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.

# Mon Feb 18 18:52:09 2013

| REV | ECN | DESCRIPTION OF REVISION | CK APPD / DATE |
|---|---|---|---|
| 8 | 0001837617 | ENGINEERING RELEASED | 2013-02-18 |

# X145 SINGLE_BRD E1C


| PDF PAGE | CSA PAGE | CONTENTS | SYNC MASTER | DATE |
|---|---|---|---|---|
| 2 | 2 | H6P JTAG,USB,PLL,HSIC,XTAL | N/A | N/A |
| 3 | 3 | H6P DIGITAL I/O,BOOTSTRAPPING | N/A | N/A |
| 4 | 4 | H6P VDDCA,VDD1/2,VDD,VDD_CPU,VDD_GPU | N/A | N/A |
| 5 | 5 | H6P GND,VDDIO18,VDDIOD,VDD_SRAM,VDD_SOC | N/A | N/A |
| 6 | 6 | H6P NAND,NAND 12X17 | N/A | N/A |
| 7 | 7 | H6P HIGH SPEED DIG (CAM,LCM,DP) | N/A | N/A |
| 8 | 8 | BUTTON FLEX B2B | N/A | N/A |
| 9 | 9 | L67 AUDIO CODEC (1/2) | N/A | N/A |
| 10 | 10 | L67 AUDIO CODEC (2/2) | N/A | N/A |
| 11 | 11 | FRONT CAM FLEX B2B | N/A | N/A |
| 12 | 12 | AMBER PMU(1/2) | N/A | N/A |
| 13 | 13 | AMBER PMU(2/2) | N/A | N/A |
| 14 | 14 | CHESTNUT,BACKLIGHT DRIVER,MESA BOOST | N/A | N/A |
| 15 | 15 | SPKR AMP + STROBE DRIVER | N/A | N/A |
| 16 | 16 | TRISTAR,EEPROM | N/A | N/A |
| 17 | 17 | DOCKFLEX B2B | N/A | N/A |
| 18 | 18 | D403 (TOUCH B2B, DRIVER ICS) | N/A | N/A |
| 19 | 19 | LCM B2B | N/A | N/A |
| 20 | 20 | OSCAR + SENSORS | N/A | N/A |
| 21 | 21 | REAR CAM B2B | N/A | N/A |
| 22 | 22 | BATT B2B, TPS, PD FEATURES | N/A | N/A |
| 23 | 23 | VOLTAGE NETS | | |
| 24 | 24 | RADIO_MLB HIERARCH. SYMBOL | N/A | N/A |
| 25 | 25 | Cross Reference Page | | |


## INDUCTOR BOM OPTIONS

UPDATED FOR EVT2 RDAR://12984453

| | PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|---|
| BUCK0 SLAVE | 152S1834 | 3 | BUCK0 SLAVE IND: 0.47UH, CYNTEC | L10,L12,L14 | CRITICAL | IND_BUCK0_SLV_P47UH_CYNTEC |
| | 152S1839 | 3 | BUCK0 SLAVE IND: 0.47UH, TAIYO | L10,L12,L14 | CRITICAL | IND_BUCK0_SLV_P47UH_TAIYO |
| BUCKXX MASTER | 152S1801 | 7 | AMBER BUCKXX IND: 1UH CYNTEC | L9,L11,L13,L15,L16,L17,L18 | CRITICAL | IND_BUCKXX_1UH_CYNTEC |
| | 152S1840 | 7 | AMBER BUCKXX IND: 1UH TAIYO | L9,L11,L13,L15,L16,L17,L18 | CRITICAL | IND_BUCKXX_1UH_TAIYO |
| STROBE | 152S1801 | 1 | STROBE IND: 1UH CYNTEC | L5 | CRITICAL | IND_STROBE_1UH_CYNTEC |
| | 152S1840 | 1 | STROBE IND: 1UH TAIYO | L5 | CRITICAL | IND_STROBE_1UH_TAIYO |
| SPKR AMP | 152S1836 | 1 | SPKR AMP IND: 1.2UH CYNTEC | L4 | CRITICAL | IND_SPKRAMP_1P2UH_CYNTEC |
| | 152S1844 | 1 | SPKR AMP IND: 1.2UH TAIYO | L4 | CRITICAL | IND_SPKAMP_1P2UH_TAIYO |
| CHARGER | 152S1721 | 1 | CHARGER IND: 2.2UH TAIYO | L8 | CRITICAL | IND_CHGR_2P2UH_TAIYO |
| | 152S1850 | 1 | CHARGER IND: 2.2UH MURATA | L8 | CRITICAL | IND_CHGR_2P2UH_MURATA |
| CHESTNUT | 152S1842 | 1 | TI CHESTNUT: 1.5UH TAIYO | L19 | CRITICAL | IND_CHESTNUT_1P5UH_TAIYO |
| | 152S1802 | 1 | TI CHESTNUT: 1.5UH CYNTEC | L19 | CRITICAL | IND_CHESTNUT_1P5UH_CYNTEC |
| | 152S1849 | 1 | TI CHESTNUT: 1.5UH MURATA | L19 | CRITICAL | IND_CHESTNUT_1P5UH_MURATA |

## AUDIO BOM OPTION

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 155S0556 | 2 | FERRITE 0402 P14OHM 1A | FL6, FL9 | CRITICAL | SPKAMP_FERRITE_REG |
| 155S0731 | 2 | FERRITE 0402 P06OHM 1P8A | FL6, FL9 | CRITICAL | SPKAMP_FERRITE_LOWDCR |
| 132S0396 | 2 | CAP 01005 10V 1000PF | C500, C501 | CRITICAL | SPKAMP_CAPFILT_1000PF |
| 132S0437 | 2 | CAP 01005 10V 150PF | C500, C501 | CRITICAL | SPKAMP_CAPFILT_150PF |
| 131S0283 | 2 | CAP 01005 10V 100PF | DZ13, DZ14 | CRITICAL | SPKAMP_ESDFILT_100PF |
| 377S0106 | 2 | VARISTOR 12V 33PF | DZ13, DZ14 | CRITICAL | SPKAMP_ESDFILT_VARS |
| 155S0453 | 2 | 120OHM FERRITE BEAD | FL1,FL10 | CRITICAL | HS3_HS4_120OHM_BEADS |
| 155S0755 | 2 | 240OHM FERRITE BEAD | FL1,FL10 | CRITICAL | HS3_HS4_240OHM_BEADS |

## NAVAJO SPI BOM OPTIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 117S0161 | 4 | 0OHMS SERIES R ON NAVAJO SPI | FL32,FL63,FL50,FL59 | CRITICAL | NAVAJO_SERIES_0OHM |
| 155S0453 | 4 | 120OHM FERRITES ON NAVAJO SPI | FL32,FL63,FL50,FL59 | CRITICAL | NAVAJO_SERIES_FERRITE |

## OSCAR BOM OPTIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 337S4416 | 1 | OSCAR A1 CSP | U9 | CRITICAL | OSCAR_CSP |
| 337S4417 | 1 | OSCAR A1 FCLGA | U9 | CRITICAL | OSCAR_FCLGA |

## MISC BOM OPTIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 118S0723 | 2 | DDR_RREF 240OHM | R73,R72 | CRITICAL | DDR_RREF_240 |
| 118S0684 | 2 | DDR_RREF 243OHM | R73,R72 | CRITICAL | DDR_RREF_243 |

## X145 BOM CALLOUTS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 051-9478 | 1 | SCH, SINGLE_BRD, X145 | SCH | CRITICAL | ? |
| 820-3292 | 1 | PCB, SINGLE_BRD, X145 | PCB | CRITICAL | ? |
| 825-6838 | 1 | LABEL FOR X145 639-4152 | EEEE_F7GR | CRITICAL | EEEE_MM_16G |
| 825-6838 | 1 | LABEL FOR X145 639-4153 | EEEE_F7GQ | CRITICAL | EEEE_MM_32G |
| 825-6838 | 1 | LABEL FOR X145 639-3465 | EEEE_DYJP | CRITICAL | EEEE_MM_64G |
| 825-6838 | 1 | LABEL FOR X145 639-4668 | EEEE_FGCC | CRITICAL | EEEE_SM_16G |
| 825-6838 | 1 | LABEL FOR X145 639-4667 | EEEE_FGCD | CRITICAL | EEEE_SM_32G |
| 825-6838 | 1 | LABEL FOR X145 639-4669 | EEEE_FGCF | CRITICAL | EEEE_SM_64G |

## SOC BOM OPTIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 339S0207 | 1 | H6P + 1GB ELPIDA | U1 | CRITICAL | |

## SOC BOM ALTERNATES

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|---|---|---|---|---|
| 339S0208 | 339S0207 | | U1 | H6P + 1GB HYNIX |

## NAND BOM OPTIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 335S0930 | 1 | NAND,19NM,16GX8,MLC,PPN1.5,HYNIX | U4 | CRITICAL | NAND_16G |
| 335S0931 | 1 | NAND,19NM,32GX8,MLC,PPN1.5,HYNIX | U4 | CRITICAL | NAND_32G |
| 335S0932 | 1 | NAND,19NM,64GX8,MLC,PPN1.5,HYNIX | U4 | CRITICAL | NAND_64G |

## NAND BOM ALTERNATES

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|---|---|---|---|---|
| 335S0921 | 335S0930 | | U4 | NAND_16GB_TOSHIBA |
| 335S0933 | 335S0930 | | U4 | NAND_16GB_SANDISK |
| 335S0922 | 335S0931 | | U4 | NAND_32GB_TOSHIBA |
| 335S0934 | 335S0931 | | U4 | NAND_32GB_SANDISK |
| 335S0923 | 335S0932 | | U4 | NAND_64GB_TOSHIBA |
| 335S0935 | 335S0932 | | U4 | NAND_64GB_SANDISK |

## RADIO_MLB ALTERNATES

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|---|---|---|---|---|
| 335S0895 | 335S0874 | | U6_RF | WINBOND NOR ALT |
| 339S0204 | 339S0205 | | U8_RF | USI WIFI ALT |
| 339S0209 | 339S0205 | | U8_RF | TDK WIFI ALT |
| 197S0491 | 197S0470 | | Y1_RF | KYOCERA ALT |
| 197S0482 | 197S0470 | | Y1_RF | EPSON ALT |

SCH 051-9478
BRD 820-3292
MCO 056-5179
BOM 639-4152 (16GB) X145
BOM 639-4153 (32GB) X145
BOM 639-3465 (64GB) X145


FOR CHESTNUT BOMTABLE - SEE PG 14
FOR RADIO BOMTABLE - SEE PG 24
FOR MISC R/L/C - SEE PG 2


I2C ADDRESS MAP

I2C0

| DEVICE | BINARY | 7-BIT HEX | 8-BIT HEX |
|---|---|---|---|
| AMBER PMU: | 1110100X | 0X74 | 0XE8 |
| CS35L19B AMP: | 1000000X | 0X40 | 0X80 |
| LM3534 BL DRIVER: | 1100011X | 0X63 | 0XC6 |
| TRISTAR: | 0011010X | 0X1A | 0X34 |
| CHESTNUT: | 0100111X | 0X27 | 0X4E |

I2C1

| | | | |
|---|---|---|---|
| CT814 ALS: | 0101001X | 0X29 | 0X52 |

RCAM I2C

| | | | |
|---|---|---|---|
| OPEL STROBE DRIVER: | 1100011X | 0X63 | 0XC6 |
| REAR FACING CAM: | 0010000X | 0X10 | 0X20 |
| ADI VCM AF DRIVER: | 0001110X | 0X0E | 0X1C |
| ROHM VCM AF DRIVER: | 0001100X | 0X0C | 0X18 |

FCAM I2C

| | | | |
|---|---|---|---|
| FRONT FACING CAM: | 0110110X | 0X36 | 0X6C |

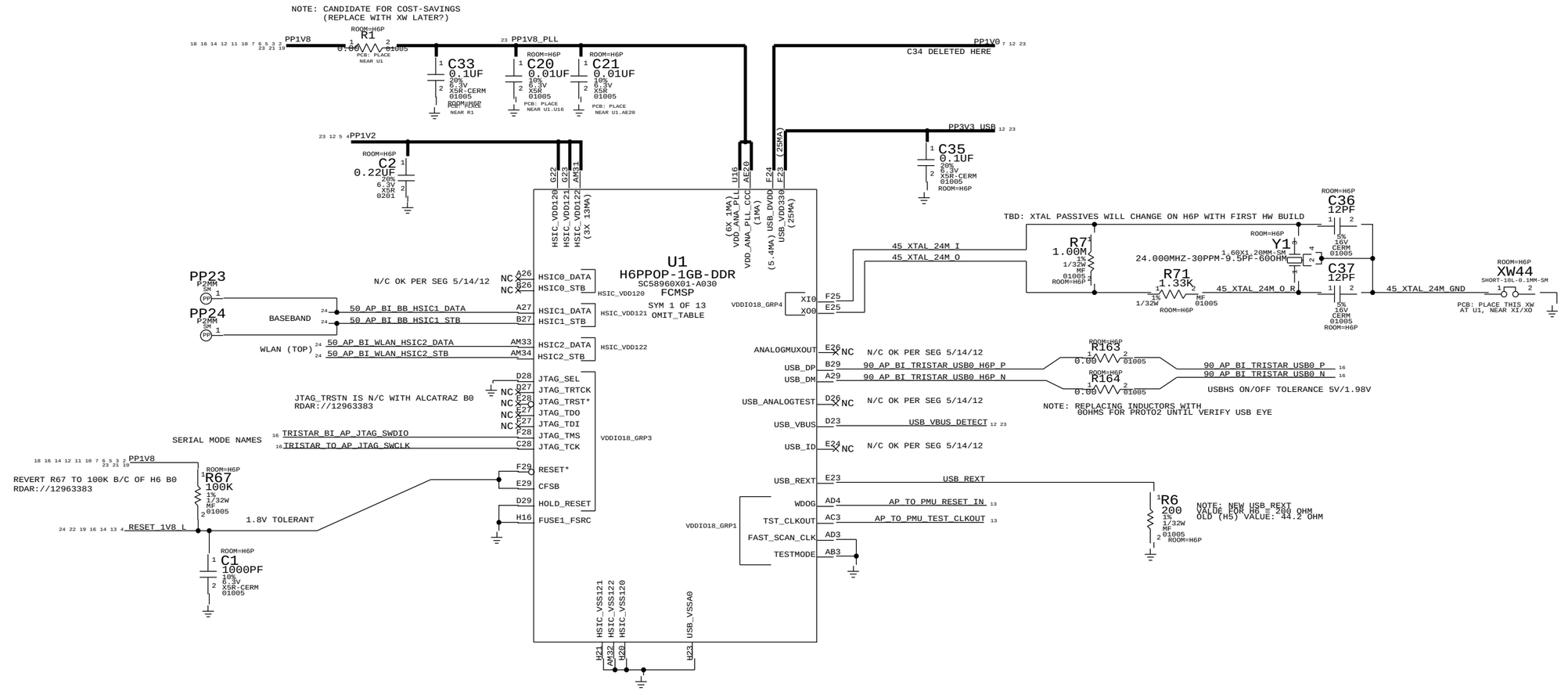
NOTE: ACCEL, GYRO, COMPASS ALL USING SPI (VIA OSCAR) FOR AP COMMUNICATION.

# H6P: JTAG, USB, PLL, HSIC, XTAL

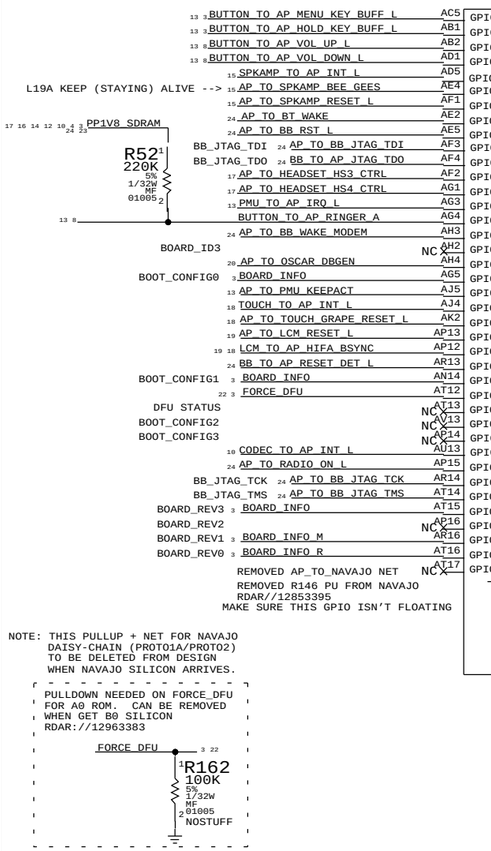
## MISC COMPONENTS ALTERNATES

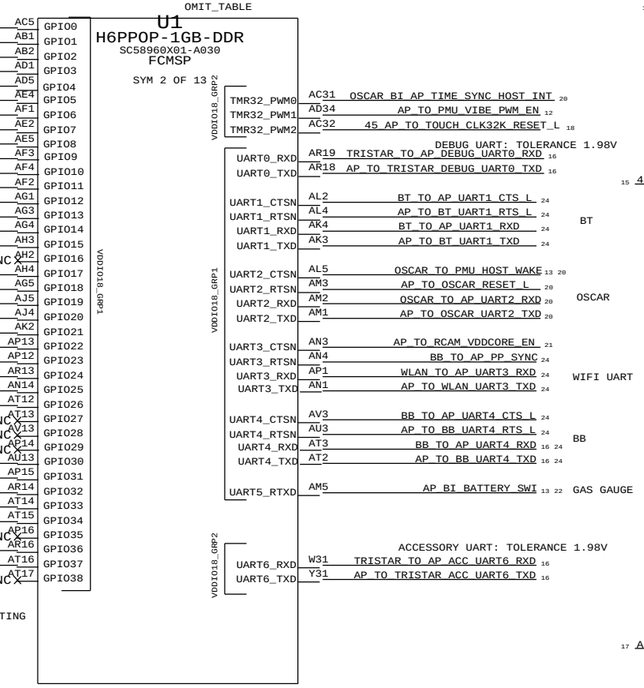
| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
|---|---|---|---|---|
| 107S0146 | 107S0208 | | | ALT FOR THERMISTOR |
| 138S0702 | 138S0657 | | | ? |
| 138S0697 | 138S0695 | | | ? |
| 138S0746 | 138S0705 | | | ? |
| 138S0739 | 138S0706 | | | ? |
| 155S0773 | 155S0453 | | | ? |
| 155S0667 | 155S0583 | | | ? |
| 335S0895 | 335S0874 | | | ? |
| 138S0703 | 138S0648 | | | ? |
| 118S0764 | 118S0717 | | | ALT FOR TCAL (R109) |

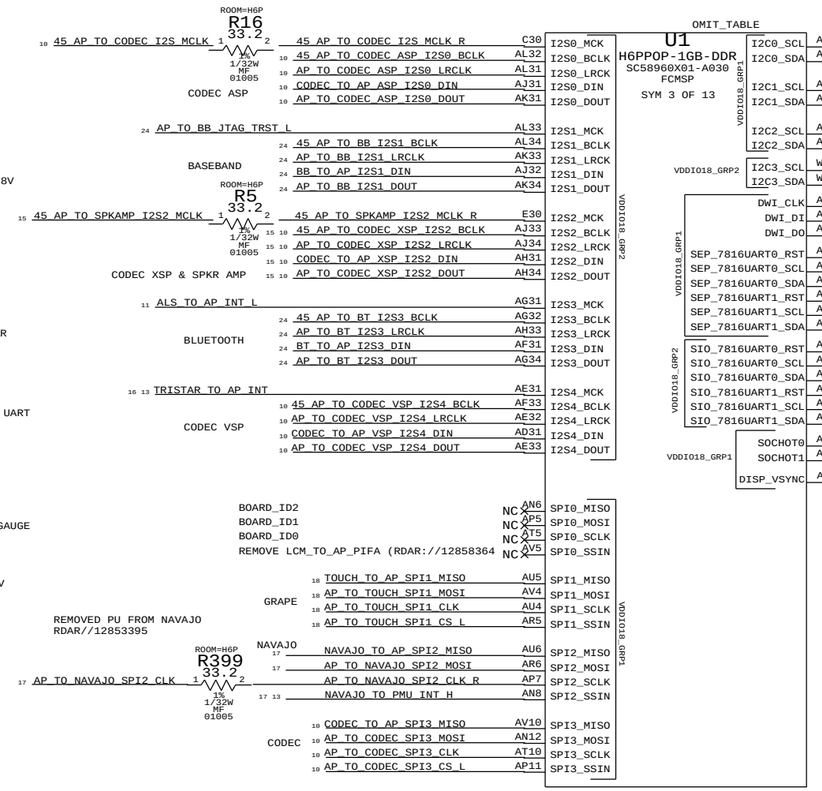
RDAR://13212472

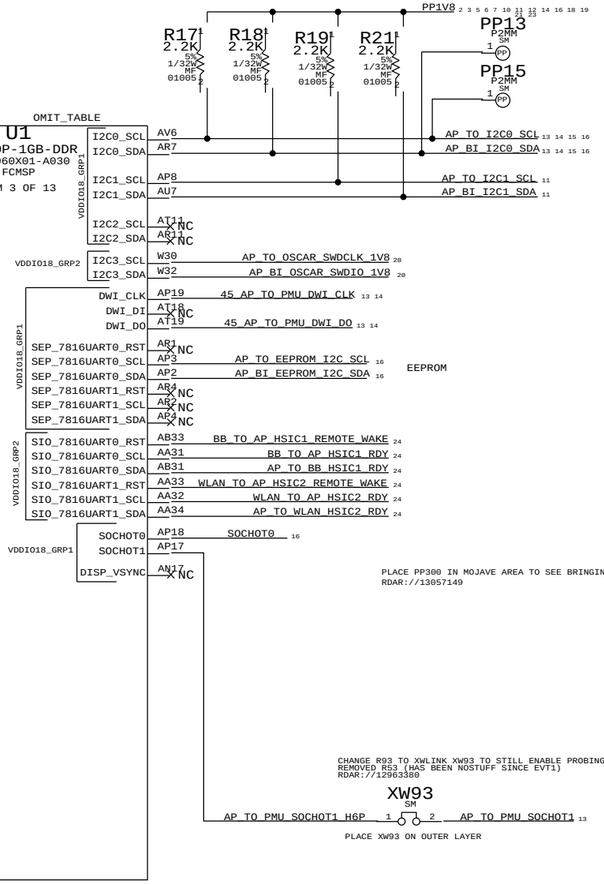


# H6P: DIGITAL I/O, BOOTSTRAPPING




NOTE: THIS PULLUP + NET FOR NAVAJO DAISY-CHAIN (PROTO1A/PROTO2) TO BE DELETED FROM DESIGN WHEN NAVAJO SILICON ARRIVES.

PULLDOWN NEEDED ON FORCE_DFU FOR A0 ROM. CAN BE REMOVED WHEN GET B0 SILICON
RDAR://12963383




## BOOTSTRAPPING (BOARD_REV, BOARD_ID, BOOT_CFG)

BOARD_REV[3:0]={GPIO34, GPIO35, GPIO36, GPIO37}
FLOAT=LOW, PULLUP=HIGH

| | |
|---|---|
| 1111 | PROTO2/2A, TRISAR/L19 |
| 1110 | EVT1 MAIN BUILD |
| 1101 | EVT1 MESA BUILD |
| 1100 | EVT1A MESA BUILD |
| 1011 | E1B MAIN BUILD |
| 1010 | E1C MAIN BUILD <--- SELECTED (NOSTUFF R3000 & STUFF R3001) |

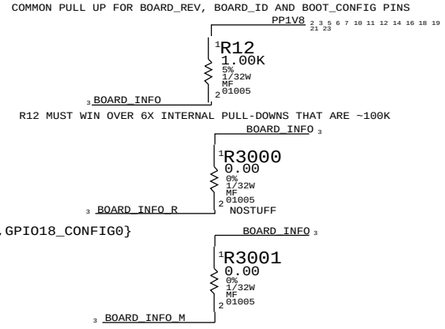
BOARD_ID[3:0]={GPIO16, SPIO0_MISO, SPI0_MOSI, SPI0_SCLK}
FLOAT=LOW, PULLUP=HIGH

| | |
|---|---|
| 0000 | X145 MLB <--- SELECTED |
| 0001 | X145 DEV |
| 0010 | X152 MLB |
| 0011 | X152 DEV |

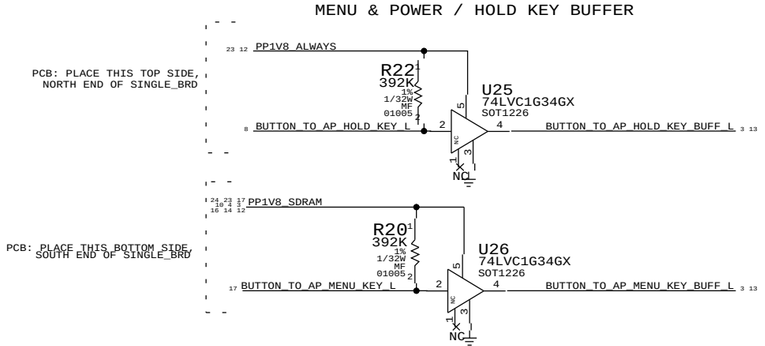
BOOT_CONFIG[3:0]={GPIO29_CONFIG3,GPIO28_CONFIG2,GPIO25_CONFIG1,GPIO18_CONFIG0}
FLOAT=LOW, PULLUP=HIGH

| | |
|---|---|
| 0000 | SPI0 |
| 0001 | SPI0 TEST MODE |
| 0010 | NAND |
| 0011 | NAND TEST MODE <--- SELECTED |

COMMON PULL UP FOR BOARD_REV, BOARD_ID AND BOOT_CONFIG PINS




MENU & POWER / HOLD KEY BUFFER



# H6P: GND, VDDCA, VDD1/2, VDD, VDD_CPU, VDD_GPU

## VDDCA, VDD1/2, VDDQ

RESET_1V8_L
NOTE: CKEIN CONFIRMED 1.8V TOLERANT ON 5/6/12, BY MANU G

PP1V2_SDRAM
C41 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=H6P

45_DDR0_ZQ
45_DDR1_ZQ
R73 243 1% 1/32W MF 01005 ROOM=H6P
R72 243 1% 1/32W MF 01005 ROOM=H6P
OMIT_TABLE
OMIT_TABLE
(DDR IMPEDANCE CONTROL)

45_DDR0_VREF_CA
45_DDR1_VREF_CA
45_DDR0_VREF_DQ
45_DDR1_VREF_DQ

DDR0_CKEIN
DDR1_CKEIN
DDR0_VDD_CKE (<1MA)
DDR1_VDD_CKE (<1MA)
OMIT_TABLE
DDR0_RREF_CA
DDR1_RREF_CA
DDR0_RREF_DQ
DDR1_RREF_DQ
DDR0_VREF_CA
DDR1_VREF_CA
DDR0_VREF_DQ
DDR1_VREF_DQ

U1
H6PPOP-1GB-DDR
SC58960X01-A030
(CURRENT CONSUMPTION SHARED WITH VDDIOD) FCMSP
SYM 7 OF 13

VDDCA

PP1V2_SDRAM
C285 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C53 1UF 20% 4V X6S 0204 ROOM=H6P
C49 1UF 20% 4V X6S 0204 ROOM=H6P
C59 0.47UF 20% 4V X7S 0204 ROOM=H6P

VSS
(500MA)
VDD2

PP1V8_SDRAM
C57 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P

(45MA PULLED BY H6)
VDD1

PP1V2
C5000 15PF 5% 16V NP0-C0G-CERM 01005
C302 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P

(CURRENT CONSUMPTION SHARED WITH VDDIOD)

C43 1UF 20% 4V X6S 0204 ROOM=H6P
C40 1UF 20% 4V X6S 0204 ROOM=H6P
C48 0.47UF 20% 4V X7S 0204 ROOM=H6P
C60 0.47UF 20% 4V X7S 0204 ROOM=H6P

VDDQ

PP1V2_SDRAM
C106 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R27 10K 1% 1/32W MF 01005 ROOM=H6P
C108 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R28 10K 1% 1/32W MF 01005 ROOM=H6P
C111 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R29 10K 1% 1/32W MF 01005 ROOM=H6P
C113 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R30 10K 1% 1/32W MF 01005 ROOM=H6P

## VDD

PP1V0_SOC
C177 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C141 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C160 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C282 1UF 20% 4V CERM 0402 ROOM=H6P
C169 1UF 20% 4V CERM 0402 ROOM=H6P
C174 0.47UF 20% 6.3V CERM 0402 ROOM=H6P
C166 0.47UF 20% 6.3V CERM 0402 ROOM=H6P

U1
H6PPOP-1GB-DDR
SC58960X01-A030
FCMSP OMIT_TABLE
SYM 10 OF 13

(VDD BALLS = VDD_SOC PWR DOMAIN)
VDD 2,500MA FOR VDD_SOC @125C @1.0V (THERMAL VIRUS) VDD

45_BUCK2_FB
VDD_SENSE

PP1V2
C114 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R31 4.7K 1% 1/32W MF 01005 ROOM=H6P
C117 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R32 4.7K 1% 1/32W MF 01005 ROOM=H6P
C118 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R33 4.7K 1% 1/32W MF 01005 ROOM=H6P
C120 0.01UF 10% 6.3V X5R 01005 ROOM=H6P
R34 4.7K 1% 1/32W MF 01005 ROOM=H6P

45_DDR0_VREF_DQ
45_DDR1_VREF_DQ

## VDD_CPU, VDD_GPU

PP1V1_GPU
C151 10UF 20% 6.3V CERM-X5R 0402-2 ROOM=H6P
C107 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C152 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C173 1UF 20% 4V X6S 0204 ROOM=H6P
C153 1UF 20% 4V X6S 0204 ROOM=H6P
C158 1UF 20% 4V CERM 0402 ROOM=H6P
C161 0.47UF 20% 6.3V CERM 0402 ROOM=H6P
C142 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=H6P

PP1V1_CPU
C75 10UF 20% 6.3V CERM-X5R 0402-2 ROOM=H6P
C80 10UF 20% 6.3V CERM-X5R 0402-2 ROOM=H6P
C68 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C133 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P

C87 1UF 20% 4V CERM 0402 ROOM=H6P
C72 1UF 20% 4V CERM 0402 ROOM=H6P
C89 1UF 20% 4V CERM 0402 ROOM=H6P
C83 1UF 20% 4V CERM 0402 ROOM=H6P
C100 0.47UF 20% 6.3V CERM 0402 ROOM=H6P
C122 0.47UF 20% 6.3V CERM 0402 ROOM=H6P
C97 0.47UF 20% 6.3V CERM 0402 ROOM=H6P
C124 0.47UF 20% 6.3V CERM 0402 ROOM=H6P
C121 0.47UF 20% 6.3V CERM 0402 ROOM=H6P
C112 0.47UF 20% 6.3V CERM 0402 ROOM=H6P

U1
H6PPOP-1GB-DDR
SC58960X01-A030
FCMSP OMIT_TABLE
SYM 13 OF 13

7,500MA FOR G3 GPU @125C @1.1V VDD_GPU
VDD_CPU 10,800MA FOR CPU0+1 @125C @1.1V/1.2GHZ VDD_CPU

45_BUCK0_FB AN30 VDD_SENSE_CPU

VDD_GPU_SENSE AA5 45_BUCK1_FB

# H6P (GND, VDDIO18, VDDIOD, VDD_SRAM, VDD_SOC)

## JUST A FEW GNDS

U1
H6PPOP-1GB-DDR
SC58960X01-A030
FCMSP
SYM 12 OF 13
OMIT_TABLE

AN32 AN33 AN34 AP6 AP20 AP21 AP24 AP25 AP26 AP27 AP28 AP29 AP30 AP31 AP32 AR3 AR8 AR12 AR15 AR17 AR20 AR21 AR22 AR23 AR24 AR25 AR28 AR29 AR32 AT1 AT4 AT6 AT20 AT21 AT22 AT23 AT24 AT25 AT26 AT27 AT28 AT29 AT30 AT31 AT32 AU1 AU2 AU11 AU16 AU18 AU21 AU33 AU34 AV1 AV2 AV9 AV11 AV14 AV16 AV18 AV20 AV33 AV34 B1 B2 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B15 B16 B17 B18 B19 B25 B28 B30 B33 B34 C1 C2 C3 C5 C6 C7 C9 — VSS

C10 C11 C12 C13 C15 C16 C17 C18 C19 C22 C23 C24 C26 C27 C29 C31 D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D15 D16 D17 D18 D19 D20 D21 D22 D32 E1 E3 E4 E5 E6 E7 E8 E9 E10 E11 E12 E13 E14 E15 E18 E19 E20 E21 E22 E31 E32 E34 F2 F3 F4 F5 F6 F7 F8 F9 F10 F12 F13 F14 F15 F26 F30 F31 G1 G3 G4 G5 G6 G7 G8 G9 G10 G11 G12 G13 G14 G15 G26 G28 — VSS

U1
H6PPOP-1GB-DDR
SC58960X01-A030
FCMSP
SYM 11 OF 13

OMIT_TABLE

A1 A2 A3 A4 A5 A7 A9 A11 A13 A14 A16 A18 A25 A28 A30 A33 A34 AA1 AA2 AA3 AA4 AA8 AA10 AA12 AA14 AA16 AA18 AA22 AA24 AA26 AA28 AA30 AB5 AB7 AB9 AB11 AB13 AB15 AB17 AB19 AB21 AB23 AB25 AB27 AB29 AB32 AC4 AC8 AC10 AC12 AC14 AC16 AC18 AC20 AC22 AC24 AC26 AC28 AC30 AC34 AD2 AD7 AD9 AD11 AD13 AD15 AD17 AD19 AD21 AD23 AD25 AD29 AD32 AE3 AE8 AE10 AE12 AE14 AE16 AE18 AE22 AE24 AE26 AE28 AF5 AF7 AF9 AF11 AF13 AF15 AF17 AF19 — VSS

AF21 AF23 AF29 AF32 AG2 AG8 AG10 AG12 AG14 AG16 AG18 AG20 AG22 AG24 AG26 AG28 AG30 AH5 AH7 AH9 AH11 AH13 AH15 AH17 AH19 AH21 AH23 AH25 AH27 AH29 AH32 AJ1 AJ3 AJ8 AJ10 AJ12 AJ14 AJ16 AJ18 AJ22 AJ24 AJ26 AJ28 AJ30 AK5 AK7 AK9 AK11 AK13 AK15 AK17 AK19 AK21 AK23 AK27 AK29 AK32 AL3 AL6 AL8 AL10 AL12 AL14 AL16 AL18 AL20 AL22 AL24 AL26 AL28 AL30 AM4 AM7 AM18 AM30 AN2 AN5 AN7 AB6 AM9 AM11 AM13 AN16 AM15 AN19 AN20 AN21 AN22 AN23 AN24 AN31 — VSS

## VDDIOD, VDDIO18

CAPS FOR VDDIOD ARE SHARED WITH VDDQ

23 12 4 2 PP1V2

AM20 AM21 AM22 AM23 AM24 — VDDIOD_DDR0CA

R29 T29 U29 V29 — VDDIOD_DDR1CA

AA6 H6 H7 H8 H9 H10 H11 H12 H13 H14 H15 M6 N6 P6 R6 T6 U6 V6 W6 Y6 — VDDIOD_DDRDQ (1000MA)

OMIT_TABLE
U1
H6PPOP-1GB-DDR
SC58960X01-A030
FCMSP
SYM 9 OF 13

R33 T1 T2 T3 T5 T7 T9 T11 T13 T15 T17 T19 T21 T23 T25 T27 T30 T31 T32 T33 T34 U3 U5 U8 U10 U12 U14 U18 U20 U22 U24 U26 U28 U30 U34 V2 V3 V4 V5 V7 V9 V11 V13 V15 V17 V19 V21 V23 V25 V27 V30 V32 V34 W1 W2 W3 W4 W5 W8 W10 W12 W14 W16 W18 W20 W22 W24 W26 W28 W33 Y2 Y3 Y4 Y5 Y7 Y9 Y11 Y13 Y15 Y17 Y19 Y21 Y23 Y27 Y29 Y32 AM17 Y30 AC6 AE6 AG6 AJ6 AE30 — VSS

CAPS FOR VDDIO18_X ARE SHARED WITH VDDIODX

14 12 11 10 7 6 5 3 2 23 21 19 18 16 PP1V8

C30 4.7UF 20% 6.3V X5R 402 ROOM=H6P
C78 1UF 20% 4V X6S 0204 ROOM=H6P
C86 1UF 20% 4V X6S 0204 ROOM=H6P
C95 0.47UF 20% 4V X7S 0204 ROOM=H6P

AD6 AH6 AM8 AM10 AM12 AM14 AM16 AM19 — VDDIO18_GRP1 (65MA) (GPIO,UART,SPI,I2C) (SENSOR,SOCHOT,PMU)

AD30 AH30 — VDDIO18_GRP2 (20MA) (I2S,TMR,SIO,GPIO,UART)

ROOM=H6P
FL67
1KOHM-25%-0.2A
0201

G25 G27 H30 K30 M30 P30 G29 — VDDIO18_GRP3 (31MA) (PPN,GPIO,JTAG)

23 PP1V8_XTAL

C379 1.0UF 20% 10V X5R-CERM 0201-1 ROOM=H6P

G24 — VDDIO18_GRP4 (2MA) (XTAL I/O)

## VDD_SRAM, VDD_SOC

U1
H6PPOP-1GB-DDR
SC58960X01-A030
FCMSP
SYM 8 OF 13
OMIT_TABLE

L4 L5 L6 L8 L10 L12 L14 L16 L18 L20 L22 L24 L26 L28 L30 L33 M1 M2 M3 M4 M5 M7 M9 M11 M13 M15 M17 M19 M21 M23 M25 M27 M29 M31 N2 N3 N4 N5 N8 N10 N12 N14 N16 N18 N20 N22 N24 N26 N28 N30 N33 P1 P2 P3 P4 P5 P7 P9 P11 P13 P15 P17 P19 P21 P23 P25 P27 P29 R2 R3 R4 R5 R8 R10 R12 R14 R16 R18 R20 R22 R24 R26 R28 R30 R31 — VSS

23 12 PP1V0_SRAM

C305 4.3UF 20% 4V X5R-CERM 0610 ROOM=H6P
C81 1UF 20% 4V X6S 0204 ROOM=H6P
C115 1UF 20% 4V X6S 0204 ROOM=H6P
C91 0.47UF 20% 4V X7S 0204 ROOM=H6P
C134 0.47UF 20% 4V X7S 0204 ROOM=H6P

AD24 AD26 AD28 AE23 AE25 AE27 AF24 AF26 AF28 AK25 Y25 — VDD_SRAM_CPU 1,500MA FOR CYCLONE + M$ SRAM @125C @1.0V

AA9 AA11 AA13 AA15 AB8 T8 T10 T12 U9 U11 U13 V8 V10 V12 W9 W11 W13 W15 Y8 Y10 Y12 Y14 — VDD_SRAM_SOC (1500MA)

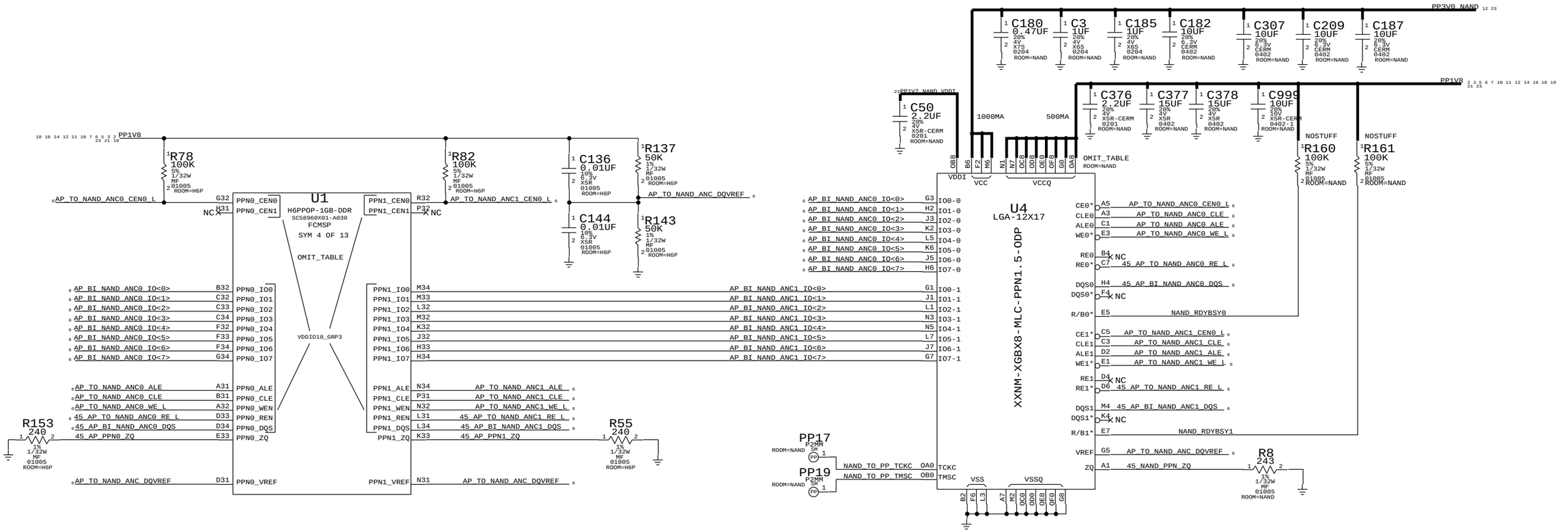
16 14 12 11 10 7 6 5 3 2 23 21 19 18 14 PP1V8

C85 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=H6P

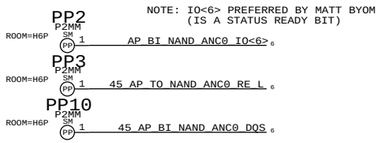
AJ20 AA20 AB4 H22 — VDD_ANA_TMPSADC0(2.5MA) VDD_ANA_TMPSADC1(2.5MA) VDD_ANA_TMPSADC2(2.5MA) VDD_ANA_TMPSADC3(2.5MA)

# H6P NAND + 12X17 NAND PKG

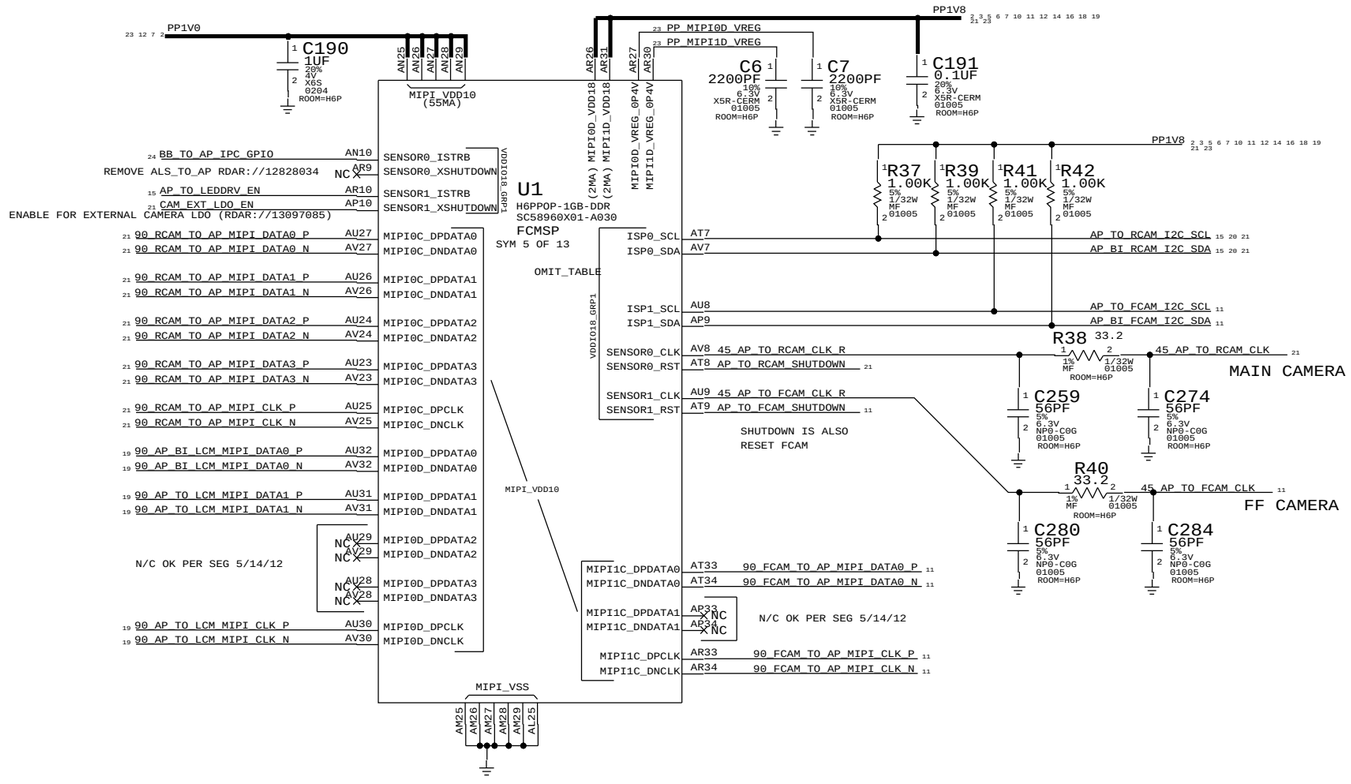
SUPPORT FOR PPN1.5 (1.8V IO) ONLY

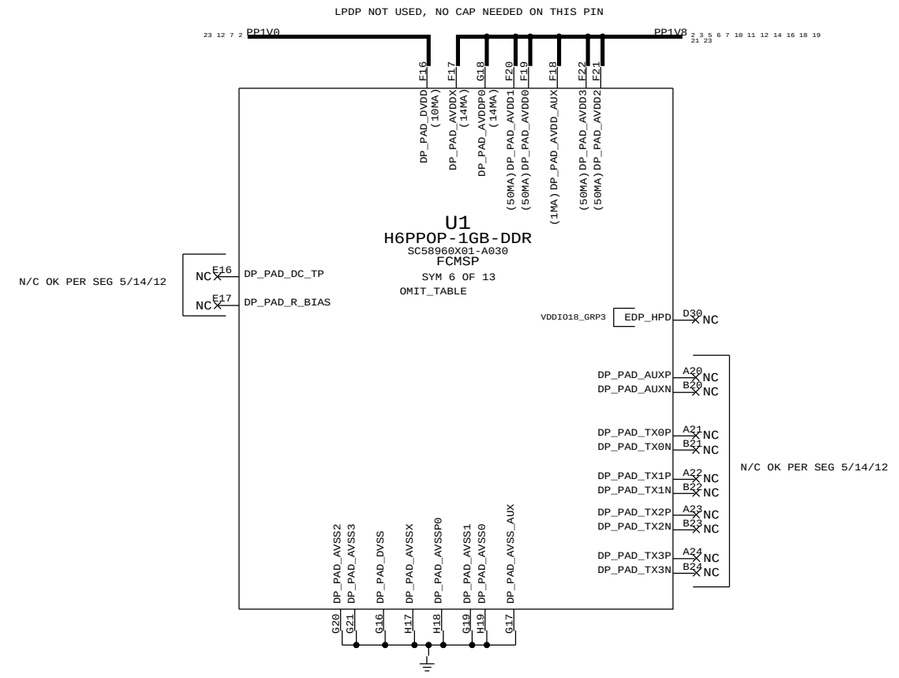



NOTE: NAND PADS SHOULD BE SHIELDED FROM TRACES WITH A GROUND PLANE



# H6P HIGH SPEED DIG (CAM, LCD, DP)



# BUTTON FLEX (VIBE DRIVER, BUTTONS, ANC REF MIC, STROBE, STROBE_NTC)

STROBE:
LED WARM, RETURN

VIBE DRIVE

BUTTONS:
RINGER, HOLD,
VOL_UP/DOWN

STROBE:
STROBE NTC

MIC2 (ANC REF MIC):
MIC2/3 BIAS,
MIC2_P,_N

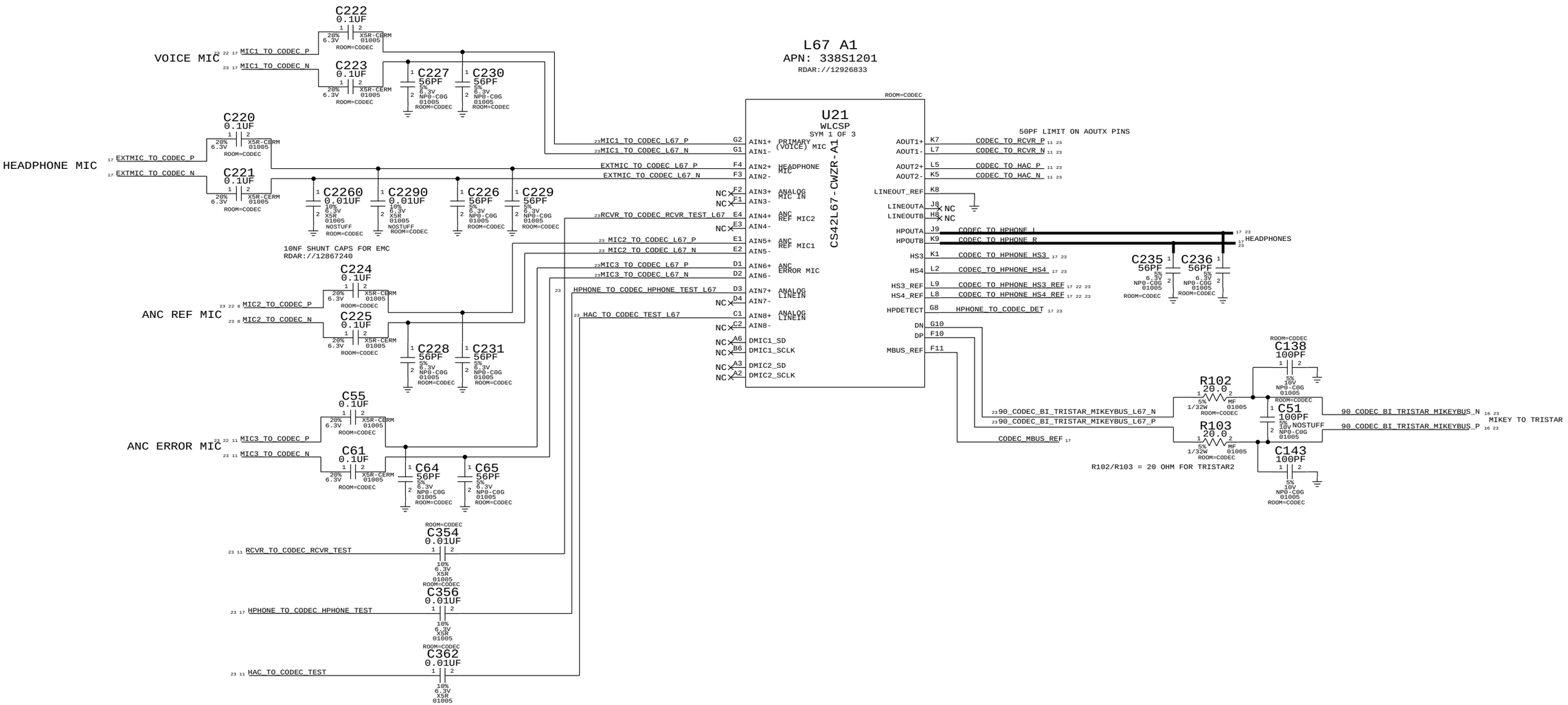
STROBE:
LED COOL

PP_STRB_DRIVER_TO_LED_WARM
C409 100PF 5% 16V NP0-C0G 01005 ROOM=BUTTON
C406 27PF 5% 16V NP0-C0G 01005 ROOM=BUTTON
NO_MORE_WIFI_PAC
REMOVED FL18, C15 ON PP3V0_SDRAM
RDAR:77131391
ON MLB ----> 516S1040 PLUG
516S1041 RCPT (FLEX)
J2 105847-018 M-ST-SM
PP_PMU_TO_VIBE
FL74 10-OHM-750MA ROOM=BUTTON 01005-1
PP_PMU_TO_VIBE_CONN
D3 DFN1006-2 BAT54LP ROOM=BUTTON A
C289 1.0UF 20% 6.3V X5R 0201-1 ROOM=BUTTON NOSTUFF
DZ101 12V-33PF 5% 01005-1 ROOM=BUTTON
NOTE: STROBE_NTC
CODEC_TO_MIC2_BIAS_CONN
NOTE: MIC_P
NOTE: MIC_N
NOTE: PP_VIBE
BUTTON_TO_AP_HOLD_KEY_CONN_L
BUTTON_TO_AP_RINGER_A_CONN
BUTTON_TO_AP_VOL_DOWN_CONN_L
BUTTON_TO_AP_VOL_UP_CONN_L
NO_MORE_WIFI_PAC
REMOVED FL71,FL70,FL72,C382,C384,C383
RDAR:77131391
NOTE: VIBE RETURN, TO GND HERE
CKPLUS_WAIVE=GNDTERM2PWR
CKPLUS_WAIVE=GNDTERM2PWR
FL21 120-OHM-210MA 01005 ROOM=BUTTON
RCAM_TO_STROBE_NTC_CONN
RCAM_TO_STROBE_NTC
C397 56PF 5% 6.3V NP0-C0G 01005 ROOM=BUTTON
R157 51.1K 1% 1/32W MF 01005
FL47 120-OHM-210MA 01005 ROOM=BUTTON
PP_CODEC_TO_MIC2_3_BIAS
C45 56PF 5% 6.3V NP0-C0G 01005 ROOM=BUTTON
C216 1.0UF 20% 6.3V X5R 0201-1 ROOM=BUTTON
PGND_MIC2_3_TO_CODEC_REF
XW41 SHORT-10L-0.1MM-SM SIGNAL_MODEL=EMPTY ROOM=BUTTON
XW5 SHORT-10L-0.1MM-SM SIGNAL_MODEL=EMPTY ROOM=BUTTON
MIC2_TO_CODEC_N
MIC2_TO_CODEC_P
C244 56PF 5% 6.3V NP0-C0G 01005 ROOM=BUTTON
FL3 120-OHM-210MA 01005 ROOM=BUTTON
BUTTON_TO_AP_HOLD_KEY_L
C314 100PF 5% 16V NP0-C0G 01005 ROOM=BUTTON
DZ1 12V-33PF 01005-1 ROOM=BUTTON
FL7 120-OHM-210MA 01005 ROOM=BUTTON
BUTTON_TO_AP_RINGER_A
C313 100PF 5% 16V NP0-C0G 01005 ROOM=BUTTON
DZ7 12V-33PF 01005-1 ROOM=BUTTON
FL8 120-OHM-210MA 01005 ROOM=BUTTON
BUTTON_TO_AP_VOL_DOWN_L
C311 100PF 5% 16V NP0-C0G 01005 ROOM=BUTTON
DZ2 12V-33PF 01005-1 ROOM=BUTTON
FL46 120-OHM-210MA 01005 ROOM=BUTTON
BUTTON_TO_AP_VOL_UP_L
C197 100PF 5% 16V NP0-C0G 01005 ROOM=BUTTON
DZ3 12V-33PF 01005-1 ROOM=BUTTON
PP_STRB_DRIVER_TO_LED_COOL
C208 27PF 5% 16V NP0-C0G 01005 ROOM=BUTTON
C241 100PF 5% 16V NP0-C0G 01005 ROOM=BUTTON

# L67 AUDIO CODEC

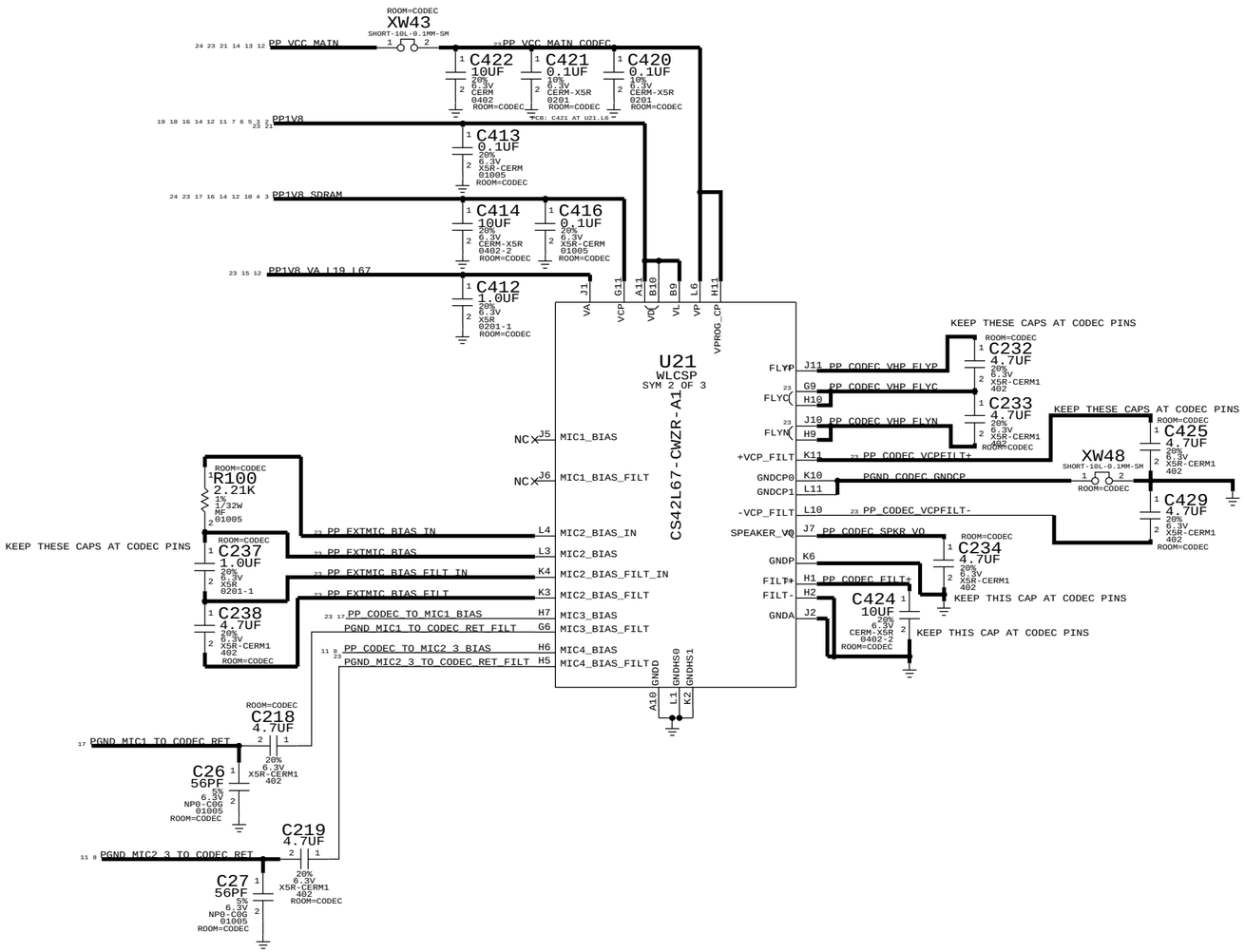
## AUDIO I/O

(ANALOG MIC IN, DIG MIC IN, HPOUT, LINEOUT, RECEIVER OUT, MIKEYBUS)

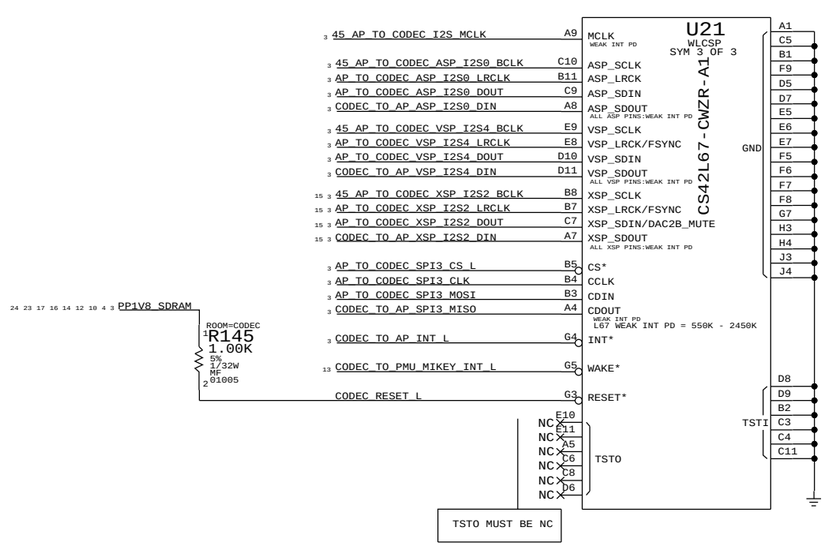


# L67 AUDIO CODEC

## POWER, MICBIAS




## DIGITAL SYSTEM I/O



# FRONT CAM FLEX B2B (FCAM, PROX, ALS, RECEIVER, ANC ERROR MIC)

FCAM: CLK, I2C, SHDN

PROX: POWER, RX, RX_EN

ALS: POWER, I2C, INT

HAC

RECEIVER

NOTE: CONN GENDER SWAPPED AT PROTO2
THIS ON ONE MLB ---> 516S0986 RCPT
516S0987 PLUG (FLEX)

PCB: PLACE THESE AT J1 CONN

FCAM: POWER AND MIPI

MIC3 (ANC ERROR MIC)

FCAM ALS INT

PROX: PWR, TX EN

CHANGE FL15 TO 155S0577 DUE TO I2C XTALK
RDAR://12877874

CHANGE FL12 TO 155S0577
RDAR://13055997

CHANGE FL14 TO 155S0577 DUE TO I2C XTALK
RDAR://12877874

PROX_RX SIGNAL MUST BE TREATED WITH CARE

CHANGE FL44 TO 0.45 MAX DCR (155S0577)
RDAR://13068204

ADD VARISTORS DZ1100 AND DZ1101 TO MIC3 LINES FOR RECEIVER MESH LOCK-UP ISSUE
RDAR://13120136

CONFIRMED NO SIGNAL RAIL IN SENSOR FOR ALS FUNCTION,
REMOVING R133 AND R132, J1.30 IS GROUNDED AS WELL ON FLEX
RDAR://12828034

NOTE: J1.30 IS GND ON POR BOARDS,
J1.30 IS ALS_INT FROM FF CAM FOR
SPECIAL CONFIG OF PROTO2
(CONTROLLED VIA BOMOPTION)

IRLED = 104-128MA

SPECIAL Z = 0.60 MM MAX

# AMBER PMU

## (BUCK, LDO, VIBE DRIVER, 32K, CHARGER)

TO DO: GEERTJAN TO UPDATE VALUE
OF R70 WITH H6P (EXPECTED TO CHANGE)

R70 68.1K 1/32W MF 01005 ROOM=PMU
USB_VBUS_DETECT
PP_PMU_VCENTER
C3096 56PF 5% 16V NP0-C0G 01005 ROOM=PMU
C204 10UF 20% 6.3V CERM-X5R 0402-2 ROOM=PMU
C281 10UF 20% 6.3V CERM-X5R 0402-2 ROOM=PMU
TRISTAR_TO_PMU_OVP_SW_EN_L
NOTE: THIS SIGNAL (ACT HI) WILL OPEN VBUS

PP5V0_USB_PROT
C272 1UF 10% 25V X5R 402 ROOM=PMU

PP_BATT_VCC
Q4 APN: 376S1131
Q4 CSD68815W15 BGA ROOM=PMU
C33 C32 C1 G1 D1 B3 B2 B1 A3 A2 A1
L8 2.2UH-20%-1.7A-200MOHM
TFA201610G-PSE20161T2R2 OMIT_TABLE
PP_VCC_MAIN_UVLO_SENSE
XW120 SHORT-10L-0.1MM-SM ROOM=PMU
XW120.2 ROUTE TO U7.D2
BATTERY_TO_PMU_SENSE
PMU_ACT_DIO
PP_PMU_VSW_CHG

PP_VCC_MAIN
C266 1.0UF 20% 6.3V X5R 0201-1 ROOM=PMU
C357 10UF 20% 6.3V CERM 0402 ROOM=PMU
C358 10UF 20% 6.3V CERM 0402 ROOM=PMU
C260 10UF 20% 6.3V CERM 0402 ROOM=PMU
C263 10UF 20% 6.3V CERM 0402 ROOM=PMU
C267 10UF 20% 6.3V CERM 0402 ROOM=PMU
C270 10UF 20% 6.3V CERM 0402 ROOM=PMU
C261 10UF 20% 6.3V CERM 0402 ROOM=PMU
C264 10UF 20% 6.3V CERM 0402 ROOM=PMU
C268 10UF 20% 6.3V CERM 0402 ROOM=PMU
C271 10UF 20% 6.3V CERM 0402 ROOM=PMU
C398 10UF 20% 6.3V CERM 0402 ROOM=PMU
C411 10UF 20% 6.3V CERM 0402 ROOM=PMU
MOVED C385 TO L19_VBOOST
RDAR://12723825

U7 AMBER-PMC FCCSP-0.84MM (1 OF 3)

| | | |
|---|---|---|
| F5 | VBUS_OVP_OFF | 00-300K INT PU TO VBUS |
| K1 | VCENTER | |
| K2 | | |
| L1 | VBUS | |
| L2 | | |
| M1 | | |
| M2 | | |
| F1 | IBAT | |
| F2 | | |
| E2 | VBAT | |
| C1 | ACT_DIO | |
| J1 | CHG_LX | |
| J2 | | |
| G1 | VCC_MAIN | |
| G2 | | |
| D2 | VCC_MAIN_S | |
| A16 | VDD_BUCK1 | BUCK INPUT |
| B16 | | |
| C4 | VDD_BUCK001_2 | |
| A13 | VDD_BUCK2 | |
| B13 | | |
| C13 | | |
| C16 | VDD_BUCK1_2 | |
| F20 | VDD_BUCK3 | |
| F21 | | |
| A20 | VDD_BUCK4 | |
| B20 | | |
| C20 | | |
| K20 | VDD_BUCK5 | |
| K21 | | |
| A4 | VDD_BUCK001 | |
| B4 | | |
| A9 | VDD_BUCK023 | |
| B9 | | |
| C9 | | |
| M12 | VDD_LDO6 | LDO INPUT |
| N13 | VDD_LDO2 | |
| M6 | VDD_LDO1_3 | |
| M7 | VDD_LDO4_7 | |
| M14 | VDD_LDO5 | |
| M8 | VDD_LDO8_9 | |
| M10 | VDD_LDO10 | |
| M11 | VDD_LDO11_13 | |
| N5 | VDD_VIB | VIBE |
| P5 | VIB | |
| M5 | VIB_PWM_EN | 50-100K INT PD |
| D1 | XTAL1 | XTAL |
| E1 | XTAL2 | |
| G10 | VSS_RTC | |

PP1V2_SDRAM
C278 1UF 10% 6.3V CERM 402 ROOM=PMU
PP_VCC_MAIN
PP_PMU_TO_VIBE
AP_TO_PMU_VIBE_PWM_EN
C96 56PF 5% 16V NP0-C0G 01005 ROOM=PMU
C343 1.0UF 20% 6.3V X5R 0201-1 ROOM=PMU
45_PMU_TO_XTAL_OSC32
45_XTAL_TO_PMU_OSC32
Y2 32.768K-20PPM-12.5PF 2012-1 ROOM=PMU
C276 18PF 5% 16V CERM 01005 ROOM=PMU
C283 18PF 5% 16V CERM 01005 ROOM=PMU
XW1 SHORT-10L-0.1MM-SM ROOM=PMU
PCB: PLACE THIS XW AT C276/C283
45_AMBER_VSS_RTC

PP_VCC_MAIN
C399 10UF 20% 6.3V CERM 0402 ROOM=PMU
C405 10UF 20% 6.3V CERM 0402 ROOM=PMU
C417 10UF 20% 6.3V CERM 0402 ROOM=PMU
C418 10UF 20% 6.3V CERM 0402 ROOM=PMU
C250 10UF 20% 6.3V CERM 0402 ROOM=PMU
C251 10UF 20% 6.3V CERM 0402 ROOM=PMU
C325 10UF 20% 6.3V CERM 0402 ROOM=PMU

SAME POLARITY
L9 OMIT_TABLE 1.0UH-20%-2.5A-0.075OHM ROOM=PMU TFA201610G-SM
L10 OMIT_TABLE 1.0UH-20%-2.5A-0.075OHM ROOM=PMU TFA201610G-SM
L11 OMIT_TABLE 1.0UH-20%-2.5A-0.075OHM ROOM=PMU TFA201610G-SM
L12 OMIT_TABLE 1.0UH-20%-2.5A-0.075OHM ROOM=PMU TFA201610G-SM
NOTE: L10, L12 BOMOPTIONS CONTROLLED ON PAGE1
R11 10 NOSTUFF 5% 1/32W MF 01005 ROOM=PMU
PCB: R11 LOCAL FEEDBACK FOR TESTING
45_BUCK0_FB

PP1V1_CPU
C290 15UF 20% 4V X5R 0402 ROOM=PMU
C292 15UF 20% 4V X5R 0402 ROOM=PMU
C294 15UF 20% 4V X5R 0402 ROOM=PMU
C135 15UF 20% 4V X5R 0402 ROOM=PMU
C296 15UF 20% 4V X5R 0402 ROOM=PMU
C145 15UF 20% 4V X5R 0402 ROOM=PMU
C162 15UF 20% 4V X5R 0402 ROOM=PMU
C128 15UF 20% 4V X5R 0402 ROOM=PMU
C181 15UF 20% 4V X5R 0402 ROOM=PMU
C262 15UF 20% 4V X5R 0402 ROOM=PMU

BUCK0_LX0 PP_BUCK0_LX0
BUCK0_LX1 PP_BUCK0_LX1
BUCK0_LX2 PP_BUCK0_LX2
BUCK0_LX3 PP_BUCK0_LX3
BUCK0_FB

SAME POLARITY
L13 OMIT_TABLE 1.0UH-20%-2.5A-0.075OHM ROOM=PMU TFA201610G-SM
L14 OMIT_TABLE 0.47UH-20%-3.2A-0.046OHM ROOM=PMU TFA201610G-SM
R115 NOSTUFF 10 5% 1/32W MF 01005 ROOM=PMU
PCB: THIS RESISTOR FOR LOCAL FEEDBACK
45_BUCK1_FB

PP1V1_GPU
C303 15UF 20% 4V X5R 0402 ROOM=PMU
C127 15UF 20% 4V X5R 0402 ROOM=PMU
C310 15UF 20% 4V X5R 0402 ROOM=PMU
C301 15UF 20% 4V X5R 0402 ROOM=PMU
C58 15UF 20% 4V X5R 0402 ROOM=PMU

BUCK1_LX0 PP_BUCK1_LX0
BUCK1_LX1 PP_BUCK1_LX1
BUCK1_FB

L15 OMIT_TABLE 1.0UH-20%-2.5A-0.075OHM ROOM=PMU TFA201610G-SM
NOTE: PP1V0_SOC STATIC AT 1.0V. NO DVFM ON THIS RAIL PER SEG.
R117 NOSTUFF 10 5% 1/32W MF 01005 ROOM=PMU
45_BUCK2_FB

PP1V0_SOC
C123 15UF 20% 4V X5R 0402 ROOM=PMU
C175 15UF 20% 4V X5R 0402 ROOM=PMU
C189 15UF 20% 4V X5R 0402 ROOM=PMU

BUCK2_LX PP_BUCK2_LX
BUCK2_FB

BUCK3_LX PP_BUCK3_LX
BUCK3_FB 45_BUCK3_FB
BUCK3_SW1 PP1V8
BUCK3_SW2 PP1V8_GRAPE
BUCK3_SW3 PP1V8_OSCAR
VBUCK3_SW

BUCK4_LX PP_BUCK4_LX
BUCK4_FB 45_BUCK4_FB
VBUCK4_SW
BUCK4_SW1 PP1V2
BUCK4_SW2 PP1V2_OSCAR

BUCK5_LX PP_BUCK5_LX
BUCK5_FB 45_BUCK5_FB

| | | | |
|---|---|---|---|
| (50MA) | VLDO1 | N6 | 2.5V-3.3V, +/-77.5MV |
| (50MA) | VLDO2 | P13 | 1.2V-1.9V, +/-42.5MV |
| (50MA) | VLDO3 | P6 | 2.5V-3.3V, +/-75MV |
| (50MA) | VLDO4 | P7 | 2.5V-3.6V, +/-75MV |
| (1000MA) | VLDO5 | P14 | 2.5V-3.6V, +/-75MV |
| (150MA) | VLDO6 | P12 | 1.2V-3.6V, +/-82.5MV |
| (250MA) | VLDO7 | N7 | 2.5V-3.6V, +/-75MV |
| (250MA) | VLDO8 | P8 | 2.5V-3.6V, +/-70MV |
| (250MA) | VLDO9 | N9 | 2.5V-3.6V, +/-71.25MV |
| | VLDO9_FB | N8 | |
| (100MA) | VLDO10 | P9 | 0.6V-1.4V, +/-25MV |
| (250MA) | VLDO11 | P10 | 2.5V-3.6V, +/-82.5MV |
| (5MA) | VLDO12 | K16 | FIXED 1.8V, +/-5% |
| (250MA) | VLDO13 | P11 | 2.5V-3.6V, +/-71.25MV |
| | VPUMP | P17 | 45_PMU_VPUMP |

VPUMP CAP:
X5R REQUIRES 10NF,
30% DERATED,
VPUMP RUNS AT 4.6V

C10 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=PMU
C104 1.0UF 20% 6.3V X5R 0201-1 ROOM=PMU
C109 1.0UF 20% 6.3V X5R 0201-1 ROOM=PMU
C299 4.7UF 20% 6.3V X5R-CERM1 402 ROOM=PMU
C207 1.0UF 20% 6.3V X5R 0201-1 ROOM=PMU
C16 4.7UF 20% 6.3V X5R-CERM1 402 ROOM=PMU
REMOVED LDO9 CAPS PER RDAR://12552087
CHANGED LDO8 CAP PER RDAR://12525301

PP2V80_THROTTLER
PP2V80_THROTTLER_FB
C442 1.0UF 20% 6.3V X5R 0201-1 ROOM=PMU
C24 4.7UF 20% 6.3V X5R-CERM1 402 ROOM=PMU
C291 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=PMU
C419 1.0UF 20% 6.3V X5R 0201-1 ROOM=PMU
CHANGED LDO11 CAP PER RDAR://12518153

PP3V3_USB — SOC USB PHY (25 MA)
PP1V8_VA_L19_L67 — SPEAKER AMP, CODEC VA (2.5 MA L19, 3MA L67)
PP3V0_SDRAM — TRISTAR VDH, WIFI_FLEX PAC (? MA) NOTE: 3V +/- 5% PER EUGENE
PP3V0_TMU — GYRO, ACCEL, COMPASS (? MA)
PP3V0_NAND — NAND (? MA)
PP3V0_ACC — ACCESSORY POWER (? MA)
PP3V0_PROX_ALS — PROX/ALS VDD (PROX: 0.75/1.2 MA ALS: 0.175/0.25 MA [TYP/MAX])
PP2V5_RCAM_AF — REAR CAM AUTO FOCUS (120MA PEAK, PROBABLY CAP AT 80MA)
REAR/FRONT CAM AVDD (? MA)
PP1V0 — SOC 1V0 MIPI, USB_DVDD, DP (71 MA TOTAL)
PP3V0_PROX_IRLED — PROX LED (102 MA TYP)
PP1V8_ALWAYS — ALWAYS ON 1V8 (? MA)
PP3V0_NAVA_IO

NOTE: 6 TURNS OF PP2V5_RCAM_AF_COMP
WAS THE MAGIC NUMBER FOR N41.
PLACE AT PMU AREA
THIS VALUE NEEDS TUNING LATER
R119 10.2 1% 1/32W MF 01005 ROOM=PMU
PP2V5_RCAM_AF
PP2V5_RCAM_AF_COMP
XW10 SM ROOM=PMU
PGND_RCAM_AF_RET
THIS XW LINK AT PMU AREA

TO DO: REVIEW ALL LDO ASSIGNMENTS
(CHECK VDD LDO INPUT SOURCE
CHECK CURRENT RATING FOR LDO OUT
VS. LOAD REQUIREMENT AT DESTINATION, ETC)

BUCK 0 — H6 VDD_CPU 10.8A MAX

BUCK 3 — H6 VDD1(BUCK3)I=0.045A MAX
BUCK3_SW1=0.500A MAX
BUCK3_SW2=0.7A MAX
BUCK3_SW3=0.7A MAX
TOTAL=0.345A MAX
OMIT_TABLE L16 1.0UH-20%-2.5A-0.075OHM TFA201610G-SM
XW18 SHORT-10L-0.1MM-SM ROOM=PMU
PP1V8_SDRAM
C293 15UF 20% 4V X5R 0402 ROOM=PMU
C443 15UF 20% 4V X5R 0402 ROOM=PMU

BUCK 4 — H6 VDDCA_VDD2 (BUCK4)I=0.500A MAX
BUCK4_SW1=1.000A MAX
BUCK4_SW2=0.100A MAX
TOTAL=1.600A MAX
OMIT_TABLE L17 1.0UH-20%-2.5A-0.075OHM TFA201610G-SM
XW20 SHORT-10L-0.1MM-SM ROOM=PMU
PP1V2_SDRAM
C308 15UF 20% 4V X5R 0402 ROOM=PMU
C316 15UF 20% 4V X5R 0402 ROOM=PMU

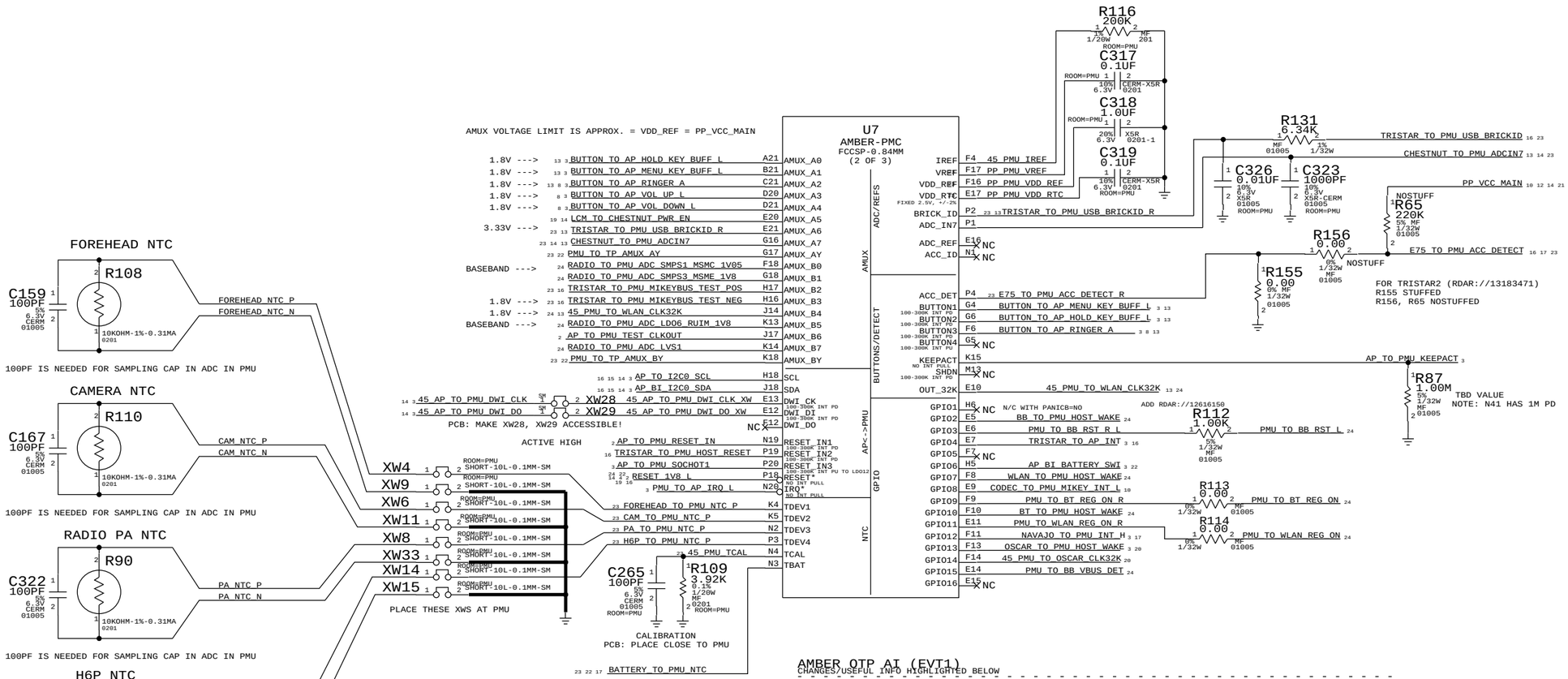
BUCK 1 — H6 VDD_GPU PMU: 5.0A MAX

BUCK 2 — H6 VDD 2.5A MAX

BUCK 5 — H6 VDD_SRAM, VDD_SRAM_SOC 1.5A MAX
UPSIZING L18 TO 2016 PKG.
RDAR://12765100
OMIT_TABLE L18 1.0UH-20%-2.4A-0.075HM PIFE20161T-SM
APN:152S1801 (CYNTEC)
XW3 SHORT-10L-0.1MM-SM ROOM=PMU
NOTE: PP1V0_SRAM STATIC AT 1.0V. NO DVFM ON THIS RAIL PER SEG.
PP1V0_SRAM
C140 15UF 20% 4V X5R 0402 ROOM=PMU
C66 15UF 20% 4V X5R 0402 ROOM=PMU
C327 15UF 20% 4V X5R 0402 ROOM=PMU

# AMBER PMU

(AMUX, GPIO, BUTTONS, ADC, THERMISTORS, SYSTEM I/F, GND)




## AMBER OTP A1 (EVT1)

CHANGES/USEFUL INFO HIGHLIGHTED BELOW

### GPIOS, BUTTONS, RESETS

GPIO1 BUCK3_SW1 OUTPUT, DRIVE LOW, OPEN DRAIN
GPIO2 BUCK3 INPUT WITH PULLDOWN
GPIO3 BUCK3 OUTPUT LOW
GPIO4 BUCK3 INPUT WITH PULLDOWN
GPIO5 BUCK3 OUTPUT LOW
GPIO6 BUCK3 INPUT WITH PULLS DISABLED (EXT PU)
GPIO7 BUCK3 INPUT WITH PULLDOWN
GPIO8 BUCK3 INPUT WITH PULLUP
GPIO9 BUCK3 OUTPUT LOW
GPIO10 BUCK3 INPUT WITH PULLDOWN
GPIO11 BUCK3 OUTPUT LOW+H12
GPIO12 BUCK3 INPUT WITH PULLUP
GPIO13 BUCK3 INPUT WILL PULLDOWN
GPIO14 BUCK3 OUTPUT LOW
GPIO15 VDD_MAIN OUTPUT LOW
GPIO16 BUCK3_SW1 INPUT WITH PULLDOWN

BUTTON2 WAKE FROM HIB AND STBY.
BUTTON4 PULLUP TO BUCK3

RESET_IN1 ENABLED
RESET_IN3 ENABLED, ACTIVE LOW, PU ENABLED TO LDO12
NOTE: HIB STATE IS NOT ENABLED FOR ANY GPIOS (OR TEMP_IRQ FOR GPIO9),
NO INPUTS ARE SELECTED AS WAKEUP EVENTS
ALL PULLED UP INPUTS ARE SELECTED AS FALLED EDGE INPUTS,
ALL PULLED DOWN INPUTS ARE SELECTED AS RISING EDGE INPUTS

### BUCKS, LDOS, TIMING

BUCK3_SW3 AND BUCK4_SW2 DEFAULT OFF
BUCK5 DEFAULT ON IN ACTIVE.
BUCK2 DEFAULT 1.0V.
LDO4 DEFAULT OFF IN ACTIVE, OFF IN HIB
LDO9 DEFAULT 2.80V.

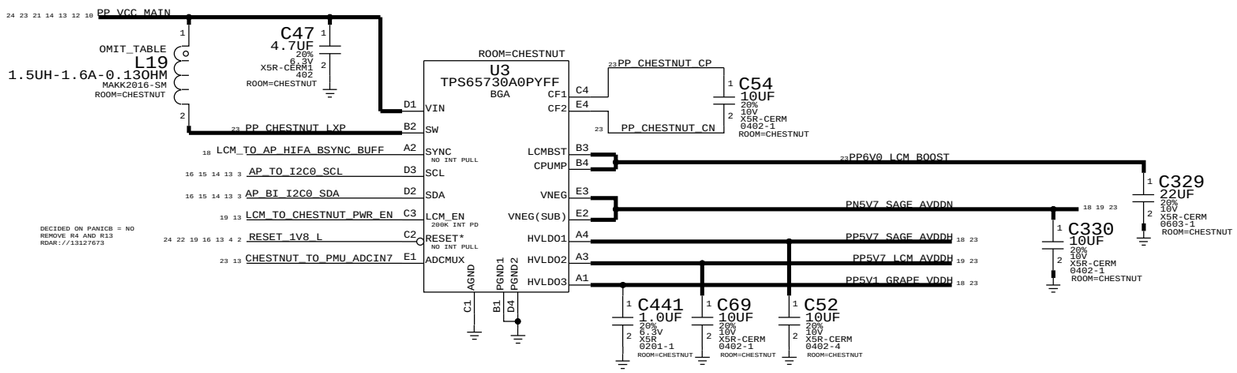
LDO3_OFF_SLOT = 7 (MOVE LDO3 OFF-SLOT TO -8)
LDO13_OFF_SLOT = 2 (CHANGE LDO13 OFF-SLOT TO -3)

CHANGE OFF-SLOT TIMERS FROM 2MS TO 3MS. (T3/T4)
- SLOT_TIMINGS T3 = 2 AND T4 = 2 (3MS FOR BOTH)

MOVE BUCK5 ON-SLOT TO SLOT 3 AND OFF-SLOT TO SLOT -4.

# CHESTNUT, BACKLIGHT DRIVER, MESA BOOST

## D403 DISPLAY PMU
(TI CHESTNUT, 338S1172)

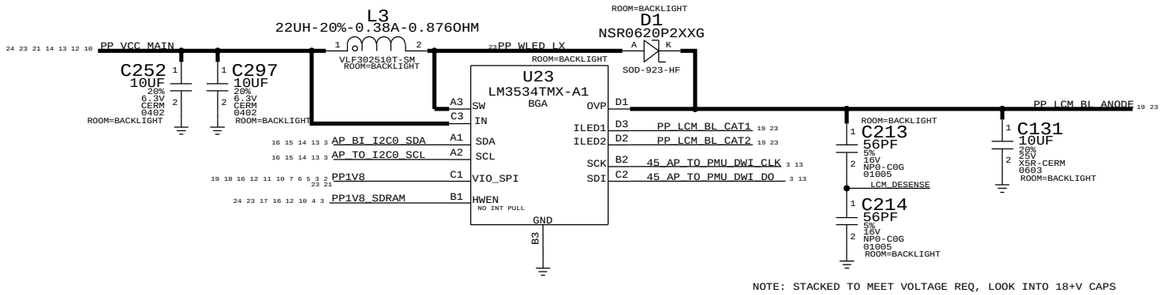



### SAGE NEG BOOST TIMING INFO:

2 MS NOMIAL START UP DELAY FOR LCM POWER SEQUENCING
0 MS DELAY AT SHUTDOWN
ACTIVE DISCHARGE 2MS TO RAIL DOWN

## D403 BACKLIGHT DRIVER

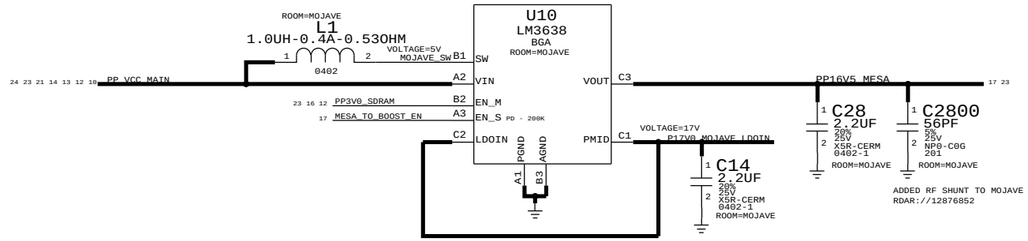
APN: 353S3721




NOTE: STACKED TO MEET VOLTAGE REQ, LOOK INTO 18+V CAPS

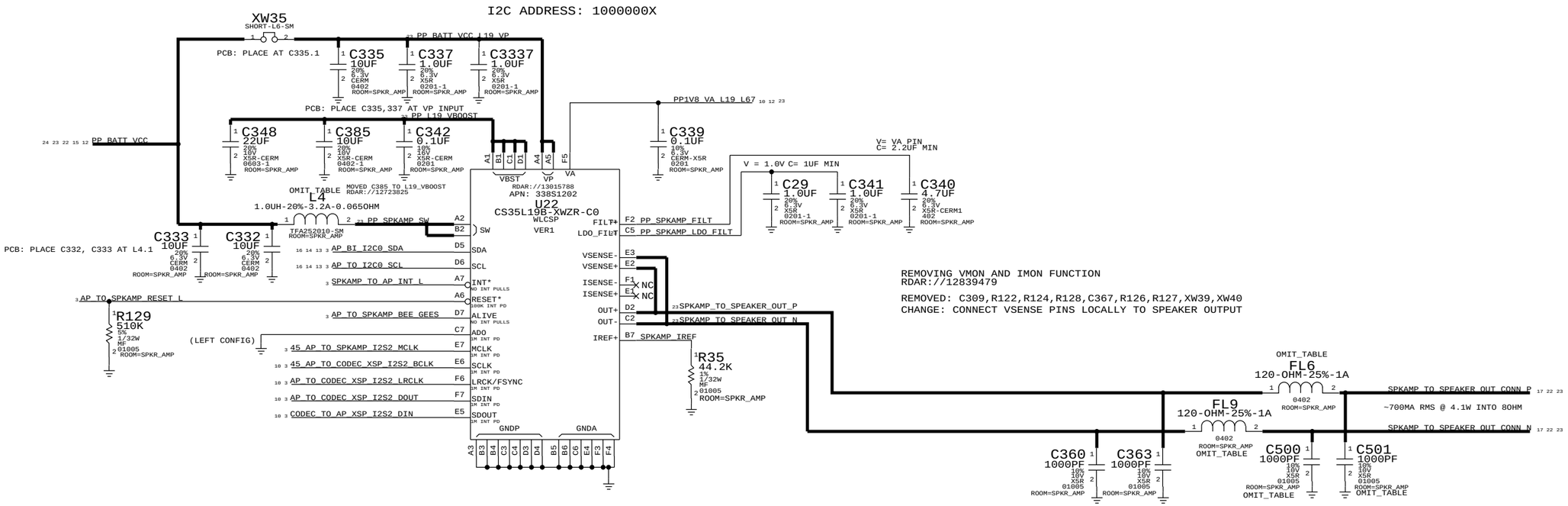
## MOJAVE

APN: 353S3978
VENDOR: TI



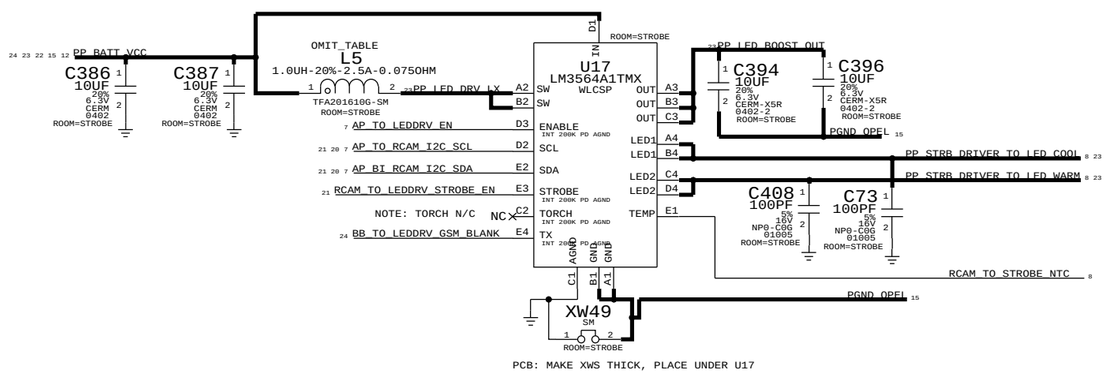
# SPEAKER AMP, LED DRIVER

## L19 SPEAKER AMP



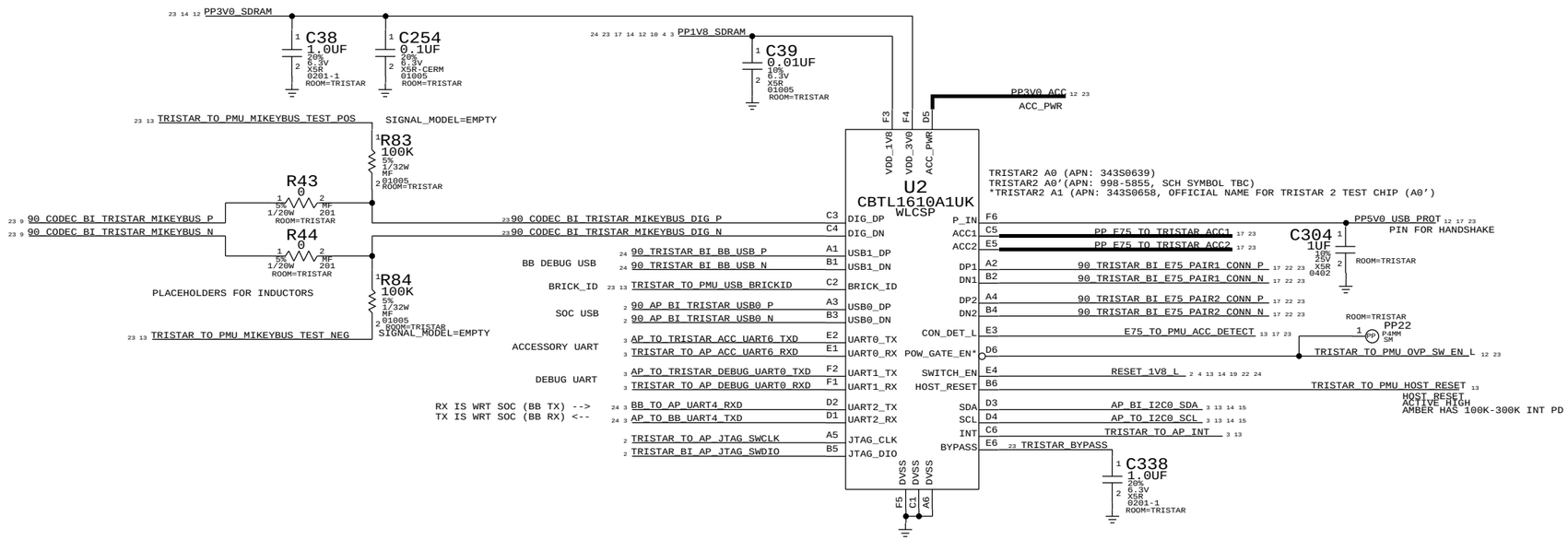

## STROBE DRIVER (OPEL)

TI: APN 353S3899



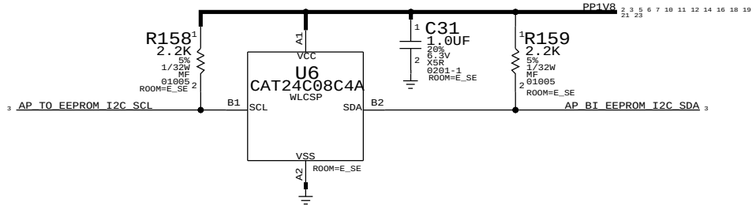
# TRISTAR

12C ADDRESS: 0011010X



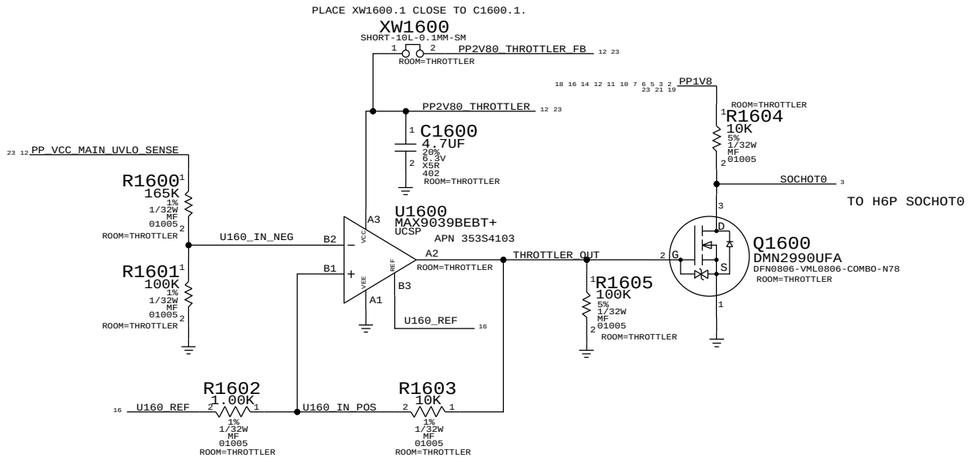

# EEPROM

## ONSEMI EEPROM
APN:335S0894




# THROTTLER

RDAR://13057149



# DOCKFLEX B2B (USB VBUS, MENU BTN, SPEAKER, HP, HP EXTMIC, NAVAJO, ANTENNA LAT SW CTRL, MIC1 (PRIMARY MIC), ACC DET/ID/PWR, E75 DIFFPAIRS)

NAVAJO: VDD(1.8V) VBOOST(18V) BOOST_EN

HPHONE: HS3/HS4, HPDET, HS3/HS4 REF, (+EXTMIC) HS3/HS4 CTRL

MENU BUTTON

MIC1 (PRIMARY MIC)

ANTENNA: PAC 2.65V

SPEAKER: SPEAKER LEADS VSENSE,

USB VBUS

NAVAJO: VDD (3.0V) SPI

HPHONE AUDIO

BATTERY NTC

ANTENNA: LAT SW CTRL

E75 DIFFPAIRS

ACCESSORY: DETECT, ID, PWR

MESA LOAD SWITCH
RDAR://13084684

U1700 TPS22904 CSP
PP1V8_SDRAM → VIN, VOUT → PP1V8_MESA_LOAD_SW_OUT
PP3V0_NAVAJO → ON
GND → B2 ROOM=MESA

C1799 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=MESA

FL33 70-OHM-300MA 01005-1 ROOM=DOCK
FL54 70-OHM-300MA 01005-1 ROOM=DOCK
PP16V5_MESA
FL66 120-OHM-210MA 01005 ROOM=DOCK
MESA_TO_BOOST_EN

C184 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
C110 56PF 5% 25V NP0-C0G-CERM 01005 ROOM=DOCK
C116 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK

R107 3.3K 1% 1/32W MF 01005 ROOM=DOCK
HPHONE_TO_CODEC_DET
C242 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK

155S0755 FOR IMPROVED AUDIO BREAKTHROUGH
RDAR://13201897
FL1 & FL10

FL1 120-OHM-210MA 01005 ROOM=DOCK OMIT_TABLE
FL10 120-OHM-210MA 01005 ROOM=DOCK OMIT_TABLE
CODEC_TO_HPHONE_HS3
CODEC_TO_HPHONE_HS4
CODEC_TO_HPHONE_HS3_CONN
CODEC_TO_HPHONE_HS4_CONN

C8 100PF 5% 16V NP0-C0G 01005 ROOM=DOCK
C5 100PF 5% 16V NP0-C0G 01005 ROOM=DOCK
STUFF C4 RDAR://12982794
C4 220PF 10% 10V X7R-CERM 01005 ROOM=DOCK
R15 1.33K 1% 1/32W MF 01005 ROOM=DOCK
R50[1] 1.33K 1% 1/32W MF 01005 ROOM=DOCK
R15/R50 TO 1.33K FOR EMC RDAR://12806830
EXTMIC_TO_CODEC_P
EXTMIC_TO_CODEC_N

FL16 120-OHM-210MA 01005 ROOM=DOCK
FL17 120-OHM-210MA 01005 ROOM=DOCK
CODEC_TO_HPHONE_HS4_REF
CODEC_TO_HPHONE_HS3_REF

DZ12 6.8V-100PF 01005 ROOM=DOCK
DZ11 6.8V-100PF 01005 ROOM=DOCK

FL69 150OHM-25%-200MA-0.7DCR 01005 ROOM=DOCK
AP_TO_HEADSET_HS3_CTRL
FL68 150OHM-25%-200MA-0.7DCR 01005 ROOM=DOCK
AP_TO_HEADSET_HS4_CTRL
AP_TO_HEADSET_HS3_CTRL_CONN
AP_TO_HEADSET_HS4_CTRL_CONN

DZ9 6.8V-100PF 01005 ROOM=DOCK
DZ10 6.8V-100PF 01005 ROOM=DOCK

FL5 120-OHM-210MA 01005 ROOM=DOCK
BUTTON_TO_AP_MENU_KEY_L
C176 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
DZ15 12V-33PF 01005-1 ROOM=DOCK NOSTUFF 50NA @ 2.5V

FL49 120-OHM-210MA 01005 ROOM=DOCK
PP_CODEC_TO_MIC1_BIAS
PP_CODEC_TO_MIC1_BIAS_CONN
C215 1.0UF 20% 6.3V X5R 0201-1 ROOM=DOCK
PGND_MIC1_TO_CODEC_RET

PLACE UNDER CONN
XW25 SHORT-10L-0.1MM-SM
MIC1_TO_CODEC_N
MIC1_TO_CODEC_P

C355 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
C359 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
XW45 SHORT-10L-0.1MM-SM ROOM=DOCK
PCB: PUT XW AT J7.33

PP_LDO14_2P65

SPKAMP_TO_SPEAKER_OUT_CONN_P
SPKAMP_TO_SPEAKER_OUT_CONN_N

Q2 CSD68813W10 BGA ROOM=DOCK
Q2 APN: 376S1130
39MOHM MAX AT -4.5V VGS
PP5V0_USB_PROT
POWER TO TRISTAR AND PMU
REVERSE_GATE

R58 5.1K 5% 1/20W MF 0201 ROOM=DOCK
NOTE: KEEP R58 AT 0201 FOR POWER DISSIPATION IN CASE OF -20V RVP EVENT

C368 0.01UF 10% 25V X5R-CERM 0201 ROOM=DOCK
PP5V0_USB_CONN
C12 100PF 5% 16V NP0-C0G 01005 ROOM=DOCK
C13 100PF 5% 16V NP0-C0G 01005 ROOM=DOCK
USB_CONN_SNUB

PCB: PLACE AT J7.GND PIN (PCB CAN CHOOSE)
XW13 SM ROOM=DOCK
CODEC_MBUS_REF

THIS ONE ON MLB ---> 516S1032 PLUG
516S1031 RCPT (USED ON FLEX)

J7 105847038102829 M-ST-SM ROOM=DOCK

| | | | |
|---|---|---|---|
| | 39 | 40 | |
| SPKAMP_TO_SPEAKER_OUT_CONN_P | 1 | 2 | NOTE: NAVAJO MISO |
| PP1V8_SDRAM_DOCK_CONN | 3 | 4 | PP3V0_NAVAJO_CONN |
| PP16V5_MESA_DOCK_CONN | 5 | 6 | AP_TO_HEADSET_HS4_CTRL_CONN |
| MESA_TO_BOOST_EN_DOCK_CONN | 7 | 8 | CODEC_TO_HPHONE_L_CONN |
| AP_TO_NAVAJO_SPI2_MOSI_CONN | 9 | 10 | CODEC_TO_HPHONE_R_CONN |
| NAVAJO_TO_PMU_INT_CONN_H | 11 | 12 | CODEC_TO_HPHONE_HS3_CONN |
| NOTE: RSVD ANTENNA | 13 | 14 | BATTERY_NTC_CONN |
| HPHONE_TO_CODEC_DET_CONN | 15 | 16 | AP_TO_NAVAJO_SPI2_CLK_CONN |
| NOTE: HS4_CONN | 17 | 18 | NOTE: LAT_SW2 |
| CODEC_TO_HPHONE_HS4_REF_CONN | 19 | 20 | NOTE: LAT_SW1 |
| CODEC_TO_HPHONE_HS3_REF_CONN | 21 | 22 | |
| NOTE: HS3_CTRL | 23 | 24 | 90_TRISTAR_BI_E75_PAIR1_CONN_P |
| BUTTON_TO_AP_MENU_KEY_CONN_L | 25 | 26 | 90_TRISTAR_BI_E75_PAIR1_CONN_N |
| NOTE: MIC1_BIAS | 27 | 28 | 90_TRISTAR_BI_E75_PAIR2_CONN_N |
| NOTE: MIC1_P | 29 | 30 | 90_TRISTAR_BI_E75_PAIR2_CONN_P |
| NOTE: MIC1_RETURN | 31 | 32 | |
| NOTE: PAC 2.65V | 33 | 34 | E75_TO_PMU_ACC_DETECT_CONN |
| NOTE: SPKR_P | 35 | 36 | PP_E75_TO_TRISTAR_ACC1_CONN |
| NOTE: SPKR_N | 37 | 38 | PP_E75_TO_TRISTAR_ACC2_CONN |
| | 41 | 42 | |

NOTE: PP5V0_USB_CONN

PCB: PLACE THESE XW LINKS AT DOCK CONNECTOR

RDAR://13049229 CHANGE DZ14,13 TO >10V PARTS
DZ14 12V-33PF 01005-1 ROOM=DOCK OMIT_TABLE
DZ13 12V-33PF 01005-1 ROOM=DOCK OMIT_TABLE
PCB: PLACE NEAR J7 (ESD + DESENSE!)
C99 56PF 5% 16V NP0-C0G 01005 ROOM=DOCK
C102 56PF 5% 16V NP0-C0G 01005 ROOM=DOCK

C70 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
C71 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
PCB: PLACE NEAR J7 (DESENSE CAPS)
C240 27PF 5% 16V NP0-C0G 01005 ROOM=DOCK

FL32 120-OHM-210MA 01005 ROOM=DOCK OMIT_TABLE
AP_TO_NAVAJO_SPI2_MOSI_CONN → AP_TO_NAVAJO_SPI2_MOSI DEFAULT 0 OHM
FL63 120-OHM-210MA 01005 ROOM=DOCK OMIT_TABLE
AP_TO_NAVAJO_SPI2_CLK_CONN → AP_TO_NAVAJO_SPI2_CLK DEFAULT 0 OHM
FL50 120-OHM-210MA 01005 ROOM=DOCK OMIT_TABLE
NAVAJO_TO_AP_SPI2_MISO_CONN → NAVAJO_TO_AP_SPI2_MISO DEFAULT 0 OHM
FL59 120-OHM-210MA 01005 ROOM=DOCK OMIT_TABLE
NAVAJO_TO_PMU_INT_CONN_H → NAVAJO_TO_PMU_INT_H DEFAULT 0 OHM

C103 56PF 5% 6.3V 01005 ROOM=DOCK NAVAJO_56PF
C101 56PF 5% 6.3V 01005 ROOM=DOCK NAVAJO_56PF
C126 56PF 5% 6.3V 01005 ROOM=DOCK NAVAJO_56PF
C98 56PF 5% 6.3V 01005 ROOM=DOCK NAVAJO_56PF

FL19 80-OHM-25%-1000MA 0201 ROOM=DOCK NOTE: 0.130HM DCR
PP3V0_NAVAJO
C119 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
C105 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=DOCK
REMOVE R135
RDAR://12853395
L7 FERR-33-OHM-0.8A-0.09-OHM 0201 ROOM=DOCK
C374 6.8V-100PF 01005 ROOM=DOCK
R23 100K 1% 1/32W MF 01005 ROOM=DOCK
HPHONE_TO_CODEC_HPHONE_TEST
CODEC_TO_HPHONE_L
CODEC_TO_HPHONE_R
R10[1] 100K 1% 1/32W MF 01005 ROOM=DOCK
L6 FERR-33-OHM-0.8A-0.09-OHM 0201 ROOM=DOCK
C375 6.8V-100PF 01005 ROOM=DOCK

FL2302 120-OHM-210MA 01005 ROOM=DOCK
BATTERY_TO_PMU_NTC
C2307 56PF 5% 16V NP0-C0G 01005 ROOM=DOCK

BB_TO_LAT_SW2_CTL
BB_TO_LAT_SW1_CTL
C188 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK
C206 56PF 5% 6.3V NP0-C0G 01005 ROOM=DOCK

REMOVED CM_CHOKES
RDAR://12894985
90_TRISTAR_BI_E75_PAIR1_CONN_P
90_TRISTAR_BI_E75_PAIR1_CONN_N
90_TRISTAR_BI_E75_PAIR2_CONN_N
90_TRISTAR_BI_E75_PAIR2_CONN_P

R130 1.00K 1% 1/32W MF 01005 ROOM=DOCK
E75_TO_PMU_ACC_DETECT
FL60 10-OHM-750MA 01005-1 ROOM=DOCK
PP_E75_TO_TRISTAR_ACC1
FL53 10-OHM-750MA 01005-1 ROOM=DOCK
PP_E75_TO_TRISTAR_ACC2

# D403 (B2B,DRIVER ICS)

## CUMULUS C1

343S0638

(TURN ON LATER THAN PP1V8_GRAPE)
(TURN OFF SAME TIME AS PP1V8_GRAPE)

PP5V1_GRAPE_VDDH → C369 10UF 20% 10V X5R-CERM 0402-1 ROOM=CUMULUS

PP_CUMULUS_VDDCORE → C370 4.7UF 20% 6.3V X5R-CERM1 402 ROOM=CUMULUS
PP_CUMULUS_VDDANA → C371 4.7UF 20% 6.3V X5R-CERM1 402 ROOM=CUMULUS

PP1V8_CUMULUS_VDDLDO → C372 1.0UF 20% 6.3V X5R 0201-1 ROOM=CUMULUS

XW36 SM ROOM=CUMULUS → PP1V8_GRAPE

ROOM=CUMULUS R86 220K 5% 1/32W MF 01005

45_PROX_TO_CUMULUS_RX → C79 1000PF 10% 6.3V X5R-CERM 01005 → 45_PROX_TO_CUMULUS_RX_FILT → R26 22.1K 1% 1/32W MF 01005 ROOM=CUMULUS
C130 27PF 5% 16V NP0-C0G 01005 ROOM=CUMULUS

CUMULUS_IN IS SENSITIVE

| | | |
|---|---|---|
| SAGE_TO_CUMULUS_IN<2> | B9 | IN0_0 |
| SAGE_TO_CUMULUS_IN<1> | B8 | IN1_0 |
| SAGE_TO_CUMULUS_IN<6> | A9 | IN2_0 |
| SAGE_TO_CUMULUS_IN<7> | B7 | IN3_0 |
| SAGE_TO_CUMULUS_IN<4> | B6 | IN4_0 |
| SAGE_TO_CUMULUS_IN<8> | A8 | IN5_0 |
| SAGE_TO_CUMULUS_IN<3> | B5 | IN6_0 |
| SAGE_TO_CUMULUS_IN<5> | B4 | IN7_0 |
| SAGE_TO_CUMULUS_IN<9> | A7 | IN8_0 |
| SAGE_TO_CUMULUS_IN<0> | B3 | IN9_0 |
| SAGE_TO_CUMULUS_IN<14> | A6 | IN10_0 |
| SAGE_TO_CUMULUS_IN<10> | A3 | IN11_0 |
| SAGE_TO_CUMULUS_IN<13> | A5 | IN12_0 |
| SAGE_TO_CUMULUS_IN<11> | A4 | IN13_0 |
| SAGE_TO_CUMULUS_IN<12> | B2 | IN14_0 |
| 45_PROX_TO_CUMULUS_RX_IN | A2 | IN14_1 |

**U12 CUMULUS-C1** WLBGA
CUMULUS C1 SILICON
RDAR://12551355

| | | |
|---|---|---|
| VSTM_0 | E9 | CUMULUS_TO_SAGE_VSTM_OUT<2> |
| VSTM_1 | E5 | CUMULUS_TO_SAGE_VSTM_OUT<5> |
| VSTM_2 | F7 | CUMULUS_TO_SAGE_VSTM_OUT<16> |
| VSTM_3 | E6 | CUMULUS_TO_SAGE_VSTM_OUT<18> |
| VSTM_4 | E7 | CUMULUS_TO_SAGE_VSTM_OUT<17> |
| VSTM_5 | F8 | CUMULUS_TO_SAGE_VSTM_OUT<11> |
| VSTM_6 | G9 | CUMULUS_TO_SAGE_VSTM_OUT<13> |
| VSTM_7 | D6 | CUMULUS_TO_SAGE_VSTM_OUT<7> |
| VSTM_8 | D7 | CUMULUS_TO_SAGE_VSTM_OUT<3> |
| VSTM_9 | D8 | CUMULUS_TO_SAGE_VSTM_OUT<9> |
| VSTM_10 | F9 | CUMULUS_TO_SAGE_VSTM_OUT<10> |
| VSTM_11 | D5 | CUMULUS_TO_SAGE_VSTM_OUT<1> |
| VSTM_12 | F6 | CUMULUS_TO_SAGE_VSTM_OUT<4> |
| VSTM_13 | F5 | CUMULUS_TO_SAGE_VSTM_OUT<8> |
| VSTM_14 | G4 | CUMULUS_TO_SAGE_VSTM_OUT<12> |
| VSTM_15 | E8 | CUMULUS_TO_SAGE_VSTM_OUT<0> |
| VSTM_16 | G8 | CUMULUS_TO_SAGE_VSTM_OUT<15> |
| VSTM_17 | G7 | CUMULUS_TO_SAGE_VSTM_OUT<19> |
| VSTM_18 | G6 | CUMULUS_TO_SAGE_VSTM_OUT<14> |
| VSTM_19 | G5 | CUMULUS_TO_SAGE_VSTM_OUT<6> |

THESE ARE ROUTED TOGETHER
SPECIAL - CANNOT SWAP
SPECIAL - CANNOT SWAP

| | | |
|---|---|---|
| GPIO_1/CK | G1 | NOTE: LCM_TO_AP_HIFA_BSYNC_BUFF |
| GPIO_2/SD | D4 | CUMULUS_TO_SAGE_BOOST_EN |
| GPIO_3 | F2 | U12_GPIO_3 → PP9 P4MM-NSM ROOM=CUMULUS |
| GPIO_4 | F3 | CUMULUS_TO_SAGE_GCM_SEL |
| TM_ACS* | C2 | CUMULUS_TO_PROX_RX_EN_1V8 |
| TM_OVR | G3 | |

R79 100K 5% 1/32W MF 01005 ROOM=CUMULUS → PP1V8_GRAPE

REMOVED Q6, R121, C366 DUE TO SAGE2 C06
RDAR://12839057

SAGE PANEL IN IS SENSITIVE
KEEP THESE NETS FROM XTALK

| | | |
|---|---|---|
| TOUCH_TO_SAGE_SENSE_IN<4> | E4 | SNS_IN0 |
| TOUCH_TO_SAGE_SENSE_IN<3> | D4 | SNS_IN1 |
| TOUCH_TO_SAGE_SENSE_IN<5> | C4 | SNS_IN2 |
| TOUCH_TO_SAGE_SENSE_IN<0> | B4 | SNS_IN3 |
| TOUCH_TO_SAGE_SENSE_IN<12> | A4 | SNS_IN4 |
| TOUCH_TO_SAGE_SENSE_IN<7> | A6 | SNS_IN5 |
| TOUCH_TO_SAGE_SENSE_IN<10> | B6 | SNS_IN6 |
| TOUCH_TO_SAGE_SENSE_IN<1> | C6 | SNS_IN7 |
| TOUCH_TO_SAGE_SENSE_IN<11> | D6 | SNS_IN8 |
| TOUCH_TO_SAGE_SENSE_IN<2> | E6 | SNS_IN9 |
| TOUCH_TO_SAGE_SENSE_IN<13> | E8 | SNS_IN10 |
| TOUCH_TO_SAGE_SENSE_IN<14> | D8 | SNS_IN11 |
| TOUCH_TO_SAGE_SENSE_IN<8> | C8 | SNS_IN12 |
| TOUCH_TO_SAGE_SENSE_IN<9> | B8 | SNS_IN13 |
| TOUCH_TO_SAGE_SENSE_IN<6> | A8 | SNS_IN14 |

| | | |
|---|---|---|
| CUMULUS_TO_SAGE_VSTM_OUT<8> | G1 | DRV_IN0 |
| CUMULUS_TO_SAGE_VSTM_OUT<6> | H1 | DRV_IN1 |
| CUMULUS_TO_SAGE_VSTM_OUT<12> | J1 | DRV_IN2 |
| CUMULUS_TO_SAGE_VSTM_OUT<1> | K1 | DRV_IN3 |
| CUMULUS_TO_SAGE_VSTM_OUT<7> | L1 | DRV_IN4 |
| CUMULUS_TO_SAGE_VSTM_OUT<15> | G2 | DRV_IN5 |
| CUMULUS_TO_SAGE_VSTM_OUT<14> | H2 | DRV_IN6 |
| CUMULUS_TO_SAGE_VSTM_OUT<18> | J2 | DRV_IN7 |
| CUMULUS_TO_SAGE_VSTM_OUT<5> | K2 | DRV_IN8 |
| | L2 | DRV_IN9 |
| CUMULUS_TO_SAGE_VSTM_OUT<4> | K3 | DRV_IN10 |
| CUMULUS_TO_SAGE_VSTM_OUT<19> | J3 | DRV_IN11 |
| CUMULUS_TO_SAGE_VSTM_OUT<13> | H3 | DRV_IN12 |
| CUMULUS_TO_SAGE_VSTM_OUT<16> | G3 | DRV_IN13 |
| CUMULUS_TO_SAGE_VSTM_OUT<3> | L4 | DRV_IN14 |
| CUMULUS_TO_SAGE_VSTM_OUT<2> | K4 | DRV_IN15 |
| CUMULUS_TO_SAGE_VSTM_OUT<0> | J4 | DRV_IN16 |
| CUMULUS_TO_SAGE_VSTM_OUT<11> | H4 | DRV_IN17 |
| CUMULUS_TO_SAGE_VSTM_OUT<17> | G4 | DRV_IN18 |
| SAGE_VBIAS | D3 | DRV_IN19 |
| | A2 | VBIAS |
| | F2 | VCPH_REF/EN |
| | | VCPL_REF/EN |
| | B1 | VBST_OUTH |
| | E1 | VBST_OUTL |
| | C1 | L_X |
| | D1 | L_Y |

**U15 SAGE2-C06** CSP

| | | |
|---|---|---|
| AVDDH1 | D2 | |
| AVDDH2 | A3 | |
| AVDDH3 | F3 | |
| AVDDH4 | F6 | |
| AVDDL1 | H5 | |
| VCPH | A1 | |
| VCPL | F1 | |
| VCPL_F | E2 | |
| VDDIO | C3 | |
| AGND1 | C2 | |
| AGND2 | B3 | |
| AGND3 | F4 | |
| AGND4 | F8 | |
| AGND5 | E3 | |
| AGND6 | L5 | |

PP_SAGE_TO_TOUCH_VCPH 13.5V → C170 0.1UF 10% 16V X5R-CERM 0201 ROOM=SAGE; C365 0.1UF 10% 16V X5R-CERM 0201 ROOM=SAGE (-12V)

PP5V7_SAGE_AVDDH 5.45-5.98V → C156 10UF 20% 10V X5R-CERM 0402-4 ROOM=SAGE

PP5V7_SAGE_AVDDN → R3301 4.7 1% 1/32W MF 01005 ROOM=SAGE → PN5V7_SAGE_AVDDN_INT
C3301 10UF 20% 10V X5R-CERM 0402-1 ROOM=SAGE
C149 10UF 20% 10V X5R-CERM 0402-1 ROOM=SAGE
DZ4 GDZT2R6.2B GDZ-0201 ROOM=SAGE (TO CLAMP THE NEGATIVE RAIL)

R3301/C3301 RC FILTER FOR VNEG RIPPLE
RDAR://12723814

PP_SAGE_VCPL_F 3.5V → C163 0.1UF 10% 6.3V CERM-X5R 0201 ROOM=SAGE

PP1V8 → C165 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SAGE

CUMULUS_IN IS SENSITIVE
KEEP THESE NETS FROM XTALK

| | | |
|---|---|---|
| SNS_OUT0 | E5 | SAGE_TO_CUMULUS_IN<4> |
| SNS_OUT1 | D5 | SAGE_TO_CUMULUS_IN<3> |
| SNS_OUT2 | C5 | SAGE_TO_CUMULUS_IN<5> |
| SNS_OUT3 | B5 | SAGE_TO_CUMULUS_IN<0> |
| SNS_OUT4 | A5 | SAGE_TO_CUMULUS_IN<12> |
| SNS_OUT5 | A7 | SAGE_TO_CUMULUS_IN<7> |
| SNS_OUT6 | B7 | SAGE_TO_CUMULUS_IN<10> |
| SNS_OUT7 | C7 | SAGE_TO_CUMULUS_IN<1> |
| SNS_OUT8 | D7 | SAGE_TO_CUMULUS_IN<11> |
| SNS_OUT9 | E7 | SAGE_TO_CUMULUS_IN<2> |
| SNS_OUT10 | E9 | SAGE_TO_CUMULUS_IN<13> |
| SNS_OUT11 | D9 | SAGE_TO_CUMULUS_IN<14> |
| SNS_OUT12 | C9 | SAGE_TO_CUMULUS_IN<8> |
| SNS_OUT13 | B9 | SAGE_TO_CUMULUS_IN<9> |
| SNS_OUT14 | A9 | SAGE_TO_CUMULUS_IN<6> |

| | | |
|---|---|---|
| DRV_OUT0 | G6 | SAGE_TO_TOUCH_VSTM_OUT<8> |
| DRV_OUT1 | H6 | SAGE_TO_TOUCH_VSTM_OUT<6> |
| DRV_OUT2 | J6 | SAGE_TO_TOUCH_VSTM_OUT<12> |
| DRV_OUT3 | K6 | SAGE_TO_TOUCH_VSTM_OUT<1> |
| DRV_OUT4 | L6 | SAGE_TO_TOUCH_VSTM_OUT<7> |
| DRV_OUT5 | G7 | SAGE_TO_TOUCH_VSTM_OUT<15> |
| DRV_OUT6 | H7 | SAGE_TO_TOUCH_VSTM_OUT<14> |
| DRV_OUT7 | J7 | SAGE_TO_TOUCH_VSTM_OUT<18> |
| DRV_OUT8 | K7 | SAGE_TO_TOUCH_VSTM_OUT<5> |
| DRV_OUT9 | L7 | SAGE_TO_TOUCH_VSTM_OUT<9> |
| DRV_OUT10 | L8 | SAGE_TO_TOUCH_VSTM_OUT<10> |
| DRV_OUT11 | K8 | SAGE_TO_TOUCH_VSTM_OUT<4> |
| DRV_OUT12 | J8 | SAGE_TO_TOUCH_VSTM_OUT<19> |
| DRV_OUT13 | H8 | SAGE_TO_TOUCH_VSTM_OUT<13> |
| DRV_OUT14 | G8 | SAGE_TO_TOUCH_VSTM_OUT<16> |
| DRV_OUT15 | L9 | SAGE_TO_TOUCH_VSTM_OUT<3> |
| DRV_OUT16 | K9 | SAGE_TO_TOUCH_VSTM_OUT<2> |
| DRV_OUT17 | J9 | SAGE_TO_TOUCH_VSTM_OUT<0> |
| DRV_OUT18 | H9 | SAGE_TO_TOUCH_VSTM_OUT<11> |
| DRV_OUT19 | G9 | SAGE_TO_TOUCH_VSTM_OUT<17> |

| | | |
|---|---|---|
| BSYNC | K5 | LCM_TO_AP_HIFA_BSYNC |
| GCM_TEST | F9 | CUMULUS_TO_SAGE_GCM_SEL |
| G0 | F7 | NC |
| VCM_IN | J5 | TOUCH_TO_SAGE_VCM_IN |
| I2C_SCL | F5 | NC |
| I2C_SDA | G5 | NC |
| BOOST_EN | B2 | CUMULUS_TO_SAGE_BOOST_EN |

PP11 P4MM SM ROOM=SAGE
PP18 P4MM-NSM SM ROOM=SAGE

REMOVED D2 (AT EVT2)
RDAR://12839057

SAGE_TO_TOUCH_VCPH_REF
SAGE_TO_TOUCH_VCPL_REF
C150 0.01UF 10% 6.3V X5R 01005 ROOM=SAGE
C147 0.01UF 10% 6.3V X5R 01005 ROOM=SAGE
C137 0.1UF 10% 6.3V CERM-X5R 0201 ROOM=SAGE

PP_SAGE_VBST_OUTH
PP_SAGE_VBST_OUTL
PP_SAGE_LX
PP_SAGE_LY
L21 10UH-0.32A-1.56OHM PSB1210T-SM ROOM=SAGE

C321 0.33UF 20% 20V TANT 0402 ROOM=SAGE
C328 1000PF 10% 25V X7R-CERM 0201 ROOM=SAGE
C349 1000PF 10% 25V X7R-CERM 0201 ROOM=SAGE
PP5V7_SAGE_AVDDH

0603-LLP C320 1UF-10OHM 20% 25V TANT ROOM=SAGE
C346 1000PF 10% 25V X7R-CERM 0201 ROOM=SAGE
C364 1000PF 10% 25V X7R-CERM 0201 ROOM=SAGE

PP1V8_GRAPE → R2 100K 5% 1/32W MF 01005 ROOM=CUMULUS
U5 VCC 74AUP2G3404GN SOT1115 ROOM=CUMULUS
LCM_TO_AP_HIFA_BSYNC_BUFF → R36 100K 5% 1/32W MF 01005 ROOM=CUMULUS → LCM_TO_AP_HIFA_BSYNC
CUMULUS_TO_PROX_TX_EN_BUFF → CUMULUS_TO_PROX_TX_EN_1V8_L

REMOVED R47, R48, R49, R61, R62 ZERO OHMS
RDAR://13109728

## TOUCH B2B

ROOM=TOUCH_B2B
J4 504459-4210-AA21-P042VA1 M-ST-SM-COMBO
REFRESHED TOUCH CONNECTOR FOR COMBO FOOTPRINT
RDAR://12993295

ON MLB ->516S1061 PLUG
ON FLEX->516S1060 RCPT

| | | | | | |
|---|---|---|---|---|---|
| C5 | TOUCH_TO_SAGE_SENSE_IN<5> | 1 | 2 | TOUCH_TO_SAGE_SENSE_IN<6> | C6 |
| C4 | TOUCH_TO_SAGE_SENSE_IN<4> | 3 | 4 | TOUCH_TO_SAGE_SENSE_IN<13> | GS3 |
| C0 | TOUCH_TO_SAGE_SENSE_IN<0> | 5 | 6 | TOUCH_TO_SAGE_SENSE_IN<7> | C7 |
| C3 | TOUCH_TO_SAGE_SENSE_IN<3> | 7 | 8 | SAGE_TO_TOUCH_VCPH_REF | VGH_REF |
| GS1 | TOUCH_TO_SAGE_SENSE_IN<11> | 9 | 10 | SAGE_TO_TOUCH_VCPL_REF | VGL_REF |
| C2 | TOUCH_TO_SAGE_SENSE_IN<2> | 11 | 12 | TOUCH_TO_SAGE_VCM_IN | VCOM |
| C1 | TOUCH_TO_SAGE_SENSE_IN<1> | 13 | 14 | TOUCH_TO_SAGE_SENSE_IN<12> | GS2 |
| GS0 | TOUCH_TO_SAGE_SENSE_IN<10> | 15 | 16 | TOUCH_TO_SAGE_SENSE_IN<9> | C9 |
| VGL | PP_SAGE_TO_TOUCH_VCPL | 17 | 18 | TOUCH_TO_SAGE_SENSE_IN<8> | C8 |
| VGH | PP_SAGE_TO_TOUCH_VCPH | 19 | 20 | TOUCH_TO_SAGE_SENSE_IN<14> | GS4 |
| R10 | SAGE_TO_TOUCH_VSTM_OUT<10> | 21 | 22 | | |
| R7 | SAGE_TO_TOUCH_VSTM_OUT<7> | 23 | 24 | SAGE_TO_TOUCH_VSTM_OUT<17> | R17 |
| R1 | SAGE_TO_TOUCH_VSTM_OUT<1> | 25 | 26 | SAGE_TO_TOUCH_VSTM_OUT<16> | R16 |
| R5 | SAGE_TO_TOUCH_VSTM_OUT<5> | 27 | 28 | SAGE_TO_TOUCH_VSTM_OUT<15> | R15 |
| R6 | SAGE_TO_TOUCH_VSTM_OUT<6> | 29 | 30 | SAGE_TO_TOUCH_VSTM_OUT<14> | R14 |
| R8 | SAGE_TO_TOUCH_VSTM_OUT<8> | 31 | 32 | SAGE_TO_TOUCH_VSTM_OUT<13> | R13 |
| R9 | SAGE_TO_TOUCH_VSTM_OUT<9> | 33 | 34 | SAGE_TO_TOUCH_VSTM_OUT<12> | R12 |
| R4 | SAGE_TO_TOUCH_VSTM_OUT<4> | 35 | 36 | SAGE_TO_TOUCH_VSTM_OUT<11> | R11 |
| R3 | SAGE_TO_TOUCH_VSTM_OUT<3> | 37 | 38 | SAGE_TO_TOUCH_VSTM_OUT<0> | R0_RIGHT |
| R2 | SAGE_TO_TOUCH_VSTM_OUT<2> | 39 | 40 | SAGE_TO_TOUCH_VSTM_OUT<18> | R18 |
| R0_LEFT | SAGE_TO_TOUCH_VSTM_OUT<0> | 41 | 42 | SAGE_TO_TOUCH_VSTM_OUT<19> | R19 |
| | | 45 | 46 | | |
| | | 48 | 47 | 43 | 44 |

45_AP_TO_TOUCH_CLK32K_RESET_L → XW51 SM → 45_AP_TO_TOUCH_CLK32K_RESET_L_XW
(ALSO A RESET IF CLOCK STOPS)
WIRED UP BY DEFAULT

CHANGED R51 TO XW LINK
RDAR://12773579

TO BE USED AS TP
RDAR://12611242

PP7 P2MM SM ROOM=CUMULUS
PP8 P2MM SM ROOM=CUMULUS

AP_TO_TOUCH_SPI1_CS_L → H_CS*
TOUCH_TO_AP_INT_L → H_INT*
AP_TO_TOUCH_SPI1_CLK → H_SCLK
AP_TO_TOUCH_SPI1_MOSI → H_SDI
TOUCH_TO_AP_SPI1_MISO → R136 10.2 1% 1/32W MF 01005 ROOM=CUMULUS → TOUCH_TO_AP_SPI1_MISO_R → H_SDO

JTAG_TCK
JTAG_TDI
JTAG_TDO
JTAG_TMS
PP1V8_CUMULUS_VDDLDO
BCFG_RTCK
CLKIN/RESET*
RSTOVR*
CUMULUS_TO_PROX_TX_EN_1V8_L

GND

# LCM B2B

REMOVED R89 ZERO OHM (RDAR://13099118)

X145 E1C USING 516S1051 EXISTING B2B
SURROUNDING COMPONENTS MOVED TO SUPPORT 516S0995 (N41-ERA)
RDAR://13094309

THIS ONE ON MLB ---> 516S1051 PLUG
516S1050 RCPT (FLEX)

LCM:
2-LANE MIPI

LCM:
POWER
(1.8V DVDD)
(+5.7V AVDD)
(-5.7V AVDD)

LCM:
DIGITAL I/F
(PWR_EN, RESET
PIFA, BSYNC)

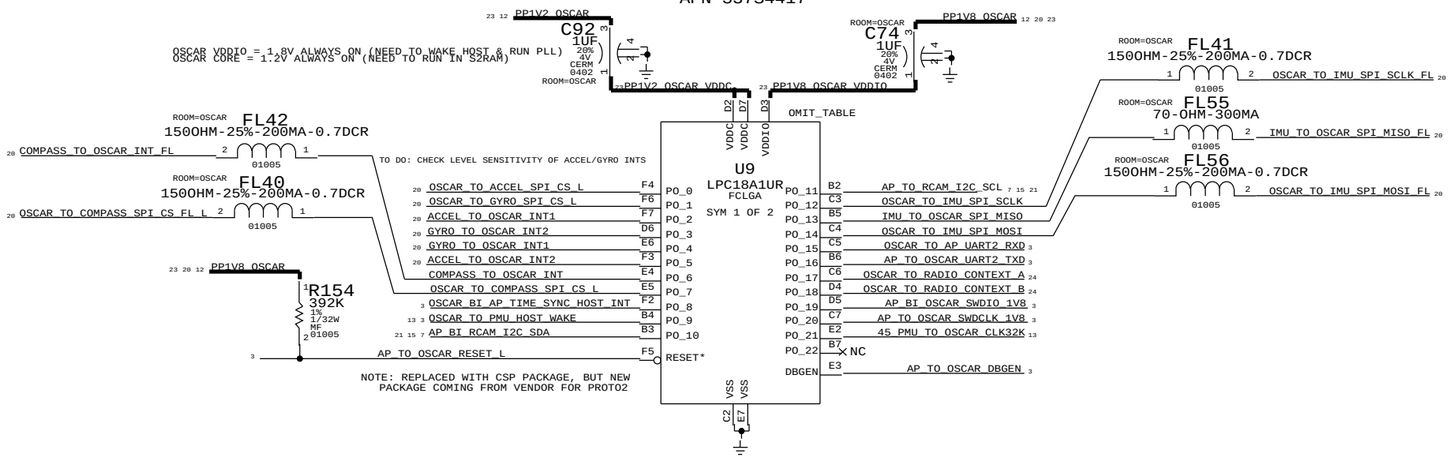
LCM:
BACKLIGHT

PCB: ALL 56PF CAPS GO AT CONN

# OSCAR + SENSORS

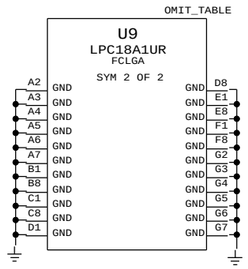
## OSCAR MODULE (CONFORMAL COATED)

APN 337S4417




## OSCAR MODULE GND BALLS

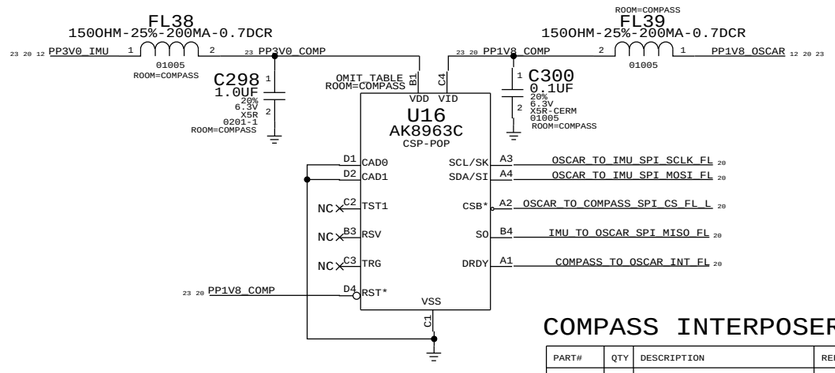
(THIS SYMBOL DOES NOT EXIST ON OSCAR CSP)




## THIS PART OUTSIDE OF SHIELD

### COMPASS

COMPASS CSP: 338S1014
COMPASS INTERPOSER (FOOTPRINT ONLY): 998-5120
COMPASS INTERPOSER MODULE: 639-4269



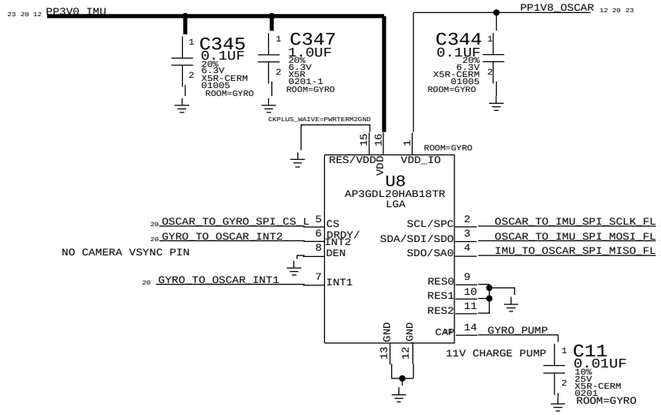

### COMPASS INTERPOSER

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 639-4269 | 1 | COMPASS INTERPOSER X152/X145 | U16 | CRITICAL | COMPASS_INTERPOSER |

## THESE PARTS INSIDE OF SHIELD

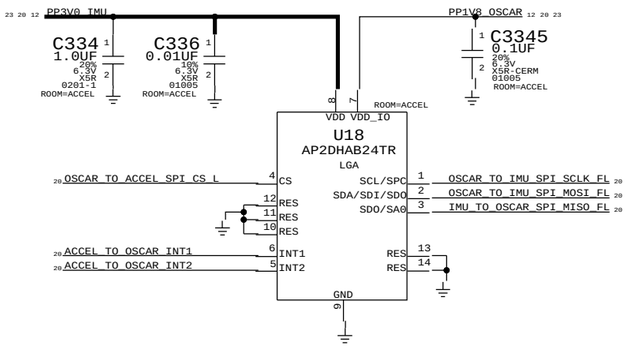
### GYRO

ST MICRO AP3GDL20HAB, APN 338S1192




### ACCELEROMETER

ST MICRO AP2DHAB, APN 338S1191




TO DO: VERIFY CONNECTIONS ON ACCEL (CS, SDO PINS)

# RCAM B2B (REAR CAMERA CONNECTOR)

RCAM:
POWER:
(1.8V DVDD)
(2.8V AVDD)
(1.2V VCC)
(2.5V AF)

RCAM:
DIGITAL I/F
(I2C,CTRL,CLK)

RCAM:
4-LANE MIPI

23 12 PP2V5_RCAM_AF_COMP

L29
FERR-22-OHM-1A-0.065-OHM
23 12 PP2V5_RCAM_AF
0201
ROOM=RCAM_B2B

C423 1.0UF 20% 6.3V X5R 0201-1 ROOM=RCAM_B2B
C391 1.0UF 20% 6.3V X5R 0201-1 ROOM=RCAM_B2B
C393 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B

1.2V RCAM LOAD SWITCH
ROOM=RCAM_B2B

U13
TPS22924X
CSP
23 12 4 PP1V2_SDRAM
A2 VIN
B2
C2 ON
NO INT PULLS
GND
C1
A1 VOUT
B1
23 PP1V2_RCAM_SWITCHOUT

C390 1.0UF 20% 6.3V X5R 0201-1 ROOM=RCAM_B2B
C389 1.0UF 20% 6.3V X5R 0201-1 ROOM=RCAM_B2B

L30
FERR-22-OHM-1A-0.065-OHM
0201
ROOM=RCAM_B2B

C392 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B

3 AP_TO_RCAM_VDDCORE_EN

R169 510K 5% 1/32W MF 01005 ROOM=RCAM_B2B

ROOM=RCAM_B2B
L28
FERR-22-OHM-1A-0.065-OHM
18 16 14 12 11 10 7 6 5 3 2 23 19 PP1V8
0201

EXTERNAL CAMERA LDO
ADD CAMERA LDO TO ADDRESS NOISE
RDAR:?/13050498

U210
LP5907UVE-2.85V
USMD
353S3696
24 23 14 13 12 10 PP_VCC_MAIN
A1 VIN
B1 VEN
GND
A2 VOUT
PP2V85_CAM_LDO_OUT

C2511 4.7UF 20% 6.3V X5R 402 ROOM=RCAM_B2B
7 CAM_EXT_LDO_EN
ROOM=RCAM_B2B

CHANGE FL43 TO 0.07 MAX DCR,155S0576
RDAR:?/13068204
ROOM=RCAM_B2B
FL43
10-OHM-750MA
01005-1

C249 2.2UF 20% 4V X5R-CERM 0201 ROOM=RCAM_B2B
C403 2.2UF 20% 4V X5R-CERM 0201 ROOM=RCAM_B2B
C404 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B
C395 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B

THIS ONE ON MLB ---> 516S0940 PLUG
516S0939 RCPT (USED ON FLEX)

XW31
SM
ROOM=RCAM_B2B

J3
BB35-PA
M-ST-SM
ROOM=RCAM_B2B

12 PGND_RCAM_AF_RET
23 PP2V5_RCAM_AF_CONN
AP_BI_RCAM_I2C_SDA_CONN
AP_TO_RCAM_I2C_SCL_CONN
23 PP1V2_RCAM_CONN
23 PP1V8_RCAM_CONN
AP_TO_RCAM_SHUTDOWN_CONN
45_AP_TO_RCAM_CLK_CONN
RCAM_TO_LEDDRV_STROBE_EN_CONN
23 PP2V85_RCAM_CONN

90_RCAM_TO_AP_MIPI_DATA3_CONN_P
90_RCAM_TO_AP_MIPI_DATA3_CONN_N
90_RCAM_TO_AP_MIPI_DATA2_CONN_P
90_RCAM_TO_AP_MIPI_DATA2_CONN_N
90_RCAM_TO_AP_MIPI_CLK_CONN_P
90_RCAM_TO_AP_MIPI_CLK_CONN_N
90_RCAM_TO_AP_MIPI_DATA1_CONN_P
90_RCAM_TO_AP_MIPI_DATA1_CONN_N
90_RCAM_TO_AP_MIPI_DATA0_CONN_P
90_RCAM_TO_AP_MIPI_DATA0_CONN_N

L34
L33
L37
L38
L36
90-OHM-50MA
TCM0605-1
SYM_VER-2
ROOM=RCAM_B2B

90_RCAM_TO_AP_MIPI_DATA3_P 7
90_RCAM_TO_AP_MIPI_DATA3_N 7
90_RCAM_TO_AP_MIPI_DATA2_P 7
90_RCAM_TO_AP_MIPI_DATA2_N 7
90_RCAM_TO_AP_MIPI_CLK_P 7
90_RCAM_TO_AP_MIPI_CLK_N 7
90_RCAM_TO_AP_MIPI_DATA1_P 7
90_RCAM_TO_AP_MIPI_DATA1_N 7
90_RCAM_TO_AP_MIPI_DATA0_P 7
90_RCAM_TO_AP_MIPI_DATA0_N 7

ROOM=RCAM_B2B
FL29
70-OHM-300MA
01005-1
20 15 7 AP_BI_RCAM_I2C_SDA

CHANGE FERRITE BEADS TO RCAM I2C
RDAR:?/12922584
FL31
70-OHM-300MA
01005-1
ROOM=RCAM_B2B
20 15 7 AP_TO_RCAM_I2C_SCL

C287 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B
C286 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B

CHANGE FL30 TO 155S0577
RDAR:?/13055997
FL30
70-OHM-300MA
01005-1
ROOM=RCAM_B2B
7 AP_TO_RCAM_SHUTDOWN

R141 100K 5% 1/32W MF 01005 ROOM=RCAM_B2B

ROOM=RCAM_B2B
FL28
120-OHM-210MA
01005
7 45_AP_TO_RCAM_CLK

C82 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B
C84 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B

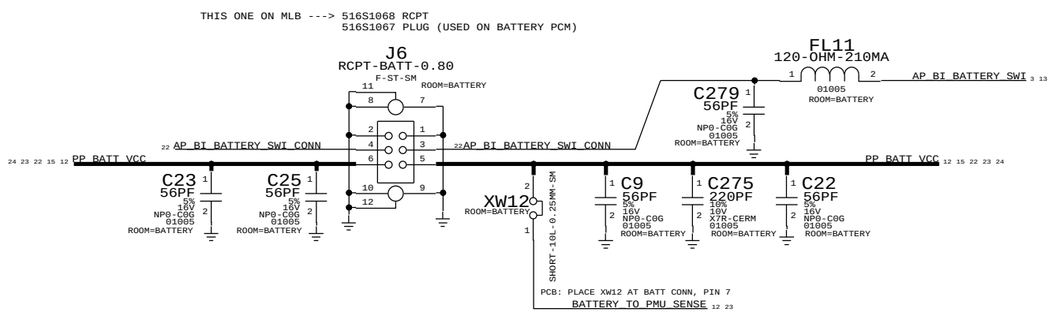
ROOM=RCAM_B2B
FL22
120-OHM-210MA
01005
15 RCAM_TO_LEDDRV_STROBE_EN

C400 56PF 5% 6.3V NP0-C0G 01005 ROOM=RCAM_B2B

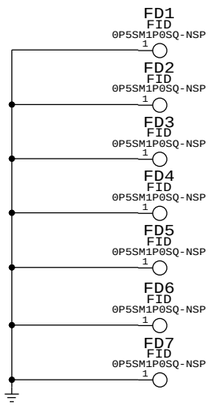
PCB: PLACE ALL 56PF CAPS AT J3

# BATT CONN, TPS, STANDOFFS/SHIELDS/FIDUCIALS

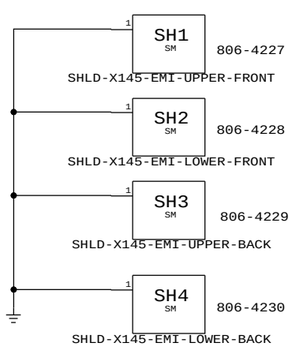
## BATTERY CONN



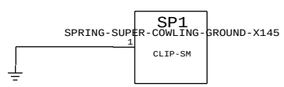

## FIDUCIALS




## SHIELDS



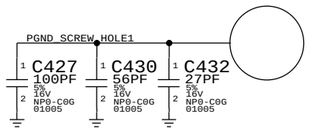

## COWLING



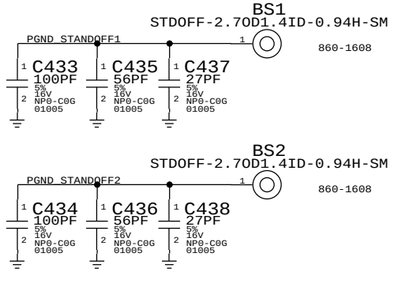

## AC COUPLED SCREW HOLES + STANDOFFS

(ON NORTH END OF SINGLE_BRD, TO MITIGATE COMPASS RETURN CURRENTS)

### SCREW HOLES




### STANDOFFS




## POWER TP

PP5V0_USB_CONN — TP1 (TP-P6) — VBUS

TP2 (TP-P90) — POWER GROUND (SUPERSIZE)

TP200 (TP-P6) — POWER GROUND

PP_BATT_VCC — TP12 (TP-P80) — VBAT (SUPERSIZE)
TP4 IS NOW BATT_VCC
RDAR://13068293

PP_BATT_VCC — TP4 (TP-P6) — VBAT (SECONDARY)

PP_BATT_VCC — TP120 (TP-P55) — VBAT (BOTTOMSIDE FOR RF)

PP_BATT_VCC — TP40 (TP-P55) — VBAT (BOTTOMSIDE FOR RF)

BATTERY_TO_PMU_NTC — TP5 (TP-P6) — BATTERY NTC

## SUPER TP

PMU_TO_TP_AMUX_AY — TP6 (TP-P6) — ANALOG MUX A OUTPUT

PMU_TO_TP_AMUX_BY — TP7 (TP-P6) — ANALOG MUX B OUTPUT

## RESET

RESET_1V8_L — TP8000 (TP-P6) — H6P & BB RESET

## DFU

FORCE_DFU — TP9 (TP-P6) — FORCE DFU

## HEADPHONE MIC

CODEC_TO_HPHONE_HS3_REF — TP28 (TP-P6) — HEADPHONE MIC NEG

CODEC_TO_HPHONE_HS4_REF — TP29 (TP-P6) — HEADPHONE MIC POS

## LCM BACKLIGHT

PP_LCM_BL_CAT1_CONN — TP18 (TP-P6) — LCD BACKLIGHT SINK1

PP_LCM_BL_CAT2_CONN — TP19 (TP-P6) — LCD BACKLIGHT SINK2

PP_LCM_BL_ANODE_CONN — TP20 (TP-P6) — LCD BACKLIGHT SOURCE

## TESTPOINTS

### E75 - USB/UART/ID/POWER

90_TRISTAR_BI_E75_PAIR1_CONN_P — TP21 (TP-P55)

90_TRISTAR_BI_E75_PAIR1_CONN_N — TP22 (TP-P55)

90_TRISTAR_BI_E75_PAIR2_CONN_P — TP23 (TP-P55)

90_TRISTAR_BI_E75_PAIR2_CONN_N — TP24 (TP-P55)

PP_E75_TO_TRISTAR_ACC1_CONN — TP26 (TP-P6) — ACCESSORY ID AND POWER

PP_E75_TO_TRISTAR_ACC2_CONN — TP27 (TP-P6)

TP32 (TP-P6) — POWER GROUND

E75_TO_PMU_ACC_DETECT_CONN — TP10 (TP-P6) — FOR DIAGS

DUPLICATE TESTPOINTS FOR UAT MATCHING RF FIXTURE
RDAR://13159278

PP_E75_TO_TRISTAR_ACC1_CONN — TP2200 (TP-P6)

E75_TO_PMU_ACC_DETECT_CONN — TP2202 (TP-P6)

## MIC AUDIO

MIC1_TO_CODEC_P — TP15 (TP-P6) — MIC1 POSITIVE

MIC2_TO_CODEC_P — TP16 (TP-P6) — MIC2 POSITIVE

MIC3_TO_CODEC_P — TP17 (TP-P6) — MIC3 POSITIVE

DRIVE MIC WRT NEAREST GROUND TEST POINT

SPKAMP_TO_SPEAKER_OUT_CONN_P — TP3 (TP-P6) — SPKR POSITIVE
ADDED PER RDAR://12611131

SPKAMP_TO_SPEAKER_OUT_CONN_N — TP11 (TP-P6) — SPKR NEGATIVE

| | | |
|---|---|---|
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<0> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<1> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<2> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<3> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<4> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<5> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<6> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<7> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<8> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<9> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<10> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<11> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<12> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<13> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<14> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<15> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<16> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<17> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<18> | |
| VOLTAGE=4.55V | CUMULUS_TO_SAGE_VSTM_OUT<19> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<0> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<1> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<2> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<3> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<4> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<5> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<6> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<7> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<8> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<9> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<10> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<11> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<12> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<13> | |
| VOLTAGE=4.55V | TOUCH_TO_SAGE_SENSE_IN<14> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<0> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<1> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<2> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<3> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<4> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<5> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<6> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<7> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<8> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<9> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<10> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<11> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<12> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<13> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<14> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<15> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<16> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<17> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<18> | |
| VOLTAGE=4.55V | SAGE_TO_TOUCH_VSTM_OUT<19> | |

| | | |
|---|---|---|
| VOLTAGE=3.8V | CODEC_TO_RCVR_P | |
| VOLTAGE=3.8V | CODEC_TO_RCVR_N | |
| VOLTAGE=3.8V | CODEC_TO_RCVR_CONN_P | |
| VOLTAGE=3.8V | CODEC_TO_RCVR_CONN_N | |
| VOLTAGE=3.8V | CODEC_TO_HAC_P | |
| VOLTAGE=3.8V | CODEC_TO_HAC_N | |
| VOLTAGE=3.8V | CODEC_TO_HAC_CONN_P | |
| VOLTAGE=3.8V | CODEC_TO_HAC_CONN_N | |
| VOLTAGE=3.114V | CODEC_TO_HPHONE_L | |
| VOLTAGE=3.114V | CODEC_TO_HPHONE_R | |
| VOLTAGE=3.114V | CODEC_TO_HPHONE_L_CONN | |
| VOLTAGE=3.114V | CODEC_TO_HPHONE_R_CONN | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS3 | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS4 | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS3_REF | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS4_REF | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS3_CONN | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS4_CONN | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS3_REF_CONN | |
| VOLTAGE=2.7V | CODEC_TO_HPHONE_HS4_REF_CONN | |
| VOLTAGE=4.3V | HPHONE_TO_CODEC_DET | |
| VOLTAGE=4.3V | HPHONE_TO_CODEC_DET_CONN | |
| VOLTAGE=2.5V | 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_P | |
| VOLTAGE=2.5V | 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_N | |
| VOLTAGE=2.5V | 90_CODEC_BI_TRISTAR_MIKEYBUS_P | |
| VOLTAGE=2.5V | 90_CODEC_BI_TRISTAR_MIKEYBUS_N | |
| VOLTAGE=2.5V | 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_P | |
| VOLTAGE=2.5V | 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_N | |
| VOLTAGE=2.5V | TRISTAR_TO_PMU_MIKEYBUS_TEST_POS | |
| VOLTAGE=2.5V | TRISTAR_TO_PMU_MIKEYBUS_TEST_NEG | |
| VOLTAGE=1.8V | MIC1_TO_CODEC_L67_P | |
| VOLTAGE=1.8V | MIC1_TO_CODEC_L67_N | |
| VOLTAGE=1.8V | MIC1_TO_CODEC_P | |
| VOLTAGE=1.8V | MIC1_TO_CODEC_N | |
| VOLTAGE=1.8V | MIC2_TO_CODEC_L67_P | |
| VOLTAGE=1.8V | MIC2_TO_CODEC_L67_N | |
| VOLTAGE=1.8V | MIC2_TO_CODEC_P | |
| VOLTAGE=1.8V | MIC2_TO_CODEC_N | |
| VOLTAGE=1.8V | MIC3_TO_CODEC_L67_P | |
| VOLTAGE=1.8V | MIC3_TO_CODEC_L67_N | |
| VOLTAGE=1.8V | MIC3_TO_CODEC_P | |
| VOLTAGE=1.8V | MIC3_TO_CODEC_N | |
| VOLTAGE=3.8V | RCVR_TO_CODEC_RCVR_TEST | |
| VOLTAGE=3.8V | RCVR_TO_CODEC_RCVR_TEST_L67 | |
| VOLTAGE=3.114V | HPHONE_TO_CODEC_HPHONE_TEST | |
| VOLTAGE=3.114V | HPHONE_TO_CODEC_HPHONE_TEST_L67 | |
| VOLTAGE=3.8V | HAC_TO_CODEC_TEST | |
| VOLTAGE=3.8V | HAC_TO_CODEC_TEST_L67 | |
| VOLTAGE=4.6V | 45_PMU_VPUMP | |
| VOLTAGE=4.3V | PMU_ACT_DIO | |
| VOLTAGE=3.6V | TRISTAR_TO_PMU_OVP_SW_EN_L | |
| VOLTAGE=3.2V | USB_VBUS_DETECT | |
| VOLTAGE=5.25V | TRISTAR_TO_PMU_USB_BRICKID | |
| VOLTAGE=5.25V | TRISTAR_TO_PMU_USB_BRICKID_R | |

| | | |
|---|---|---|
| VOLTAGE=2.5V | BATTERY_TO_PMU_NTC | |
| VOLTAGE=2.5V | BATTERY_NTC_CONN | |
| VOLTAGE=4.2V | BATTERY_TO_PMU_SENSE | |
| VOLTAGE=8V | SPKAMP_TO_SPEAKER_OUT_CONN_P | |
| VOLTAGE=8V | SPKAMP_TO_SPEAKER_OUT_CONN_N | |
| VOLTAGE=8V | SPKAMP_TO_SPEAKER_OUT_P | |
| VOLTAGE=8V | SPKAMP_TO_SPEAKER_OUT_N | |
| VOLTAGE=5.25V | 90_TRISTAR_BI_E75_PAIR1_CONN_P | |
| VOLTAGE=5.25V | 90_TRISTAR_BI_E75_PAIR1_CONN_N | |
| VOLTAGE=5.25V | 90_TRISTAR_BI_E75_PAIR2_CONN_P | |
| VOLTAGE=5.25V | 90_TRISTAR_BI_E75_PAIR2_CONN_N | |
| VOLTAGE=3.0V | TRISTAR_BYPASS | |
| VOLTAGE=-5.7V | PN5V7_SAGE_AVDDN | |
| VOLTAGE=-5.7V | PN5V7_SAGE_AVDDN_INT | |
| VOLTAGE=-5.7V | PN5V7_LCM_AVDDN | |
| VOLTAGE=2.5V | SAGE_VBIAS | |
| VOLTAGE=11V | GYRO_PUMP | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<0> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<1> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<2> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<3> | |
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| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<5> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<6> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<7> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<8> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<9> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<10> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<11> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<12> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<13> | |
| VOLTAGE=XV | SAGE_TO_CUMULUS_IN<14> | |
| VOLTAGE=18.0V | PP16V5_MESA | |
| VOLTAGE=18.0V | PP16V5_MESA_DOCK_CONN | |
| VOLTAGE=1.0V | PP1V0 | |
| VOLTAGE=1.0V | PP1V0_SOC | |
| VOLTAGE=1.0V | PP1V0_SRAM | |
| VOLTAGE=1.1V | PP1V1_CPU | |
| VOLTAGE=1.1V | PP1V1_GPU | |
| VOLTAGE=1.2V | PP1V2 | |
| VOLTAGE=1.2V | PP1V2_NAND_VDDI | |
| VOLTAGE=1.2V | PP1V2_OSCAR | |
| VOLTAGE=1.2V | PP1V2_OSCAR_VDDC | |
| VOLTAGE=1.2V | PP1V2_RCAM_CONN | |
| VOLTAGE=1.2V | PP1V2_RCAM_SWITCHOUT | |
| VOLTAGE=1.2V | PP1V2_SDRAM | |
| VOLTAGE=4.3V | PP_VCC_MAIN_UVLO_SENSE | |
| VOLTAGE=2.8V | PP2V80_THROTTLER | |
| VOLTAGE=2.85V | PP2V85_CAM_LDO_OUT | |
| VOLTAGE=2.8V | PP2V80_THROTTLER_FB | |
| VOLTAGE=1.8V | PP1V8_MESA_LOAD_SW_OUT | |

| | | |
|---|---|---|
| VOLTAGE=1.8V | PP1V8 | |
| VOLTAGE=1.8V | PP1V8_ALWAYS | |
| VOLTAGE=1.8V | PP1V8_COMP | |
| VOLTAGE=1.8V | PP1V8_CUMULUS_VDDLDO | |
| VOLTAGE=1.8V | PP1V8_FCAM_CONN | |
| VOLTAGE=1.8V | PP1V8_GRAPE | |
| VOLTAGE=1.8V | PP1V8_LCM_CONN | |
| VOLTAGE=1.8V | PP1V8_OSCAR | |
| VOLTAGE=1.8V | PP1V8_OSCAR_VDDIO | |
| VOLTAGE=1.8V | PP1V8_PLL | |
| VOLTAGE=1.8V | PP1V8_RCAM_CONN | |
| VOLTAGE=1.8V | PP1V8_SDRAM | |
| VOLTAGE=1.8V | PP1V8_SDRAM_DOCK_CONN | |
| VOLTAGE=1.8V | PP1V8_VA_L19_L67 | |
| VOLTAGE=1.8V | PP1V8_XTAL | |
| VOLTAGE=2.5V | PP2V5_RCAM_AF | |
| VOLTAGE=2.5V | PP2V5_RCAM_AF_COMP | |
| VOLTAGE=2.5V | PP2V5_RCAM_AF_CONN | |
| VOLTAGE=2.8V | PP2V85_FCAM_CONN | |
| VOLTAGE=2.8V | PP2V85_RCAM_CONN | |
| VOLTAGE=3.0V | PP3V0_ACC | |
| VOLTAGE=3.0V | PP3V0_ALS | |
| VOLTAGE=3.0V | PP3V0_COMP | |
| VOLTAGE=3.0V | PP3V0_IMU | |
| VOLTAGE=3.0V | PP3V0_NAND | |
| VOLTAGE=3.0V | PP3V0_NAVAJO | |
| VOLTAGE=3.0V | PP3V0_NAVAJO_CONN | |
| VOLTAGE=3.0V | PP3V0_PROX | |
| VOLTAGE=3.0V | PP3V0_PROX_ALS | |
| VOLTAGE=3.0V | PP3V0_PROX_IRLED | |
| VOLTAGE=3.0V | PP3V0_SDRAM | |
| VOLTAGE=3.3V | PP3V3_USB | |
| VOLTAGE=5.0V | PP5V0_USB_CONN | |
| VOLTAGE=5.0V | PP5V0_USB_PROT | |
| VOLTAGE=5.1V | PP5V1_GRAPE_VDDH | |
| VOLTAGE=5.7V | PP5V7_LCM_AVDDH | |
| VOLTAGE=5.7V | PP5V7_LCM_AVDDH_CONN | |
| VOLTAGE=5.7V | PP5V7_SAGE_AVDDH | |
| VOLTAGE=6V | PP6V0_LCM_BOOST | |
| VOLTAGE=4.3V | PP_BATT_VCC | |
| VOLTAGE=4.3V | PP_BATT_VCC_L19_VP | |
| VOLTAGE=4.3V | PP_BUCK0_LX0 | |
| VOLTAGE=4.3V | PP_BUCK0_LX1 | |
| VOLTAGE=4.3V | PP_BUCK0_LX2 | |
| VOLTAGE=4.3V | PP_BUCK0_LX3 | |
| VOLTAGE=4.3V | PP_BUCK1_LX0 | |
| VOLTAGE=4.3V | PP_BUCK1_LX1 | |
| VOLTAGE=4.3V | PP_BUCK2_LX | |
| VOLTAGE=4.3V | PP_BUCK3_LX | |
| VOLTAGE=4.3V | PP_BUCK4_LX | |
| VOLTAGE=4.3V | PP_BUCK5_LX | |
| VOLTAGE=-6V | PP_CHESTNUT_CN | |
| VOLTAGE=6V | PP_CHESTNUT_CP | |
| VOLTAGE=6V | PP_CHESTNUT_LXP | |
| VOLTAGE=1.8V | PP_CODEC_FILT+ | |
| VOLTAGE=2.2V | PP_CODEC_SPKR_VQ | |
| VOLTAGE=2.7V | PP_CODEC_TO_MIC1_BIAS | |
| VOLTAGE=2.7V | PP_CODEC_TO_MIC1_BIAS_CONN | |
| VOLTAGE=2.7V | PP_CODEC_TO_MIC2_3_BIAS | |
| VOLTAGE=2.7V | PP_CODEC_TO_MIC3_BIAS_CONN | |
| VOLTAGE=2.5V | PP_CODEC_VCPFILT+ | |
| VOLTAGE=-2.5V | PP_CODEC_VCPFILT- | |

| | | |
|---|---|---|
| VOLTAGE=0.2V | PP_CODEC_VHP_FLYC | |
| VOLTAGE=-2.5V | PP_CODEC_VHP_FLYN | |
| VOLTAGE=2.5V | PP_CODEC_VHP_FLYP | |
| VOLTAGE=1.6V | PP_CUMULUS_VDDANA | |
| VOLTAGE=1.6V | PP_CUMULUS_VDDCORE | |
| VOLTAGE=4.3V | PP_E75_TO_TRISTAR_ACC1 | |
| VOLTAGE=4.3V | PP_E75_TO_TRISTAR_ACC1_CONN | |
| VOLTAGE=4.3V | PP_E75_TO_TRISTAR_ACC2 | |
| VOLTAGE=4.3V | PP_E75_TO_TRISTAR_ACC2_CONN | |
| VOLTAGE=2.7V | PP_EXTMIC_BIAS | |
| VOLTAGE=2.7V | PP_EXTMIC_BIAS_FILT | |
| VOLTAGE=2.7V | PP_EXTMIC_BIAS_FILT_IN | |
| VOLTAGE=2.7V | PP_EXTMIC_BIAS_IN | |
| VOLTAGE=8V | PP_L19_VBOOST | |
| VOLTAGE=22V | PP_LCM_BL_ANODE | |
| VOLTAGE=22V | PP_LCM_BL_ANODE_CONN | |
| VOLTAGE=0.2V | PP_LCM_BL_CAT1 | |
| VOLTAGE=0.2V | PP_LCM_BL_CAT1_CONN | |
| VOLTAGE=0.2V | PP_LCM_BL_CAT2 | |
| VOLTAGE=0.2V | PP_LCM_BL_CAT2_CONN | |
| VOLTAGE=2.65V | PP_LDO14_2P65 | |
| VOLTAGE=2.5V | CHESTNUT_TO_PMU_ADCIN7 | |
| VOLTAGE=5V | E75_TO_PMU_ACC_DETECT | |
| VOLTAGE=5V | E75_TO_PMU_ACC_DETECT_R | |
| VOLTAGE=5V | PMU_TO_TP_AMUX_AY | |
| VOLTAGE=5V | PMU_TO_TP_AMUX_BY | |
| VOLTAGE=2.5V | FOREHEAD_TO_PMU_NTC_P | |
| VOLTAGE=2.5V | CAM_TO_PMU_NTC_P | |
| VOLTAGE=2.5V | PA_TO_PMU_NTC_P | |
| VOLTAGE=2.5V | H6P_TO_PMU_NTC_P | |
| VOLTAGE=2.5V | 45_PMU_TCAL | |
| VOLTAGE=5V | PP_LED_BOOST_OUT | |
| VOLTAGE=5V | PP_LED_DRV_LX | |
| VOLTAGE=0.4V | PP_MIPI0D_VREG | |
| VOLTAGE=0.4V | PP_MIPI1D_VREG | |
| VOLTAGE=3.4V | PP_PMU_TO_VIBE | |
| VOLTAGE=3.4V | PP_PMU_TO_VIBE_CONN | |
| VOLTAGE=5.25V | PP_PMU_VCENTER | |
| VOLTAGE=4.3V | PP_PMU_VDD_REF | |
| VOLTAGE=2.5V | PP_PMU_VDD_RTC | |
| VOLTAGE=1.2V | PP_PMU_VREF | |
| VOLTAGE=5.25V | PP_PMU_VSW_CHG | |
| VOLTAGE=5.7V | PP_SAGE_LX | |
| VOLTAGE=17V | PP_SAGE_LY | |
| VOLTAGE=13.5V | PP_SAGE_TO_TOUCH_VCPH | |
| VOLTAGE=-12V | PP_SAGE_TO_TOUCH_VCPL | |
| VOLTAGE=18V | PP_SAGE_VBST_OUTH | |
| VOLTAGE=-14V | PP_SAGE_VBST_OUTL | |
| VOLTAGE=-12V | PP_SAGE_VCPL_F | |
| VOLTAGE=1.8V | PP_SPKAMP_FILT | |
| VOLTAGE=1V | PP_SPKAMP_LDO_FILT | |
| VOLTAGE=8V | PP_SPKAMP_SW | |
| VOLTAGE=5V | PP_STRB_DRIVER_TO_LED_COOL | |
| VOLTAGE=5V | PP_STRB_DRIVER_TO_LED_WARM | |
| VOLTAGE=4.3V | PP_VCC_MAIN | |
| VOLTAGE=4.3V | PP_VCC_MAIN_CODEC | |
| VOLTAGE=22V | PP_WLED_LX | |

VOLTAGE=0V GND

# RADIO_MLB HIERARCHICAL SYMBOL

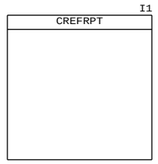
## AP/RADIO INTERFACE

SUBDESIGN_SUFFIX=RF
I616

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 35 23 22 15 12 | IN | PP_BATT_VCC | MAKE_BASE=TRUE | PP_BATT_VCC_CONN | | | |
| 56 23 21 14 13 12 10 | IN | PP_VCC_MAIN | MAKE_BASE=TRUE | PP_VCC_MAIN_WLAN | | | |
| 56 23 17 16 14 12 10 4 3 | IN | PP1V8_SDRAM | MAKE_BASE=TRUE | PP_WL_BT_VDDIO_AP | | | |
| 36 23 17 | OUT | PP_LDO14_2P65 | MAKE_BASE=TRUE | PP_LDO14_2V65 | | | |
| 35 3 | IN | AP_TO_RADIO_ON_L | MAKE_BASE=TRUE | RADIO_ON_L | BB_JTAG_TCK | MAKE_BASE=TRUE | AP_TO_BB_JTAG_TCK BI 3 35 |
| 35 3 | OUT | BB_TO_AP_RESET_DET_L | MAKE_BASE=TRUE | RESET_DET_L | BB_JTAG_TDI | MAKE_BASE=TRUE | AP_TO_BB_JTAG_TDI BI 3 35 |
| 35 13 | IN | PMU_TO_BB_RST_L | MAKE_BASE=TRUE | RESET_PMU_L | BB_JTAG_TMS | MAKE_BASE=TRUE | AP_TO_BB_JTAG_TMS BI 3 35 |
| 35 3 | IN | AP_TO_BB_RST_L | MAKE_BASE=TRUE | BB_RST_L | BB_JTAG_TRST_L | MAKE_BASE=TRUE | AP_TO_BB_JTAG_TRST_L BI 3 35 |
| 35 22 19 16 14 13 4 2 | OUT | RESET_1V8_L | MAKE_BASE=TRUE | RF_RESET_L | BB_JTAG_TDO | MAKE_BASE=TRUE | BB_TO_AP_JTAG_TDO BI 3 35 |
| 35 13 | IN | 45_PMU_TO_WLAN_CLK32K | MAKE_BASE=TRUE | CLK32K_AP | | | |
| 39 15 | OUT | BB_TO_LEDDRV_GSM_BLANK | MAKE_BASE=TRUE | TX_GTR_THRESH | | | |
| 35 16 | BI | 90_TRISTAR_BI_BB_USB_N | MAKE_BASE=TRUE | 90_BB_USB_D_N | | | |
| 35 16 | BI | 90_TRISTAR_BI_BB_USB_P | MAKE_BASE=TRUE | 90_BB_USB_D_P | | | |
| 35 13 | IN | PMU_TO_BB_VBUS_DET | MAKE_BASE=TRUE | BB_USB_VBUS | | | |
| 35 3 | IN | AP_TO_BB_UART4_RTS_L | MAKE_BASE=TRUE | BB_UART_CTS_L | | | |
| 35 3 | OUT | BB_TO_AP_UART4_CTS_L | MAKE_BASE=TRUE | BB_UART_RTS_L | | | |
| 35 16 3 | IN | AP_TO_BB_UART4_TXD | MAKE_BASE=TRUE | BB_UART_RXD | | | |
| 35 16 3 | OUT | BB_TO_AP_UART4_RXD | MAKE_BASE=TRUE | BB_UART_TXD | | | |
| 35 13 | OUT | BB_TO_PMU_HOST_WAKE | MAKE_BASE=TRUE | HOST_WAKE_BB | | | |
| 39 3 | OUT | BB_TO_AP_PP_SYNC | MAKE_BASE=TRUE | PP_SYNC | | | |
| 35 3 | IN | 45_AP_TO_BB_I2S1_BCLK | MAKE_BASE=TRUE | BB_I2S_CLK | RADIO_MLB | | |
| 35 3 | IN | AP_TO_BB_I2S1_DOUT | MAKE_BASE=TRUE | BB_I2S_RXD | | | |
| 35 3 | OUT | BB_TO_AP_I2S1_DIN | MAKE_BASE=TRUE | BB_I2S_TXD | | | |
| 35 3 | IN | AP_TO_BB_I2S1_LRCLK | MAKE_BASE=TRUE | BB_I2S_WS | | | |
| 35 13 | OUT | RADIO_TO_PMU_ADC_SMPS1_MSMC_1V05 | MAKE_BASE=TRUE | ADC_SMPS1_MSMC_1V05 | | | |
| 35 13 | OUT | RADIO_TO_PMU_ADC_SMPS3_MSME_1V8 | MAKE_BASE=TRUE | ADC_SMPS3_MSME_1V8 | | | |
| 35 13 | OUT | RADIO_TO_PMU_ADC_LDO6_RUIM_1V8 | MAKE_BASE=TRUE | ADC_LDO6_RUIM_1V8 | | | |
| 35 13 | OUT | RADIO_TO_PMU_ADC_LVS1 | MAKE_BASE=TRUE | ADC_LVS1 | | | |
| 35 13 | IN | PMU_TO_WLAN_REG_ON | MAKE_BASE=TRUE | WLAN_REG_ON | | | |
| 56 3 | IN | AP_TO_WLAN_UART3_TXD | MAKE_BASE=TRUE | WLAN_UART_RXD | | | |
| 56 3 | OUT | WLAN_TO_AP_UART3_RXD | MAKE_BASE=TRUE | WLAN_UART_TXD | | | |
| 56 13 | OUT | WLAN_TO_PMU_HOST_WAKE | MAKE_BASE=TRUE | HOST_WAKE_WLAN | | | |
| 35 13 | IN | PMU_TO_BT_REG_ON | MAKE_BASE=TRUE | BT_REG_ON | | | |
| 56 3 | IN | AP_TO_BT_UART1_RTS_L | MAKE_BASE=TRUE | BT_UART_CTS_L | | | |
| 56 3 | OUT | BT_TO_AP_UART1_CTS_L | MAKE_BASE=TRUE | BT_UART_RTS_L | | | |
| 35 3 | IN | AP_TO_BT_UART1_TXD | MAKE_BASE=TRUE | BT_UART_RXD | | | |
| 35 3 | OUT | BT_TO_AP_UART1_RXD | MAKE_BASE=TRUE | BT_UART_TXD | | | |
| 35 3 | IN | AP_TO_BT_WAKE | MAKE_BASE=TRUE | BT_WAKE | | | |
| 56 13 | OUT | BT_TO_PMU_HOST_WAKE | MAKE_BASE=TRUE | HOST_WAKE_BT | | | |
| 56 | BI | 45_AP_TO_BT_I2S3_BCLK | MAKE_BASE=TRUE | BT_PCM_CLK | | | |
| 56 | BI | AP_TO_BT_I2S3_DOUT | MAKE_BASE=TRUE | BT_PCM_IN | | | |
| 56 | BI | BT_TO_AP_I2S3_DIN | MAKE_BASE=TRUE | BT_PCM_OUT | | | |
| 56 | BI | AP_TO_BT_I2S3_LRCLK | MAKE_BASE=TRUE | BT_PCM_SYNC | | | |
| 35 2 | BI | 50_AP_BI_BB_HSIC1_DATA | MAKE_BASE=TRUE | 50_HSIC_BB_DATA | | | |
| 35 2 | BI | 50_AP_BI_BB_HSIC1_STB | MAKE_BASE=TRUE | 50_HSIC_BB_STROBE | | | |
| 35 3 | IN | AP_TO_BB_HSIC1_RDY | MAKE_BASE=TRUE | AP_HSIC1_RDY | | | |
| 35 3 | OUT | BB_TO_AP_HSIC1_RDY | MAKE_BASE=TRUE | PBL_RUN_BB_HSIC1_RDY | | | |
| 39 3 | BI | BB_TO_AP_HSIC1_REMOTE_WAKE | MAKE_BASE=TRUE | BB_HSIC1_REMOTE_WAKE | | | |
| 39 3 | IN | AP_TO_BB_WAKE_MODEM | MAKE_BASE=TRUE | AP_WAKE_MODEM | | | |
| 35 | BI | 50_AP_BI_WLAN_HSIC2_DATA | MAKE_BASE=TRUE | 50_HSIC_WLAN_DATA | | | |
| 35 | BI | 50_AP_BI_WLAN_HSIC2_STB | MAKE_BASE=TRUE | 50_HSIC_WLAN_STROBE | | | |
| 35 | OUT | AP_TO_WLAN_HSIC2_RDY | MAKE_BASE=TRUE | AP_HSIC3_RDY | | | |
| 35 | OUT | WLAN_TO_AP_HSIC2_RDY | MAKE_BASE=TRUE | WLAN_HSIC3_DEVICE_RDY | | | |
| 35 | BI | WLAN_TO_AP_HSIC2_REMOTE_WAKE | MAKE_BASE=TRUE | WLAN_HSIC3_RESUME | | | |
| 35 17 | OUT | BB_TO_LAT_SW1_CTL | MAKE_BASE=TRUE | LAT_SW1_CTL | | | |
| 39 17 | OUT | BB_TO_LAT_SW2_CTL | MAKE_BASE=TRUE | LAT_SW2_CTL | | | |
| | | <OUT> BB_TO_LAT_SW3_CTL | | | | | |
| 39 | OUT | BB_TO_ANTENNA_PAC_SPI_CS | MAKE_BASE=TRUE | BB_SPI_TO_PAC_CS | | | |
| 39 | OUT | BB_TO_ANTENNA_PAC_SPI_SCLK | MAKE_BASE=TRUE | BB_SPI_TO_PAC_CLK | | | |
| 39 | OUT | BB_TO_ANTENNA_PAC_SPI_MOSI | MAKE_BASE=TRUE | BB_SPI_TO_PAC_DATA_MOSI | | | |
| NOTE: ANTENNA_PAC_TO_BB_SPI_MISO DOES NOT COME TO SINGLE_BRD MLB | | | | PAC_TO_BB_SPI_DATA_MISO | | | |
| 39 | BI | BB_TO_AP_IPC_GPIO | MAKE_BASE=TRUE | BB_IPC_GPIO | | | |
| 39 20 | IN | OSCAR_TO_RADIO_CONTEXT_A | MAKE_BASE=TRUE | OSCAR_CONTEXT_A | | | |
| 39 20 | IN | OSCAR_TO_RADIO_CONTEXT_B | MAKE_BASE=TRUE | OSCAR_CONTEXT_B | | | |

## RF BOARD_ID BOM OPTIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 118S0621 | 1 | 1.00M 1% 01005 | R25_RF | CRITICAL | N51_ALL |
| 118S0732 | 1 | 50K 1% 01005 | R26_RF | CRITICAL | N51_ALL |
| 117S0159 | 1 | 470K 5% 01005 | R25_RF | CRITICAL | N51_DTD |
| 118S0626 | 1 | 100K 1% 01005 | R26_RF | CRITICAL | N51_DTD |
| 118S0626 | 1 | 100K 1% 01005 | R25_RF | CRITICAL | N53_ALL |
| 118S0726 | 1 | 162K 1% 01005 | R26_RF | CRITICAL | N53_ALL |
| 118S0626 | 1 | 100K 1% 01005 | R25_RF | CRITICAL | N53_DTD |
| 118S0623 | 1 | 267K 1% 01005 | R26_RF | CRITICAL | N53_DTD |


I1
CREFRPT

```
Title:       Basenet Report
Design:      single_brd
Date:        Feb 6 20:18:49 2013

Base nets and synonyms for
single_brd_lib.SINGLE_BRD(@single_brd_lib.single_brd(sch_1))
```

| Base Signal | Synonyms | Location([Zone][dir]) |
|---|---|---|
| 45_AMBER_VSS_RTC | 45_AMBER_VSS_RTC - @single_brd_lib.SINGLE_BRD | 12A7 |
| 45_AP_BI_NAND_ANC0_DQS | 45_AP_BI_NAND_ANC0_DQS - @single_brd_lib.SINGLE_BRD | 6A7 6B8 6C2 |
| 45_AP_BI_NAND_ANC1_DQS | 45_AP_BI_NAND_ANC1_DQS - @single_brd_lib.SINGLE_BRD | 6B3 6B6 |
| 45_AP_PPN0_ZQ | 45_AP_PPN0_ZQ - @single_brd_lib.SINGLE_BRD | 6B8 |
| 45_AP_PPN1_ZQ | 45_AP_PPN1_ZQ - @single_brd_lib.SINGLE_BRD | 6B6 |
| 45_AP_TO_BB_I2S1_BCLK | 45_AP_TO_BB_I2S1_BCLK - @single_brd_lib.SINGLE_BRD<br>BB_I2S_CLK - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C4 24C6<br>35B5 35C8 39B4 |
| 45_AP_TO_BT_I2S3_BCLK | 45_AP_TO_BT_I2S3_BCLK - @single_brd_lib.SINGLE_BRD<br>BT_PCM_CLK - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C4 24B6<br>35B8 56B3 |
| 45_AP_TO_CODEC_ASP_I2S0_BCLK | 45_AP_TO_CODEC_ASP_I2S0_BCLK - @single_brd_lib.SINGLE_BRD | 3D4 10D3 |
| 45_AP_TO_CODEC_I2S_MCLK | 45_AP_TO_CODEC_I2S_MCLK - @single_brd_lib.SINGLE_BRD | 3D5 10D3 |
| 45_AP_TO_CODEC_I2S_MCLK_R | 45_AP_TO_CODEC_I2S_MCLK_R - @single_brd_lib.SINGLE_BRD | 3D4 |
| 45_AP_TO_CODEC_VSP_I2S4_BCLK | 45_AP_TO_CODEC_VSP_I2S4_BCLK - @single_brd_lib.SINGLE_BRD | 3C4 10C3 |
| 45_AP_TO_CODEC_XSP_I2S2_BCLK | 45_AP_TO_CODEC_XSP_I2S2_BCLK - @single_brd_lib.SINGLE_BRD | 3C4 10C3 15C6 |
| 45_AP_TO_FCAM_CLK | 45_AP_TO_FCAM_CLK - @single_brd_lib.SINGLE_BRD | 7B4 11D8 |
| 45_AP_TO_FCAM_CLK_CONN | 45_AP_TO_FCAM_CLK_CONN - @single_brd_lib.SINGLE_BRD | 11D6 |
| 45_AP_TO_FCAM_CLK_R | 45_AP_TO_FCAM_CLK_R - @single_brd_lib.SINGLE_BRD | 7C6 |
| 45_AP_TO_NAND_ANC0_RE_L | 45_AP_TO_NAND_ANC0_RE_L - @single_brd_lib.SINGLE_BRD | 6A7 6B8 6C2 |
| 45_AP_TO_NAND_ANC1_RE_L | 45_AP_TO_NAND_ANC1_RE_L - @single_brd_lib.SINGLE_BRD | 6B3 6B6 |
| 45_AP_TO_PMU_DWI_CLK | 45_AP_TO_PMU_DWI_CLK - @single_brd_lib.SINGLE_BRD | 3C2 13B7 14B6 |
| 45_AP_TO_PMU_DWI_CLK_XW | 45_AP_TO_PMU_DWI_CLK_XW - @single_brd_lib.SINGLE_BRD | 13B6 |
| 45_AP_TO_PMU_DWI_DO | 45_AP_TO_PMU_DWI_DO - @single_brd_lib.SINGLE_BRD | 3C2 13B7 14B6 |
| 45_AP_TO_PMU_DWI_DO_XW | 45_AP_TO_PMU_DWI_DO_XW - @single_brd_lib.SINGLE_BRD | 13B6 |
| 45_AP_TO_RCAM_CLK | 45_AP_TO_RCAM_CLK - @single_brd_lib.SINGLE_BRD | 7C4 21A7 |
| 45_AP_TO_RCAM_CLK_CONN | 45_AP_TO_RCAM_CLK_CONN - @single_brd_lib.SINGLE_BRD | 21B4 |
| 45_AP_TO_RCAM_CLK_R | 45_AP_TO_RCAM_CLK_R - @single_brd_lib.SINGLE_BRD | 7C6 |
| 45_AP_TO_SPKAMP_I2S2_MCLK | 45_AP_TO_SPKAMP_I2S2_MCLK - @single_brd_lib.SINGLE_BRD | 3C5 15C6 |
| 45_AP_TO_SPKAMP_I2S2_MCLK_R | 45_AP_TO_SPKAMP_I2S2_MCLK_R - @single_brd_lib.SINGLE_BRD | 3C4 |
| 45_AP_TO_TOUCH_CLK32K_RESET_L | 45_AP_TO_TOUCH_CLK32K_RESET_L - @single_brd_lib.SINGLE_BRD | 3C5 18B8 |
| 45_AP_TO_TOUCH_CLK32K_RESET_L_XW | 45_AP_TO_TOUCH_CLK32K_RESET_L_XW - @single_brd_lib.SINGLE_BRD | 18B7 |
| 45_BUCK0_FB | 45_BUCK0_FB - @single_brd_lib.SINGLE_BRD | 4A3 12D4 |
| 45_BUCK1_FB | 45_BUCK1_FB - @single_brd_lib.SINGLE_BRD | 4A1 12C4 |
| 45_BUCK2_FB | 45_BUCK2_FB - @single_brd_lib.SINGLE_BRD | 4A5 12C4 |
| 45_BUCK3_FB | 45_BUCK3_FB - @single_brd_lib.SINGLE_BRD | 12B5 |
| 45_BUCK4_FB | 45_BUCK4_FB - @single_brd_lib.SINGLE_BRD | 12B5 |
| 45_BUCK5_FB | 45_BUCK5_FB - @single_brd_lib.SINGLE_BRD | 12B5 |
| 45_DDR0_VREF_CA | 45_DDR0_VREF_CA - @single_brd_lib.SINGLE_BRD | 4A7 4D8 |
| 45_DDR0_VREF_DQ | 45_DDR0_VREF_DQ - @single_brd_lib.SINGLE_BRD | 4A5 4D8 |
| 45_DDR0_ZQ | 45_DDR0_ZQ - @single_brd_lib.SINGLE_BRD | 4D8 |
| 45_DDR1_VREF_CA | 45_DDR1_VREF_CA - @single_brd_lib.SINGLE_BRD | 4A6 4D8 |
| 45_DDR1_VREF_DQ | 45_DDR1_VREF_DQ - @single_brd_lib.SINGLE_BRD | 4A4 4D8 |
| 45_DDR1_ZQ | 45_DDR1_ZQ - @single_brd_lib.SINGLE_BRD | 4D8 |
| 45_NAND_PPN_ZQ | 45_NAND_PPN_ZQ - @single_brd_lib.SINGLE_BRD | 6B3 |
| 45_PMU_IREF | 45_PMU_IREF - @single_brd_lib.SINGLE_BRD | 13C4 |
| 45_PMU_TCAL | 45_PMU_TCAL - @single_brd_lib.SINGLE_BRD | 13B6 23C2 |
| 45_PMU_TO_OSCAR_CLK32K | 45_PMU_TO_OSCAR_CLK32K - @single_brd_lib.SINGLE_BRD | 13B4 20C5 |
| 45_PMU_TO_WLAN_CLK32K | 45_PMU_TO_WLAN_CLK32K - @single_brd_lib.SINGLE_BRD<br>CLK32K_AP - @single_brd_lib.RADIO_MLB(i616_page 24) | 13B4 13C6 24D6<br>35C6 35C8 56C7 |
| 45_PMU_TO_XTAL_OSC32 | 45_PMU_TO_XTAL_OSC32 - @single_brd_lib.SINGLE_BRD | 12A7 |
| 45_PMU_VPUMP | 45_PMU_VPUMP - @single_brd_lib.SINGLE_BRD | 12A5 23B7 |
| 45_PROX_TO_CUMULUS_RX | 45_PROX_TO_CUMULUS_RX - @single_brd_lib.SINGLE_BRD | 11C8 18C8 |
| 45_PROX_TO_CUMULUS_RX_CONN | 45_PROX_TO_CUMULUS_RX_CONN - @single_brd_lib.SINGLE_BRD | 11C6 |
| 45_PROX_TO_CUMULUS_RX_FILT | 45_PROX_TO_CUMULUS_RX_FILT - @single_brd_lib.SINGLE_BRD | 18C8 |
| 45_PROX_TO_CUMULUS_RX_IN | 45_PROX_TO_CUMULUS_RX_IN - @single_brd_lib.SINGLE_BRD | 18B7 |
| 45_XTAL_24M_GND | 45_XTAL_24M_GND - @single_brd_lib.SINGLE_BRD | 2C2 |
| 45_XTAL_24M_I | 45_XTAL_24M_I - @single_brd_lib.SINGLE_BRD | 2C4 |
| 45_XTAL_24M_O | 45_XTAL_24M_O - @single_brd_lib.SINGLE_BRD | 2C4 |
| 45_XTAL_24M_O_R | 45_XTAL_24M_O_R - @single_brd_lib.SINGLE_BRD | 2C2 |
| 45_XTAL_TO_PMU_OSC32 | 45_XTAL_TO_PMU_OSC32 - @single_brd_lib.SINGLE_BRD | 12A7 |
| 50_AP_BI_BB_HSIC1_DATA | 50_AP_BI_BB_HSIC1_DATA - @single_brd_lib.SINGLE_BRD<br>50_HSIC_BB_DATA - @single_brd_lib.RADIO_MLB(i616_page 24) | 2B6 24B6<br>35B1 35B6 35C8 38B3 |
| 50_AP_BI_BB_HSIC1_STB | 50_AP_BI_BB_HSIC1_STB - @single_brd_lib.SINGLE_BRD<br>50_HSIC_BB_STROBE - @single_brd_lib.RADIO_MLB(i616_page 24) | 2B6 24B6<br>35B1 35B6 35C8 38B3 |
| 50_AP_BI_WLAN_HSIC2_DATA | 50_AP_BI_WLAN_HSIC2_DATA - @single_brd_lib.SINGLE_BRD<br>50_HSIC_WLAN_DATA - @single_brd_lib.RADIO_MLB(i616_page 24) | 2B6 24B6<br>35B6 35C8 56B6 |
| 50_AP_BI_WLAN_HSIC2_STB | 50_AP_BI_WLAN_HSIC2_STB - @single_brd_lib.SINGLE_BRD<br>50_HSIC_WLAN_STROBE - @single_brd_lib.RADIO_MLB(i616_page 24) | 2B6 24B6<br>35B6 35C8 56B6 |
| 90_AP_BI_LCM_MIPI_DATA0_CONN_N | 90_AP_BI_LCM_MIPI_DATA0_CONN_N - @single_brd_lib.SINGLE_BRD | 19C6 |
| 90_AP_BI_LCM_MIPI_DATA0_CONN_P | 90_AP_BI_LCM_MIPI_DATA0_CONN_P - @single_brd_lib.SINGLE_BRD | 19C6 |
| 90_AP_BI_LCM_MIPI_DATA0_N | 90_AP_BI_LCM_MIPI_DATA0_N - @single_brd_lib.SINGLE_BRD | 7B8 19C7 |
| 90_AP_BI_LCM_MIPI_DATA0_P | 90_AP_BI_LCM_MIPI_DATA0_P - @single_brd_lib.SINGLE_BRD | 7B8 19C7 |
| 90_AP_BI_TRISTAR_USB0_H6P_N | 90_AP_BI_TRISTAR_USB0_H6P_N - @single_brd_lib.SINGLE_BRD | 2B4 |
| 90_AP_BI_TRISTAR_USB0_H6P_P | 90_AP_BI_TRISTAR_USB0_H6P_P - @single_brd_lib.SINGLE_BRD | 2B4 |
| 90_AP_BI_TRISTAR_USB0_N | 90_AP_BI_TRISTAR_USB0_N - @single_brd_lib.SINGLE_BRD | 2B2 16C4 |
| 90_AP_BI_TRISTAR_USB0_P | 90_AP_BI_TRISTAR_USB0_P - @single_brd_lib.SINGLE_BRD | 2B2 16C4 |
| 90_AP_TO_LCM_MIPI_CLK_CONN_N | 90_AP_TO_LCM_MIPI_CLK_CONN_N - @single_brd_lib.SINGLE_BRD | 19C6 |
| 90_AP_TO_LCM_MIPI_CLK_CONN_P | 90_AP_TO_LCM_MIPI_CLK_CONN_P - @single_brd_lib.SINGLE_BRD | 19C6 |
| 90_AP_TO_LCM_MIPI_CLK_N | 90_AP_TO_LCM_MIPI_CLK_N - @single_brd_lib.SINGLE_BRD | 7B8 19C7 |
| 90_AP_TO_LCM_MIPI_CLK_P | 90_AP_TO_LCM_MIPI_CLK_P - @single_brd_lib.SINGLE_BRD | 7B8 19C7 |
| 90_AP_TO_LCM_MIPI_DATA1_CONN_N | 90_AP_TO_LCM_MIPI_DATA1_CONN_N - @single_brd_lib.SINGLE_BRD | 19C6 |
| 90_AP_TO_LCM_MIPI_DATA1_CONN_P | 90_AP_TO_LCM_MIPI_DATA1_CONN_P - @single_brd_lib.SINGLE_BRD | 19C6 |
| 90_AP_TO_LCM_MIPI_DATA1_N | 90_AP_TO_LCM_MIPI_DATA1_N - @single_brd_lib.SINGLE_BRD | 7B8 19C7 |
| 90_AP_TO_LCM_MIPI_DATA1_P | 90_AP_TO_LCM_MIPI_DATA1_P - @single_brd_lib.SINGLE_BRD | 7B8 19C7 |
| 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_N | 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_N - @single_brd_lib.SINGLE_BRD | 16D5 23C7 |
| 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_P | 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_P - @single_brd_lib.SINGLE_BRD | 16D5 23C7 |
| 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_N | 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_N - @single_brd_lib.SINGLE_BRD | 9B4 23C7 |
| 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_P | 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_P - @single_brd_lib.SINGLE_BRD | 9B4 23C7 |
| 90_CODEC_BI_TRISTAR_MIKEYBUS_N | 90_CODEC_BI_TRISTAR_MIKEYBUS_N - @single_brd_lib.SINGLE_BRD | 9B1 16D6 23C7 |
| 90_CODEC_BI_TRISTAR_MIKEYBUS_P | 90_CODEC_BI_TRISTAR_MIKEYBUS_P - @single_brd_lib.SINGLE_BRD | 9B1 16D6 23C7 |
| 90_FCAM_TO_AP_MIPI_CLK_CONN_N | 90_FCAM_TO_AP_MIPI_CLK_CONN_N - @single_brd_lib.SINGLE_BRD | 11C4 |
| 90_FCAM_TO_AP_MIPI_CLK_CONN_P | 90_FCAM_TO_AP_MIPI_CLK_CONN_P - @single_brd_lib.SINGLE_BRD | 11C4 |
| 90_FCAM_TO_AP_MIPI_CLK_N | 90_FCAM_TO_AP_MIPI_CLK_N - @single_brd_lib.SINGLE_BRD | 7B5 11D1 |
| 90_FCAM_TO_AP_MIPI_CLK_P | 90_FCAM_TO_AP_MIPI_CLK_P - @single_brd_lib.SINGLE_BRD | 7B5 11D1 |
| 90_FCAM_TO_AP_MIPI_DATA0_CONN_N | 90_FCAM_TO_AP_MIPI_DATA0_CONN_N - @single_brd_lib.SINGLE_BRD | 11C4 |
| 90_FCAM_TO_AP_MIPI_DATA0_CONN_P | 90_FCAM_TO_AP_MIPI_DATA0_CONN_P - @single_brd_lib.SINGLE_BRD | 11C4 |
| 90_FCAM_TO_AP_MIPI_DATA0_N | 90_FCAM_TO_AP_MIPI_DATA0_N - @single_brd_lib.SINGLE_BRD | 7B5 11D1 |
| 90_FCAM_TO_AP_MIPI_DATA0_P | 90_FCAM_TO_AP_MIPI_DATA0_P - @single_brd_lib.SINGLE_BRD | 7B5 11D1 |
| 90_RCAM_TO_AP_MIPI_CLK_CONN_N | 90_RCAM_TO_AP_MIPI_CLK_CONN_N - @single_brd_lib.SINGLE_BRD | 21B3 |
| 90_RCAM_TO_AP_MIPI_CLK_CONN_P | 90_RCAM_TO_AP_MIPI_CLK_CONN_P - @single_brd_lib.SINGLE_BRD | 21B3 |
| 90_RCAM_TO_AP_MIPI_CLK_N | 90_RCAM_TO_AP_MIPI_CLK_N - @single_brd_lib.SINGLE_BRD | 7C8 21B1 |
| 90_RCAM_TO_AP_MIPI_CLK_P | 90_RCAM_TO_AP_MIPI_CLK_P - @single_brd_lib.SINGLE_BRD | 7C8 21B1 |
| 90_RCAM_TO_AP_MIPI_DATA0_CONN_N | 90_RCAM_TO_AP_MIPI_DATA0_CONN_N - @single_brd_lib.SINGLE_BRD | 21B3 |
| 90_RCAM_TO_AP_MIPI_DATA0_CONN_P | 90_RCAM_TO_AP_MIPI_DATA0_CONN_P - @single_brd_lib.SINGLE_BRD | 21B3 |
| 90_RCAM_TO_AP_MIPI_DATA0_N | 90_RCAM_TO_AP_MIPI_DATA0_N - @single_brd_lib.SINGLE_BRD | 7C8 21B1 |
| 90_RCAM_TO_AP_MIPI_DATA0_P | 90_RCAM_TO_AP_MIPI_DATA0_P - @single_brd_lib.SINGLE_BRD | 7C8 21B1 |
| 90_RCAM_TO_AP_MIPI_DATA1_CONN_N | 90_RCAM_TO_AP_MIPI_DATA1_CONN_N - @single_brd_lib.SINGLE_BRD | 21B3 |
| 90_RCAM_TO_AP_MIPI_DATA1_CONN_P | 90_RCAM_TO_AP_MIPI_DATA1_CONN_P - @single_brd_lib.SINGLE_BRD | 21B3 |
| 90_RCAM_TO_AP_MIPI_DATA1_N | 90_RCAM_TO_AP_MIPI_DATA1_N - @single_brd_lib.SINGLE_BRD | 7C8 21B1 |
| 90_RCAM_TO_AP_MIPI_DATA1_P | 90_RCAM_TO_AP_MIPI_DATA1_P - @single_brd_lib.SINGLE_BRD | 7C8 21B1 |
| 90_RCAM_TO_AP_MIPI_DATA2_CONN_N | 90_RCAM_TO_AP_MIPI_DATA2_CONN_N - @single_brd_lib.SINGLE_BRD | 21C3 |
| 90_RCAM_TO_AP_MIPI_DATA2_CONN_P | 90_RCAM_TO_AP_MIPI_DATA2_CONN_P - @single_brd_lib.SINGLE_BRD | 21C3 |
| 90_RCAM_TO_AP_MIPI_DATA2_N | 90_RCAM_TO_AP_MIPI_DATA2_N - @single_brd_lib.SINGLE_BRD | 7C8 21C1 |
| 90_RCAM_TO_AP_MIPI_DATA2_P | 90_RCAM_TO_AP_MIPI_DATA2_P - @single_brd_lib.SINGLE_BRD | 7C8 21C1 |
| 90_RCAM_TO_AP_MIPI_DATA3_CONN_N | 90_RCAM_TO_AP_MIPI_DATA3_CONN_N - @single_brd_lib.SINGLE_BRD | 21C3 |
| 90_RCAM_TO_AP_MIPI_DATA3_CONN_P | 90_RCAM_TO_AP_MIPI_DATA3_CONN_P - @single_brd_lib.SINGLE_BRD | 21C3 |
| 90_RCAM_TO_AP_MIPI_DATA3_N | 90_RCAM_TO_AP_MIPI_DATA3_N - @single_brd_lib.SINGLE_BRD | 7C8 21C1 |
| 90_RCAM_TO_AP_MIPI_DATA3_P | 90_RCAM_TO_AP_MIPI_DATA3_P - @single_brd_lib.SINGLE_BRD | 7C8 21C1 |
| ATA3_P | @single_brd_lib.SINGLE_BRD | |
| 90_TRISTAR_BI_BB_USB_N | 90_TRISTAR_BI_BB_USB_N - @single_brd_lib.SINGLE_BRD<br>90_BB_USB_D_N - @single_brd_lib.RADIO_MLB(i616_page 24) | 16C4 24C6<br>35C3 35C8 38A5 |
| 90_TRISTAR_BI_BB_USB_P | 90_TRISTAR_BI_BB_USB_P - @single_brd_lib.SINGLE_BRD<br>90_BB_USB_D_P - @single_brd_lib.RADIO_MLB(i616_page 24) | 16D4 24C6<br>35C3 35C8 38A5 |
| 90_TRISTAR_BI_E75_PAIR1_CONN_N | 90_TRISTAR_BI_E75_PAIR1_CONN_N - @single_brd_lib.SINGLE_BRD | 16C2 17B1 22D3 23D5 |
| 90_TRISTAR_BI_E75_PAIR1_CONN_P | 90_TRISTAR_BI_E75_PAIR1_CONN_P - @single_brd_lib.SINGLE_BRD | 16C2 17B1 22D3 23D5 |
| 90_TRISTAR_BI_E75_PAIR2_CONN_N | 90_TRISTAR_BI_E75_PAIR2_CONN_N - @single_brd_lib.SINGLE_BRD | 16C2 17B1 22C3 23D5 |
| 90_TRISTAR_BI_E75_PAIR2_CONN_P | 90_TRISTAR_BI_E75_PAIR2_CONN_P - @single_brd_lib.SINGLE_BRD | 16C2 17B1 22D3 23D5 |
| ACCEL_TO_OSCAR_INT1 | ACCEL_TO_OSCAR_INT1 - @single_brd_lib.SINGLE_BRD | 20B3 20D7 |
| ACCEL_TO_OSCAR_INT2 | ACCEL_TO_OSCAR_INT2 - @single_brd_lib.SINGLE_BRD | 20B3 20C7 |
| ALS_TO_AP_INT_CONN_L | ALS_TO_AP_INT_CONN_L - @single_brd_lib.SINGLE_BRD | 11C5 |
| ALS_TO_AP_INT_L | ALS_TO_AP_INT_L - @single_brd_lib.SINGLE_BRD | 3C5 11B7 |
| AP_BI_BATTERY_SWI | AP_BI_BATTERY_SWI - @single_brd_lib.SINGLE_BRD | 3B5 13B4 22D5 |
| AP_BI_BATTERY_SWI_CONN | AP_BI_BATTERY_SWI_CONN - @single_brd_lib.SINGLE_BRD | 22D7 22D8 |
| AP_BI_EEPROM_I2C_SDA | AP_BI_EEPROM_I2C_SDA - @single_brd_lib.SINGLE_BRD | 3C2 16A6 |
| AP_BI_FCAM_I2C_SDA | AP_BI_FCAM_I2C_SDA - @single_brd_lib.SINGLE_BRD | 7C4 11C7 |
| AP_BI_FCAM_SDA_CONN | AP_BI_FCAM_SDA_CONN - @single_brd_lib.SINGLE_BRD | 11D6 |
| AP_BI_I2C0_SDA | AP_BI_I2C0_SDA - @single_brd_lib.SINGLE_BRD | 3D1 13B6 14B7 14C6 15C6 16C2 |
| AP_BI_I2C1_SDA | AP_BI_I2C1_SDA - @single_brd_lib.SINGLE_BRD | 3D1 11B8 |
| AP_BI_I2C1_SDA_ALS_CONN | AP_BI_I2C1_SDA_ALS_CONN - @single_brd_lib.SINGLE_BRD | 11C5 |
| AP_BI_NAND_ANC0_IO<0> | AP_BI_NAND_ANC0_IO<0> - @single_brd_lib.SINGLE_BRD | 6C5 6C8 |
| AP_BI_NAND_ANC0_IO<1> | AP_BI_NAND_ANC0_IO<1> - @single_brd_lib.SINGLE_BRD | 6C5 6C8 |
| AP_BI_NAND_ANC0_IO<2> | AP_BI_NAND_ANC0_IO<2> - @single_brd_lib.SINGLE_BRD | 6C5 6C8 |
| AP_BI_NAND_ANC0_IO<3> | AP_BI_NAND_ANC0_IO<3> - @single_brd_lib.SINGLE_BRD | 6C5 6C8 |
| AP_BI_NAND_ANC0_IO<4> | AP_BI_NAND_ANC0_IO<4> - @single_brd_lib.SINGLE_BRD | 6C5 6C8 |
| AP_BI_NAND_ANC0_IO<5> | AP_BI_NAND_ANC0_IO<5> - @single_brd_lib.SINGLE_BRD | 6C5 6C8 |
| AP_BI_NAND_ANC0_IO<6> | AP_BI_NAND_ANC0_IO<6> - @single_brd_lib.SINGLE_BRD | 6B7 6C5 6C8 |
| AP_BI_NAND_ANC0_IO<7> | AP_BI_NAND_ANC0_IO<7> - @single_brd_lib.SINGLE_BRD | 6C5 6C8 |
| AP_BI_NAND_ANC1_IO<0> | AP_BI_NAND_ANC1_IO<0> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_NAND_ANC1_IO<1> | AP_BI_NAND_ANC1_IO<1> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_NAND_ANC1_IO<2> | AP_BI_NAND_ANC1_IO<2> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_NAND_ANC1_IO<3> | AP_BI_NAND_ANC1_IO<3> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_NAND_ANC1_IO<4> | AP_BI_NAND_ANC1_IO<4> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_NAND_ANC1_IO<5> | AP_BI_NAND_ANC1_IO<5> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_NAND_ANC1_IO<6> | AP_BI_NAND_ANC1_IO<6> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_NAND_ANC1_IO<7> | AP_BI_NAND_ANC1_IO<7> - @single_brd_lib.SINGLE_BRD | 6C5 |
| AP_BI_OSCAR_SWDIO_1V8 | AP_BI_OSCAR_SWDIO_1V8 - @single_brd_lib.SINGLE_BRD | 3C2 20C5 |
| AP_BI_RCAM_I2C_SDA | AP_BI_RCAM_I2C_SDA - @single_brd_lib.SINGLE_BRD | 7C4 15A6 20C7 21B7 |
| AP_BI_RCAM_I2C_SDA_CONN | AP_BI_RCAM_I2C_SDA_CONN - @single_brd_lib.SINGLE_BRD | 21C4 |
| AP_TO_BB_HSIC1_RDY | AP_TO_BB_HSIC1_RDY - @single_brd_lib.SINGLE_BRD<br>AP_HSIC1_RDY - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C2 24B6<br>35C1 35C8 39B2 |
| AP_TO_BB_I2S1_DOUT | AP_TO_BB_I2S1_DOUT - @single_brd_lib.SINGLE_BRD<br>BB_I2S_RXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C4 24C6<br>35B5 35C8 39B4 |
| AP_TO_BB_I2S1_LRCLK | AP_TO_BB_I2S1_LRCLK - @single_brd_lib.SINGLE_BRD<br>BB_I2S_WS - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C4 24C6<br>35B5 35C8 39B4 |
| AP_TO_BB_JTAG_TCK | AP_TO_BB_JTAG_TCK - @single_brd_lib.SINGLE_BRD<br>BB_JTAG_TCK - @single_brd_lib.RADIO_MLB(i616_page 24) | 3B7 24D3<br>35B8 35C3 38B5 |
| AP_TO_BB_JTAG_TDI | AP_TO_BB_JTAG_TDI - @single_brd_lib.SINGLE_BRD<br>BB_JTAG_TDI - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C7 24D3<br>35B8 35C3 38B5 |
| AP_TO_BB_JTAG_TMS | AP_TO_BB_JTAG_TMS - @single_brd_lib.SINGLE_BRD<br>BB_JTAG_TMS - @single_brd_lib.RADIO_MLB(i616_page 24) | 3B7 24D3<br>35B8 35C3 38B5 |
| AP_TO_BB_JTAG_TRST_L | AP_TO_BB_JTAG_TRST_L - @single_brd_lib.SINGLE_BRD<br>BB_JTAG_TRST_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 3D5 24D3<br>35B8 35C3 38B5 |
| AP_TO_BB_RST_L | AP_TO_BB_RST_L - @single_brd_lib.SINGLE_BRD<br>BB_RST_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C8 24D6<br>35C1 35D8 37C8 |
| AP_TO_BB_UART4_RTS_L | AP_TO_BB_UART4_RTS_L - @single_brd_lib.SINGLE_BRD<br>BB_UART_CTS_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C5 24C6<br>35C3 35C8 39C4 |
| AP_TO_BB_UART4_TXD | AP_TO_BB_UART4_TXD - @single_brd_lib.SINGLE_BRD<br>BB_UART_RXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C5 16C4 24C6<br>35C3 35C8 39C4 |
| AP_TO_BB_WAKE_MODEM | AP_TO_BB_WAKE_MODEM - @single_brd_lib.SINGLE_BRD<br>AP_WAKE_MODEM - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C8 24B6<br>35D8 39B4 |
| AP_TO_BT_I2S3_DOUT | AP_TO_BT_I2S3_DOUT - @single_brd_lib.SINGLE_BRD<br>BT_PCM_IN - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C4 24B6<br>35B8 56B3 |
| AP_TO_BT_I2S3_LRCLK | AP_TO_BT_I2S3_LRCLK - @single_brd_lib.SINGLE_BRD<br>BT_PCM_SYNC - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C4 24B6<br>35B8 56B3 |
| AP_TO_BT_UART1_RTS_L | AP_TO_BT_UART1_RTS_L - @single_brd_lib.SINGLE_BRD<br>BT_UART_CTS_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C5 24B6<br>35B8 56B3 |
| AP_TO_BT_UART1_TXD | AP_TO_BT_UART1_TXD - @single_brd_lib.SINGLE_BRD<br>BT_UART_RXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C5 24B6<br>35B6 35B8 56C3 |
| AP_TO_BT_WAKE | AP_TO_BT_WAKE - @single_brd_lib.SINGLE_BRD<br>BT_WAKE - @single_brd_lib.RADIO_MLB(i616_page 24) | 3C8 24B6<br>35B8 35D1 56C2 |
| AP_TO_CODEC_ASP_I2S0_DOUT | AP_TO_CODEC_ASP_I2S0_DOUT - @single_brd_lib.SINGLE_BRD | 3D4 10C3 |
| AP_TO_CODEC_ASP_I2S0_LRCLK | AP_TO_CODEC_ASP_I2S0_LRCLK - @single_brd_lib.SINGLE_BRD | 3D4 10D3 |
| AP_TO_CODEC_SPI3_CLK | AP_TO_CODEC_SPI3_CLK - @single_brd_lib.SINGLE_BRD | 3B4 10C3 |
| AP_TO_CODEC_SPI3_CS_L | AP_TO_CODEC_SPI3_CS_L - @single_brd_lib.SINGLE_BRD | 3B4 10C3 |
| AP_TO_CODEC_SPI3_MOSI | AP_TO_CODEC_SPI3_MOSI - @single_brd_lib.SINGLE_BRD | 3B4 10C3 |
| AP_TO_CODEC_VSP_I2S4_DOUT | AP_TO_CODEC_VSP_I2S4_DOUT - @single_brd_lib.SINGLE_BRD | 3C4 10C3 |
| AP_TO_CODEC_VSP_I2S4_LRCLK | AP_TO_CODEC_VSP_I2S4_LRCLK - @single_brd_lib.SINGLE_BRD | 3C4 10C3 |
| AP_TO_CODEC_XSP_I2S2_DOUT | AP_TO_CODEC_XSP_I2S2_DOUT - @single_brd_lib.SINGLE_BRD | 3C4 10C3 15C6 |
| AP_TO_CODEC_XSP_I2S2_LRCLK | AP_TO_CODEC_XSP_I2S2_LRCLK - @single_brd_lib.SINGLE_BRD | 3C4 10C3 15C6 |
| AP_TO_EEPROM_I2C_SCL | AP_TO_EEPROM_I2C_SCL - @single_brd_lib.SINGLE_BRD | 3C2 16A8 |
| AP_TO_FCAM_I2C_SCL | AP_TO_FCAM_I2C_SCL - @single_brd_lib.SINGLE_BRD | 7C4 11D7 |
| AP_TO_FCAM_SCL_CONN | AP_TO_FCAM_SCL_CONN - @single_brd_lib.SINGLE_BRD | 11D6 |
| AP_TO_FCAM_SHUTDOWN | AP_TO_FCAM_SHUTDOWN - @single_brd_lib.SINGLE_BRD | 7C5 11D8 |
| AP_TO_FCAM_SHUTDOWN_CONN | AP_TO_FCAM_SHUTDOWN_CONN - @single_brd_lib.SINGLE_BRD | 11D6 |
| AP_TO_HEADSET_HS3_CTRL | AP_TO_HEADSET_HS3_CTRL - @single_brd_lib.SINGLE_BRD | 3C8 17C8 |
| AP_TO_HEADSET_HS3_CTRL_CONN | AP_TO_HEADSET_HS3_CTRL_CONN - @single_brd_lib.SINGLE_BRD | 17C7 |
| AP_TO_HEADSET_HS4_CTRL | AP_TO_HEADSET_HS4_CTRL - @single_brd_lib.SINGLE_BRD | 3C8 17B8 |
| AP_TO_HEADSET_HS4_CTRL_CONN | AP_TO_HEADSET_HS4_CTRL_CONN - @single_brd_lib.SINGLE_BRD | 17C4 17C6 |
| AP_TO_I2C0_SCL | AP_TO_I2C0_SCL - @single_brd_lib.SINGLE_BRD | 3D1 13B6 14B7 14C6 15C6 16C2 |
| AP_TO_I2C1_SCL | AP_TO_I2C1_SCL - @single_brd_lib.SINGLE_BRD | 3D1 11B7 |
| AP_TO_I2C1_SCL_ALS_CONN | AP_TO_I2C1_SCL_ALS_CONN - @single_brd_lib.SINGLE_BRD | 11C5 |
| AP_TO_LCM_RESET_CONN_L | AP_TO_LCM_RESET_CONN_L - @single_brd_lib.SINGLE_BRD | 19C5 |
| AP_TO_LCM_RESET_L | AP_TO_LCM_RESET_L - @single_brd_lib.SINGLE_BRD | 3C8 19C2 |
| AP_TO_LEDDRV_EN | AP_TO_LEDDRV_EN - @single_brd_lib.SINGLE_BRD | 7C8 15A6 |
| AP_TO_NAND_ANC0_ALE | AP_TO_NAND_ANC0_ALE - @single_brd_lib.SINGLE_BRD | 6B8 6C2 |
| AP_TO_NAND_ANC0_CEN0_L | AP_TO_NAND_ANC0_CEN0_L - @single_brd_lib.SINGLE_BRD | 6C2 6C8 |
| AP_TO_NAND_ANC0_CLE | AP_TO_NAND_ANC0_CLE - @single_brd_lib.SINGLE_BRD | 6B8 6C2 |
| AP_TO_NAND_ANC0_WE_L | AP_TO_NAND_ANC0_WE_L - @single_brd_lib.SINGLE_BRD | 6B8 6C2 |
| AP_TO_NAND_ANC1_ALE | AP_TO_NAND_ANC1_ALE - @single_brd_lib.SINGLE_BRD | 6B6 6C3 |
| AP_TO_NAND_ANC1_CEN0_L | AP_TO_NAND_ANC1_CEN0_L - @single_brd_lib.SINGLE_BRD | 6C3 6C6 |
| AP_TO_NAND_ANC1_CLE | AP_TO_NAND_ANC1_CLE - @single_brd_lib.SINGLE_BRD | 6B6 6C3 |
| AP_TO_NAND_ANC1_WE_L | AP_TO_NAND_ANC1_WE_L - @single_brd_lib.SINGLE_BRD | 6B6 6C3 |
| AP_TO_NAND_ANC_DQVREF | AP_TO_NAND_ANC_DQV

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|---|---|---|
| | @single_brd_lib.SINGLE_BRD | |
| AP_TO_PMU_SOCHOT1 | AP_TO_PMU_SOCHOT1 - @single_brd_lib.SINGLE_BRD | 3B1 13B6 |
| AP_TO_PMU_SOCHOT1_H6P | AP_TO_PMU_SOCHOT1_H6P - @single_brd_lib.SINGLE_BRD | 3B2 |
| AP_TO_PMU_TEST_CLKOUT | AP_TO_PMU_TEST_CLKOUT - @single_brd_lib.SINGLE_BRD | 2B3 13C6 |
| AP_TO_PMU_VIBE_PWM_EN | AP_TO_PMU_VIBE_PWM_EN - @single_brd_lib.SINGLE_BRD | 3C5 12B7 |
| AP_TO_RADIO_ON_L | AP_TO_RADIO_ON_L - @single_brd_lib.SINGLE_BRD | 3C8 24D6 |
| | RADIO_ON_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 35D3 35D8 37C8 |
| AP_TO_RCAM_I2C_SCL | AP_TO_RCAM_I2C_SCL - @single_brd_lib.SINGLE_BRD | 7C4 15A6 20D5 21B7 |
| AP_TO_RCAM_I2C_SCL_CONN | AP_TO_RCAM_I2C_SCL_CONN - @single_brd_lib.SINGLE_BRD | 21C4 |
| AP_TO_RCAM_SHUTDOWN | AP_TO_RCAM_SHUTDOWN - @single_brd_lib.SINGLE_BRD | 7C5 21B7 |
| AP_TO_RCAM_SHUTDOWN_CONN | AP_TO_RCAM_SHUTDOWN_CONN - @single_brd_lib.SINGLE_BRD | 21B4 |
| AP_TO_RCAM_VDDCORE_EN | AP_TO_RCAM_VDDCORE_EN - @single_brd_lib.SINGLE_BRD | 3C5 21C7 |
| AP_TO_SPKAMP_BEE_GEES | AP_TO_SPKAMP_BEE_GEES - @single_brd_lib.SINGLE_BRD | 3D8 15C6 |
| AP_TO_SPKAMP_RESET_L | AP_TO_SPKAMP_RESET_L - @single_brd_lib.SINGLE_BRD | 3C8 15C7 |
| AP_TO_TOUCH_GRAPE_RESET_L | AP_TO_TOUCH_GRAPE_RESET_L - @single_brd_lib.SINGLE_BRD | 3C8 18B7 |
| AP_TO_TOUCH_SPI1_CLK | AP_TO_TOUCH_SPI1_CLK - @single_brd_lib.SINGLE_BRD | 3B4 18B8 |
| AP_TO_TOUCH_SPI1_CS_L | AP_TO_TOUCH_SPI1_CS_L - @single_brd_lib.SINGLE_BRD | 3B4 18B8 |
| AP_TO_TOUCH_SPI1_MOSI | AP_TO_TOUCH_SPI1_MOSI - @single_brd_lib.SINGLE_BRD | 3B4 18B8 |
| AP_TO_TRISTAR_ACC_UART6_TXD | AP_TO_TRISTAR_ACC_UART6_TXD - @single_brd_lib.SINGLE_BRD | 3B5 16C4 |
| AP_TO_TRISTAR_DEBUG_UART0_TXD | AP_TO_TRISTAR_DEBUG_UART0_TXD - @single_brd_lib.SINGLE_BRD | 3C5 16C4 |
| AP_TO_WLAN_HSIC2_RDY | AP_TO_WLAN_HSIC2_RDY - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | AP_HSIC3_RDY - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C6 35C8 56B3 |
| AP_TO_WLAN_UART3_TXD | AP_TO_WLAN_UART3_TXD - @single_brd_lib.SINGLE_BRD | 3C5 24C6 |
| | WLAN_UART_RXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C8 56B3 |
| BATTERY_NTC_CONN | BATTERY_NTC_CONN - @single_brd_lib.SINGLE_BRD | 17C4 23D5 |
| BATTERY_TO_PMU_NTC | BATTERY_TO_PMU_NTC - @single_brd_lib.SINGLE_BRD | 13A6 17C1 22C4 23D5 |
| BATTERY_TO_PMU_SENSE | BATTERY_TO_PMU_SENSE - @single_brd_lib.SINGLE_BRD | 12C7 22C6 23D5 |
| BB_TO_ANTENNA_PAC_SPI_CS | BB_TO_ANTENNA_PAC_SPI_CS - @single_brd_lib.SINGLE_BRD | 24A6 |
| | BB_SPI_TO_PAC_CS - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 39C4 53C7 |
| BB_TO_ANTENNA_PAC_SPI_MOSI | BB_TO_ANTENNA_PAC_SPI_MOSI - @single_brd_lib.SINGLE_BRD | 24A6 |
| | BB_SPI_TO_PAC_DATA_MOSI - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 39C4 53C7 |
| BB_TO_ANTENNA_PAC_SPI_SCLK | BB_TO_ANTENNA_PAC_SPI_SCLK - @single_brd_lib.SINGLE_BRD | 24A6 |
| | BB_SPI_TO_PAC_CLK - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 39C4 53C7 |
| BB_TO_AP_HSIC1_RDY | BB_TO_AP_HSIC1_RDY - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | PBL_RUN_BB_HSIC1_RDY - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C1 35D8 39B2 |
| BB_TO_AP_HSIC1_REMOTE_WAKE | BB_TO_AP_HSIC1_REMOTE_WAKE - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | BB_HSIC1_REMOTE_WAKE - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C8 39B2 |
| BB_TO_AP_I2S1_DIN | BB_TO_AP_I2S1_DIN - @single_brd_lib.SINGLE_BRD | 3C4 24C6 |
| | BB_I2S_TXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B5 35C8 39B4 |
| BB_TO_AP_IPC_GPIO | BB_TO_AP_IPC_GPIO - @single_brd_lib.SINGLE_BRD | 7C8 24A6 |
| | BB_IPC_GPIO - @single_brd_lib.RADIO_MLB(i616_page 24) | 35A8 39B2 |
| BB_TO_AP_JTAG_TDO | BB_TO_AP_JTAG_TDO - @single_brd_lib.SINGLE_BRD | 3C7 24D3 |
| | BB_JTAG_TDO - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 35C3 38B3 |
| BB_TO_AP_PP_SYNC | BB_TO_AP_PP_SYNC - @single_brd_lib.SINGLE_BRD | 3C5 24C6 |
| | PP_SYNC - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C8 39B2 |
| BB_TO_AP_RESET_DET_L | BB_TO_AP_RESET_DET_L - @single_brd_lib.SINGLE_BRD | 3C8 24D6 |
| | RESET_DET_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C1 35D8 39B2 |
| BB_TO_AP_UART4_CTS_L | BB_TO_AP_UART4_CTS_L - @single_brd_lib.SINGLE_BRD | 3C5 24C6 |
| | BB_UART_RTS_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C3 35C8 39C4 |
| BB_TO_AP_UART4_RXD | BB_TO_AP_UART4_RXD - @single_brd_lib.SINGLE_BRD | 3C5 16C4 24C6 |
| | BB_UART_TXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C3 35C8 39C4 |
| BB_TO_LAT_SW1_CTL | BB_TO_LAT_SW1_CTL - @single_brd_lib.SINGLE_BRD | 17B1 24A6 |
| | LAT_SW1_CTL - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 35C1 39C2 |
| BB_TO_LAT_SW2_CTL | BB_TO_LAT_SW2_CTL - @single_brd_lib.SINGLE_BRD | 17B1 24A6 |
| | LAT_SW2_CTL - | 35B8 39C2 |

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|---|---|---|
| | @single_brd_lib.RADIO_MLB(i616_page 24) | |
| BB_TO_LEDDRV_GSM_BLANK | BB_TO_LEDDRV_GSM_BLANK - @single_brd_lib.SINGLE_BRD | 15A6 24D6 |
| | TX_GTR_THRESH - @single_brd_lib.RADIO_MLB(i616_page 24) | 35D8 39C2 |
| BB_TO_PMU_HOST_WAKE | BB_TO_PMU_HOST_WAKE - @single_brd_lib.SINGLE_BRD | 13B4 24C6 |
| | HOST_WAKE_BB - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C1 35D8 39B2 |
| BOARD_INFO | BOARD_INFO - @single_brd_lib.SINGLE_BRD | 3A6 3A6 3A6 3B8 3C8 3C8 |
| BOARD_INFO_M | BOARD_INFO_M - @single_brd_lib.SINGLE_BRD | 3A6 3B8 |
| BOARD_INFO_R | BOARD_INFO_R - @single_brd_lib.SINGLE_BRD | 3A6 3B8 |
| BT_TO_AP_I2S3_DIN | BT_TO_AP_I2S3_DIN - @single_brd_lib.SINGLE_BRD | 3C4 24B6 |
| | BT_PCM_OUT - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 56B3 |
| BT_TO_AP_UART1_CTS_L | BT_TO_AP_UART1_CTS_L - @single_brd_lib.SINGLE_BRD | 3C5 24B6 |
| | BT_UART_RTS_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 56C3 |
| BT_TO_AP_UART1_RXD | BT_TO_AP_UART1_RXD - @single_brd_lib.SINGLE_BRD | 3C5 24B6 |
| | BT_UART_TXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B6 35B8 56C3 |
| BT_TO_PMU_HOST_WAKE | BT_TO_PMU_HOST_WAKE - @single_brd_lib.SINGLE_BRD | 13B4 24B6 |
| | HOST_WAKE_BT - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C8 56C3 |
| BUTTON_TO_AP_HOLD_KEY_BUFF_L | BUTTON_TO_AP_HOLD_KEY_BUFF_L - @single_brd_lib.SINGLE_BRD | 3A2 3D8 13C4 13C6 |
| BUTTON_TO_AP_HOLD_KEY_CONN_L | BUTTON_TO_AP_HOLD_KEY_CONN_L - @single_brd_lib.SINGLE_BRD | 8C5 |
| BUTTON_TO_AP_HOLD_KEY_L | BUTTON_TO_AP_HOLD_KEY_L - @single_brd_lib.SINGLE_BRD | 3A4 8B7 |
| BUTTON_TO_AP_MENU_KEY_BUFF_L | BUTTON_TO_AP_MENU_KEY_BUFF_L - @single_brd_lib.SINGLE_BRD | 3A2 3D8 13C4 13C6 |
| BUTTON_TO_AP_MENU_KEY_CONN_L | BUTTON_TO_AP_MENU_KEY_CONN_L - @single_brd_lib.SINGLE_BRD | 17C5 |
| BUTTON_TO_AP_MENU_KEY_L | BUTTON_TO_AP_MENU_KEY_L - @single_brd_lib.SINGLE_BRD | 3A4 17B8 |
| BUTTON_TO_AP_RINGER_A | BUTTON_TO_AP_RINGER_A - @single_brd_lib.SINGLE_BRD | 3C8 8B7 13C4 13C6 |
| BUTTON_TO_AP_RINGER_A_CONN | BUTTON_TO_AP_RINGER_A_CONN - @single_brd_lib.SINGLE_BRD | 8C5 |
| BUTTON_TO_AP_VOL_DOWN_CONN_L | BUTTON_TO_AP_VOL_DOWN_CONN_L - @single_brd_lib.SINGLE_BRD | 8C5 |
| BUTTON_TO_AP_VOL_DOWN_L | BUTTON_TO_AP_VOL_DOWN_L - @single_brd_lib.SINGLE_BRD | 3D8 8B7 13C6 |
| BUTTON_TO_AP_VOL_UP_CONN_L | BUTTON_TO_AP_VOL_UP_CONN_L - @single_brd_lib.SINGLE_BRD | 8C5 |
| BUTTON_TO_AP_VOL_UP_L | BUTTON_TO_AP_VOL_UP_L - @single_brd_lib.SINGLE_BRD | 3D8 8B7 13C6 |
| CAM_EXT_LDO_EN | CAM_EXT_LDO_EN - @single_brd_lib.SINGLE_BRD | 7C8 21B7 |
| CAM_NTC_N | CAM_NTC_N - @single_brd_lib.SINGLE_BRD | 13B7 |
| CAM_NTC_P | CAM_NTC_P - @single_brd_lib.SINGLE_BRD | 13B7 |
| CAM_TO_PMU_NTC_P | CAM_TO_PMU_NTC_P - @single_brd_lib.SINGLE_BRD | 13B6 23C2 |
| CHESTNUT_TO_PMU_ADCIN7 | CHESTNUT_TO_PMU_ADCIN7 - @single_brd_lib.SINGLE_BRD | 13C2 13C6 14C6 23C2 |
| CODEC_MBUS_REF | CODEC_MBUS_REF - @single_brd_lib.SINGLE_BRD | 9B3 17D5 |
| CODEC_RESET_L | CODEC_RESET_L - @single_brd_lib.SINGLE_BRD | 10C3 |
| CODEC_TO_AP_ASP_I2S0_DIN | CODEC_TO_AP_ASP_I2S0_DIN - @single_brd_lib.SINGLE_BRD | 3D4 10C3 |
| CODEC_TO_AP_INT_L | CODEC_TO_AP_INT_L - @single_brd_lib.SINGLE_BRD | 3C8 10C3 |
| CODEC_TO_AP_SPI3_MISO | CODEC_TO_AP_SPI3_MISO - @single_brd_lib.SINGLE_BRD | 3B4 10C3 |
| CODEC_TO_AP_VSP_I2S4_DIN | CODEC_TO_AP_VSP_I2S4_DIN - @single_brd_lib.SINGLE_BRD | 3C4 10C3 |
| CODEC_TO_AP_XSP_I2S2_DIN | CODEC_TO_AP_XSP_I2S2_DIN - @single_brd_lib.SINGLE_BRD | 3C4 10C3 15C6 |
| CODEC_TO_HAC_CONN_N | CODEC_TO_HAC_CONN_N - @single_brd_lib.SINGLE_BRD | 11A6 23D7 |
| CODEC_TO_HAC_CONN_P | CODEC_TO_HAC_CONN_P - @single_brd_lib.SINGLE_BRD | 11A6 23D7 |
| CODEC_TO_HAC_N | CODEC_TO_HAC_N - @single_brd_lib.SINGLE_BRD | 9C3 11A8 23D7 |
| CODEC_TO_HAC_P | CODEC_TO_HAC_P - @single_brd_lib.SINGLE_BRD | 9C3 11A8 23D7 |
| CODEC_TO_HPHONE_HS3 | CODEC_TO_HPHONE_HS3 - @single_brd_lib.SINGLE_BRD | 9C3 17C8 23D7 |
| CODEC_TO_HPHONE_HS3_CONN | CODEC_TO_HPHONE_HS3_CONN - @single_brd_lib.SINGLE_BRD | 17C4 17C6 23D7 |
| CODEC_TO_HPHONE_HS3_REF | CODEC_TO_HPHONE_HS3_REF - @single_brd_lib.SINGLE_BRD | 9B3 17C7 22B5 23D7 |
| CODEC_TO_HPHONE_HS3_REF_CONN | CODEC_TO_HPHONE_HS3_REF_CONN - @single_brd_lib.SINGLE_BRD | 17C5 23C7 |
| CODEC_TO_HPHONE_HS4 | CODEC_TO_HPHONE_HS4 - @single_brd_lib.SINGLE_BRD | 9B3 17C8 23D7 |
| CODEC_TO_HPHONE_HS4_CONN | CODEC_TO_HPHONE_HS4_CONN - @single_brd_lib.SINGLE_BRD | 17C6 23C7 |
| CODEC_TO_HPHONE_HS4_REF | CODEC_TO_HPHONE_HS4_REF - @single_brd_lib.SINGLE_BRD | 9B3 17C7 22B5 23D7 |
| CODEC_TO_HPHONE_HS4_REF_CONN | CODEC_TO_HPHONE_HS4_REF_CONN - @single_brd_lib.SINGLE_BRD | 17C5 23C7 |
| CODEC_TO_HPHONE_L | CODEC_TO_HPHONE_L - @single_brd_lib.SINGLE_BRD | 9C2 17C1 23D7 |
| CODEC_TO_HPHONE_L_CONN | CODEC_TO_HPHONE_L_CONN - @single_brd_lib.SINGLE_BRD | 17C4 23D7 |
| CODEC_TO_HPHONE_R | CODEC_TO_HPHONE_R - @single_brd_lib.SINGLE_BRD | 9C2 17C1 23D7 |
| CODEC_TO_HPHONE_R_CONN | CODEC_TO_HPHONE_R_CONN - @single_brd_lib.SINGLE_BRD | 17C4 23D7 |
| CODEC_TO_MIC2_BIAS_CONN | CODEC_TO_MIC2_BIAS_CONN - @single_brd_lib.SINGLE_BRD | 8C4 |
| CODEC_TO_PMU_MIKEY_INT_L | CODEC_TO_PMU_MIKEY_INT_L - @single_brd_lib.SINGLE_BRD | 10C3 13B4 |
| CODEC_TO_RCVR_CONN_N | CODEC_TO_RCVR_CONN_N - @single_brd_lib.SINGLE_BRD | 11A6 23D7 |

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|---|---|---|
| CODEC_TO_RCVR_CONN_P | CODEC_TO_RCVR_CONN_P - @single_brd_lib.SINGLE_BRD | 11A6 23D7 |
| CODEC_TO_RCVR_N | CODEC_TO_RCVR_N - @single_brd_lib.SINGLE_BRD | 9C3 11A8 23D7 |
| CODEC_TO_RCVR_P | CODEC_TO_RCVR_P - @single_brd_lib.SINGLE_BRD | 9C3 11A8 23D7 |
| COMPASS_TO_OSCAR_INT | COMPASS_TO_OSCAR_INT - @single_brd_lib.SINGLE_BRD | 20C7 |
| COMPASS_TO_OSCAR_INT_FL | COMPASS_TO_OSCAR_INT_FL - @single_brd_lib.SINGLE_BRD | 20A5 20D8 |
| CUMULUS_TO_PROX_RX_EN_1V8 | CUMULUS_TO_PROX_RX_EN_1V8 - @single_brd_lib.SINGLE_BRD | 11C8 18B5 |
| CUMULUS_TO_PROX_RX_EN_1V8_CONN | CUMULUS_TO_PROX_RX_EN_1V8_CONN - @single_brd_lib.SINGLE_BRD | 11C5 |
| CUMULUS_TO_PROX_TX_EN_1V8_L | CUMULUS_TO_PROX_TX_EN_1V8_L - @single_brd_lib.SINGLE_BRD | 18A3 18B7 |
| CUMULUS_TO_PROX_TX_EN_BUFF | CUMULUS_TO_PROX_TX_EN_BUFF - @single_brd_lib.SINGLE_BRD | 11B2 18A4 |
| CUMULUS_TO_SAGE_BOOST_EN | CUMULUS_TO_SAGE_BOOST_EN - @single_brd_lib.SINGLE_BRD | 18B1 18B5 |
| CUMULUS_TO_SAGE_GCM_SEL | CUMULUS_TO_SAGE_GCM_SEL - @single_brd_lib.SINGLE_BRD | 18B1 18B5 |
| CUMULUS_TO_SAGE_VSTM_OUT<0> | CUMULUS_TO_SAGE_VSTM_OUT<0> - @single_brd_lib.SINGLE_BRD | 18B3 18B5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<1> | CUMULUS_TO_SAGE_VSTM_OUT<1> - @single_brd_lib.SINGLE_BRD | 18C3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<2> | CUMULUS_TO_SAGE_VSTM_OUT<2> - @single_brd_lib.SINGLE_BRD | 18B3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<3> | CUMULUS_TO_SAGE_VSTM_OUT<3> - @single_brd_lib.SINGLE_BRD | 18B3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<4> | CUMULUS_TO_SAGE_VSTM_OUT<4> - @single_brd_lib.SINGLE_BRD | 18C3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<5> | CUMULUS_TO_SAGE_VSTM_OUT<5> - @single_brd_lib.SINGLE_BRD | 18C3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<6> | CUMULUS_TO_SAGE_VSTM_OUT<6> - @single_brd_lib.SINGLE_BRD | 18B5 18C3 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<7> | CUMULUS_TO_SAGE_VSTM_OUT<7> - @single_brd_lib.SINGLE_BRD | 18C3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<8> | CUMULUS_TO_SAGE_VSTM_OUT<8> - @single_brd_lib.SINGLE_BRD | 18C3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<9> | CUMULUS_TO_SAGE_VSTM_OUT<9> - @single_brd_lib.SINGLE_BRD | 18C6 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<10> | CUMULUS_TO_SAGE_VSTM_OUT<10> - @single_brd_lib.SINGLE_BRD | 18C6 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<11> | CUMULUS_TO_SAGE_VSTM_OUT<11> - @single_brd_lib.SINGLE_BRD | 18B3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<12> | CUMULUS_TO_SAGE_VSTM_OUT<12> - @single_brd_lib.SINGLE_BRD | 18B5 18C3 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<13> | CUMULUS_TO_SAGE_VSTM_OUT<13> - @single_brd_lib.SINGLE_BRD | 18C3 18C5 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<14> | CUMULUS_TO_SAGE_VSTM_OUT<14> - @single_brd_lib.SINGLE_BRD | 18B5 18C3 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<15> | CUMULUS_TO_SAGE_VSTM_OUT<15> - @single_brd_lib.SINGLE_BRD | 18B5 18C3 23D8 |
| CUMULUS_TO_SAGE_VSTM_OUT<16> | CUMULUS_TO_SAGE_VSTM_OUT<16> - @single_brd_lib.SINGLE_BRD | 18B3 18C5 23C8 |
| CUMULUS_TO_SAGE_VSTM_OUT<17> | CUMULUS_TO_SAGE_VSTM_OUT<17> - @single_brd_lib.SINGLE_BRD | 18B3 18C5 23C8 |
| CUMULUS_TO_SAGE_VSTM_OUT<18> | CUMULUS_TO_SAGE_VSTM_OUT<18> - @single_brd_lib.SINGLE_BRD | 18C3 18C5 23C8 |
| CUMULUS_TO_SAGE_VSTM_OUT<19> | CUMULUS_TO_SAGE_VSTM_OUT<19> - @single_brd_lib.SINGLE_BRD | 18B5 18C3 23C8 |
| E75_TO_PMU_ACC_DETECT | E75_TO_PMU_ACC_DETECT - @single_brd_lib.SINGLE_BRD | 13C2 16C2 17A1 23C2 |
| E75_TO_PMU_ACC_DETECT_CONN | E75_TO_PMU_ACC_DETECT_CONN - @single_brd_lib.SINGLE_BRD | 17B4 22B3 22C3 |
| E75_TO_PMU_ACC_DETECT_R | E75_TO_PMU_ACC_DETECT_R - @single_brd_lib.SINGLE_BRD | 13C4 23C2 |
| EXTMIC_TO_CODEC_L67_N | EXTMIC_TO_CODEC_L67_N - @single_brd_lib.SINGLE_BRD | 9C5 |
| EXTMIC_TO_CODEC_L67_P | EXTMIC_TO_CODEC_L67_P - @single_brd_lib.SINGLE_BRD | 9C5 |
| EXTMIC_TO_CODEC_N | EXTMIC_TO_CODEC_N - @single_brd_lib.SINGLE_BRD | 9C8 17C8 |
| EXTMIC_TO_CODEC_P | EXTMIC_TO_CODEC_P - @single_brd_lib.SINGLE_BRD | 9C8 17C8 |
| FORCE_DFU | FORCE_DFU - @single_brd_lib.SINGLE_BRD | 3B8 3C8 22B4 |
| FOREHEAD_NTC_N | FOREHEAD_NTC_N - @single_brd_lib.SINGLE_BRD | 13C7 |
| FOREHEAD_NTC_P | FOREHEAD_NTC_P - @single_brd_lib.SINGLE_BRD | 13C7 |
| FOREHEAD_TO_PMU_NTC_P | FOREHEAD_TO_PMU_NTC_P - @single_brd_lib.SINGLE_BRD | 13B6 23C2 |
| GYRO_PUMP | GYRO_PUMP - @single_brd_lib.SINGLE_BRD | 20C2 23C5 |
| GYRO_TO_OSCAR_INT1 | GYRO_TO_OSCAR_INT1 - @single_brd_lib.SINGLE_BRD | 20C3 20C7 |
| GYRO_TO_OSCAR_INT2 | GYRO_TO_OSCAR_INT2 - @single_brd_lib.SINGLE_BRD | 20C3 20D7 |
| H6P_NTC_N | H6P_NTC_N - @single_brd_lib.SINGLE_BRD | 13A7 |
| H6P_NTC_P | H6P_NTC_P - @single_brd_lib.SINGLE_BRD | 13A7 |
| H6P_TO_PMU_NTC_P | H6P_TO_PMU_NTC_P - @single_brd_lib.SINGLE_BRD | 13B6 23C2 |
| HAC_TO_CODEC_TEST | HAC_TO_CODEC_TEST - @single_brd_lib.SINGLE_BRD | 9A7 11A7 23B7 |
| HAC_TO_CODEC_TEST_L67 | HAC_TO_CODEC_TEST_L67 - @single_brd_lib.SINGLE_BRD | 9B6 23B7 |
| HPHONE_TO_CODEC_DET | HPHONE_TO_CODEC_DET - @single_brd_lib.SINGLE_BRD | 9B3 17D7 23C7 |
| HPHONE_TO_CODEC_DET_CONN | HPHONE_TO_CODEC_DET_CONN - @single_brd_lib.SINGLE_BRD | 17C5 23C7 |
| HPHONE_TO_CODEC_HPHONE_TEST | HPHONE_TO_CODEC_HPHONE_TEST - @single_brd_lib.SINGLE_BRD | 9A7 17C2 23B7 |
| HPHONE_TO_CODEC_HPHONE_TEST_L67 | HPHONE_TO_CODEC_HPHONE_TEST_L67 - @single_brd_lib.SINGLE_BRD | 9B6 23B7 |
| IMU_TO_OSCAR_SPI_MISO | IMU_TO_OSCAR_SPI_MISO - @single_brd_lib.SINGLE_BRD | 20D5 |
| IMU_TO_OSCAR_SPI_MISO_FL | IMU_TO_OSCAR_SPI_MISO_FL - @single_brd_lib.SINGLE_BRD | 20A5 20B1 20C1 20D4 |
| LCM_DESENSE | LCM_DESENSE - @single_brd_lib.SINGLE_BRD | 14B5 |
| LCM_DESENSE_CONN | LCM_DESENSE_CONN - @single_brd_lib.SINGLE_BRD | 19B4 |
| LCM_TO_AP_HIFA_BSYNC | LCM_TO_AP_HIFA_BSYNC - @single_brd_lib.SINGLE_BRD | 3C8 18A3 18B1 19C2 |
| LCM_TO_AP_HIFA_BSYNC_BUFF | LCM_TO_AP_HIFA_BSYNC_BUFF - @single_brd_lib.SINGLE_BRD | 14C6 18A4 |
| LCM_TO_AP_HIFA_BSYNC_CONN | LCM_TO_AP_HIFA_BSYNC_CONN - @single_brd_lib.SINGLE_BRD | 19C5 |
| LCM_TO_AP_PANIC_L | LCM_TO_AP_PANIC_L - @single_brd_lib.SINGLE_BRD | 19C5 |

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| LCM_TO_AP_PIFA_CONN | LCM_TO_AP_PIFA_CONN - @single_brd_lib.SINGLE_BRD | 19C5 |
| LCM_TO_CHESTNUT_PWR_EN | LCM_TO_CHESTNUT_PWR_EN - @single_brd_lib.SINGLE_BRD | 13C6 14C6 19D2 |
| LCM_TO_CHESTNUT_PWR_EN_CONN | LCM_TO_CHESTNUT_PWR_EN_CONN - @single_brd_lib.SINGLE_BRD | 19C5 |
| MESA_TO_BOOST_EN | MESA_TO_BOOST_EN - @single_brd_lib.SINGLE_BRD | 14B3 17D7 |
| MESA_TO_BOOST_EN_DOCK_CONN | MESA_TO_BOOST_EN_DOCK_CONN - @single_brd_lib.SINGLE_BRD | 17C5 |
| MIC1_TO_CODEC_L67_N | MIC1_TO_CODEC_L67_N - @single_brd_lib.SINGLE_BRD | 9C5 23C7 |
| MIC1_TO_CODEC_L67_P | MIC1_TO_CODEC_L67_P - @single_brd_lib.SINGLE_BRD | 9C5 23C7 |
| MIC1_TO_CODEC_N | MIC1_TO_CODEC_N - @single_brd_lib.SINGLE_BRD | 9C7 17B8 23C7 |
| MIC1_TO_CODEC_P | MIC1_TO_CODEC_P - @single_brd_lib.SINGLE_BRD | 9C7 17B8 22B3 23C7 |
| MIC2_TO_CODEC_L67_N | MIC2_TO_CODEC_L67_N - @single_brd_lib.SINGLE_BRD | 9C5 23B7 |
| MIC2_TO_CODEC_L67_P | MIC2_TO_CODEC_L67_P - @single_brd_lib.SINGLE_BRD | 9C5 23B7 |
| MIC2_TO_CODEC_N | MIC2_TO_CODEC_N - @single_brd_lib.SINGLE_BRD | 8C2 9B7 23B7 |
| MIC2_TO_CODEC_P | MIC2_TO_CODEC_P - @single_brd_lib.SINGLE_BRD | 8C2 9B7 22B3 23B7 |
| MIC3_TO_CODEC_L67_N | MIC3_TO_CODEC_L67_N - @single_brd_lib.SINGLE_BRD | 9B5 23B7 |
| MIC3_TO_CODEC_L67_P | MIC3_TO_CODEC_L67_P - @single_brd_lib.SINGLE_BRD | 9C5 23B7 |
| MIC3_TO_CODEC_N | MIC3_TO_CODEC_N - @single_brd_lib.SINGLE_BRD | 9B7 11C2 23B7 |
| MIC3_TO_CODEC_P | MIC3_TO_CODEC_P - @single_brd_lib.SINGLE_BRD | 9B7 11C2 22B3 23B7 |
| MOJAVE_SW | MOJAVE_SW - @single_brd_lib.SINGLE_BRD | 14B3 |
| NAND_RDYBSY0 | NAND_RDYBSY0 - @single_brd_lib.SINGLE_BRD | 6C3 |
| NAND_RDYBSY1 | NAND_RDYBSY1 - @single_brd_lib.SINGLE_BRD | 6B3 |
| NAND_TO_PP_TCKC | NAND_TO_PP_TCKC - @single_brd_lib.SINGLE_BRD | 6B4 |
| NAND_TO_PP_TMSC | NAND_TO_PP_TMSC - @single_brd_lib.SINGLE_BRD | 6B4 |
| NAVAJO_TO_AP_SPI2_MISO | NAVAJO_TO_AP_SPI2_MISO - @single_brd_lib.SINGLE_BRD | 3B4 17D1 |
| NAVAJO_TO_AP_SPI2_MISO_CONN | NAVAJO_TO_AP_SPI2_MISO_CONN - @single_brd_lib.SINGLE_BRD | 17D3 |
| NAVAJO_TO_PMU_INT_CONN_H | NAVAJO_TO_PMU_INT_CONN_H - @single_brd_lib.SINGLE_BRD | 17C5 17D3 |
| NAVAJO_TO_PMU_INT_H | NAVAJO_TO_PMU_INT_H - @single_brd_lib.SINGLE_BRD | 3B4 13B4 17D1 |
| OSCAR_BI_AP_TIME_SYNC_HOST_INT | OSCAR_BI_AP_TIME_SYNC_HOST_INT - @single_brd_lib.SINGLE_BRD | 3D5 20C7 |
| OSCAR_TO_ACCEL_SPI_CS_L | OSCAR_TO_ACCEL_SPI_CS_L - @single_brd_lib.SINGLE_BRD | 20B3 20D7 |
| OSCAR_TO_AP_UART2_RXD | OSCAR_TO_AP_UART2_RXD - @single_brd_lib.SINGLE_BRD | 3C5 20C5 |
| OSCAR_TO_COMPASS_SPI_CS_FL_L | OSCAR_TO_COMPASS_SPI_CS_FL_L - @single_brd_lib.SINGLE_BRD | 20A5 20D8 |
| OSCAR_TO_COMPASS_SPI_CS_L | OSCAR_TO_COMPASS_SPI_CS_L - @single_brd_lib.SINGLE_BRD | 20C6 |
| OSCAR_TO_GYRO_SPI_CS_L | OSCAR_TO_GYRO_SPI_CS_L - @single_brd_lib.SINGLE_BRD | 20D3 20D7 |
| OSCAR_TO_IMU_SPI_MOSI | OSCAR_TO_IMU_SPI_MOSI - @single_brd_lib.SINGLE_BRD | 20D5 |
| OSCAR_TO_IMU_SPI_MOSI_FL | OSCAR_TO_IMU_SPI_MOSI_FL - @single_brd_lib.SINGLE_BRD | 20A5 20B1 20C1 20D4 |
| OSCAR_TO_IMU_SPI_SCLK | OSCAR_TO_IMU_SPI_SCLK - @single_brd_lib.SINGLE_BRD | 20D5 |
| OSCAR_TO_IMU_SPI_SCLK_FL | OSCAR_TO_IMU_SPI_SCLK_FL - @single_brd_lib.SINGLE_BRD | 20A5 20B1 20D1 20D4 |
| OSCAR_TO_PMU_HOST_WAKE | OSCAR_TO_PMU_HOST_WAKE - @single_brd_lib.SINGLE_BRD | 3C5 13B4 20C7 |
| OSCAR_TO_RADIO_CONTEXT_A | OSCAR_TO_RADIO_CONTEXT_A - @single_brd_lib.SINGLE_BRD | 20C5 24A6 |
| | OSCAR_CONTEXT_A - @single_brd_lib.RADIO_MLB(i616_page 24) | 35A8 39B4 56B3 |
| OSCAR_TO_RADIO_CONTEXT_B | OSCAR_TO_RADIO_CONTEXT_B - @single_brd_lib.SINGLE_BRD | 20C5 24A6 |
| | OSCAR_CONTEXT_B - @single_brd_lib.RADIO_MLB(i616_page 24) | 35A8 39B2 56B3 |
| P17V0_MOJAVE_LDOIN | P17V0_MOJAVE_LDOIN - @single_brd_lib.SINGLE_BRD | 14B2 |
| PA_NTC_N | PA_NTC_N - @single_brd_lib.SINGLE_BRD | 13B7 |
| PA_NTC_P | PA_NTC_P - @single_brd_lib.SINGLE_BRD | 13B7 |
| PA_TO_PMU_NTC_P | PA_TO_PMU_NTC_P - @single_brd_lib.SINGLE_BRD | 13B6 23C2 |
| PGND_CODEC_GNDCP | PGND_CODEC_GNDCP - @single_brd_lib.SINGLE_BRD | 10B5 |
| PGND_IRLED_DRAIN | PGND_IRLED_DRAIN - @single_brd_lib.SINGLE_BRD | 11B4 |
| PGND_IRLED_K | PGND_IRLED_K - @single_brd_lib.SINGLE_BRD | 11C4 |
| PGND_MIC1_TO_CODEC_RET | PGND_MIC1_TO_CODEC_RET - @single_brd_lib.SINGLE_BRD | 10B8 17B8 |
| PGND_MIC1_TO_CODEC_RET_FILT | PGND_MIC1_TO_CODEC_RET_FILT - @single_brd_lib.SINGLE_BRD | 10B7 |
| PGND_MIC2_3_TO_CODEC_RET | PGND_MIC2_3_TO_CODEC_RET - @single_brd_lib.SINGLE_BRD | 8C2 10A8 11C4 |
| PGND_MIC2_3_TO_CODEC_RET_FILT | PGND_MIC2_3_TO_CODEC_RET_FILT - @single_brd_lib.SINGLE_BRD | 10B7 |
| PGND_OPEL | PGND_OPEL - @single_brd_lib.SINGLE_BRD | 15A4 15A4 |

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| | 24) | |
| PMU_TO_BB_RST_R_L | PMU_TO_BB_RST_R_L - @single_brd_lib.SINGLE_BRD | 13B4 |
| PMU_TO_BB_VBUS_DET | PMU_TO_BB_VBUS_DET - @single_brd_lib.SINGLE_BRD | 13B4 24C6 |
| | BB_USB_VBUS - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C3 35C8 38A5 |
| PMU_TO_BT_REG_ON | PMU_TO_BT_REG_ON - @single_brd_lib.SINGLE_BRD | 13B3 24B6 |
| | BT_REG_ON - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 35C1 56C6 |
| PMU_TO_BT_REG_ON_R | PMU_TO_BT_REG_ON_R - @single_brd_lib.SINGLE_BRD | 13B4 |
| PMU_TO_TP_AMUX_AY | PMU_TO_TP_AMUX_AY - @single_brd_lib.SINGLE_BRD | 13C6 22C4 23C2 |
| PMU_TO_TP_AMUX_BY | PMU_TO_TP_AMUX_BY - @single_brd_lib.SINGLE_BRD | 13B6 22C4 23C2 |
| PMU_TO_WLAN_REG_ON | PMU_TO_WLAN_REG_ON - @single_brd_lib.SINGLE_BRD | 13B3 24C6 |
| | WLAN_REG_ON - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C1 35C8 56C6 |
| PMU_TO_WLAN_REG_ON_R | PMU_TO_WLAN_REG_ON_R - @single_brd_lib.SINGLE_BRD | 13B4 |
| PN5V7_LCM_AVDDN | PN5V7_LCM_AVDDN - @single_brd_lib.SINGLE_BRD | 19C5 23D5 |
| PN5V7_SAGE_AVDDN | PN5V7_SAGE_AVDDN - @single_brd_lib.SINGLE_BRD | 14C3 18D5 19D2 23D5 |
| PN5V7_SAGE_AVDDN_INT | PN5V7_SAGE_AVDDN_INT - @single_brd_lib.SINGLE_BRD | 18D4 23D5 |
| PP1V0 | PP1V0 - @single_brd_lib.SINGLE_BRD | 2C3 7C3 7D8 12A2 23B5 |
| PP1V0_SOC | PP1V0_SOC - @single_brd_lib.SINGLE_BRD | 4D6 12C3 23B5 |
| PP1V0_SRAM | PP1V0_SRAM - @single_brd_lib.SINGLE_BRD | 5C3 12C1 23B5 |
| PP1V1_CPU | PP1V1_CPU - @single_brd_lib.SINGLE_BRD | 4D3 12D3 23B5 |
| PP1V1_GPU | PP1V1_GPU - @single_brd_lib.SINGLE_BRD | 4D3 12C3 23B5 |
| PP1V2 | PP1V2 - @single_brd_lib.SINGLE_BRD | 2C6 4A6 4B8 5D5 12B5 23B5 |
| PP1V2_NAND_VDDI | PP1V2_NAND_VDDI - @single_brd_lib.SINGLE_BRD | 6D4 23B5 |
| PP1V2_OSCAR | PP1V2_OSCAR - @single_brd_lib.SINGLE_BRD | 12B5 20D7 23B5 |
| PP1V2_OSCAR_VDDC | PP1V2_OSCAR_VDDC - @single_brd_lib.SINGLE_BRD | 20D6 23B5 |
| PP1V2_RCAM_CONN | PP1V2_RCAM_CONN - @single_brd_lib.SINGLE_BRD | 21B4 23B5 |
| PP1V2_RCAM_SWITCHOUT | PP1V2_RCAM_SWITCHOUT - @single_brd_lib.SINGLE_BRD | 21C6 23B5 |
| PP1V2_SDRAM | PP1V2_SDRAM - @single_brd_lib.SINGLE_BRD | 4A8 4C8 4D8 12B7 12D1 21C7 23B5 |
| PP1V8 | PP1V8 - @single_brd_lib.SINGLE_BRD | 2B7 2C6 3A6 3D1 5A3 5B5 6C8 6D1 7C2 7C4 7D5 10C7 11C2 12B5 14B7 16B3 16B6 18D1 19C2 19D2 21C7 23D3 |
| PP1V8_ALWAYS | PP1V8_ALWAYS - @single_brd_lib.SINGLE_BRD | 3B4 12A2 23D3 |
| PP1V8_COMP | PP1V8_COMP - @single_brd_lib.SINGLE_BRD | 20A7 20B6 23D3 |
| PP1V8_CUMULUS_VDDLDO | PP1V8_CUMULUS_VDDLDO - @single_brd_lib.SINGLE_BRD | 18B7 18D6 23D3 |
| PP1V8_FCAM_CONN | PP1V8_FCAM_CONN - @single_brd_lib.SINGLE_BRD | 11C4 23D3 |
| PP1V8_GRAPE | PP1V8_GRAPE - @single_brd_lib.SINGLE_BRD | 12B5 18A3 18B5 18D5 23D3 |
| PP1V8_LCM_CONN | PP1V8_LCM_CONN - @single_brd_lib.SINGLE_BRD | 19C5 23D3 |
| PP1V8_MESA_LOAD_SW_OUT | PP1V8_MESA_LOAD_SW_OUT - @single_brd_lib.SINGLE_BRD | 17D7 23A5 |
| PP1V8_OSCAR | PP1V8_OSCAR - @single_brd_lib.SINGLE_BRD | 12B5 20B5 20C1 20C8 20D1 20D5 23D3 |
| PP1V8_OSCAR_VDDIO | PP1V8_OSCAR_VDDIO - @single_brd_lib.SINGLE_BRD | 20D6 23D3 |
| PP1V8_PLL | PP1V8_PLL - @single_brd_lib.SINGLE_BRD | 2C5 23D3 |
| PP1V8_RCAM_CONN | PP1V8_RCAM_CONN - @single_brd_lib.SINGLE_BRD | 21B4 23D3 |
| PP1V8_SDRAM | PP1V8_SDRAM - @single_brd_lib.SINGLE_BRD | 3A4 3C8 4B8 10C3 10C7 12D1 14B7 16D4 17D8 23D3 24D6 |
| | PP_WL_BT_VDDIO_AP - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C8 56C3 |
| PP1V8_SDRAM_DOCK_CONN | PP1V8_SDRAM_DOCK_CONN - @single_brd_lib.SINGLE_BRD | 17C5 23D3 |
| PP1V8_VA_L19_L67 | PP1V8_VA_L19_L67 - @single_brd_lib.SINGLE_BRD | 10C7 12A2 15D4 23D3 |
| PP1V8_XTAL | PP1V8_XTAL - @single_brd_lib.SINGLE_BRD | 5A5 23D3 |
| PP2V5_RCAM_AF | PP2V5_RCAM_AF - @single_brd_lib.SINGLE_BRD | 12A2 12B2 21D7 23D3 |
| PP2V5_RCAM_AF_COMP | PP2V5_RCAM_AF_COMP - @single_brd_lib.SINGLE_BRD | 12B1 21D7 23C3 |
| PP2V5_RCAM_AF_CONN | PP2V5_RCAM_AF_CONN - @single_brd_lib.SINGLE_BRD | 21C4 23C3 |
| PP2V80_THROTTLER | PP2V80_THROTTLER - @single_brd_lib.SINGLE_BRD | 12A3 16B3 23B5 |
| PP2V80_THROTTLER_FB | PP2V80_THROTTLER_FB - @single_brd_lib.SINGLE_BRD | 12A3 16B3 23B5 |
| PP2V85_CAM_LDO_OUT | PP2V85_CAM_LDO_OUT - @single_brd_lib.SINGLE_BRD | 11D2 21B6 23B5 |
| PP2V85_FCAM_CONN | PP2V85_FCAM_CONN - @single_brd_lib.SINGLE_BRD | 11C4 23C3 |
| PP2V85_RCAM_CONN | PP2V85_RCAM_CONN - @single_brd_lib.SINGLE_BRD | 21B4 23C3 |
| PP3V0_ACC | PP3V0_ACC - @single_brd_lib.SINGLE_BRD | 12A2 16D3 23C3 |
| PP3V0_ALS | PP3V0_ALS - @single_brd_lib.SINGLE_BRD | 11C5 23C3 |
| PP3V0_COMP | PP3V0_COMP - @single_brd_lib.SINGLE_BRD | 20B7 23C3 |
| PP3V0_IMU | PP3V0_IMU - @single_brd_lib.SINGLE_BRD | 12A2 20B7 20C3 20D3 23C3 |
| PP3V0_NAND | PP3V0_NAND - @single_brd_lib.SINGLE_BRD | 6D1 12A2 23C3 |
| PP3V0_NAVAJO | PP3V0_NAVAJO - @single_brd_lib.SINGLE_BRD | 12A2 17D1 17D8 23C3 |
| PP3V0_NAVAJO_CONN | PP3V0_NAVAJO_CONN - @single_brd_lib.SINGLE_BRD | 17C4 23C3 |
| PP3V0_PROX | PP3V0_PROX - @single_brd_lib.SINGLE_BRD | 11C6 23C3 |
| PP3V0_PROX_ALS | PP3V0_PROX_ALS - @single_brd_lib.SINGLE_BRD | 11B8 11C8 12A2 23C3 |
| PP3V0_PROX_IRLED | PP3V0_PROX_IRLED - @single_brd_lib.SINGLE_BRD | 11A2 12A2 23C3 |
| PP3V0_SDRAM | PP3V0_SDRAM - @single_brd_lib.SINGLE_BRD | 12A2 14B3 16D6 23C3 |
| PP3V3_USB | PP3V3_USB - @single_brd_lib.SINGLE_BRD | 2C3 12B2 23B3 |
| PP5V0_USB_CONN | PP5V0_USB_CONN - @single_brd_lib.SINGLE_BRD | 17A6 22D5 23B3 |
| PP5V0_USB_PROT | PP5V0_USB_PROT - @single_brd_lib.SINGLE_BRD | 12D8 16D1 17A8 23B3 |
| PP5V1_GRAPE_VDDH | PP5V1_GRAPE_VDDH - @single_brd_lib.SINGLE_BRD | 14C3 18D7 23B3 |
| PP5V7_LCM_AVDDH | PP5V7_LCM_AVDDH - @single_brd_lib.SINGLE_BRD | 14C3 19D2 23B3 |
| PP5V7_LCM_AVDDH_CONN | PP5V7_LCM_AVDDH_CONN - @single_brd_lib.SINGLE_BRD | 19C5 23B3 |
| PP5V7_SAGE_AVDDH | PP5V7_SAGE_AVDDH - @single_brd_lib.SINGLE_BRD | 14C3 18B4 18D3 23B4 |
| PP6V0_LCM_BOOST | PP6V0_LCM_BOOST - @single_brd_lib.SINGLE_BRD | 14C4 23B4 |
| PP16V5_MESA | PP16V5_MESA - @single_brd_lib.SINGLE_BRD | 14B1 17D7 23C5 |
| PP16V5_MESA_DOCK_CONN | PP16V5_MESA_DOCK_CONN - @single_brd_lib.SINGLE_BRD | 17C5 23C5 |
| PP_BATT_VCC | PP_BATT_VCC - @single_brd_lib.SINGLE_BRD | 12C8 15B7 15D7 22C4 22D4 22D5 22D8 23B4 24D6 |
| | PP_BATT_VCC_CONN - @single_brd_lib.RADIO_MLB(i616_page 24) | 35D1 35D8 36C8 44C6 45C6 46C6 47C6 48C6 49C6 50C8 |
| PP_BATT_VCC_L19_VP | PP_BATT_VCC_L19_VP - @single_brd_lib.SINGLE_BRD | 15D6 23B4 |
| PP_BUCK0_LX0 | PP_BUCK0_LX0 - @single_brd_lib.SINGLE_BRD | 12D5 23B4 |
| PP_BUCK0_LX1 | PP_BUCK0_LX1 - @single_brd_lib.SINGLE_BRD | 12D5 23B4 |
| PP_BUCK0_LX2 | PP_BUCK0_LX2 - @single_brd_lib.SINGLE_BRD | 12C5 23B4 |
| PP_BUCK0_LX3 | PP_BUCK0_LX3 - @single_brd_lib.SINGLE_BRD | 12C5 23B4 |
| PP_BUCK1_LX0 | PP_BUCK1_LX0 - @single_brd_lib.SINGLE_BRD | 12C5 23B4 |
| PP_BUCK1_LX1 | PP_BUCK1_LX1 - @single_brd_lib.SINGLE_BRD | 12C5 23B4 |
| PP_BUCK2_LX | PP_BUCK2_LX - @single_brd_lib.SINGLE_BRD | 12C5 23B4 |
| PP_BUCK3_LX | PP_BUCK3_LX - @single_brd_lib.SINGLE_BRD | 12C5 23B4 |
| PP_BUCK4_LX | PP_BUCK4_LX - @single_brd_lib.SINGLE_BRD | 12B5 23A4 |
| PP_BUCK5_LX | PP_BUCK5_LX - @single_brd_lib.SINGLE_BRD | 12B5 23A4 |
| PP_CHESTNUT_CN | PP_CHESTNUT_CN - @single_brd_lib.SINGLE_BRD | 14D4 23A4 |
| PP_CHESTNUT_CP | PP_CHESTNUT_CP - @single_brd_lib.SINGLE_BRD | 14D4 23A4 |
| PP_CHESTNUT_LXP | PP_CHESTNUT_LXP - @single_brd_lib.SINGLE_BRD | 14D6 23A4 |
| PP_CODEC_FILT+ | PP_CODEC_FILT+ - @single_brd_lib.SINGLE_BRD | 10B5 23A4 |
| PP_CODEC_SPKR_VQ | PP_CODEC_SPKR_VQ - @single_brd_lib.SINGLE_BRD | 10B5 23A4 |
| PP_CODEC_TO_MIC1_BIAS | PP_CODEC_TO_MIC1_BIAS - @single_brd_lib.SINGLE_BRD | 10B7 17B8 23A4 |
| PP_CODEC_TO_MIC1_BIAS_CONN | PP_CODEC_TO_MIC1_BIAS_CONN - @single_brd_lib.SINGLE_BRD | 17B6 23A4 |
| PP_CODEC_TO_MIC2_3_BIAS | PP_CODEC_TO_MIC2_3_BIAS - @single_brd_lib.SINGLE_BRD | 8C2 10B7 11B2 23A4 |
| PP_CODEC_TO_MIC3_BIAS_CONN | PP_CODEC_TO_MIC3_BIAS_CONN - @single_brd_lib.SINGLE_BRD | 11C4 23A4 |
| PP_CODEC_VCPFILT+ | PP_CODEC_VCPFILT+ - @single_brd_lib.SINGLE_BRD | 10C5 23A4 |
| PP_CODEC_VCPFILT- | PP_CODEC_VCPFILT- - @single_brd_lib.SINGLE_BRD | 10B5 23A4 |
| PP_CODEC_VHP_FLYC | PP_CODEC_VHP_FLYC - @single_brd_lib.SINGLE_BRD | 10C5 23D2 |
| PP_CODEC_VHP_FLYN | PP_CODEC_VHP_FLYN - @single_brd_lib.SINGLE_BRD | 10C5 23D2 |
| PP_CODEC_VHP_FLYP | PP_CODEC_VHP_FLYP - @single_brd_lib.SINGLE_BRD | 10C5 23D2 |
| PP_CUMULUS_VDDANA | PP_CUMULUS_VDDANA - @single_brd_lib.SINGLE_BRD | 18C7 23D2 |
| PP_CUMULUS_VDDCORE | PP_CUMULUS_VDDCORE - @single_brd_lib.SINGLE_BRD | 18C7 23D2 |
| PP_E75_TO_TRISTAR_ACC1 | PP_E75_TO_TRISTAR_ACC1 - @single_brd_lib.SINGLE_BRD | 16D2 17A1 23D2 |
| PP_E75_TO_TRISTAR_ACC1_CONN | PP_E75_TO_TRISTAR_ACC1_CONN - @single_brd_lib.SINGLE_BRD | 17B4 22C3 22C3 23D2 |
| PP_E75_TO_TRISTAR_ACC2 | PP_E75_TO_TRISTAR_ACC2 - @single_brd_lib.SINGLE_BRD | 16D2 17A1 23D2 |
| PP_E75_TO_TRISTAR_ACC2_CONN | PP_E75_TO_TRISTAR_ACC2_CONN - @single_brd_lib.SINGLE_BRD | 17B4 22C3 23D2 |
| PP_EXTMIC_BIAS | PP_EXTMIC_BIAS - @single_brd_lib.SINGLE_BRD | 10B7 23D2 |
| PP_EXTMIC_BIAS_FILT | PP_EXTMIC_BIAS_FILT - @single_brd_lib.SINGLE_BRD | 10B7 23D2 |
| PP_EXTMIC_BIAS_FILT_IN | PP_EXTMIC_BIAS_FILT_IN - @single_brd_lib.SINGLE_BRD | 10B7 23D2 |
| PP_EXTMIC_BIAS_IN | PP_EXTMIC_BIAS_IN - @single_brd_lib.SINGLE_BRD | 10B7 23D2 |
| PP_L19_VBOOST | PP_L19_VBOOST - @single_brd_lib.SINGLE_BRD | 15D6 23D2 |
| PP_LCM_BL_ANODE | PP_LCM_BL_ANODE - @single_brd_lib.SINGLE_BRD | 14B5 19B2 23D2 |
| PP_LCM_BL_ANODE_CONN | PP_LCM_BL_ANODE_CONN - @single_brd_lib.SINGLE_BRD | 19C5 22A5 23D2 |
| PP_LCM_BL_CAT1 | PP_LCM_BL_CAT1 - @single_brd_lib.SINGLE_BRD | 14B6 19A2 23C2 |
| PP_LCM_BL_CAT1_CONN | PP_LCM_BL_CAT1_CONN - @single_brd_lib.SINGLE_BRD | 19C5 22A5 23C2 |
| PP_LCM_BL_CAT2 | PP_LCM_BL_CAT2 - @single_brd_lib.SINGLE_BRD | 14B6 19A2 23C2 |
| PP_LCM_BL_CAT2_CONN | PP_LCM_BL_CAT2_CONN - @single_brd_lib.SINGLE_BRD | 19C5 22A5 23C2 |
| PP_LDO14_2P65 | PP_LDO14_2P65 - @single_brd_lib.SINGLE_BRD | 17A7 23C2 24D6 |
| | PP_LDO14_2V65 - @single_brd_lib.RADIO_MLB(i616_page 24) | 35B8 36B1 43C8 50C8 51C6 53D3 |
| PP_LED_BOOST_OUT | PP_LED_BOOST_OUT - @single_brd_lib.SINGLE_BRD | 15B5 23C2 |
| PP_LED_DRV_LX | PP_LED_DRV_LX - | 15B5 23C2 |
| | @single_brd_lib.SINGLE_BRD | |
| PP_MIPI0D_VREG | PP_MIPI0D_VREG - @single_brd_lib.SINGLE_BRD | 7D6 23C2 |
| PP_MIPI1D_VREG | PP_MIPI1D_VREG - @single_brd_lib.SINGLE_BRD | 7D6 23B2 |
| PP_PMU_TO_VIBE | PP_PMU_TO_VIBE - @single_brd_lib.SINGLE_BRD | 8C7 12B7 23B2 |
| PP_PMU_TO_VIBE_CONN | PP_PMU_TO_VIBE_CONN - @single_brd_lib.SINGLE_BRD | 8C6 23B2 |
| PP_PMU_VCENTER | PP_PMU_VCENTER - @single_brd_lib.SINGLE_BRD | 12D7 23B2 |
| PP_PMU_VDD_REF | PP_PMU_VDD_REF - @single_brd_lib.SINGLE_BRD | 13C4 23B2 |
| PP_PMU_VDD_RTC | PP_PMU_VDD_RTC - @single_brd_lib.SINGLE_BRD | 13C4 23B2 |
| PP_PMU_VREF | PP_PMU_VREF - @single_brd_lib.SINGLE_BRD | 13C4 23B2 |
| PP_PMU_VSW_CHG | PP_PMU_VSW_CHG - @single_brd_lib.SINGLE_BRD | 12C7 23B2 |
| PP_SAGE_LX | PP_SAGE_LX - @single_brd_lib.SINGLE_BRD | 18B3 23B2 |
| PP_SAGE_LY | PP_SAGE_LY - @single_brd_lib.SINGLE_BRD | 18B3 23B2 |
| PP_SAGE_TO_TOUCH_VCPH | PP_SAGE_TO_TOUCH_VCPH - @single_brd_lib.SINGLE_BRD | 18A8 18D3 23B2 |
| PP_SAGE_TO_TOUCH_VCPL | PP_SAGE_TO_TOUCH_VCPL - @single_brd_lib.SINGLE_BRD | 18A8 18D5 19C7 23B2 |
| PP_SAGE_VBST_OUTH | PP_SAGE_VBST_OUTH - @single_brd_lib.SINGLE_BRD | 18B3 23B2 |
| PP_SAGE_VBST_OUTL | PP_SAGE_VBST_OUTL - @single_brd_lib.SINGLE_BRD | 18B3 23B2 |
| PP_SAGE_VCPL_F | PP_SAGE_VCPL_F - @single_brd_lib.SINGLE_BRD | 18D1 23B2 |
| PP_SPKAMP_FILT | PP_SPKAMP_FILT - @single_brd_lib.SINGLE_BRD | 15C5 23A2 |
| PP_SPKAMP_LDO_FILT | PP_SPKAMP_LDO_FILT - @single_brd_lib.SINGLE_BRD | 15C5 23A2 |
| PP_SPKAMP_SW | PP_SPKAMP_SW - @single_brd_lib.SINGLE_BRD | 15C6 23A2 |
| PP_STRB_DRIVER_TO_LED_COOL | PP_STRB_DRIVER_TO_LED_COOL - @single_brd_lib.SINGLE_BRD | 8B2 15A3 23A2 |
| PP_STRB_DRIVER_TO_LED_WARM | PP_STRB_DRIVER_TO_LED_WARM - @single_brd_lib.SINGLE_BRD | 8D7 15A3 23A2 |
| PP_VCC_MAIN | PP_VCC_MAIN - @single_brd_lib.SINGLE_BRD | 10D7 12A8 12B7 12C8 13C2 14B4 14B8 14D6 21B7 23A2 24D6 |
| | PP_VCC_MAIN_WLAN - @single_brd_lib.RADIO_MLB(i616_page 24) | 35D8 56D6 |
| PP_VCC_MAIN_CODEC | PP_VCC_MAIN_CODEC - @single_brd_lib.SINGLE_BRD | 10D7 23A2 |
| PP_VCC_MAIN_UVLO_SENSE | PP_VCC_MAIN_UVLO_SENSE - @single_brd_lib.SINGLE_BRD | 12C7 16B5 23B5 |
| PP_WLED_LX | PP_WLED_LX - @single_brd_lib.SINGLE_BRD | 14B7 23A2 |
| RADIO_TO_PMU_ADC_LDO6_RUIM_1V8 | RADIO_TO_PMU_ADC_LDO6_RUIM_1V8 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_LDO6_RUIM_1V8 - @single_brd_lib.RADIO_MLB(i616_page 24) | 35A7 35B8 |
| RADIO_TO_PMU_ADC_LVS1 | RADIO_TO_PMU_ADC_LVS1 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_LVS1 - @single_brd_lib.RADIO_MLB(i616_page 24) | 35A7 35A8 |
| RADIO_TO_PMU_ADC_SMPS1_MSMC_1V05 | RADIO_TO_PMU_ADC_SMPS1_MSMC_1V05 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_SMPS1_MSMC_1V05 - @single_brd_lib.RADIO_MLB(i616_page 24) | 35A7 35B8 |
| RADIO_TO_PMU_ADC_SMPS3_MSME_1V8 | RADIO_TO_PMU_ADC_SMPS3_MSME_1V8 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_SMPS3_MSME_1V8 - @single_brd_lib.RADIO_MLB(i616_page 24) | 35A7 35B8 |
| RCAM_TO_LEDDRV_STROBE_EN | RCAM_TO_LEDDRV_STROBE_EN - @single_brd_lib.SINGLE_BRD | 15A6 21A7 |
| RCAM_TO_LEDDRV_STROBE_EN_CONN | RCAM_TO_LEDDRV_STROBE_EN_CONN - @single_brd_lib.SINGLE_BRD | 21B4 |
| RCAM_TO_STROBE_NTC | RCAM_TO_STROBE_NTC - @single_brd_lib.SINGLE_BRD | 8D2 15A3 |
| RCAM_TO_STROBE_NTC_CONN | RCAM_TO_STROBE_NTC_CONN - @single_brd_lib.SINGLE_BRD | 8D3 |
| RCVR_TO_CODEC_RCVR_TEST | RCVR_TO_CODEC_RCVR_TEST - @single_brd_lib.SINGLE_BRD | 9A7 11A7 23B7 |
| RCVR_TO_CODEC_RCVR_TEST_L67 | RCVR_TO_CODEC_RCVR_TEST_L67 - @single_brd_lib.SINGLE_BRD | 9C5 23B7 |
| RESET_1V8_L | RESET_1V8_L - @single_brd_lib.SINGLE_BRD | 2B7 4D8 13B6 14C6 16C2 19B2 22B4 24D6 |
| | RF_RESET_L - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C3 35D8 |
| REVERSE_GATE | REVERSE_GATE - @single_brd_lib.SINGLE_BRD | 17A7 |
| SAGE_TO_CUMULUS_IN<0> | SAGE_TO_CUMULUS_IN<0> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<1> | SAGE_TO_CUMULUS_IN<1> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<2> | SAGE_TO_CUMULUS_IN<2> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<3> | SAGE_TO_CUMULUS_IN<3> - @single_brd_lib.SINGLE_BRD | 18C7 18D1 23C5 |
| SAGE_TO_CUMULUS_IN<4> | SAGE_TO_CUMULUS_IN<4> - @single_brd_lib.SINGLE_BRD | 18C7 18D1 23C5 |
| SAGE_TO_CUMULUS_IN<5> | SAGE_TO_CUMULUS_IN<5> - @single_brd_lib.SINGLE_BRD | 18C7 18D1 23C5 |
| SAGE_TO_CUMULUS_IN<6> | SAGE_TO_CUMULUS_IN<6> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<7> | SAGE_TO_CUMULUS_IN<7> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<8> | SAGE_TO_CUMULUS_IN<8> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<9> | SAGE_TO_CUMULUS_IN<9> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<10> | SAGE_TO_CUMULUS_IN<10> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<11> | SAGE_TO_CUMULUS_IN<11> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<12> | SAGE_TO_CUMULUS_IN<12> - @single_brd_lib.SINGLE_BRD | 18B7 18C1 23C5 |
| SAGE_TO_CUMULUS_IN<13> | SAGE_TO_CUMULUS_IN<13> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_CUMULUS_IN<14> | SAGE_TO_CUMULUS_IN<14> - @single_brd_lib.SINGLE_BRD | 18C1 18C7 23C5 |
| SAGE_TO_TOUCH_VCPH_REF | SAGE_TO_TOUCH_VCPH_REF - @single_brd_lib.SINGLE_BRD | 18A7 18B4 |
| SAGE_TO_TOUCH_VCPL_REF | SAGE_TO_TOUCH_VCPL_REF - @single_brd_lib.SINGLE_BRD | 18A7 18B4 |
| SAGE_TO_TOUCH_VSTM_OUT<0> | SAGE_TO_TOUCH_VSTM_OUT<0> - @single_brd_lib.SINGLE_BRD | 18A7 18A8 18B1 23C8 |
| SAGE_TO_TOUCH_VSTM_OUT<1> | SAGE_TO_TOUCH_VSTM_OUT<1> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23C8 |
| SAGE_TO_TOUCH_VSTM_OUT<2> | SAGE_TO_TOUCH_VSTM_OUT<2> - @single_brd_lib.SINGLE_BRD | 18A8 18B1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<3> | SAGE_TO_TOUCH_VSTM_OUT<3> - @single_brd_lib.SINGLE_BRD | 18A8 18B1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<4> | SAGE_TO_TOUCH_VSTM_OUT<4> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<5> | SAGE_TO_TOUCH_VSTM_OUT<5> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<6> | SAGE_TO_TOUCH_VSTM_OUT<6> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<7> | SAGE_TO_TOUCH_VSTM_OUT<7> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<8> | SAGE_TO_TOUCH_VSTM_OUT<8> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<9> | SAGE_TO_TOUCH_VSTM_OUT<9> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<10> | SAGE_TO_TOUCH_VSTM_OUT<10> - @single_brd_lib.SINGLE_BRD | 18A8 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<11> | SAGE_TO_TOUCH_VSTM_OUT<11> - @single_brd_lib.SINGLE_BRD | 18A7 18B1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<12> | SAGE_TO_TOUCH_VSTM_OUT<12> - @single_brd_lib.SINGLE_BRD | 18A7 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<13> | SAGE_TO_TOUCH_VSTM_OUT<13> - @single_brd_lib.SINGLE_BRD | 18A7 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<14> | SAGE_TO_TOUCH_VSTM_OUT<14> - @single_brd_lib.SINGLE_BRD | 18A7 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<15> | SAGE_TO_TOUCH_VSTM_OUT<15> - @single_brd_lib.SINGLE_BRD | 18A7 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<16> | SAGE_TO_TOUCH_VSTM_OUT<16> - @single_brd_lib.SINGLE_BRD | 18A7 18B1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<17> | SAGE_TO_TOUCH_VSTM_OUT<17> - @single_brd_lib.SINGLE_BRD | 18A7 18B1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<18> | SAGE_TO_TOUCH_VSTM_OUT<18> - @single_brd_lib.SINGLE_BRD | 18A7 18C1 23B8 |
| SAGE_TO_TOUCH_VSTM_OUT<19> | SAGE_TO_TOUCH_VSTM_OUT<19> - @single_brd_lib.SINGLE_BRD | 18A7 18C1 23B8 |
| SAGE_VBIAS | SAGE_VBIAS - @single_brd_lib.SINGLE_BRD | 18B3 23D5 |
| SOCHOT0 | SOCHOT0 - @single_brd_lib.SINGLE_BRD | 3C2 16A2 |
| SPKAMP_IREF | SPKAMP_IREF - @single_brd_lib.SINGLE_BRD | 15C5 |
| SPKAMP_TO_AP_INT_L | SPKAMP_TO_AP_INT_L - @single_brd_lib.SINGLE_BRD | 3D8 15C6 |
| SPKAMP_TO_SPEAKER_OUT_CONN_N | SPKAMP_TO_SPEAKER_OUT_CONN_N - @single_brd_lib.SINGLE_BRD | 15C1 17A7 22A3 23D5 |
| SPKAMP_TO_SPEAKER_OUT_CONN_P | SPKAMP_TO_SPEAKER_OUT_CONN_P - @single_brd_lib.SINGLE_BRD | 15C1 17A7 17C5 22A3 23D5 |
| SPKAMP_TO_SPEAKER_OUT_N | SPKAMP_TO_SPEAKER_OUT_N - @single_brd_lib.SINGLE_BRD | 15C5 23D5 |
| SPKAMP_TO_SPEAKER_OUT_P | SPKAMP_TO_SPEAKER_OUT_P - @single_brd_lib.SINGLE_BRD | 15C5 23D5 |
| THROTTLER_OUT | THROTTLER_OUT - @single_brd_lib.SINGLE_BRD | 16A3 |
| TOUCH_TO_AP_INT_L | TOUCH_TO_AP_INT_L - @single_brd_lib.SINGLE_BRD | 3C8 18B8 |
| TOUCH_TO_AP_SPI1_MISO | TOUCH_TO_AP_SPI1_MISO - @single_brd_lib.SINGLE_BRD | 3B4 18B8 |
| TOUCH_TO_AP_SPI1_MISO_R | TOUCH_TO_AP_SPI1_MISO_R - @single_brd_lib.SINGLE_BRD | 18B7 |
| TOUCH_TO_SAGE_SENSE_IN<0> | TOUCH_TO_SAGE_SENSE_IN<0> - @single_brd_lib.SINGLE_BRD | 18A8 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<1> | TOUCH_TO_SAGE_SENSE_IN<1> - @single_brd_lib.SINGLE_BRD | 18A8 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<2> | TOUCH_TO_SAGE_SENSE_IN<2> - @single_brd_lib.SINGLE_BRD | 18A8 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<3> | TOUCH_TO_SAGE_SENSE_IN<3> - @single_brd_lib.SINGLE_BRD | 18A8 18D3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<4> | TOUCH_TO_SAGE_SENSE_IN<4> - @single_brd_lib.SINGLE_BRD | 18A8 18D3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<5> | TOUCH_TO_SAGE_SENSE_IN<5> - @single_brd_lib.SINGLE_BRD | 18A8 18D3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<6> | TOUCH_TO_SAGE_SENSE_IN<6> - @single_brd_lib.SINGLE_BRD | 18A7 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<7> | TOUCH_TO_SAGE_SENSE_IN<7> - @single_brd_lib.SINGLE_BRD | 18A7 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<8> | TOUCH_TO_SAGE_SENSE_IN<8> - @single_brd_lib.SINGLE_BRD | 18A7 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<9> | TOUCH_TO_SAGE_SENSE_IN<9> - @single_brd_lib.SINGLE_BRD | 18A7 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<10> | TOUCH_TO_SAGE_SENSE_IN<10> - @single_brd_lib.SINGLE_BRD | 18A8 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<11> | TOUCH_TO_SAGE_SENSE_IN<11> - @single_brd_lib.SINGLE_BRD | 18A8 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<12> | TOUCH_TO_SAGE_SENSE_IN<12> - @single_brd_lib.SINGLE_BRD | 18A7 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<13> | TOUCH_TO_SAGE_SENSE_IN<13> - @single_brd_lib.SINGLE_BRD | 18A7 18C3 23C8 |
| TOUCH_TO_SAGE_SENSE_IN<14> | TOUCH_TO_SAGE_SENSE_IN<14> - @single_brd_lib.SINGLE_BRD | 18A7 18C3 23C8 |
| TOUCH_TO_SAGE_VCM_IN | TOUCH_TO_SAGE_VCM_IN - @single_brd_lib.SINGLE_BRD | 18A7 18B1 |
| TRISTAR_BI_AP_JTAG_SWDIO | TR

| | | |
|---|---|---|
| U12_GPIO_3 | U12_GPIO_3 - @single_brd_lib.SINGLE_BRD | 18B6 |
| U160_IN_NEG | U160_IN_NEG - @single_brd_lib.SINGLE_BRD | 16A4 |
| U160_IN_POS | U160_IN_POS - @single_brd_lib.SINGLE_BRD | 16A4 |
| U160_REF | U160_REF - @single_brd_lib.SINGLE_BRD | 16A3 16A5 |
| USB_CONN_SNUB | USB_CONN_SNUB - @single_brd_lib.SINGLE_BRD | 17A6 |
| USB_REXT | USB_REXT - @single_brd_lib.SINGLE_BRD | 2B4 |
| USB_VBUS_DETECT | USB_VBUS_DETECT - @single_brd_lib.SINGLE_BRD | 2B3 12D8 23A7 |
| WLAN_TO_AP_HSIC2_RDY | WLAN_TO_AP_HSIC2_RDY - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | WLAN_HSIC3_DEVICE_RDY - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C6 35C8 56B3 |
| WLAN_TO_AP_HSIC2_REMOTE_WAKE | WLAN_TO_AP_HSIC2_REMOTE_WAKE - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | WLAN_HSIC3_RESUME - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C6 35D8 56B3 |
| WLAN_TO_AP_UART3_RXD | WLAN_TO_AP_UART3_RXD - @single_brd_lib.SINGLE_BRD | 3C5 24C6 |
| | WLAN_UART_TXD - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C8 56B3 |
| WLAN_TO_PMU_HOST_WAKE | WLAN_TO_PMU_HOST_WAKE - @single_brd_lib.SINGLE_BRD | 13B4 24C6 |
| | HOST_WAKE_WLAN - @single_brd_lib.RADIO_MLB(i616_page 24) | 35C8 56B3 |

Base nets and synonyms for single_brd_lib.RADIO_MLB(@single_brd_lib.single_brd(sch_1):page24_i616@radio_mlb_lib.radio_mlb(sch_1))

| Base Signal | Synonyms | Location([Zone][dir]) |
|---|---|---|
| 2G_FEM_S0 | 2G_FEM_S0 - @single_brd_lib.RADIO_MLB | 39C2 50C3 |
| 2G_FEM_S1 | 2G_FEM_S1 - @single_brd_lib.RADIO_MLB | 35C1 39C2 50C3 |
| 2G_FEM_S2 | 2G_FEM_S2 - @single_brd_lib.RADIO_MLB | 39C2 43C8 50C3 |
| 2G_FEM_S3 | 2G_FEM_S3 - @single_brd_lib.RADIO_MLB | 39C2 43C8 50C3 |
| 2G_FEM_S4 | 2G_FEM_S4 - @single_brd_lib.RADIO_MLB | 35C3 39C2 50C3 |
| 2G_FEM_S5 | 2G_FEM_S5 - @single_brd_lib.RADIO_MLB | 39C2 50C3 |
| 2G_FEM_S6 | 2G_FEM_S6 - @single_brd_lib.RADIO_MLB | 39C2 43C8 50C3 |
| 19P2M_CLK_EN | 19P2M_CLK_EN - @single_brd_lib.RADIO_MLB | 37B2 38A5 |
| 19P2M_MDM | 19P2M_MDM - @single_brd_lib.RADIO_MLB | 35C6 37B2 38A5 |
| 19P2M_WTR | 19P2M_WTR - @single_brd_lib.RADIO_MLB | 37B2 40C5 |
| 19P2M_WTR_IN | 19P2M_WTR_IN - @single_brd_lib.RADIO_MLB | 40C4 |
| 19P2M_XTAL_IN | 19P2M_XTAL_IN - @single_brd_lib.RADIO_MLB | 37B4 |
| 19P2M_XTAL_OUT | 19P2M_XTAL_OUT - @single_brd_lib.RADIO_MLB | 37B4 |
| 50_2G_HB_PA_IN | 50_2G_HB_PA_IN - @single_brd_lib.RADIO_MLB | 50C6 |
| 50_2G_LB_PA_IN | 50_2G_LB_PA_IN - @single_brd_lib.RADIO_MLB | 50C6 |
| 50_B1_B4_ANT | 50_B1_B4_ANT - @single_brd_lib.RADIO_MLB | 44C2 50B7 |
| 50_B1_B4_DPLX_ANT | 50_B1_B4_DPLX_ANT - @single_brd_lib.RADIO_MLB | 44C3 |
| 50_B1_TX_PAD_IN | 50_B1_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 44C6 |
| 50_B1_TX_SAW_IN | 50_B1_TX_SAW_IN - @single_brd_lib.RADIO_MLB | 42D4 43C8 |
| 50_B1_TX_SAW_OUT | 50_B1_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C6 44C7 |
| 50_B2_ANT | 50_B2_ANT - @single_brd_lib.RADIO_MLB | 45B2 50B7 |
| 50_B2_B25_TX_SAW_IN | 50_B2_B25_TX_SAW_IN - @single_brd_lib.RADIO_MLB | 42C4 43C8 |
| 50_B2_DPLX_ANT | 50_B2_DPLX_ANT - @single_brd_lib.RADIO_MLB | 45B3 |
| 50_B2_DUPLX_RX | 50_B2_DUPLX_RX - @single_brd_lib.RADIO_MLB | 42B8 45B5 |
| 50_B2_RX_BALUN | 50_B2_RX_BALUN - @single_brd_lib.RADIO_MLB | 42B7 |
| 50_B2_TX_PAD_IN | 50_B2_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 45C6 |
| 50_B2_TX_SAW_OUT | 50_B2_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C6 45B7 |
| 50_B3_ANT | 50_B3_ANT - @single_brd_lib.RADIO_MLB | 45C2 50C4 |
| 50_B3_B4_TX_SAW_IN | 50_B3_B4_TX_SAW_IN - @single_brd_lib.RADIO_MLB | 42D4 43C8 |
| 50_B3_DPLX_ANT | 50_B3_DPLX_ANT - @single_brd_lib.RADIO_MLB | 45C3 |
| 50_B3_DUPLX_RX | 50_B3_DUPLX_RX - @single_brd_lib.RADIO_MLB | 42B8 45B5 |
| 50_B3_RX_BALUN | 50_B3_RX_BALUN - @single_brd_lib.RADIO_MLB | 42A7 |
| 50_B3_TX_PAD_IN | 50_B3_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 45C6 |
| 50_B3_TX_SAW_OUT | 50_B3_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C6 45C7 |
| 50_B4_TX_PAD_IN | 50_B4_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 44C6 |
| 50_B4_TX_SAW_OUT | 50_B4_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C6 44B7 |
| 50_B5_ANT | 50_B5_ANT - @single_brd_lib.RADIO_MLB | 47C2 50B7 |
| 50_B5_DPLX_ANT | 50_B5_DPLX_ANT - @single_brd_lib.RADIO_MLB | 47C3 |
| 50_B5_TX_PAD_IN | 50_B5_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 47C6 |
| 50_B5_TX_SAW_OUT | 50_B5_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C2 47C7 |
| 50_B8_ANT | 50_B8_ANT - @single_brd_lib.RADIO_MLB | 47B2 50B7 |
| 50_B8_DPLX_ANT | 50_B8_DPLX_ANT - @single_brd_lib.RADIO_MLB | 47B3 |
| 50_B8_TX_PAD_IN | 50_B8_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 47C6 |
| 50_B8_TX_SAW_OUT | 50_B8_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C2 47B7 |
| 50_B13_ANT | 50_B13_ANT - @single_brd_lib.RADIO_MLB | 48C1 50B7 |
| 50_B13_DPLX_ANT | 50_B13_DPLX_ANT - @single_brd_lib.RADIO_MLB | 48C3 |
| 50_B13_LPF_IN | 50_B13_LPF_IN - @single_brd_lib.RADIO_MLB | 48C3 |
| 50_B13_TX_PAD_IN | 50_B13_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 48C6 |
| 50_B13_TX_SAW_OUT | 50_B13_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C2 48C7 |
| 50_B17_ANT | 50_B17_ANT - @single_brd_lib.RADIO_MLB | 48B2 50B7 |
| 50_B17_DPLX_ANT | 50_B17_DPLX_ANT - @single_brd_lib.RADIO_MLB | 48B3 |
| 50_B17_TX_PAD_IN | 50_B17_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 48C6 |
| 50_B17_TX_SAW_OUT | 50_B17_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C2 48B7 |
| 50_B20_ANT | 50_B20_ANT - @single_brd_lib.RADIO_MLB | 46C2 50B7 |
| 50_B20_DPLX_ANT | 50_B20_DPLX_ANT - @single_brd_lib.RADIO_MLB | 46C3 |
| 50_B20_TX_PAD_IN | 50_B20_TX_PAD_IN - @single_brd_lib.RADIO_MLB | 46C6 |
| 50_B20_TX_SAW_OUT | 50_B20_TX_SAW_OUT - @single_brd_lib.RADIO_MLB | 43C2 46C7 |
| 50_COUPLER_TERM | 50_COUPLER_TERM - @single_brd_lib.RADIO_MLB | 50B2 |
| 50_DCS_RX | 50_DCS_RX - @single_brd_lib.RADIO_MLB | 43B5 50B7 |
| 50_DCS_RX_MATCH | 50_DCS_RX_MATCH - @single_brd_lib.RADIO_MLB | 43B5 |
| 50_DIVERSITY_SWITCH_MATCH | 50_DIVERSITY_SWITCH_MATCH - @single_brd_lib.RADIO_MLB | 51C6 |
| 50_DRX_ANT | 50_DRX_ANT - @single_brd_lib.RADIO_MLB | 50C4 51C7 |
| 50_GPS_ANT | 50_GPS_ANT - @single_brd_lib.RADIO_MLB | 52B7 |
| 50_GPS_ANT_FEED | 50_GPS_ANT_FEED - @single_brd_lib.RADIO_MLB | 52B5 |
| 50_GPS_LNA_MATCH | 50_GPS_LNA_MATCH - @single_brd_lib.RADIO_MLB | 52B6 |
| 50_GPS_LNA_OUT | 50_GPS_LNA_OUT - @single_brd_lib.RADIO_MLB | 51C5 52B3 |
| 50_HSIC_BB_DATA | 50_AP_BI_BB_HSIC1_DATA - @single_brd_lib.SINGLE_BRD | 2B6 24B6 |
| | 50_HSIC_BB_DATA - @single_brd_lib.RADIO_MLB | 35B1 35B6 35C8 38B3 |
| 50_HSIC_BB_STROBE | 50_AP_BI_BB_HSIC1_STB - @single_brd_lib.SINGLE_BRD | 2B6 24B6 |
| | 50_HSIC_BB_STROBE - @single_brd_lib.RADIO_MLB | 35B1 35B6 35C8 38B3 |
| 50_HSIC_CAL | 50_HSIC_CAL - @single_brd_lib.RADIO_MLB | 38B3 |
| 50_HSIC_WLAN_DATA | 50_AP_BI_WLAN_HSIC2_DATA - @single_brd_lib.SINGLE_BRD | 2B6 24B6 |
| | 50_HSIC_WLAN_DATA - @single_brd_lib.RADIO_MLB | 35B6 35C8 56B6 |
| 50_HSIC_WLAN_STROBE | 50_AP_BI_WLAN_HSIC2_STB - @single_brd_lib.SINGLE_BRD | 2B6 24B6 |
| | 50_HSIC_WLAN_STROBE - @single_brd_lib.RADIO_MLB | 35B6 35C8 56B6 |
| 50_LAT_5G_NOTCH | 50_LAT_5G_NOTCH - @single_brd_lib.RADIO_MLB | 50B3 |
| 50_LAT_ASM | 50_LAT_ASM - @single_brd_lib.RADIO_MLB | 50B4 |
| 50_LAT_COUPLER_IN | 50_LAT_COUPLER_IN - @single_brd_lib.RADIO_MLB | 50B1 50B3 |
| 50_LAT_LPF | 50_LAT_LPF - @single_brd_lib.RADIO_MLB | 50C3 |
| 50_LAT_TEST | 50_LAT_TEST - @single_brd_lib.RADIO_MLB | 50C1 53B7 |
| 50_NTCH_FILT_OUT | 50_NTCH_FILT_OUT - @single_brd_lib.RADIO_MLB | 53D7 |
| 50_PCS_RX | 50_PCS_RX - @single_brd_lib.RADIO_MLB | 43B5 50B7 |
| 50_PCS_RX_MATCH | 50_PCS_RX_MATCH - @single_brd_lib.RADIO_MLB | 43B5 |
| 50_PDET_IN | 50_PDET_IN - @single_brd_lib.RADIO_MLB | 40C3 |
| 50_PDET_PAD_IN | 50_PDET_PAD_IN - @single_brd_lib.RADIO_MLB | 40C1 50B3 |
| 50_PDET_PAD_OUT | 50_PDET_PAD_OUT - @single_brd_lib.RADIO_MLB | 40C2 |
| 50_UAT_ASM | 50_UAT_ASM - @single_brd_lib.RADIO_MLB | 50B4 |
| 50_UAT_COAX_DOWN | 50_UAT_COAX_DOWN - @single_brd_lib.RADIO_MLB | 53C4 |
| 50_UAT_LPF | 50_UAT_LPF - @single_brd_lib.RADIO_MLB | 50B3 |
| 50_UAT_TEST | 50_UAT_TEST - @single_brd_lib.RADIO_MLB | 50B1 53C2 |
| 50_UPPER_ANT_FEED | 50_UPPER_ANT_FEED - @single_brd_lib.RADIO_MLB | 53D8 |
| 50_UPPER_MCH_1 | 50_UPPER_MCH_1 - @single_brd_lib.RADIO_MLB | 53D6 |
| 50_WLAN_A | 50_WLAN_A - @single_brd_lib.RADIO_MLB | 56C1 56D2 |
| 50_WLAN_ANT_FD | 50_WLAN_ANT_FD - @single_brd_lib.RADIO_MLB | 56D3 |
| 50_WLAN_ANT_MATCH | 50_WLAN_ANT_MATCH - @single_brd_lib.RADIO_MLB | 56D2 |
| 50_WLAN_ANT_MATCH_T | 50_WLAN_ANT_MATCH_T - @single_brd_lib.RADIO_MLB | 56D2 |
| 50_WLAN_A_ANT | 50_WLAN_A_ANT - @single_brd_lib.RADIO_MLB | 56C4 |
| 50_WLAN_G | 50_WLAN_G - @single_brd_lib.RADIO_MLB | 56C1 56D2 |
| 50_WLAN_G_ANT | 50_WLAN_G_ANT - @single_brd_lib.RADIO_MLB | 56C4 |
| 50_XCVR_2G_HB_TX | 50_XCVR_2G_HB_TX - @single_brd_lib.RADIO_MLB | 40D2 50B8 |
| 50_XCVR_2G_HB_TX_MATCH | 50_XCVR_2G_HB_TX_MATCH - @single_brd_lib.RADIO_MLB | 50B8 |
| 50_XCVR_2G_LB_TX | 50_XCVR_2G_LB_TX - @single_brd_lib.RADIO_MLB | 40D2 50C8 |
| 50_XCVR_2G_LB_TX_MATCH | 50_XCVR_2G_LB_TX_MATCH - @single_brd_lib.RADIO_MLB | 50C8 |
| 50_XCVR_B1_TX | 50_XCVR_B1_TX - @single_brd_lib.RADIO_MLB | 40D2 42D6 |
| 50_XCVR_B2_B25_TX | 50_XCVR_B2_B25_TX - @single_brd_lib.RADIO_MLB | 40D2 42C6 |
| 50_XCVR_B3_B4_TX | 50_XCVR_B3_B4_TX - @single_brd_lib.RADIO_MLB | 40D2 42D6 |
| 50_XCVR_B5_B18_TX | 50_XCVR_B5_B18_TX - @single_brd_lib.RADIO_MLB | 40D2 43C4 |
| 50_XCVR_B8_TX | 50_XCVR_B8_TX - @single_brd_lib.RADIO_MLB | 40D2 43C4 |
| 50_XCVR_B13_B17_B20_TX | 50_XCVR_B13_B17_B20_TX - @single_brd_lib.RADIO_MLB | 40D2 43C4 |
| 90_BB_USB_D_N | 90_TRISTAR_BI_BB_USB_N - @single_brd_lib.SINGLE_BRD | 16C4 24C6 |
| | 90_BB_USB_D_N - @single_brd_lib.RADIO_MLB | 35C3 35C8 38A5 |
| 90_BB_USB_D_P | 90_TRISTAR_BI_BB_USB_P - @single_brd_lib.SINGLE_BRD | 16D4 24C6 |
| | 90_BB_USB_D_P - @single_brd_lib.RADIO_MLB | 35C3 35C8 38A5 |
| 100_B1_B4_DUPLX_RX_N | 100_B1_B4_DUPLX_RX_N - @single_brd_lib.RADIO_MLB | 42B4 44B5 |
| 100_B1_B4_DUPLX_RX_P | 100_B1_B4_DUPLX_RX_P - @single_brd_lib.RADIO_MLB | 42C4 44B5 |
| 100_B5_B18_DUPLX_RX_N | 100_B5_B18_DUPLX_RX_N - @single_brd_lib.RADIO_MLB | 42B4 47B5 |
| 100_B5_B18_DUPLX_RX_P | 100_B5_B18_DUPLX_RX_P - @single_brd_lib.RADIO_MLB | 42B4 47B5 |
| 100_B8_DUPLX_RX_N | 100_B8_DUPLX_RX_N - @single_brd_lib.RADIO_MLB | 42A4 47B5 |
| 100_B8_DUPLX_RX_P | 100_B8_DUPLX_RX_P - @single_brd_lib.RADIO_MLB | 42A4 47B5 |
| 100_B13_DUPLX_RX_N | 100_B13_DUPLX_RX_N - @single_brd_lib.RADIO_MLB | 43C8 48B5 |
| 100_B13_DUPLX_RX_P | 100_B13_DUPLX_RX_P - @single_brd_lib.RADIO_MLB | 43C8 48B5 |
| 100_B17_DUPLX_RX_N | 100_B17_DUPLX_RX_N - @single_brd_lib.RADIO_MLB | 43C8 48B5 |
| 100_B17_DUPLX_RX_P | 100_B17_DUPLX_RX_P - @single_brd_lib.RADIO_MLB | 43C8 48B5 |
| 100_B20_DUPLX_RX_N | 100_B20_DUPLX_RX_N - @single_brd_lib.RADIO_MLB | 43B8 46B5 |
| 100_B20_DUPLX_RX_P | 100_B20_DUPLX_RX_P - @single_brd_lib.RADIO_MLB | 43B8 46B5 |
| 100_DCS_PCS_RX_FILTER_N | 100_DCS_PCS_RX_FILTER_N - @single_brd_lib.RADIO_MLB | 43B3 |
| 100_DCS_PCS_RX_FILTER_P | 100_DCS_PCS_RX_FILTER_P - @single_brd_lib.RADIO_MLB | 43B3 |
| 100_XCVR_B1_B4_DRX_N | 100_XCVR_B1_B4_DRX_N - @single_brd_lib.RADIO_MLB | 40C8 51C3 |
| 100_XCVR_B1_B4_DRX_P | 100_XCVR_B1_B4_DRX_P - @single_brd_lib.RADIO_MLB | 40C8 51C3 |
| 100_XCVR_B1_B4_PRX_N | 100_XCVR_B1_B4_PRX_N - @single_brd_lib.RADIO_MLB | 40C8 42C2 |
| 100_XCVR_B1_B4_PRX_P | 100_XCVR_B1_B4_PRX_P - @single_brd_lib.RADIO_MLB | 40C8 42B2 |
| 100_XCVR_B2_B25_B3_DRX_N | 100_XCVR_B2_B25_B3_DRX_N - @single_brd_lib.RADIO_MLB | 40C8 51B3 |
| 100_XCVR_B2_B25_B3_DRX_P | 100_XCVR_B2_B25_B3_DRX_P - @single_brd_lib.RADIO_MLB | 40C8 51B3 |
| 100_XCVR_B2_B25_PRX_N | 100_XCVR_B2_B25_PRX_N - @single_brd_lib.RADIO_MLB | 40C8 42B6 |
| 100_XCVR_B2_B25_PRX_P | 100_XCVR_B2_B25_PRX_P - @single_brd_lib.RADIO_MLB | 40D8 42B6 |
| 100_XCVR_B3_PRX_N | 100_XCVR_B3_PRX_N - @single_brd_lib.RADIO_MLB | 40C8 42B6 |
| 100_XCVR_B3_PRX_P | 100_XCVR_B3_PRX_P - @single_brd_lib.RADIO_MLB | 40C8 42A6 |
| 100_XCVR_B5_B18_B13_B17_DRX_N | 100_XCVR_B5_B18_B13_B17_DRX_N - @single_brd_lib.RADIO_MLB | 40C8 51B3 |
| 100_XCVR_B5_B18_B13_B17_DRX_P | 100_XCVR_B5_B18_B13_B17_DRX_P - @single_brd_lib.RADIO_MLB | 40C8 51B3 |
| 100_XCVR_B5_B18_PRX_N | 100_XCVR_B5_B18_PRX_N - @single_brd_lib.RADIO_MLB | 40D8 42B2 |
| 100_XCVR_B5_B18_PRX_P | 100_XCVR_B5_B18_PRX_P - @single_brd_lib.RADIO_MLB | 40D8 42B2 |
| 100_XCVR_B8_B20_DRX_N | 100_XCVR_B8_B20_DRX_N - @single_brd_lib.RADIO_MLB | 40C8 51B3 |
| 100_XCVR_B8_B20_DRX_P | 100_XCVR_B8_B20_DRX_P - @single_brd_lib.RADIO_MLB | 40C8 51B3 |
| 100_XCVR_B8_PRX_N | 100_XCVR_B8_PRX_N - @single_brd_lib.RADIO_MLB | 40D8 42A2 |
| 100_XCVR_B8_PRX_P | 100_XCVR_B8_PRX_P - @single_brd_lib.RADIO_MLB | 40D8 42A2 |
| 100_XCVR_B13_B17_B20_PRX_N | 100_XCVR_B13_B17_B20_PRX_N - @single_brd_lib.RADIO_MLB | 40D8 43C6 |
| 100_XCVR_B13_B17_B20_PRX_P | 100_XCVR_B13_B17_B20_PRX_P - @single_brd_lib.RADIO_MLB | 40D8 43C6 |
| 100_XCVR_DCS_PCS_PRX_N | 100_XCVR_DCS_PCS_PRX_N - @single_brd_lib.RADIO_MLB | 40C8 43B1 |
| 100_XCVR_DCS_PCS_PRX_P | 100_XCVR_DCS_PCS_PRX_P - @single_brd_lib.RADIO_MLB | 40C8 43B1 |
| 100_XCVR_GPS_RX_N | 100_XCVR_GPS_RX_N - @single_brd_lib.RADIO_MLB | 40B8 51C3 |
| 100_XCVR_GPS_RX_P | 100_XCVR_GPS_RX_P - @single_brd_lib.RADIO_MLB | 40B8 51C3 |
| ADC_LDO6_RUIM_1V8 | RADIO_TO_PMU_ADC_LDO6_RUIM_1V8 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_LDO6_RUIM_1V8 - @single_brd_lib.RADIO_MLB | 35A7 35B8 |
| ADC_LVS1 | RADIO_TO_PMU_ADC_LVS1 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_LVS1 - @single_brd_lib.RADIO_MLB | 35A7 35A8 |
| ADC_SMPS1_MSMC_1V05 | RADIO_TO_PMU_ADC_SMPS1_MSMC_1V05 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_SMPS1_MSMC_1V05 - @single_brd_lib.RADIO_MLB | 35A7 35B8 |
| ADC_SMPS3_MSME_1V8 | RADIO_TO_PMU_ADC_SMPS3_MSME_1V8 - @single_brd_lib.SINGLE_BRD | 13C6 24C6 |
| | ADC_SMPS3_MSME_1V8 - @single_brd_lib.RADIO_MLB | 35A7 35B8 |
| AP_HSIC1_RDY | AP_TO_BB_HSIC1_RDY - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | AP_HSIC1_RDY - @single_brd_lib.RADIO_MLB | 35C1 35C8 39B2 |
| AP_HSIC3_RDY | AP_TO_WLAN_HSIC2_RDY - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | AP_HSIC3_RDY - @single_brd_lib.RADIO_MLB | 35C6 35C8 56B3 |
| AP_WAKE_MODEM | AP_TO_BB_WAKE_MODEM - @single_brd_lib.SINGLE_BRD | 3C8 24B6 |
| | AP_WAKE_MODEM - @single_brd_lib.RADIO_MLB | 35D8 39B4 |
| BB_ERROR_FLAG | BB_ERROR_FLAG - @single_brd_lib.RADIO_MLB | 35D6 39B2 |
| BB_HSIC1_REMOTE_WAKE | BB_TO_AP_HSIC1_REMOTE_WAKE - @single_brd_lib.SINGLE_BRD | 3C2 24B6 |
| | BB_HSIC1_REMOTE_WAKE - @single_brd_lib.RADIO_MLB | 35C8 39B2 |
| BB_I2S_CLK | 45_AP_TO_BB_I2S1_BCLK - @single_brd_lib.SINGLE_BRD | 3C4 24C6 |
| | BB_I2S_CLK - @single_brd_lib.RADIO_MLB | 35B5 35C8 39B4 |
| BB_I2S_RXD | AP_TO_BB_I2S1_DOUT - @single_brd_lib.SINGLE_BRD | 3C4 24C6 |
| | BB_I2S_RXD - @single_brd_lib.RADIO_MLB | 35B5 35C8 39B4 |
| BB_I2S_TXD | BB_TO_AP_I2S1_DIN - @single_brd_lib.SINGLE_BRD | 3C4 24C6 |
| | BB_I2S_TXD - @single_brd_lib.RADIO_MLB | 35B5 35C8 39B4 |
| BB_I2S_WS | AP_TO_BB_I2S1_LRCLK - @single_brd_lib.SINGLE_BRD | 3C4 24C6 |
| | BB_I2S_WS - @single_brd_lib.RADIO_MLB | 35B5 35C8 39B4 |
| BB_IPC_GPIO | BB_TO_AP_IPC_GPIO - @single_brd_lib.SINGLE_BRD | 7C8 24A6 |
| | BB_IPC_GPIO - @single_brd_lib.RADIO_MLB | 35A8 39B2 |
| BB_JTAG_RTCLK | BB_JTAG_RTCLK - @single_brd_lib.RADIO_MLB | 35C3 38B3 |
| BB_JTAG_TCK | AP_TO_BB_JTAG_TCK - @single_brd_lib.SINGLE_BRD | 3B7 24D3 |
| | BB_JTAG_TCK - @single_brd_lib.RADIO_MLB | 35B8 35C3 38B5 |
| BB_JTAG_TDI | AP_TO_BB_JTAG_TDI - @single_brd_lib.SINGLE_BRD | 3C7 24D3 |
| | BB_JTAG_TDI - @single_brd_lib.RADIO_MLB | 35B8 35C3 38B5 |
| BB_JTAG_TDO | BB_TO_AP_JTAG_TDO - @single_brd_lib.SINGLE_BRD | 3C7 24D3 |
| | BB_JTAG_TDO - @single_brd_lib.RADIO_MLB | 35B8 35C3 38B3 |
| BB_JTAG_TMS | AP_TO_BB_JTAG_TMS - @single_brd_lib.SINGLE_BRD | 3B7 24D3 |
| | BB_JTAG_TMS - @single_brd_lib.RADIO_MLB | 35B8 35C3 38B5 |
| BB_JTAG_TRST_L | AP_TO_BB_JTAG_TRST_L - @single_brd_lib.SINGLE_BRD | 3D5 24D3 |
| | BB_JTAG_TRST_L - @single_brd_lib.RADIO_MLB | 35B8 35C3 38B5 |
| BB_PDM | BB_PDM - @single_brd_lib.RADIO_MLB | 39B2 49C7 |
| BB_PDM_FILT | BB_PDM_FILT - @single_brd_lib.RADIO_MLB | 49C6 |
| BB_RST_L | AP_TO_BB_RST_L - @single_brd_lib.SINGLE_BRD | 3C8 24D6 |
| | BB_RST_L - @single_brd_lib.RADIO_MLB | 35C1 35D8 37C8 |
| BB_SPI_TO_PAC_CLK | BB_TO_ANTENNA_PAC_SPI_SCLK - @single_brd_lib.SINGLE_BRD | 24A6 |
| | BB_SPI_TO_PAC_CLK - @single_brd_lib.RADIO_MLB | 35B8 39C4 53C7 |
| BB_SPI_TO_PAC_CLK_FILT | BB_SPI_TO_PAC_CLK_FILT - @single_brd_lib.RADIO_MLB | 53C6 |
| BB_SPI_TO_PAC_CS | BB_TO_ANTENNA_PAC_SPI_CS - @single_brd_lib.SINGLE_BRD | 24A6 |
| | BB_SPI_TO_PAC_CS - @single_brd_lib.RADIO_MLB | 35B8 39C4 53C7 |
| BB_SPI_TO_PAC_CS_FILT | BB_SPI_TO_PAC_CS_FILT - @single_brd_lib.RADIO_MLB | 53C6 |
| BB_SPI_TO_PAC_DATA_MOSI | BB_TO_ANTENNA_PAC_SPI_MOSI - @single_brd_lib.SINGLE_BRD | 24A6 |
| | BB_SPI_TO_PAC_DATA_MOSI - @single_brd_lib.RADIO_MLB | 35B8 39C4 53C7 |
| BB_SPI_TO_PAC_DATA_MOSI_FILT | BB_SPI_TO_PAC_DATA_MOSI_FILT - @single_brd_lib.RADIO_MLB | 53C6 |
| BB_UART_CTS_L | AP_TO_BB_UART4_RTS_L - @single_brd_lib.SINGLE_BRD | 3C5 24C6 |
| | BB_UART_CTS_L - @single_brd_lib.RADIO_MLB | 35C3 35C8 39C4 |
| BB_UART_RTS_L | BB_TO_AP_UART4_CTS_L - @single_brd_lib.SINGLE_BRD | 3C5 24C6 |
| | BB_UART_RTS_L - @single_brd_lib.RADIO_MLB | 35C3 35C8 39C4 |
| BB_UART_RXD | AP_TO_BB_UART4_TXD - @single_brd_lib.SINGLE_BRD | 3C5 16C4 24C6 |
| | BB_UART_RXD - @single_brd_lib.RADIO_MLB | 35C3 35C8 39C4 |
| BB_UART_TXD | BB_TO_AP_UART4_RXD - @single_brd_lib.SINGLE_BRD | 3C5 16C4 24C6 |
| | BB_UART_TXD - @single_brd_lib.RADIO_MLB | 35C3 35C8 39C4 |
| BB_USB_VBUS | PMU_TO_BB_VBUS_DET - @single_brd_lib.SINGLE_BRD | 13B4 24C6 |
| | BB_USB_VBUS - @single_brd_lib.RADIO_MLB | 35C3 35C8 38A5 |
| BOARD_ID | BOARD_ID - @single_brd_lib.RADIO_MLB | 37D4 |
| BOOT_CONFIG_6 | BOOT_CONFIG_6 - @single_brd_lib.RADIO_MLB | 35C2 |
| BT_PCM_CLK | 45_AP_TO_BT_I2S3_BCLK - @single_brd_lib.SINGLE_BRD | 3C4 24B6 |
| | BT_PCM_CLK - @single_brd_lib.RADIO_MLB | 35B8 56B3 |
| BT_PCM_IN | AP_TO_BT_I2S3_DOUT - @single_brd_lib.SINGLE_BRD | 3C4 24B6 |
| | BT_PCM_IN - @single_brd_lib.RADIO_MLB | 35B8 56B3 |
| BT_PCM_OUT | BT_TO_AP_I2S3_DIN - @single_brd_lib.SINGLE_BRD | 3C4 24B6 |
| | BT_PCM_OUT - @single_brd_lib.RADIO_MLB | 35B8 56B3 |
| BT_PCM_SYNC | AP_TO_BT_I2S3_LRCLK - @single_brd_lib.SINGLE_BRD | 3C4 24B6 |
| | BT_PCM_SYNC - @single_brd_lib.RADIO_MLB | 35B8 56B3 |
| BT_REG_ON | PMU_TO_BT_REG_ON - @single_brd_lib.SINGLE_BRD | 13B3 24B6 |
| | BT_REG_ON - @single_brd_lib.RADIO_MLB | 35B8 35C1 56C6 |
| BT_UART_CTS_L | AP_TO_BT_UART1_RTS_L - @single_brd_lib.SINGLE_BRD | 3C5 24B6 |
| | BT_UART_CTS_L - @single_brd_lib.RADIO_MLB | 35B8 56B3 |
| BT_UART_RTS_L | BT_TO_AP_UART1_CTS_L - @single_brd_lib.SINGLE_BRD | 3C5 24B6 |
| | BT_UART_RTS_L - @single_brd_lib.RADIO_MLB | 35B8 56C3 |
| BT_UART_RXD | AP_TO_BT_UART1_TXD - | 3C5 24B6 |

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|---|---|---|
| | @single_brd_lib.SINGLE_BRD | |
| | BT_UART_RXD - | 35B6 35B8 56C3 |
| | @single_brd_lib.RADIO_MLB | |
| BT_UART_TXD | BT_TO_AP_UART1_RXD - | 3C5 24B6 |
| | @single_brd_lib.SINGLE_BRD | |
| | BT_UART_TXD - | 35B6 35B8 56C3 |
| | @single_brd_lib.RADIO_MLB | |
| BT_WAKE | AP_TO_BT_WAKE - | 3C8 24B6 |
| | @single_brd_lib.SINGLE_BRD | |
| | BT_WAKE - @single_brd_lib.RADIO_MLB | 35B8 35D1 56C2 |
| CLK32K_AP | 45_PMU_TO_WLAN_CLK32K - | 13B4 13C6 24D6 |
| | @single_brd_lib.SINGLE_BRD | |
| | CLK32K_AP - | 35C6 35C8 56C7 |
| | @single_brd_lib.RADIO_MLB | |
| DCDC_ADJ | DCDC_ADJ - | 49C5 |
| | @single_brd_lib.RADIO_MLB | |
| DCDC_EN | DCDC_EN - @single_brd_lib.RADIO_MLB | 39C2 49C6 |
| DCDC_MODE | DCDC_MODE - | 39B2 49B6 |
| | @single_brd_lib.RADIO_MLB | |
| DCDC_OUT | DCDC_OUT - | 49C4 |
| | @single_brd_lib.RADIO_MLB | |
| DCDC_PGND | DCDC_PGND - | 49B3 49B4 49C4 49C5 |
| | @single_brd_lib.RADIO_MLB | |
| DEBUG_RST_L | DEBUG_RST_L - | 35D3 38B5 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_ASM_V1 | DRX_ASM_V1 - | 39B4 51C3 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_ASM_V2 | DRX_ASM_V2 - | 39C2 51C3 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_ASM_V3 | DRX_ASM_V3 - | 39C2 51C3 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_ASM_V4 | DRX_ASM_V4 - | 39B2 51C3 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_BB_I_N | DRX_BB_I_N - | 39C8 40C5 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_BB_I_P | DRX_BB_I_P - | 39C8 40C5 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_BB_Q_N | DRX_BB_Q_N - | 39C8 40C5 |
| | @single_brd_lib.RADIO_MLB | |
| DRX_BB_Q_P | DRX_BB_Q_P - | 39C8 40C5 |
| | @single_brd_lib.RADIO_MLB | |
| EBI1_CAL | EBI1_CAL - | 38D2 |
| | @single_brd_lib.RADIO_MLB | |
| GPIO_6 | GPIO_6 - @single_brd_lib.RADIO_MLB | 56C5 |
| GPIO_51 | GPIO_51 - @single_brd_lib.RADIO_MLB | 35C3 39C2 |
| GPIO_DEBUG_LED | GPIO_DEBUG_LED - | 35C3 39B4 |
| | @single_brd_lib.RADIO_MLB | |
| GPS_BB_I_N | GPS_BB_I_N - | 39C8 40B5 |
| | @single_brd_lib.RADIO_MLB | |
| GPS_BB_I_P | GPS_BB_I_P - | 39C8 40B5 |
| | @single_brd_lib.RADIO_MLB | |
| GPS_BB_Q_N | GPS_BB_Q_N - | 39C8 40B5 |
| | @single_brd_lib.RADIO_MLB | |
| GPS_BB_Q_P | GPS_BB_Q_P - | 39C8 40B5 |
| | @single_brd_lib.RADIO_MLB | |
| HOST_WAKE_BB | BB_TO_PMU_HOST_WAKE - | 13B4 24C6 |
| | @single_brd_lib.SINGLE_BRD | |
| | HOST_WAKE_BB - | 35C1 35D8 39B2 |
| | @single_brd_lib.RADIO_MLB | |
| HOST_WAKE_BT | BT_TO_PMU_HOST_WAKE - | 13B4 24B6 |
| | @single_brd_lib.SINGLE_BRD | |
| | HOST_WAKE_BT - | 35C8 56C3 |
| | @single_brd_lib.RADIO_MLB | |
| HOST_WAKE_WLAN | WLAN_TO_PMU_HOST_WAKE - | 13B4 24C6 |
| | @single_brd_lib.SINGLE_BRD | |
| | HOST_WAKE_WLAN - | 35C8 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| JTAG_SEL | JTAG_SEL - | 56A6 56C6 |
| | @single_brd_lib.RADIO_MLB | |
| LAT_SW1_CTL | BB_TO_LAT_SW1_CTL - | 17B1 24A6 |
| | @single_brd_lib.SINGLE_BRD | |
| | LAT_SW1_CTL - | 35B8 35C1 39C2 |
| | @single_brd_lib.RADIO_MLB | |
| LAT_SW2_CTL | BB_TO_LAT_SW2_CTL - | 17B1 24A6 |
| | @single_brd_lib.SINGLE_BRD | |
| | LAT_SW2_CTL - | 35B8 39C2 |
| | @single_brd_lib.RADIO_MLB | |
| LTE_COEX_RXD | LTE_COEX_RXD - | 39B2 56A6 |
| | @single_brd_lib.RADIO_MLB | |
| LTE_COEX_TXD | LTE_COEX_TXD - | 35B6 39B2 56A6 |
| | @single_brd_lib.RADIO_MLB | |
| OSCAR_CONTEXT_A | OSCAR_TO_RADIO_CONTEXT_A - | 20C5 24A6 |
| | @single_brd_lib.SINGLE_BRD | |
| | OSCAR_CONTEXT_A - | 35A8 39B4 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| OSCAR_CONTEXT_B | OSCAR_TO_RADIO_CONTEXT_B - | 20C5 24A6 |
| | @single_brd_lib.SINGLE_BRD | |
| | OSCAR_CONTEXT_B - | 35A8 39B2 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| PAC_TO_BB_SPI_DATA_MISO | PAC_TO_BB_SPI_DATA_MISO - | 35B8 39C4 53C7 |
| | @single_brd_lib.RADIO_MLB | |
| PAC_TO_BB_SPI_DATA_MISO_FILT | PAC_TO_BB_SPI_DATA_MISO_FILT - | 53C6 |
| | @single_brd_lib.RADIO_MLB | |
| PA_BS | PA_BS - @single_brd_lib.RADIO_MLB | 39B4 44C3 45C4 47C3 48C4 |
| PA_ID | PA_ID - @single_brd_lib.RADIO_MLB | 37D3 |
| PA_ON_B1_B4 | PA_ON_B1_B4 - | 39B4 44C3 |
| | @single_brd_lib.RADIO_MLB | |
| PA_ON_B2_B3 | PA_ON_B2_B3 - | 39B4 45C4 |
| | @single_brd_lib.RADIO_MLB | |
| PA_ON_B5_B8 | PA_ON_B5_B8 - | 39B4 47C3 |
| | @single_brd_lib.RADIO_MLB | |
| PA_ON_B13_B17 | PA_ON_B13_B17 - | 39B4 48C4 |
| | @single_brd_lib.RADIO_MLB | |
| PA_ON_B20 | PA_ON_B20 - | 39B4 46C3 |
| | @single_brd_lib.RADIO_MLB | |
| PA_R1 | PA_R1 - @single_brd_lib.RADIO_MLB | 39C2 44C3 45C4 46C3 47C3 48C4 |
| PBL_RUN_BB_HSIC1_RDY | BB_TO_AP_HSIC1_RDY - | 3C2 24B6 |
| | @single_brd_lib.SINGLE_BRD | |
| | PBL_RUN_BB_HSIC1_RDY - | 35C1 35D8 39B2 |
| | @single_brd_lib.RADIO_MLB | |
| PMIC_RESOUT_L | PMIC_RESOUT_L - | 35C1 37C6 38B5 |
| | @single_brd_lib.RADIO_MLB | |
| PMIC_SSBI | PMIC_SSBI - | 35D6 37C8 38A5 |
| | @single_brd_lib.RADIO_MLB | |
| PM_MDM_IRQ_L | PM_MDM_IRQ_L - | 37C6 39B2 |
| | @single_brd_lib.RADIO_MLB | |
| PM_USR_IRQ_L | PM_USR_IRQ_L - | 37C6 39A2 |
| | @single_brd_lib.RADIO_MLB | |
| PP_BATT_VCC_2G_FEM | PP_BATT_VCC_2G_FEM - | 50C7 |
| | @single_brd_lib.RADIO_MLB | |
| PP_BATT_VCC_CONN | PP_BATT_VCC - | 12C8 15B7 15D7 22C4 22D4 |
| | @single_brd_lib.SINGLE_BRD | 22D4 22D5 22D5 22D8 23B4 24D6 |

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|---|---|---|
| | PP_BATT_VCC_CONN - | 35D1 35D8 36C8 44C6 45C6 |
| | @single_brd_lib.RADIO_MLB | 46C6 47C6 48C6 49C6 50C8 |
| PP_BATT_VCC_PA_DCDC | PP_BATT_VCC_PA_DCDC - | 49C5 |
| | @single_brd_lib.RADIO_MLB | |
| PP_BATT_VCC_WLAN | PP_BATT_VCC_WLAN - | 56D5 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO1 | PP_LDO1 - @single_brd_lib.RADIO_MLB | 36B2 |
| PP_LDO2_XO_HS_1V8 | PP_LDO2_XO_HS_1V8 - | 36B1 38B5 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO3_AMUX_1V8 | PP_LDO3_AMUX_1V8 - | 36B1 37B5 37D4 38B6 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO4_VDDA_3V3 | PP_LDO4_VDDA_3V3 - | 36B1 38B6 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO5_GPS_LNA_2V5 | PP_LDO5_GPS_LNA_2V5 - | 36B1 52C4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO6_RUIM_1V8 | PP_LDO6_RUIM_1V8 - | 35A4 35A6 35A8 35D1 36B1 |
| | @single_brd_lib.RADIO_MLB | 38A6 |
| PP_LDO7_DAC_1V8 | PP_LDO7_DAC_1V8 - | 36B1 38A6 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO8_VDDPX_1V2 | PP_LDO8_VDDPX_1V2 - | 36B1 38A6 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO9_PLL_1V05 | PP_LDO9_PLL_1V05 - | 36B1 38B6 38B8 38D8 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO10_ADSP_1V05 | PP_LDO10_ADSP_1V05 - | 36B1 38C6 38D7 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO11_MDSP_FW_1V05 | PP_LDO11_MDSP_FW_1V05 - | 36B1 38C6 38D6 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO12_MDSP_SW_1V05 | PP_LDO12_MDSP_SW_1V05 - | 36B1 38B6 38D7 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO13_VDDPX_2V95 | PP_LDO13_VDDPX_2V95 - | 36B1 38A8 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LDO14_2V65 | PP_LDO14_2P65 - | 17A7 23C2 24D6 |
| | @single_brd_lib.SINGLE_BRD | |
| | PP_LDO14_2V65 - | 35B8 36B1 43C8 50C8 51C6 |
| | @single_brd_lib.RADIO_MLB | 53D3 |
| PP_LDO14_PAC_2V65 | PP_LDO14_PAC_2V65 - | 53D4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_LVS1 | PP_LVS1 - @single_brd_lib.RADIO_MLB | 35A8 36D1 38B6 |
| PP_PA | PP_PA - @single_brd_lib.RADIO_MLB | 44C6 45C6 46C6 47C6 48C6 49C2 50C8 |
| PP_RF1_1V3_DRX_FE | PP_RF1_1V3_DRX_FE - | 41B4 41B5 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_DRX_LBLO - | 41A5 41B4 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_DRX_MBLO - | 41A5 41B4 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_DIG - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_LNA - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_PLL - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_VCO - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_JAM_DET - | 41A6 41B4 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_PRX_FELO1 - | 41B4 41B5 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_PRX_FELO2 - | 41B4 41B6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_PRX_PLL - | 41A4 41D6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_PRX_VCO - | 41B4 41D6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_SHDR_PLL - | 41A4 41D6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_SHDR_VCO - | 41A4 41C6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_DA - | 41B1 41C6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_LO - | 41B1 41B6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_SYNTH - | 41B1 41C6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_UPCONVERTER - | 41B1 41B6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_SMPS2_RF1_1V3_FILT - | 41D5 41D8 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_UPCONVERTER - | 41B1 41B6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_SYNTH - | 41B1 41C6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_LO - | 41B1 41B6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_TX_DA - | 41B1 41C6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_SHDR_VCO - | 41A4 41C6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_SHDR_PLL - | 41A4 41D6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_PRX_VCO - | 41B4 41D6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_PRX_PLL - | 41A4 41D6 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_PRX_FELO1 - | 41B4 41B5 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_JAM_DET - | 41A6 41B4 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_VCO - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_PLL - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_LNA - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_GPS_DIG - | 41A1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF1_1V3_DRX_LBLO - | 41A5 41B4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_RF1_1V8_DIG | PP_RF1_1V8_DIG - | 41A1 41C4 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_SMPS3_MSME_1V8 - | 35A8 35D1 36B6 36C1 38A6 |
| | @single_brd_lib.RADIO_MLB | 38A6 38A6 38A8 38C6 38D7 38D8 39B8 39C4 41C5 |
| PP_RF2_2V05_DRX_BB | PP_RF2_2V05_DRX_BB - | 41B4 41D1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_PRX_BB - | 41B4 41D1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_PRX_VCO - | 41B4 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_SHDR_VCO - | 41A4 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_BB - | 41B1 41D1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_DA - | 41B1 41D1 |

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|---|---|---|
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_PLL - | 41B1 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_VCO - | 41B1 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_XO_FILT - | 41B1 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_SMPS4_RF2_2V05_FILT - | 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_XO_FILT - | 41B1 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_VCO - | 41B1 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_PLL - | 41B1 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_DA - | 41B1 41D1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_TX_BB - | 41B1 41D1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_SHDR_VCO - | 41A4 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_PRX_VCO - | 41B4 41C1 |
| | @single_brd_lib.RADIO_MLB | |
| | PP_RF2_2V05_PRX_BB - | 41B4 41D1 |
| | @single_brd_lib.RADIO_MLB | |
| PP_SMPS1_MSMC_1V05 | PP_SMPS1_MSMC_1V05 - | 35A8 36D1 38C8 38C8 38D8 |
| | @single_brd_lib.RADIO_MLB | |
| PP_SMPS2_RF1_1V3 | PP_SMPS2_RF1_1V3 - | 36D1 38A5 41D8 |
| | @single_brd_lib.RADIO_MLB | |
| PP_SMPS4_RF2_2V05 | PP_SMPS4_RF2_2V05 - | 36B6 36C1 41D3 |
| | @single_brd_lib.RADIO_MLB | |
| PP_SMPS5_DSP_1V05 | PP_SMPS5_DSP_1V05 - | 36B6 36C1 |
| | @single_brd_lib.RADIO_MLB | |
| PP_SPI_NOR_1V8 | PP_SPI_NOR_1V8 - | 39B7 |
| | @single_brd_lib.RADIO_MLB | |
| PP_SYNC | BB_TO_AP_PP_SYNC - | 3C5 24C6 |
| | @single_brd_lib.SINGLE_BRD | |
| | PP_SYNC - @single_brd_lib.RADIO_MLB | 35C8 39B2 |
| PP_VCC_MAIN_WLAN | PP_VCC_MAIN - | 10D7 12A8 12B7 12C8 13C2 |
| | @single_brd_lib.SINGLE_BRD | 14B4 14B8 14D6 21B7 23A2 24D6 |
| | PP_VCC_MAIN_WLAN - | 35D8 56D6 |
| | @single_brd_lib.RADIO_MLB | |
| PP_VREG | PP_VREG - @single_brd_lib.RADIO_MLB | 36D2 |
| PP_VSW_S1 | PP_VSW_S1 - | 36C4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_VSW_S2 | PP_VSW_S2 - | 36C4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_VSW_S3 | PP_VSW_S3 - | 36C4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_VSW_S4 | PP_VSW_S4 - | 36C4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_VSW_S5 | PP_VSW_S5 - | 36B4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_WLAN_VDDIO_1V8 | PP_WLAN_VDDIO_1V8 - | 56B6 56C4 |
| | @single_brd_lib.RADIO_MLB | |
| PP_WL_BT_VDDIO_AP | PP1V8_SDRAM - | 3A4 3C8 4B8 10C3 10C7 |
| | @single_brd_lib.SINGLE_BRD | 12D1 14B7 16D4 17D8 23D3 24D6 |
| | PP_WL_BT_VDDIO_AP - | 35C8 56C3 |
| | @single_brd_lib.RADIO_MLB | |
| PRX_BB_I_N | PRX_BB_I_N - | 39C8 40D5 |
| | @single_brd_lib.RADIO_MLB | |
| PRX_BB_I_P | PRX_BB_I_P - | 39C8 40D5 |
| | @single_brd_lib.RADIO_MLB | |
| PRX_BB_Q_N | PRX_BB_Q_N - | 39C8 40D5 |
| | @single_brd_lib.RADIO_MLB | |
| PRX_BB_Q_P | PRX_BB_Q_P - | 39C8 40D5 |
| | @single_brd_lib.RADIO_MLB | |
| PS_HOLD | PS_HOLD - @single_brd_lib.RADIO_MLB | 37C8 39B2 |
| PS_HOLD_PMIC | PS_HOLD_PMIC - | 35C3 37C7 |
| | @single_brd_lib.RADIO_MLB | |
| RADIO_ON_L | AP_TO_RADIO_ON_L - | 3C8 24D6 |
| | @single_brd_lib.SINGLE_BRD | |
| | RADIO_ON_L - | 35D3 35D8 37C8 |
| | @single_brd_lib.RADIO_MLB | |
| REF_BYP | REF_BYP - @single_brd_lib.RADIO_MLB | 36C5 |
| REF_GND | REF_GND - @single_brd_lib.RADIO_MLB | 36C5 |
| RESET_DET_L | BB_TO_AP_RESET_DET_L - | 3C8 24D6 |
| | @single_brd_lib.SINGLE_BRD | |
| | RESET_DET_L - | 35C1 35D8 39B2 |
| | @single_brd_lib.RADIO_MLB | |
| RESET_PMU_L | PMU_TO_BB_RST_L - | 13B3 24D6 |
| | @single_brd_lib.SINGLE_BRD | |
| | RESET_PMU_L - | 35D3 35D8 37C8 |
| | @single_brd_lib.RADIO_MLB | |
| RF_RESET_L | RESET_1V8_L - | 2B7 4D8 13B6 14C6 16C2 |
| | @single_brd_lib.SINGLE_BRD | 19B2 22B4 24D6 |
| | RF_RESET_L - | 35C3 35D8 |
| | @single_brd_lib.RADIO_MLB | |
| RREFEXT | RREFEXT - @single_brd_lib.RADIO_MLB | 38A5 |
| S1_GND | S1_GND - @single_brd_lib.RADIO_MLB | 36B6 36D2 37B6 |
| S2_GND | S2_GND - @single_brd_lib.RADIO_MLB | 36B6 36C2 37B6 |
| S3_GND | S3_GND - @single_brd_lib.RADIO_MLB | 36B6 36C2 37B6 |
| S4_GND | S4_GND - @single_brd_lib.RADIO_MLB | 36B6 36C2 37B6 |
| S5_GND | S5_GND - @single_brd_lib.RADIO_MLB | 36B2 36B5 37B6 |
| SDIO_DATA_1 | SDIO_DATA_1 - | 56A6 56B6 |
| | @single_brd_lib.RADIO_MLB | |
| SDIO_DATA_2 | SDIO_DATA_2 - | 56A6 56B6 |
| | @single_brd_lib.RADIO_MLB | |
| SIMCRD_CLK_CONN | SIMCRD_CLK_CONN - | 35A2 35A6 35C1 35D5 39C4 |
| | @single_brd_lib.RADIO_MLB | |
| SIMCRD_IO_CONN | SIMCRD_IO_CONN - | 35A4 35A4 35C1 39C4 |
| | @single_brd_lib.RADIO_MLB | |
| SIMCRD_RST_CONN | SIMCRD_RST_CONN - | 35A4 35A6 35C1 35D5 39C4 |
| | @single_brd_lib.RADIO_MLB | |
| SIM_TRAY_DETECT | SIM_TRAY_DETECT - | 35A2 35A5 35C1 39C4 |
| | @single_brd_lib.RADIO_MLB | |
| SLEEP_CLK_32K | SLEEP_CLK_32K - | 35D6 37B2 38B5 |
| | @single_brd_lib.RADIO_MLB | |
| SPI_CLK | SPI_CLK - @single_brd_lib.RADIO_MLB | 35D5 39A8 39C4 |
| SPI_CS_L | SPI_CS_L - | 35C5 39A6 39C4 |
| | @single_brd_lib.RADIO_MLB | |
| SPI_DATA_MISO | SPI_DATA_MISO - | 35C5 39A6 39C4 |
| | @single_brd_lib.RADIO_MLB | |
| SPI_DATA_MOSI | SPI_DATA_MOSI - | 35D5 39A8 39C4 |
| | @single_brd_lib.RADIO_MLB | |
| TX_BB_I_N | TX_BB_I_N - | 39C6 40D4 |
| | @single_brd_lib.RADIO_MLB | |
| TX_BB_I_P | TX_BB_I_P - | 39C6 40D4 |
| | @single_brd_lib.RADIO_MLB | |
| TX_BB_Q_N | TX_BB_Q_N - | 39C6 40D4 |
| | @single_brd_lib.RADIO_MLB | |
| TX_BB_Q_P | TX_BB_Q_P - | 39C6 40D4 |

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|---|---|---|
| | @single_brd_lib.RADIO_MLB | |
| TX_GTR_THRESH | BB_TO_LEDDRV_GSM_BLANK - | 15A6 24D6 |
| | @single_brd_lib.SINGLE_BRD | |
| | TX_GTR_THRESH - | 35D8 39C2 |
| | @single_brd_lib.RADIO_MLB | |
| VDDPX_BIAS | VDDPX_BIAS - | 37D3 38B6 |
| | @single_brd_lib.RADIO_MLB | |
| VREF_DAC_BIAS | VREF_DAC_BIAS - | 37C3 39C6 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_BUCK_OUT | WLAN_BUCK_OUT - | 56C7 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_CLK32K | WLAN_CLK32K - | 56C6 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_COEX_RXD | WLAN_COEX_RXD - | 56A5 56B6 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_COEX_TXD | WLAN_COEX_TXD - | 35B6 56A5 56B6 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_HSIC3_DEVICE_RDY | WLAN_TO_AP_HSIC2_RDY - | 3C2 24B6 |
| | @single_brd_lib.SINGLE_BRD | |
| | WLAN_HSIC3_DEVICE_RDY - | 35C6 35C8 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_HSIC3_RESUME | WLAN_TO_AP_HSIC2_REMOTE_WAKE - | 3C2 24B6 |
| | @single_brd_lib.SINGLE_BRD | |
| | WLAN_HSIC3_RESUME - | 35C6 35D8 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_REG_ON | PMU_TO_WLAN_REG_ON - | 13B3 24C6 |
| | @single_brd_lib.SINGLE_BRD | |
| | WLAN_REG_ON - | 35C1 35C8 56C6 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_SR_VLX1 | WLAN_SR_VLX1 - | 56B6 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_TX_BLANK | WLAN_TX_BLANK - | 39B2 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_UART_RXD | AP_TO_WLAN_UART3_TXD - | 3C5 24C6 |
| | @single_brd_lib.SINGLE_BRD | |
| | WLAN_UART_RXD - | 35C8 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| WLAN_UART_TXD | WLAN_TO_AP_UART3_RXD - | 3C5 24C6 |
| | @single_brd_lib.SINGLE_BRD | |
| | WLAN_UART_TXD - | 35C8 56B3 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_BB_TX_DAC_IREF | WTR_BB_TX_DAC_IREF - | 39C6 40D4 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_GP_DATA0 | WTR_GP_DATA0 - | 39B2 40D4 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_GP_DATA1 | WTR_GP_DATA1 - | 39B2 40D4 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_RBIAS | WTR_RBIAS - | 40C4 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_RF_ON | WTR_RF_ON - | 35C6 39B4 40C4 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_RX_ON | WTR_RX_ON - | 35C6 39B4 40C4 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_SSBI_PRX_DRX | WTR_SSBI_PRX_DRX - | 35C6 39B2 40C4 |
| | @single_brd_lib.RADIO_MLB | |
| WTR_SSBI_TX_GPS | WTR_SSBI_TX_GPS - | 35C6 39B2 40C4 |
| | @single_brd_lib.RADIO_MLB | |
| XO_GND | XO_GND - @single_brd_lib.RADIO_MLB | 37A4 |
| XO_THERM_Y1 | XO_THERM_Y1 - | 37B4 |
| | @single_brd_lib.RADIO_MLB | |

Title: Cref Part Report
Design: single_brd
Date: Feb 6 20:18:49 2013

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|---|---|---|
| BS1 | PCB_STANDOFF | single_brd[22A5] |
| BS2 | PCB_STANDOFF | single_brd[22A5] |
| C1 | CAP_01005 | single_brd[2B7] |
| C1_RF | SUPPR_TRANSIENT_2P1_01005-1 | radio_mlb[35A4]single_brd[24] |
| C2 | CAP_0201 | single_brd[2C6] |
| C2_RF | CAP_0201-1 | radio_mlb[36B4]single_brd[24] |
| C3 | CAP_0204 | single_brd[6D3] |
| C3_RF | CAP_0201-1 | radio_mlb[36B4]single_brd[24] |
| C4 | CAP_01005 | single_brd[17C6] |
| C4_RF | CAP_0201-1 | radio_mlb[36B4]single_brd[24] |
| C5 | CAP_01005 | single_brd[17C6] |
| C5_RF | CAP_0201-1 | radio_mlb[36A3]single_brd[24] |
| C6 | CAP_01005 | single_brd[7C6] |
| C6_RF | CAP_0201-1 | radio_mlb[36B3]single_brd[24] |
| C7 | CAP_01005 | single_brd[7C6] |
| C7_RF | CAP_0201-1 | radio_mlb[36A3]single_brd[24] |
| C8 | CAP_01005 | single_brd[17C6] |
| C8_RF | CAP_0402 | radio_mlb[36B3]single_brd[24] |
| C9 | CAP_01005 | single_brd[22D6] |
| C9_RF | CAP_0402 | radio_mlb[36A3]single_brd[24] |
| C10 | CAP_01005 | single_brd[12A5] |
| C10_RF | CAP_0402 | radio_mlb[36B3]single_brd[24] |
| C11 | CAP_0201 | single_brd[20C1] |
| C11_RF | CAP_0402 | radio_mlb[36A2]single_brd[24] |
| C12 | CAP_01005 | single_brd[17A6] |
| C12_RF | CAP_0201-1 | radio_mlb[36D2]single_brd[24] |
| C13 | CAP_01005 | single_brd[17A6] |
| C13_RF | CAP_0402 | radio_mlb[36B2]single_brd[24] |
| C14 | CAP_0402-1 | single_brd[14A2] |
| C14_RF | CAP_0201-1 | radio_mlb[38D8]single_brd[24] |
| C15_RF | CAP_0201-1 | radio_mlb[38D8]single_brd[24] |
| C16 | CAP_402 | single_brd[12A3] |
| C16_RF | CAP_0201-1 | radio_mlb[38D8]single_brd[24] |
| C17 | CAP_01005 | single_brd[19B4] |
| C17_RF | CAP_0201-1 | radio_mlb[38D8]single_brd[24] |
| C18 | CAP_01005 | single_brd[19A4] |
| C18_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C19 | CAP_01005 | single_brd[19A4] |
| C19_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C20 | CAP_01005 | single_brd[2C5] |
| C20_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C21 | CAP_01005 | single_brd[2C5] |
| C21_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C22 | CAP_01005 | single_brd[22D6] |
| C22_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C23 | CAP_01005 | single_brd[22D8] |
| C23_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C24 | CAP_402 | single_brd[12A3] |
| C24_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C25 | CAP_01005 | single_brd[22D7] |
| C25_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C26 | CAP_01005 | single_brd[10B7] |
| C26_RF | CAP_0201-1 | radio_mlb[38D7]single_brd[24] |
| C27 | CAP_01005 | single_brd[10A7] |
| C27_RF | CAP_0201-1 | radio_mlb[38D6]single_brd[24] |
| C28 | CAP_0402-1 | single_brd[14B1] |
| C28_RF | CAP_0201-1 | radio_mlb[38D6]single_brd[24] |
| C29 | CAP_0201-1 | single_brd[15C4] |
| C29_RF | CAP_0201-1 | radio_mlb[38D6]single_brd[24] |
| C30 | CAP_402 | single_brd[5B5] |
| C30_RF | CAP_0201-1 | radio_mlb[38D6]single_brd[24] |
| C31 | CAP_0201-1 | single_brd[16B7] |
| C31_RF | CAP_01005 | radio_mlb[38B6]single_brd[24] |
| C32_RF | CAP_0201-1 | radio_mlb[38D6]single_brd[24] |
| C33 | CAP_01005 | single_brd[2C6] |
| C33_RF | CAP_0201-1 | radio_mlb[38A6]single_brd[24] |
| C34_RF | CAP_0201-1 | radio_mlb[38D6]single_brd[24] |
| C35 | CAP_01005 | single_brd[2C4] |
| C35_RF | CAP_0201-1 | radio_mlb[38D5]single_brd[24] |
| C36 | CAP_01005 | single_brd[2C2] |
| C36_RF | CAP_0201-1 | radio_mlb[38D5]single_brd[24] |
| C37 | CAP_01005 | single_brd[2C2] |
| C37_RF | CAP_01005 | radio_mlb[56C4]single_brd[24] |
| C38 | CAP_0201-1 | single_brd[16D5] |
| C38_RF | CAP_01005 | radio_mlb[53C5]single_brd[24] |
| C39 | CAP_01005 | single_brd[16D4] |
| C39_RF | CAP_0201 | radio_mlb[46B3]single_brd[24] |
| C40 | CAP_0204 | single_brd[4B7] |
| C40 | CAP_0201 | radio_mlb[42C3]single_brd[24] |
| C41 | CAP_01005 | single_brd[4D8] |
| C41_RF | CAP_402 | radio_mlb[49B3]single_brd[24] |
| C42_RF | CAP_0402 | radio_mlb[36C8]single_brd[24] |
| C43 | CAP_0204 | single_brd[4B8] |
| C43_RF | CAP_0402 | radio_mlb[36C7]single_brd[24] |
| C44 | CAP_01005 | single_brd[11A4] |
| C44_RF | CAP_0402 | radio_mlb[36C7]single_brd[24] |
| C45 | CAP_01005 | single_brd[8C3] |
| C45_RF | CAP_01005 | radio_mlb[36C7]single_brd[24] |
| C46_RF | CAP_0402 | radio_mlb[36B6]single_brd[24] |
| C47 | CAP_402 | single_brd[14D5] |
| C47_RF | CAP_0402 | radio_mlb[36B6]single_brd[24] |
| C48 | CAP_0204 | single_brd[4A8] |
| C48_RF | CAP_0402 | radio_mlb[36B6]single_brd[24] |
| C49 | CAP_0204 | single_brd[4C7] |
| C49_RF | CAP_0402 | radio_mlb[36B6]single_brd[24] |
| C50 | CAP_0201 | single_brd[6C4] |
| C50_RF | CAP_01005 | radio_mlb[36C5]single_brd[24] |
| C51 | CAP_01005 | single_brd[9B2] |
| C51_RF | CAP_0402 | radio_mlb[36B5]single_brd[24] |
| C52 | CAP_0402-1 | single_brd[14C4] |
| C52_RF | CAP_0201-1 | radio_mlb[36A4]single_brd[24] |
| C53 | CAP_0204 | single_brd[4C8] |
| C53_RF | CAP_0201-1 | radio_mlb[36A4]single_brd[24] |
| C54 | CAP_0402-1 | single_brd[14D4] |
| C54_RF | CAP_0201-1 | radio_mlb[36A4]single_brd[24] |
| C55 | CAP_01005 | single_brd[9B7] |
| C55_RF | CAP_0603 | radio_mlb[36D2]single_brd[24] |
| C56 | CAP_01005 | single_brd[11B7] |
| C56_RF | CAP_0603 | radio_mlb[36C2]single_brd[24] |
| C57 | CAP_0610 | single_brd[4B8] |
| C57_RF | CAP_0603-3 | radio_mlb[36C2]single_brd[24] |
| C58 | CAP_0402 | single_brd[12C3] |
| C58_RF | CAP_0603-3 | radio_mlb[36C2]single_brd[24] |
| C59 | CAP_0204 | single_brd[4C7] |
| C59_RF | CAP_0603 | radio_mlb[36B2]single_brd[24] |
| C60 | CAP_0204 | single_brd[4A7] |
| C60_RF | CAP_01005 | radio_mlb[36C2]single_brd[24] |
| C61 | CAP_01005 | single_brd[9B7] |
| C61_RF | CAP_01005 | radio_mlb[39B7]single_brd[24] |
| C62 | CAP_01005 | single_brd[11C6] |
| C62_RF | CAP_01005 | radio_mlb[39C6]single_brd[24] |
| C63 | CAP_01005 | single_brd[11C6] |
| C63_RF | CAP_SM | radio_mlb[48C3]single_brd[24] |
| C64 | CAP_01005 | single_brd[9B6] |
| C64_RF | CAP_01005 | radio_mlb[50B7]single_brd[24] |
| C65 | CAP_01005 | single_brd[9B6] |
| C65_RF | CAP_01005 | radio_mlb[50C7]single_brd[24] |
| C66 | CAP_0402 | single_brd[12C1] |
| C66_RF | CAP_0402 | radio_mlb[50C7]single_brd[24] |
| C67 | CAP_01005 | single_brd[11C3] |
| C67_RF | CAP_01005 | radio_mlb[50C6]single_brd[24] |
| C68 | CAP_0610 | single_brd[4C3] |
| C68_RF | CAP_0201-1 | radio_mlb[38C8]single_brd[24] |
| C69 | CAP_0402-1 | single_brd[14C4] |
| C69_RF | CAP_0201-1 | radio_mlb[38A6]single_brd[24] |
| C70 | CAP_01005 | single_brd[17B4] |
| C70_RF | CAP_0201-1 | radio_mlb[38A6]single_brd[24] |
| C71 | CAP_01005 | single_brd[17B4] |
| C71_RF | CAP_0201-1 | radio_mlb[38B6]single_brd[24] |
| C72 | CAP_4P1_0402 | single_brd[4C3] |
| C72_RF | CAP_0402 | radio_mlb[41D7]single_brd[24] |
| C73 | CAP_01005 | single_brd[15A4] |
| C73_RF | CAP_01005 | radio_mlb[41D6]single_brd[24] |
| C74 | CAP_4P1_0402 | single_brd[20D5] |
| C74_RF | CAP_01005 | radio_mlb[41D6]single_brd[24] |
| C75 | CAP_0402-2 | single_brd[4D3] |
| C75_RF | CAP_01005 | radio_mlb[41C6]single_brd[24] |
| C76_RF | CAP_01005 | radio_mlb[41C6]single_brd[24] |
| C77_RF | CAP_01005 | radio_mlb[41C6]single_brd[24] |
| C78 | CAP_0204 | single_brd[5B5] |
| C78_RF | CAP_01005 | radio_mlb[41C6]single_brd[24] |
| C79 | CAP_01005 | single_brd[18C8] |
| C79_RF | CAP_01005 | radio_mlb[41B6]single_brd[24] |
| C80 | CAP_0402-2 | single_brd[4D3] |
| C80_RF | CAP_01005 | radio_mlb[41B6]single_brd[24] |
| C81 | CAP_0204 | single_brd[5C3] |
| C81_RF | CAP_01005 | radio_mlb[41B6]single_brd[24] |
| C82 | CAP_01005 | single_brd[21A6] |
| C82_RF | CAP_01005 | radio_mlb[41A6]single_brd[24] |
| C83 | CAP_4P1_0402 | single_brd[4C3] |
| C83_RF | CAP_01005 | radio_mlb[41A6]single_brd[24] |
| C84 | CAP_01005 | single_brd[21A5] |
| C85 | CAP_01005 | single_brd[5A2] |
| C85_RF | CAP_01005 | radio_mlb[41D5]single_brd[24] |
| C86 | CAP_0204 | single_brd[5B5] |
| C86_RF | CAP_01005 | radio_mlb[41D5]single_brd[24] |
| C87 | CAP_4P1_0402 | single_brd[4C3] |
| C87_RF | CAP_0201-1 | radio_mlb[41C1]single_brd[24] |
| C88 | CAP_01005 | single_brd[19C3] |
| C88_RF | CAP_0402 | radio_mlb[41D3]single_brd[24] |
| C89 | CAP_4P1_0402 | single_brd[4C3] |
| C89_RF | CAP_01005 | radio_mlb[41C1]single_brd[24] |
| C90 | CAP_01005 | single_brd[19C3] |
| C90_RF | CAP_01005 | radio_mlb[41C1]single_brd[24] |
| C91 | CAP_0204 | single_brd[5B3] |
| C91_RF | CAP_01005 | radio_mlb[41C1]single_brd[24] |
| C92 | CAP_4P1_0402 | single_brd[20D6] |
| C92_RF | CAP_01005 | radio_mlb[41B1]single_brd[24] |
| C93 | CAP_01005 | single_brd[19C3] |
| C93 | CAP_0201 | radio_mlb[42B3]single_brd[24] |
| C94 | CAP_01005 | single_brd[19D3] |
| C95 | CAP_0204 | single_brd[5B5] |
| C96 | CAP_01005 | single_brd[12B7] |
| C96_RF | CAP_01005 | radio_mlb[53C6]single_brd[24] |
| C97 | CAP_4P1_0402 | single_brd[4B3] |
| C97_RF | CAP_01005 | radio_mlb[53C5]single_brd[24] |
| C98 | CAP_01005 | single_brd[17D2] |
| C98_RF | CAP_01005 | radio_mlb[53C5]single_brd[24] |
| C99 | CAP_01005 | single_brd[17A5] |
| C99_RF | CAP_01005 | radio_mlb[53D4]single_brd[24] |
| C100 | CAP_4P1_0402 | single_brd[4B3] |
| C101 | CAP_01005 | single_brd[17D3] |
| C101_RF | CAP_201 | radio_mlb[56D2]single_brd[24] |
| C102 | CAP_01005 | single_brd[17A5] |
| C102_RF | CAP_402 | radio_mlb[56B7]single_brd[24] |
| C103 | CAP_01005 | single_brd[17D3] |
| C103_RF | CAP_0402-2 | radio_mlb[56C5]single_brd[24] |
| C104 | CAP_0201-1 | single_brd[12A4] |
| C104_RF | CAP_01005 | radio_mlb[56C5]single_brd[24] |
| C105 | CAP_01005 | single_brd[17D3] |
| C105_RF | CAP_01005 | radio_mlb[56C4]single_brd[24] |
| C106 | CAP_01005 | single_brd[4A8] |
| C106_RF | CAP_0201 | radio_mlb[56C2]single_brd[24] |
| C107 | CAP_0610 | single_brd[4D3] |
| C107_RF | RES_201 | radio_mlb[56C2]single_brd[24] |
| C108 | CAP_01005 | single_brd[4A8] |
| C108_RF | CAP_01005-1 | radio_mlb[48C6]single_brd[24] |
| C109 | CAP_0201-1 | single_brd[12A4] |
| C109_RF | CAP_01005 | radio_mlb[48B6]single_brd[24] |
| C110 | CAP_01005 | single_brd[17D6] |
| C110_RF | CAP_01005 | radio_mlb[48C6]single_brd[24] |
| C111 | CAP_01005 | single_brd[4A7] |
| C111_RF | CAP_0201-1 | radio_mlb[48C5]single_brd[24] |
| C112 | CAP_4P1_0402 | single_brd[4B3] |
| C112_RF | CAP_0201 | radio_mlb[50B4]single_brd[24] |
| C113 | CAP_01005 | single_brd[4A7] |
| C113_RF | CAP_0201 | radio_mlb[48B3]single_brd[24] |
| C114 | CAP_01005 | single_brd[4A5] |
| C114_RF | CAP_0201 | radio_mlb[48B3]single_brd[24] |
| C115 | CAP_0204 | single_brd[5C2] |
| C115_RF | CAP_01005 | radio_mlb[48B2]single_brd[24] |
| C116 | CAP_01005 | single_brd[17D6] |
| C116_RF | CAP_01005 | radio_mlb[47C7]single_brd[24] |
| C117 | CAP_01005 | single_brd[4A5] |
| C117_RF | CAP_01005 | radio_mlb[47B7]single_brd[24] |
| C118 | CAP_01005 | single_brd[4A4] |
| C118_RF | CAP_01005 | radio_mlb[47C6]single_brd[24] |
| C119 | CAP_01005 | single_brd[17D3] |
| C119_RF | CAP_0201-1 | radio_mlb[47C5]single_brd[24] |
| C120 | CAP_01005 | single_brd[4A4] |
| C120_RF | CAP_01005-1 | radio_mlb[50C8]single_brd[24] |
| C121 | CAP_4P1_0402 | single_brd[4B3] |
| C121_RF | CAP_01005 | radio_mlb[48C2]single_brd[24] |
| C122 | CAP_4P1_0402 | single_brd[4B3] |
| C122_RF | CAP_201 | radio_mlb[47B2]single_brd[24] |
| C123 | CAP_0402 | single_brd[12C4] |
| C123_RF | CAP_0201 | radio_mlb[47B2]single_brd[24] |
| C124 | CAP_4P1_0402 | single_brd[4B3] |
| C124_RF | CAP_0201 | radio_mlb[50B3]single_brd[24] |
| C126 | CAP_01005 | single_brd[17D3] |
| C127 | CAP_0402 | single_brd[12C4] |
| C127_RF | CAP_01005 | radio_mlb[37B4]single_brd[24] |
| C128 | CAP_0402 | single_brd[12D4] |
| C128_RF | CAP_01005 | radio_mlb[40C4]single_brd[24] |
| C130 | CAP_01005 | single_brd[18C7] |
| C131 | CAP_0603 | single_brd[14B5] |
| C133 | CAP_0610 | single_brd[4C3] |
| C134 | CAP_0204 | single_brd[5B2] |
| C135 | CAP_0402 | single_brd[12D3] |
| C136 | CAP_01005 | single_brd[6C6] |
| C137 | CAP_201 | single_brd[18B4] |
| C138 | CAP_01005 | single_brd[9B2] |
| C140 | CAP_0402 | single_brd[12C2] |
| C141 | CAP_0610 | single_brd[4D5] |
| C142 | CAP_01005 | single_brd[4D1] |
| C143 | CAP_01005 | single_brd[9B2] |
| C144 | CAP_01005 | single_brd[6C6] |
| C144_RF | CAP_01005 | radio_mlb[49C6]single_brd[24] |
| C145 | CAP_0402 | single_brd[12D3] |
| C145_RF | CAP_01005 | radio_mlb[49C6]single_brd[24] |
| C147 | CAP_01005 | single_brd[18B4] |
| C147_RF | CAP_01005 | radio_mlb[45B7]single_brd[24] |
| C148_RF | CAP_01005 | radio_mlb[45C6]single_brd[24] |
| C149 | CAP_0402-1 | single_brd[18D4] |
| C149_RF | CAP_0201-1 | radio_mlb[45C5]single_brd[24] |
| C150 | CAP_01005 | single_brd[18B4] |
| C151 | CAP_0402-2 | single_brd[4D3] |
| C152 | CAP_0610 | single_brd[4D3] |
| C152_RF | CAP_0201 | radio_mlb[45B2]single_brd[24] |
| C153 | CAP_0204 | single_brd[4D2] |
| C153_RF | CAP_201 | radio_mlb[45B2]single_brd[24] |
| C156 | CAP_0402-1 | single_brd[18D3] |
| C156_RF | CAP_01005 | radio_mlb[46C6]single_brd[24] |
| C158 | CAP_4P1_0402 | single_brd[4D2] |
| C159 | CAP_01005 | single_brd[13C8] |
| C160 | CAP_0610 | single_brd[4D5] |
| C160_RF | CAP_0201 | radio_mlb[46B2]single_brd[24] |
| C161 | CAP_4P1_0402 | single_brd[4D1] |
| C162 | CAP_0402 | single_brd[12D3] |
| C162_RF | CAP_01005 | radio_mlb[44C7]single_brd[24] |
| C163 | CAP_201 | single_brd[18D2] |
| C163_RF | CAP_01005 | radio_mlb[44B7]single_brd[24] |
| C164_RF | CAP_01005 | radio_mlb[44C6]single_brd[24] |
| C165 | CAP_01005 | single_brd[18D2] |
| C165_RF | CAP_0201-1 | radio_mlb[44C5]single_brd[24] |
| C166 | CAP_4P1_0402 | single_brd[4C5] |
| C167 | CAP_01005 | single_brd[13B8] |
| C167_RF | CAP_0201 | radio_mlb[44B2]single_brd[24] |
| C168 | CAP_01005 | single_brd[13A8] |
| C168_RF | CAP_01005 | radio_mlb[49B3]single_brd[24] |
| C169 | CAP_4P1_0402 | single_brd[4C5] |
| C169_RF | CAP_01005 | radio_mlb[49C4]single_brd[24] |
| C170 | CAP_0201 | single_brd[18D2] |
| C170_RF | CAP_0201 | radio_mlb[56B2]single_brd[24] |
| C173 | CAP_0204 | single_brd[4D2] |
| C174 | CAP_4P1_0402 | single_brd[4C5] |
| C175 | CAP_0402 | single_brd[12C4] |
| C176 | CAP_01005 | single_brd[17B7] |
| C177 | CAP_0610 | single_brd[4D5] |
| C177_RF | CAP_01005 | radio_mlb[35A5]single_brd[24] |
| C180 | CAP_0204 | single_brd[6D4] |
| C181 | CAP_0402 | single_brd[12D3] |
| C182 | CAP_0402-1 | single_brd[6D3] |
| C182_RF | CAP_01005 | radio_mlb[40C4]single_brd[24] |
| C183 | CAP_01005 | radio_mlb[42B7]single_brd[24] |
| C184 | CAP_01005 | single_brd[17D6] |
| C184 | CAP_01005 | radio_mlb[42A7]single_brd[24] |
| C185 | CAP_0204 | single_brd[6D3] |
| C185 | CAP_01005 | radio_mlb[42B7]single_brd[24] |
| C186 | CAP_01005 | radio_mlb[42B7]single_brd[24] |
| C187 | CAP_0402-1 | single_brd[6D2] |
| C187 | CAP_01005 | radio_mlb[42B7]single_brd[24] |
| C188 | CAP_01005 | single_brd[17B3] |
| C188 | CAP_01005 | radio_mlb[42A7]single_brd[24] |
| C189 | CAP_0402 | single_brd[12C3] |
| C189_RF | CAP_01005 | radio_mlb[49C5]single_brd[24] |
| C190 | CAP_0204 | single_brd[7D7] |
| C190_RF | CAP_01005 | radio_mlb[50C7]single_brd[24] |
| C191 | CAP_01005 | single_brd[7C5] |
| C192 | CAP_01005 | single_brd[11D6] |
| C193_RF | CAP_01005 | radio_mlb[45C6]single_brd[24] |
| C194 | CAP_0201-1 | single_brd[11C6] |
| C195_RF | CAP_01005 | radio_mlb[46C6]single_brd[24] |
| C196 | CAP_01005 | single_brd[11C6] |
| C197 | CAP_01005 | single_brd[8B6] |
| C198 | CAP_01005 | single_brd[11D6] |
| C199 | CAP_01005 | single_brd[11B6] |
| C200 | CAP_01005 | single_brd[11A4] |
| C200_RF | CAP_01005-1 | radio_mlb[50C7]single_brd[24] |
| C201 | CAP_01005 | single_brd[11C7] |
| C201_RF | CAP_01005 | radio_mlb[50B7]single_brd[24] |
| C202 | CAP_01005 | single_brd[11D6] |
| C202_RF | CAP_01005 | radio_mlb[50C8]single_brd[24] |
| C203_RF | CAP_01005 | radio_mlb[50C6]single_brd[24] |
| C204 | CAP_0402-2 | single_brd[12D7] |
| C206 | CAP_01005 | single_brd[17B2] |
| C207 | CAP_0201-1 | single_brd[12A4] |
| C207_RF | CAP_201 | radio_mlb[50B3]single_brd[24] |
| C208 | CAP_01005 | single_brd[8B4] |
| C208_RF | CAP_01005 | radio_mlb[44C6]single_brd[24] |
| C209 | CAP_0402-1 | single_brd[6D2] |
| C209_RF | CAP_201 | radio_mlb[44C5]single_brd[24] |
| C210 | CAP_01005 | single_brd[11B6] |
| C210_RF | CAP_01005 | radio_mlb[45C6]single_brd[24] |
| C211 | CAP_01005 | single_brd[11B7] |
| C211_RF | CAP_201 | radio_mlb[45C5]single_brd[24] |
| C212 | CAP_01005 | single_brd[11B6] |
| C212_RF | CAP_01005 | radio_mlb[47C5]single_brd[24] |
| C213 | CAP_01005 | single_brd[14B5] |
| C213_RF | CAP_201 | radio_mlb[47C5]single_brd[24] |
| C214 | CAP_01005 | single_brd[14A5] |
| C214_RF | CAP_01005 | radio_mlb[47C4]single_brd[24] |
| C215 | CAP_0201-1 | single_brd[17B7] |
| C215_RF | CAP_01005 | radio_mlb[47C4]single_brd[24] |
| C216 | CAP_0201-1 | single_brd[8C3] |
| C216_RF | CAP_01005 | radio_mlb[47C4]single_brd[24] |
| C217_RF | CAP_01005 | radio_mlb[48C5]single_brd[24] |
| C218 | CAP_402 | single_brd[10B7] |
| C219 | CAP_402 | single_brd[10A7] |
| C220 | CAP_01005 | single_brd[9C7] |
| C221 | CAP_01005 | single_brd[9C7] |
| C222 | CAP_01005 | single_brd[9C7] |
| C223 | CAP_01005 | single_brd[9C7] |
| C224 | CAP_01005 | single_brd[9B7] |
| C225 | CAP_01005 | single_brd[9B7] |
| C226 | CAP_01005 | single_brd[9C6] |
| C226_RF | CAP_01005 | radio_mlb[50C5]single_brd[24] |
| C227 | CAP_01005 | single_brd[9C6] |
| C227_RF | CAP_01005 | radio_mlb[50C4]single_brd[24] |
| C228 | CAP_01005 | single_brd[9B6] |
| C228_RF | CAP_01005 | radio_mlb[50C4]single_brd[24] |
| C229 | CAP_01005 | single_brd[9C6] |
| C229_RF | CAP_01005 | radio_mlb[50C4]single_brd[24] |
| C230 | CAP_01005 | single_brd[9C6] |
| C230_RF | CAP_01005 | radio_mlb[50C4]single_brd[24] |
| C231 | CAP_01005 | single_brd[9B6] |
| C231_RF | CAP_01005 | radio_mlb[50C3]single_brd[24] |
| C232 | CAP_402 | single_brd[10C5] |
| C232_RF | CAP_01005 | radio_mlb[50C3]single_brd[24] |
| C233 | CAP_402 | single_brd[10C5] |
| C233_RF | CAP_01005 | radio_mlb[46C5]single_brd[24] |
| C234 | CAP_402 | single_brd[10B5] |
| C234_RF | CAP_0201 | radio_mlb[46C5]single_brd[24] |
| C235 | CAP_01005 | single_brd[9C3] |
| C235_RF | CAP_201 | radio_mlb[48C5]single_brd[24] |
| C236 | CAP_01005 | single_brd[9C3] |
| C236_RF | CAP_01005 | radio_mlb[44C4]single_brd[24] |
| C237 | CAP_0201-1 | single_brd[10B8] |
| C237_RF | CAP_01005 | radio_mlb[44C4]single_brd[24] |
| C238 | CAP_402 | single_brd[10B8] |
| C238_RF | CAP_01005 | radio_mlb[44C4]single_brd[24] |
| C239_RF | CAP_01005 | radio_mlb[46C4]single_brd[24] |
| C240 | CAP_01005 | single_brd[17B4] |
| C240_RF | CAP_01005 | radio_mlb[46C4]single_brd[24] |
| C241 | CAP_01005 | single_brd[8B4] |
| C242 | CAP_01005 | single_brd[17B6] |
| C242_RF | CAP_01005 | radio_mlb[50C6]single_brd[24] |
| C243 | CAP_01005 | single_brd[19B4] |
| C243_RF | CAP_01005 | radio_mlb[50C6]single_brd[24] |
| C244 | CAP_01005 | single_brd[8C3] |
| C244_RF | CAP_01005 | radio_mlb[41D1]single_brd[24] |
| C245_RF | CAP_0201 | radio_mlb[43B4]single_brd[24] |
| C246_RF | CAP_0201 | radio_mlb[43B4]single_brd[24] |
| C247_RF | CAP_01005 | radio_mlb[53D4]single_brd[24] |
| C248_RF | CAP_01005 | radio_mlb[40C2]single_brd[24] |
| C249 | CAP_0201 | single_brd[21B6] |
| C249_RF | CAP_0201 | radio_mlb[44B3]single_brd[24] |
| C250 | CAP_0402-1 | single_brd[12A7] |
| C250_RF | CAP_201 | radio_mlb[45B3]single_brd[24] |
| C251 | CAP_0402-1 | single_brd[12A7] |
| C251_RF | CAP_201 | radio_mlb[45B3]single_brd[24] |
| C252 | CAP_0402-1 | single_brd[14B8] |
| C252_RF | CAP_0201 | radio_mlb[47B3]single_brd[24] |
| C253 | CAP_01005 | single_brd[11B3] |
| C253_RF | CAP_0201 | radio_mlb[47B3]single_brd[24] |
| C254 | CAP_01005 | single_brd[10D5] |
| C254_RF | CAP_01005-1 | radio_mlb[48B3]single_brd[24] |
| C255_RF | CAP_201 | radio_mlb[51C7]single_brd[24] |
| C256 | CAP_402 | single_brd[11A3] |
| C256_RF | CAP_01005 | radio_mlb[47C6]single_brd[24] |
| C257_RF | CAP_01005 | radio_mlb[47B6]single_brd[24] |
| C258 | CAP_01005 | single_brd[19B3] |
| C258_RF | CAP_01005 | radio_mlb[44C6]single_brd[24] |
| C259 | CAP_01005 | single_brd[7C5] |
| C259_RF | CAP_01005 | radio_mlb[45B6]single_brd[24] |
| C260 | CAP_0402-1 | single_brd[12B8] |
| C261 | CAP_0402-1 | single_brd[12B8] |
| C262 | CAP_0402 | single_brd[12D3] |
| C263 | CAP_0402-1 | single_brd[12B8] |
| C264 | CAP_0402-1 | single_brd[12B8] |
| C265 | CAP_01005 | single_brd[13B6] |
| C266 | CAP_0201-1 | single_brd[12C8] |
| C267 | CAP_0402-1 | single_brd[12B8] |
| C268 | CAP_0402-1 | single_brd[12B8] |
| C270 | CAP_0402-1 | single_brd[12B7] |
| C271 | CAP_0402-1 | single_brd[12B7] |
| C272 | CAP_402 | single_brd[12C7] |
| C274 | CAP_01005 | single_brd[7C4] |
| C275 | CAP_01005 | single_brd[22D6] |
| C276 | CAP_01005 | single_brd[12A7] |
| C278 | CAP_402 | single_brd[12B7] |
| C279 | CAP_01005 | single_brd[22D6] |
| C280 | CAP_01005 | single_brd[7B5] |
| C280_RF | IND_0201 | radio_mlb[56C2]single_brd[24] |
| C281 | CAP_0402-2 | single_brd[12D7] |
| C281_RF | IND_0201 | radio_mlb[56B2]single_brd[24] |
| C282 | CAP_4P1_0402 | single_brd[4C3] |
| C282 | CAP_0201 | radio_mlb[52B6]single_brd[24] |
| C283 | CAP_01005 | single_brd[12A7] |
| C283_RF | CAP_0201 | radio_mlb[56C2]single_brd[24] |
| C284 | CAP_01005 | single_brd[7B4] |
| C285 | CAP_0610 | single_brd[4C8] |
| C286 | CAP_01005 | single_brd[21B5] |
| C287 | CAP_01005 | single_brd[21B5] |
| C289 | CAP_0201-1 | single_brd[8C6] |
| C290 | CAP_0402 | single_brd[12D4] |
| C291 | CAP_01005 | single_brd[12A2] |
| C292 | CAP_0402 | single_brd[12D4] |
| C293 | CAP_0402 | single_brd[12D2] |
| C294 | CAP_0402 | single_brd[12D3] |
| C295 | CAP_01005 | single_brd[19B3] |
| C296 | CAP_0402 | single_brd[12D4] |
| C297 | CAP_0402-1 | single_brd[14B8] |
| C298 | CAP_0201-1 | single_brd[20A7] |
| C299 | CAP_402 | single_brd[12A4] |
| C300 | CAP_01005 | single_brd[20A6] |
| C301 | CAP_0402 | single_brd[12C4] |
| C302 | CAP_0610 | single_brd[4B7] |
| C303 | CAP_0402 | single_brd[12C4] |
| C304 | CAP_0402 | single_brd[16D2] |
| C305 | CAP_0610 | single_brd[5C2] |
| C306 | CAP_0201 | single_brd[18D5] |
| C307 | CAP_0402-1 | single_brd[6D2] |
| C308 | CAP_0402 | single_brd[12D2] |
| C310 | CAP_0402 | single_brd[12C3] |
| C311 | CAP_01005 | single_brd[8B6] |
| C313 | CAP_01005 | single_brd[8B6] |
| C314 | CAP_01005 | single_brd[8B6] |
| C315 | CAP_0402 | single_brd[18D4] |
| C316 | CAP_0402 | single_brd[12D1] |
| C317 | CAP_201 | single_brd[13C4] |
| C318 | CAP_0201-1 | single_brd[13C4] |
| C319 | CAP_201 | single_brd[13C4] |
| C320 | CAP_P_0603-LLP | single_brd[18A4] |
| C321 | CAP_P_0402 | single_brd[18B4] |
| C322 | CAP_01005 | single_brd[13B8] |
| C323 | CAP_01005 | single_brd[13C3] |
| C324 | CAP_0402 | single_brd[18D4] |
| C325 | CAP_0402-1 | single_brd[12A6] |
| C326 | CAP_01005 | single_brd[13C3] |

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|---|---|---|
| C327 | CAP_0402 | single_brd[12C1] |
| C328 | CAP_0201 | single_brd[18B3] |
| C329 | CAP_0603-1 | single_brd[14C3] |
| C330 | CAP_0402-1 | single_brd[14C3] |
| C331 | CAP_0402 | single_brd[18D4] |
| C332 | CAP_0402-1 | single_brd[15C6] |
| C333 | CAP_0402-1 | single_brd[15C7] |
| C334 | CAP_0201-1 | single_brd[20C3] |
| C335 | CAP_0402-1 | single_brd[15D6] |
| C336 | CAP_01005 | single_brd[20C2] |
| C337 | CAP_0201-1 | single_brd[15D6] |
| C338 | CAP_0201-1 | single_brd[16C3] |
| C339 | CAP_201 | single_brd[15D5] |
| C340 | CAP_402 | single_brd[15C4] |
| C341 | CAP_0201-1 | single_brd[15C4] |
| C342 | CAP_0201 | single_brd[15D6] |
| C343 | CAP_0201-1 | single_brd[12B7] |
| C344 | CAP_01005 | single_brd[20D2] |
| C345 | CAP_01005 | single_brd[20D3] |
| C346 | CAP_0201 | single_brd[18A3] |
| C347 | CAP_0201-1 | single_brd[20D2] |
| C348 | CAP_0603-1 | single_brd[15D7] |
| C349 | CAP_0201 | single_brd[18B3] |
| C350 | CAP_402 | single_brd[19D2] |
| C351 | CAP_402 | single_brd[19D2] |
| C354 | CAP_01005 | single_brd[9A6] |
| C355 | CAP_01005 | single_brd[17B6] |
| C356 | CAP_01005 | single_brd[9A6] |
| C357 | CAP_0402-1 | single_brd[12C8] |
| C358 | CAP_0402-1 | single_brd[12C8] |
| C359 | CAP_01005 | single_brd[17B6] |
| C360 | CAP_01005 | single_brd[15B3] |
| C362 | CAP_01005 | single_brd[9A6] |
| C363 | CAP_01005 | single_brd[15B3] |
| C364 | CAP_0201 | single_brd[18A3] |
| C365 | CAP_0201 | single_brd[18D2] |
| C368 | CAP_0201 | single_brd[17A6] |
| C369 | CAP_0402-1 | single_brd[18C7] |
| C370 | CAP_402 | single_brd[18C7] |
| C371 | CAP_402 | single_brd[18C7] |
| C372 | CAP_0201-1 | single_brd[18C6] |
| C374 | SUPPR_TRANSIENT_2P1_01005 | single_brd[17C3] |
| C375 | SUPPR_TRANSIENT_2P1_01005 | single_brd[17C3] |
| C376 | CAP_0201 | single_brd[6D3] |
| C377 | CAP_0402 | single_brd[6D3] |
| C378 | CAP_0402 | single_brd[6D3] |
| C379 | CAP_0201-1 | single_brd[5A5] |
| C380 | CAP_0201-1 | single_brd[11C3] |
| C381 | CAP_0201 | single_brd[18D5] |
| C385 | CAP_0402-1 | single_brd[15D6] |
| C386 | CAP_0402-1 | single_brd[15B6] |
| C387 | CAP_0402-1 | single_brd[15B6] |
| C389 | CAP_0201-1 | single_brd[21C6] |
| C390 | CAP_0201-1 | single_brd[21C6] |
| C391 | CAP_0201-1 | single_brd[21D6] |
| C392 | CAP_01005 | single_brd[21C5] |
| C393 | CAP_01005 | single_brd[21D5] |
| C394 | CAP_0402-2 | single_brd[15B4] |
| C395 | CAP_01005 | single_brd[21C5] |
| C396 | CAP_0402-2 | single_brd[15B4] |
| C397 | CAP_01005 | single_brd[8D3] |
| C398 | CAP_0402-1 | single_brd[12B8] |
| C399 | CAP_0402-1 | single_brd[12A8] |
| C400 | CAP_01005 | single_brd[21A5] |
| C402 | CAP_01005 | single_brd[11C3] |
| C403 | CAP_0201 | single_brd[21B5] |
| C404 | CAP_01005 | single_brd[21B5] |
| C405 | CAP_0402-1 | single_brd[12A8] |
| C406 | CAP_01005 | single_brd[8D6] |
| C407 | CAP_01005 | single_brd[11C3] |
| C408 | CAP_01005 | single_brd[15A4] |
| C409 | CAP_01005 | single_brd[8D6] |
| C410 | CAP_01005 | single_brd[11C3] |
| C411 | CAP_0402-1 | single_brd[12B7] |
| C412 | CAP_0201-1 | single_brd[10C7] |
| C413 | CAP_01005 | single_brd[10C7] |
| C414 | CAP_0402-2 | single_brd[10C7] |
| C416 | CAP_01005 | single_brd[10C6] |
| C417 | CAP_0402-1 | single_brd[12A7] |
| C418 | CAP_0402-1 | single_brd[12A7] |
| C419 | CAP_0201-1 | single_brd[12A2] |
| C420 | CAP_201 | single_brd[10D6] |
| C421 | CAP_201 | single_brd[10D6] |
| C422 | CAP_0402-2 | single_brd[10D7] |
| C423 | CAP_0201-1 | single_brd[21D6] |
| C424 | CAP_0402-2 | single_brd[10B5] |
| C425 | CAP_402 | single_brd[10C4] |
| C427 | CAP_01005 | single_brd[22A8] |
| C429 | CAP_402 | single_brd[10B4] |
| C430 | CAP_01005 | single_brd[22A8] |
| C432 | CAP_01005 | single_brd[22A7] |
| C433 | CAP_01005 | single_brd[22A6] |
| C434 | CAP_01005 | single_brd[22A6] |
| C435 | CAP_01005 | single_brd[22A6] |
| C436 | CAP_01005 | single_brd[22A6] |
| C437 | CAP_01005 | single_brd[22A6] |
| C438 | CAP_01005 | single_brd[22A6] |
| C439 | CAP_201 | single_brd[19D3] |
| C440 | CAP_01005 | single_brd[19D4] |
| C441 | CAP_0201-1 | single_brd[14C4] |
| C442 | CAP_0201-1 | single_brd[12A3] |
| C443 | CAP_0402 | single_brd[12D2] |
| C444 | CAP_01005 | single_brd[19D3] |
| C500 | CAP_01005 | single_brd[15B2] |
| C501 | CAP_01005 | single_brd[15B2] |
| C999 | CAP_0402-1 | single_brd[6D2] |
| C1201_RF | CAP_0402 | radio_mlb[49C5]single_brd[24] |
| C1214_RF | CAP_01005 | radio_mlb[49C5]single_brd[24] |
| C1215_RF | CAP_0201-1 | radio_mlb[49C4]single_brd[24] |
| C1600 | CAP_402 | single_brd[16B4] |
| C1726_RF | CAP_01005 | radio_mlb[53D6]single_brd[24] |
| C1799 | CAP_01005 | single_brd[17D7] |
| C2260 | CAP_01005 | single_brd[9C7] |
| C2290 | CAP_01005 | single_brd[9C7] |
| C2307 | CAP_01005 | single_brd[17B2] |
| C2511 | CAP_402 | single_brd[21B7] |
| C2800 | CAP_201 | single_brd[14B1] |
| C3096 | CAP_01005 | single_brd[12D7] |
| C3301 | CAP_0402-1 | single_brd[18D4] |
| C3337 | CAP_0201-1 | single_brd[15D6] |
| C3345 | CAP_01005 | single_brd[20C1] |
| C5000 | CAP_01005 | single_brd[4B8] |

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|---|---|---|
| D1 | DIODE_SCHOT_2P_SOD-923-HF | single_brd[14B6] |
| D3 | DIODE_SCHOT_DFN1006-2 | single_brd[8C6] |
| DZ1 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[8B6] |
| DZ2 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[8B6] |
| DZ3 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[8B6] |
| DZ4 | ZENER_GDZ-0201 | single_brd[18D3] |
| DZ7 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[8B6] |
| DZ9 | SUPPR_TRANSIENT_2P1_01005 | single_brd[17B6] |
| DZ10 | SUPPR_TRANSIENT_2P1_01005 | single_brd[17B6] |
| DZ11 | SUPPR_TRANSIENT_2P1_01005 | single_brd[17C6] |
| DZ12 | SUPPR_TRANSIENT_2P1_01005 | single_brd[17C6] |
| DZ13 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[17B5] |
| DZ14 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[17B5] |
| DZ15 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[17B6] |
| DZ16 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[11B5] |
| DZ17 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[11B5] |
| DZ18 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[11B5] |
| DZ19 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[11B5] |
| DZ101 | SUPPR_TRANSIENT_2P1_01005-1 | single_brd[8C5] |
| DZ1100 | SUPPR_TRANSIENT_2P1_01005 | single_brd[11C3] |
| DZ1101 | SUPPR_TRANSIENT_2P1_01005 | single_brd[11B3] |
| FD1 | FIDUCIAL_0P5SM1P0SQ-NSP | single_brd[22C8] |
| FD2 | FIDUCIAL_0P5SM1P0SQ-NSP | single_brd[22C8] |
| FD3 | FIDUCIAL_0P5SM1P0SQ-NSP | single_brd[22B8] |
| FD4 | FIDUCIAL_0P5SM1P0SQ-NSP | single_brd[22B8] |
| FD5 | FIDUCIAL_0P5SM1P0SQ-NSP | single_brd[22B8] |
| FD6 | FIDUCIAL_0P5SM1P0SQ-NSP | single_brd[22B8] |
| FD7 | FIDUCIAL_0P5SM1P0SQ-NSP | single_brd[22B8] |
| FL1 | FILTER_2P_01005 | single_brd[17C7] |
| FL1_RF | FILTER_2P_01005-1 | radio_mlb[50C7]single_brd[24] |
| FL2 | FILTER_2P_01005 | single_brd[11B7] |
| FL2_RF | FILTER_SAW_LMTPFJGAE50_LGA | radio_mlb[43C3]single_brd[24] |
| FL3 | FILTER_2P_01005 | single_brd[8B6] |
| FL4 | FILTER_2P_01005 | single_brd[11B7] |
| FL4_RF | FILTER_2P_01005-1 | radio_mlb[39B7]single_brd[24] |
| FL5 | FILTER_2P_01005 | single_brd[17B7] |
| FL6 | FILTER_2P_0402 | single_brd[15C2] |
| FL6_RF | FILTER_SAW_2UNB2BAL_10P_LGA-1 | radio_mlb[43B4]single_brd[24] |
| FL7 | FILTER_2P_01005 | single_brd[8B6] |
| FL8 | FILTER_2P_01005 | single_brd[8B6] |
| FL9 | FILTER_2P_0402 | single_brd[15C2] |
| FL9_RF | FIL_COUPLER_6P_0805-6SM | radio_mlb[50B2]single_brd[24] |
| FL10 | FILTER_2P_01005 | single_brd[17C7] |
| FL10_RF | FIL_COUPLER_6P1_0805-6SM | radio_mlb[50C2]single_brd[24] |
| FL11 | FILTER_2P_01005 | single_brd[22D6] |
| FL12 | FILTER_2P_01005-1 | single_brd[11D7] |
| FL13 | FILTER_2P_01005 | single_brd[11D7] |
| FL14 | FILTER_2P_01005-1 | single_brd[11C7] |
| FL15 | FILTER_2P_01005-1 | single_brd[11D7] |
| FL16 | FILTER_2P_01005 | single_brd[17C6] |
| FL17 | FILTER_2P_01005 | single_brd[17C6] |
| FL19 | FILTER_2P_0201 | single_brd[17D2] |
| FL20 | FILTER_2P_01005 | single_brd[11B7] |
| FL21 | FILTER_2P_01005 | single_brd[8D3] |
| FL22 | FILTER_2P_01005 | single_brd[21A6] |
| FL23 | FILTER_2P_01005-1 | single_brd[11C2] |
| FL24 | FILTER_2P_0201-1 | single_brd[19B3] |
| FL25 | FILTER_2P_0201-1 | single_brd[19A3] |
| FL26 | FILTER_2P_0201-1 | single_brd[19A3] |
| FL27 | FILTER_2P_0201-1 | single_brd[19D3] |
| FL28 | FILTER_2P_01005 | single_brd[21A6] |
| FL29 | FILTER_2P_01005-1 | single_brd[21B6] |
| FL30 | FILTER_2P_01005-1 | single_brd[21B6] |
| FL31 | FILTER_2P_01005-1 | single_brd[21B6] |
| FL32 | FILTER_2P_01005 | single_brd[17D2] |
| FL33 | FILTER_2P_01005-1 | single_brd[17D6] |
| FL34 | FILTER_2P_01005 | single_brd[19C3] |
| FL35 | FILTER_2P_01005 | single_brd[19D3] |
| FL36 | FILTER_2P_01005 | single_brd[19C3] |
| FL37 | FILTER_2P_0201-1 | single_brd[19D3] |
| FL38 | FILTER_2P_01005 | single_brd[20B7] |
| FL39 | FILTER_2P_01005 | single_brd[20B5] |
| FL40 | FILTER_2P_01005 | single_brd[20D7] |
| FL41 | FILTER_2P_01005 | single_brd[20D4] |
| FL42 | FILTER_2P_01005 | single_brd[20D7] |
| FL43 | FILTER_2P_01005-1 | single_brd[21B6] |
| FL44 | FILTER_2P_01005-1 | single_brd[11D3] |
| FL45 | FILTER_2P_01005 | single_brd[11C7] |
| FL46 | FILTER_2P_01005 | single_brd[8B6] |
| FL47 | FILTER_2P_01005 | single_brd[8C3] |
| FL48 | FILTER_2P_01005 | single_brd[11B2] |
| FL49 | FILTER_2P_01005 | single_brd[17B7] |
| FL50 | FILTER_2P_01005 | single_brd[17D2] |
| FL51 | FILTER_2P_01005-1 | single_brd[11A7] |
| FL52 | FILTER_2P_01005-1 | single_brd[11A7] |
| FL53 | FILTER_2P_01005-1 | single_brd[17A3] |
| FL54 | FILTER_2P_01005-1 | single_brd[17D6] |
| FL55 | FILTER_2P_01005 | single_brd[20D4] |
| FL56 | FILTER_2P_01005 | single_brd[20D4] |
| FL57 | FILTER_2P_01005 | single_brd[11B7] |
| FL58 | FILTER_2P_01005 | single_brd[11C7] |
| FL59 | FILTER_2P_01005 | single_brd[17D2] |
| FL60 | FILTER_2P_01005-1 | single_brd[17A3] |

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|---|---|---|
| FL61 | FILTER_2P_01005-1 | single_brd[19D3] |
| FL62 | FILTER_2P_01005 | single_brd[19B3] |
| FL63 | FILTER_2P_01005 | single_brd[17D2] |
| FL64 | FILTER_2P_01005-1 | single_brd[11A7] |
| FL65 | FILTER_2P_01005-1 | single_brd[11A7] |
| FL66 | FILTER_2P_01005 | single_brd[17D6] |
| FL67 | FILTER_2P_0201 | single_brd[5A5] |
| FL68 | FILTER_2P_01005 | single_brd[17B7] |
| FL69 | FILTER_2P_01005 | single_brd[17C7] |
| FL74 | FILTER_2P_01005-1 | single_brd[8C6] |
| FL1701_RF | FILTER_3P5_LFE18832M-HC1D449 | radio_mlb[53D7]single_brd[24] |
| FL2302 | FILTER_2P_01005 | single_brd[17C2] |
| J1 | CON_F34ST_D6MT_SM_F-ST-SM | single_brd[11C5] |
| J1_RF | CON_M54ST_D4MT_SM_M-ST-SM | radio_mlb[35D2]single_brd[24] |
| J2 | CON_M18ST_D4MT_SM_M-ST-SM | single_brd[8C4] |
| J2_RF | CON_F1ST_COAX_S3MT_SM_F-ST-SM | radio_mlb[35B2]single_brd[24] |
| J3 | CON_M32ST_D4MT_SM_M-ST-SM | single_brd[21C4] |
| J3_RF | CON_F1ST_COAX_S3MT_SM_F-ST-SM | radio_mlb[35B2]single_brd[24] |
| J4 | CON_M42ST_D6MT_SM_M-ST-SM-COMBO | single_brd[18A7] |
| J4_RF | CON_F1ST_COAX_S3MT_SM_F-ST-SM | radio_mlb[53B8]single_brd[24] |
| J5 | CON_M22ST_D4MT_SM_M-ST-SM-1 | single_brd[19C5] |
| J5_RF | CON_F1ST_COAX_S3MT_SM_F-ST-SM | radio_mlb[53C3]single_brd[24] |
| J6 | CON_F6ST_6MT_BATT_SM_F-ST-SM | single_brd[22D7] |
| J6_RF | CON_F1ST_COAX_S3MT_SM_F-ST-SM | radio_mlb[53C3]single_brd[24] |
| J7 | CON_M38ST_D4MT_SM_M-ST-SM | single_brd[17C4] |
| J10_RF | CON_F1ST_COAX_S3MT_SM_F-ST-SM | radio_mlb[56D4]single_brd[24] |
| J11_RF | CON_F6ST_6MT_SIMCARD_SM3_F-ST-SM | radio_mlb[35A6]single_brd[24] |
| L1 | IND_0402 | single_brd[14B3] |
| L1_RF | IND_0806 | radio_mlb[36D3]single_brd[24] |
| L2_RF | IND_0806 | radio_mlb[36C3]single_brd[24] |
| L3 | IND_P_VLF302510T-SM | single_brd[14B7] |
| L3_RF | IND_0806 | radio_mlb[36C3]single_brd[24] |
| L4 | IND_TFA252010-SM | single_brd[15C6] |
| L4_RF | IND_0806 | radio_mlb[36D3]single_brd[24] |
| L5 | IND_P_TFA201610G-SM | single_brd[15B6] |
| L5_RF | IND_P_2520-SM | radio_mlb[36C3]single_brd[24] |
| L6 | IND_0201 | single_brd[17C2] |
| L6_RF | IND_01005 | radio_mlb[53C6]single_brd[24] |
| L7 | IND_0201 | single_brd[17C2] |
| L7_RF | IND_01005 | radio_mlb[47C6]single_brd[24] |
| L8 | IND_P_TFA201610G-PSE20161T2R2 | single_brd[12C7] |
| L8_RF | IND_03015 | radio_mlb[53C4]single_brd[24] |
| L9 | IND_P_TFA201610G-SM | single_brd[12D4] |
| L9_RF | IND_0603 | radio_mlb[56B6]single_brd[24] |
| L10 | IND_P_TFA201610G-SM | single_brd[12D4] |
| L10_RF | IND_01005 | radio_mlb[47B6]single_brd[24] |
| L11 | IND_P_TFA201610G-SM | single_brd[12D4] |
| L11_RF | IND_01005 | radio_mlb[44C6]single_brd[24] |
| L12 | IND_P_TFA201610G-SM | single_brd[12D4] |
| L12_RF | IND_01005 | radio_mlb[44B6]single_brd[24] |
| L13 | IND_P_TFA201610G-SM | single_brd[12C4] |
| L13_RF | IND_01005 | radio_mlb[50C7]single_brd[24] |
| L14 | IND_P_TFA201610G-SM | single_brd[12C4] |
| L14_RF | IND_01005 | radio_mlb[45C7]single_brd[24] |
| L15 | IND_P_TFA201610G-SM | single_brd[12C4] |
| L15_RF | IND_01005 | radio_mlb[45B6]single_brd[24] |
| L16 | IND_P_TFA201610G-SM | single_brd[12D2] |
| L16_RF | IND_01005 | radio_mlb[46C7]single_brd[24] |
| L17 | IND_P_TFA201610G-SM | single_brd[12D2] |
| L17_RF | IND_01005 | radio_mlb[46C6]single_brd[24] |
| L18 | IND_P_PIFE20161T-SM | single_brd[12C2] |
| L18_RF | IND_01005 | radio_mlb[48C6]single_brd[24] |
| L19 | IND_P_TFA201610G-SM | single_brd[14D6] |
| L19_RF | IND_01005 | radio_mlb[48B6]single_brd[24] |
| L20 | IND_0201 | radio_mlb[52B6]single_brd[24] |
| L21 | IND_PSB12101T-SM | single_brd[18B3] |
| L21_RF | IND_P_MAKK2016-SM | radio_mlb[49C4]single_brd[24] |
| L22_RF | IND_0201 | radio_mlb[48C2]single_brd[24] |
| L23_RF | IND_0201 | radio_mlb[50B3]single_brd[24] |
| L24 | IND_0201 | radio_mlb[50C3]single_brd[24] |
| L28 | IND_0201 | single_brd[21C6] |
| L29 | IND_0201 | single_brd[21D6] |
| L30 | IND_0201 | single_brd[21C5] |
| L33 | FILTER_4P_TCM0605-1 | single_brd[21C2] |
| L33_RF | CAP_0201 | radio_mlb[56D3]single_brd[24] |
| L34 | FILTER_4P_TCM0605-1 | single_brd[21C2] |
| L35 | FILTER_4P_TCM0605-1 | single_brd[11D2] |
| L36 | FILTER_4P_TCM0605-1 | single_brd[21B2] |
| L36 | IND_0201DS | radio_mlb[42B7]single_brd[24] |
| L37 | FILTER_4P_TCM0605-1 | single_brd[21B2] |
| L37 | IND_0201 | radio_mlb[42B7]single_brd[24] |
| L38 | FILTER_4P_TCM0605-1 | single_brd[21B2] |
| L38 | IND_0201DS | radio_mlb[42B6]single_brd[24] |
| L39 | FILTER_4P_TCM0605-1 | single_brd[11D2] |
| L39 | IND_0201 | radio_mlb[42B6]single_brd[24] |
| L41 | FILTER_4P_TCM0605-1 | single_brd[19C7] |
| L42 | FILTER_4P_TCM0605-1 | single_brd[19C7] |
| L44 | FILTER_4P_TCM0605-1 | single_brd[19C7] |
| L44 | IND_0201 | radio_mlb[42B3]single_brd[24] |
| L45 | IND_0201 | radio_mlb[42B3]single_brd[24] |
| L46 | IND_0201 | radio_mlb[42A3]single_brd[24] |
| L49 | IND_0201 | radio_mlb[42B3]single_brd[24] |
| L50 | IND_0201 | radio_mlb[42B3]single_brd[24] |
| L51 | IND_0201 | radio_mlb[42A3]single_brd[24] |
| L52 | IND_0201 | radio_mlb[42A3]single_brd[24] |
| L53_RF | IND_0201 | radio_mlb[43B2]single_brd[24] |
| L54_RF | IND_0201 | radio_mlb[43B2]single_brd[24] |
| L55_RF | IND_0201 | radio_mlb[43B2]single_brd[24] |
| L57_RF | IND_0201 | radio_mlb[50B1]single_brd[24] |
| L64_RF | IND_0201 | radio_mlb[43B5]single_brd[24] |
| L65_RF | IND_0201 | radio_mlb[43B5]single_brd[24] |
| L66_RF | IND_01005 | radio_mlb[53C6]single_brd[24] |
| L67_RF | IND_01005 | radio_mlb[53C6]single_brd[24] |
| L68_RF | IND_01005 | radio_mlb[53C6]single_brd[24] |
| L69_RF | IND_01005 | radio_mlb[53D3]single_brd[24] |
| L70_RF | IND_0201 | radio_mlb[44C3]single_brd[24] |
| L71_RF | IND_0201 | radio_mlb[45C3]single_brd[24] |

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|---|---|---|
| L72_RF | IND_0201 | radio_mlb[45B3]single_brd[24] |
| L73_RF | IND_0201 | radio_mlb[46C3]single_brd[24] |
| L74_RF | IND_0201 | radio_mlb[47C3]single_brd[24] |
| L75_RF | IND_0201 | radio_mlb[47B3]single_brd[24] |
| L77_RF | IND_01005 | radio_mlb[48B3]single_brd[24] |
| L78_RF | IND_0201 | radio_mlb[50B3]single_brd[24] |
| L79_RF | IND_0201 | radio_mlb[51C7]single_brd[24] |
| L1732_RF | IND_03015 | radio_mlb[53D6]single_brd[24] |
| PP1_RF | PROBEPOINT_SM | radio_mlb[35D7]single_brd[24] |
| PP2 | PROBEPOINT_SM | single_brd[6B8] |
| PP2_RF | PROBEPOINT_SM | radio_mlb[35D7]single_brd[24] |
| PP3 | PROBEPOINT_SM | single_brd[6A8] |
| PP3_RF | PROBEPOINT_SM | radio_mlb[35D7]single_brd[24] |
| PP4_RF | PROBEPOINT_SM | radio_mlb[35B6]single_brd[24] |
| PP5_RF | PROBEPOINT_SM | radio_mlb[35B6]single_brd[24] |
| PP6_RF | PROBEPOINT_SM | radio_mlb[35B6]single_brd[24] |
| PP7 | PROBEPOINT_SM | single_brd[18B8] |
| PP7_RF | PROBEPOINT_SM | radio_mlb[35B6]single_brd[24] |
| PP8 | PROBEPOINT_SM | single_brd[18B8] |
| PP8_RF | PROBEPOINT_SM | radio_mlb[35D6]single_brd[24] |
| PP9 | PROBEPOINT_SM | single_brd[18B5] |
| PP9_RF | PROBEPOINT_SM | radio_mlb[35D6]single_brd[24] |
| PP10 | PROBEPOINT_SM | single_brd[6A8] |
| PP10_RF | PROBEPOINT_SM | radio_mlb[35D6]single_brd[24] |
| PP11 | PROBEPOINT_SM | single_brd[18B1] |
| PP11_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP12_RF | PROBEPOINT_SM | radio_mlb[35D6]single_brd[24] |
| PP13 | PROBEPOINT_SM | single_brd[3D1] |
| PP13_RF | PROBEPOINT_SM | radio_mlb[35C6]single_brd[24] |
| PP14_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP15 | PROBEPOINT_SM | single_brd[3D1] |
| PP15_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP16_RF | PROBEPOINT_SM | radio_mlb[35C6]single_brd[24] |
| PP17 | PROBEPOINT_SM | single_brd[6B4] |
| PP17_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP18 | PROBEPOINT_SM | single_brd[18B1] |
| PP18_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP19 | PROBEPOINT_SM | single_brd[6B4] |
| PP19_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP20_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP21_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP22 | PROBEPOINT_SM | single_brd[16C2] |
| PP22_RF | PROBEPOINT_SM | radio_mlb[35C7]single_brd[24] |
| PP23 | PROBEPOINT_SM | single_brd[2C7] |
| PP24 | PROBEPOINT_SM | single_brd[2B7] |
| PP40_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| PP41_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| PP42_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| PP43_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| PP44_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| PP45_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| PP46_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| PP47_RF | PROBEPOINT_SM | radio_mlb[35B7]single_brd[24] |
| Q1 | TRA_MOSFET_NCHN_3P3_DFN1006H4-3 | single_brd[11B4] |
| Q2 | TRA_MOSFET_PCHN_4P5_BGA | single_brd[17A6] |
| Q4 | TRA_MOSFET_PCHN_9P2_BGA | single_brd[12C8] |
| Q1600 | TRA_MOSFET_NCHN_3P11_DFN0806-VML0806-COM | single_brd[16A3] |
| R1 | RES_01005 | single_brd[2C6] |
| R1_RF | RES_01005 | radio_mlb[35C1]single_brd[24] |
| R2 | RES_01005 | single_brd[18A3] |
| R3 | RES_01005 | single_brd[11A6] |
| R3_RF | RES_01005 | radio_mlb[35A5]single_brd[24] |
| R4_RF | RES_01005 | radio_mlb[39C4]single_brd[24] |
| R5 | RES_01005 | single_brd[3C4] |
| R5_RF | RES_01005 | radio_mlb[53C7]single_brd[24] |
| R6 | RES_01005 | single_brd[2B3] |
| R6_RF | RES_01005 | radio_mlb[38B6]single_brd[24] |
| R7 | RES_01005 | single_brd[2C3] |
| R7_RF | RES_01005 | radio_mlb[38A5]single_brd[24] |
| R8 | RES_01005 | single_brd[6B2] |
| R9 | RES_01005 | single_brd[11A6] |
| R9_RF | RES_01005 | radio_mlb[38B2]single_brd[24] |
| R10 | RES_01005 | single_brd[17C3] |
| R10_RF | RES_01005 | radio_mlb[38D1]single_brd[24] |
| R11 | RES_01005 | single_brd[12D4] |
| R12 | RES_01005 | single_brd[3A6] |
| R12_RF | RES_0201 | radio_mlb[52B5]single_brd[24] |
| R13_RF | RES_201 | radio_mlb[56D2]single_brd[24] |
| R14_RF | RES_01005 | radio_mlb[56A7]single_brd[24] |
| R15 | RES_01005 | single_brd[17C6] |
| R15_RF | RES_01005 | radio_mlb[56A7]single_brd[24] |
| R16 | RES_01005 | single_brd[3D4] |
| R16_RF | RES_01005 | radio_mlb[56C5]single_brd[24] |
| R17 | RES_01005 | single_brd[3D2] |
| R17_RF | RES_01005 | radio_mlb[56C3]single_brd[24] |
| R18 | RES_01005 | single_brd[3D2] |
| R18_RF | RES_01005 | radio_mlb[56C3]single_brd[24] |
| R19 | RES_01005 | single_brd[3D2] |
| R19_RF | RES_201 | radio_mlb[41D3]single_brd[24] |
| R20 | RES_01005 | single_brd[3A3] |
| R20_RF | RES_01005 | radio_mlb[37C8]single_brd[24] |
| R21 | RES_01005 | single_brd[3D2] |
| R21_RF | RES_01005 | radio_mlb[37C8]single_brd[24] |
| R22 | RES_01005 | single_brd[3A3] |
| R22_RF | RES_01005 | radio_mlb[37B5]single_brd[24] |
| R23 | RES_01005 | single_brd[17C3] |
| R23_RF | RES_01005 | radio_mlb[37D4]single_brd[24] |
| R24 | RES_01005 | radio_mlb[37D4]single_brd[24] |
| R25_RF | RES_01005 | radio_mlb[37D3]single_brd[24] |
| R26 | RES_01005 | single_brd[18C7] |
| R26_RF | RES_01005 | radio_mlb[37D3]single_brd[24] |
| R27 | RES_01005 | single_brd[4A8] |
| R27_RF | RES_01005 | radio_mlb[40C4]single_brd[24] |
| R28 | RES_01005 | single_brd[4A8] |
| R28_RF | RES_01005 | radio_mlb[40C2]single_brd[24] |
| R29 | RES_01005 | single_brd[4A6] |
| R29_RF | RES_01005 | radio_mlb[40C2]single_brd[24] |
| R30 | RES_01005 | single_brd[4A6] |
| R30_RF | RES_01005 | radio_mlb[40C1]single_brd[24] |
| R31 | RES_01005 | single_brd[4A5] |
| R32 | RES_01005 | single_brd[4A5] |
| R33 | RES_01005 | single_brd[4A4] |
| R33_RF | RES_01005 | radio_mlb[49C7]single_brd[24] |
| R34 | RES_01005 | single_brd[4A4] |
| R34_RF | RES_01005 | radio_mlb[49C6]single_brd[24] |
| R35 | RES_01005 | single_brd[15C5] |
| R35_RF | RES_01005 | radio_mlb[50B2]single_brd[24] |
| R36 | RES_01005 | single_brd[18A4] |
| R37 | RES_01005 | single_brd[7C5] |

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|---|---|---|
| R38 | RES_01005 | single_brd[7C5] |
| R39 | RES_01005 | single_brd[7C5] |
| R40 | RES_01005 | single_brd[7B5] |
| R41 | RES_01005 | single_brd[7C5] |
| R42 | RES_01005 | single_brd[7C5] |
| R43 | RES_201 | single_brd[16D5] |
| R43_RF | RES_01005 | radio_mlb[56A6]single_brd[24] |
| R44 | RES_201 | single_brd[16D5] |
| R44_RF | RES_01005 | radio_mlb[56A6]single_brd[24] |
| R45 | RES_201 | single_brd[11B4] |
| R46 | RES_01005 | single_brd[19C3] |
| R46 | RES_01005 | radio_mlb[42D5]single_brd[24] |
| R47 | RES_01005 | radio_mlb[42D5]single_brd[24] |
| R48 | RES_01005 | radio_mlb[42C5]single_brd[24] |
| R50 | RES_01005 | single_brd[17C6] |
| R51_RF | RES_01005 | radio_mlb[56A5]single_brd[24] |
| R52 | RES_01005 | single_brd[3C8] |
| R52_RF | RES_01005 | radio_mlb[56A5]single_brd[24] |
| R53_RF | RES_201 | radio_mlb[41D8]single_brd[24] |
| R55 | RES_01005 | single_brd[6B5] |
| R55_RF | RES_01005 | radio_mlb[50B8]single_brd[24] |
| R57 | THERMISTER_0201 | single_brd[13A8] |
| R58 | RES_201 | single_brd[17A7] |
| R65 | RES_01005 | single_brd[13C3] |
| R67 | RES_01005 | single_brd[2B7] |
| R70 | RES_01005 | single_brd[12D8] |
| R71 | RES_01005 | single_brd[2C3] |
| R72 | RES_01005 | single_brd[4D8] |
| R73 | RES_01005 | single_brd[4D8] |
| R78 | RES_01005 | single_brd[6C8] |
| R79 | RES_01005 | single_brd[18B5] |
| R82 | RES_01005 | single_brd[6C6] |
| R83 | RES_01005 | single_brd[16D5] |
| R84 | RES_01005 | single_brd[16C5] |
| R85 | RES_01005 | single_brd[11B3] |
| R86 | RES_01005 | single_brd[18C5] |
| R87 | RES_01005 | single_brd[13B3] |
| R90 | THERMISTER_0201 | single_brd[13B8] |
| R94 | RES_01005 | single_brd[11A7] |
| R95 | RES_01005 | single_brd[11A7] |
| R100 | RES_01005 | single_brd[10B8] |
| R102 | RES_01005 | single_brd[9B3] |
| R103 | RES_01005 | single_brd[9B3] |
| R107 | RES_01005 | single_brd[17D7] |
| R108 | THERMISTER_0201 | single_brd[13C8] |
| R109 | RES_0201 | single_brd[13B6] |
| R110 | THERMISTER_0201 | single_brd[13B8] |
| R112 | RES_01005 | single_brd[13B3] |
| R113 | RES_01005 | single_brd[13B3] |
| R114 | RES_01005 | single_brd[13B3] |
| R115 | RES_01005 | single_brd[12C4] |
| R116 | RES_201 | single_brd[13D4] |
| R117 | RES_01005 | single_brd[12C4] |
| R119 | RES_01005 | single_brd[12B1] |
| R125 | RES_01005 | single_brd[11C7] |
| R129 | RES_01005 | single_brd[15C7] |
| R130 | RES_01005 | single_brd[17A3] |
| R131 | RES_01005 | single_brd[13C3] |
| R136 | RES_01005 | single_brd[18B7] |
| R137 | RES_01005 | single_brd[6C5] |
| R141 | RES_01005 | single_brd[21A5] |
| R143 | RES_01005 | single_brd[6C5] |
| R145 | RES_01005 | single_brd[10C3] |
| R152 | RES_01005 | single_brd[19C3] |
| R153 | RES_01005 | single_brd[6B8] |
| R154 | RES_01005 | single_brd[20C7] |
| R155 | RES_01005 | single_brd[13C3] |
| R156 | RES_01005 | single_brd[13C3] |
| R157 | RES_01005 | single_brd[8D2] |
| R158 | RES_01005 | single_brd[16A8] |
| R159 | RES_01005 | single_brd[16A7] |
| R160 | RES_01005 | single_brd[6C2] |
| R161 | RES_01005 | single_brd[6C2] |
| R162 | RES_01005 | single_brd[3B8] |
| R163 | RES_01005 | single_brd[2B3] |
| R164 | RES_01005 | single_brd[2B3] |
| R169 | RES_01005 | single_brd[21C6] |
| R399 | RES_01005 | single_brd[3B4] |
| R1600 | RES_01005 | single_brd[16A4] |
| R1601 | RES_01005 | single_brd[16A4] |
| R1602 | RES_01005 | single_brd[16A4] |
| R1603 | RES_01005 | single_brd[16A4] |
| R1604 | RES_01005 | single_brd[16B3] |
| R1605 | RES_01005 | single_brd[16A3] |
| R3000 | RES_01005 | single_brd[3A6] |
| R3001 | RES_01005 | single_brd[3A6] |
| R3301 | RES_01005 | single_brd[18D4] |
| SH1 | SHLD_1P_SM | single_brd[22C7] |
| SH2 | SHLD_1P_SM | single_brd[22C7] |
| SH3 | SHLD_1P_SM | single_brd[22B7] |
| SH4 | SHLD_1P_SM | single_brd[22B7] |
| SP1 | SPRING_CLIP_1P_CLIP-SM | single_brd[22C5] |
| SP1_RF | SMT_PAD_SM-NSP | radio_mlb[53D8]single_brd[24] |
| SP2 | SMT_PAD_SM-NSP | radio_mlb[52B7]single_brd[24] |
| SP3 | SPRING_CLIP_1P_CLIP-SM | radio_mlb[52B7]single_brd[24] |
| TP1 | TP_TP-P6 | single_brd[22D4] |
| TP1_RF | TP_TP-P6 | radio_mlb[53C3]single_brd[24] |
| TP2 | TP_TP-P90 | single_brd[22D4] |
| TP3 | TP_TP-P6 | single_brd[22A2] |
| TP4 | TP_TP-P6 | single_brd[22D4] |
| TP5 | TP_TP-P6 | single_brd[22C4] |
| TP6 | TP_TP-P6 | single_brd[22C4] |
| TP7 | TP_TP-P6 | single_brd[22C4] |
| TP9 | TP_TP-P6 | single_brd[22B4] |
| TP10 | TP_TP-P6 | single_brd[22C2] |
| TP11 | TP_TP-P6 | single_brd[22A2] |
| TP12 | TP_TP-P80 | single_brd[22D4] |
| TP15 | TP_TP-P6 | single_brd[22B2] |
| TP16 | TP_TP-P6 | single_brd[22B2] |
| TP17 | TP_TP-P6 | single_brd[22B2] |
| TP18 | TP_TP-P6 | single_brd[22A4] |
| TP19 | TP_TP-P6 | single_brd[22A4] |
| TP20 | TP_TP-P6 | single_brd[22A4] |
| TP21 | TP_TP-P55 | single_brd[22D2] |
| TP22 | TP_TP-P55 | single_brd[22D2] |
| TP23 | TP_TP-P55 | single_brd[22D2] |
| TP24 | TP_TP-P55 | single_brd[22C2] |
| TP26 | TP_TP-P6 | single_brd[22C2] |
| TP27 | TP_TP-P6 | single_brd[22C2] |
| TP28 | TP_TP-P6 | single_brd[22B4] |
| TP29 | TP_TP-P6 | single_brd[22B4] |
| TP32 | TP_TP-P6 | single_brd[22C2] |

| | | |
|---|---|---|
| TP40 | TP_TP-P55 | single_brd[22C4] |
| TP120 | TP_TP-P55 | single_brd[22D4] |
| TP200 | TP_TP-P6 | single_brd[22D4] |
| TP2200 | TP_TP-P6 | single_brd[22C2] |
| TP2202 | TP_TP-P6 | single_brd[22B2] |
| TP8000 | TP_TP-P6 | single_brd[22B4] |
| U1 | H6P_FCMSP | single_brd[2C5] |
| U1 | H6P_FCMSP | single_brd[3D3 3D7] |
| U1 | H6P_FCMSP | single_brd[4D2 4D5 4D7] |
| U1 | H6P_FCMSP | single_brd[5D2 5D4 5D8 5D7] |
| U1 | H6P_FCMSP | single_brd[6C7] |
| U1 | H6P_FCMSP | single_brd[7C3 7C7] |
| U1_RF | MODEM_MDM9615M_1_BGA | radio_mlb[38B4 38D2 38D4 38C7]single_brd[24] |
| U1_RF | MODEM_MDM9615M_1_BGA | radio_mlb[39C3 39D7]single_brd[24] |
| U2 | CBTL1610_WLCSP36_WLCSP | single_brd[16D4] |
| U2_RF | PM8018_WLNSP105_BGA | radio_mlb[36C5]single_brd[24] |
| U2_RF | PM8018_WLNSP105_BGA | radio_mlb[37D3 37B7 37B4 37C7]single_brd[24] |
| U3 | TPS65730_CHESTNUT_BGA | single_brd[14D5] |
| U3_RF | WTR1605_SM | radio_mlb[40D4 40B7 40D7 40C7]single_brd[24] |
| U3_RF | WTR1605_SM | radio_mlb[41B3]single_brd[24] |
| U4 | FLASH_XGX8_60LGA_LGA-12X17 | single_brd[6C4] |
| U5 | 74AUP2G3404_SOT1115 | single_brd[18A3] |
| U5_RF | SUPPR_TPD4E101_SON4 | radio_mlb[35A3]single_brd[24] |
| U6 | CAT24C08_WLCSP4_WLCSP | single_brd[16B8] |
| U6_RF | FLASH_MX25U1635E_WLCSP | radio_mlb[39A7]single_brd[24] |
| U7 | AMBER_PMC_FCCSP-0.84MM | single_brd[12D6] |
| U7 | AMBER_PMC_FCCSP-0.84MM | single_brd[13C2 13C5] |
| U7_RF | RF1112_WLCSP | radio_mlb[53C5]single_brd[24] |
| U8 | AP3GDL20HAB18_LGA | single_brd[20D2] |
| U8_RF | MOD_WIFI_BT_IMPERIAL_LGA60_LGA | radio_mlb[56C5]single_brd[24] |
| U9 | OSCAR1_FCLGA | single_brd[20C6 20D6] |
| U9_RF | MOD_HFQSMXXFA_LGA | radio_mlb[43C7]single_brd[24] |
| U10 | LM3638_BGA | single_brd[14B3] |
| U11_RF | MAX77100_WLP | radio_mlb[49C5]single_brd[24] |
| U12 | CUMULUS_BGA63_WLBGA | single_brd[18C6] |
| U12_RF | FIL_HMD809J_SM | radio_mlb[56D2]single_brd[24] |
| U13 | TPS22924_CSP | single_brd[21C6] |
| U14_RF | AMP_TQM6M6314_LGA | radio_mlb[44C5]single_brd[24] |
| U15 | SAGE2_1_CSP | single_brd[18D3] |
| U16 | AK8963C_CSP-POP | single_brd[20A6] |
| U16_RF | MOD_HFQSWXXUA_LGA | radio_mlb[51C5]single_brd[24] |
| U17 | LM3564_WLCSP | single_brd[15B5] |
| U18 | AP2DHAB24_LGA | single_brd[20B2] |
| U20 | AMP_SKY65736_LGA | radio_mlb[52C4]single_brd[24] |
| U21 | CS42L67_WLCSP | single_brd[9C5] |
| U21 | CS42L67_WLCSP | single_brd[10D2 10C6] |
| U22 | CS35L19B_WLCSP | single_brd[15C6] |
| U23 | LM3534_BGA | single_brd[14B7] |
| U23_RF | AMP_AFEM792503_LGA | radio_mlb[45C5]single_brd[24] |
| U25 | 74LVC1G34_SOT1226 | single_brd[3A3] |
| U26 | 74LVC1G34_SOT1226 | single_brd[3A3] |
| U58_RF | AMP_DUPLEXER_BAND58_LGA30_LGA | radio_mlb[47C5]single_brd[24] |
| U207_RF | AMP_DUPLEXER_BAND20_LGA30_LGA | radio_mlb[46C5]single_brd[24] |
| U210 | LREG_LP5907_USMD | single_brd[21C7] |
| U1317_RF | AMP_RF3763_LGA | radio_mlb[48C5]single_brd[24] |
| U1600 | COMPARATOR_MAX9039_UCSP | single_brd[16A4] |
| U1700 | TPS22904_CSP | single_brd[17D8] |
| U2000_RF | AMP_SKY77572_LGA | radio_mlb[50C6]single_brd[24] |
| XW1 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[12A7] |
| XW1_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[37B6]single_brd[24] |
| XW2_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[37B6]single_brd[24] |
| XW3 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[12C2] |
| XW3_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[37B6]single_brd[24] |
| XW4 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |
| XW4_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[37B6]single_brd[24] |
| XW5 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[8C3] |
| XW6 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |
| XW6_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[49B4]single_brd[24] |
| XW7 | SHORT_SM | single_brd[11C3] |
| XW8 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |
| XW8_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[49B4]single_brd[24] |
| XW9 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |
| XW9_RF | SHORT_LAYER_9_SHORT-L9-SM | radio_mlb[56D6]single_brd[24] |
| XW10 | SHORT_SM | single_brd[12B1] |
| XW10_RF | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | radio_mlb[37A4]single_brd[24] |
| XW11 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |
| XW11_RF | SHORT_SHORT-01005 | radio_mlb[56C7]single_brd[24] |
| XW12 | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | single_brd[22D7] |
| XW12_RF | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | radio_mlb[35A7]single_brd[24] |
| XW13 | SHORT_SM | single_brd[17D4] |
| XW13_RF | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | radio_mlb[35A7]single_brd[24] |
| XW14 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |
| XW14_RF | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | radio_mlb[35A7]single_brd[24] |
| XW15 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |

| | | |
|---|---|---|
| XW15_RF | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | radio_mlb[35A7]single_brd[24] |
| XW16_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[37A6]single_brd[24] |
| XW17_RF | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | radio_mlb[36C5]single_brd[24] |
| XW18 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[12D2] |
| XW20 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[12D2] |
| XW20_RF | SHORT_LAYER_9_SHORT-L9-SM | radio_mlb[56D6]single_brd[24] |
| XW25 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[17B7] |
| XW28 | SHORT_SM | single_brd[13B6] |
| XW29 | SHORT_SM | single_brd[13B6] |
| XW31 | SHORT_SM | single_brd[21C4] |
| XW33 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[13B6] |
| XW35 | SHORT_LAYER_6_SHORT-L6-SM | single_brd[15D6] |
| XW36 | SHORT_SM | single_brd[18D5] |
| XW41 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[8C3] |
| XW42 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[11C3] |
| XW43 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[10D7] |
| XW44 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[2C1] |
| XW45 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[17B6] |
| XW47_RF | SHORT10LP25_WITH_ALTS_SHORT-10L-0.25MM-SM | radio_mlb[49C6]single_brd[24] |
| XW48 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[10B5] |
| XW49 | SHORT_SM | single_brd[15A5] |
| XW51 | SHORT_SM | single_brd[18B7] |
| XW93 | SHORT_SM | single_brd[3B2] |
| XW120 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[12C6] |
| XW1600 | SHORT10LP1_WITH_ALTS_SHORT-10L-0.1MM-SM | single_brd[16B4] |
| Y1 | CRYSTAL_4PIN1_1.60X1.20MM-SM | single_brd[2C2] |
| Y1_RF | CRYSTAL_4PIN2_2.0X1.6-SM | radio_mlb[37B4]single_brd[24] |
| Y2 | CRYSTAL_2012-1 | single_brd[12A7] |

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 |
|---|---|---|---|
| 8 | 0001837617 | ENGINEERING RELEASED | 2013-02-18 |

# X145_RADIO_MLB SUBDESIGN - EVT1C 02/12/2013


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## BOARD_ID BOM OPTIONS

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 118S0621 | 1 | 1.00M 1% 01005 | R25_RF | Y | N51_CFG_A |
| 118S0732 | 1 | 50K 1% 01005 | R26_RF | Y | N51_CFG_A |
| 117S0159 | 1 | 470K 5% 01005 | R25_RF | Y | N51_CFG_B |
| 118S0626 | 1 | 100K 1% 01005 | R26_RF | Y | N51_CFG_B |
| 118S0626 | 1 | 100K 1% 01005 | R25_RF | Y | N53_CFG_A |
| 118S0726 | 1 | 162K 1% 01005 | R26_RF | Y | N53_CFG_A |
| 118S0626 | 1 | 100K 1% 01005 | R25_RF | Y | N53_CFG_B |
| 118S0623 | 1 | 267K 1% 01005 | R26_RF | Y | N53_CFG_B |
| 118S0659 | 1 | 255K 1% 01005 | R25_RF | Y | N48_CFG_A |
| 118S0626 | 1 | 100K 1% 01005 | R26_RF | Y | N48_CFG_A |
| 118S0689 | 1 | 147K 1% 01005 | R25_RF | Y | N48_CFG_B |
| 118S0626 | 1 | 100K 1% 01005 | R26_RF | Y | N48_CFG_B |
| 118S0626 | 1 | 100K 1% 01005 | R25_RF | Y | N49_CFG_A |
| 118S0650 | 1 | 499K 1% 01005 | R26_RF | Y | N49_CFG_A |
| 118S0732 | 1 | 50K 1% 01005 | R25_RF | Y | N49_CFG_B |
| 118S0621 | 1 | 1.00M 1% 01005 | R26_RF | Y | N49_CFG_B |

SCH :951-2446
BOM :939-0308
BOARD :920-2148

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|---|---|---|---|---|---|
| 951-2446 | 1 | X145_RADIO_MLB | SCH | Y | |
| 825-2029 | 1 | EEE FOR 939-0308 | EEEE_???? | Y | NA |

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

# AP INTERFACE & DEBUG CONNECTORS

## AP CONNECTIONS

IN = FROM AP
OUT = TO AP

PP_BATT_VCC_CONN
PP_VCC_MAIN_WLAN
TX_GTR_THRESH
BB_RST_L
RESET_DET_L
RADIO_ON_L
RESET_PMU_L
HOST_WAKE_BB
RF_RESET_L
PBL_RUN_BB_HSIC1_RDY
WLAN_HSIC3_RESUME
AP_WAKE_MODEM
AP_HSIC1_RDY
50_HSIC_BB_DATA
50_HSIC_BB_STROBE
BB_HSIC1_REMOTE_WAKE
BB_UART_TXD
BB_UART_RXD
BB_UART_RTS_L
BB_UART_CTS_L
BB_USB_VBUS
90_BB_USB_D_P
90_BB_USB_D_N
BB_I2S_CLK
BB_I2S_WS
BB_I2S_TXD
BB_I2S_RXD
PP_SYNC
PP_WL_BT_VDDIO_AP
CLK32K_AP
WLAN_REG_ON
WLAN_UART_TXD
WLAN_UART_RXD
HOST_WAKE_WLAN
WLAN_HSIC3_DEVICE_RDY
AP_HSIC3_RDY
50_HSIC_WLAN_DATA
50_HSIC_WLAN_STROBE
HOST_WAKE_BT
BT_WAKE
BT_UART_TXD
BT_UART_RXD
BT_UART_RTS_L
BT_UART_CTS_L
BT_REG_ON
BT_PCM_CLK
BT_PCM_SYNC
BT_PCM_OUT
BT_PCM_IN
LAT_SW1_CTL
LAT_SW2_CTL

BB_SPI_TO_PAC_CS
BB_SPI_TO_PAC_DATA_MOSI
BB_SPI_TO_PAC_CLK
PAC_TO_BB_SPI_DATA_MISO
PP_LDO14_2V65
BB_JTAG_TCK
BB_JTAG_TDI
BB_JTAG_TMS
BB_JTAG_TRST_L
BB_JTAG_TDO
ADC_SMPS1_MSMC_1V05
ADC_SMPS3_MSME_1V8
ADC_LDO6_RUIM_1V8
ADC_LVS1
BB_IPC_GPIO
OSCAR_CONTEXT_A
OSCAR_CONTEXT_B

## PROBE POINTS

PP1_RF P4MM SM — BB_ERROR_FLAG
PP2_RF P3MM SM — SLEEP_CLK_32K
PP3_RF P4MM SM — PMIC_SSBI
PP17_RF P4MM-NSM SM — 19P2M_MDM
PP11_RF P4MM SM — CLK32K_AP
PP14_RF P4MM SM — AP_HSIC3_RDY
PP15_RF P4MM SM — WLAN_HSIC3_DEVICE_RDY
PP18_RF P4MM SM — WLAN_HSIC3_RESUME
PP19_RF P4MM-NSM SM — WTR_SSBI_TX_GPS
PP20_RF P4MM-NSM SM — WTR_SSBI_PRX_DRX
PP21_RF P4MM SM — WTR_RX_ON
PP22_RF P4MM SM — WTR_RF_ON
PP40_RF P4MM SM — WLAN_COEX_TXD
PP41_RF P4MM SM — LTE_COEX_TXD
PP42_RF P4MM-NSM SM — 50_HSIC_BB_STROBE
PP43_RF P4MM-NSM SM — 50_HSIC_BB_DATA
PP44_RF P4MM SM — 50_HSIC_WLAN_STROBE
PP45_RF P4MM SM — 50_HSIC_WLAN_DATA
PP46_RF P4MM SM — BT_UART_TXD
PP47_RF P4MM SM — BT_UART_RXD
PP8_RF P4MM-NSM SM — SIMCRD_RST_CONN
PP9_RF P4MM-NSM SM — SIMCRD_CLK_CONN
PP10_RF P4MM SM — SPI_DATA_MOSI
PP12_RF P4MM SM — SPI_CLK
PP13_RF P4MM SM — SPI_CS_L
PP16_RF P4MM SM — SPI_DATA_MISO
PP4_RF P4MM SM — BB_I2S_CLK
PP5_RF P4MM SM — BB_I2S_WS
PP6_RF P4MM SM — BB_I2S_RXD
PP7_RF P4MM SM — BB_I2S_TXD

## DEBUG CONNECTOR

J1_RF AXE654124 M-ST-SM (NOSTUFF)

| | | | |
|---|---|---|---|
| DEBUG_RST_L | 10 | 9 | PP_SMPS3_MSME_1V8 |
| RESET_PMU_L | 12 | 11 | BT_WAKE |
| RADIO_ON_L | 14 | 13 | |
| | 16 | 15 | PP_LDO6_RUIM_1V8 |
| BB_USB_VBUS | 18 | 17 | WLAN_REG_ON |
| 90_BB_USB_D_N | 20 | 19 | NC |
| 90_BB_USB_D_P | 22 | 21 | NC |
| RF_RESET_L | 24 | 23 | PMIC_RESOUT_L |
| BB_JTAG_TCK | 26 | 25 | NC |
| BB_JTAG_TMS | 28 | 27 | |
| BB_JTAG_TDO | 30 | 29 | AP_HSIC1_RDY |
| BB_JTAG_TDI | 32 | 31 | BT_REG_ON |
| BB_JTAG_TRST_L | 34 | 33 | HOST_WAKE_BB |
| BB_JTAG_RTCLK | 36 | 35 | NC |
| | 38 | 37 | RESET_DET_L |
| PS_HOLD_PMIC | 40 | 39 | SIMCRD_CLK_CONN |
| BB_UART_TXD | 42 | 41 | SIMCRD_IO_CONN |
| BB_UART_RXD | 44 | 43 | SIM_TRAY_DETECT |
| BB_UART_RTS_L | 46 | 45 | BB_RST_L |
| BB_UART_CTS_L | 48 | 47 | SIMCRD_RST_CONN |
| GPIO_DEBUG_LED | 50 | 49 | PBL_RUN_BB_HSIC1_RDY |
| GPIO_51 | 52 | 51 | GPIO54/BOOT_CONFIG_0 — 2G_FEM_S1 |
| 2G_FEM_S4 | 54 | 53 | GPIO53/BOOT_CONFIG_1 — GPIO48/BOOT_CONFIG_6 — BOOT_CONFIG_6 |
| | 58 | 57 | |

GPIO51/BOOT_CONFIG_3

R1_RF 0.00 1% 2 LAT_SW1_CTL — 0% 1/32W MF 01005 NOSTUFF

| BOOT OPTIONS | BOOT_CONFIG SW REGISTER VALUE | GPIO/BOOT_CONFIG CONFIGURATION 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|
| | | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 |
| BOOT_DEFAULT_OPTION | 0X00 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X |
| BOOT_NAND_OPTION | 0X01 | X | 1 | 0 | 0 | 0 | 0 | 0 | 1 | X |
| BOOT_HSIC_OPTION | 0X02 | X | 1 | 0 | 0 | 0 | 0 | 1 | 0 | X |
| BOOT_USB_OPTION | 0X03 | X | 1 | 0 | 0 | 0 | 0 | 1 | 1 | X |
| ENABLE SAHARA PROTOCOL | 0X08 | X | 1 | 0 | 0 | 1 | 0 | X | X | X |

J2_RF MM4829-2702 F-ST-SM (NOSTUFF) — 1 — 50_HSIC_BB_DATA

J3_RF MM4829-2702 F-ST-SM (NOSTUFF) — 1 — 50_HSIC_BB_STROBE

## SIM CARD CONNECTOR

PP_LDO6_RUIM_1V8
R3_RF 15.00K 1% 1/32W MF 01005
J11_RF SIM-CARD-N48 F-ST-SM
VCC
SIMCRD_RST_CONN — RST
SIMCRD_CLK_CONN — CLK
I/O — SIMCRD_IO_CONN
DETECT — SIM_TRAY_DETECT
SWP
GND
C177_RF 100PF 5% 6.3V CERM 01005
C1_RF 12V-33PF 01005-1

XW12_RF SHORT-10L-0.1MM-SM — PP_SMPS1_MSMC_1V05 — ADC_SMPS1_MSMC_1V05
XW13_RF SHORT-10L-0.1MM-SM — PP_SMPS3_MSME_1V8 — ADC_SMPS3_MSME_1V8
XW14_RF SHORT-10L-0.1MM-SM — PP_LDO6_RUIM_1V8 — ADC_LDO6_RUIM_1V8
XW15_RF SHORT-10L-0.1MM-SM — PP_LVS1 — ADC_LVS1

## SIM CARD ESD PROTECTION

U5_RF TPD4E101DPWR SON4

| | | | |
|---|---|---|---|
| SIMCRD_IO_CONN | 1 | 4 | SIM_TRAY_DETECT |
| GND | 5 | | |
| SIMCRD_RST_CONN | 2 | 3 | SIMCRD_CLK_CONN |

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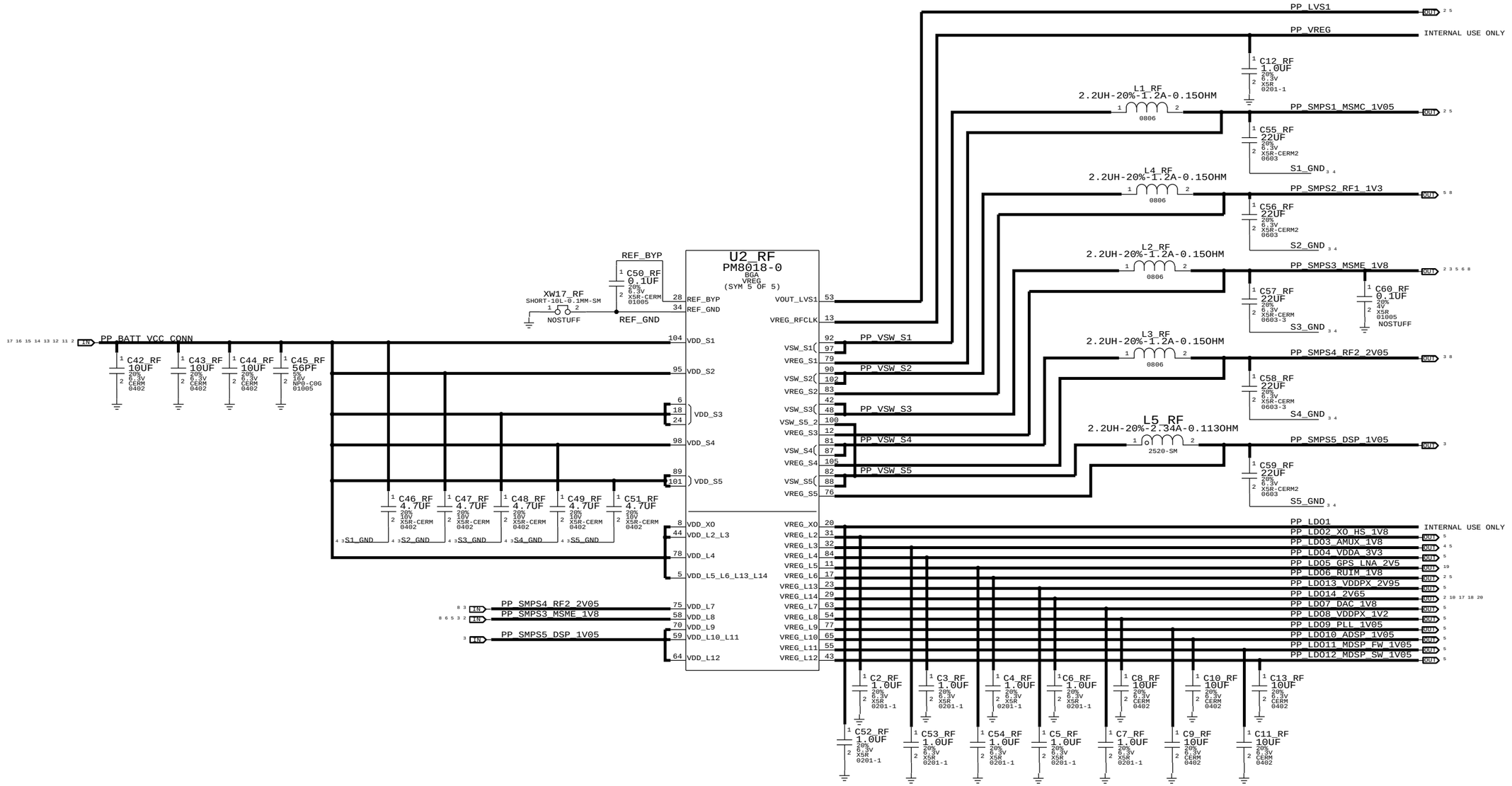
# PMU (1 OF 2)

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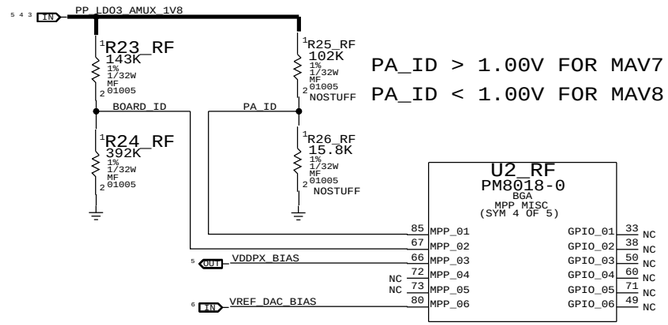
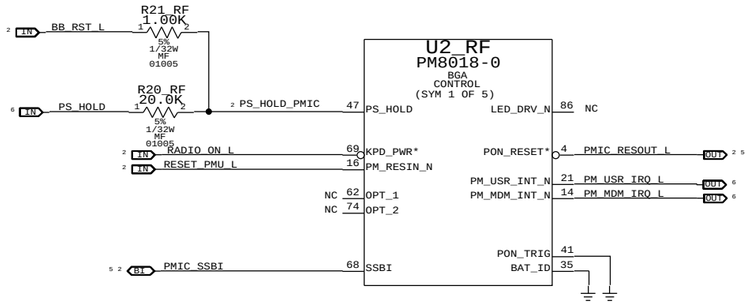
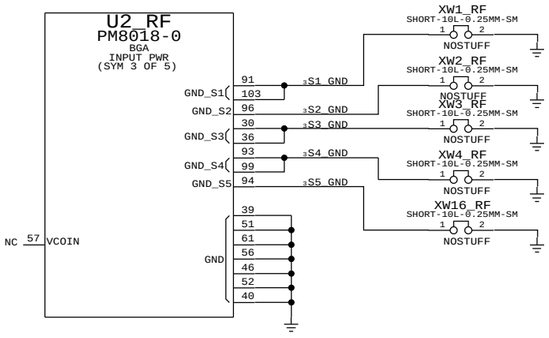
# PMU (2 OF 2)

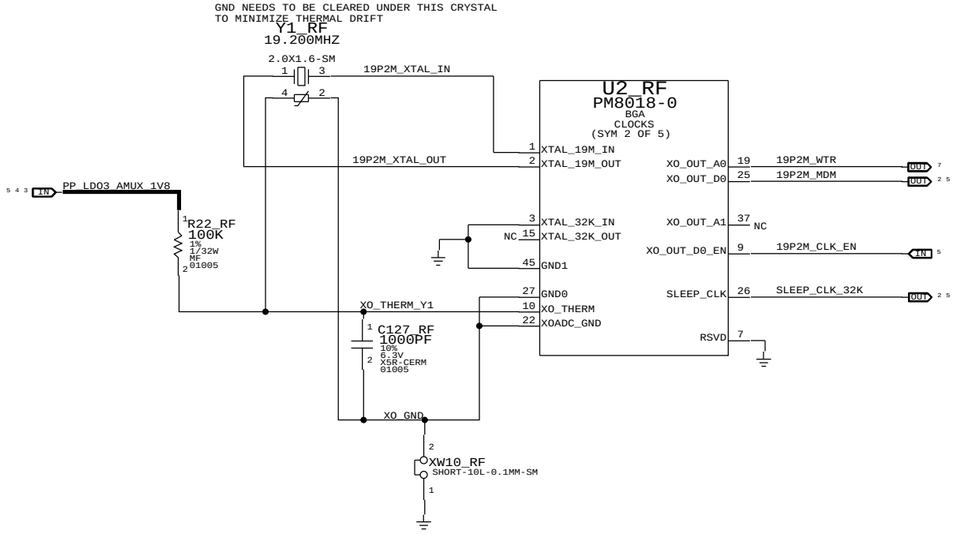
| BOARD_ID | REVISION |
|---|---|
| 0.1V | UNUSED |
| 0.3V | UNUSED |
| 0.5V | UNUSED |
| 0.7V | PROTO1 |
| 0.9V | PROTO2 |
| 1.1V | EVT1 |
| 1.3V | E1C |
| 1.5V | EVT2 |
| 1.7V | DVT/PVT |




PA THERMISTOR REMOVED TO MATCH N41, AP SECTION
NEEDS ITS OWN THERMISTOR PLACED NEAR THE PA'S.



# BASEBAND (1 OF 2)

PP_SMPS1_MSMC_1V05 — C15_RF 1.0UF, C18_RF 1.0UF, C20_RF 1.0UF, C23_RF 1.0UF, C26_RF 1.0UF (20% 6.3V X5R 0201-1)

PP_LDO9_PLL_1V05 — C16_RF 1.0UF, C19_RF 1.0UF, C21_RF 1.0UF, C24_RF 1.0UF (20% 6.3V X5R 0201-1)

PP_LDO10_ADSP_1V05 — C27_RF 1.0UF, C30_RF 1.0UF (20% 6.3V X5R 0201-1)

PP_LDO11_MDSP_FW_1V05 — C34_RF 1.0UF, C35_RF 1.0UF, C36_RF 1.0UF (20% 6.3V X5R 0201-1)

PP_SMPS3_MSME_1V8 — C14_RF 1.0UF, C17_RF 1.0UF (20% 6.3V X5R 0201-1)

PP_SMPS3_MSME_1V8 — C22_RF 1.0UF, C25_RF 1.0UF (20% 6.3V X5R 0201-1)

PP_LDO12_MDSP_SW_1V05 — C28_RF 1.0UF, C29_RF 1.0UF, C32_RF 1.0UF (20% 6.3V X5R 0201-1)

U1_RF MDM9615M BGA (5 OF 6) PWR

| | | |
|---|---|---|
| PP_SMPS1_MSMC_1V05 | F8, F9, F12, F13, F14, G9, G12, H9, H12, J8, J9, J12, J13, K8, K9, K12, K13, L8, L9, L12, L13, M8, M9, M12, M13, N8, N9, N12, N13, P9, P12, R9, R12, T8, T9 | VDD_CORE |
| PP_LDO9_PLL_1V05 | C17, C18, E17, F17, G7, G8, G13, G14, H7, H8, H13, H14, P7, P8, P13, P14, R7, R8, R13, R14 | VDD_MEM |
| PP_SMPS3_MSME_1V8 | A14, A19, F21, M1, M21 | VDD_P1 |
| PP_LDO13_VDDPX_2V95 | K21 | VDD_P2 |
| PP_SMPS3_MSME_1V8 | AA20, B19, F20, M20 | VDD_DDR |
| PP_LDO10_ADSP_1V05 | C5, C6, E6, E7, F5 | VDD_ADSP |
| PP_LDO11_MDSP_FW_1V05 | T15, T16, T17, U14, U15, U16, U17, U19, T19 | VDD_MDSP_FW |
| PP_LDO12_MDSP_SW_1V05 | N15, N16, N17, N19, P15, P16, P17, P19 | VDD_MDSP_SW |
| PP_LVS1 | B13 | VDD_QFUSE_PRG |
| PP_LDO2_XO_HS_1V8 | E12 | VDD_USB_1P8 |
| PP_LDO4_VDDA_3V3 | E10 | VDD_USB_3P3 |
| VDDPX_BIAS | E16 | VDD_HVPAD_BIAS |
| PP_LDO9_PLL_1V05 | K17, L17 | VDD_PLL1 |
| PP_LDO3_AMUX_1V8 | W12 | VDD_PLL2 |
| PP_LDO7_DAC_1V8 | U6, U7 | VDD_A2 |
| PP_SMPS2_RF1_1V3 | W9, AA7 | VDD_A1 |
| PP_SMPS3_MSME_1V8 | A15, G1, G21, L1, U1, W19 | VDD_P3 |
| PP_LDO6_RUIM_1V8 | A2 | VDD_P4 |
| PP_SMPS3_MSME_1V8 | A3 | VDD_P5 |
| PP_LDO8_VDDPX_1V2 | A7 | VDD_P6 |
| PP_SMPS3_MSME_1V8 | A11 | VDD_P7 |

GND: AA11, AA18, AA15

C68_RF 1.0UF (20% 6.3V X5R 0201-1)

C71_RF 1.0UF (20% 6.3V X5R 0201-1)

C31_RF 0.1UF (20% 4V X5R 01005 NOSTUFF)

C70_RF 1.0UF, C33_RF 1.0UF (20% 6.3V X5R 0201-1)

C69_RF 1.0UF (20% 6.3V X5R 0201-1)

R6_RF 470K (5% 1/32W MF 01005)

U1_RF MDM9615M BGA (6 OF 6) GND

GND: A21, AA1, AA21, B2, B7, B11, B14, B15, C19, F6, F7, F10, F15, F16, F19, G2, G6, G10, G11, G15, G16, G17, G20, H6, H10, H11, H15, H16, J6, J7, J10, J11, J14, J15, K6, K7, K10, K11, K14, K15, K20, L2, L6, L7, L10, L11, L14, L15, M6, M7, M10, M11, M14, M15, M16, M17, M19, N6, N7, N10, N11, N14, P6, P10, P11, R6, R10, R11, R15, R16, R17, R19, T10, T12, T13, T14, U2, V19

GND_ANA: F11, J16, K16, L16, T6, T7, T11, U9, U12, W7, W14, Y7, Y11, Y15, Y18, U13, W13

U1_RF MDM9615M BGA (2 OF 6) EBI1_EBI2

| | | | | |
|---|---|---|---|---|
| NC | D21 | EBI2_NAND_CS* | EBI2_AD_0 J20 | NC |
| NC | E19 | EBI2_OE* | EBI2_AD_1 J19 | NC |
| NC | D20 | EBI2_WE* | EBI2_AD_2 G19 | NC |
| NC | D19 | EBI2_BUSY* | EBI2_AD_3 H20 | NC |
| | | | EBI2_AD_4 J21 | NC |
| | | | EBI2_AD_5 H19 | NC |
| NC | C20 | EBI2_CLE* | EBI2_AD_6 H21 | NC |
| NC | E20 | EBI2_ALE* | EBI2_AD_7 E21 | NC |

EBI1_CAL — C21_EBI1_CAL, R10_RF 240 (1% 1/32W MF 01005)

U1_RF MDM9615M BGA (1 OF 6) DIGITAL

| | | | |
|---|---|---|---|
| PMIC_RESOUT_L | Y20 | RESIN* | RESOUT* U20 NC |
| DEBUG_RST_L | Y4 | SRST* | |
| SLEEP_CLK_32K | AA19 | SLEEP_CLK | |
| BB_JTAG_TCK | Y3 | TCK | TDO AA3 BB_JTAG_TDO (OUT) |
| BB_JTAG_TDI | AA2 | TDI | RTCK Y2 BB_JTAG_RTCLK (OUT) |
| BB_JTAG_TMS | W4 | TMS | HSIC_CAL A8 50_HSIC_CAL |
| BB_JTAG_TRST_L | AA4 | TRST* | HSIC_DATA C7 50_HSIC_BB_DATA (BI) |
| NC | W20 | MODE_0 | HSIC_STB B8 50_HSIC_BB_STROBE (BI) |
| NC | Y19 | MODE_1 | |
| 19P2M_MDM | V20 | CXO | |
| 19P2M_CLK_EN | U21 | CXO_EN | |
| PMIC_SSBI | Y21 | SSBI_PMIC | |
| 90_BB_USB_D_P | C11 | USB_HS_DP | DNC E8, C8, B9, A9 NC |
| 90_BB_USB_D_N | E11 | USB_HS_DM | |
| RREFEXT | A12 | USB_HS_REXT | |
| ID IS NC | C12 | USB_HS_ID | |
| | B12 | USB_HS_SYSCLK | |
| BB_USB_VBUS | C10 | USB_HS_VBUS | DNC E9, C9, B10, A10 NC |
| | | | SDC1_CMD K19 NC |
| | | | SDC1_CLK L21 NC |
| | | | SDC1_DATA0 L19 NC |
| | | | SDC1_DATA1 L20 NC |
| | | | SDC1_DATA2 N20 NC |
| | | | SDC1_DATA3 N21 NC |

R9_RF 240 (1% 1/32W MF 01005)

R7_RF 200 (1% 1/32W MF 01005)

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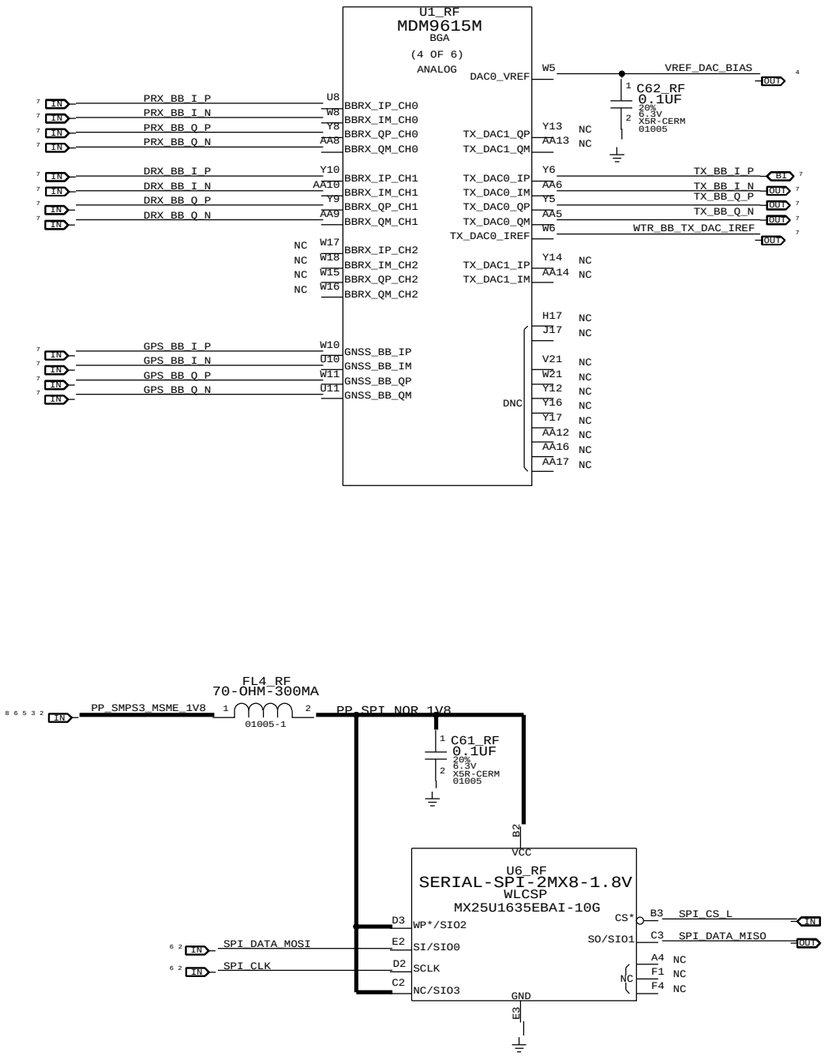
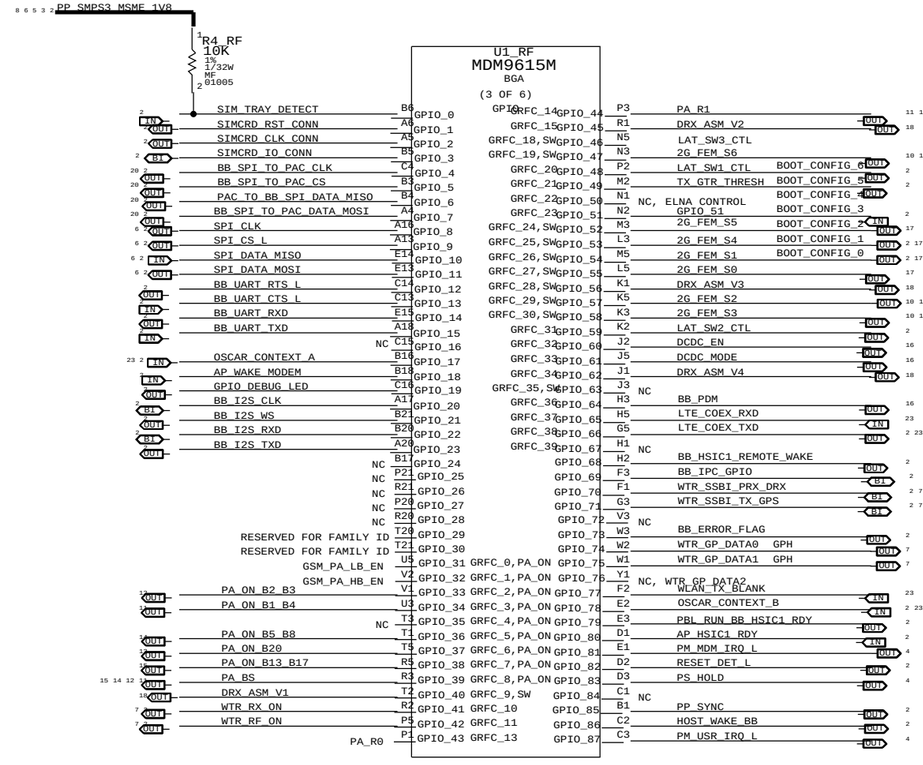
# BASEBAND (2 OF 2)



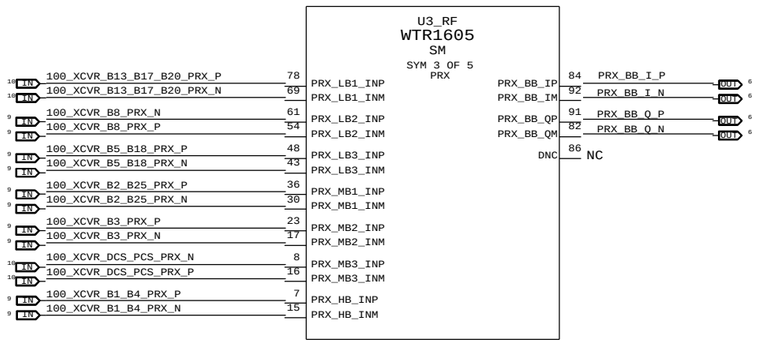




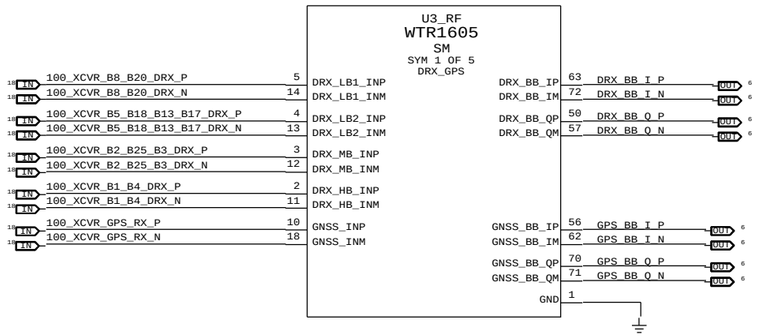


# RF TRANSCEIVER (1 OF 4)

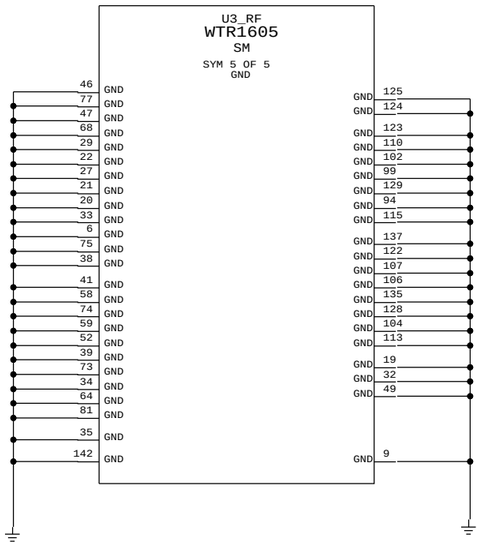
PRX TRANSCEIVER RF AND IQ PORTS



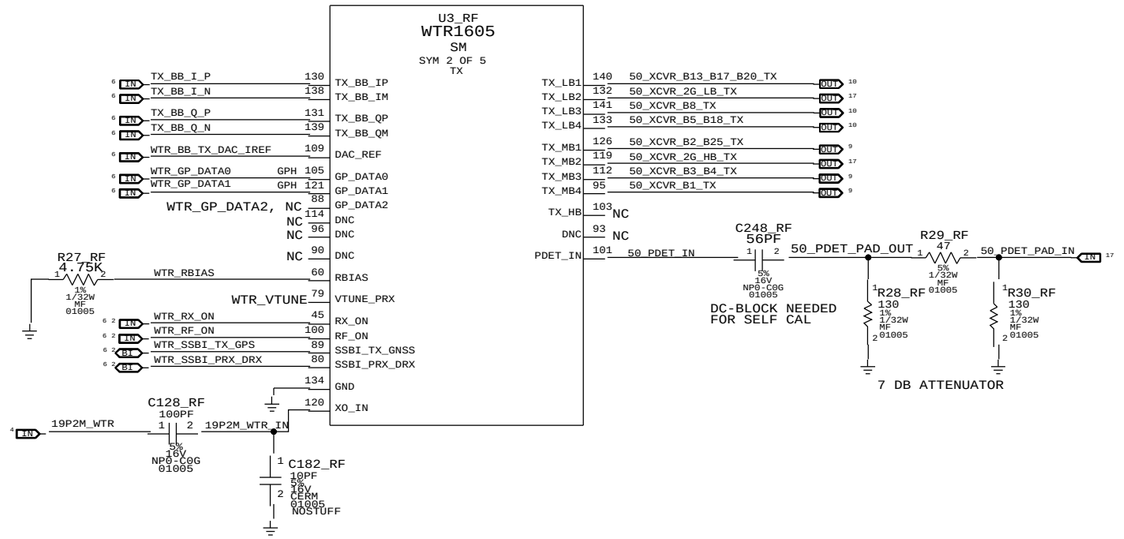

DRX TRANSCEIVER RF AND IQ PORTS




TRANSCEIVER GROUND CONNECTIONS




TRANSCEIVER PHASE CONTROL, TX RF & IQ PORTS

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# RF TRANSCEIVER (2 OF 2)

## RF1_1V3

PP_SMPS2_RF1_1V3 → R53_RF 0 (5% 1/20W MF 201) → PP_SMPS2_RF1_1V3_FILT

C72_RF 10UF 20% 6.3V CERM 0402

STAR ROUTING

| ALIAS | C | Value | Notes |
|---|---|---|---|
| PP_RF1_1V3_PRX_PLL | C73_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.66 |
| PP_RF1_1V3_SHDR_PLL | C74_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.65 |
| PP_RF1_1V3_PRX_VCO | C75_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.76 |
| PP_RF1_1V3_SHDR_VCO | C76_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.40 |
| PP_RF1_1V3_TX_DA | C77_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.118 NOSTUFF |
| PP_RF1_1V3_TX_SYNTH | C78_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.98 |
| PP_RF1_1V3_TX_LO | C79_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.116 |
| PP_RF1_1V3_TX_UPCONVERTER | C80_RF | 100PF 5% 16V NP0-C0G 01005 | PLACE NEAR U3.117 |

STAR ROUTING

| ALIAS | C | Value | Notes |
|---|---|---|---|
| PP_RF1_1V3_PRX_FELO1 | C81_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.53 AND U3.26 |
| PP_RF1_1V3_DRX_FE | | | |
| PP_RF1_1V3_PRX_FELO2 | C82_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.42 |
| PP_RF1_1V3_DRX_LBLO | C83_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.25 AND U3.28 |
| PP_RF1_1V3_DRX_MBLO | | | |
| PP_RF1_1V3_JAM_DET | | | |

## RF1_1V3

PP_SMPS2_RF1_1V3_FILT

STAR ROUTING

| ALIAS | C | Value | Notes |
|---|---|---|---|
| PP_RF1_1V3_GPS_LNA | C85_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.24 AND U3.31 |
| PP_RF1_1V3_GPS_DIG | | | |
| PP_RF1_1V3_GPS_VCO | C86_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.37 AND U3.55 |
| PP_RF1_1V3_GPS_PLL | | | |

## RF1_1V8

PP_SMPS3_MSME_1V8 → PP_RF1_1V8_DIG

C87_RF 1.0UF 20% 6.3V X5R 0201-1 PLACE NEAR U3.87

## RF2_2V05

PP_SMPS4_RF2_2V05 → R19_RF 0 (5% 1/20W MF 201) → PP_SMPS4_RF2_2V05_FILT

C88_RF 10UF 20% 6.3V CERM 0402

STAR ROUTING

| ALIAS | C | Value | Notes |
|---|---|---|---|
| PP_RF2_2V05_DRX_BB | | | |
| PP_RF2_2V05_TX_DA | C244_RF | 100PF 5% 16V NP0-C0G 01005 | PLACE NEAR U3.111 |
| PP_RF2_2V05_PRX_BB | | | |
| PP_RF2_2V05_TX_BB | | | |
| PP_RF2_2V05_PRX_VCO | C89_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.67 |
| PP_RF2_2V05_SHDR_VCO | C90_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.51 |
| PP_RF2_2V05_TX_VCO | C91_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.136 |
| PP_RF2_2V05_TX_PLL | | | |
| PP_RF2_2V05_XO_FILT | C92_RF | 0.1UF 20% 6.3V X5R-CERM 01005 | PLACE NEAR U3.127 |

## TRANSCEIVER POWER CONNECTIONS

U3_RF
WTR1605
SM
SRM 4 OF 5
PWR

| | | | | | |
|---|---|---|---|---|---|
| PP_RF1_1V3_PRX_FELO1 | 53 | VDD_RF1_P_FELO | VDD_RF2_T_DA | 111 | PP_RF2_2V05_TX_DA |
| PP_RF1_1V3_PRX_FELO2 | 42 | VDD_RF1_P_FELO | VDD_RF1_T_DA | 118 | PP_RF1_1V3_TX_DA |
| PP_RF1_1V3_DRX_LBLO | 28 | VDD_RF1_D_LBLO | VDD_RF1_T_UPC | 117 | PP_RF1_1V3_TX_UPCONVERTER |
| PP_RF1_1V3_DRX_FE | 26 | VDD_RF1_D_FE | VDD_RF1_T_LO | 116 | PP_RF1_1V3_TX_LO |
| PP_RF1_1V3_DRX_MBLO | 25 | VDD_RF1_D_MBLO | VDD_RF2_T_BB | 108 | PP_RF2_2V05_TX_BB |
| PP_RF1_1V3_JAM_DET | 85 | VDD_RF1_JDET | VDD_RF2_T_VCO | 136 | PP_RF2_2V05_TX_VCO |
| PP_RF2_2V05_PRX_BB | 83 | VDD_RF2_P_BB | VDD_RF2_XO | 127 | PP_RF2_2V05_XO_FILT |
| PP_RF2_2V05_DRX_BB | 44 | VDD_RF2_D_BB | VDD_RF1_T_SYN | 98 | PP_RF1_1V3_TX_SYNTH |
| PP_RF2_2V05_PRX_VCO | 67 | VDD_RF2_P_VCO | VDD_RF2_T_PLL | 97 | PP_RF2_2V05_TX_PLL |
| PP_RF1_1V3_PRX_VCO | 76 | VDD_RF1_P_VCO | | | |
| PP_RF1_1V3_PRX_PLL | 66 | VDD_RF1_P_PLL | VDD_RF1_G_LNA | 24 | PP_RF1_1V3_GPS_LNA |
| PP_RF2_2V05_SHDR_VCO | 51 | VDD_RF2_S_VCO | VDD_RF1_G_VCO | 37 | PP_RF1_1V3_GPS_VCO |
| PP_RF1_1V3_SHDR_VCO | 40 | VDD_RF1_S_VCO | VDD_RF1_G_PLL | 55 | PP_RF1_1V3_GPS_PLL |
| PP_RF1_1V3_SHDR_PLL | 65 | VDD_RF1_S_PLL | VDD_RF1_G_BB | 31 | PP_RF1_1V3_GPS_DIG |
| | | | VDD_DIO | 87 | PP_RF1_1V8_DIG |

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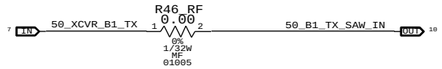
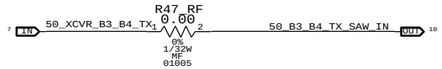
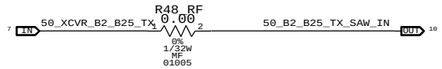
# TRANSCEIVER TX AND RX MATCHING

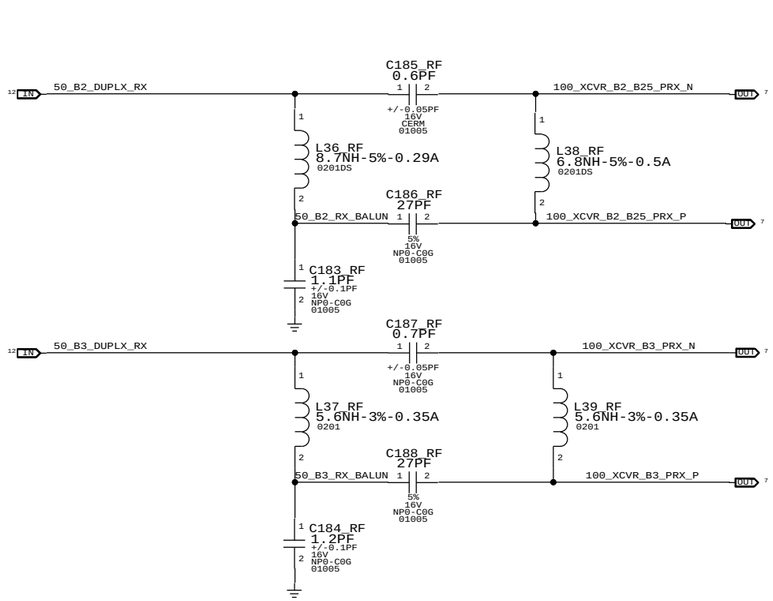
## TX MATCHING NETWORKS

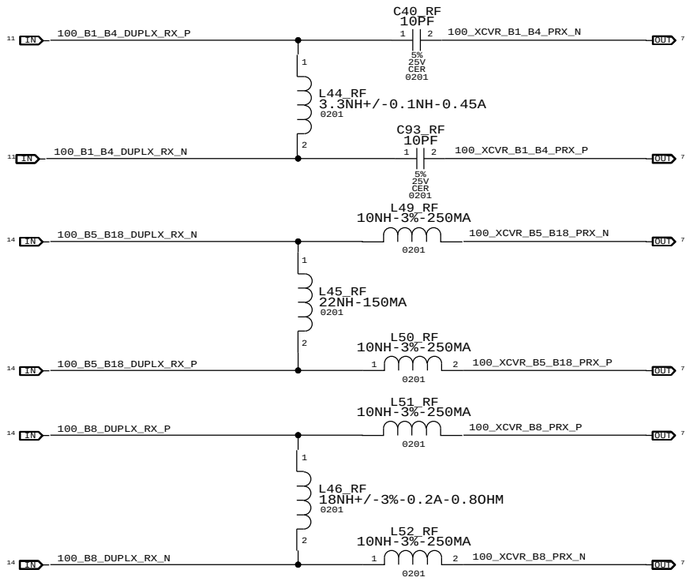



## RX MATCHING NETWORKS

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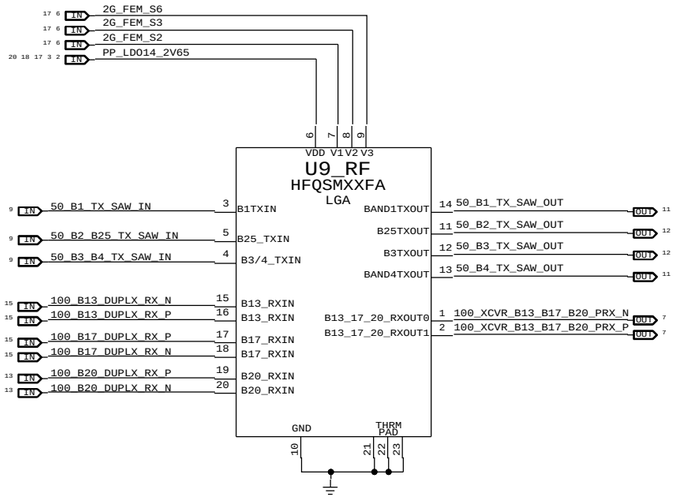
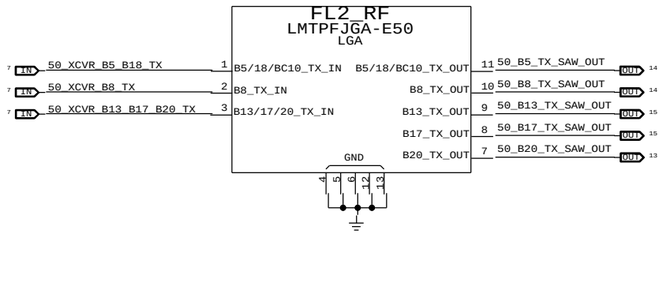
# SAW BANKS

## HB TX SAW BANK + B13/B17/B20 DP6T SWITCH AND MATCHING

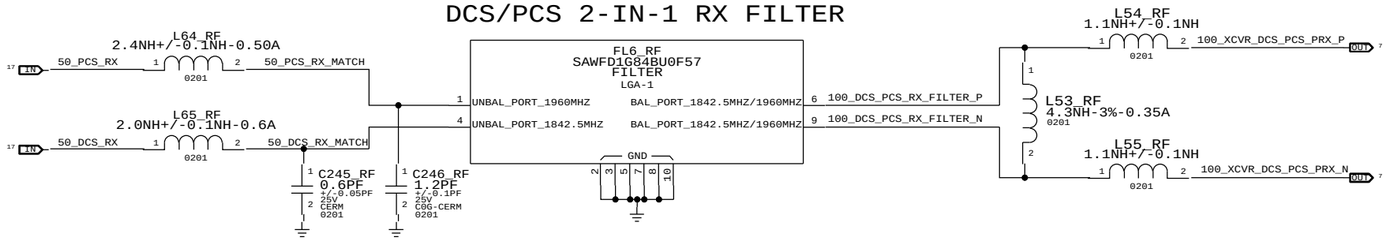



| BAND | S6 | S3 | S2 |
|---|---|---|---|
| B3 TX | HIGH | X | X |
| B4 TX | LOW | X | X |
| B13 RX | X | HIGH | HIGH |
| B17 RX | X | HIGH | LOW |
| B20 RX | X | LOW | HIGH |

## LB TX SAW BANK




## DCS/PCS 2-IN-1 RX FILTER

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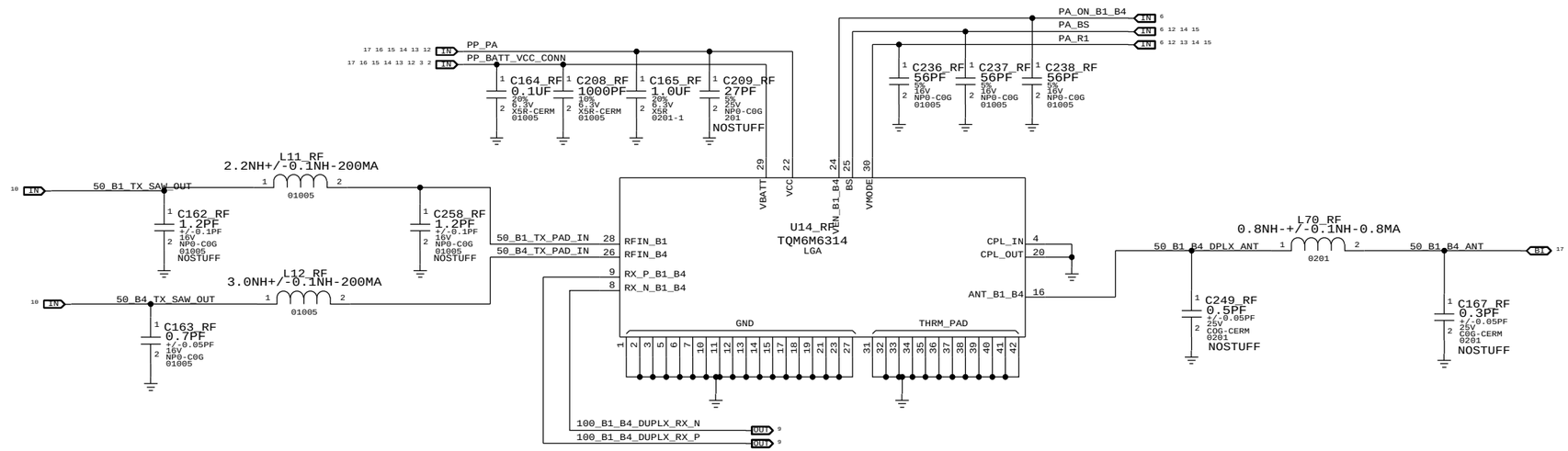
# BAND 1/4 PAT




| BAND | PA POWER MODE | PA_BS | PA_ON_B1_B4 | PA_R1 |
|---|---|---|---|---|
| POWER DOWN | X | 0 | 0 | 0 |
| STANDBY | X | X | 0 | X |
| B4 | HPM | 0 | 1 | 0 |
| B4 | LPM | 0 | 1 | 1 |
| B1 | HPM | 1 | 1 | 0 |
| B1 | LPM | 1 | 1 | 1 |

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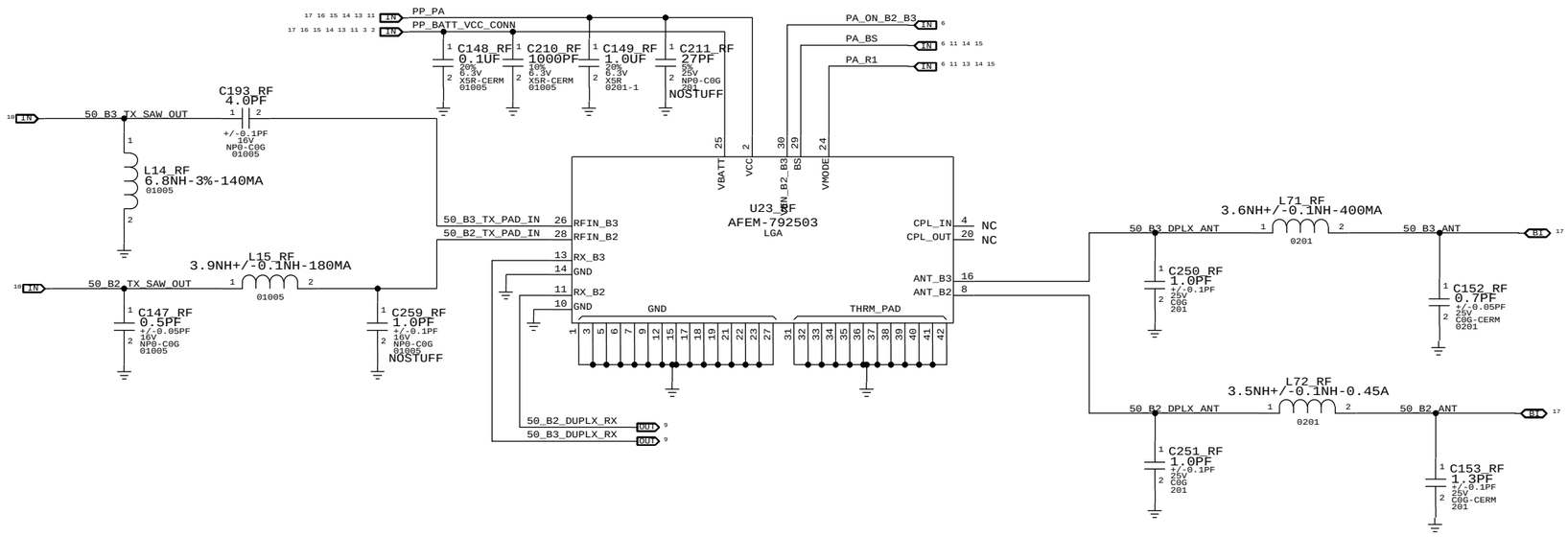
# BAND 2/3 PAD




| BAND | PA POWER MODE | PA_BS | PA_ON_B2_B3 | PA_R1 |
|---|---|---|---|---|
| POWER DOWN | X | 0 | 0 | 0 |
| STANDBY | 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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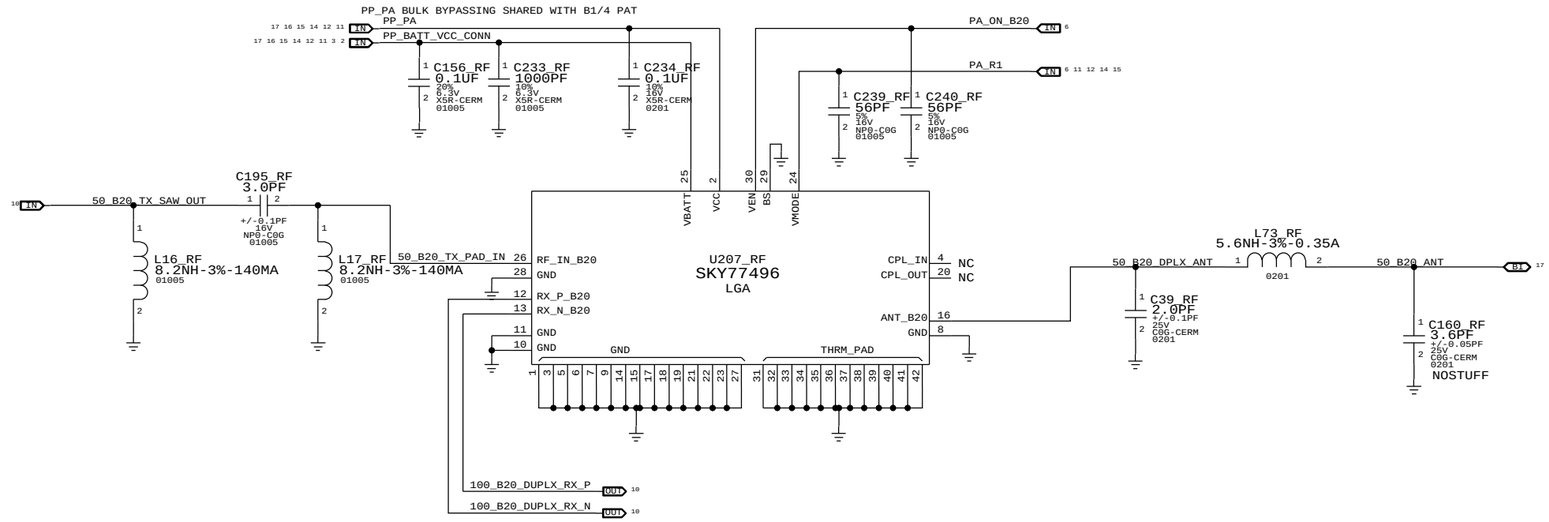
# BAND 20 PAD




| BAND | PA POWER MODE | PA_ON_B20 | PA_R1 |
|---|---|---|---|
| POWER DOWN | LPM | 0 | 0 |
| STANDBY | X | 0 | X |
| B20 | HPM | 1 | 0 |
| B20 | LPM | 1 | 1 |

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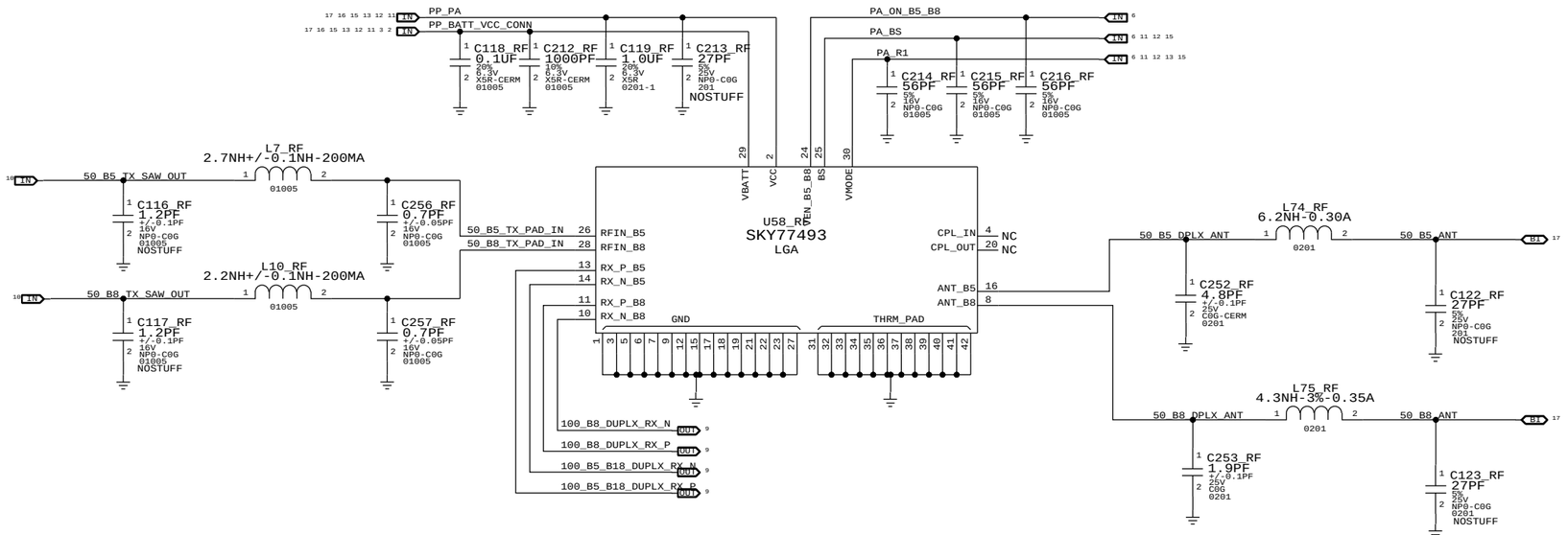
# BAND 5/8 PAD




| BAND | PA POWER MODE | PA_BS | PA_ON_B5_B8 | PA_R1 |
|---|---|---|---|---|
| POWER DOWN | X | 0 | 0 | 0 |
| STANDBY | 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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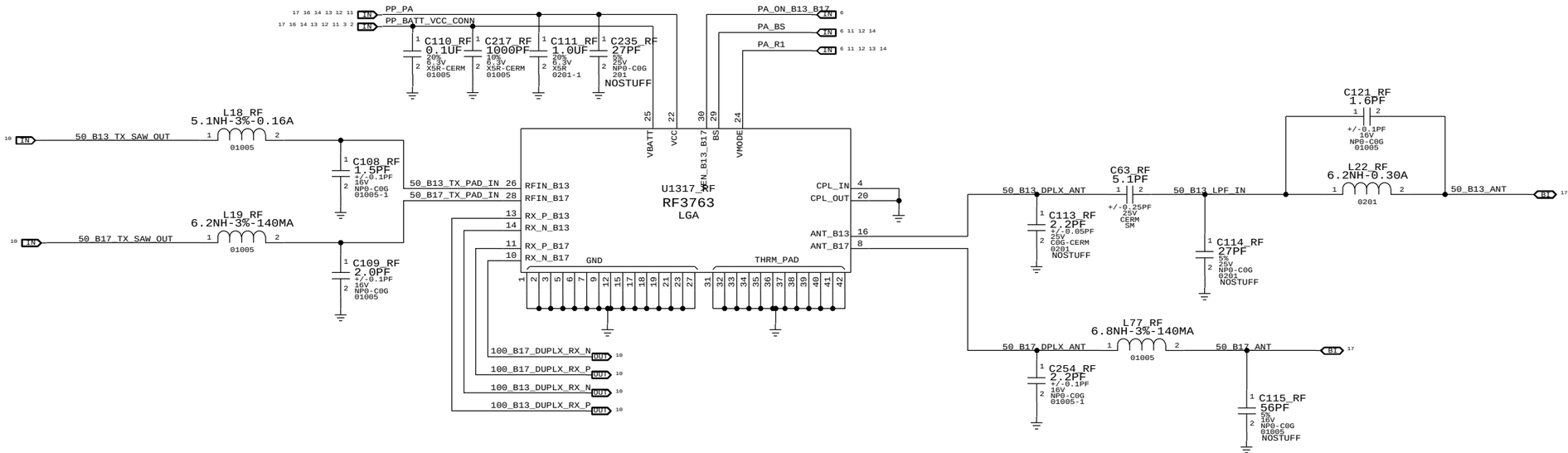
# BAND 13/17 PAD




| BAND | PA POWER MODE | PA_BS | PA_ON_B13_B17 | PA_R1 |
|---|---|---|---|---|
| POWER DOWN | X | 0 | 0 | 0 |
| STANDBY | X | X | 0 | X |
| B17 | HPM | 0 | 1 | 0 |
| B17 | LPM | 0 | 1 | 1 |
| B13 | HPM | 1 | 1 | 0 |
| B13 | LPM | 1 | 1 | 1 |

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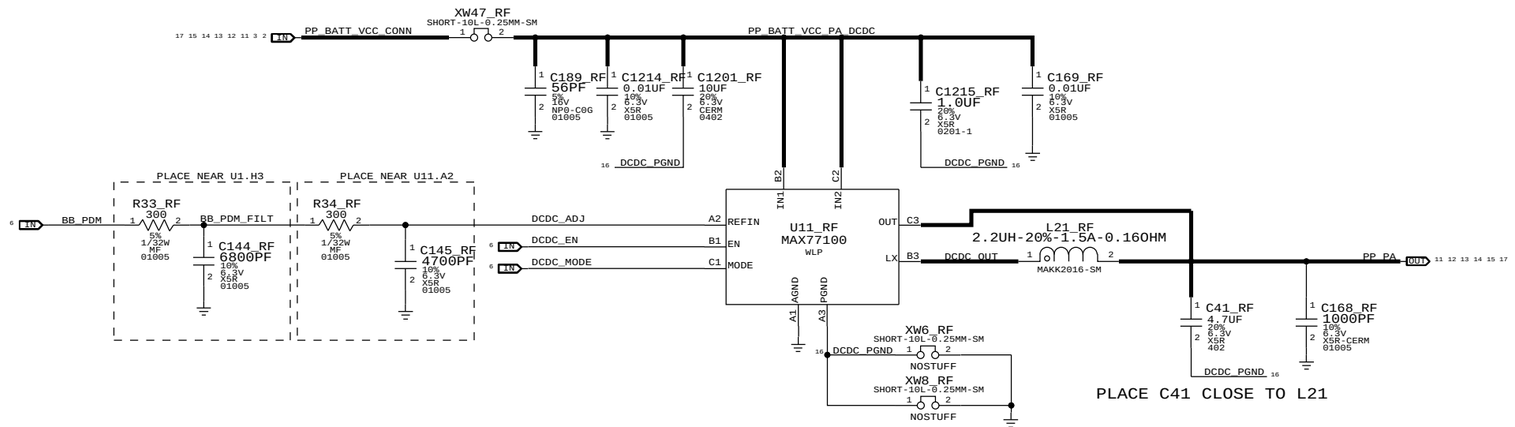
# PA DC/DC CONVERTER

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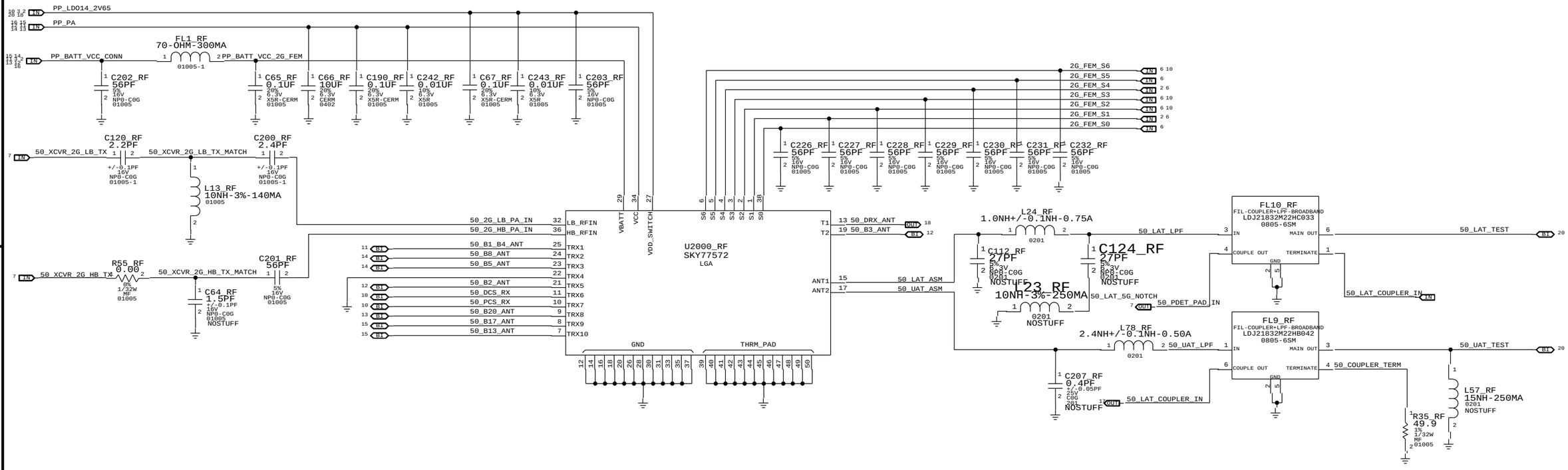
# 2G FEM




SEE PGS. 21-22 FOR 2G FEM LOGIC TABLE

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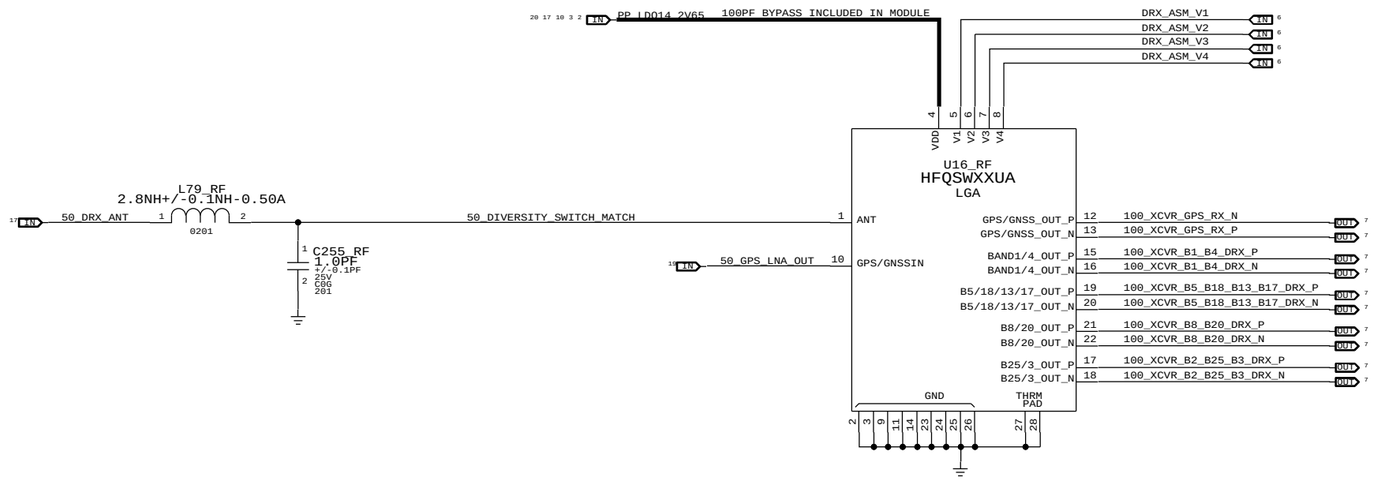
# RX DIVERSITY




| BAND | DRX_ASM_V4 | DRX_ASM_V3 | DRX_ASM_V2 | DRX_ASM_V1 |
|---|---|---|---|---|
| B1/B4 | LOW | LOW | LOW | LOW |
| B2/25 | LOW | HIGH | LOW | LOW |
| B3 | HIGH | LOW | LOW | LOW |
| B5/6/18 | LOW | LOW | HIGH | LOW |
| B8 | LOW | LOW | LOW | HIGH |
| B13/17 | LOW | HIGH | HIGH | HIGH |
| B20 | LOW | HIGH | HIGH | LOW |
| OFF | LOW | LOW | HIGH | HIGH |
| SWITCH IS TERMINATED IN ALL OTHER POSSIBLE STATES | | | | |

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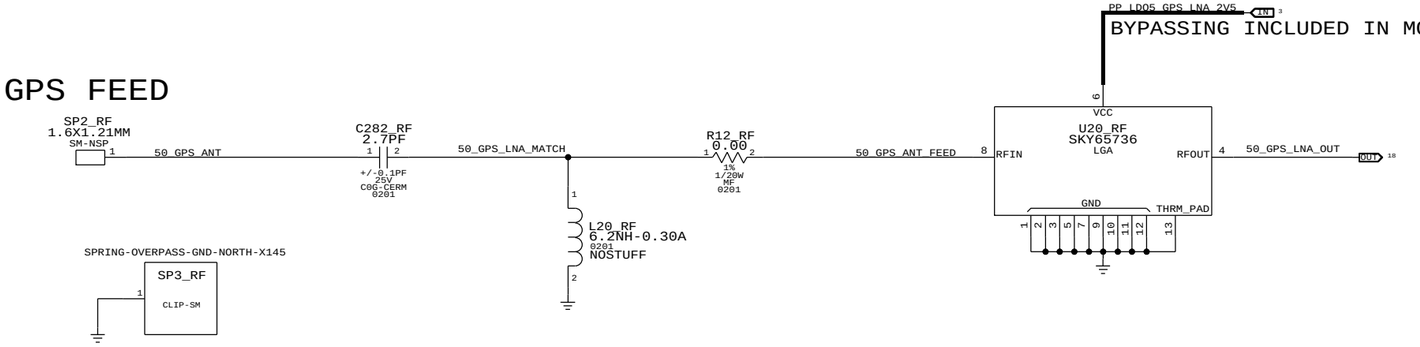
# GPS

## GPS FEED

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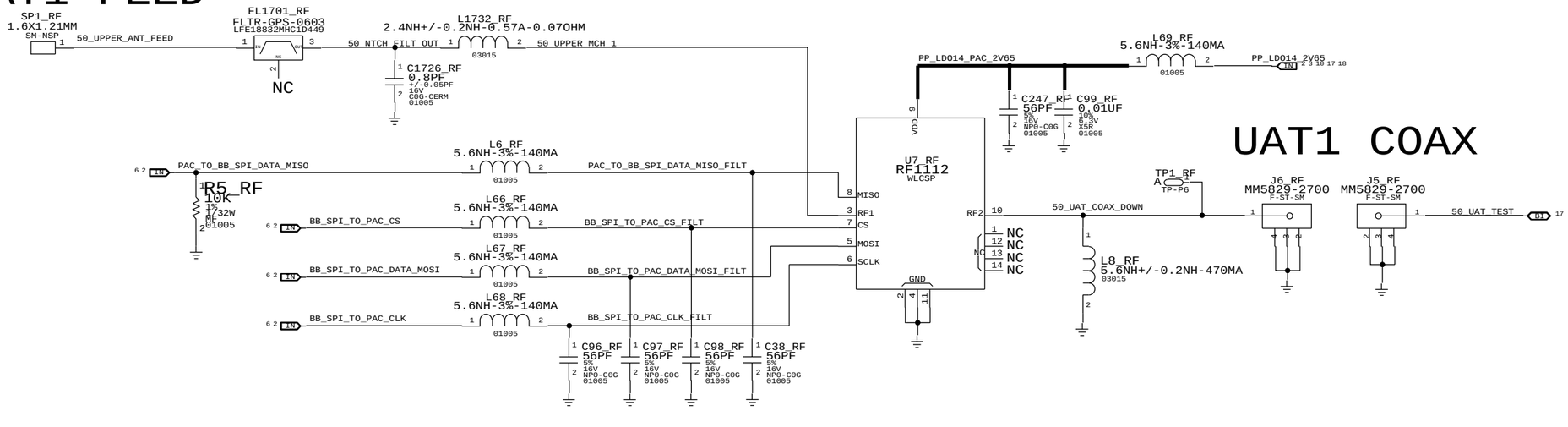
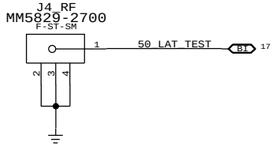
# ANTENNA FEEDS

## UAT1 FEED




## UAT1 COAX

## LAT

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# 2G FEM LOGIC TABLE (1 OF 2)

| BAND | S6 | S5 | S4 | S3 | S2 | S1 | S0 | TX/PRX PATH | DRX PATH |
|---|---|---|---|---|---|---|---|---|---|
| LB TX, IDLE, LAT | HIGH | HIGH | HIGH | LOW | LOW | HIGH | HIGH | LAT | UAT |
| LB TX, IDLE, UAT | HIGH | HIGH | HIGH | LOW | LOW | LOW | HIGH | UAT | LAT |
| LB TX, LAT, HPM | HIGH | HIGH | HIGH | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| LB TX, UAT, HPM | HIGH | HIGH | HIGH | LOW | HIGH | LOW | HIGH | UAT | LAT |
| LB TX, LAT, LPM | HIGH | HIGH | HIGH | LOW | HIGH | HIGH | LOW | LAT | UAT |
| LB TX, UAT, LPM | HIGH | HIGH | HIGH | LOW | HIGH | LOW | LOW | UAT | LAT |
| LB TX, HIGH Z, LAT, HPM | HIGH | HIGH | LOW | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| LB TX, HIGH Z, UAT, HPM | HIGH | HIGH | LOW | LOW | HIGH | LOW | HIGH | UAT | LAT |
| LB TX, HIGH Z, LAT, LPM | HIGH | HIGH | LOW | LOW | HIGH | HIGH | LOW | LAT | UAT |
| LB TX, HIGH Z, UAT, LPM | HIGH | HIGH | LOW | LOW | HIGH | LOW | LOW | UAT | LAT |
| HB TX, IDLE, LAT | HIGH | HIGH | HIGH | HIGH | LOW | HIGH | HIGH | LAT | UAT |
| HB TX, IDLE, UAT | HIGH | HIGH | HIGH | HIGH | LOW | LOW | HIGH | UAT | LAT |
| HB TX, LAT, HPM | HIGH | HIGH | HIGH | HIGH | HIGH | HIGH | HIGH | LAT | UAT |
| HB TX, UAT, HPM | HIGH | HIGH | HIGH | HIGH | HIGH | LOW | HIGH | UAT | LAT |
| HB TX, LAT, LPM | HIGH | HIGH | HIGH | HIGH | HIGH | HIGH | LOW | LAT | UAT |
| HB TX, UAT, LPM | HIGH | HIGH | HIGH | HIGH | HIGH | LOW | LOW | UAT | LAT |
| HB TX, HIGH Z, LAT, HPM | HIGH | HIGH | LOW | HIGH | HIGH | HIGH | HIGH | LAT | UAT |
| HB TX, HIGH Z, UAT, HPM | HIGH | HIGH | LOW | HIGH | HIGH | LOW | HIGH | UAT | LAT |
| HB TX, HIGH Z, LAT, LPM | HIGH | HIGH | LOW | HIGH | HIGH | HIGH | LOW | LAT | UAT |
| HB TX, HIGH Z, UAT, LPM | HIGH | HIGH | LOW | HIGH | HIGH | LOW | LOW | UAT | LAT |
| GSM850 RX, LAT | HIGH | LOW | HIGH | HIGH | LOW | HIGH | HIGH | LAT | UAT |
| GSM850 RX, UAT | HIGH | LOW | HIGH | HIGH | LOW | LOW | HIGH | UAT | LAT |
| GSM900 RX, LAT | HIGH | LOW | HIGH | HIGH | HIGH | HIGH | HIGH | LAT | UAT |
| GSM900 RX, UAT | HIGH | LOW | HIGH | HIGH | HIGH | LOW | HIGH | UAT | LAT |
| GSM1900 RX, LAT | LOW | HIGH | LOW | HIGH | HIGH | HIGH | HIGH | LAT | UAT |
| GSM1900 RX, UAT | LOW | HIGH | LOW | HIGH | HIGH | LOW | HIGH | UAT | LAT |
| GSM1800 RX, LAT | HIGH | LOW | LOW | HIGH | HIGH | HIGH | HIGH | LAT | UAT |
| GSM1800 RX, UAT | HIGH | LOW | LOW | HIGH | HIGH | LOW | HIGH | UAT | LAT |
| TERMINATED, UAT | HIGH | LOW | HIGH | LOW | HIGH | HIGH | HIGH | UAT | LAT |
| TERMINATED, LAT | HIGH | LOW | HIGH | LOW | HIGH | LOW | HIGH | LAT | UAT |

LAT = LOWER ANTENNA
UAT = UPPER ANTENNA

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# 2G FEM LOGIC TABLE - DEV2 (2 OF 2)

| BAND | S6 | S5 | S4 | S3 | S2 | S1 | S0 | TX/PRX PATH | DRX PATH |
|---|---|---|---|---|---|---|---|---|---|
| B1/BC6, LAT | LOW | LOW | LOW | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| B1/BC6, UAT | LOW | LOW | LOW | LOW | HIGH | LOW | HIGH | UAT | LAT |
| B2/B25/BC1, LAT | LOW | HIGH | LOW | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| B2/B25/BC1, UAT | LOW | HIGH | LOW | LOW | HIGH | LOW | HIGH | UAT | LAT |
| B3, LAT | HIGH | LOW | LOW | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| B3, UAT | HIGH | LOW | LOW | LOW | HIGH | LOW | HIGH | UAT | LAT |
| B4/BC15, LAT | LOW | LOW | LOW | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| B4/BC15, UAT | LOW | LOW | LOW | LOW | HIGH | LOW | HIGH | UAT | LAT |
| B5/B6/B18/BC0/BC10, LAT | LOW | LOW | HIGH | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| B5/B6/B18/BC0/BC10, UAT | LOW | LOW | HIGH | LOW | HIGH | LOW | HIGH | UAT | LAT |
| B8, LAT | LOW | LOW | LOW | HIGH | HIGH | HIGH | HIGH | LAT | UAT |
| B8, UAT | LOW | LOW | LOW | HIGH | HIGH | LOW | HIGH | UAT | LAT |
| B13, LAT | LOW | HIGH | HIGH | HIGH | HIGH | HIGH | HIGH | LAT | UAT |
| B13, UAT | LOW | HIGH | HIGH | HIGH | HIGH | LOW | HIGH | UAT | LAT |
| B17, LAT | LOW | HIGH | HIGH | HIGH | LOW | HIGH | HIGH | LAT | UAT |
| B17, UAT | LOW | HIGH | HIGH | HIGH | LOW | LOW | HIGH | UAT | LAT |
| B20, LAT | LOW | HIGH | HIGH | LOW | HIGH | HIGH | HIGH | LAT | UAT |
| B20, UAT | LOW | HIGH | HIGH | LOW | HIGH | LOW | HIGH | UAT | LAT |
| OFF | LOW | LOW | HIGH | HIGH | X | X | X | X | X |
| STANDBY | LOW | LOW | LOW | LOW | LOW | LOW | LOW | X | X |

LAT = LOWER ANTENNA
UAT = UPPER ANTENNA
OFF = LOWEST POWER STATE WITHOUT REMOVING LDO14_2V65 POWER
STANDBY = ADDED TO SUPPORT EXISTING SW ARCHITECTURE. NOT TO BE USED AS A LOW POWER STATE.

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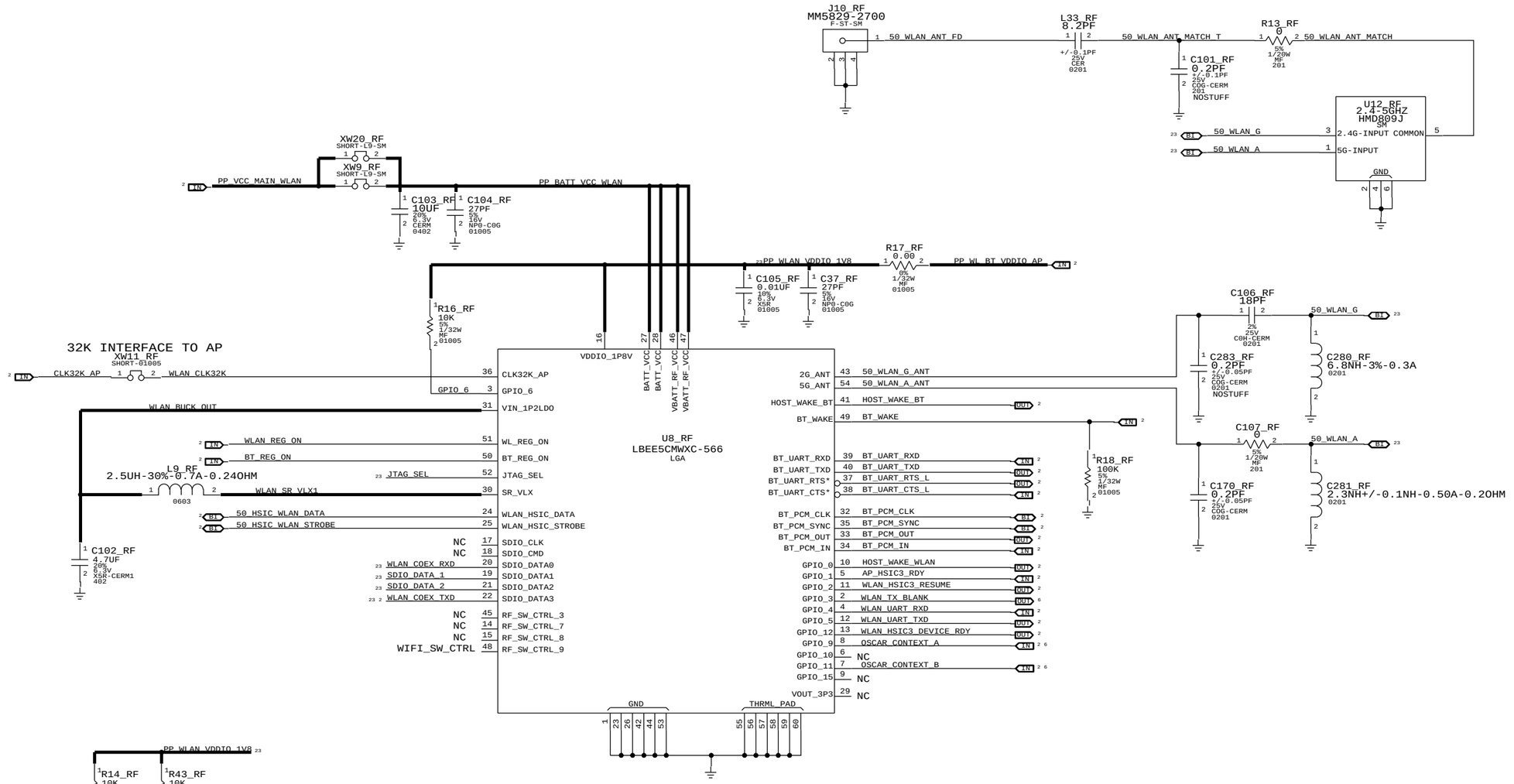
# WLAN/BT

## UAT2




PULL-UP ON GPIO6, SDIO_DATA_2 & PULL-DOWN ON SDIO_DATA_1 REQUIRED FOR HSIC BOOTSTRAPPING

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