mlb_lib.RADIO_MLB	3C2 3C6
DDR_DQS1	DDR_DQS1 - @radio_mlb_lib.RADIO_MLB	3C2 3C6
DDR_RAS_N	DDR_RAS_N - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DDR_WE_N	DDR_WE_N - @radio_mlb_lib.RADIO_MLB	3C4 3C8
DEBUG_GPIO_LED	DEBUG_GPIO_LED - @radio_mlb_lib.RADIO_MLB	2C6 7C4
DEBUG_RST_N	DEBUG_RST_N - @radio_mlb_lib.RADIO_MLB	2C5 7C4
DIV_800_FIL_OUT_N	DIV_800_FIL_OUT_N - @radio_mlb_lib.RADIO_MLB	8A4
DIV_800_FIL_OUT_P	DIV_800_FIL_OUT_P - @radio_mlb_lib.RADIO_MLB	8A4
DIV_1900_FIL_OUT_N	DIV_1900_FIL_OUT_N - @radio_mlb_lib.RADIO_MLB	8B4
DIV_1900_FIL_OUT_P	DIV_1900_FIL_OUT_P - @radio_mlb_lib.RADIO_MLB	8B4
DIV_GPS_ANTENNA	DIV_GPS_ANTENNA - @radio_mlb_lib.RADIO_MLB	8B6
DIV_GPS_ANT_FEED	DIV_GPS_ANT_FEED - @radio_mlb_lib.RADIO_MLB	8D8
DIV_GPS_ANT_MAT	DIV_GPS_ANT_MAT - @radio_mlb_lib.RADIO_MLB	8D7
DIV_GPS_ANT_MATCH	DIV_GPS_ANT_MATCH - @radio_mlb_lib.RADIO_MLB	8B7
DIV_GPS_COAX_IN	DIV_GPS_COAX_IN - @radio_mlb_lib.RADIO_MLB	8D7
DIV_GPS_COAX_OUT	DIV_GPS_COAX_OUT - @radio_mlb_lib.RADIO_MLB	8B8
DIV_GPS_RF_SWITCH	DIV_GPS_RF_SWITCH - @radio_mlb_lib.RADIO_MLB	8B6
DNC4	DNC4 - @radio_mlb_lib.RADIO_MLB	9A2
DRX_800_N	DRX_800_N - @radio_mlb_lib.RADIO_MLB	8A2 9A3
DRX_800_P	DRX_800_P - @radio_mlb_lib.RADIO_MLB	8A2 9A3
DRX_1900_N	DRX_1900_N - @radio_mlb_lib.RADIO_MLB	8B2 9A3
DRX_1900_P	DRX_1900_P - @radio_mlb_lib.RADIO_MLB	8B2 9A3
EBI1_CAL	EBI1_CAL - @radio_mlb_lib.RADIO_MLB	3C8
EXT_GPS_LNA_EN	EXT_GPS_LNA_EN - @radio_mlb_lib.RADIO_MLB	2B6 8C6
FAILED_BOOT	FAILED_BOOT - @radio_mlb_lib.RADIO_MLB	2B6
GAS_GAUGE	GAS_GAUGE - @radio_mlb_lib.RADIO_MLB	7A6 7D8
GAS_GAUGE_CONN	GAS_GAUGE_CONN - @radio_mlb_lib.RADIO_MLB	7A4 7A8
GPIO_35	GPIO_35 - @radio_mlb_lib.RADIO_MLB	2B7
GPIO_77	GPIO_77 - @radio_mlb_lib.RADIO_MLB	2C6
GPS_EXT_LNA_IN	GPS_EXT_LNA_IN - @radio_mlb_lib.RADIO_MLB	8C5
GPS_EXT_LNA_OUT	GPS_EXT_LNA_OUT - @radio_mlb_lib.RADIO_MLB	8C5
GPS_FILT_IN	GPS_FILT_IN - @radio_mlb_lib.RADIO_MLB	8C4
GPS_FILT_OUT	GPS_FILT_OUT - @radio_mlb_lib.RADIO_MLB	8C6
GPS_IN_F_MATCH_N	GPS_IN_F_MATCH_N - @radio_mlb_lib.RADIO_MLB	8C3
GPS_IN_F_MATCH_P	GPS_IN_F_MATCH_P - @radio_mlb_lib.RADIO_MLB	8C3
GPS_IN_F_N	GPS_IN_F_N - @radio_mlb_lib.RADIO_MLB	8C3
GPS_IN_F_P	GPS_IN_F_P - @radio_mlb_lib.RADIO_MLB	8C3
GPS_IN_N	GPS_IN_N - @radio_mlb_lib.RADIO_MLB	8C1 9B1
GPS_IN_P	GPS_IN_P - @radio_mlb_lib.RADIO_MLB	8C1 9B1
HOST_WAKE_BT	HOST_WAKE_BT - @radio_mlb_lib.RADIO_MLB	7B8 10C5
HOST_WAKE_WLAN	HOST_WAKE_WLAN - @radio_mlb_lib.RADIO_MLB	7B8 10C5
HSIC_CAL	HSIC_CAL - @radio_mlb_lib.RADIO_MLB	2C2
IPC_GPIO2	IPC_GPIO2 - @radio_mlb_lib.RADIO_MLB	2C5 7C8
IPC_MISO	IPC_MISO - @radio_mlb_lib.RADIO_MLB	2C8 7D8
IPC_MOSI	IPC_MOSI - @radio_mlb_lib.RADIO_MLB	2C8 7D8
IPC_MRDY	IPC_MRDY - @radio_mlb_lib.RADIO_MLB	2D6 7D8
IPC_SCLK	IPC_SCLK - @radio_mlb_lib.RADIO_MLB	2C8 7D8
IPC_SRDY	IPC_SRDY - @radio_mlb_lib.RADIO_MLB	2D6 7D8
L1	L1 - @radio_mlb_lib.RADIO_MLB	6B2
L7	L7 - @radio_mlb_lib.RADIO_MLB	6A2
L9	L9 - @radio_mlb_lib.RADIO_MLB	6B2
L10	L10 - @radio_mlb_lib.RADIO_MLB	6B2
L13	L13 - @radio_mlb_lib.RADIO_MLB	6B2
L16	L16 - @radio_mlb_lib.RADIO_MLB	6A4
L17	L17 - @radio_mlb_lib.RADIO_MLB	6A4
L18	L18 - @radio_mlb_lib.RADIO_MLB	6A2
MODE_0	MODE_0 - @radio_mlb_lib.RADIO_MLB	2C3
MODE_1	MODE_1 - @radio_mlb_lib.RADIO_MLB	2A5 2C3
MODE_2	MODE_2 - @radio_mlb_lib.RADIO_MLB	2C3
NAND_ALE	NAND_ALE - @radio_mlb_lib.RADIO_MLB	3B4 3B8
NAND_A_D<15..0>	NAND_A_D<15..0> - @radio_mlb_lib.RADIO_MLB	3B2 3B6
NAND_CE_N	NAND_CE_N - @radio_mlb_lib.RADIO_MLB	3C4
NAND_CLE	NAND_CLE - @radio_mlb_lib.RADIO_MLB	3B4 3B8
NAND_CS1_N	NAND_CS1_N - @radio_mlb_lib.RADIO_MLB	3B8 3C6
NAND_OE_N	NAND_OE_N - @radio_mlb_lib.RADIO_MLB	3B4 3B8
NAND_R_B_N	NAND_R_B_N - @radio_mlb_lib.RADIO_MLB	2C6 3B1
NAND_WE_N	NAND_WE_N - @radio_mlb_lib.RADIO_MLB	3B8 3C4
NTC	NTC - @radio_mlb_lib.RADIO_MLB	7A6 7D8
NTC_CONN	NTC_CONN - @radio_mlb_lib.RADIO_MLB	7A5 7A8
OSC_P_SRC	OSC_P_SRC - @radio_mlb_lib.RADIO_MLB	10A7
PA_CPLD	PA_CPLD - @radio_mlb_lib.RADIO_MLB	9A1 9B5
PA_CPLD_BLK	PA_CPLD_BLK - @radio_mlb_lib.RADIO_MLB	9B5
PA_ON_800	PA_ON_800 - @radio_mlb_lib.RADIO_MLB	2B6 9B7
PA_ON_1900	PA_ON_1900 - @radio_mlb_lib.RADIO_MLB	2B6 9C8
PA_ON_1900_IN	PA_ON_1900_IN - @radio_mlb_lib.RADIO_MLB	9C7
PA_R0	PA_R0 - @radio_mlb_lib.RADIO_MLB	2C2 9B7 9C7
PA_R1	PA_R1 - @radio_mlb_lib.RADIO_MLB	2C2 9B7 9C7
PBL_EMER_DWLD	PBL_EMER_DWLD - @radio_mlb_lib.RADIO_MLB	2C6
PDET_IN	PDET_IN - @radio_mlb_lib.RADIO_MLB	9A2
PM_INT_N	PM_INT_N - @radio_mlb_lib.RADIO_MLB	2C3 5B4 7B5
PON_RESET_N	PON_RESET_N - @radio_mlb_lib.RADIO_MLB	2C5 5B4 7A1
PS_HOLD	PS_HOLD - @radio_mlb_lib.RADIO_MLB	2C4 5B6
PS_HOLD_NP	PS_HOLD_NP - @radio_mlb_lib.RADIO_MLB	2C3
RADIO_ON_N	RADIO_ON_N - @radio_mlb_lib.RADIO_MLB	5B6 7B2 7C4 7D8
REF_BYP	REF_BYP - @radio_mlb_lib.RADIO_MLB	6C5
RESET_DET_N	RESET_DET_N - @radio_mlb_lib.RADIO_MLB	2C6 7B4 7D8
RESET_PMU_N	RESET_PMU_N - @radio_mlb_lib.RADIO_MLB	5A8 7B2 7C4 7D3 7D8
RESET_PMU_N_BUFFER	RESET_PMU_N_BUFFER - @radio_mlb_lib.RADIO_MLB	5B6
RESET_PMU_N_FET	RESET_PMU_N_FET - @radio_mlb_lib.RADIO_MLB	7D3
RESIN_N	RESIN_N - @radio_mlb_lib.RADIO_MLB	2C3 7A2
RESOUT_N	RESOUT_N - @radio_mlb_lib.RADIO_MLB	2C2 3B4 7B4
REV_ID<0>	REV_ID<0> - @radio_mlb_lib.RADIO_MLB	2A8 2C6
REV_ID<1>	REV_ID<1> - @radio_mlb_lib.RADIO_MLB	2A8 2C6
REV_ID<2>	REV_ID<2> - @radio_mlb_lib.RADIO_MLB	2A8 2C6
REV_ID<3>	REV_ID<3> - @radio_mlb_lib.RADIO_MLB	2A8 2C6
REV_ID<4>	REV_ID<4> - @radio_mlb_lib.RADIO_MLB	2A8 2C6
RF_RBIAS	RF_RBIAS - @radio_mlb_lib.RADIO_MLB	9A2
RF_RESET_N	RF_RESET_N - @radio_mlb_lib.RADIO_MLB	7C4 7D8
RPMU_FET	RPMU_FET - @radio_mlb_lib.RADIO_MLB	5A7
RPMU_UR	RPMU_UR - @radio_mlb_lib.RADIO_MLB	5B7
RX_800_BAL_N	RX_800_BAL_N - @radio_mlb_lib.RADIO_MLB	9B5
RX_800_BAL_P	RX_800_BAL_P - @radio_mlb_lib.RADIO_MLB	9B4
RX_800_LNA_N	RX_800_LNA_N - @radio_mlb_lib.RADIO_MLB	9B3
RX_800_LNA_P	RX_800_LNA_P - @radio_mlb_lib.RADIO_MLB	9B3
RX_800_TRAP	RX_800_TRAP - @radio_mlb_lib.RADIO_MLB	9B4
RX_1900	RX_1900 - @radio_mlb_lib.RADIO_MLB	9A6 9C4
RX_1900_BAL_N	RX_1900_BAL_N - @radio_mlb_lib.RADIO_MLB	9A5
RX_1900_BAL_P	RX_1900_BAL_P - @radio_mlb_lib.RADIO_MLB	9A5
RX_1900_LNA_N	RX_1900_LNA_N - @radio_mlb_lib.RADIO_MLB	9A3
RX_1900_LNA_P	RX_1900_LNA_P - @radio_mlb_lib.RADIO_MLB	9A3
S1	S1 - @radio_mlb_lib.RADIO_MLB	6C2
S1_GND	S1_GND - @radio_mlb_lib.RADIO_MLB	6B6 6C3
S2	S2 - @radio_mlb_lib.RADIO_MLB	6C2
S2_GND	S2_GND - @radio_mlb_lib.RADIO_MLB	6B6 6C3
S3	S3 - @radio_mlb_lib.RADIO_MLB	6C2
S3_GND	S3_GND - @radio_mlb_lib.RADIO_MLB	6B6 6C3
S4	S4 - @radio_mlb_lib.RADIO_MLB	6B2
S4_GND	S4_GND - @radio_mlb_lib.RADIO_MLB	6B3 6B5
SDIO_CLK_XW	SDIO_CLK_XW - @radio_mlb_lib.RADIO_MLB	10C7
SDIO_CMD_XW	SDIO_CMD_XW - @radio_mlb_lib.RADIO_MLB	10C7
SDIO_D0_XW	SDIO_D0_XW - @radio_mlb_lib.RADIO_MLB	10C7
SDIO_D1_XW	SDIO_D1_XW - @radio_mlb_lib.RADIO_MLB	10C7
SDIO_D2_XW	SDIO_D2_XW - @radio_mlb_lib.RADIO_MLB	10C7
SDIO_D3_XW	SDIO_D3_XW - @radio_mlb_lib.RADIO_MLB	10C7
SLEEP_CLK	SLEEP_CLK - @radio_mlb_lib.RADIO_MLB	2C3 5C2 7B5
SSBI_PMIC	SSBI_PMIC - @radio_mlb_lib.RADIO_MLB	2C3 5B6 7B5
TRX_800	TRX_800 - @radio_mlb_lib.RADIO_MLB	9C3
TRX_1900	TRX_1900 - @radio_mlb_lib.RADIO_MLB	9D3
TX_800	TX_800 - @radio_mlb_lib.RADIO_MLB	9A1 9C8
TX_800_IN	TX_800_IN - @radio_mlb_lib.RADIO_MLB	9C8
TX_1900	TX_1900 - @radio_mlb_lib.RADIO_MLB	9A1 9D8
TX_1900_MATCH	TX_1900_MATCH - @radio_mlb_lib.RADIO_MLB	9D8
VDD_1P3_DA	VDD_1P3_DA - @radio_mlb_lib.RADIO_MLB	4C4 6C7
VDD_1P3_DRXLO	VDD_1P3_DRXLO - @radio_mlb_lib.RADIO_MLB	4C7 6D5
VDD_1P3_GPSDIG	VDD_1P3_GPSDIG - @radio_mlb_lib.RADIO_MLB	4C7 6D4
VDD_1P3_GPSLO	VDD_1P3_GPSLO - @radio_mlb_lib.RADIO_MLB	4C7 6D5
VDD_1P3_GPSPLL	VDD_1P3_GPSPLL - @radio_mlb_lib.RADIO_MLB	4C7 6D7
VDD_1P3_LNA	VDD_1P3_LNA - @radio_mlb_lib.RADIO_MLB	4C7 6D6
VDD_1P3_PDA	VDD_1P3_PDA - @radio_mlb_lib.RADIO_MLB	4C4 6C7
VDD_1P3_PRXLO	VDD_1P3_PRXLO - @radio_mlb_lib.RADIO_MLB	4C7 6D4
VDD_1P3_RDCO	VDD_1P3_RDCO - @radio_mlb_lib.RADIO_MLB	4C4 6D6
VDD_1P3_RXPLL	VDD_1P3_RXPLL - @radio_mlb_lib.RADIO_MLB	4C4 6D7
VDD_1P3_SBIDIG	VDD_1P3_SBIDIG - @radio_mlb_lib.RADIO_MLB	4C7 6C5
VDD_1P3_TDCO	VDD_1P3_TDCO - @radio_mlb_lib.RADIO_MLB	4C4 6C6
VDD_1P3_TXLO	VDD_1P3_TXLO - @radio_mlb_lib.RADIO_MLB	4C4 6C6
VDD_1P3_TXMIX	VDD_1P3_TXMIX - @radio_mlb_lib.RADIO_MLB	4C4 6C5
VDD_1P3_TXPLL	VDD_1P3_TXPLL - @radio_mlb_lib.RADIO_MLB	4C4 6C7
VDD_1P8_XO	VDD_1P8_XO - @radio_mlb_lib.RADIO_MLB	4C7 6B7
VDD_2P2_BIAS	VDD_2P2_BIAS - @radio_mlb_lib.RADIO_MLB	4C7 6A7
VDD_2P2_PDET	VDD_2P2_PDET - @radio_mlb_lib.RADIO_MLB	4C4 6B7
VDD_2P2_RDCO	VDD_2P2_RDCO - @radio_mlb_lib.RADIO_MLB	4C4 6A7
VDD_2P2_TDCO	VDD_2P2_TDCO - @radio_mlb_lib.RADIO_MLB	4C4 6A7
VDD_A0	VDD_A0 - @radio_mlb_lib.RADIO_MLB	4C3
VDD_QFUSE	VDD_QFUSE - @radio_mlb_lib.RADIO_MLB	4C4 7A4
VDD_RF_DIG	VDD_RF_DIG - @radio_mlb_lib.RADIO_MLB	4C7 6B7
VREG_GP_1P2	VREG_GP_1P2 - @radio_mlb_lib.RADIO_MLB	4C4 6A1
VREG_GP_1P8	VREG_GP_1P8 - @radio_mlb_lib.RADIO_MLB	4C1 6A1 6B8
VREG_GP_2P05	VREG_GP_2P05 - @radio_mlb_lib.RADIO_MLB	4C1 6B1
VREG_MPLL	VREG_MPLL - @radio_mlb_lib.RADIO_MLB	4C1 6A1
VREG_MSMC	VREG_MSMC - @radio_mlb_lib.RADIO_MLB	4B1 4B4 6C1 7A4
VREG_MSME	VREG_MSME - @radio_mlb_lib.RADIO_MLB	2A5 2A8 2D5 3B1 3C5 3D1 4B4 4C1 5B4 6A7 6B8 6C1 7A4
VREG_QFUSE	VREG_QFUSE - @radio_mlb_lib.RADIO_MLB	4C4 6B1
VREG_RF1_1P3	VREG_RF1_1P3 - @radio_mlb_lib.RADIO_MLB	4C4 6C1 6C8
VREG_RF1_1P3_RX	VREG_RF1_1P3_RX - @radio_mlb_lib.RADIO_MLB	4C4 4C7 6C1 6D8
VREG_RF2_2P2	VREG_RF2_2P2 - @radio_mlb_lib.RADIO_MLB	4C4 4C7 6B1 6B8
VREG_RFA_2P2	VREG_RFA_2P2 - @radio_mlb_lib.RADIO_MLB	5C5 6B1
VREG_RF_SW	VREG_RF_SW - @radio_mlb_lib.RADIO_MLB	6B1 8D6
VREG_RF_SW_GPS_LNA	VREG_RF_SW_GPS_LNA - @radio_mlb_lib.RADIO_MLB	8C5
VREG_SDCC1	VREG_SDCC1 - @radio_mlb_lib.RADIO_MLB	4C1 6A1
VREG_USB_3P075	VREG_USB_3P075 - @radio_mlb_lib.RADIO_MLB	4C1 6B1
VSW_S1	VSW_S1 - @radio_mlb_lib.RADIO_MLB	6B4
VSW_S2	VSW_S2 - @radio_mlb_lib.RADIO_MLB	6B4
VSW_S3	VSW_S3 - @radio_mlb_lib.RADIO_MLB	6B4
VSW_S4	VSW_S4 - @radio_mlb_lib.RADIO_MLB	6B4
WDOG_DISABLE	WDOG_DISABLE - @radio_mlb_lib.RADIO_MLB	2A5 2B6
WLAN_BT_DIPLEXER	WLAN_BT_DIPLEXER - @radio_mlb_lib.RADIO_MLB	10D4
WLAN_BUCK_OUT_1V4	WLAN_BUCK_OUT_1V4 - @radio_mlb_lib.RADIO_MLB	10C8
WLAN_CLK_REQ	WLAN_CLK_REQ - @radio_mlb_lib.RADIO_MLB	7D5 10A7 10C8
WLAN_FEM_ANT	WLAN_FEM_ANT - @radio_mlb_lib.RADIO_MLB	10C5
WLAN_FILT	WLAN_FILT - @radio_mlb_lib.RADIO_MLB	10D4
WLAN_RESET_N	WLAN_RESET_N - @radio_mlb_lib.RADIO_MLB	7B8 7C2 10A5 10C8
WLAN_SDIO_CLK	WLAN_SDIO_CLK - @radio_mlb_lib.RADIO_MLB	7B8 10C8
WLAN_SDIO_CMD	WLAN_SDIO_CMD - @radio_mlb_lib.RADIO_MLB	7B8 10C8
WLAN_SDIO_DATA<0>	WLAN_SDIO_DATA<0> - @radio_mlb_lib.RADIO_MLB	10B8
WLAN_SDIO_DATA<3..0>	WLAN_SDIO_DATA<3..0> - @radio_mlb_lib.RADIO_MLB	7B8
WLAN_SDIO_DATA<1>	WLAN_SDIO_DATA<1> - @radio_mlb_lib.RADIO_MLB	10B8
WLAN_SDIO_DATA<2>	WLAN_SDIO_DATA<2> - @radio_mlb_lib.RADIO_MLB	10B8
WLAN_SDIO_DATA<3>	WLAN_SDIO_DATA<3> - @radio_mlb_lib.RADIO_MLB	10B8
WLAN_SR_VLX1	WLAN_SR_VLX1 - @radio_mlb_lib.RADIO_MLB	10C7
WLAN_TCK	WLAN_TCK - @radio_mlb_lib.RADIO_MLB	7D5 10C5
WLAN_TDI	WLAN_TDI - @radio_mlb_lib.RADIO_MLB	7D5 10B5
WLAN_TDO	WLAN_TDO - @radio_mlb_lib.RADIO_MLB	7D5 10C5
WLAN_TMS	WLAN_TMS - @radio_mlb_lib.RADIO_MLB	7D5 10C5
WLAN_TRST_N	WLAN_TRST_N - @radio_mlb_lib.RADIO_MLB	7D5 10C5
WLAN_VDDIO_1V8	WLAN_VDDIO_1V8 - @radio_mlb_lib.RADIO_MLB	10A5 10D6
WL_BT_REG_ON	WL_BT_REG_ON - @radio_mlb_lib.RADIO_MLB	7B8 7C2 7C5 10C8
WL_BT_VDDIO	WL_BT_VDDIO -	5B8 7B8 10A8 10D4

	@radio_mlb_lib.RADIO_MLB	
WL_BT_VDDIO_FILT_TCX	WL_BT_VDDIO_FILT_TCXO -	10A7
O	@radio_mlb_lib.RADIO_MLB	
XO_GND	XO_GND - @radio_mlb_lib.RADIO_MLB	5C4 5C5
XO_OUT	XO_OUT - @radio_mlb_lib.RADIO_MLB	9B2
XO_OUT_A0	XO_OUT_A0 -	5C2 9B1
	@radio_mlb_lib.RADIO_MLB	
XO_OUT_D1	XO_OUT_D1 -	2C3 5C2 7B5
	@radio_mlb_lib.RADIO_MLB	
XO_OUT_D1_EN	XO_OUT_D1_EN -	2C3 5C2
	@radio_mlb_lib.RADIO_MLB	
XO_THERM	XO_THERM - @radio_mlb_lib.RADIO_MLB	5C4
XTAL19M_IN	XTAL19M_IN -	5D4
	@radio_mlb_lib.RADIO_MLB	
XTAL19M_OUT	XTAL19M_OUT -	5D4
	@radio_mlb_lib.RADIO_MLB	

Title: Cref Part Report
Design: radio_mlb
Date: Dec 17 16:28:43 2010

BR1	BRACKET_1P_SM	radio_mlb[8C8]
BR2	BRACKET_1P_SM	radio_mlb[8B8]
C1	CAP_0201-MUR	radio_mlb[7D3]
C2	CAP_201	radio_mlb[5A8]
C3	CAP_201	radio_mlb[8B3]
C4	CAP_201	radio_mlb[8B3]
C5	CAP_201	radio_mlb[8A6]
C6	CAP_201	radio_mlb[8B6]
C7	CAP_402	radio_mlb[10A8]
C8	CAP_01005	radio_mlb[10A7]
C9	CAP_201	radio_mlb[8A5]
C10	CAP_201	radio_mlb[5B6]
C12	CAP_201	radio_mlb[10A6]
C13	CAP_201	radio_mlb[8C6]
C14	CAP_01005	radio_mlb[9C7]
C15	CAP_201	radio_mlb[9D8]
C16	CAP_201	radio_mlb[8C6]
C17	CAP_201	radio_mlb[9D8]
C18	CAP_201	radio_mlb[7A7]
C19	CAP_201	radio_mlb[8C5]
C20	CAP_201	radio_mlb[8C4]
C21	CAP_201	radio_mlb[8C4]
C22	CAP_201	radio_mlb[8C4]
C23	CAP_01005	radio_mlb[6C7]
C24	CAP_01005	radio_mlb[8C3]
C25	CAP_01005	radio_mlb[8C3]
C26	CAP_01005	radio_mlb[9B7]
C27	CAP_201	radio_mlb[9D6]
C28	CAP_01005	radio_mlb[9B7]
C29	CAP_201	radio_mlb[9D7]
C30	CAP_01005	radio_mlb[9C7]
C32	CAP_01005	radio_mlb[9B7]
C33	CAP_01005	radio_mlb[9C6]
C34	CAP_01005	radio_mlb[9D6]
C35	CAP_201	radio_mlb[9C6]
C36	CAP_01005	radio_mlb[10A7]
C37	CAP_201	radio_mlb[9D6]
C38	CAP_01005	radio_mlb[9C5]
C39	CAP_01005	radio_mlb[9D5]
C40	CAP_201	radio_mlb[9C5]
C41	CAP_201	radio_mlb[9D5]
C42	CAP_201	radio_mlb[9C5]
C43	CAP_01005	radio_mlb[9B5]
C44	CAP_201	radio_mlb[9D5]
C45	CAP_201	radio_mlb[9C5]
C46	CAP_0201	radio_mlb[9D4]
C47	CAP_402-LF	radio_mlb[9C5]
C48	CAP_402-LF	radio_mlb[9D5]
C49	CAP_0201	radio_mlb[9A4]
C50	CAP_0201	radio_mlb[9A4]
C51	CAP_201	radio_mlb[9B4]
C52	CAP_201	radio_mlb[9D4]
C53	CAP_201	radio_mlb[9D3]
C54	CAP_201	radio_mlb[9C3]
C55	CAP_201	radio_mlb[9A2]
C56	CAP_0402	radio_mlb[6D8]
C57	CAP_0402	radio_mlb[6C8]
C58	CAP_0201	radio_mlb[8C8]
C59	CAP_201	radio_mlb[9D1]
C60	CAP_402	radio_mlb[9D1]
C61	CAP_201	radio_mlb[8C2]
C65	CAP_201	radio_mlb[9C2]
C66	CAP_201	radio_mlb[3C5]
C67	CAP_603	radio_mlb[10D7]
C68	CAP_201	radio_mlb[10D7]
C69	CAP_201	radio_mlb[10D6]
C70	CAP_201	radio_mlb[10D5]
C71	CAP_0201	radio_mlb[8C7]
C72	CAP_0201	radio_mlb[8D7]
C79	CAP_201	radio_mlb[10A8]
C81	CAP_201	radio_mlb[7A7]
C82	CAP_201	radio_mlb[7A7]
C83	CAP_201	radio_mlb[7A7]
C85	CAP_201	radio_mlb[9D2]
C86	CAP_402	radio_mlb[10C7]
C87	CAP_201	radio_mlb[8B7]
C88	CAP_201	radio_mlb[8A7]
C89	CAP_201	radio_mlb[8A7]
C90	CAP_01005	radio_mlb[2B5]
C103	CAP_201	radio_mlb[2D4]
C104	CAP_01005	radio_mlb[2B5]
C105	CAP_01005	radio_mlb[2B5]
C106	CAP_201	radio_mlb[2B3]
C107	CAP_0201	radio_mlb[3D2]
C108	CAP_0201	radio_mlb[3D2]
C109	CAP_0201	radio_mlb[3D2]
C110	CAP_0201	radio_mlb[3D2]
C111	CAP_201	radio_mlb[6B7]
C112	CAP_201	radio_mlb[6B7]
C113	CAP_201	radio_mlb[6B7]
C114	CAP_402-LF	radio_mlb[6A7]
C115	CAP_402-LF	radio_mlb[6A7]
C116	CAP_201	radio_mlb[6A7]
C117	CAP_01005	radio_mlb[6D6]
C118	CAP_01005	radio_mlb[6D6]
C119	CAP_01005	radio_mlb[6C7]
C120	CAP_01005	radio_mlb[6C6]
C121	CAP_01005	radio_mlb[6C7]
C122	CAP_01005	radio_mlb[6D7]
C124	CAP_01005	radio_mlb[6D7]
C125	CAP_603	radio_mlb[5C8]
C126	CAP_603	radio_mlb[6D2]
C127	CAP_0201	radio_mlb[4C4]
C128	CAP_0201	radio_mlb[4B4]
C129	CAP_0201	radio_mlb[4B4]
C130	CAP_0201	radio_mlb[4B4]
C131	CAP_0201	radio_mlb[4A4]
C132	CAP_0201	radio_mlb[4A4]
C133	CAP_0201	radio_mlb[4A2]
C134	CAP_0201	radio_mlb[4B2]
C135	CAP_0402	radio_mlb[6C1]
C136	CAP_01005	radio_mlb[5C8]
C137	CAP_0201	radio_mlb[4B1]
C138	CAP_0201	radio_mlb[4B1]
C139	CAP_0201	radio_mlb[4B1]
C140	CAP_201	radio_mlb[6B5]
C141	CAP_603	radio_mlb[6B6]
C142	CAP_603	radio_mlb[6B6]
C143	CAP_603	radio_mlb[6B6]
C144	CAP_603	radio_mlb[6B5]
C145	CAP_402	radio_mlb[6B6]
C146	CAP_201	radio_mlb[6A6]
C147	CAP_201	radio_mlb[6A6]
C148	CAP_402	radio_mlb[6D4]
C149	CAP_01005	radio_mlb[5C8]
C150	CAP_603	radio_mlb[6D2]
C151	CAP_201	radio_mlb[6D2]
C152	CAP_603	radio_mlb[6C3]
C153	CAP_201	radio_mlb[9D6]
C154	CAP_603	radio_mlb[6C3]
C155	CAP_201	radio_mlb[9C6]
C157	CAP_603	radio_mlb[6C3]
C159	CAP_603	radio_mlb[6B3]
C160	CAP_402	radio_mlb[6A1]
C161	CAP_402	radio_mlb[6A4]
C162	CAP_402	radio_mlb[6A4]
C163	CAP_402	radio_mlb[6A3]
C166	CAP_402-LF	radio_mlb[6A2]
C167	CAP_402	radio_mlb[6A3]
C168	CAP_402-LF	radio_mlb[6A2]
C169	CAP_402	radio_mlb[6A2]
C170	CAP_402	radio_mlb[6A2]
C171	CAP_01005	radio_mlb[5C4]
C172	CAP_402	radio_mlb[6A2]
C174	CAP_01005	radio_mlb[5C5]
C178	CAP_402-LF	radio_mlb[6A4]
C179	CAP_01005	radio_mlb[6D5]
C180	CAP_201	radio_mlb[6D4]
C181	CAP_01005	radio_mlb[6C6]
C182	CAP_0201	radio_mlb[6C5]
C183	CAP_01005	radio_mlb[6D5]
C184	CAP_01005	radio_mlb[6D4]
C187	CAP_201	radio_mlb[9C8]
C188	CAP_01005	radio_mlb[6C5]
C189	CAP_201	radio_mlb[6D4]
C200	CAP_402	radio_mlb[6C6]
C201	CAP_402-1	radio_mlb[6D7]
C202	CAP_402	radio_mlb[6C7]
C203	CAP_402-1	radio_mlb[6C7]
C204	CAP_402	radio_mlb[6D6]
C205	CAP_402-1	radio_mlb[6C7]
C206	CAP_402	radio_mlb[6B7]
C217	CAP_01005	radio_mlb[9B2]
C225	CAP_201	radio_mlb[8C5]
FL1	MOD_HFQTP4ZEA047_LGA	radio_mlb[8B5]
FL2	FILTER_SAFFB1G88AA0F57_LLP	radio_mlb[9D7]
FL3	FILTER_SAFEB1G57FM_LLP	radio_mlb[8C4]
FL4	FIL_LDM18_0603	radio_mlb[9A6]
FL5	FILTER_SAFEA836MAA0F57_LLP	radio_mlb[9C8]
FL6	FILTER_2P_0201-1	radio_mlb[7A7]
FL7	FILTER_6P1_LLP	radio_mlb[9C2]
FL9	FILTER_2P_0201	radio_mlb[7A7]
FL10	FILTER_3P1_0805-SM	radio_mlb[10D4]
FL11	FILTER_2P_0402	radio_mlb[6C1]
FL12	FILTER_2P_0402	radio_mlb[6C1]
FL13	FILTER_2P_0402	radio_mlb[6C1]
FL14	FILTER_2P_0402	radio_mlb[6C1]
FL15	FILTER_2P_0402	radio_mlb[6B1]
G1	OSC_4PIN_ST_2.1X1.7X0.8-SM	radio_mlb[10A7]
J1	CON_M40ST_D4MT_SM1_M-ST-SM	radio_mlb[7C3]
J2	CON_F1ST_COAX_S3MT_S_F-ST-SM	radio_mlb[10D3]
J3	CON_F1ST_COAX_S3MT_S_F-ST-SM	radio_mlb[8D6]
J4	CON_F1ST_COAX_S3MT_S_F-ST-SM	radio_mlb[9D1]
J5	CON_F1ST_COAX_S3MT_S_F-ST-SM	radio_mlb[8B8]
J6	CON_F2ST_COAX_2MT_SM_2_F-ST-SM	radio_mlb[9C1]
J9	CON_F2ST_COAX_2MT_SM_2_F-ST-SM	radio_mlb[8B6]
J14	CON_F4ST_S2MT_SM_F-ST-SM	radio_mlb[7A8]
L1	IND_0201	radio_mlb[8A3]
L2	IND_0201	radio_mlb[8B3]
L3	IND_0201	radio_mlb[8A2]
L4	IND_0201	radio_mlb[8B2]
L5	IND_VLS3012-SM-HF	radio_mlb[6D2]
L6	IND_0201	radio_mlb[8C2]
L7	IND_0201	radio_mlb[8C2]
L8	IND_0201	radio_mlb[9C5]
L9	IND_0201	radio_mlb[9D5]
L10	IND_0201	radio_mlb[9B7]
L11	IND_0201	radio_mlb[9A5]
L12	IND_0201	radio_mlb[9B6]
L13	IND_0201	radio_mlb[9A4]
L14	IND_0201	radio_mlb[9B4]
L15	IND_0201	radio_mlb[9B4]
L16	IND_0201	radio_mlb[9D3]
L17	IND_0201	radio_mlb[9B4]
L18	IND_0201	radio_mlb[9B4]
L19	IND_0201	radio_mlb[9B3]
L20	IND_0201	radio_mlb[9B3]
L21	IND_03015	radio_mlb[8D7]
L22	IND_0201	radio_mlb[9C2]
L23	IND_0201	radio_mlb[9C1]
L24	CAP_201	radio_mlb[10C4]
L25	IND_0201	radio_mlb[6C8]
L26	IND_0201	radio_mlb[6D6]
L27	IND_0201	radio_mlb[6C7]
L28	IND_0201	radio_mlb[6D7]
L29	IND_0201	radio_mlb[6D6]
L30	IND_0201	radio_mlb[6D5]
L31	IND_0201	radio_mlb[6D8]
L32	IND_03015	radio_mlb[8C7]
L33	IND_VLS2012E-SM	radio_mlb[10C7]
L34	IND_402	radio_mlb[9D2]
L36	IND_0201	radio_mlb[6C7]
L37	IND_0201	radio_mlb[6D5]
L38	IND_0201	radio_mlb[9D8]
L39	IND_0201	radio_mlb[9D6]
L40	IND_0201	radio_mlb[9C7]
L41	IND_0201	radio_mlb[8A3]
L42	IND_0201	radio_mlb[8A3]
L43	IND_0201	radio_mlb[9C7]
L44	IND_0201	radio_mlb[9B8]
L50	IND_0201	radio_mlb[6D8]
L54	IND_0201	radio_mlb[8C5]
L60	IND_03015	radio_mlb[8C6]
L61	IND_VLS2012E-SM	radio_mlb[6C3]
L62	IND_VLS2012E-SM	radio_mlb[6C3]
L63	IND_VLS2012E-SM	radio_mlb[6C3]
L64	IND_VLS2012E-SM	radio_mlb[6B3]
PP1	PROBEPOINT_SM	radio_mlb[7C5]
PP2	PROBEPOINT_SM	radio_mlb[7C5]
PP3	PROBEPOINT_SM	radio_mlb[7C5]
PP4	PROBEPOINT_SM	radio_mlb[7B5]
PP7	PROBEPOINT_SM	radio_mlb[7D5]
PP8	PROBEPOINT_SM	radio_mlb[7D5]
PP9	PROBEPOINT_SM	radio_mlb[7D5]
PP10	PROBEPOINT_SM	radio_mlb[7D5]
PP11	PROBEPOINT_SM	radio_mlb[7D5]
PP12	PROBEPOINT_SM	radio_mlb[7C5]
PP13	PROBEPOINT_SM	radio_mlb[7C5]
PP14	PROBEPOINT_SM	radio_mlb[7D5]
PP15	PROBEPOINT_SM	radio_mlb[7B5]
PP16	PROBEPOINT_SM	radio_mlb[7B5]
PP17	PROBEPOINT_SM	radio_mlb[7B5]
PP18	PROBEPOINT_SM	radio_mlb[7B5]
PP24	PROBEPOINT_SM	radio_mlb[7B4]
PP25	PROBEPOINT_SM	radio_mlb[7B4]
PP26	PROBEPOINT_SM	radio_mlb[7B4]
PP30	PROBEPOINT_SM	radio_mlb[7B3]
PP31	PROBEPOINT_SM	radio_mlb[7A3]
PP40	PROBEPOINT_SM	radio_mlb[7B2]
PP41	PROBEPOINT_SM	radio_mlb[7B2]
PP42	PROBEPOINT_SM	radio_mlb[7B2]
PP43	PROBEPOINT_SM	radio_mlb[7B2]
PP44	PROBEPOINT_SM	radio_mlb[7B2]
PP45	PROBEPOINT_SM	radio_mlb[7A2]
PP46	PROBEPOINT_SM	radio_mlb[7A2]
PP47	PROBEPOINT_SM	radio_mlb[7A2]
PP52	PROBEPOINT_SM	radio_mlb[2B6]
PP53	PROBEPOINT_SM	radio_mlb[2B6]
PP58	PROBEPOINT_SM	radio_mlb[2B8]
PP71	PROBEPOINT_SM	radio_mlb[2C4]
PP72	PROBEPOINT_SM	radio_mlb[2C4]
PP73	PROBEPOINT_SM	radio_mlb[2C4]
Q1	TRA_MOSFET_NCHN_3P_SOT883L	radio_mlb[5B7]
R1	RES_201	radio_mlb[3B2]
R2	RES_201	radio_mlb[2D4]
R3	RES_201	radio_mlb[2D4]
R4	RES_201	radio_mlb[2C4]
R5	RES_402	radio_mlb[6D4]
R6	RES_01005	radio_mlb[2A4]
R7	RES_01005	radio_mlb[2A4]
R8	RES_01005	radio_mlb[2A4]
R9	RES_201	radio_mlb[6D2]
R10	RES_01005	radio_mlb[9D6]
R11	RES_201	radio_mlb[10A8]
R12	RES_01005	radio_mlb[9A2]
R13	RES_201	radio_mlb[9A1]
R14	RES_201	radio_mlb[9A1]
R15	RES_201	radio_mlb[9A1]
R16	RES_01005	radio_mlb[2C6]
R17	RES_01005	radio_mlb[2C6]
R18	RES_01005	radio_mlb[10A3]
R19	RES_01005	radio_mlb[7D3]
R20	RES_201	radio_mlb[5B7]
R24	RES_01005	radio_mlb[2B2]
R28	RES_01005	radio_mlb[2B5]
R29	RES_01005	radio_mlb[2B5]
R30	RES_01005	radio_mlb[2B3]
R31	RES_01005	radio_mlb[2A7]
R32	RES_01005	radio_mlb[2A7]
R33	RES_01005	radio_mlb[2A7]
R34	RES_01005	radio_mlb[2A7]
R36	RES_01005	radio_mlb[2A7]
R37	RES_01005	radio_mlb[2A7]
R38	RES_01005	radio_mlb[2A7]
R39	RES_01005	radio_mlb[2A7]
R40	RES_01005	radio_mlb[2A7]
R41	RES_01005	radio_mlb[2A7]
R43	RES_201	radio_mlb[6B8]
R44	RES_201	radio_mlb[6B8]
R45	RES_201	radio_mlb[6B8]
R46	RES_201	radio_mlb[6A8]
R47	RES_201	radio_mlb[6A8]
R48	RES_201	radio_mlb[6A8]
R49	RES_201	radio_mlb[6D7]
R51	IND_0201	radio_mlb[6C8]
R55	IND_0201	radio_mlb[6C8]
R58	THERMISTER_0201	radio_mlb[5C4]
R59	RES_01005	radio_mlb[5C5]
R60	RES_201	radio_mlb[6D2]
R61	RES_201	radio_mlb[9C8]
R62	RES_01005	radio_mlb[2C8]
R63	RES_01005	radio_mlb[2C8]
R68	RES_201	radio_mlb[6B1]
R69	RES_201	radio_mlb[6B1]
R70	RES_201	radio_mlb[6B1]
R72	RES_201	radio_mlb[6B1]
R76	RES_201	radio_mlb[6A1]
R81	RES_01005	radio_mlb[3C8]
R82	RES_201	radio_mlb[4C4]
R83	RES_201	radio_mlb[6A1]
R86	RES_201	radio_mlb[4C4]
R93	RES_201	radio_mlb[4C4]
R97	RES_201	radio_mlb[6C6]
R98	RES_201	radio_mlb[6C6]
R101	RES_01005	radio_mlb[3B5]
R102	RES_01005	radio_mlb[3C5]
R103	RES_01005	radio_mlb[3C5]
R104	RES_201	radio_mlb[10D5]
R106	RES_01005	radio_mlb[10A5]
R107	RES_01005	radio_mlb[10A5]
R108	RES_01005	radio_mlb[10A3]
R109	RES_201	radio_mlb[10D4]
R110	RES_201	radio_mlb[9D8]
R185	RES_201	radio_mlb[9C8]
SP1	SPRING_CLIP_1P_CLIP-SM	radio_mlb[8D8]
TP1	TP_TP-P6	radio_mlb[7A5]
TP2	TP_TP-P6	radio_mlb[7B4]
TP3	TP_TP-P6	radio_mlb[7A4]
TP4	TP_TP-P6	radio_mlb[7A4]
TP5	TP_TP-P6	radio_mlb[7A4]
TP7	TP_TP-P6	radio_mlb[7B3]
TP8	TP_TP-P6	radio_mlb[7B3]
TP10	TP_TP-P6	radio_mlb[7A4]
TP11	TP_TP-P6	radio_mlb[7B3]
TP12	TP_TP-P6	radio_mlb[7A3]
TP13	TP_TP-P6	radio_mlb[7A3]
TP14	TP_TP-P6	radio_mlb[7A3]
TP22	TP_TP-P6	radio_mlb[7B3]
TP33	TP_TP-P6	radio_mlb[7B5]
TP34	TP_TP-P6	radio_mlb[7B5]
U1	BGA486_CUSTOM_N92_BGA	radio_mlb[2D7 2D3]
U1	BGA486_CUSTOM_N92_BGA	radio_mlb[3D7]
U1	BGA486_CUSTOM_N92_BGA	radio_mlb[4C3 4D6 4C7]
U1	BGA486_CUSTOM_N92_BGA	radio_mlb[9B2]
U2	SDRAM_EEPROM_4MX16X4_130BGA_TFBGA	radio_mlb[3D4]
U3	PWRMGR_EU_BGA136_BGA	radio_mlb[5B3 5D3 5B6 5D7]
U3	PWRMGR_EU_BGA136_BGA	radio_mlb[6C5]
U4	SN74LVC1G11_BGA	radio_mlb[2C4]
U5	MAX8839L_WLP	radio_mlb[6D3]
U6	AMP_SKY77710_LLP	radio_mlb[9C6]
U7	AMP_SKY77711_LLP	radio_mlb[9D5]
U8	FIL_SAYRF836MCA0F57_LGA	radio_mlb[9C4]
U9	FIL_ACMD7410_2.0X2.5MM	radio_mlb[9D4]
U10	SN74AUC1G32_BGA-YZP	radio_mlb[3C5]
U11	74LVC1G04_SOT891	radio_mlb[5B8]
U12	MOD_WIFI_BT_UNO_LGA5_LGA	radio_mlb[10C7]
U13	FPF1039_CSP	radio_mlb[7D2]
U33	XM1500LB_QFN	radio_mlb[8C5]
XW1	SHORT10L25_WITH_ALT_SM	radio_mlb[7A6]
XW2	SHORT_SM	radio_mlb[6C3]
XW3	SHORT_SM	radio_mlb[6C3]
XW4	SHORT_SM	radio_mlb[6C3]
XW5	SHORT_SM	radio_mlb[6B3]
XW6	SHORT_SHORT-0201	radio_mlb[10D7]
XW7	SHORT10LP25_WITH_ALT_SHORT-10L-0.25MM-SM	radio_mlb[5C3]
XW9	SHORT_SM	radio_mlb[10C7]
XW10	SHORT_SM	radio_mlb[10C7]
XW11	SHORT_SM	radio_mlb[10B7]
XW12	SHORT_SM	radio_mlb[10B7]
XW13	SHORT_SM	radio_mlb[10B7]
XW14	SHORT_SM	radio_mlb[10B7]
Y1	CRYSTAL_4PIN_SM-2.5X2.0MM	radio_mlb[5D4]

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
				2010-12-22

I BLEW UP 2 ASHLEYS, CYA IN CASE THE N88 AMANDA BUG IS BACK

LAYOUT: PLACE XW1 AND XW2 REMOTELY BY AP

U48_PMU
D1815A3-110-00
UFBG
(2 OF 2)

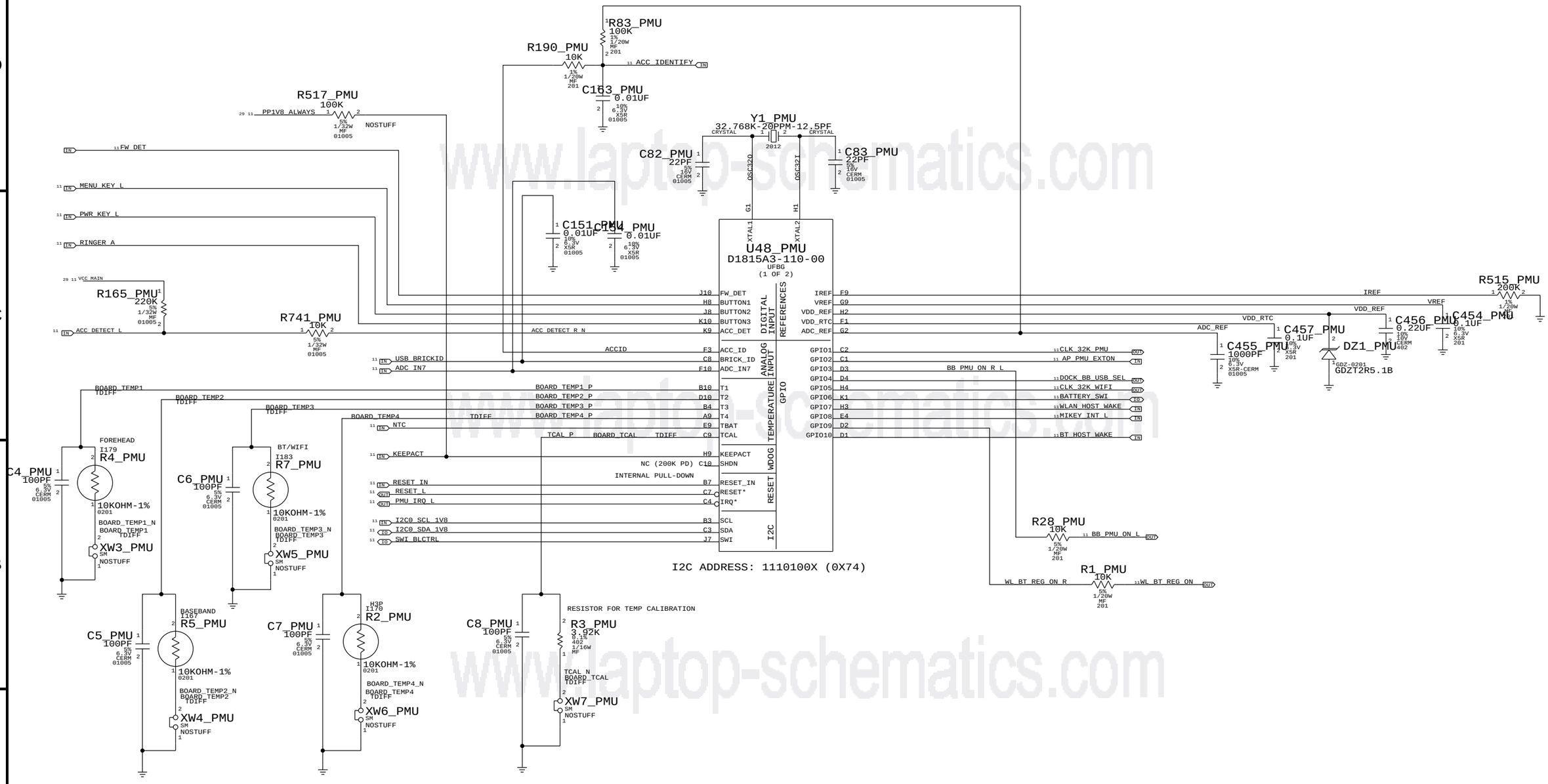
L1_PMU 5.6UH-1.15A-462MOHM VLS252012-SM
L3_PMU 5.6UH-1.15A-462MOHM VLS252012-SM
L16_PMU 5.6UH-1.15A-462MOHM VLS252012-SM
L2_PMU 3.3UH-1.4A-272MOHM VLS252012-SM
L17_PMU 2.2UH-1.5A-98MOHM VLS3012-SM
XW1_PMU
XW2_PMU
L18_PMU 5.6UH-1.15A-462MOHM VLS252012-SM
L7_PMU 2.2UH-1.8A-155MOHM VLS252012-SM
XW147_PMU

Q1_PMU FDFME3N311ZT UMLP
Q3_PMU NTK3134NTXXH SOT723
D1_PMU PMEG2005AEL SOD882

C168_PMU 10UF 20% 6.3V X5R 603
C269_PMU 10UF 20% 6.3V X5R 603
C243_PMU 10UF 20% 6.3V X5R 603
C453_PMU 10UF 20% 6.3V X5R 603
C58_PMU 1UF 10% 6.3V CERM 402
C459_PMU 1UF 10% 6.3V CERM 402
C460_PMU 1UF 10% 6.3V CERM 402
C49_PMU 4.7UF 20% 6.3V X5R-CERM1 402
C161_PMU 4.7UF 20% 6.3V X5R-CERM1 402
C462_PMU 1UF 10% 6.3V CERM 402
C70_PMU 1UF 10% 6.3V CERM 402
C69_PMU 4.7UF 20% 6.3V X5R-CERM1 402
C164_PMU 1UF 10% 6.3V CERM 402
C47_PMU 1UF 10% 6.3V CERM 402
C68_PMU 1UF 10% 6.3V CERM 402
C203_PMU 1UF 10% 6.3V CERM 402
C267_PMU 1UF 10% 6.3V CERM 402
C191_PMU 1UF 10% 6.3V CERM 402
C274_PMU 1UF 10% 6.3V CERM 402
C76_PMU 1UF 10% 6.3V CERM 402
R8_PMU 0.00 5% 1/32W MF 01005
C474_PMU 1UF 10% 6.3V CERM 402
C298_PMU 1UF 10% 6.3V CERM 402
C291_PMU 1UF 10% 6.3V CERM 402
C299_PMU 1UF 10% 6.3V CERM 402
C301_PMU 1UF 10% 6.3V CERM 402
C300_PMU 1UF 10% 6.3V CERM 402
C63_PMU 47UF 20% 6.3V TANT-POLY CASE-A4
C2_PMU 4.7UF 20% 6.3V X5R-CERM1 402
C3_PMU 4.7UF 20% 6.3V X5R-CERM1 402
C265_PMU 82PF 5% 25V CERM 0201
C266_PMU 18PF 5% 16V CERM 01005
C160_PMU 10UF 20% 6.3V X5R 603
C176_PMU 1UF 10% 6.3V CERM 402
C153_PMU 10UF 20% 6.3V X5R 603
C32_PMU 4.7UF 10% 6.3V X5R-CERM 603
C209_PMU 4.7UF 10% 6.3V X5R-CERM 603
C178_PMU 10UF 20% 6.3V X5R 603
C67_PMU 2.2UF 10% 25V X5R-CERM 805
C177_PMU 39PF 5% 25V NP0-C0G 201
C179_PMU 100PF 5% 25V CERM 201
C42_PMU 0.01UF 10% 6.3V X5R 01005
C1_PMU 1UF 10% 6.3V CERM 402
C190_PMU 10UF 20% 10V X5R 603
C272_PMU 56PF 5% 6.3V NP0-C0G 01005
R522_PMU 470K 1% 1/16W MF-LF 402
R225_PMU 25.5K 1% 1/20W MF 201
R519_PMU 0.1 1% 1/20W MF 201
R6_PMU 0.1 1% 1/20W MF 201

NOSTUFF
MAKE BASE TRUE
PWRSW ST
PWR2000
PWR1000
PWR250
PWR150
PWR50
PP3V3_ACC_SNUB
GND_ST

SYNC_MASTER=N/A	SYNC DATE=N/A
DRAWING TITLE	ASHLEY PAGE 1
Apple Inc.	DRAWING NUMBER 051-8296 · SIZE D · REVISION A.6.0 · BRANCH · PAGE 1 OF 2 · SHEET 32 OF 33



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REVISION: A.6.0

BRANCH:

PAGE: 2 OF 2

SHEET: 33 OF 33