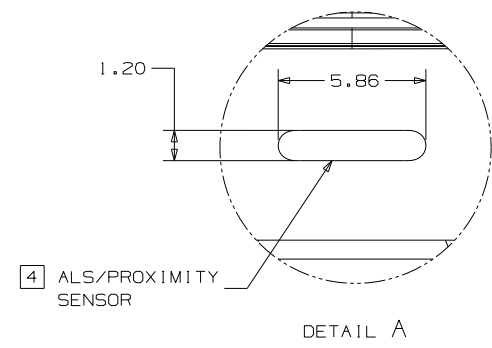
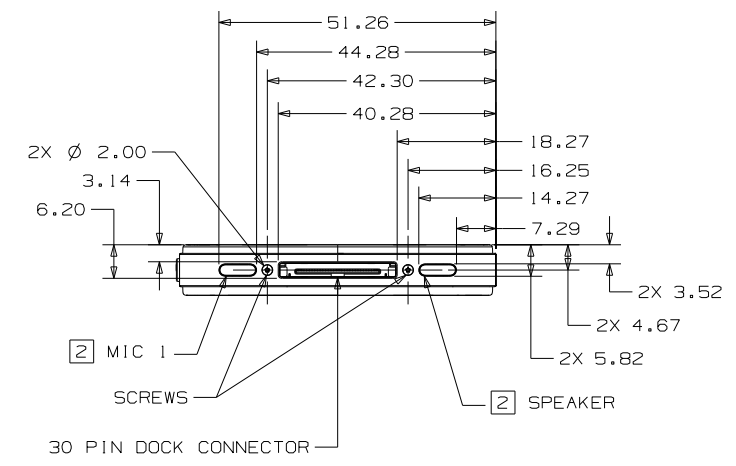
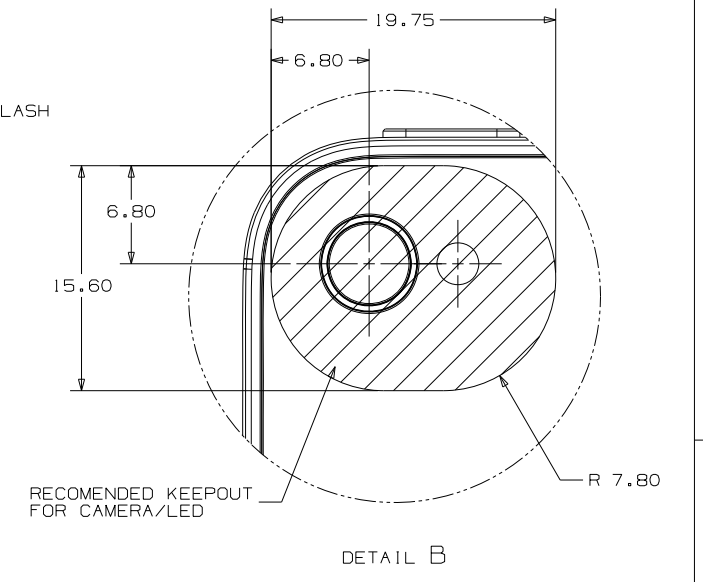
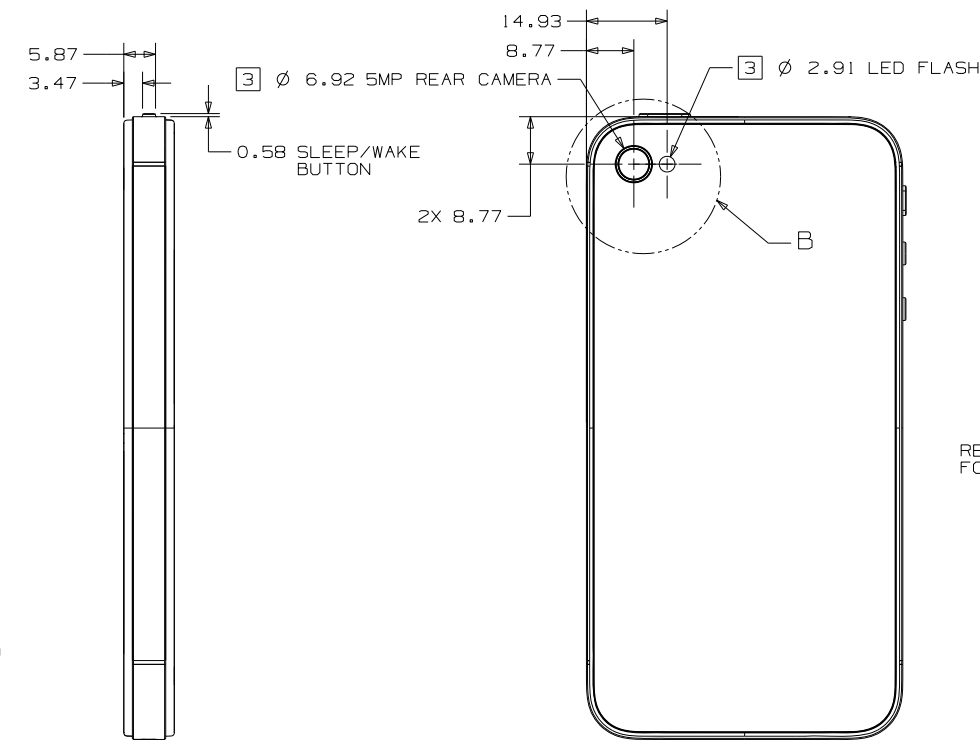
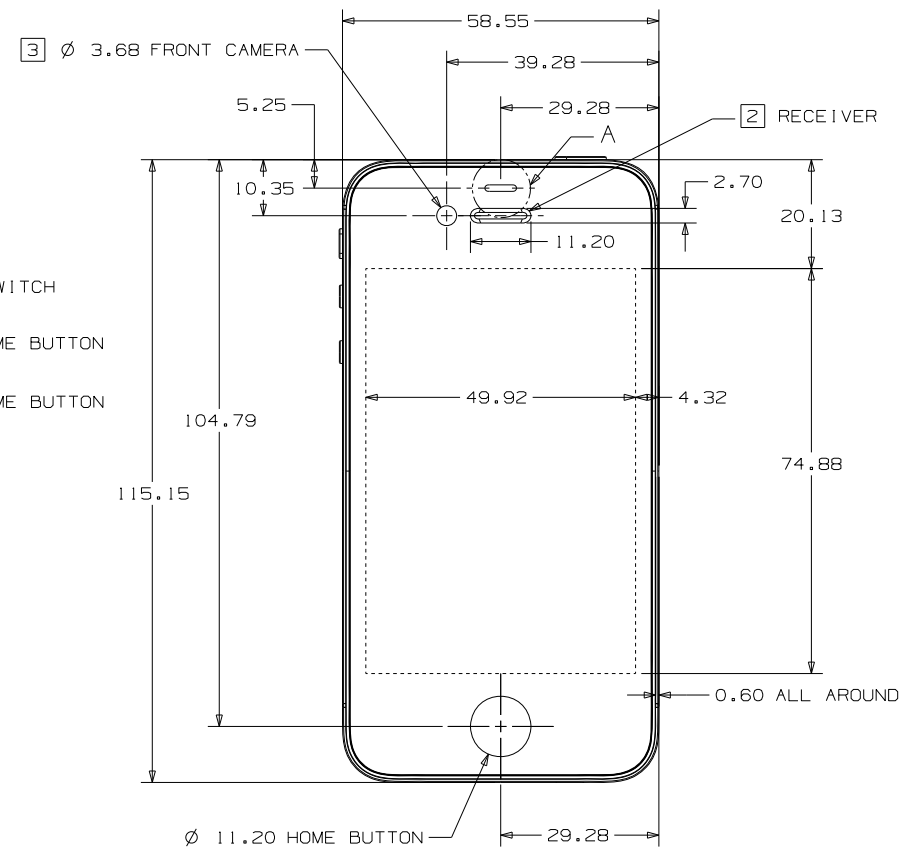
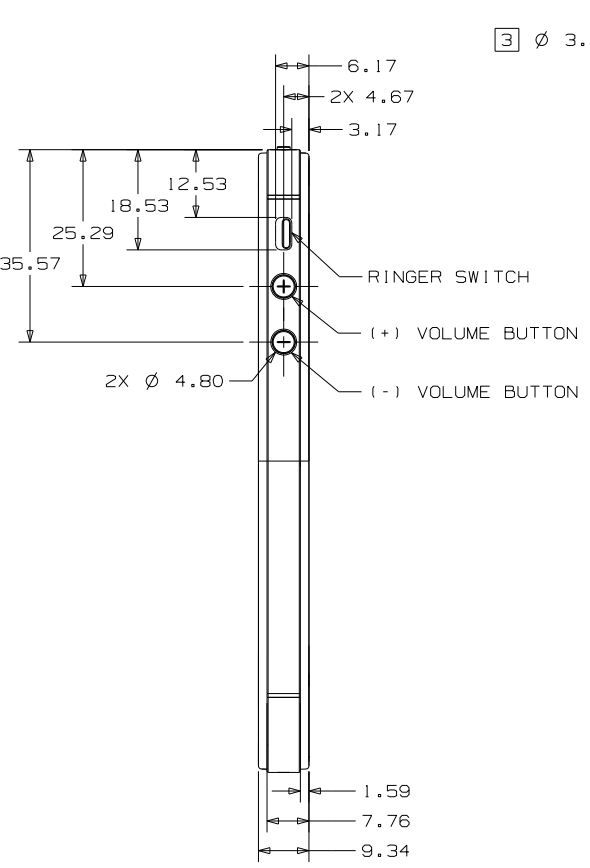
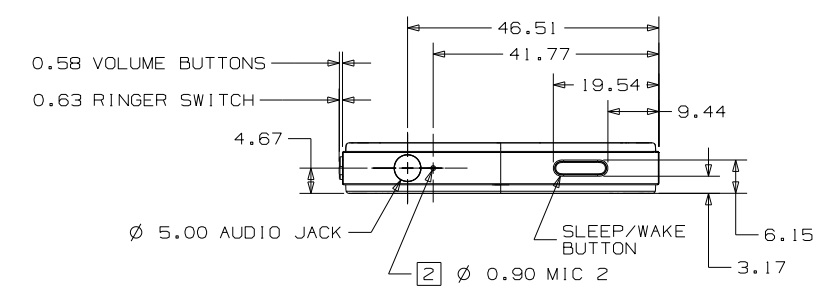
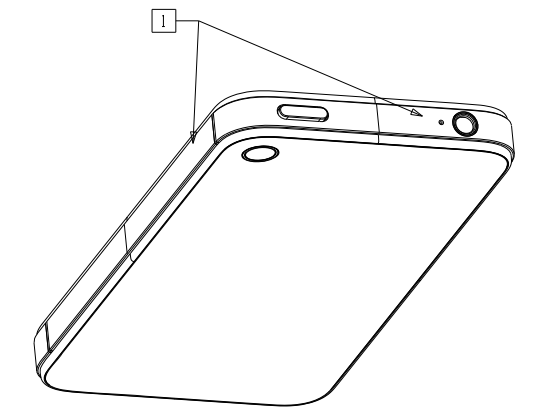
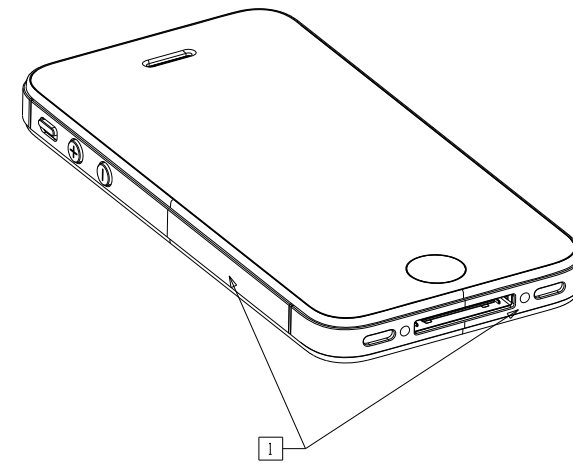
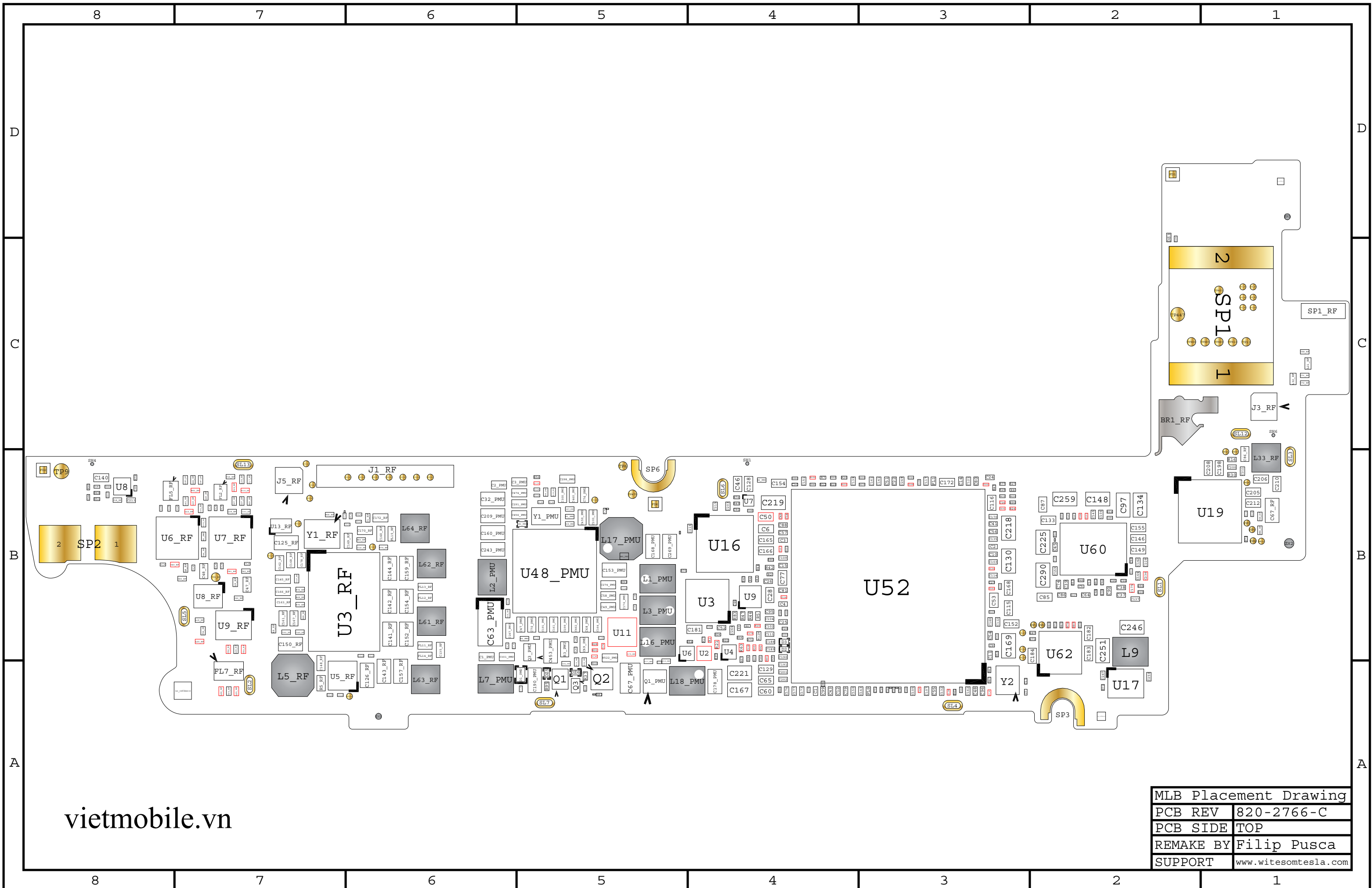


NOTES

- 1 NO METAL CONTACT WITH iPhone 4 METAL BAND.
- 2 DO NOT OBSTRUCT THE ACOUSTIC OPENINGS: MIC 1, MIC 2, RECEIVER, AND SPEAKER.
- 3 DO NOT OBSTRUCT THE IMAGING FEATURES: FRONT CAMERA, 5MP REAR CAMERA, LED FLASH.
- 4 DO NOT OBSTRUCT THE ALS/PROXIMITY SENSOR.

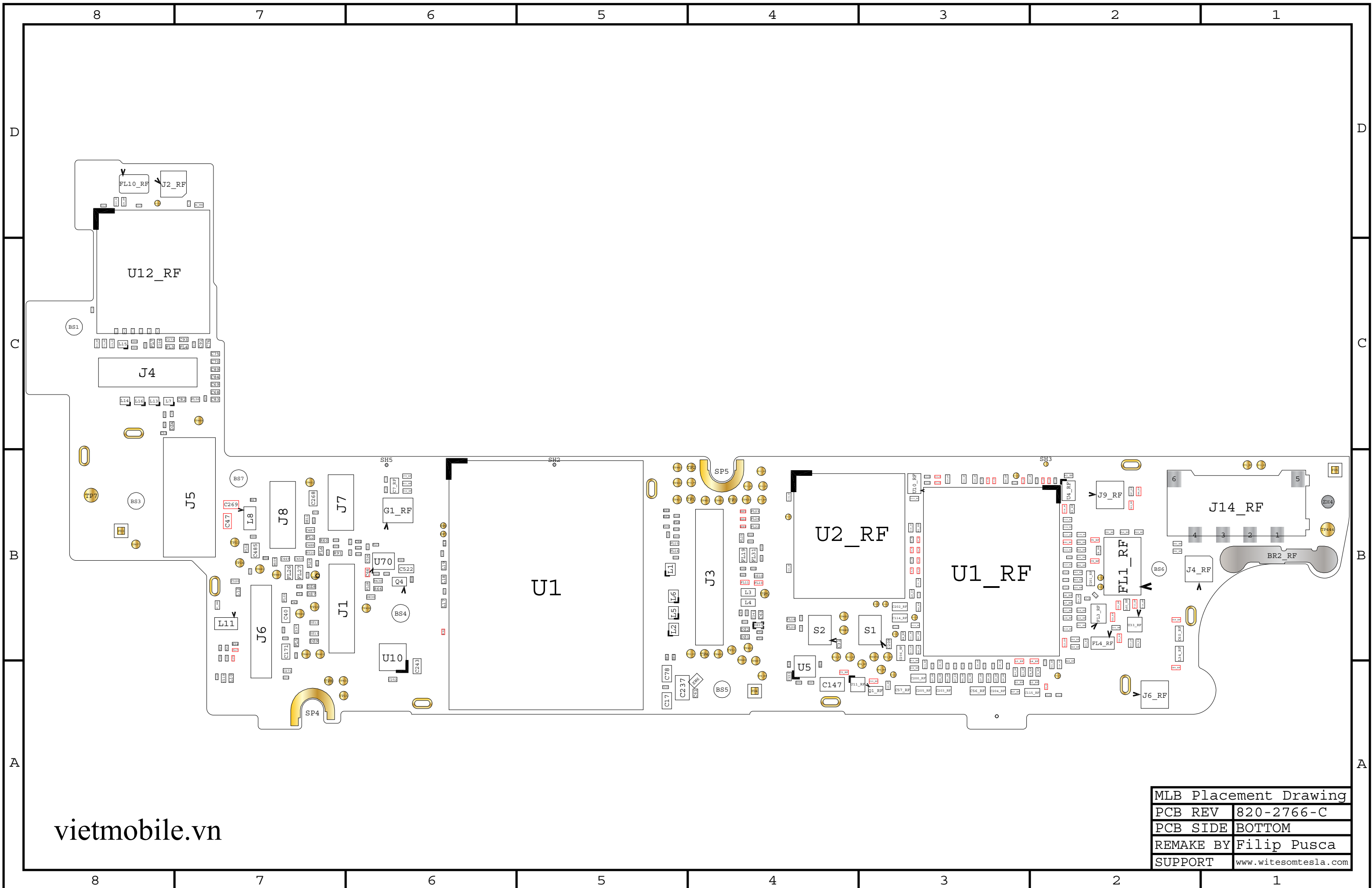


| | | | |
|-------------------------------|--------|---|------------|
| METRIC | | Apple Inc. | |
| DRAFTER | DATE | NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE INC. | |
| DESIGNER | DATE | ©2011 APPLE INC. ALL RIGHTS RESERVED. APPLE, THE APPLE LOGO, AND iPhone ARE TRADEMARKS OF APPLE INC., REGISTERED IN THE U.S. AND OTHER COUNTRIES. | |
| DIMENSIONS ARE IN MILLIMETERS | | TITLE | |
| TOLERANCES | | iPhone 4 (CDMA model) Dimensional Drawing | |
| X.X | ±0.4 | DRAWING NUMBER | REV. |
| X.XX | ±0.20 | | 1 |
| X.XXX | ±0.100 | | |
| ANGLES ±0.5° | | | |
| DO NOT SCALE DRAWINGS | | | |
| THIRD ANGLE PROJECTION | | SCALE | SHT 1 OF 1 |



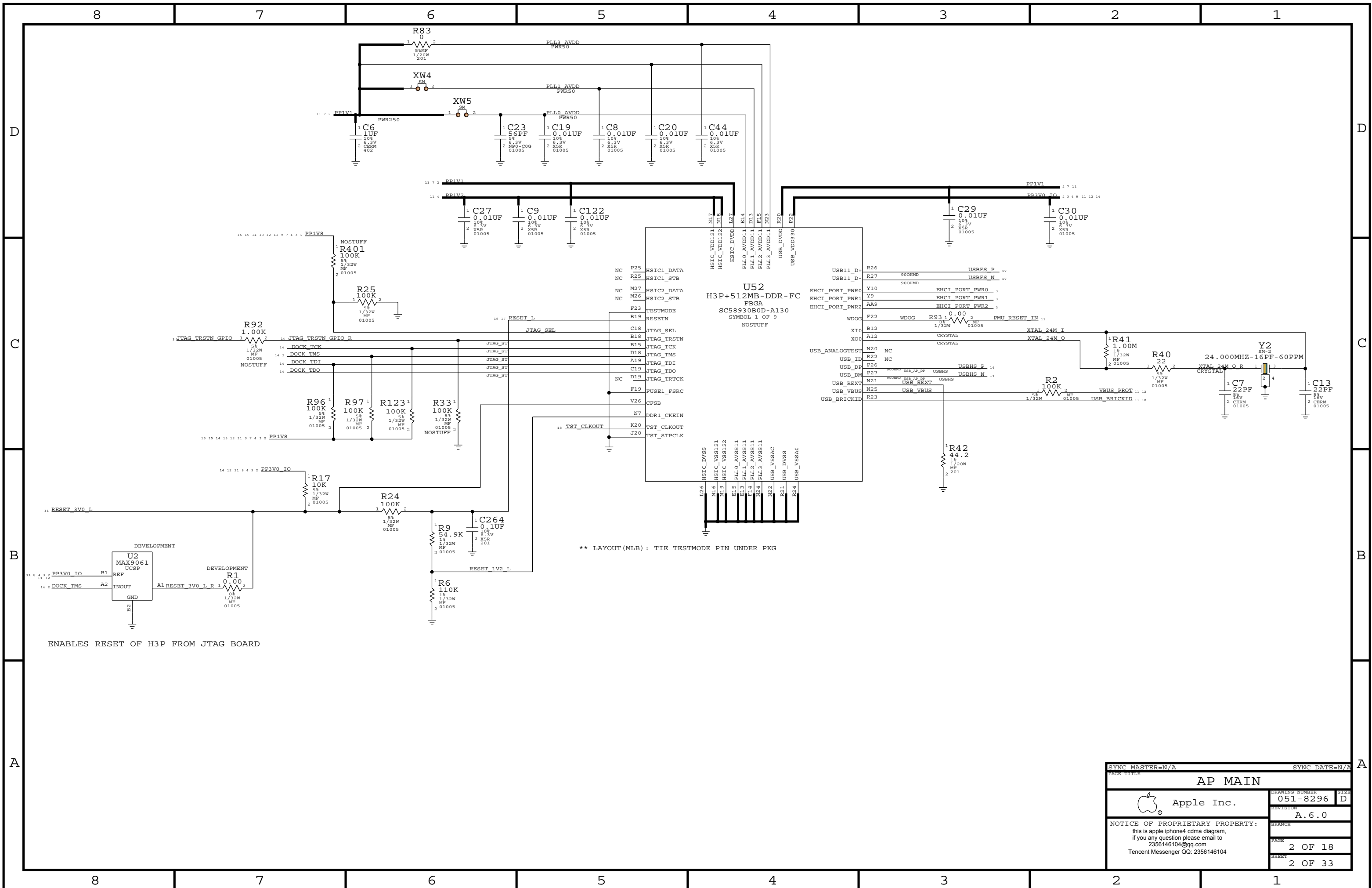
vietmobile.vn

| | |
|-----------------------|----------------------|
| MLB Placement Drawing | |
| PCB REV | 820-2766-C |
| PCB SIDE | TOP |
| REMAKE BY | Filip Pusca |
| SUPPORT | www.witesomtesla.com |




vietmobile.vn

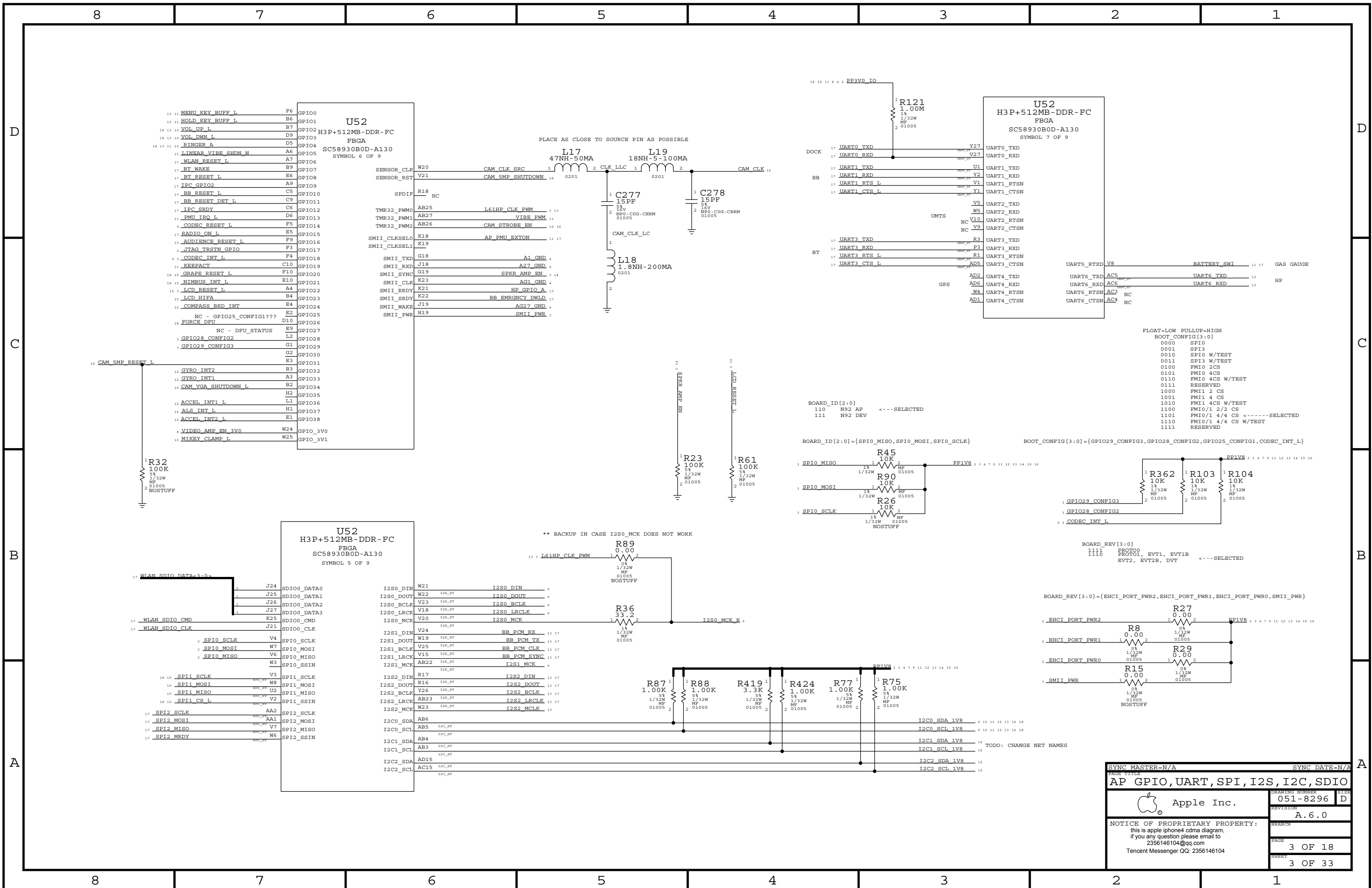
| | |
|-----------------------|----------------------|
| MLB Placement Drawing | |
| PCB REV | 820-2766-C |
| PCB SIDE | BOTTOM |
| REMAKE BY | Filip Pusca |
| SUPPORT | www.witesomtesla.com |



** LAYOUT (MLB) : TIE TESTMODE PIN UNDER PKG

ENABLES RESET OF H3P FROM JTAG BOARD

| | | | |
|--|----------------|---------------|-----------|
| PAGE TITLE | | SYNC DATE=N/A | |
| AP MAIN | | | |
|  Apple Inc. | DRAWING NUMBER | 051-8296 | SIZE D |
| | REVISION | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | BRANCH | |
| | | PAGE | 2 OF 18 |
| | | SHEET | 2 OF 33 |



| Pin | Signal | IC | Pin | Signal | IC |
|-----|------------------------|-----|----------|--------|-----|
| 13 | MENU_KEY_BUFF_L | F6 | GPIO0 | | U52 |
| 11 | HOLD_KEY_BUFF_L | B6 | GPIO1 | | U52 |
| 13 | VOL_UP_L | B7 | GPIO2 | | U52 |
| 13 | VOL_DWN_L | D9 | GPIO3 | | U52 |
| 13 | RINGER_A | D5 | GPIO4 | | U52 |
| 11 | LINEAR_VIBE_SHDN_N | A6 | GPIO5 | | U52 |
| 17 | WLAN_RESET_L | A7 | GPIO6 | | U52 |
| 17 | BT_WAKE | B9 | GPIO7 | | U52 |
| 17 | BT_RESET_L | E6 | GPIO8 | | U52 |
| 17 | IPC_GPIO2 | A9 | GPIO9 | | U52 |
| 17 | BB_RESET_L | C5 | GPIO10 | | U52 |
| 17 | BB_RESET_DET_L | C9 | GPIO11 | | U52 |
| 17 | IPC_SRDY | C6 | GPIO12 | | U52 |
| 17 | PMU_IRQ_L | D6 | GPIO13 | | U52 |
| 17 | CODEC_RESET_L | F5 | GPIO14 | | U52 |
| 17 | RADIO_ON_L | E5 | GPIO15 | | U52 |
| 17 | AUDIENCE_RESET_L | F9 | GPIO16 | | U52 |
| 17 | JTAG_TRSTN_GPIO | F3 | GPIO17 | | U52 |
| 9 | CODEC_INT_L | F4 | GPIO18 | | U52 |
| 11 | KEEPACT | C10 | GPIO19 | | U52 |
| 11 | GRAPE_RESET_L | F10 | GPIO20 | | U52 |
| 11 | NIMBUS_INT_L | E10 | GPIO21 | | U52 |
| 11 | LCD_RESET_L | A4 | GPIO22 | | U52 |
| 11 | LCD_HIFA | B4 | GPIO23 | | U52 |
| 11 | COMPASS_BRD_INT | E4 | GPIO24 | | U52 |
| 11 | NC - GPIO25_CONFIG1??? | E2 | GPIO25 | | U52 |
| 14 | FORCE_DFU | D10 | GPIO26 | | U52 |
| 11 | NC - DFU_STATUS | E9 | GPIO27 | | U52 |
| 11 | GPIO28_CONFIG2 | L2 | GPIO28 | | U52 |
| 11 | GPIO29_CONFIG3 | G1 | GPIO29 | | U52 |
| 11 | | G2 | GPIO30 | | U52 |
| 11 | | E3 | GPIO31 | | U52 |
| 11 | | B3 | GPIO32 | | U52 |
| 11 | | A3 | GPIO33 | | U52 |
| 11 | | B2 | GPIO34 | | U52 |
| 11 | | H2 | GPIO35 | | U52 |
| 11 | | L1 | GPIO36 | | U52 |
| 11 | | H1 | GPIO37 | | U52 |
| 11 | | E1 | GPIO38 | | U52 |
| 11 | | W24 | GPIO_3V0 | | U52 |
| 11 | | W25 | GPIO_3V1 | | U52 |

| Pin | Signal | IC | Pin | Signal | IC |
|-----|---------------------|-----|-------------|--------|-----|
| 17 | WLAN_SDIO_DATA<3:0> | J24 | SDIO0_DATA0 | | U52 |
| 17 | | J25 | SDIO0_DATA1 | | U52 |
| 17 | | J26 | SDIO0_DATA2 | | U52 |
| 17 | | J27 | SDIO0_DATA3 | | U52 |
| 17 | WLAN_SDIO_CMD | K25 | SDIO0_CMD | | U52 |
| 17 | WLAN_SDIO_CLK | J21 | SDIO0_CLK | | U52 |
| 17 | | V4 | SPI0_SCLK | | U52 |
| 17 | | W7 | SPI0_MOSI | | U52 |
| 17 | | V6 | SPI0_MISO | | U52 |
| 17 | | W3 | SPI0_SSIN | | U52 |
| 17 | | V3 | SPI1_SCLK | | U52 |
| 17 | | W8 | SPI1_MOSI | | U52 |
| 17 | | U2 | SPI1_MISO | | U52 |
| 17 | | V2 | SPI1_CS_L | | U52 |
| 17 | | AA2 | SPI2_SCLK | | U52 |
| 17 | | AA1 | SPI2_MOSI | | U52 |
| 17 | | V7 | SPI2_MISO | | U52 |
| 17 | | W6 | SPI2_MRDY | | U52 |

| Pin | Signal | IC | Pin | Signal | IC |
|------|------------|--------------|---------------------|--------|----|
| W21 | I2S0_DIN | I2S0_DIN | 9 | | |
| W22 | I2S0_DOUT | I2S0_DOUT | 9 | | |
| V23 | I2S0_BCLK | I2S0_BCLK | 9 | | |
| V18 | I2S0_LRCLK | I2S0_LRCLK | 9 | | |
| V20 | I2S0_MCK | I2S0_MCK | 9 | | |
| V24 | I2S1_DIN | BB_PCM_RX | 13 17 | | |
| W19 | I2S1_DOUT | BB_PCM_TX | 13 17 | | |
| V25 | I2S1_BCLK | BB_PCM_CLK | 13 17 | | |
| V15 | I2S1_LRCLK | BB_PCM_SYNC | 13 17 | | |
| AB22 | I2S1_MCK | I2S1_MCK | 9 | | |
| R17 | I2S2_DIN | I2S2_DIN | 13 17 | | |
| R16 | I2S2_DOUT | I2S2_DOUT | 13 17 | | |
| Y26 | I2S2_BCLK | I2S2_BCLK | 13 17 | | |
| AB23 | I2S2_LRCLK | I2S2_LRCLK | 13 17 | | |
| W23 | I2S2_MCK | I2S2_MCK | 13 | | |
| AB6 | I2C0_SDA | I2C0_SDA_1V8 | 9 10 11 12 13 16 18 | | |
| AB5 | I2C0_SCL | I2C0_SCL_1V8 | 9 10 11 12 13 16 18 | | |
| AB4 | I2C1_SDA | I2C1_SDA_1V8 | 16 | | |
| AB3 | I2C1_SCL | I2C1_SCL_1V8 | 16 | | |
| AD15 | I2C2_SDA | I2C2_SDA_1V8 | 12 | | |
| AC15 | I2C2_SCL | I2C2_SCL_1V8 | 12 | | |

| | | | |
|--|----------------|---------------|---------|
| PAGE TITLE | | SYNC DATE=N/A | |
| AP GPIO, UART, SPI, I2S, I2C, SDIO | | | |
| Apple Inc. | DRAWING NUMBER | 051-8296 | SIZE |
| | REVISION | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com | | BRANCH | |
| Tencent Messenger QQ: 2356146104 | | PAGE | 3 OF 18 |
| | | SHEET | 3 OF 33 |

```

BOARD_ID[2:0]
110 N92 AP <---SELECTED
111 N92 DEV

BOARD_ID[2:0] = {SPI0_MISO, SPI0_MOSI, SPI0_SCLK}
BOARD_REV[3:0]
1111 PROTOO
1110 PROTOO, EVT1, EVT1B <---SELECTED
EVT2, EVT2B, DVT

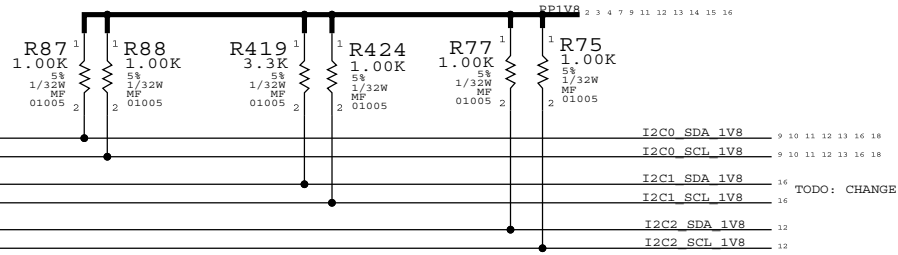
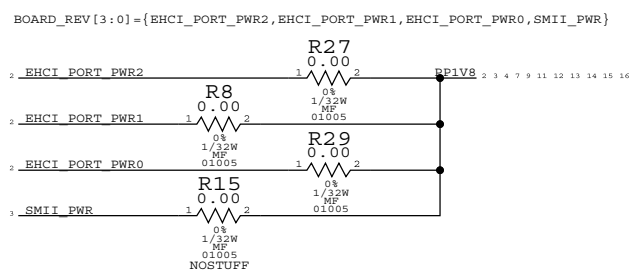
BOOT_CONFIG[3:0]
0000 SPI0
0001 SPI3
0010 SPI0 W/TEST
0011 SPI3 W/TEST
0100 FMIO 2CS
0101 FMIO 4CS
0110 FMIO 4CS W/TEST
0111 RESERVED
1000 FMIO 2 CS
1001 FMIO 4 CS
1010 FMIO 4CS W/TEST
1100 FMIO/1 2/2 CS
1101 FMIO/1 4/4 CS <---SELECTED
1110 FMIO/1 4/4 CS W/TEST
1111 RESERVED

GPIO29_CONFIG3
GPIO28_CONFIG2
CODEC_INT_L

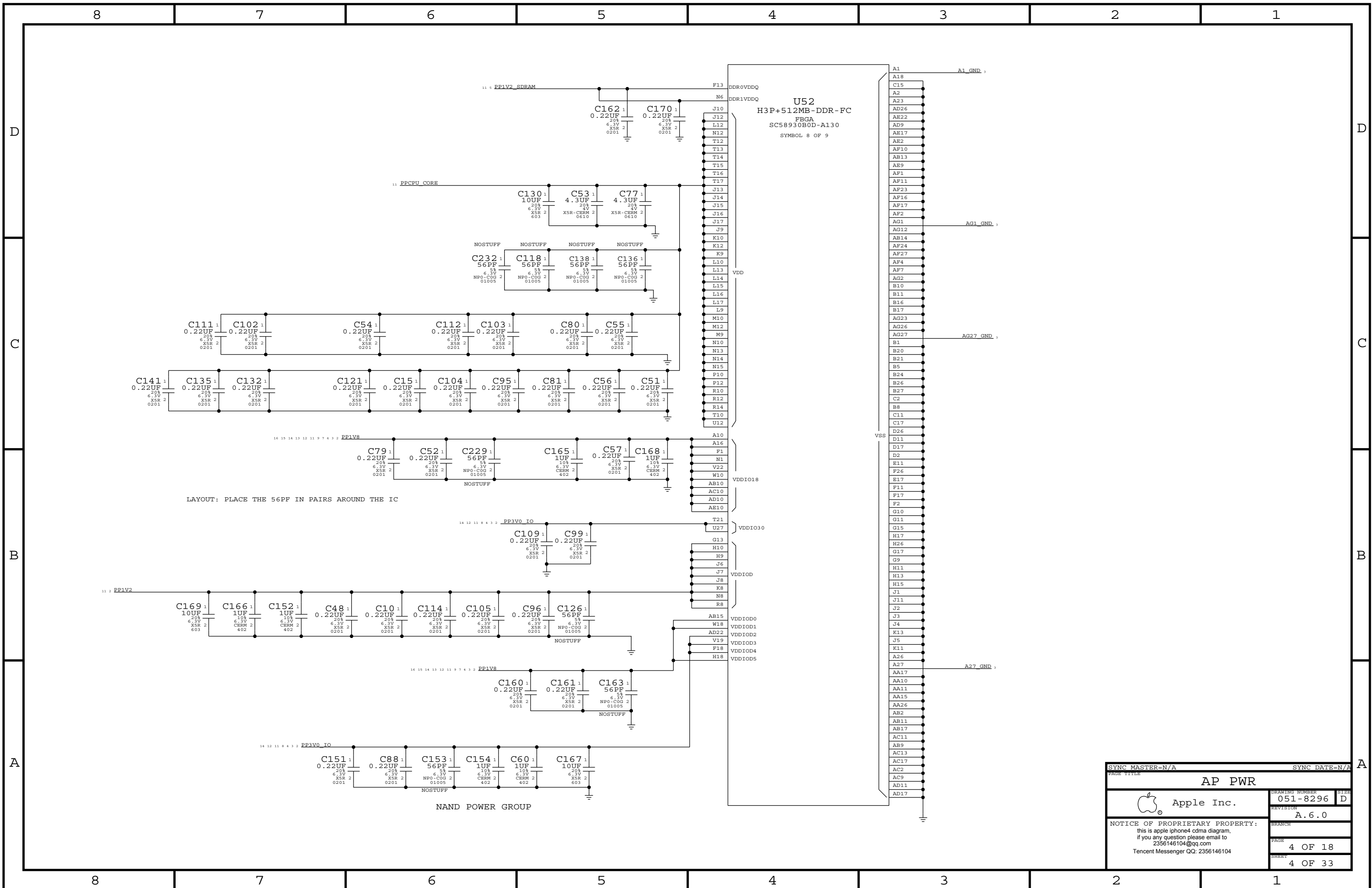
GPIO25_CONFIG1
CODEC_INT_L

GPIO28_CONFIG2
GPIO29_CONFIG3
CODEC_INT_L

```




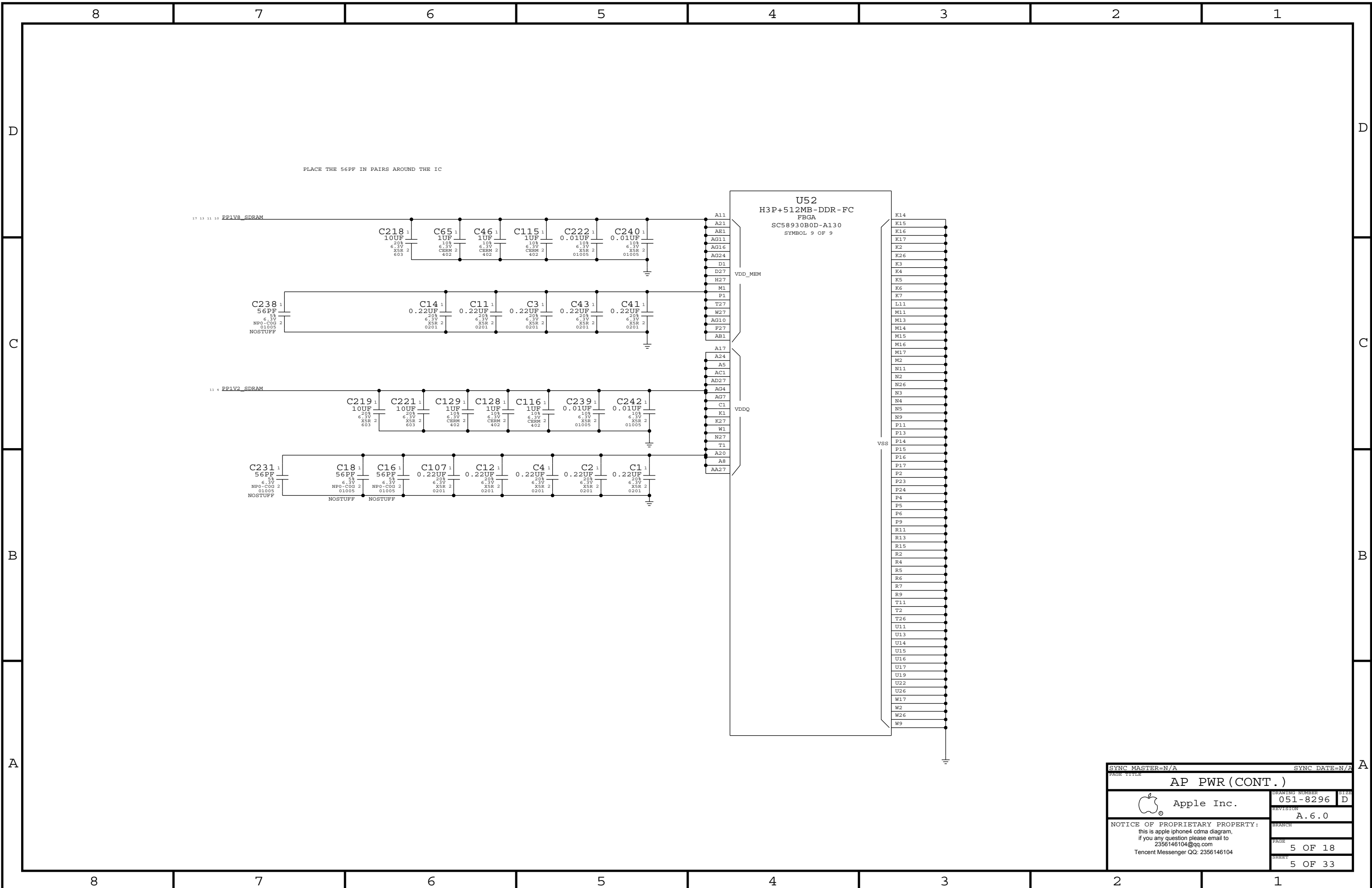
TODD: CHANGE NET NAMES



LAYOUT: PLACE THE 56PF IN PAIRS AROUND THE IC

NAND POWER GROUP

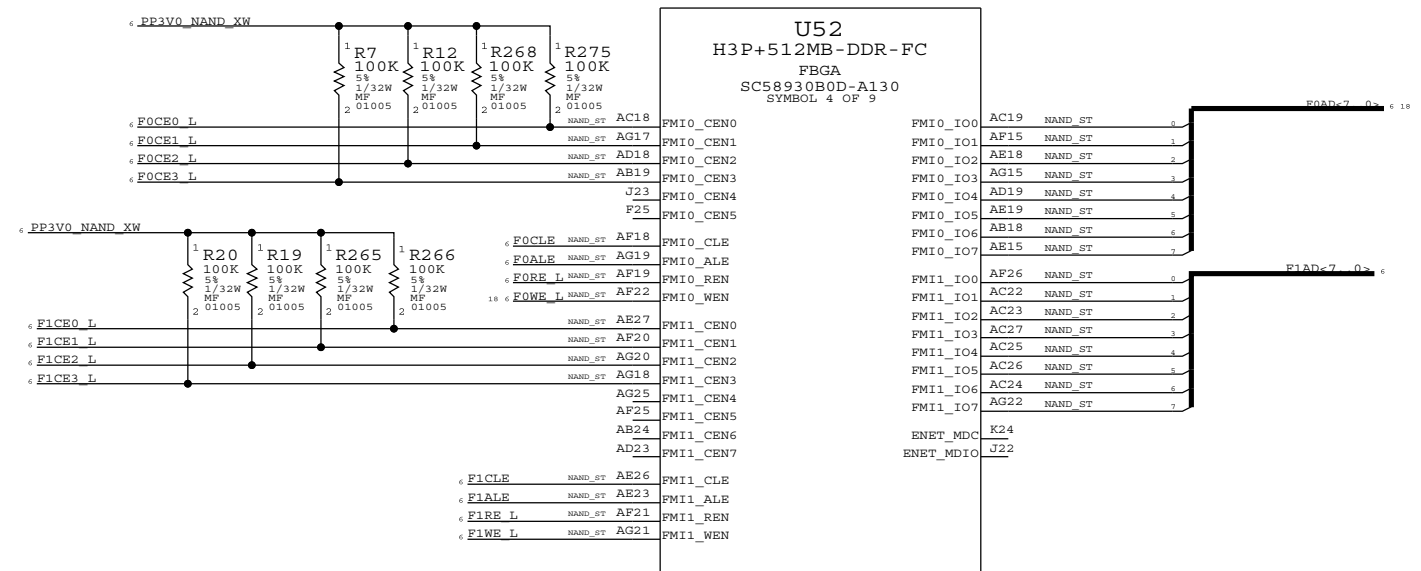
| | | | |
|--|--|----------------|----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| AP PWR | | | |
|  Apple Inc. | | DRAWING NUMBER | 051-8296 |
| | | REVISION | A.6.0 |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | BRANCH | |
| | | PAGE | 4 OF 18 |
| | | SHEET | 4 OF 33 |



| | | | |
|--|--|----------------|----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| AP PWR (CONT.) | | | |
| | | DRAWING NUMBER | 051-8296 |
| | | REVISION | A.6.0 |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | BRANCH | |
| | | PAGE | 5 OF 18 |
| | | SHEET | 5 OF 33 |

D

D



C

C

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 |

B

B

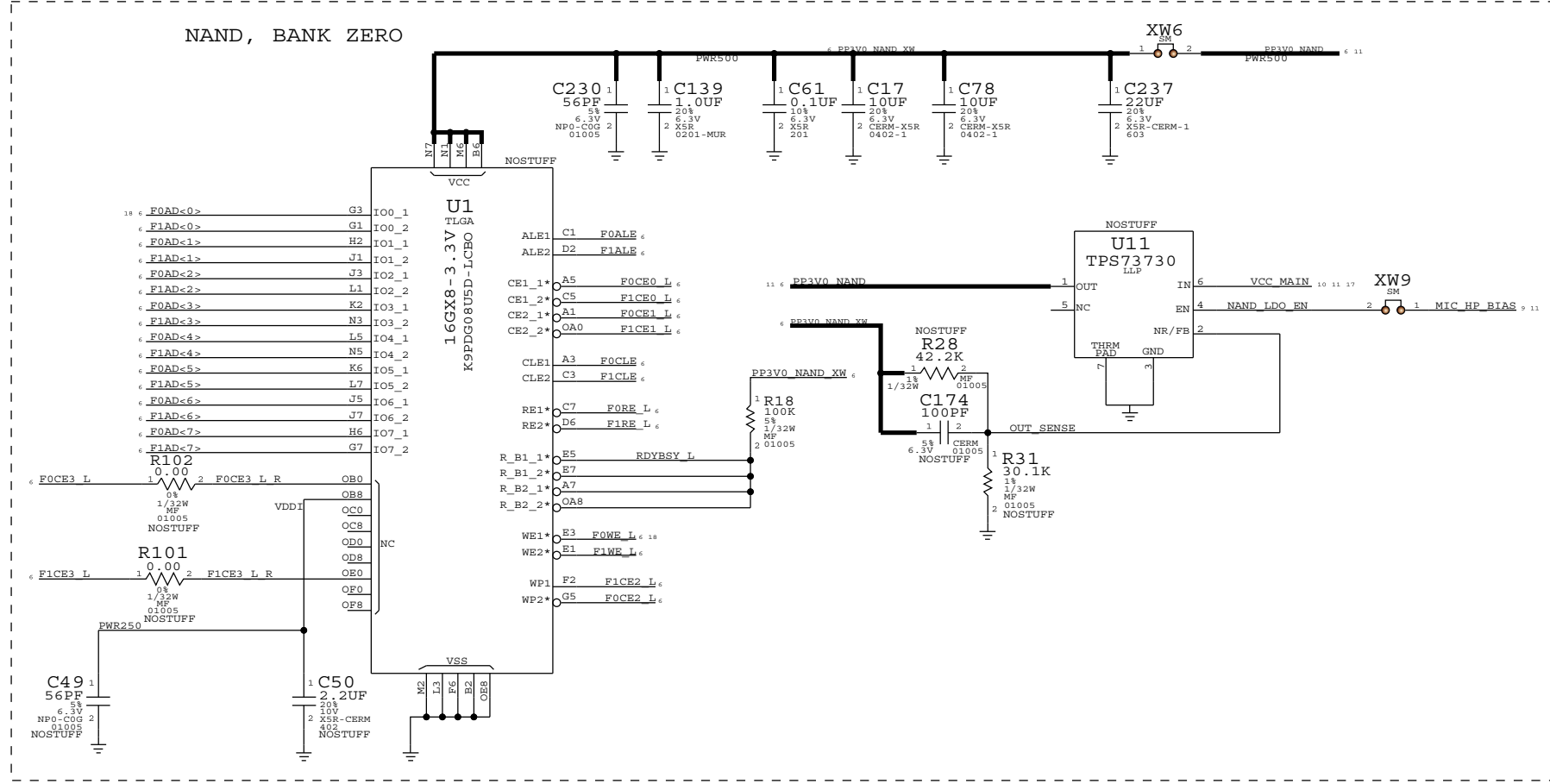
NAND ALTERNATE SUBBOMS

| 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 |

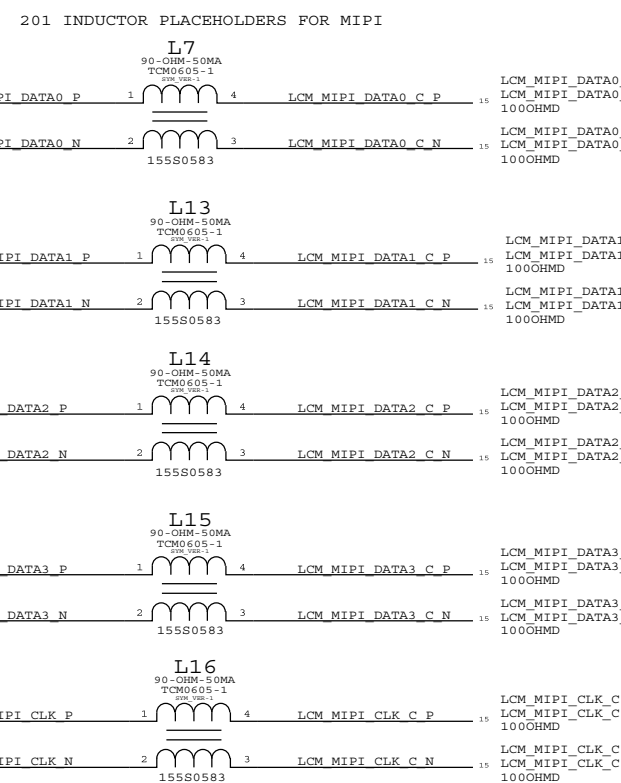
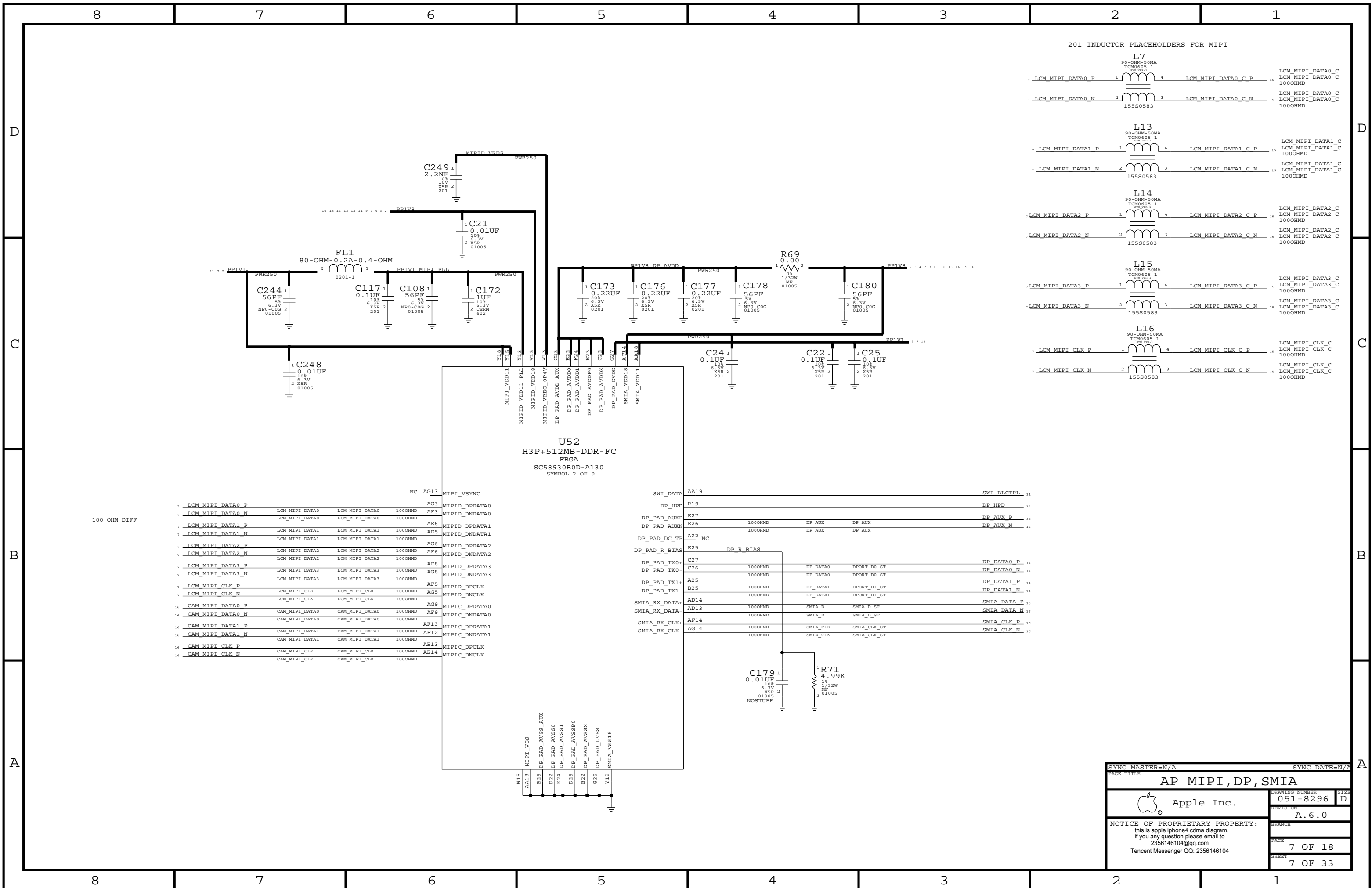
===NOTES===
 -ALL SUB-BOMS THAT ARE NOT USED ARE DESIGNATED WITH BOMOPTION "NOSTUFF"
 -TO ADD ADDITIONAL NAND DEVICES OR TO CHANGE A NAND CONFIG USE THE "NAND BOM" SUBDESIGN TO MANAGE THE 607- APNS LISTED ABOVE
 -THIS TABLE SHOULD NOT BE MODIFIED OTHER THAN TO ADD/REMOVE THE "NOSTUFF" PROPERTY.

A

A

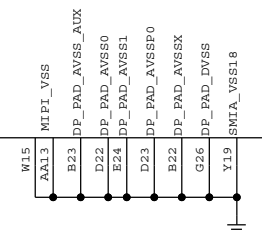
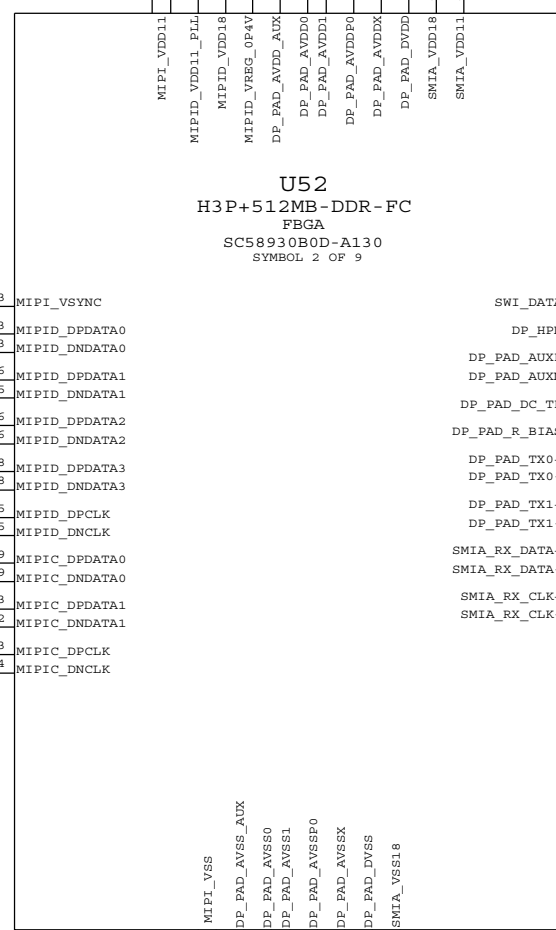


| | | | |
|--|----------------|---------------|------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| NAND & NOR | | | |
| Apple Inc. | DRAWING NUMBER | 051-8296 | SIZE |
| | REVISION | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | BRANCH | | |
| | PAGE | 6 OF 18 | |
| | SHEET | 6 OF 33 | |

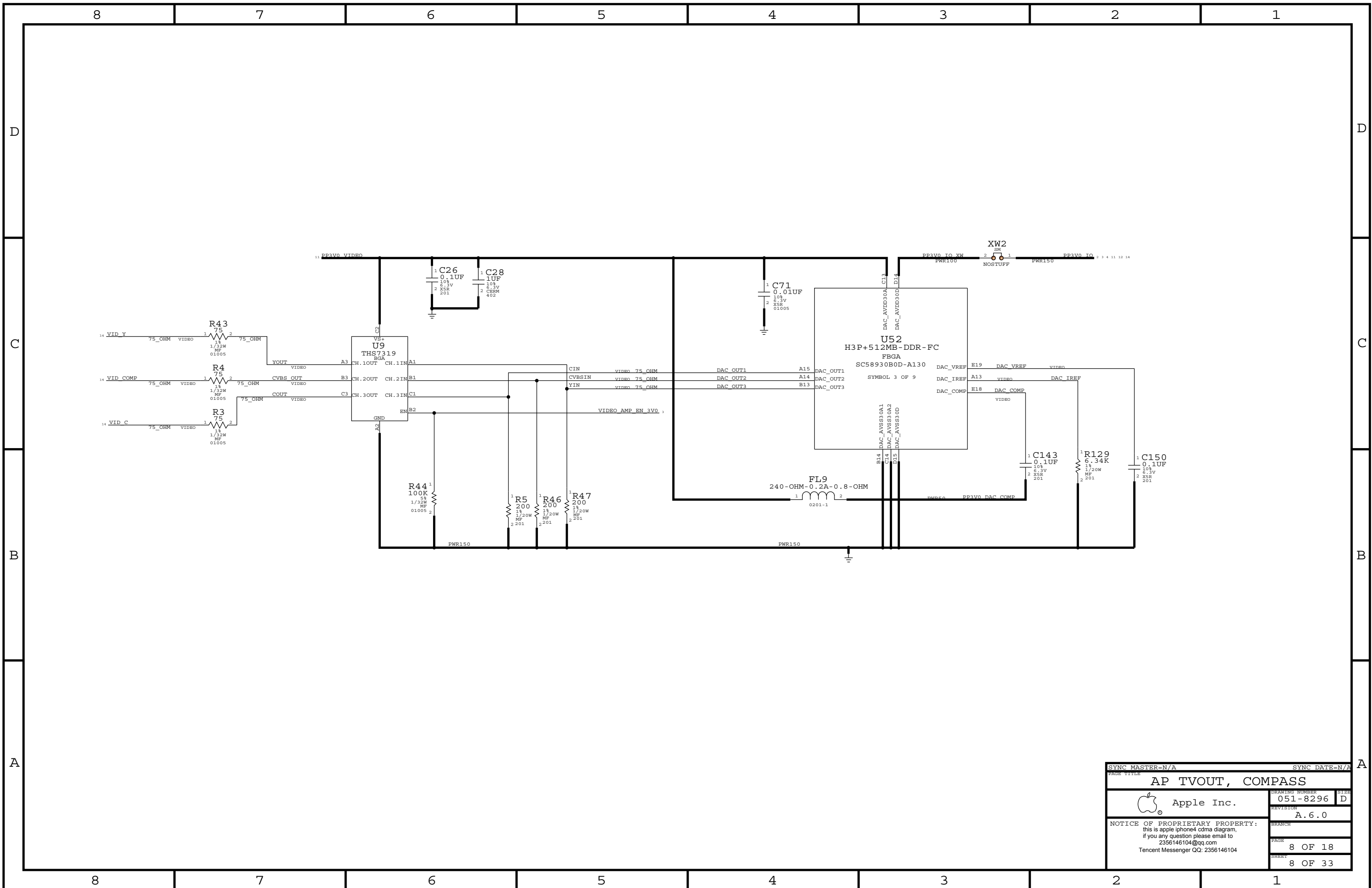


| | | | | | | |
|----|------------------|----------------|----------------|---------|------|---------------|
| 7 | LCM_MIPI_DATA0_P | LCM_MIPI_DATA0 | LCM_MIPI_DATA0 | 100OHMD | AG3 | MIPID_DPDATA0 |
| 7 | LCM_MIPI_DATA0_N | LCM_MIPI_DATA0 | LCM_MIPI_DATA0 | 100OHMD | AF3 | MIPID_DNDATA0 |
| 7 | LCM_MIPI_DATA1_P | LCM_MIPI_DATA1 | LCM_MIPI_DATA1 | 100OHMD | AE6 | MIPID_DPDATA1 |
| 7 | LCM_MIPI_DATA1_N | LCM_MIPI_DATA1 | LCM_MIPI_DATA1 | 100OHMD | AE5 | MIPID_DNDATA1 |
| 7 | LCM_MIPI_DATA2_P | LCM_MIPI_DATA2 | LCM_MIPI_DATA2 | 100OHMD | AG6 | MIPID_DPDATA2 |
| 7 | LCM_MIPI_DATA2_N | LCM_MIPI_DATA2 | LCM_MIPI_DATA2 | 100OHMD | AF6 | MIPID_DNDATA2 |
| 7 | LCM_MIPI_DATA3_P | LCM_MIPI_DATA3 | LCM_MIPI_DATA3 | 100OHMD | AF8 | MIPID_DPDATA3 |
| 7 | LCM_MIPI_DATA3_N | LCM_MIPI_DATA3 | LCM_MIPI_DATA3 | 100OHMD | AG8 | MIPID_DNDATA3 |
| 7 | LCM_MIPI_CLK_P | LCM_MIPI_CLK | LCM_MIPI_CLK | 100OHMD | AF5 | MIPID_DPCLK |
| 7 | LCM_MIPI_CLK_N | LCM_MIPI_CLK | LCM_MIPI_CLK | 100OHMD | AG5 | MIPID_DNCLK |
| 14 | CAM_MIPI_DATA0_P | CAM_MIPI_DATA0 | CAM_MIPI_DATA0 | 100OHMD | AG9 | MIPIC_DPDATA0 |
| 14 | CAM_MIPI_DATA0_N | CAM_MIPI_DATA0 | CAM_MIPI_DATA0 | 100OHMD | AF9 | MIPIC_DNDATA0 |
| 14 | CAM_MIPI_DATA1_P | CAM_MIPI_DATA1 | CAM_MIPI_DATA1 | 100OHMD | AF13 | MIPIC_DPDATA1 |
| 14 | CAM_MIPI_DATA1_N | CAM_MIPI_DATA1 | CAM_MIPI_DATA1 | 100OHMD | AF12 | MIPIC_DNDATA1 |
| 14 | CAM_MIPI_CLK_P | CAM_MIPI_CLK | CAM_MIPI_CLK | 100OHMD | AE13 | MIPIC_DPCLK |
| 14 | CAM_MIPI_CLK_N | CAM_MIPI_CLK | CAM_MIPI_CLK | 100OHMD | AE14 | MIPIC_DNCLK |

| | | | |
|---------------|------|-------------|----------------|
| SWI_DATA | AA19 | SWI_BLCCTRL | 11 |
| DP_HPD | R19 | DP_HPD | 14 |
| DP_PAD_AUXP | E27 | DP_AUX_P | 14 |
| DP_PAD_AUXN | E26 | DP_AUX_N | 14 |
| DP_PAD_DC_TP | A22 | NC | |
| DP_PAD_R_BIAS | E25 | DP_R_BIAS | |
| DP_PAD_TX0+ | C27 | DP_DATA0 | DPORT_D0_ST 14 |
| DP_PAD_TX0- | C26 | DP_DATA0 | DPORT_D0_ST 14 |
| DP_PAD_TX1+ | A25 | DP_DATA1 | DPORT_D1_ST 14 |
| DP_PAD_TX1- | B25 | DP_DATA1 | DPORT_D1_ST 14 |
| SMIA_RX_DATA+ | AD14 | SMIA_D | SMIA_D_ST 16 |
| SMIA_RX_DATA- | AD13 | SMIA_D | SMIA_D_ST 16 |
| SMIA_RX_CLK+ | AF14 | SMIA_CLK | SMIA_CLK_ST 16 |
| SMIA_RX_CLK- | AG14 | SMIA_CLK | SMIA_CLK_ST 16 |



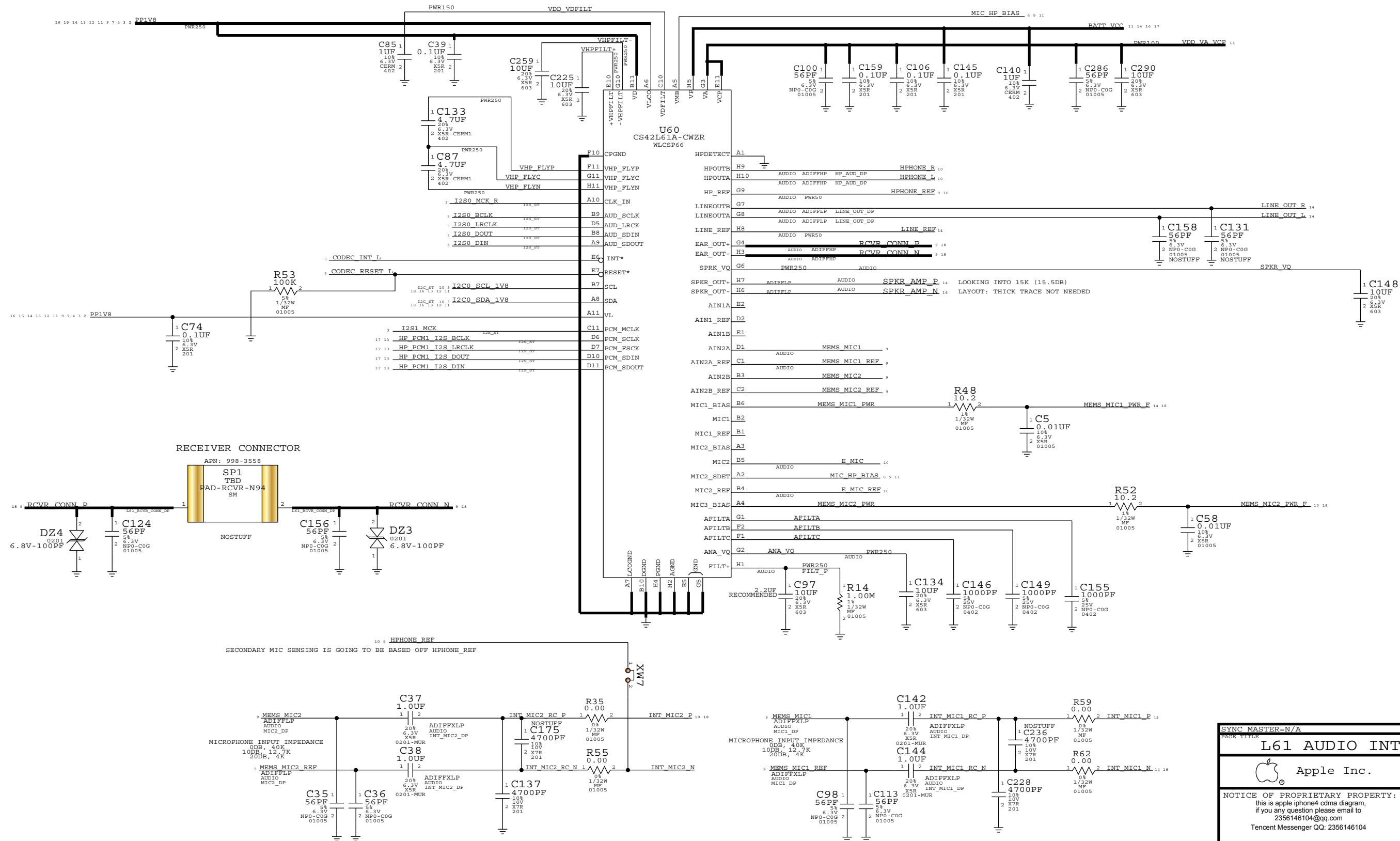
| | | | |
|--|----------|---------------|---------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| PAGE TITLE | | | |
| AP MIPI, DP, SMIA | | | |
| DRAWING NUMBER | 051-8296 | SIZE | D |
| | REVISION | | A.6.0 |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | PAGE | 7 OF 18 |
| | | SHEET | 7 OF 33 |



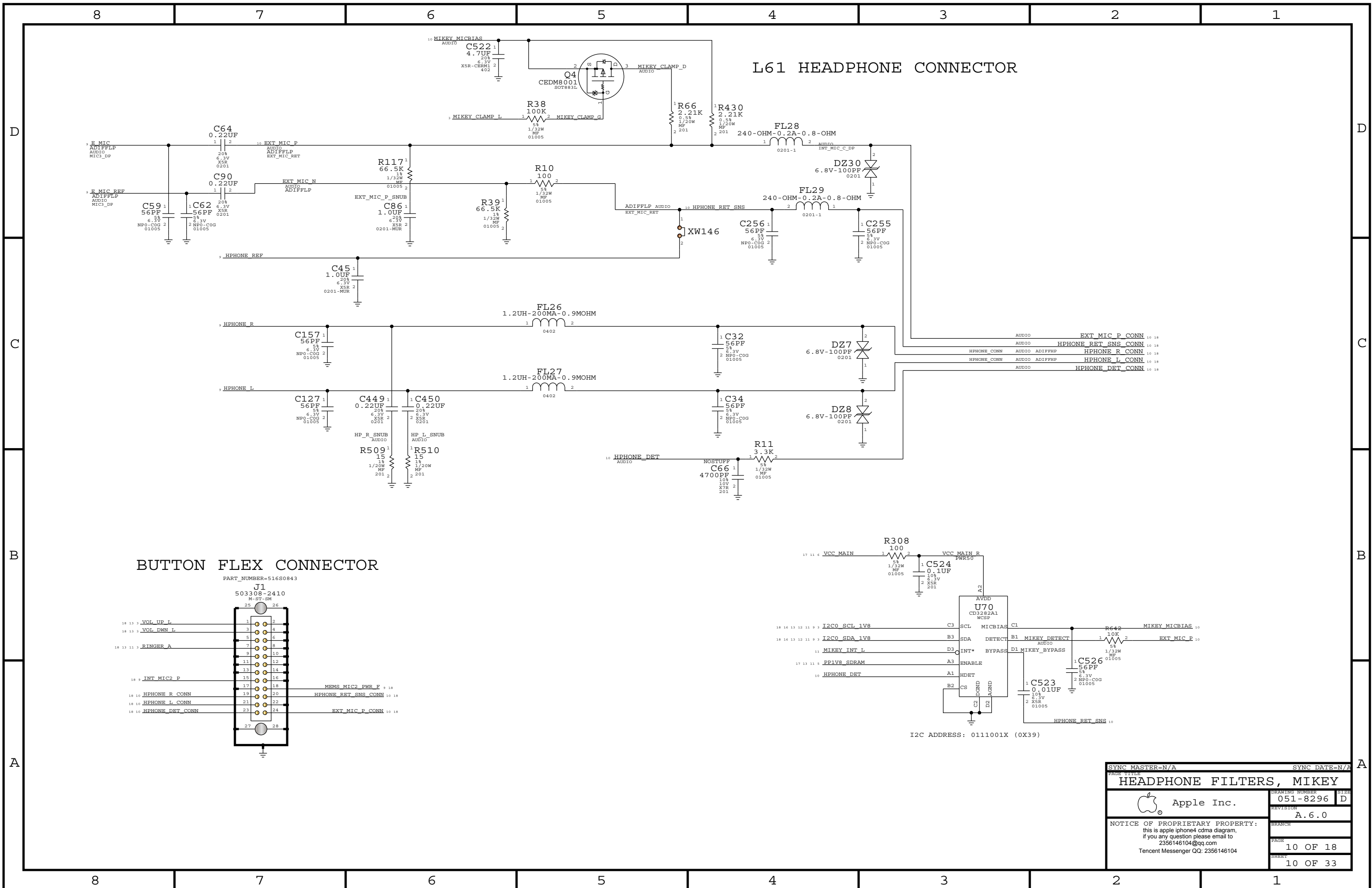
| | | | |
|--|--|------------------|--|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| PAGE TITLE AP TVOUT, COMPASS | | | |
| DRAWING NUMBER 051-8296 | | SIZE D | |
| REVISION A.6.0 | | BRANCH | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | PAGE 8 OF 18 | |
| | | SHEET 8 OF 33 | |

L61 AUDIO INTERFACE

I2C ADDRESS: 1001010X

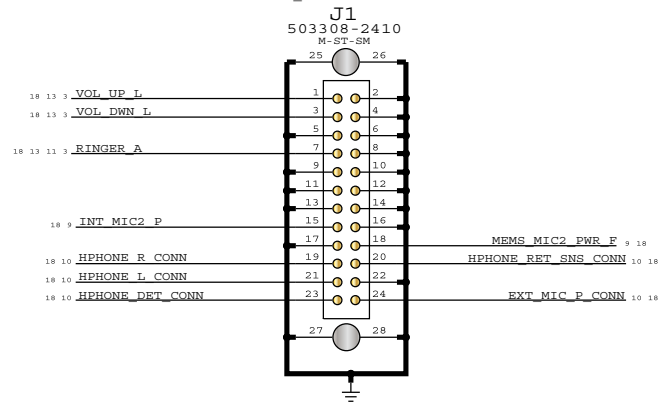


| | | | |
|--|--|----------------|----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| L61 AUDIO INTERFACE | | | |
| Apple Inc. | | DRAWING NUMBER | 051-8296 |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | REVISION | A.6.0 |
| | | PAGE | 9 OF 18 |
| | | SHEET | 9 OF 33 |



BUTTON FLEX CONNECTOR

PART_NUMBER=516S0843



| | | | |
|--|----------------|---------------|----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| HEADPHONE FILTERS, MIKEY | | | |
| | DRAWING NUMBER | 051-8296 | SIZE |
| | REVISION | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | BRANCH | |
| | | PAGE | 10 OF 18 |
| | | SHEET | 10 OF 33 |

D

C

B

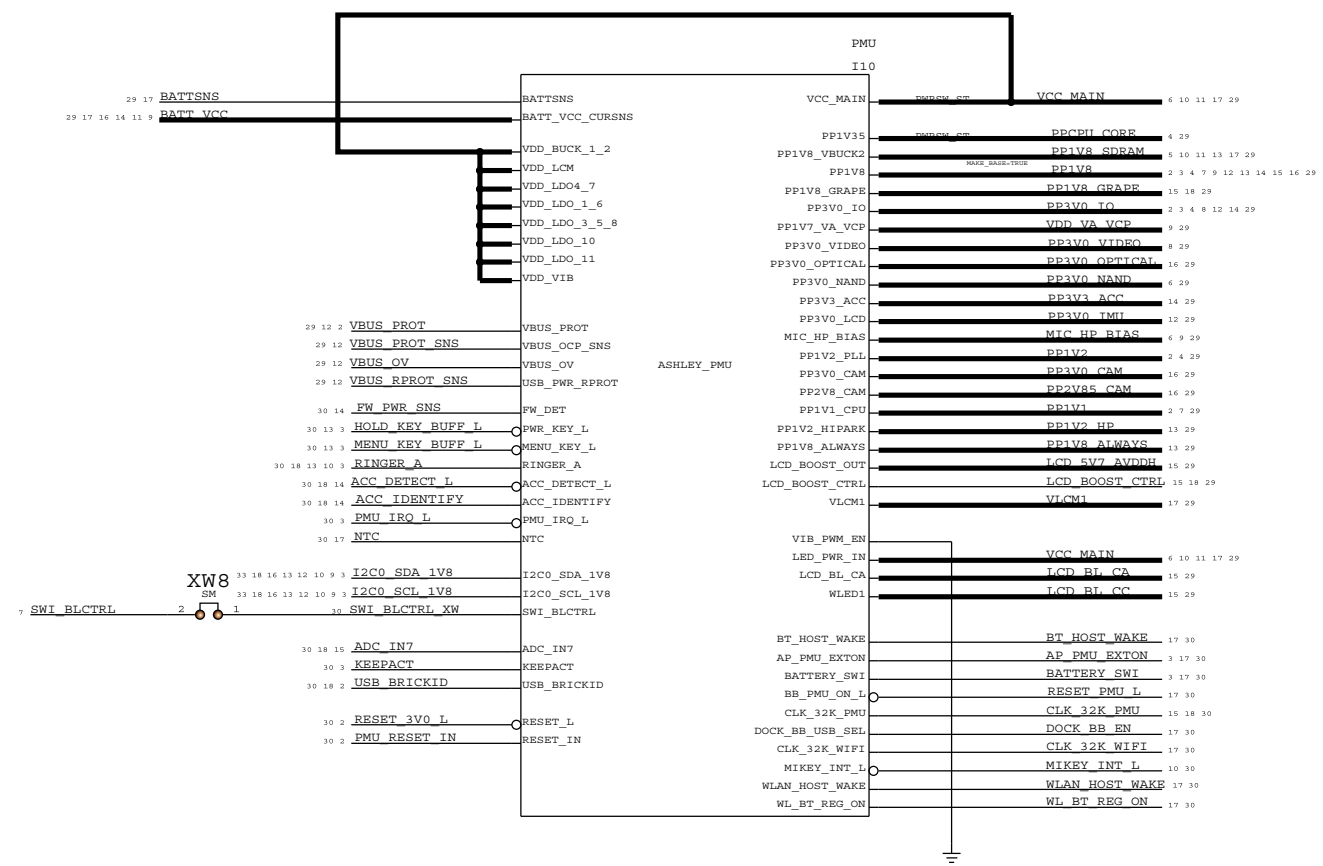
A

D

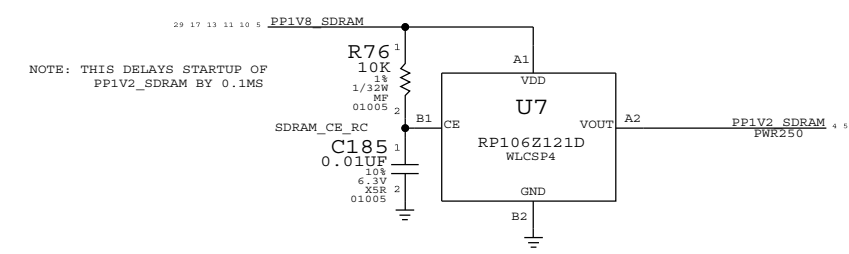
C

B

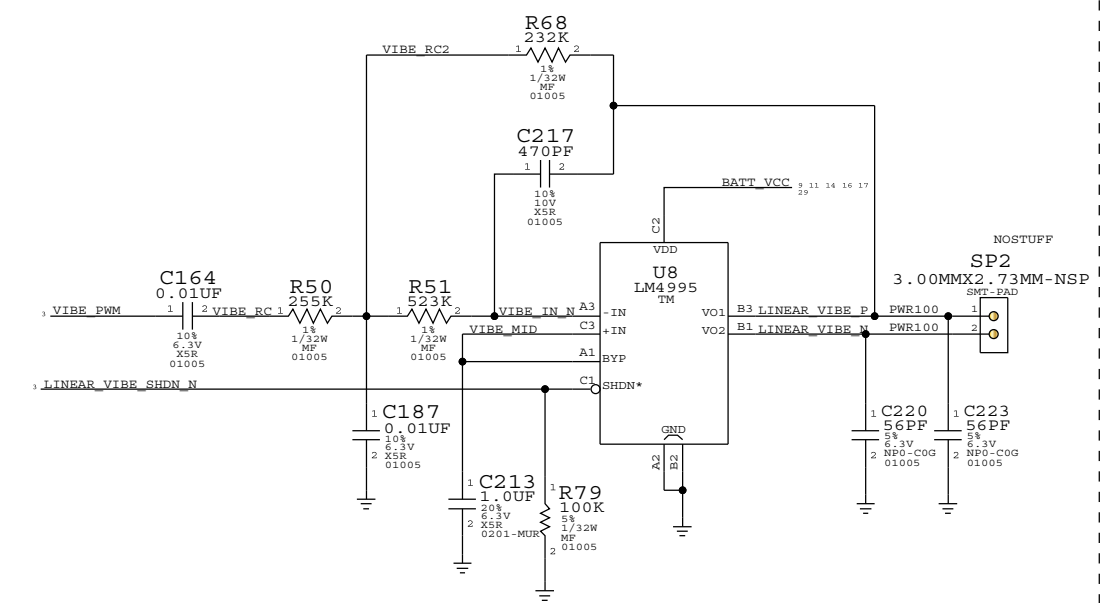
A



LOCATED ON PP 29 - 30



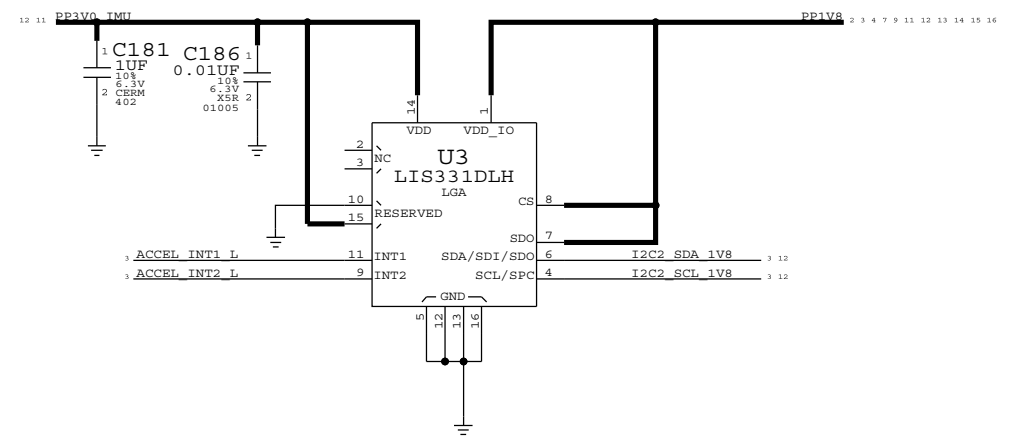
LINEAR VIBE DRIVE



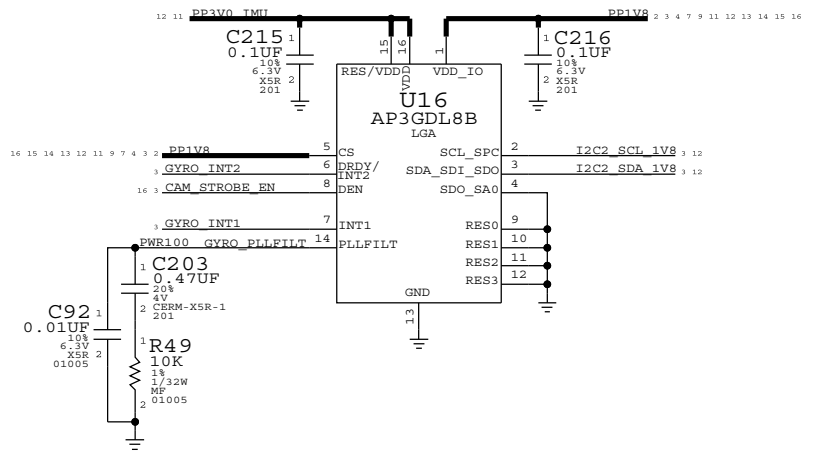
| | | | |
|--|--|----------------|------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| ASHLEY PMU | | | |
| Apple Inc. | | DRAWING NUMBER | SIZE |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | 051-8296 | D |
| | | REVISION | |
| | | A.6.0 | |
| | | BRANCH | |
| | | PAGE | |
| | | 11 OF 18 | |
| | | SHEET | |
| | | 11 OF 33 | |

ACCELEROMETER

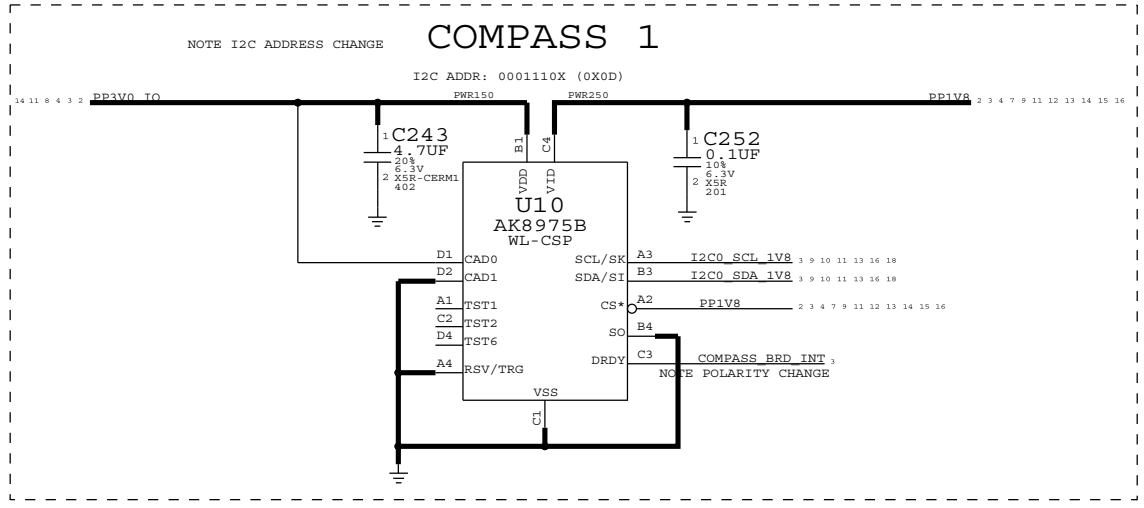
I2C ADDRESS: 0011101X (0X1D)



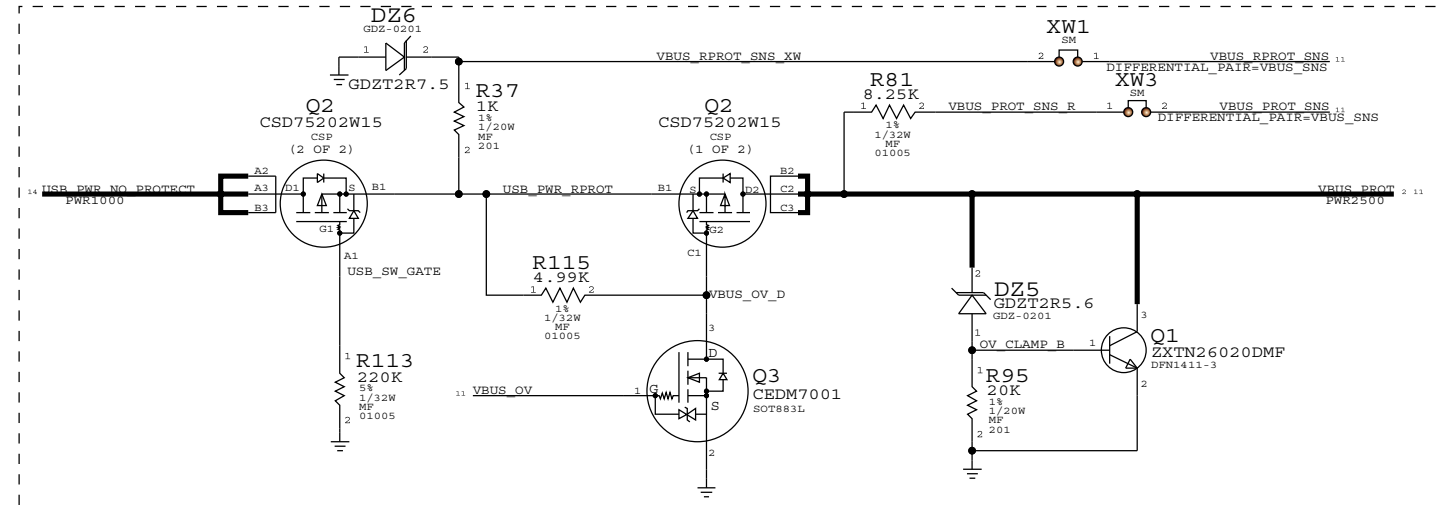
GYRO



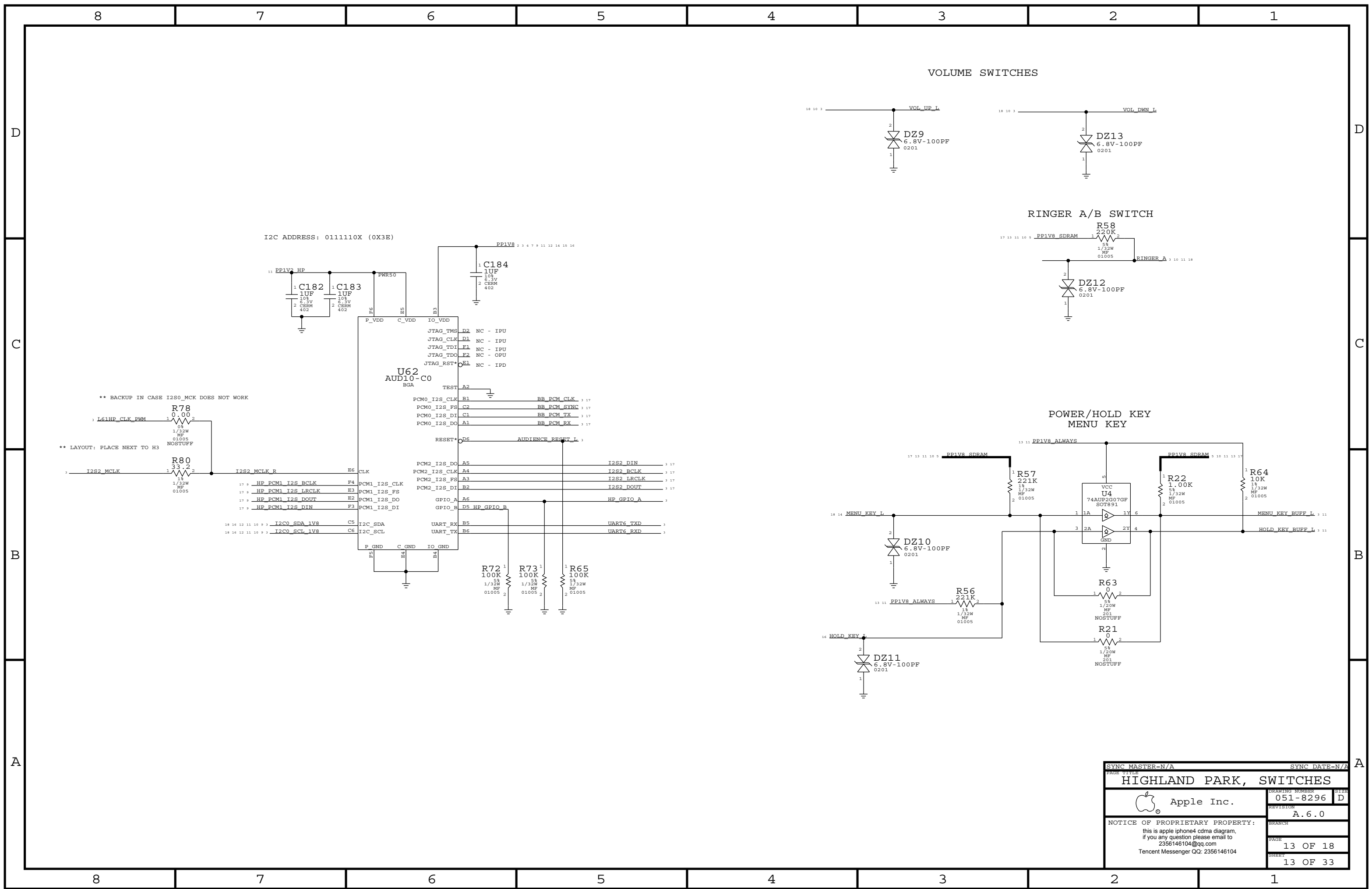
COMPASS 1




USB OVER/REVERSE VOLTAGE PROTECTITON

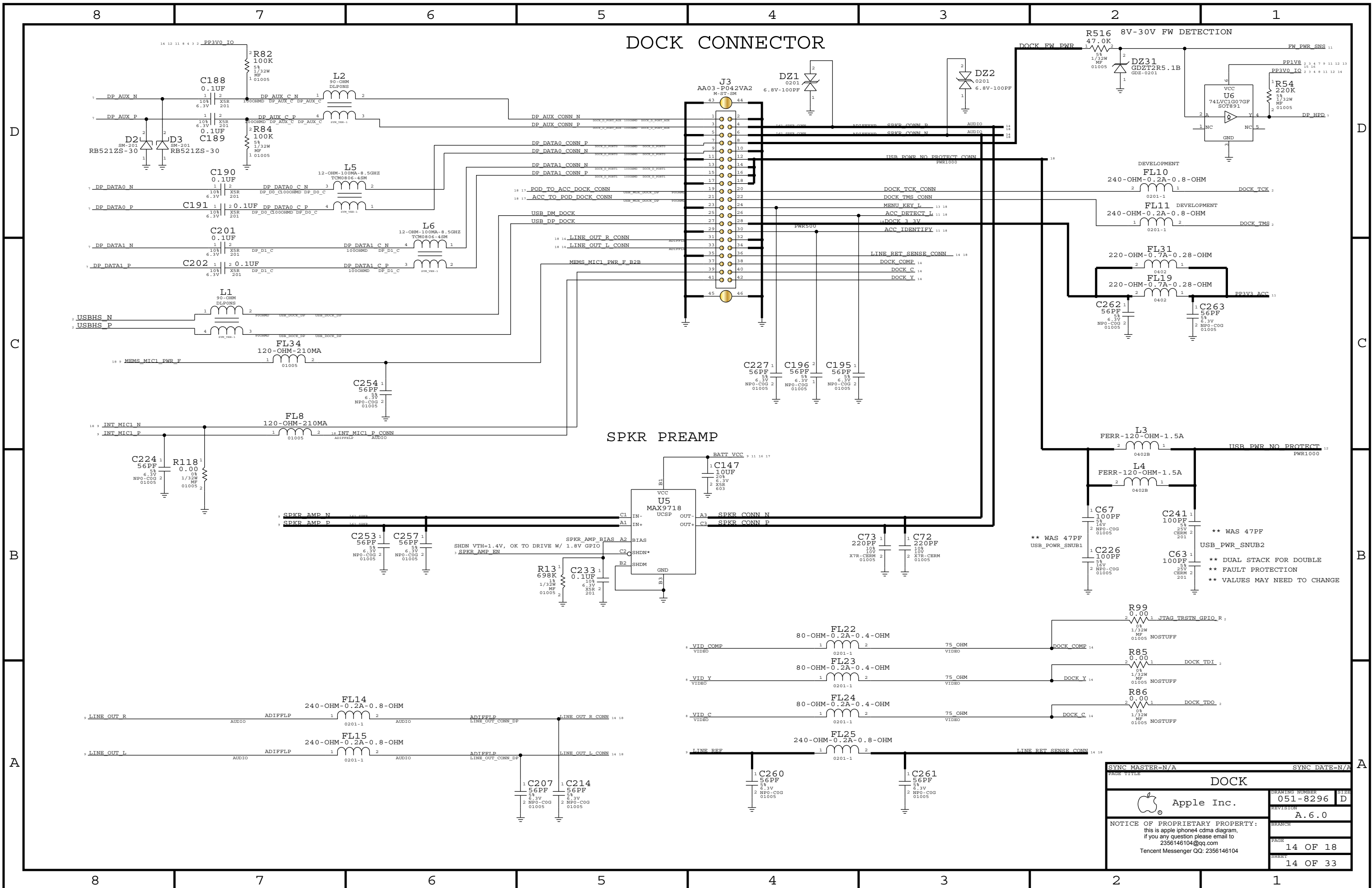


| | | | |
|--|--|-------------------|--|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| PAGE TITLE SIM, ACCEL, VIBE, GYRO, COMPASS | | | |
| DRAWING NUMBER 051-8296 | | SIZE D | |
| REVISION A.6.0 | | BRANCH | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | | |
| PAGE 12 OF 18 | | SHEET 12 OF 33 | |



| | | | | | |
|--|--|-----------------|----------|---------------|---|
| PAGE TITLE | | SYNC MASTER=N/A | | SYNC DATE=N/A | |
| HIGHLAND PARK, SWITCHES | | | | | |
|  Apple Inc. | | DRAWING NUMBER | 051-8296 | SIZE | D |
| | | REVISION | A.6.0 | BRANCH | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | | | | |
| PAGE | | 13 OF 18 | | | |
| SHEET | | 13 OF 33 | | | |

DOCK CONNECTOR



** WAS 47PF
USB_PWR_SNUB1

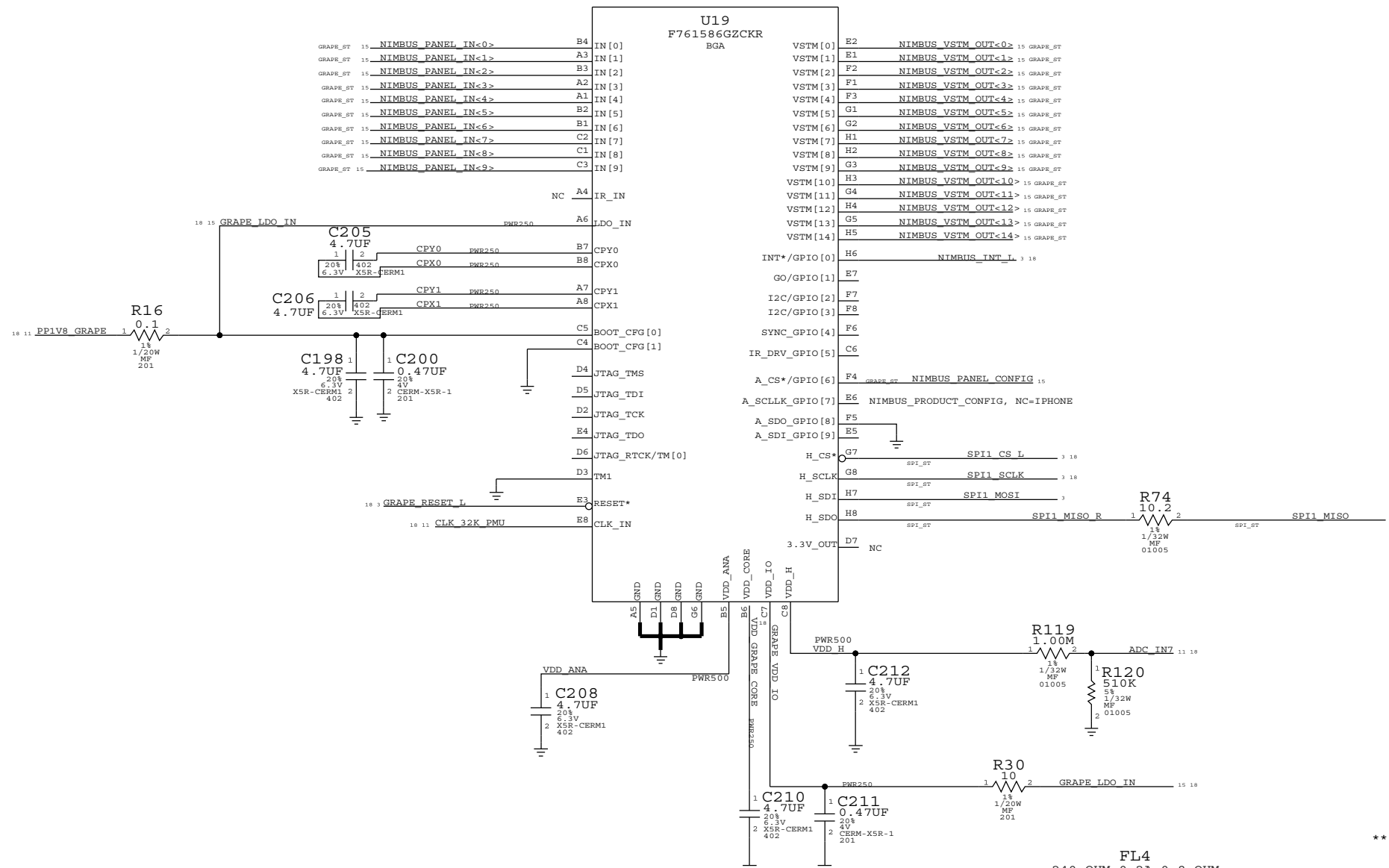
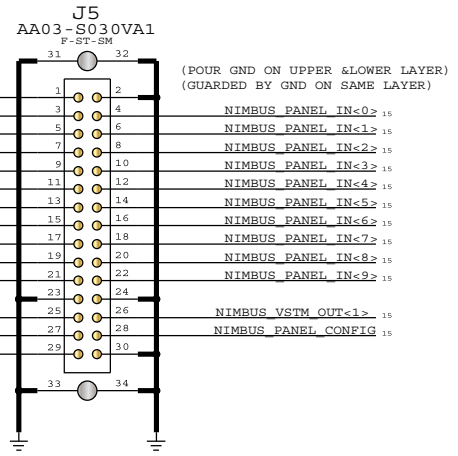
** WAS 47PF
USB_PWR_SNUB2

** DUAL STACK FOR DOUBLE
** FAULT PROTECTION
** VALUES MAY NEED TO CHANGE

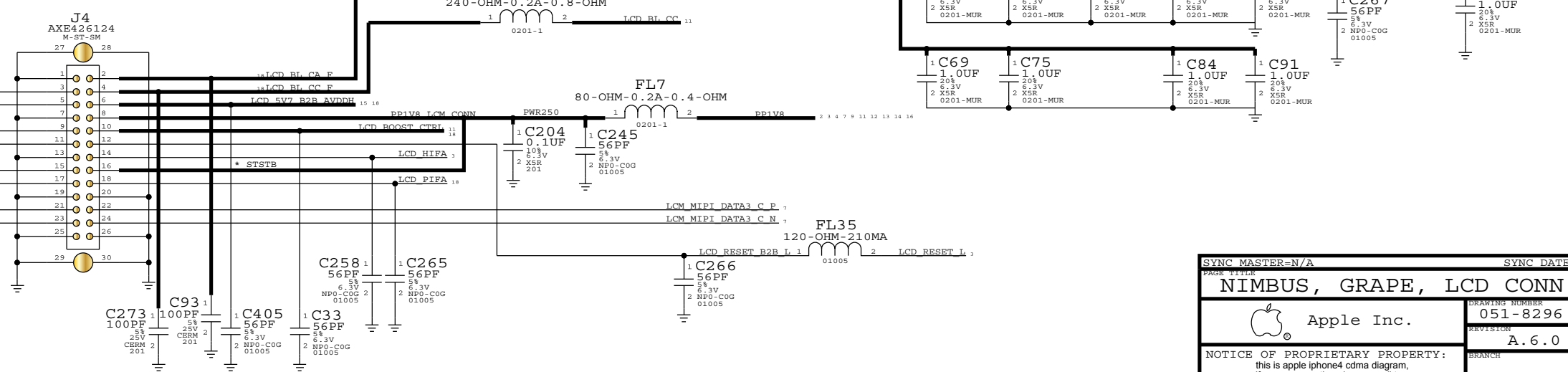
| | | | |
|--|--|----------------|------|
| PAGE TITLE | | SYNC DATE=N/A | |
| DOCK | | | |
| Apple Inc. | | DRAWING NUMBER | SIZE |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | 051-8296 | D |
| | | REVISION | |
| | | A.6.0 | |
| | | PAGE | |
| | | 14 OF 18 | |
| | | SHEET | |
| | | 14 OF 33 | |

NIMBUS

GRAPE CONNECTOR NIMBUS CONNECTOR



LCD CONNECTOR



| | | | |
|--|--|----------------|----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| NIMBUS, GRAPE, LCD CONN. | | | |
| Apple Inc. | | DRAWING NUMBER | SIZE |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | 051-8296 | D |
| | | REVISION | |
| | | A.6.0 | |
| | | BRANCH | |
| | | PAGE | 15 OF 18 |
| | | SHEET | 15 OF 33 |

5MP CAMERA CONNECTOR

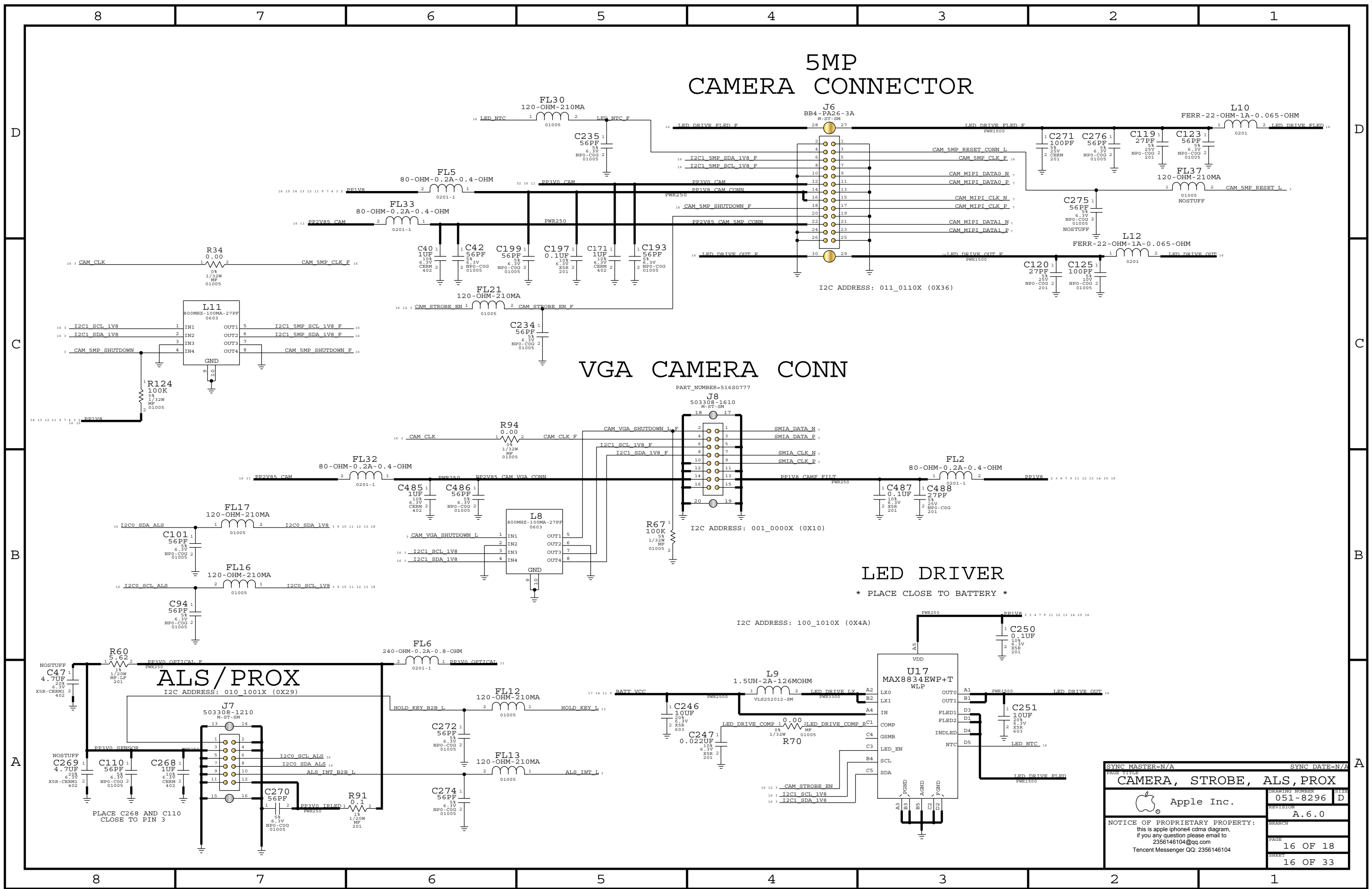
VGA CAMERA CONN

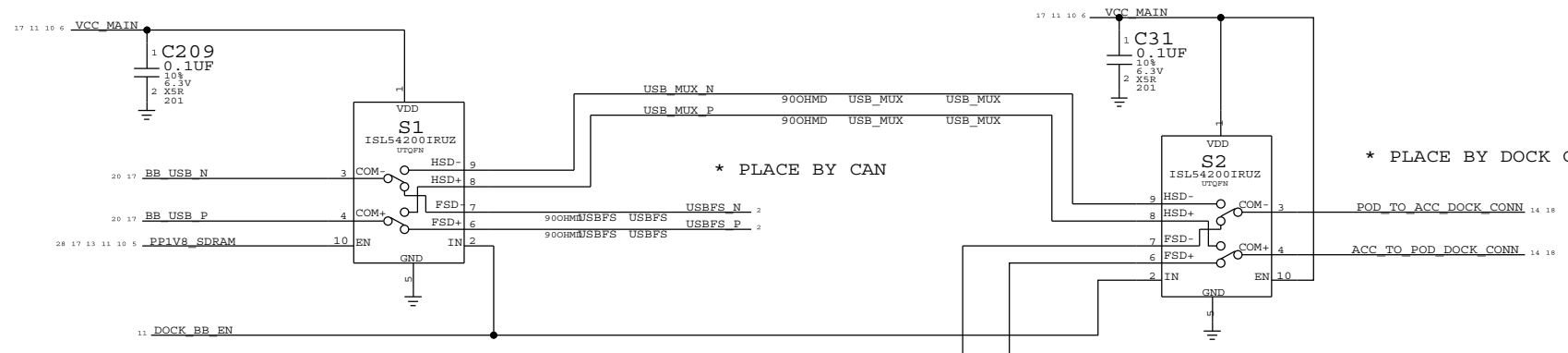
LED DRIVER

* PLACE CLOSE TO BATTERY *

ALS/PROX

| | | | |
|---------------------------|--|---------------|--|
| PAGE TITLE | | SYNC DATE=N/A | |
| CAMERA, STROBE, ALS, PROX | | | |
| DRAWING NUMBER | | SIZE | |
| 051-8296 | | D | |
| REVISION | | BRANCH | |
| A.6.0 | | | |
| PAGE | | PAGE | |
| 16 OF 18 | | 16 OF 33 | |
| SHEET | | SHEET | |
| 16 OF 18 | | 16 OF 33 | |





** 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

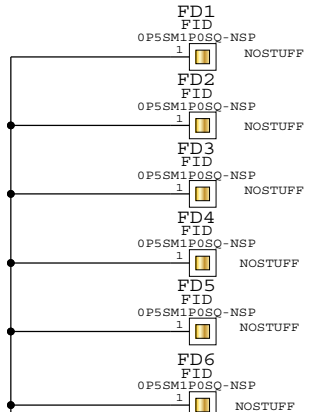
** NOT CHARACTERIZED AT VDD > 3.6 V BUT
 VDD RANGE IS 2.7V < VDD < 5.5V

AP/RADIO INTERFACE

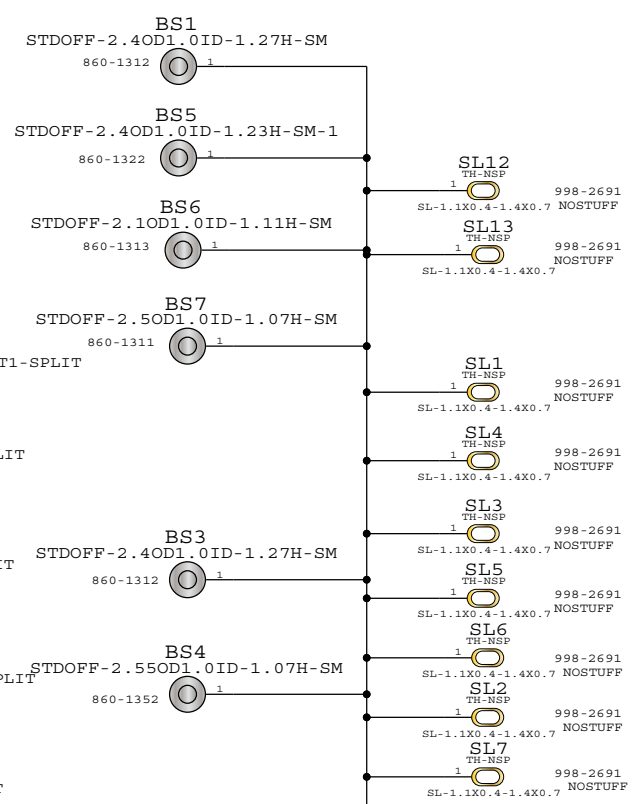
| | | | |
|------------------|----------------------|---------|----------------------|
| 23 16 14 11 9 | BATT_VCC | PWR2500 | BATT_VCC |
| 25 11 | BATTSNS | | BATSM |
| | NTC | | NTC |
| 25 11 3 | BATTERY_SWI | | GAS_GAUGE |
| 25 18 2 | RESET_L | | RF_RESET_N |
| 23 3 | RADIO_ON_L | | RADIO_ON_N |
| 23 11 | RESET_PMU_L | | RESET_PMU_N |
| 20 3 | BB_RESET_L | | BB_RST_N |
| 20 3 | BB_RESET_DET_L | | RESET_DET_N |
| 20 3 | SPI2_MRDY | | IPC_MRDY |
| 20 3 | IPC_SRDY | | IPC_SRDY |
| 20 3 | SPI2_SCLK | | IPC_SCLK |
| 20 3 | SPI2_MOSI | | IPC_MOSI |
| 20 3 | SPI2_MISO | | IPC_MISO |
| 20 3 | BB_EMRGNCY_DWLD | | BB_EMRGNCY_DWLD |
| 20 11 | AP_PMU_EXTON | | AP_PMU_EXTON |
| 20 3 | IPC_GPIQ2 | | IPC_GPIQ2 |
| 20 11 | VLCM1 | | BB_USB_VBUS |
| 20 17 | BB_USB_P | | BB_USB_DATA_P |
| 20 17 | BB_USB_N | | BB_USB_DATA_N |
| 20 3 | UART1_RXD | | BB_UART_TXD |
| 20 3 | UART1_TXD | | BB_UART_RXD |
| 20 3 | UART1_CTS_L | | BB_UART_RTS_N |
| 20 3 | UART1_RTS_L | | BB_UART_CTS_N |
| 20 13 3 | BB_PCM_CLK | | BB_PCM_CLK |
| 20 13 3 | BB_PCM_SYNC | | BB_PCM_SYNC |
| 20 13 3 | BB_PCM_TX | | BB_PCM_TX |
| 20 13 3 | BB_PCM_RX | | BB_PCM_RX |
| 20 13 3 | I2S2_BCLK | | BB_I2S2_CLK |
| 20 13 3 | I2S2_LRCLK | | BB_I2S2_WAO |
| 20 13 3 | I2S2_DIN | | BB_I2S2_TX |
| 20 13 3 | I2S2_DOUT | | BB_I2S2_RX |
| 28 17 13 11 10 6 | PPIV8_SDRAM | | WL_BT_VDDIO |
| 25 11 | WL_BT_REG_ON | | WL_BT_REG_ON |
| 25 11 | CLK_32K_WIFI | | CLK32K_AP |
| 25 3 | WLAN_RESET_L | | WLAN_RESET_N |
| 28 3 | WLAN_SDIO_CLK | | WLAN_SDIO_CLK |
| 28 3 | WLAN_SDIO_CMD | | WLAN_SDIO_CMD |
| 28 3 | WLAN_SDIO_DATA<3..0> | | WLAN_SDIO_DATA<3..0> |
| 28 11 | WLAN_HOST_WAKE | | HOST_WAKE_WLAN |
| 28 11 | BT_HOST_WAKE | | HOST_WAKE_BT |
| 25 3 | BT_RESET_L | | BT_RESET_N |
| 25 3 | BT_WAKE | | BT_WAKE |
| 25 3 | UART3_RXD | | BT_UART_TXD |
| 25 3 | UART3_TXD | | BT_UART_RXD |
| 25 3 | UART3_CTS_L | | BT_UART_RTS_N |
| 25 3 | UART3_RTS_L | | BT_UART_CTS_N |
| 28 13 4 | HP_PCM1_I2S_BCLK | | BT_PCM_CLK |
| 28 13 4 | HP_PCM1_I2S_LRCLK | | BT_PCM_SYNC |
| 28 13 4 | HP_PCM1_I2S_DIN | | BT_PCM_TX |
| 28 13 4 | HP_PCM1_I2S_DOUT | | BT_PCM_RX |

TODO: CONN TO TP'S

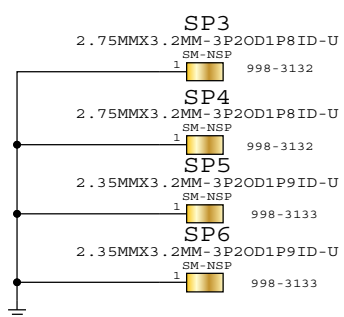
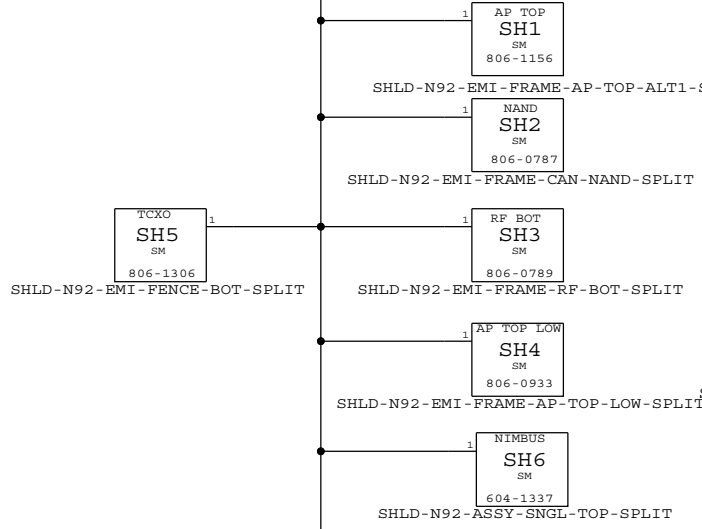
FIDUCIALS



STANDOFFS

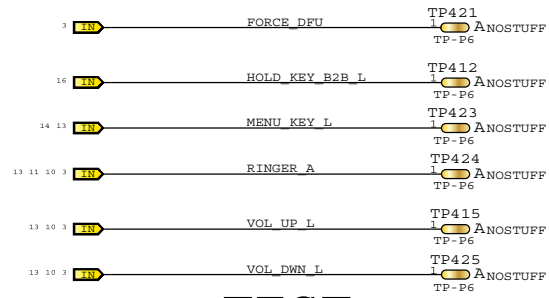


SHIELDS



| | | | |
|--|--|----------------|----------|
| PAGE TITLE | | SYNC DATE=N/A | |
| RADIO CONNECTIVITY | | | |
| Apple Inc. | | DRAWING NUMBER | 051-8296 |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | REVISION | A.6.0 |
| | | PAGE | 17 OF 18 |
| | | SHEET | 17 OF 33 |

GPIO



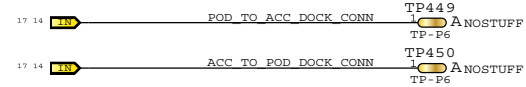
TODD: CONN TO TP'S

RESET

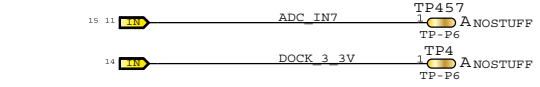


TEST POINTS

UART



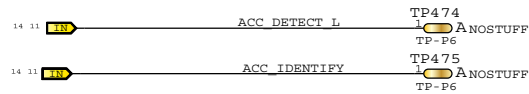
POWER



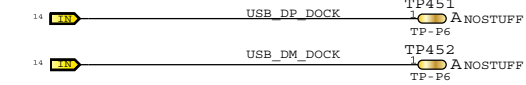
TEST



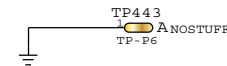
ACCESSORY DETECT



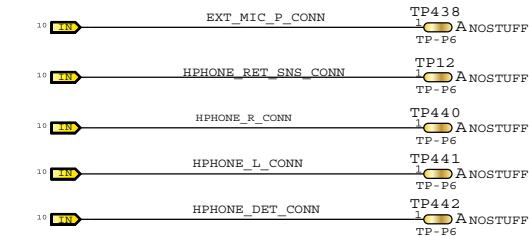
USB



SIGNAL GND (SENSE)

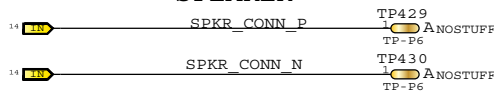


HEADPHONE

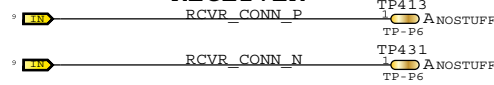


AUDIO

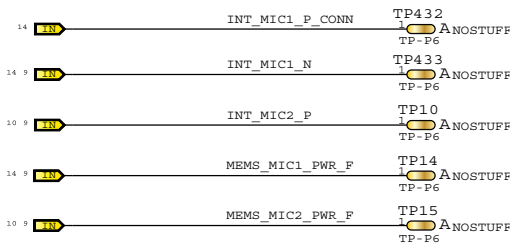
SPEAKER



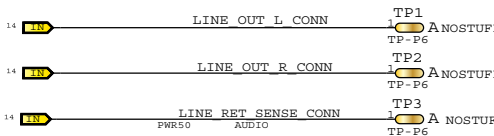
RECEIVER



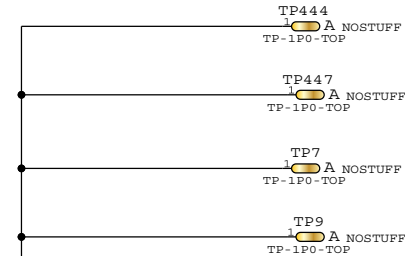
MIC



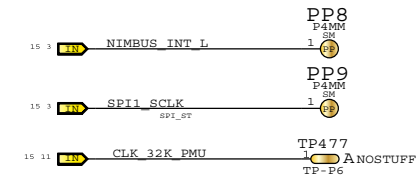
LINE OUT



POWER GND

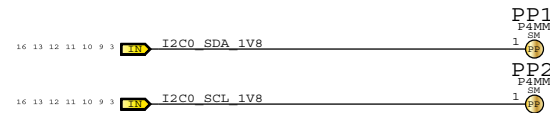
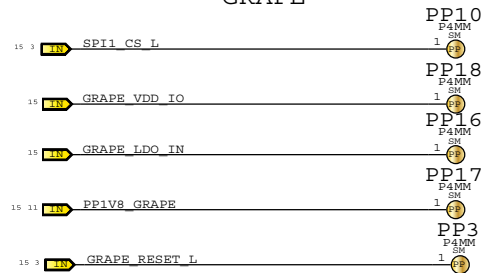


GRAPE

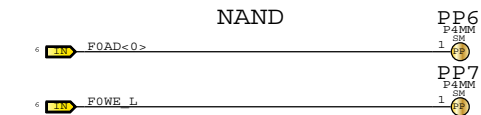


PROBE POINTS

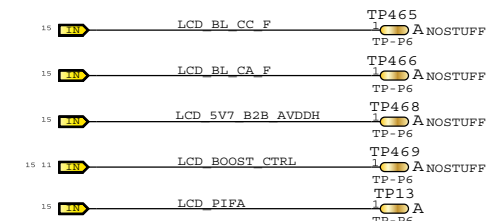
GRAPE



NAND



LCM



| | | | |
|--|----------------|---------------|----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| TEST POINTS | | | |
| Apple Inc. | DRAWING NUMBER | 051-8296 | SIZE |
| | REVISION | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | BRANCH | |
| | | PAGE | 18 OF 18 |
| | | SHEET | 18 OF 33 |

8

7

6

5

4

3

2

1

1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.
 2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.
 3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

| | | | | |
|-----|-----|-------------------------|---------|------------|
| REV | ECN | DESCRIPTION OF REVISION | CK APPD | DATE |
| | | | | 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) | |
| DRAWING NUMBER | | 051-8296 | SIZE |
| REVISION | | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: this is apple iphone4 cdma diagram, if you any question please email to 2356146104@qq.com Tencent Messenger QQ: 2356146104 | | BRANCH | |
| | | PAGE | 1 OF 13 |
| | | SHEET | 19 OF 33 |

8

7

6

5

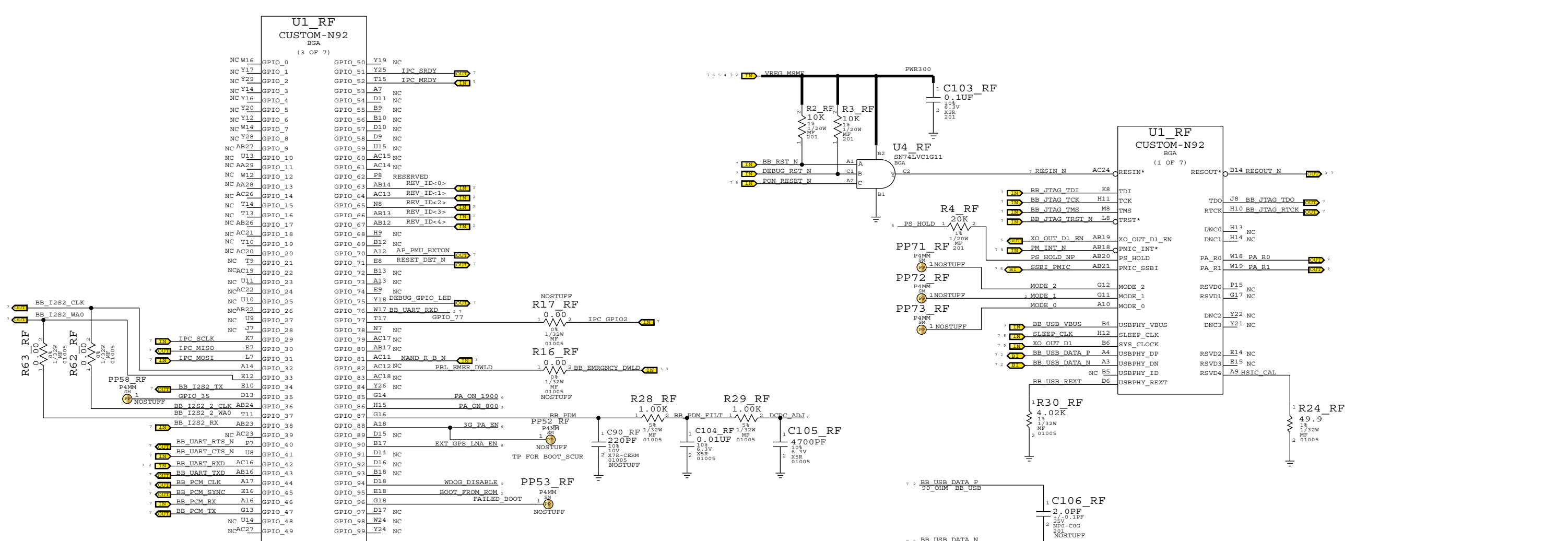
4

3

2

1

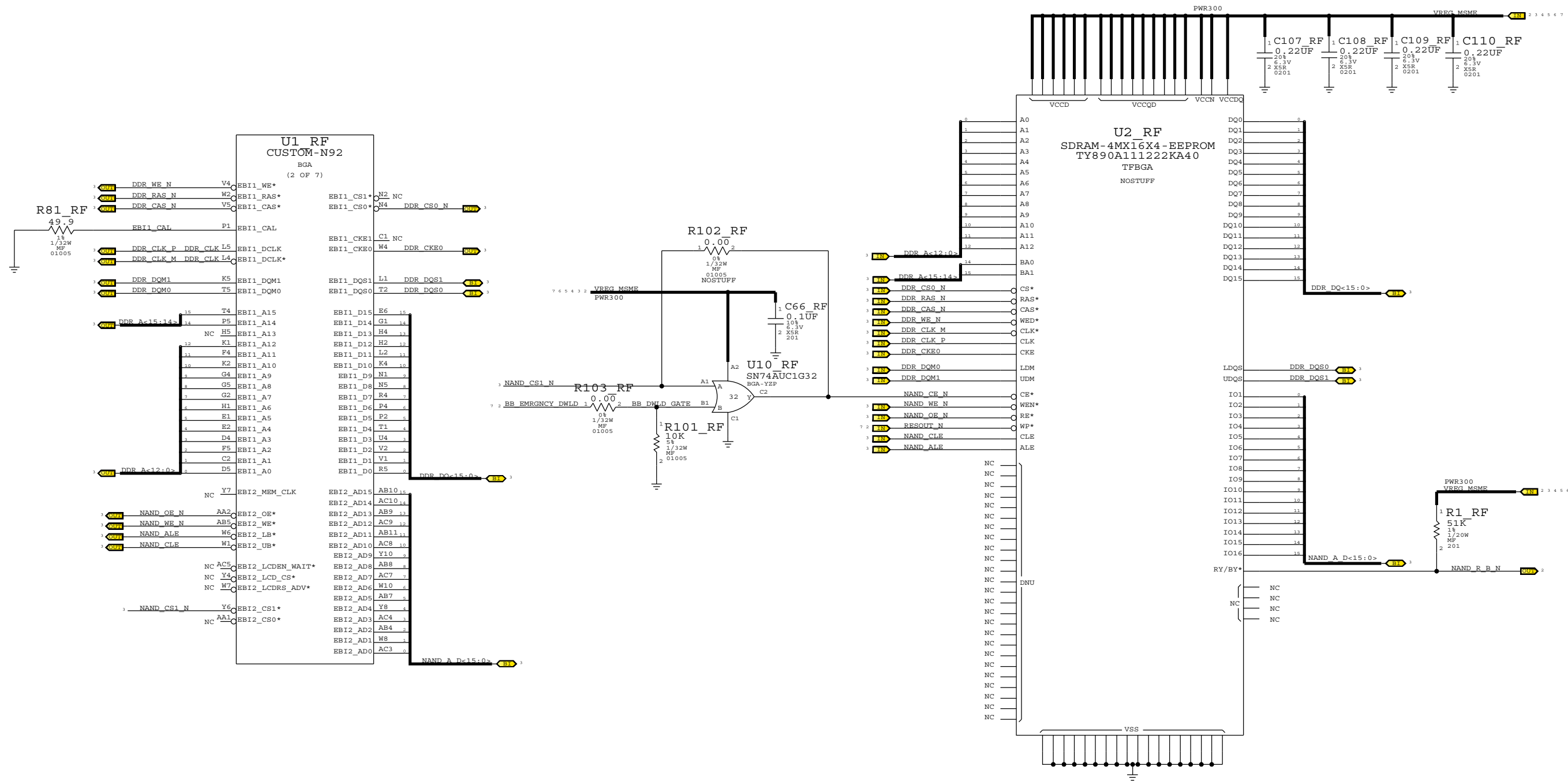
BASEBAND



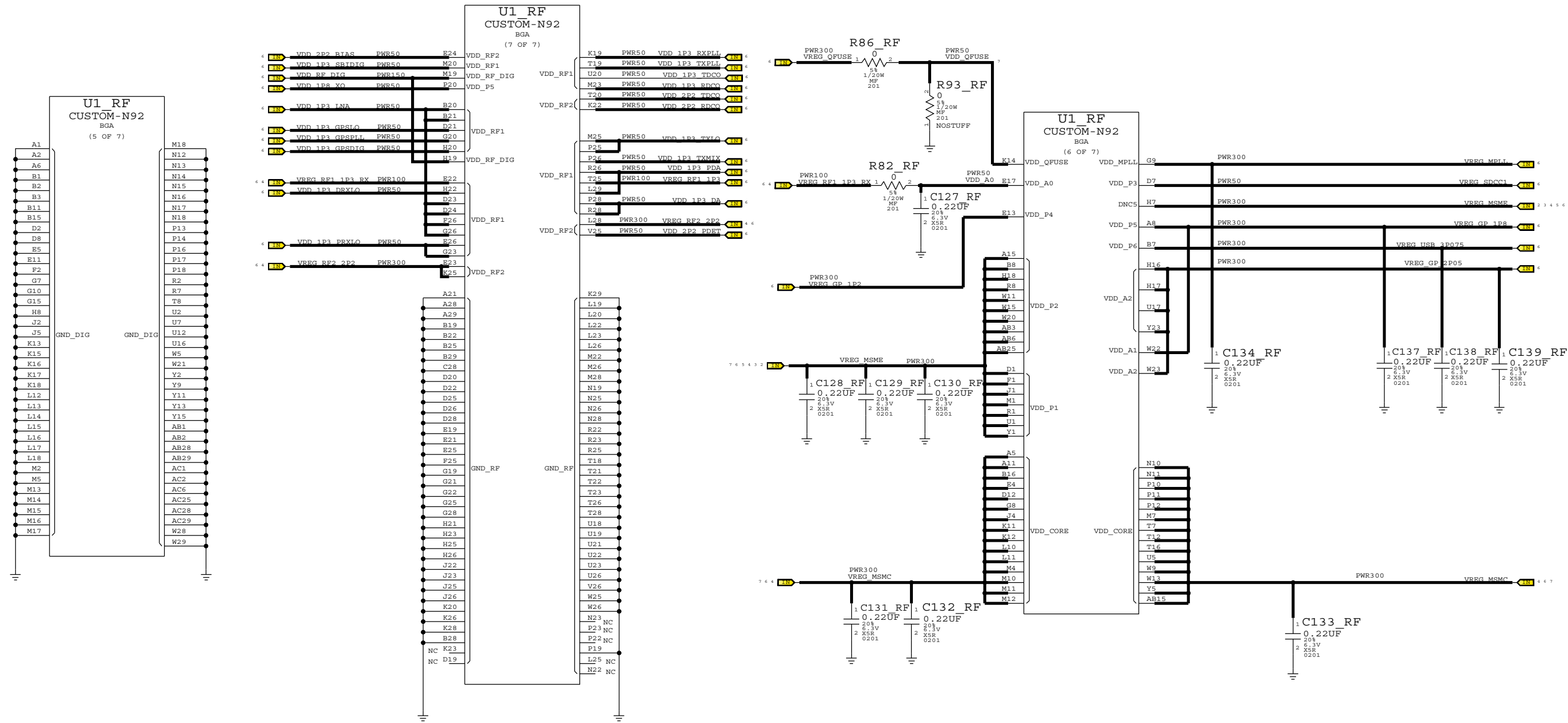
| REV_ID<4> | HB PA SELECT | |
|--------------|--------------|-----------------|
| 0 | TQM | |
| 1 | SKY | |
| NST | ANAD | |
| REV_ID<3> | LB PA SELECT | |
| 0 | TQM | |
| 1 | SKY | |
| NST | ANAD | |
| REV_ID<2..0> | | |
| 0 | 0 | DEV 1 |
| 0 | 0 | DEV 2 |
| 0 | 1 | DEV 3 |
| 0 | 1 | DEV 4 |
| NST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

| MODE_1 | |
|--------|-------------|
| NST | NATIVE MODE |
| 1 | ETM MODE |

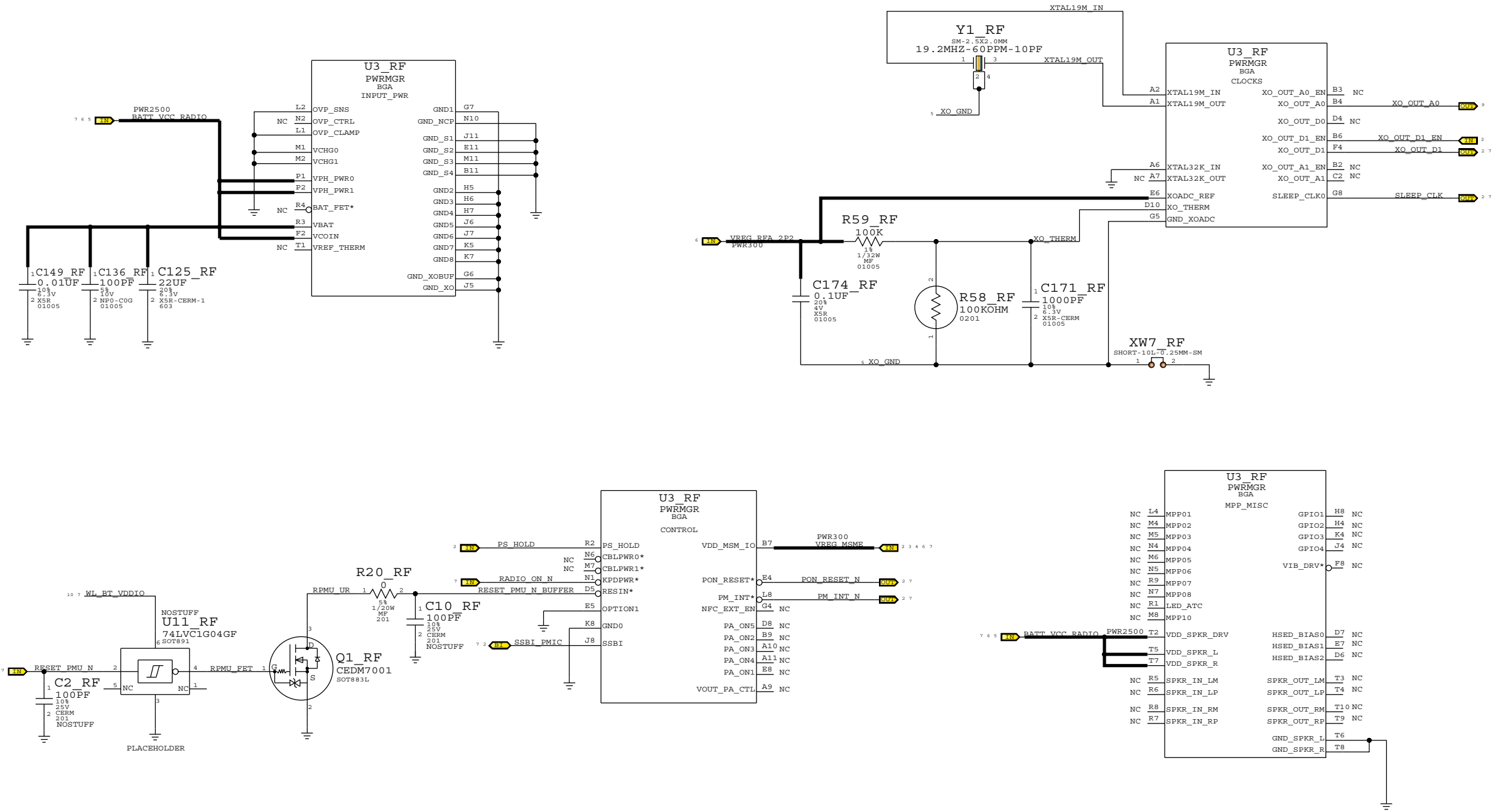
BASEBAND MEMORY



BASEBAND POWER

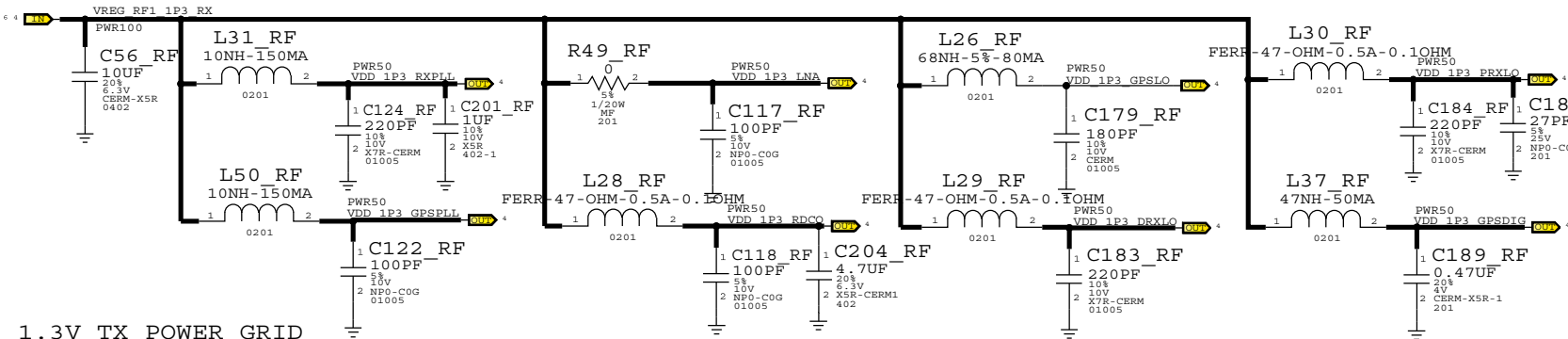


POWER1: CONTROL

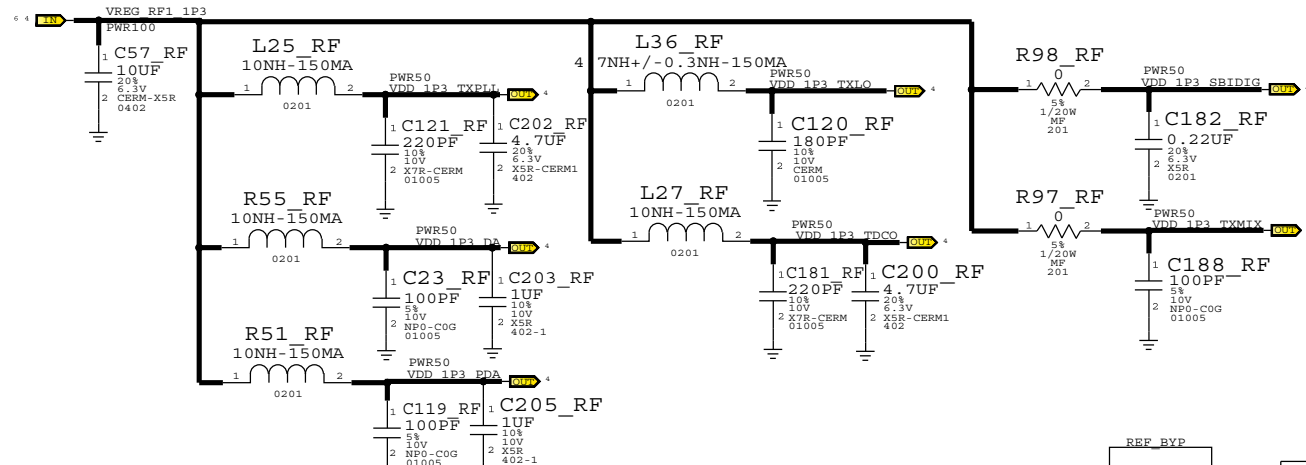


POWER2: DIGITAL, ANALOG, RF

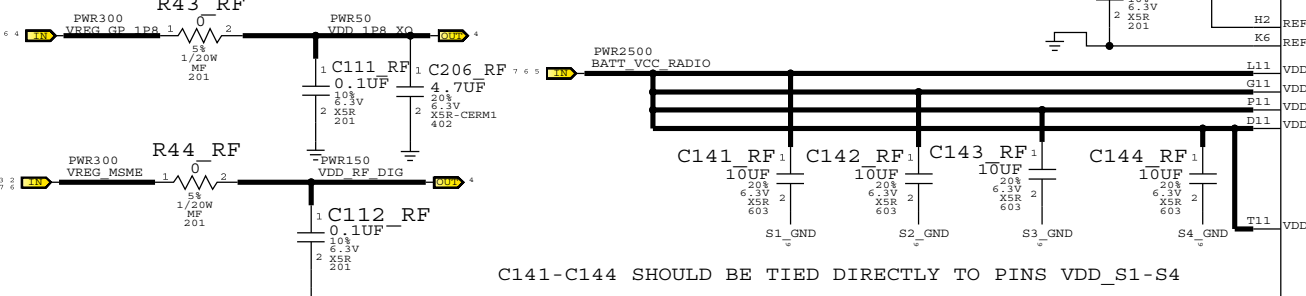
1.3V RX POWER GRID



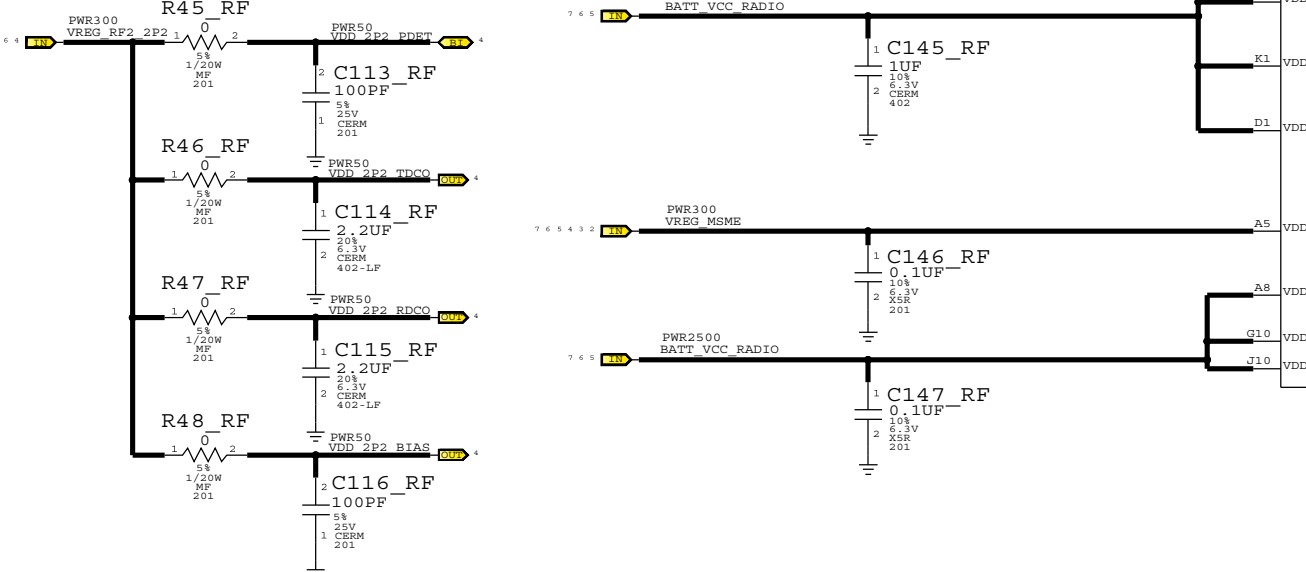
1.3V TX POWER GRID



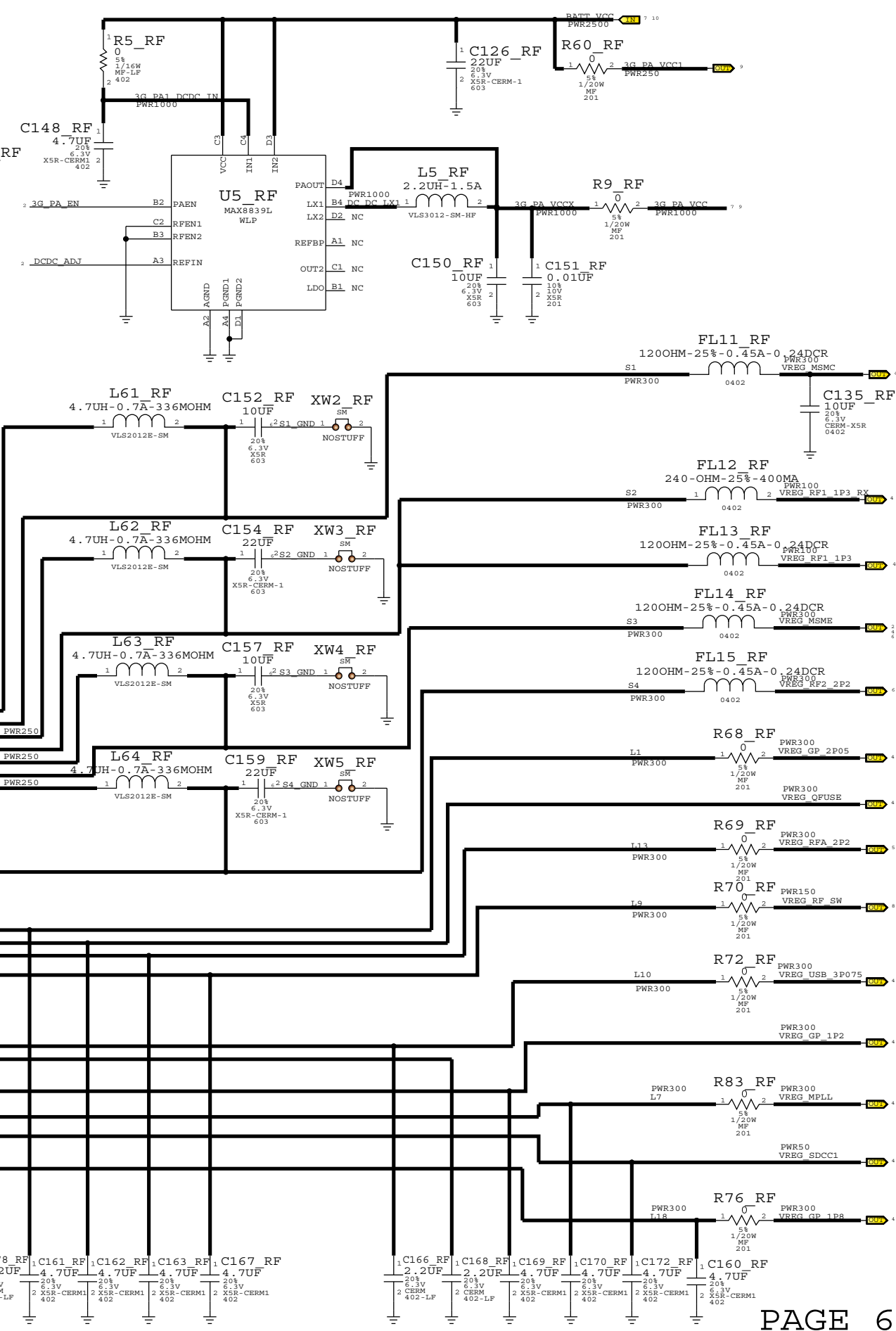
1.8V POWER GRID



2.2V POWER GRID

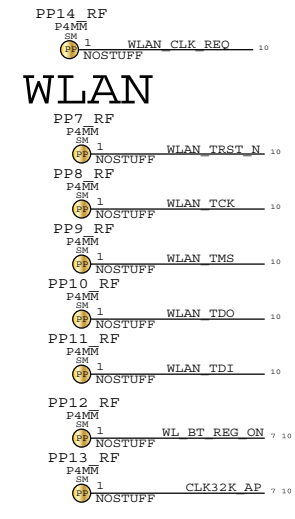
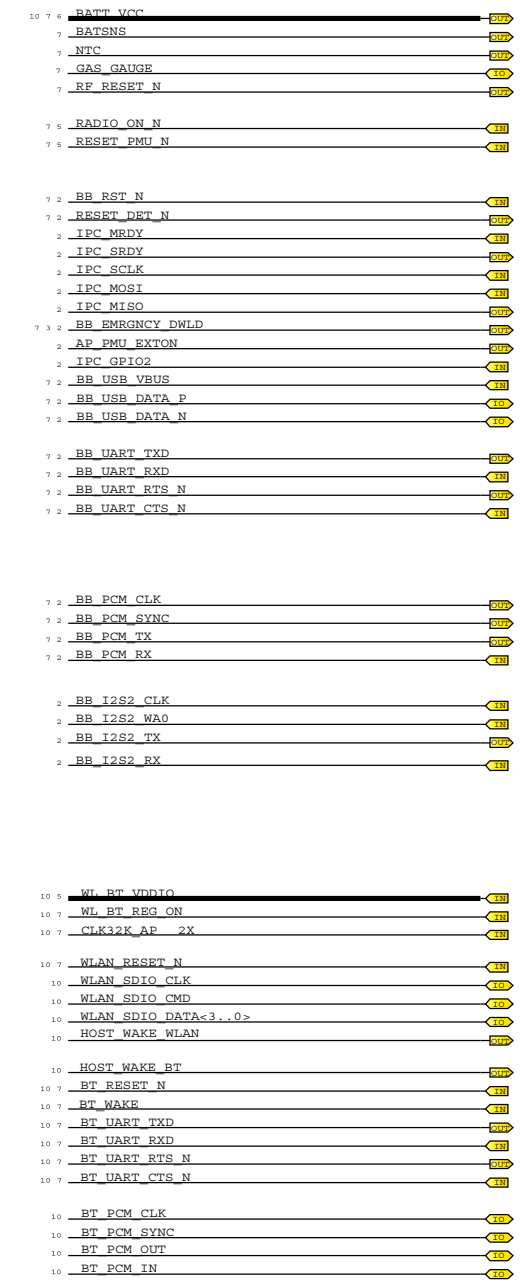


C141-C144 SHOULD BE TIED DIRECTLY TO PINS VDD_S1-S4

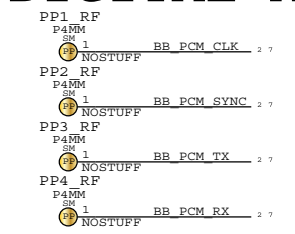


SYSTEM CONNECTORS

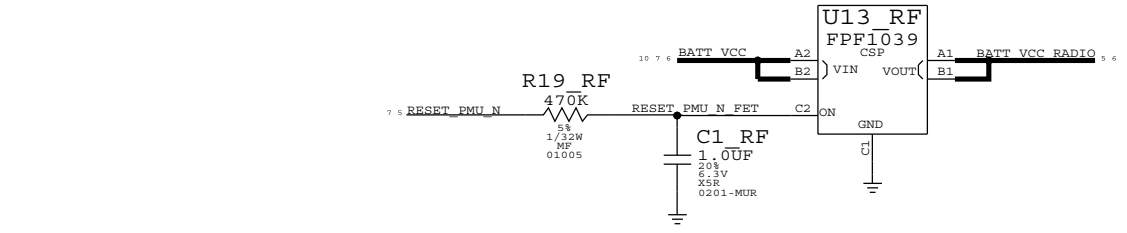
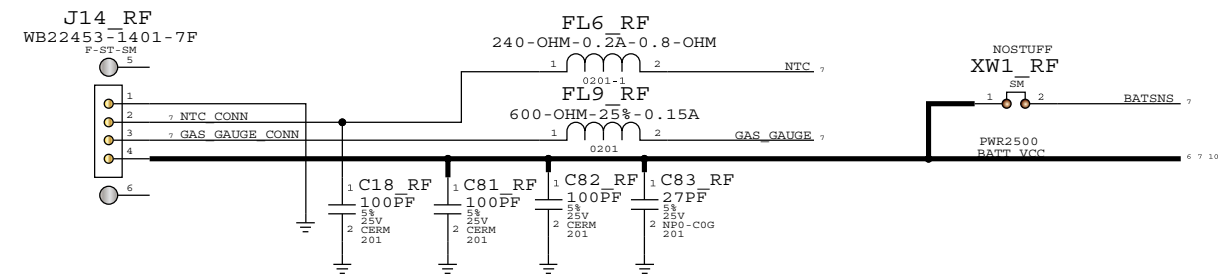
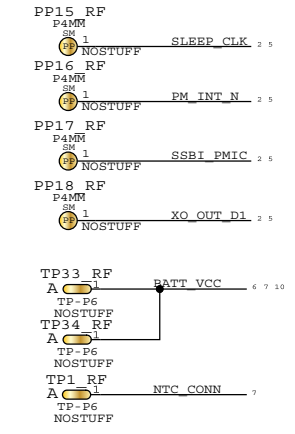
AP CONNECTIONS



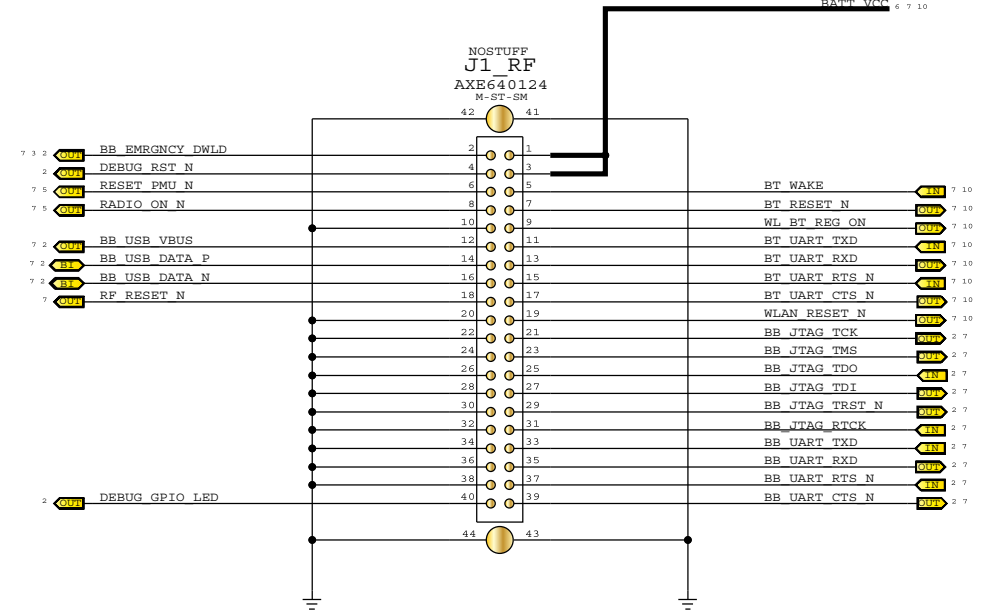
DIGITAL AUDIO



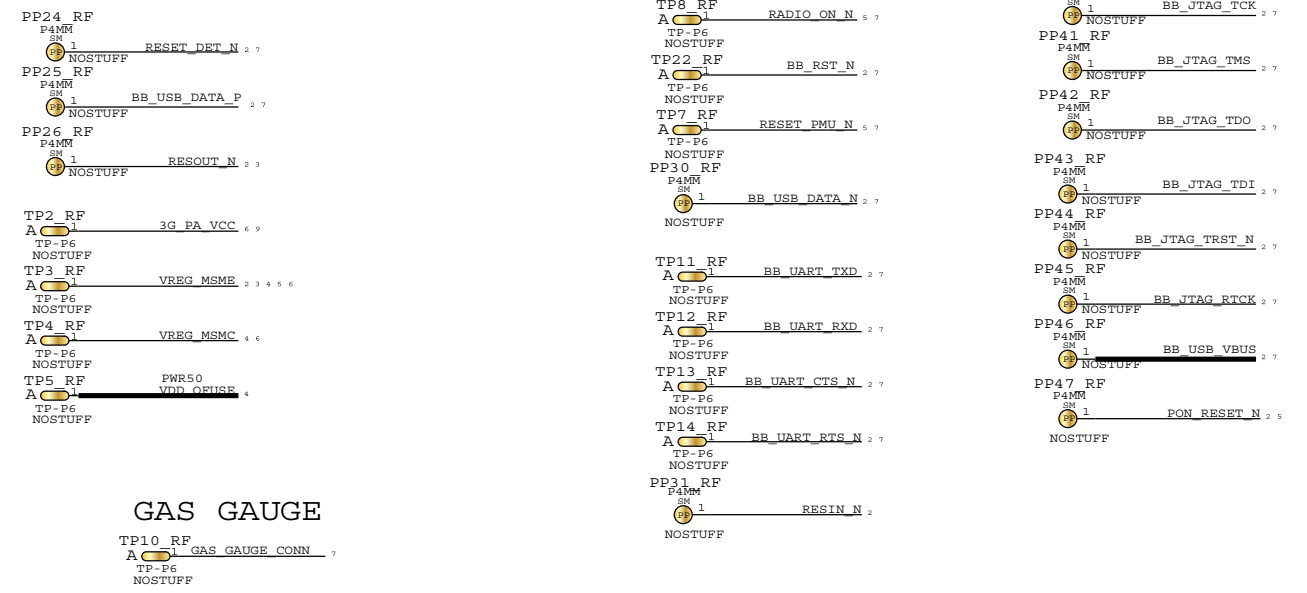
PMIC



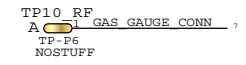
DEBUG CONNECTOR



CONTROL

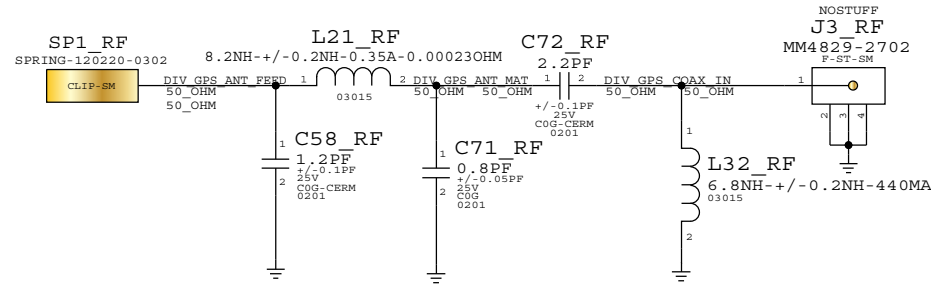


GAS GAUGE

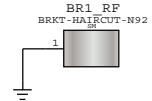


RX DIVERSITY & GPS LNA

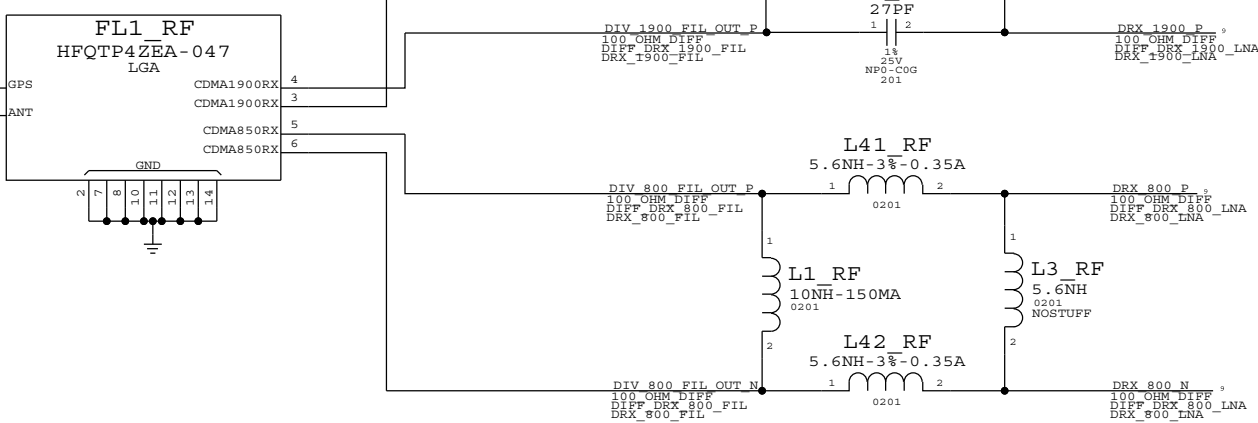
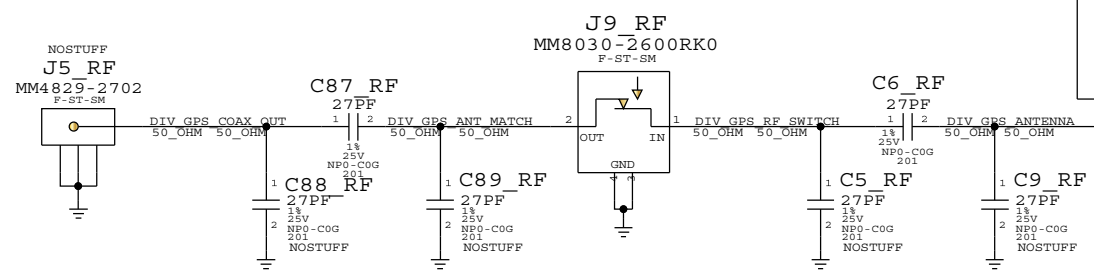
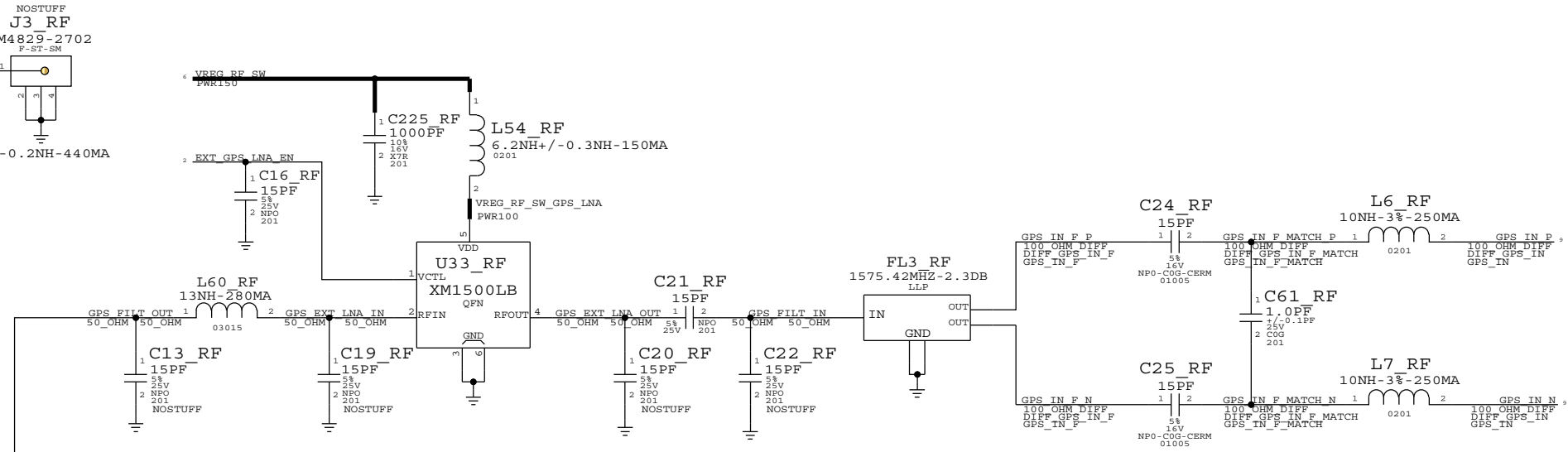
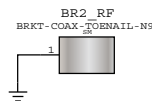
UPPER ANTENNA SPRING

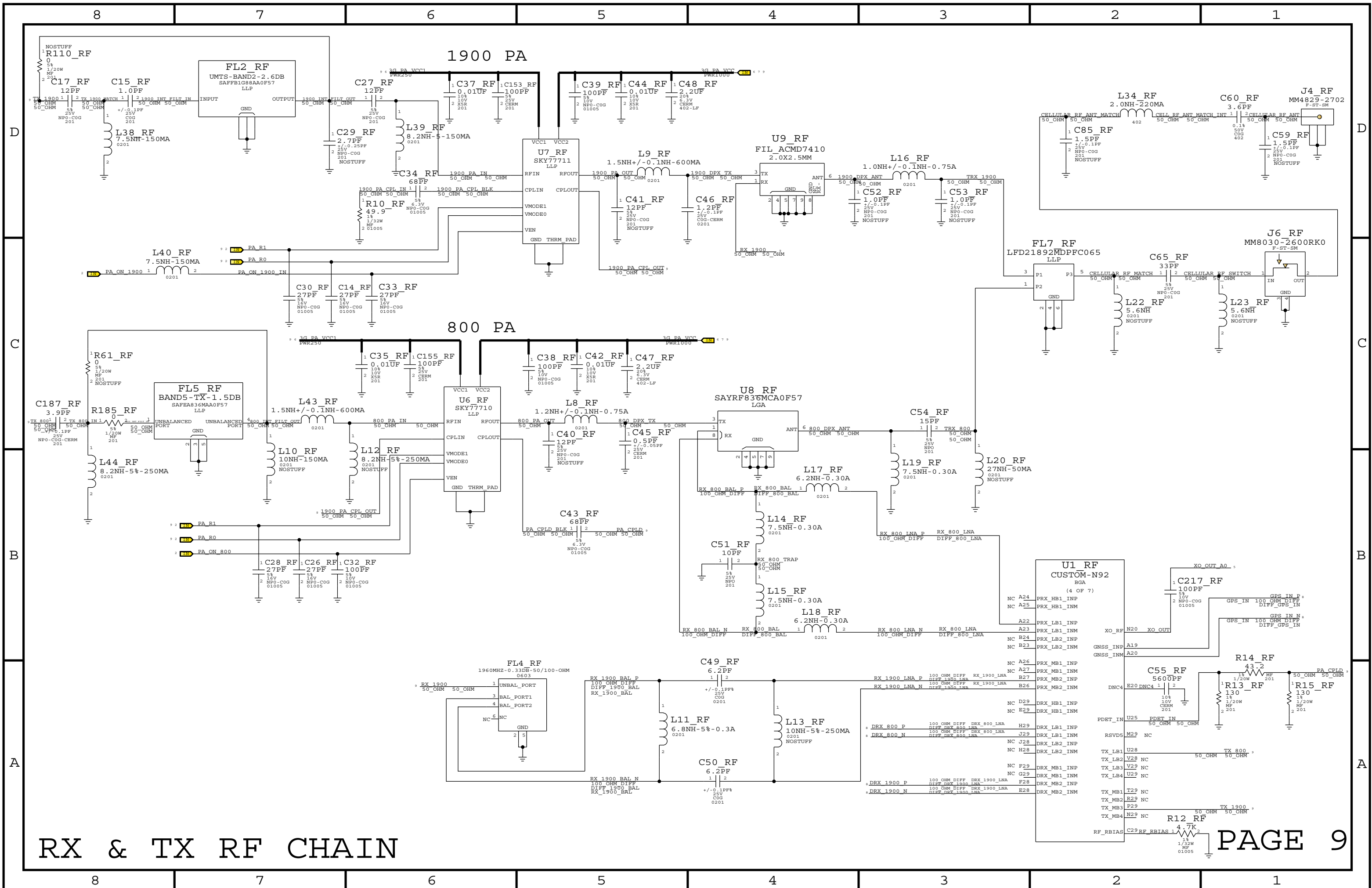


UPPER COAX CABLE STRAIN RELIEF



LOWER COAX CABLE STRAIN RELIEF



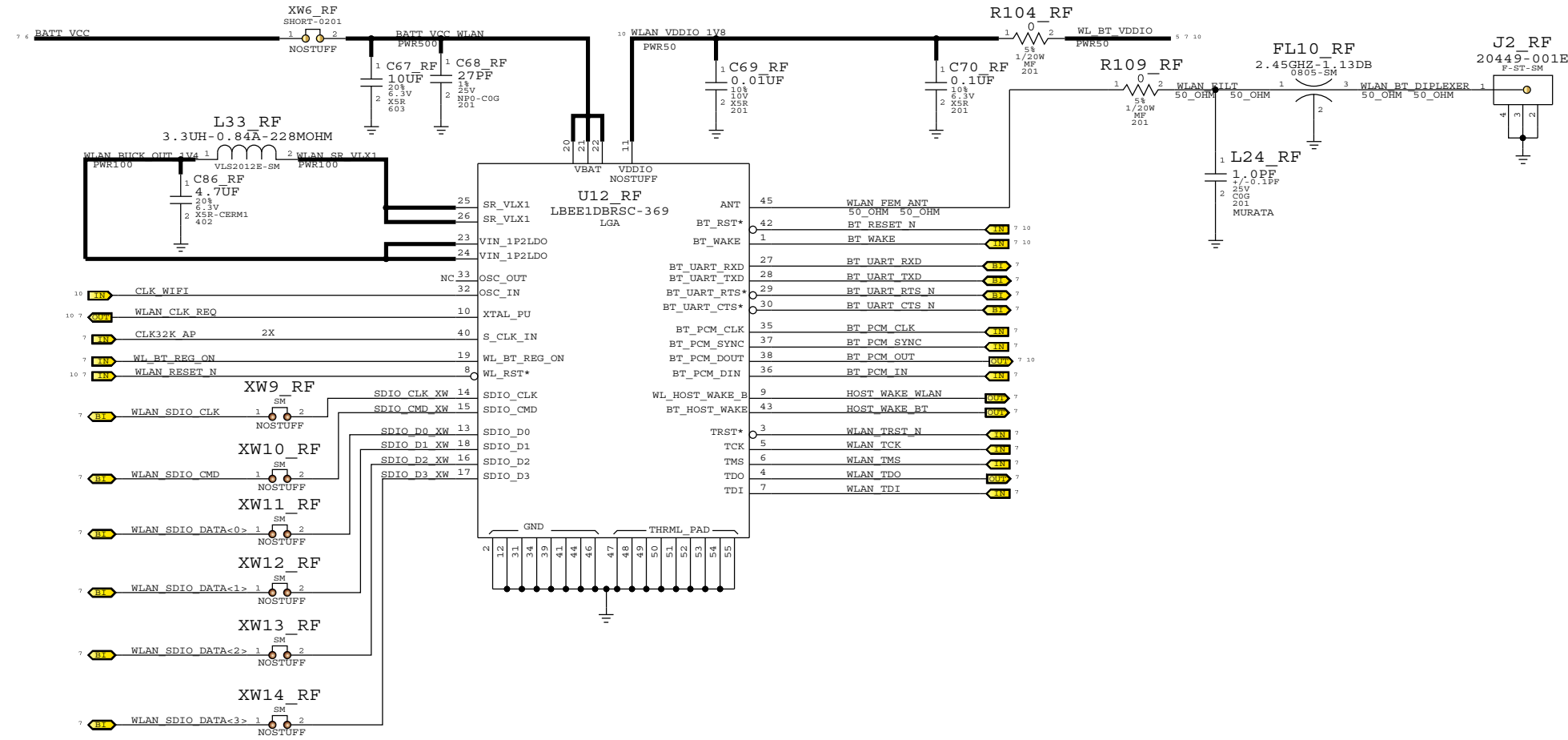


RX & TX RF CHAIN

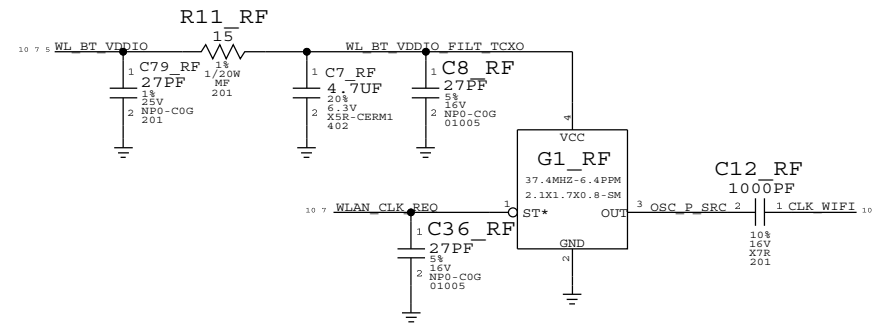
WLAN/BLUETOOTH RADIO

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

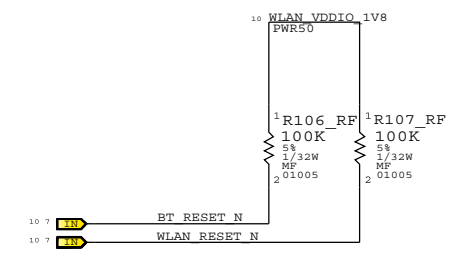
RF FILTER, CONNECTOR, ANTENNA MATCH AND FEED



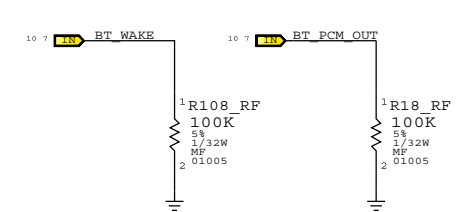
REFERENCE OSCILLATOR TCXO



PULL UP RESISTORS



PULL DOWN RESISTORS

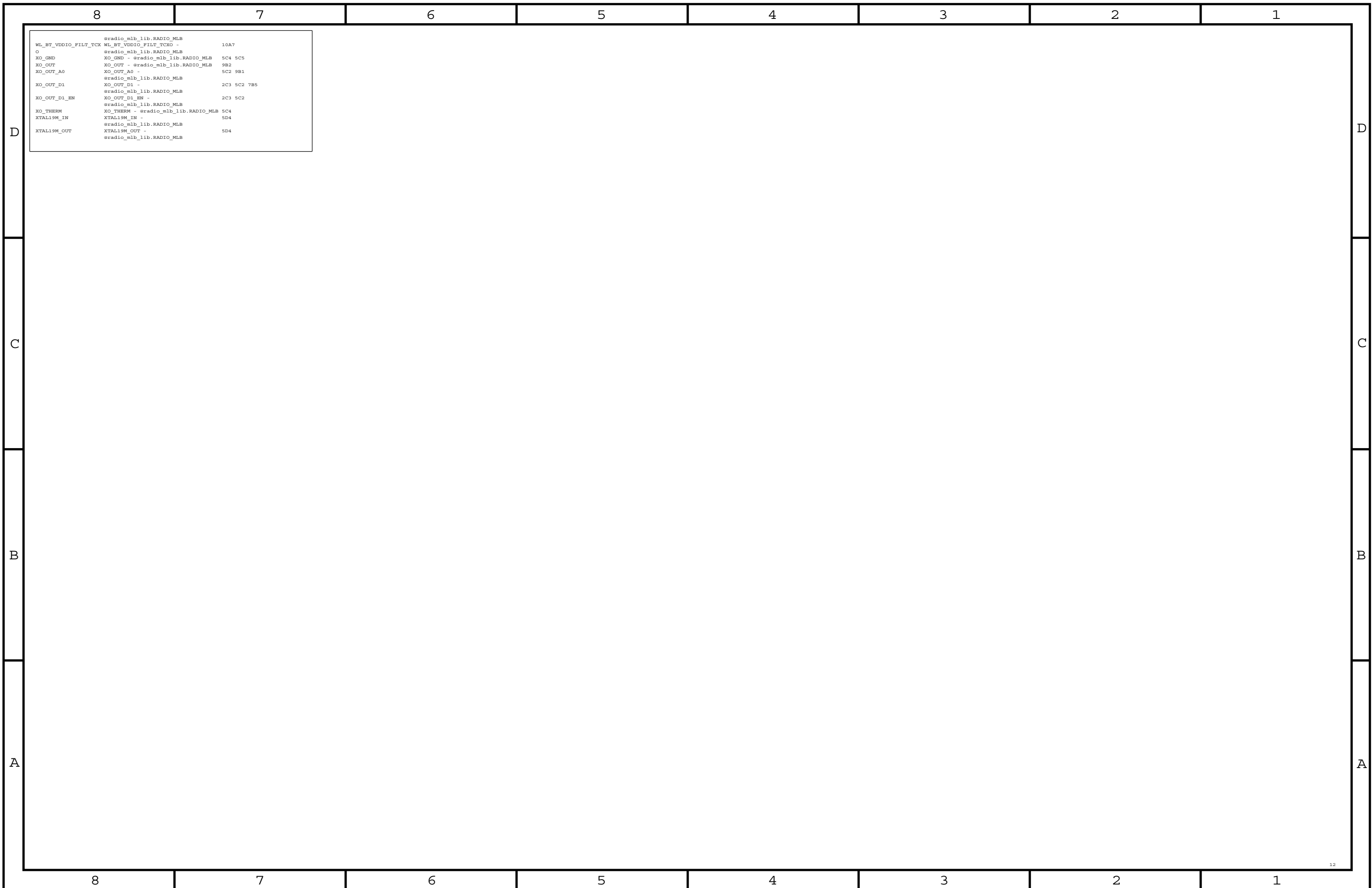


| | | | | | | | | | | | | | | | |
|---|-------------------------------------|-------------------------|--|---|--|---|--|---|--|---|--|---|--|---|--|
| 8 | | 7 | | 6 | | 5 | | 4 | | 3 | | 2 | | 1 | |
| Title: Basenet Report | | | | | | | | | | | | | | | |
| Design: radio_mlb | | | | | | | | | | | | | | | |
| 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 - | 6D3 | | | | | | | | | | | | | |
| 3G_PA_EN | 3G_PA_EN - @radio_mlb.lib.RADIO_MLB | 2B6 6D4 | | | | | | | | | | | | | |
| 3G_PA_VCC | 3G_PA_VCC - | 6D1 7B4 9C4 9D4 | | | | | | | | | | | | | |
| 3G_PA_VCC1 | @radio_mlb.lib.RADIO_MLB | 6D1 9C7 9D6 | | | | | | | | | | | | | |
| 3G_PA_VCCX | 3G_PA_VCCX - | 6D2 | | | | | | | | | | | | | |
| 800_DPX_ANT | @radio_mlb.lib.RADIO_MLB | 9C4 | | | | | | | | | | | | | |
| 800_DPX_TX | @radio_mlb.lib.RADIO_MLB | 9C5 | | | | | | | | | | | | | |
| 800_INT_FILT_IN | @radio_mlb.lib.RADIO_MLB | 9C8 | | | | | | | | | | | | | |
| 800_INT_FILT_OUT | @radio_mlb.lib.RADIO_MLB | 9C7 | | | | | | | | | | | | | |
| 800_PA_IN | 800_PA_IN - | 9C6 | | | | | | | | | | | | | |
| 800_PA_OUT | @radio_mlb.lib.RADIO_MLB | 9C5 | | | | | | | | | | | | | |
| 1900_DPX_ANT | 1900_DPX_ANT - | 9D4 | | | | | | | | | | | | | |
| 1900_DPX_TX | @radio_mlb.lib.RADIO_MLB | 9D4 | | | | | | | | | | | | | |
| 1900_INT_FILT_IN | @radio_mlb.lib.RADIO_MLB | 9D8 | | | | | | | | | | | | | |
| 1900_INT_FILT_OUT | @radio_mlb.lib.RADIO_MLB | 9D7 | | | | | | | | | | | | | |
| 1900_PA_CPL_BLK | 1900_PA_CPL_BLK - | 9D6 | | | | | | | | | | | | | |
| 1900_PA_CPL_IN | 1900_PA_CPL_IN - | 9D6 | | | | | | | | | | | | | |
| 1900_PA_CPL_OUT | 1900_PA_CPL_OUT - | 9B7 9C5 | | | | | | | | | | | | | |
| 1900_PA_IN | 1900_PA_IN - | 9D6 | | | | | | | | | | | | | |
| 1900_PA_OUT | 1900_PA_OUT - | 9D5 | | | | | | | | | | | | | |
| AP_PMU_EXTON | AP_PMU_EXTON - | 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 | | | | | | | | | | | | | |
| BATT_VCC_RADIO | BATT_VCC_RADIO - | 5B4 5C8 6A7 6B7 6B7 7D2 | | | | | | | | | | | | | |
| BATT_VCC_WLAN | BATT_VCC_WLAN - | 10D7 | | | | | | | | | | | | | |
| BB_DWLD_GATE | BB_DWLD_GATE - | 3C5 | | | | | | | | | | | | | |
| BB_EMERGNCY_DWLD | BB_EMERGNCY_DWLD - | 2C5 3C6 7C4 7C8 | | | | | | | | | | | | | |
| BB_I2S2_2_CLK | BB_I2S2_2_CLK - | 2B8 | | | | | | | | | | | | | |
| BB_I2S2_2_WA0 | BB_I2S2_2_WA0 - | 2B8 | | | | | | | | | | | | | |
| BB_I2S2_CLK | BB_I2S2_CLK - | 2C8 7C8 | | | | | | | | | | | | | |
| BB_I2S2_RX | BB_I2S2_RX - | 2B8 7C8 | | | | | | | | | | | | | |
| BB_I2S2_TX | BB_I2S2_TX - | 2C8 7C8 | | | | | | | | | | | | | |
| BB_I2S2_WA0 | BB_I2S2_WA0 - | 2C8 7C8 | | | | | | | | | | | | | |
| BB_JTAG_RTCK | BB_JTAG_RTCK - | 2C2 7A1 7C2 | | | | | | | | | | | | | |
| BB_JTAG_TCK | BB_JTAG_TCK - | 2C3 7B1 7C2 | | | | | | | | | | | | | |
| BB_JTAG_TDI | BB_JTAG_TDI - | 2C3 7B1 7C2 | | | | | | | | | | | | | |
| BB_JTAG_TDO | BB_JTAG_TDO - | 2C2 7B1 7C2 | | | | | | | | | | | | | |
| BB_JTAG_TMS | BB_JTAG_TMS - | 2C3 7B1 7C2 | | | | | | | | | | | | | |
| BB_JTAG_TRST_N | BB_JTAG_TRST_N - | 2C3 7B1 7C2 | | | | | | | | | | | | | |
| BB_PCM_CLK | BB_PCM_CLK - | 2B8 7C5 7C8 | | | | | | | | | | | | | |
| BB_PCM_RX | BB_PCM_RX - | 2B8 7B5 7C8 | | | | | | | | | | | | | |
| BB_PCM_SYNC | BB_PCM_SYNC - | 2B8 7C5 7C8 | | | | | | | | | | | | | |
| BB_PCM_TX | BB_PCM_TX - | 2B8 7C5 7C8 | | | | | | | | | | | | | |
| BB_PDM | BB_PDM - @radio_mlb.lib.RADIO_MLB | 2B6 | | | | | | | | | | | | | |
| BB_PDM_FILT | BB_PDM_FILT - | 2B5 | | | | | | | | | | | | | |
| BB_RST_N | BB_RST_N - @radio_mlb.lib.RADIO_MLB | 2C5 7B2 7D8 | | | | | | | | | | | | | |
| BB_UART_CTS_N | BB_UART_CTS_N - | 2B8 7A2 7C2 7C8 | | | | | | | | | | | | | |
| BB_UART_RTS_N | BB_UART_RTS_N - | 2B8 7A2 7C2 7C8 | | | | | | | | | | | | | |
| BB_UART_RXD | BB_UART_RXD - | 2B8 2C6 7A2 7C2 7C8 | | | | | | | | | | | | | |
| BB_UART_TXD | BB_UART_TXD - | 2B8 7B2 7C2 7C8 | | | | | | | | | | | | | |
| BB_USB_DATA_N | BB_USB_DATA_N - | 2B4 2C3 7B2 7C4 7C8 | | | | | | | | | | | | | |
| BB_USB_DATA_P | BB_USB_DATA_P - | 2B4 2C3 7B4 7C4 7C8 | | | | | | | | | | | | | |
| BB_USB_REXT | BB_USB_REXT - | 2C3 | | | | | | | | | | | | | |
| BB_USB_VBUS | BB_USB_VBUS - | 2C3 7A1 7C4 7C8 | | | | | | | | | | | | | |
| BOOT_FROM_ROM | BOOT_FROM_ROM - | 2A5 2B6 | | | | | | | | | | | | | |
| BT_PCM_CLK | BT_PCM_CLK - | 7B8 10C5 | | | | | | | | | | | | | |
| BT_PCM_IN | BT_PCM_IN - | 7B8 10C5 | | | | | | | | | | | | | |
| BT_PCM_OUT | BT_PCM_OUT - | 7B8 10A3 10C5 | | | | | | | | | | | | | |
| BT_PCM_SYNC | BT_PCM_SYNC - | 7B8 10C5 | | | | | | | | | | | | | |
| BT_RESET_N | BT_RESET_N - | 7B8 7C2 10A5 10C5 | | | | | | | | | | | | | |

| | | | | | | | | | | | |
|-----------------------|---------------------------------------|-------------------|--|---|--|---|--|---|--|---|--|
| 6 | | 5 | | 4 | | 3 | | 2 | | 1 | |
| BT_UART_CTS_N | BT_UART_CTS_N - | 7B8 7C2 10C5 | | | | | | | | | |
| BT_UART_RTS_N | @radio_mlb.lib.RADIO_MLB | 7B8 7C2 10C5 | | | | | | | | | |
| BT_UART_RXD | @radio_mlb.lib.RADIO_MLB | 7B8 7C2 10C5 | | | | | | | | | |
| BT_UART_TXD | @radio_mlb.lib.RADIO_MLB | 7B8 7C2 10C5 | | | | | | | | | |
| BT_WAKE | @radio_mlb.lib.RADIO_MLB | 7B8 7C2 10A4 10C5 | | | | | | | | | |
| CELLULAR_RF_ANT | CELLULAR_RF_ANT - | 9D1 | | | | | | | | | |
| CELLULAR_RF_ANT_MATCH | CELLULAR_RF_ANT_MATCH - | 9D2 | | | | | | | | | |
| CELLULAR_RF_MATCH | CELLULAR_RF_MATCH - | 9C2 | | | | | | | | | |
| CELLULAR_RF_SWITCH | CELLULAR_RF_SWITCH - | 9C2 | | | | | | | | | |
| CELL_RF_ANT_MATCH_INT | CELL_RF_ANT_MATCH_INT - | 9D2 | | | | | | | | | |
| CLK32K_AP | CLK32K_AP - | 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 - | 6D3 | | | | | | | | | |
| DDR_A<12..0> | DDR_A<12..0> - | 3B8 3C4 | | | | | | | | | |
| DDR_A<15..14> | DDR_A<15..14> - | 3C4 3C8 | | | | | | | | | |
| DDR_CAS_N | DDR_CAS_N - | 3C4 3C8 | | | | | | | | | |
| DDR_CKE0 | DDR_CKE0 - @radio_mlb.lib.RADIO_MLB | 3C4 3C6 | | | | | | | | | |
| DDR_CLK_M | DDR_CLK_M - | 3C4 3C8 | | | | | | | | | |
| DDR_CLK_P | DDR_CLK_P - | 3C4 3C8 | | | | | | | | | |
| DDR_CS0_N | DDR_CS0_N - | 3C4 3C6 | | | | | | | | | |
| DDR_DQ<15..0> | DDR_DQ<15..0> - | 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 - | 3C4 3C8 | | | | | | | | | |
| DEBUG_WE_N | DEBUG_WE_N - @radio_mlb.lib.RADIO_MLB | 3C4 3C8 | | | | | | | | | |
| DEBUG_GPIO_LED | DEBUG_GPIO_LED - | 2C6 7C4 | | | | | | | | | |
| DEBUG_RST_N | DEBUG_RST_N - | 2C5 7C4 | | | | | | | | | |
| DIV_800_FIL_OUT_N | DIV_800_FIL_OUT_N - | 8A4 | | | | | | | | | |
| DIV_800_FIL_OUT_P | DIV_800_FIL_OUT_P - | 8A4 | | | | | | | | | |
| DIV_1900_FIL_OUT_N | DIV_1900_FIL_OUT_N - | 8B4 | | | | | | | | | |
| DIV_1900_FIL_OUT_P | DIV_1900_FIL_OUT_P - | 8B4 | | | | | | | | | |
| DIV_GPS_ANTENNA | DIV_GPS_ANTENNA - | 8B6 | | | | | | | | | |
| DIV_GPS_ANT_FEED | DIV_GPS_ANT_FEED - | 8D8 | | | | | | | | | |
| DIV_GPS_ANT_MAT | DIV_GPS_ANT_MAT - | 8D7 | | | | | | | | | |
| DIV_GPS_ANT_MATCH | DIV_GPS_ANT_MATCH - | 8B7 | | | | | | | | | |
| DIV_GPS_COAX_IN | DIV_GPS_COAX_IN - | 8D7 | | | | | | | | | |
| DIV_GPS_COAX_OUT | DIV_GPS_COAX_OUT - | 8B8 | | | | | | | | | |
| DIV_GPS_RF_SWITCH | DIV_GPS_RF_SWITCH - | 8B6 | | | | | | | | | |
| DNC4 | DNC4 - @radio_mlb.lib.RADIO_MLB | 9A2 | | | | | | | | | |
| DRX_800_N | DRX_800_N - | 8A2 9A3 | | | | | | | | | |
| DRX_800_P | DRX_800_P - | 8A2 9A3 | | | | | | | | | |
| DRX_1900_N | DRX_1900_N - | 8B2 9A3 | | | | | | | | | |
| DRX_1900_P | DRX_1900_P - | 8B2 9A3 | | | | | | | | | |
| EBI1_CAL | EBI1_CAL - @radio_mlb.lib.RADIO_MLB | 3C8 | | | | | | | | | |
| EXT_GPS_LNA_EN | EXT_GPS_LNA_EN - | 2B6 8C6 | | | | | | | | | |
| FAILED_BOOT | FAILED_BOOT - | 2B6 | | | | | | | | | |
| GAS_GAUGE | GAS_GAUGE - | 7A6 7D8 | | | | | | | | | |
| GAS_GAUGE_CONN | GAS_GAUGE_CONN - | 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 - | 8C5 | | | | | | | | | |
| GPS_EXT_LNA_OUT | GPS_EXT_LNA_OUT - | 8C5 | | | | | | | | | |
| GPS_FILT_IN | GPS_FILT_IN - | 8C4 | | | | | | | | | |
| GPS_FILT_OUT | GPS_FILT_OUT - | 8C6 | | | | | | | | | |
| GPS_IN_F_MATCH_N | GPS_IN_F_MATCH_N - | 8C3 | | | | | | | | | |
| GPS_IN_F_MATCH_P | GPS_IN_F_MATCH_P - | 8C3 | | | | | | | | | |
| GPS_IN_F_N | GPS_IN_F_N - | 8C3 | | | | | | | | | |
| GPS_IN_F_P | GPS_IN_F_P - | 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 - | 7B8 10C5 | | | | | | | | | |
| HOST_WAKE_WLAN | HOST_WAKE_WLAN - | 7B8 10C5 | | | | | | | | | |
| HSIC_CAL | HSIC_CAL - @radio_mlb.lib.RADIO_MLB | 2C2 | | | | | | | | | |
| IPC_GPIO2 | IPC_GPIO2 - | 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 | | | | | | | | | |
| LI | LI - @radio_mlb.lib.RADIO_MLB | 6B2 | | | | | | | | | |

| | | | | | | | | | | | |
|--------------------|-------------------------------------|---------------------|--|---|--|---|--|---|--|--|--|
| 5 | | 4 | | 3 | | 2 | | 1 | | | |
| 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> - | 3B2 3B6 | | | | | | | | | |
| NAND_CE_N | NAND_CE_N - | 3C4 | | | | | | | | | |
| NAND_CLE | NAND_CLE - @radio_mlb.lib.RADIO_MLB | 3B4 3B8 | | | | | | | | | |
| NAND_CS1_N | NAND_CS1_N - | 3B8 3C6 | | | | | | | | | |
| NAND_CE_N | NAND_CE_N - | 3B4 3B8 | | | | | | | | | |
| NAND_R_B_N | NAND_R_B_N - | 2C6 3B1 | | | | | | | | | |
| NAND_WE_N | NAND_WE_N - | 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 - | 10A7 | | | | | | | | | |
| PA_CPLD | PA_CPLD - @radio_mlb.lib.RADIO_MLB | 9A1 9B5 | | | | | | | | | |
| PA_CPLD_BLK | PA_CPLD_BLK - | 9B5 | | | | | | | | | |
| PA_ON_800 | PA_ON_800 - | 2B6 9B7 | | | | | | | | | |
| PA_ON_1900 | PA_ON_1900 - | 2B6 9C8 | | | | | | | | | |
| PA_ON_1900_IN | PA_ON_1900_IN - | 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 - | 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 - | 2C5 5B4 7A1 | | | | | | | | | |
| PS_HOLD | PS_HOLD - @radio_mlb.lib.RADIO_MLB | 2C4 5B6 | | | | | | | | | |
| PS_HOLD_NF | PS_HOLD_NF - | 2C3 | | | | | | | | | |
| RADIO_ON_N | RADIO_ON_N - | 5B6 7B2 7C4 7D8 | | | | | | | | | |
| REF_BYP | REF_BYP - @radio_mlb.lib.RADIO_MLB | 6C5 | | | | | | | | | |
| RESET_DET_N | RESET_DET_N - | 2C6 7B4 7D8 | | | | | | | | | |
| RESET_PMU_N | RESET_PMU_N - | 5A8 7B2 7C4 7D3 7D8 | | | | | | | | | |
| RESET_PMU_N_BUFFER | RESET_PMU_N_BUFFER - | 5B6 | | | | | | | | | |
| RESET_PMU_N_FET | RESET_PMU_N_FET - | 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> - | 2A8 2C6 | | | | | | | | | |
| REV_ID<1> | REV_ID<1> - | 2A8 2C6 | | | | | | | | | |
| REV_ID<2> | REV_ID<2> - | 2A8 2C6 | | | | | | | | | |
| REV_ID<3> | REV_ID<3> - | 2A8 2C6 | | | | | | | | | |
| REV_ID<4> | REV_ID<4> - | 2A8 2C6 | | | | | | | | | |
| RF_RBIAS | RF_RBIAS - @radio_mlb.lib.RADIO_MLB | 9A2 | | | | | | | | | |
| RF_RESET_N | RF_RESET_N - | 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 - | 9B5 | | | | | | | | | |
| RX_800_BAL_P | RX_800_BAL_P - | 9B4 | | | | | | | | | |
| RX_800_LNA_N | RX_800_LNA_N - | 9B3 | | | | | | | | | |
| RX_800_LNA_P | RX_800_LNA_P - | 9B3 | | | | | | | | | |
| RX_800_TRAP | RX_800_TRAP - | 9B4 | | | | | | | | | |
| RX_1900 | RX_1900 - @radio_mlb.lib.RADIO_MLB | 9A6 9C4 | | | | | | | | | |
| RX_1900_BAL_N | RX_1900_BAL_N - | 9A5 | | | | | | | | | |
| RX_1900_BAL_P | RX_1900_BAL_P - | 9A5 | | | | | | | | | |
| RX_1900_LNA_N | RX_1900_LNA_N - | 9A3 | | | | | | | | | |
| RX_1900_LNA_P | RX_1900_LNA_P - | 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 - | 10C7 | | | | | | | | | |
| SDIO_CMD_XW | SDIO_CMD_XW - | 10C7 | | | | | | | | | |
| SDIO_D0_XW | SDIO_D0_XW - | 10C7 | | | | | | | | | |
| SDIO_D1_XW | SDIO_D1_XW - | 10C7 | | | | | | | | | |
| SDIO_D2_XW | SDIO_D2_XW - | 10C7 | | | | | | | | | |
| SDIO_D3_XW | SDIO_D3_XW - | 10C7 | | | | | | | | | |
| SLEEP_CLK | SLEEP_CLK - | 2C3 5C2 7B5 | | | | | | | | | |
| SSBI_PMIC | SSBI_PMIC - | 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 - | 9C8 | | | | | | | | | |
| TX_800_IN | @radio_mlb.lib.RADIO_MLB | | | | | | | | | | |

| | | | | | |
|--------------------|------------------------------------|-------------------------|--|---|--|
| 3 | | 2 | | 1 | |
| TX_1900 | TX_1900 - @radio_mlb.lib.RADIO_MLB | 9A1 9D8 | | | |
| TX_1900_MATCH | TX_1900_MATCH - | 9D8 | | | |
| VDD_1P3_DA | VDD_1P3_DA - | 4C4 6C7 | | | |
| VDD_1P3_DRXLO | VDD_1P3_DRXLO - | 4C7 6D5 | | | |
| VDD_1P3_GPSDIG | VDD_1P3_GPSDIG - | 4C7 6D4 | | | |
| VDD_1P3_GPSLO | VDD_1P3_GPSLO - | 4C7 6D5 | | | |
| VDD_1P3_GSPSLL | VDD_1P3_GSPSLL - | 4C7 6D7 | | | |
| VDD_1P3_LNA | VDD_1P3_LNA - | 4C7 6D6 | | | |
| VDD_1P3_PDA | VDD_1P3_PDA - | 4C4 6C7 | | | |
| VDD_1P3_PRXLO | VDD_1P3_PRXLO - | 4C7 6D4 | | | |
| VDD_1P3_RDCCO | VDD_1P3_RDCCO - | 4C4 6D6 | | | |
| VDD_1P3_RXPLL | VDD_1P3_RXPLL - | 4C4 6D7 | | | |
| VDD_1P3_SBDIG | VDD_1P3_SBDIG - | 4C7 6C5 | | | |
| VDD_1P3_TDCO | VDD_1P3_TDCO - | 4C4 6C6 | | | |
| VDD_1P3_TXLO | VDD_1P3_TXLO - | 4C4 6C6 | | | |
| VDD_1P3_TXMIX | VDD_1P3_TXMIX - | 4C4 6C5 | | | |
| VDD_1P3_TXPLL | VDD_1P3_TXPLL - | 4C4 6C7 | | | |
| VDD_1P8_XO | VDD_1P8_XO - | 4C7 6B7 | | | |
| VDD_2P2_BIAS | VDD_2P2_BIAS - | 4C7 6A7 | | | |
| VDD_2P2_PDDET | VDD_2P2_PDDET - | 4C4 6B7 | | | |
| VDD_2P2_RDCCO | VDD_2P2_RDCCO - | 4C4 6A7 | | | |
| VDD_2P2_TDCO | VDD_2P2_TDCO - | 4C4 6A7 | | | |
| VDD_A0 | VDD_A0 - @radio_mlb.lib.RADIO_MLB | 4C3 | | | |
| VDD_QFUSE | VDD_QFUSE - | 4C4 7A4 | | | |
| VDD_RF_DIG | VDD_RF_DIG - | 4C7 6B7 | | | |
| VREG_GP_1P2 | VREG_GP_1P2 - | 4C4 6A1 | | | |
| VREG_GP_1P8 | VREG_GP_1P8 - | 4C1 6A1 6B8 | | | |
| VREG_GP_2P05 | VREG_GP_2P05 - | 4C1 6B1 | | | |
| VREG_MPLL | VREG_MPLL - | 4C1 6A1 | | | |
| VREG_MSMC | VREG_MSMC - | 4B1 4B4 6C1 7A4 | | | |
| VREG_MSMC | VREG_MSMC - | 2A5 2A8 2D5 3B1 3C5 3D1 | | | |
| VREG_MSME | VREG_MSME - | 4B4 4C1 5B4 6A7 6B8 6C1 | | | |
| VREG_QFUSE | VREG_QFUSE - | 4C4 6B1 | | | |
| VREG_RF1_1P3 | VREG_RF1_1P3 - | 4C4 6C1 6C8 | | | |
| VREG_RF1_1P3_RX | VREG_RF1_1P3_RX - | 4C4 4C7 6C1 6D8 | | | |
| VREG_RF2_2P2 | VREG_RF2_2P2 - | 4C4 4C7 6B1 6B8 | | | |
| VREG_RFA_2P2 | VREG_RFA_2P2 - | 5C5 6B1 | | | |
| VREG_RF_SW | VREG_RF_SW - | 6B1 8D6 | | | |
| VREG_RF_SW_GPS_LNA | VREG_RF_SW_GPS_LNA - | 8C5 | | | |
| VREG_SDCC1 | VREG_SDCC1 - | 4C1 6A1 | | | |
| VREG_USB_3P075 | VREG_USB_3P075 - | 4C1 6B1 | | | |
| VSW_S1 | VSW_S1 | | | | |



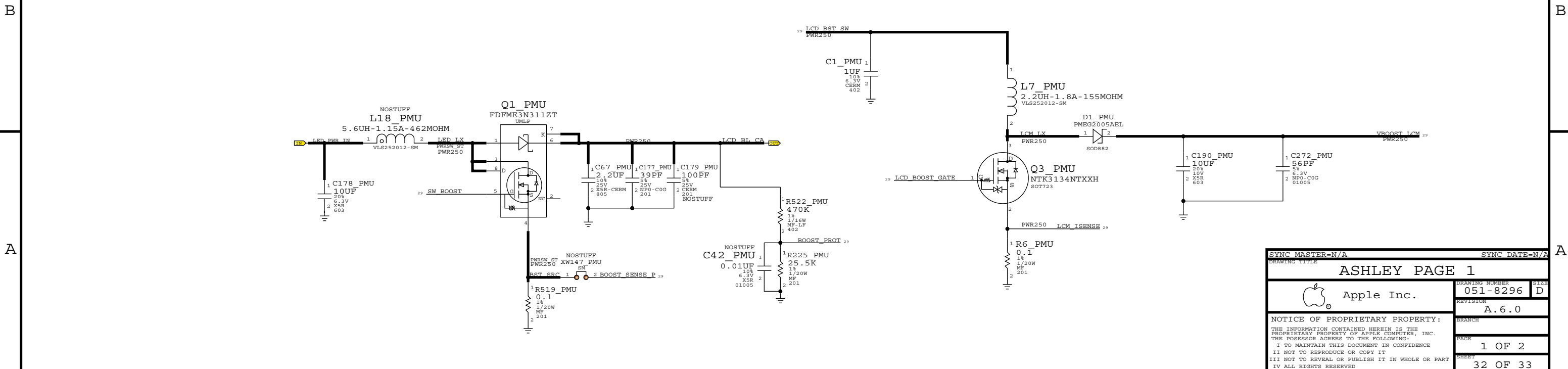
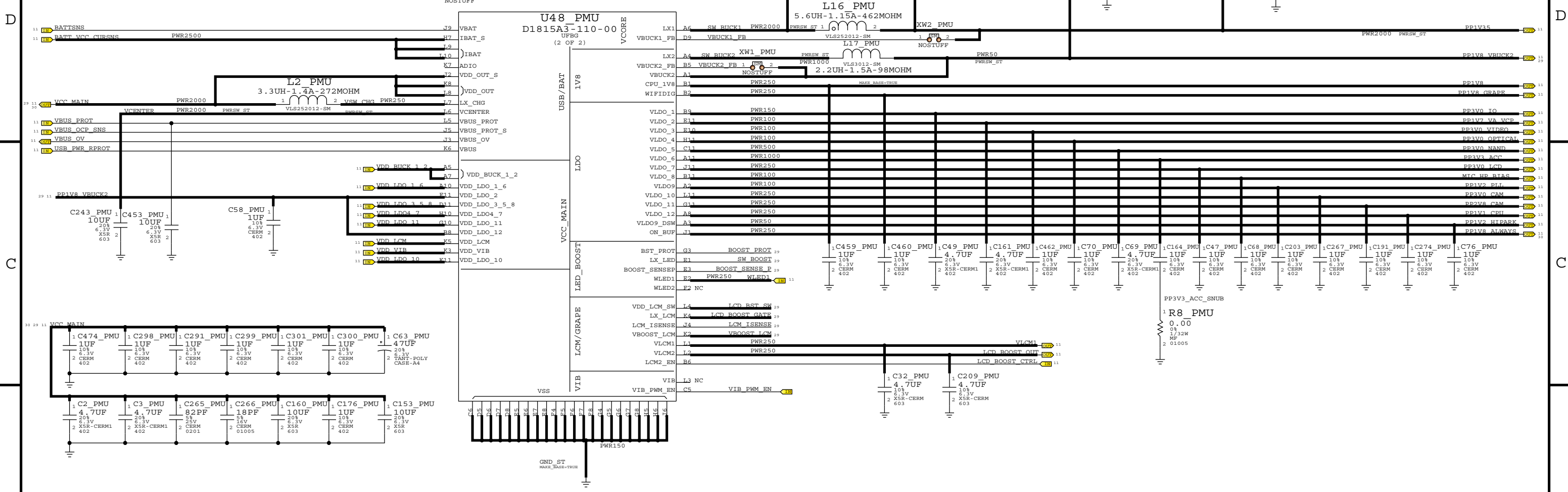
| | | | |
|----------------------|--------------------------|-------------------------|-------------|
| WL_BT_VDDIO_FILT_TCX | @radio_mlb.lib.RADIO_MLB | WL_BT_VDDIO_FILT_TCXO - | 10A7 |
| O | @radio_mlb.lib.RADIO_MLB | | |
| XO_GND | @radio_mlb.lib.RADIO_MLB | XO_GND - | 5C4 5C5 |
| XO_OUT | @radio_mlb.lib.RADIO_MLB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

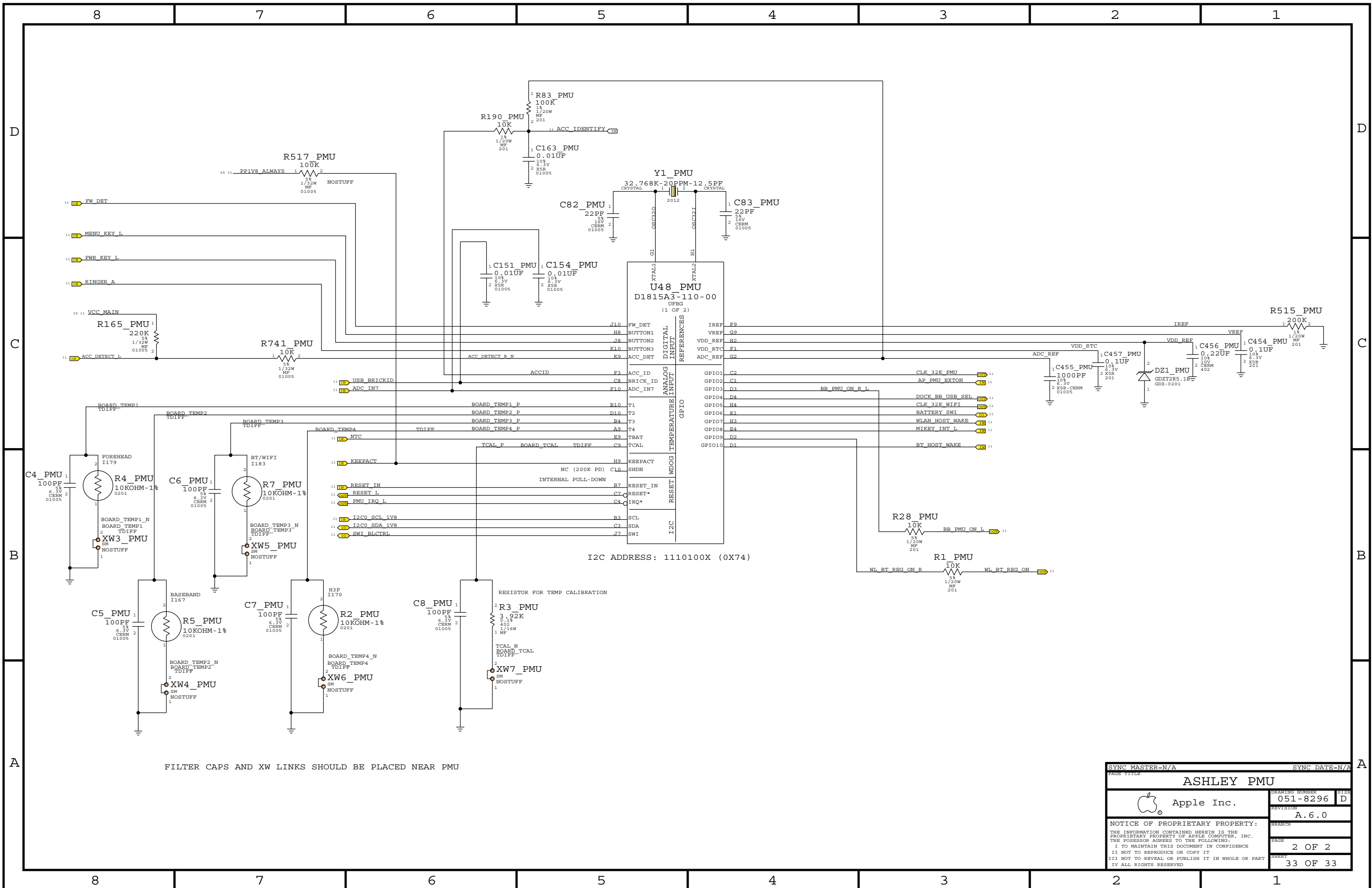
| REV | ECN | DESCRIPTION OF REVISION | CK APPD | DATE |
|-----|-----|-------------------------|---------|------------|
| | | | | 2010-12-22 |

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


LAYOUT: PLACE XW1 AND XW2 REMOTELY BY AP



| | | | |
|---|--|----------------|------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| DRAWING TITLE | | | |
| ASHLEY PAGE 1 | | | |
| Apple Inc. | | DRAWING NUMBER | SIZE |
| | | 051-8296 | D |
| | | REVISION | |
| | | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: | | | |
| THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: | | | |
| I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE | | | |
| II NOT TO REPRODUCE OR COPY IT | | | |
| III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART | | | |
| IV ALL RIGHTS RESERVED | | | |
| PAGE | | SHEET | |
| 1 OF 2 | | 32 OF 33 | |



FILTER CAPS AND XW LINKS SHOULD BE PLACED NEAR PMU

| | | | |
|---|----------------|---------------|-----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| ASHLEY PMU | | | |
|  Apple Inc. | DRAWING NUMBER | 051-8296 | SIZE D |
| | REVISION | A.6.0 | |
| NOTICE OF PROPRIETARY PROPERTY: | | | |
| THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: | | | |
| I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE | | | |
| II NOT TO REPRODUCE OR COPY IT | | | |
| III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART | | | |
| IV ALL RIGHTS RESERVED | | | |
| PAGE | 2 OF 2 | | SHEET |
| | | 33 OF 33 | |