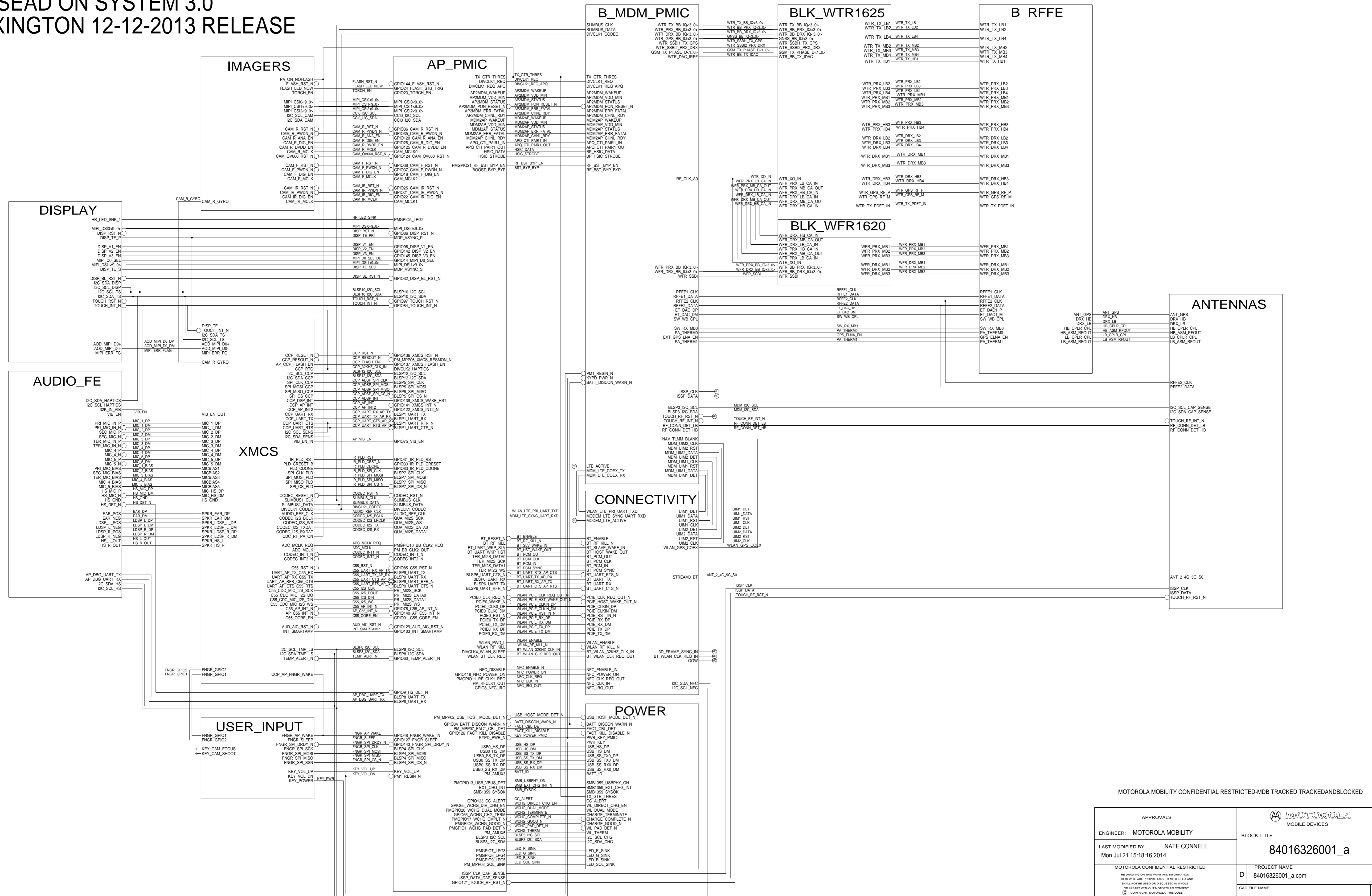


# QUANTUM RevA TOP

## BASEAD ON SYSTEM 3.0

### LEXINGTON 12-12-2013 RELEASE

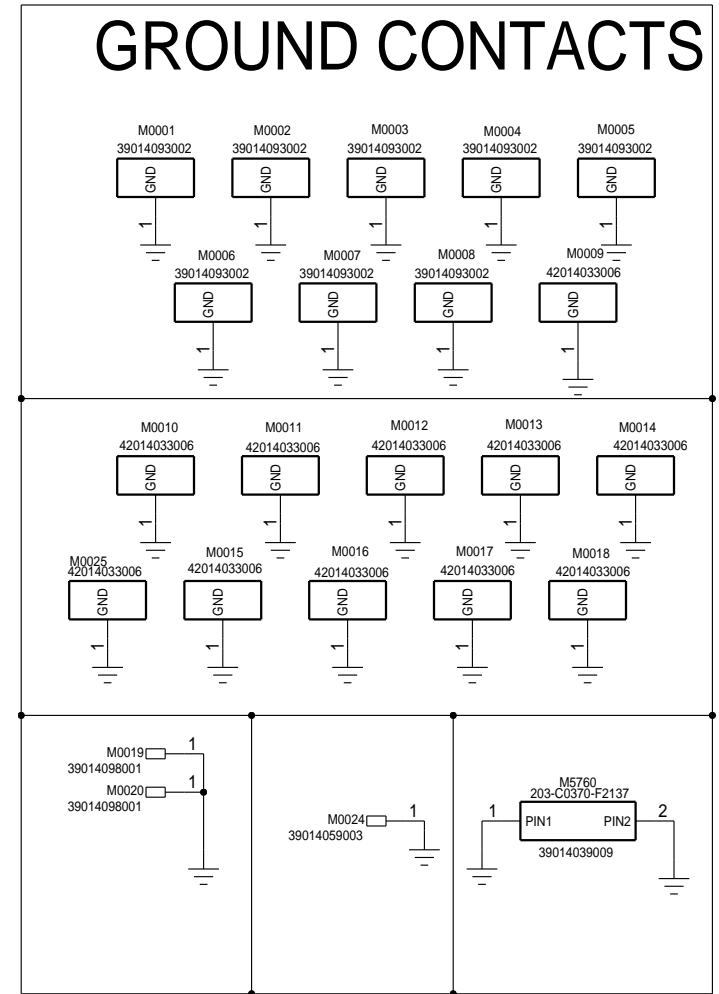
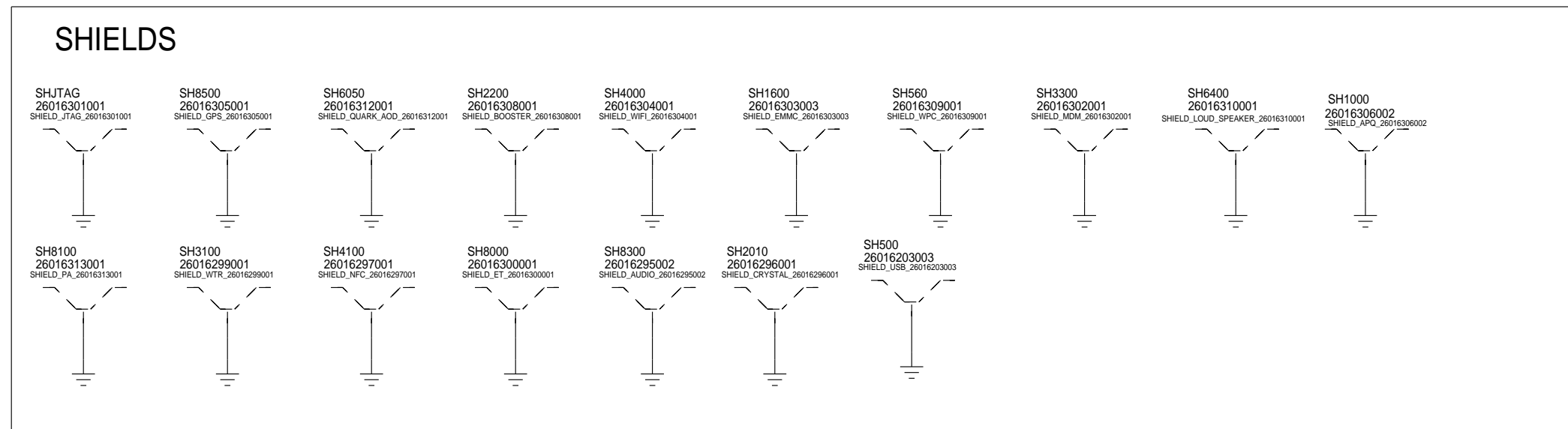
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

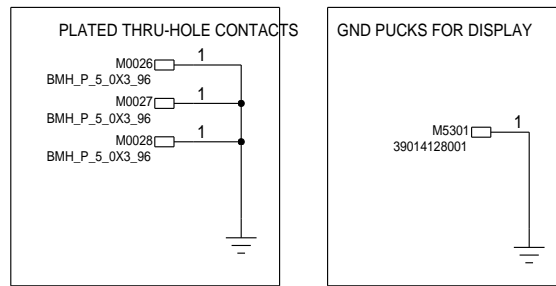
APPROVALS		 MOTOROLA MOBILE DEVICES	
ENGINEER:	MOTOROLA MOBILITY	BLOCK TITLE:	84016326001_a
LAST MODIFIED BY:	NATE CONNELL	PROJECT NAME:	84016326001_a.cpm
Mon Jul 21 15:18:16 2014		REV	01
MOTOROLA CONFIDENTIAL RESTRICTED		CAD FILE NAME:	
<small>THE DRAWING ON THIS PRINT AND INFORMATION THEREON ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCLOSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA, THIS DOES NOT APPLY TO PUBLICATION.</small>		PAGE 1 OF 77	

# QUANTUM ME/SHIELDS



## LEXINGTON REFERENCE DESIGNATOR RANGES BY BLOCK

- 000 - 499: ANTENNA
- 500 - 599: USER INPUT
- 600 - 799: POWER
- 1000-2999: APQ8084 + PMA8084
- 3000-3199: WFR1620 + WTR1605
- 3200-3999: MDM9625 + PM8019
- 4000-4499: CONNECTIVITY
- 4500-4999: AUDIO FE
- 5000-5499: DISPLAY
- 5500-5999: CAMERA
- 6000-6999: XMCS
- 7000-8999: RFFE
- 9000-9999: PRODUCT-SPECIFIC (FILTERING, 100PF CAPS)

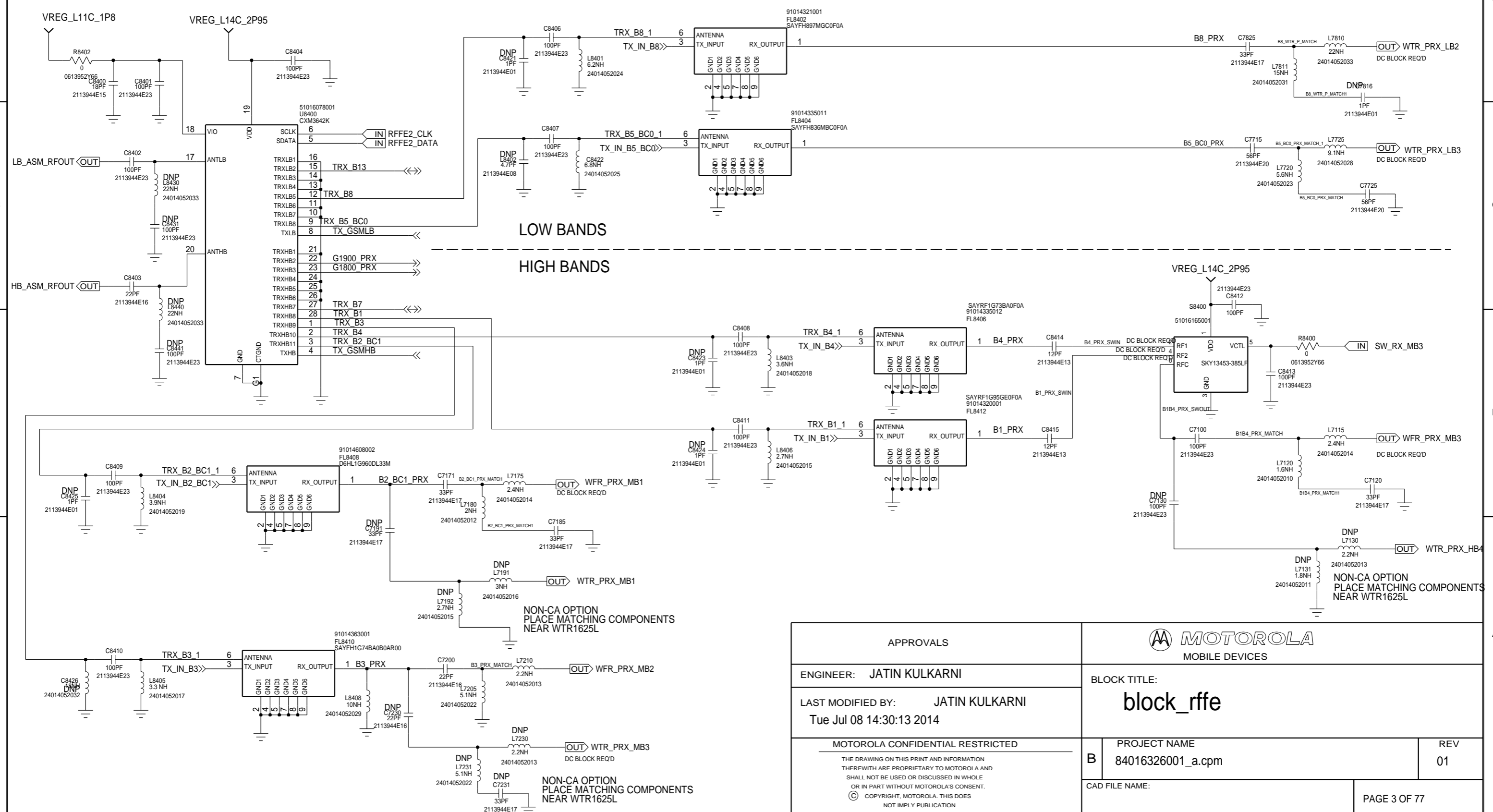


MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS			
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Tue Aug 12 08:53:14 2014		84016326001_a	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
<small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		B 84016326001_a.cpm	01
		CAD FILE NAME:	PAGE 2 OF 77

# RFFE: TRX SWITCH

## REF 7100-8499

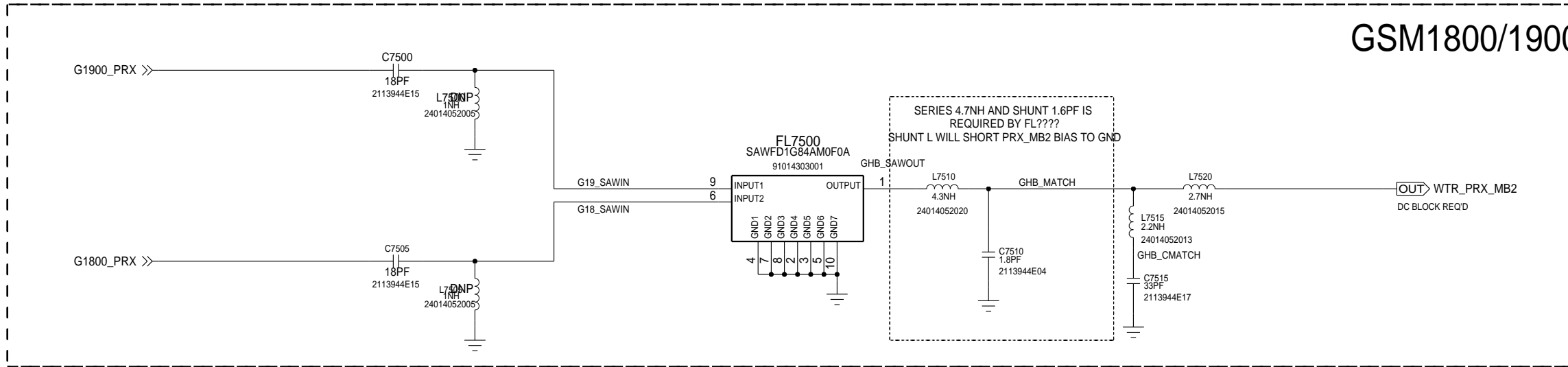



APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: JATIN KULKARNI		BLOCK TITLE: <b>block_rfe</b>	
LAST MODIFIED BY: JATIN KULKARNI Tue Jul 08 14:30:13 2014		PROJECT NAME <b>B 84016326001_a.cpm</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		CAD FILE NAME:	REV <b>01</b>
		PAGE 3 OF 77	

# RFFE: PRX GSM1800/GSM1900

REF 7100-8499

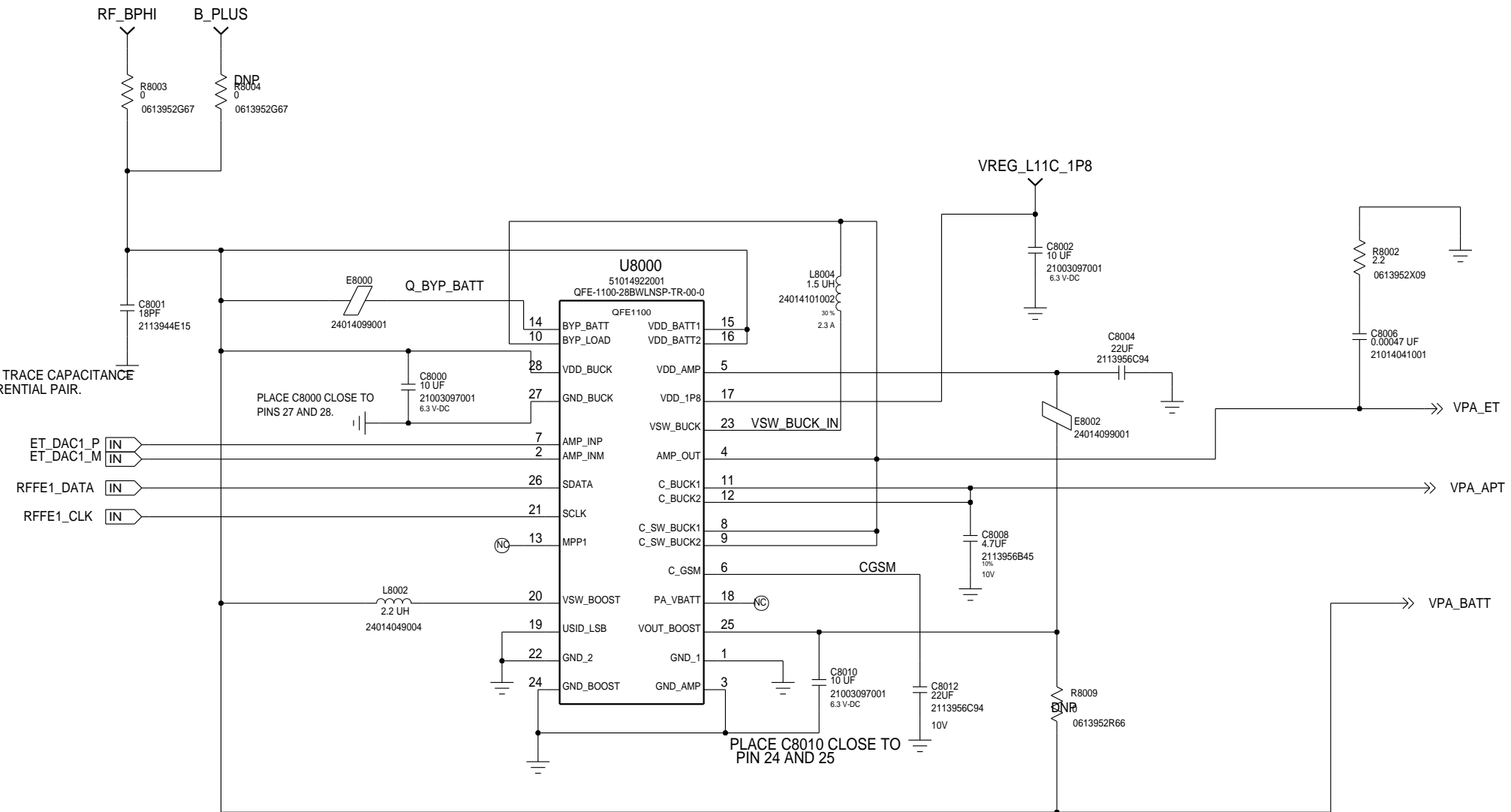
## GSM1800/1900



APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: JATIN KULKARNI		BLOCK TITLE:	
LAST MODIFIED BY: JATIN KULKARNI Thu Jun 05 15:26:04 2014		<b>block_rfe</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 807463260001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 4 OF 77	

# RFFE: APT/ET

REF 8000-8099



QCOM'S NOTE:  
RECOMMENDED MAXIMUM TRACE CAPACITANCE  
IS 5PF FOR ET\_DAC DIFFERENTIAL PAIR.

IF USING ET, PLACE R8010 AND R8011  
IF NOT USING ET, DNP R8010 AND R8011

### QCOM'S NOTES:

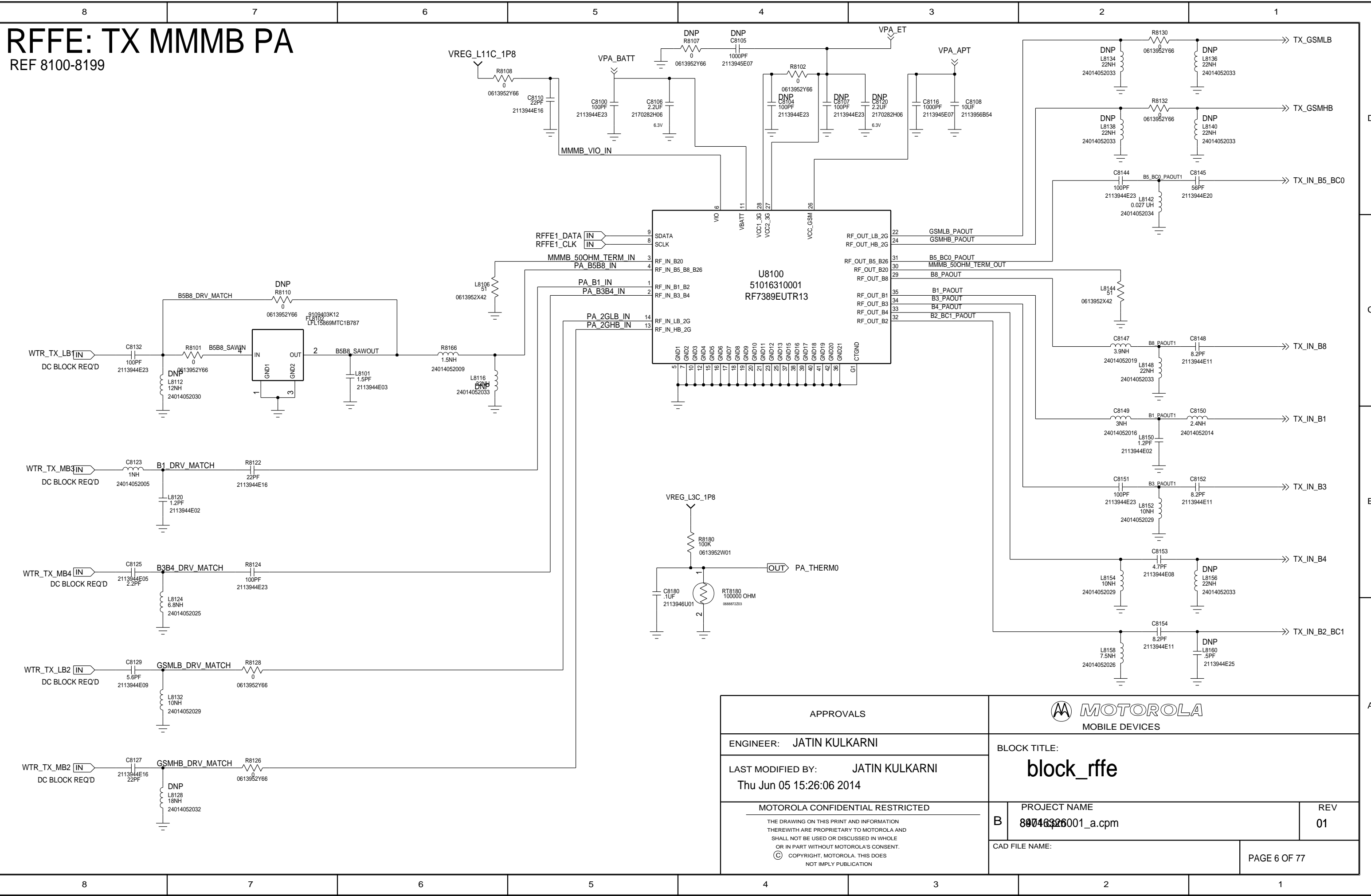
- QFE1100 ES2 PIN 13 CONNECTION TO PMIC HKADC IS FOR ET ENVELOP GAIN CALIBRATION AND QFE1100 INTERNAL TEMPERATURE SENSOR READING.
- WHEN QFE1100 ES2 PIN13 IS CONNECTED TO PMIC HKADC, PULL-UP RESISTOR ON BB SIDED SHOULD BE REMOVED FOR PM8019 (MDM9X25), OR SOFTWARE SHOULD DISABLE PULL-UP PULL-UP ON PM8941, PIN195 (MSM8974).
- FULL SUPPORT OF LOW VOLTAGE BATTERY WITH LTE 1RB IS AVAILABLE ON ES2 SAMPLE (FEB. 2013). ES2 COMBINED WITH L8001 AND C8005 CHANGE SUPPORTS LOW VOLTAGE BATTERY OVER ALL TECHNOLOGIES WHICH SUPPORT ET.

PLEASE REFER TO 80-NA681-5 AND 80-NA681-91 FOR QFE1100  
CRITICAL LAYOUT GUIDE LINES IN MORE DETAIL.

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:26:05 2014		<b>block_rfe</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 80746326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 5 OF 77	

# RFFE: TX MMB PA

REF 8100-8199



APPROVALS

ENGINEER: **JATIN KULKARNI**

LAST MODIFIED BY: **JATIN KULKARNI**  
Thu Jun 05 15:26:06 2014

MOTOROLA CONFIDENTIAL RESTRICTED  
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.  
© COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION

**MOTOROLA**  
MOBILE DEVICES

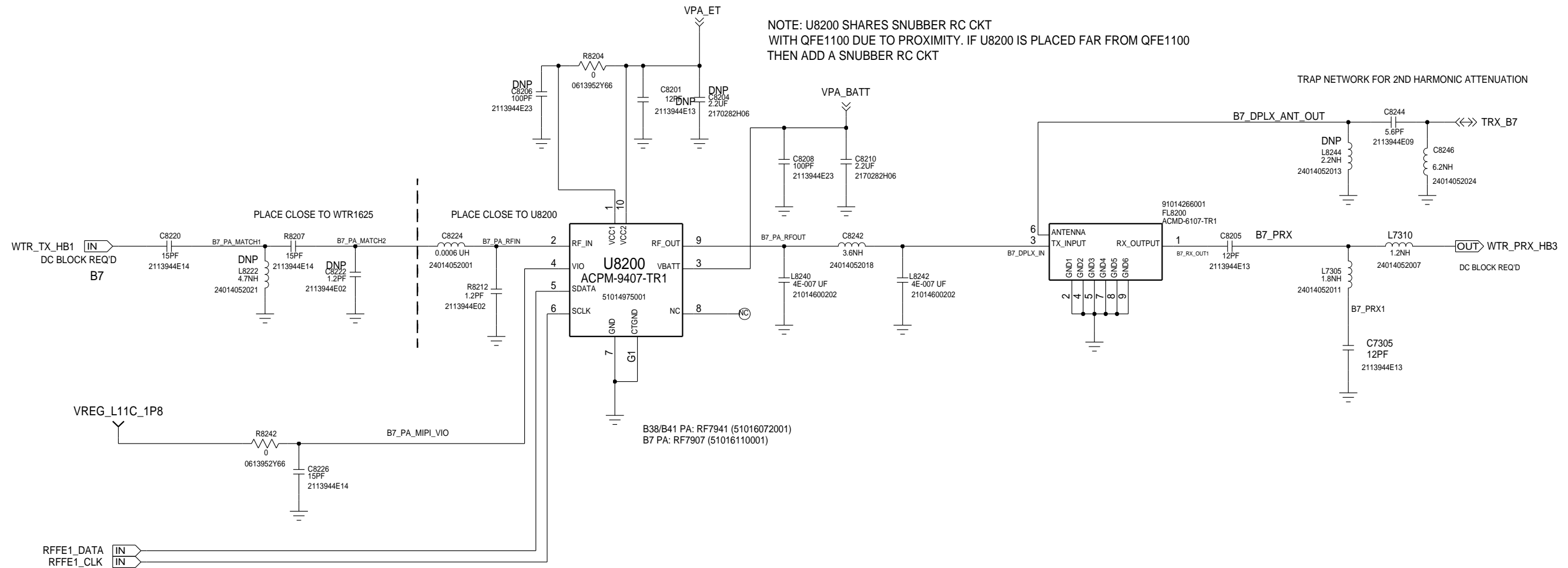
BLOCK TITLE:  
**block\_rfe**

PROJECT NAME  
**80746320001\_a.cpm**

REV  
**01**

# RFFE: TX B7

REF 7100-8299

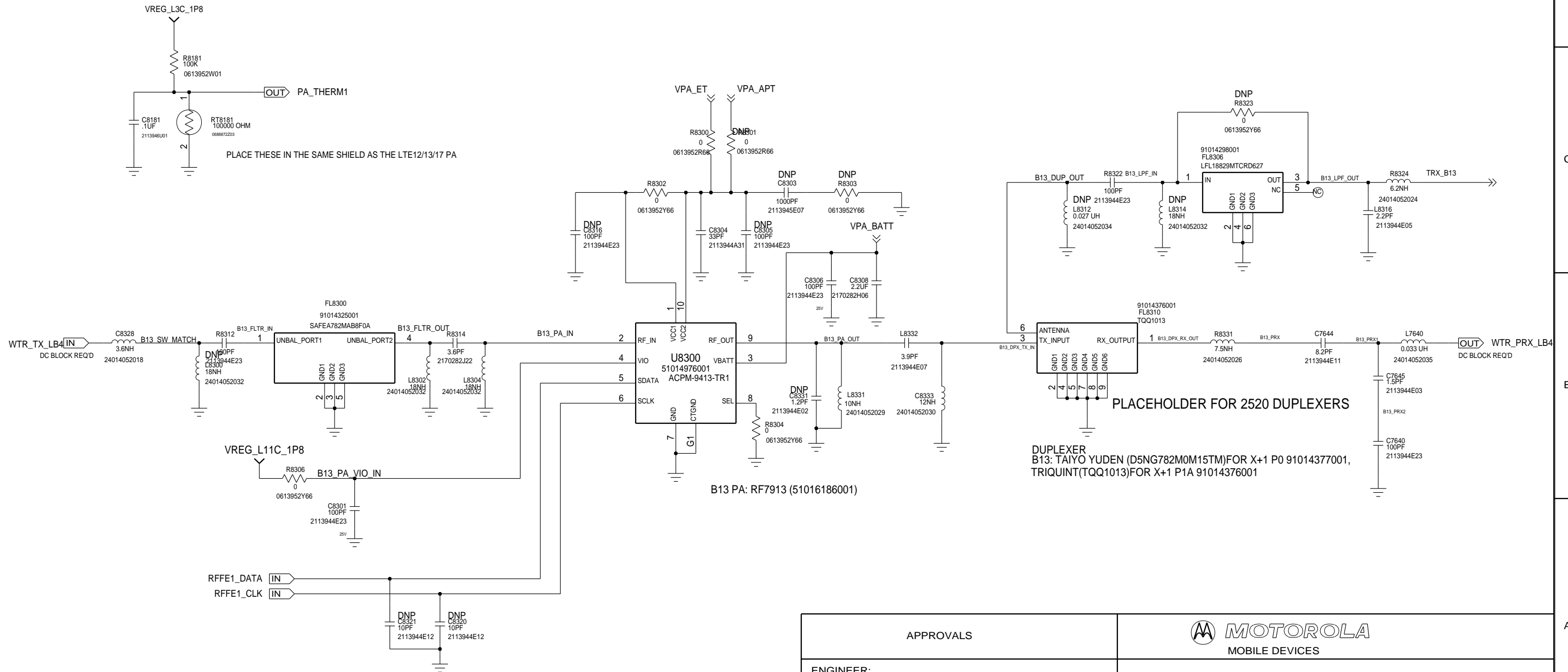


**NOTES:**  
DATE: 2/7/2013  
- THE MATCHING COMPONENTS ARE TEMPORARY PLACE HOLDERS ONLY.  
THE EXACT COMPONENTS WILL NEED TO BE DEFINED BEFORE RELEASED.

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE: <b>block_rfe</b>	
LAST MODIFIED BY: Wed Jul 16 15:10:23 2014		PROJECT NAME B 80746326001_a.cpm	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		REV <b>01</b>	
		CAD FILE NAME: PAGE 7 OF 77	

# RFFE: TX B13

REF 7600-8399



B13 PA: RF7913 (51016186001)

PLACEHOLDER FOR 2520 DUPLEXERS

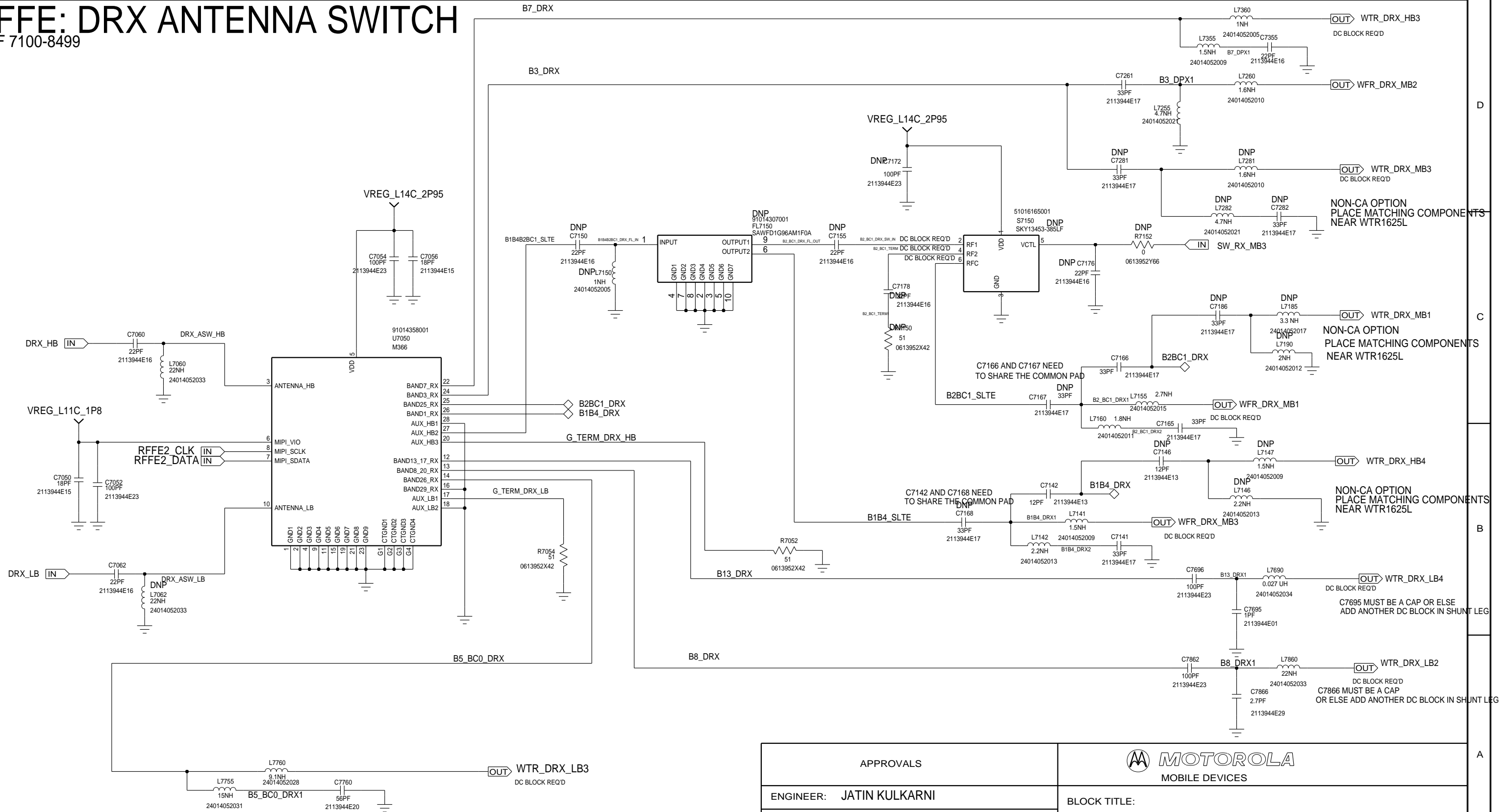
DUPLEXER  
 B13: TAIYO YUDEN (D5NG782M0M15TM) FOR X+1 P0 91014377001,  
 TRIQUINT(TQQ1013) FOR X+1 P1A 91014376001

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY:		<b>block_rfe</b>	
Mon Jun 23 16:11:37 2014		PROJECT NAME	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		<b>B</b> 8074632001_a.cpm	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 8 OF 77	



# RFFE: DRX ANTENNA SWITCH

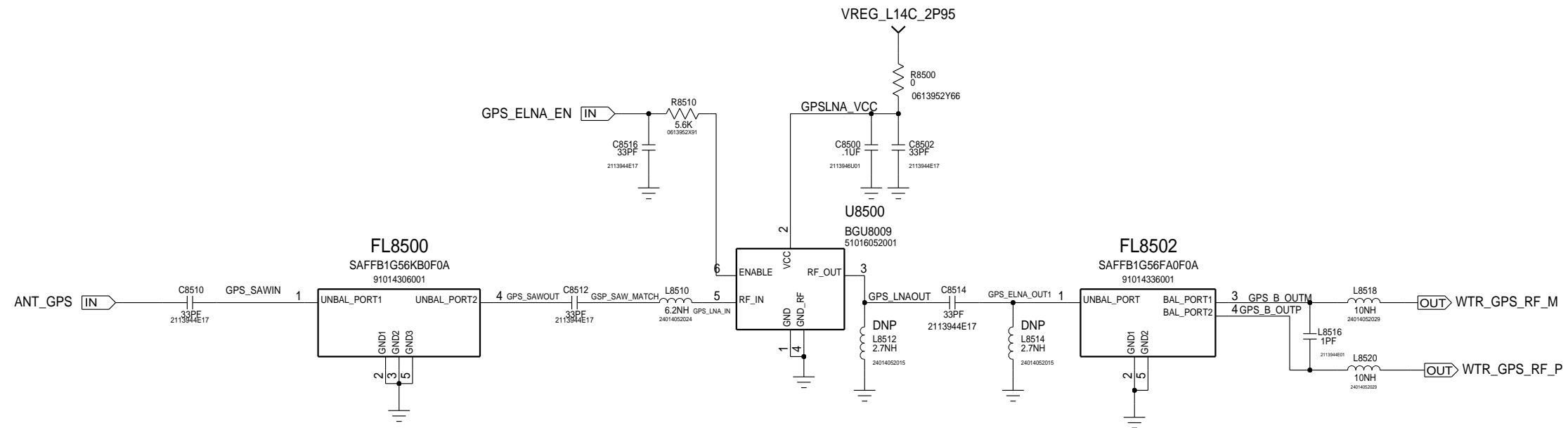
REF 7100-8499




APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: JATIN KULKARNI		BLOCK TITLE: <b>block_rfe</b>	
LAST MODIFIED BY: JATIN KULKARNI Tue Jul 08 14:31:11 2014		PROJECT NAME <b>B 8004632001_a.cpm</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		REV <b>01</b>	
		PAGE 9 OF 77	

# RFFE: GPS

REF : 8500-8549

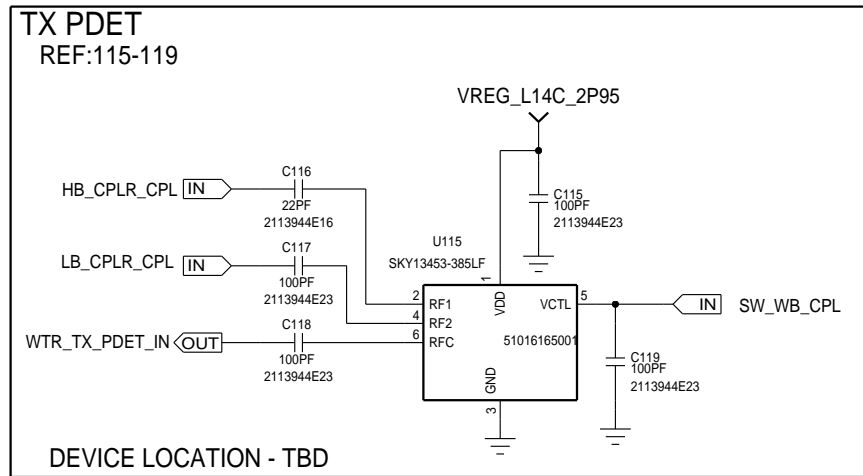


PLACE IN WTR1625 SHIELD

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Tue Jun 24 16:29:14 2014		<b>block_rfe</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 80746326001_a.cpm	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 10 OF 77	

# RFFE: PDET

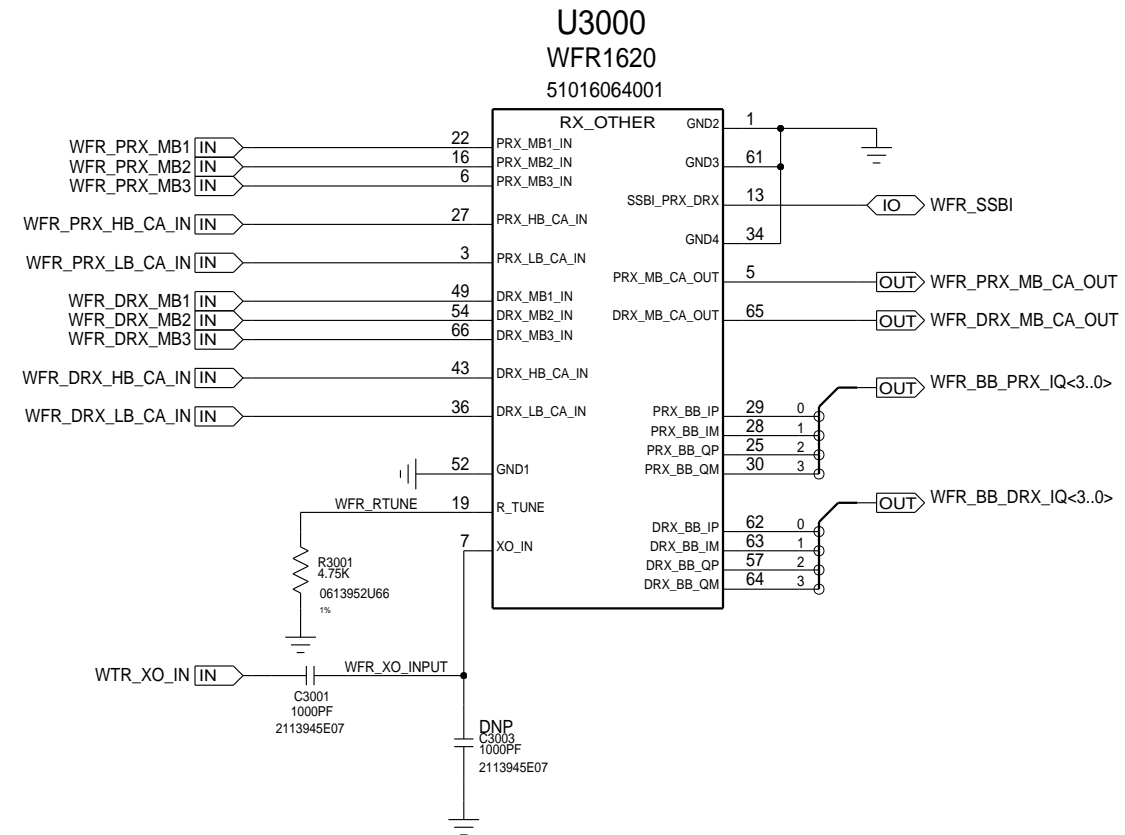
REF : 8500-8549



APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:26:09 2014		<b>block_rfe</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 80746326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 11 OF 77	

# WFR1620: BB RF

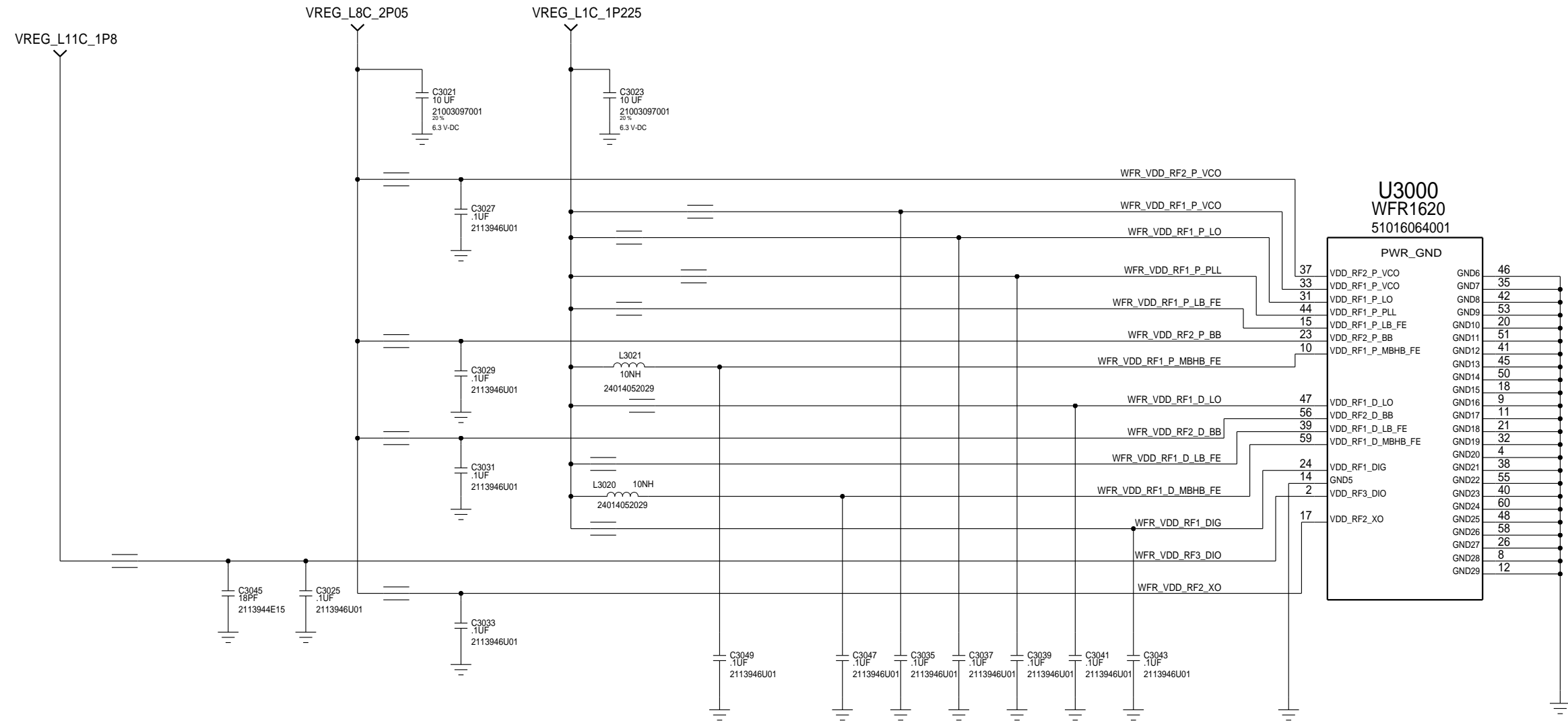
REF 3000-3019




APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:26:02 2014		block_wfr1620	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME B 80746326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 12 OF 77	

# WFR1620: POWER

REF 3020-3099

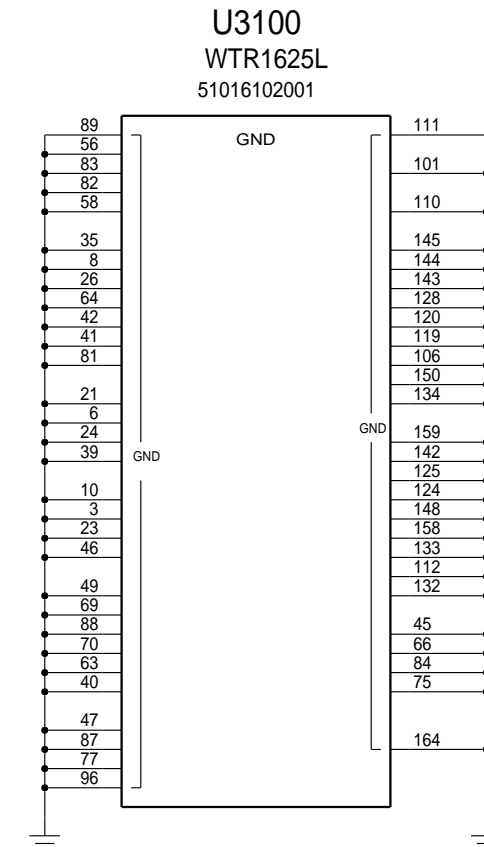
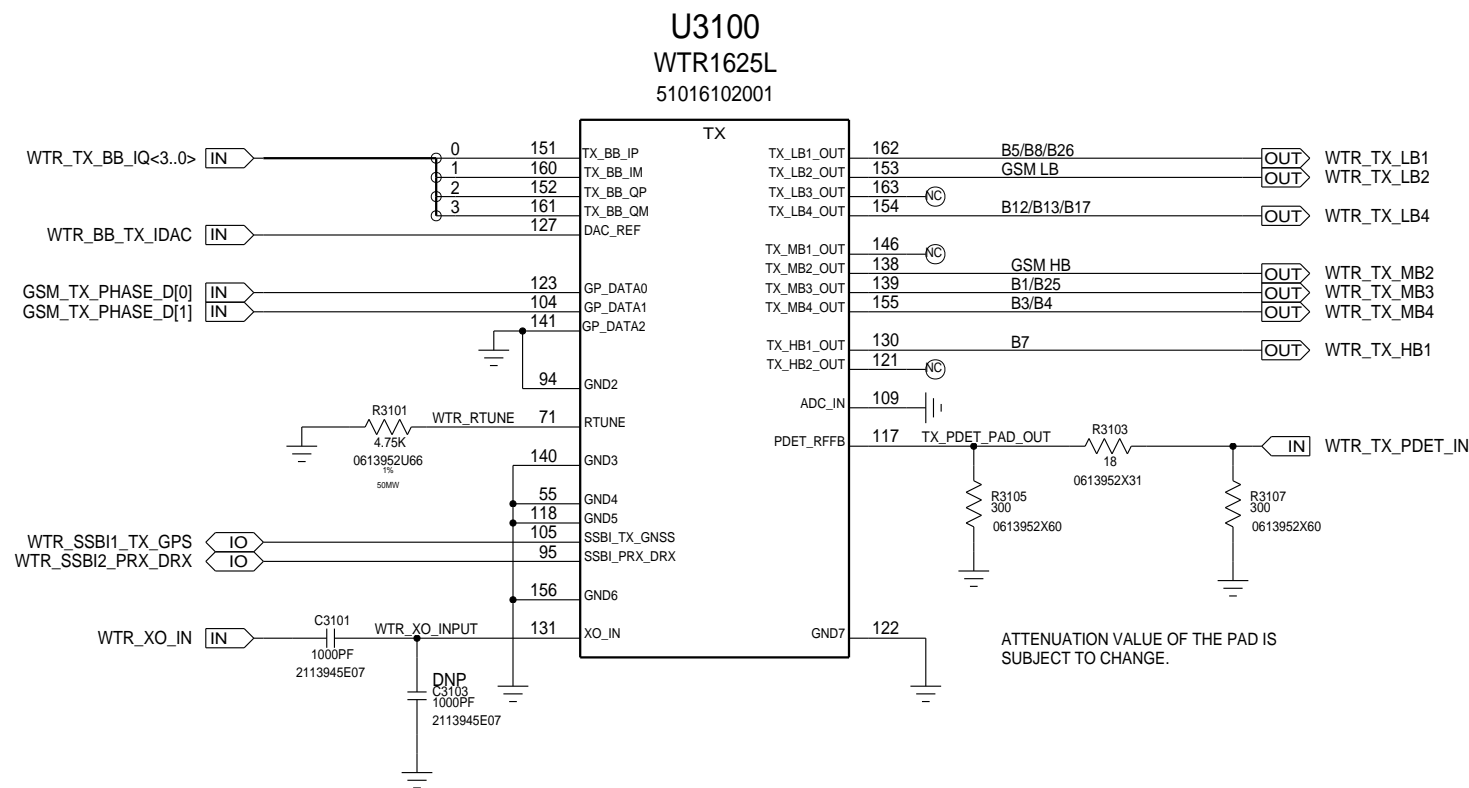


NOTES:  
- THE POWER PIN CONNECTIONS SHOULD EMPLOY STAR CONNECTIONS

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:26:03 2014		block_wfr1620	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.                  © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME B 80746326_001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 13 OF 77	

# WTR1625: TX/GROUND

REF 3100-3109

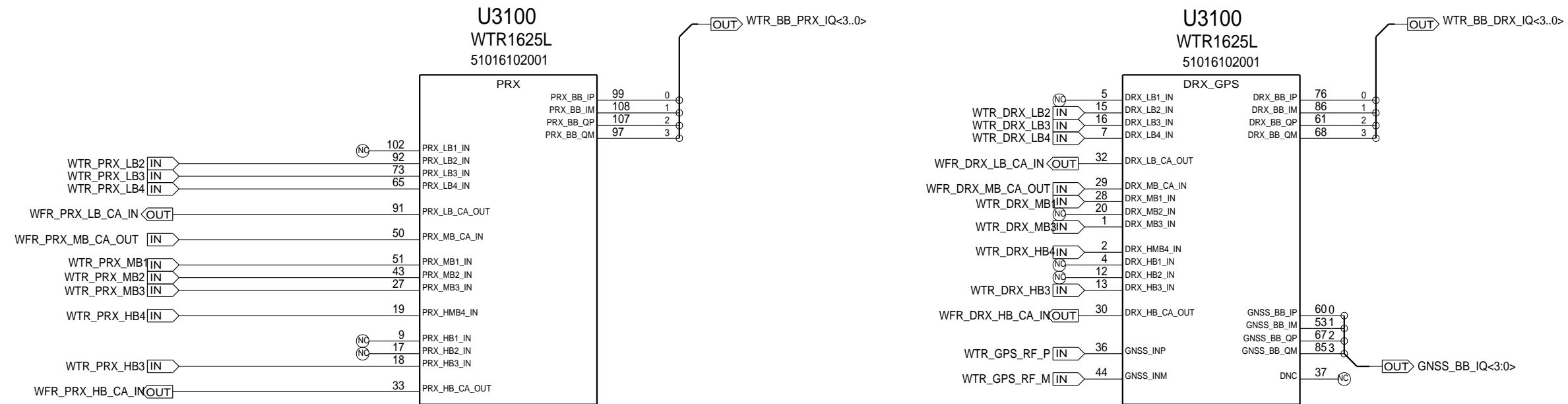


QCOM'S NOTE:  
 WTR/WFR SHARE ONE 19.2 MHZ REFERENCE CLOCK.  
 IT IS RECOMMENDED TO KEEP THE TRACE LENGTH DELTA TO WTR/WFR  
 FROM THE TEEING OFF POINT LESS THAN 5MM FOR BETTER CLOCK SIGNAL INTEGRITY.

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE: <b>block_wtr1625</b>	
LAST MODIFIED BY: Thu Jun 05 15:26:00 2014		PROJECT NAME 8074632001_a.cpm	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		B	REV 01
		CAD FILE NAME: PAGE 14 OF 77	

# WTR1625: PRX/DRX/GPS

REF 3110-3119

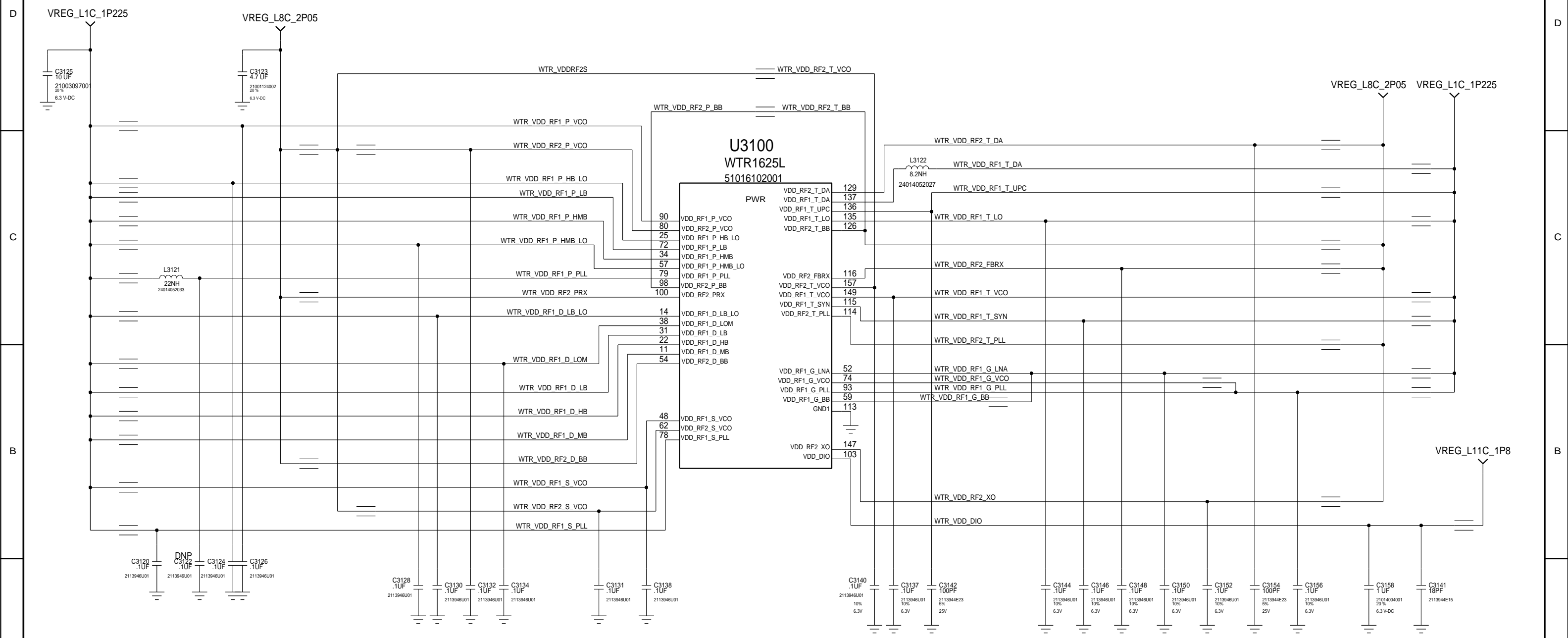


QCOM'S NOTE:  
WTR/WFR CA\_IN/OUT INTERCONNECTION MAXIMUM TRACE LENGTH:  
LOW BAND 12 MM; MID/ HI BAND 10 MM

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:26:00 2014		<b>block_wtr1625</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.                  © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME B 807463260001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 15 OF 77	

# WTR1625: POWER

REF 3120-3199



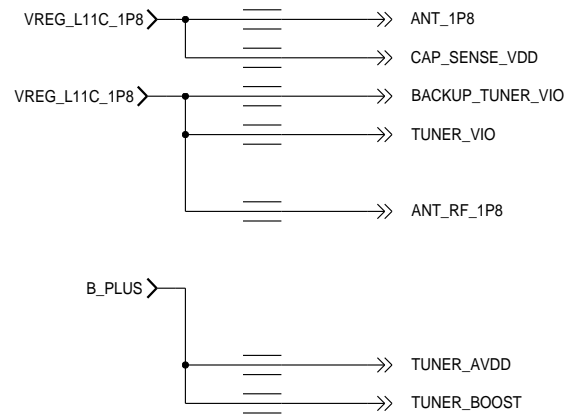
APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:26:01 2014		<b>block_wtr1625</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 807463260001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 16 OF 77	



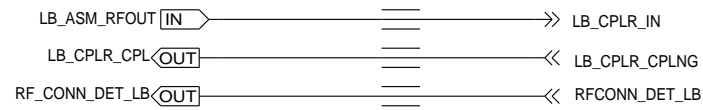
# ANT: PORTS

REFDES: 000 - 499

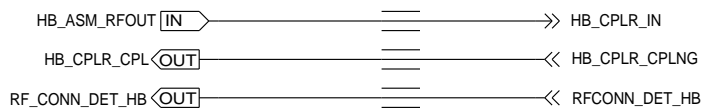
## SUPPLIES



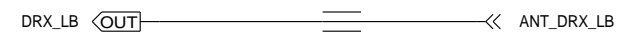
## TX LOW BAND ANTENNA



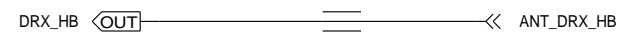
## TX HIGH BAND ANTENNA



## DRX LOW BAND ANTENNA



## DRX HIGH BAND ANTENNA



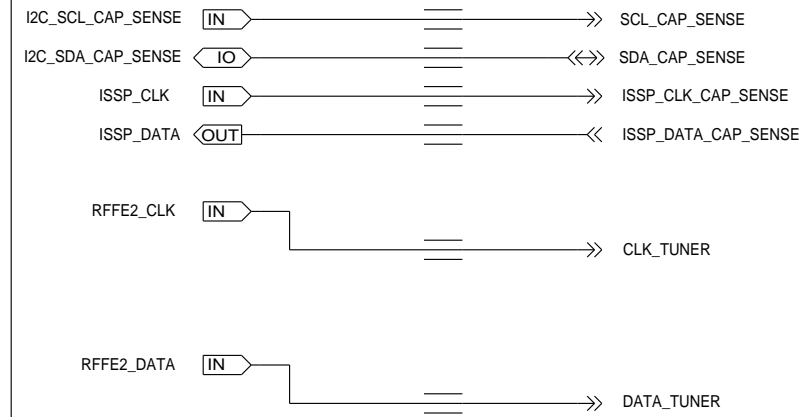
## GPS ANTENNA



## BT/WLAN ANTENNA



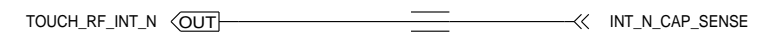
## INTERFACES



## GPIO - INPUT



## GPIO - OUTPUT

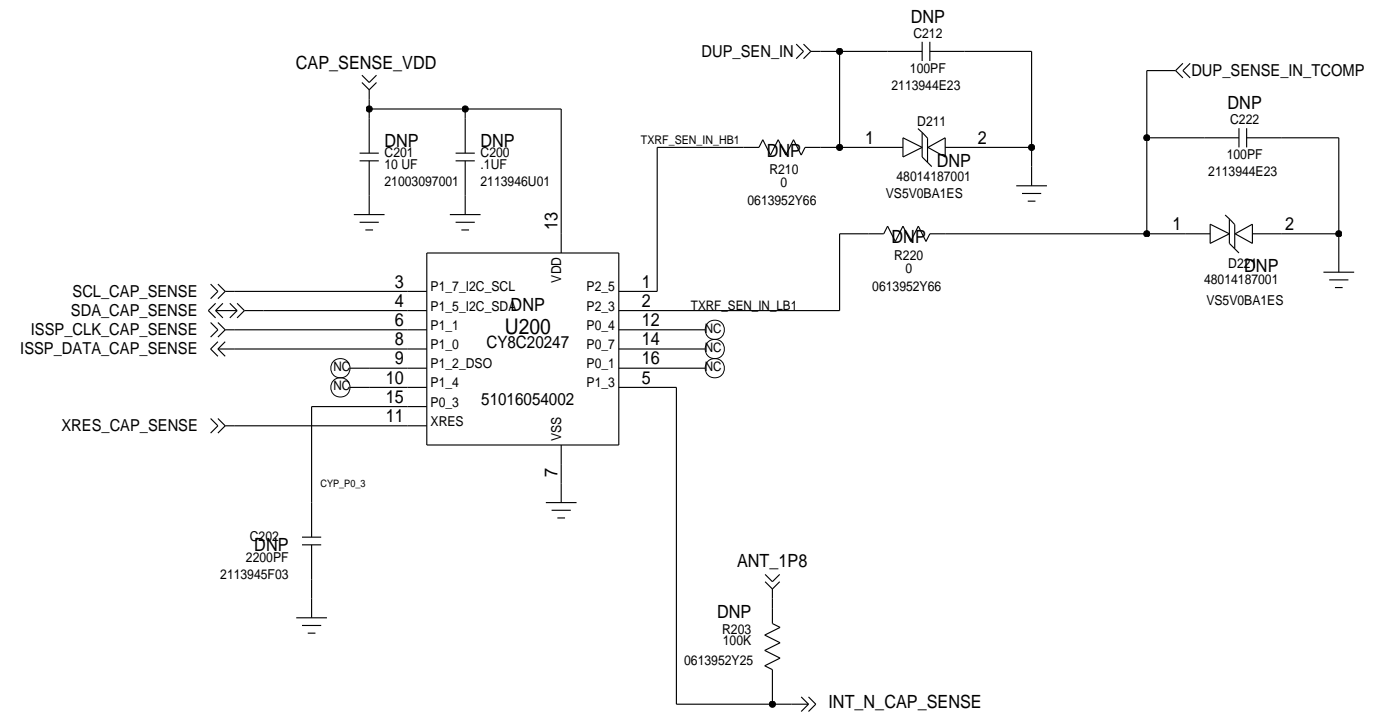


APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: NATE CONNELL		BLOCK TITLE:	
LAST MODIFIED BY: NATE CONNELL Thu Jun 05 15:25:56 2014		<b>antennas</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 17 OF 77	



# ANT: CAP SENSE

REFDES: 200-299



APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Thu Jun 05 15:25:57 2014		<b>antennas</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 19 OF 77	

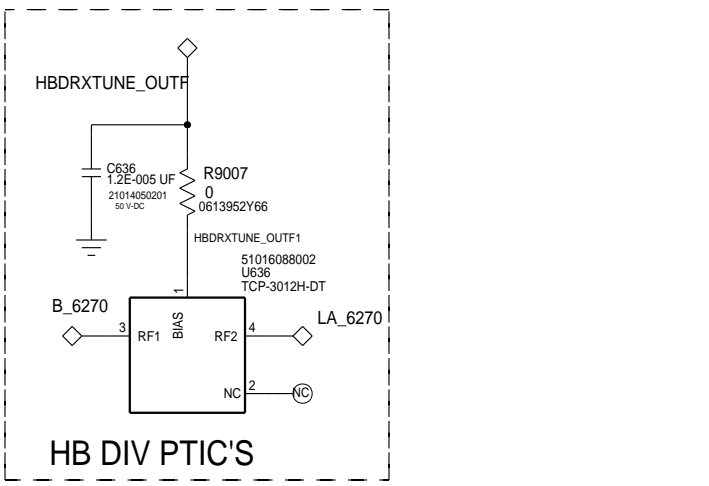
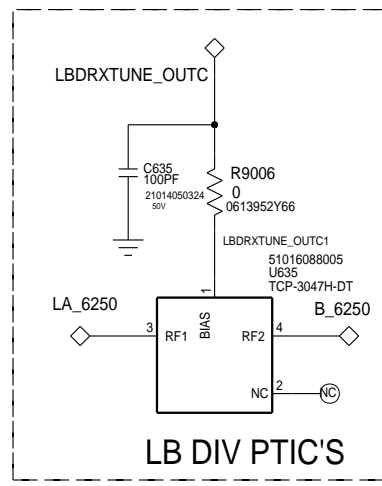
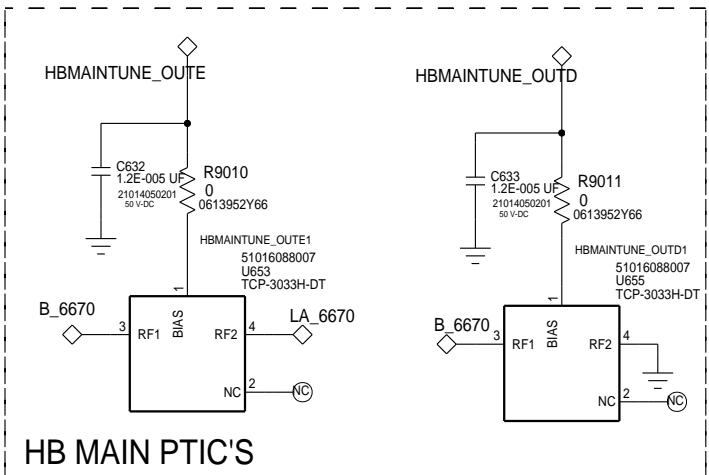
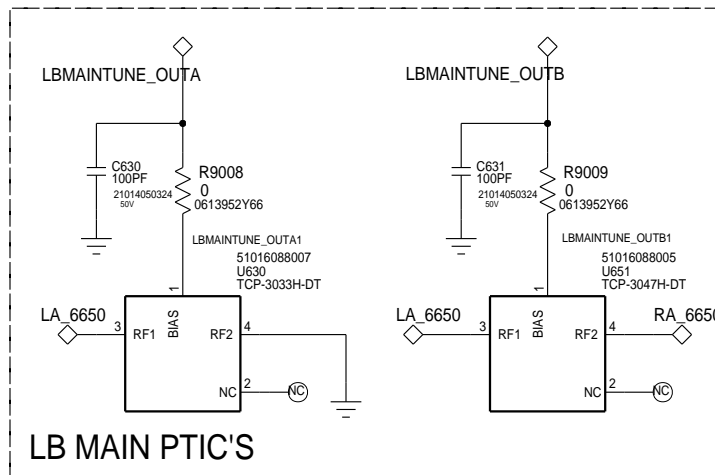
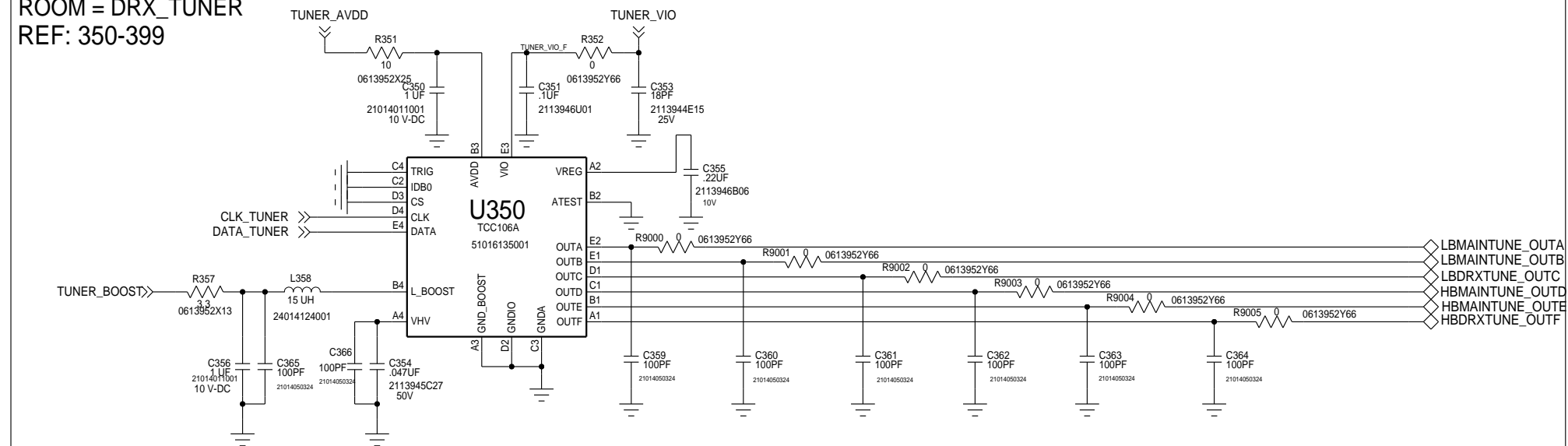
# ANT: TUNERS

REFDES: 300-499

## DIVERSITY RX (RFFE2)

ROOM = DRX\_TUNER

REF: 350-399

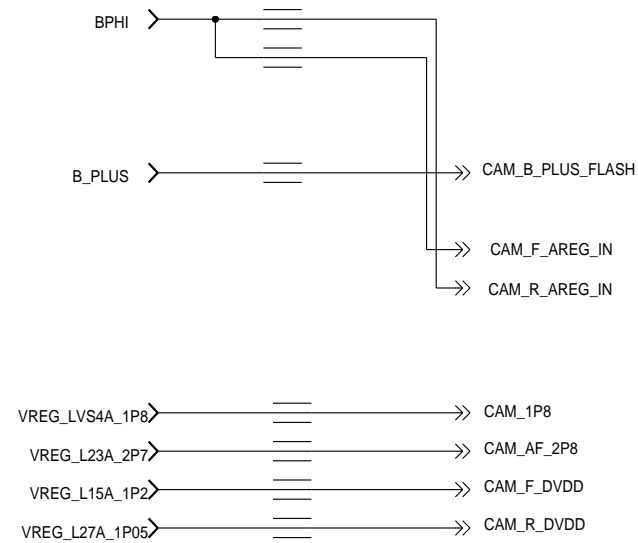


APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Wed Jun 25 09:29:00 2014		<b>antennas</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 20 OF 77	

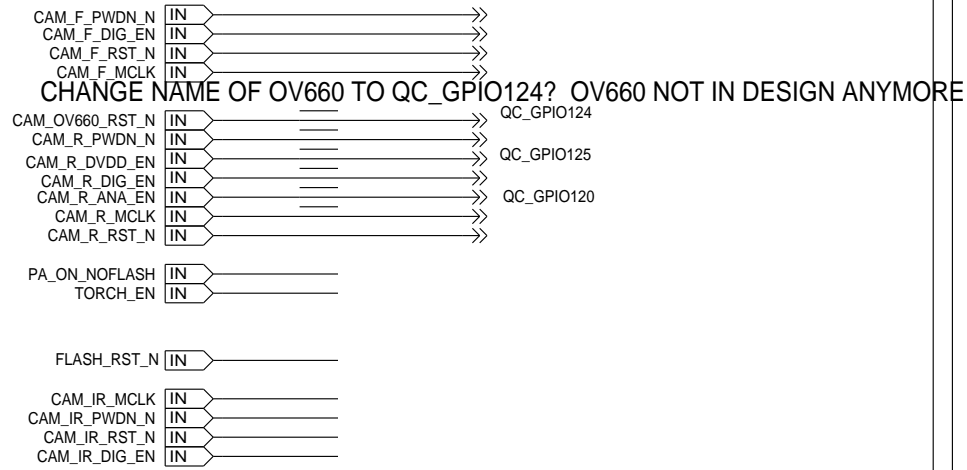
# CAM: PORTS

REF 5500-5999

## SUPPLIES



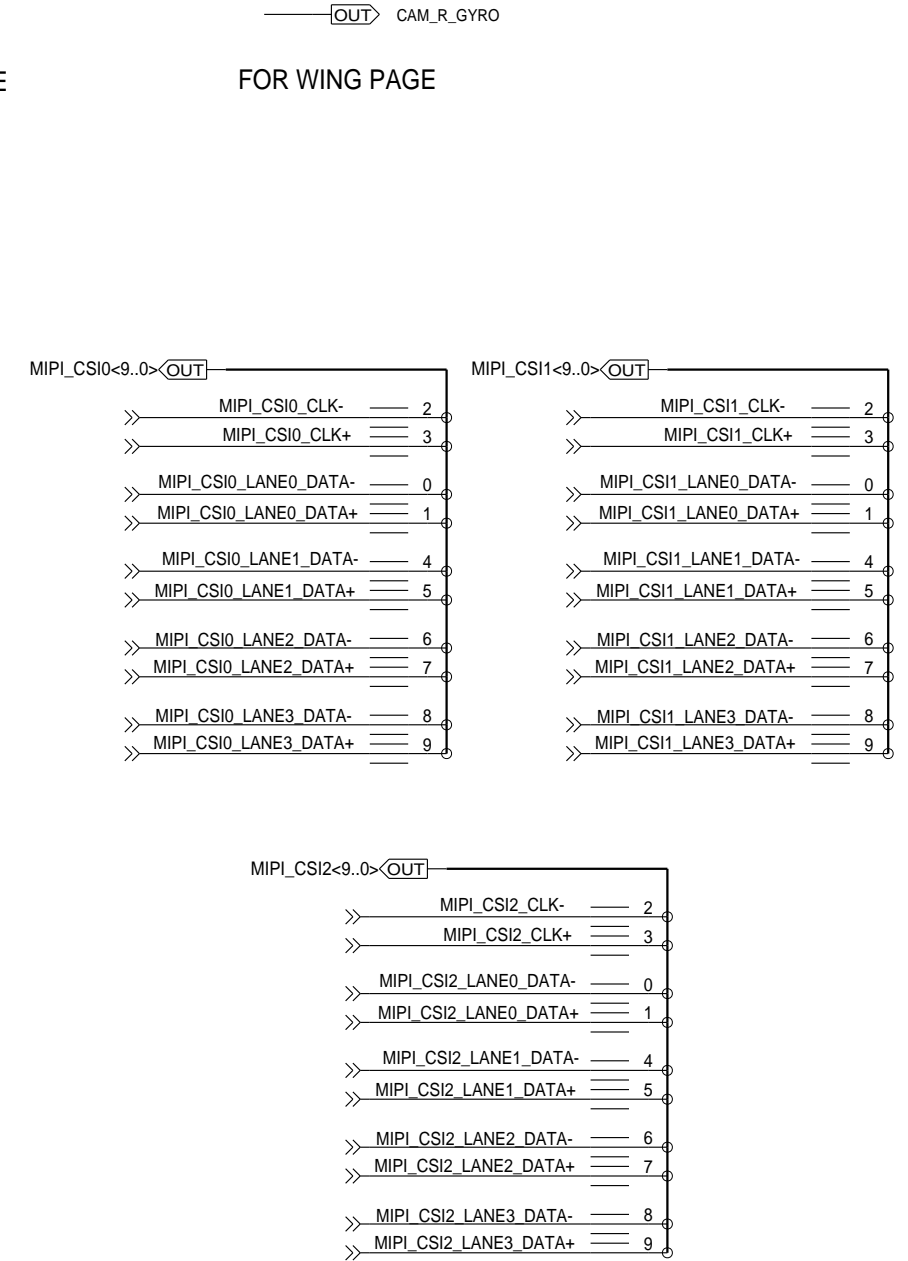
## INPUTS



## INTERFACES



## OUTPUTS



### APPROVALS

ENGINEER: NATE CONNELL

LAST MODIFIED BY: NATE CONNELL  
Thu Jun 05 15:25:54 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
SHALL NOT BE USED OR DISCUSSED IN WHOLE  
OR IN PART WITHOUT MOTOROLA'S CONSENT.  
© COPYRIGHT, MOTOROLA. THIS DOES  
NOT IMPLY PUBLICATION



BLOCK TITLE:

imagers

PROJECT NAME

B 84016326001\_a.cpm

REV

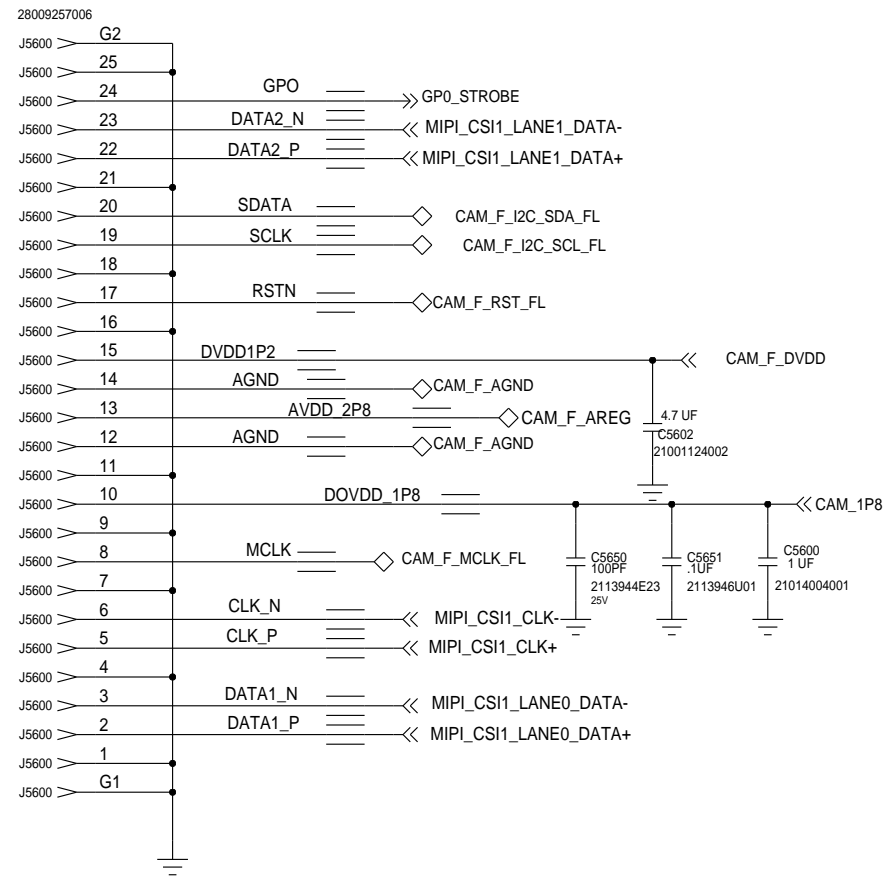
01

CAD FILE NAME:

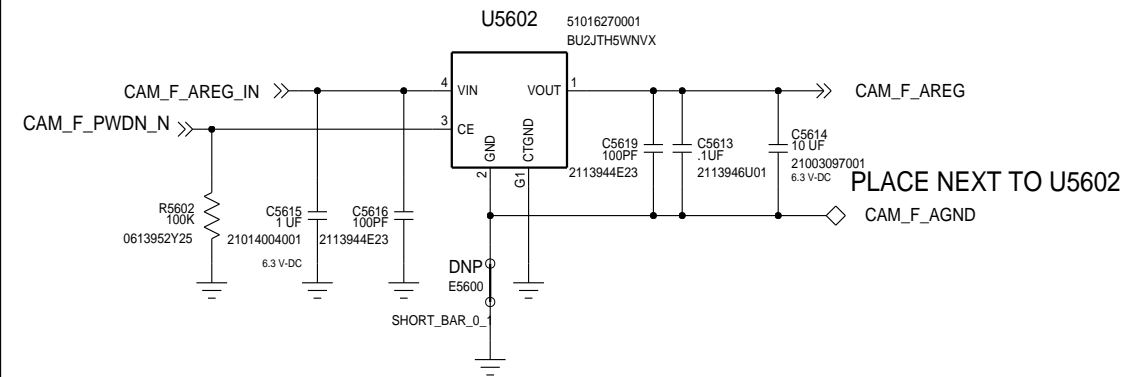
PAGE 21 OF 77

# CAM: FRONT

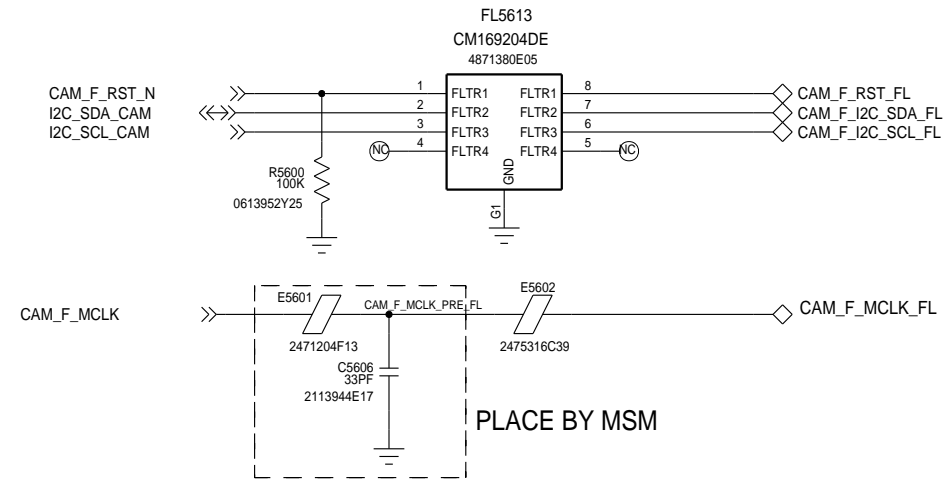
REF 5600-5699



## POWER



## EMI/ESD FILTER



MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

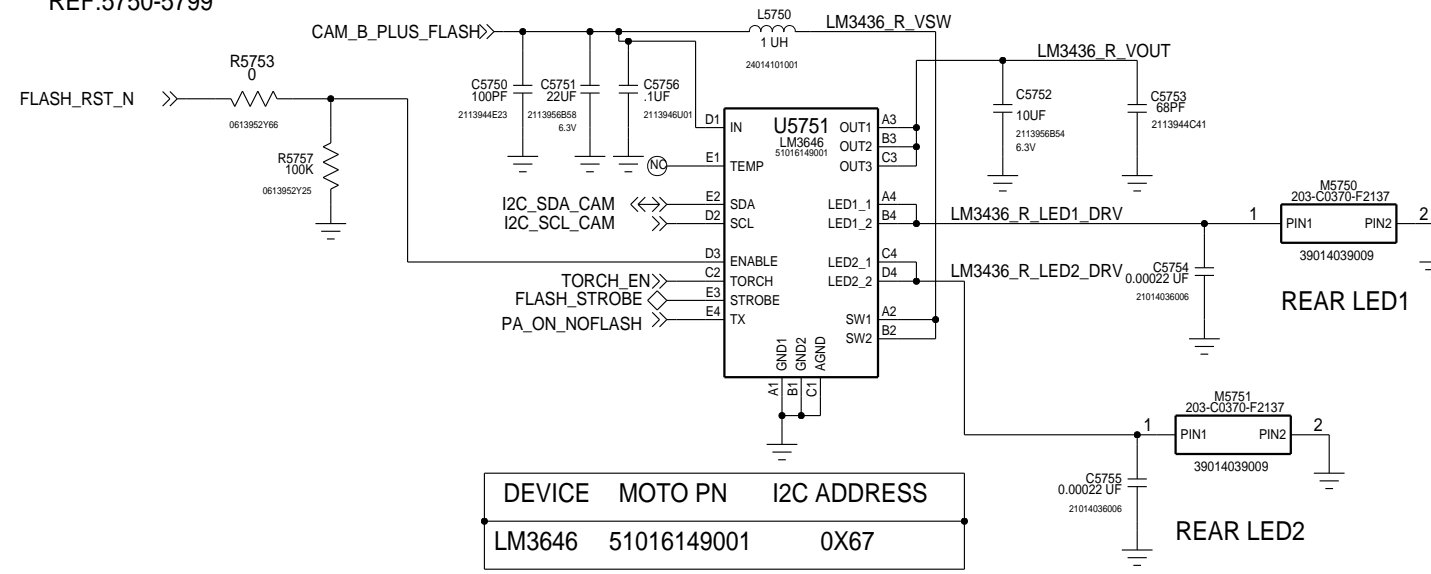
APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: JOHN KRAMER		BLOCK TITLE:	
LAST MODIFIED BY: UID ELRAN Mon Jul 21 14:58:46 2014		<b>imagers</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	PAGE 22 OF 77

# CAM: REAR

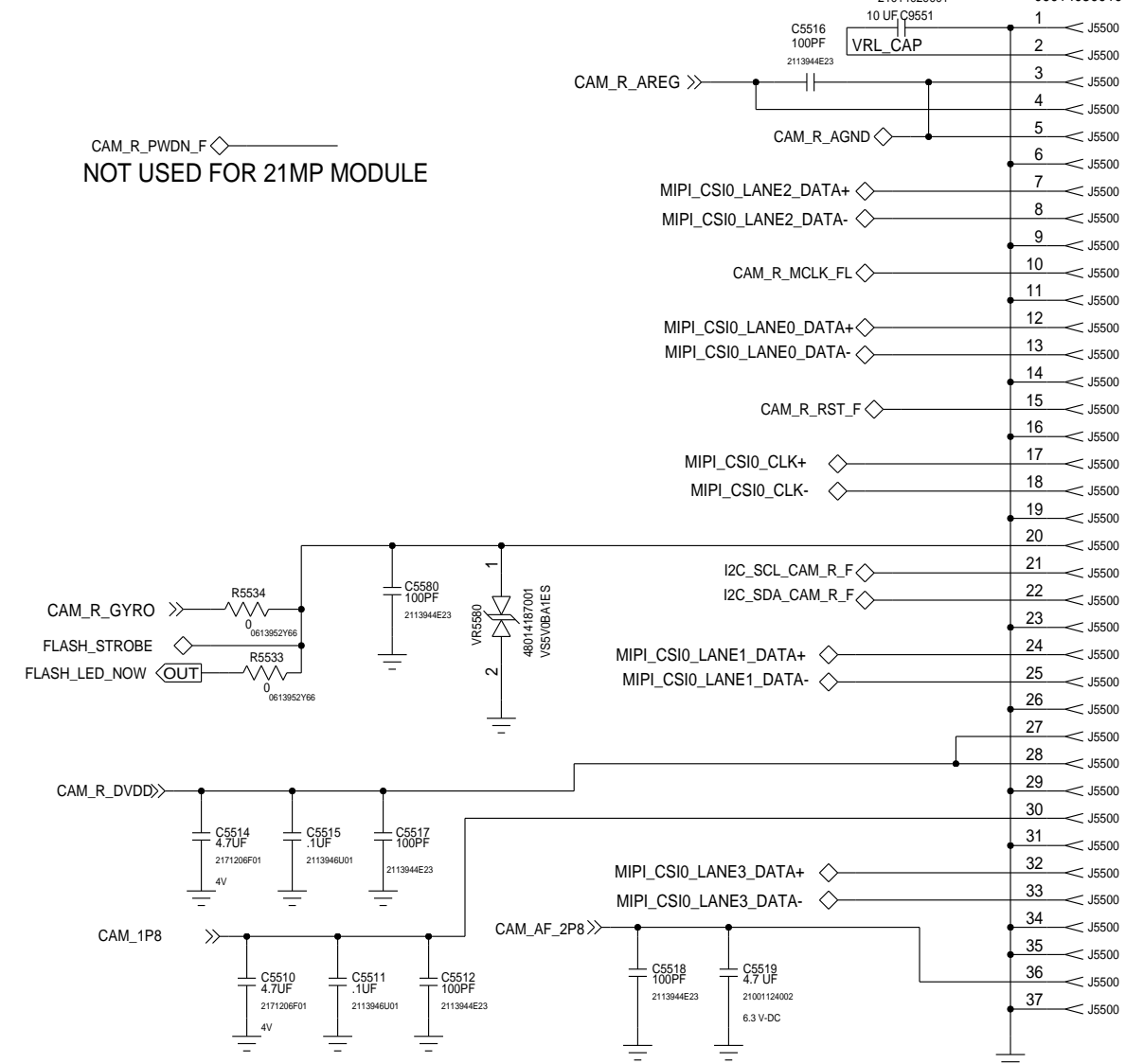
REF:5500-5599

## LED FLASH DRIVER - LM3646

REF:5750-5799

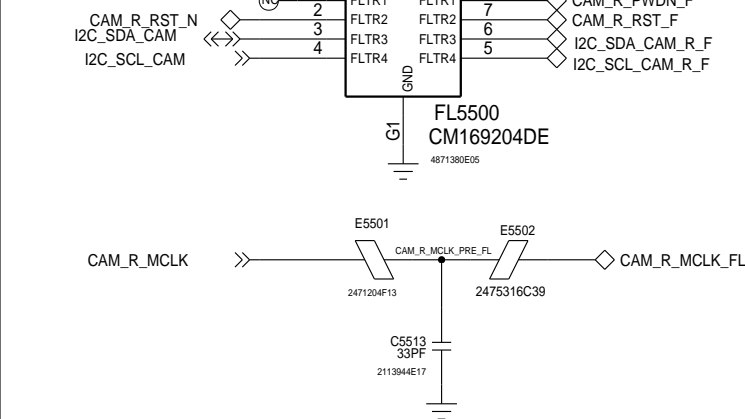


## IMAGER FLEX CONNECTOR

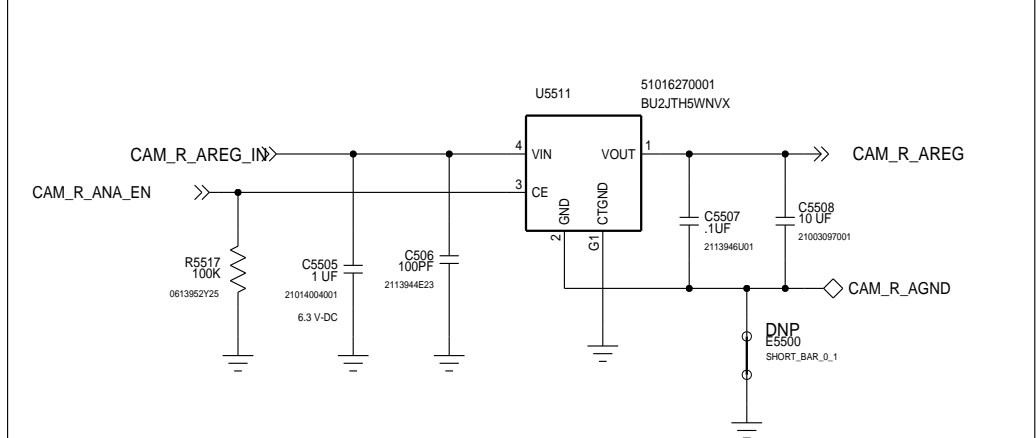


## EMI/ESD FILTER

CAM\_R\_PWDN NOT USED



## ANALOG REGULATOR

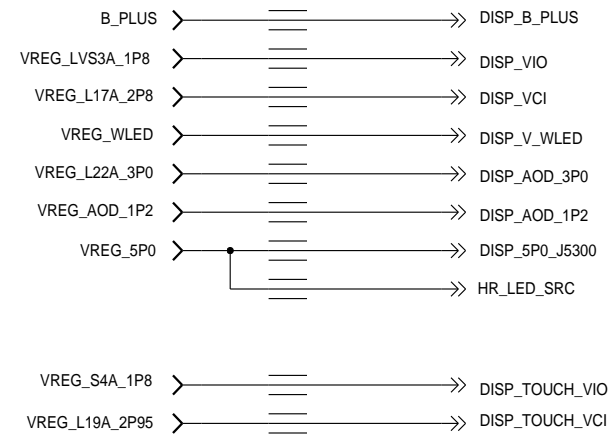


APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE: <b>imagers</b>	
LAST MODIFIED BY: MOTOROLA Tue Aug 12 11:16:25 2014		PROJECT NAME 84016326001_a.cpm	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		REV 01	
		PAGE 23 OF 77	

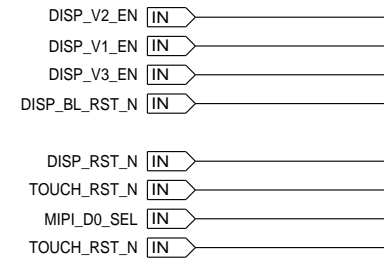
# DISP: PORTS

REF 5000-5499

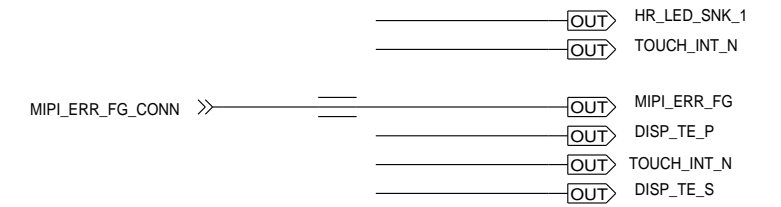
## SUPPLIES



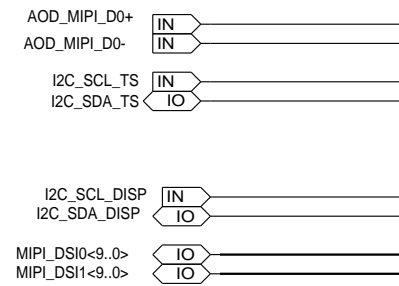
## INPUTS



## OUTPUTS



## INTERFACES



### APPROVALS

ENGINEER: NATE CONNELL

LAST MODIFIED BY: NATE CONNELL  
Thu Jun 05 15:25:51 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
SHALL NOT BE USED OR DISCUSSED IN WHOLE  
OR IN PART WITHOUT MOTOROLA'S CONSENT.  
© COPYRIGHT, MOTOROLA. THIS DOES  
NOT IMPLY PUBLICATION



BLOCK TITLE:

display

PROJECT NAME  
B 84016326001\_a.cpm

REV  
01

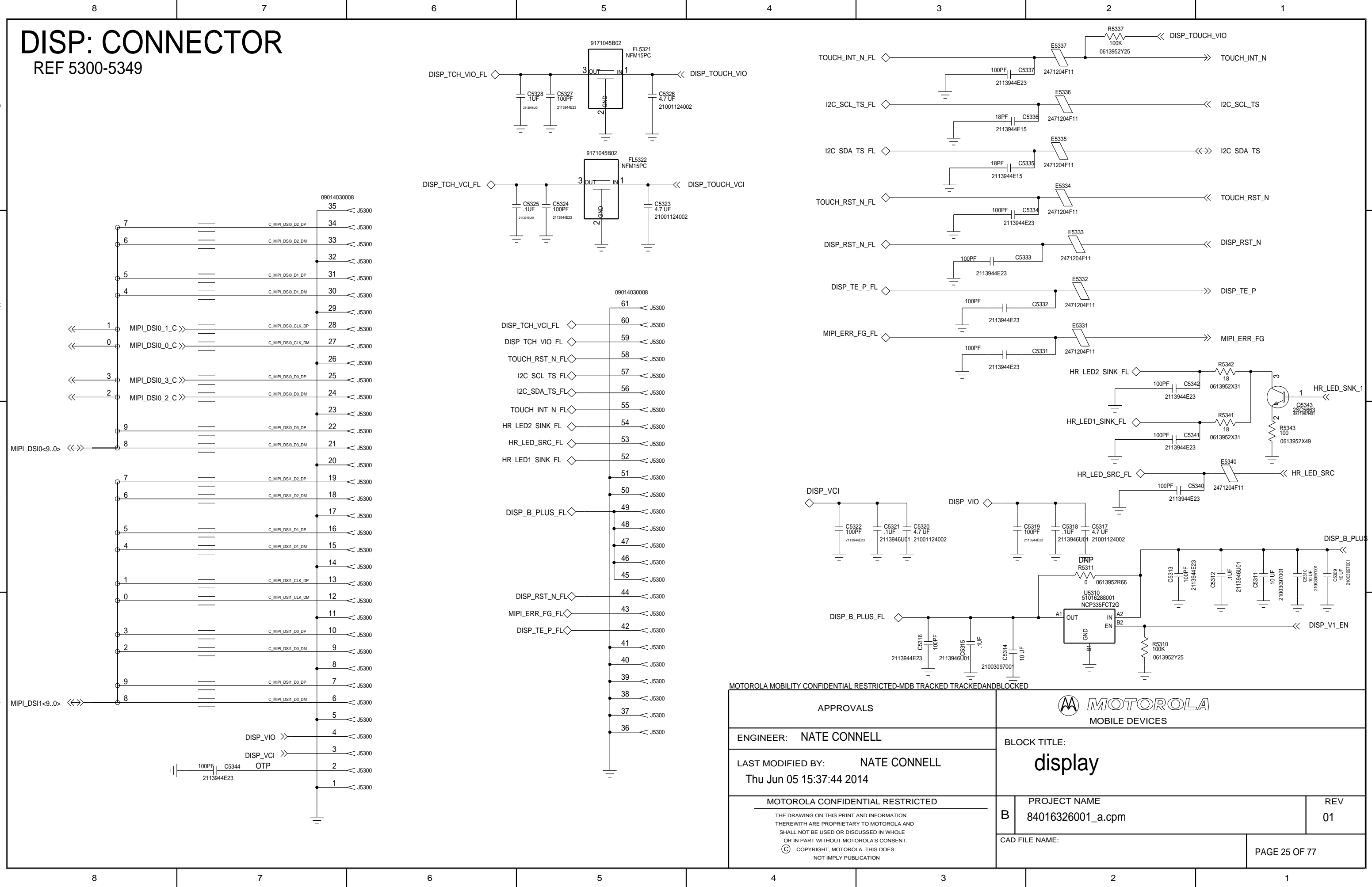
CAD FILE NAME:

PAGE 24 OF 77



# DISP: CONNECTOR

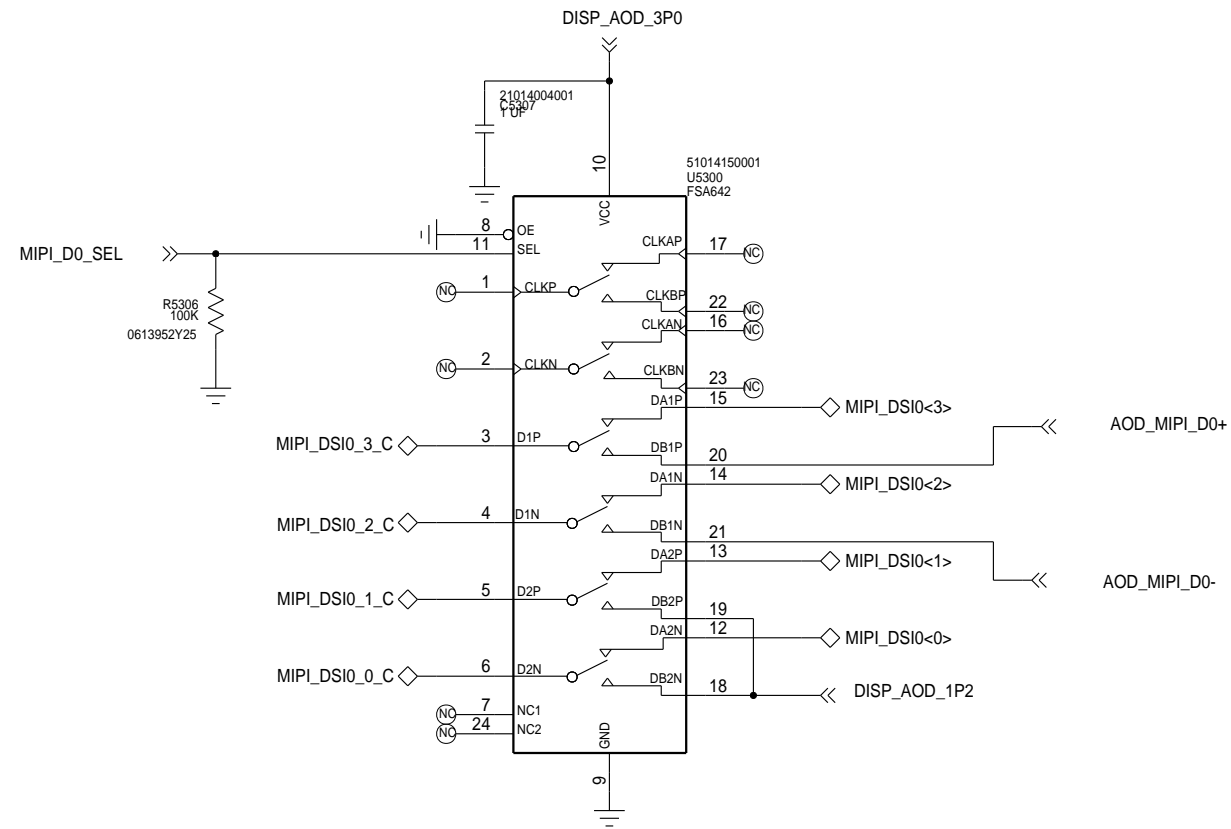
REF 5300-5349



MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: NATE CONNELL			
LAST MODIFIED BY: NATE CONNELL Thu Jun 05 15:37:44 2014		display	
MOTOROLA CONFIDENTIAL RESTRICTED THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 25 OF 77	

# DISP: AOD

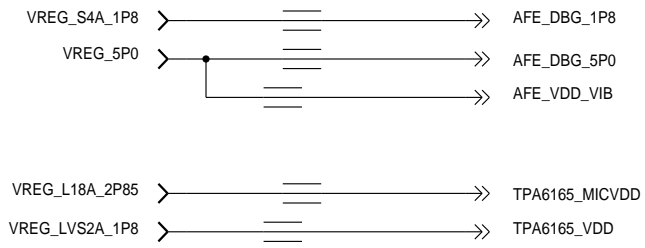


APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Thu Jun 05 15:25:53 2014		<b>display</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 26 OF 77	

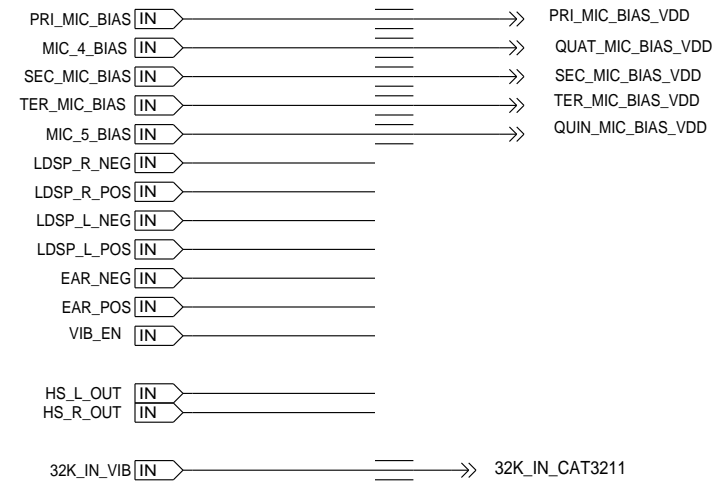
# AFE: PORTS

REF 4500-4999

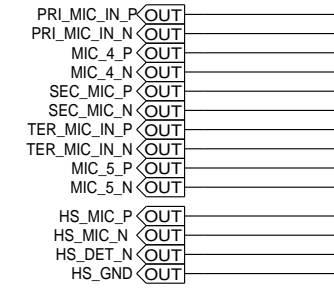
## SUPPLIES



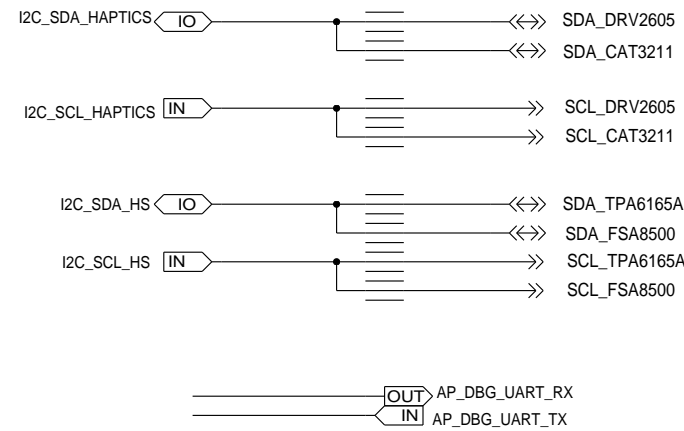
## INPUTS



## OUTPUTS



## INTERFACES



### APPROVALS

ENGINEER: NATE CONNELL

LAST MODIFIED BY: NATE CONNELL  
 Thu Jun 05 15:25:47 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
 THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
 SHALL NOT BE USED OR DISCUSSED IN WHOLE  
 OR IN PART WITHOUT MOTOROLA'S CONSENT.  
 © COPYRIGHT, MOTOROLA. THIS DOES  
 NOT IMPLY PUBLICATION



BLOCK TITLE:

audio\_fe

PROJECT NAME  
 B 84016326001\_a.cpm

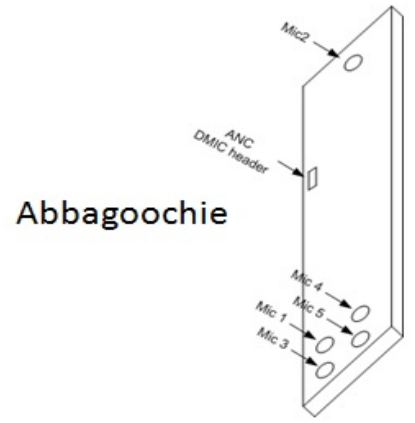
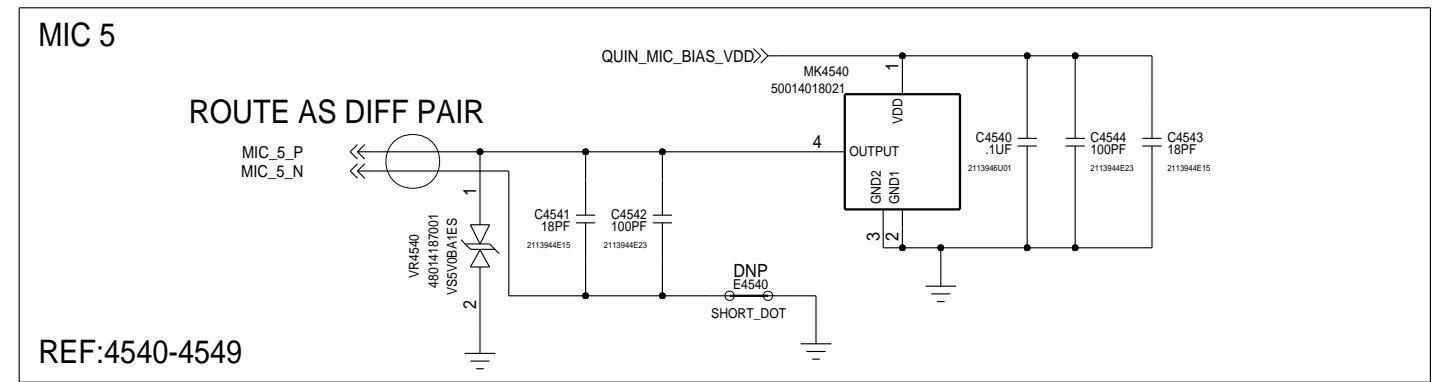
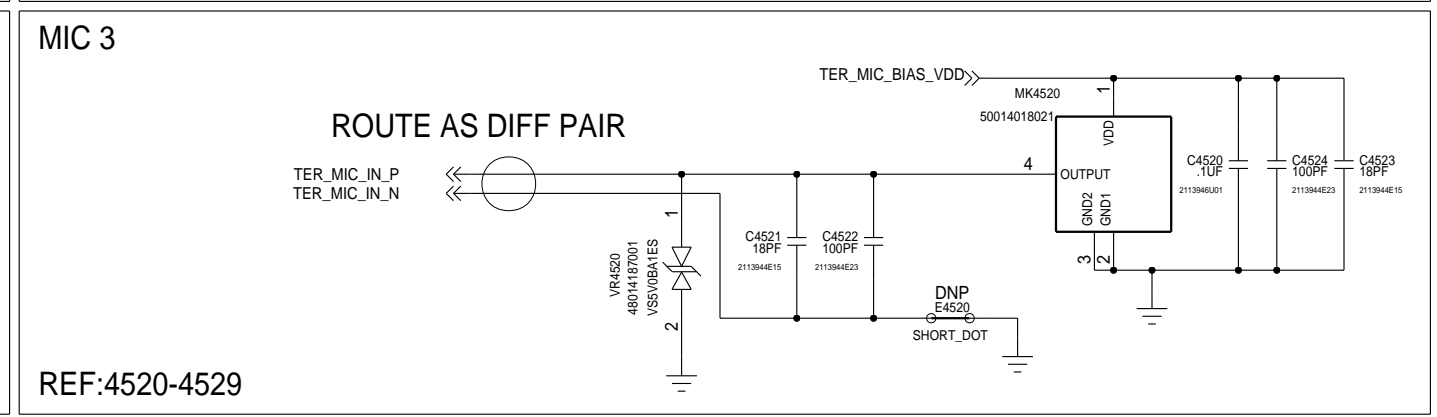
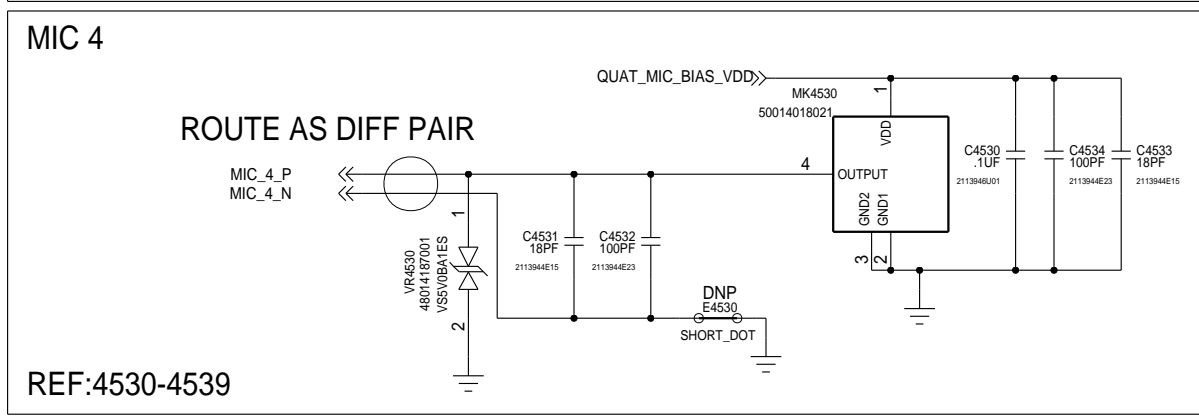
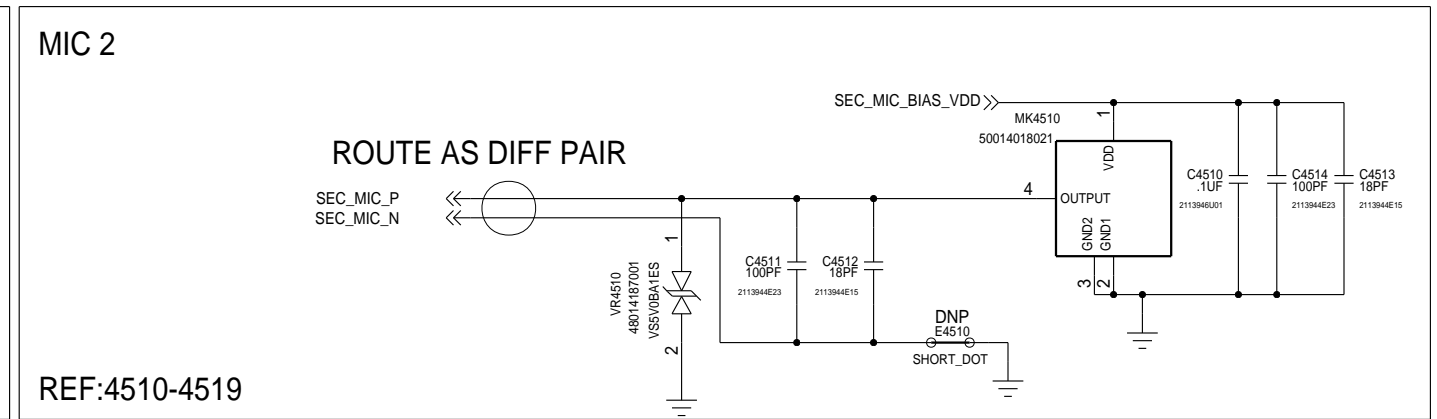
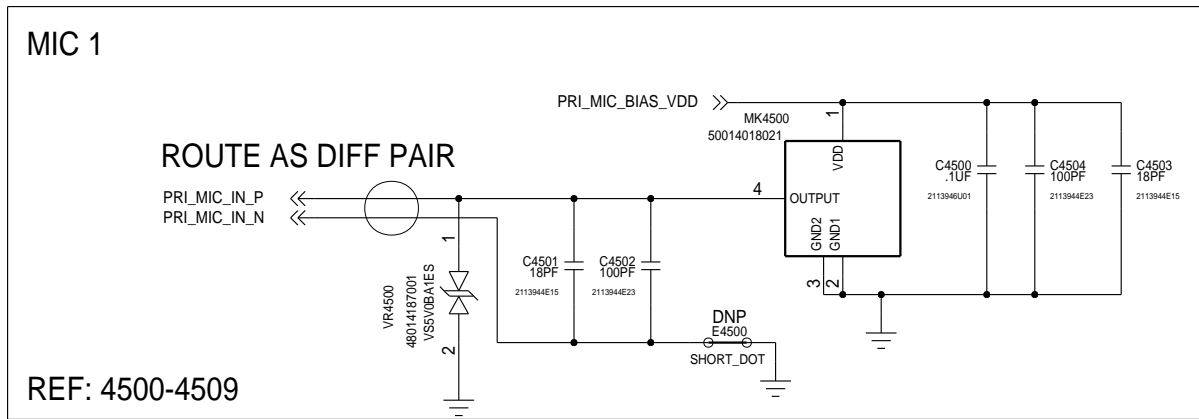
REV  
 01

CAD FILE NAME:

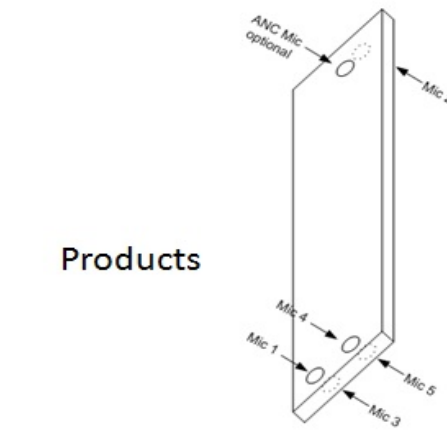
PAGE 27 OF 77

# AFE: MICS

REF: 4500-4599



	Voice	AoV	Camcorder	Voice with ANC
Mic 1	X	X	X	X
Mic 2	X	X	X	X
Mic 3	X	X	X	X
Mic 4		X	X	
Mic 5		X	X	
ANC Mic				X



	Voice	AoV	Camcorder	Voice with ANC
Mic 1	X	X	X	
Mic 2	X		X	
Mic 3	X	X	X	
Mic 4		X	X	
Mic 5		X	X	
ANC Mic optional				

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE: <b>audio_fe</b>	
LAST MODIFIED BY: MOTOROLA Tue Jun 17 17:05:18 2014		PROJECT NAME 84016326001_a.cpm	
MOTOROLA CONFIDENTIAL RESTRICTED THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		CAD FILE NAME:	REV 01
		PAGE 28 OF 77	

# AFE: SPEAKERS

REF: 4600-4699

## LOUDSPEAKER RIGHT (BOTTOM)

REF:4670-4674

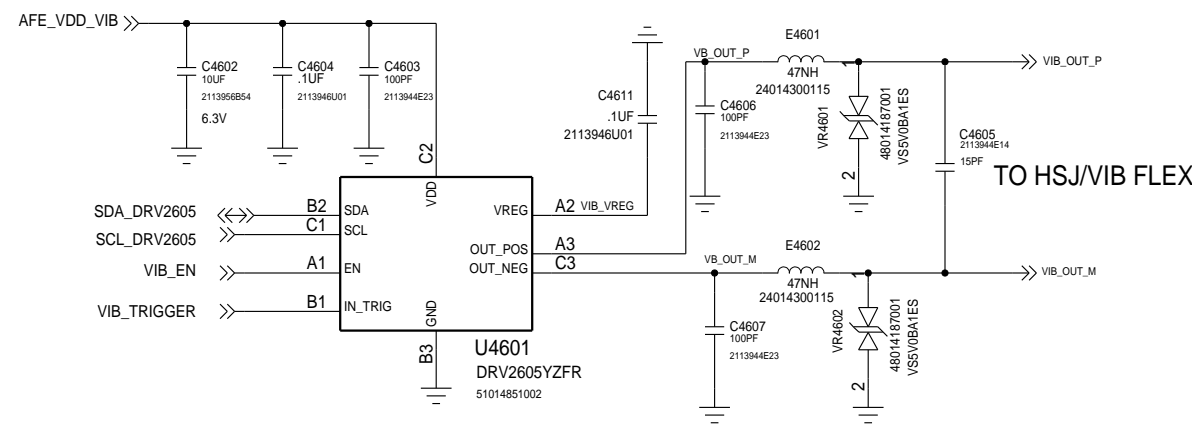
## LOUDSPEAKER LEFT (TOP)

REF:4680-4684

## EAR PIECE

REF:4690-4699

## ROTARY VIBRATOR REF DES 4600-4619

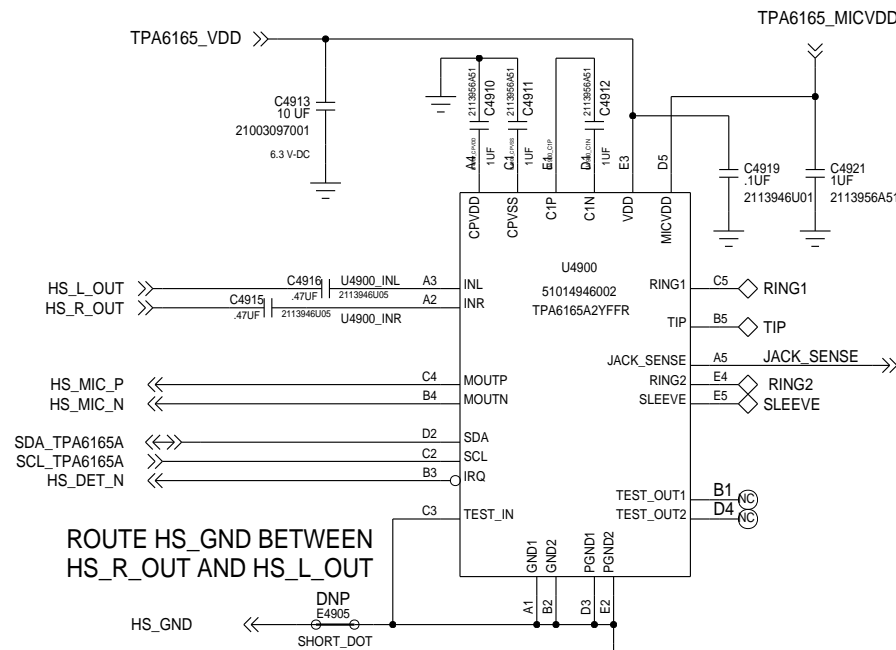


MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: DENNIS BUDNICK		BLOCK TITLE: <b>audio_fe</b>	
LAST MODIFIED BY: TIM MILLER Wed Aug 06 11:13:45 2014		PROJECT NAME 84016326001_a.cpm	
MOTOROLA CONFIDENTIAL RESTRICTED THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		REV 01	
		PAGE 29 OF 77	

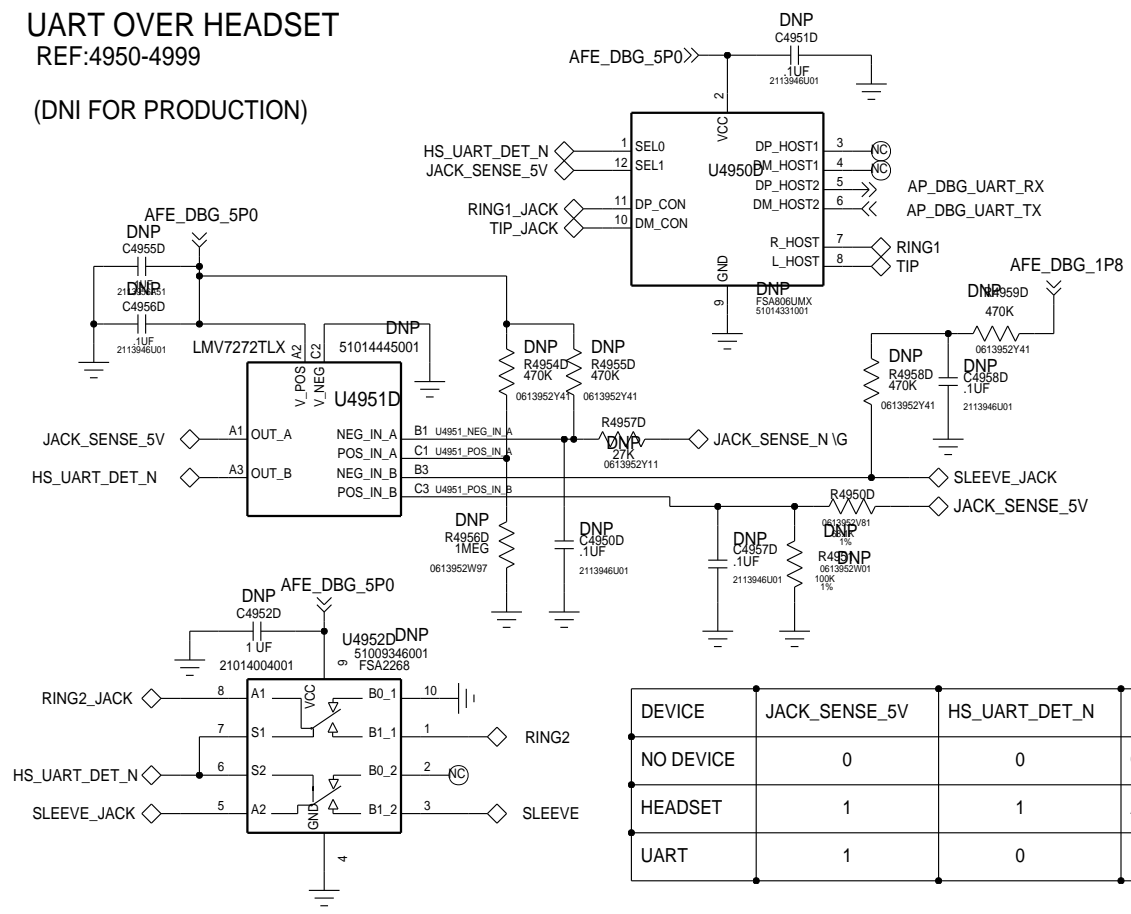
# AFE: 3.5MM HEADSET

## UNIVERSAL HEADSET REF:4900-4949



## UART OVER HEADSET REF:4950-4999

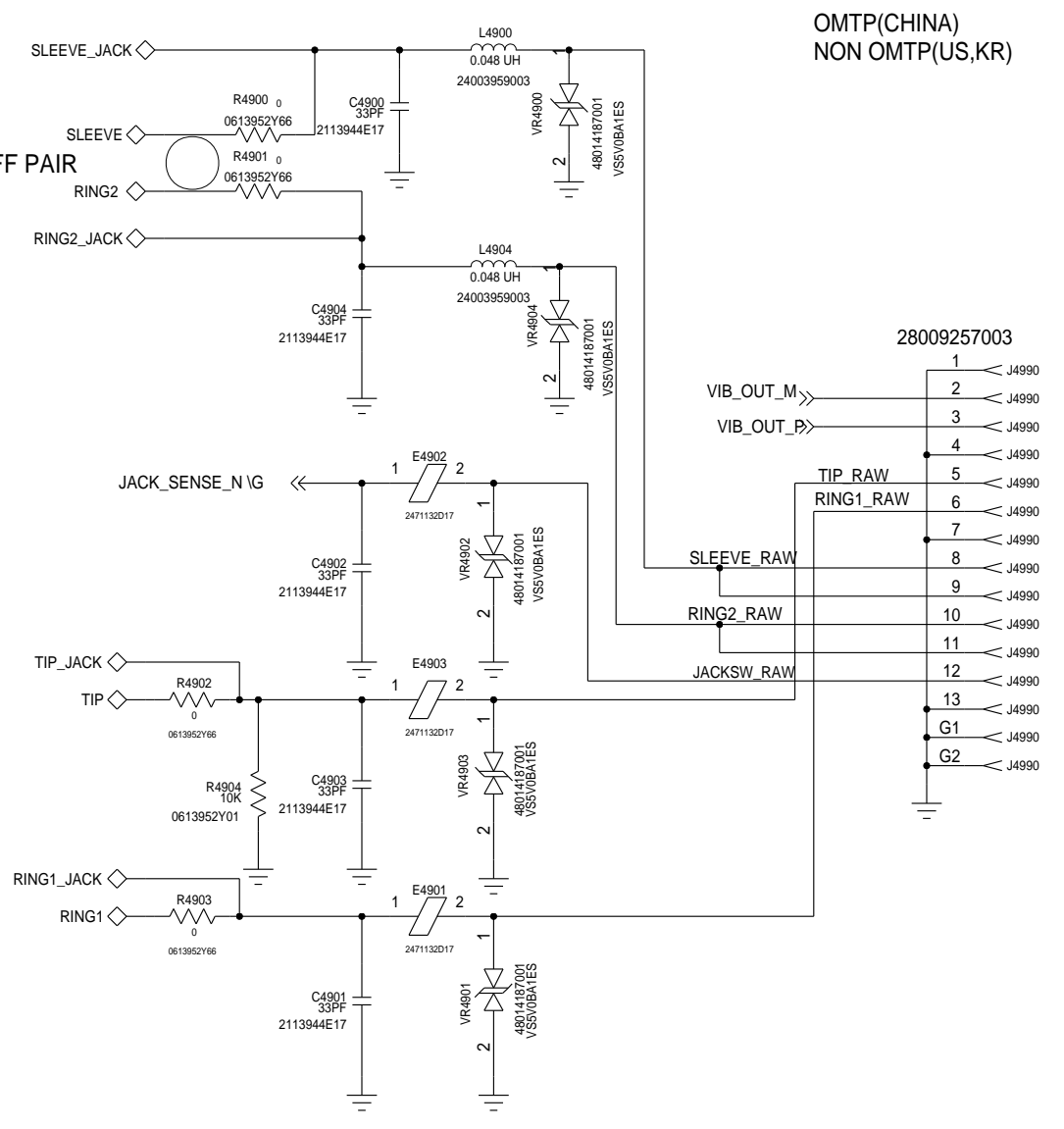
(DNI FOR PRODUCTION)



DEVICE	JACK_SENSE_5V	HS_UART_DET_N	STATE	
NO DEVICE	0	0	OPEN	SLEEVE - NC RING2 - GND
HEADSET	1	1	AUDIO MODE	RING2 - TPA6165 SLEEVE - TPA6165
UART	1	0	UART OUTPUT	SLEEVE - NC RING2 - GND

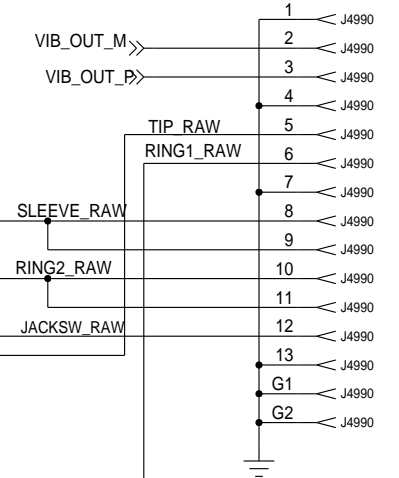
## 3.5MM HSJ REF:4900-4949

ROUTE AS DIFF PAIR



OMTP(CHINA)  
NON OMTP(US,KR)

28009257003



MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

### APPROVALS

ENGINEER: MATT MOTTIER

LAST MODIFIED BY: NATE CONNELL  
Thu Jun 05 15:25:50 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
SHALL NOT BE USED OR DISCUSSED IN WHOLE  
OR IN PART WITHOUT MOTOROLA'S CONSENT.  
© COPYRIGHT, MOTOROLA. THIS DOES  
NOT IMPLY PUBLICATION



BLOCK TITLE:

audio\_fe

PROJECT NAME

84016326001\_a.cpm

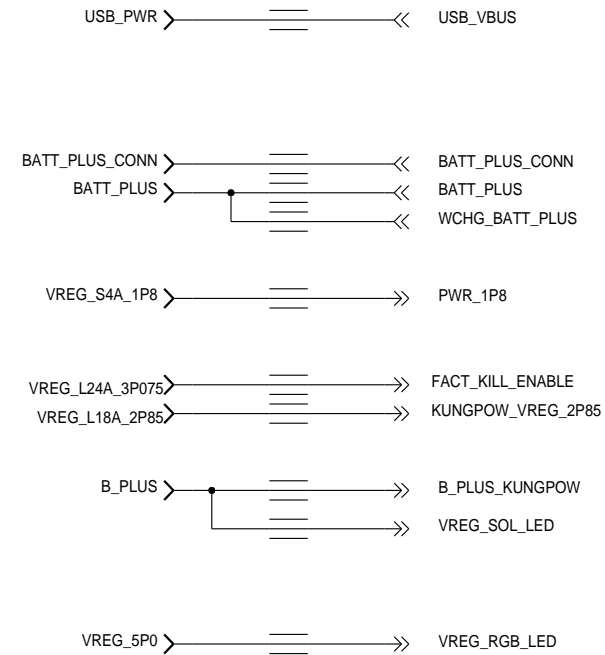
CAD FILE NAME:

REV  
01

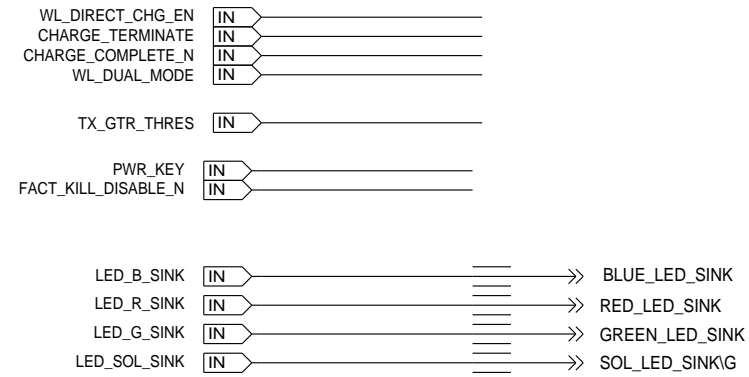
# PWR: PORTS

REF 500-799

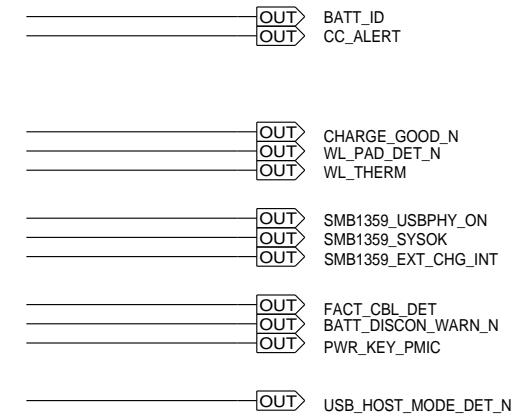
## SUPPLIES



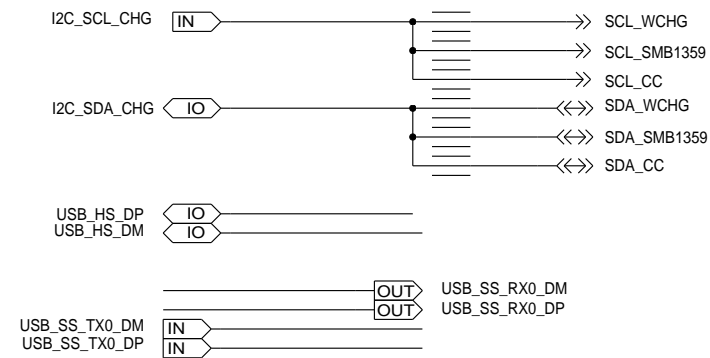
## INPUTS



## OUTPUTS



## INTERFACES



### APPROVALS

ENGINEER: NATE CONNELL

LAST MODIFIED BY: NATE CONNELL  
Thu Jun 05 15:25:43 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
SHALL NOT BE USED OR DISCUSSED IN WHOLE  
OR IN PART WITHOUT MOTOROLA'S CONSENT.  
© COPYRIGHT, MOTOROLA. THIS DOES  
NOT IMPLY PUBLICATION



BLOCK TITLE:

**power**

PROJECT NAME  
B 84016326001\_a.cpm

REV  
01

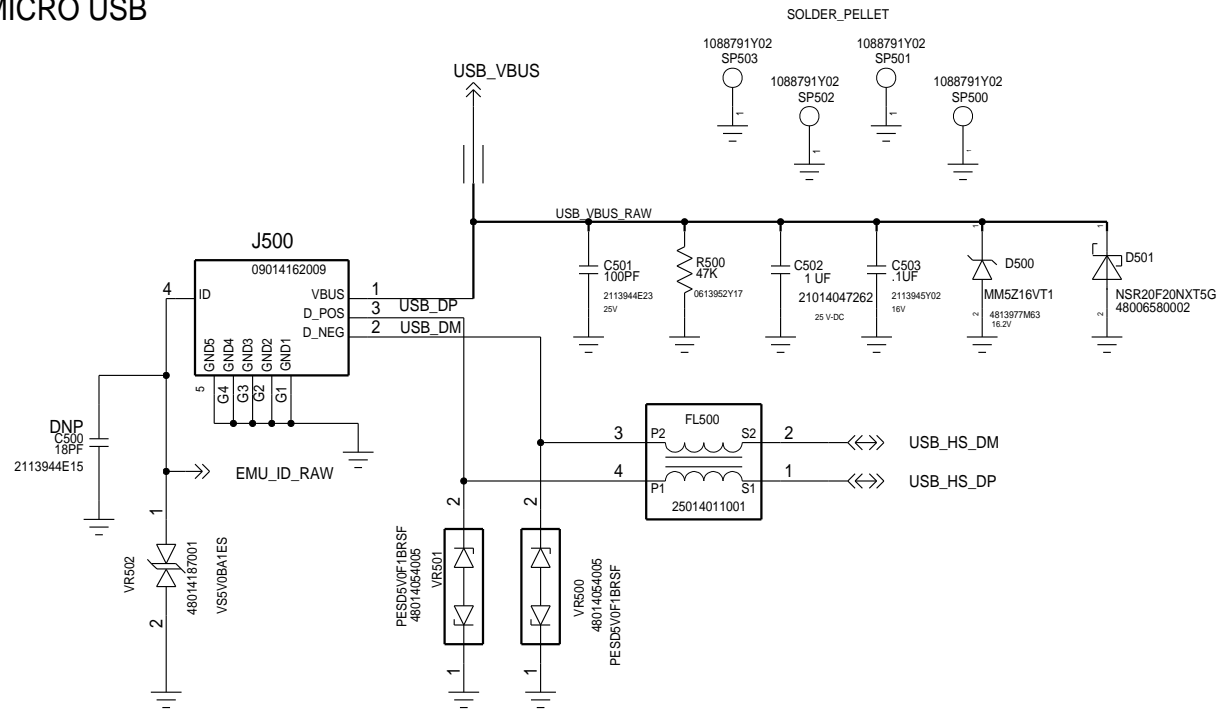
CAD FILE NAME:

PAGE 31 OF 77

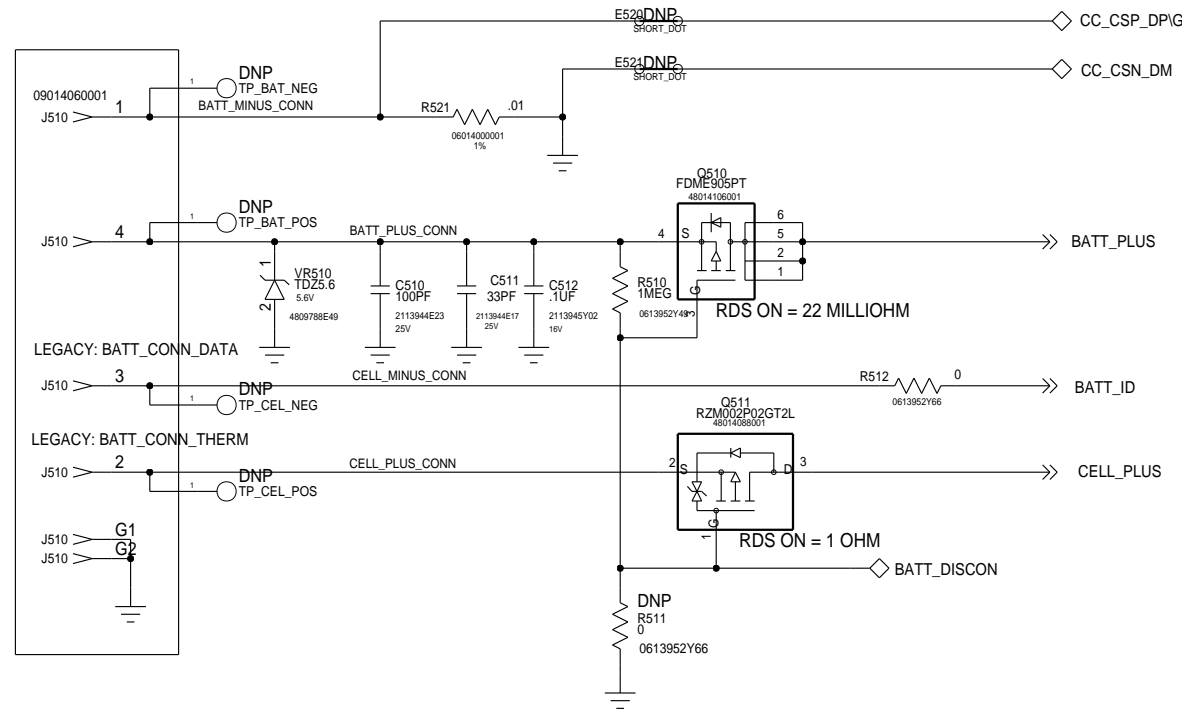
# PWR: USB2 / BATT

REF: 500-530

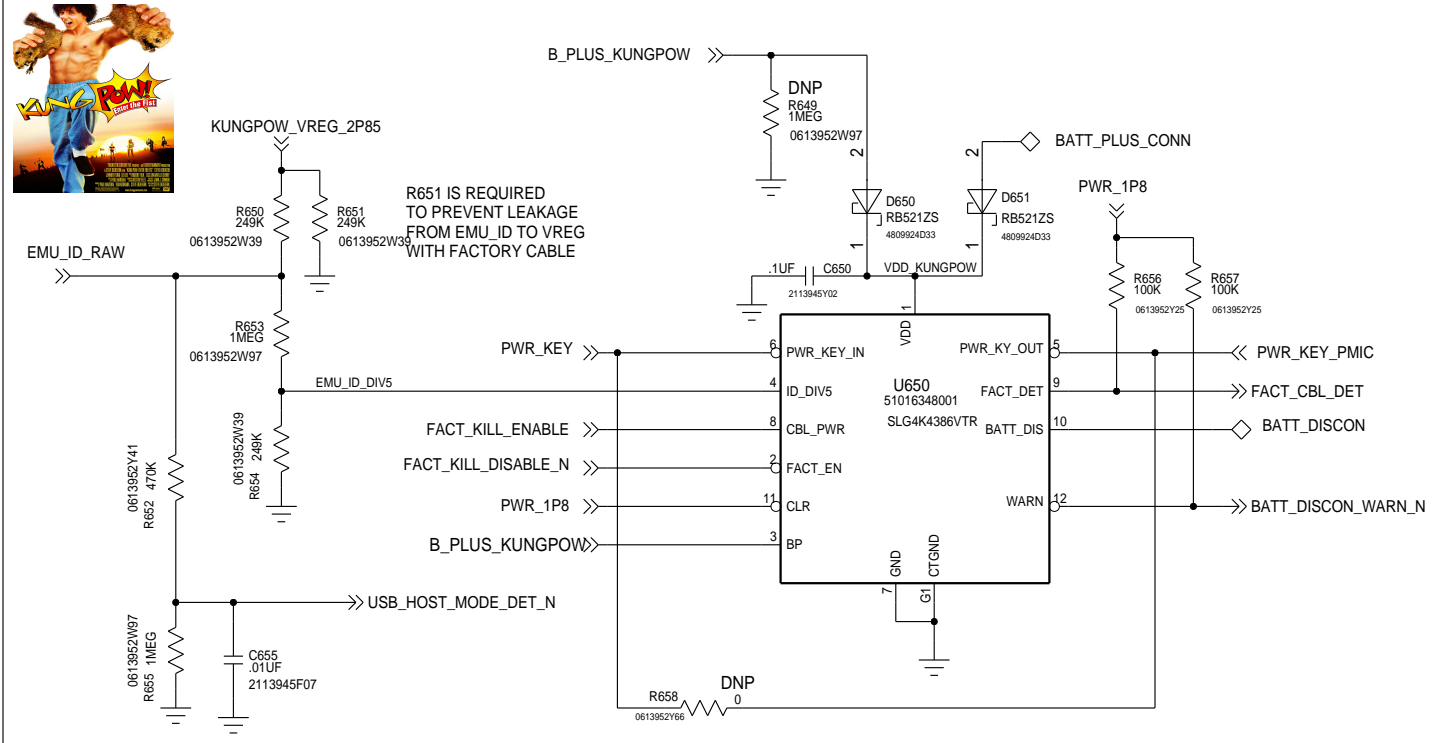
## MICRO USB



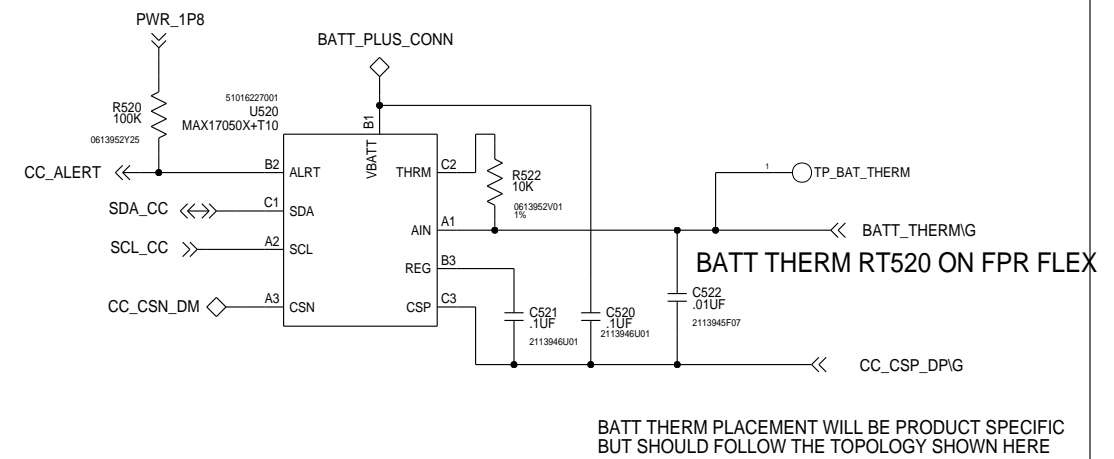
## BATTERY BLOCK



## KUNG POW BATTERY DISCONNECT



## FUEL GAUGE



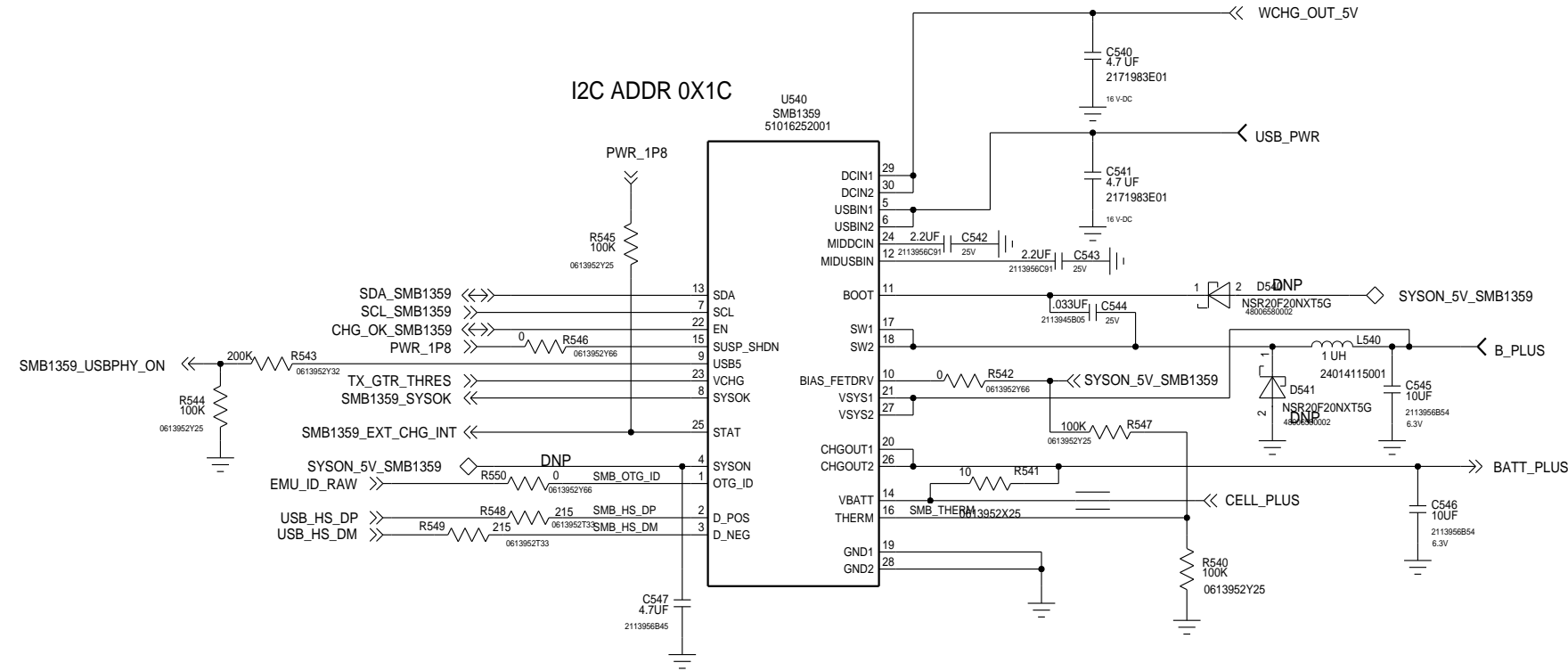
MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED


APPROVALS		 MOTOROLA MOBILE DEVICES	
ENGINEER: RICH NG		BLOCK TITLE:	
LAST MODIFIED BY: UDI ELRAN Tue Jun 10 18:46:21 2014		power	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 32 OF 77	



# PWR: EXT CHG

REF: 540-559

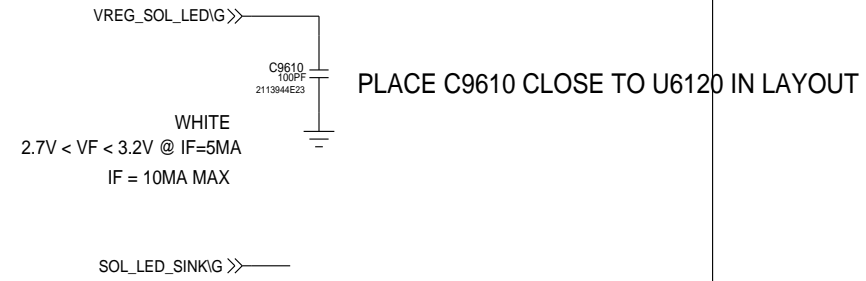


APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: R. NG Fri Jun 13 15:34:10 2014		power	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 33 OF 77	

# PWR: LIGHTING

TRI-COLOR LED  
REF: 600-609

SOL LED  
REF: 610-619



SOL LED D610 MOVED TO PROX/SOL SPACER BRD

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: <b>TIM MILLER</b> Thu Jun 05 15:25:45 2014		<b>power</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 34 OF 77	

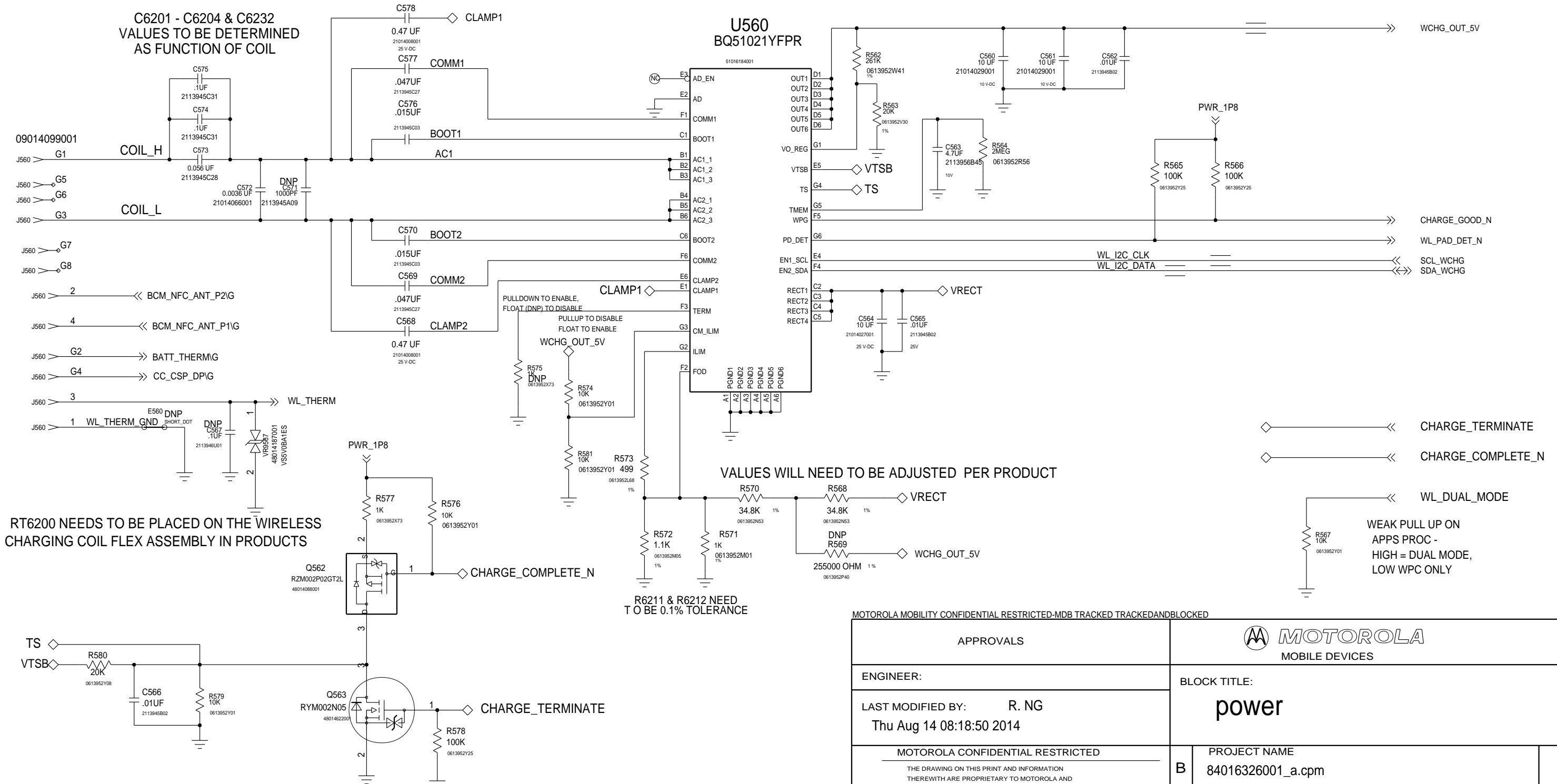
# PWR: WCHG

REF: 560-599

WCHG\_BATT\_PLUS

CONTROLLED BY APPS PROC

WL\_DIRECT\_CHG\_EN



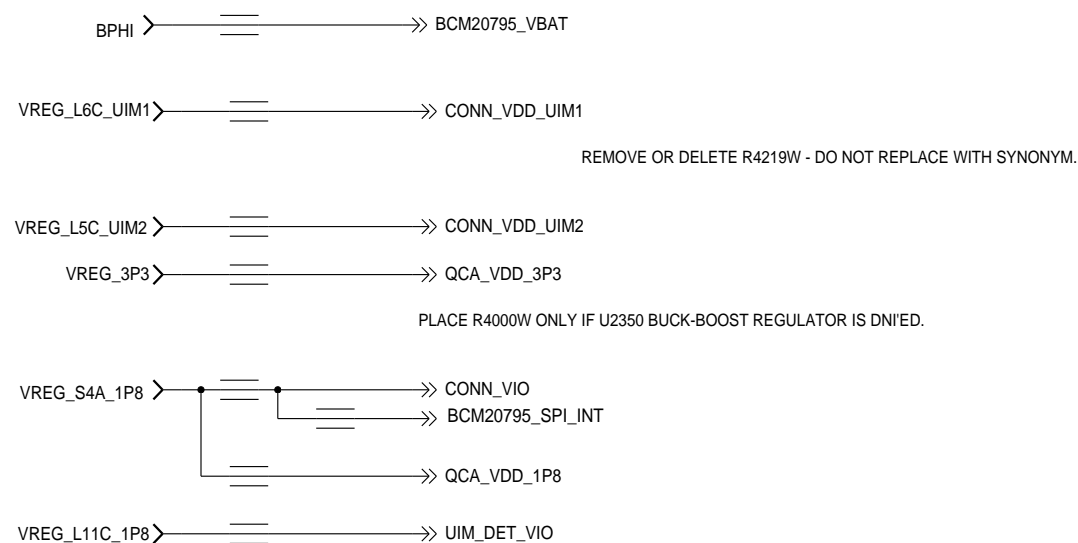
MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: R. NG Thu Aug 14 08:18:50 2014		power	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 35 OF 77	

# CONN: POWER

REF 4490-4499

## SUPPLIES

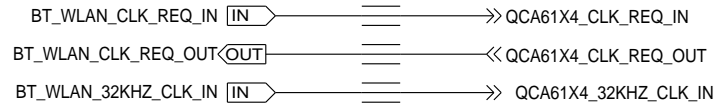


APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: FROEHLING		BLOCK TITLE:	
LAST MODIFIED BY: FROEHLING Thu Jun 05 15:25:38 2014		<b>connectivity</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 36 OF 77	

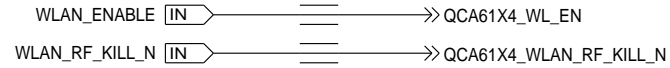
# CONN: PORTS

REF 4000-4499

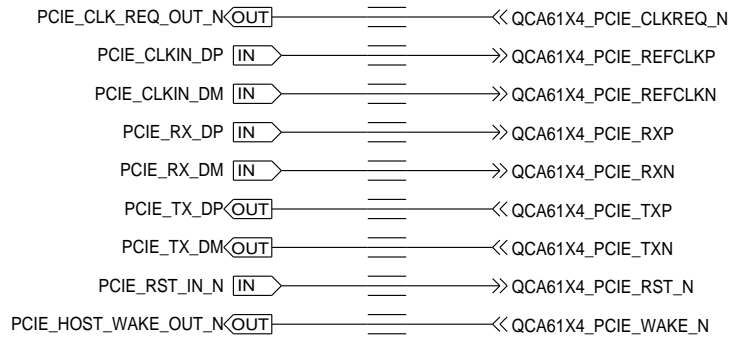
## BT/WLAN SYSTEM



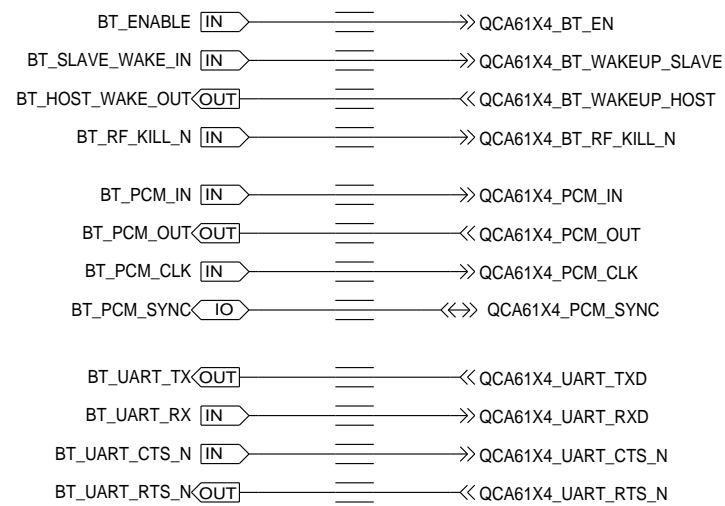
## WLAN



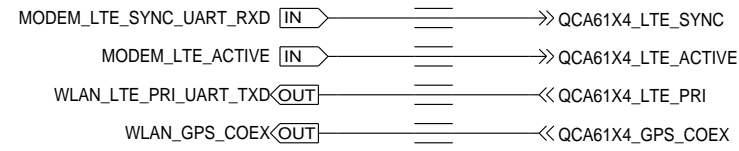
## PCIE



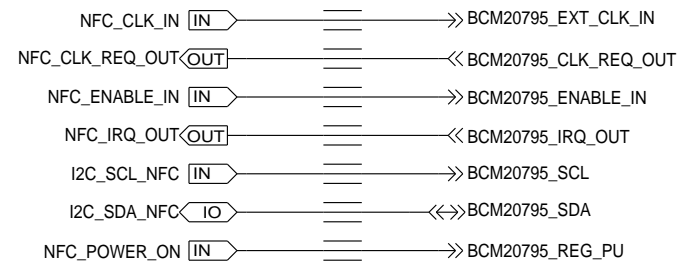
## BT CONTROLS AND INTERFACES



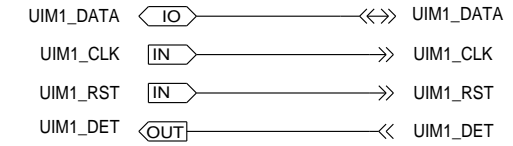
## CELLULAR MODEM/GPS COEXISTENCE



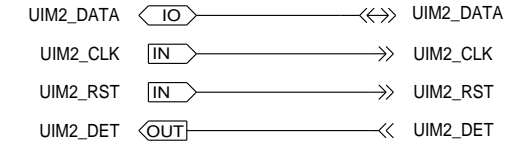
## NFC



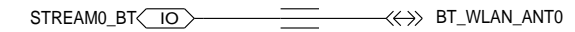
## UIM1



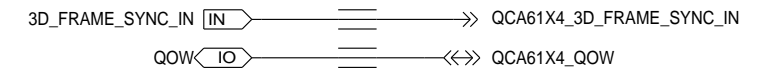
## UIM2



## ANTENNA



## MISCELLANEOUS



### APPROVALS

ENGINEER: FROEHLING

LAST MODIFIED BY: FROEHLING  
 Tue Dec 17 14:31:06 2013

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
 THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
 SHALL NOT BE USED OR DISCUSSED IN WHOLE  
 OR IN PART WITHOUT MOTOROLA'S CONSENT.  
 © COPYRIGHT, MOTOROLA. THIS DOES  
 NOT IMPLY PUBLICATION



BLOCK TITLE:

connectivity

PROJECT NAME

B 84016326001\_a.cpm

REV

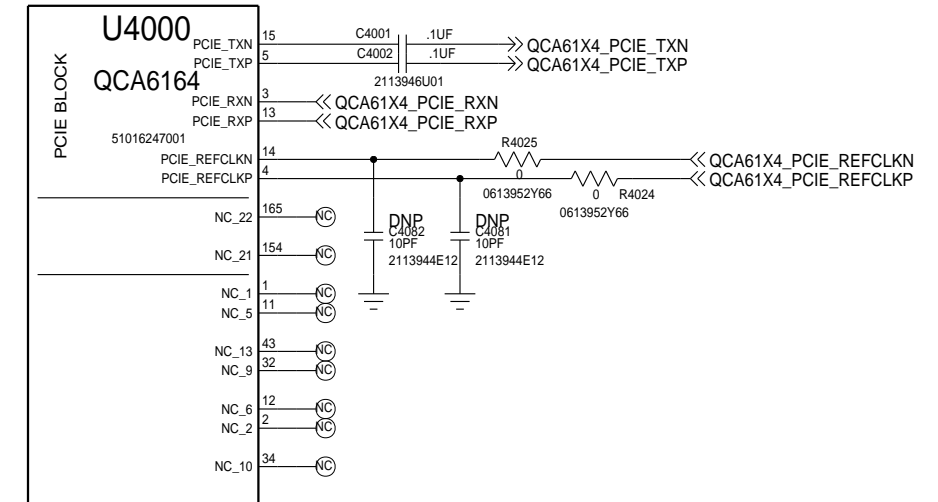
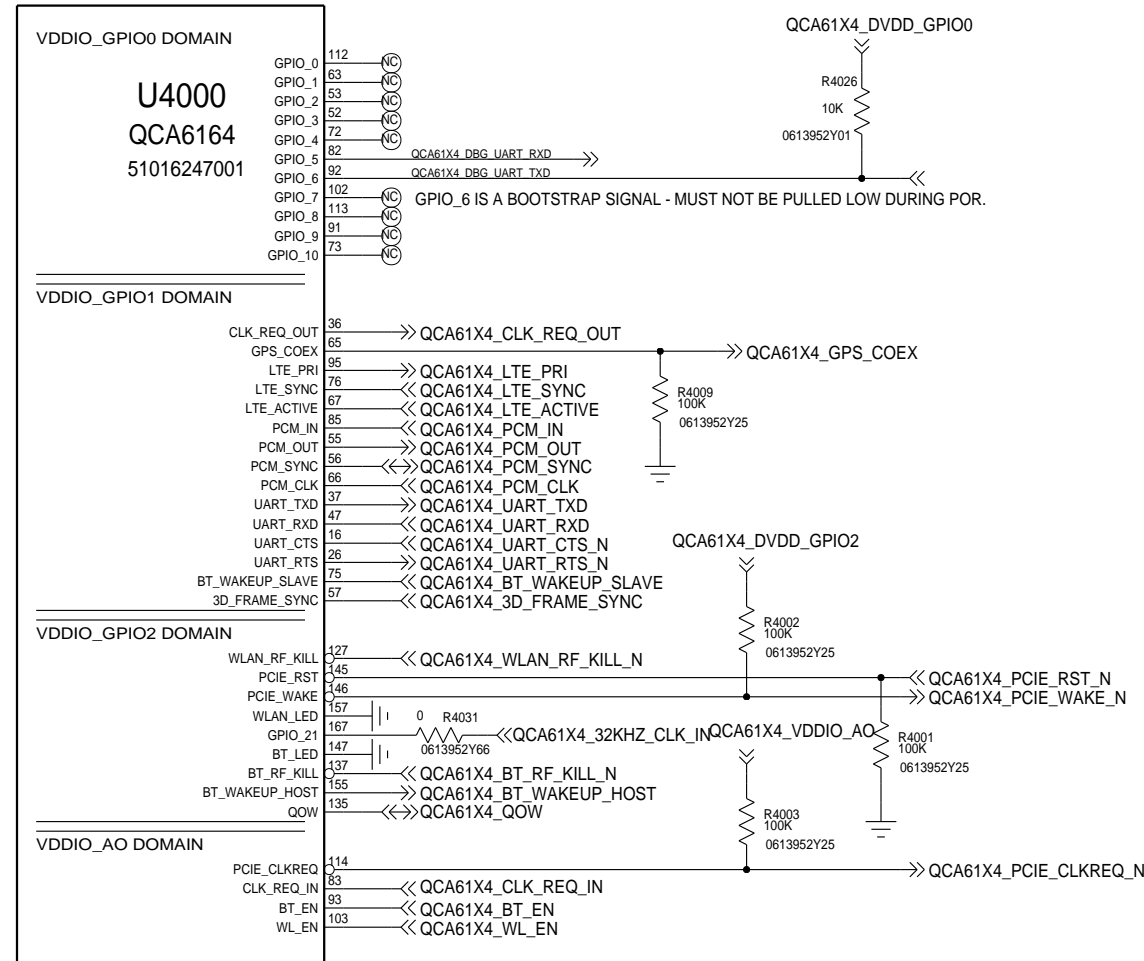
01

CAD FILE NAME:

PAGE 37 OF 77

# CONN: QCA6164 HOST I/F

REF: 4000-4099



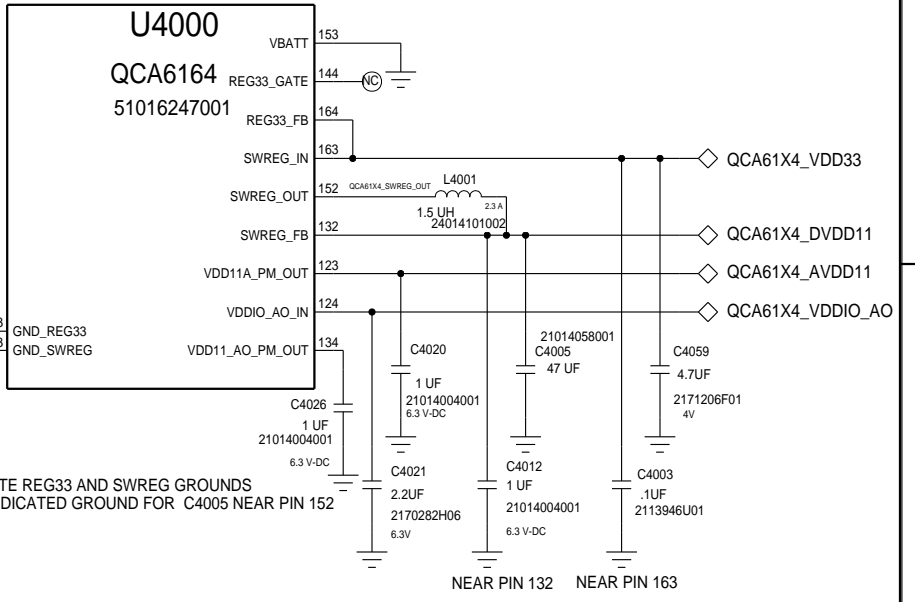
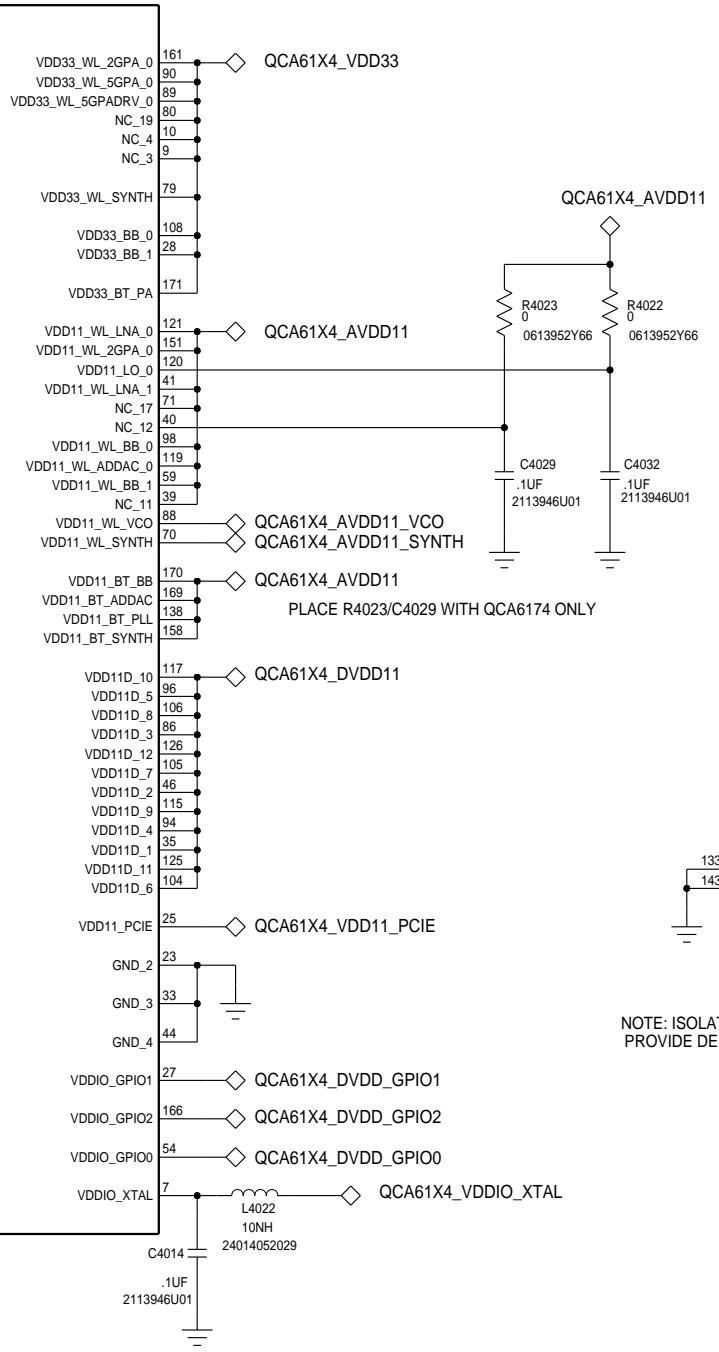
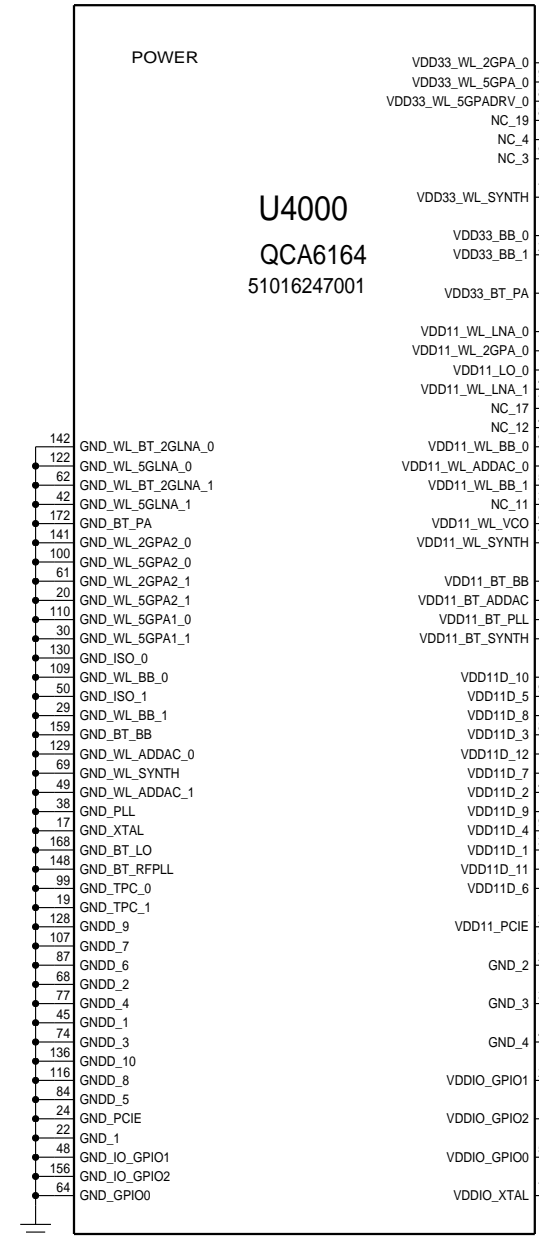
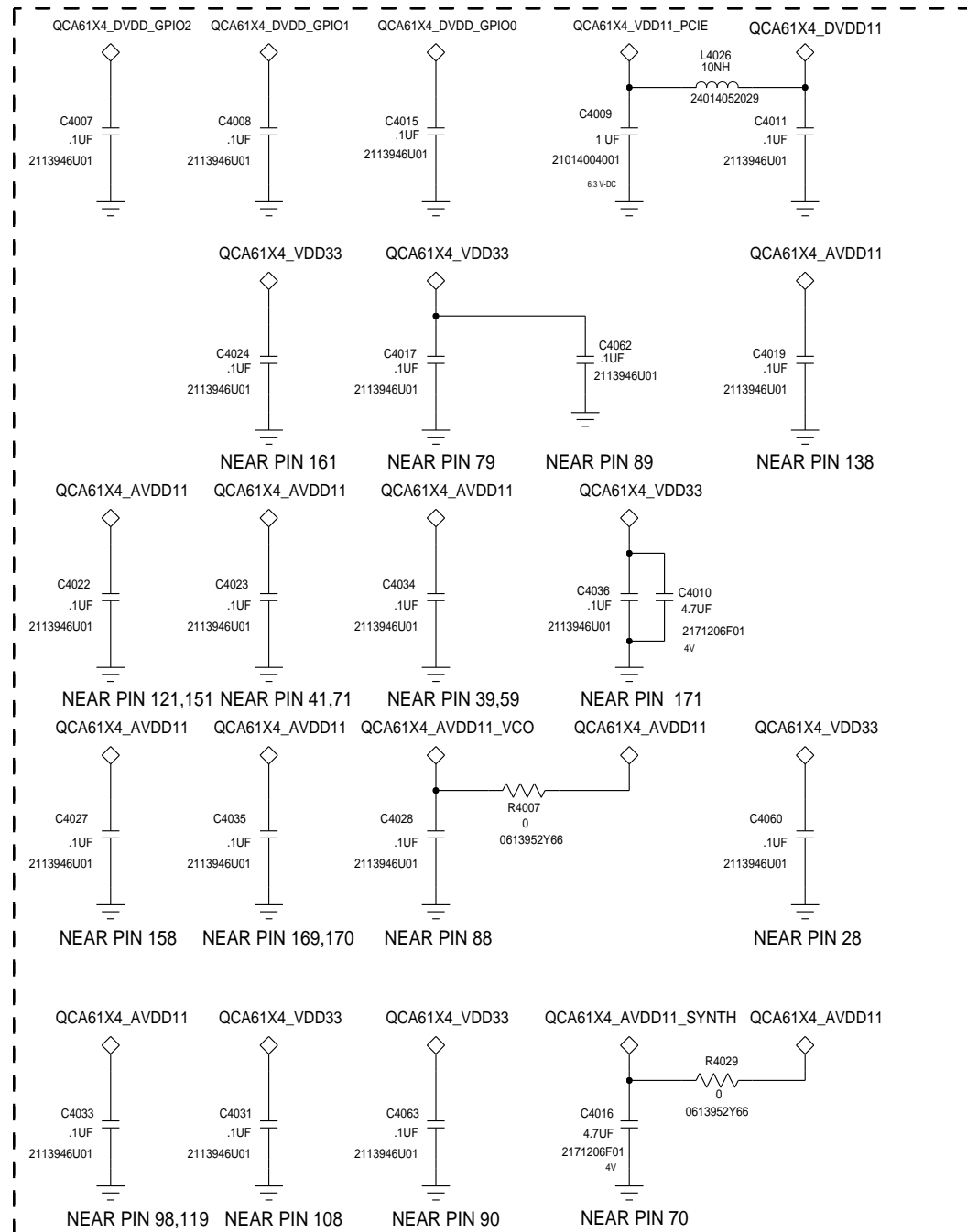
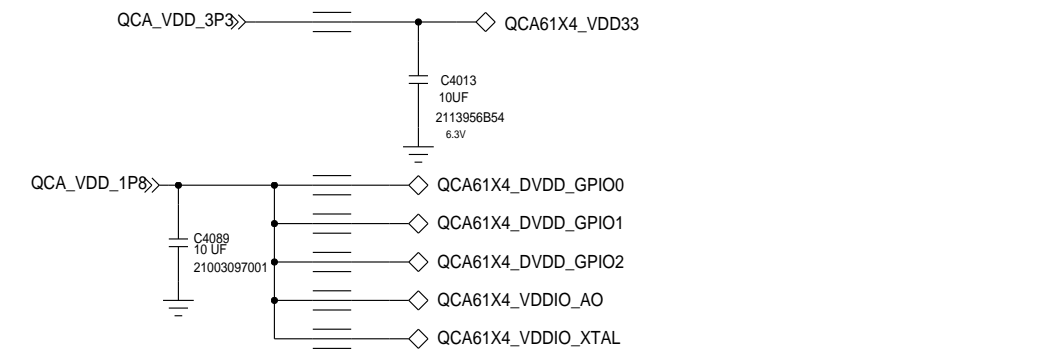
BASED ON 80-WL400/405-42 REV. B

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: FROEHLING		BLOCK TITLE:	
LAST MODIFIED BY: FROEHLING Thu Jun 05 15:25:39 2014		<b>connectivity</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 38 OF 77	

# CONN: QCA6164 POWER

## REF 4000-4099

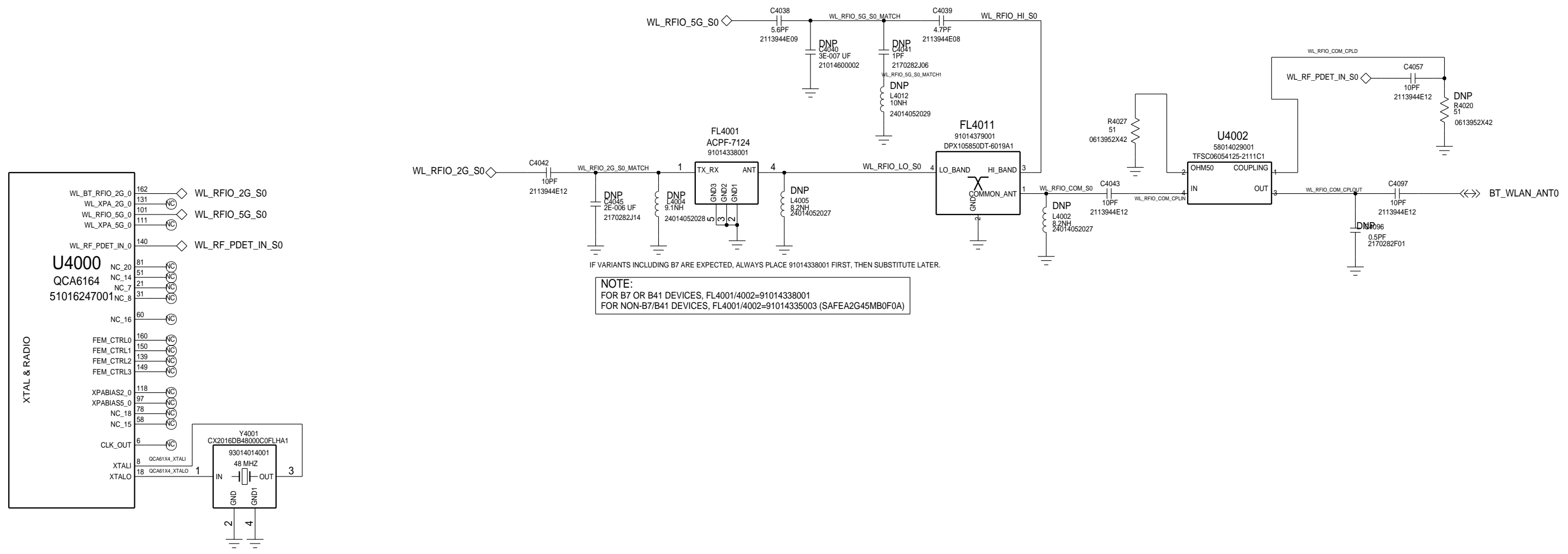


BASED ON 80-WL400-42 REV. B

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: FROEHLING		BLOCK TITLE:	
LAST MODIFIED BY: FROEHLING Thu Jun 05 15:25:40 2014		connectivity	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		B 84016326001_a.cpm	01
		CAD FILE NAME:	
		PAGE 39 OF 77	

# CONN: QCA6164 RADIO/XTAL

## REF 4000-4099



BASED ON 80-WL400-42 REV. B

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: FROEHLING		BLOCK TITLE:	
LAST MODIFIED BY: FROEHLING Thu Jun 12 13:30:12 2014		<b>connectivity</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 40 OF 77	



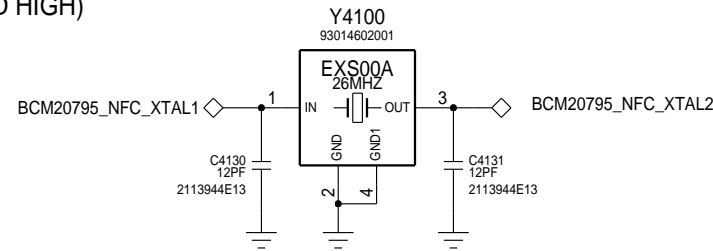
# CONN: BCM20795 NFC

REF: 4100-4199

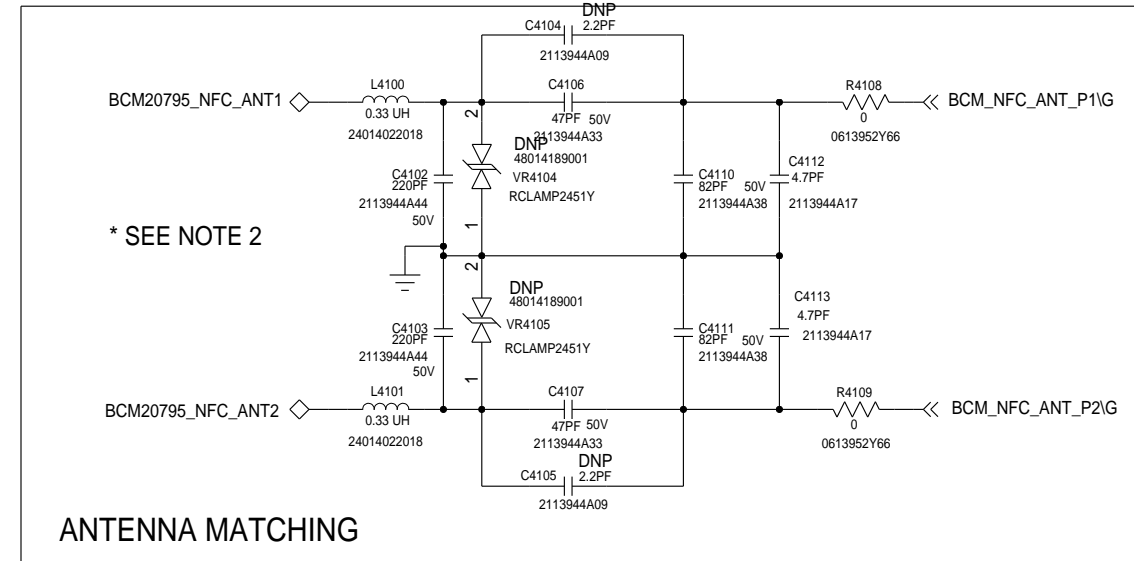
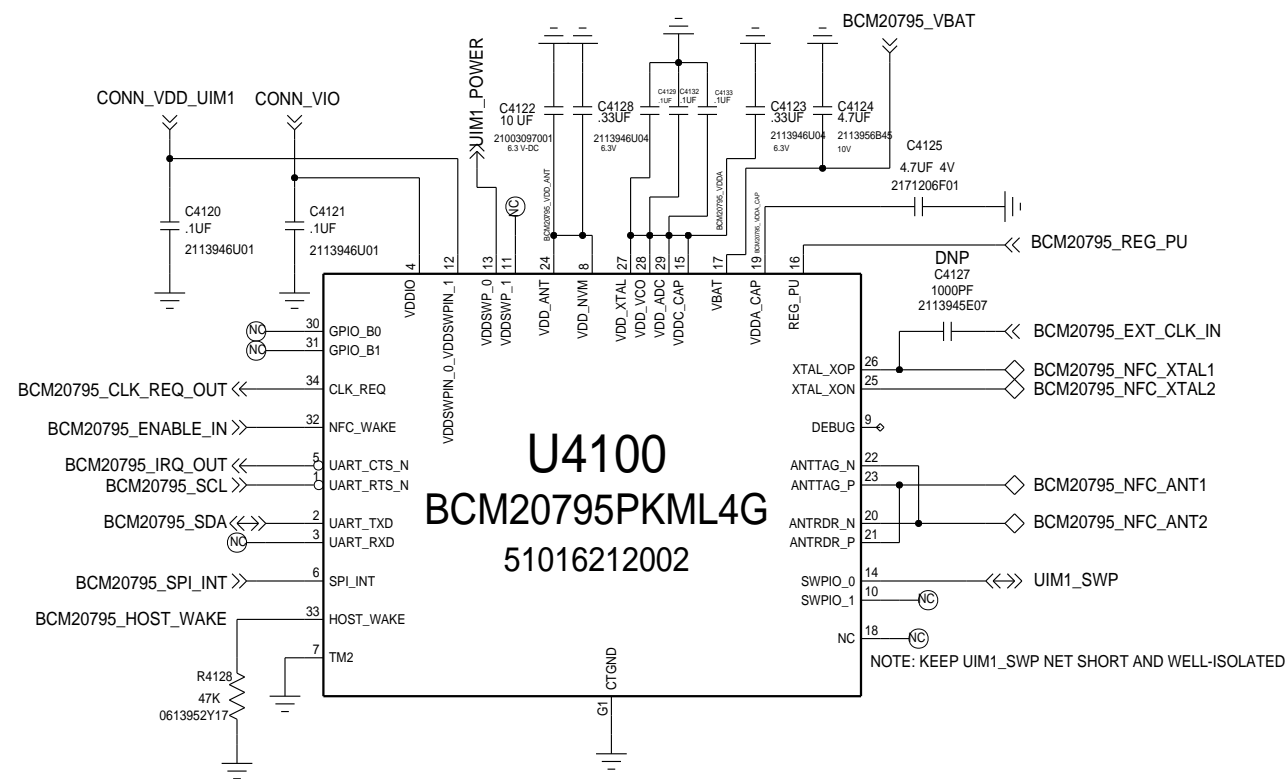
I2C ADDR: 0X77 (BOOT DEFAULT WHEN PIN 3 IS PULLED TO GROUND)

OR

I2C ADDR: 0X76 (BOOT DEFAULT WHEN PIN 3 IS FLOATED/PULLED HIGH)



\* SEE NOTE 1



\* SEE NOTE 2

## ANTENNA MATCHING

REFERENCE DESIGNATOR	26 MHZ CRYSTAL OSCILLATOR	19.2 MHZ EXTERNAL CLOCK
C4130	PLACE	DNI
C4131	PLACE	DNI
C4127	DNI	PLACE
Y4100	PLACE	DNI

### NOTES:

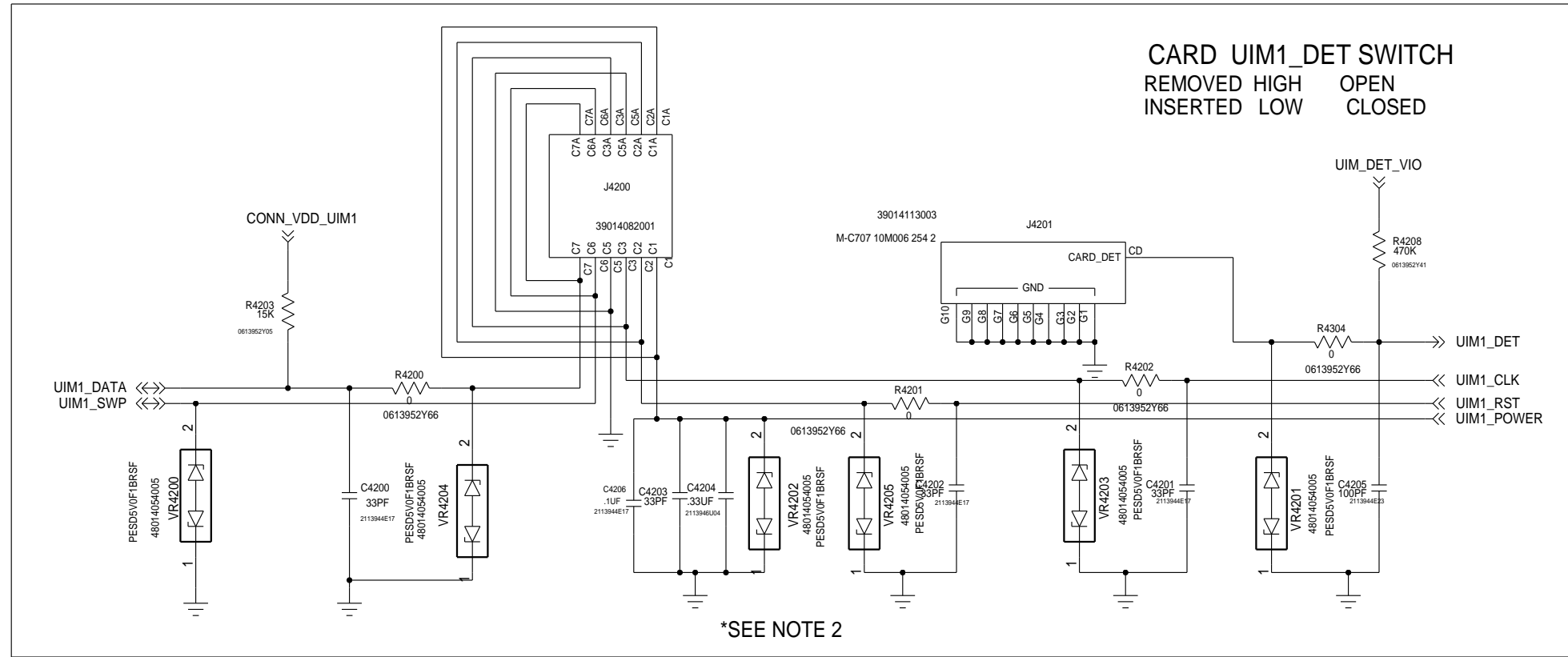
- PER BROADCOM RECOMMENDATION, CAPACITANCE ON UIM1\_POWER NET SHOULD BE 0.33UF. TOO LITTLE COMPROMISES REGULATOR STABILITY, TOO MUCH CAN CAUSE INADVERTENT POWER-ON RESETS AT VDD.
- L5900W AND L5901W PLACEMENT MUST MINIMIZE MUTUAL INDUCTIVE COUPLING, OR CIRCUIT'S WIRELESS FUNCTION WILL BE SEVERELY IMPAIRED.

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: FROEHLING		BLOCK TITLE:	
LAST MODIFIED BY: FROEHLING 10 Jun 2015 15:25:41 2014		<b>connectivity</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 41 OF 77	

# CONN: UIM1

## REF:4200-4219



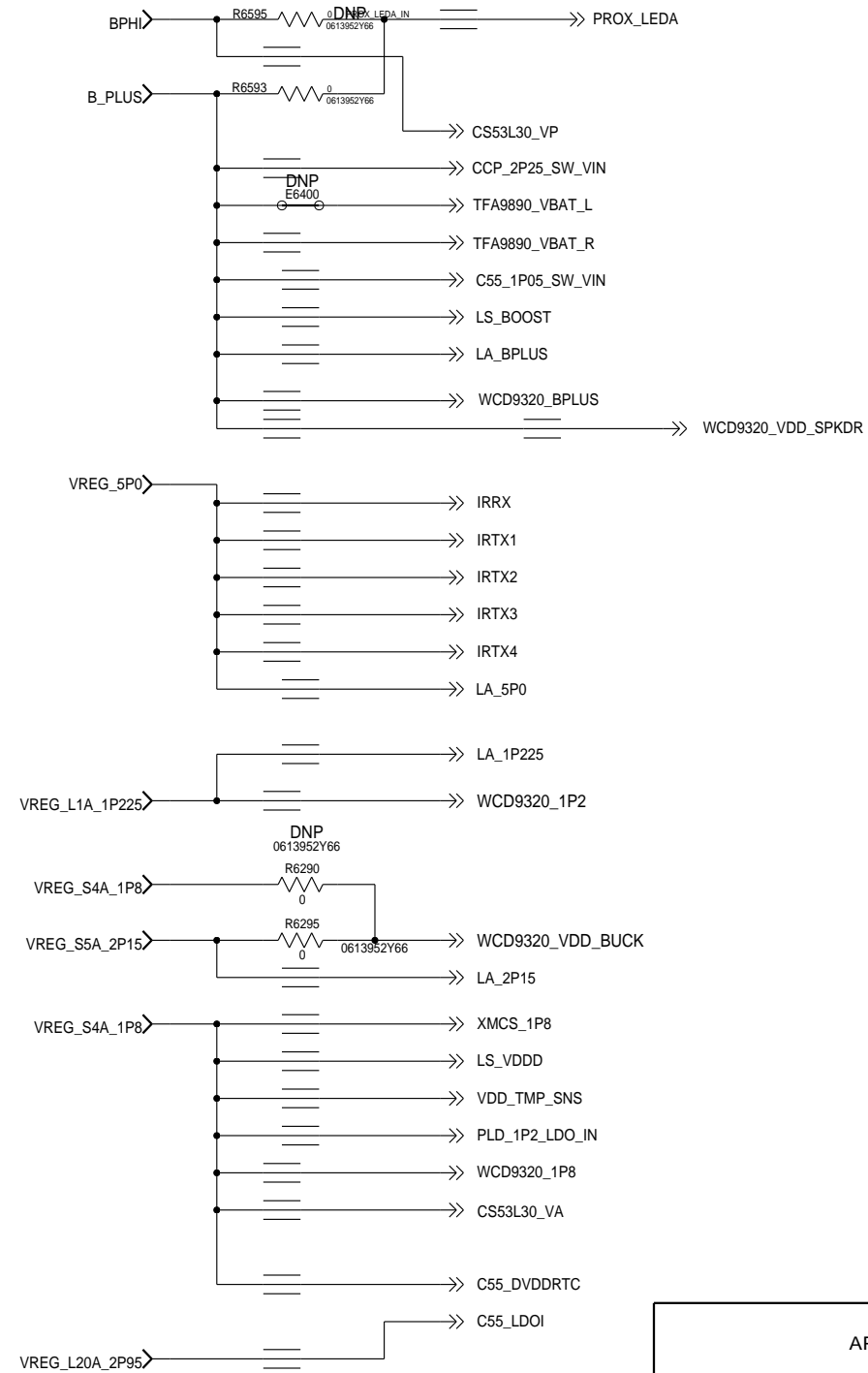
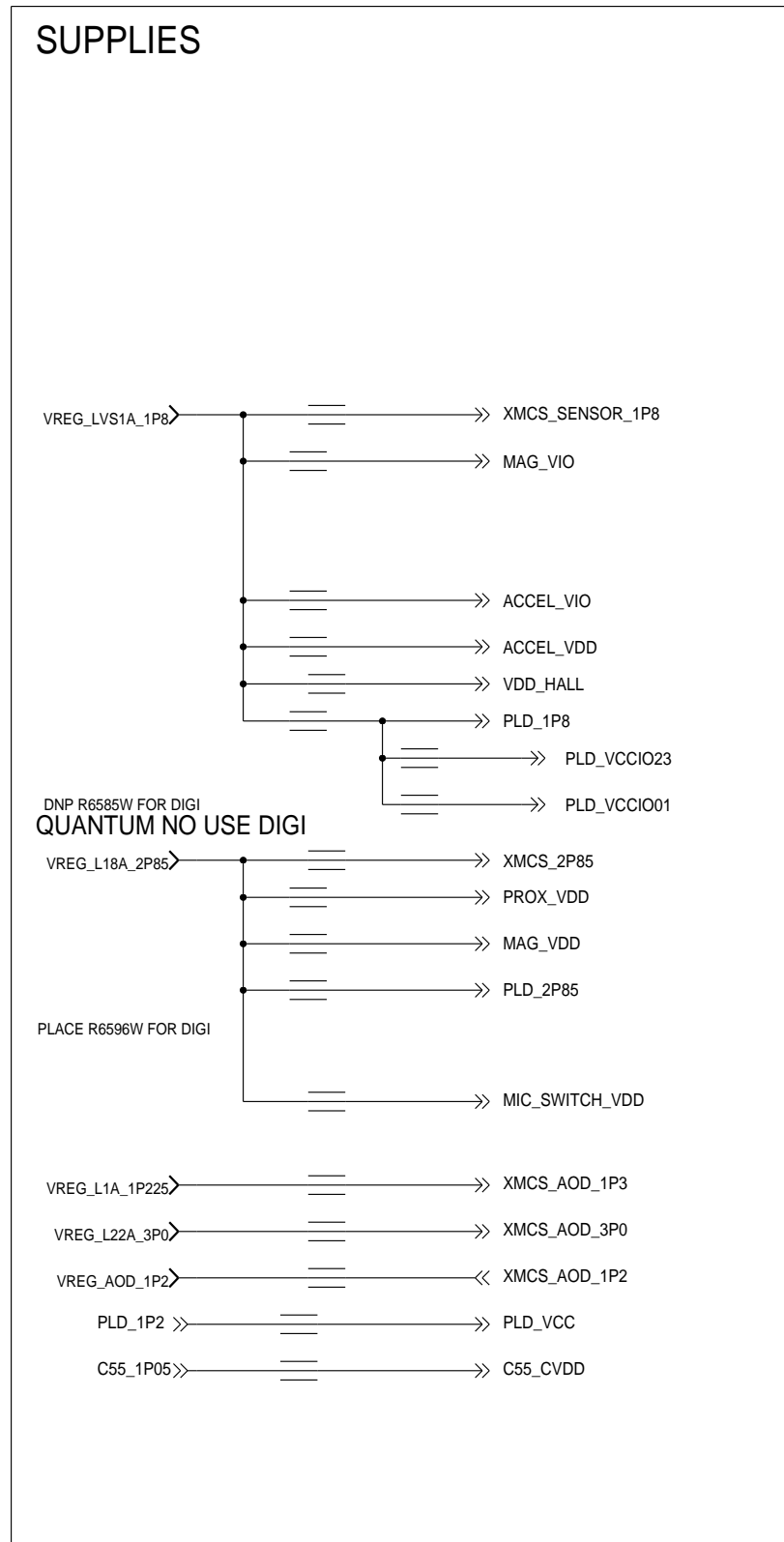
\*SEE NOTE 2

NOTE 1: DELETED  
 NOTE 2: UIM\_PWR BYPASS OF 0.33UF RECOMMENDED BY NFC IC SUPPLIER, PLACE NEAR CONNECTOR.

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: FROEHLING		BLOCK TITLE:	
LAST MODIFIED BY: FROEHLING Thu Jun 05 15:25:42 2014		<b>connectivity</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 42 OF 77	

# XMCS: POWER

REF 6000-6999

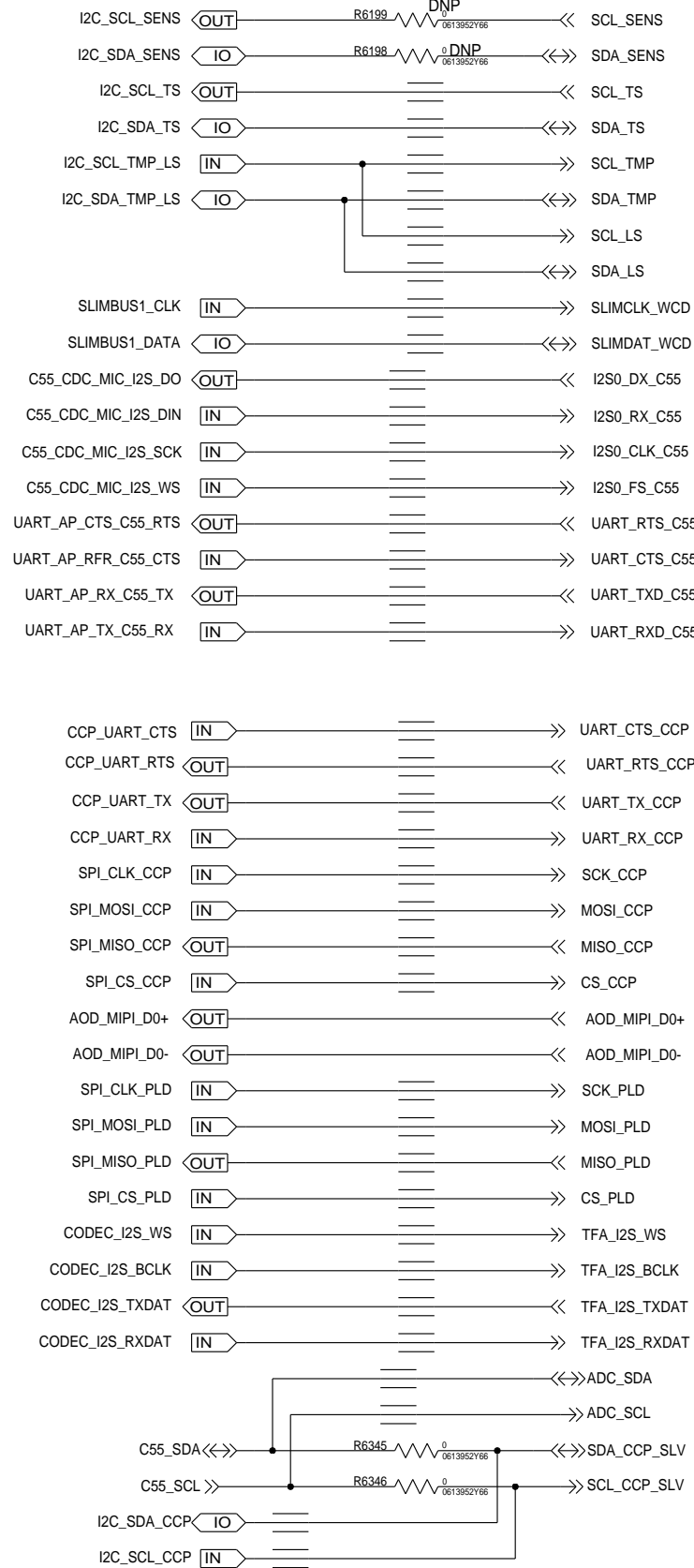


APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: NATE CONNELL		BLOCK TITLE:	
LAST MODIFIED BY: NATE CONNELL Thu Jun 05 15:25:29 2014		<b>xmcs</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
B		84016326001_a.cpm	01
CAD FILE NAME:		PAGE 43 OF 77	

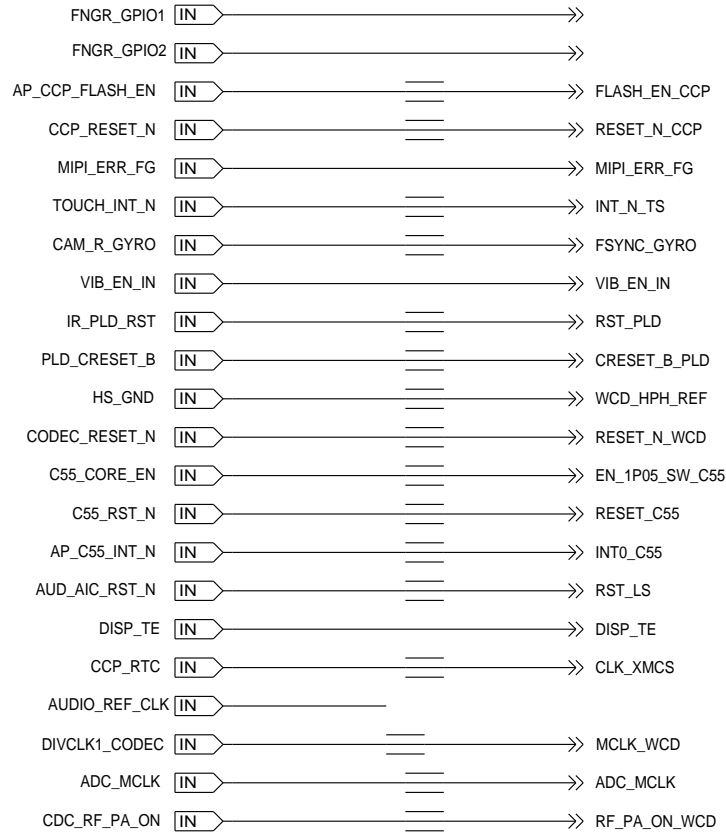
# XMCS: PORTS

REF 6000-6999

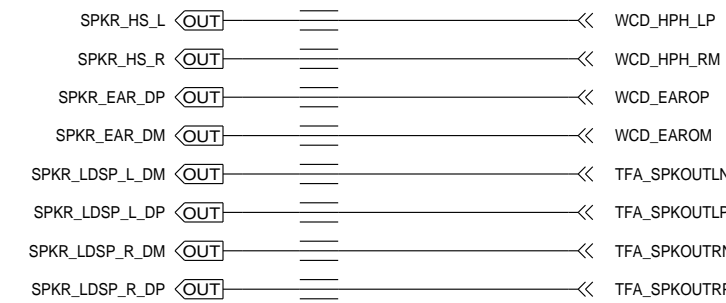
## INTERFACES



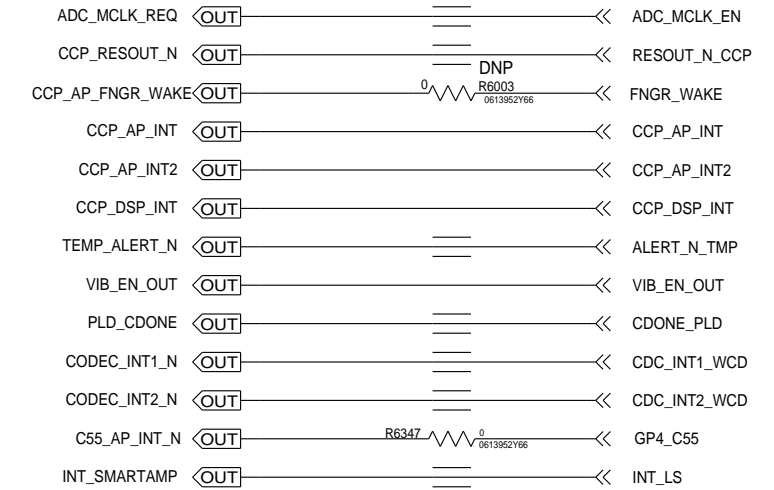
## INPUTS



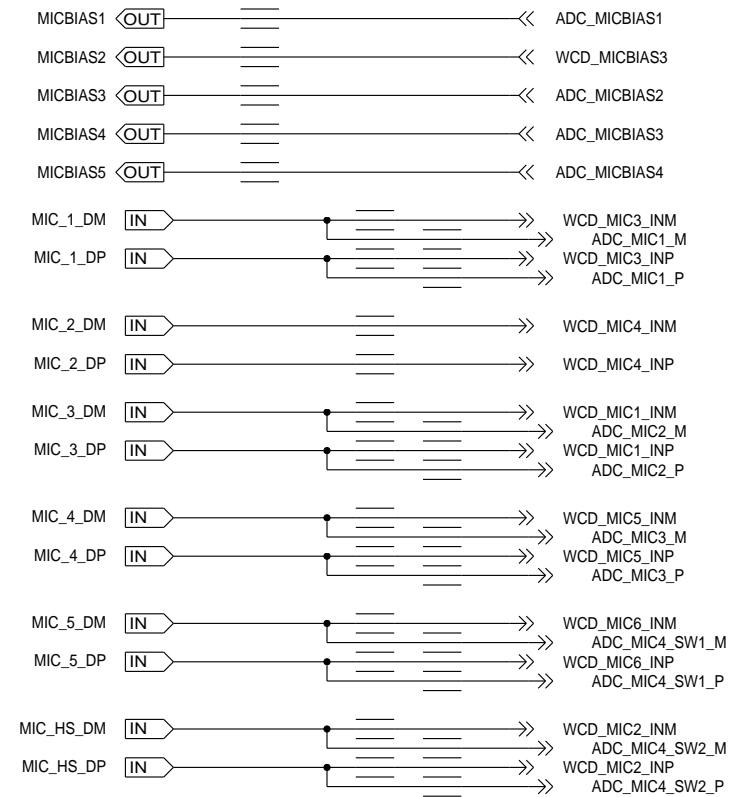
## SPEAKER PATHS



## OUTPUTS



## MIC PATHS



### APPROVALS

ENGINEER: NATE CONNELL

LAST MODIFIED BY: NATE CONNELL  
Fri Mar 21 18:25:27 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
SHALL NOT BE USED OR DISCUSSED IN WHOLE  
OR IN PART WITHOUT MOTOROLA'S CONSENT.  
© COPYRIGHT, MOTOROLA. THIS DOES  
NOT IMPLY PUBLICATION



BLOCK TITLE:

xmcs

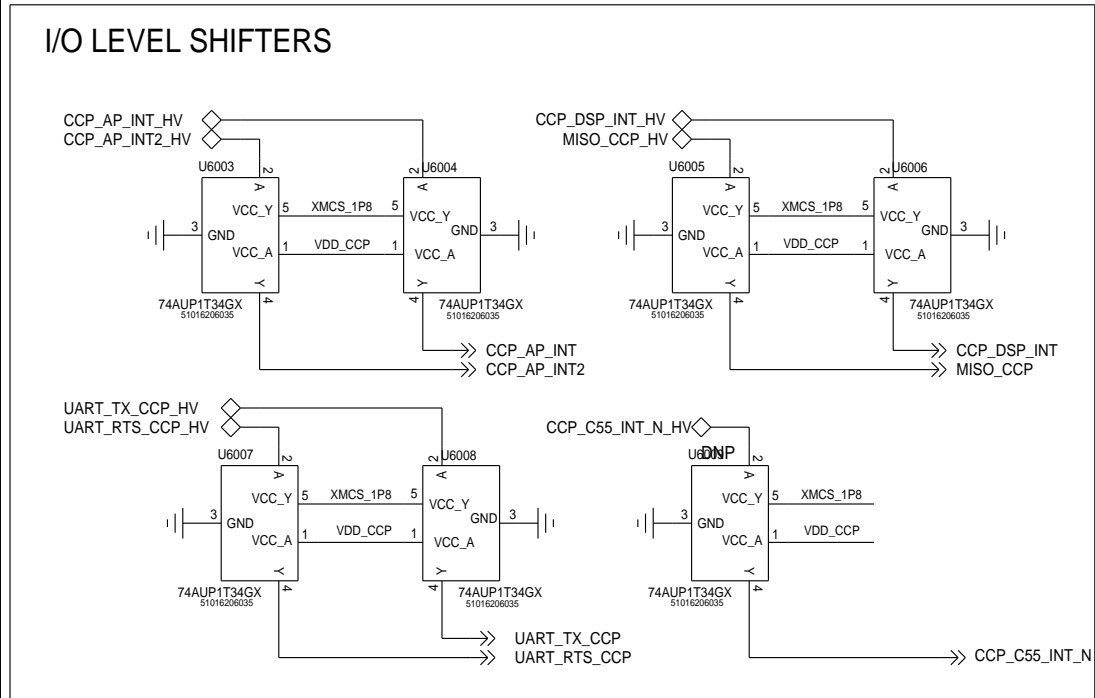
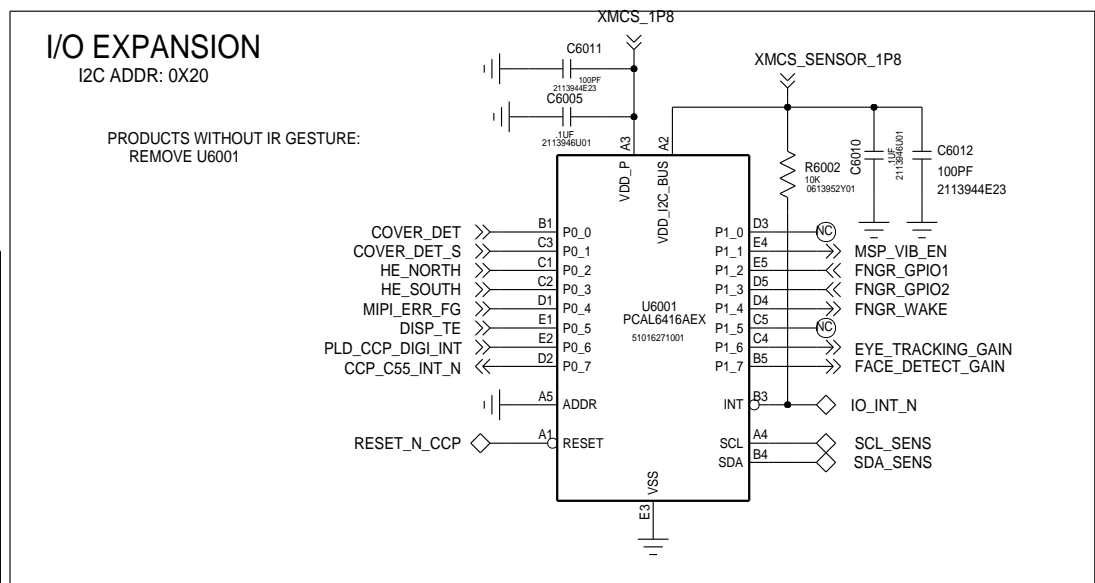
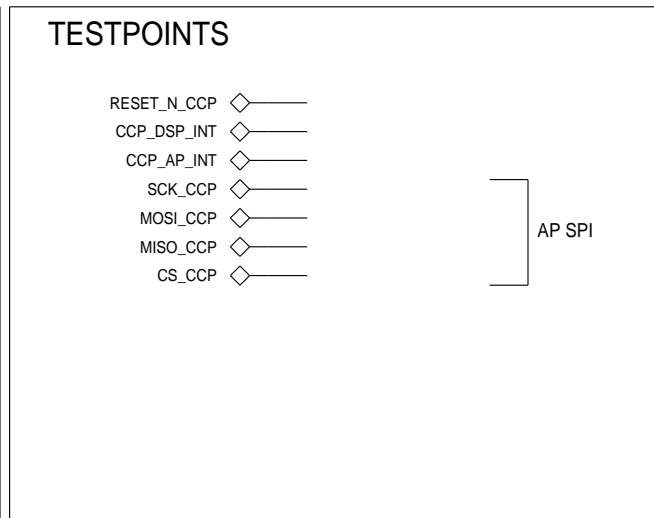
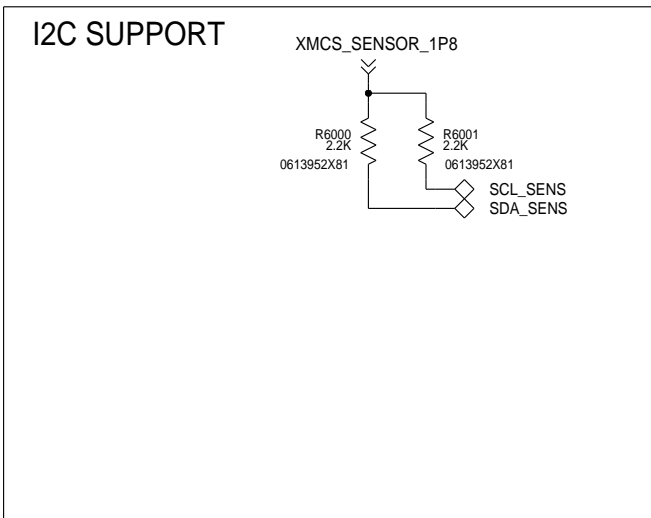
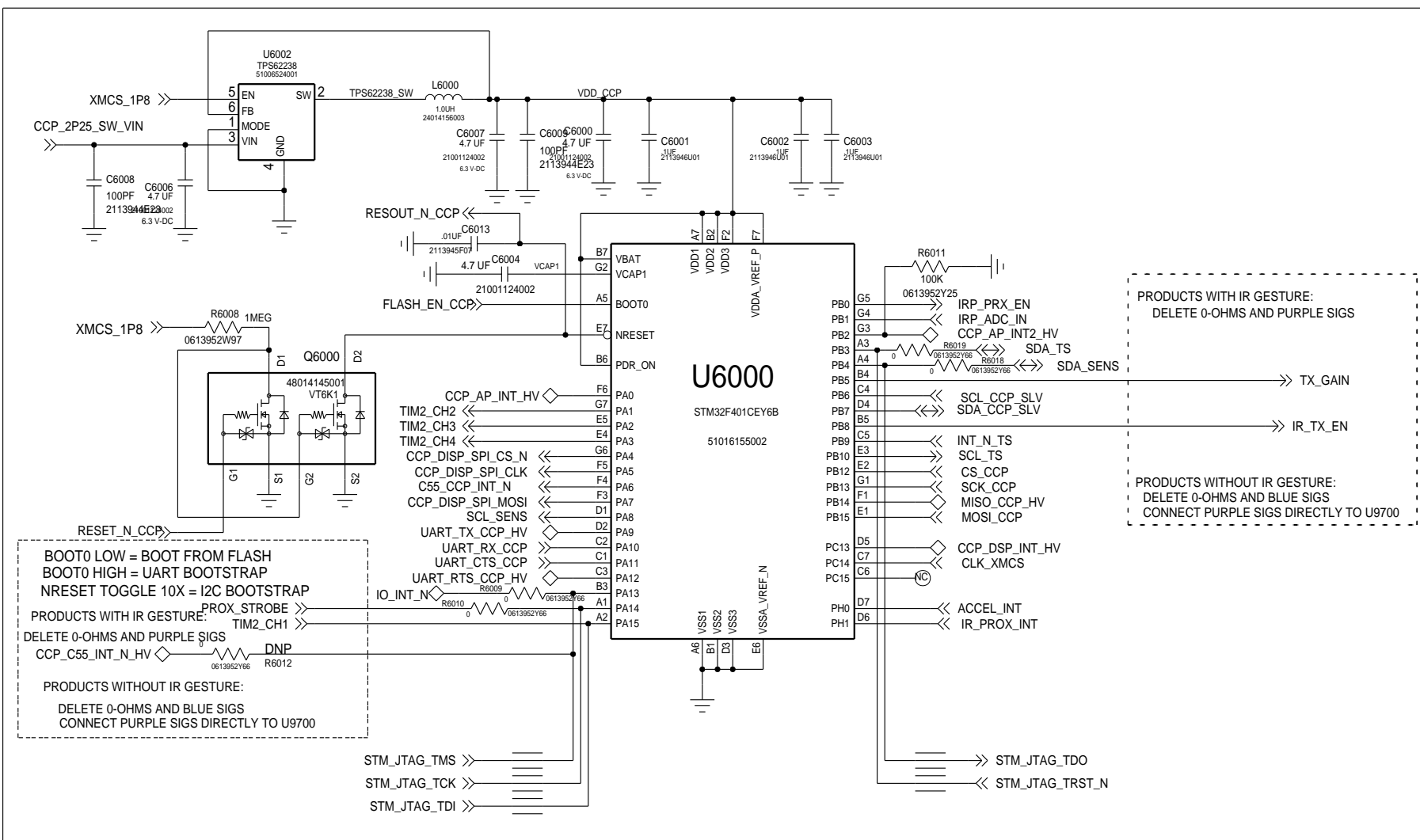
PROJECT NAME  
84016326001\_a.cpm

CAD FILE NAME:

REV  
01

# XMCS: CCP

REF: 6000-6049



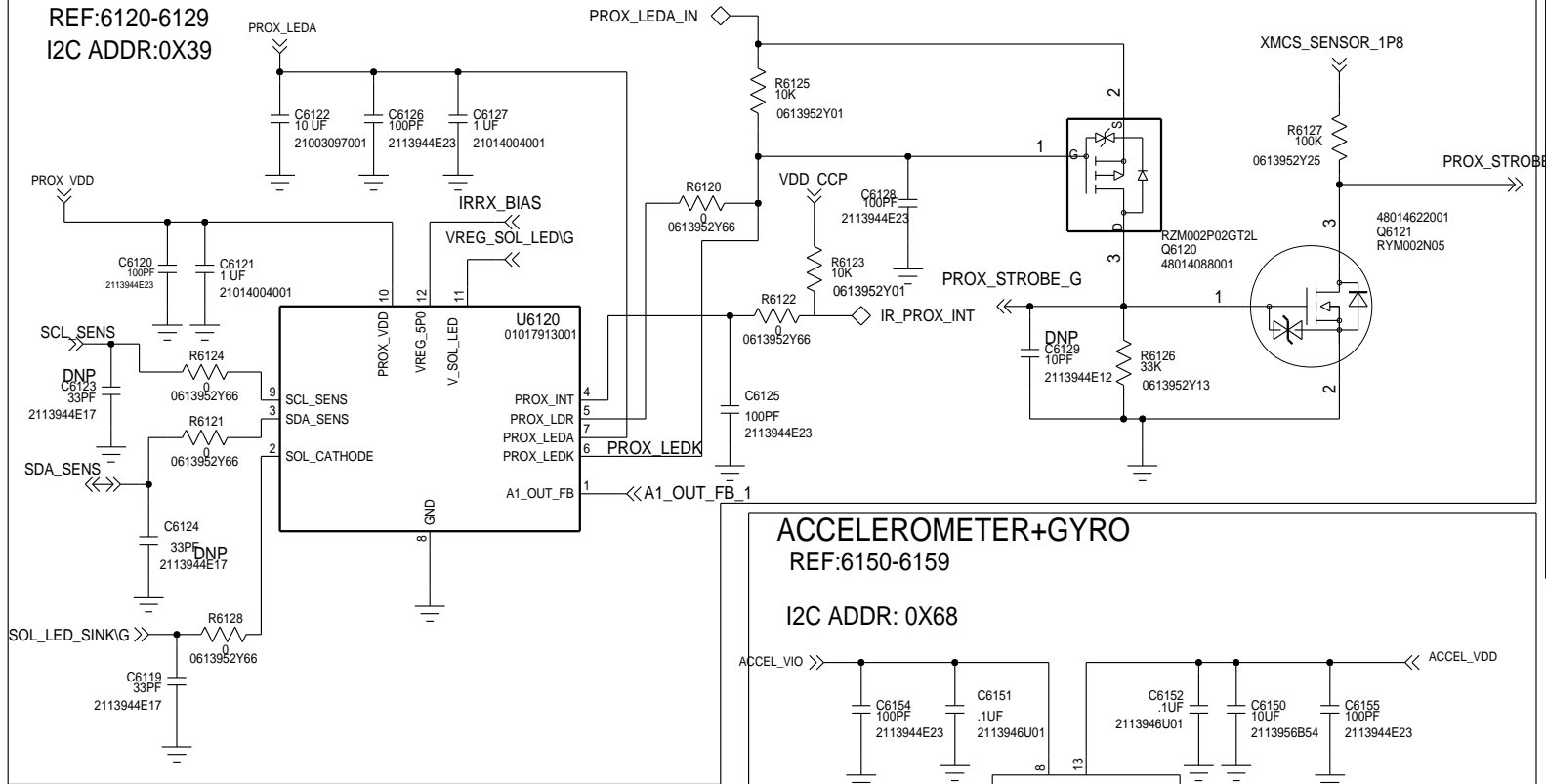
APPROVALS			
ENGINEER: JOHN GORSICA			
LAST MODIFIED BY: NATE CONNELL Mon Jun 09 12:38:07 2014		xmcs	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		B 84016326001_a.cpm	01
		CAD FILE NAME:	PAGE 45 OF 77

# XMCS: SENSORS

REF: 6100-6199

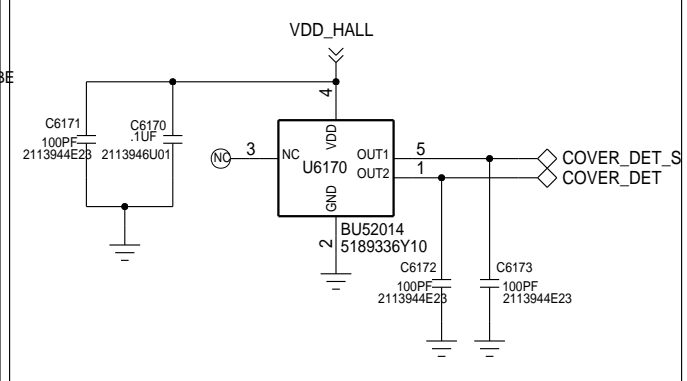
## PROX SENSOR/ALS

REF:6120-6129  
I2C ADDR:0X39



## HALL EFFECT

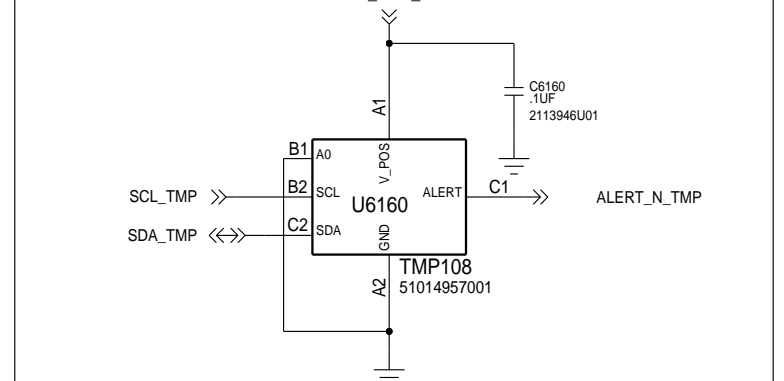
REF:6170-6179



2ND HALL EFFECT FOR SMART COVER SUPPORT

## BOARD TEMP SENSORS

REF:6160-6169

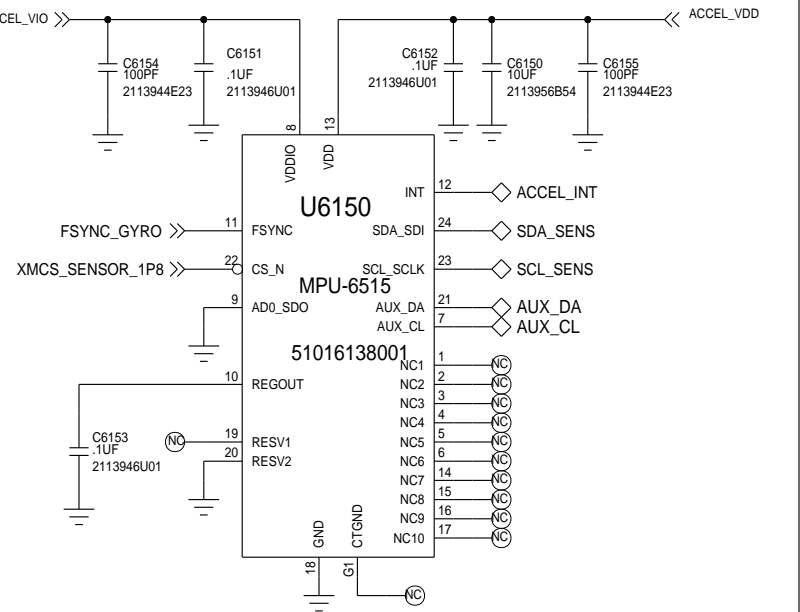


I2C ADDR: 0X48  
I2C ADDR: 0X49  
U6161 DELETED

## ACCELEROMETER+GYRO

REF:6150-6159

I2C ADDR: 0X68



PRODUCTS MUST FOLLOW ABBAGOOCHIE PCB ORIENTATION

## BAROMETER

REF:6130-6139

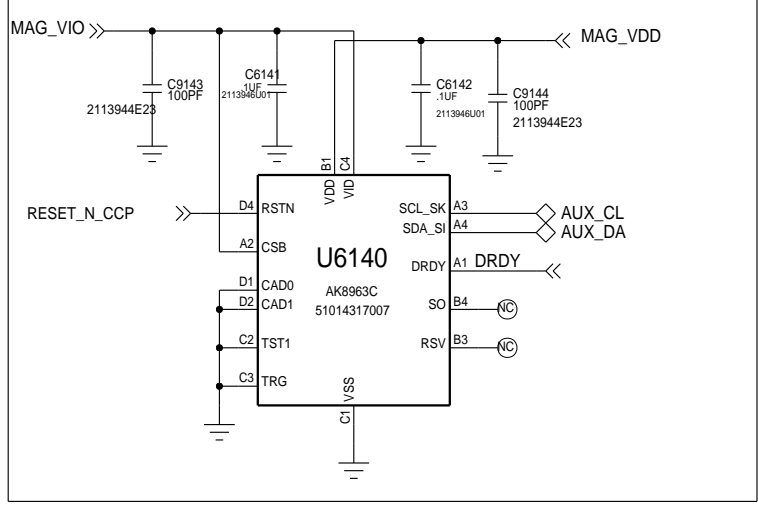
I2C ADDR: 0X77

(This section is currently blank in the drawing)

## MAGNETOMETER

REF:6140-6149

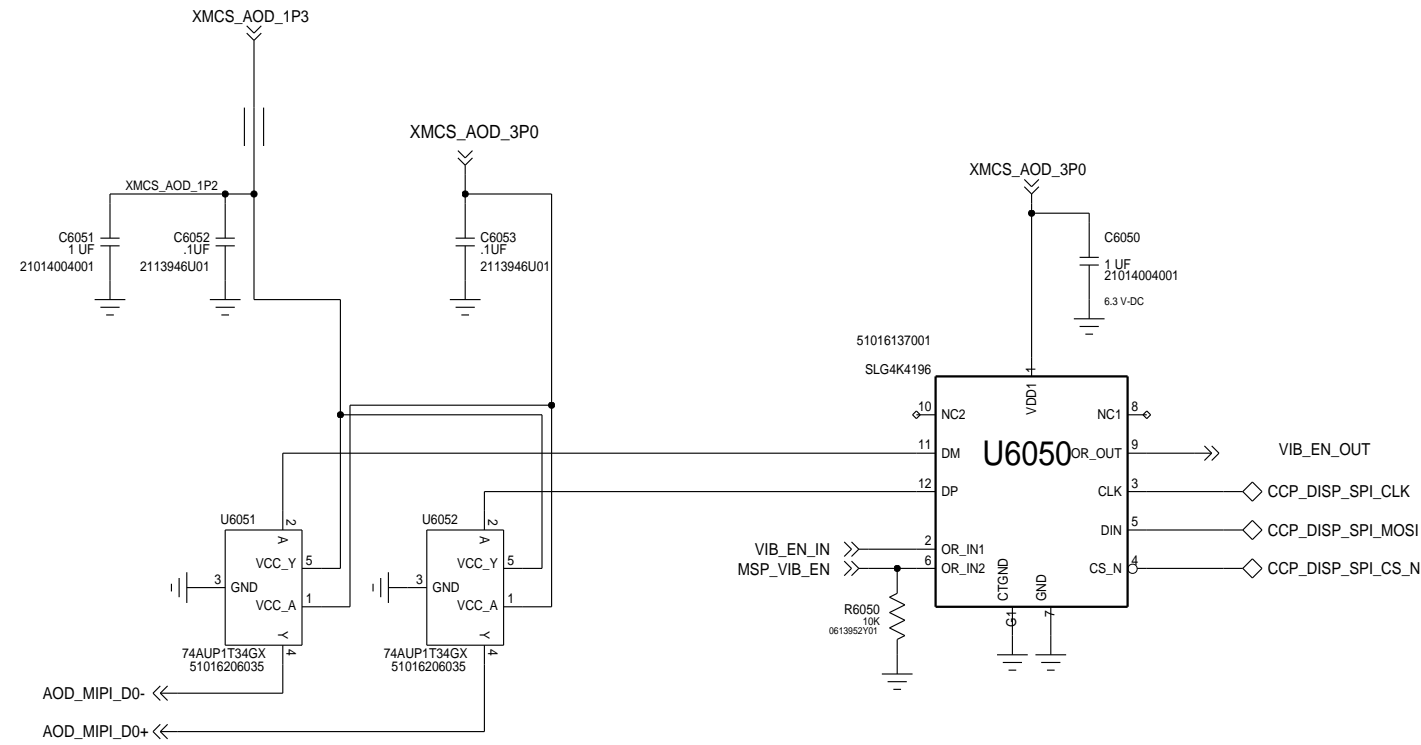
I2C ADDR: 0X0C




JOHN GORSICA/NATE CONNELL APPROVALS			
ENGINEER: C HERNANDEZ			
LAST MODIFIED BY: C HERNANDEZ Thu Jun 05 17:48:59 2014		BLOCK TITLE: <b>XMCS</b>	
MOTOROLA CONFIDENTIAL RESTRICTED THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		PROJECT NAME 84016326001ABBAGOOCHIE	REV 01
		CAD FILE NAME:	

# XMCS: AOD

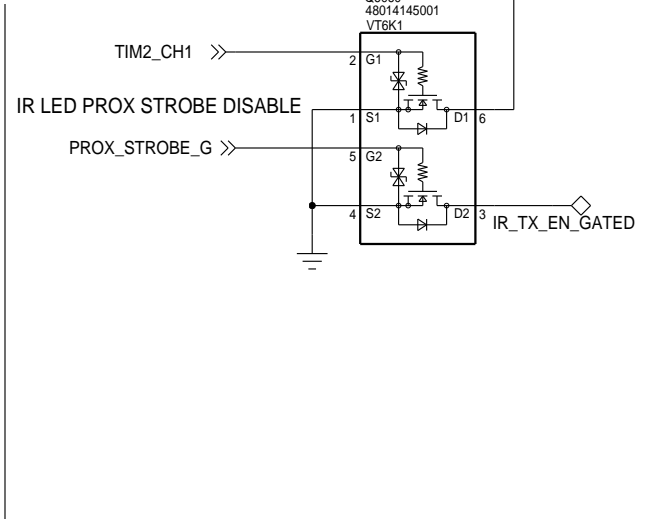
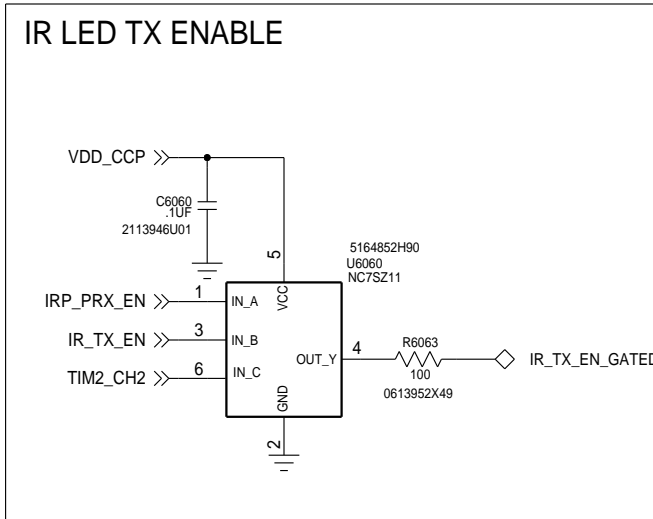
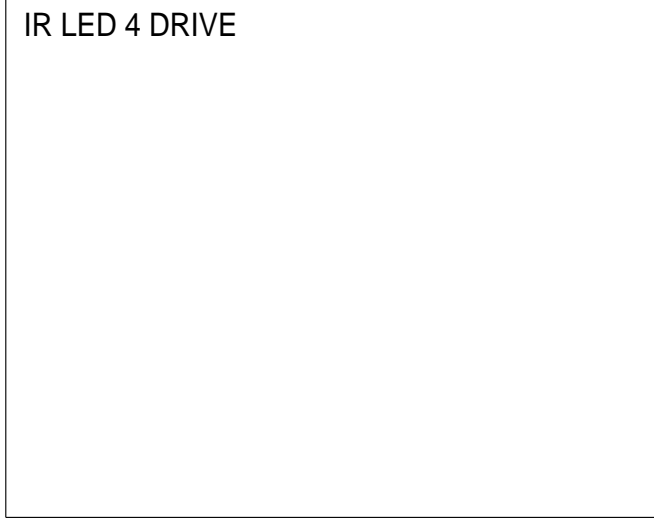
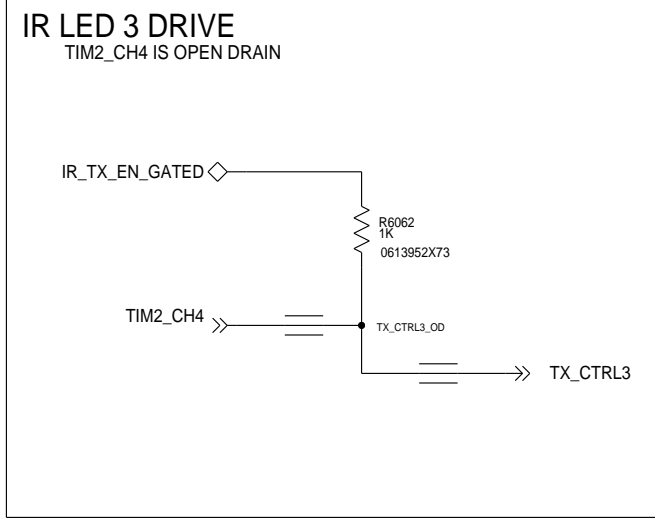
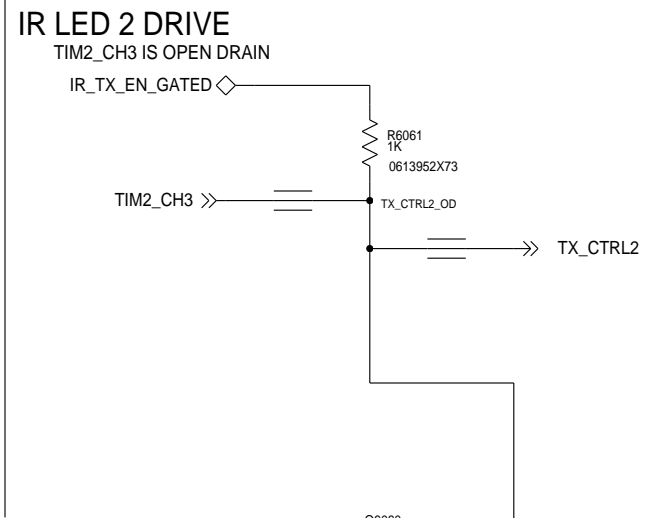
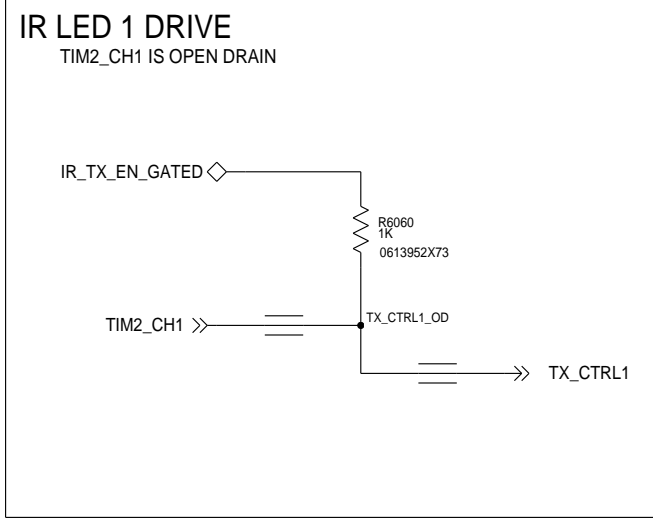
REF: 6050-6059



APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Thu Jun 05 15:25:31 2014		<b>xmcs</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 47 OF 77	

# XMCS: NATIVE IR

REF: 6060-6069



APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: NATE CONNELL		BLOCK TITLE:	
LAST MODIFIED BY: NATE CONNELL Mon Jun 09 12:39:30 2014		<b>xmcs</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	
		PAGE 48 OF 77	



# XMCS: FPGA IR

REF: 6500-6599

## FPGA IR DELETED

D

D

C


C

B

B

A

A

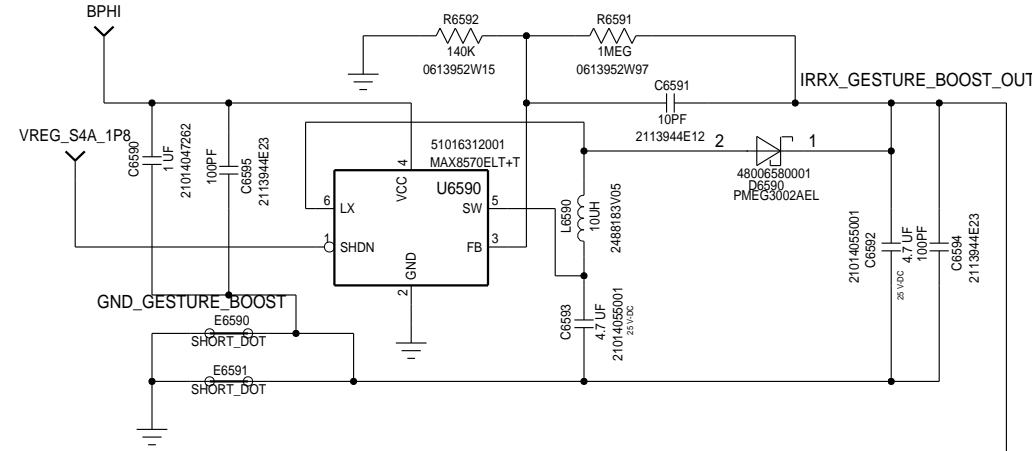
APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Tue Jan 14 15:56:44 2014		<b>xmcs</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
		CAD FILE NAME:	PAGE 49 OF 77

# XMCS: IR LED

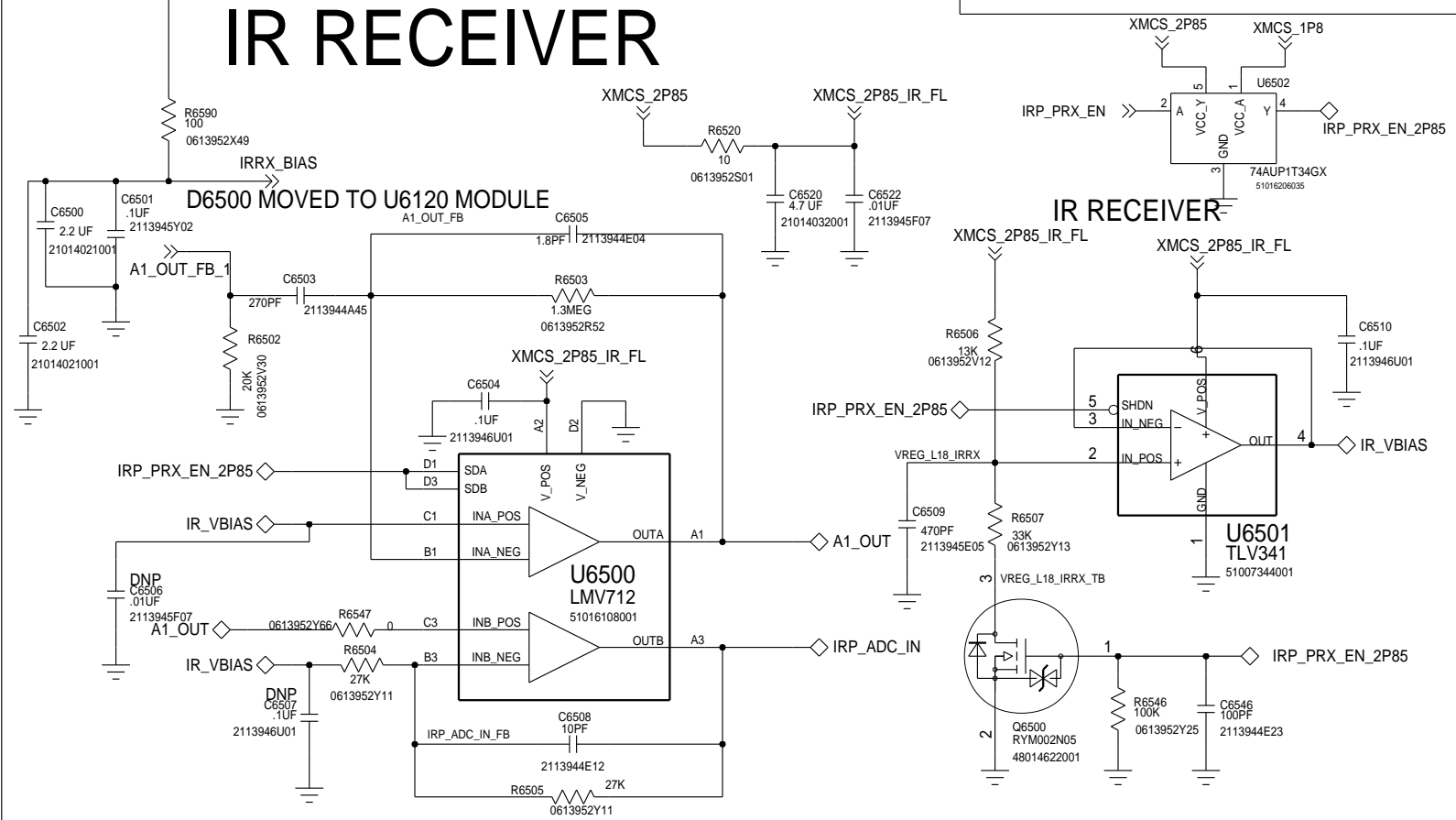
REF 6500-6549

## GESTURE BOOST

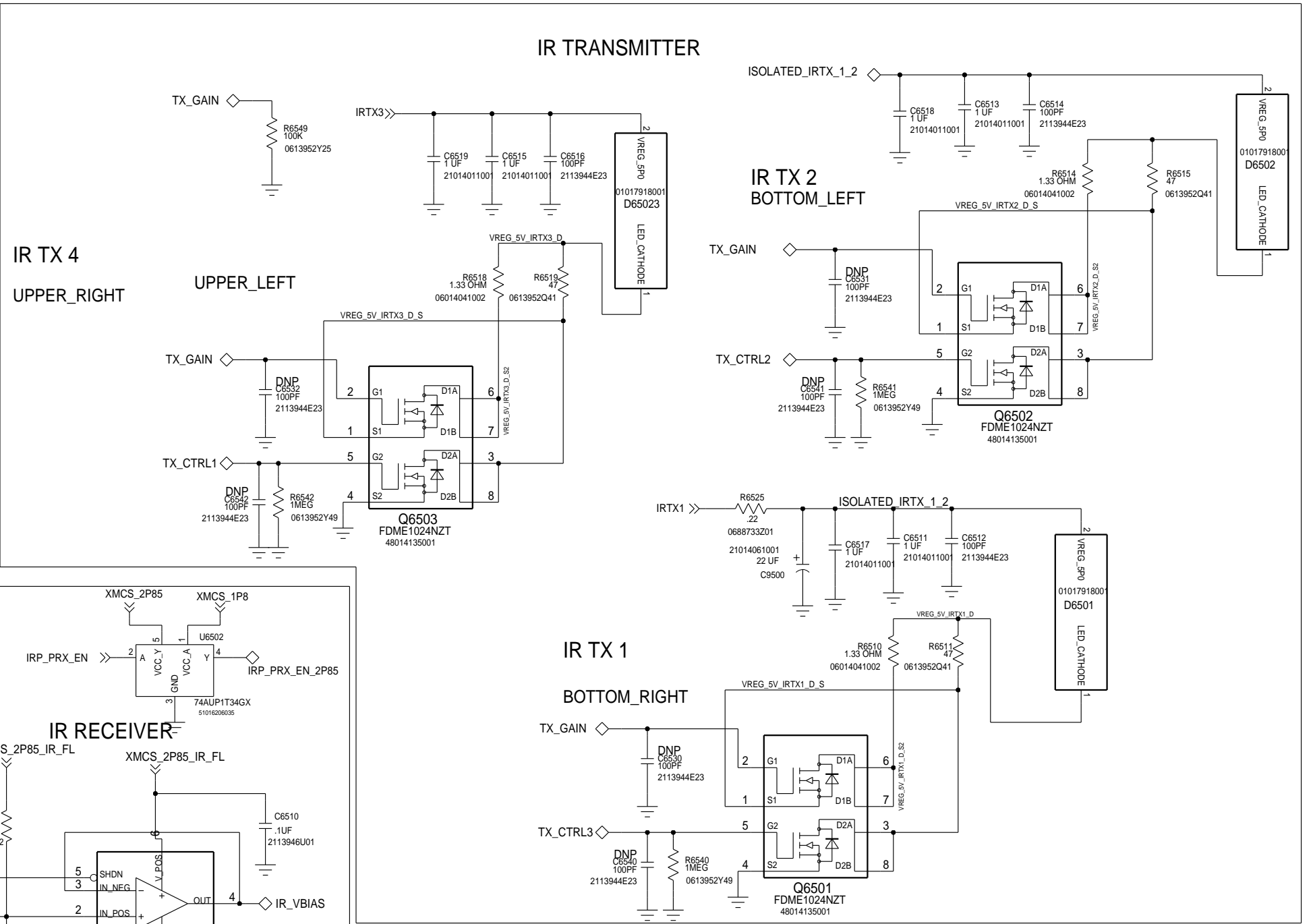
FOR 10V OPERATION, R6592 = 140K (0613952W15)  
 FOR 12V OPERATION, R6592 = 113K (0613952W06)



## IR RECEIVER



## IR TRANSMITTER

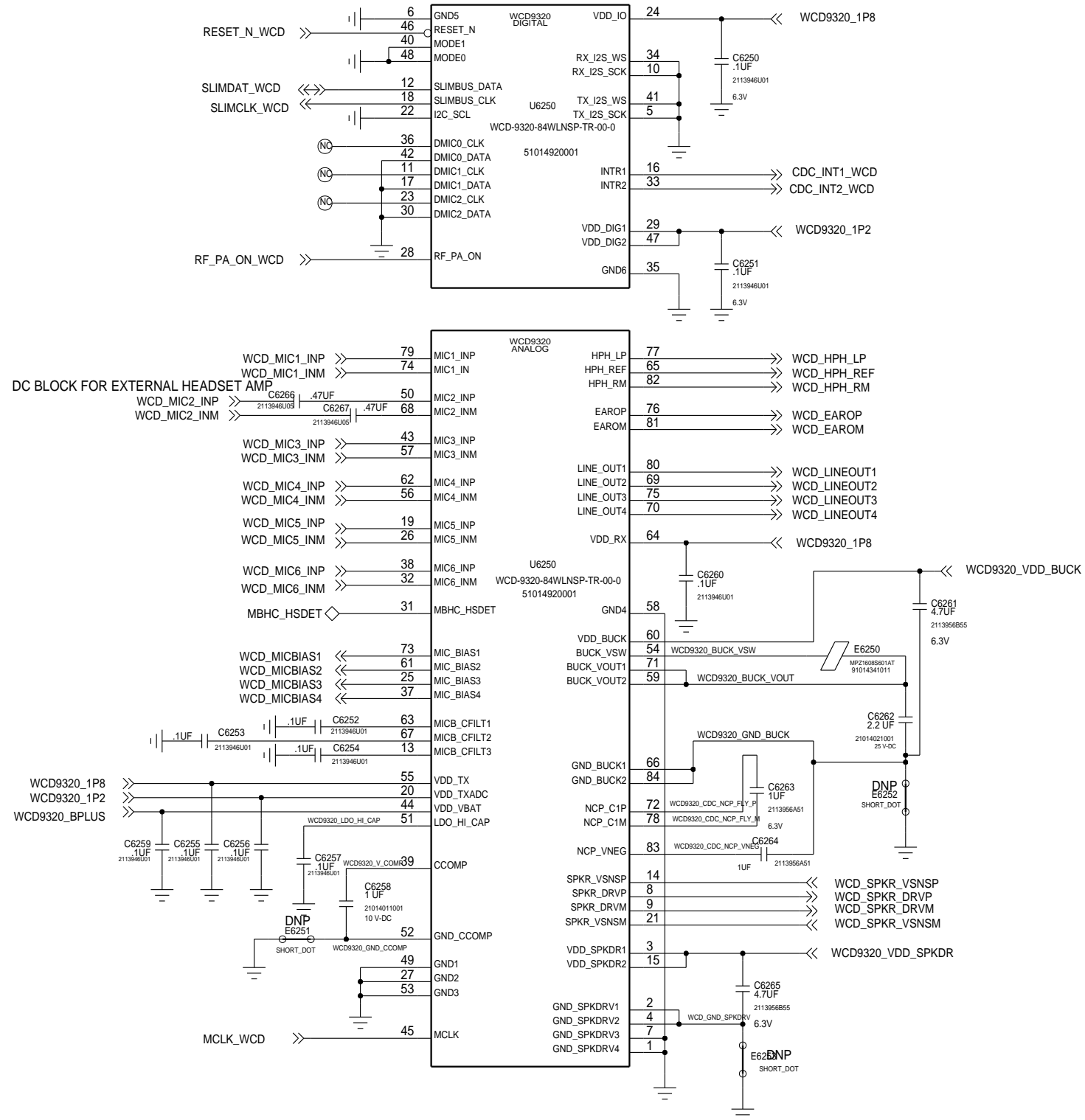


APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MATT MOTTIER		BLOCK TITLE: <b>xmcs</b>	
LAST MODIFIED BY: UDI ELRAN Wed Jul 09 12:28:06 2014		PROJECT NAME 84016326001_a.cpm	
MOTOROLA CONFIDENTIAL RESTRICTED		REV 01	
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		PAGE 50 OF 77	

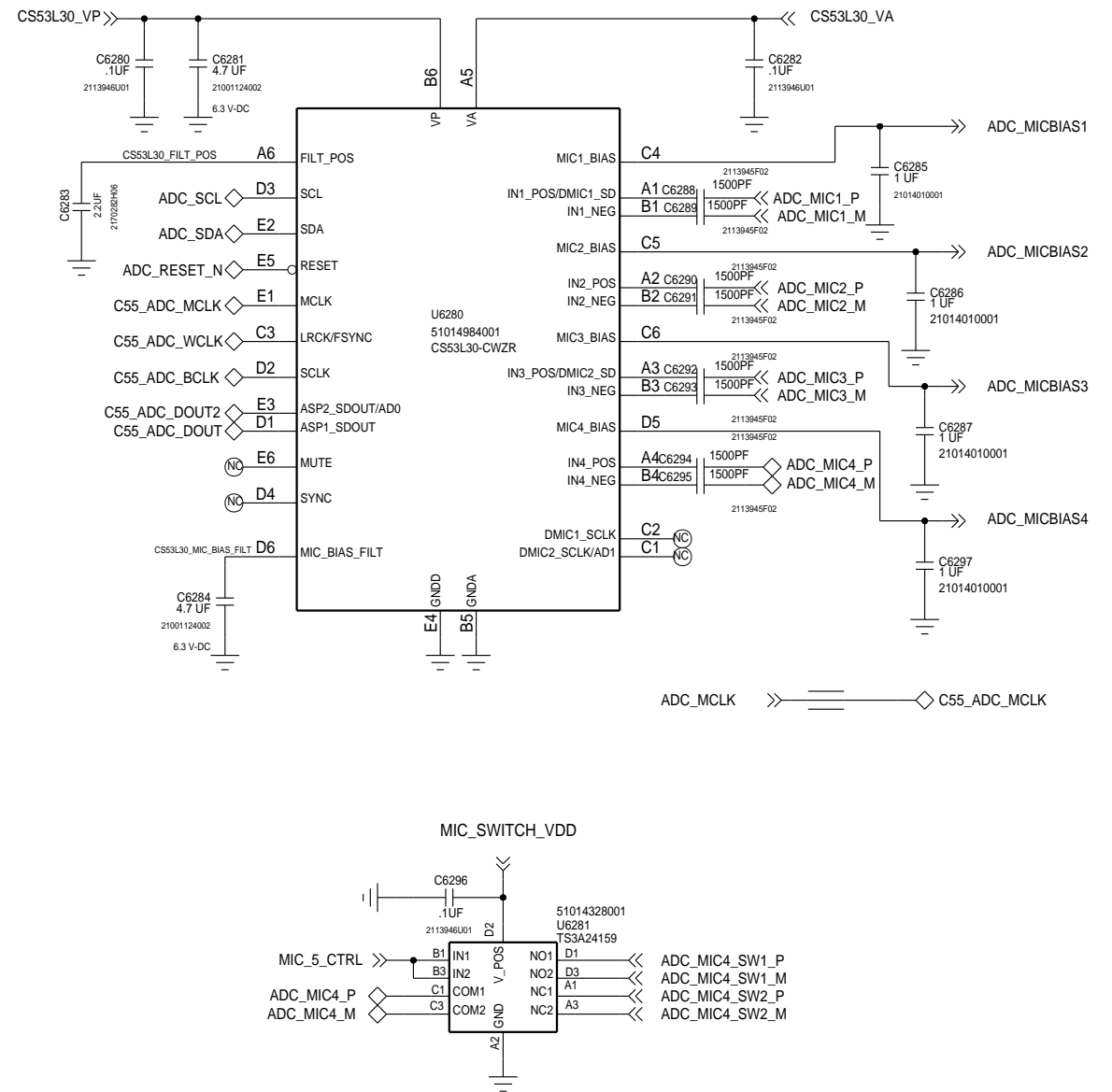
# XMCS: CODEC

REF 6250-6299

## WCD9320



## CIRRUS ADC

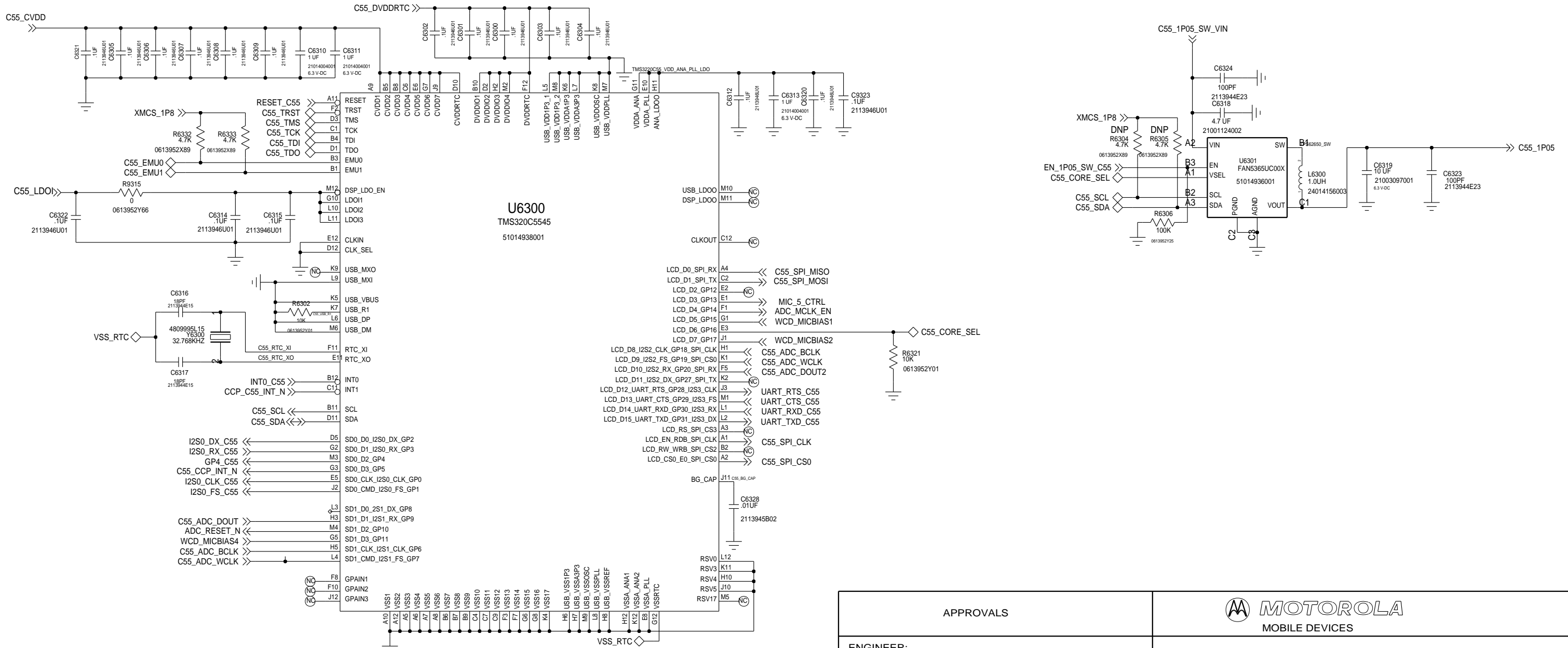


MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:25:34 2014		<b>xmcs</b>	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		<b>B</b> 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 51 OF 77	

# XMCS: DSP

REF 6300-6399



ANALOG GND LAYOUT NEEDS TO FOLLOW TI RECOMMENDATION

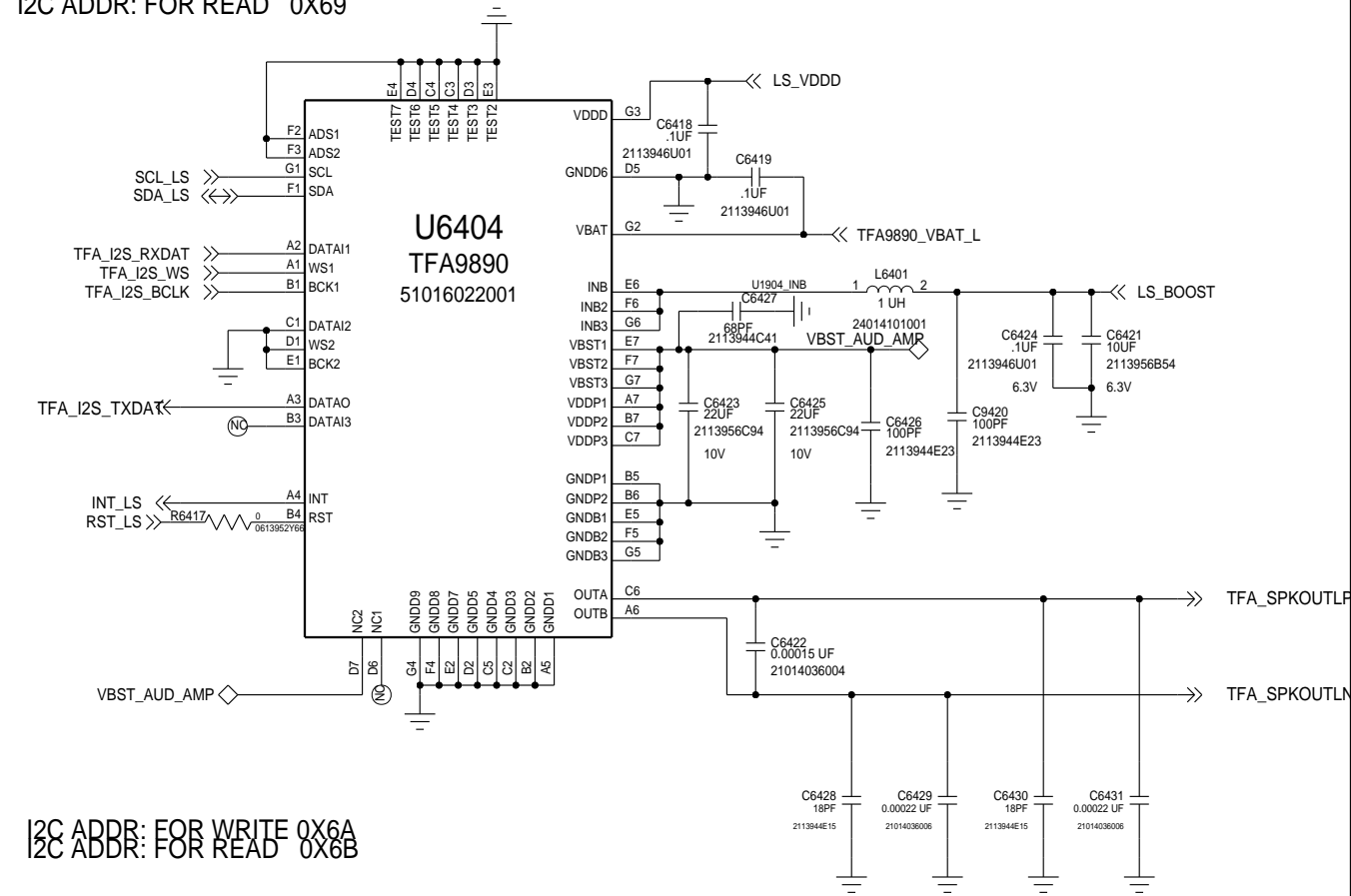
MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:25:35 2014		<b>xmcs</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 52 OF 77	

# XMCS: LOUD SPEAKER

REF 6400-6499

I2C ADDR: FOR WRITE 0X68  
I2C ADDR: FOR READ 0X69



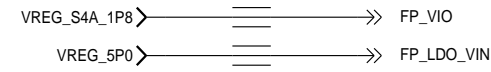
MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Tue Aug 12 11:13:51 2014		<b>xmcs</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 53 OF 77	

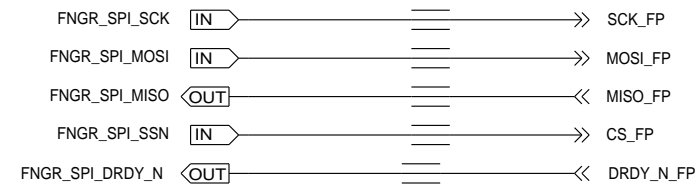
# USR: PORTS

REF: 800-999

## SUPPLIES



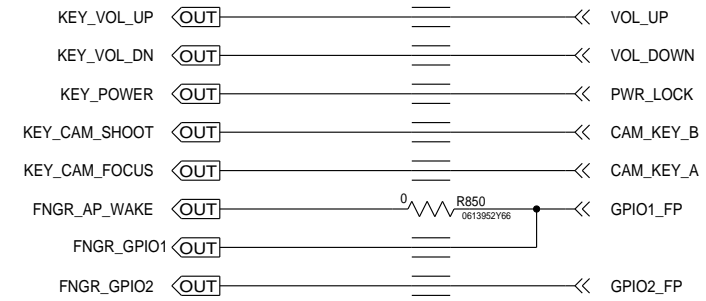
## INTERFACES



## GPIO - INPUT



## GPIO - OUTPUT



### APPROVALS

ENGINEER: NATE CONNELL

LAST MODIFIED BY: NATE CONNELL  
Thu Jun 05 15:25:27 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION  
THEREWITH ARE PROPRIETARY TO MOTOROLA AND  
SHALL NOT BE USED OR DISCUSSED IN WHOLE  
OR IN PART WITHOUT MOTOROLA'S CONSENT.  
© COPYRIGHT, MOTOROLA. THIS DOES  
NOT IMPLY PUBLICATION



BLOCK TITLE:

user\_input

PROJECT NAME  
B 84016326001\_a.cpm

REV  
01

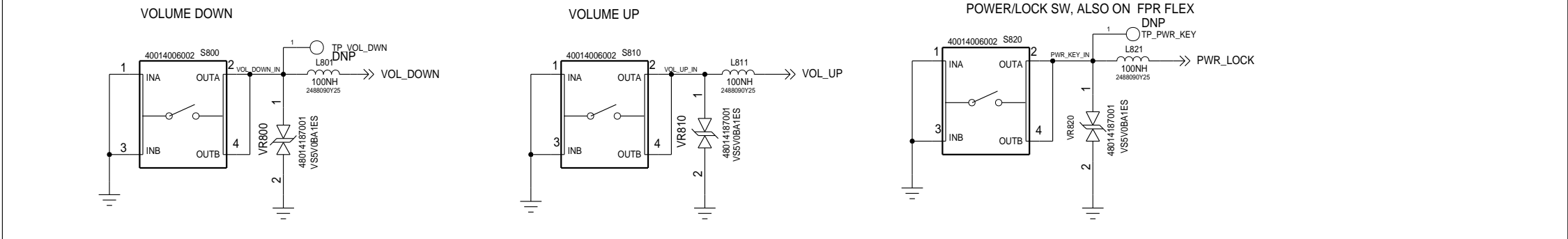
CAD FILE NAME:

PAGE 54 OF 77

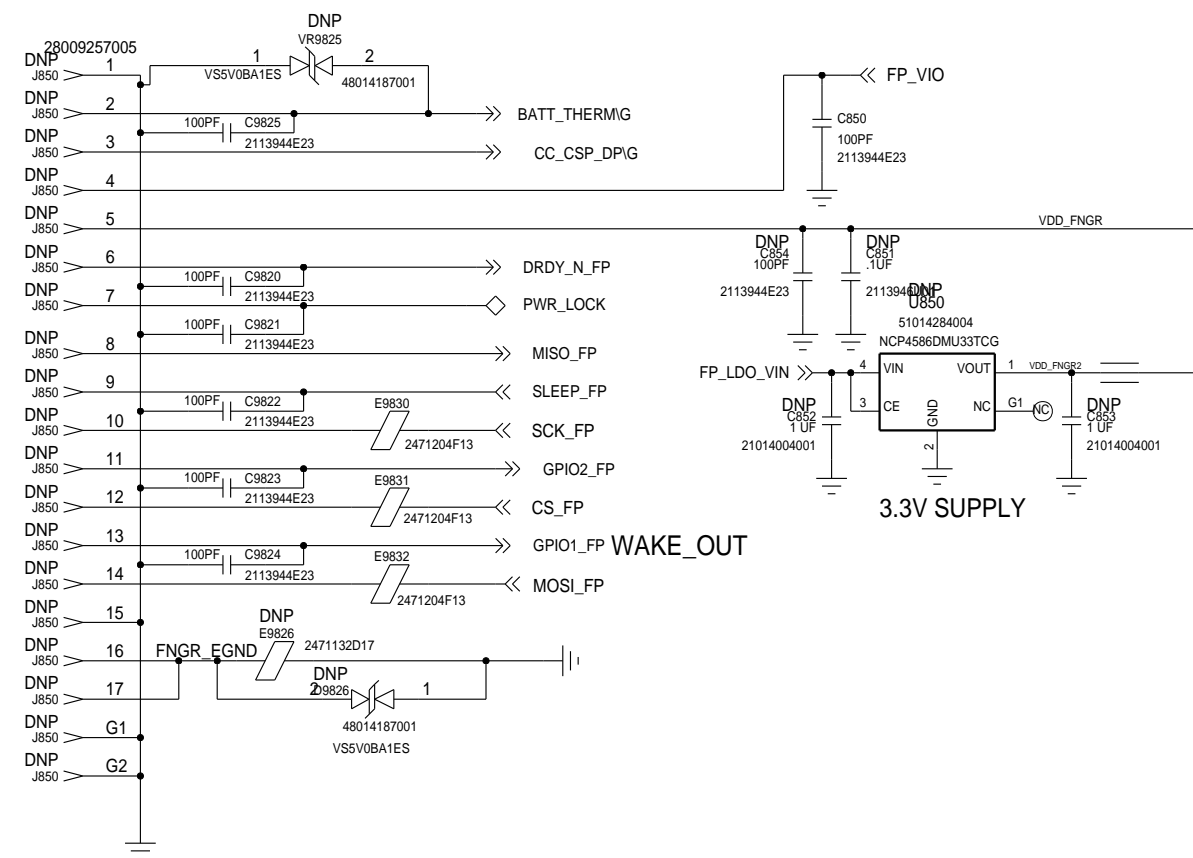
# USR: INPUT

REF: 800-899

## MECHANICAL KEYS



## FINGERPRINT SENSOR ZIF FLEX CONNECTOR

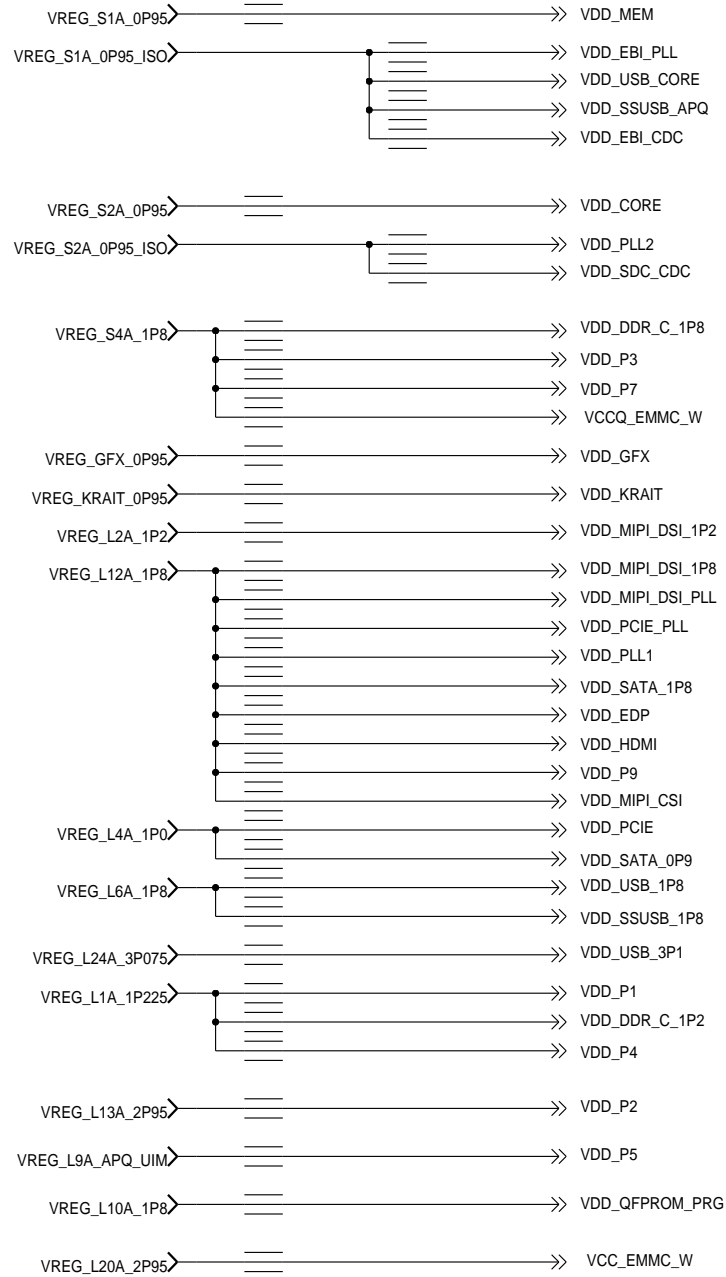



APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: NATE CONNELL		BLOCK TITLE:	
LAST MODIFIED BY: NATE CONNELL Thu Jun 05 15:25:28 2014		<b>user_input</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 55 OF 77	

# APQ: POWER

REF: 1000-1999

## SUPPLIES



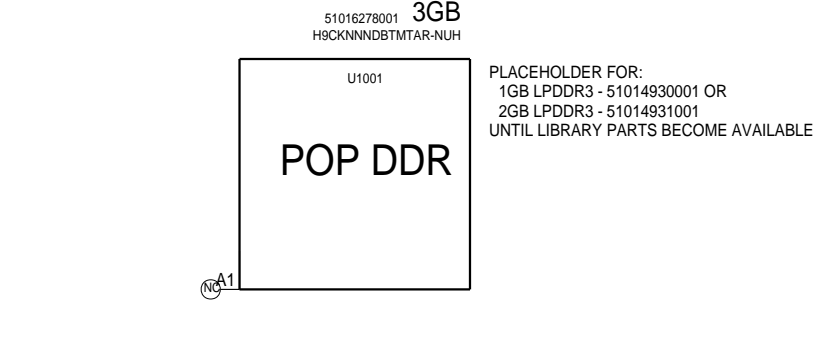
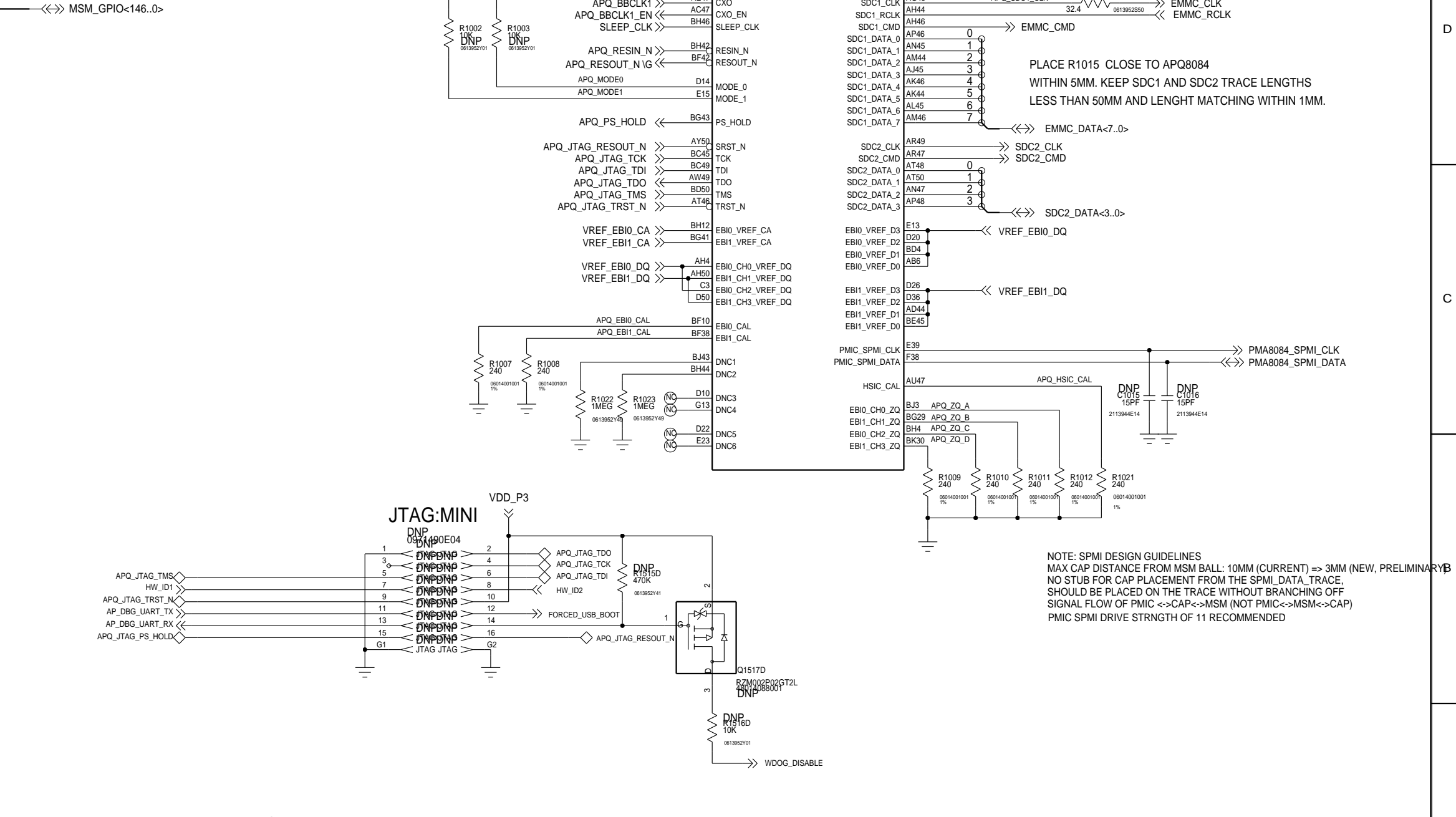
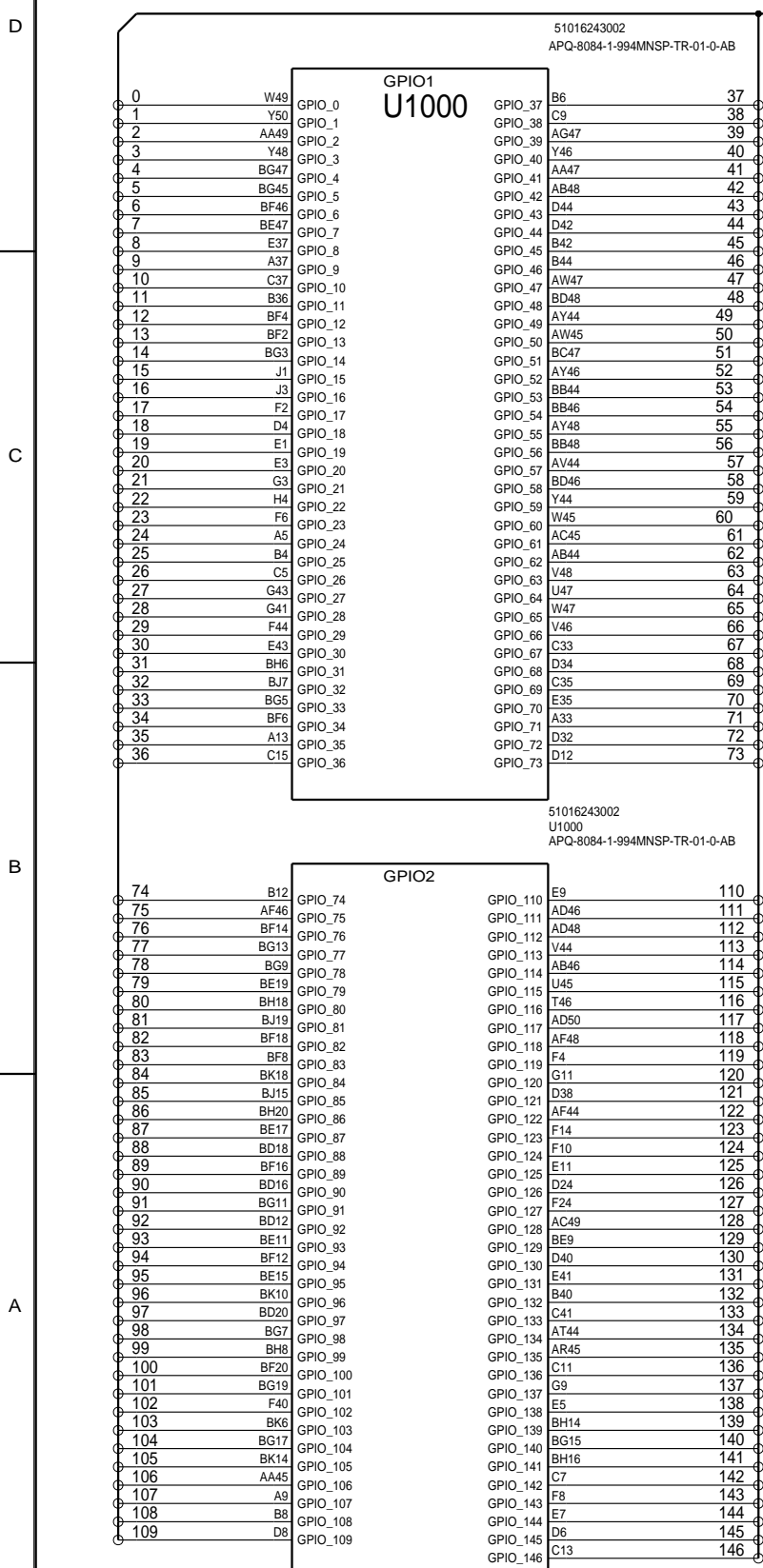
APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: NATE CONNELL		BLOCK TITLE:	
LAST MODIFIED BY: NATE CONNELL Thu Jun 05 15:25:17 2014		ap_pmic	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
		CAD FILE NAME:	
		PAGE 56 OF 77	



# APQ: CTRL / GPIO

REF 1000-1099

FOR PORTABLE DESIGNS RENAME ETM\_GPIO BUS TO GPIO BUS



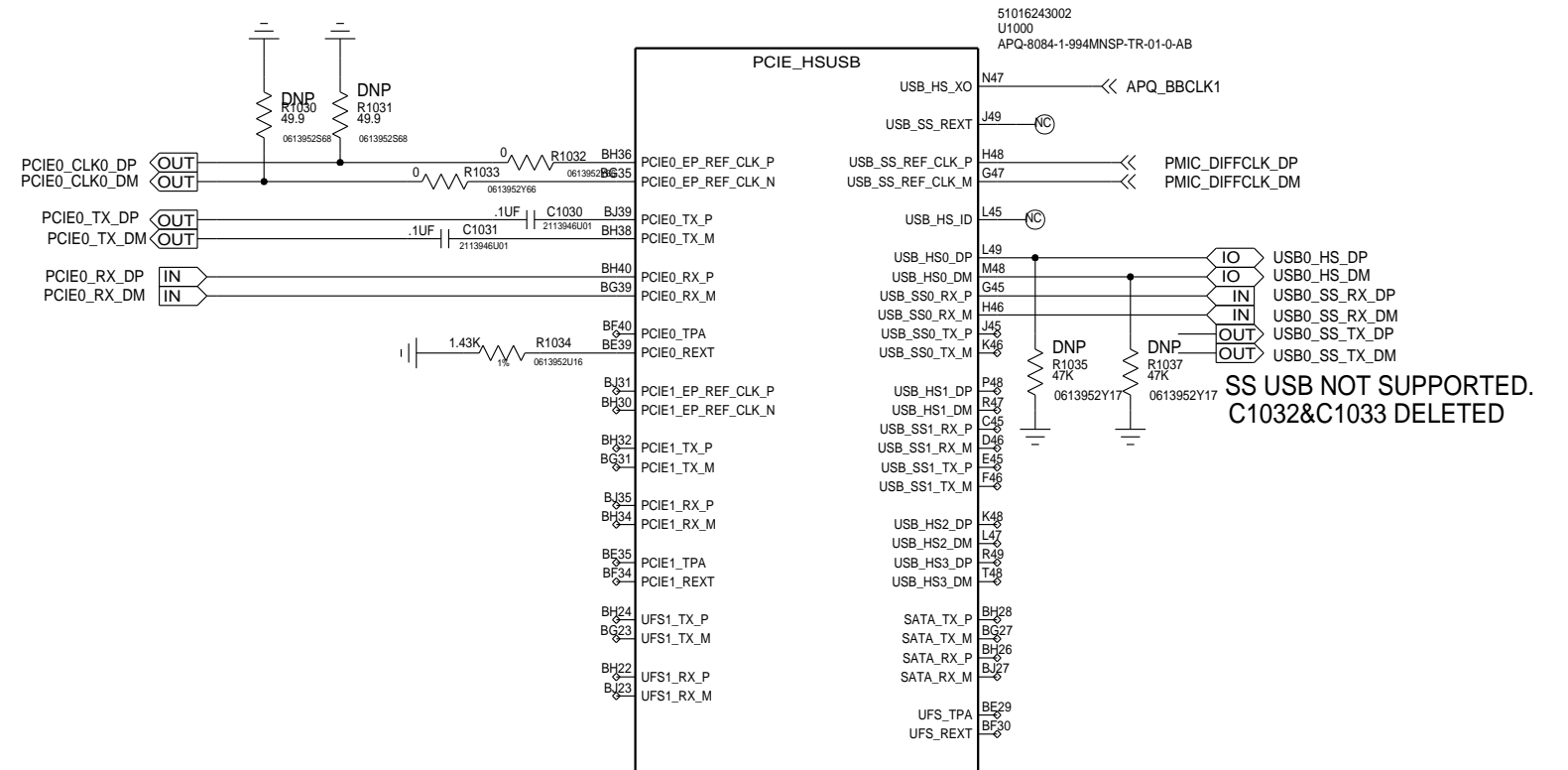
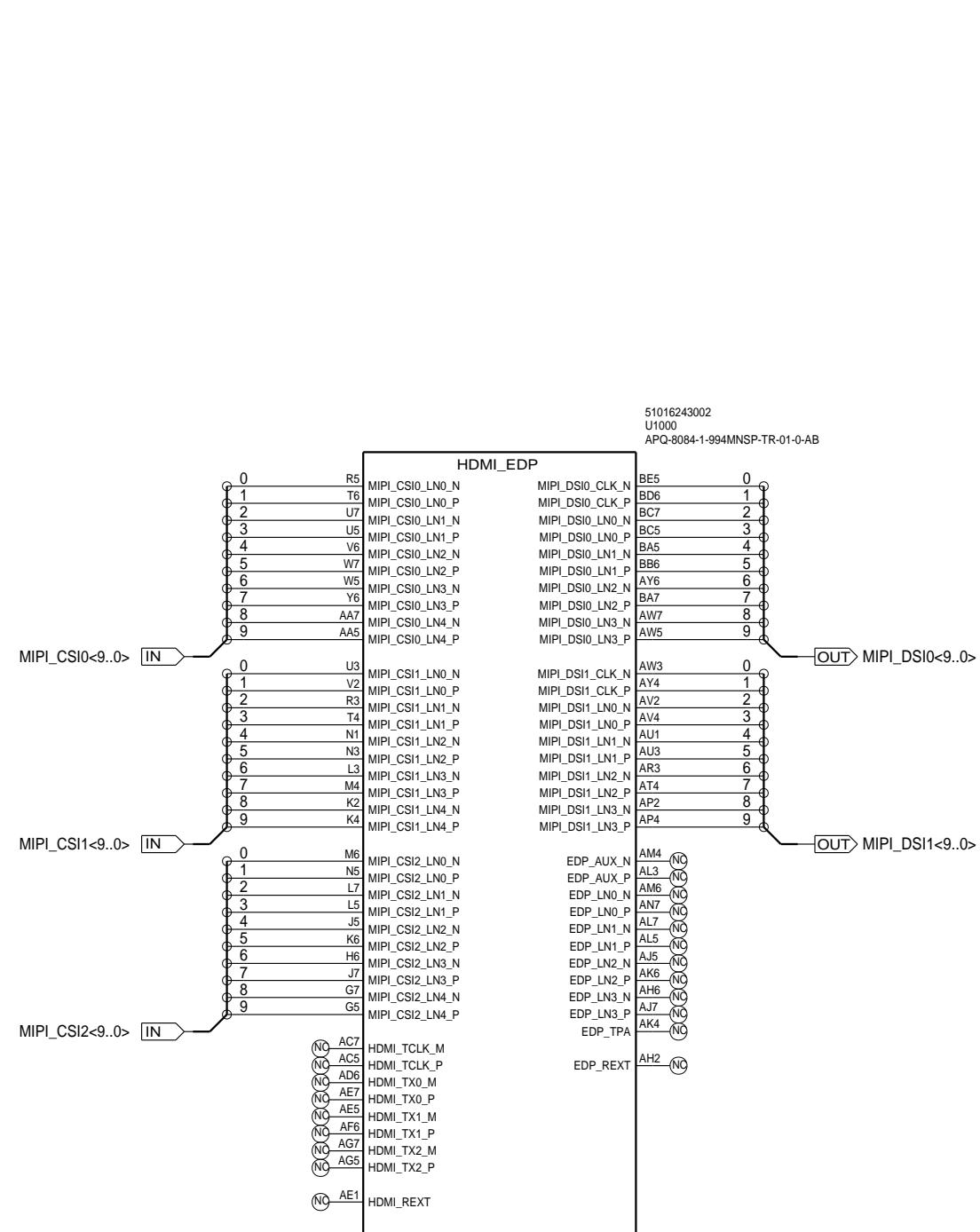
NOTE: SPMI DESIGN GUIDELINES  
 MAX CAP DISTANCE FROM MSM BALL: 10MM (CURRENT) => 3MM (NEW, PRELIMINARY)  
 NO STUB FOR CAP PLACEMENT FROM THE SPMI\_DATA TRACE,  
 SHOULD BE PLACED ON THE TRACE WITHOUT BRANCHING OFF  
 SIGNAL FLOW OF PMIC <->CAP<->MSM (NOT PMIC<->MSM<->CAP)  
 PMIC SPMI DRIVE STRNGTH OF 11 RECOMMENDED

BASED ON 80-NA437-41 REV. G

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED	
APPROVALS	<b>MOTOROLA</b> MOBILE DEVICES
ENGINEER:	BLOCK TITLE: <b>ap_pmic</b>
LAST MODIFIED BY: Thu Jun 05 15:25:18 2014	PROJECT NAME <b>84016326001_a.cpm</b>
MOTOROLA CONFIDENTIAL RESTRICTED	REV <b>01</b>
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION	CAD FILE NAME: <b>84016326001_a.cpm</b>
	PAGE 57 OF 77

# APQ: MIPI/USB/PCIE

REF 1030-1039

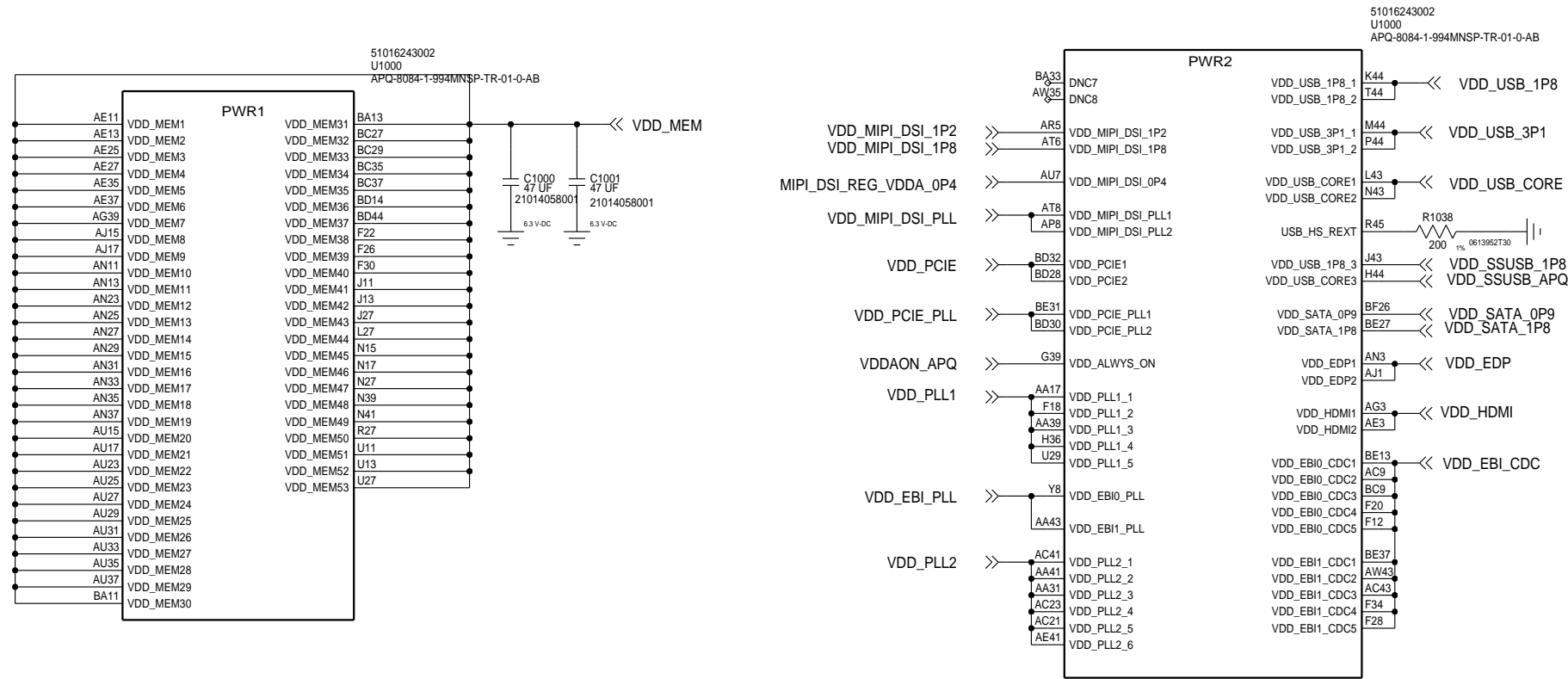


BASED ON 80-NA437-41 REV. G


MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS			
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:25:19 2014		<b>ap_pmic</b>	
MOTOROLA CONFIDENTIAL RESTRICTED THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
CAD FILE NAME:		PAGE 58 OF 77	

# APQ: POWER 1

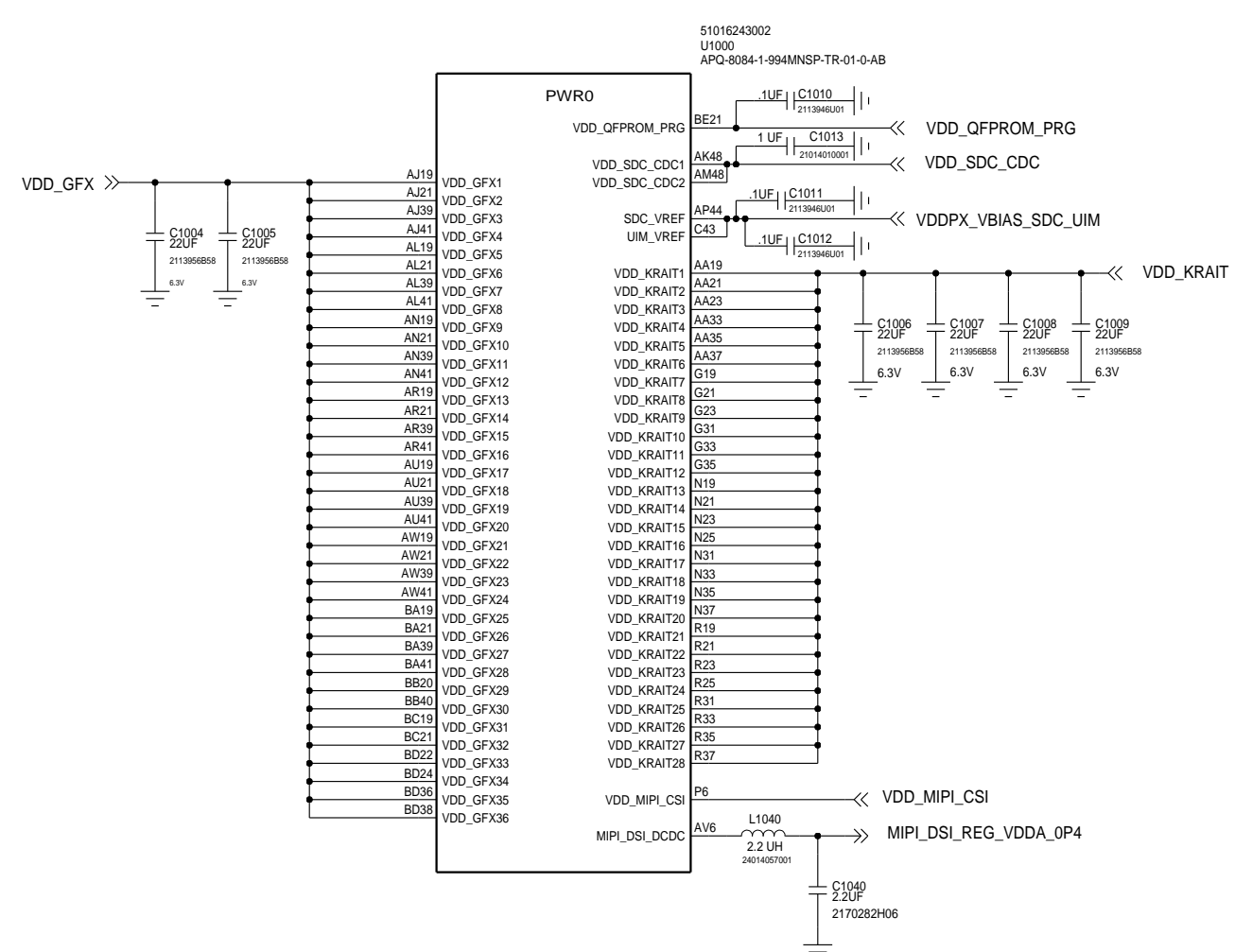
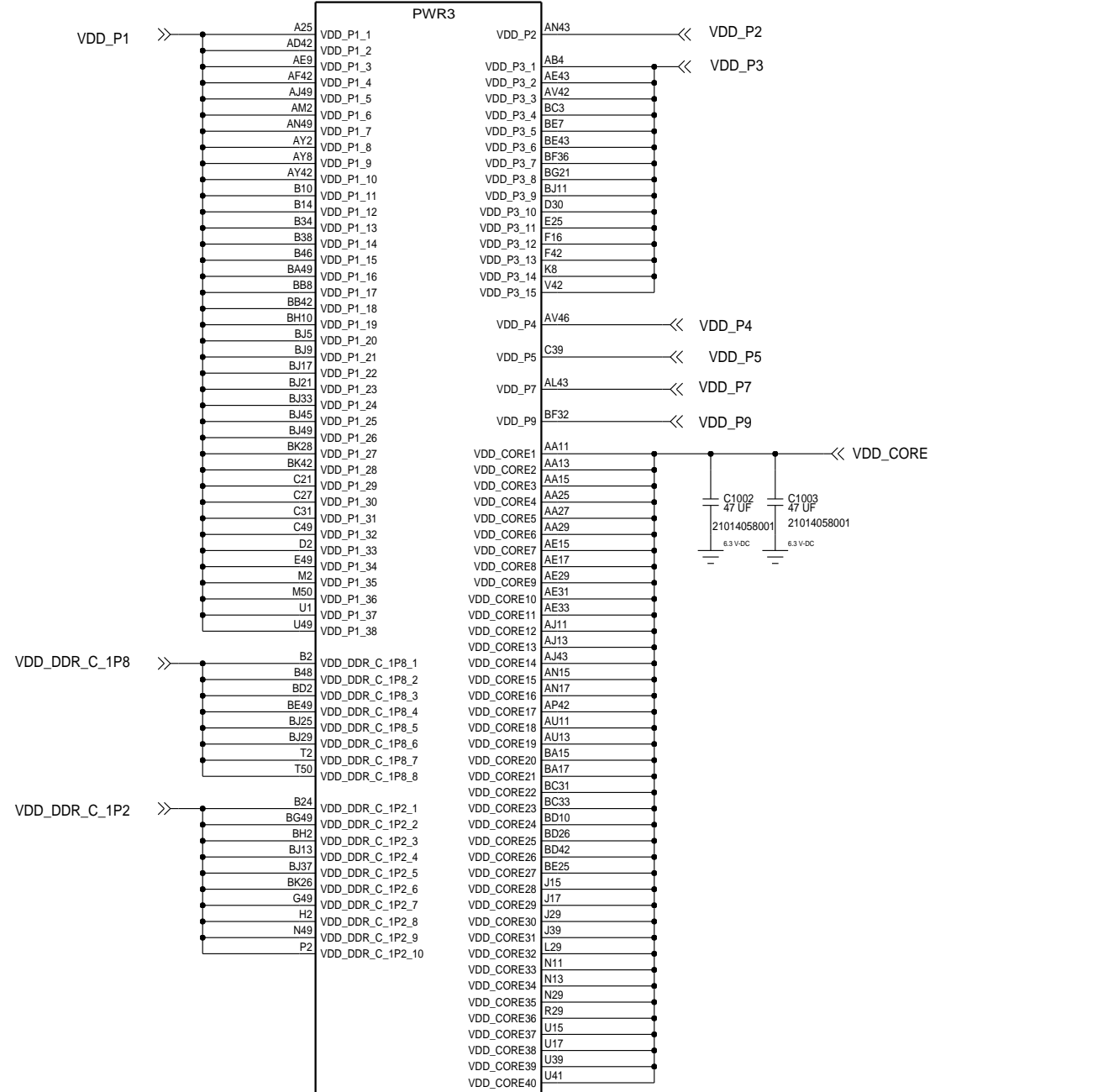


MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Thu Jun 05 15:25:19 2014		ap_pmic	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 59 OF 77	

# APQ: POWER 2

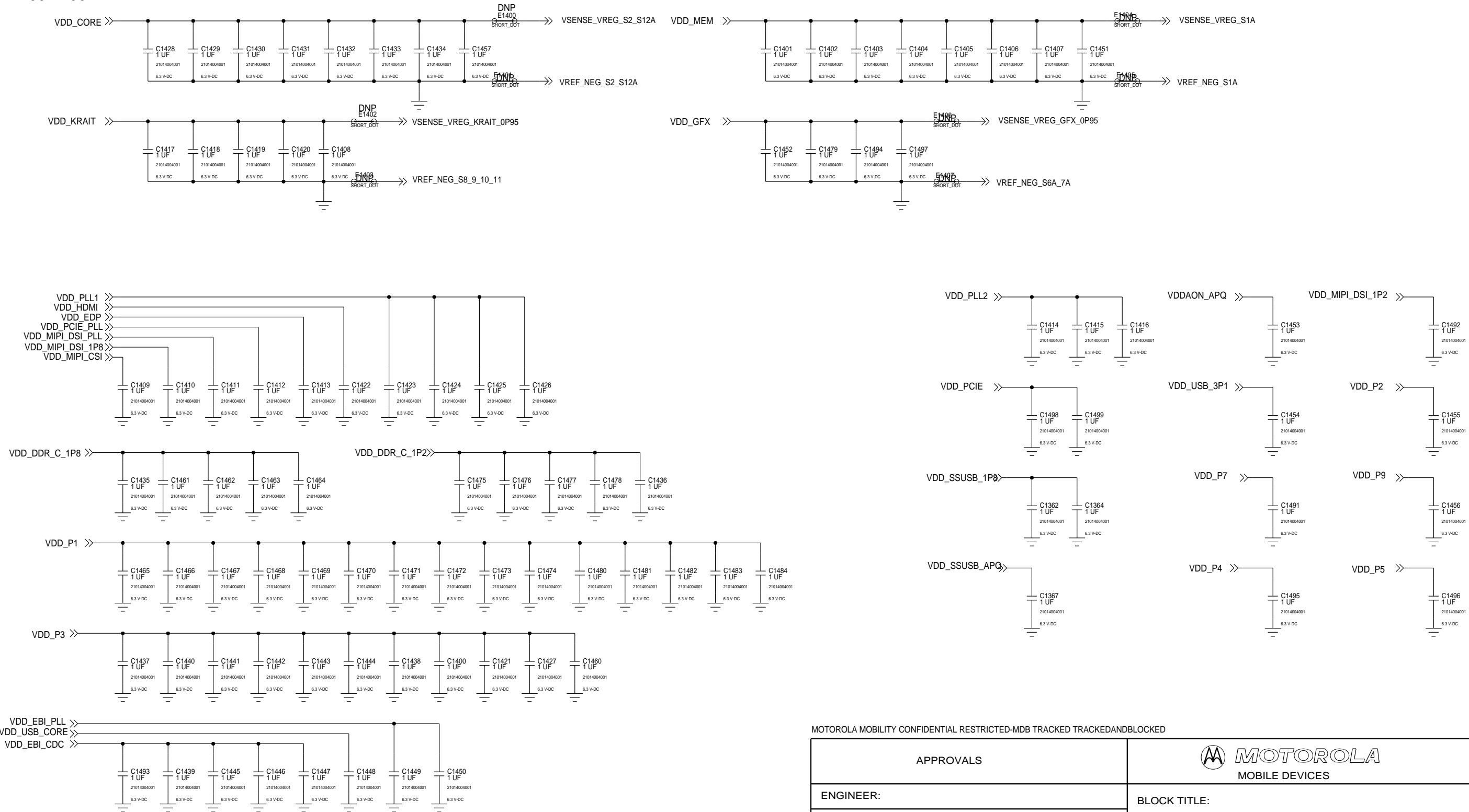
51016243002  
U1000  
APQ-8084-1-994MNSP-TR-01-0-AB




APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Thu Jun 05 15:25:20 2014		<b>ap_pmic</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 60 OF 77	

# APQ: BYPASS CAPS

REF 1400-1499



MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:25:21 2014		<b>ap_pmic</b>	
MOTOROLA CONFIDENTIAL RESTRICTED THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		PROJECT NAME	REV
		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 61 OF 77	

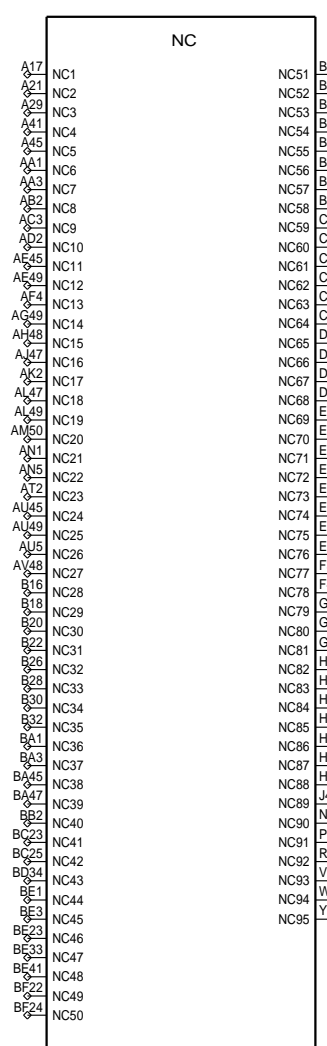
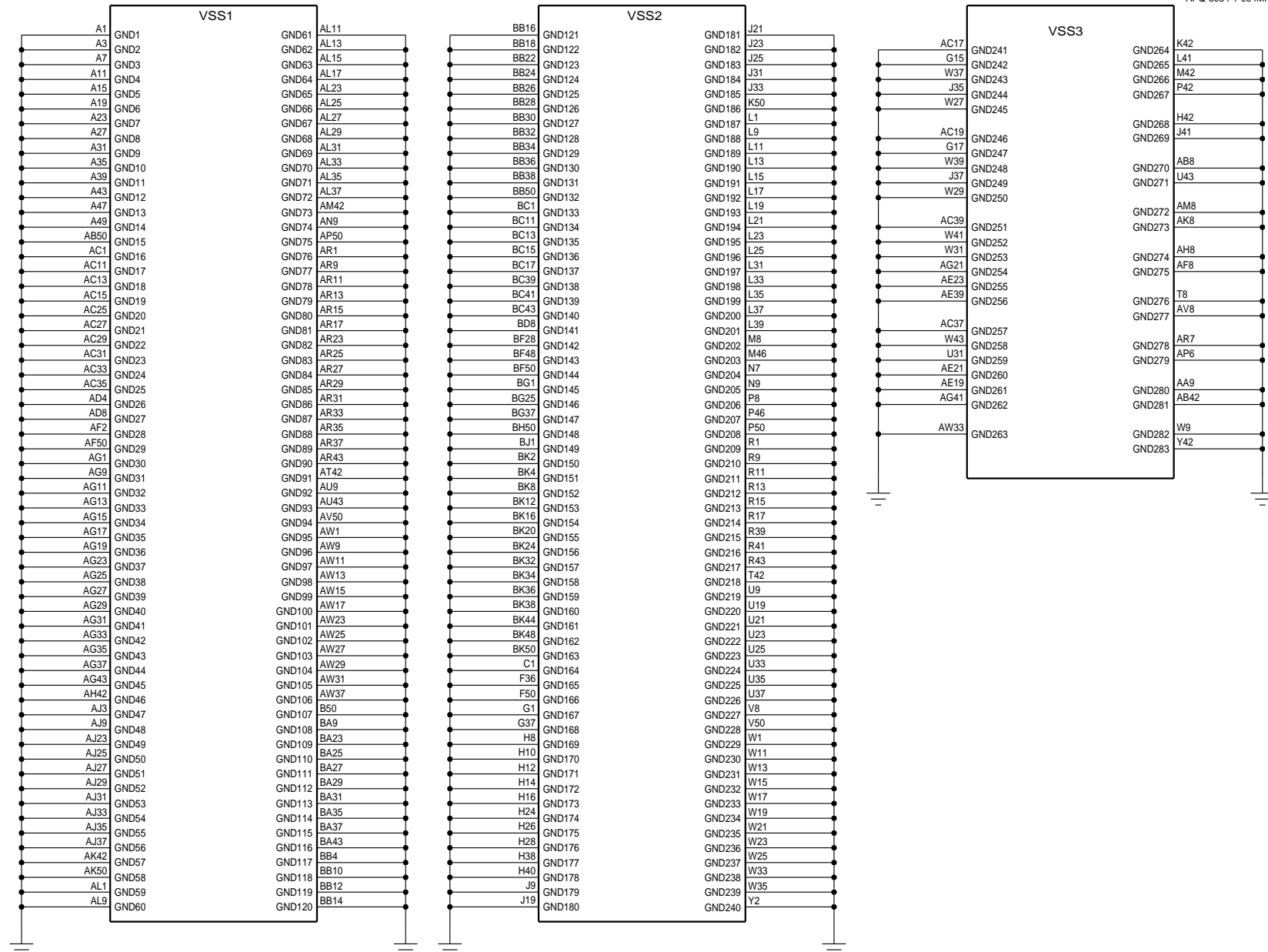
# APQ: GND/NC

51016243002  
U1000  
APQ-8084-1-994MNSP-TR-01-0-AB

51016243002  
U1000  
APQ-8084-1-994MNSP-TR-01-0-AB

51016243002  
U1000  
APQ-8084-1-994MNSP-TR-01-0-AB

51016243002  
U1000  
APQ-8084-1-994MNSP-TR-01-0-AB



BASED ON 80-NA437-41 REV. G

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Thu Jun 05 15:25:21 2014		ap_pmic	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
		CAD FILE NAME:	
		PAGE 62 OF 77	

# APQ: GPIO MAP

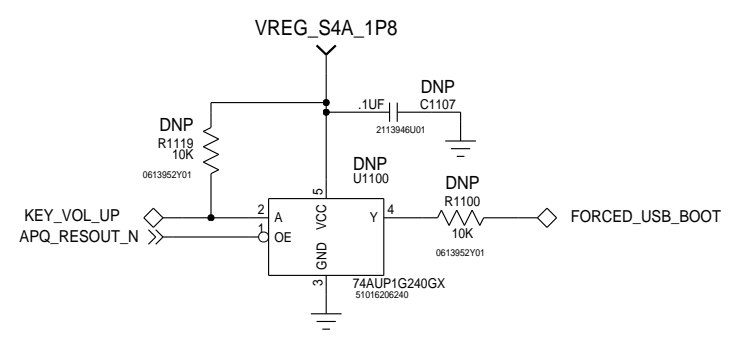
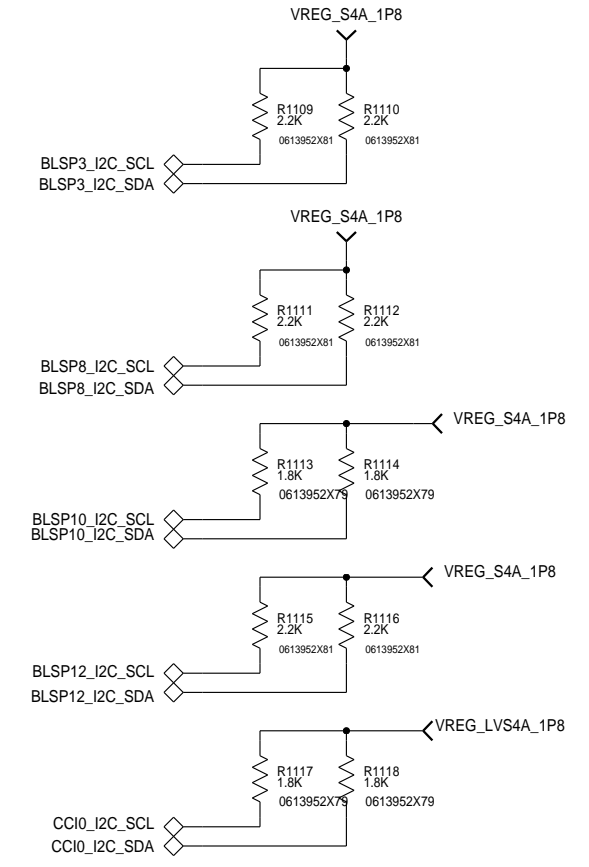
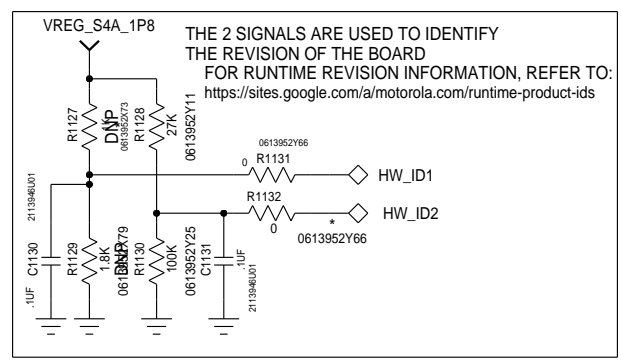
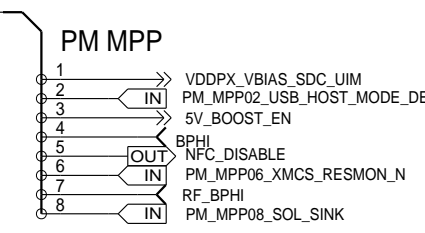
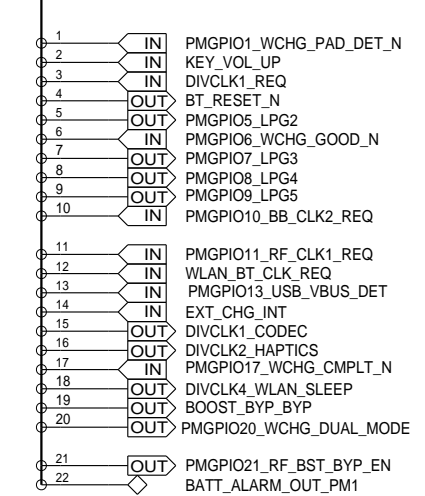
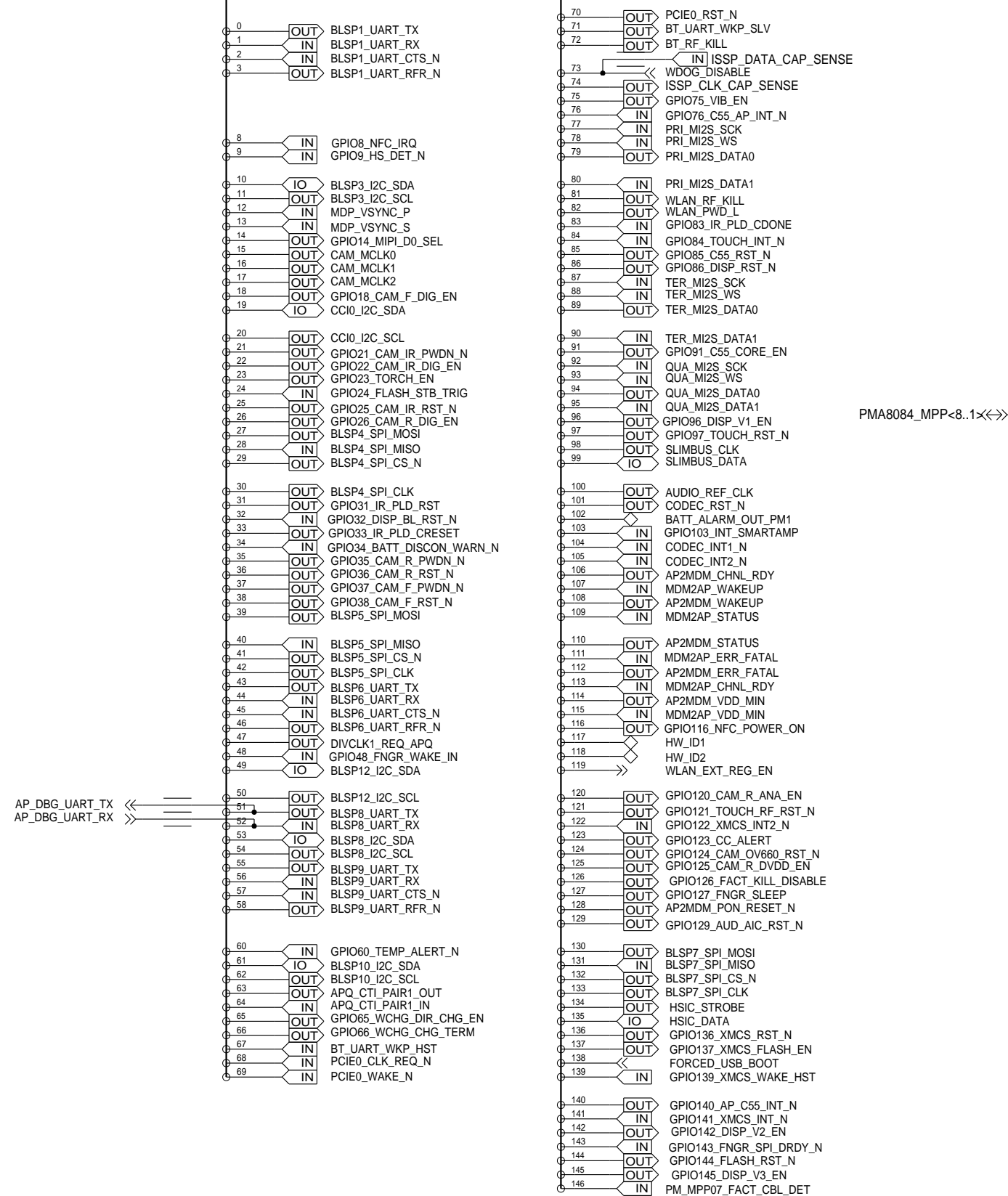
PURPLE=MOT CUSTOM  
CYAN=QCOM REFERENCE

MSM\_GPIO<146..0><=>

PMA8084\_GPIO<22..1><=>

## PM GPIO

## PM MPP



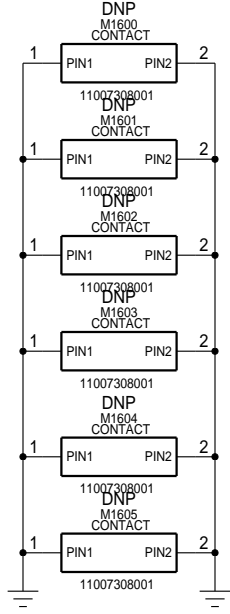
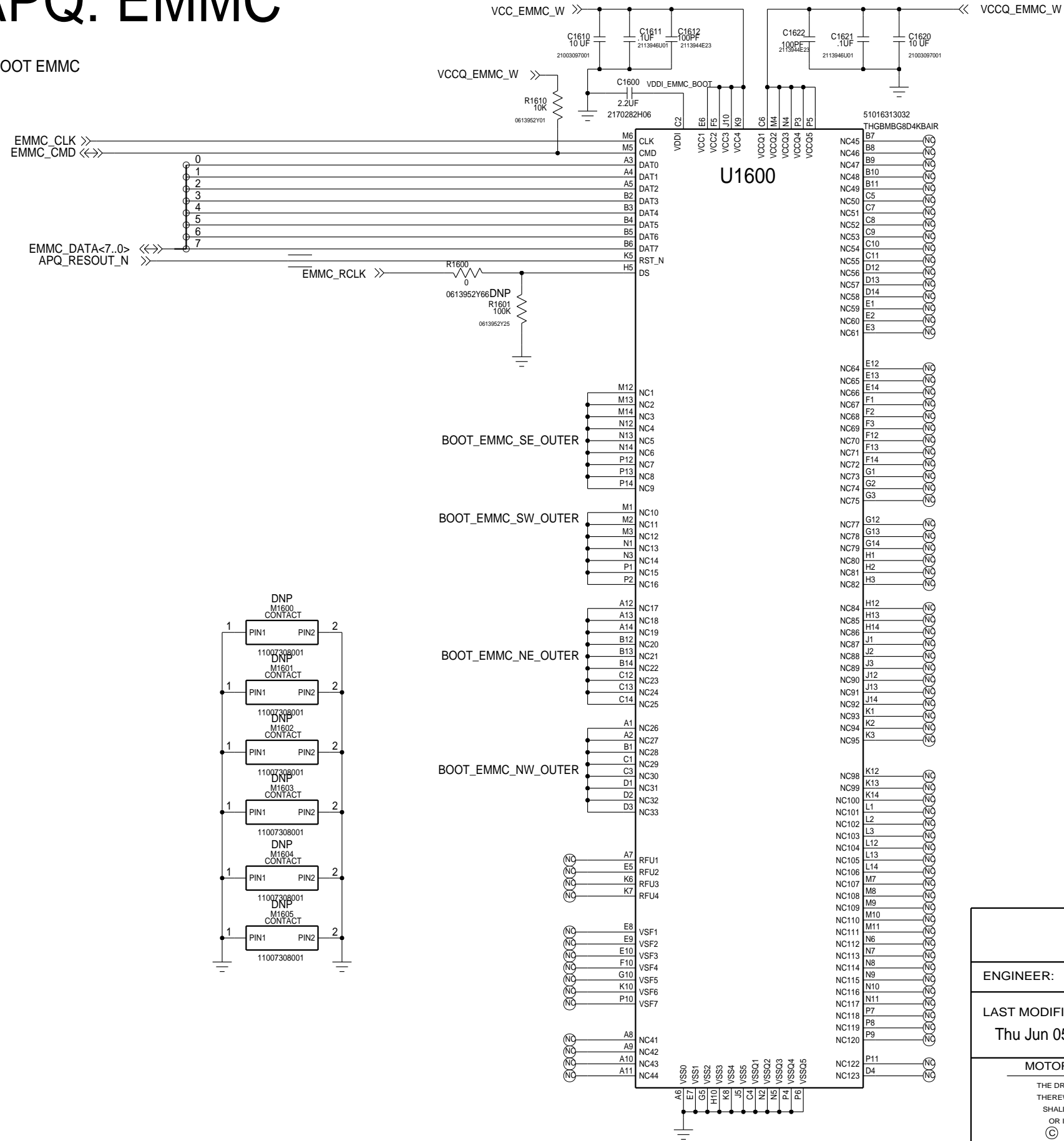
BASED ON 80-NA437-41 REV. G

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: <b>TIM MILLER</b> Fri Jul 11 09:59:19 2014		<b>ap_pmic</b>	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
<small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.</small> <small>© COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		<b>B</b> 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 63 OF 77	

# APQ: EMMC

BOOT EMMC



MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

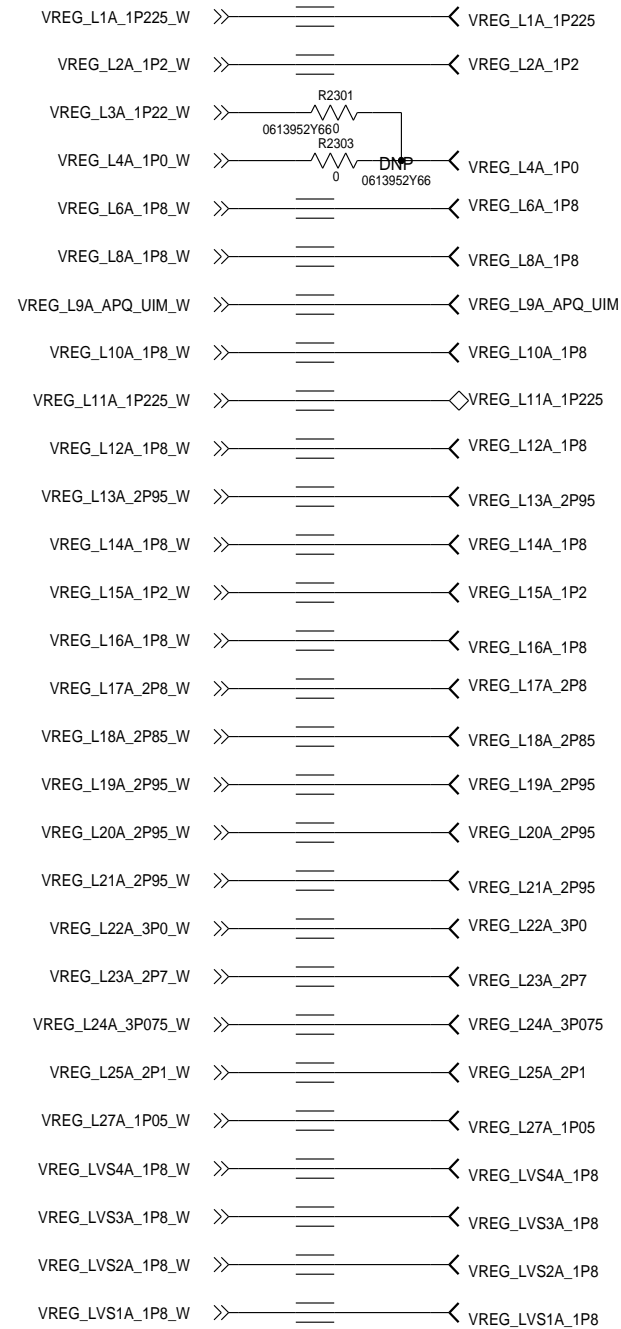
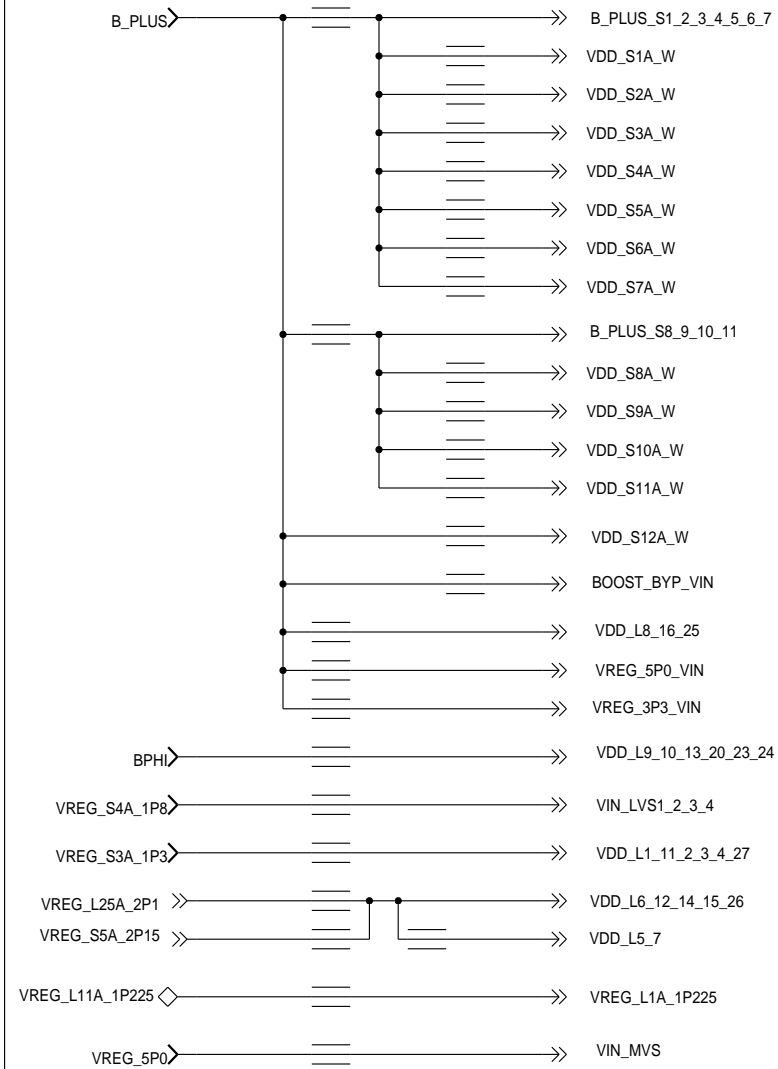
APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE: <b>ap_pmic</b>	
LAST MODIFIED BY: MOTOROLA Thu Jun 05 15:25:23 2014		PROJECT NAME 84016326001_a.cpm	
MOTOROLA CONFIDENTIAL RESTRICTED THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		CAD FILE NAME:	REV 01
		PAGE 64 OF 77	



# PMA8084: POWER

REF: 2000-2999

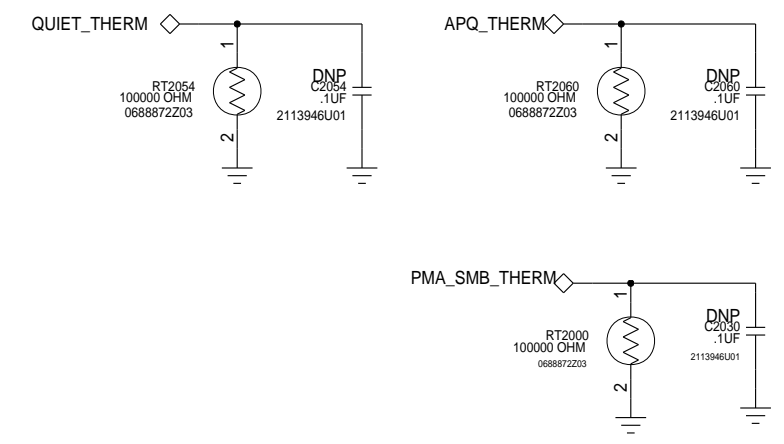
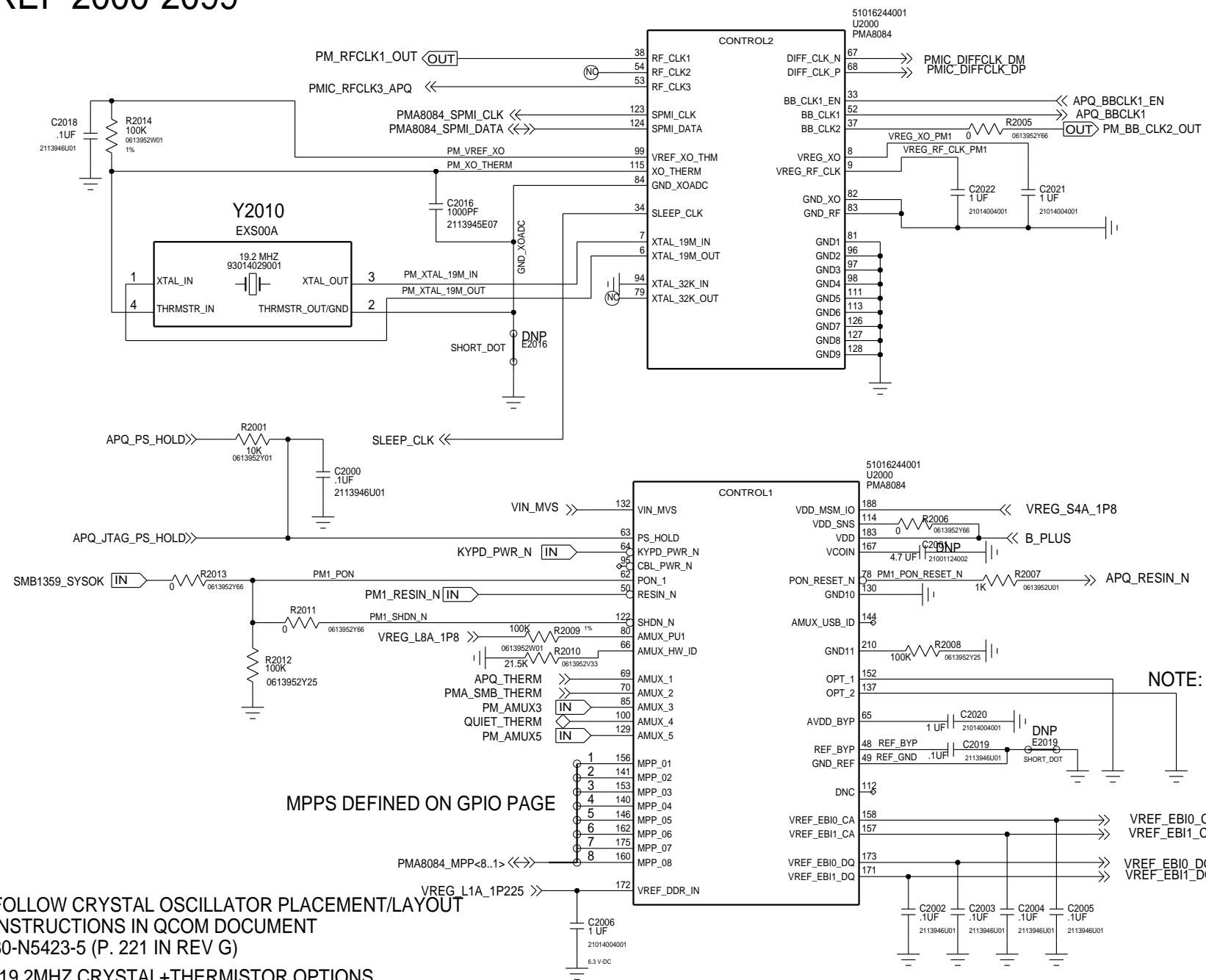
## SUPPLIES



APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: NATE CONNELL		BLOCK TITLE:	
LAST MODIFIED BY: NATE CONNELL Thu Jun 05 15:25:23 2014		<b>ap_pmic</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 65 OF 77	

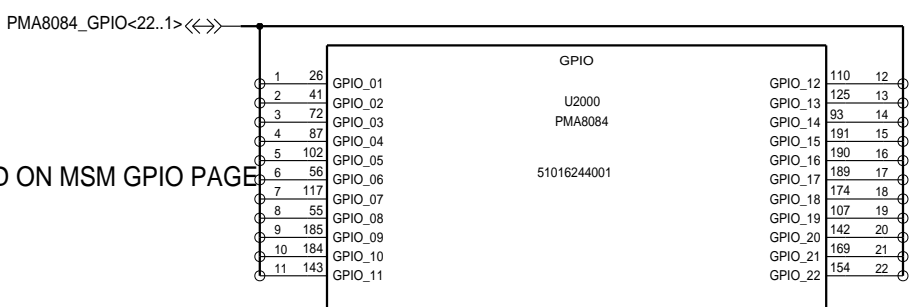
# PMA8084: CLK/CTRL/GPIO

## REF 2000-2099



NOTE: OPT\_1&OPT\_2 = GND FOR APQ8084

FOLLOW CRYSTAL OSCILLATOR PLACEMENT/LAYOUT INSTRUCTIONS IN QCOM DOCUMENT 80-N5423-5 (P. 221 IN REV G)   
 \*19.2MHZ CRYSTAL+THERMISTOR OPTIONS   
 PACKAGE PART NUMBER   
 2520 93014012001   
 2016 93014029001

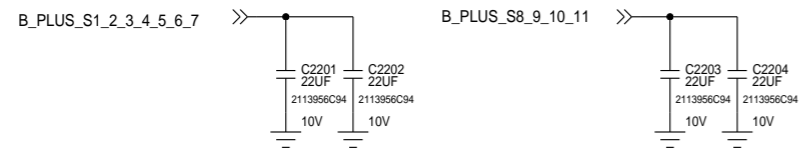
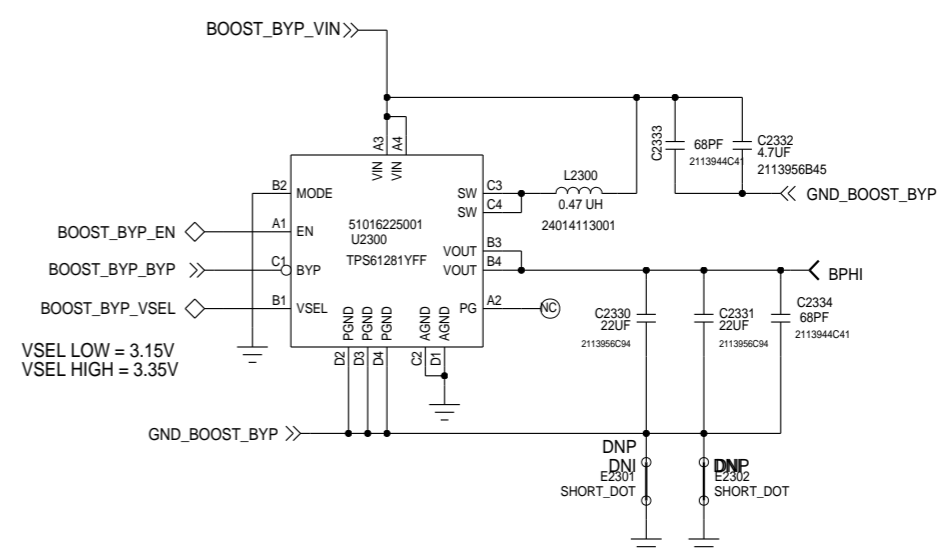
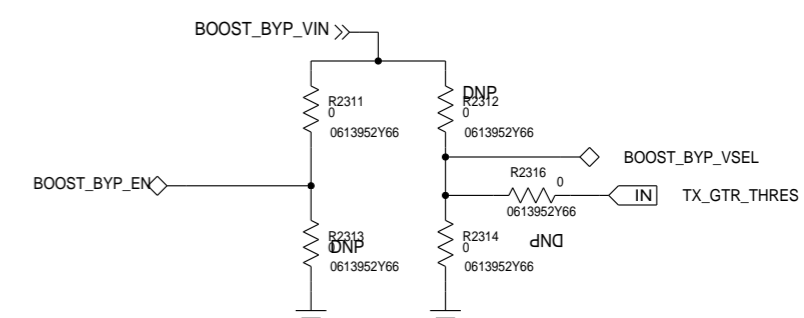
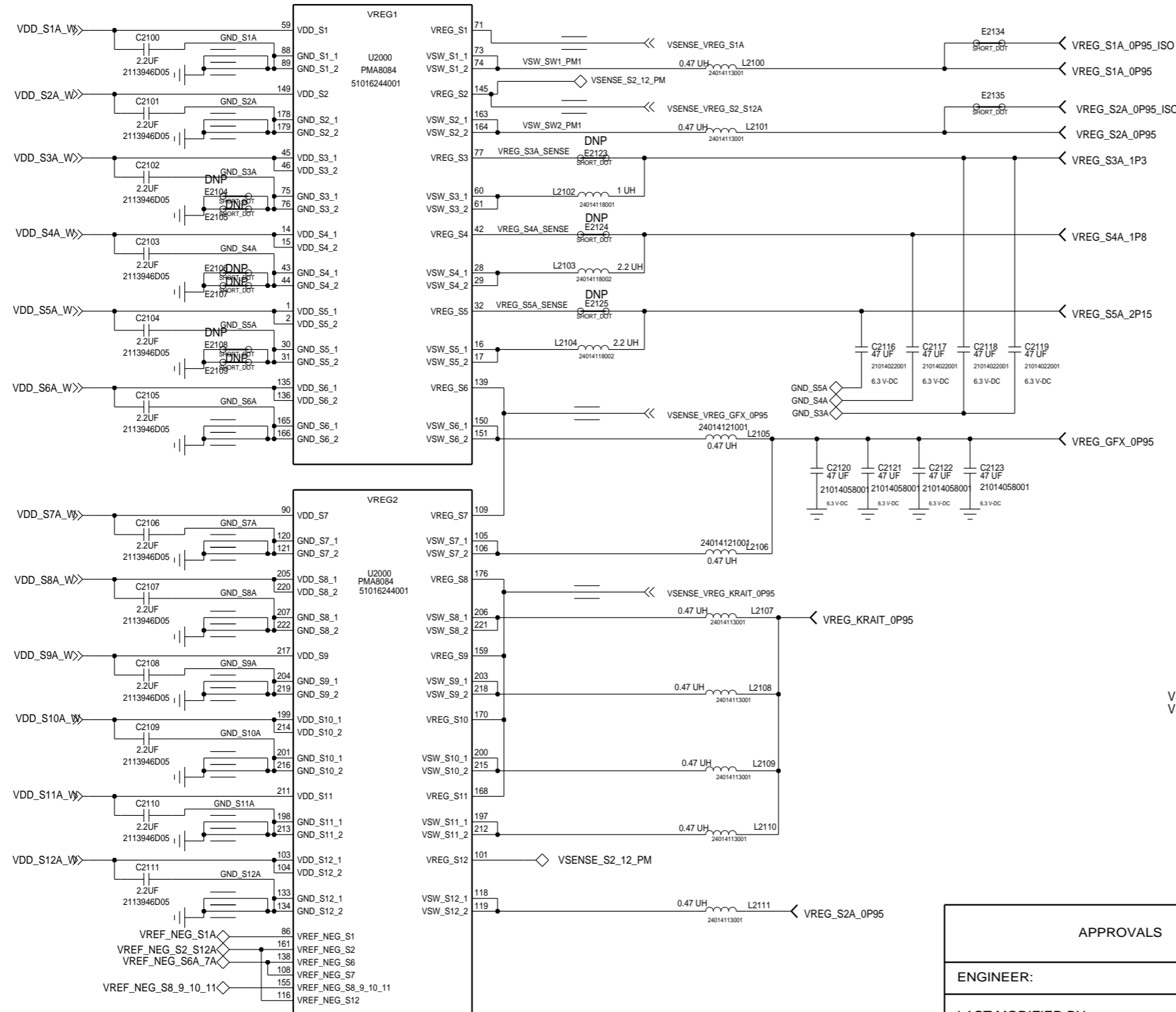


BASED ON 80-NA437-41 REV. G

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE: <b>ap_pmic</b>	
LAST MODIFIED BY: Thu Jun 05 15:25:24 2014		PROJECT NAME <b>84016326001_a.cpm</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		CAD FILE NAME:	REV <b>01</b>
		PAGE 66 OF 77	

# PMA8084: SMPS

## REF 2200-2299



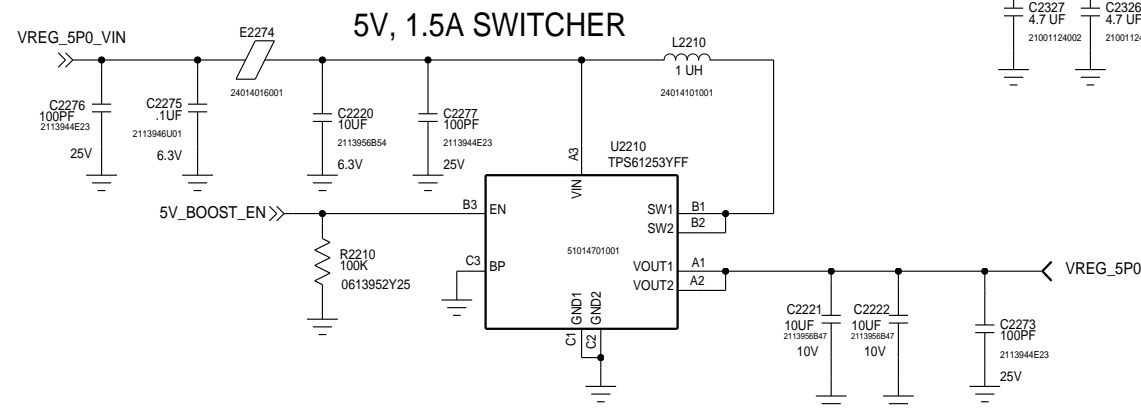
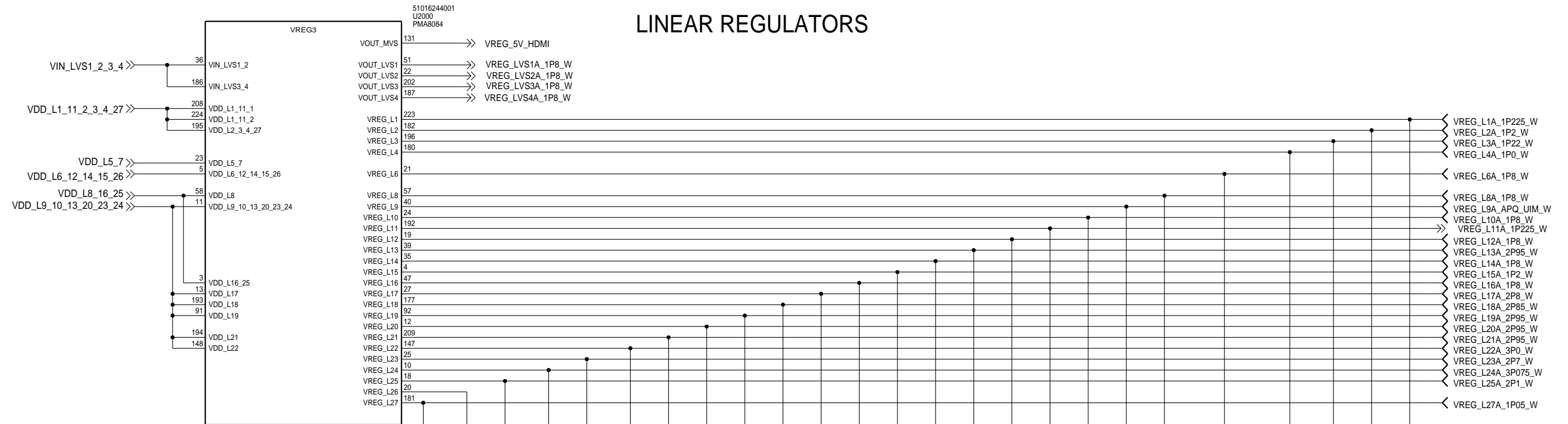
APPROVALS			
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY: Wed Jul 09 14:04:43 2014		<b>ap_pmic</b>	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
<small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		<b>B</b> 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 67 OF 77	

MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

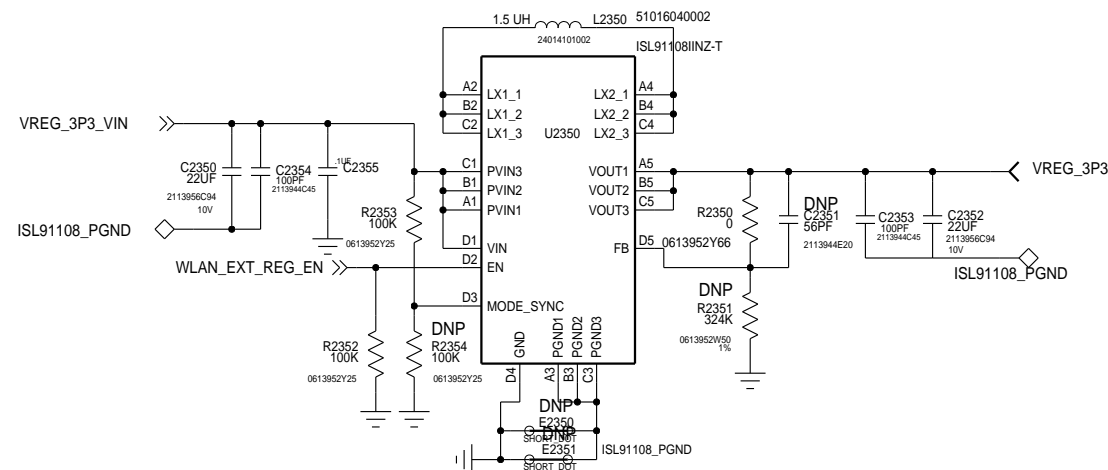
# PMA8084: VREGS

REF 2300-2349

## LINEAR REGULATORS



### 3.3V, 1.5A BUCK BOOST

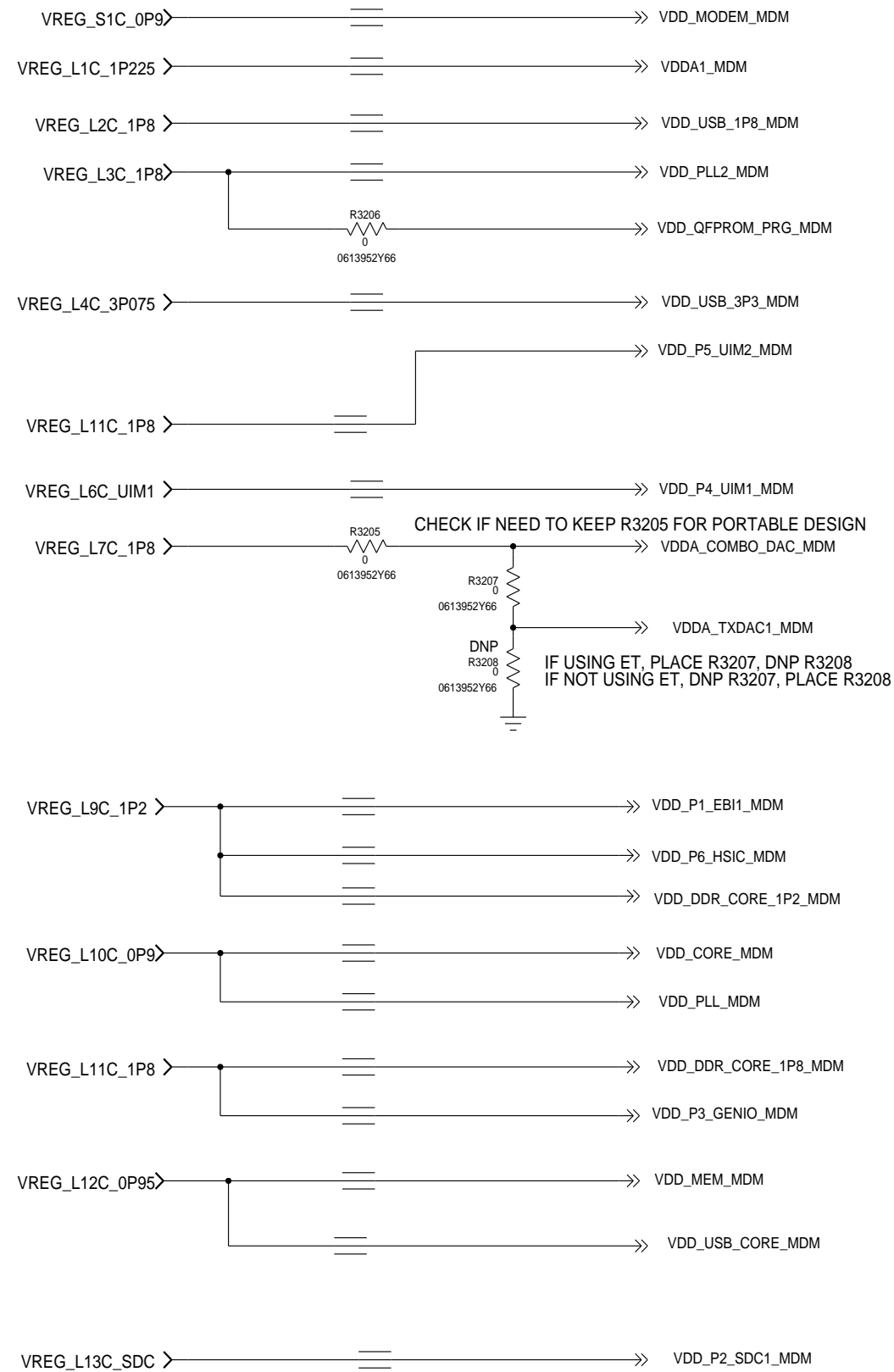


MOTOROLA MOBILITY CONFIDENTIAL RESTRICTED-MDB TRACKED TRACKEDANDBLOCKED

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER:		BLOCK TITLE:	
LAST MODIFIED BY:		ap_pmic	
Thu Jun 05 16:04:44 2014			
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 68 OF 77	

# MDM9x25M POWER

REF 3200-3249

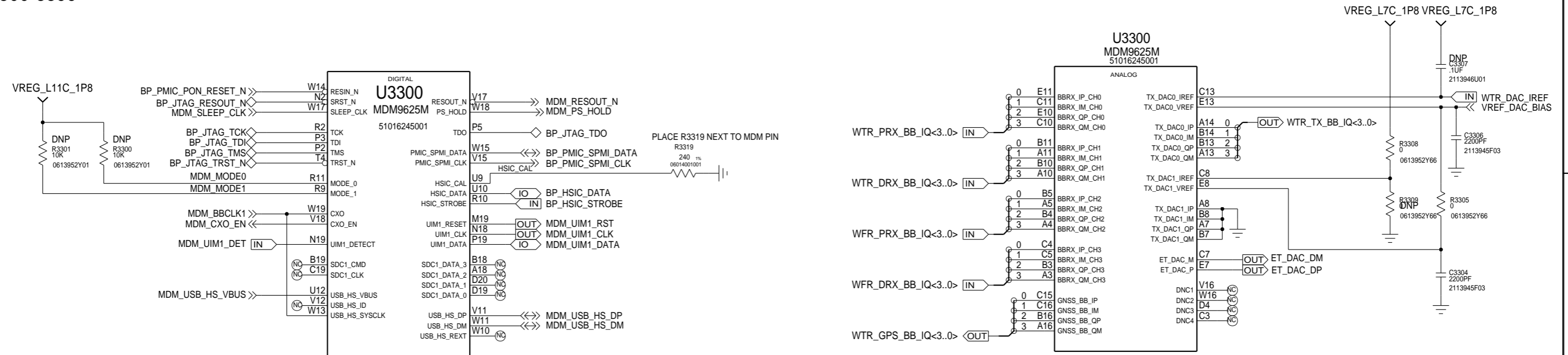


BASED ON 80-NJ851-41 REV.A

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: W00281		BLOCK TITLE:	
LAST MODIFIED BY: W00281 Thu Jun 05 15:25:08 2014		<b>block_mdm9x25m_pm8019</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B</b> 84016326001_a.cpm	REV 01
CAD FILE NAME:			PAGE 69 OF 77

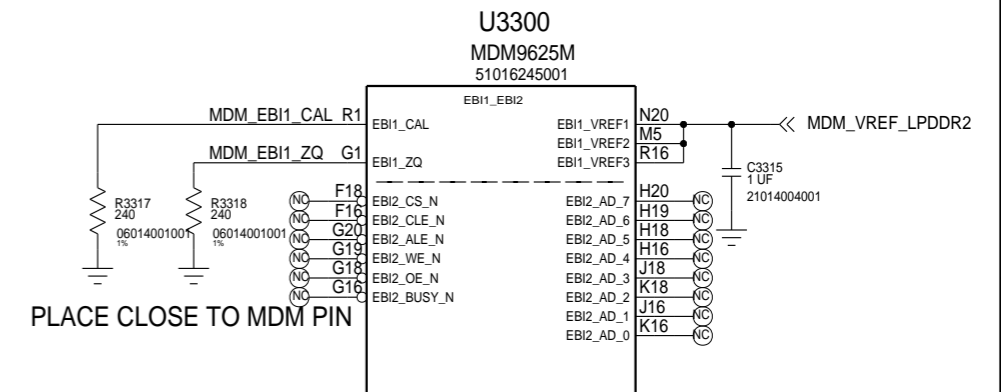
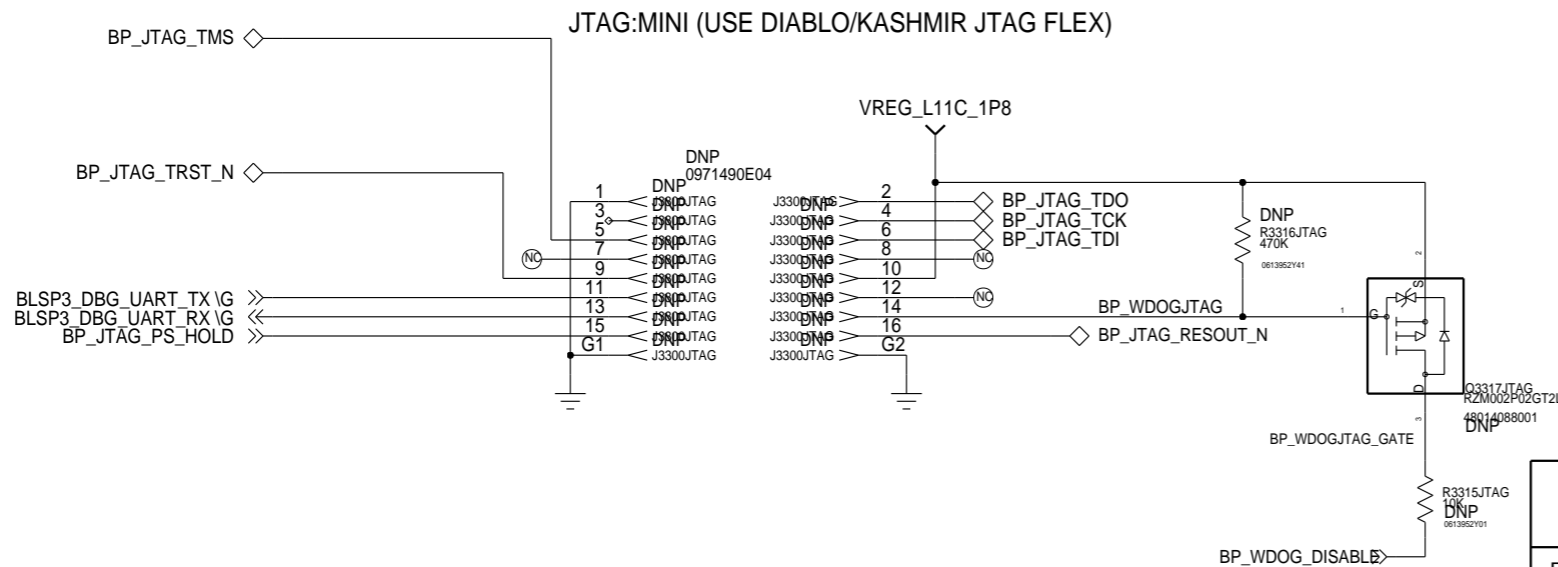
# MDM9x25M CTRL/ANALOG/JTAG

REF 3300-3399



IF USING ET, PLACE R3308 & R3305, DNP R3209  
IF NOT USING ET, DNP R3308 & R3305, PLACE R3309 AND REPLACE C3304 W/ 00HM

NOTE: PLACE R3309W NEAR PIN W10 FOR WING BRD  
DELETE R3309W AND LEAVE PIN W10 NC FOR PORTABLE



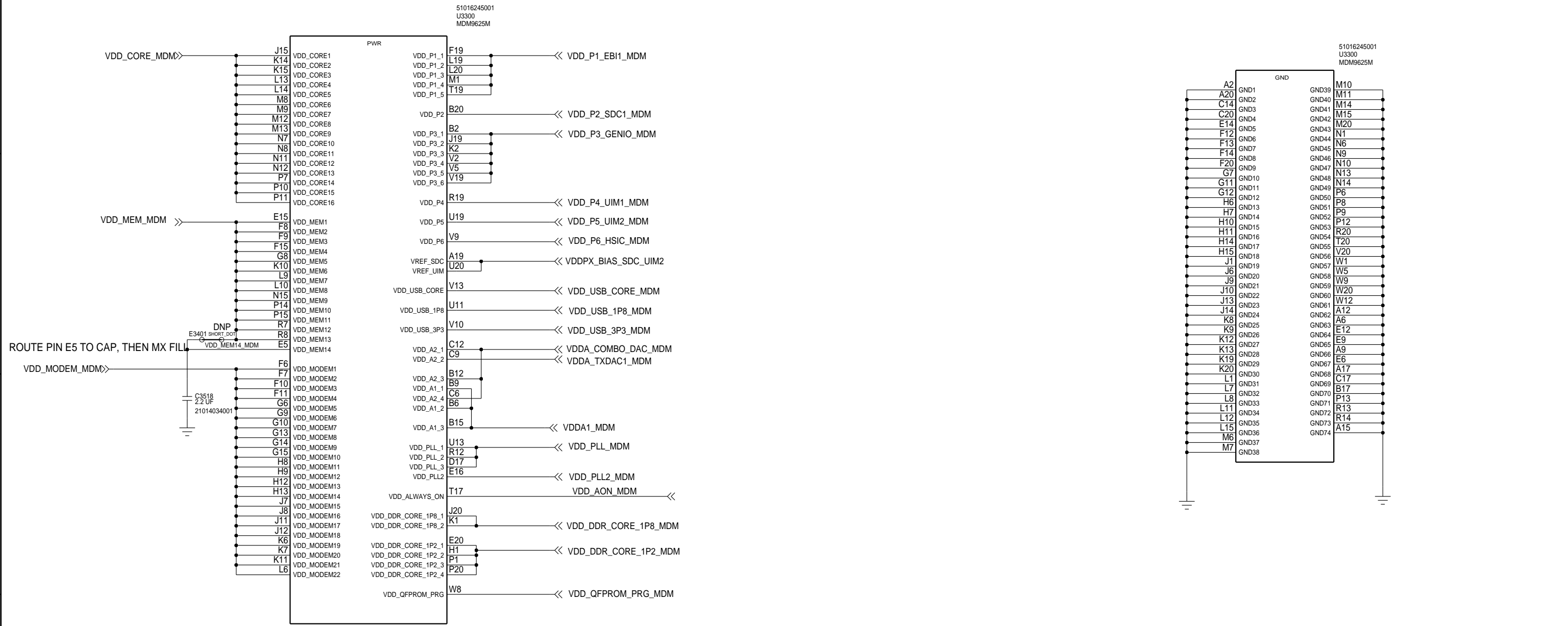
PLACE CLOSE TO MDM PIN

BASED ON 80-NJ851-41 REV.A

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: THIREN RAYAMAJHI		BLOCK TITLE:	
LAST MODIFIED BY: THIREN RAYAMAJHI Thu Jun 05 15:25:09 2014		<b>block_mdm9x25m_pm8019</b>	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION		B 84016326001_a.cpm	01
		CAD FILE NAME:	PAGE 70 OF 77

# MDM9x25M POWER1/2

REF 3400-3499

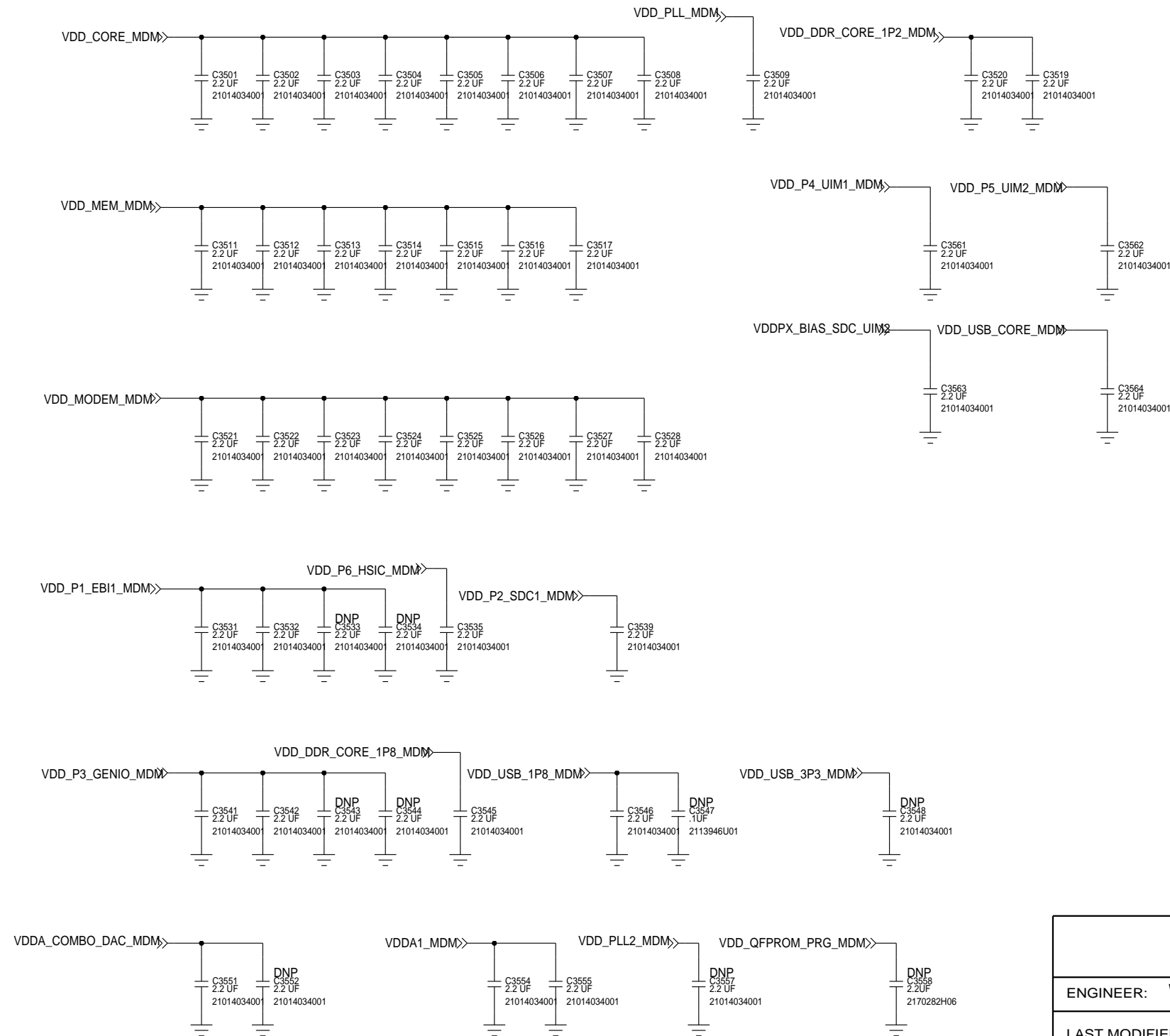


BASED ON 80-NJ851-41 REV.A

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: W00281		BLOCK TITLE:	
LAST MODIFIED BY: W00281 Thu Jun 05 15:25:10 2014		<b>block_mdm9x25m_pm8019</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 71 OF 77	

# MDM9x25M POWER 2/2

## REF 3500-3599



BASED ON 80-NJ851-41 REV.A

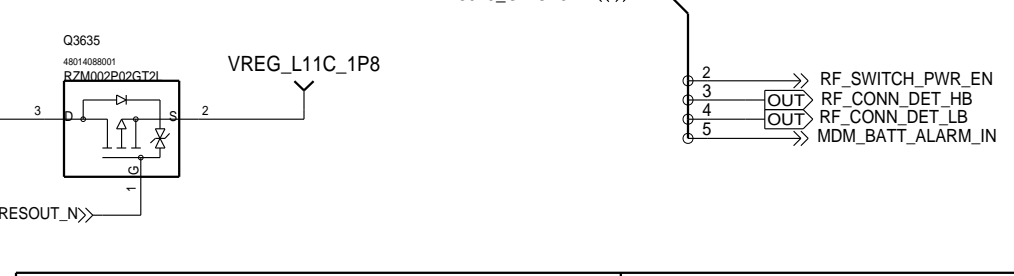
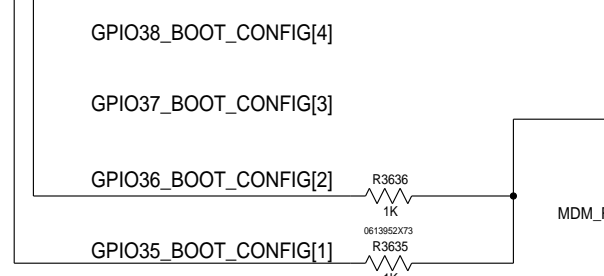
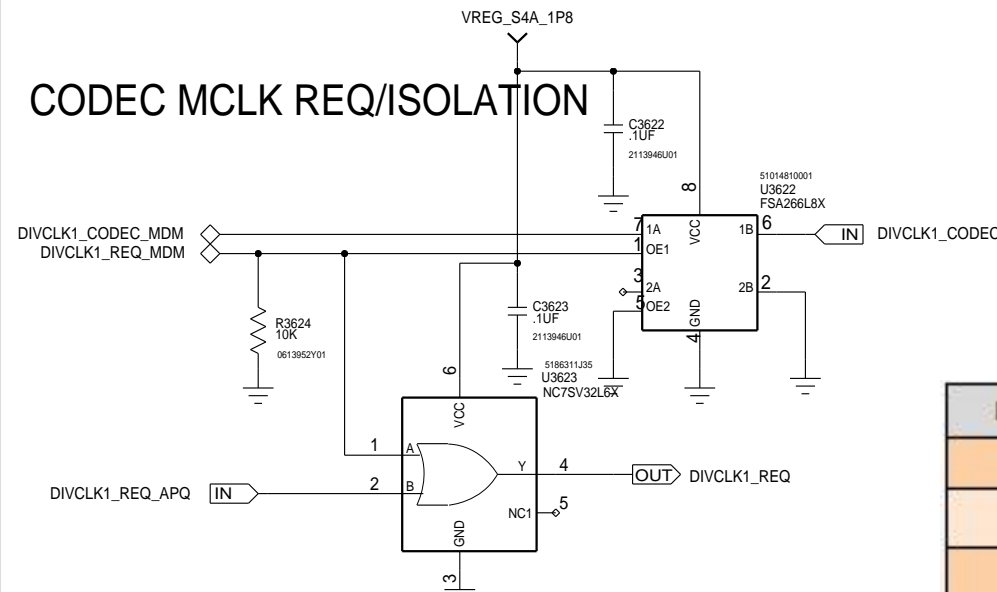
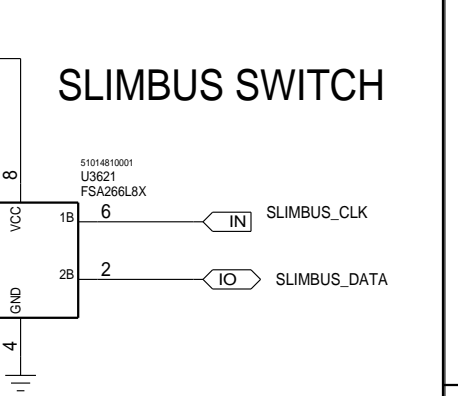
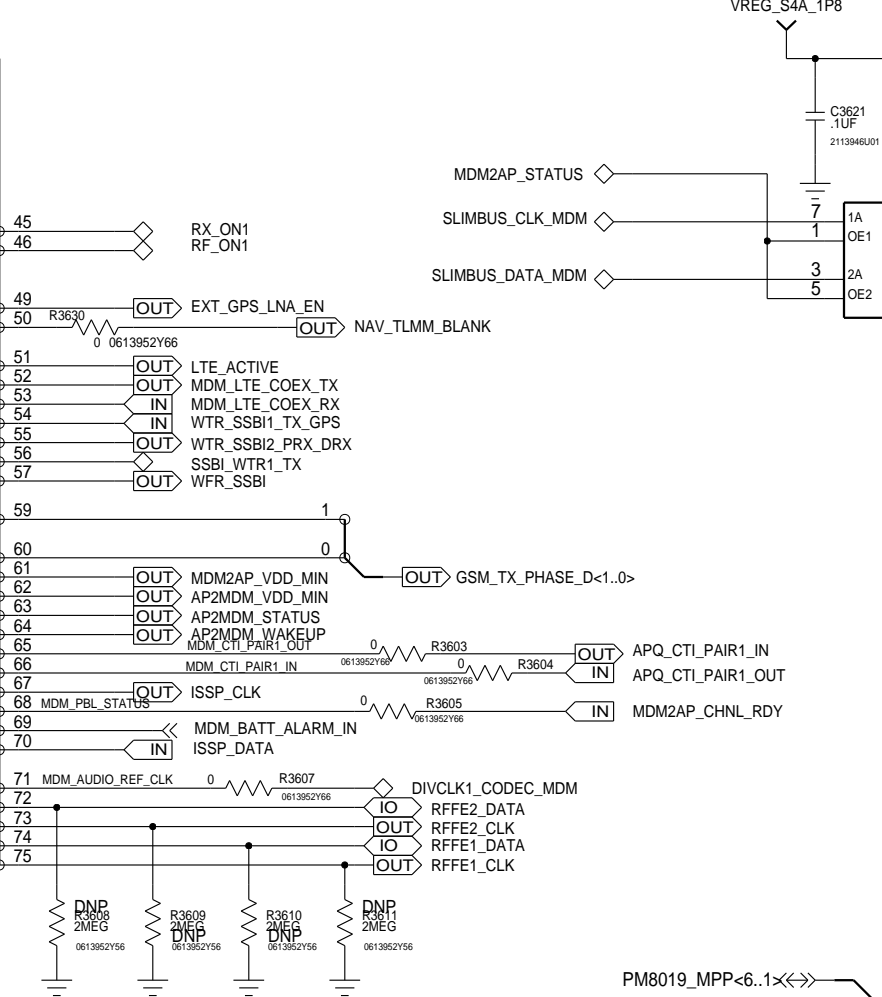
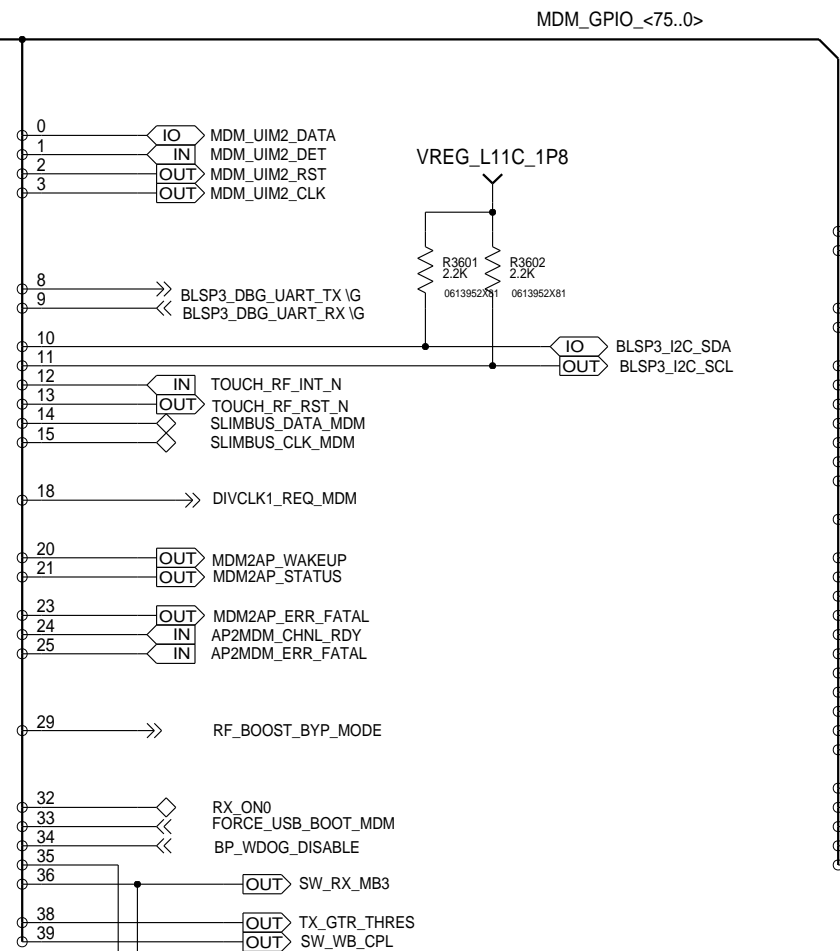
APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: W00281		BLOCK TITLE: <b>block_mdm9x25m_pm8019</b>	
LAST MODIFIED BY: W00281 Thu Jun 05 15:25:11 2014		PROJECT NAME B 84016326001_a.cpm	REV 01
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		CAD FILE NAME: PAGE 72 OF 77	



# MDM9x25M GPIO MAP

REF 3600-3699

GPIO Pin	Label	GPIO Pin	Label
0	R18	GPIO_38	H5
1	U18	GPIO_39	H2
2	T18	GPIO_40	H3
3	P18	GPIO_41	G3
4	U15	GPIO_42	F2
5	U14	GPIO_43	F1
6	V14	GPIO_44	D3
7	U16	GPIO_45	C1
8	U3	GPIO_46	C1
9	U4	GPIO_47	G5
10	W2	GPIO_48	F3
11	V3	GPIO_49	E3
12	V7	GPIO_50	F5
13	V6	GPIO_51	N5
14	W7	GPIO_52	N3
15	U8	GPIO_53	T3
16	M18	GPIO_54	E2
17	M16	GPIO_55	D1
18	N16	GPIO_56	E1
19	L16	GPIO_57	T1
20	D18	GPIO_58	R6
21	C18	GPIO_59	R3
22	E19	GPIO_60	V8
23	E18	GPIO_61	U7
24	P16	GPIO_62	V8
25	L18	GPIO_63	W4
26	L5	GPIO_64	W3
27	M3	GPIO_65	U6
28	K3	GPIO_66	T2
29	L3	GPIO_67	R15
30	M2	GPIO_68	V4
31	K5	GPIO_69	U17
32	B1	GPIO_70	W6
33	C2	GPIO_71	V1
34	J5	GPIO_72	U2
35	L2	GPIO_73	U5
36	J3	GPIO_74	U1
37	J2	GPIO_75	R5



BOOT_CONFIG[4:1]	Boot device
0b00000	NAND followed by USB
0b00001	NAND
0b00010	USB
0b00011	HSIC

**APPROVALS**

ENGINEER: W00281

LAST MODIFIED BY: W00281  
Thu Jun 05 15:25:12 2014

MOTOROLA CONFIDENTIAL RESTRICTED

THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.

© COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION

**MOTOROLA**  
MOBILE DEVICES

BLOCK TITLE:  
**block\_mdm9x25m\_pm8019**

PROJECT NAME	REV
B 84016326001_a.cpm	01

CAD FILE NAME:

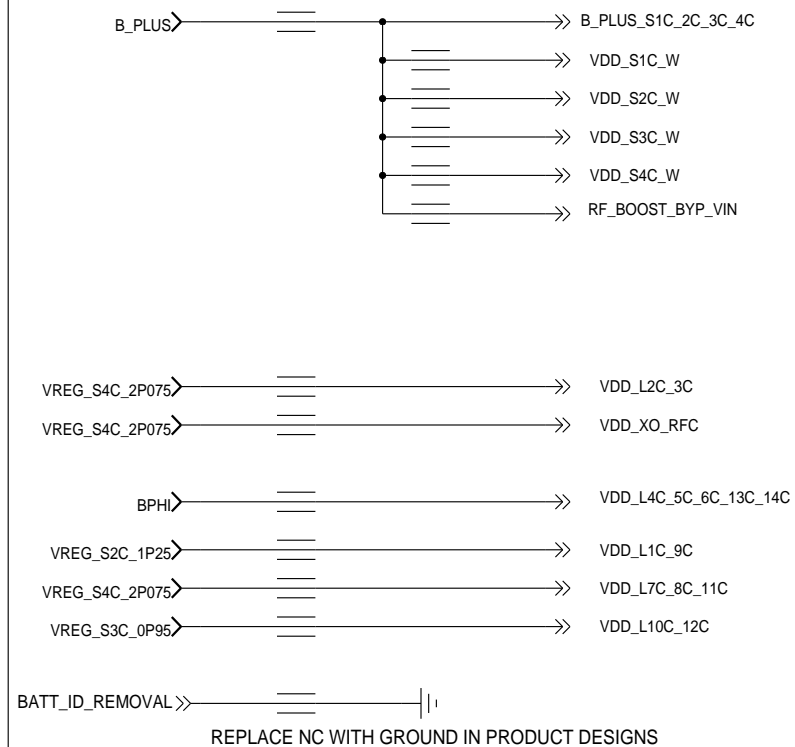
PAGE 73 OF 77

BASED ON 80-NJ851-41 REV.A

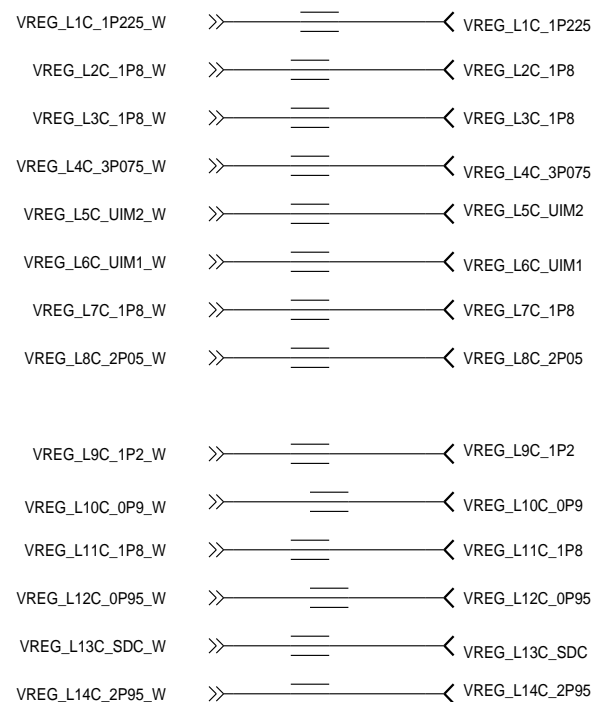
# PM8019 POWER

REF 3900-3949

## SUPPLIES



REPLACE NC WITH GROUND IN PRODUCT DESIGNS



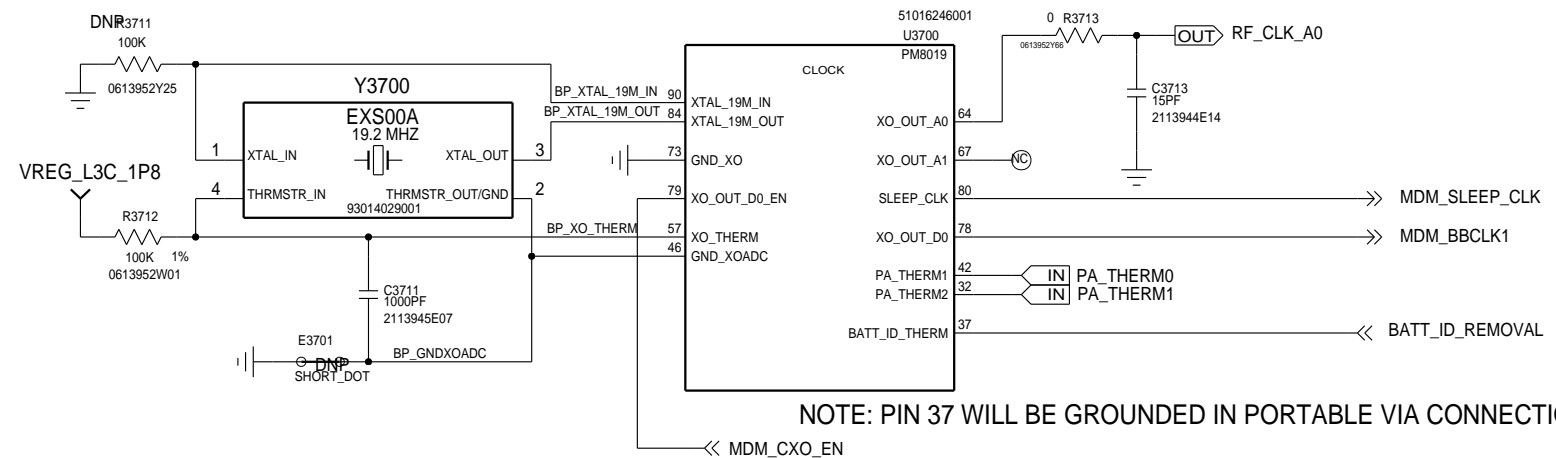
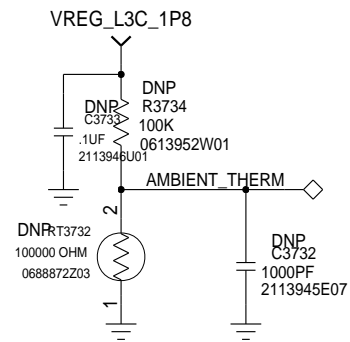
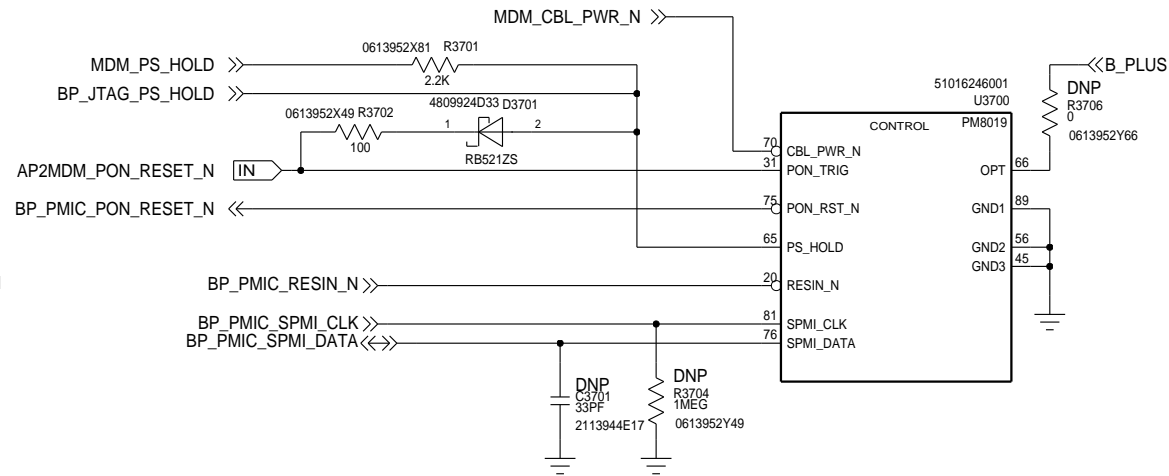
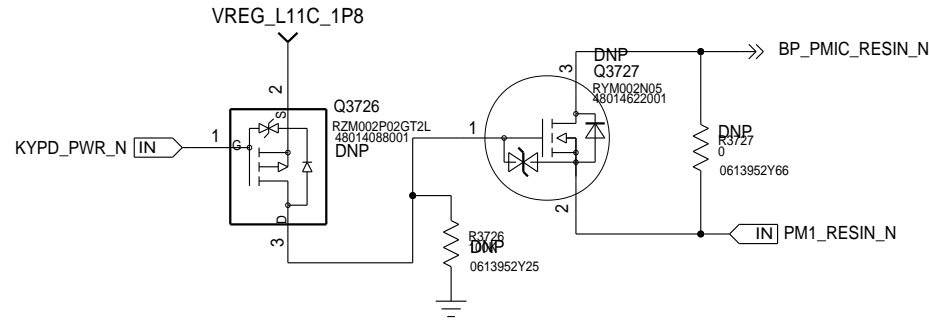
BASED ON 80-NJ851-41 REV.A

APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: W00281		BLOCK TITLE:	
LAST MODIFIED BY: W00281 Thu Jun 05 15:25:13 2014		<b>block_mdm9x25m_pm8019</b>	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME <b>B 84016326001_a.cpm</b>	REV <b>01</b>
		CAD FILE NAME:	
		PAGE 74 OF 77	

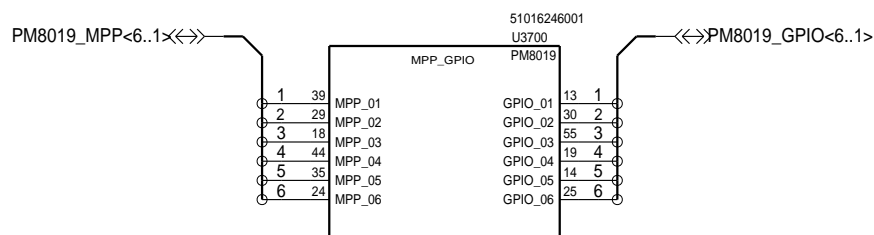
# PM8019 CONTROL/CLOCK

REF 3700-3799

OR GATE FORCE BP RESET  
 BP\_PMIC\_RESIN\_N LOW  
 WHEN BOTH KYPD\_PWR\_N AND PM1\_RESIN\_N LOW



NOTE: PIN 37 WILL BE GROUNDED IN PORTABLE VIA CONNECTION ON PM8019 POWER SHEET

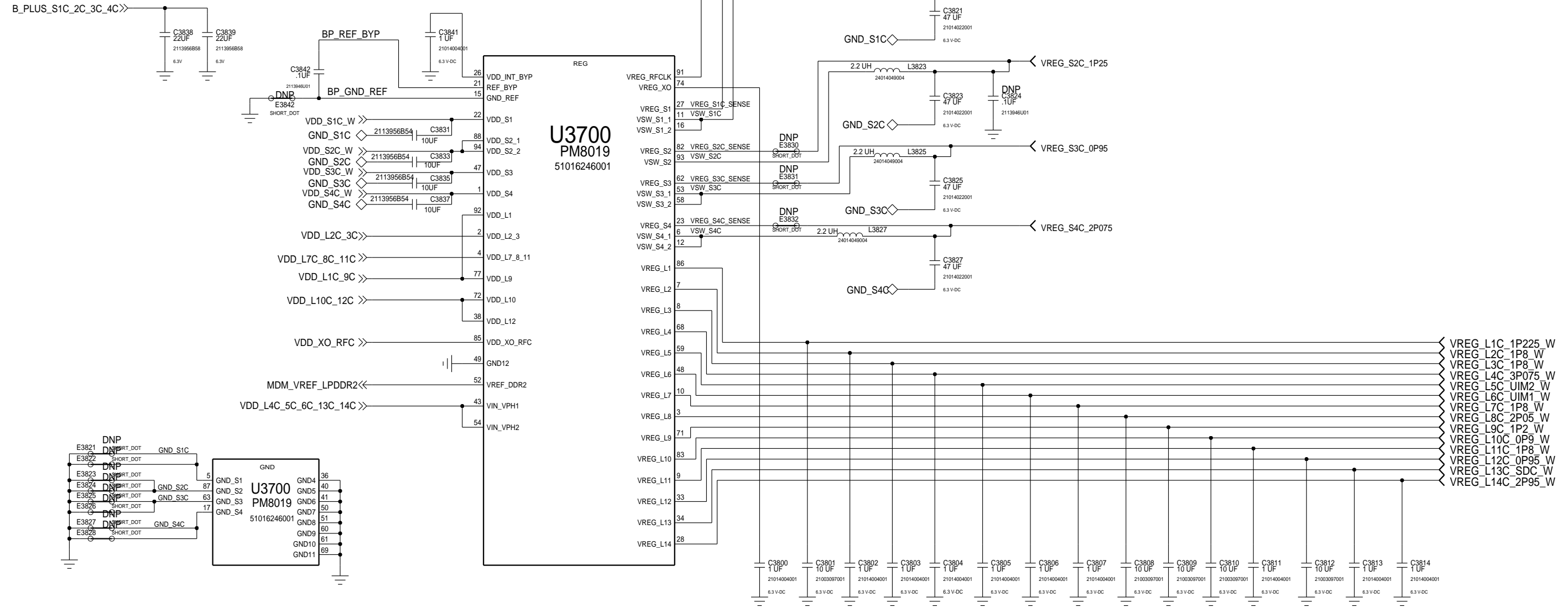


BASED ON 80-NJ851-41 REV.A

APPROVALS			
ENGINEER: W00281		BLOCK TITLE:	
LAST MODIFIED BY: W00281 Mon Jul 21 15:13:45 2014		<h2>block_mdm9x25m_pm8019</h2>	
MOTOROLA CONFIDENTIAL RESTRICTED		PROJECT NAME	REV
<small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.                  © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		B 84016326001_a.cpm	01
CAD FILE NAME:		PAGE 75 OF 77	

# PM8019 SMPS VREGS

REF 3800-3899

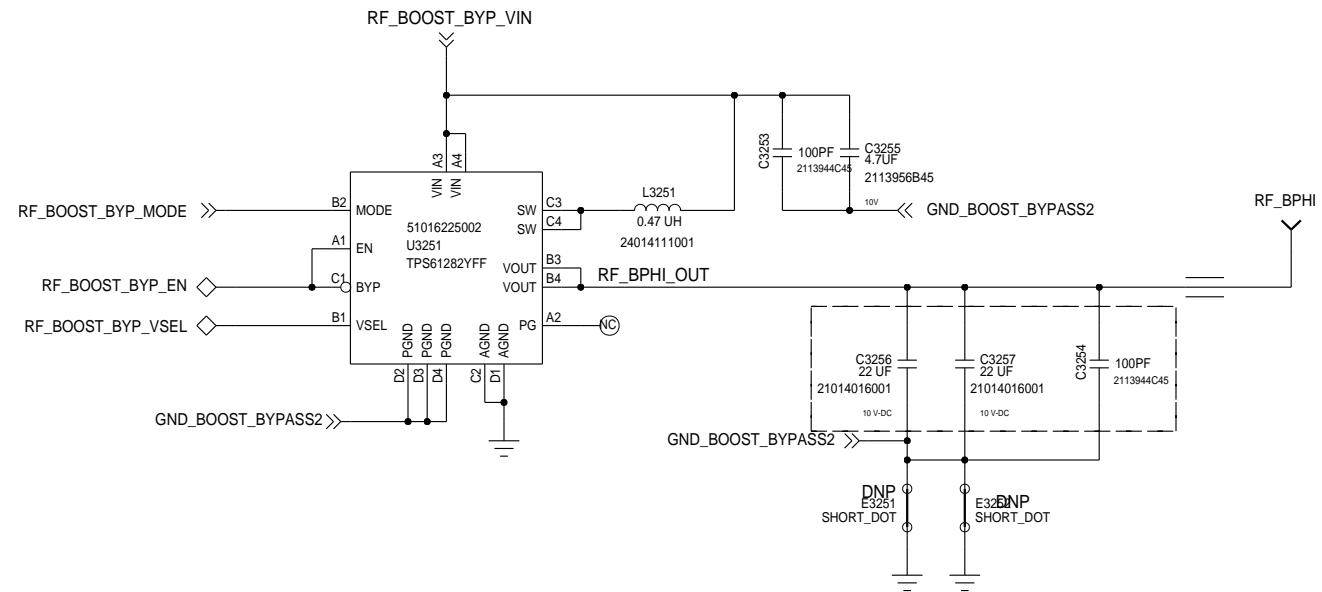
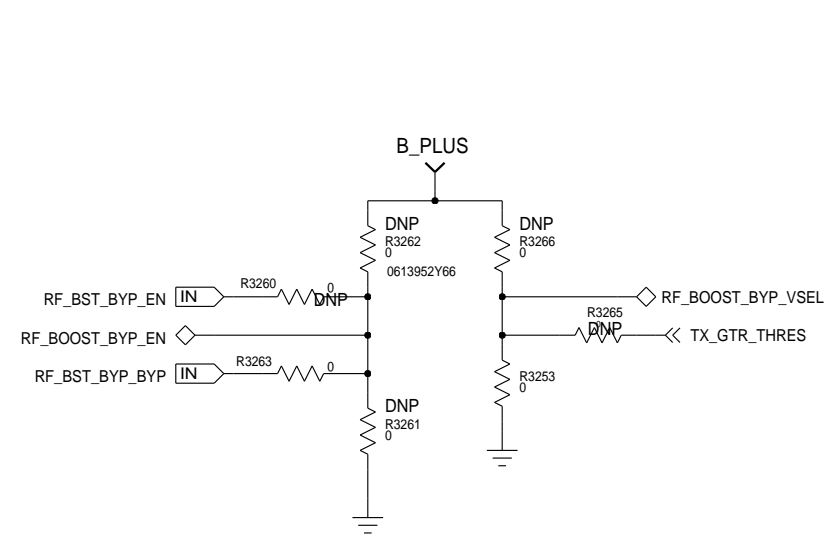


BASED ON 80-NJ851-41 REV.A

APPROVALS		 <b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: W00281		BLOCK TITLE:	
LAST MODIFIED BY: W00281 Thu Jun 05 15:25:15 2014		block_mdm9x25m_pm8019	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT.          © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
		CAD FILE NAME:	PAGE 76 OF 77

# PM8019 BST/BYP

REF 3250-3299



APPROVALS		<b>MOTOROLA</b> MOBILE DEVICES	
ENGINEER: W00281		BLOCK TITLE:	
LAST MODIFIED BY: W00281 Thu Jun 05 15:25:15 2014		block_mdm9x25m_pm8019	
MOTOROLA CONFIDENTIAL RESTRICTED <small>THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO MOTOROLA AND SHALL NOT BE USED OR DISCUSSED IN WHOLE OR IN PART WITHOUT MOTOROLA'S CONSENT. © COPYRIGHT, MOTOROLA. THIS DOES NOT IMPLY PUBLICATION</small>		PROJECT NAME	REV
		B 84016326001_a.cpm	01
		CAD FILE NAME:	
		PAGE 77 OF 77	