

REV	2 Revision Notes	Designer	1 Approver	Date
A1	First Release	Ansu/Guru/Vishal	Jothi	20-09-17

## EDUK\_SMOB (Main and Bottom PCB) COVER PAGE

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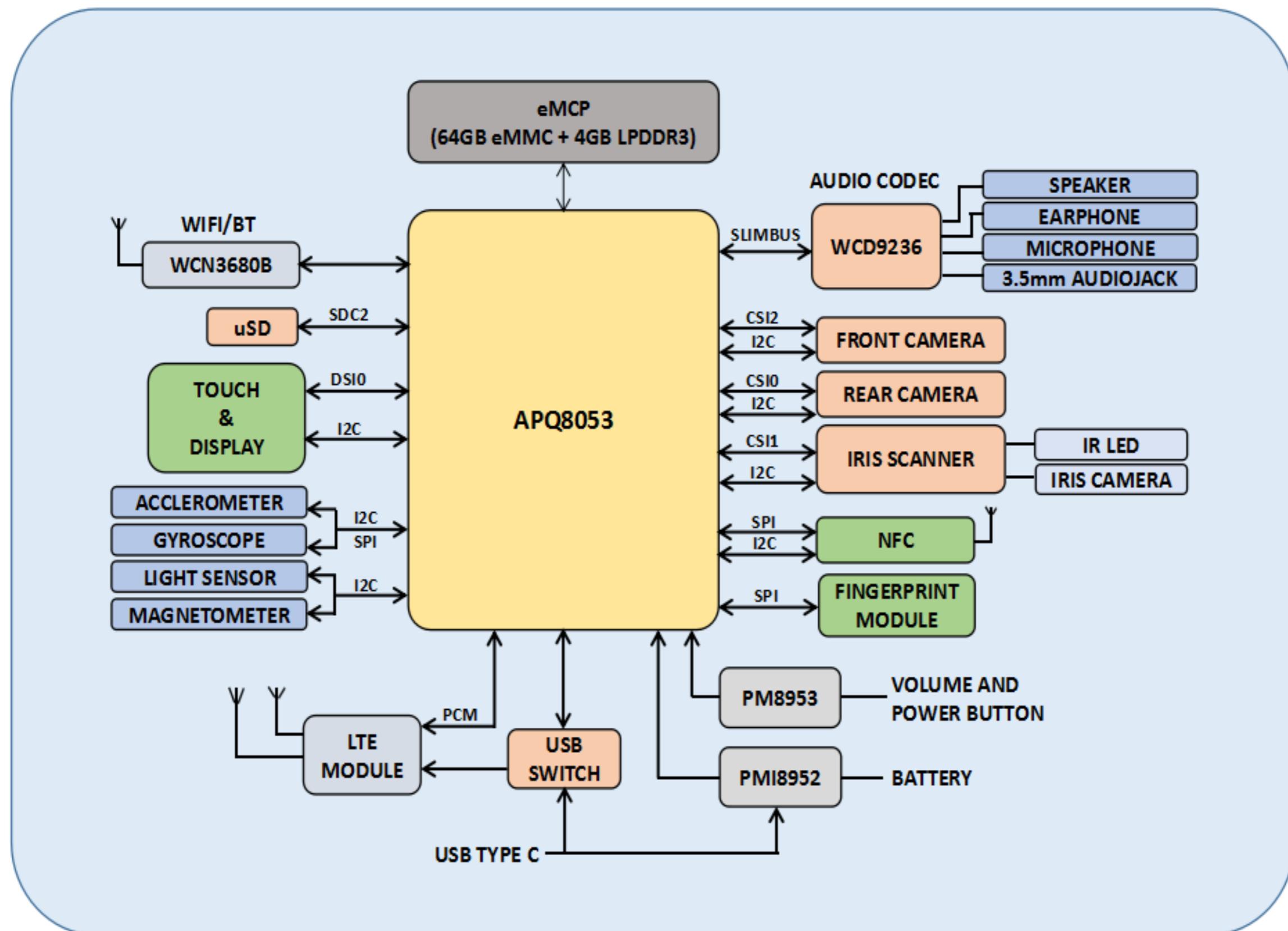
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**NOTE : Parts in this color are No Mount or DNP**

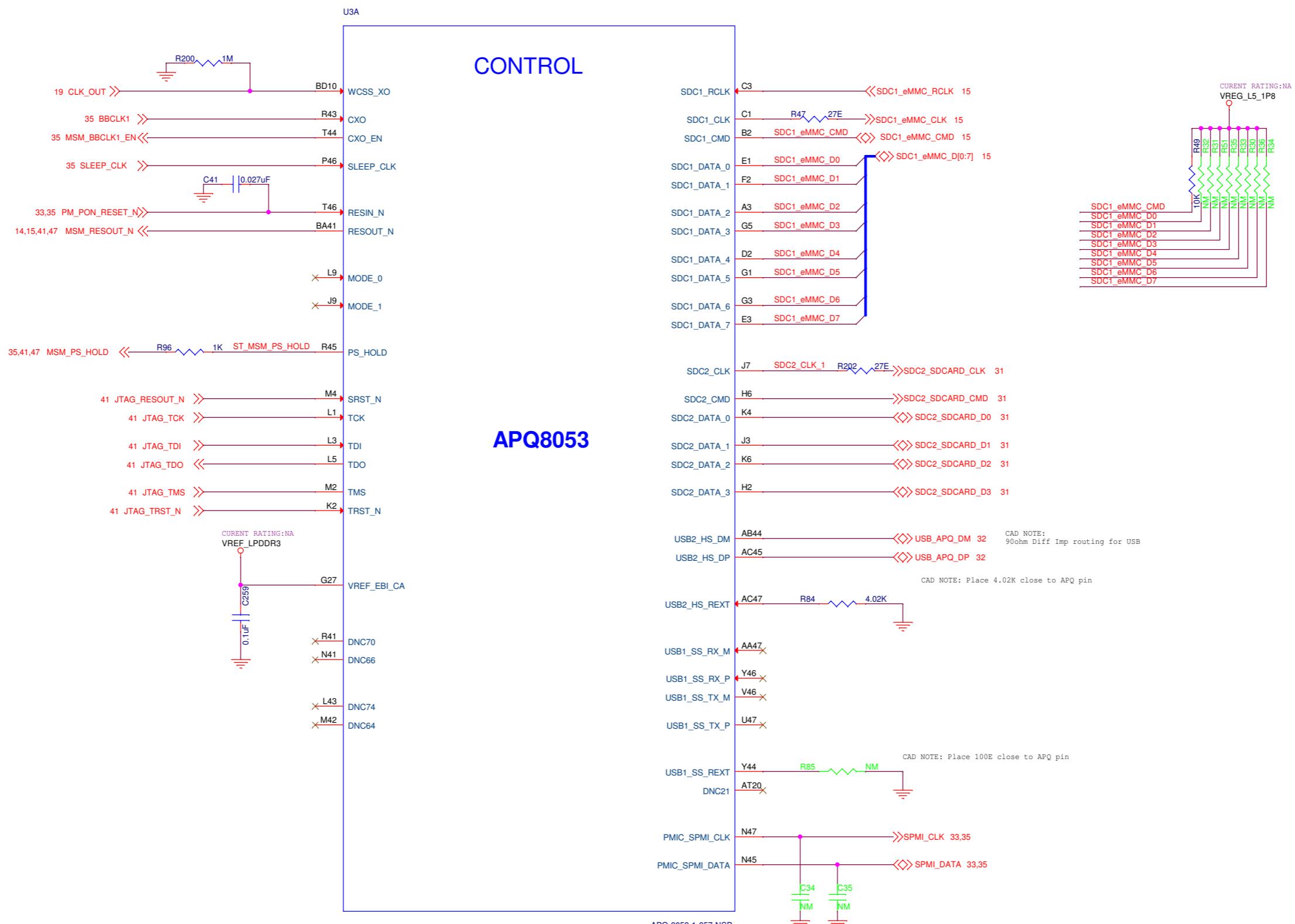
**NOTE: Text with this color are for current/power info (only for Layout use)**

CURRENT RATING:-NA - normal trace  
CURRENT RATING:-\* - Refer QRD

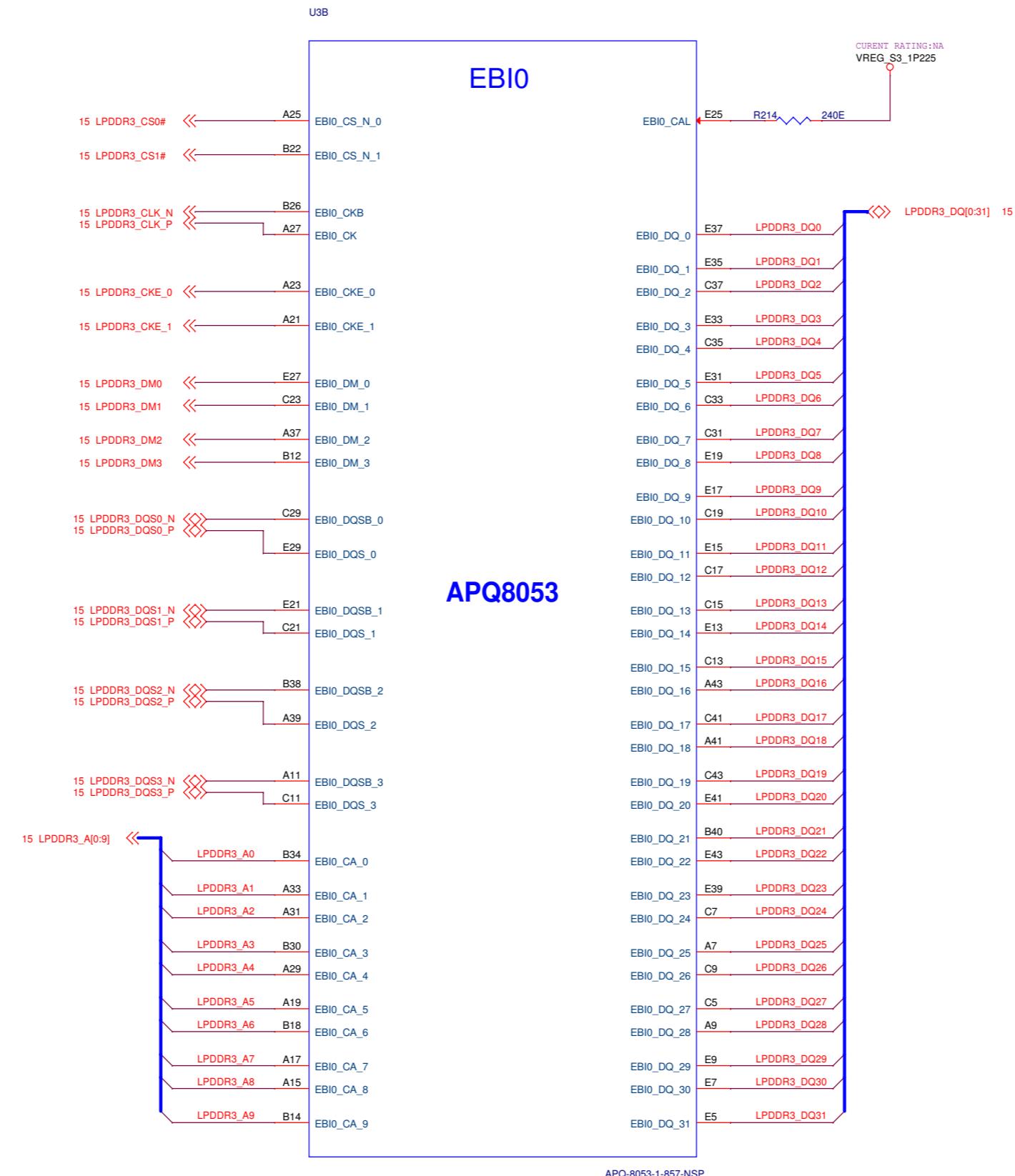
## BLOCK DIAGRAM



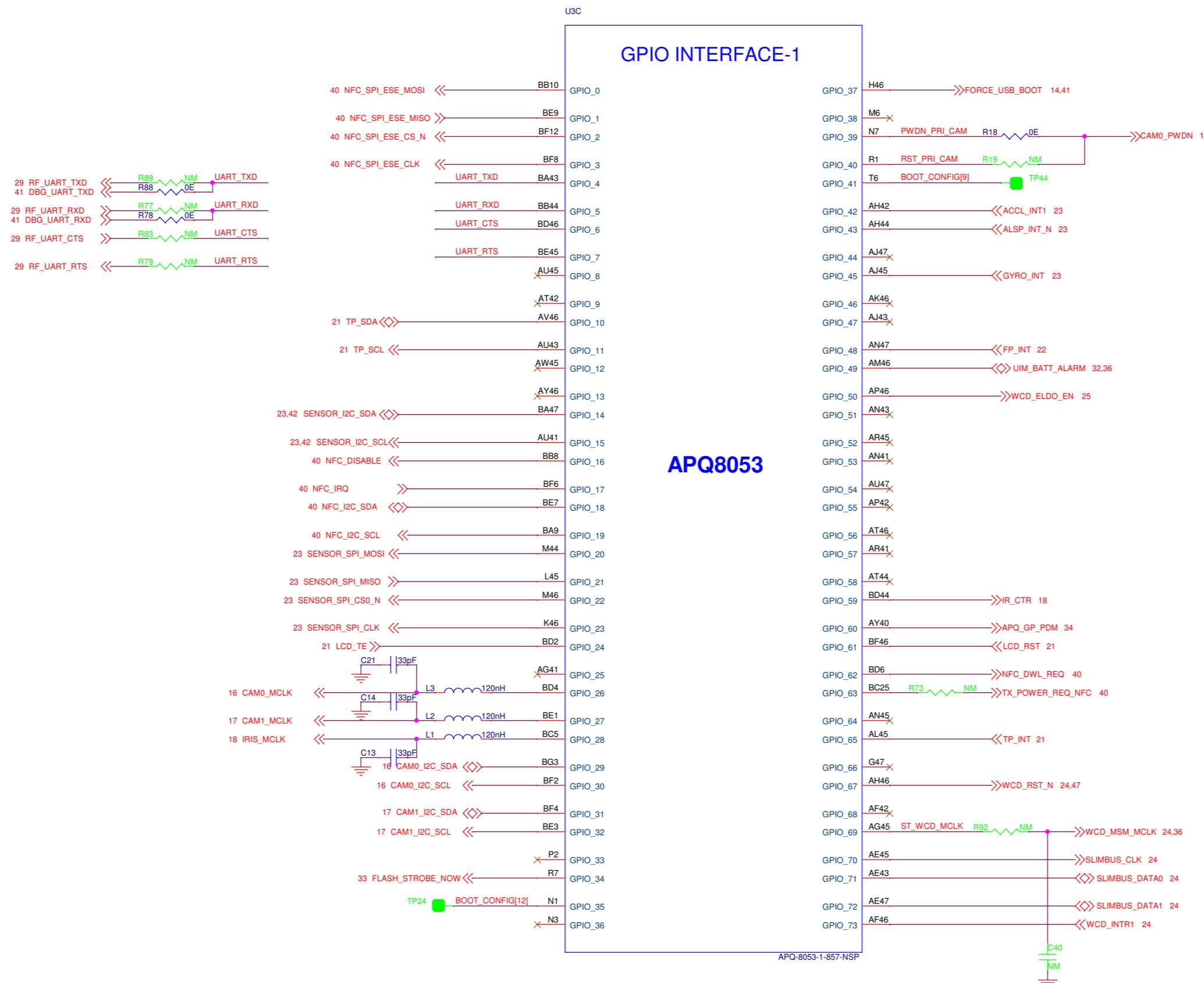
**APQ8053\_eMMC\_SD\_USB**



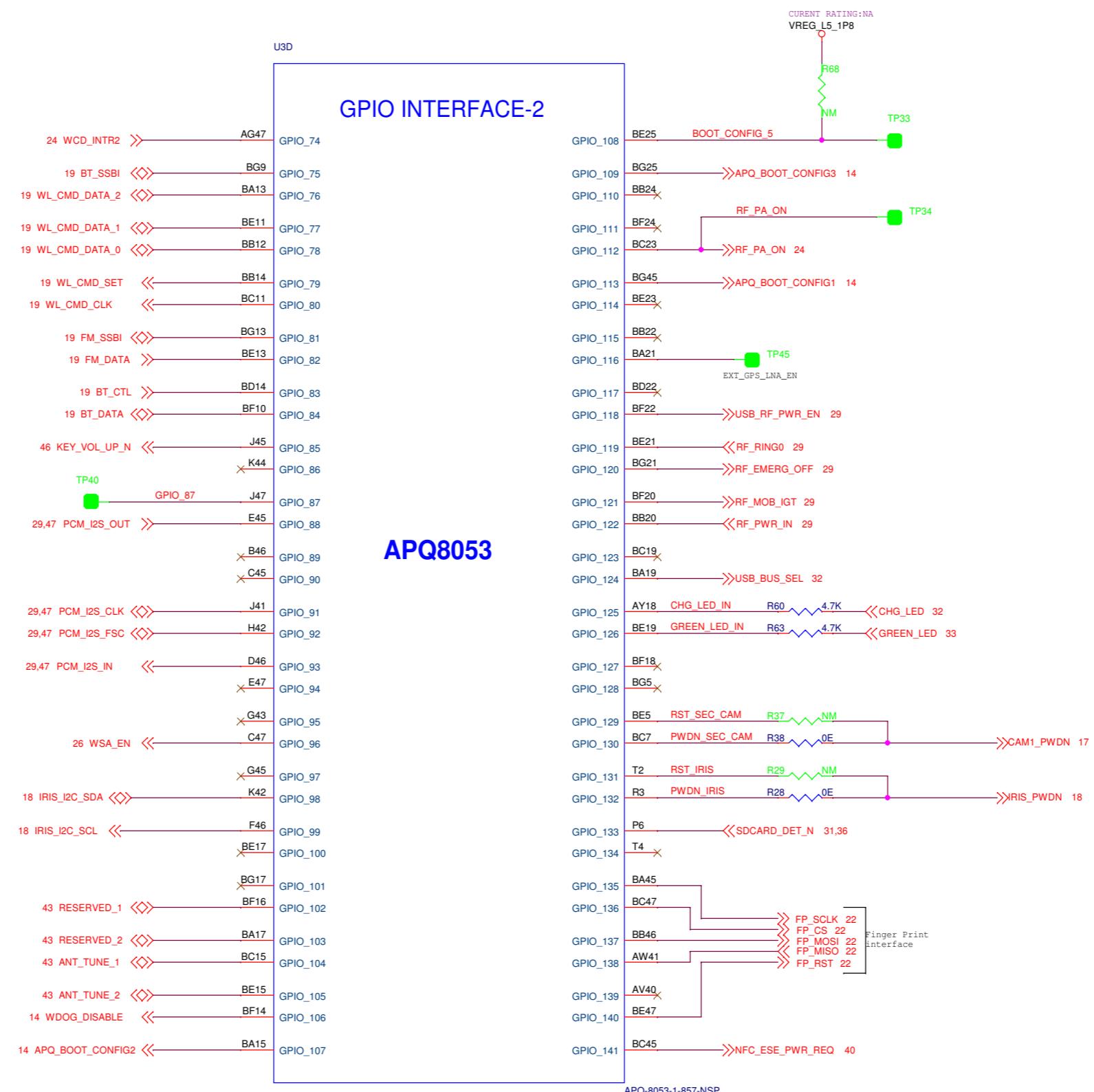
# APQ8053 LPDDR3



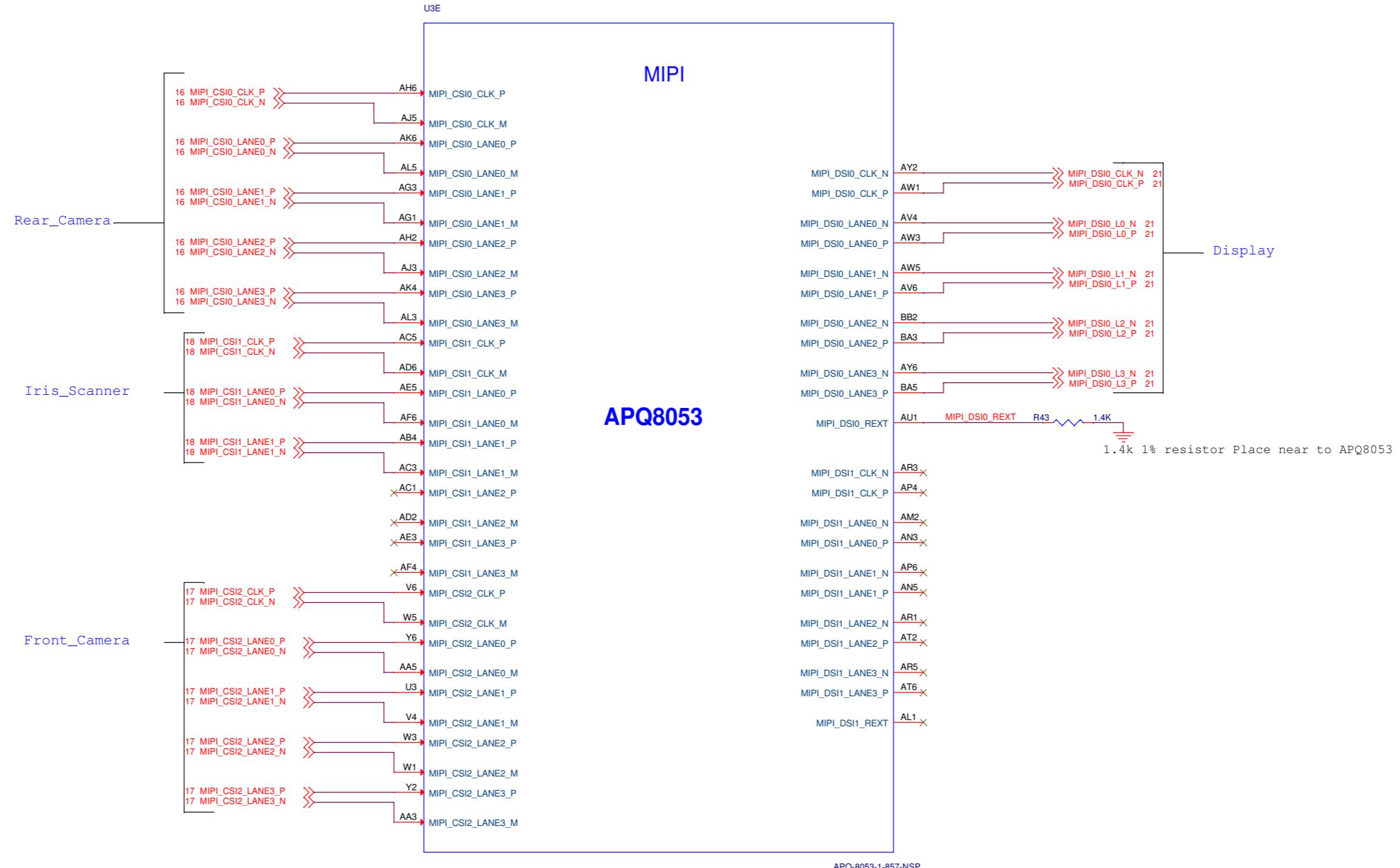
# APQ8053\_GPIO[0-73]



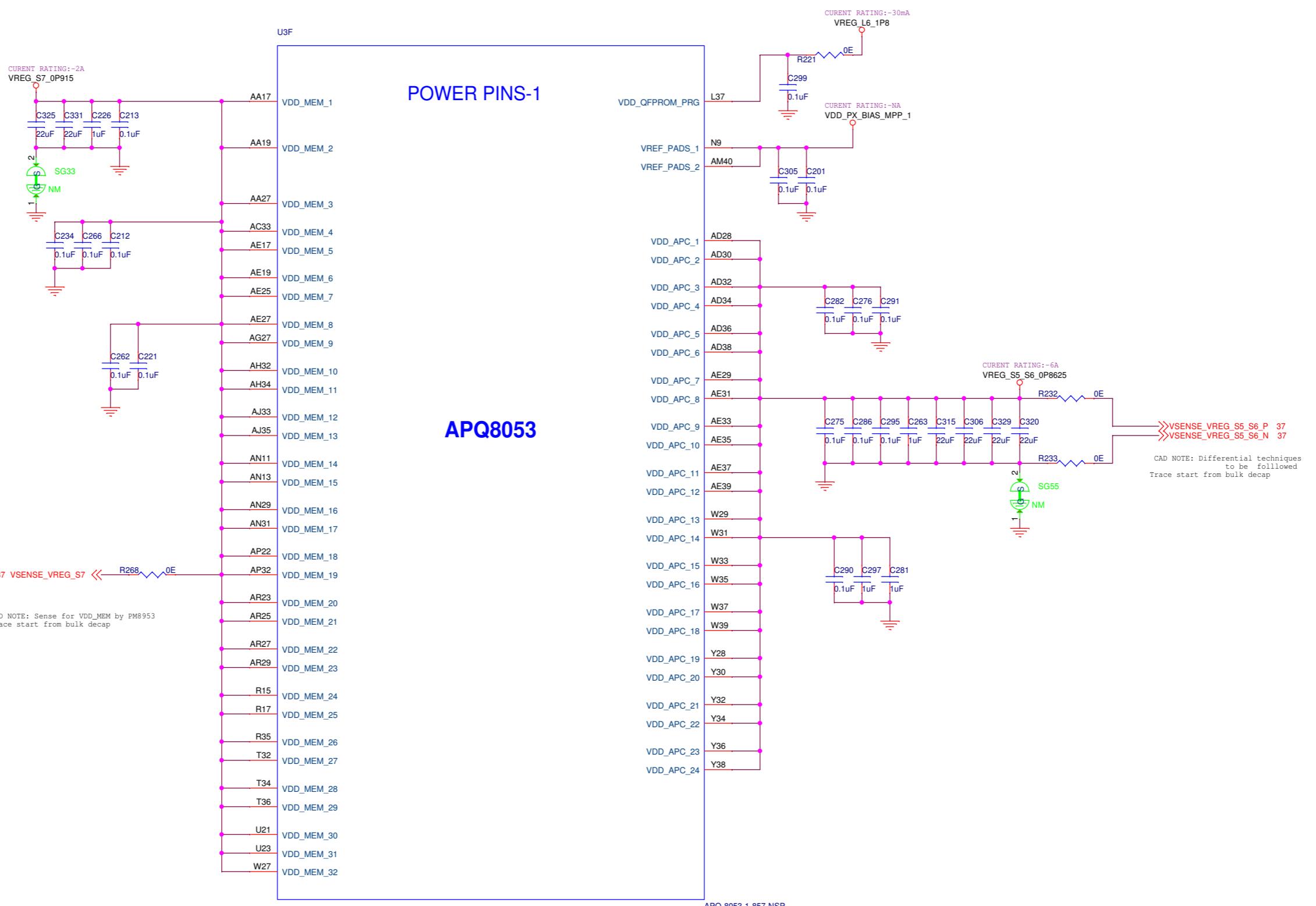
# APQ8053\_GPIO[74-141]



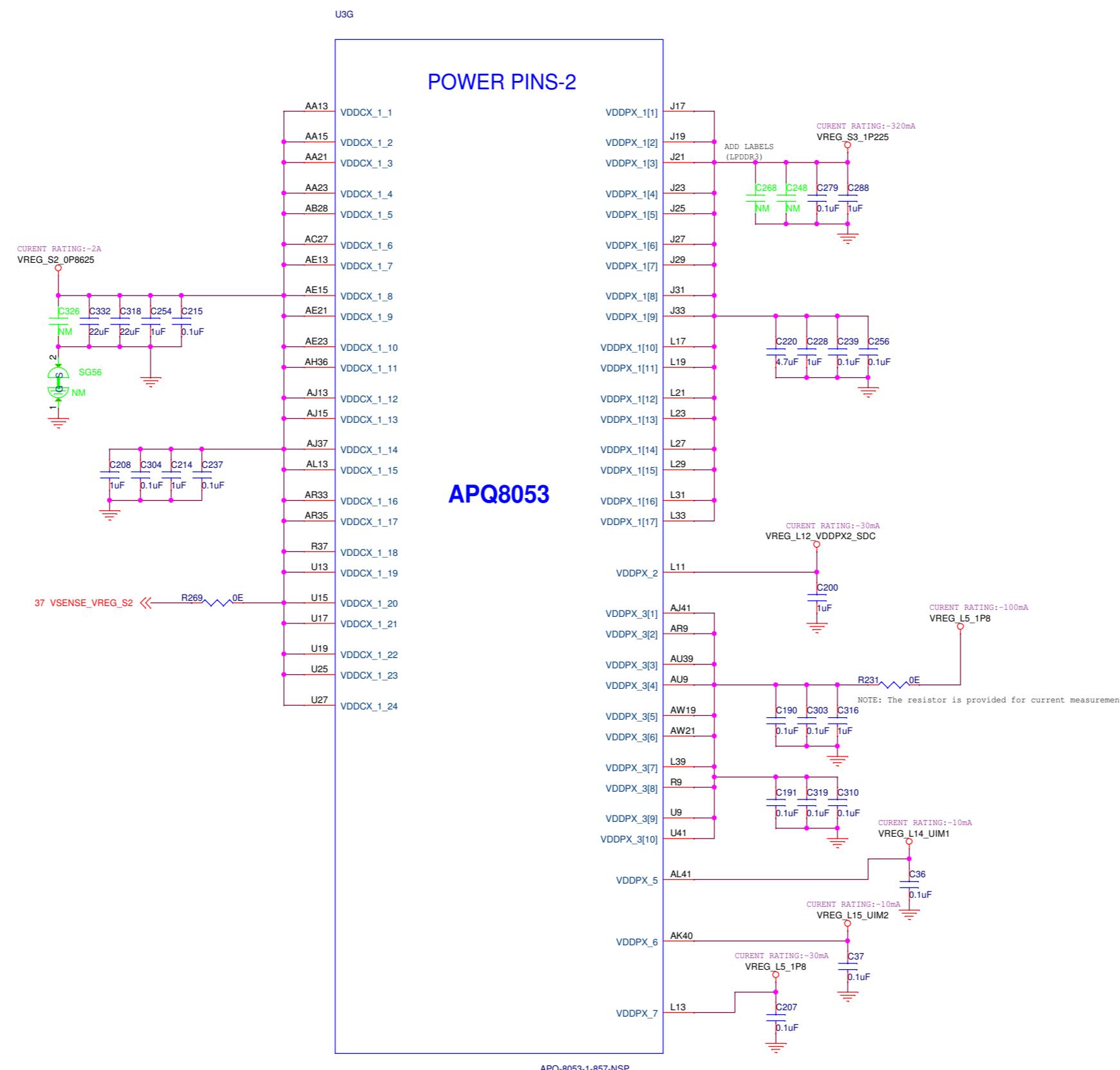
# APQ8053\_MIPI\_CSI\_MIPI\_DSI



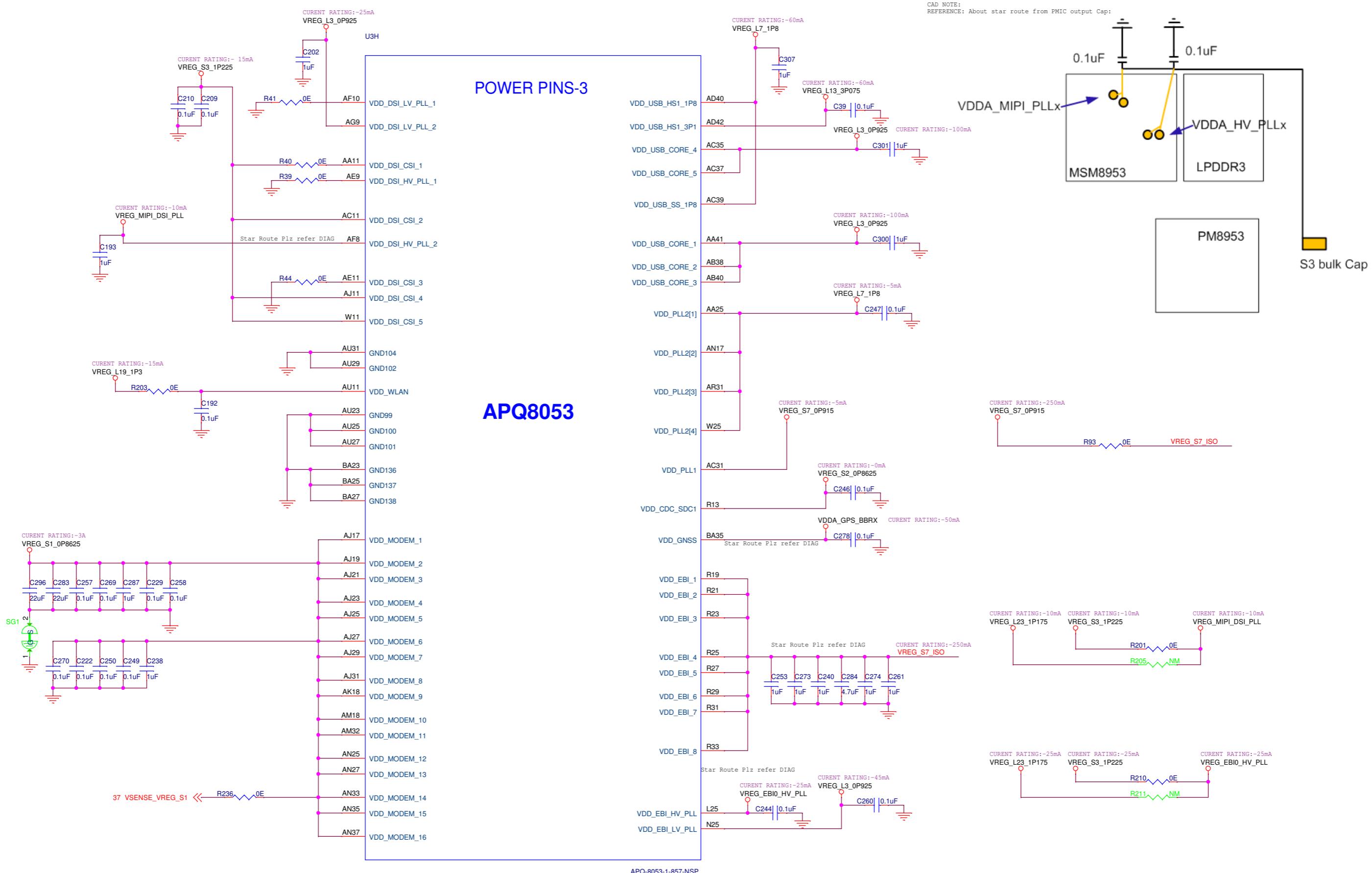
## APQ8053 POWER: 1



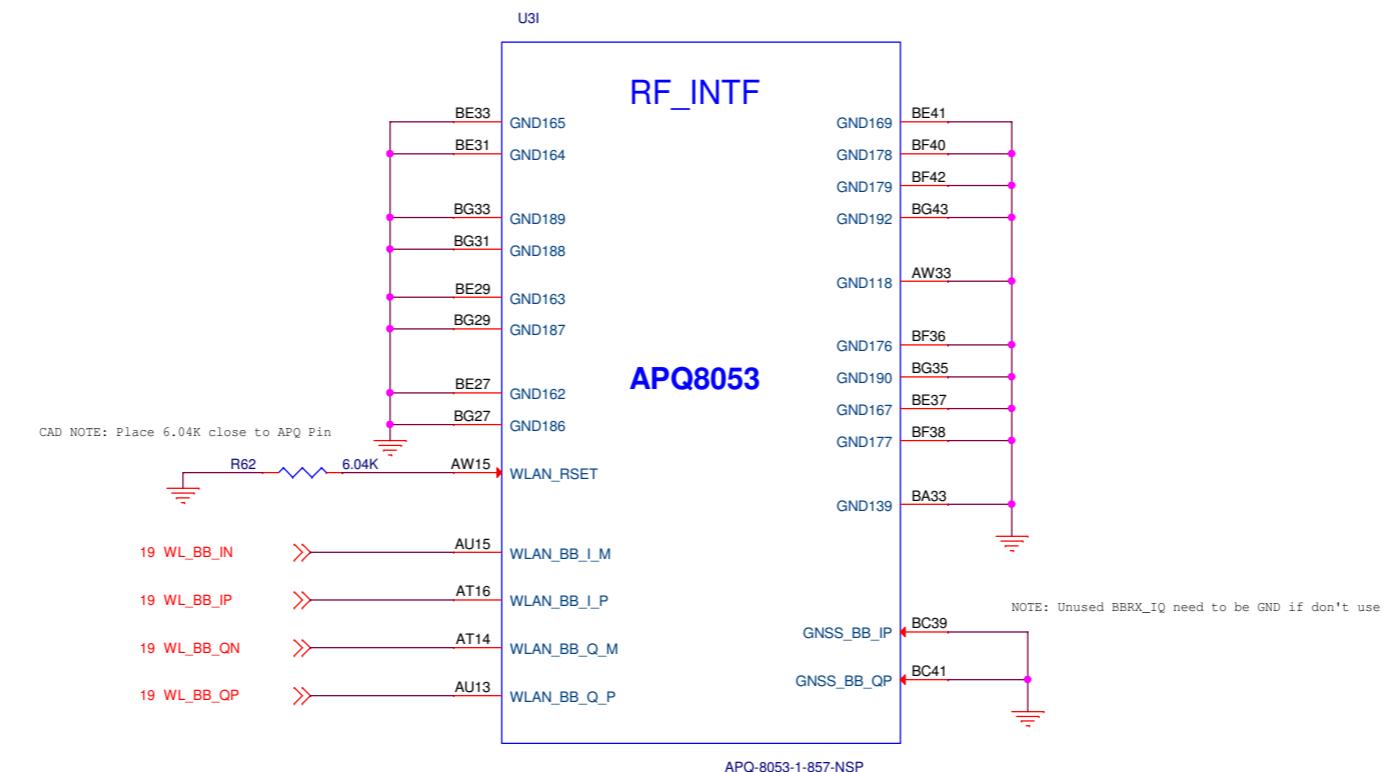
## APQ8053 POWER: 2



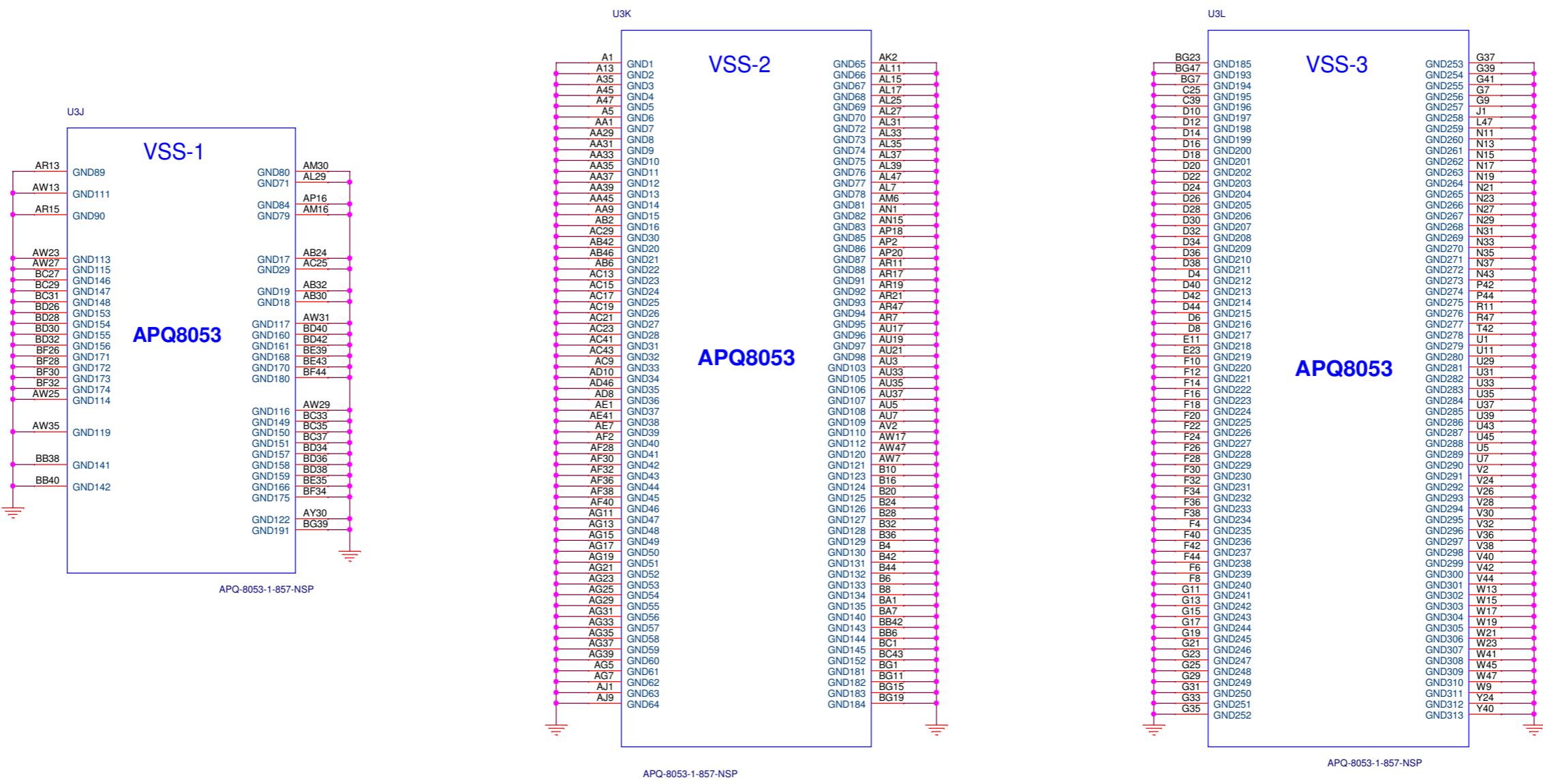
# APQ8053 POWER: 3



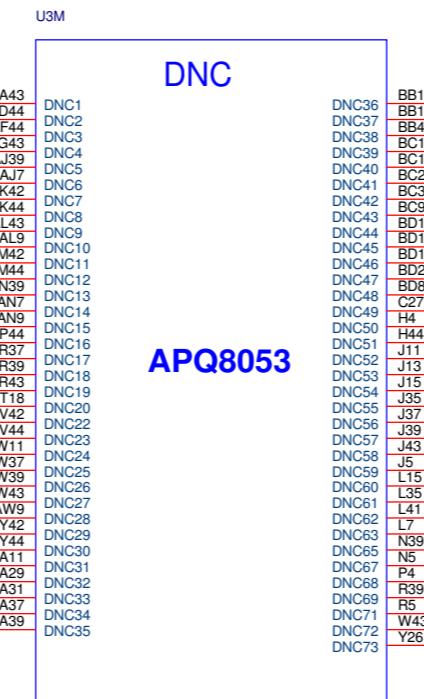
# APQ8053\_RF\_INTERFACE



# APQ8053 GND



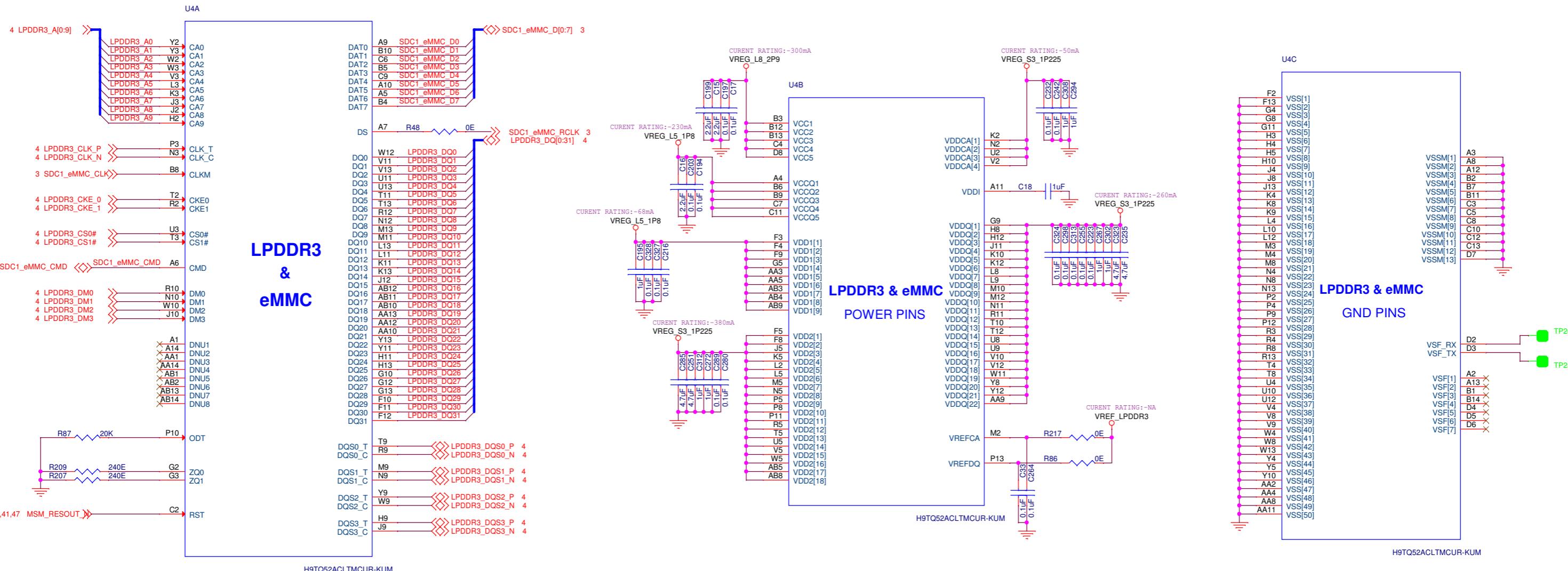
# APQ8053 DNC



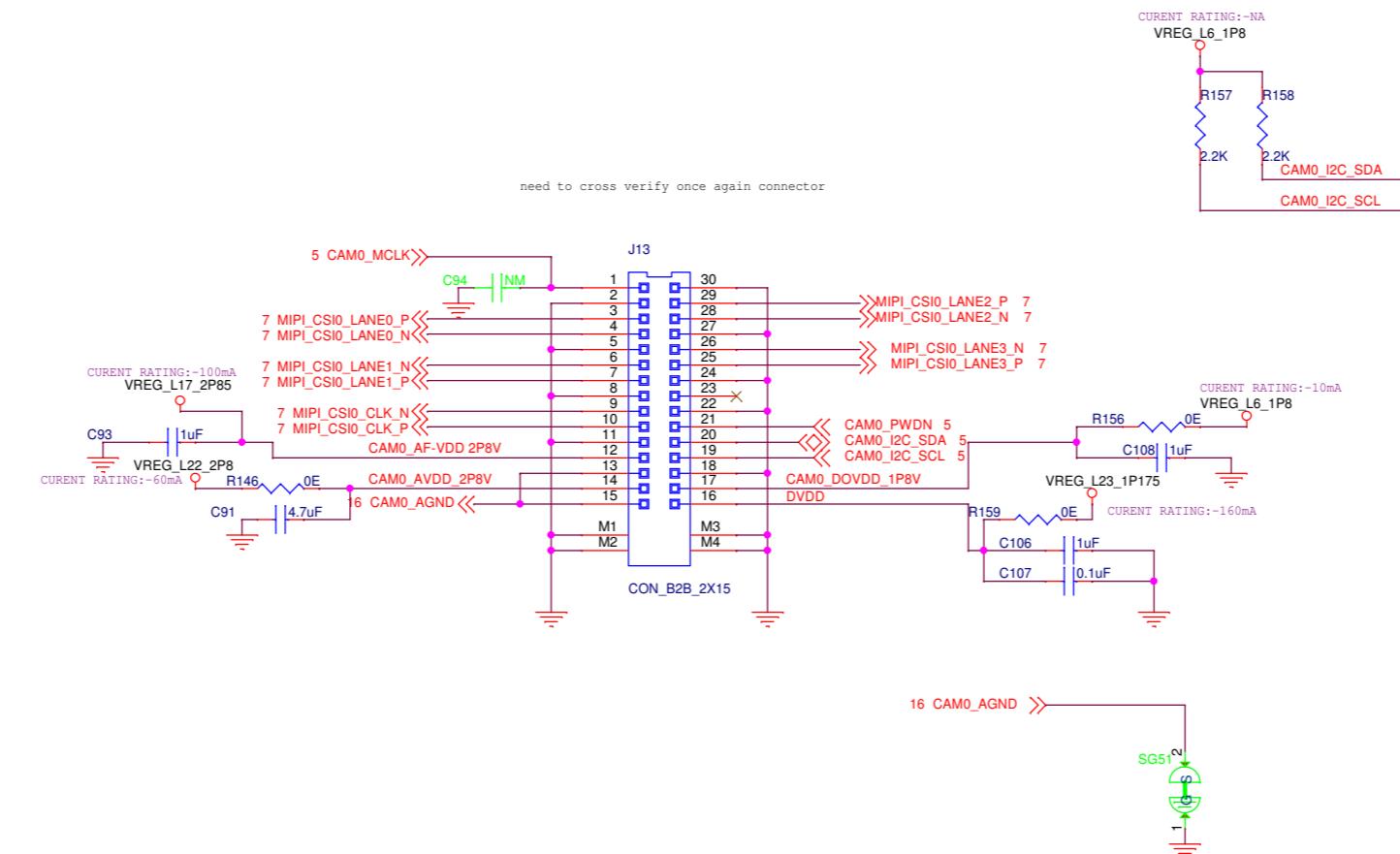
# APQ8053 BOOT CONFIGURATION



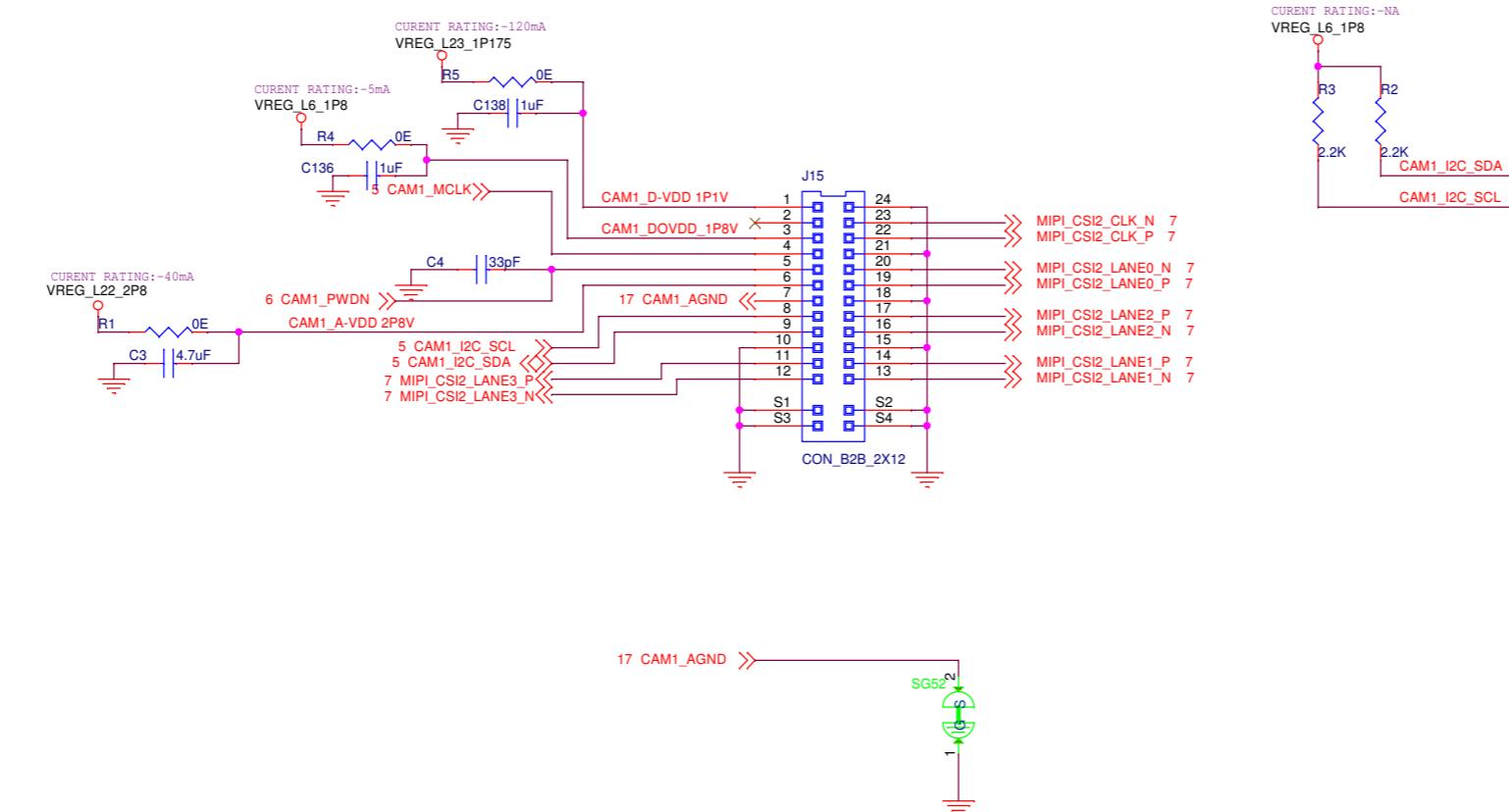
# LPDDR3 And eMMC



## REAR\_CAMERA\_13MP

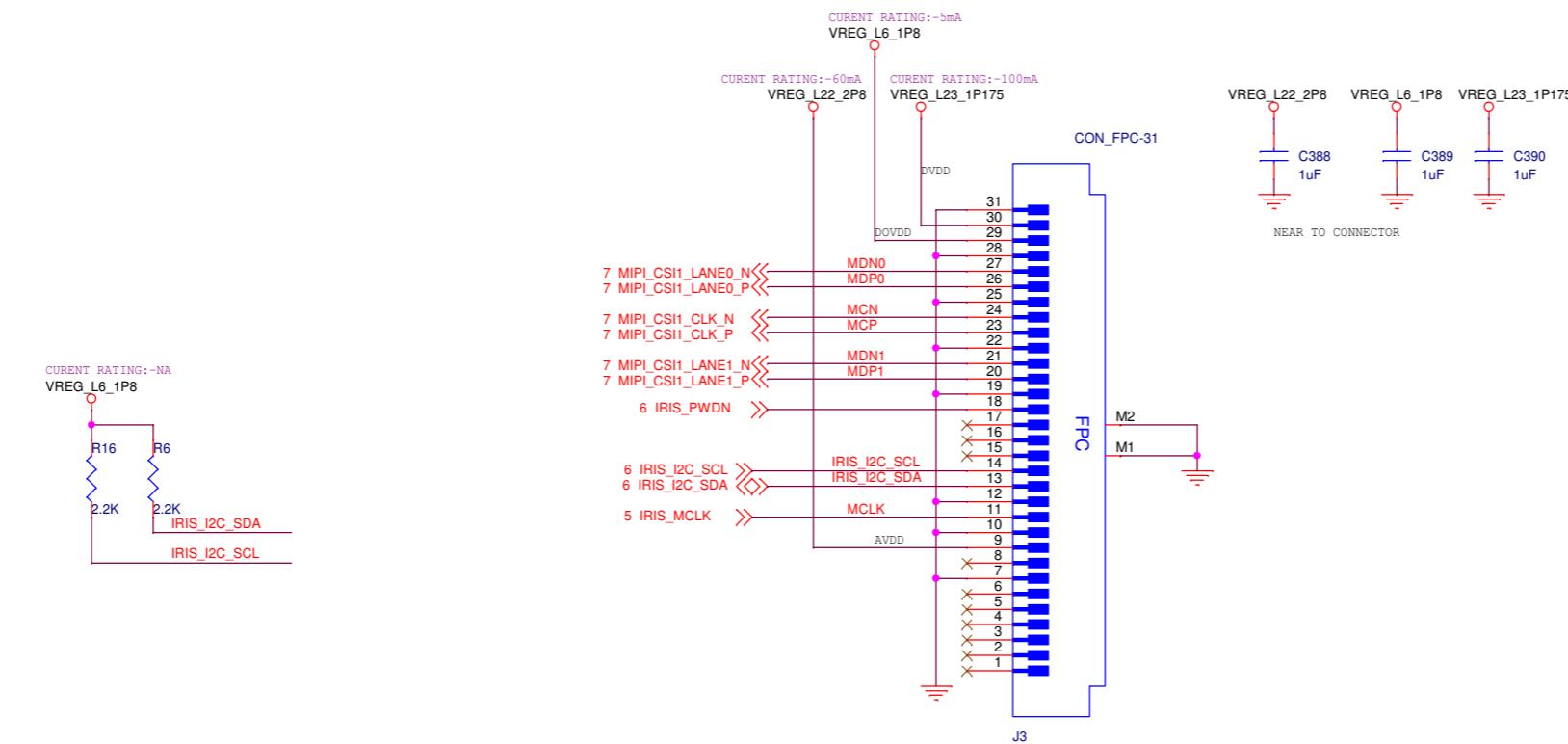


# FRONT\_CAMERA\_8MP

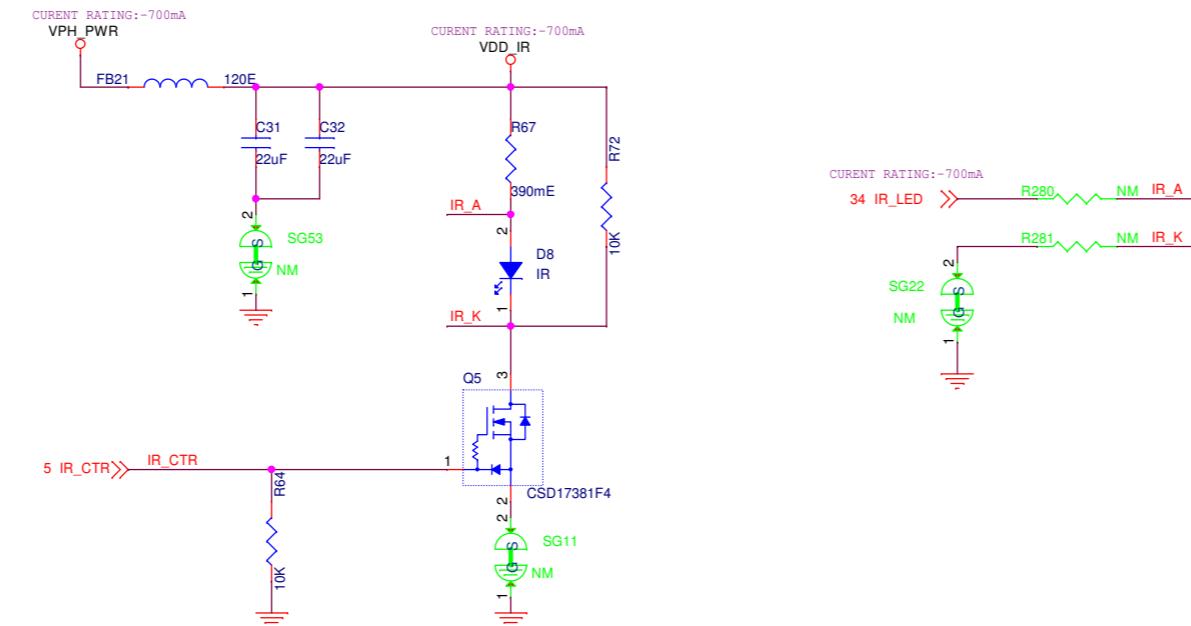


 VVDN TECHNOLOGIES	Title : FRONT_CAMERA_8MP	
	Fab No : 501-1-00626	Rev: A1
	Asy No : 701-1-00728	Sheet 17 of 47
		1

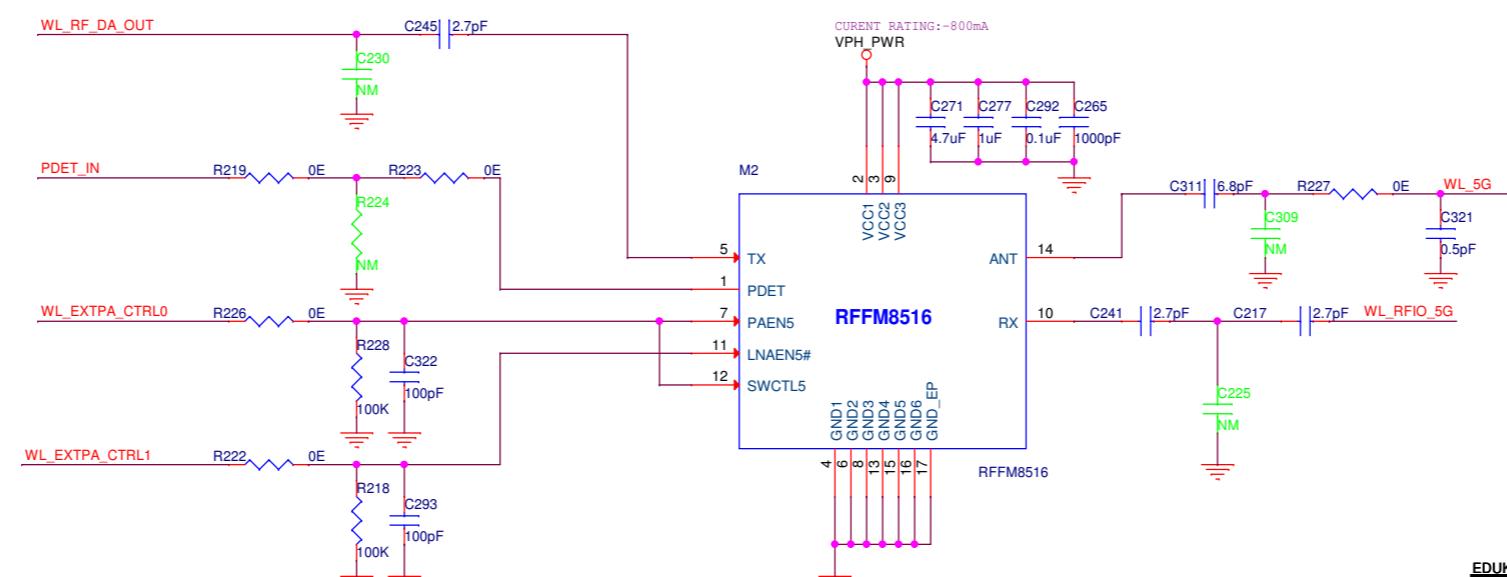
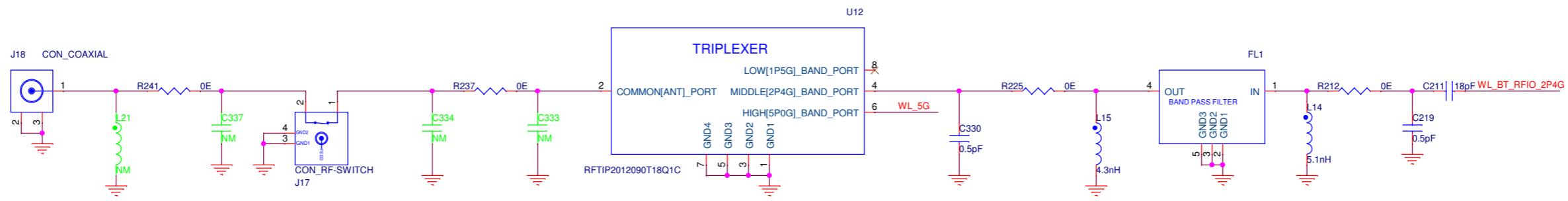
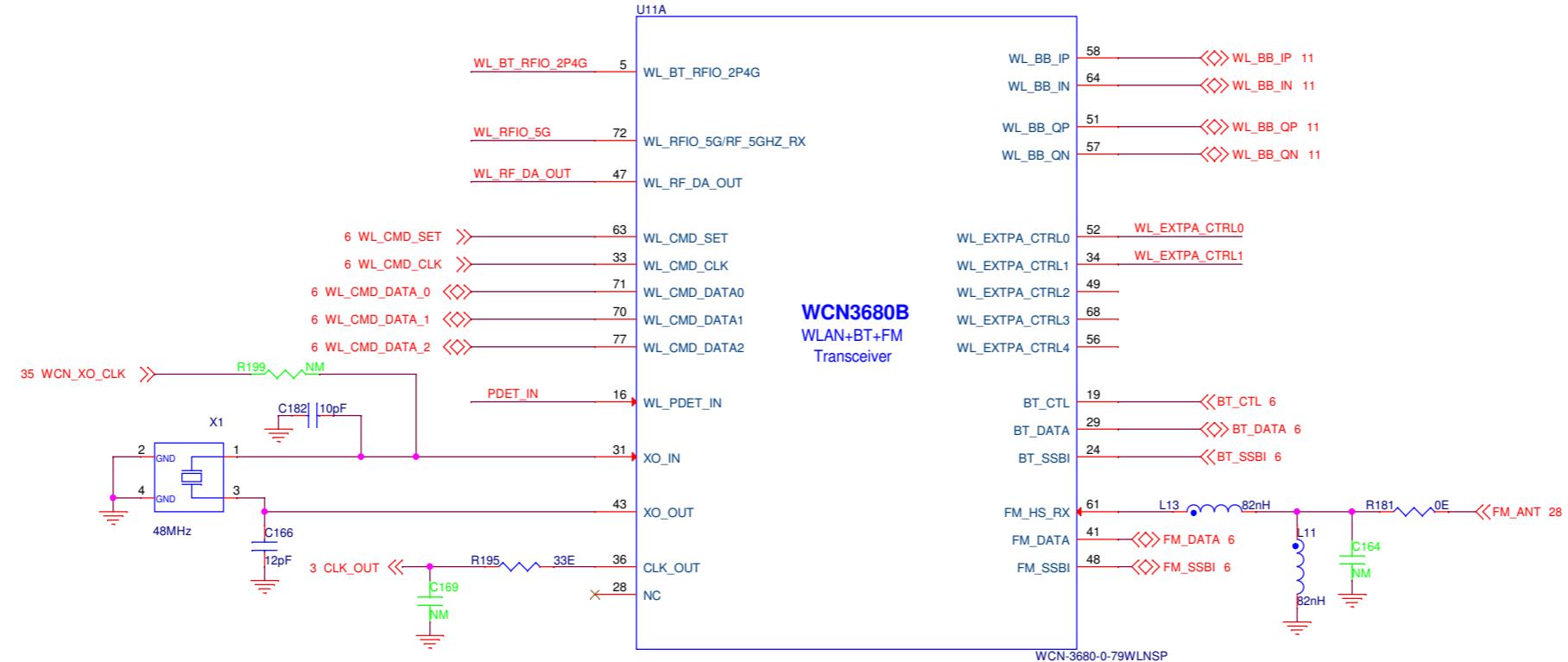
# IRIS SCANNER 2MP



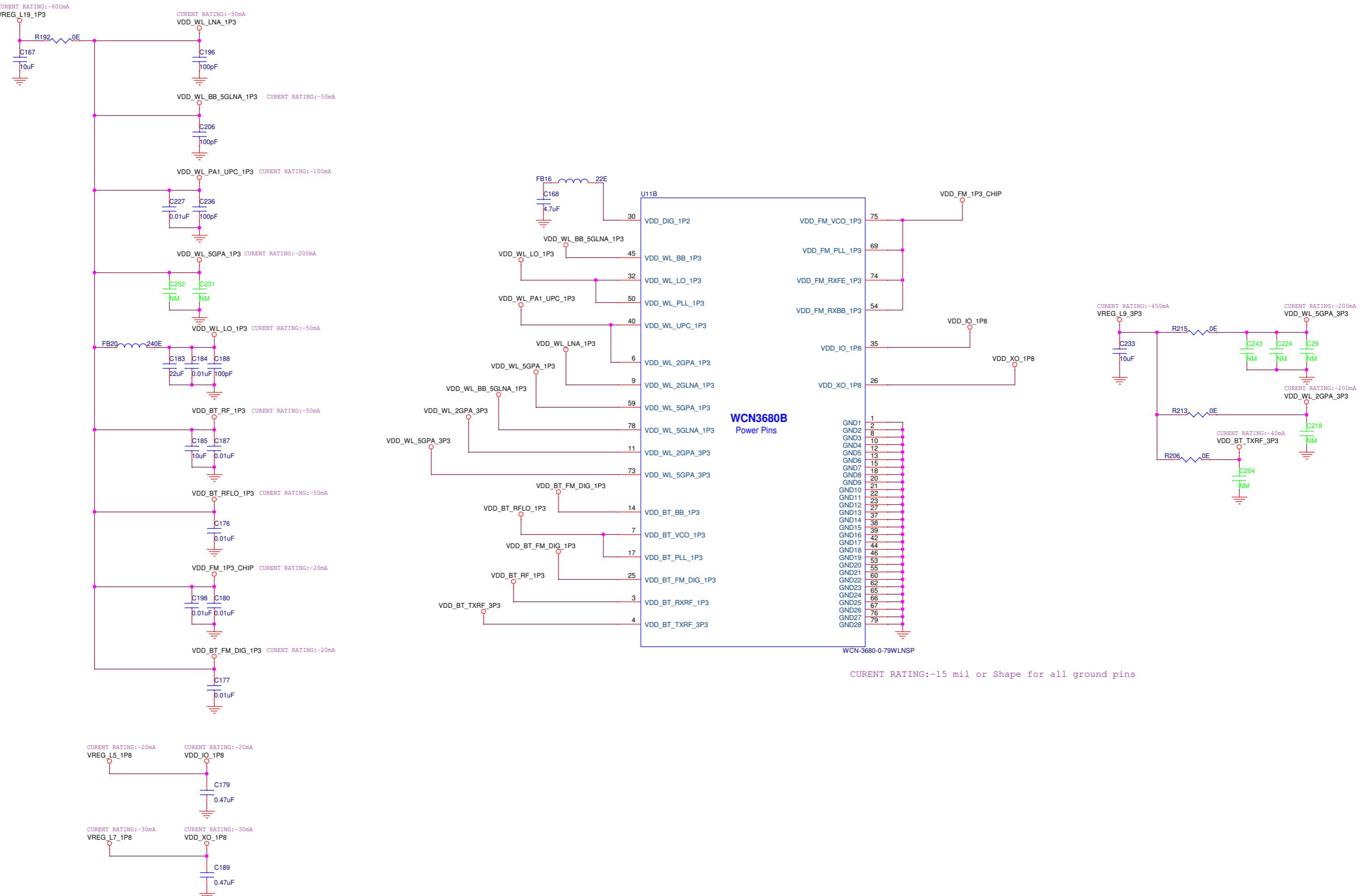
# IR LED



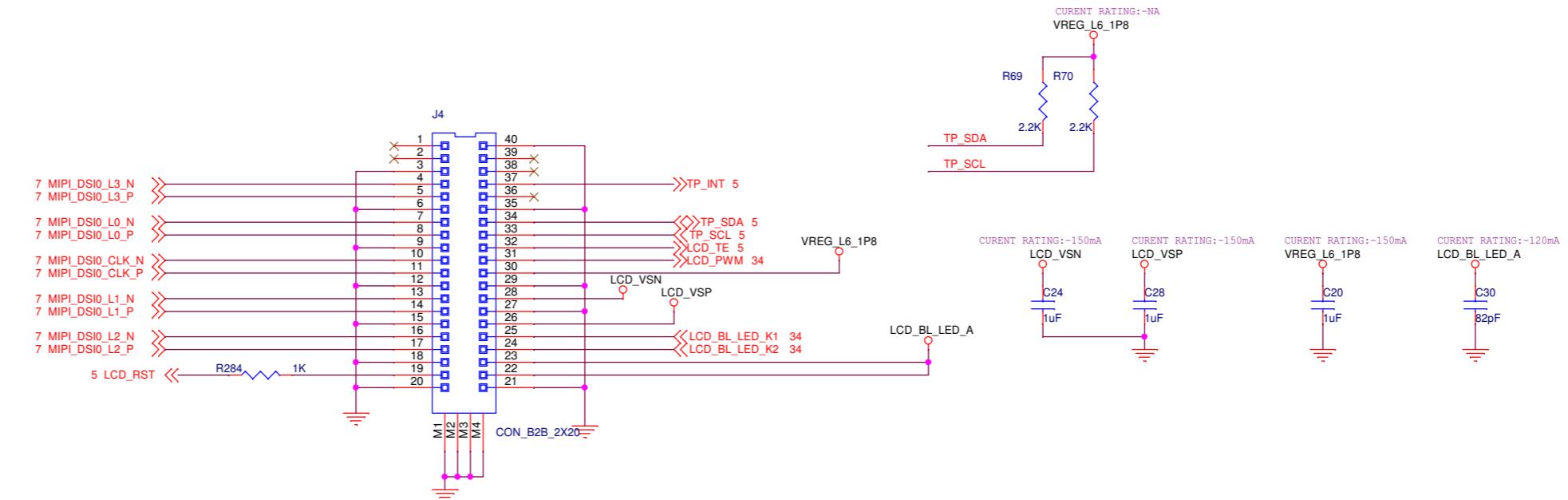
Wifi + BT + FM



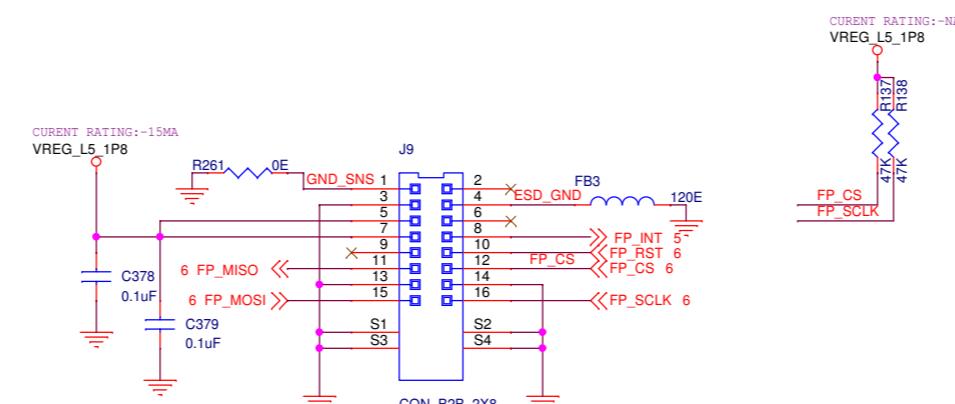
**Wifi + BT + FM POWER**



# DISPLAY



# FINGER PRINT

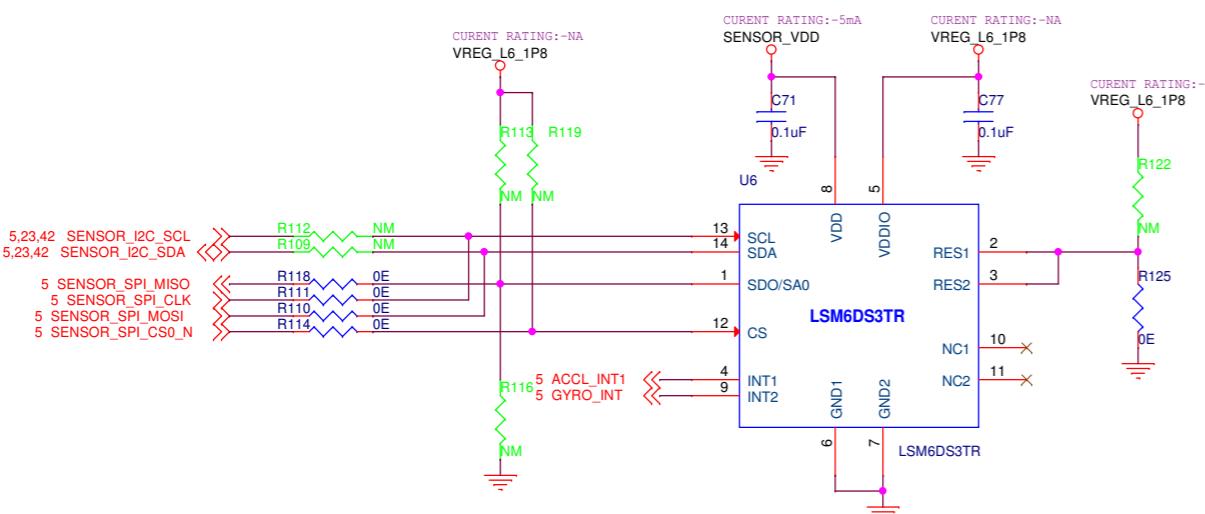


 <b>VVDN</b> <small>TECHNOLOGIES</small>	<b>Title : FINGER PRINT</b>	
	<b>Fab No :</b> 501-1-00626	<b>Rev:</b> A1
	<b>Asy No :</b> 701-1-00728	<b>Sheet</b> 22 <b>of</b> 47

## SENSORS(ALS+PS+9AXIS)

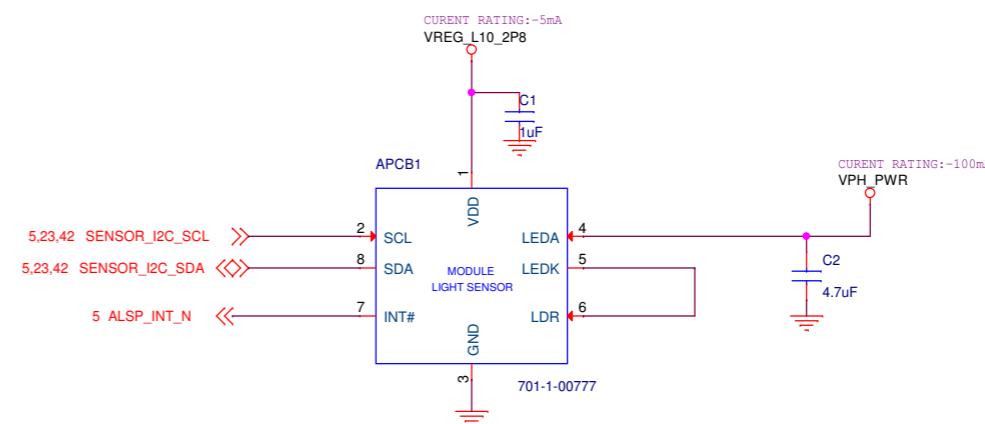
### ACCELEROMETER & GYROSCOPE

Accelerometer Address : 0x6A



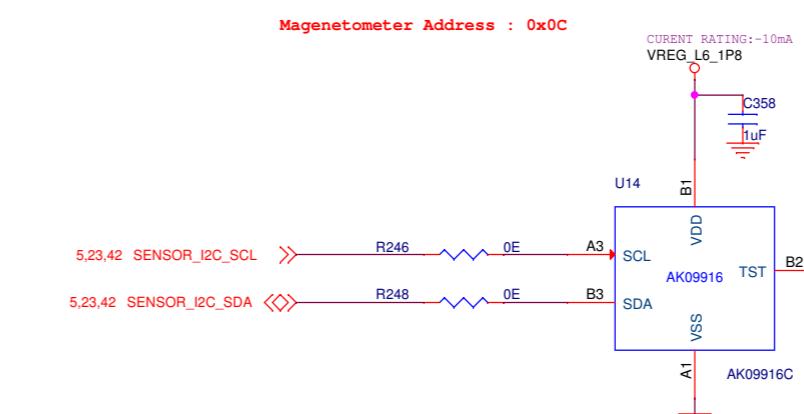
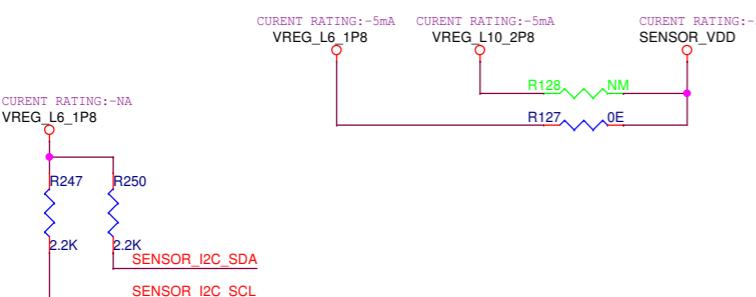
### AMBIENT LIGHT & PROXIMITY SENSOR

Proximity Address : 0x39

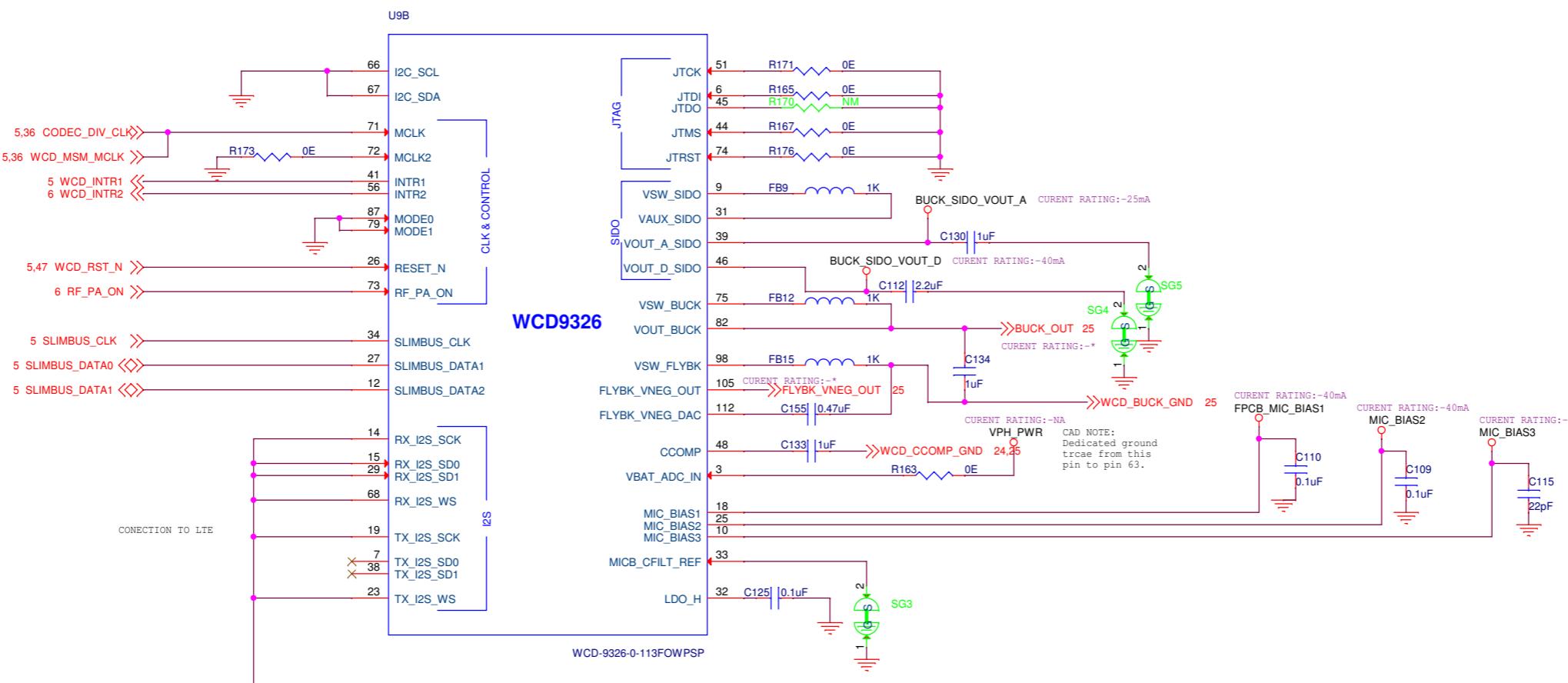
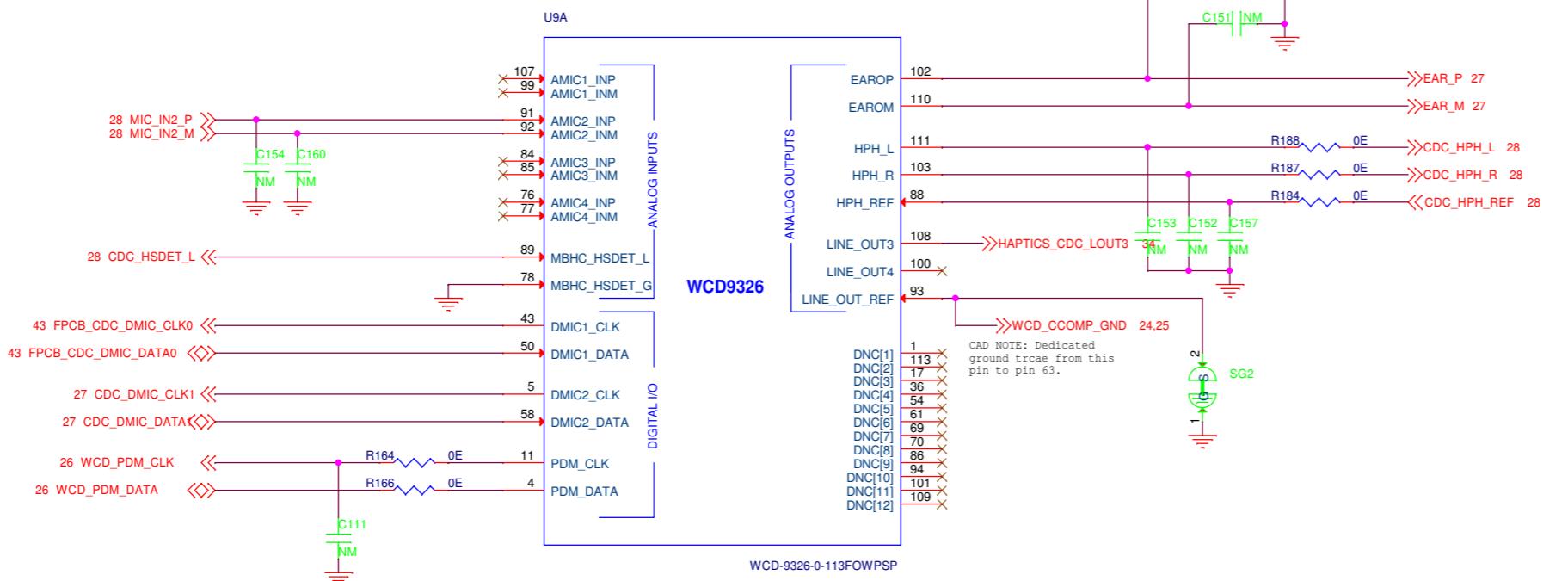


### MAGNETOMETER

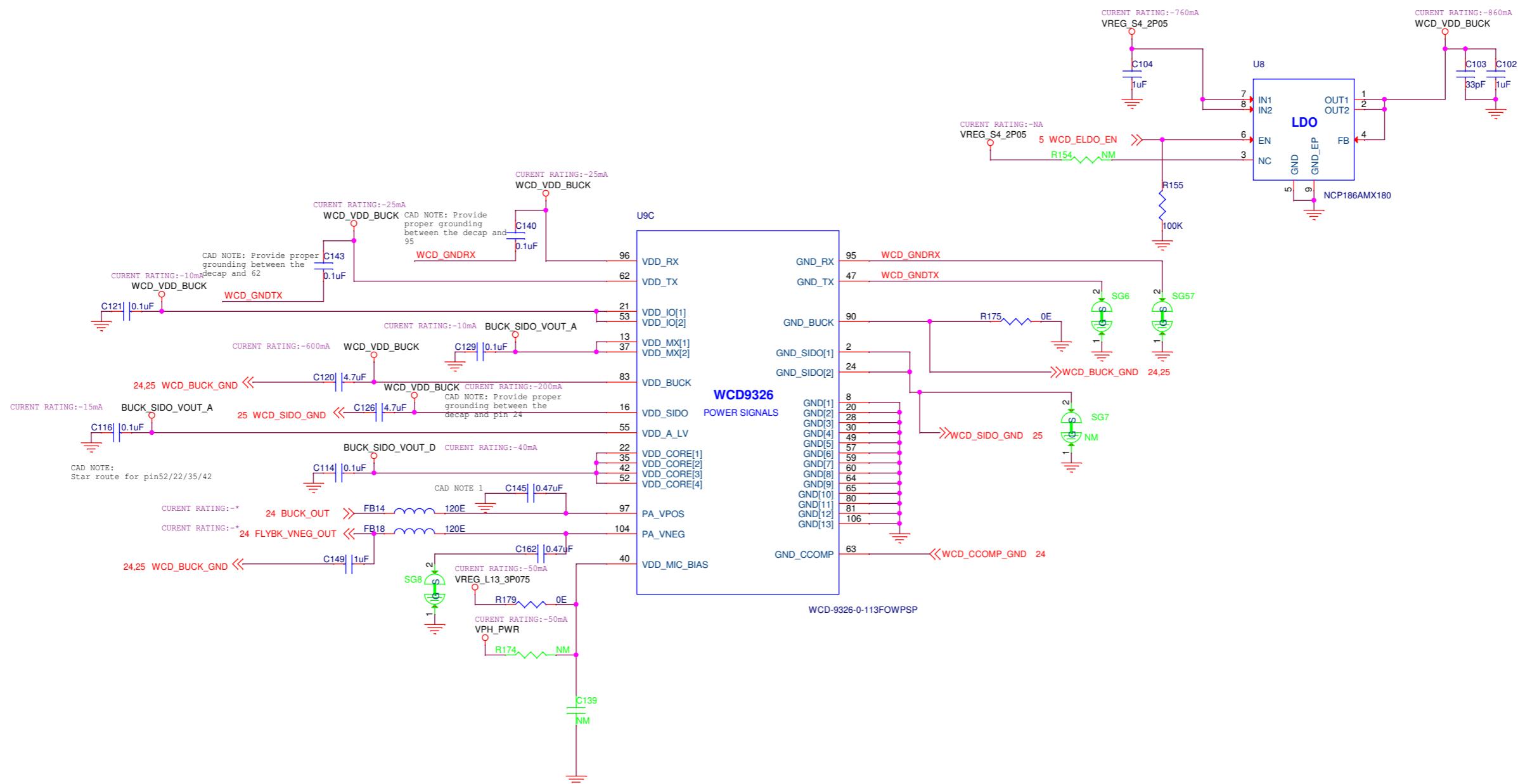
Magnetometer Address : 0x0C



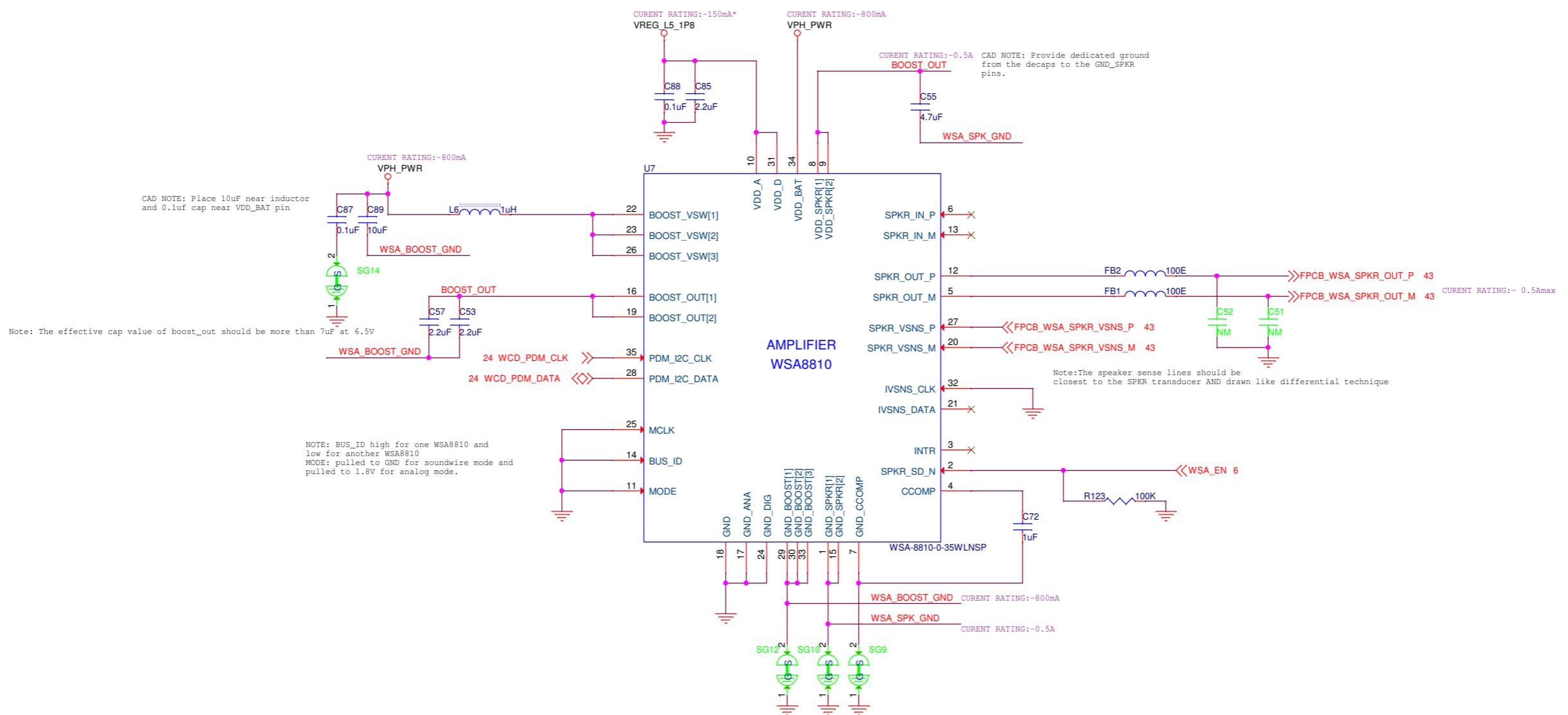
# WCD9326 CODEC



## WCD9326 POWER & GROUND

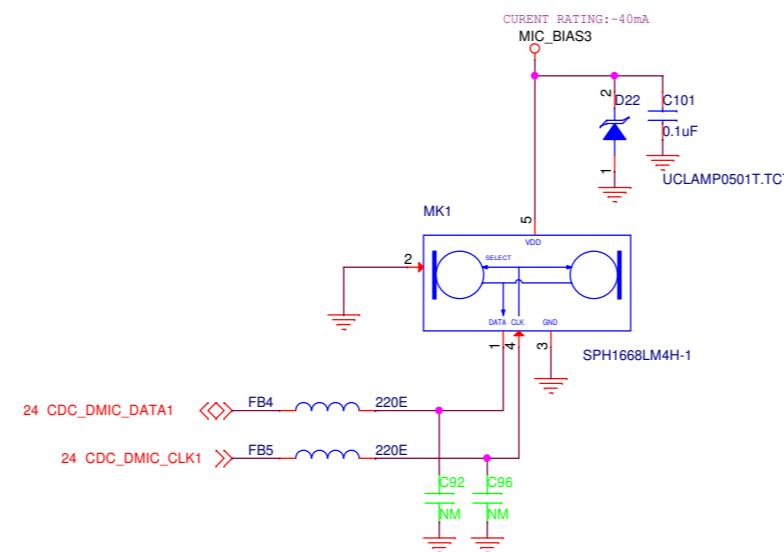


WSA8810

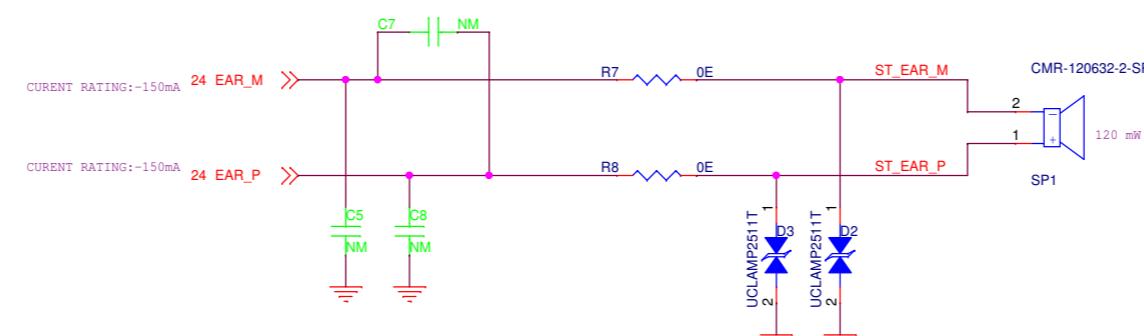


## SEC\_MIC & EAR\_SPEAKER

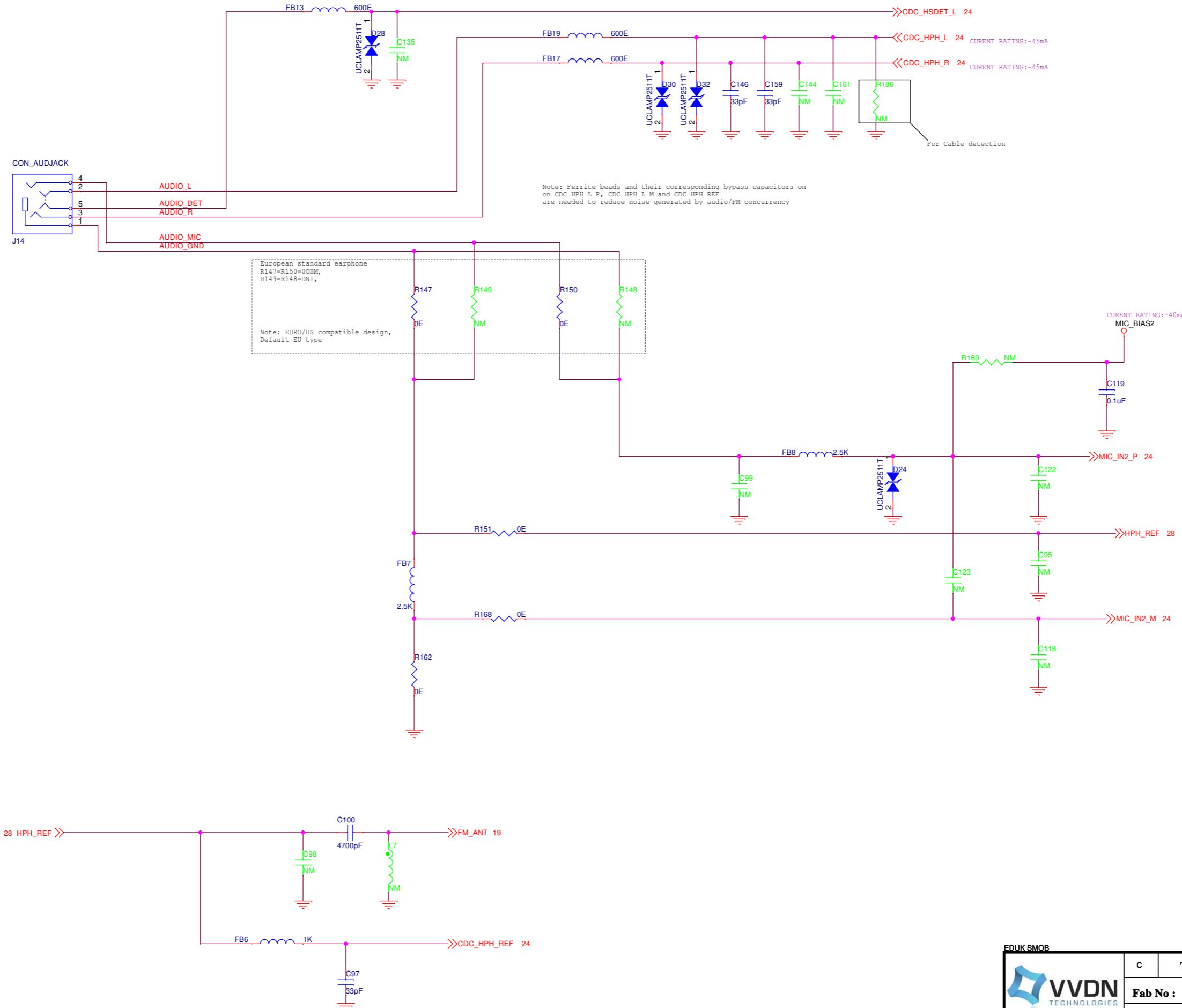
### SECONDARY MIC



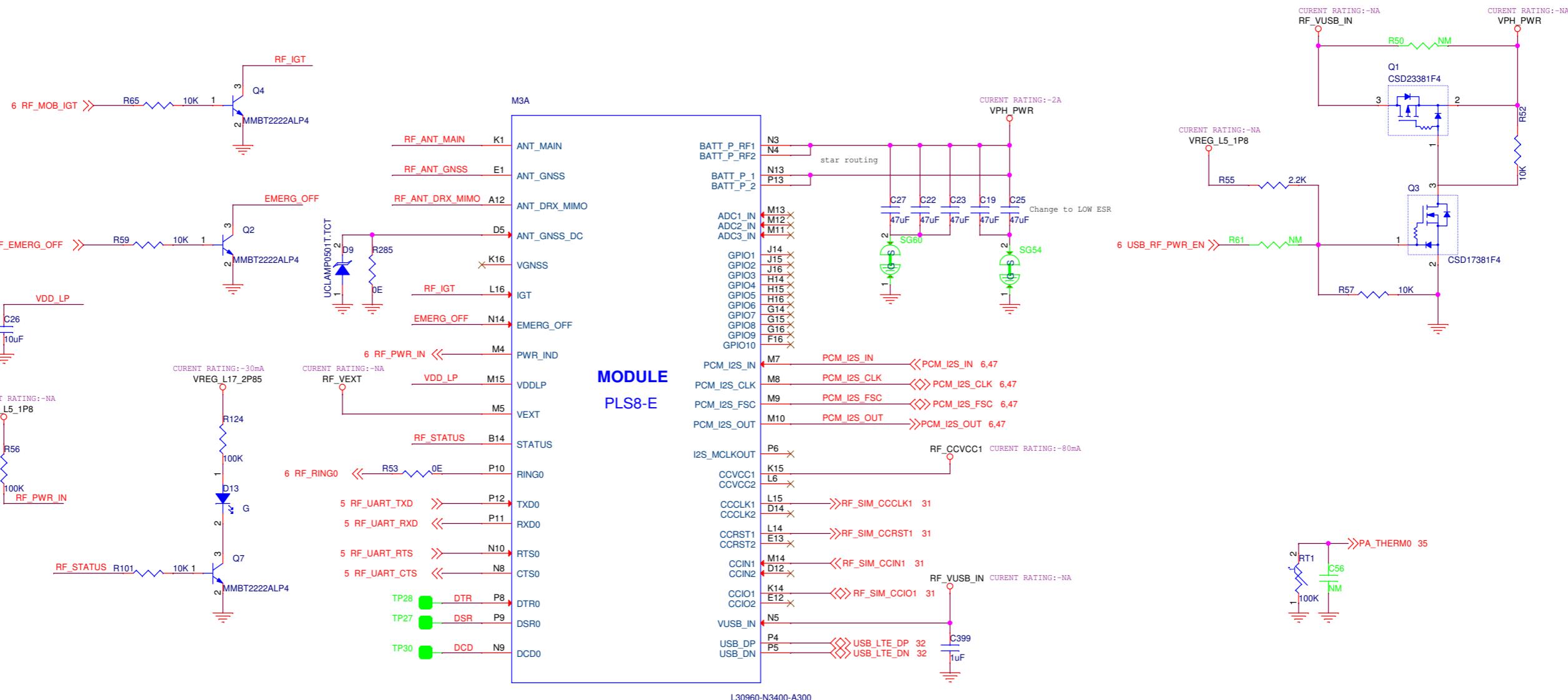
### EAR SPEAKER



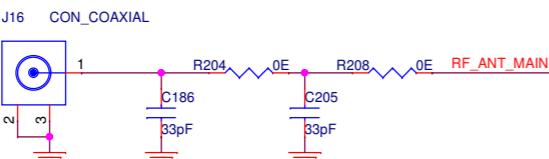
# AUDIO HEADSET



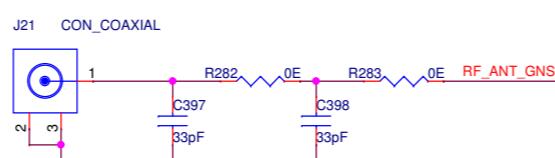
# LTE / WCDMA / GSM / GNSS RF MODULE



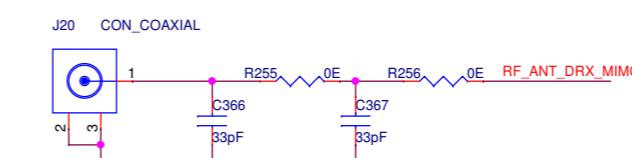
## MAIN ANTENNA



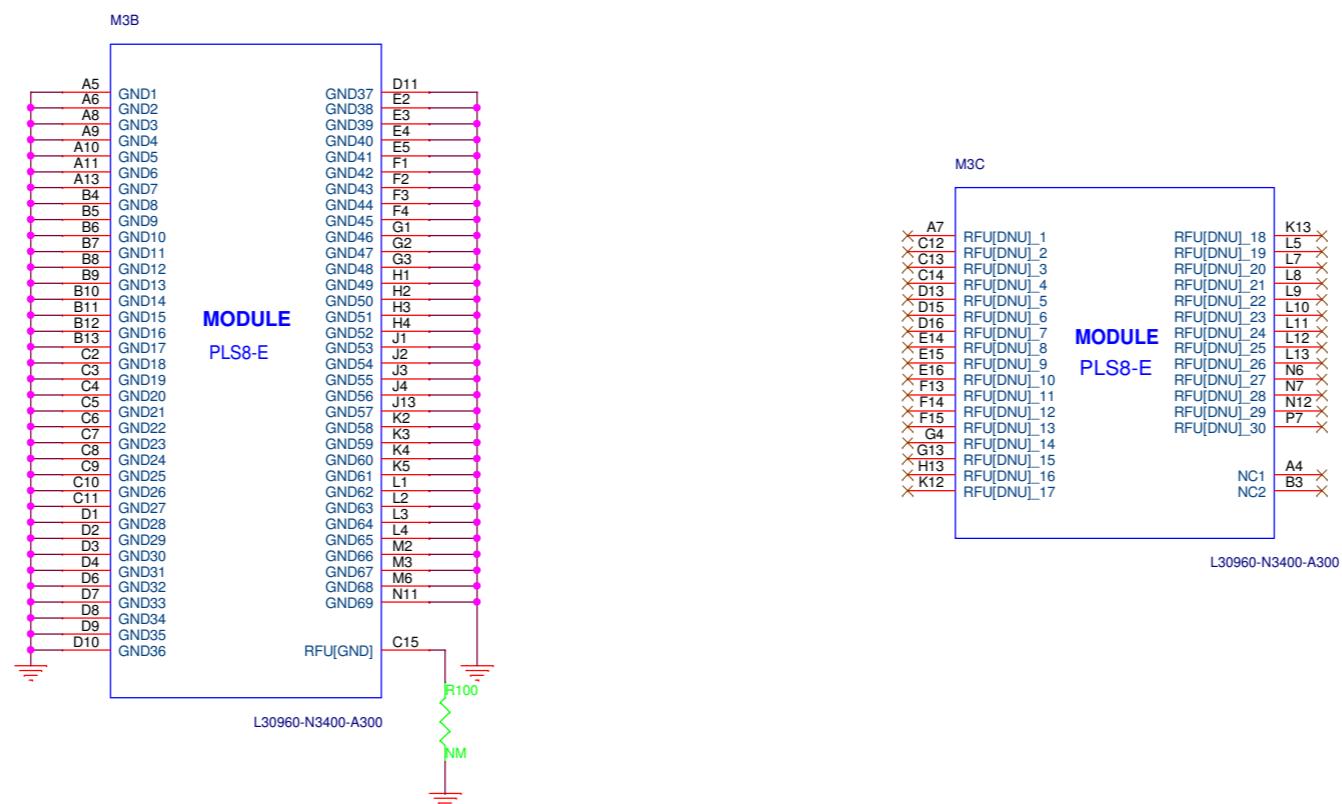
GNSS ANTENNA



## DIVERSITY ANTENNA

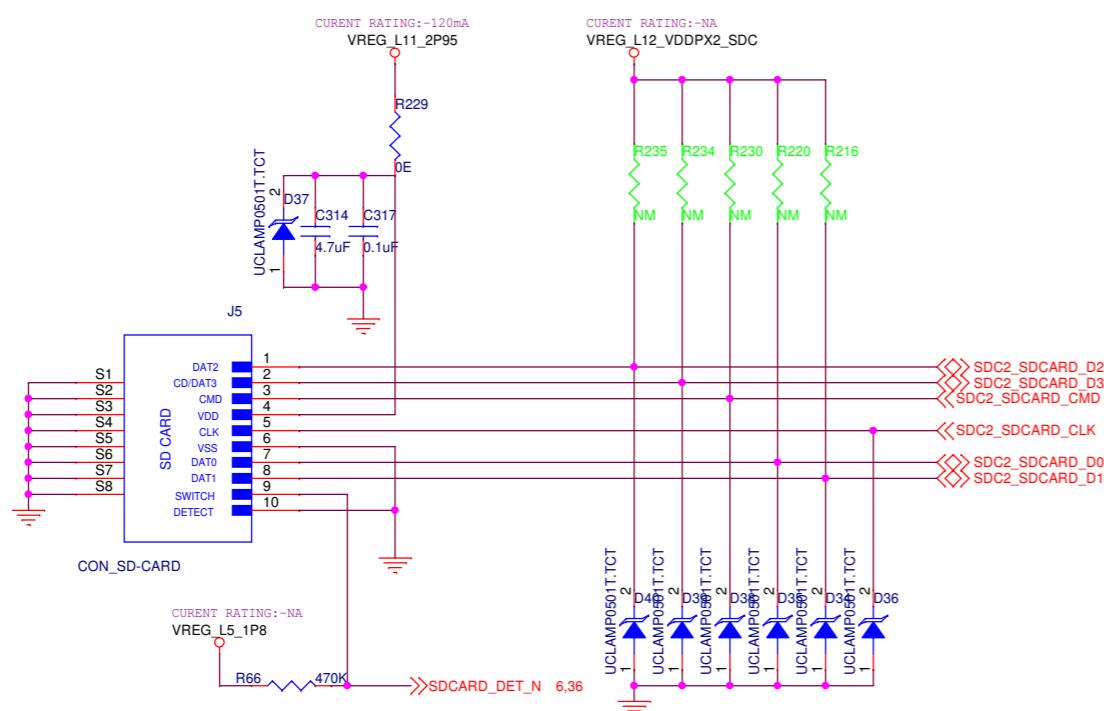


## RF MODULE GROUND & DNC

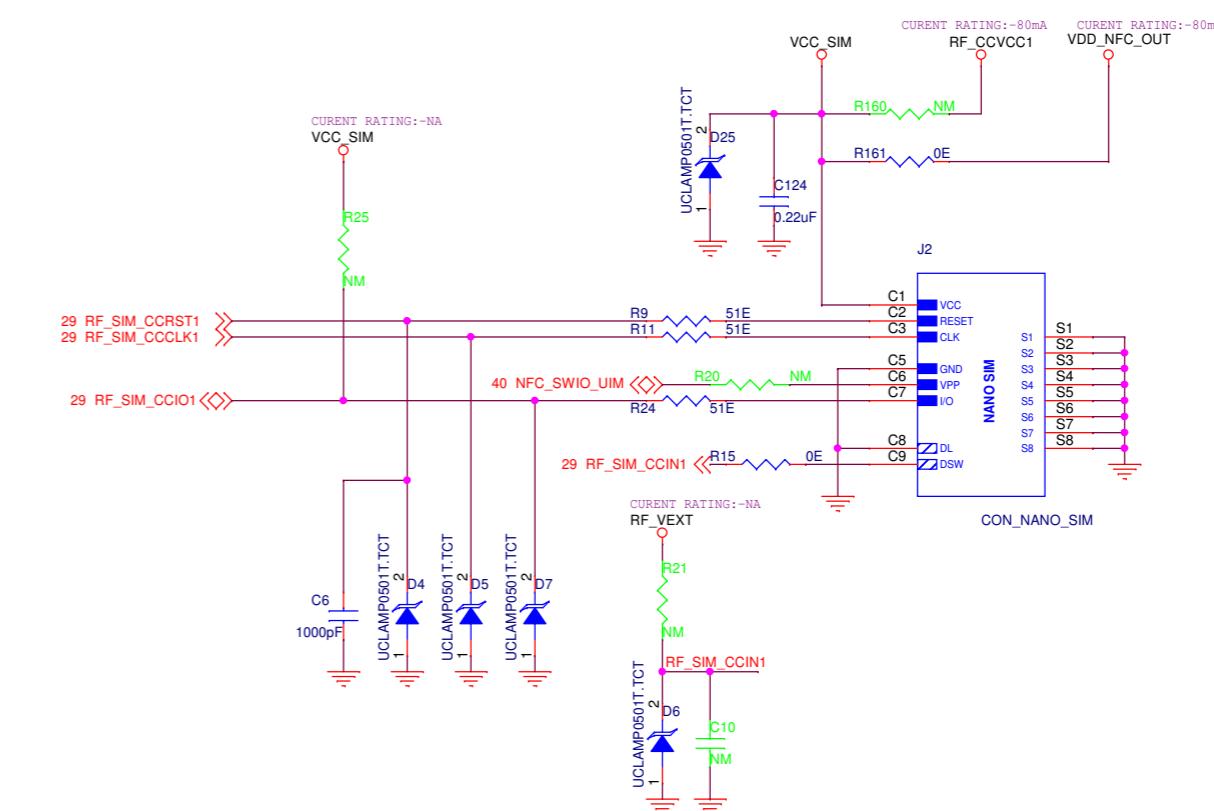


## MICRO-SD & NANO-SIM

### MICRO-SD CARD

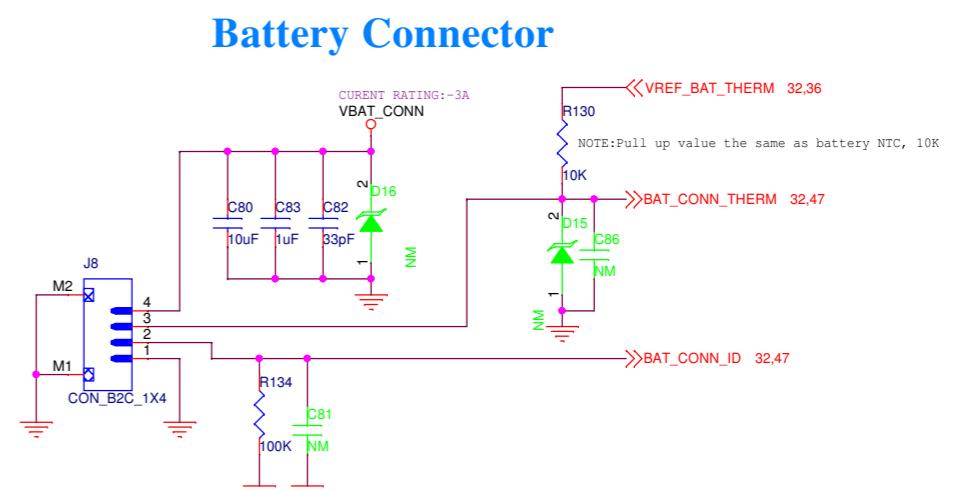
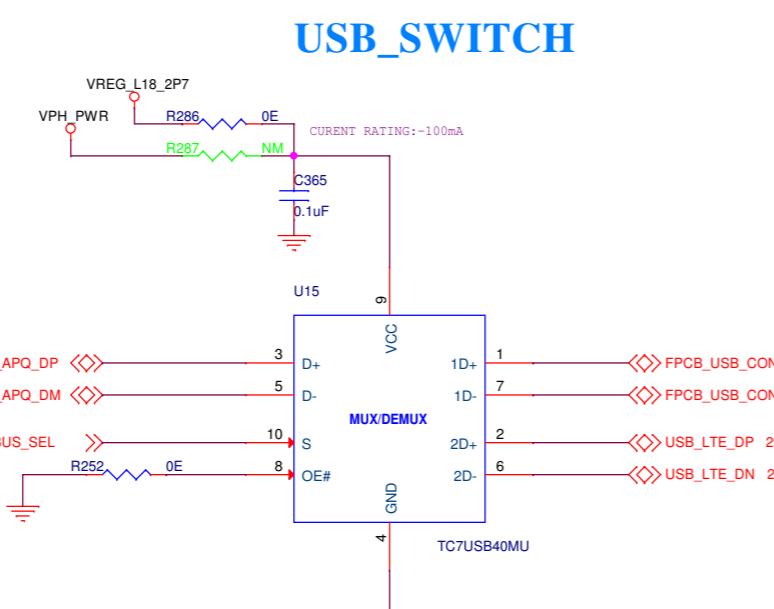
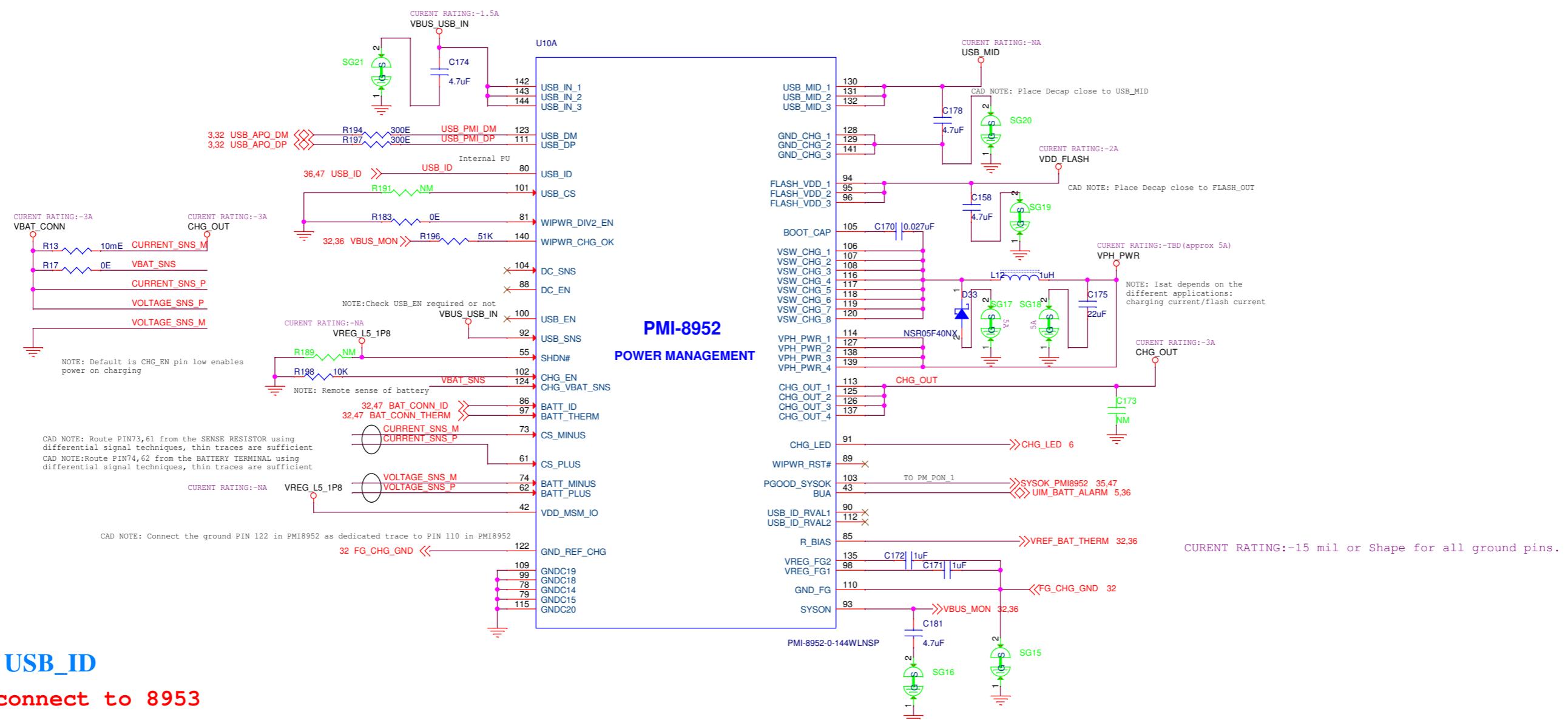


### NANO\_SIM\_CARD

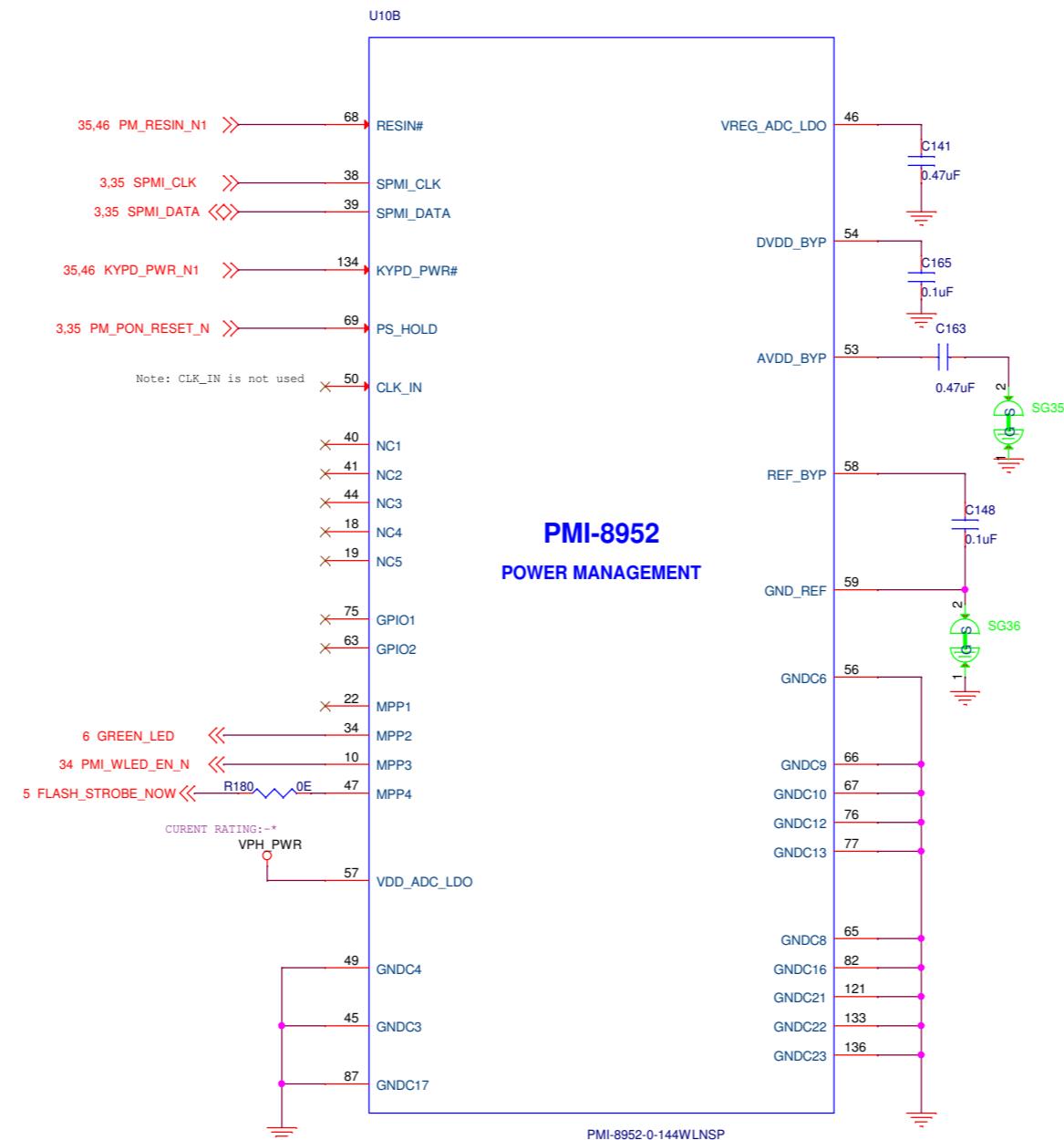


PMI PIN	Connection on device without Wipower	Connection on device with Wipower
CHG_OK	Pull up to VDD_CAP with 51kohm	Stark PRU CHG_OK
DVI2_EN	Pull down to GND with 0ohm	Stark PRU DIV2_EN
GPIO2	No Connect For parallel charging: Connects to SMB EN pin. Do NOT pull up to VDD_CAP.	10Kohm pull down to gnd. For parallel charging: Connects to SMB EN pin. Do Not pull up to VDD_CAP.

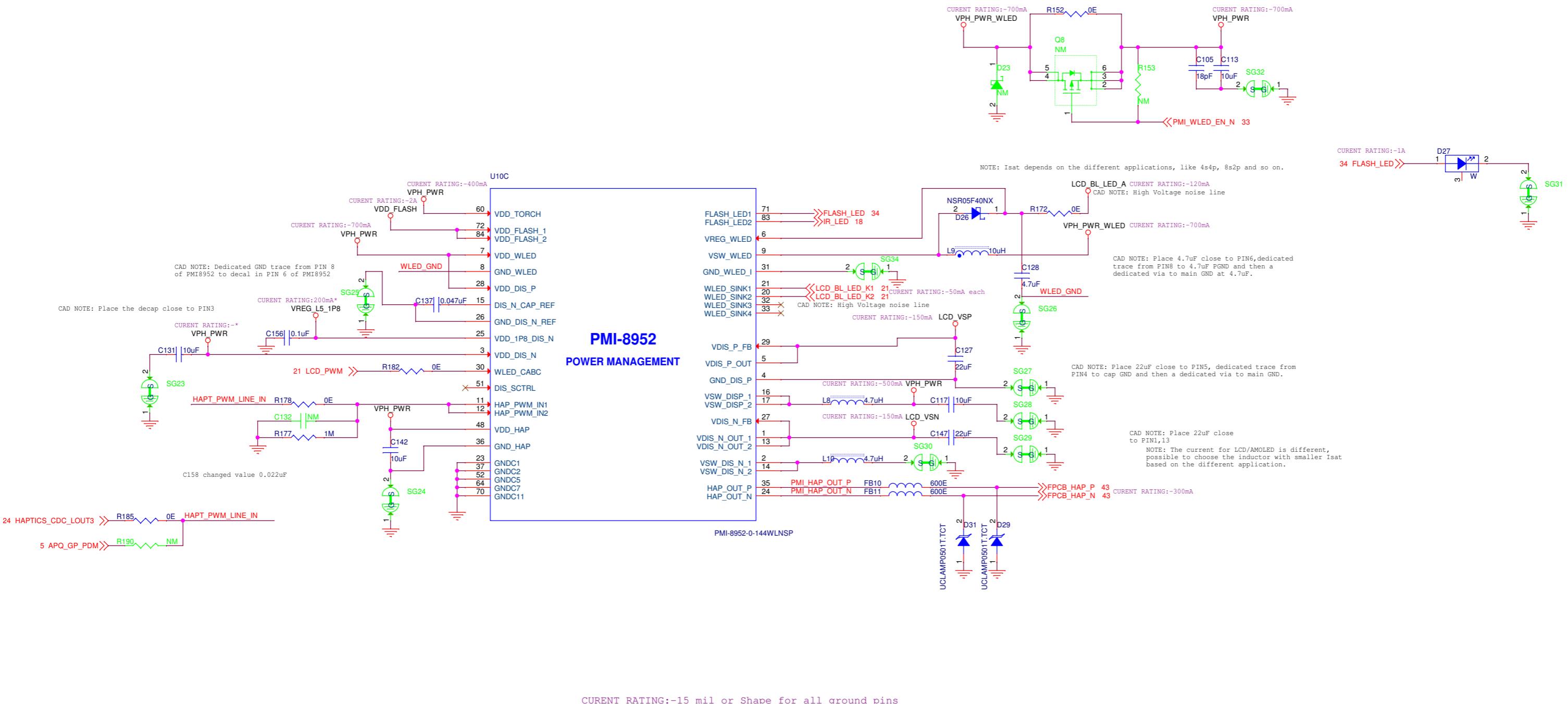
## PMI8952 POWER MANAGEMENT



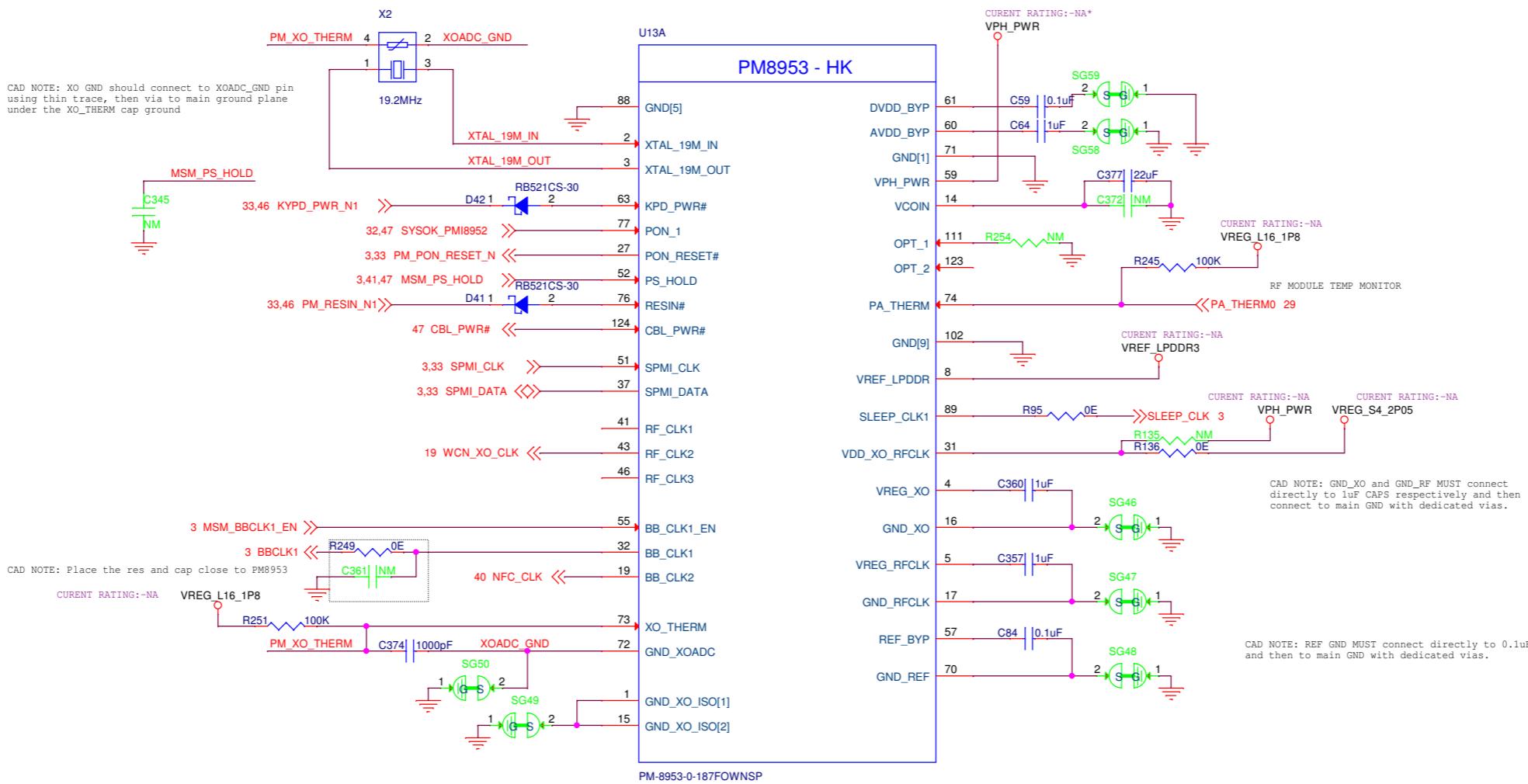
## PMI8952 CONTROL AND GPIO



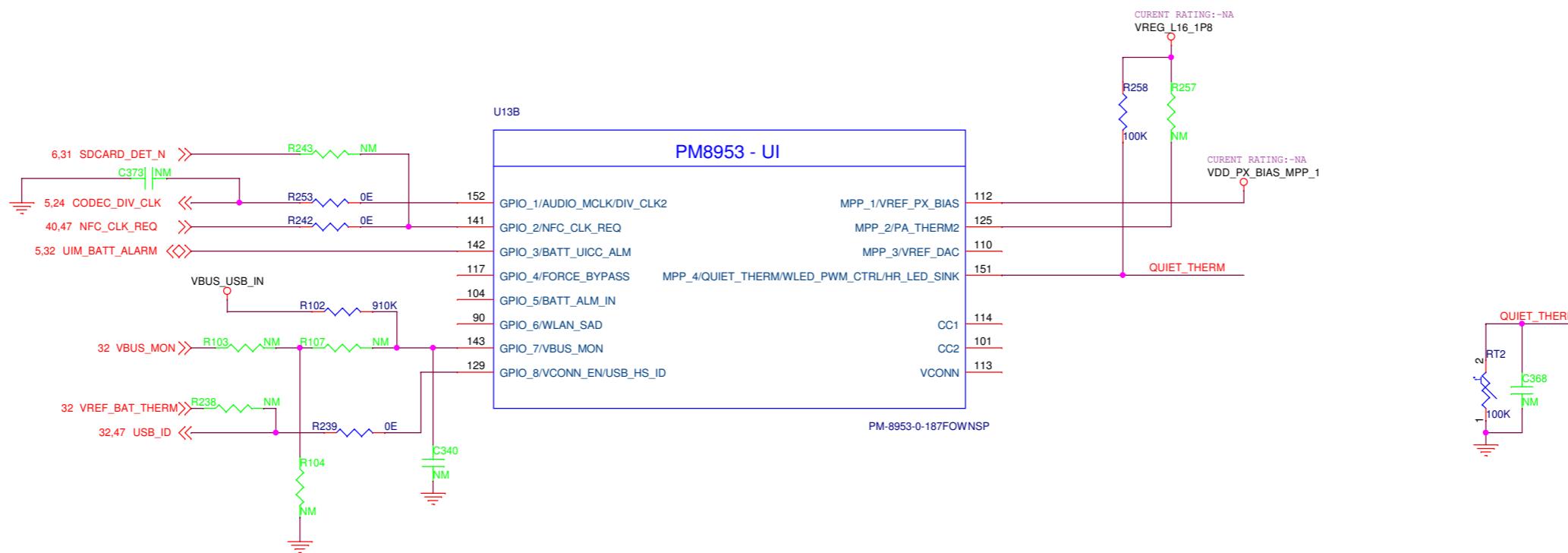
# PMI8952 CONTROL\_WHITE LED



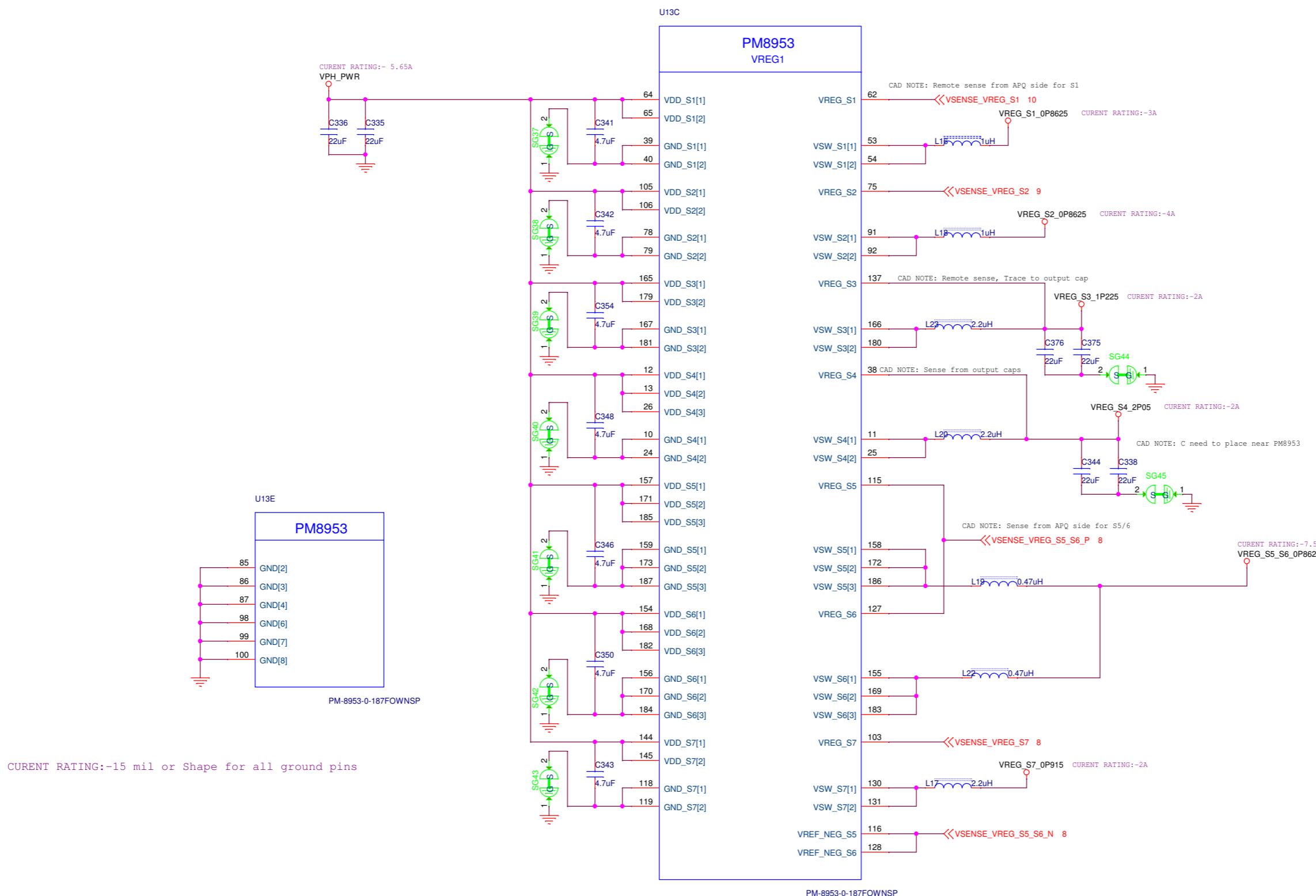
# PM8953 CONTROL & CLOCKS



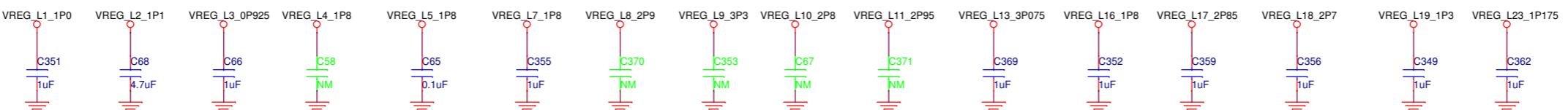
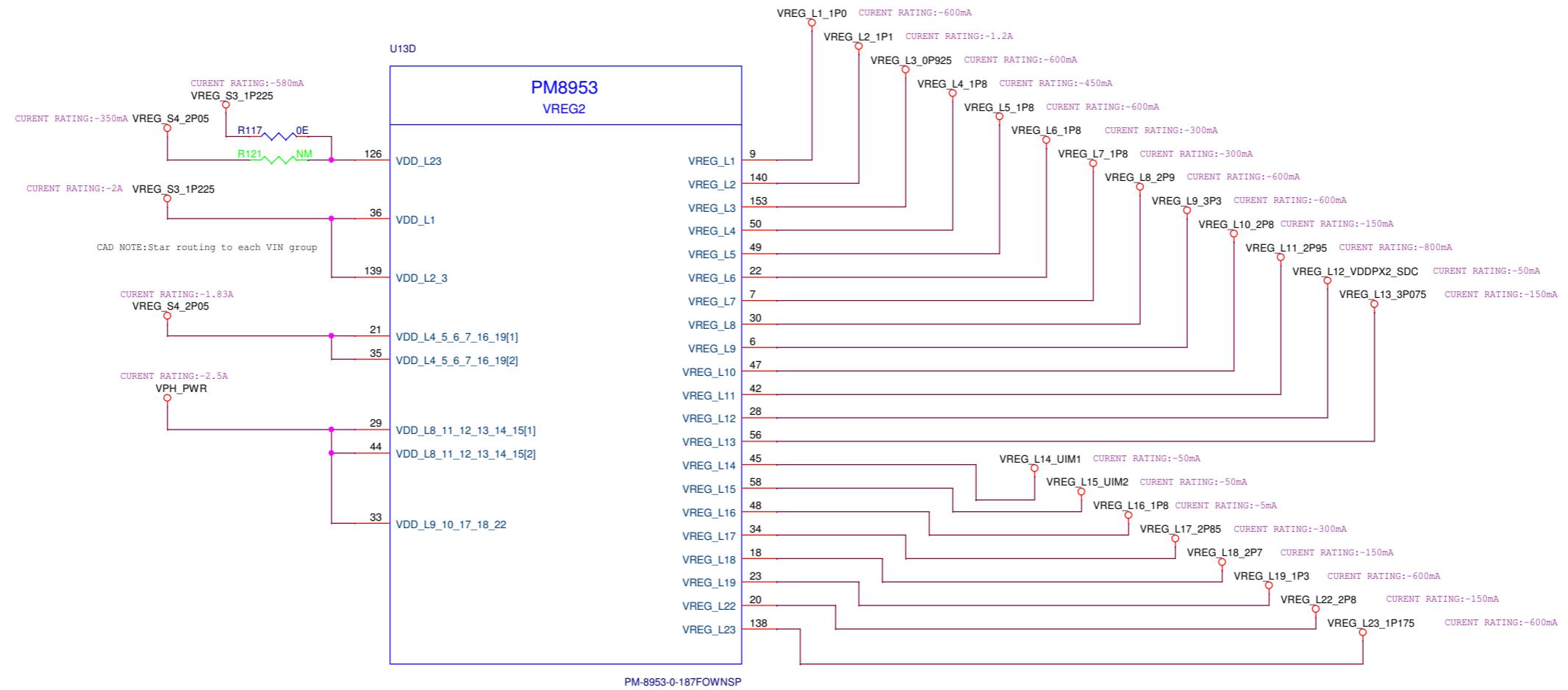
# PM8953 GPIO & MPP



# PM8953 SMPS

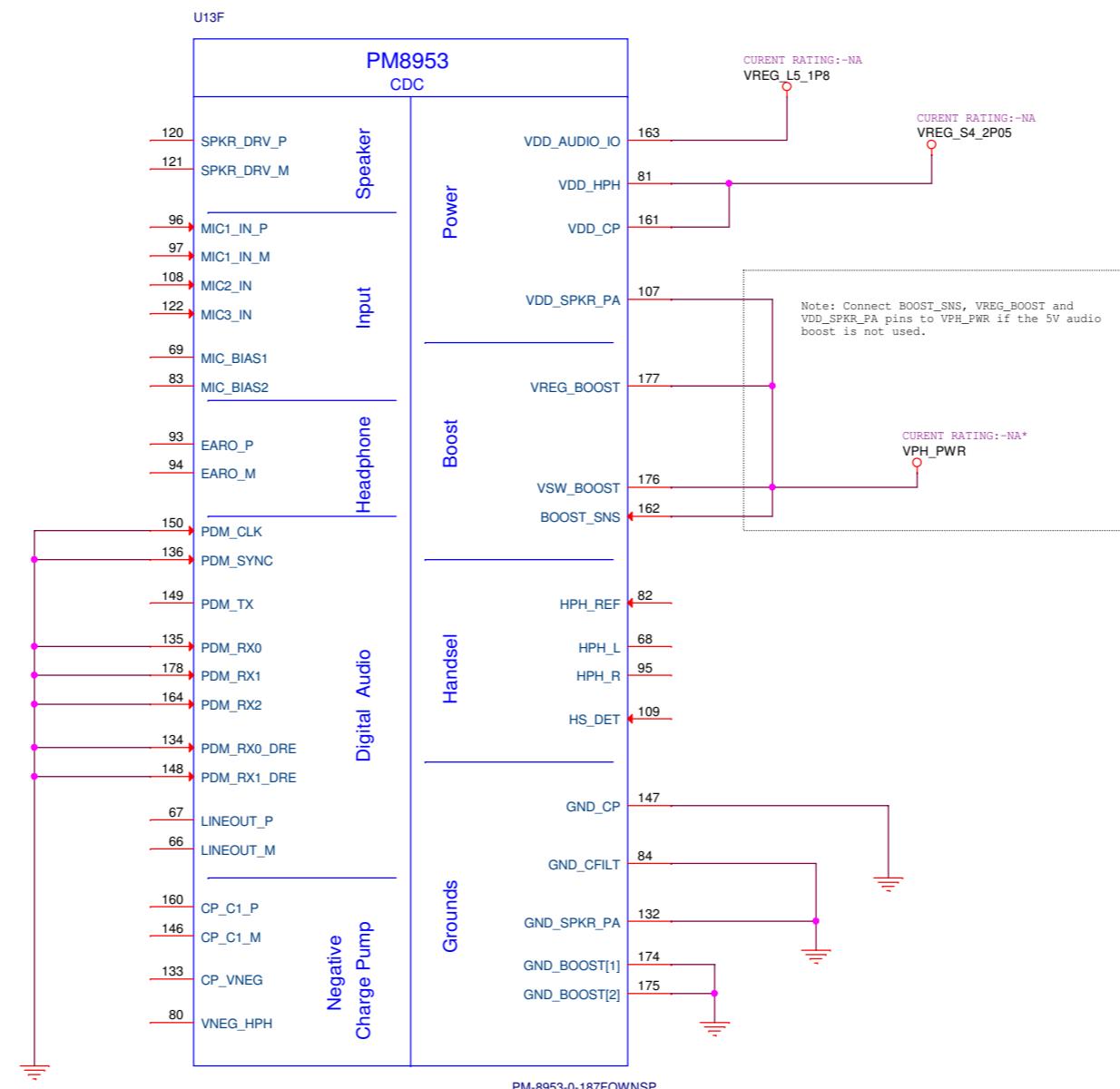


# PM8953 LDOs

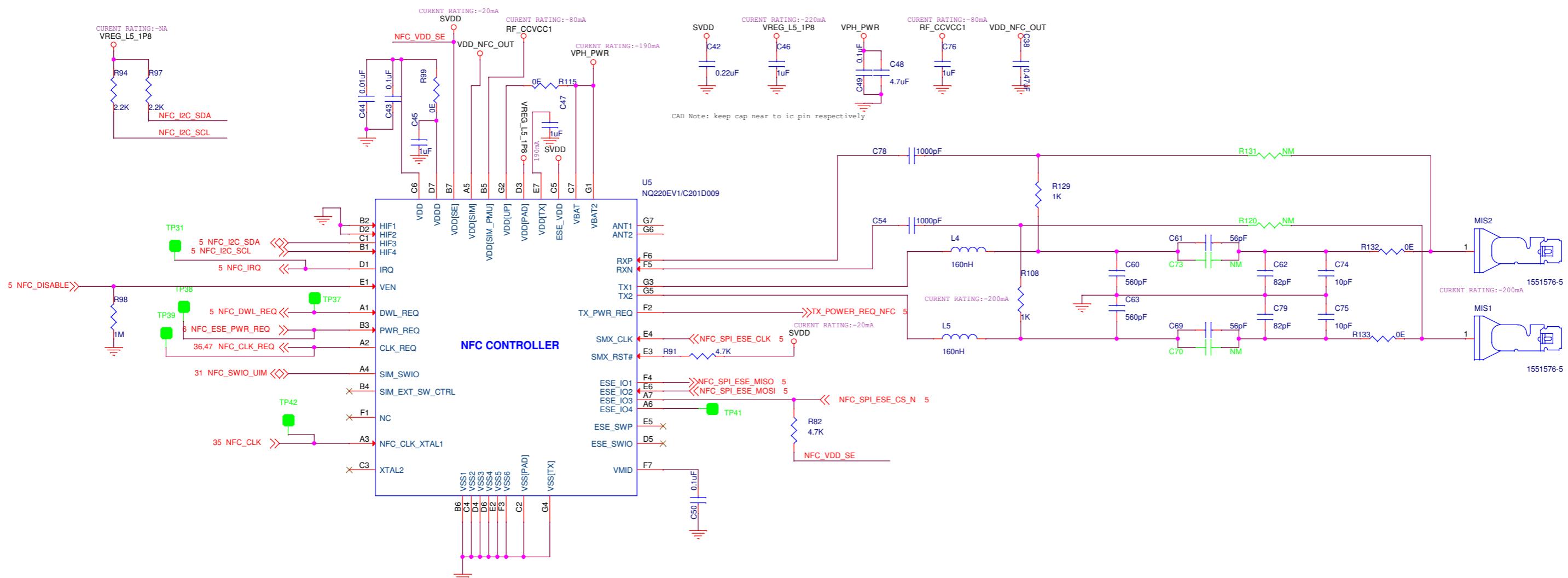


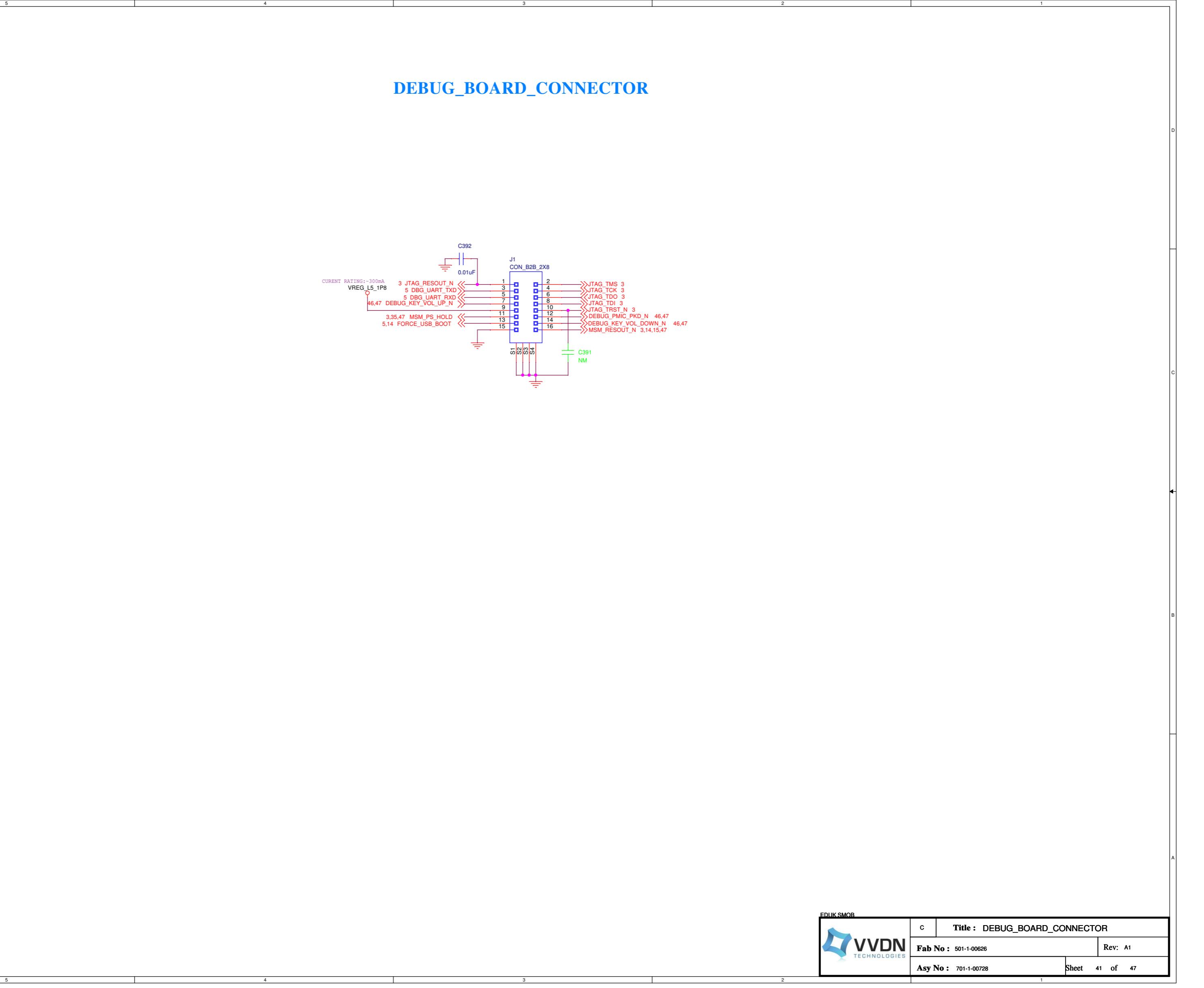
CURRENT RATING:-15 mil or Shape for all ground pins

# PM8953 CODEC



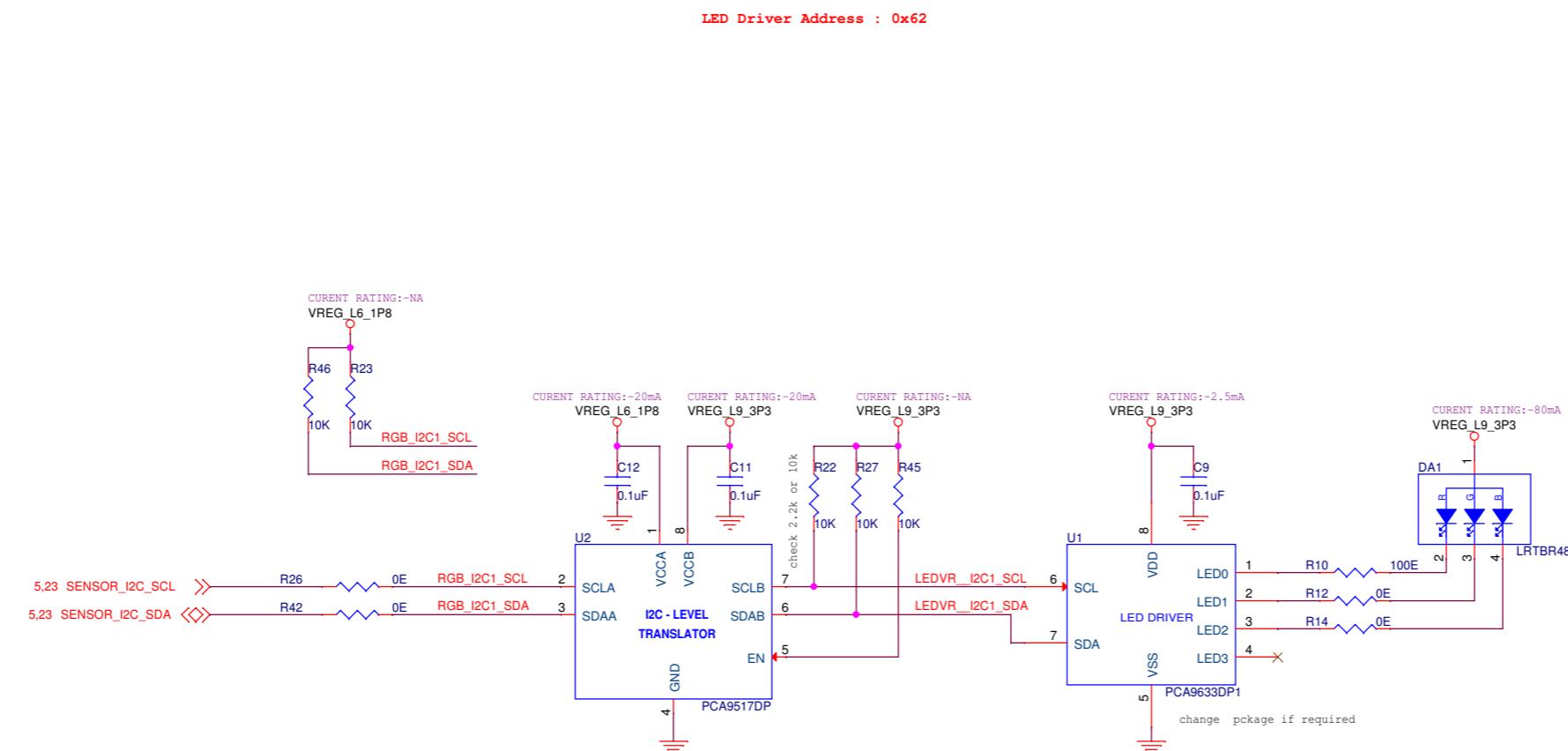
NFC



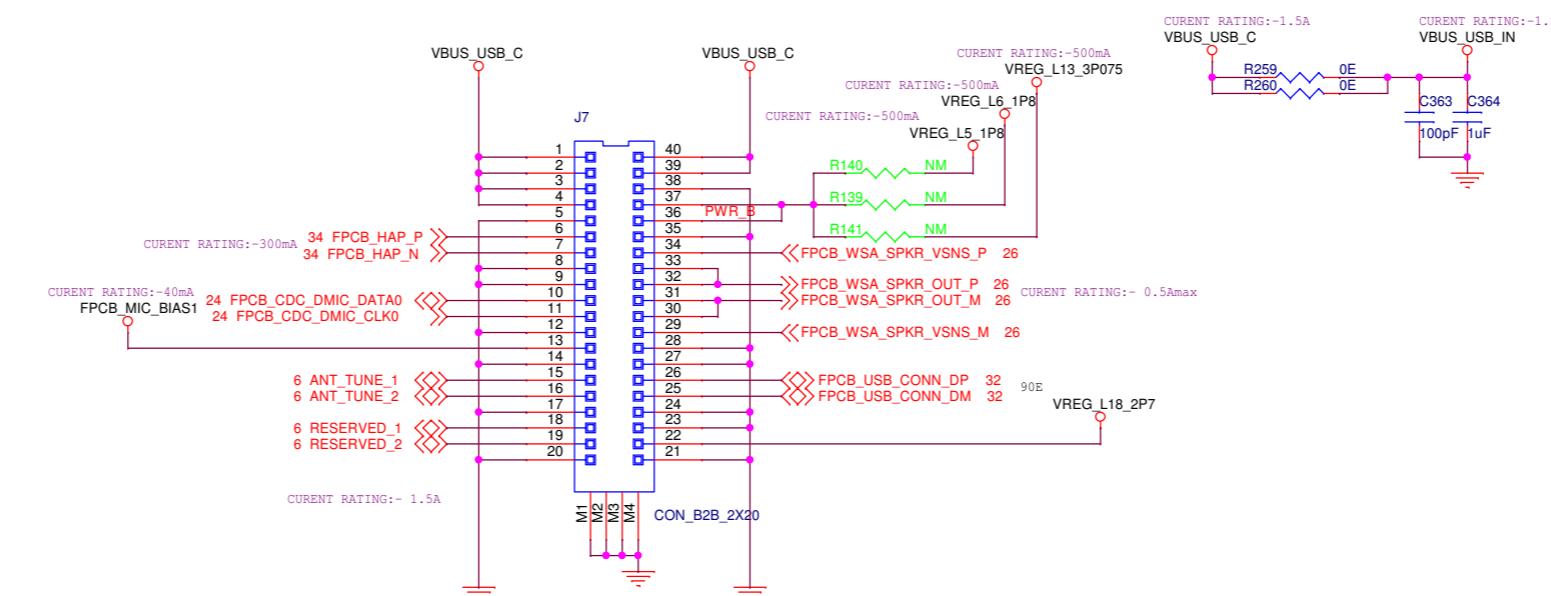


 <b>VVDN</b> <small>TECHNOLOGIES</small>	C	Title : DEBUG_BOARD_CONNECTOR	
	Fab No :	501-1-00626	Rev: A1
	Asy No :	701-1-00728	Sheet 41 of 47

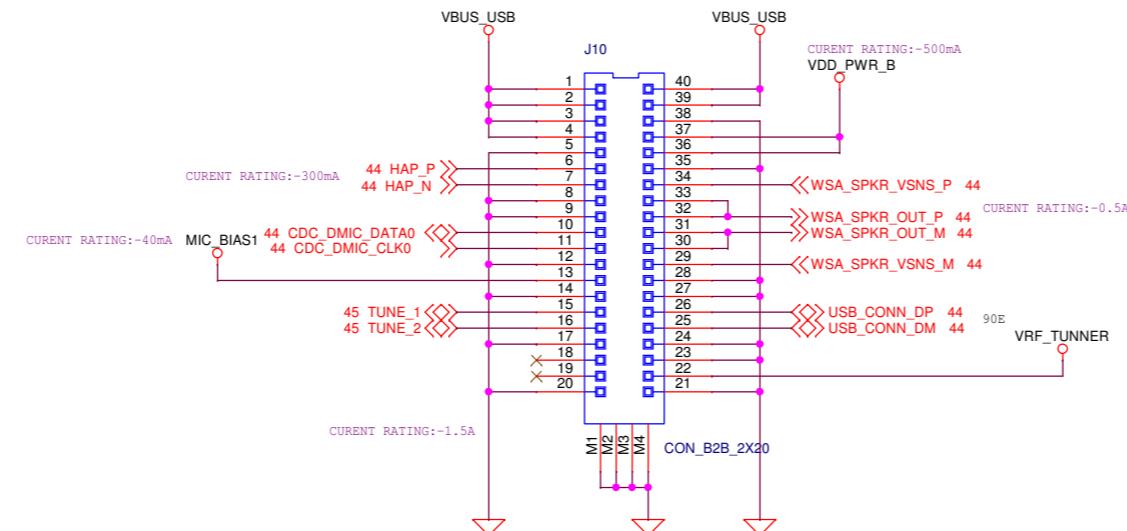
## Notification RGB LED Driver



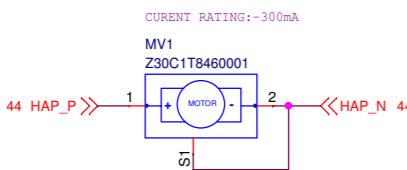
# FLEX\_PCB\_CONNECTOR



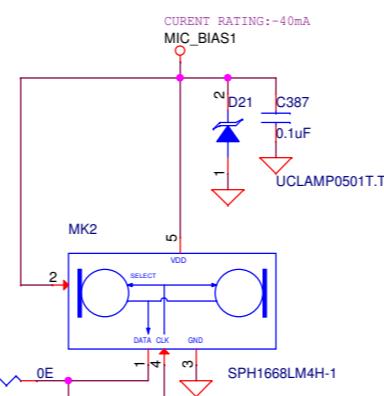
BOTTOM\_PCB



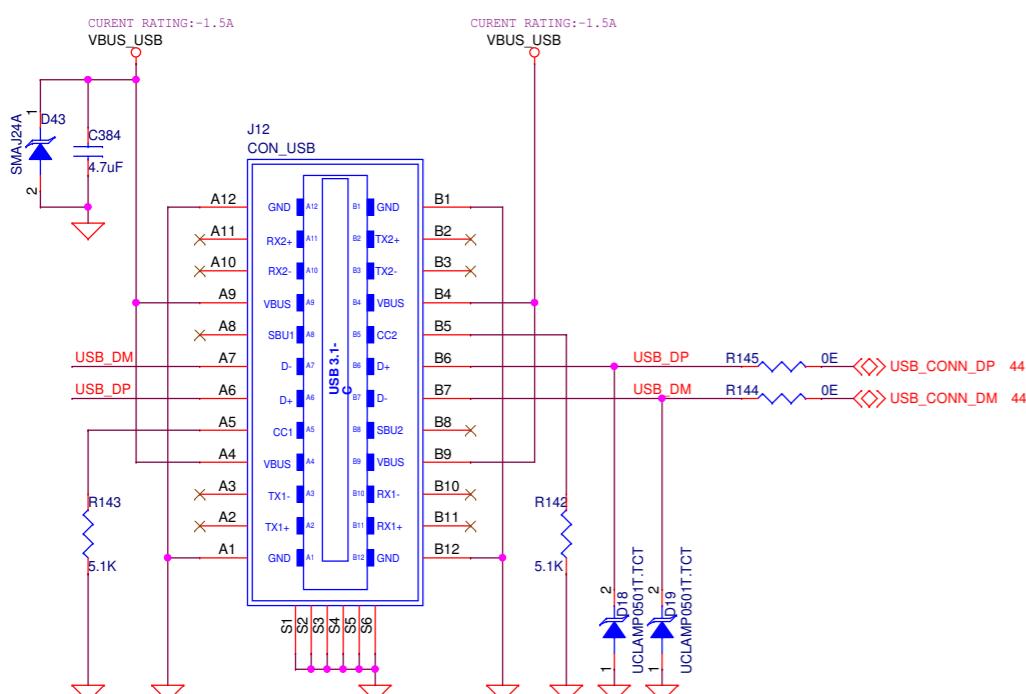
## HAPTIC MOTOR



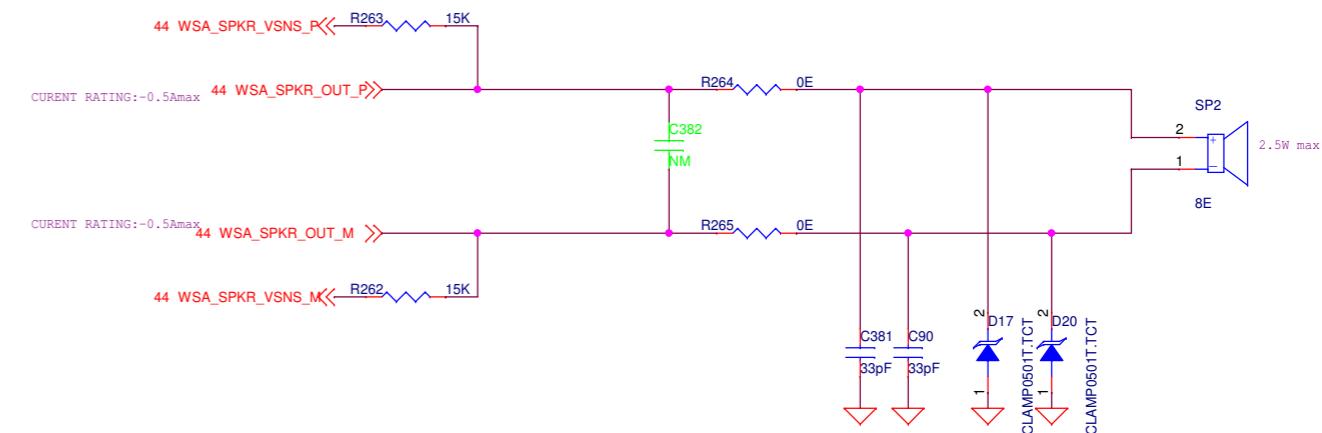
## PRIMARY MIC



## MICRO TYPE-C USB

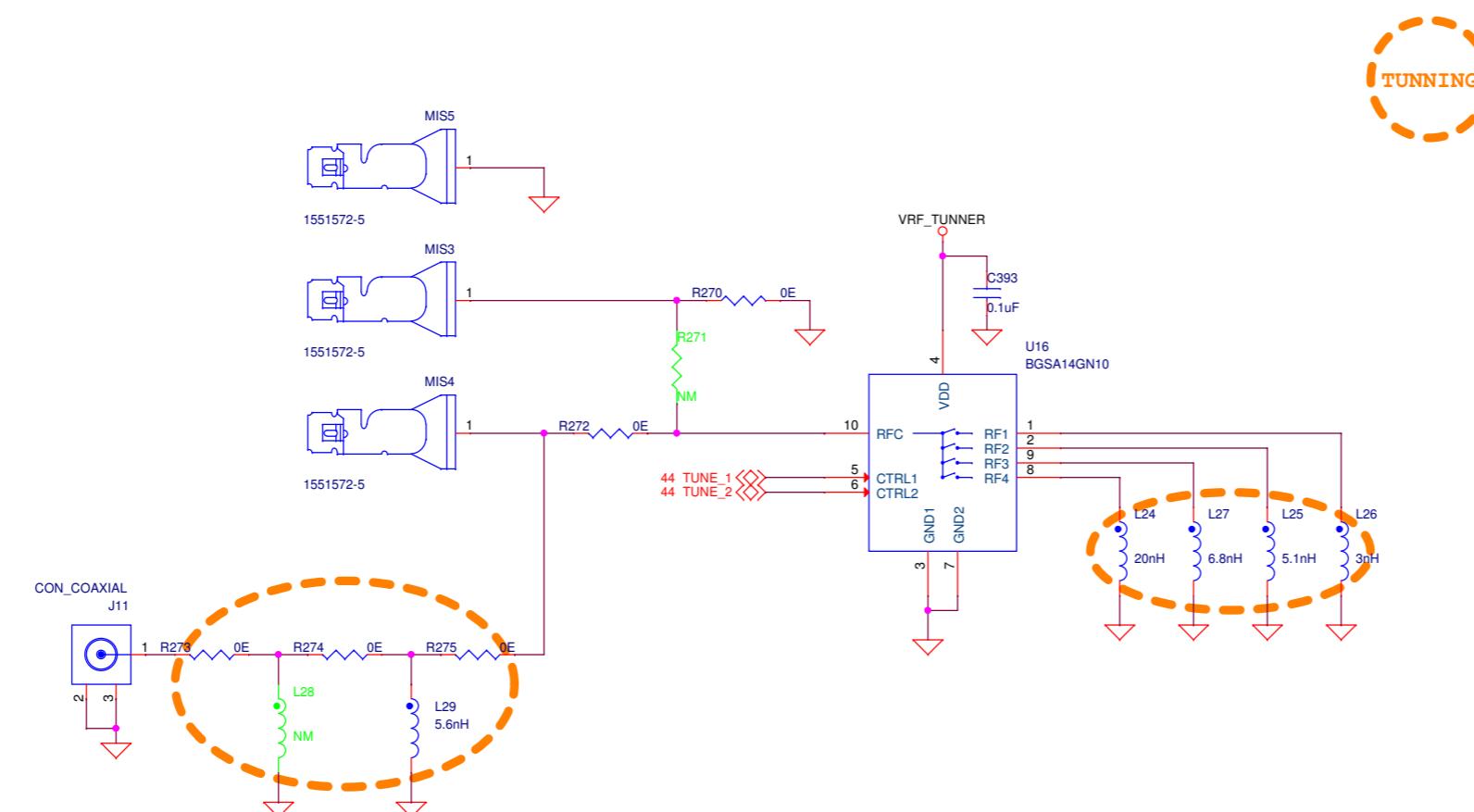


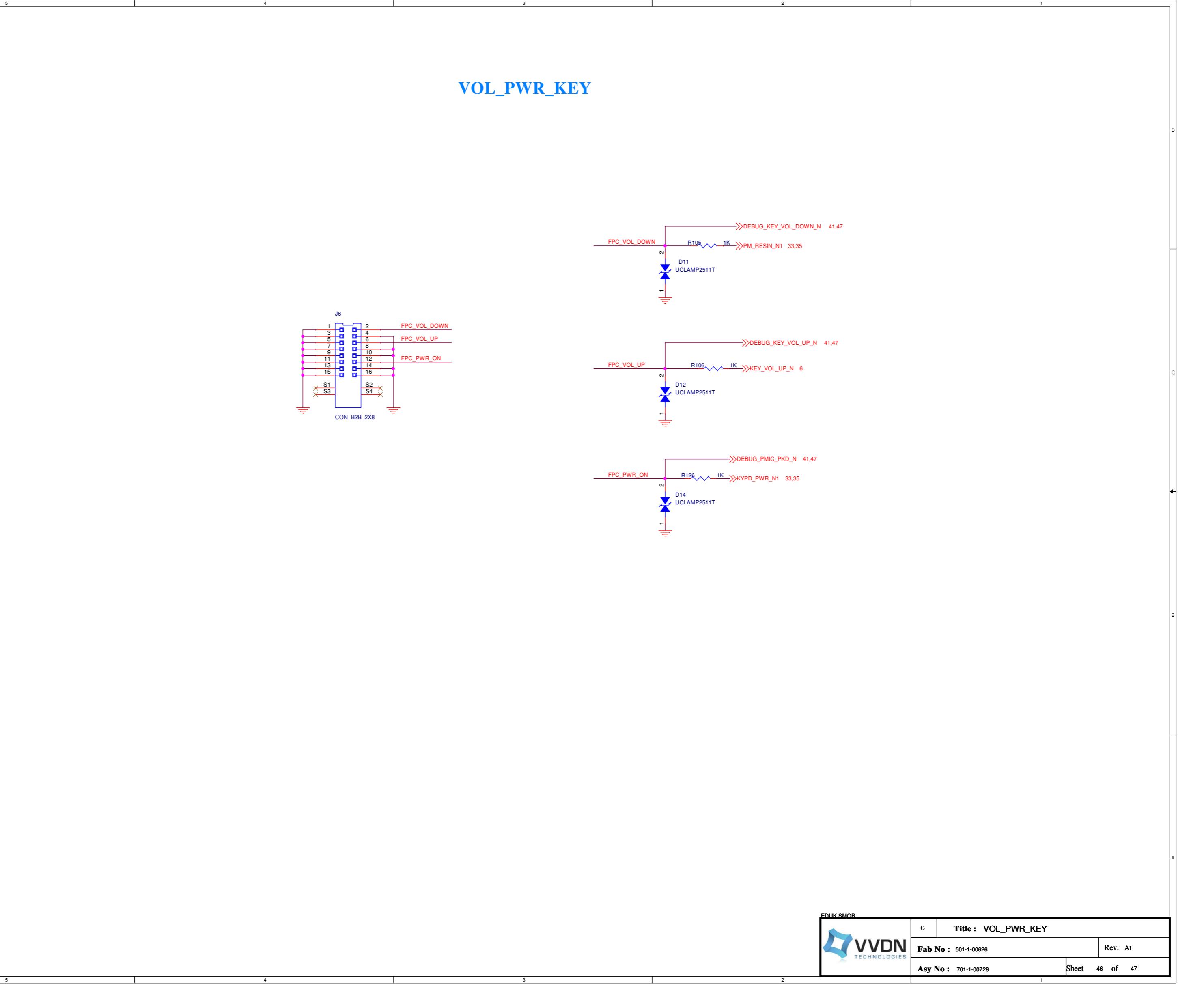
# **LOUD SPEAKER**



## ANTENNA TUNNER PRIMARY

### LTE MAIN ANTENNA





 VVDN TECHNOLOGIES	Title : VOL_PWR_KEY	
	Fab No : 501-1-00626	Rev: A1
	Asy No : 701-1-00728	Sheet 46 of 47
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