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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.

X200 | MLB-C1

LAST_MODIFIED= Tue Oct 29 15:52:27 2013

| REV | ECN | DESCRIPTION OF REVISION | CK APPD |
|-----|------------|-------------------------|------------|
| A | 0002535199 | PRODUCTION RELEASED | 2014-01-13 |

SCH AND BOARD PART NUMBERS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | BOM OPTION |
|----------|-----|------------------|-------------------------|------------|
| 051-0886 | 1 | SCH_MLB-C1_X200 | SCH1 | |
| 820-4124 | 1 | PCBF_MLB-C1_X200 | PCB1 | |

PDF CSA CONTENTS

SYNC MASTER DATE

| | | | | |
|----|-----|---------------------------------------|--------------------|------------|
| 21 | 27 | SENSOR: ACCEL, COMPASS, GYRO | N/A | N/A |
| 22 | 28 | SENSOR: PROX | J85_MLB_I2/05/12 | |
| 23 | 29 | CAMERA: REAR CONN & FILTERS | N/A | N/A |
| 24 | 30 | CELL: AP INTERFACE & DEBUG CONNECTORS | J85_MLB_I2/05/12 | |
| 25 | 32 | CELL: BASEBAND PMU (1 OF 2) | RADIO_MLB_I2/05/12 | |
| 26 | 33 | CELL: BASEBAND PMU (2 OF 2) | RADIO_MLB_I2/05/12 | |
| 27 | 34 | CELL: BASEBAND (1 OF 2) | RADIO_MLB_I2/05/12 | |
| 28 | 35 | CELL: BASEBAND (2 OF 2) | RADIO_MLB_I2/05/12 | |
| 29 | 36 | CELL: RF TRANSCEIVER (1 OF 2) | RADIO_MLB_I2/05/12 | |
| 30 | 37 | CELL: RF TRANSCEIVER (2 OF 2) | RADIO_MLB_I2/05/12 | |
| 31 | 38 | CELL: RX MATCHING | RADIO_MLB_I2/05/12 | |
| 32 | 39 | CELL: RF TRANSCEIVER (3 OF 4) | RADIO_MLB_I2/05/12 | |
| 33 | 40 | CELL: PENTABAND PA | RADIO_MLB_I2/05/12 | |
| 34 | 41 | CELL: BAND 2/3 PAD | RADIO_MLB_I2/05/12 | |
| 35 | 42 | CELL: BAND 7/20 PAD | RADIO_MLB_I2/05/12 | |
| 36 | 43 | CELL: BAND 5/8 PAD | RADIO_MLB_I2/05/12 | |
| 37 | 44 | CELL: 2G PA | RADIO_MLB_I2/05/12 | |
| 38 | 45 | CELL: PA DCDC CONVERTER | RADIO_MLB_I2/05/12 | |
| 39 | 46 | CELL: ASM AND HB LTE FRONT-END | RADIO_MLB_I2/05/12 | |
| 40 | 47 | CELL: RX DIVERSITY | RADIO_MLB_I2/05/12 | |
| 41 | 48 | CELL: GPS | RADIO_MLB_I2/05/12 | |
| 42 | 49 | CELL: ANTENNA FEEDS | RADIO_MLB_I2/05/12 | |
| 43 | 57 | IO: FILTERS & HOTBAR CONN | N/A | 04/18/2011 |
| 44 | 58 | WIFI/BT: MODULE | WIFI_DEV05/20/2013 | |
| 45 | 75 | POWER: BATTERY CONNECTOR | N/A | N/A |
| 46 | 81 | PMU: ANYA PAGE 1 | J72_MLB_I1/26/2012 | |
| 47 | 82 | PMU: ANYA PAGE 2 | J85_MLB_I2/03/2012 | |
| 48 | 83 | PMU: ANYA PAGE 3 | J72_MLB_I1/26/2012 | |
| 49 | 84 | PMU: ANYA PAGE 4 | J72_MLB_I1/26/2012 | |
| 50 | 85 | POWER: PPIV8_SW | J85_MLB_I2/05/2012 | |
| 51 | 90 | SEP: EEPROM & SOC DEBUG | J72_MLB_I1/26/2012 | |
| 52 | 93 | TEST: TP/HOLES/FIDUCIALS | J85_MLB_I2/03/12 | |
| 53 | 94 | TEST: EE TP/PP | J72_MLB_I1/26/2012 | |
| 54 | 121 | POWER: ALIASES | J72_MLB_I1/26/2012 | |

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SYNC MASTER DATE

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

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| SCH, MLB-C1, X200 | 051-0886 | D |
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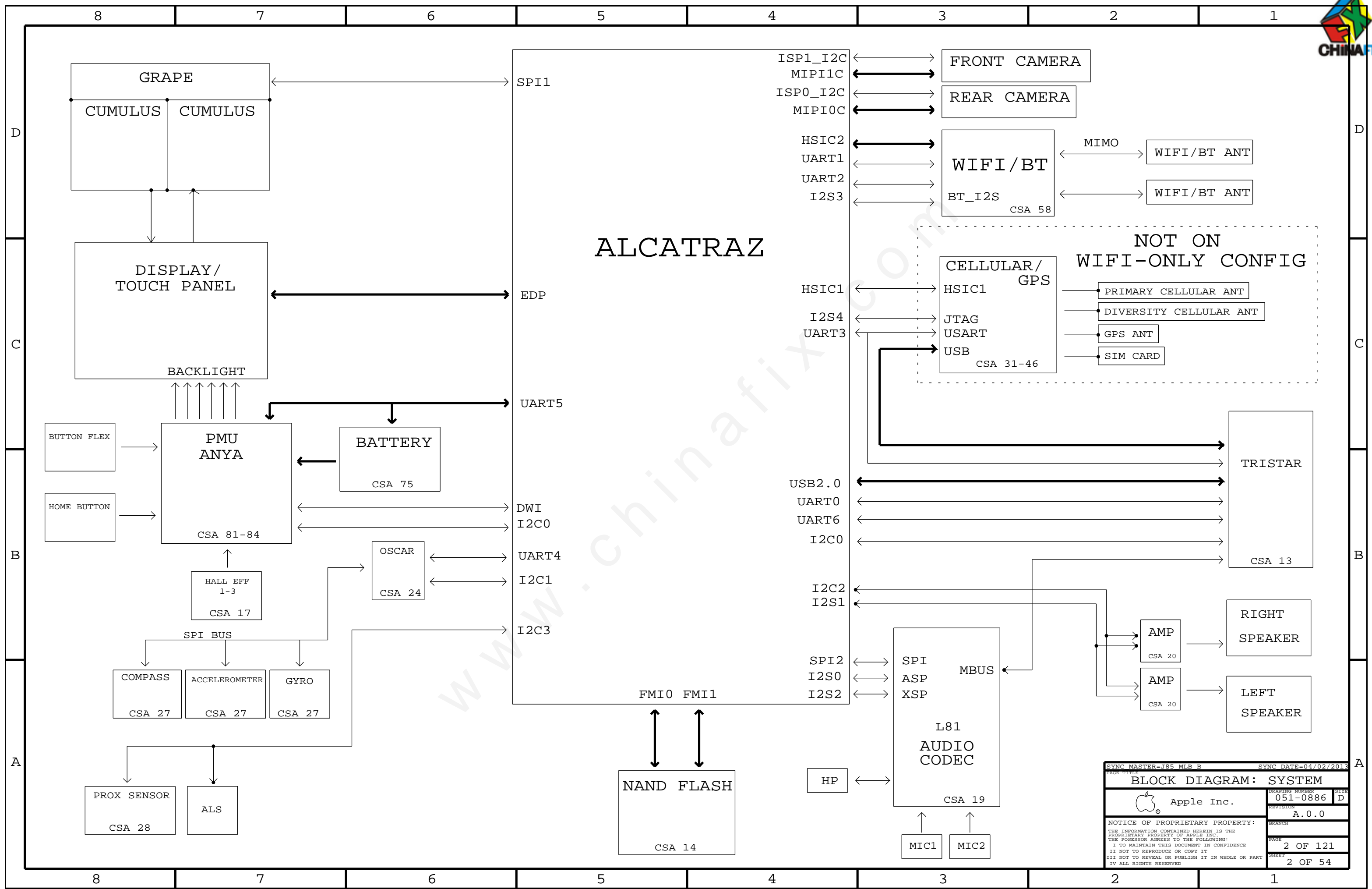
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Page Notes

Power aliases required by this page:
(NONE)

Signal aliases required by this page:
(NONE)

BOM options provided by this page:

BOM OPTIONS

COMMON
ALTERNATE
16GB_PROD
32GB_PROD
64GB_PROD
128GB_PROD
DEVELOPMENT_JTAG_TAP
JTAG_DAP
MLB (WDOG TO PMU)

WIFI BOM OPTIONS

ANDGATE_T1
FERRITE_T1
FERRITE_IDK

| BOM GROUP | BOM OPTIONS |
|-----------|-------------------|
| BASIC | COMMON, ALTERNATE |

SOC

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

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

PMU

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

FLASH CONFIGURATIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | BOM OPTION |
|----------|-----|-----------------------------------|-------------------------|------------|
| 335S0921 | 1 | TOS, 19NM, PPN1.5, C, DDP, 16GB | U1400 | 16GB |
| 335S0922 | 1 | TOS, 19NM, PPN1.5, C, QDP, 32GB | U1400 | 32GB |
| 335S0923 | 1 | TOS, 19NM, PPN1.5, C, ODP, 64GB | U1400 | 64GB |
| 335S0929 | 1 | TOS, 19NM, PPN1.5, C, 12DP, 64GB | U1400 | 96GB |
| 335S0924 | 1 | TOS, 19NM, PPN1.5, C, 16DP, 128GB | U1400 | 128GB |

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

U2200

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | BOM OPTION |
|----------|-----|--|-------------------------|------------|
| 353S4272 | 1 | IC, SIO/SAP1421V, PMU SW, (SEESFET1), 4A, TQFN | U2200 | |

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

4.3UF CAP

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|-------------|---------------------------|------------|-------------------|----------------|
| 138S0702 | 138S0657 | | C1009, C1015, ... | RDAR #13988471 |

WIFI

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

MECHANICAL PARTS

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

BARCODE LABEL/EEEE CODES

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

GYRO

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

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

ACCEL

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|----------|-----|---------------------------------------|-------------------------|----------|------------|
| 338S1163 | 1 | IC, ACCEL, 3-AXIS, DIG, BMA282, LGA14 | U2700 | CRITICAL | |

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|-------------|---------------------------|------------|---------|-----------|
| | | | | |

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

SYNC MASTER=J72_MLB_C SYNC DATE=11/26/2012

BOM TABLES

Apple Inc.

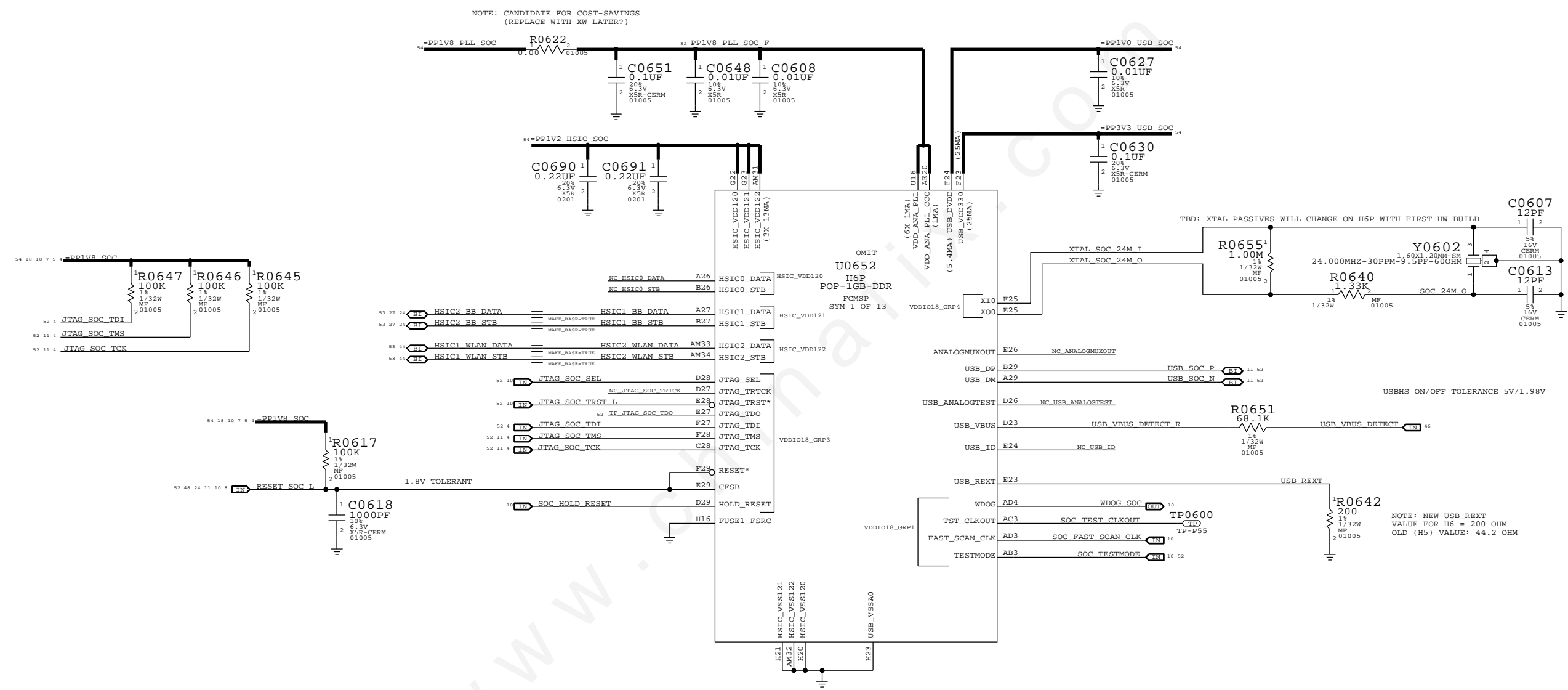
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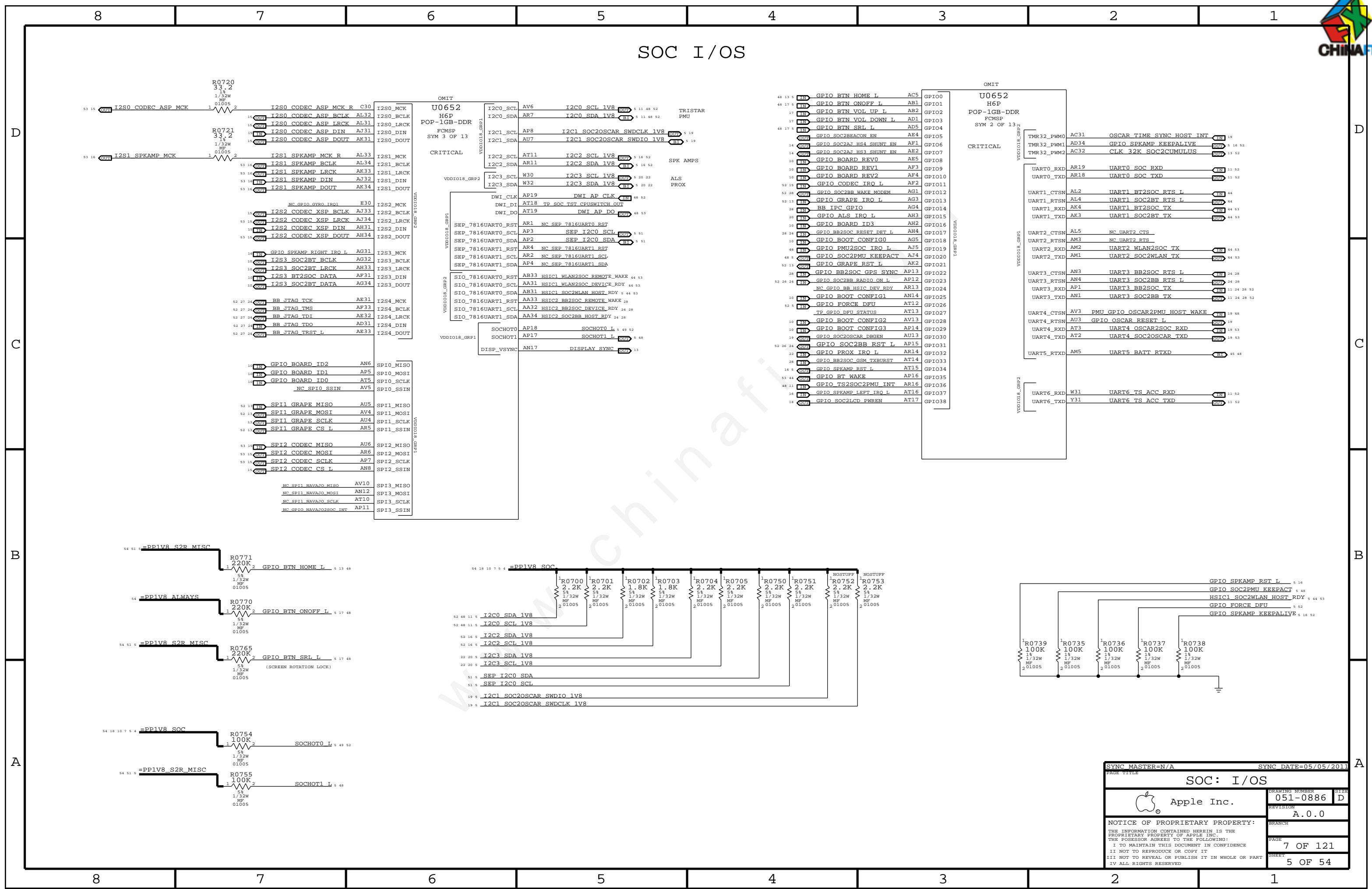
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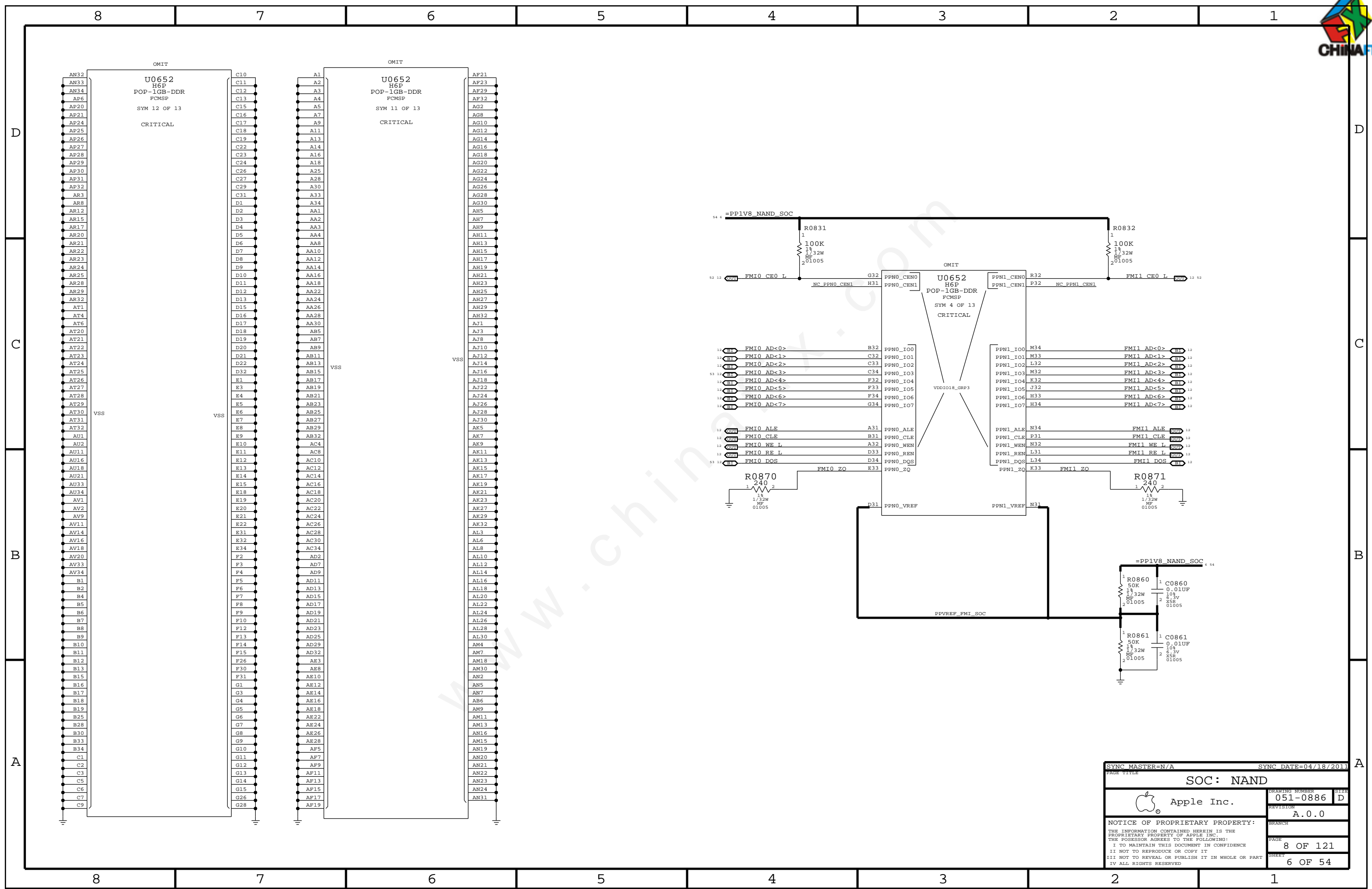
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SOC I/OS

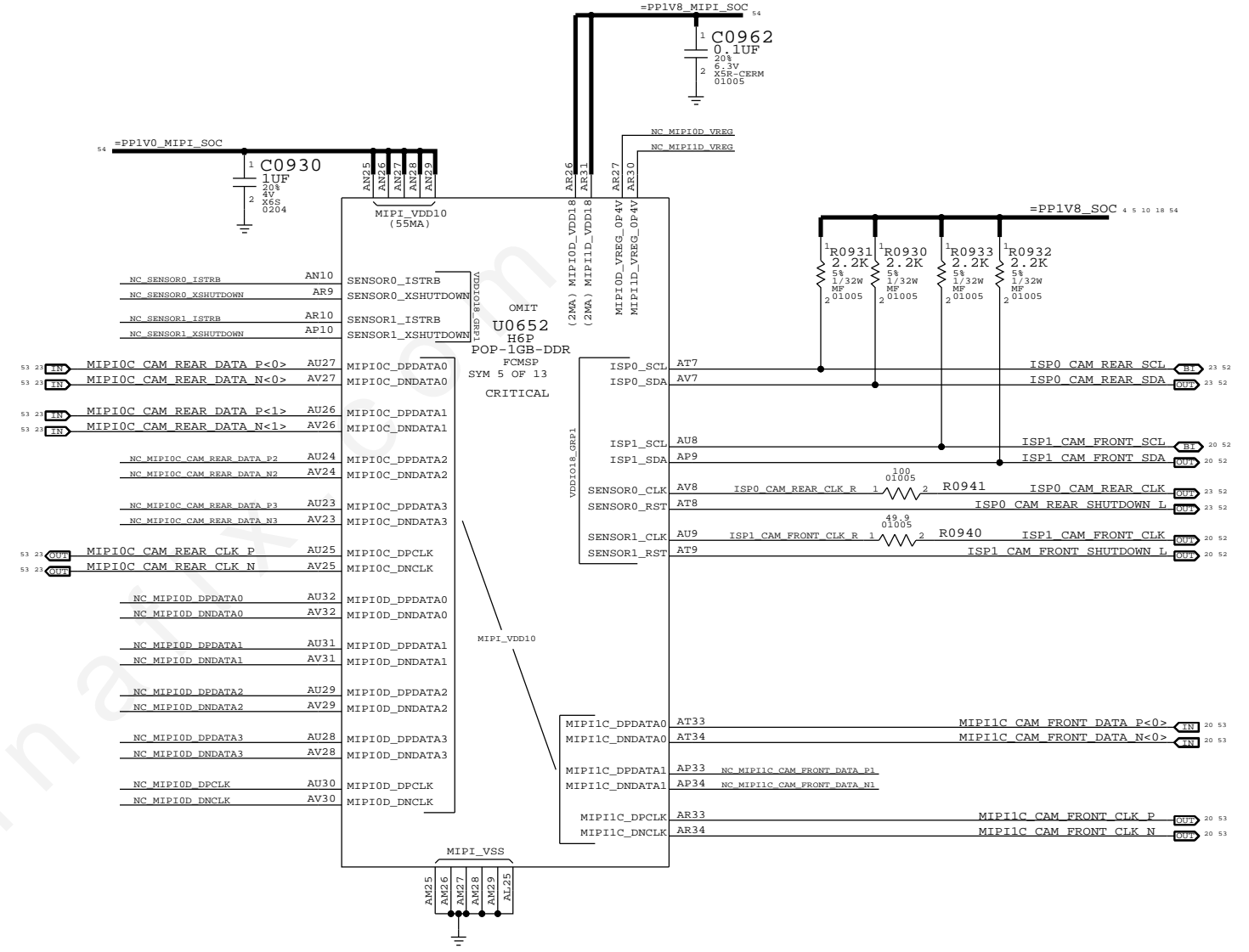
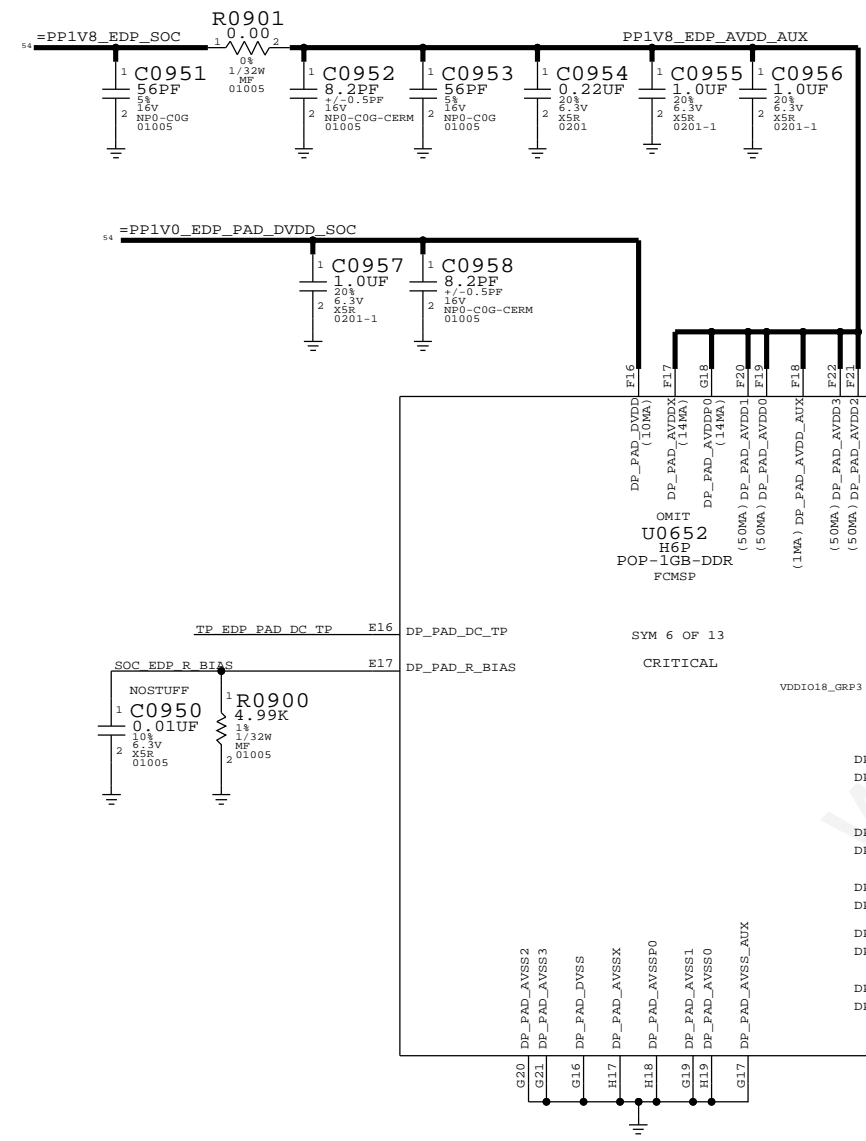


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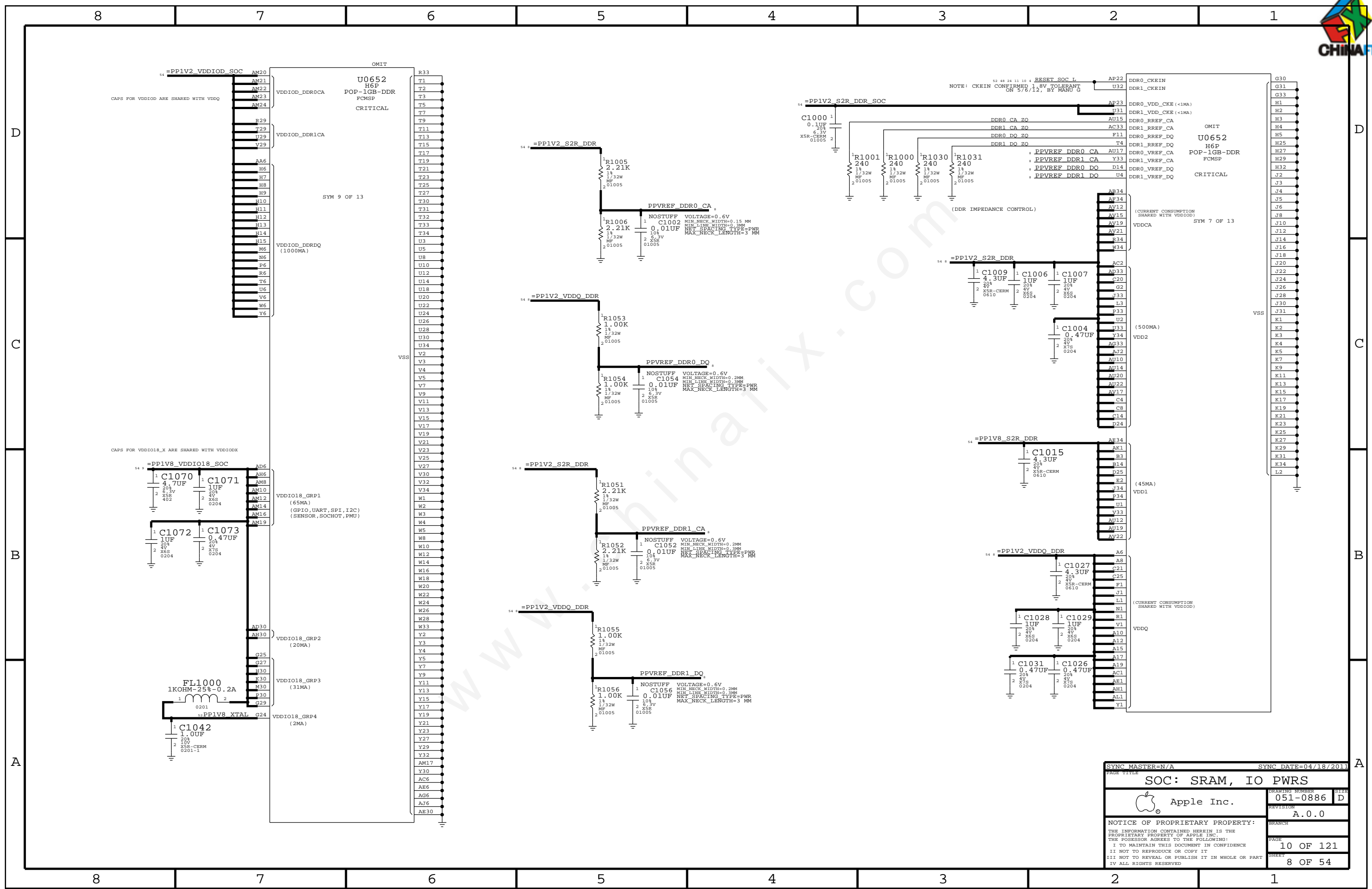


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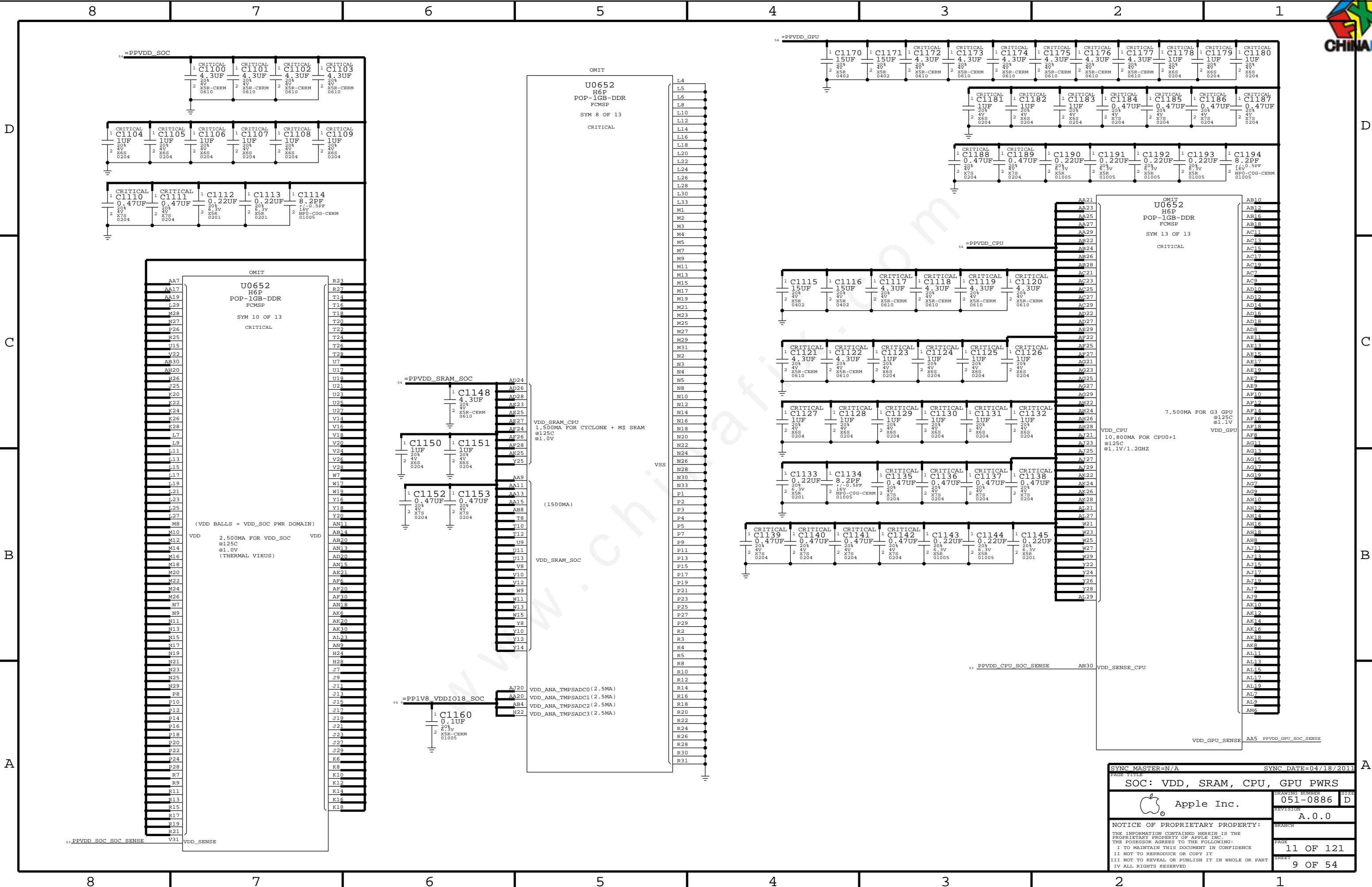
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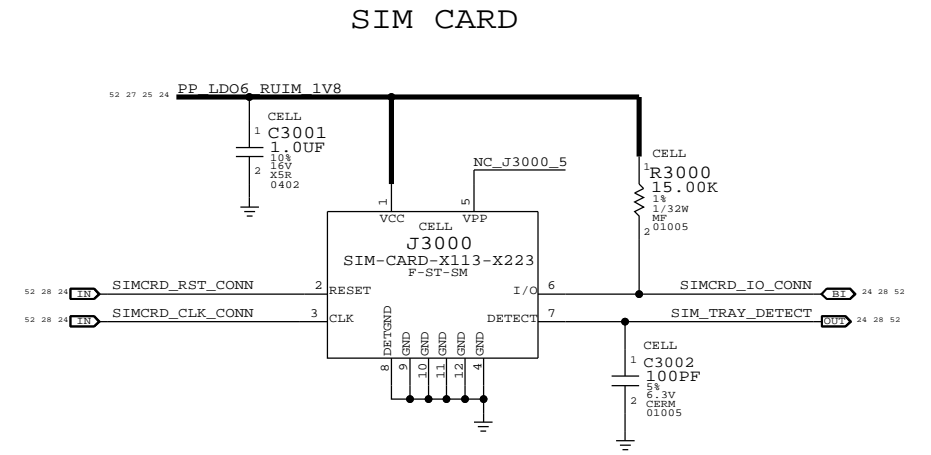
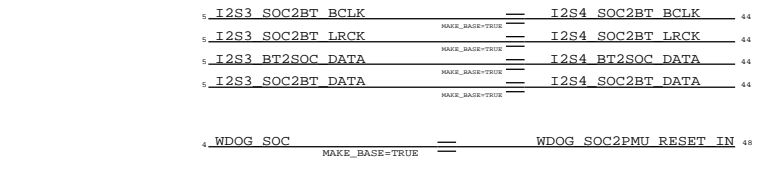
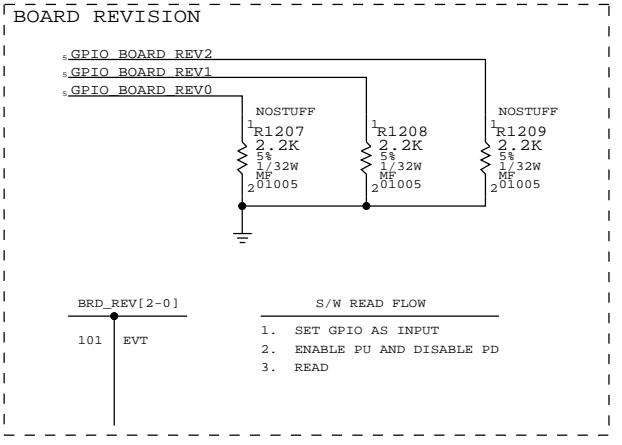
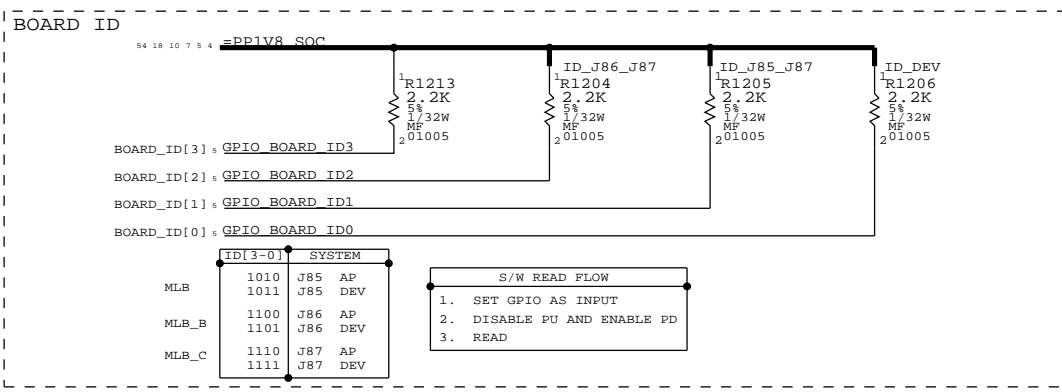
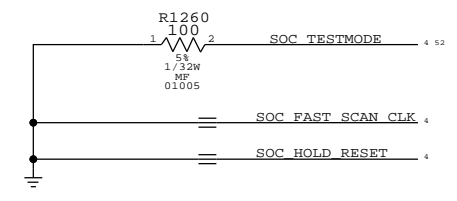
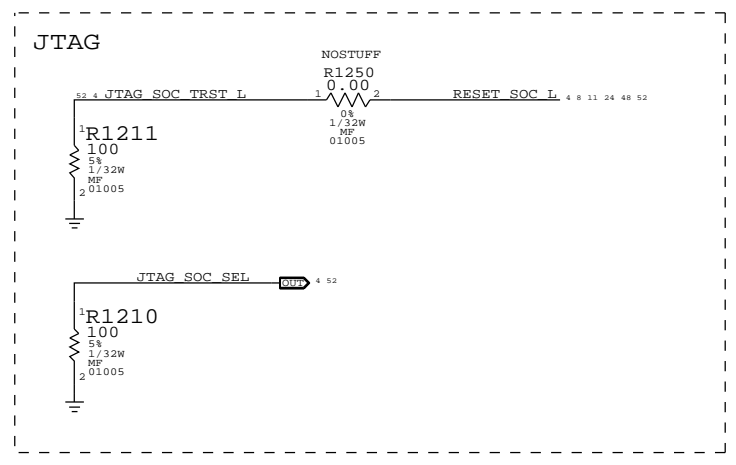
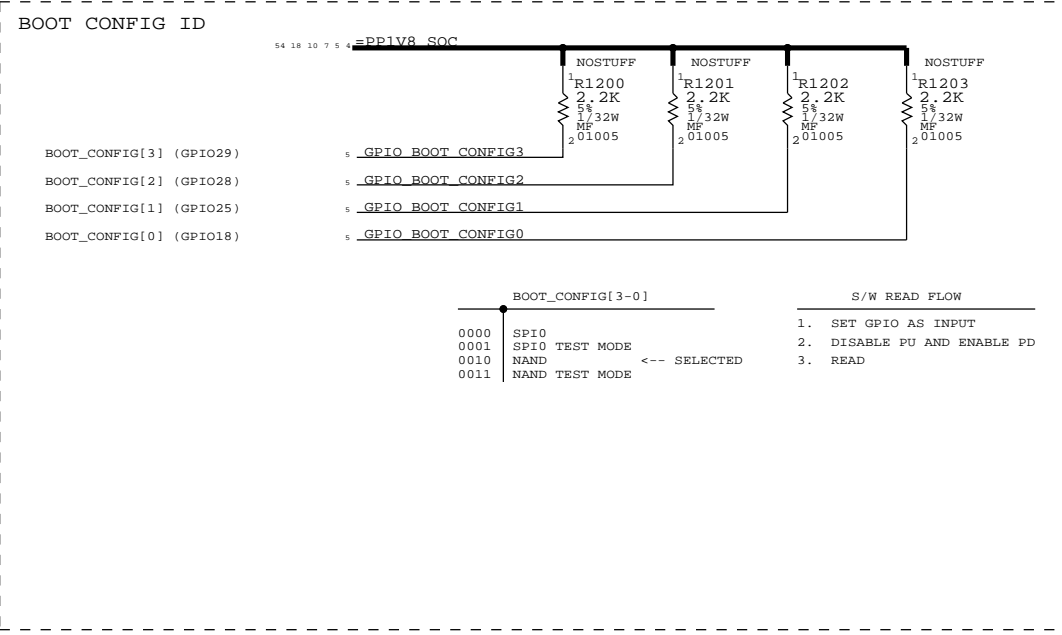
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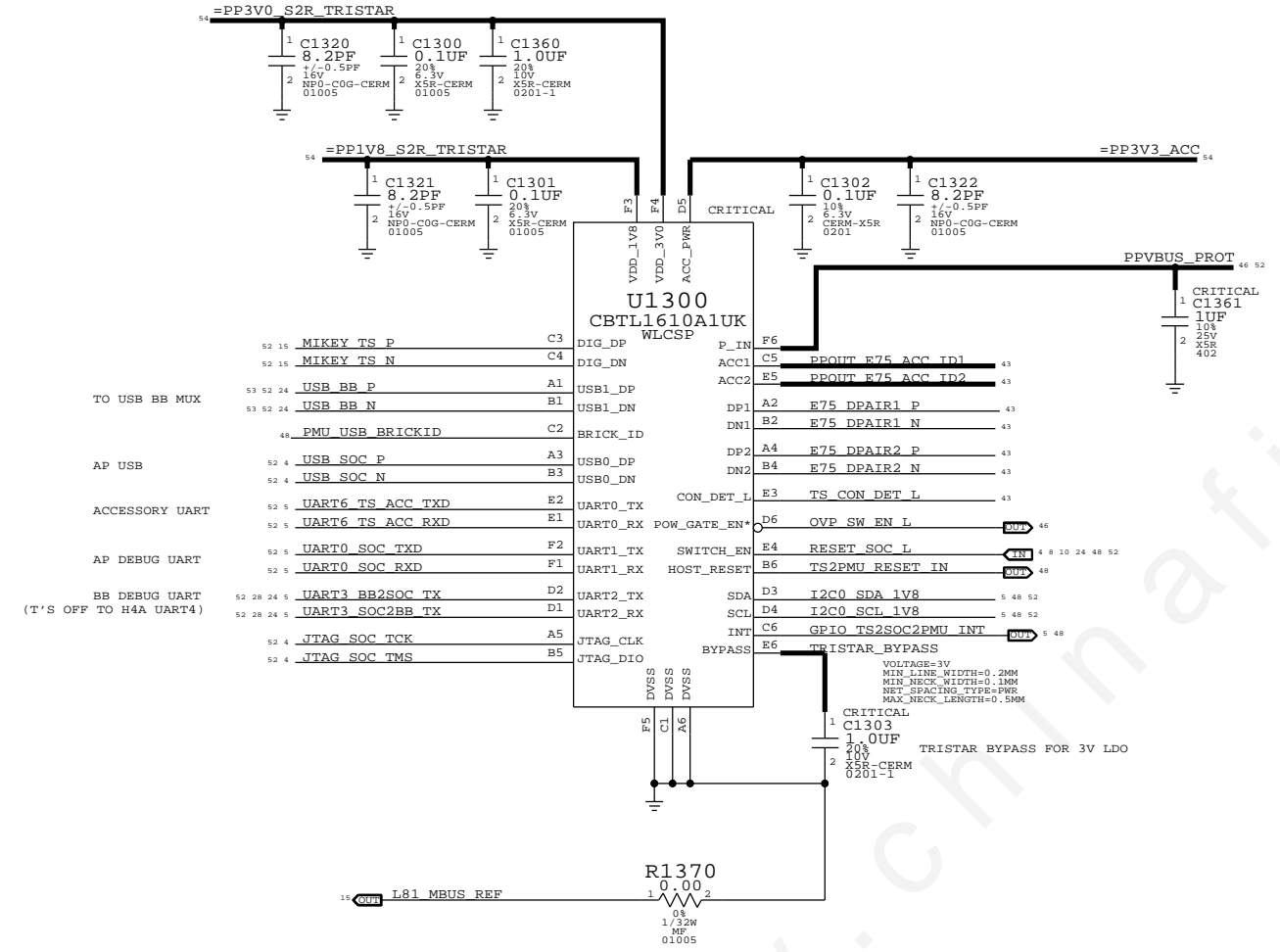
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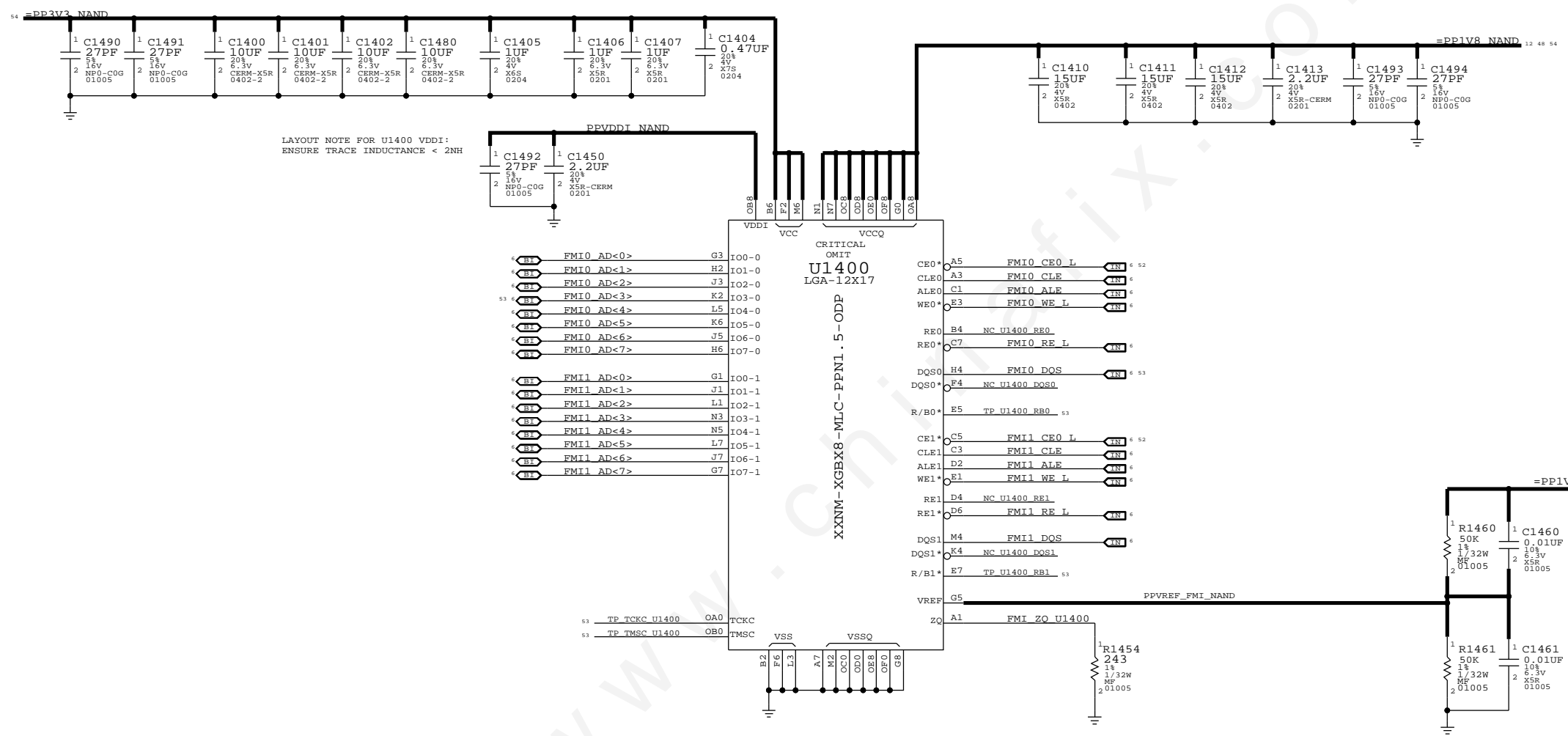


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 998-5855 = TRISTAR 2, TC
 343S0639 = TRISTAR 2, A0
 343S0614 = TRISTAR 1

TRISTAR



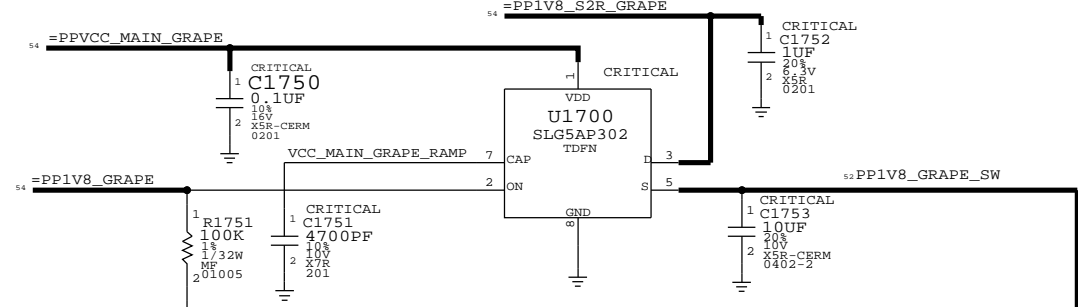
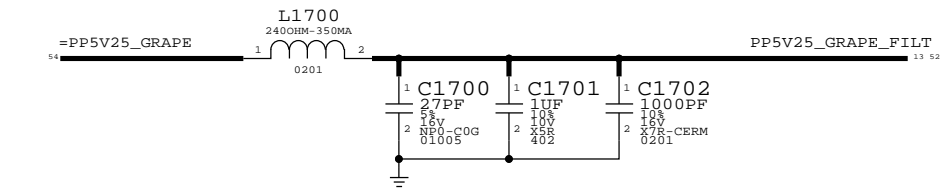
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| | | PAGE | 13 OF 121 |
| | | SHEET | 11 OF 54 |



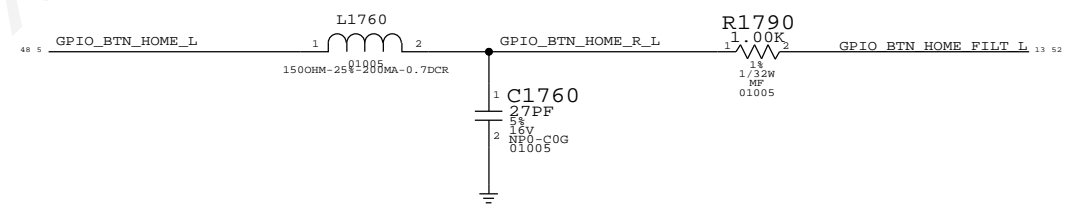
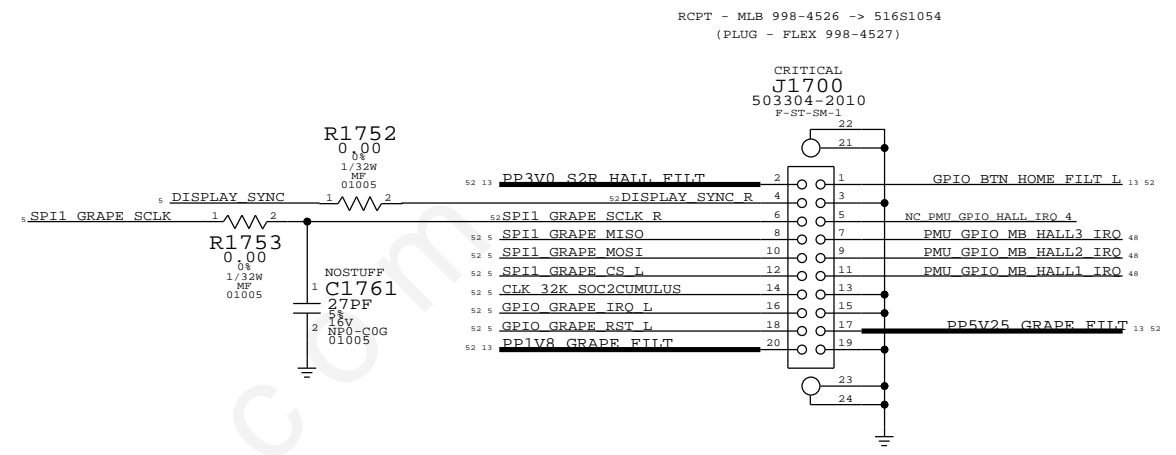
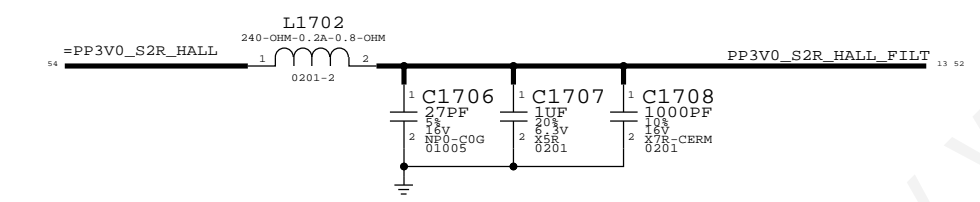
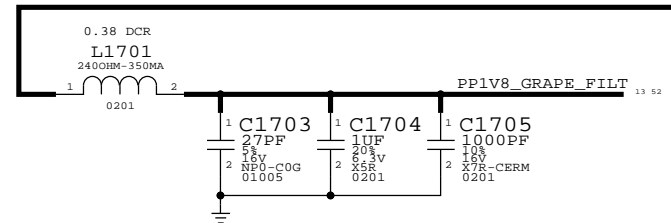
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| SYNC MASTER=MLB | | SYNC DATE=05/04/2012 | |
| NAND STORAGE | | | |
| Apple Inc. | | DRAWING NUMBER | 051-0886 |
| | | REVISION | A.0.0 |
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| | | PAGE | 14 OF 121 |
| | | SHEET | 12 OF 54 |



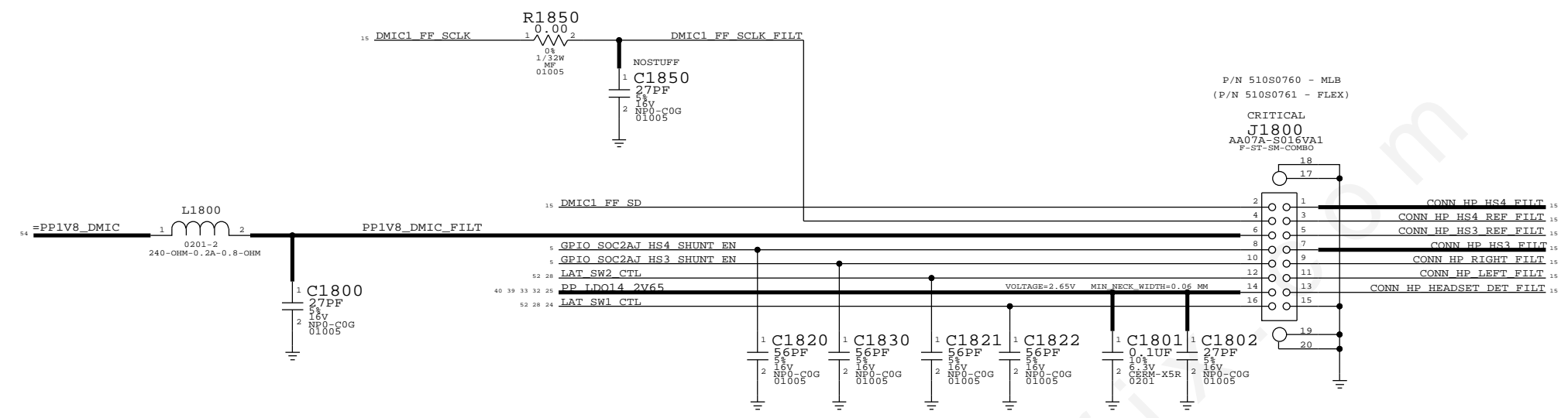
TOUCH SUBSYSTEM



LAYOUT NOTE:
PUT THERMAL VIAS AROUND U2200 IN CASE OF SHORTED CONDITION



| | | | |
|---|----------------|----------------------|-------------------|
| SYNC MASTER=N/A | | SYNC DATE=06/21/2010 | |
| PAGE TITLE TOUCH: SUPPORT CKT & CONN | | | |
| Apple Inc. | DRAWING NUMBER | 051-0886 | SIZE D |
| | REVISION | A.0.0 | BRANCH |
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| | | | SHEET 13 OF 54 |

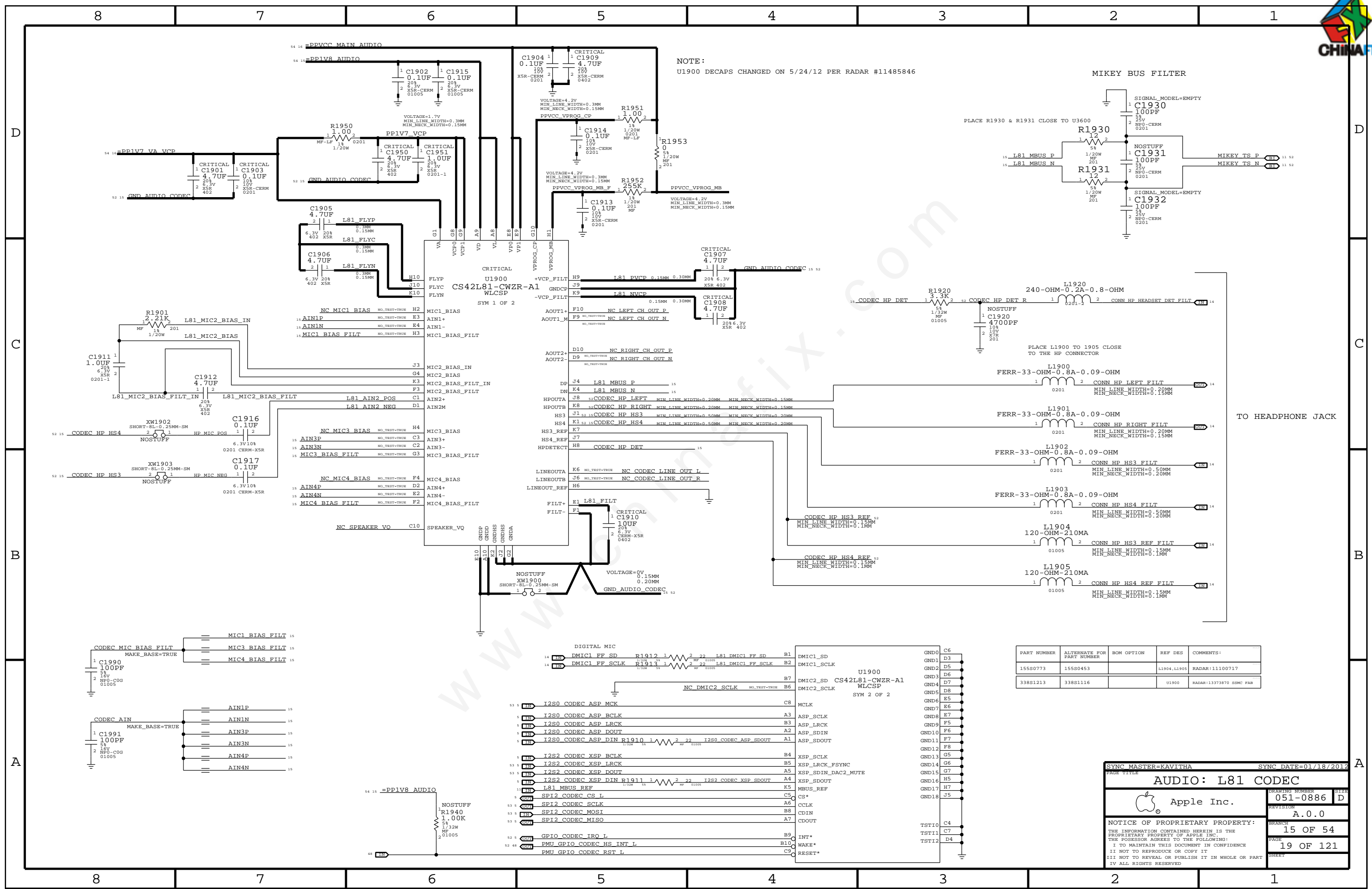


P/N 510S0760 - MLB
(P/N 510S0761 - FLEX)
CRITICAL
J1800
AA07A-S016VA1
F-ST-SM-COMBO

AUDIO_JACK_FLEX RET2
AUDIO_JACK_FLEX MIC1
AUDIO_JACK_FLEX MIC2
AUDIO_JACK_FLEX RET1

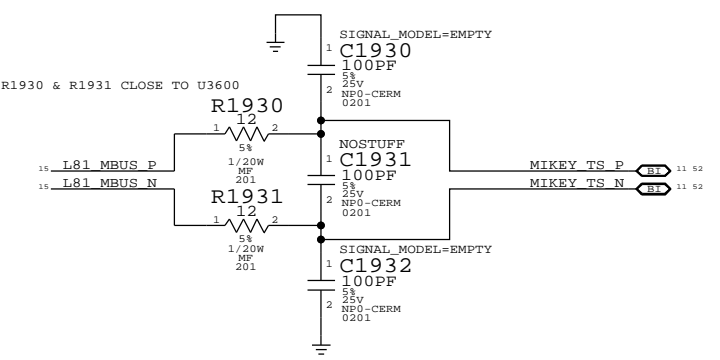
PER DAVE BREECE

| | | | |
|---|--|----------------------|-----------|
| SYNC MASTER=N/A | | SYNC DATE=03/31/2011 | |
| AUDIO: HP FLEX CONN | | | |
| Apple Inc. | | DRAWING NUMBER | SIZE |
| | | 051-0886 | D |
| | | REVISION | |
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| | | PAGE | 18 OF 121 |
| | | SHEET | |
| | | | |



NOTE:
U1900 DECAPS CHANGED ON 5/24/12 PER RADAR #11485846

MIKEY BUS FILTER



TO HEADPHONE JACK

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|-------------|---------------------------|------------|--------------|-------------------------|
| 15580773 | 15580453 | | L1904, L1905 | RADAR:11100717 |
| 33881213 | 33881116 | | U1900 | RADAR:13373870 SSMC FAB |

SYNC MASTER=KAVITHA SYNC DATE=01/18/2012

AUDIO: L81 CODEC

Apple Inc.

DRAWING NUMBER: 051-0886 SIZE: D

REVISION: A.0.0

BRANCH: 15 OF 54

PAGE: 19 OF 121

SHEET

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| U1900 | CS42L81-CWZR-A1 | WLCSP | SYM 2 OF 2 |
|-------|--------------------|------------|------------|
| B1 | DMIC1_SD | DMIC1_SD | |
| B2 | DMIC1_SCLK | DMIC1_SCLK | |
| B7 | DMIC2_SD | DMIC2_SD | |
| B6 | DMIC2_SCLK | DMIC2_SCLK | |
| C8 | MCLK | | |
| A3 | ASP_SCLK | | |
| B3 | ASP_LRCK | | |
| A2 | ASP_SDIN | | |
| A1 | ASP_SDOUT | | |
| B4 | XSP_SCLK | | |
| B5 | XSP_LRCK_FSYNC | | |
| A5 | XSP_SDIN_DAC2_MUTE | | |
| A4 | XSP_SDOUT | | |
| K5 | MBUS_REF | | |
| C5 | CS* | | |
| A6 | CCLK | | |
| B8 | CDIN | | |
| A7 | CDOUT | | |
| B9 | INT* | | |
| B10 | WAKE* | | |
| C9 | RESET* | | |

| | |
|-------|----|
| GND0 | C6 |
| GND1 | D3 |
| GND2 | D5 |
| GND3 | D6 |
| GND4 | D7 |
| GND5 | D8 |
| GND6 | E5 |
| GND7 | E6 |
| GND8 | E7 |
| GND9 | F5 |
| GND10 | F6 |
| GND11 | F7 |
| GND12 | F8 |
| GND13 | G5 |
| GND14 | G6 |
| GND15 | G7 |
| GND16 | H5 |
| GND17 | H7 |
| GND18 | J5 |

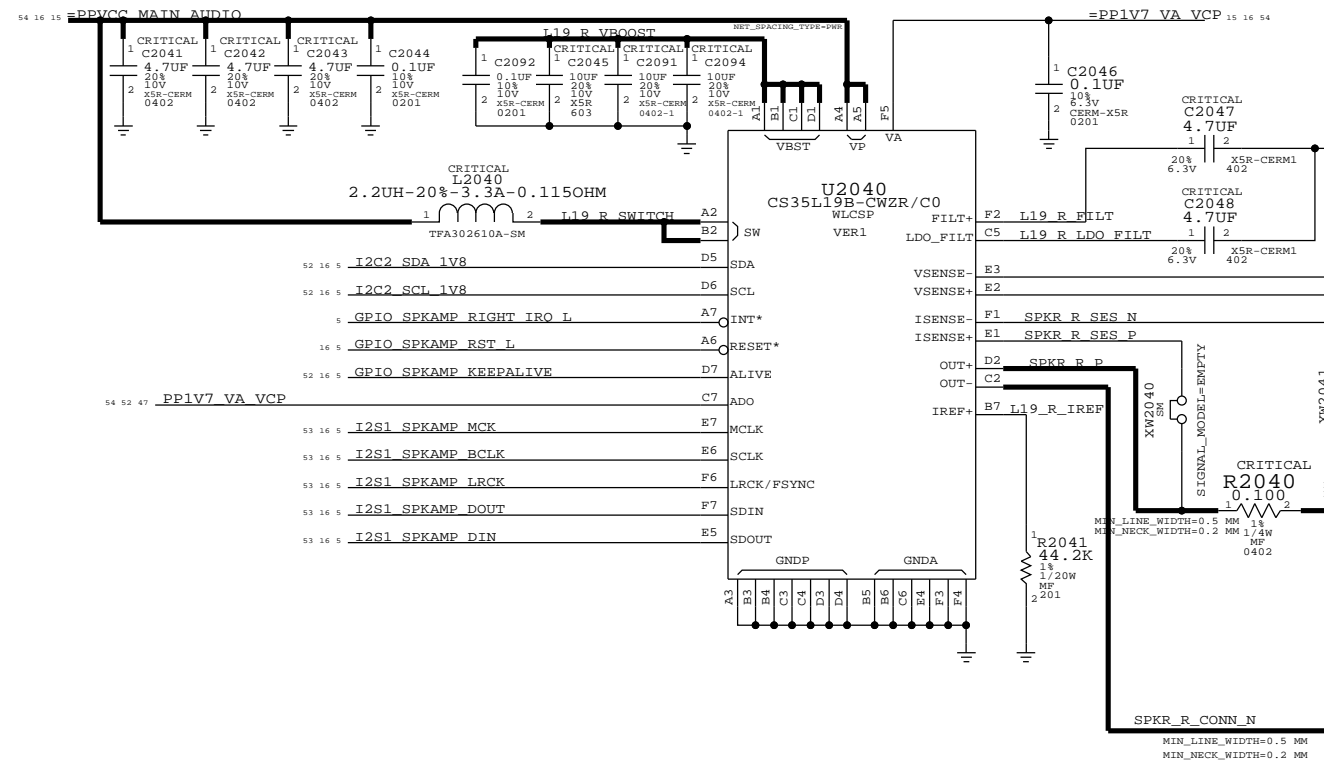
A

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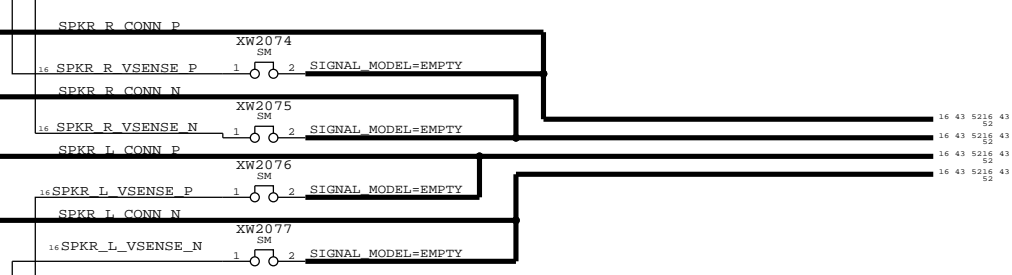


RIGHT SPEAKER AMP

I2C ADDRESS: 100001X

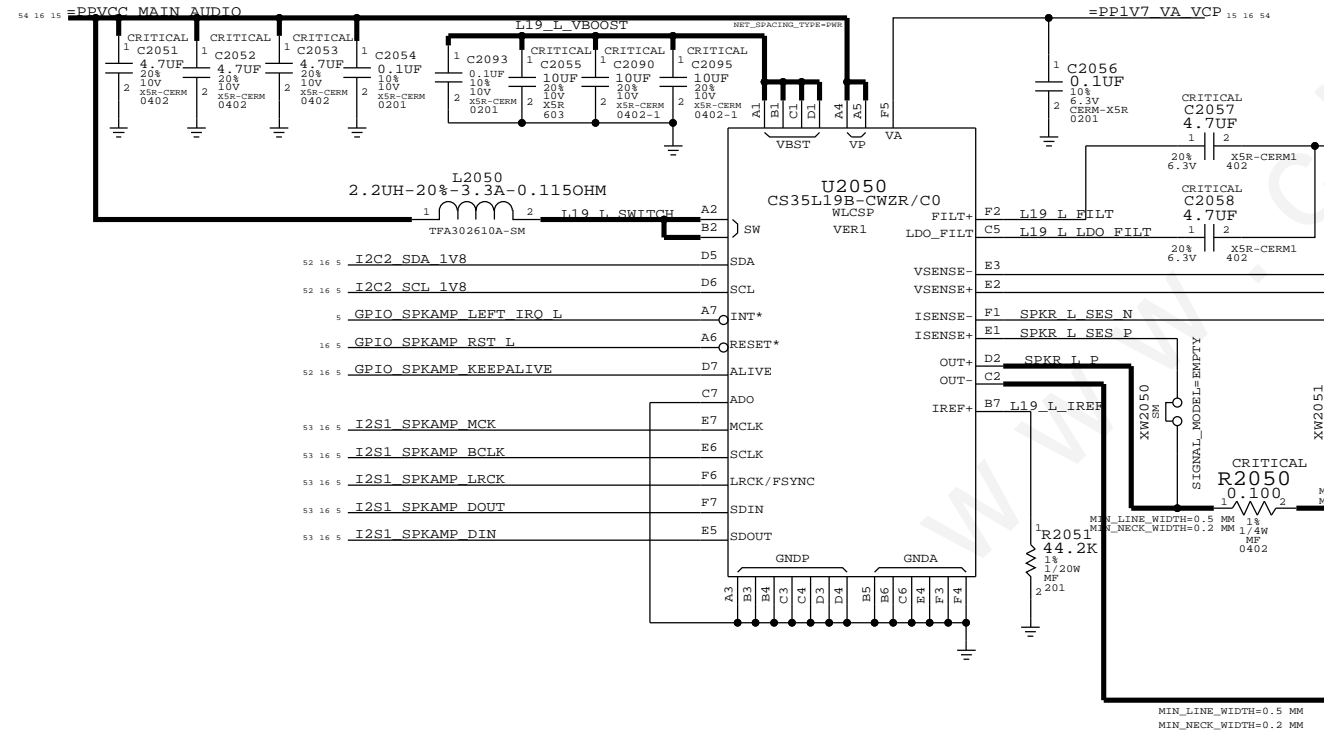


SPEAKER CONNECTOR



LEFT SPEAKER AMP

I2C ADDRESS: 100000X



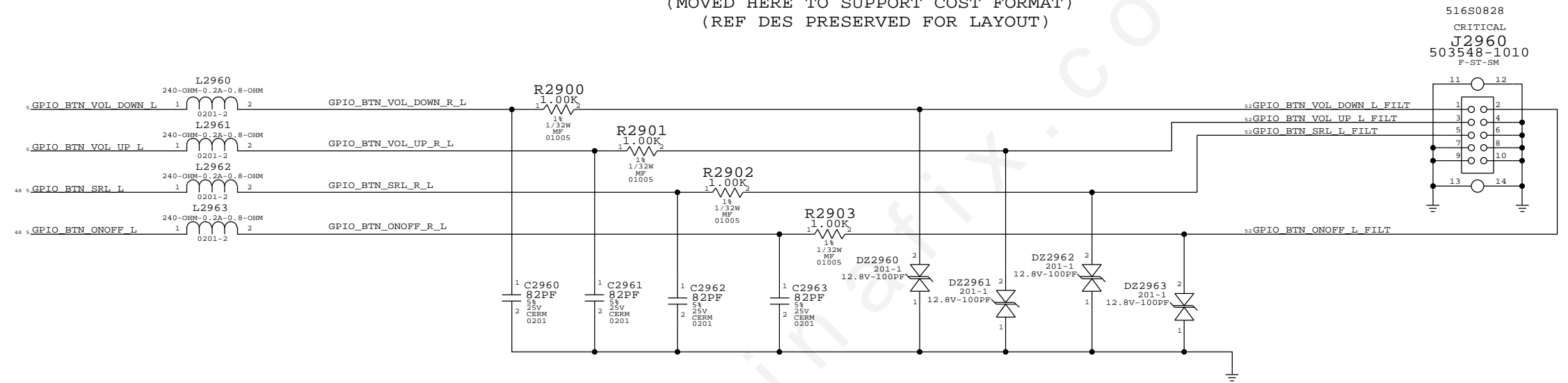
UPDATED: DEC 13

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

| | | | |
|---|--|----------------------|-----------|
| SYNC MASTER=KAVITHA | | SYNC DATE=01/18/2012 | |
| PAGE TITLE | | | |
| AUDIO: CS35L19A AMPS | | DRAWING NUMBER | 051-0886 |
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BUTTON CONNECTOR

(MOVED HERE TO SUPPORT COST FORMAT)
(REF DES PRESERVED FOR LAYOUT)

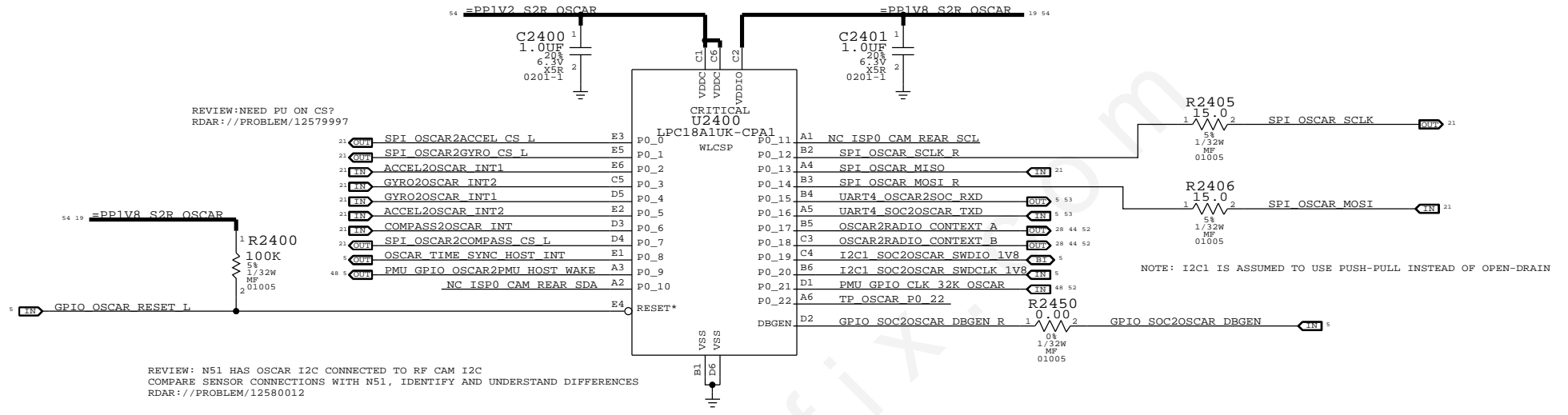


| | | | |
|--|--|----------------|-----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| BUTTON: CONN | | | |
| Apple Inc. | | DRAWING NUMBER | SIZE |
| | | 051-0886 | D |
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OSCAR

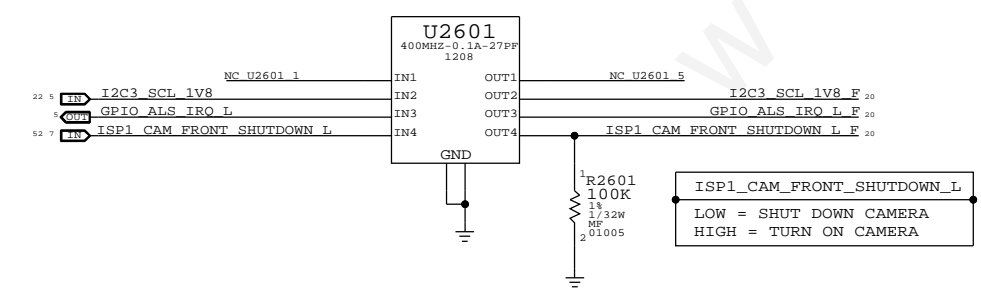
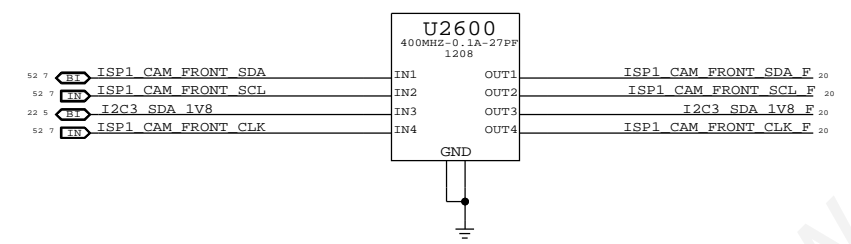
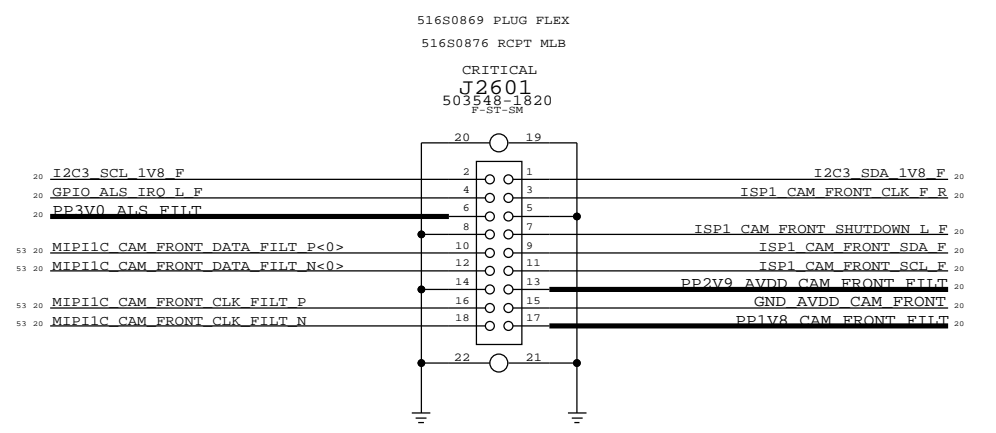
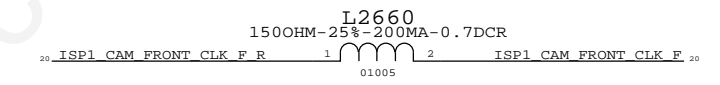
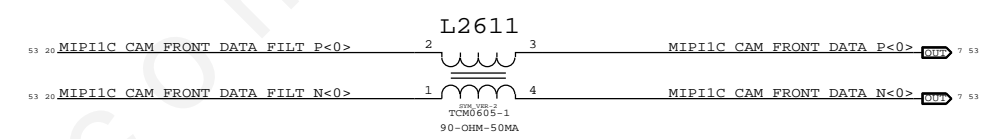
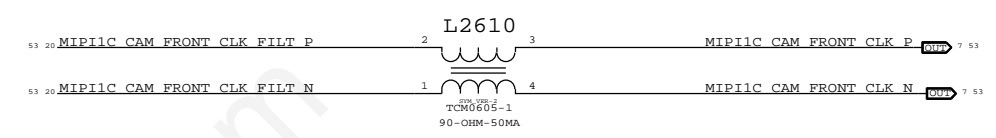
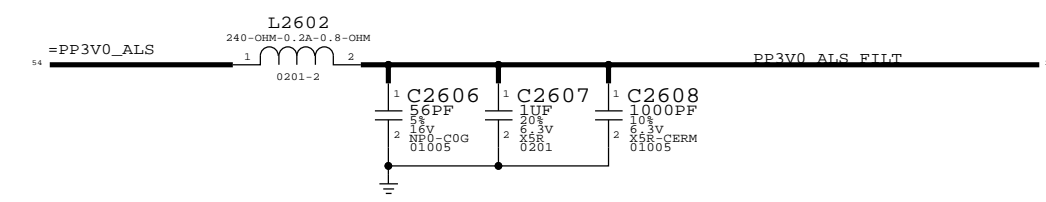
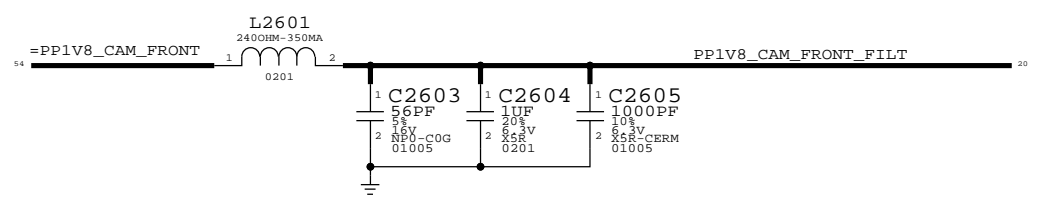
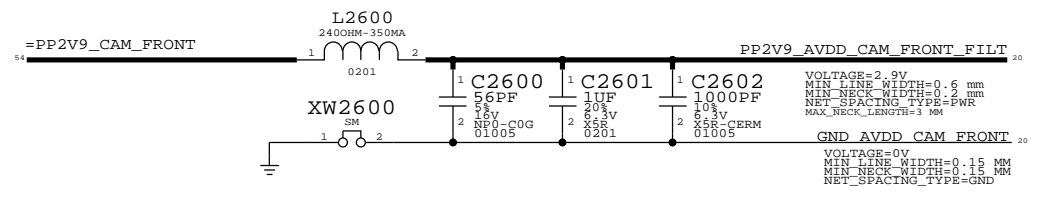
APN 337S4416

OSCAR VDDIO = 1.8V HIBERNATE (NEED TO WAKE HOST)
OSCAR CORE = 1.2V HIBERNATE (NEED TO RUN IN S2R)



| | | | |
|---|--|--------------------------|---------|
| SYNC MASTER=j72_MLB_C | | SYNC DATE=11/26/2012 | |
| PAGE TITLE: SENSOR: OSCAR | | | |
| Apple Inc. | | DRAWING NUMBER: 051-0886 | SIZE: D |
| | | REVISION: A.0.0 | |
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VGA FRONT CAMERA CONNECTOR

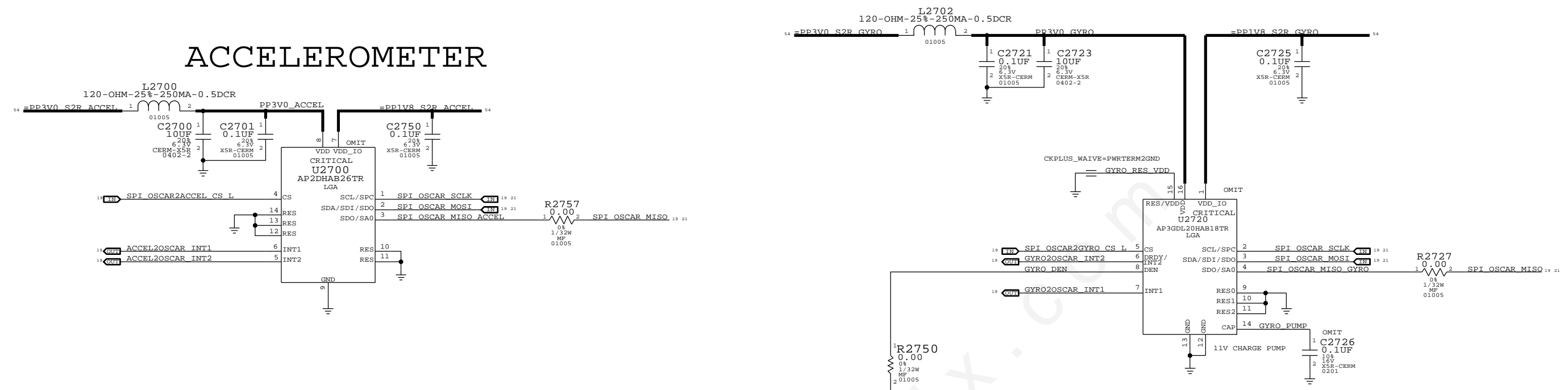


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| CAMERA: FF-ALS CONN & FILTERS | | | |
| DRAWING NUMBER | | SIZE | |
| 051-0886 | | D | |
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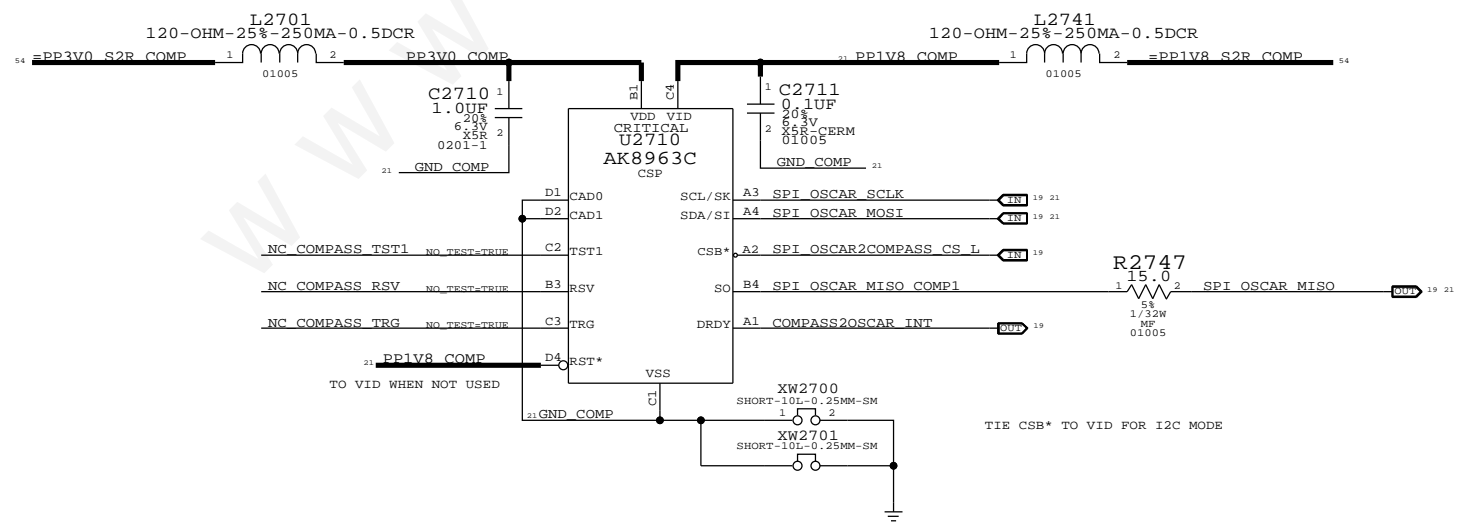
GYRO

ACCELEROMETER



COMPASS

APN 338S1014

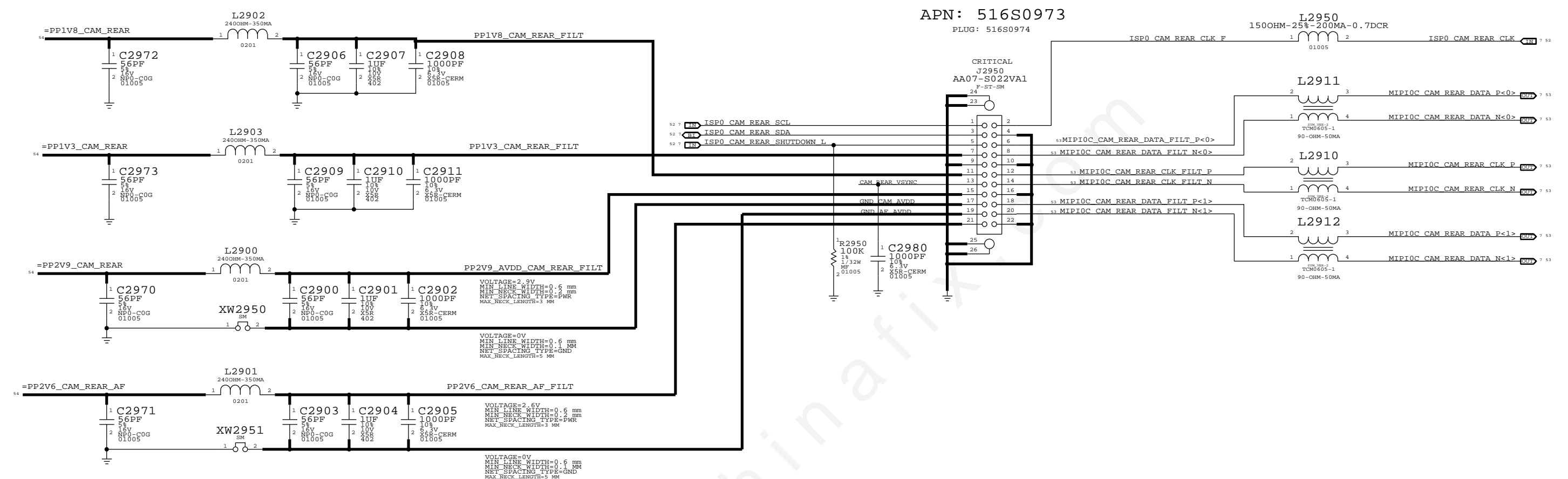


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|---|--|----------------|------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| SENSOR: ACCEL, COMPASS, GYRO | | | |
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| | | 051-0886 | D |
| | | REVISION | |
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REAR CAMERA CONNECTOR

APN: 516S0973
PLUG: 516S0974



| | | | |
|---|--|----------------|-----------|
| SYNC MASTER=N/A | | SYNC DATE=N/A | |
| CAMERA: REAR CONN & FILTERS | | | |
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AP INTERFACE & DEBUG CONNECTORS

D

D

C

C

B

B

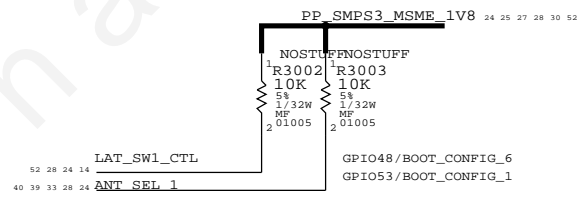
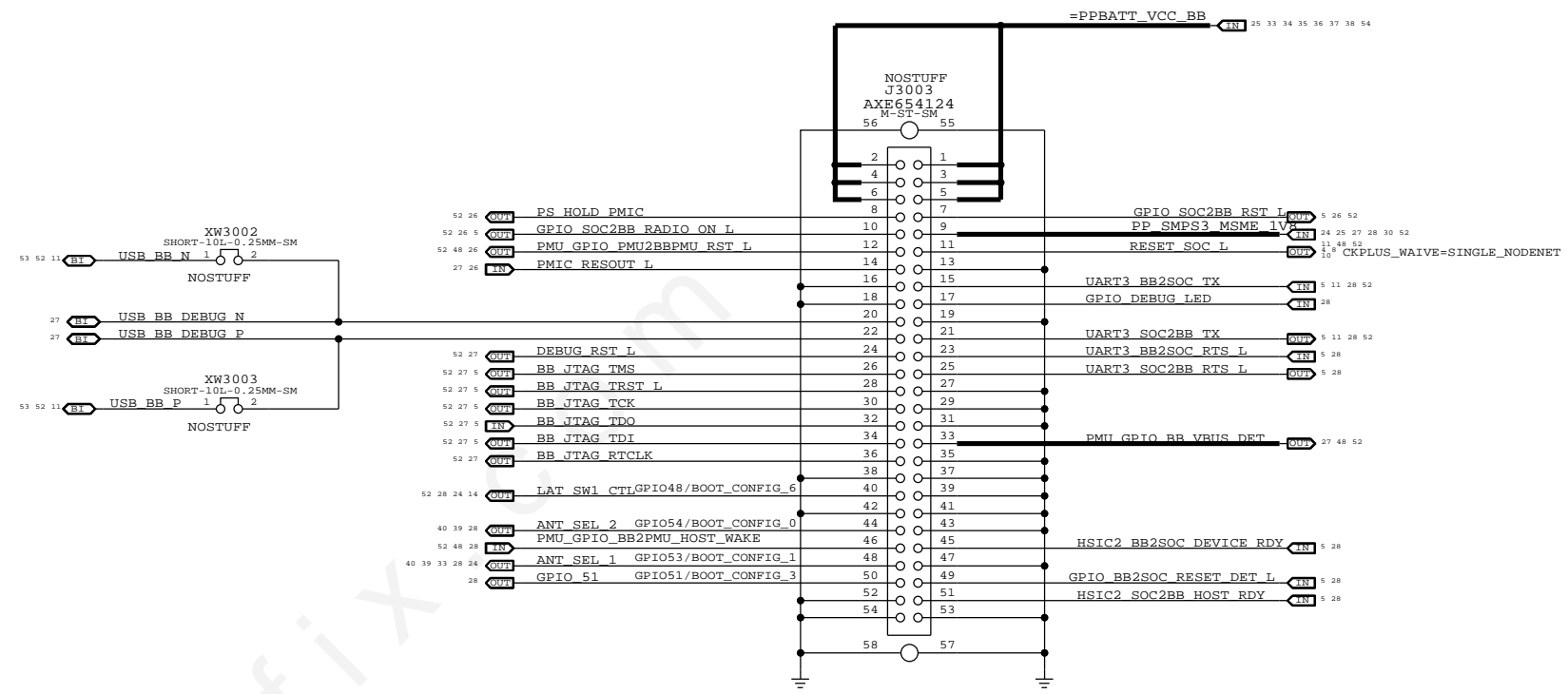
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PROBE POINTS

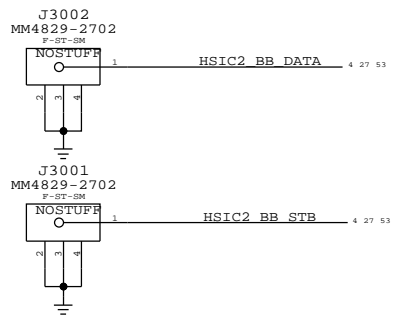
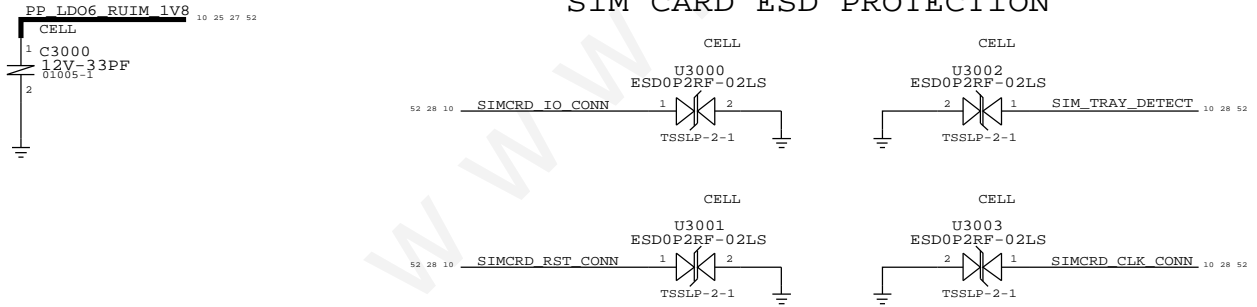
- PP3000 P4MM 1 BB_ERROR_FLAG 28
- PP3001 P4MM 1 SLEEP_CLK_32K 26 27
- PP3002 P4MM 1 PMIC_SSBI 26 27
- PP3003 P4MM 1 19P2M_MDM 26 27
- PP3008 P4MM 1 WTR_SSBI_TX_GPS 28 29
- PP3009 P4MM 1 WTR_SSBI_PRX_DRX 28 29
- PP3010 P4MM 1 WTR_RX_ON 28 29
- PP3011 P4MM 1 WTR_RF_ON 28 29
- PP3012 P4MM 1 UART_WLAN2BB_LTE_COEX 28 44
- PP3013 P4MM 1 UART_BB2WLAN_LTE_COEX 28 44

DEBUG CONNECTOR



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

SIM CARD ESD PROTECTION



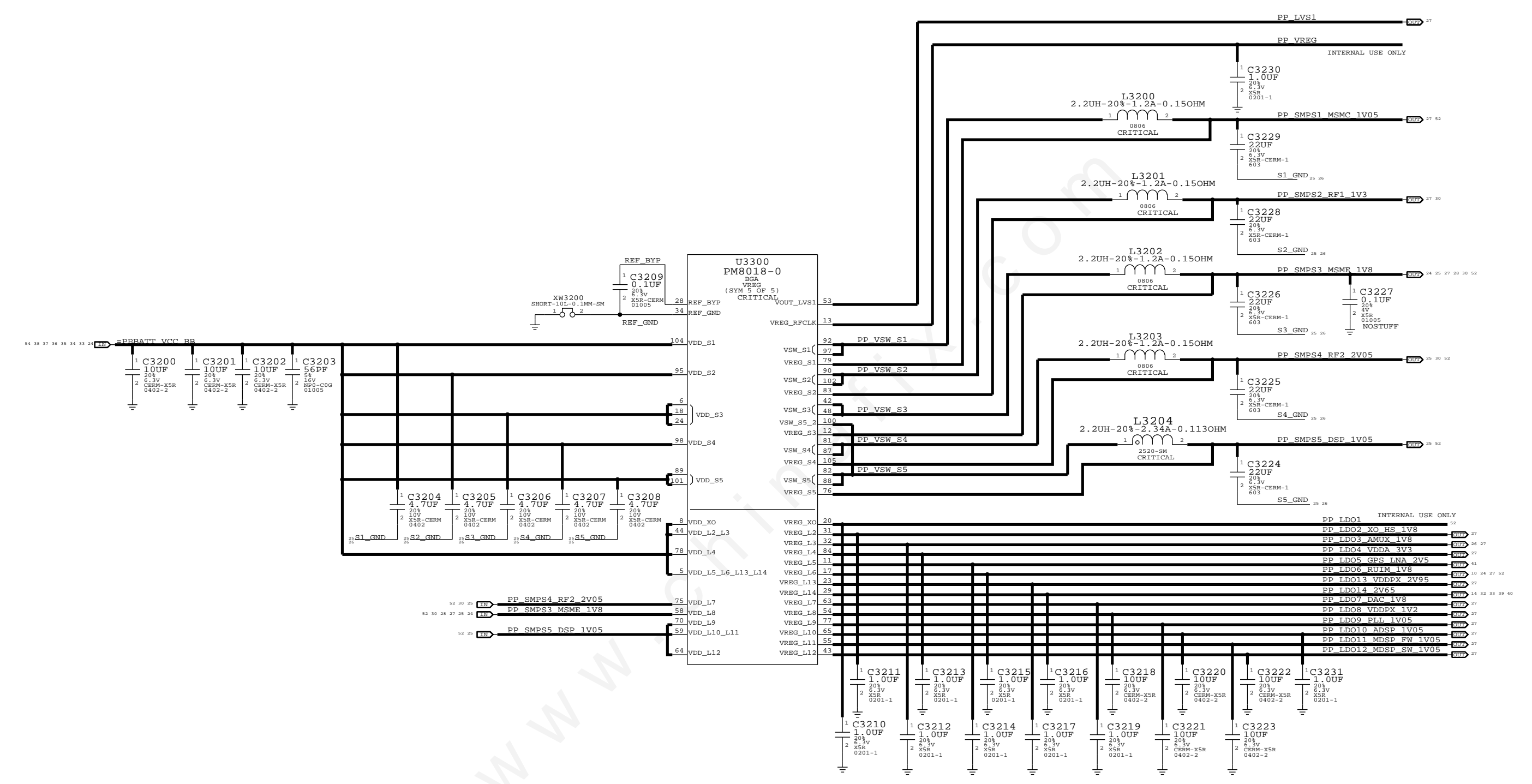
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PMU (1 OF 2)

D
C
B
A

D
C
B
A



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| | | |
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| PAGE | 32 OF 121 | SHEET |
| | | 25 OF 54 |

8 7 6 5 4 3 2 1

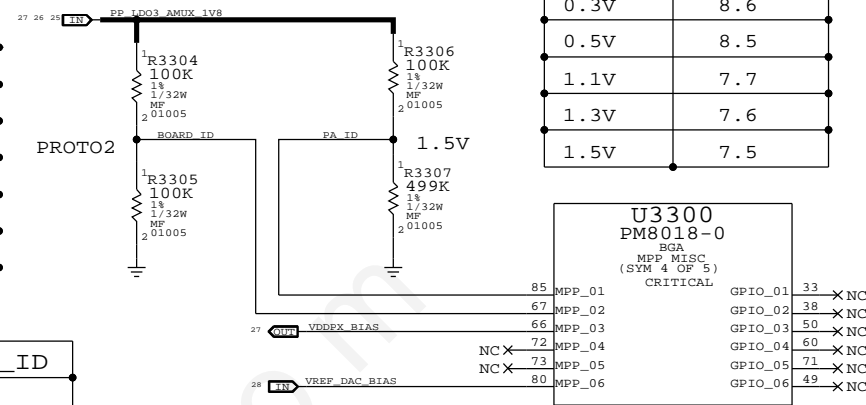
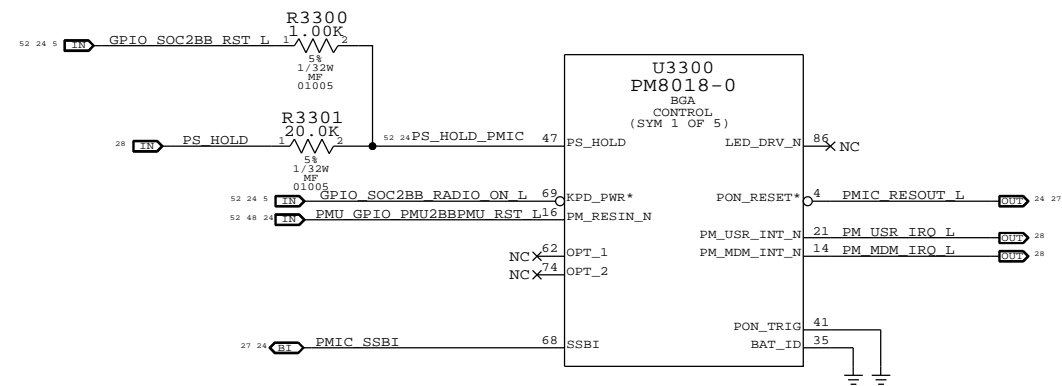


PMU (2 OF 2)

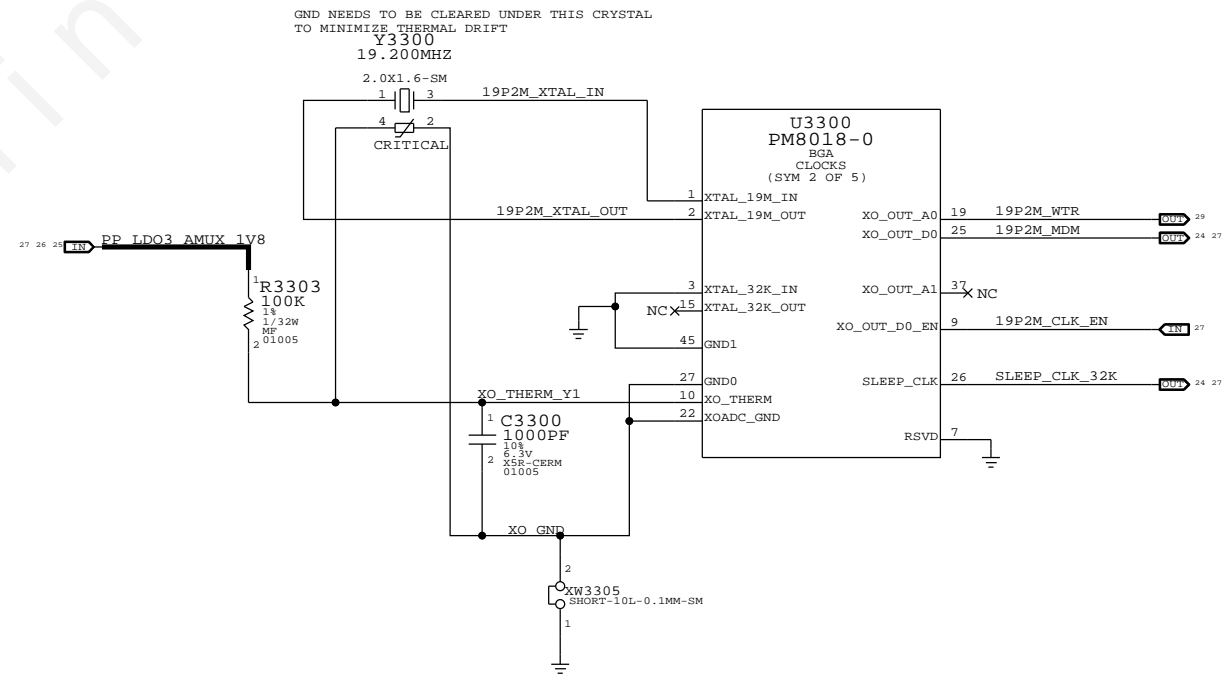
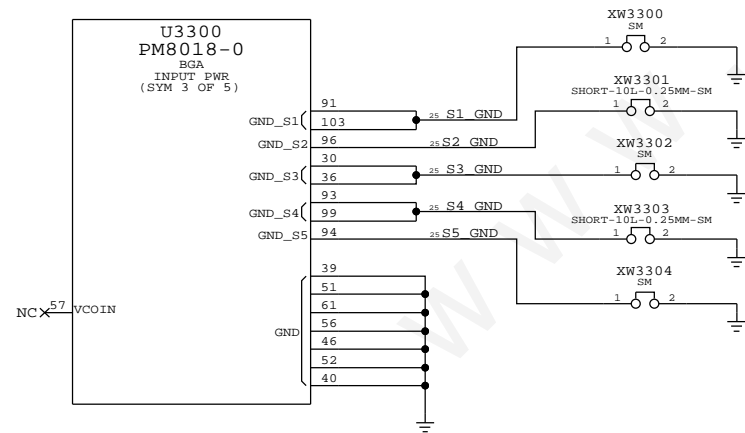
| BOARD_ID | REVISION |
|----------|----------|
| 0.7V | PROTO1 |
| 0.9V | PROTO2 |
| 1.1V | EVT1 |
| 1.3V | EVT2 |
| 1.5V | DVT |
| 1.7V | PVT |

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

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



AP SECTION NEEDS ITS OWN THERMISTOR PLACED NEAR THE PA'S.



| | | | | | |
|---|--|----------------|-----------|------|---|
| CELL: BASEBAND PMU (2 OF 2) | | DRAWING NUMBER | 051-0886 | SIZE | D |
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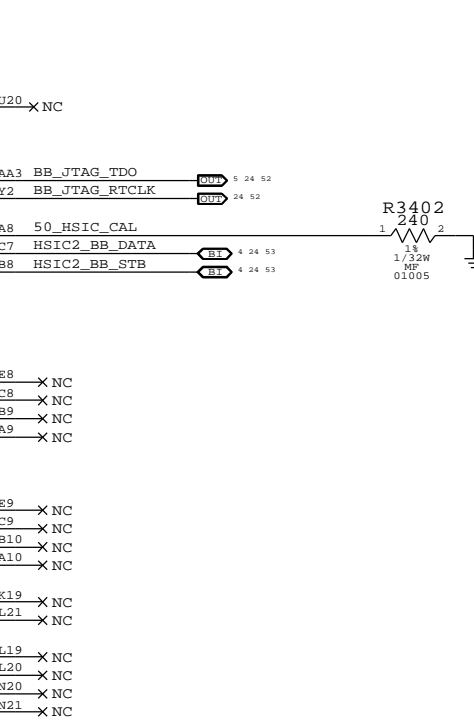
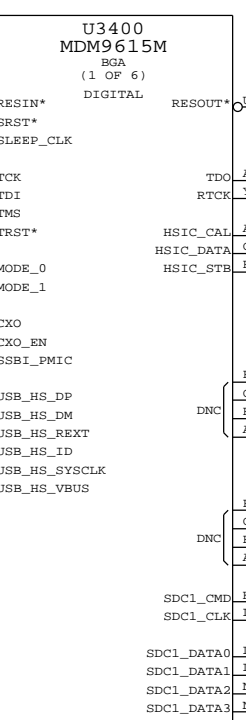
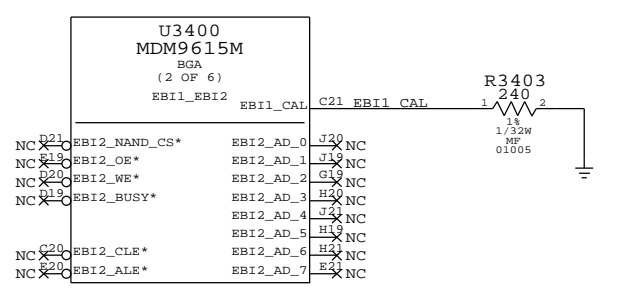
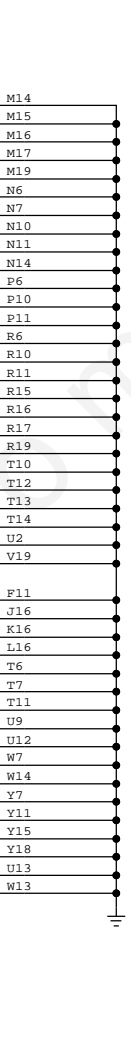
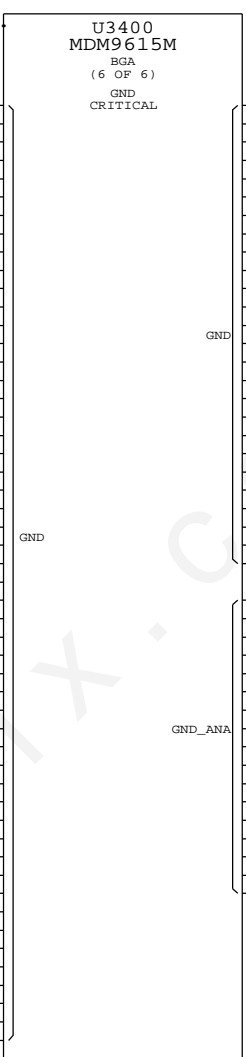
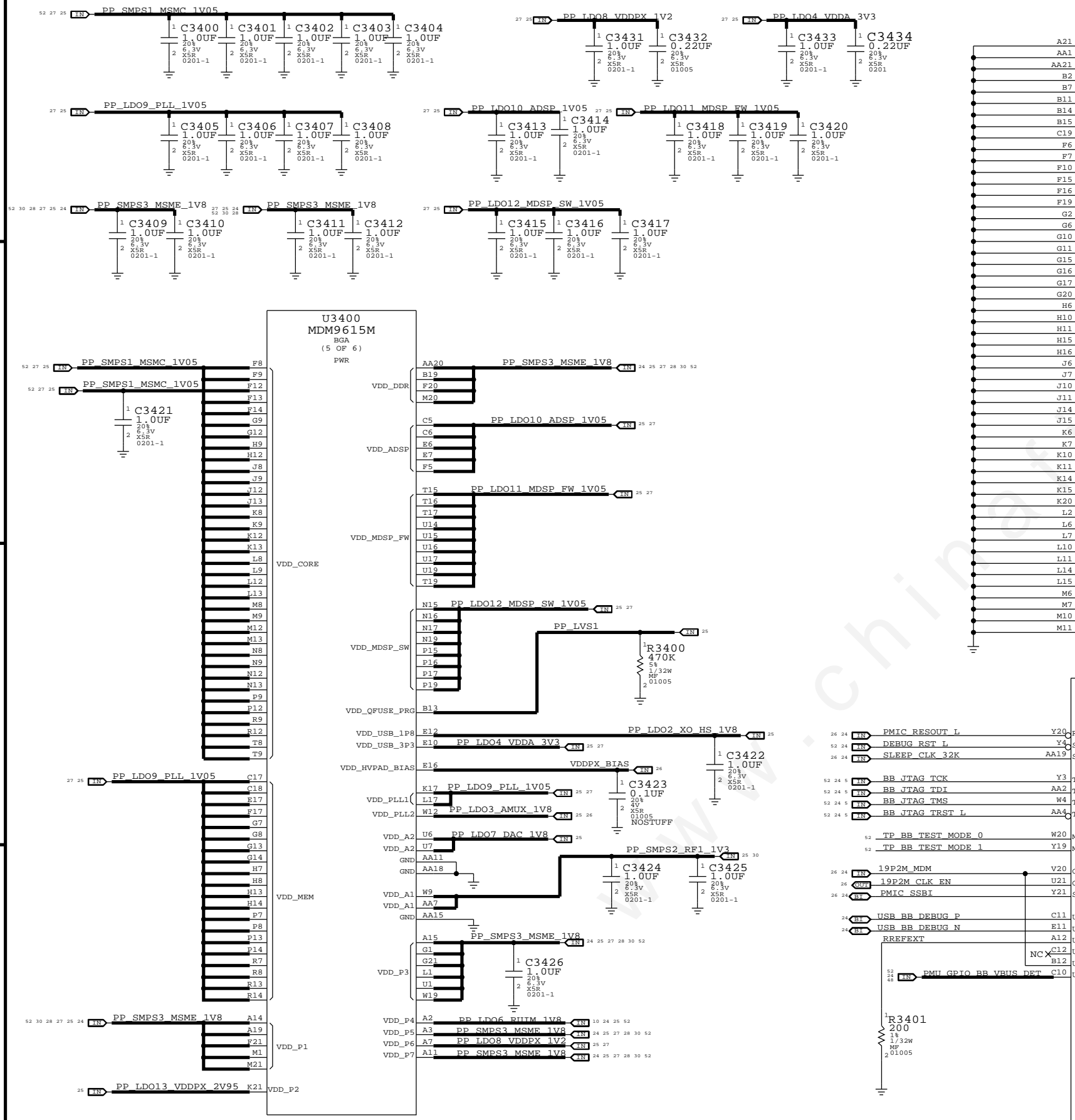


BASEBAND (1 OF 2)

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D
C
B
A

D
C
B
A

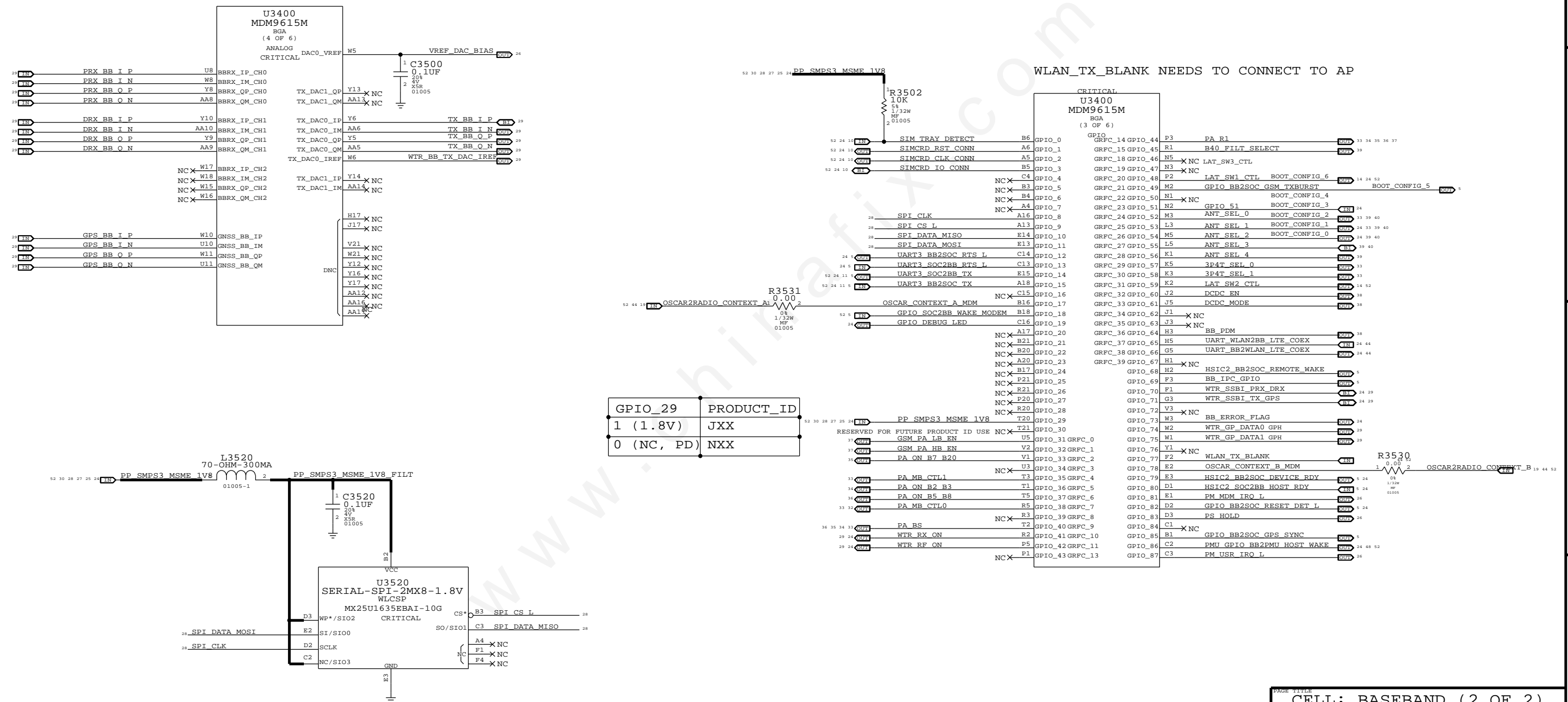


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8 7 6 5 4 3 2 1

BASEBAND (2 OF 2)

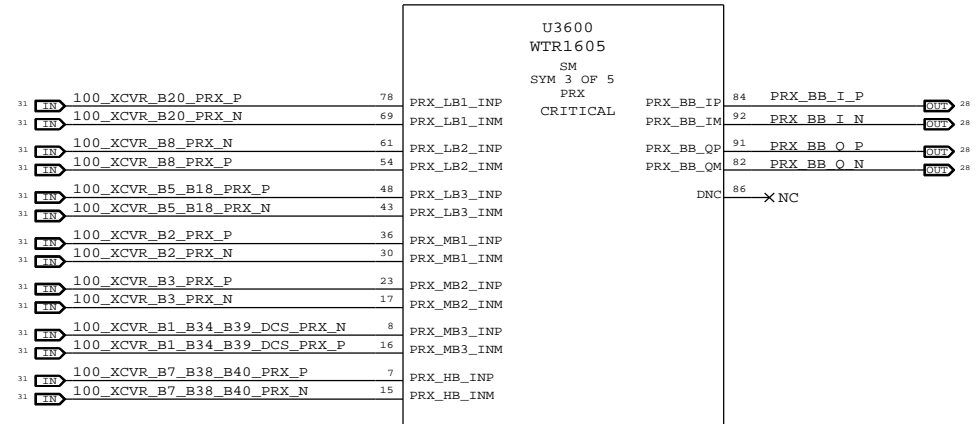


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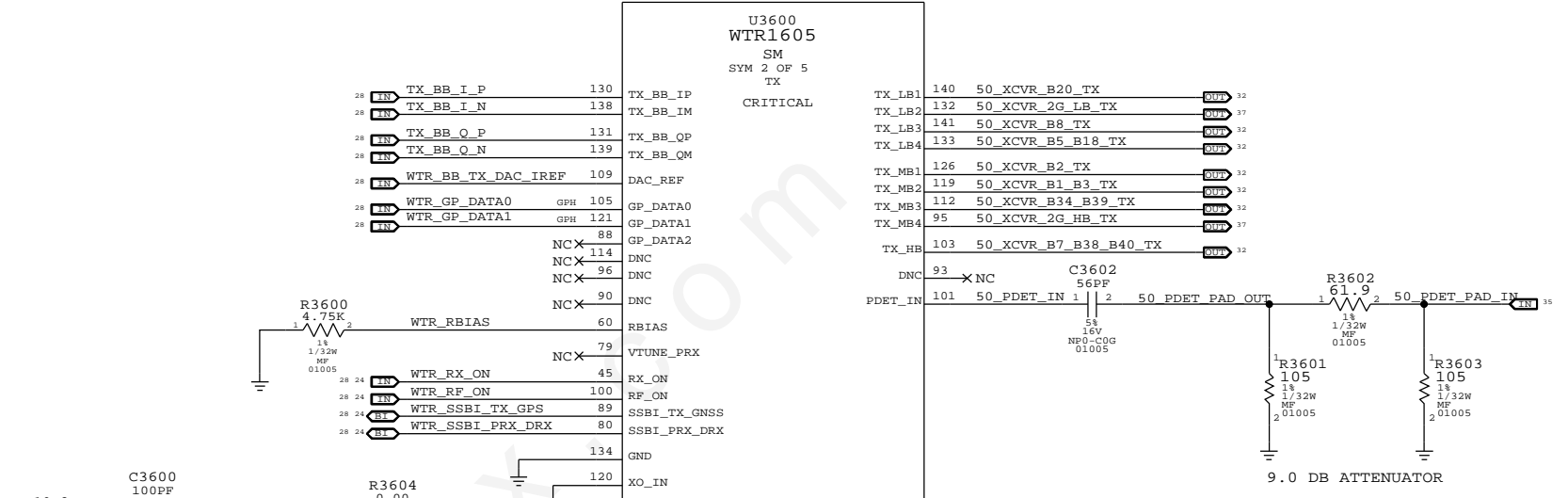


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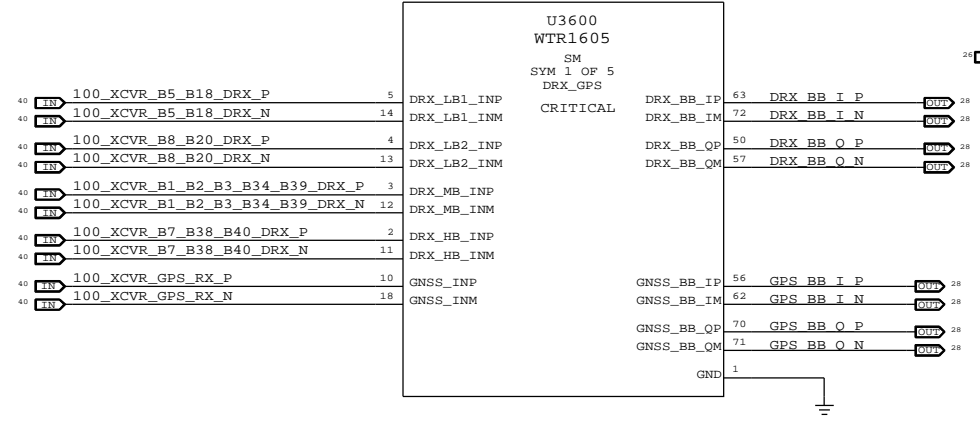
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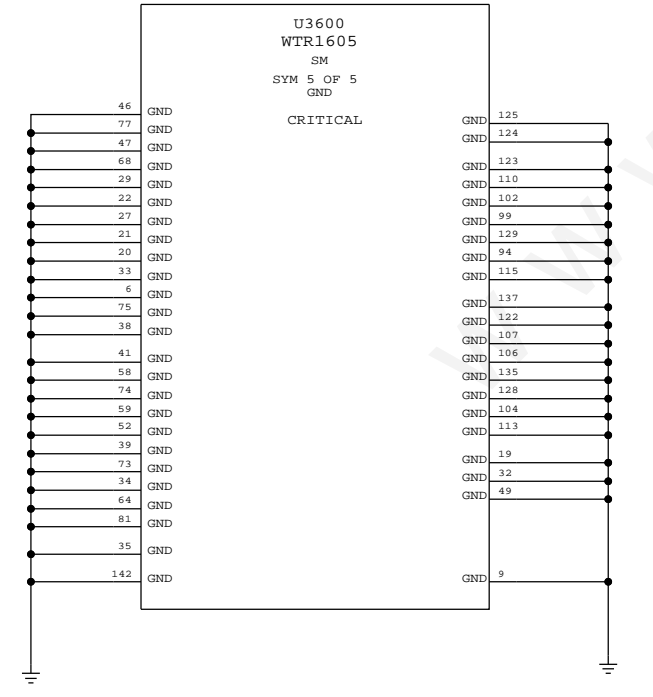
TRANSCEIVER PHASE CONTROL, TX RF & IQ PORTS



DRX TRANSCEIVER RF AND IQ PORTS



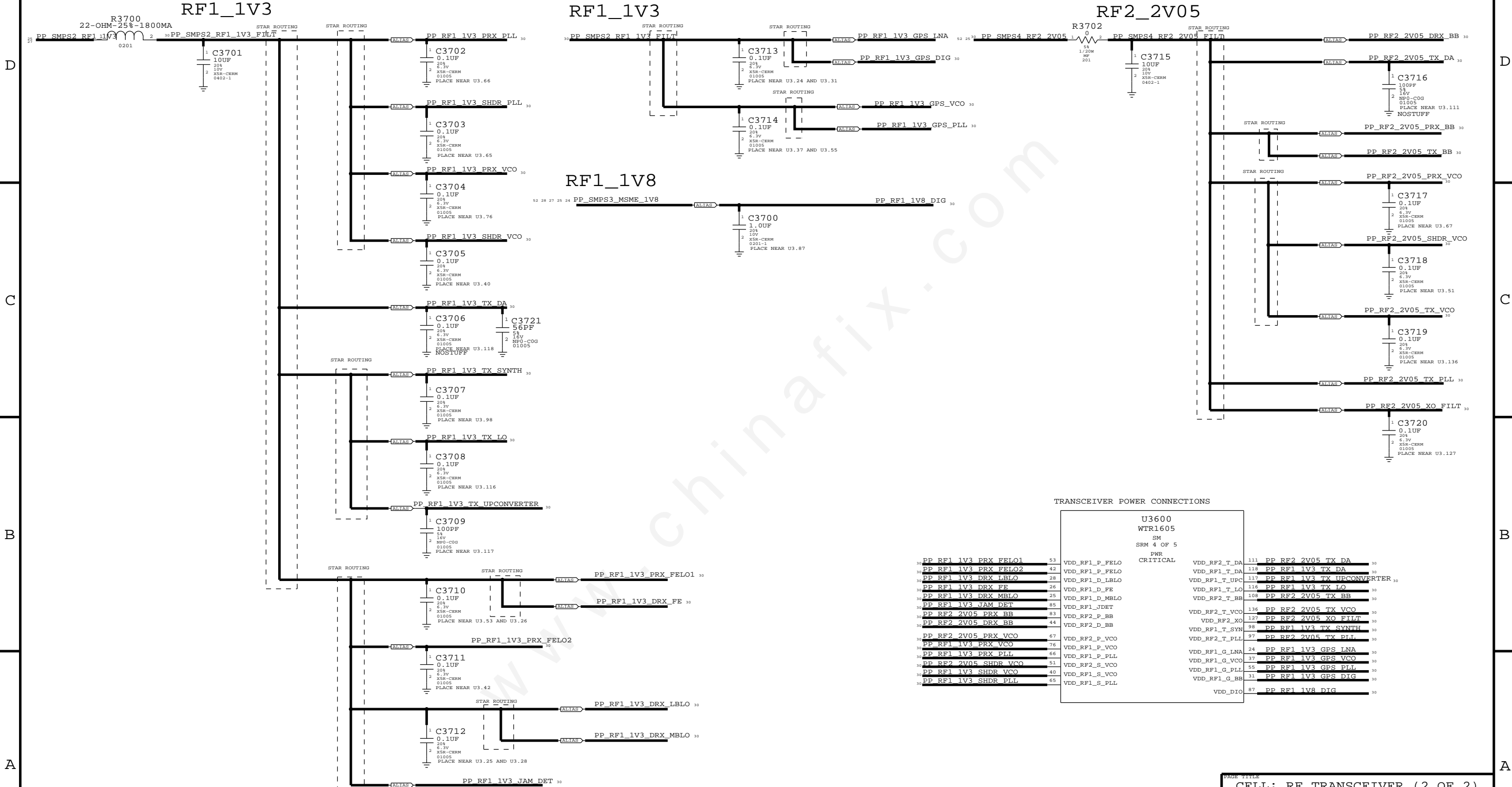
TRANSCEIVER GROUND CONNECTIONS



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RF TRANSCEIVER (2 OF 2)



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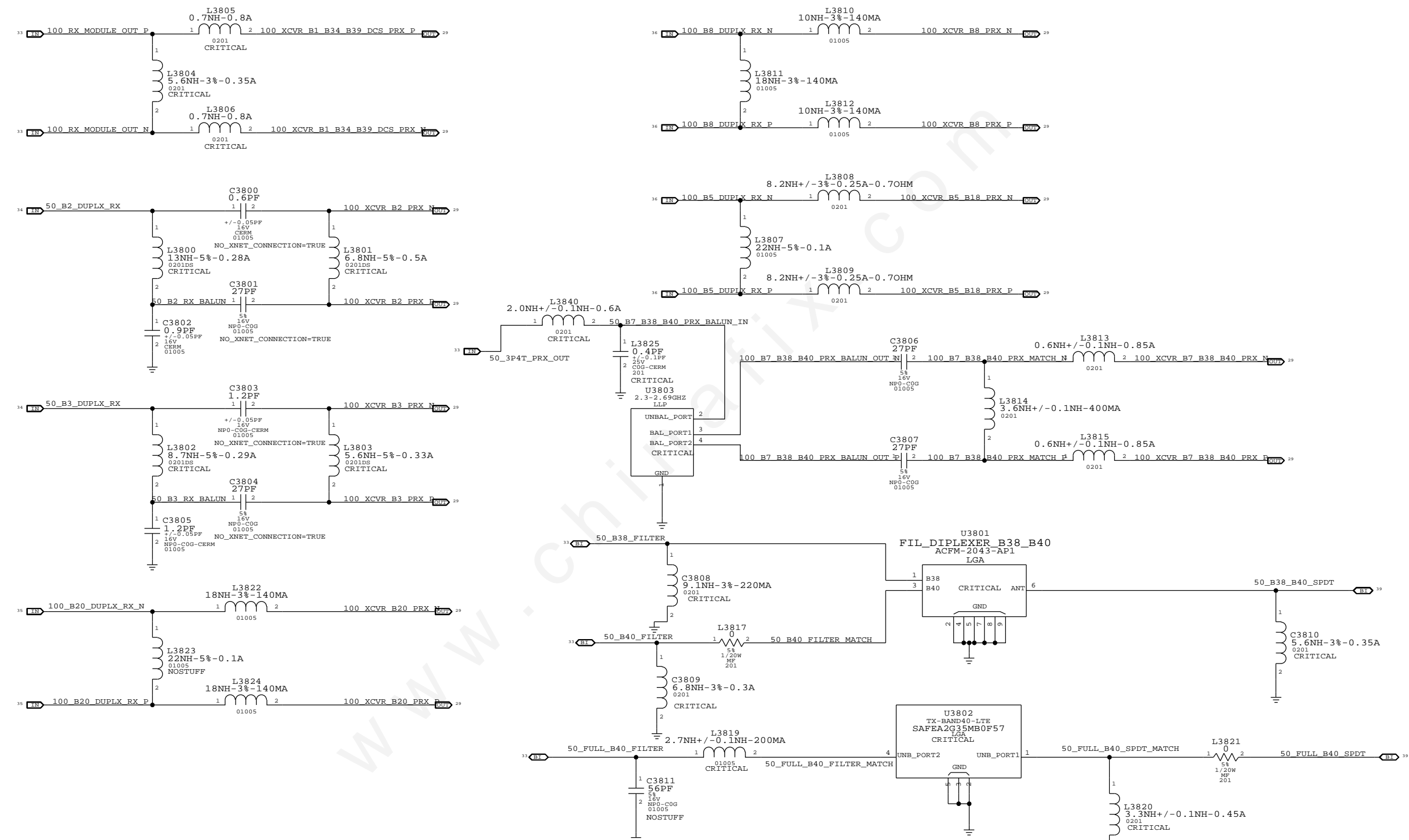
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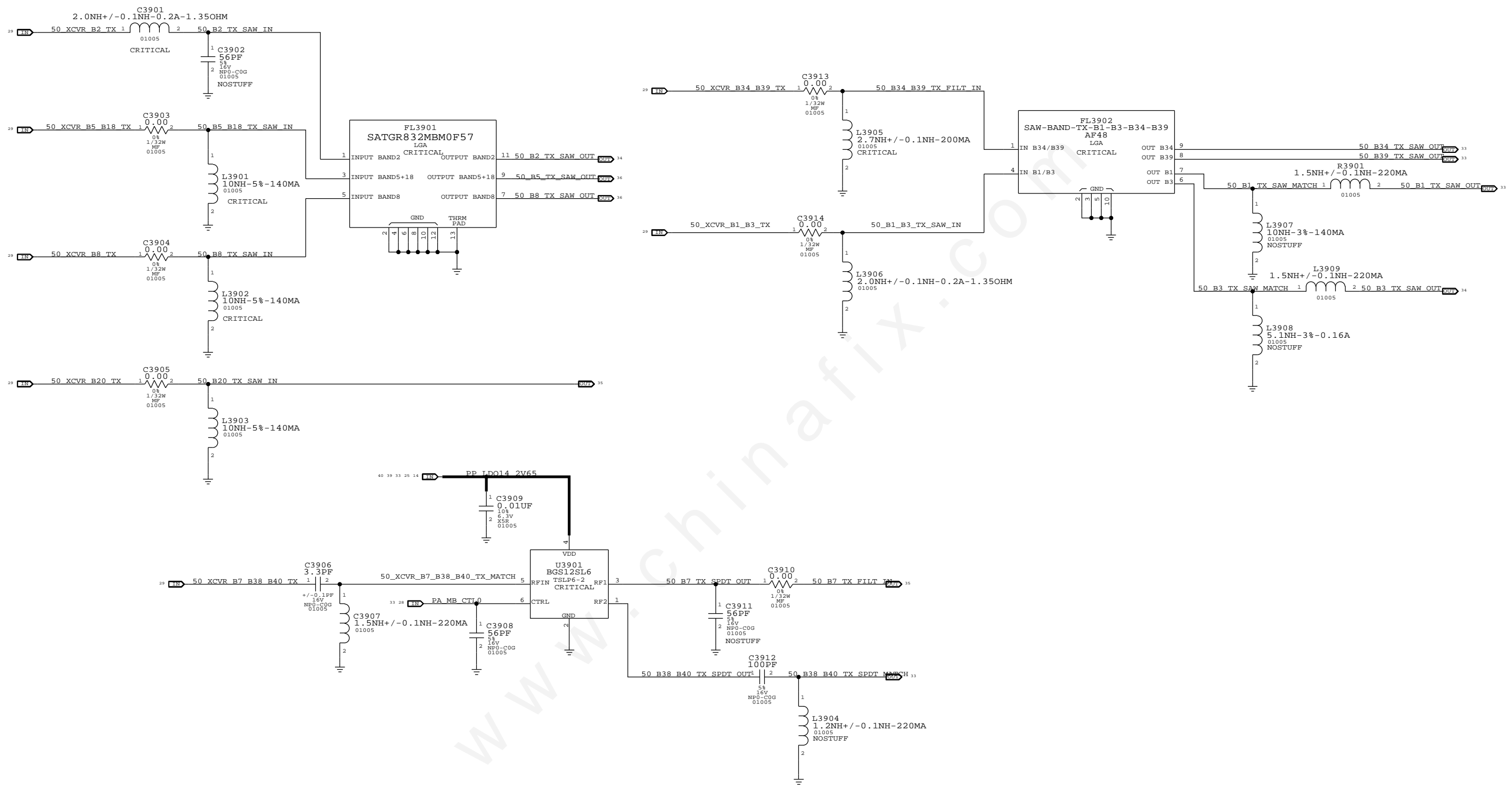
RX MATCHING



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TX INTERSTAGE FILTERS



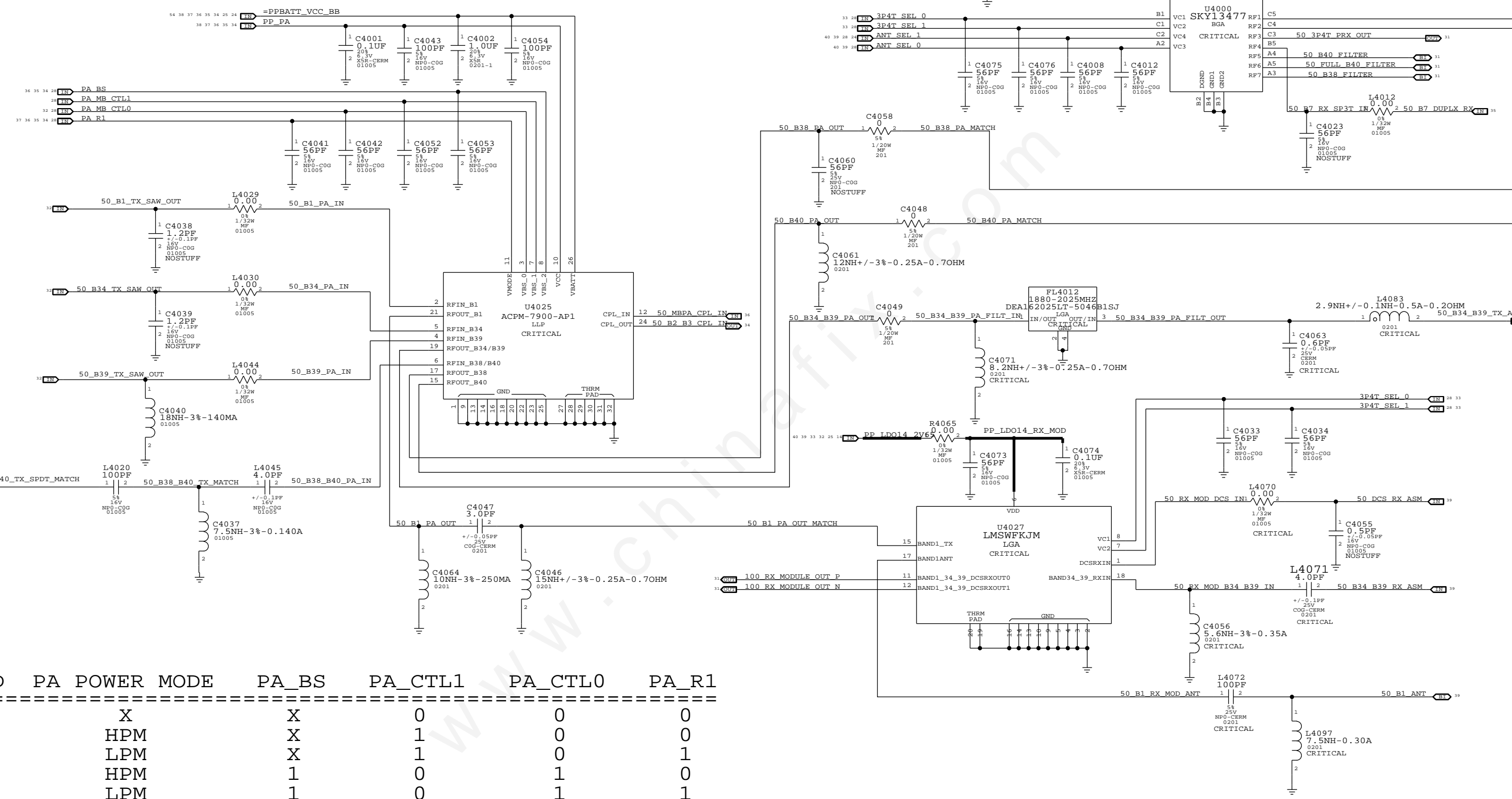
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BAND 1/34/39/38/40 TX

D
C
B
A

D
C
B
A



| BAND | PA POWER MODE | PA_BS | PA_CTL1 | PA_CTL0 | PA_R1 |
|------|---------------|-------|---------|---------|-------|
| OFF | X | X | 0 | 0 | 0 |
| B1 | HPM | X | 1 | 0 | 0 |
| B1 | LPM | X | 1 | 0 | 1 |
| B34 | HPM | 1 | 0 | 1 | 0 |
| B34 | LPM | 1 | 0 | 1 | 1 |
| B39 | HPM | 0 | 0 | 1 | 0 |
| B39 | LPM | 0 | 0 | 1 | 1 |
| B38 | HPM | 1 | 1 | 1 | 0 |
| B38 | LPM | 1 | 1 | 1 | 1 |
| B40 | HPM | 0 | 1 | 1 | 0 |
| B40 | LPM | 0 | 1 | 1 | 1 |

CELL: PENTABAND PA

Apple Inc.

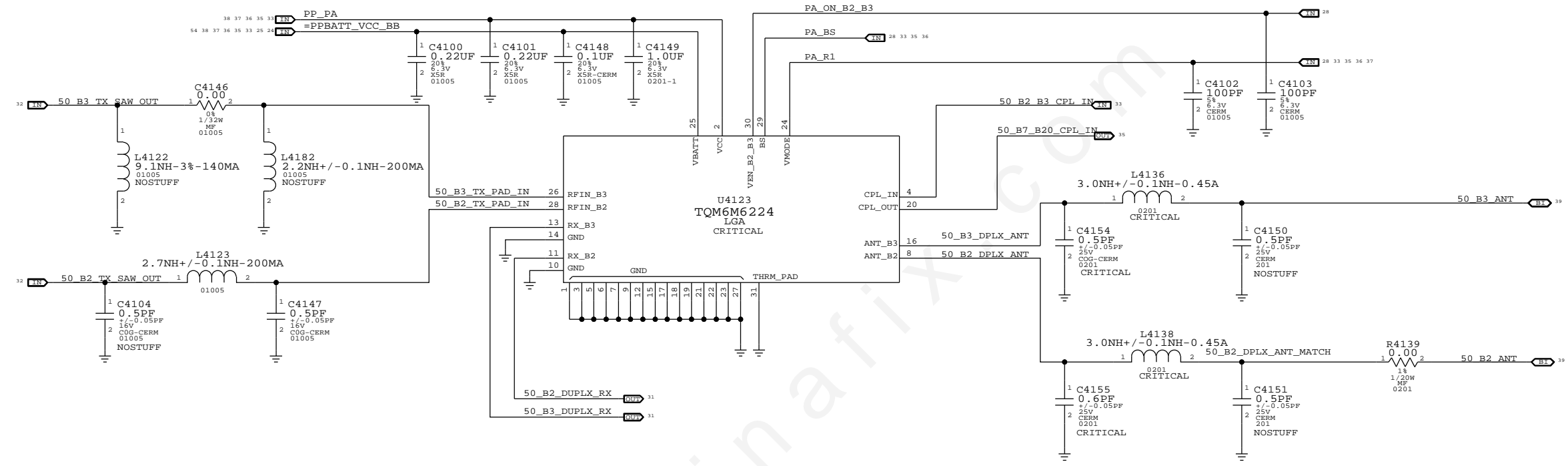
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BAND 2/3 PAD

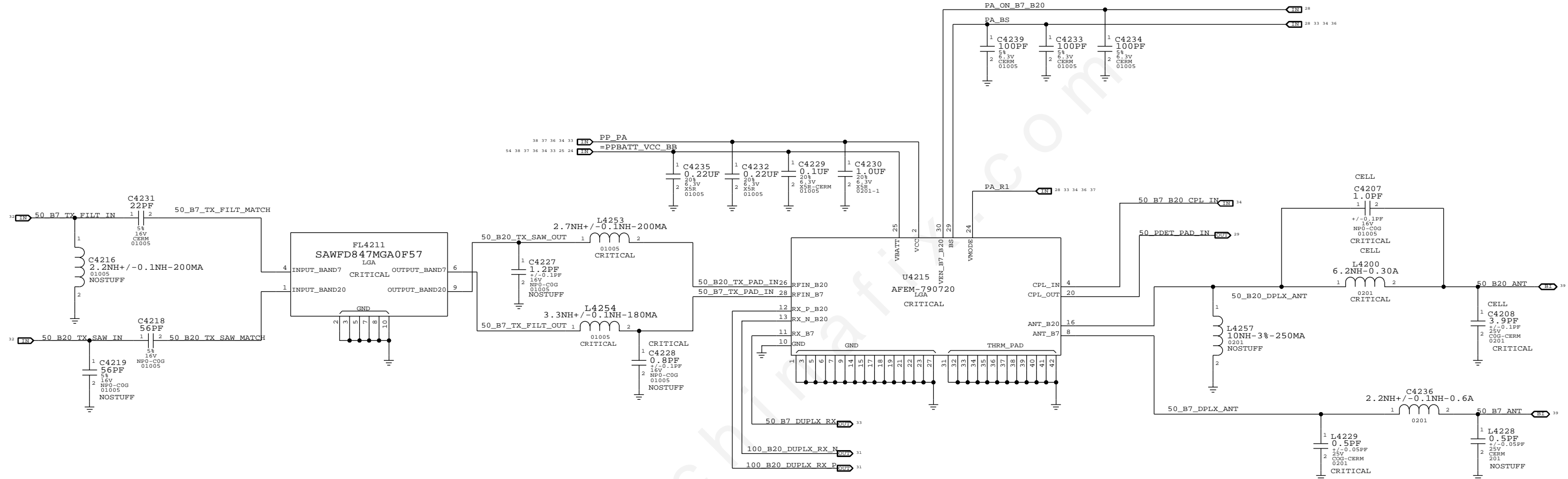


| BAND | PA POWER MODE | PA_BS | PA_ON_B2_B3 | PA_R1 |
|------|---------------|-------|-------------|-------|
| OFF | X | X | 0 | X |
| B3 | HPM | 0 | 1 | 0 |
| B3 | LPM | 0 | 1 | 1 |
| B2 | HPM | 1 | 1 | 0 |
| B2 | LPM | 1 | 1 | 1 |

| | | |
|--|----------------|-------------------|
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BAND 20/7 PAD

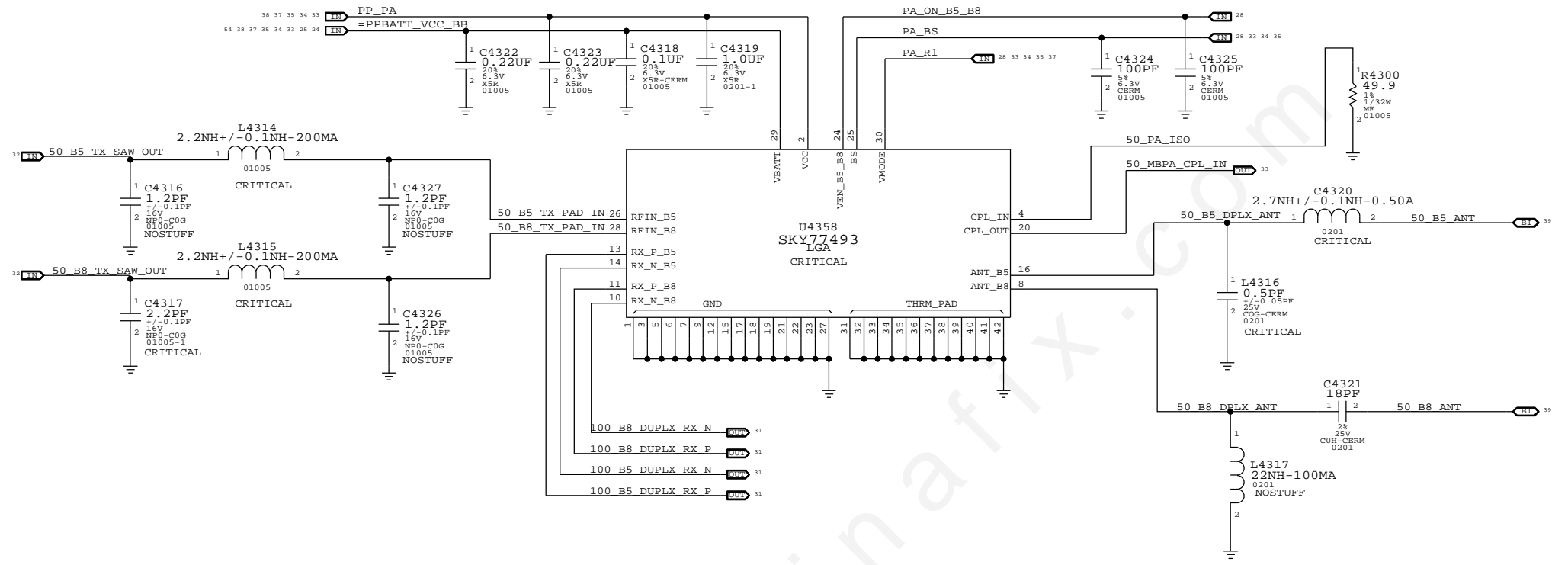


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| BAND | PA POWER MODE | PA_BS | PA_ON_B20_B7 | PA_R1 |
|------|---------------|-------|--------------|-------|
| OFF | X | X | 0 | X |
| B20 | HPM | 0 | 1 | 0 |
| B20 | LPM | 0 | 1 | 1 |
| B7 | HPM | 1 | 1 | 0 |
| B7 | LPM | 1 | 1 | 1 |

| | | | |
|---|----------------|---------------------|------|
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BAND 5/8 PAD



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

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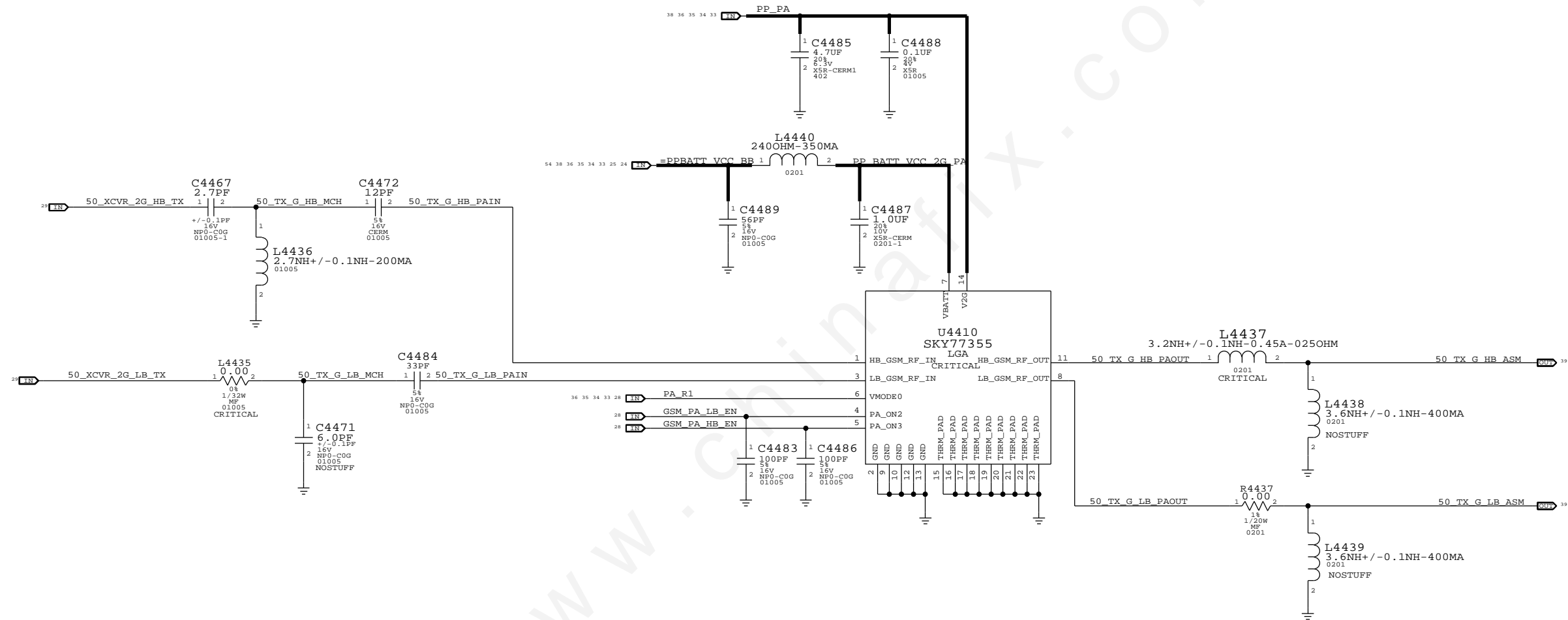


2G PA

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2G PA GAIN MODES

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

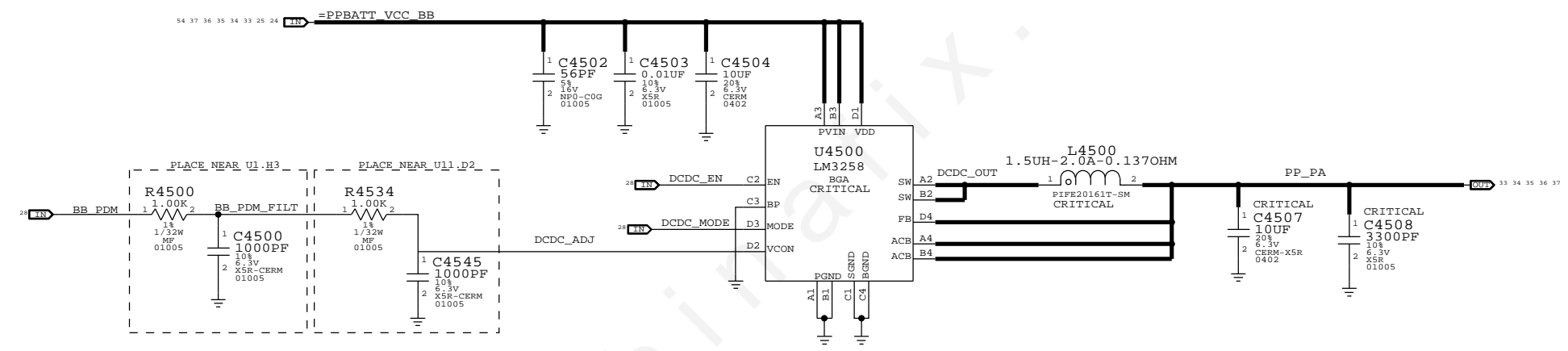


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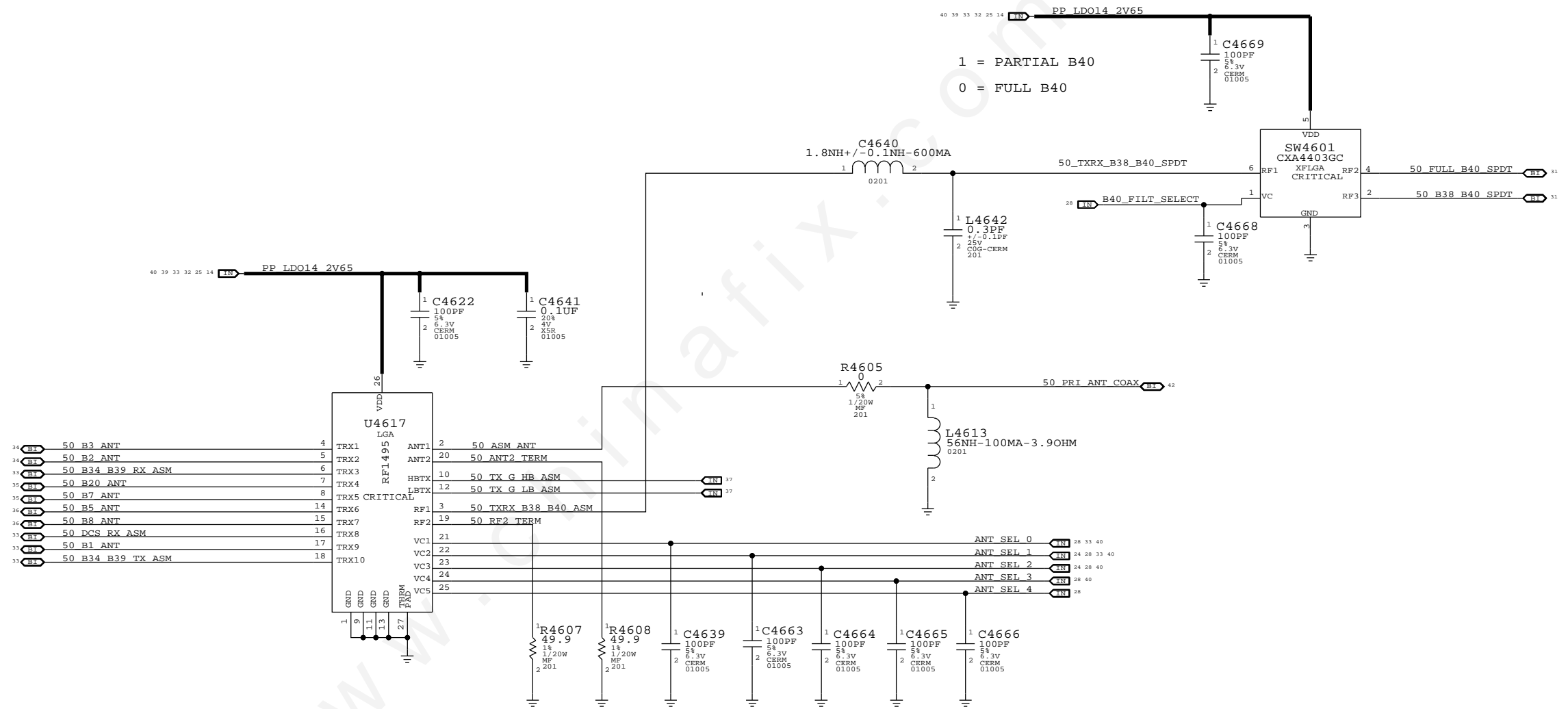
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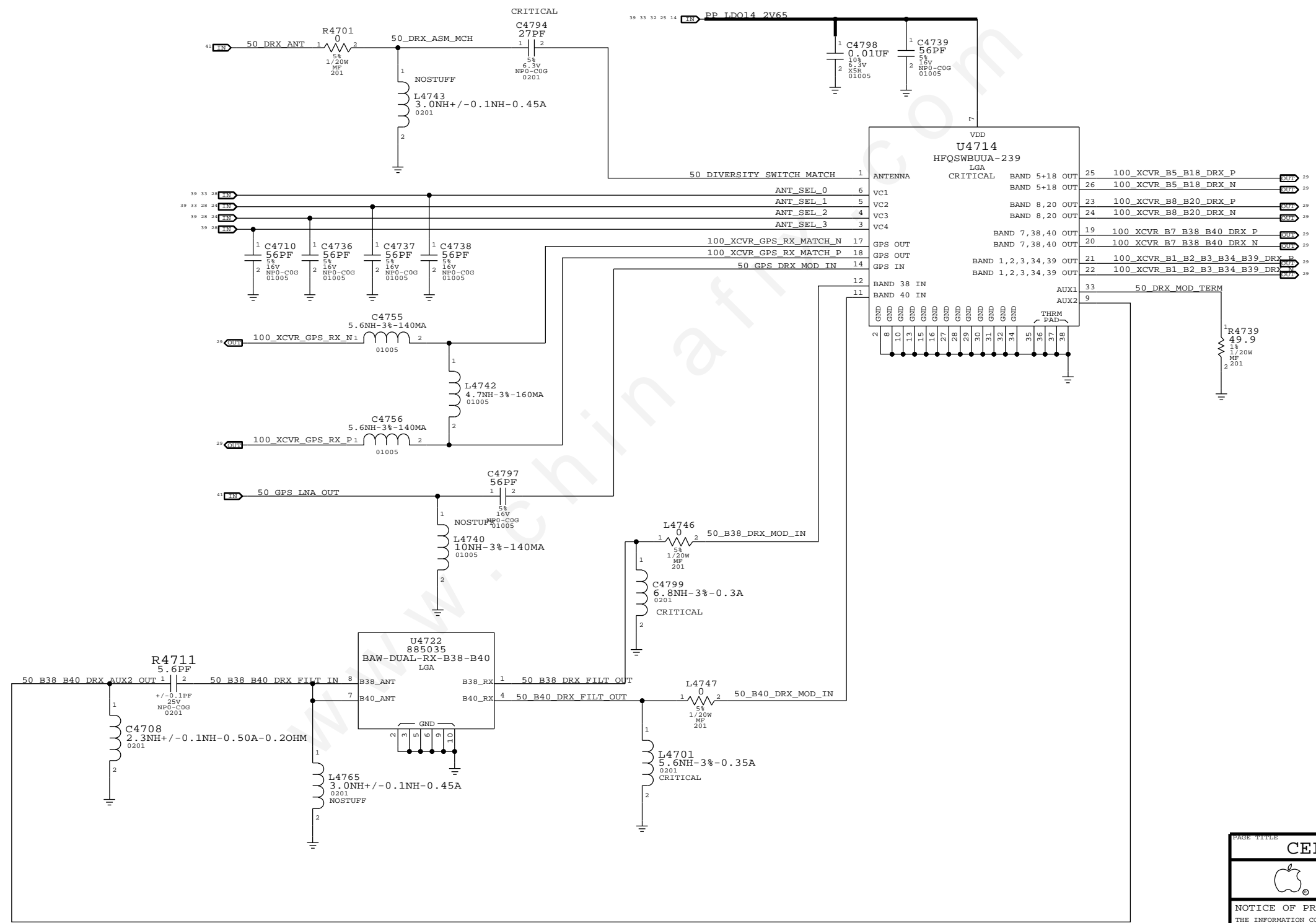


PRIMARY ASM



| | | |
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RX DIVERSITY

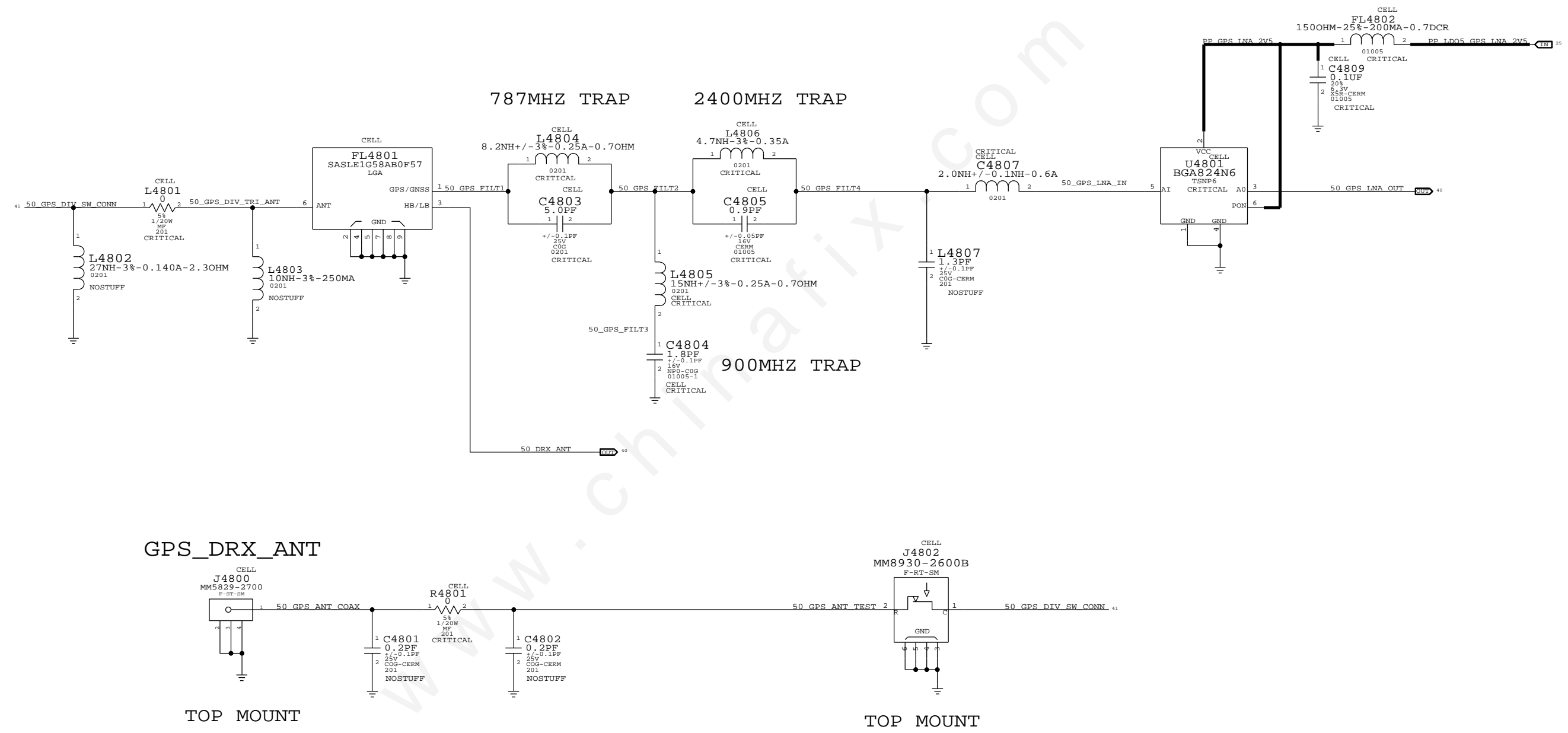


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GPS

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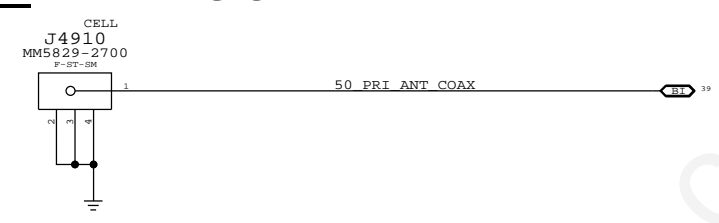


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| CELL: GPS | | | |
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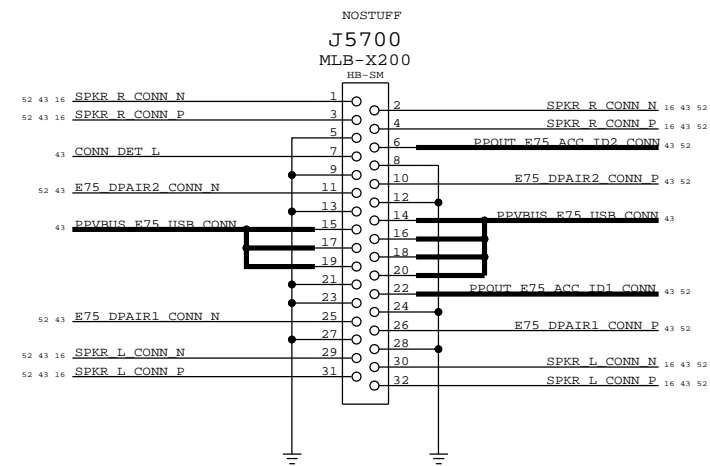
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PRI_ANT COAX

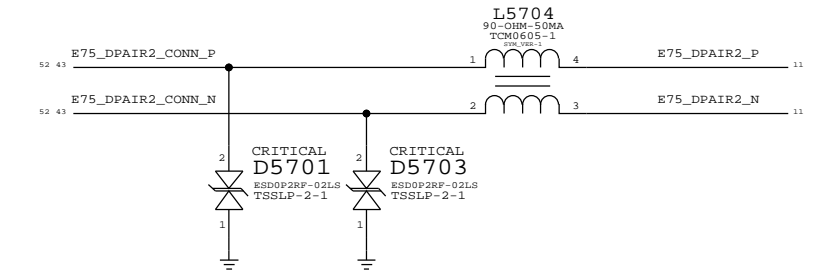
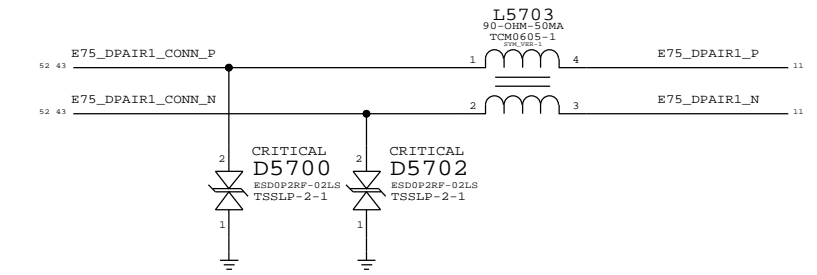
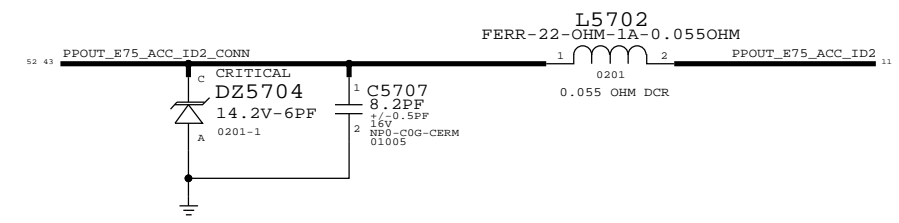
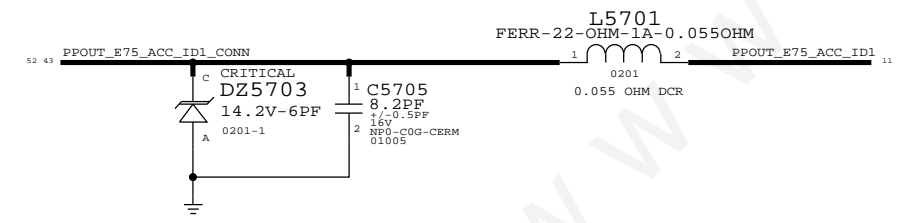
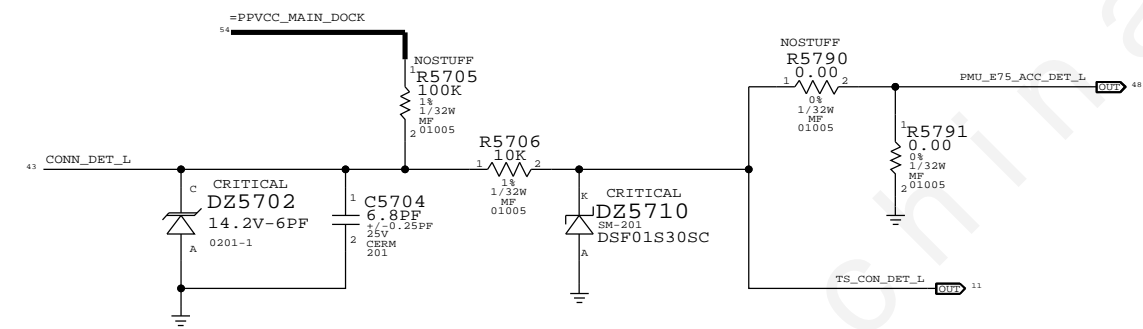
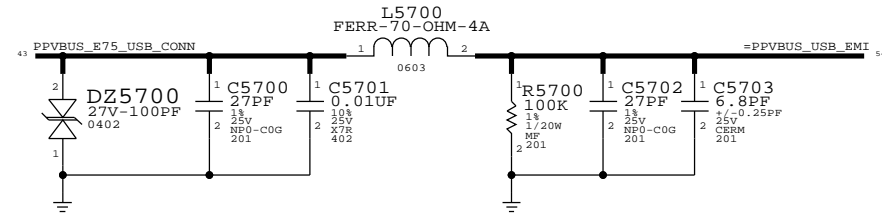


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| | | | |
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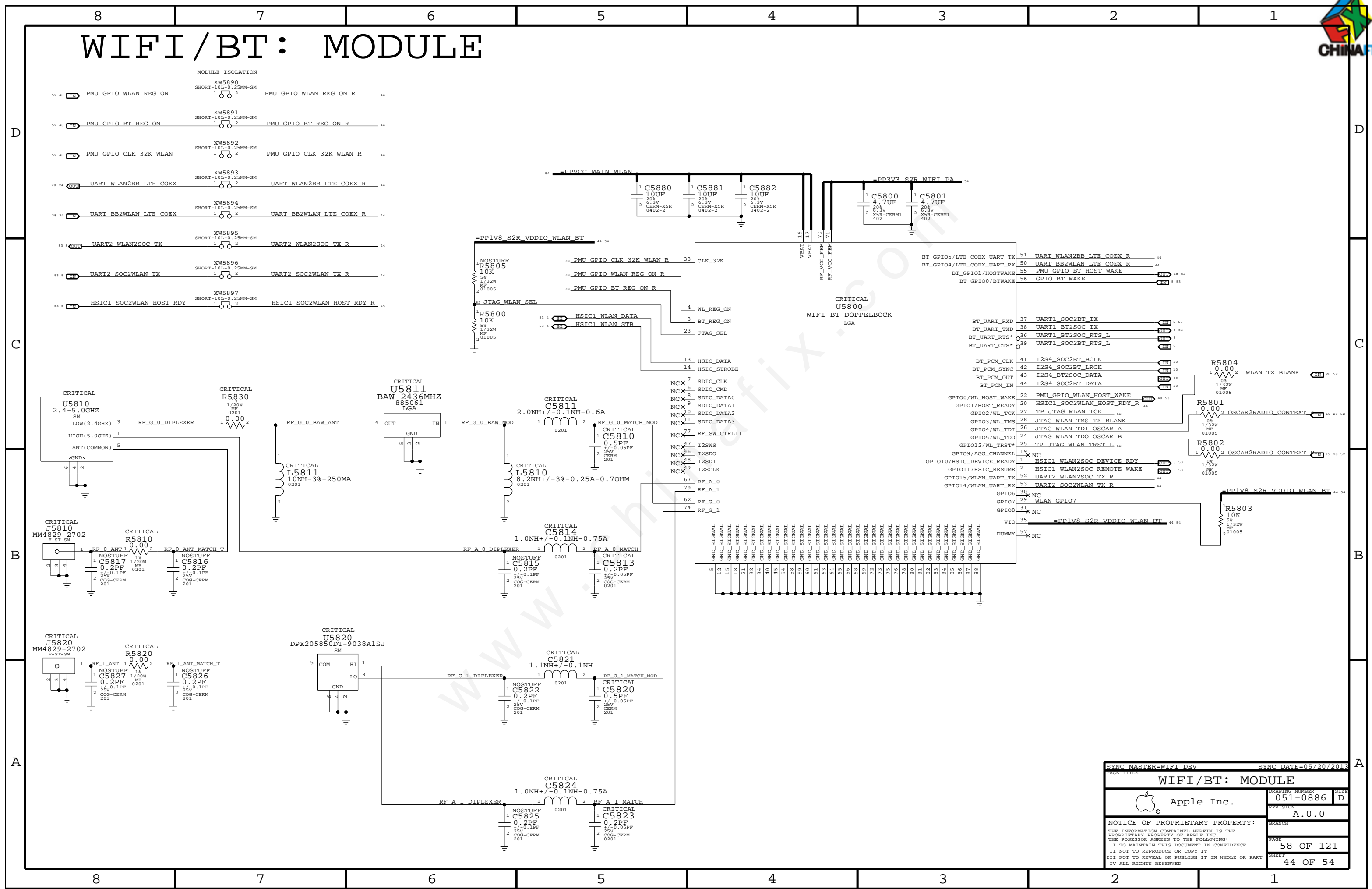
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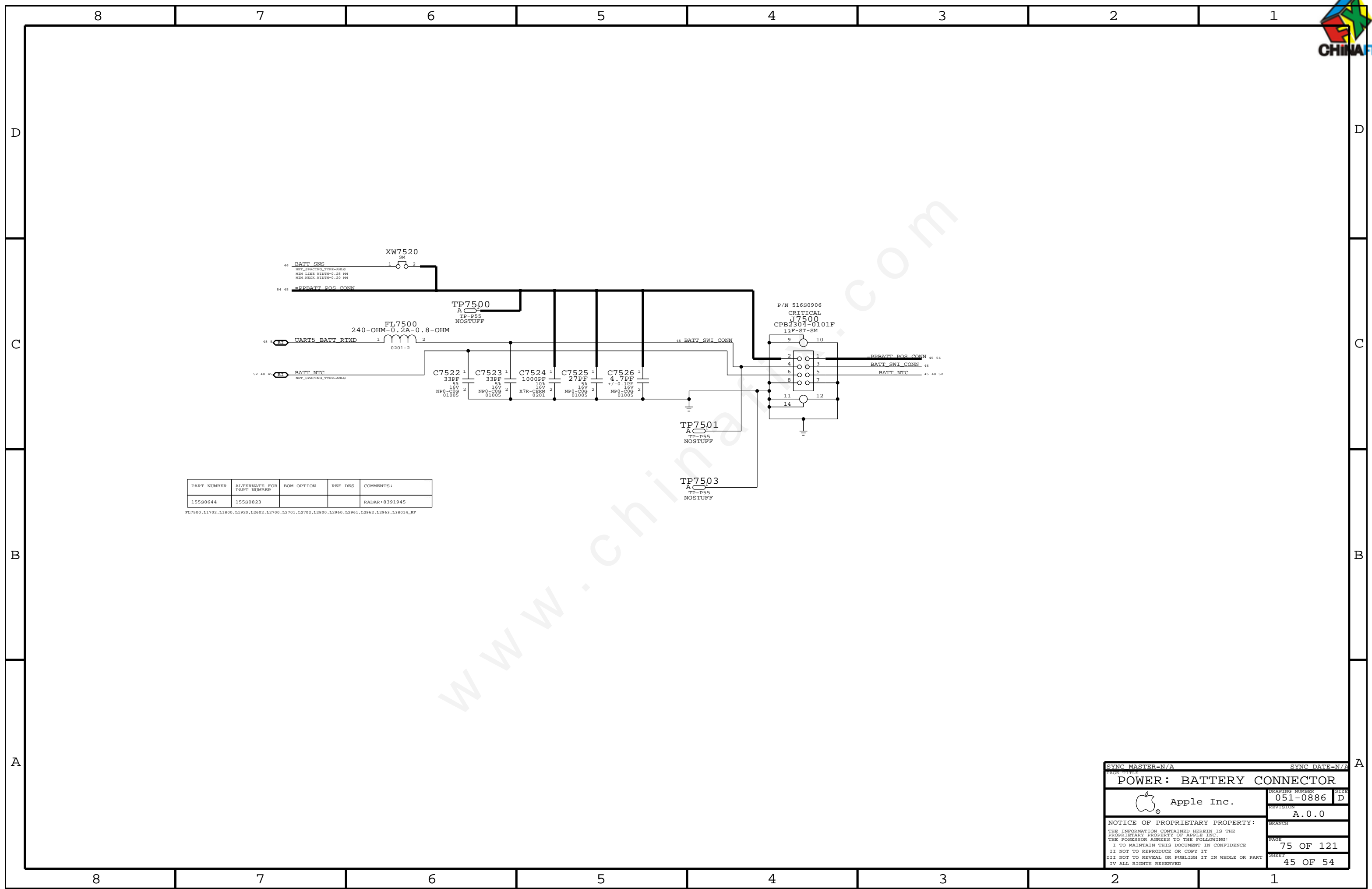
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WIFI/BT: MODULE



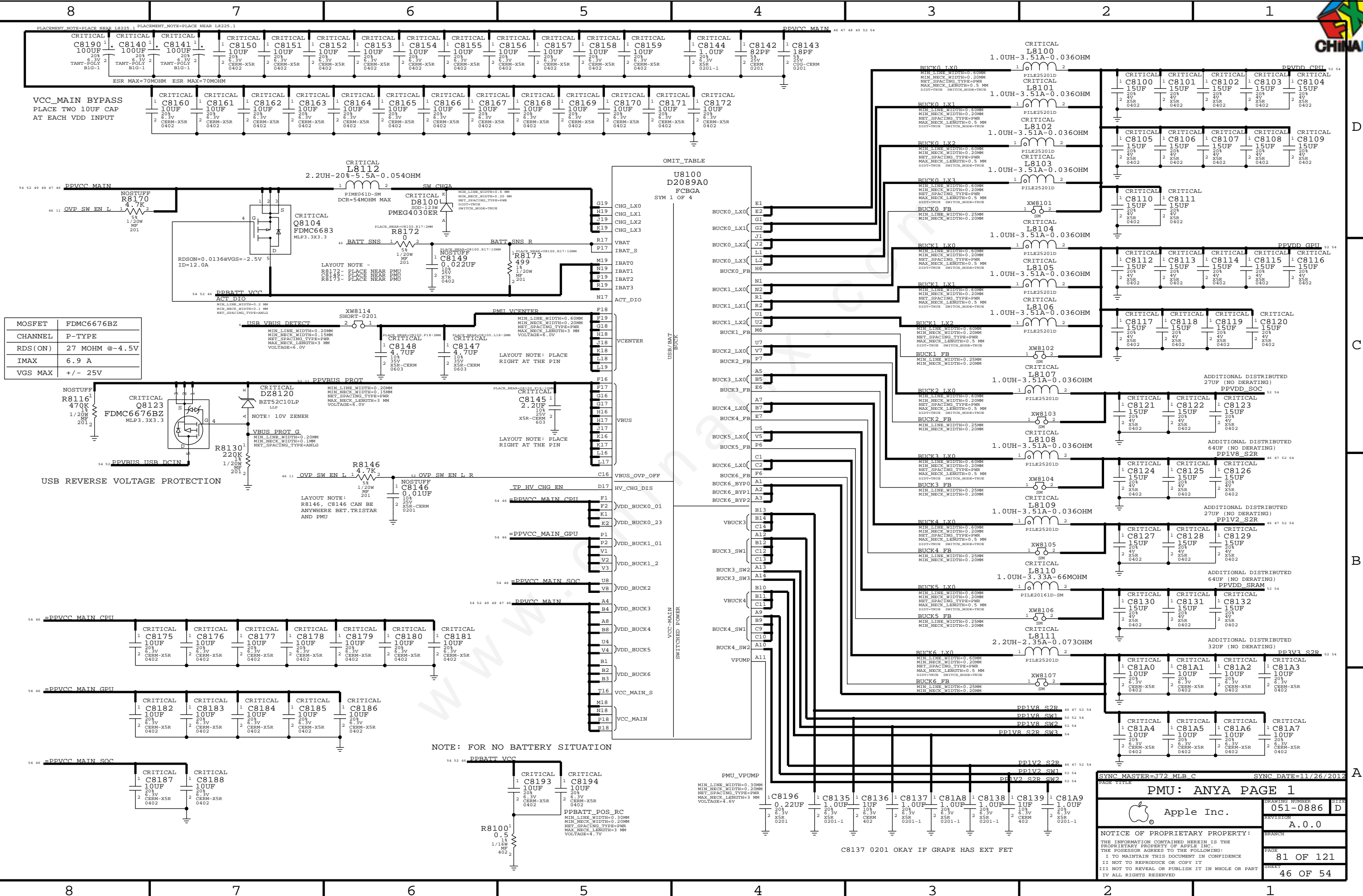
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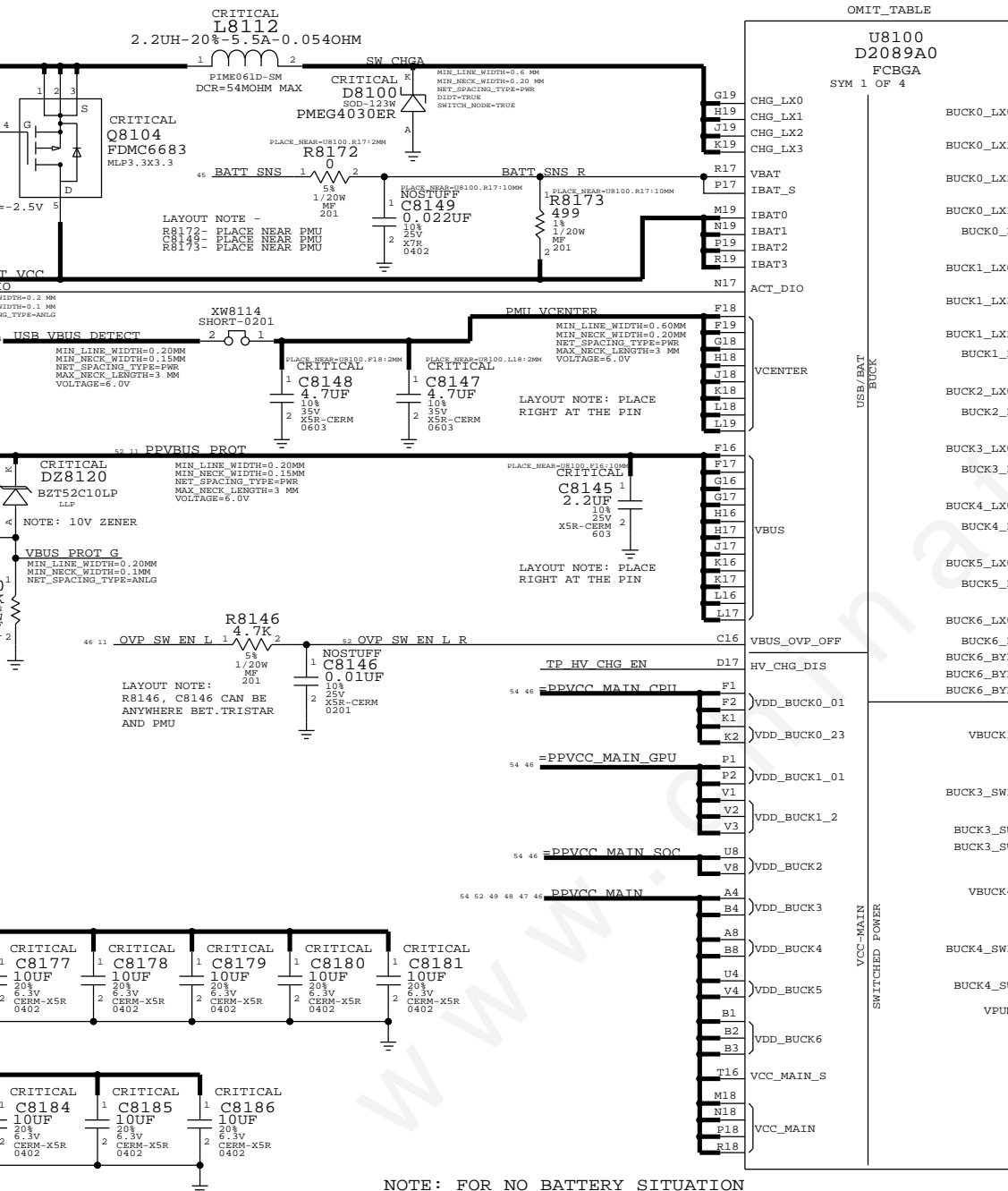
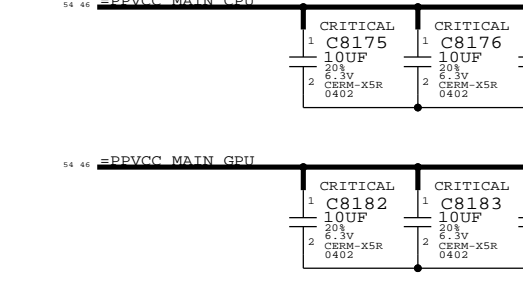
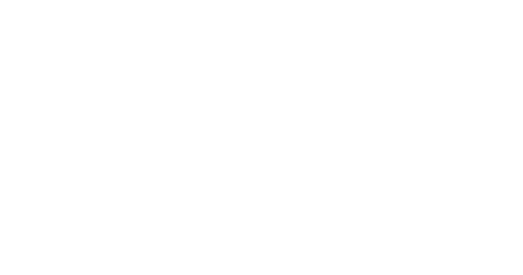
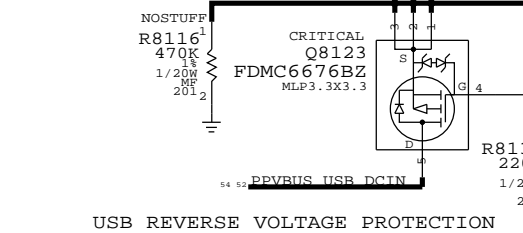
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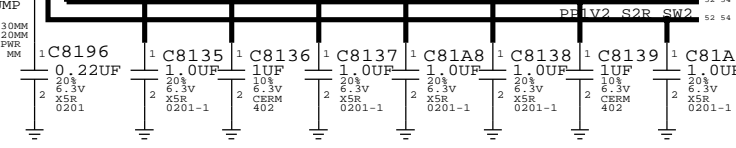
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| | |
|---------|----------------|
| MOSFET | FDMC6676BZ |
| CHANNEL | P-TYPE |
| RDS(ON) | 27 MOHM @-4.5V |
| IMAX | 6.9 A |
| VGS MAX | +/- 25V |



NOTE: FOR NO BATTERY SITUATION



SYNC MASTER=J72_MLB_C SYNC DATE=11/26/2012

PMU: ANYA PAGE 1

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DRAWING NUMBER: 051-0886 SIZE: D

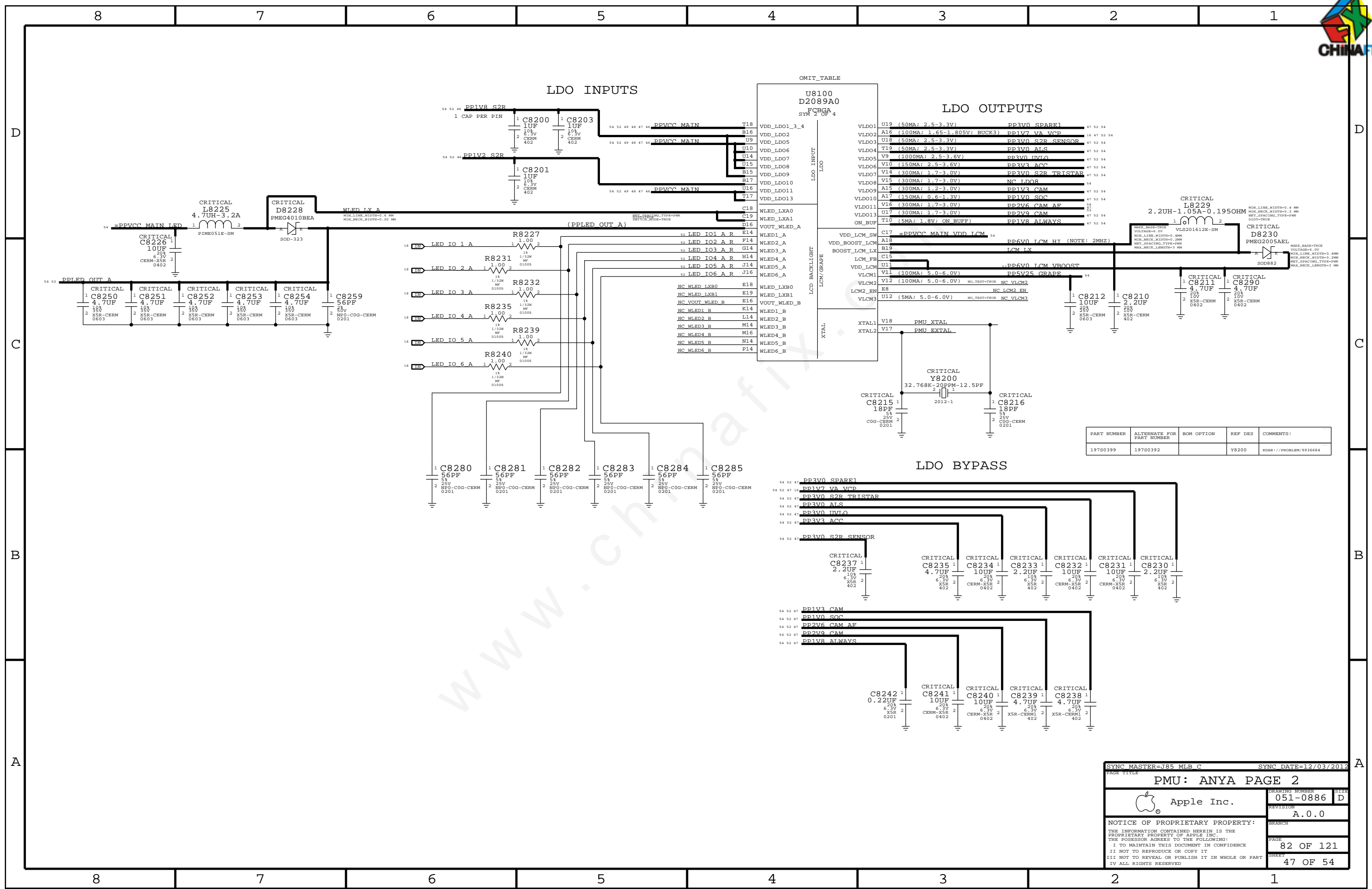
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C8137 0201 OKAY IF GRAPE HAS EXT FET



| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|-------------|---------------------------|------------|---------|------------------------|
| 197S0399 | 197S0392 | | Y8200 | RDAR://PROBLEM/9936684 |

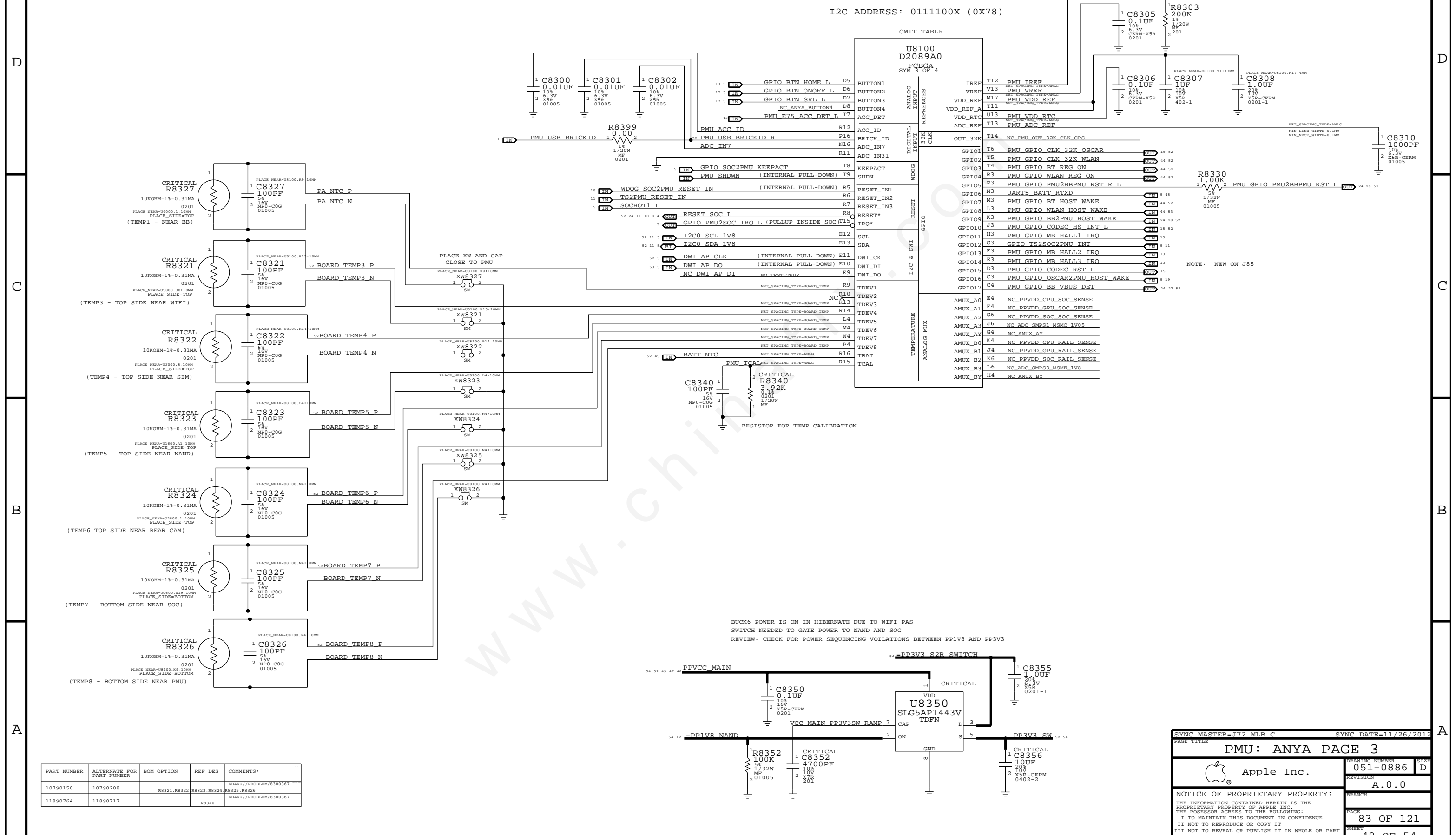
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|---|--|----------------------|-----------|
| SYNC MASTER=J85 MLB C | | SYNC DATE=12/03/2012 | |
| PAGE TITLE | | | |
| PMU: ANYA PAGE 2 | | | |
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REVIEW: VERIFY NC ON TDEV2 IS OK

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|-------------|---------------------------|------------|---------|-----------|
| 138S0739 | 138S0706 | | C8308 | |

I2C ADDRESS: 0111100X (0X78)



| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|-------------|---------------------------|--------------|--------------|--------------------------|
| 107S0150 | 107S0208 | R8321, R8322 | R8323, R8324 | RDAR: // PROBLEM/8380367 |
| 118S0764 | 118S0717 | | R8340 | RDAR: // PROBLEM/8380367 |

BUCK6 POWER IS ON IN HIBERNATE DUE TO WIFI PAS
 SWITCH NEEDED TO GATE POWER TO NAND AND SOC
 REVIEW: CHECK FOR POWER SEQUENCING VIOLATIONS BETWEEN PP1V8 AND PP3V3

SYNC MASTER=J72 MLB C SYNC DATE=11/26/2012

PMU: ANYA PAGE 3

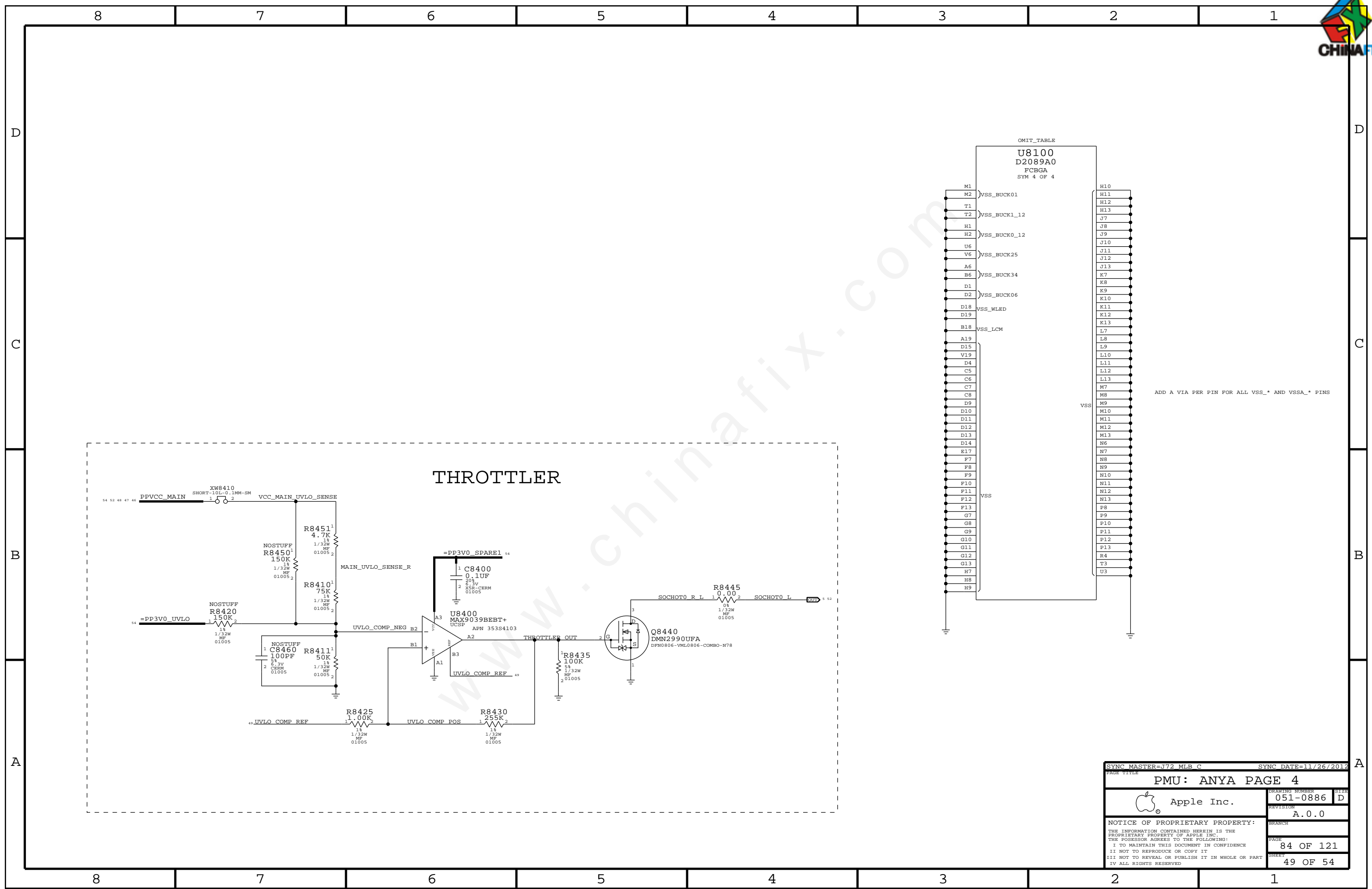
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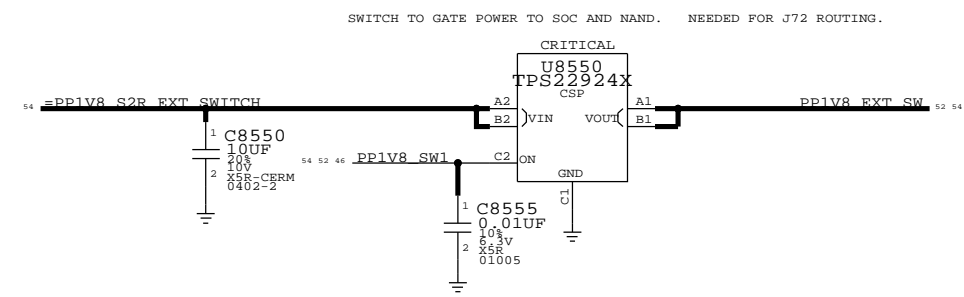
ADD A VIA PER PIN FOR ALL VSS_* AND VSSA_* PINS

| | | | |
|--|----------------|----------------------|-----------|
| SYNC MASTER=j72_MLB_C | | SYNC DATE=11/26/2012 | |
| PAGE TITLE PMU: ANYA PAGE 4 | | | |
| | DRAWING NUMBER | 051-0886 | SIZE D |
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8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A



www.chinafix.com

| | | | |
|---|--|----------------------|-----------|
| SYNC MASTER=J85 MLB C | | SYNC DATE=11/26/2012 | |
| POWER: PP1V8_SW | | | |
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8 7 6 5 4 3 2 1



8 7 6 5 4 3 2 1

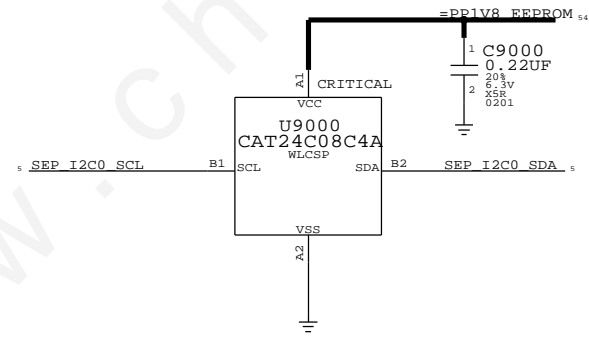
D
C
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DEBUG

TP9002
TP-P55

SEP EEPROM

UNPROGRAMMED P/N: 335S0894



| | | | | |
|--|--|----------------|--|-----------|
| PAGE TITLE | | DRAWING NUMBER | | SIZE |
| SEP: EEPROM & SOC DEBUG | | 051-0886 | | D |
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8 7 6 5 4 3 2 1



8 7 6 5 4 3 2 1

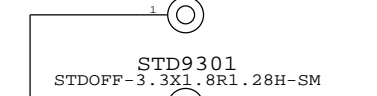
TP9300 GPIO CODEC IRO L 5 15
 A TP9304 PMU GPIO CODEC HS INT L 15 48
 TP9303 BATT NTC 45 48
 TP9305 PPLED OUT A 47 54
 TP9306 PP3V0 UVLO 47 54
 TP9307 PP3V0 SPARE1 47 54
 TP9308 SOCHOT0 L 5 49
 TP9312 BOARD TEMP3 P 48
 TP9313 BOARD TEMP4 P 48
 TP9314 BOARD TEMP5 P 48
 TP9315 BOARD TEMP6 P 48
 TP9316 BOARD TEMP7 P 48
 TP9317 BOARD TEMP8 P 48
 TP9318 CLK 32K SOC2CUMULUS 5 13
 TP9320 CODEC HP DET R 15
 TP9321 CODEC HP HS3 15
 TP9322 CODEC HP HS3 REF 15
 TP9323 CODEC HP HS4 15
 TP9324 CODEC HP HS4 REF 15
 TP9325 CODEC HP LEFT 15
 TP9326 CODEC HP RIGHT 15
 TP9328 DISPLAY SYNC R 13
 TP9329 DWI AP CLK 5 48
 TP9330 E75 DPAIR1 CONN N 43
 TP9331 E75 DPAIR1 CONN P 43
 TP9332 E75 DPAIR2 CONN N 43
 TP9333 E75 DPAIR2 CONN P 43
 TP9334 FMIO CE0 L 6 12
 TP9335 FMIO CE0 L 6 12
 TP9336 GND
 TP9337 GND AUDIO CODEC 15
 TP9338 GPIO BTN HOME FILT L 13
 TP9339 GPIO BTN ONOFF L FILT 17
 TP9340 GPIO BTN SRL L FILT 17
 TP9341 GPIO BTN VOL DOWN L FILT 17
 TP9342 GPIO BTN VOL UP L FILT 17
 TP9343 GPIO FORCE DFU 5
 TP9344 GPIO GRAPE IRO L 5 13
 TP9345 GPIO GRAPE RST L 5 13
 TP9346 GPIO SOC2BB WAKE MODEM 5 28
 TP9347 GPIO SPKAMP KEEPALIVE 5 16
 TP9348 I2C0 SCL 1V8 5 11 48
 TP9349 I2C0 SDA 1V8 5 11 48
 TP9350 I2C2 SCL 1V8 5 16
 TP9351 I2C2 SDA 1V8 5 16
 TP9352 ISPO CAM REAR CLK 7 23
 TP9353 ISPO CAM REAR SCL 7 23
 TP9354 ISPO CAM REAR SDA 7 23
 TP9355 ISPO CAM REAR SHUTDOWN L 7 23
 TP9356 ISP1 CAM FRONT CLK 7 20
 TP9357 ISP1 CAM FRONT SCL 7 20
 TP9358 ISP1 CAM FRONT SDA 7 20
 TP9359 ISP1 CAM FRONT SHUTDOWN L 7 20
 TP9360 JTAG SOC SEL 4 10
 TP9361 JTAG SOC TCK 4 11
 TP9362 JTAG SOC TDI 4
 TP9363 JTAG SOC TMS 4 11
 TP9364 JTAG SOC TRST L 4 10
 TP9365 JTAG WLAN SEL 44
 TP9366 OSCAR2RADIO CONTEXT A 19 28 44
 TP9367 OSCAR2RADIO CONTEXT B 19 28 44
 TP9368 WLAN TX BLANK 28 44
 TP9369 LAT SW1 CTL 14 24 28
 TP9370 LAT SW2 CTL 14 24 28
 TP9371 LED IO1 A R 47
 TP9372 LED IO2 A R 47
 TP9373 LED IO3 A R 47
 TP9374 LED IO4 A R 47
 TP9375 LED IO5 A R 47
 TP9376 LED IO6 A R 47
 TP9377 MIKEY TS N 11 15
 TP9378 MIKEY TS P 11 15

TP9380 OVP SW EN L R 46
 TP9382 PMU GPIO BT HOST WAKE 44 48
 TP9383 PMU GPIO BT REG ON 44 48
 TP9384 PMU GPIO CLK 32K OSCAR 44 48
 TP9385 PMU GPIO CLK 32K WLAN 44 48
 TP9387 PMU USB BRICKID R 48
 TP9388 PP1V0 SOC 47 54
 TP9389 PP1V2 S2R 46 47 54
 TP9390 PP1V2 S2R SW2 46 54
 TP9391 PP1V2 SW1 46 54
 TP9393 PP1V7 VA VCP 16 47 54
 TP9395 PP1V8 ALWAYS 47 54
 TP9320 PP1V8 EXT SW 50 54
 TP9321 PP1V8 GRAPE FILT 13
 TP9322 PP1V8 GRAPE SW 13
 TP9323 PP1V8 PLL SOC F 4
 TP9324 PP1V8 S2R 46 47 54
 TP9326 PP1V8 S2R SW3 COMP 54
 TP9327 PP1V8 SW1 46 50 54
 TP9328 PP1V8 SW2 46 54
 TP9329 PP1V8 XTAL 8
 TP9330 PP2V6 CAM AF 47 54
 TP9338 PP3V0 S2R HALL FILT 13
 TP9340 PP3V0 S2R SENSOR 47 54
 TP9341 PP3V0 S2R TRISTAR 47 54
 TP9343 PP3V3 ACC 47 54
 TP9344 PP3V3 S2R 46 54
 TP9345 PP3V3 SW 48 54
 TP9346 PP5V25 GRAPE FILT 13
 TP9348 PP6V0 LCM VBOOST 47
 TP9349 PPBATT VCC 46 54
 TP9350 PPLED BACK REG A 18
 TP9351 PPROUT E75 ACC ID1 CONN 43
 TP9352 PPROUT E75 ACC ID2 CONN 43
 TP9353 PPVBUS PROT 11 46
 TP9354 PPVBUS USB DCIN 46 54
 TP9355 PPVCC MAIN 46 47 48 49 54
 TP9356 PPVCC MAIN LCD SW CONN 18
 TP9357 PPVDD CPU 46 54
 TP9358 PPVDD GPU 46 54
 TP9359 PPVDD SOC 46 54
 TP9360 PPVDD SRAM 46 54

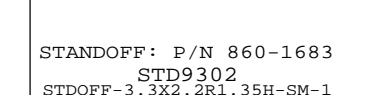
TP93G4 PP SMPS4 RF2 2V05 25 30
 TP93G9 SOC TESTMODE 4 10
 TP93H1 SPI1 GRAPE CS L 5 13
 TP93H2 SPI1 GRAPE MISO 5 13
 TP93H3 SPI1 GRAPE MOSI 5 13
 TP93H4 SPI1 GRAPE SCLK R 13
 TP93H5 SPKR L CONN N 16 43
 TP93H6 SPKR L CONN P 16 43
 TP93H7 SPKR R CONN N 16 43
 TP93H8 SPKR R CONN P 16 43
 TP93I1 TP JTAG SOC TDO 4
 TP93I2 TP JTAG WLAN TCK 44
 TP93I3 TP JTAG WLAN TRST L 44
 TP93I4 UART0 SOC RXD 5 11
 TP93I5 UART0 SOC TXD 5 11
 TP93I6 UART3 BB2SOC TX 5 11 24 28
 TP93I7 UART3 SOC2BB TX 5 11 24 28
 TP93I8 UART6 TS ACC RXD 5 11
 TP93I9 UART6 TS ACC TXD 5 11
 TP93J0 USB SOC N 4 11
 TP93J1 USB SOC P 4 11
 TP93J9 PP3V0 ALS 47 54
 TP93JA PP2V9 CAM 47 54
 TP93JB PP1V3 CAM 47 54
 TP93JC PMU GPIO WLAN REG ON 44 48

RF TEST POINTS
 TP93G1 PP SMPS1 MSME 1V05 25 27
 TP93G2 PP SMPS3 MSME 1V8 24 25 27 28 30
 TP93G5 PP SMPS5 DSP 1V05 25
 TP93H5 PP LDO1 25
 TP93H9 TP BB TEST MODE 0 27
 TP93I0 TP BB TEST MODE 1 27
 TP93J0 SIMCRD RST CONN 10 24 28
 TP93J5 SIMCRD CLK CONN 10 24 28
 TP93K7 SIMCRD IO CONN 10 24 28
 TP93K8 SIM TRAY DETECT 10 24 28
 TP93F3 PP LDO6 RUM 1V8 10 24 25 27
 TP93J7 GPIO SOC2BB RADIO ON L 5 24 26
 TP93J3 GPIO SOC2BB RST L 5 24 26
 TP93J4 PMU GPIO PMU2BBPMU RST L 24 26 48
 TP93B1 PMU GPIO BB2PMU HOST WAKE 24 28 48
 TP93J5 PS HOLD PMIC 24 26
 TP93J7 DEBUG RST L 24 27
 TP93J6 BB JTAG RTCLK 24 27
 TP93J7 BB JTAG TCK 5 24 27
 TP93J8 BB JTAG TDI 5 24 27
 TP93J9 BB JTAG TDO 5 24 27
 TP93I0 BB JTAG TMS 5 24 27
 TP93I1 BB JTAG TRST L 5 24 27
 TP93J6 USB BB N 11 24 53
 TP93J7 USB BB P 11 24 53
 TP93G6 RESET SOC L 4 8 10 11 24 48
 TP93J8 PMU GPIO BB VBUS DET 24 27 48

STANDOFFS: P/N 860-1657
 STD9300
 STDOFF-3.3X1.8R1.28H-SM

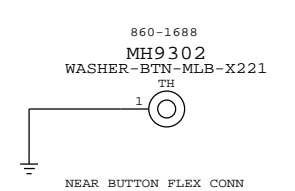
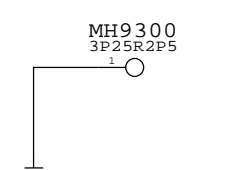
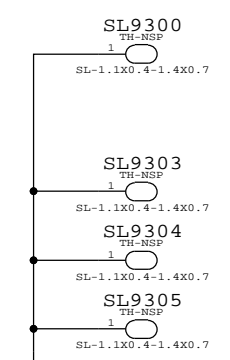


STD9301
 STDOFF-3.3X1.8R1.28H-SM



STANDOFF: P/N 860-1683
 STD9302
 STDOFF-3.3X2.2R1.35H-SM-1

PLATED THROUGH HOLES
 DRILL SIZE: 1.1MM X 0.4MM
 PLATING SIZE: 1.4MM X 0.7MM



8 7 6 5 4 3 2 1

| | | | |
|---|--|--------------------|-----------|
| SYNC MASTER=J85 MLB C | | SYNC DATE=12/03/12 | |
| TEST: TP/HOLES/FIDUCIALS | | | |
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8 7 6 5 4 3 2 1

EE CHARACTERIZATION TP

FOR FRANK (SEG)

NAND

| | | | | |
|--------|---|---------------|---|---------|
| PP9401 | 1 | FMI0_DQS | PLACE_SIDE=BOTTOM PLACE_NEAR=U0652.D34:2MM | 4 12 53 |
| PP9402 | 1 | FMI0_AD<3> | PLACE_SIDE=BOTTOM PLACE_NEAR=U0652.C34:2MM | 6 12 |
| PP9403 | 1 | FMI0_DQS | PLACE_NEAR=U0652.D34:2MM | 4 12 53 |
| PP9410 | 1 | TP_TCKC_U1400 | | 12 |
| PP9411 | 1 | TP_TM5C_U1400 | | 12 |
| PP9412 | 1 | TP_U1400_RB0 | | 12 |
| PP9413 | 1 | TP_U1400_RB1 | | 12 |

DWI

| | | | | |
|--------|---|-----------|---|------|
| PP9405 | 1 | DWI_AP_DO | PLACE_SIDE=BOTTOM PLACE_NEAR=U8100:2MM | 6 48 |
|--------|---|-----------|---|------|

AUDIO

| | | | | |
|--------|---|--------------------|----------------------|------|
| PP9406 | 1 | I2S0_CODEC_ASP_MCK | PLACE_NEAR=U1900:2MM | 6 15 |
|--------|---|--------------------|----------------------|------|

| | | | | |
|--------|---|---------------------|----------------------|------|
| PP9416 | 1 | I2S2_CODEC_XSP_LRCK | PLACE_NEAR=U1900:2MM | 6 15 |
| PP9417 | 1 | I2S2_CODEC_XSP_DOUT | PLACE_NEAR=U1900:2MM | 6 15 |

| | | | | |
|--------|---|------------------|---|------|
| PP9419 | 1 | I2S1_SPKAMP_MCK | PLACE_NEAR=U2040:2MM | 6 16 |
| PP9420 | 1 | I2S1_SPKAMP_BCLK | PLACE_NEAR=U2040:2MM | 6 16 |
| PP9421 | 1 | I2S1_SPKAMP_LRCK | PLACE_NEAR=U2040:2MM | 6 16 |
| PP9422 | 1 | I2S1_SPKAMP_DOUT | PLACE_NEAR=U2040:2MM | 6 16 |
| PP9423 | 1 | I2S1_SPKAMP_DIN | PLACE_SIDE=BOTTOM PLACE_NEAR=U0652:2MM | 6 16 |

| | | | | |
|--------|---|-----------------|---|------|
| PP9424 | 1 | SPI2_CODEC_SCLK | PLACE_NEAR=U1900:2MM | 6 15 |
| PP9425 | 1 | SPI2_CODEC_MOSI | PLACE_NEAR=U1900:2MM | 6 15 |
| PP9426 | 1 | SPI2_CODEC_MISO | PLACE_SIDE=BOTTOM PLACE_NEAR=U0652:2MM | 6 15 |

GRAPE

OSCAR

| | | | | |
|--------|---|---------------------|---|------|
| PP9428 | 1 | UART4_SOC2OSCAR_TXD | PLACE_SIDE=BOTTOM PLACE_NEAR=U2400:2MM | 6 19 |
| PP9429 | 1 | UART4_OSCAR2SOC_RXD | PLACE_SIDE=BOTTOM PLACE_NEAR=U0652:2MM | 6 19 |

UART5

| | | | | |
|--------|---|---------------------|---------------------------|--|
| PP9450 | 1 | PPVDD_SOC_SOC_SENSE | PLACE_NEAR=U0652.V31:1MM | |
| PP9451 | 1 | PPVDD_CPU_SOC_SENSE | PLACE_NEAR=U0652.AN30:1MM | |

WIFI

| | | | | |
|--------|---|----------------------------|--|-------|
| PP9480 | 1 | HSIC1_WLAN2SOC_DEVICE_RDY | | 5 44 |
| PP9481 | 1 | HSIC1_WLAN2SOC_REMOTE_WAKE | | 5 44 |
| PP9482 | 1 | PMU_GPIO_WLAN_HOST_WAKE | | 44 48 |
| PP9483 | 1 | HSIC1_SOC2WLAN_HOST_RDY | | 5 44 |

GPIO_BT_WAKE FUNC_TEST=TRUE 5 44

| | | | | |
|---------------------------|---|-------------------|---------------------------|---------|
| FOR HSIC CHARACTERIZATION | | | | |
| PP9460 | 1 | HSIC1_WLAN_DATA | PLACE_NEAR=U0652.AM33:3MM | 4 44 53 |
| PP9462 | 1 | HSIC1_WLAN_DATA | PLACE_NEAR=U5800.13:3MM | 4 44 53 |
| PP9463 | 1 | HSIC1_WLAN_STB | PLACE_NEAR=U5800.14:3MM | 4 44 |
| PP9468 | 1 | UART1_BT2SOC_TX | PLACE_NEAR=U0652:3MM | 5 44 |
| PP9469 | 1 | UART1_SOC2BT_TX | PLACE_NEAR=U5800:3MM | 5 44 |
| PP9471 | 1 | UART2_WLAN2SOC_TX | PLACE_NEAR=U0652:3MM | 5 44 |
| PP9472 | 1 | UART2_SOC2WLAN_TX | PLACE_NEAR=U5800:3MM | 5 44 |

BASEBAND

| | | |
|----------|----------------|----------|
| USB_BB_P | FUNC_TEST=TRUE | 11 24 52 |
| USB_BB_N | FUNC_TEST=TRUE | 11 24 52 |

| | | | | |
|---------------------------|---|---------------|--------------------------|---------|
| FOR HSIC CHARACTERIZATION | | | | |
| PP9465 | 1 | HSIC2_BB_STB | PLACE_NEAR=U0652.B27:3MM | 4 24 27 |
| PP9466 | 1 | HSIC2_BB_DATA | PLACE_NEAR=U3400.C7:3MM | 4 24 27 |

PROX

HIGH SPEED, NO TEST

| | | |
|-----------------------------------|--------------|---------|
| MIPI0C_CAM_REAR_CLK_P | NO_TEST=TRUE | 7 23 53 |
| MIPI0C_CAM_REAR_CLK_N | NO_TEST=TRUE | 7 23 53 |
| MIPI0C_CAM_REAR_DATA_P<0..3> | NO_TEST=TRUE | 7 23 53 |
| MIPI0C_CAM_REAR_DATA_N<0..3> | NO_TEST=TRUE | 7 23 53 |
| MIPI0C_CAM_REAR_CLK_FILT_P | NO_TEST=TRUE | 23 |
| MIPI0C_CAM_REAR_CLK_FILT_N | NO_TEST=TRUE | 23 |
| MIPI0C_CAM_REAR_DATA_FILT_P<0..3> | NO_TEST=TRUE | 23 |
| MIPI0C_CAM_REAR_DATA_FILT_N<0..3> | NO_TEST=TRUE | 23 |
| MIPI1C_CAM_FRONT_CLK_P | NO_TEST=TRUE | 7 20 53 |
| MIPI1C_CAM_FRONT_CLK_N | NO_TEST=TRUE | 7 20 53 |
| MIPI1C_CAM_FRONT_DATA_P<0> | NO_TEST=TRUE | 7 20 53 |
| MIPI1C_CAM_FRONT_DATA_N<0> | NO_TEST=TRUE | 7 20 53 |
| MIPI1C_CAM_FRONT_CLK_FILT_P | NO_TEST=TRUE | 20 |
| MIPI1C_CAM_FRONT_CLK_FILT_N | NO_TEST=TRUE | 20 |
| MIPI1C_CAM_FRONT_DATA_FILT_P<0> | NO_TEST=TRUE | 20 |
| MIPI1C_CAM_FRONT_DATA_FILT_N<0> | NO_TEST=TRUE | 20 |
| EDP_DATA_P<0..3> | NO_TEST=TRUE | 7 18 |
| EDP_DATA_N<0..3> | NO_TEST=TRUE | 7 18 |
| EDP_DATA_EMI_P<0..3> | NO_TEST=TRUE | 18 |
| EDP_DATA_EMI_N<0..3> | NO_TEST=TRUE | 18 |
| EDP_DATA_EMI_CONN_P<0..3> | NO_TEST=TRUE | 18 |
| EDP_DATA_EMI_CONN_N<0..3> | NO_TEST=TRUE | 18 |

CAMERA

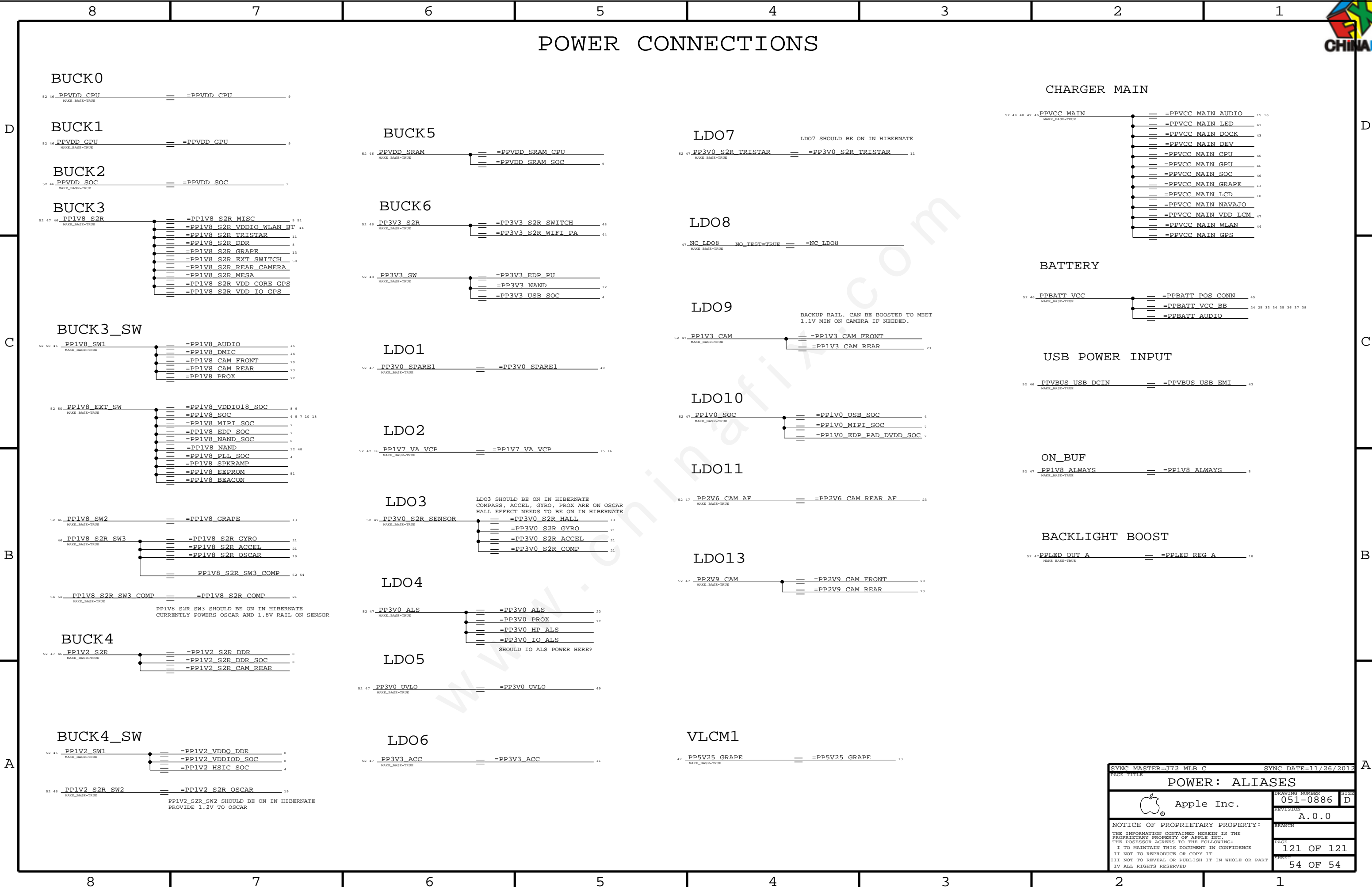
| | | | | |
|--------|---|----------------------------|---------------------------|---------|
| PP9440 | 1 | MIPI1C_CAM_FRONT_CLK_P | PLACE_NEAR=U0652.AR33:3MM | 7 20 53 |
| PP9441 | 1 | MIPI1C_CAM_FRONT_CLK_N | PLACE_NEAR=U0652.AR34:3MM | 7 20 53 |
| PP9442 | 1 | MIPI1C_CAM_FRONT_DATA_P<0> | PLACE_NEAR=U0652.AT33:3MM | 7 20 53 |
| PP9443 | 1 | MIPI1C_CAM_FRONT_DATA_N<0> | PLACE_NEAR=U0652.AT34:3MM | 7 20 53 |
| PP9444 | 1 | MIPI0C_CAM_REAR_CLK_P | PLACE_NEAR=U0652.AV25:3MM | 7 23 53 |
| PP9445 | 1 | MIPI0C_CAM_REAR_CLK_N | PLACE_NEAR=U0652.AV25:3MM | 7 23 53 |
| PP9446 | 1 | MIPI0C_CAM_REAR_DATA_P<0> | PLACE_NEAR=U0652.AV27:3MM | 7 23 53 |
| PP9447 | 1 | MIPI0C_CAM_REAR_DATA_N<0> | PLACE_NEAR=U0652.AV27:3MM | 7 23 53 |

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| SYNC MASTER=J72_MLB_C | | SYNC DATE=11/26/2012 | |
| TEST: EE TP/PP | | | |
| Apple Inc. | | DRAWING NUMBER | 051-0886 |
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POWER CONNECTIONS



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| SYNC MASTER=j72 MLB C | | SYNC DATE=11/26/2012 | |
| PAGE TITLE POWER: ALIASES | | | |
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