

Lenovo

**Moto razr 60
ultra/ razr ultra**



**Moto razr 60 ultra/razr ultra
Level 3 – Service Manual**

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REVISION HISTORY

Revision	Date	Notes
1	03/19/2025	Initial Release.



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CONN: WCN7861 CTRL/PCIE	84
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NFC	86
RFFE: MHB_LPAMID-QM71018_TRX0	87
RFFE: QET7100_1#	87

L3 PARTS LIST AND IMAGE

Table 1. L3 Parts List

Location	Part Number	Ref.	Commodity	Qty	Part Level	Description	Function	Remark
1	SC98D46374	U1600, U1800, U1900, U2000	IC	4	L3	IC, PMIC, WLPSP, 104PINS, 1.8V, PM8550VE	Power Management Integrated Circuits	
2	SC98D46375	U1700	IC	1	L3	IC, PMIC, WLPSP, 77PINS, 1.8V, PM8550VS		
3	SC98D49860	U5400	IC	1	L3	IC, PMIC, WLPSP25B, 25PIN, 1.8V, 10mA, PMR735D		
4	SC98E39893	U1550	IC	1	L3	IC, PMIC, FOWPSP, 42PINS, 1.8V, PMK8750		
5	SC98E41263	U2300	IC	1	L3	IC, PMIC, WLNSP, 195PIN,5-21.5V, 6A, PMIH0104		
6	SC98E51268	U2100	IC	1	L3	IC, PMIC, FOWPSP, 110PIN, 1.8V, PM8550 Rev2.1		
7	SC98E62206	U3000	IC	1	L3	IC, PMIC, 20PIN, PM- 8010-0-WLPSP20-TR-U4-0		
	SCA8C09270	J6300	Connector	1	L2.5	BTB C; GB35R-10S-H08; 10pin; 0.35pitch		
	SCA8C44152	J3150	Connector	1	L3	CONN, BTB, 40PINS, 0.35, F, 0.8mm, Receptacle		
8	SCA8C71314	J550	Connector	1	L2.5	CONN, BTB, 6PIN RCPT, 0.35mm Pitch, SMITH		Battery Connector
	SCA8D38328	J9000	Connector	1	L2.5	CONN, RF, L1.4xW1.2x H0.65		
	SCA8D57591	J3100, J3200	Connector	2	L3	CONN, BTB, 0.35 BB CONN H=0.6 24Pin REC		
	SCA8E47385	J500W	Connector	1	L2.5	CONN, SIM CONN, CONN NANO SIM CRD BLCK		On Sub Board
	SCA8E47386	J501W	Connector	1	L2.5	CONN, SIM CONN, CONN NANO SIM CRD		On Sub Board
	SCA8E75511	J500	Connector	1	L2.5	CONN USB,CONN USB 24PIN TYPE-C		On Sub Board
	SM48E48179	MK4722	Microphone	1	L2.5	AU, DIG MIC, 3.5x2.65		

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<i>Location</i>	<i>Part Number</i>	<i>Ref.</i>	<i>Commodity</i>	<i>Qty</i>	<i>Part Level</i>	<i>Description</i>	<i>Function</i>	<i>Remark</i>
	SM48D32612	MK4720	Microphone	1	L2.5	AU, MIC, 3.5x2.65mm, GP compliant		

NOTE

L3 parts are not commonly stocked, contact our USA distributors partners to request prices and lead times.



Front View

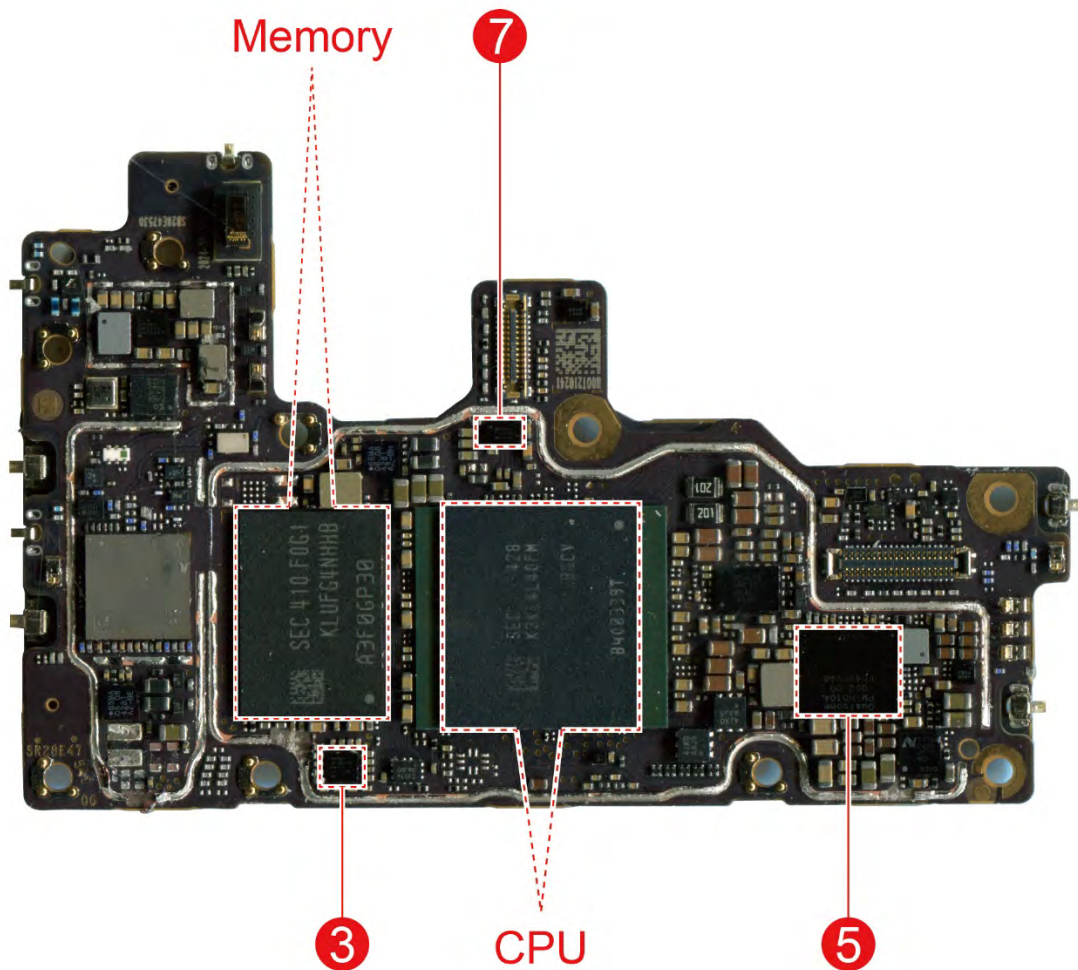


Figure 1. Front View

Back View

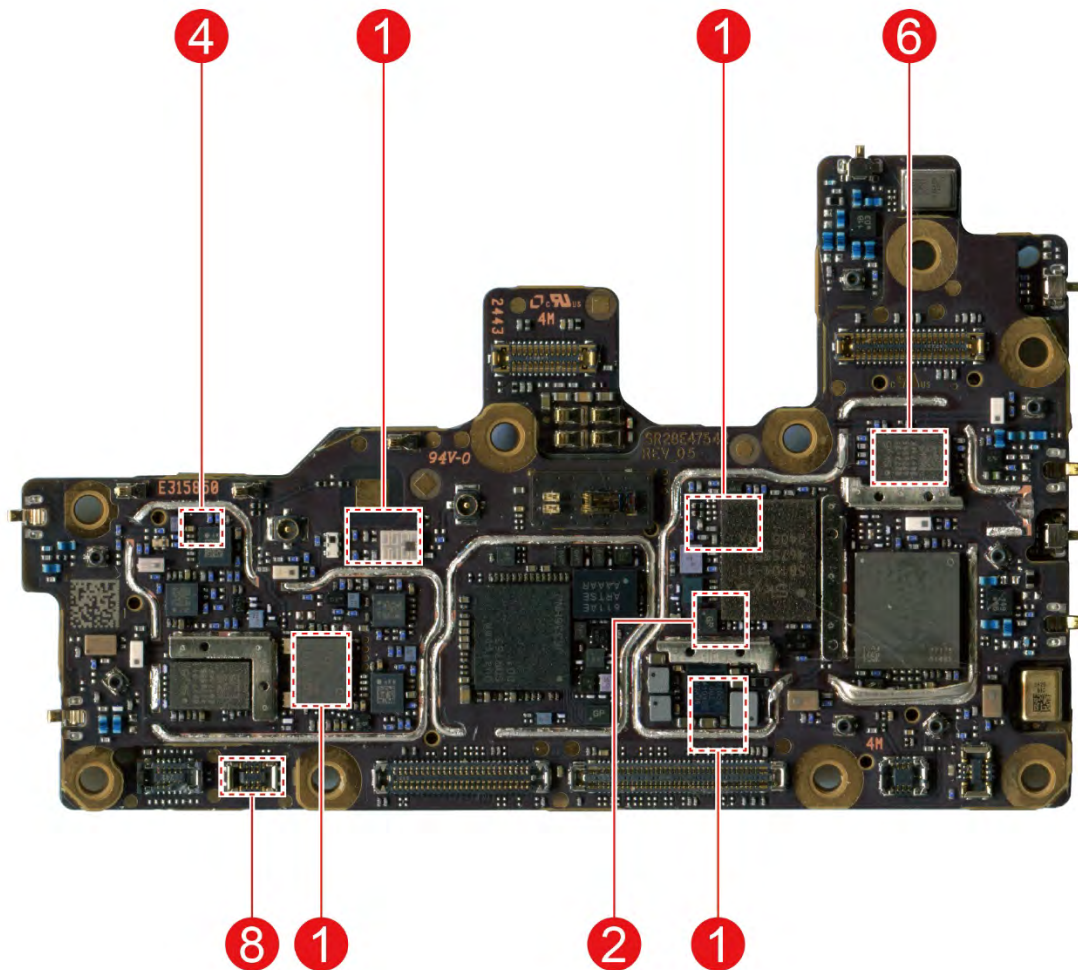


Figure 2. Back View

TROUBLE SHOOTING GUIDE

WLAN/BT TROUBLESHOOTING

Bluetooth/WiFi power-on failure

WLAN/BT power-on failure Symptoms:

- WLAN DL test firmware test commands fail.
- Bluetooth power-on test commands fail.

Step 1 for BT/Wi-Fi 2.4GHz power-on failure

- Check if the other functionality fails as well, e.g. check WLAN “power on” if Bluetooth can not be powered on. Check Bluetooth “power on” if WLAN can not be powered on.
- WLAN 2.4G and Bluetooth share the same IC and circuit, so if one of the BT/Wi-Fi fails, the other should fail as well. If only one of them fails, it is highly likely that it is not a hardware problem and it could just be that the BT/Wi-Fi is turned on through the UI already and the test commands can not turn it on again.

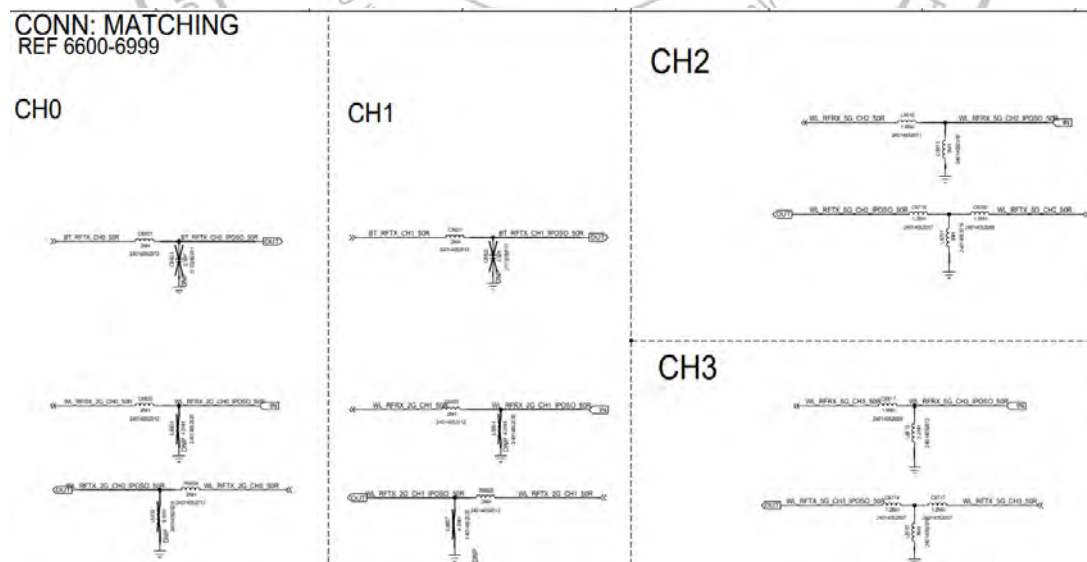
Step 2 for BT/Wi-Fi power-on failure

- If both BT and WLAN fails, it is highly indicative of a hardware failure.
- Location of the Bluetooth and WLAN circuit (Shown on the next few pages).
- Check for any visible damage around the BT/WLAN IC area.

Step 3 for BT/Wi-Fi power-on failure

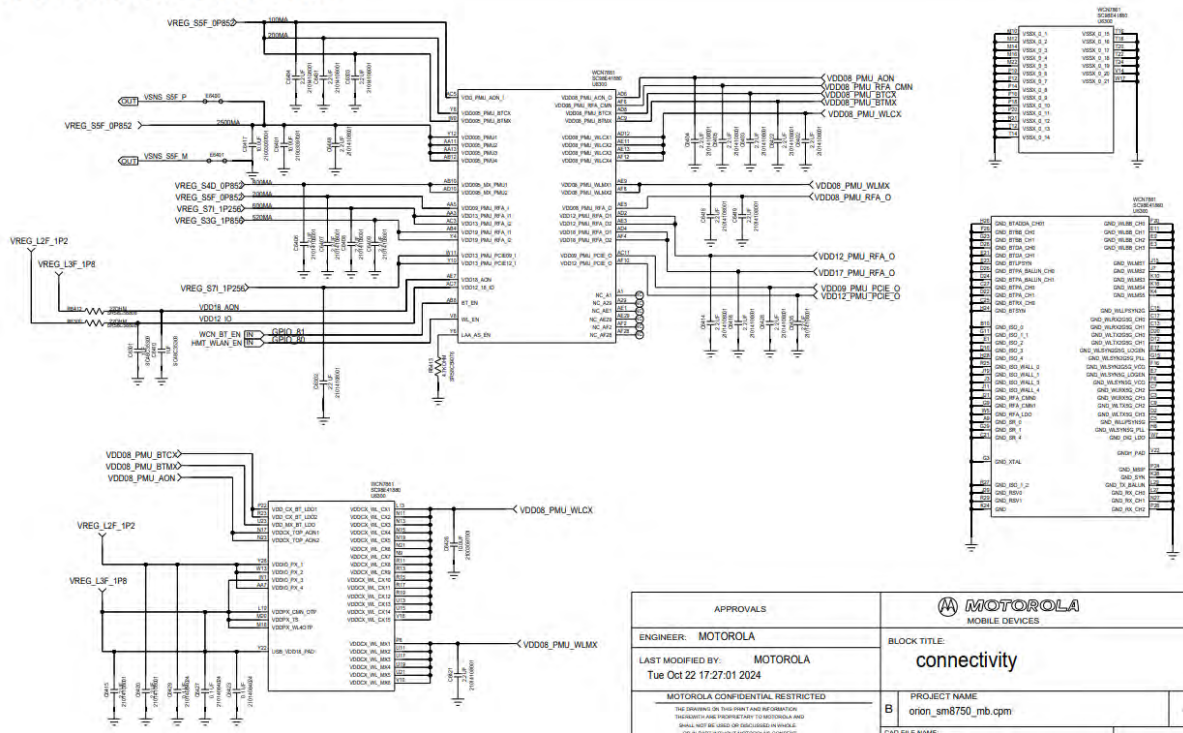
If no visible damage can be seen, open up the shield and check for any visible damage on the IC and components. Look for misplaced or damaged components.

BT/2.4G Wi-Fi & 5G WIFI Schematic mainboard

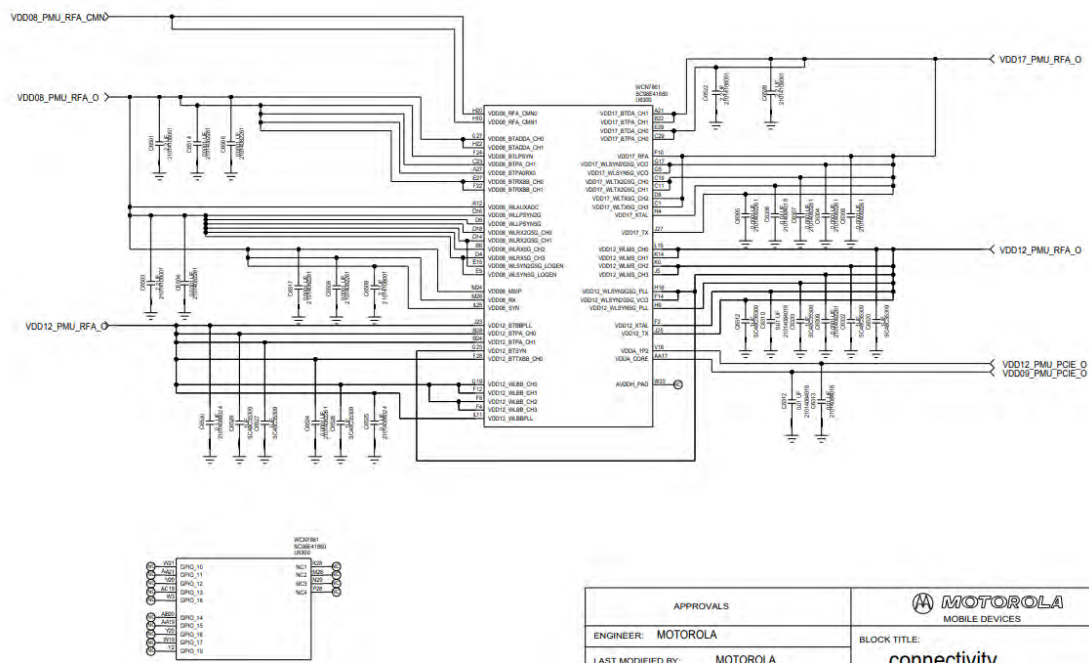


Power supply Schematic main board

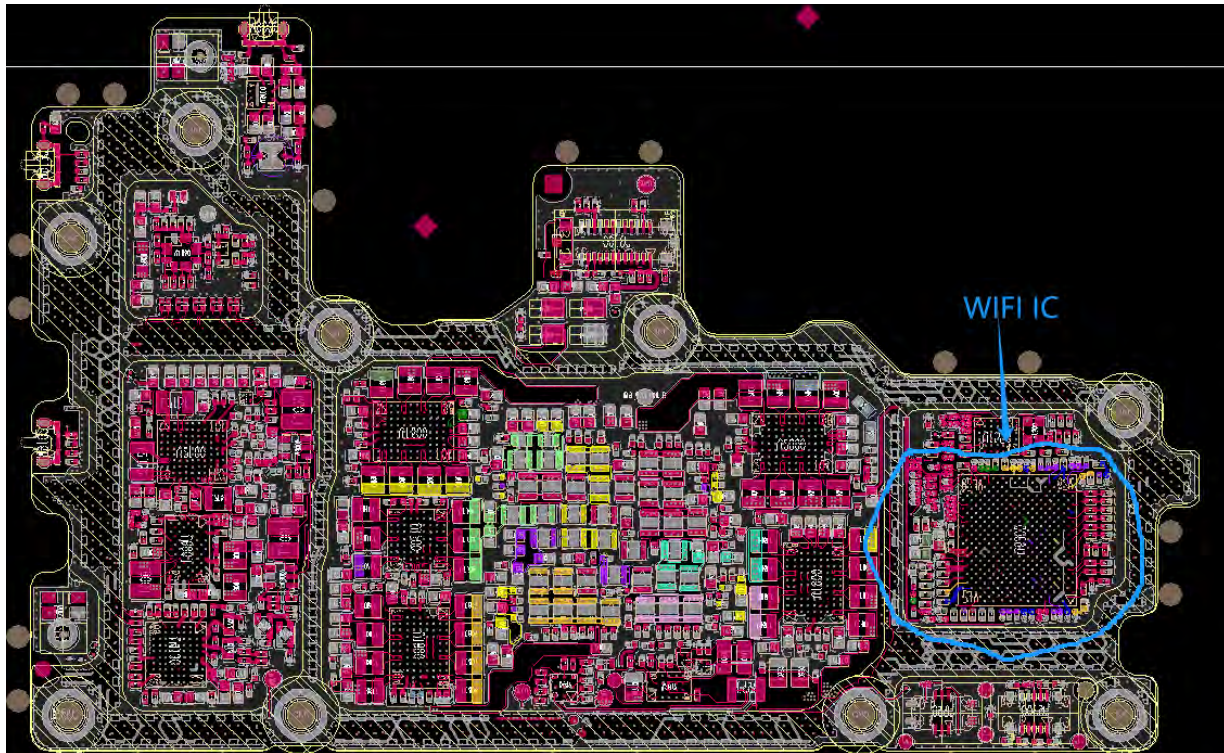
CONN: WCN7861 PWR/GND1



CONN: WCN7861 PWR/GND2
REF 6300-6999



WiFi IC Part placement main board



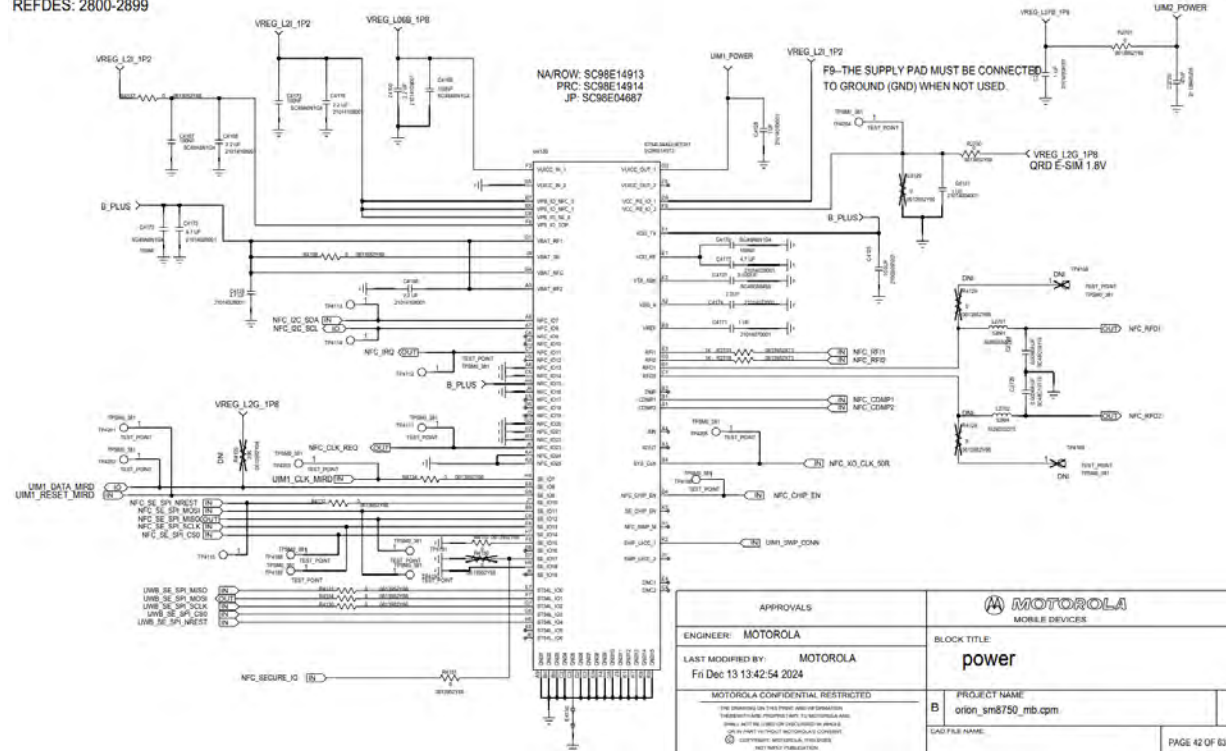
Debugging BT/WLAN low TX power

- Probe and measure the output power at the contact area and see in a spectrum analyzer if you see if the phone is transmitting any power.
- Please measure the output power in BP-tools or qcom mode using the latest QRCT and procedures described in the following link: <https://drive.google.com/drive/folders/1Yad4L19x3fqlldDr3ZtLPVRJGJ3W0dQQ>.

NFC TROUBLESHOOTING

Schematic diagram of NFC

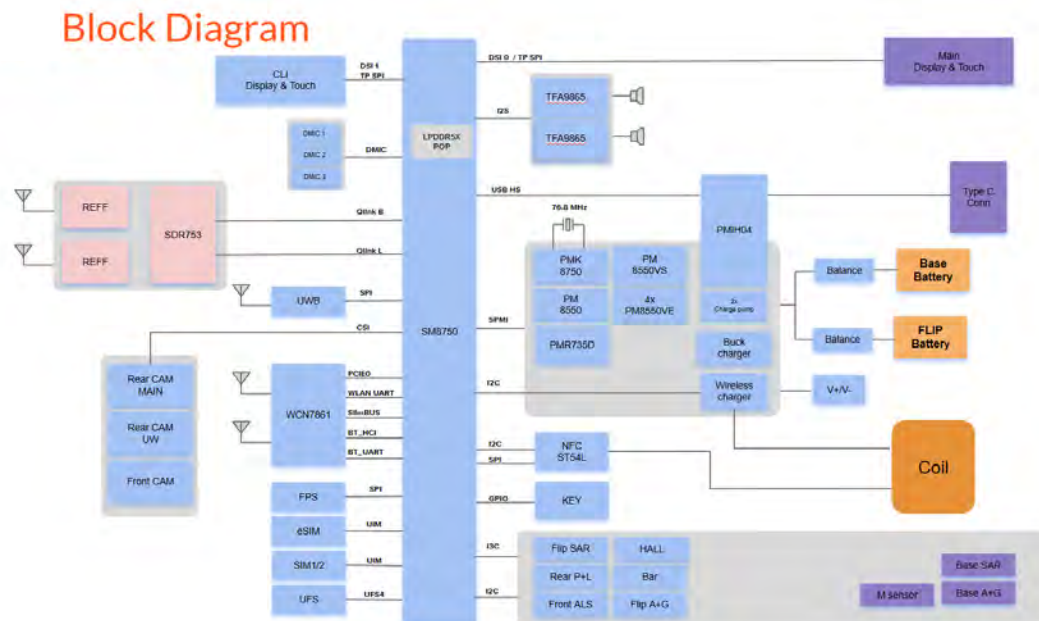
NFC: ST54L
REFDES: 2800-2899



Debugging NFC failure

1. Check NFC assembly;
2. Check NFC_VTX voltage;
3. If only SIM1 work on ROW SKU, please check UIM2_power voltage.

System TROUBLESHOOTING



System Cold Boot Sequence

Refer to the PMK8750 Spec Section 3.8.1 Power-on circuits and power sequence.

PBS OTP resides in PMK8750; so after receiving the PON trigger, it executes the PON sequence that involves turning on multiple regulators in different including PM8550, PM8550VS, PM8550VE, PMR735A, PMIH010X and so on.

1. Always on Power
 - The whole system have one always on power as long as plug the battery or charger.
 - VREG_1P8_SYS, VREG_1P2_SYS.
 - VREG_COIN is enabled in PSI. So, during cold boot VREG_COIN is turned ON later in the boot flow.
2. The boot sequence shows on the right table.
 - The following power and signal will be provided in the following order one by one.
 - In the table, you can find the corresponding and its reference number for each signal.
 - Once the PON_RESET_N is released, the whole system will begin to boot. And when it is connected with computer, the 9008 port can be found.

Table 3-25 PMK8750 platform PON sequence

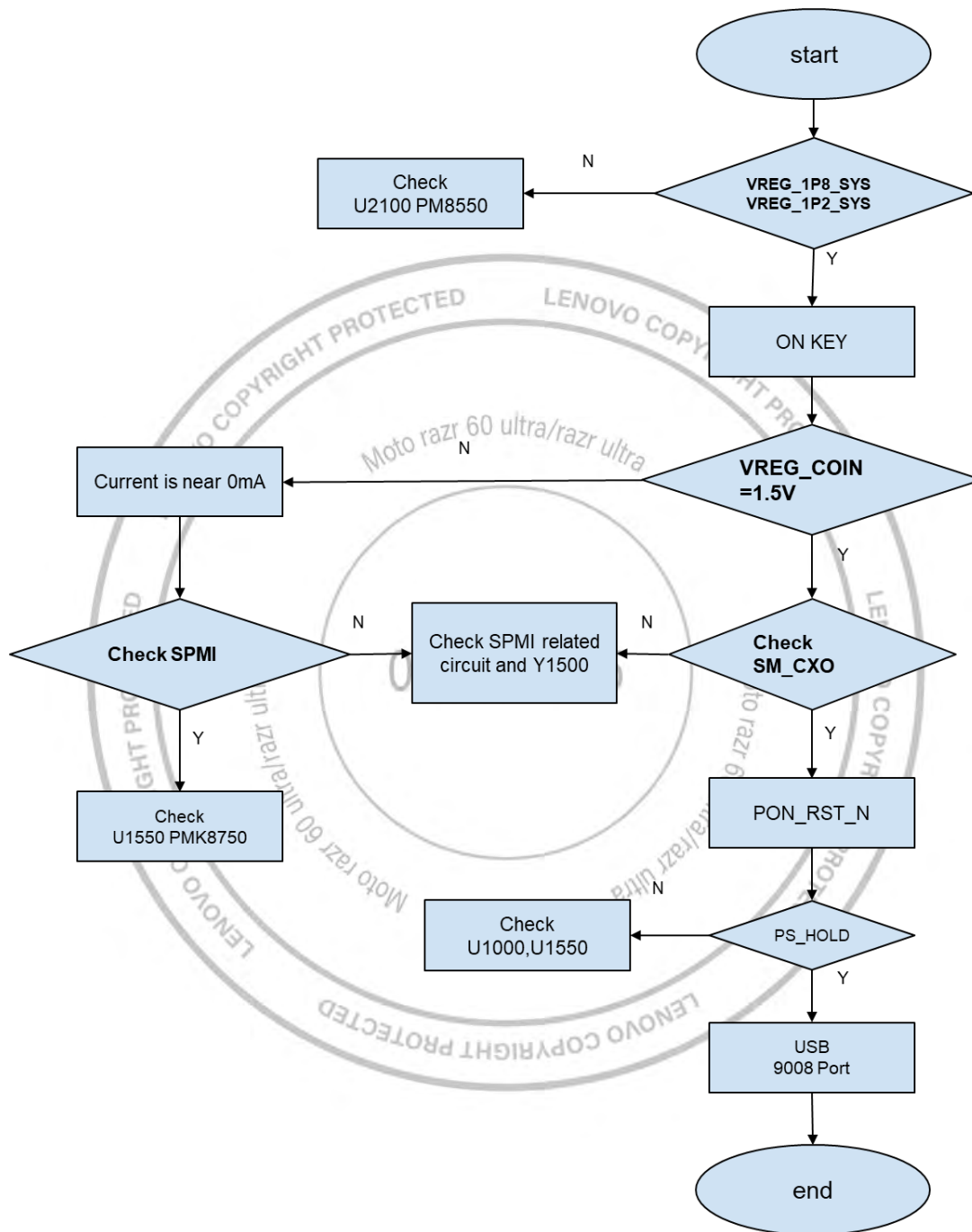
Event	Platform applicability
VREG_COIN	SM8750
VREG_1P8_SYS	SM8750
VREG_1P2_SYS	SM8750
PON trigger is asserted	
CBST	SM8750
S3G	SM8750
BOB1	SM8750
S1D	SM8750

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S7I	SM8750
L03B	SM8750
S8F	SM8750
L3J	SM8750
S2G	SM8750
S1J	SM8750
S5I	SM8750
L2I	SM8750
S3D	SM8750
L3K	SM8750
VREF_IX	SM8750
L15B	SM8750
L3F	SM8750
L3G	SM8750
L2F	SM8750
L3I	SM8750
L1J	SM8750
L1F	SM8750
L2D	SM8750
S2J	SM8750
L05B	SM8750
BOB2	SM8750
L17B	SM8750
L1D	SM8750
S8I	SM8750
S1G	SM8750
VREG_BB	SM8750
CLK6_LN	SM8750
SLPCLK_1P2	SM8750
S6F	SM8750
S4J_5J_6J	SM8750
CLK8_LN	SM8750
GPIO_06I	SM8750
PON_RESET_N	SM8750

System Boot issue troubleshooting

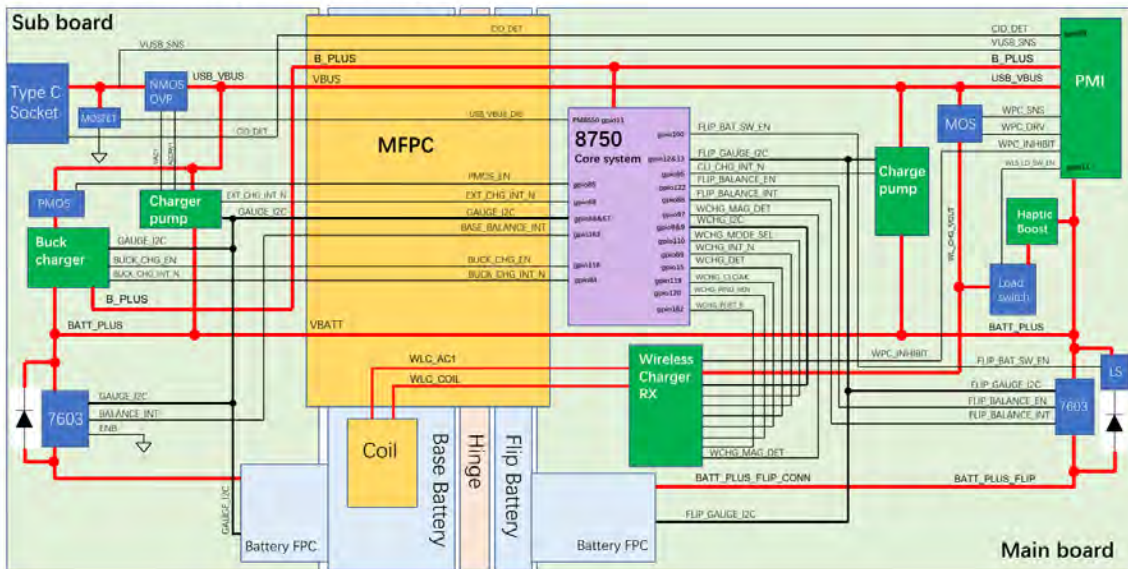
When you encounter the trouble that it can't boot, we are highly recommended you follow the following sequence to check.



CHARGING TROUBLESHOOTING

Fast & Wireless Charger Block Diagram

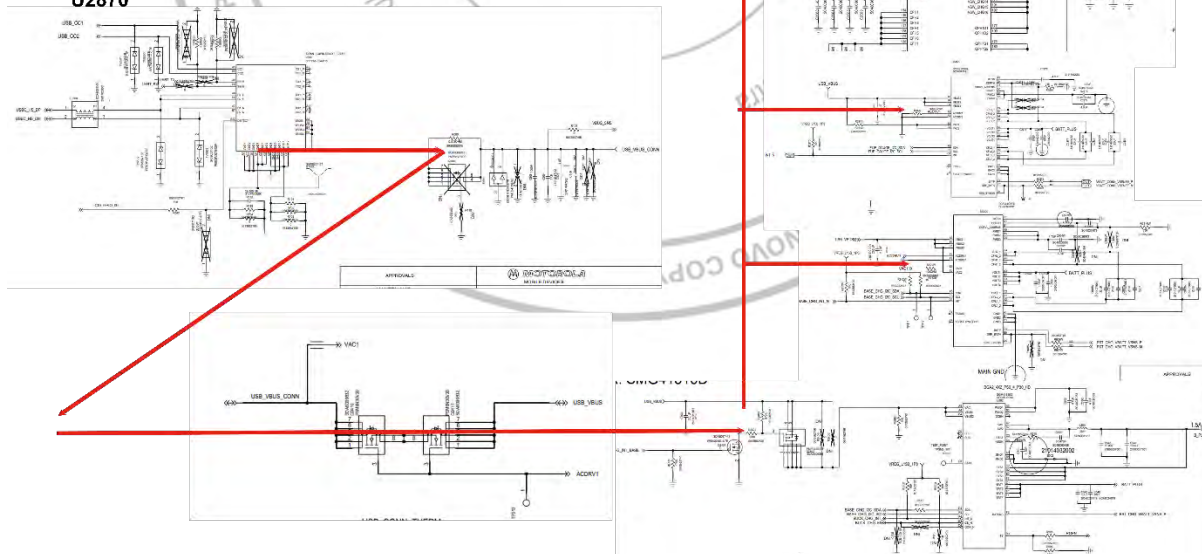
12.4A total into battery



Wired Charging Path – Schematics

Input path:

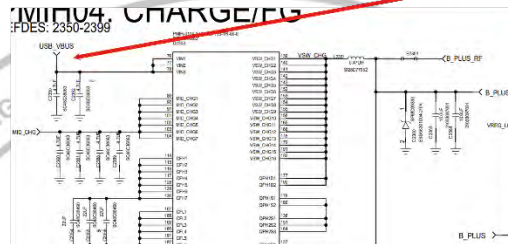
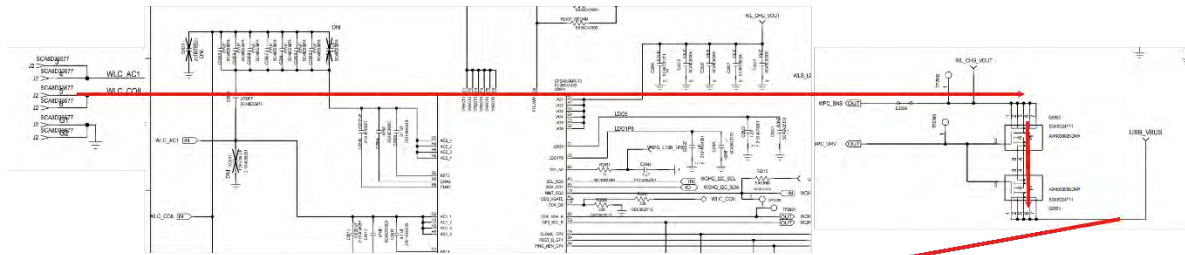
Type C → J500 → OVP Q2410 Q2411 → U5300, U502, FPC B2B → U2300 U2870



Wireless Charging Path – Schematics

Input path:

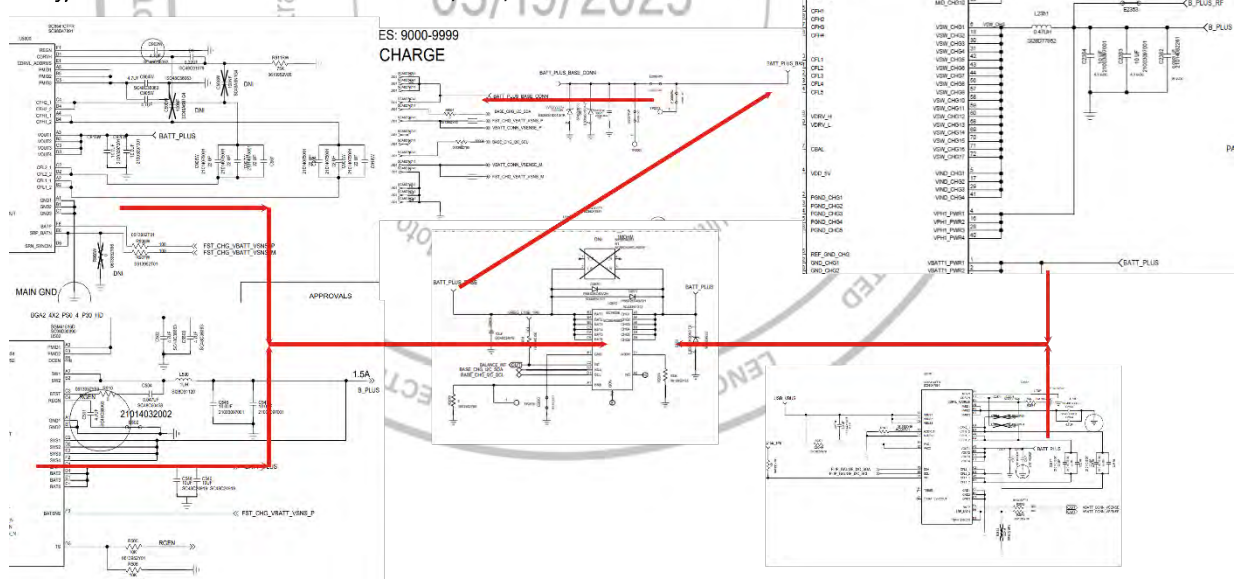
MFPC J2 → U2801 → Q2802, Q2803 → U2300 U2870, FPC B2B → U5300, U502



Base battery Charging Path – Schematics

Input path:

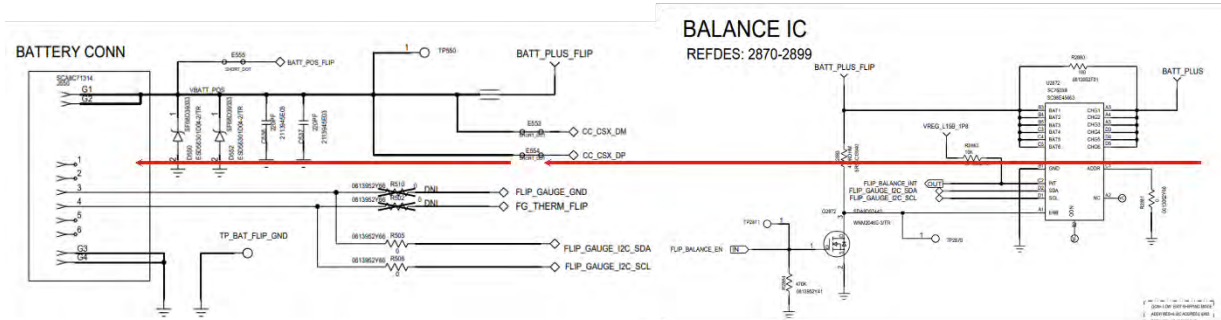
Type C → J500 → OVP Q2410 Q2411 → U5300, U502, U2300 U2870 → SUB U2872 → J301



CLI battery Charging Path – Schematics

Input path:

Type C → J500 → OVP Q2410 Q2411 → U5300,U502, U2300 U2870 → MAIN U2872 → J550



Charging Path – Troubleshooting

In the event of charging issues:

- Do visual inspection on Type-C USB connector, 60 pin connector, Interposer board, battery connector and battery pack.
- Check charging voltages along the charging path.
 - Measure 'USB_VBUS_CONN' and 'USB_VBUS' charger input voltage.
The voltage should be around 5V-11V while charging.
 - Check the battery voltage at BATT_PLUS. The test point is in PCBA Bottom. It should be higher than 2.1V and lower than 4.48V. If the battery is below 2.1V, there maybe a short in the circuit somewhere and the battery protection circuit has been triggered.
- Insert adapter witch is support PPS charge. Check the charging current through ampere meter, have no voltage climb or restart voltage climb over and over again, there maybe an abnormal status on cap switch charge circuit.
- Insert adapter witch is support PD2.0 charge. Check the charging current through ampere meter, have no voltage climb or restart voltage climb over and over again, there maybe an abnormal status on buck charge circuit.
- Check Base/CLI battery thermistor.
 - Battery temperature should be in the range of 0°C ~ 45°C to be fully charged. Check the thermistor voltage at the point or net (D2010RW, FG_THERM_FLIP). It should be around 0.9375V at room temperature (25°C).

Wireless Charging Path – Troubleshooting

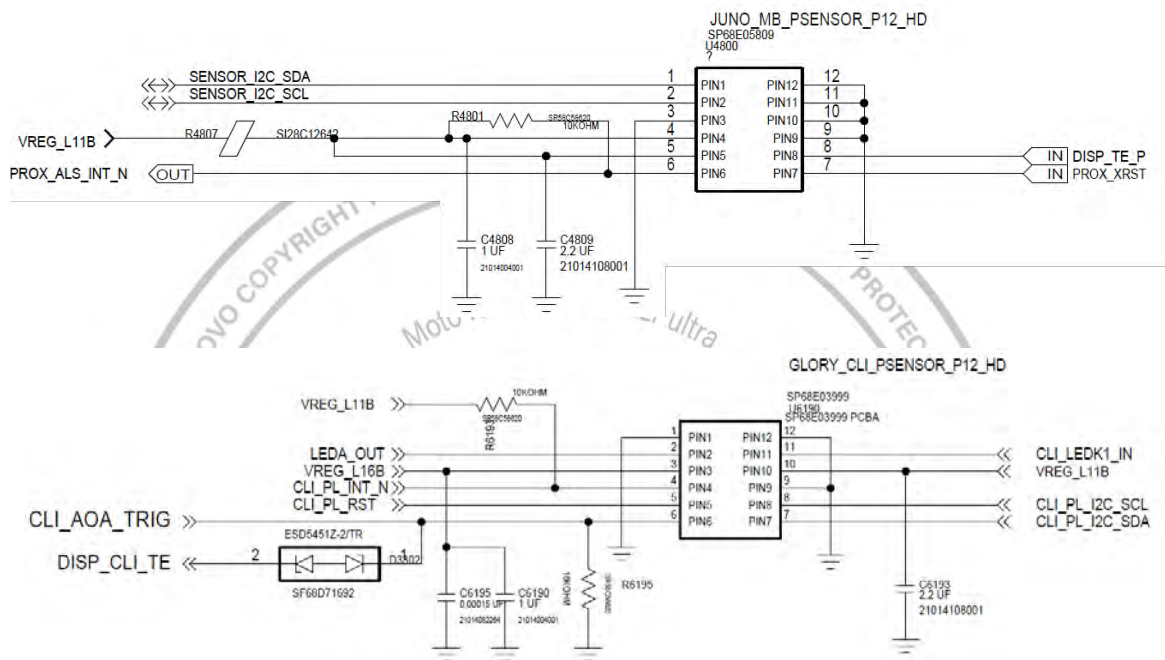
In the event of charging issues:

- Check charging voltages along the charging path.
 - Measure 'WL_CHG_VOUT' and 'USB_VBUS' net . The voltage should be around 5V ~11V .
 - Check the battery voltage at BATT_PLUS net. It should be higher than 2.1V and lower than 4.48V. If the battery is below 2.1V, there maybe a short in the circuit somewhere and the battery protection circuit has been triggered.
- Attach wireless TX which is support MOTO 68W. Note: AC adapter need to support 15V output, check the charging current through ampere meter, have no voltage climb or restart voltage climb over and over again, there maybe a abnormal status on charging circuit.

Sensors TROUBLESHOOTING

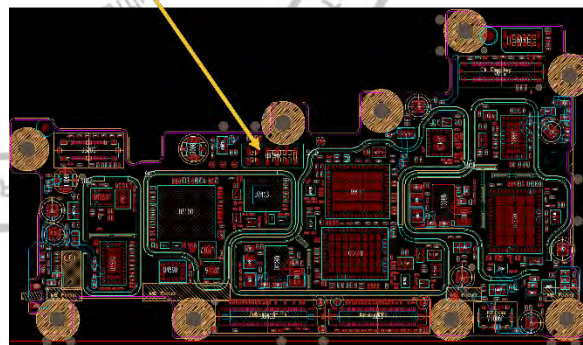
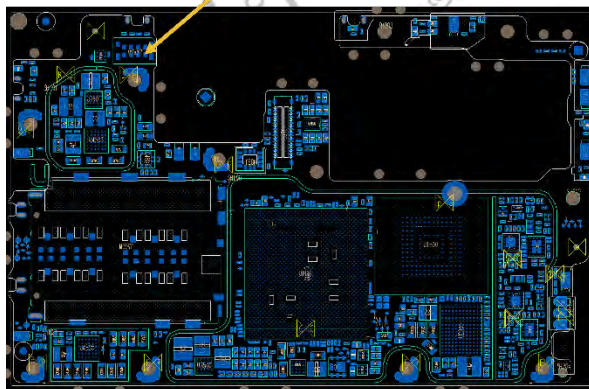
Light sensor and proximity sensor

1. Inner light Sensor is U4800.
2. Inner P sensor is ultra-sonic that reuse top speaker and MIC.
3. Rear L/P sensor is U6190.



Inner light sensor

Rear L/P sensor



Inner Light sensor

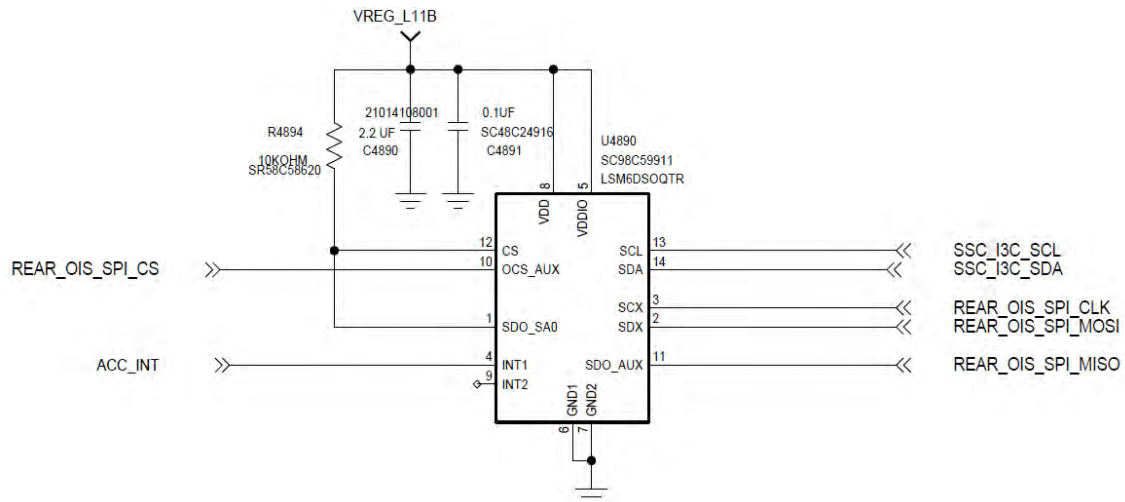
1. Visually inspect the sensor whether it was damaged in physical or not.
2. Check the sensor board was well soldered in the right place and whether rubber is assembled.
3. Measure the voltage of the inner light sensor at C4808/C4809. It should be around 1.8V.
 - If the power is not correct, then check VREG_L11 of PM7550(U2201).
4. Measure the I2C signal of the sensor at C4813 and C4814.
 - Resolder a new sensor to check the function if the I2C signal was right.
If nothing captured, Check AP side I2C interface and corresponding pull-up resistor R1019/R1020.

Rear Light sensor and proximity sensor

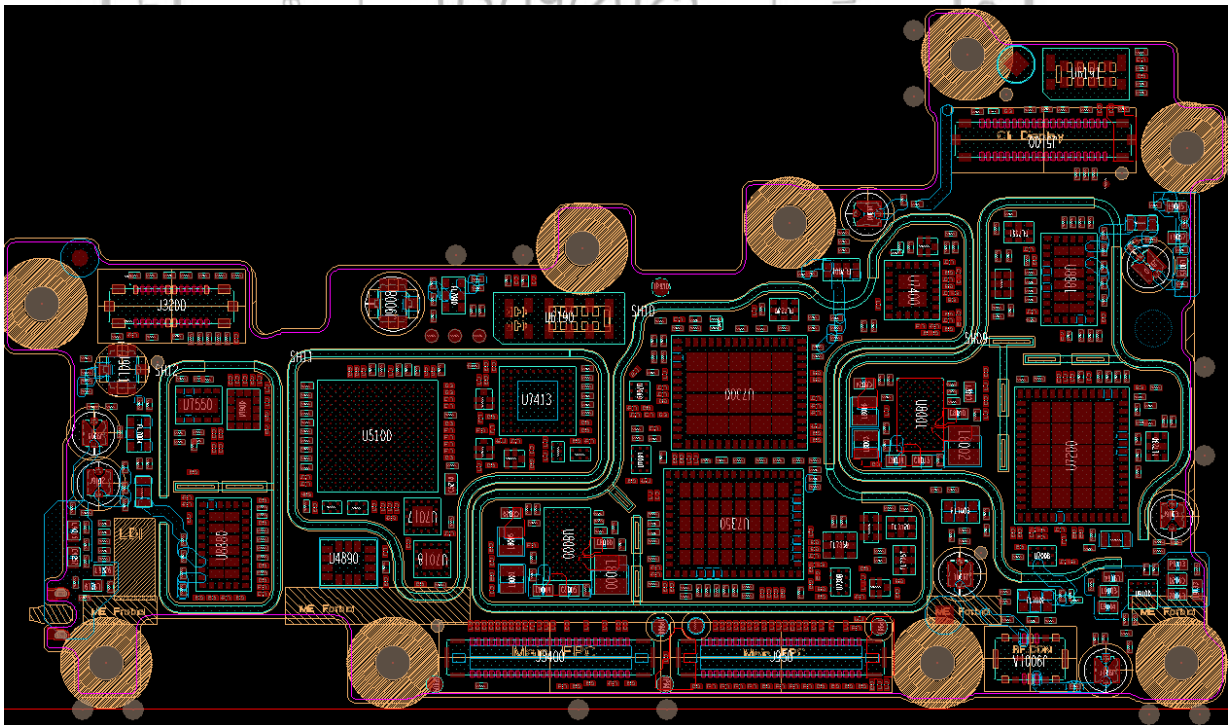
1. Visually inspect the sensor whether it was damaged in physical or not.
2. Check the sensor board was well soldered in the right place and whether rubber is assembled.
3. Measure the voltage of the rear P/L sensor at C6193. It should be 1.8V.
 - If the power is not correct, then check VREG_L11 of PM7550 (U2201).
4. Measure the voltage of the rear P/L sensor at C6190/C6195. It should be 3.3V.
 - If the power is not correct, then check VREG_L16 of PM7550 (U2201).
5. Measure the I2C signal of the sensor at R1039 and R1040.
 - Resolder a new sensor to check the function if the I2C signal was right.
If nothing captured, Check AP side I2C interface and corresponding pull-up resistor R1039/R1040.

CLI Acceleration sensor

CLI Acceleration sensor locate at board.

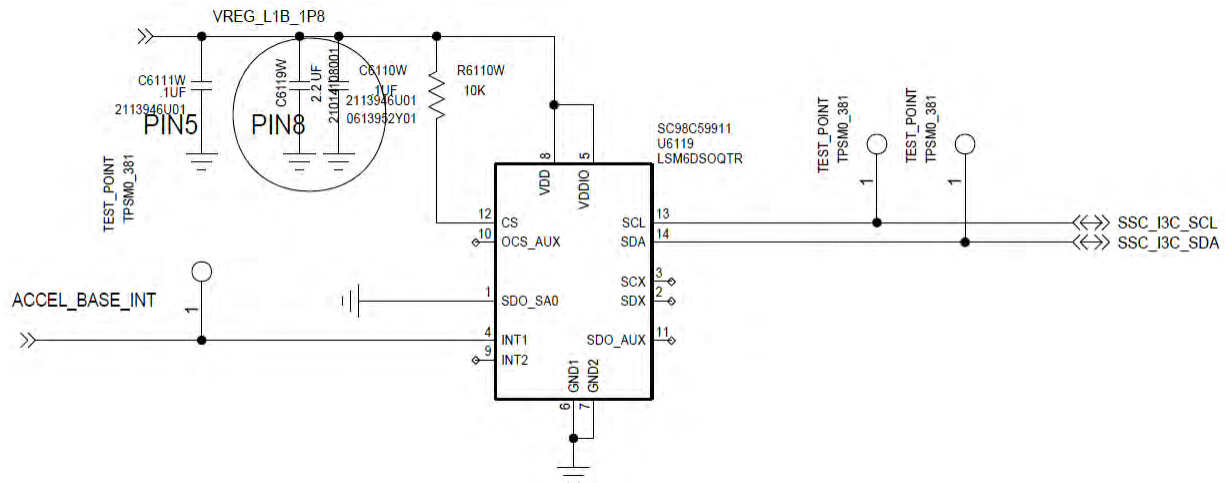


1. Measure the voltage of the sensor at C4890. It should be around 1.8V.
 - If the voltage is equal or close to 0 V. We should remove the sensor and measure the voltage again. In case a short circuit of the IC is presented, Check VREG_L11 of PM7550(U2201) if the power is still 0V.
2. If the voltage is normal, replace a new sensor IC and try again.
3. If it still can't work, check AP.

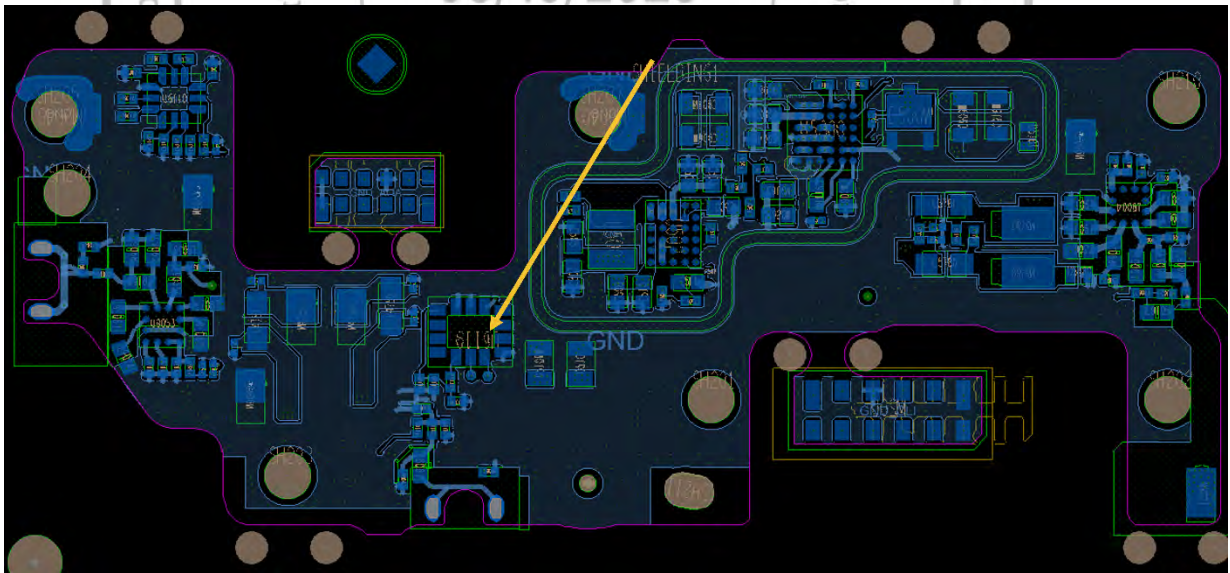


Base Acceleration sensor

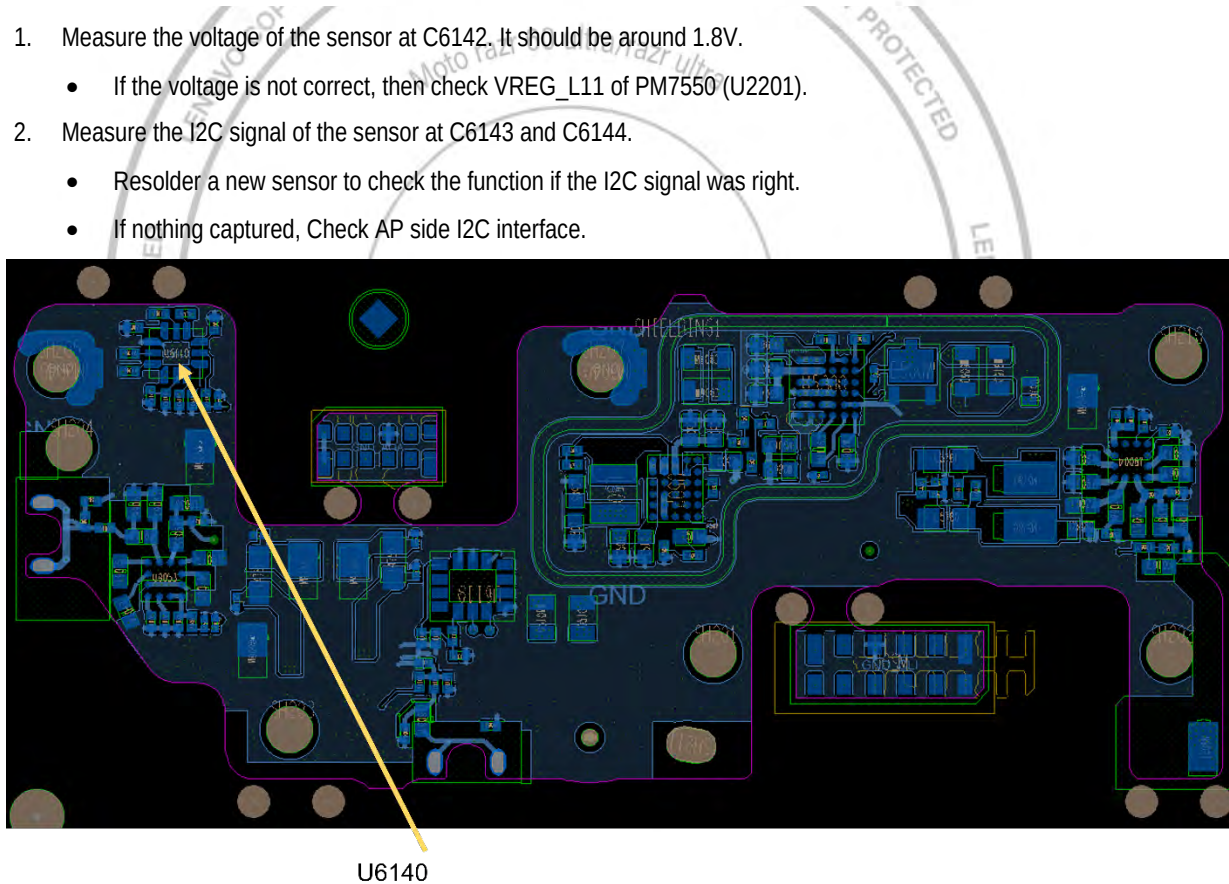
Base Acceleration sensor locate at USB SUB board.



1. Measure the voltage of the sensor at C6119w. It should be around 1.8V.
 - If the voltage is equal or close to 0V. We should remove the sensor and measure the voltage again. In case a short circuit of the IC is presented, Check VREG_L11 of PM7550 (U2201) if the power is still 0V.
2. If the voltage is normal, replace a new sensor IC and try again.
3. If it still can't work, check AP.

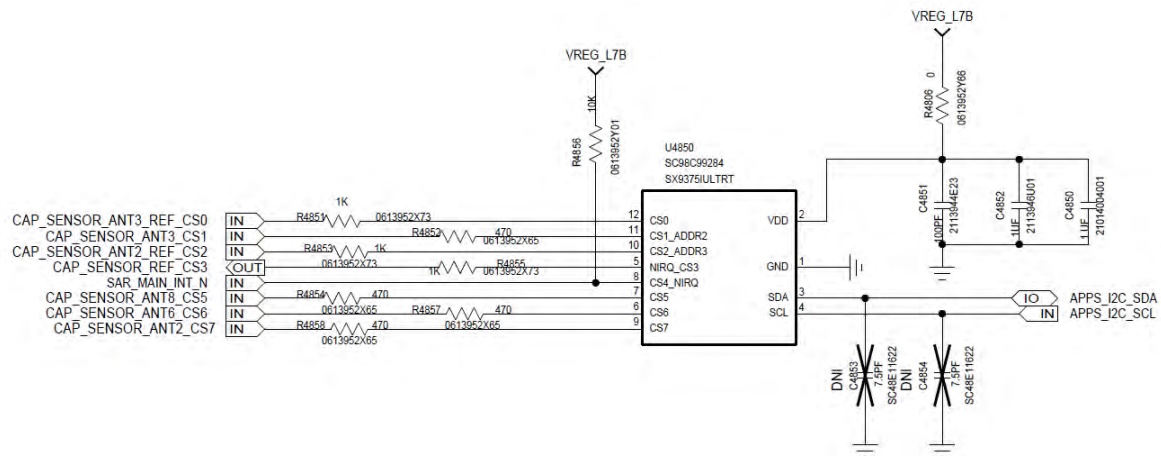


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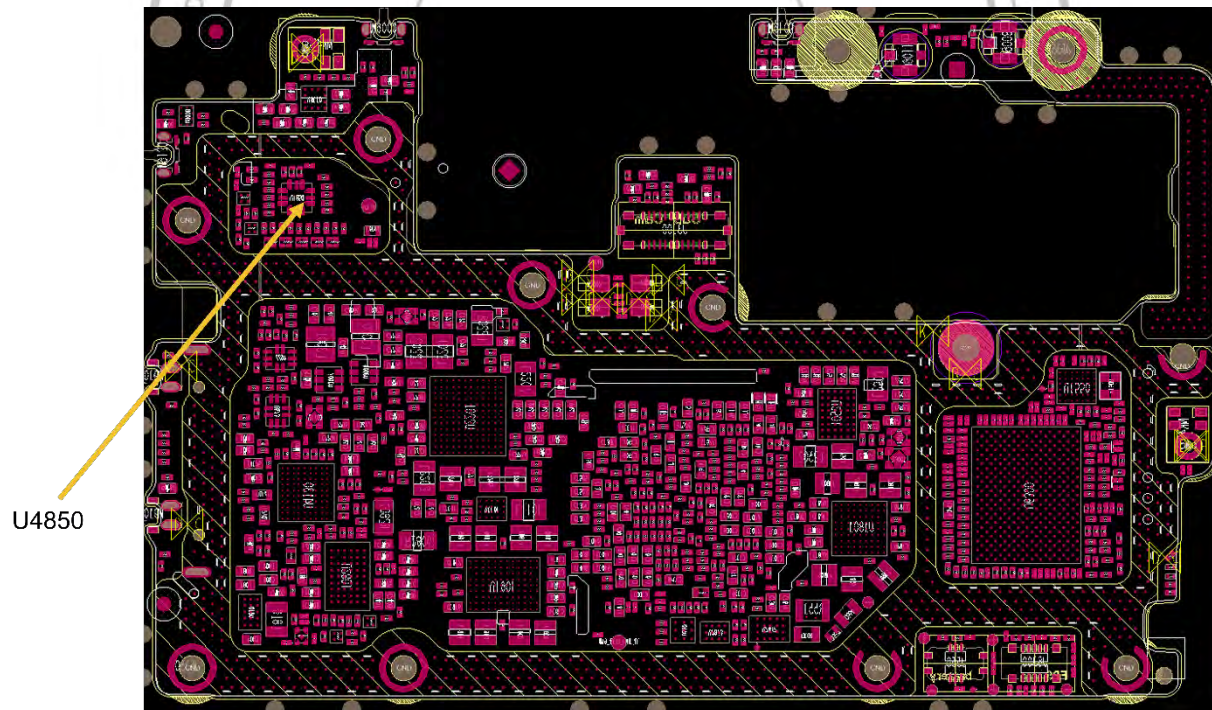


U6140

CLI Sar sensor

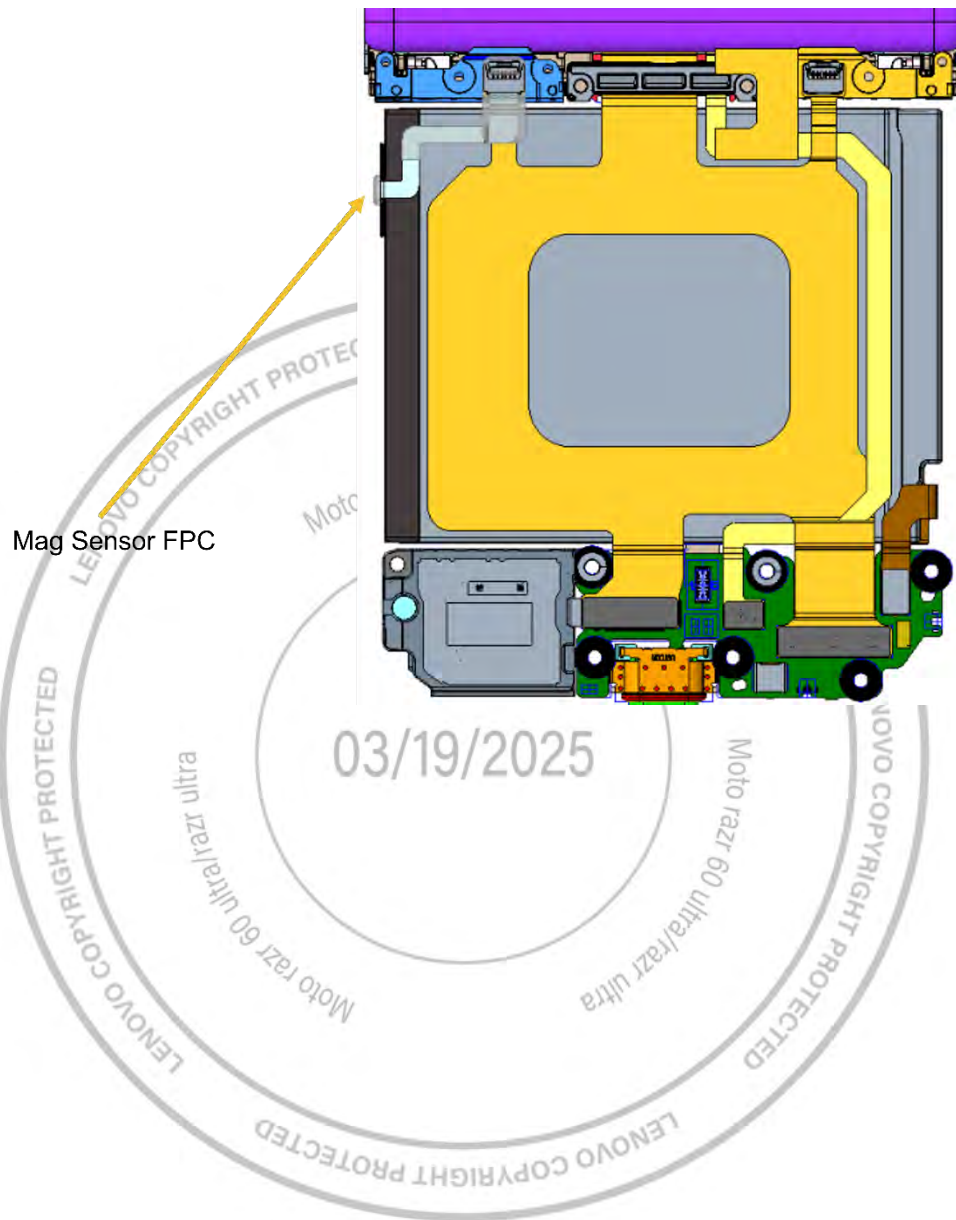


1. Measure the voltage of the sensor at C4850. It should be around 1.8V.
 - If the voltage is not correct, then check VREG_L11 of PM7550 (U2201).
2. Measure the I2C signal of the sensor at C4853 and C4854.
 - Resolder a new sensor to check the function if the I2C signal was right.
 - If nothing captured, Check AP side I2C interface.



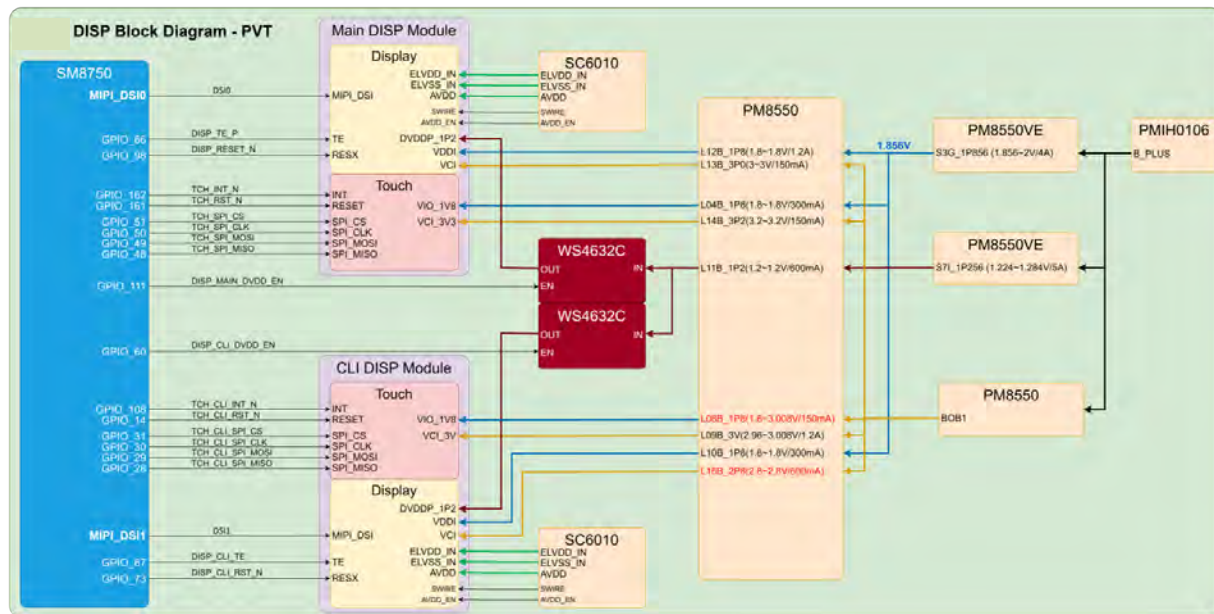
Magnetometer sensor

M sensor is on a dedicate FPC, pls replace the M sensor FPCA with a new one.



DISPLAY & TOUCH TROUBLESHOOTING

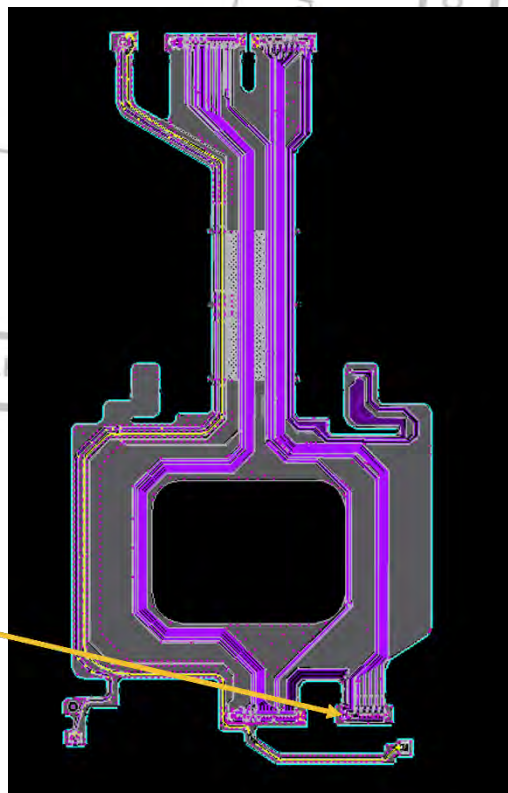
Display & Touch Block Diagram



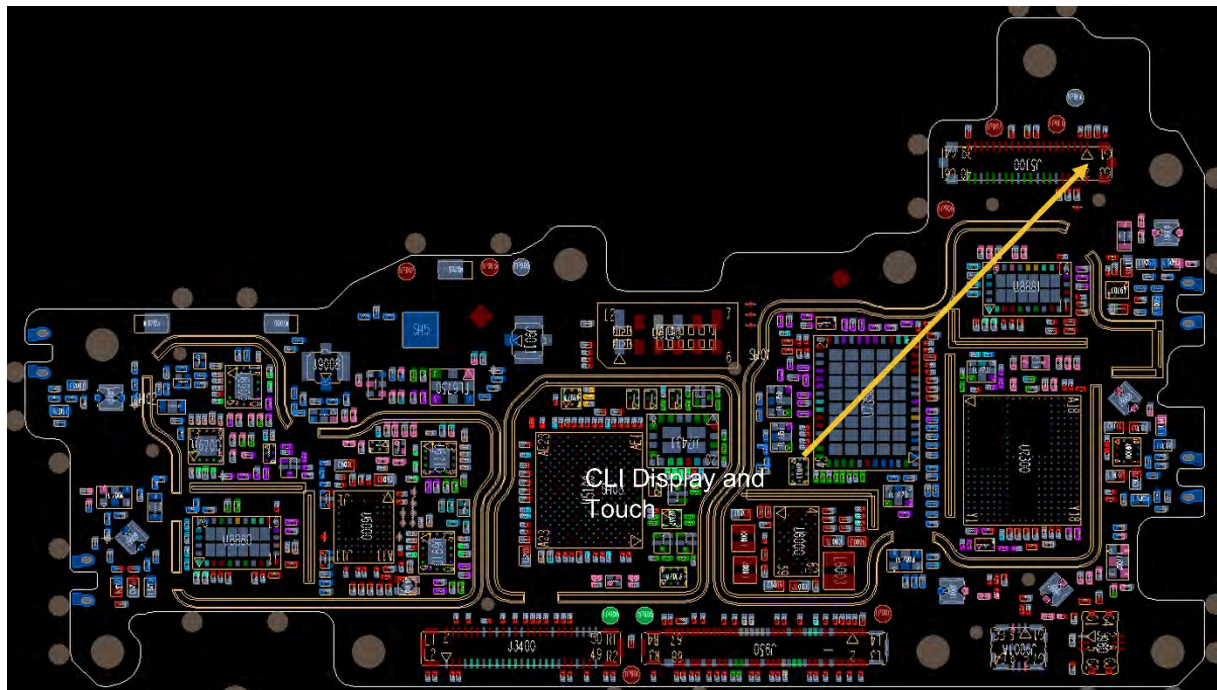
Display connection

Main Display and Touch Connector on Main FPC, connect to Display module directly.

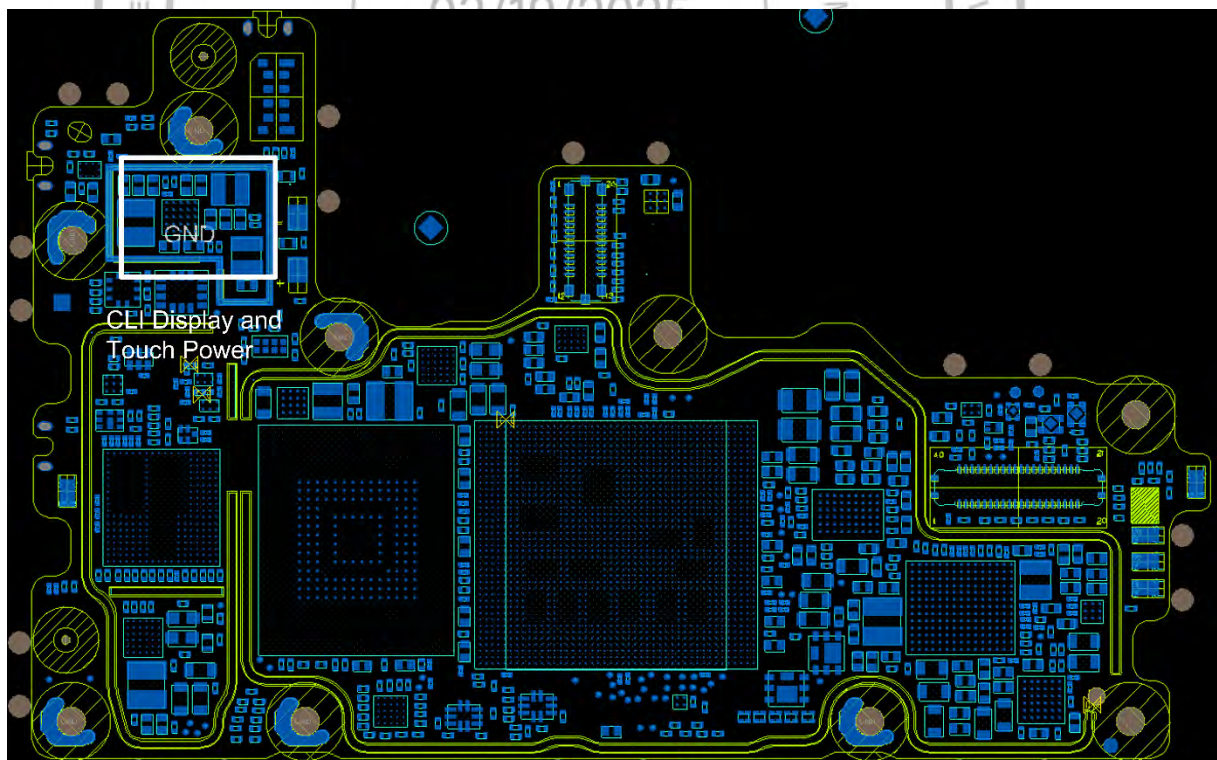
Main Display and Touch

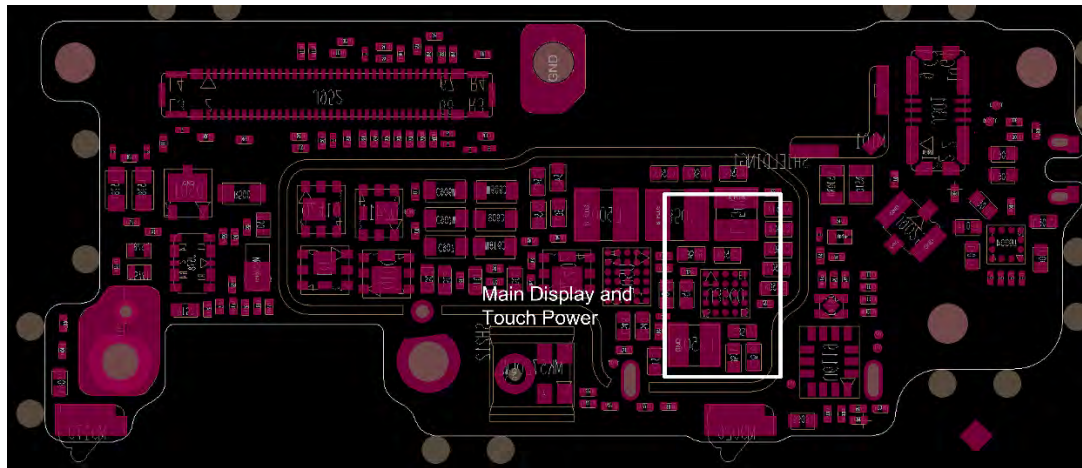


CLI Display and Touch Connector at Board



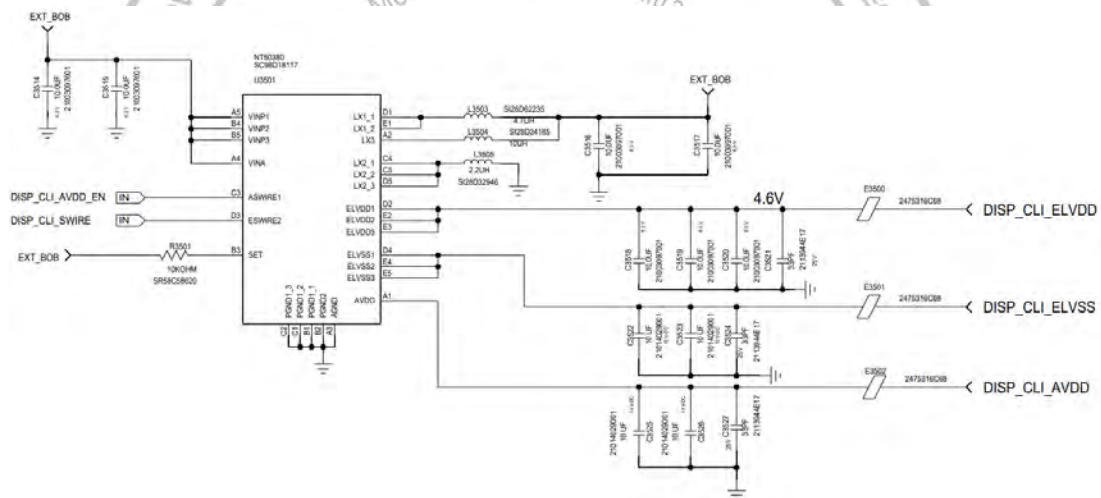
Display power location





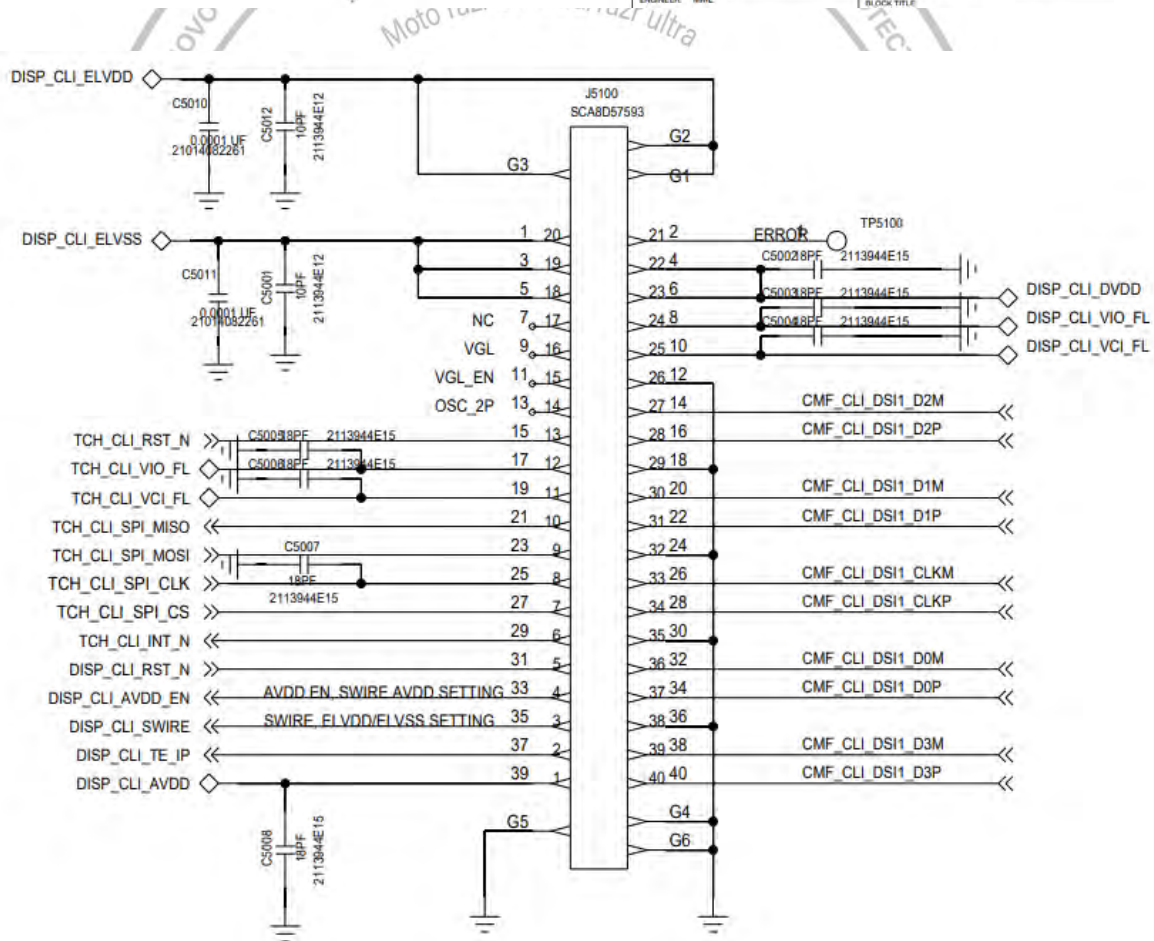
Schematic

CLI Display and Touch Power



Moto razr 60 ultra/razr ultra Level 3 – Service Manual

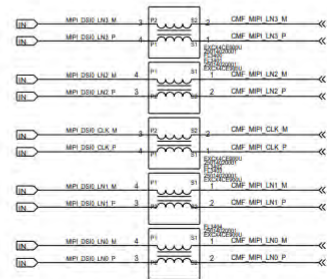
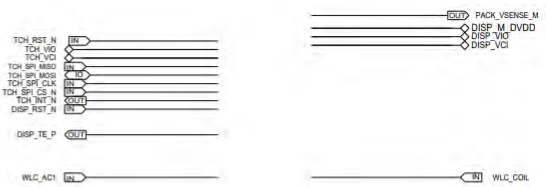
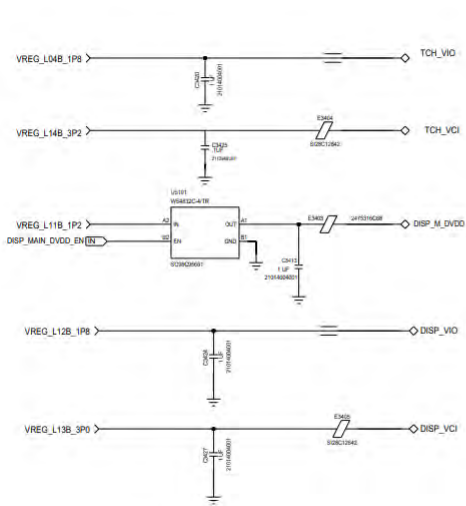
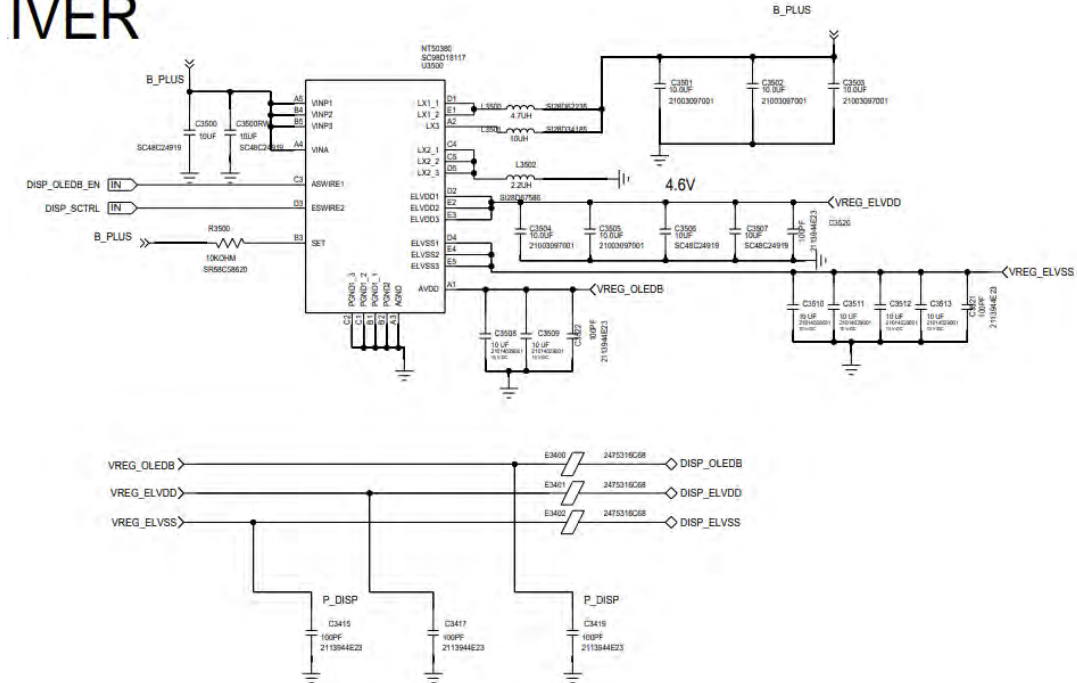
REFDES: 5000-5199



Moto razr 60 ultra/razr ultra Level 3 – Service Manual

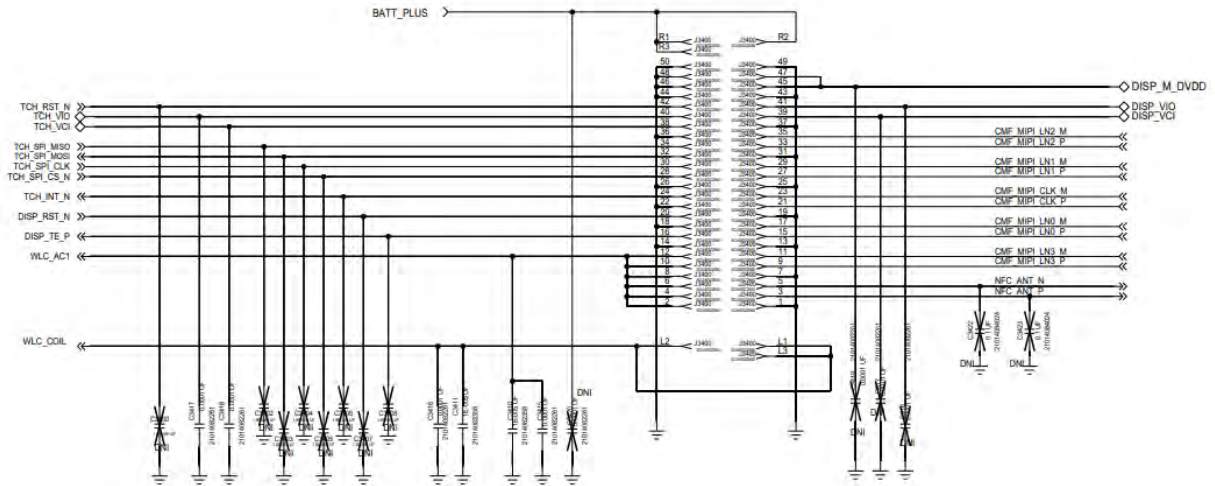
Main Display and Touch Power

IVER



Moto razr 60 ultra/razr ultra

Level 3 – Service Manual



CLI Display & Touch – Troubleshooting

In the event of Display & Touch panel issues:

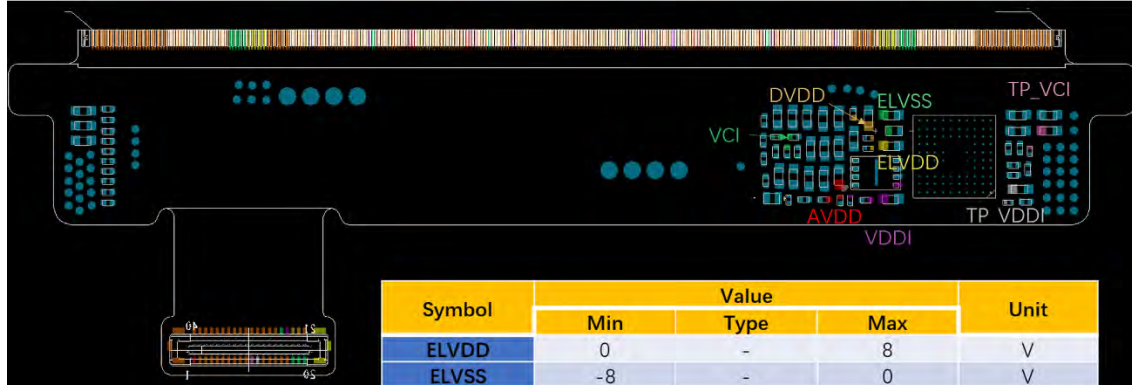
1. Do visual inspection on Display & Touch panel, display connector Display & Touch connector, EMI filter.
2. Check display voltages along the Display panel path.

Symbol	Value			Unit
	Min	Type	Max	
ELVDD	0	-	8	V
ELVSS	-8	-	0	V
AVDD	5.0	7.0	8	V
VDDI/VIO	1.65	1.8	1.95	V
VCI	2.65	3.0	4.5	V
DVDD	1.2	1.2	1.95	V
TSP_VDDI	1.65	1.8	1.95	V
TSP_VCI	2.7	2.8/3.0/3/3	3.4	V

Main Display & Touch – Troubleshooting

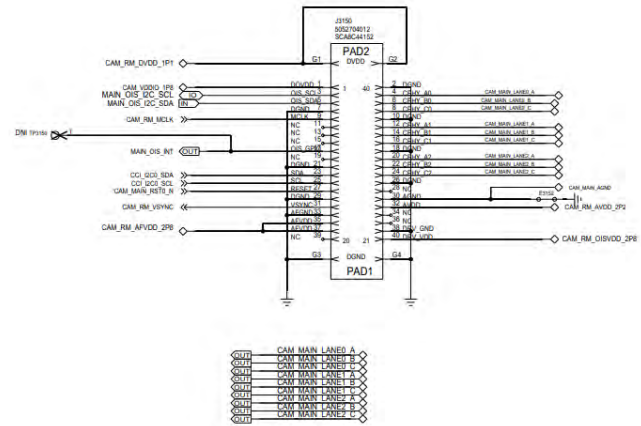
In the event of Display & Touch panel issues:

1. Do visual inspection on Display & Touch panel, Display & Touch connector, EMI filter.
2. Check display voltages along the Display panel path.



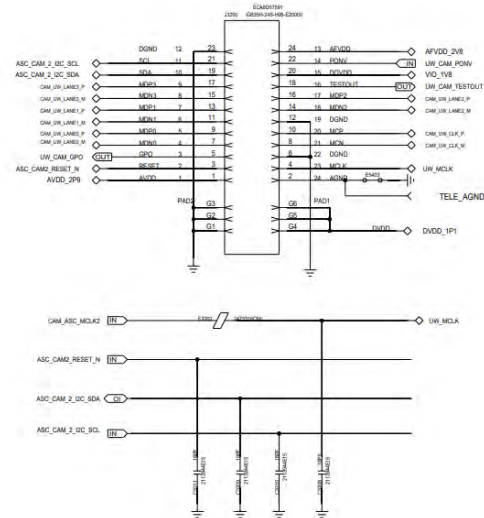
*Lenovo Copyright Protected:
Do not share without consent from Lenovo*

REFDES: 3150-3199



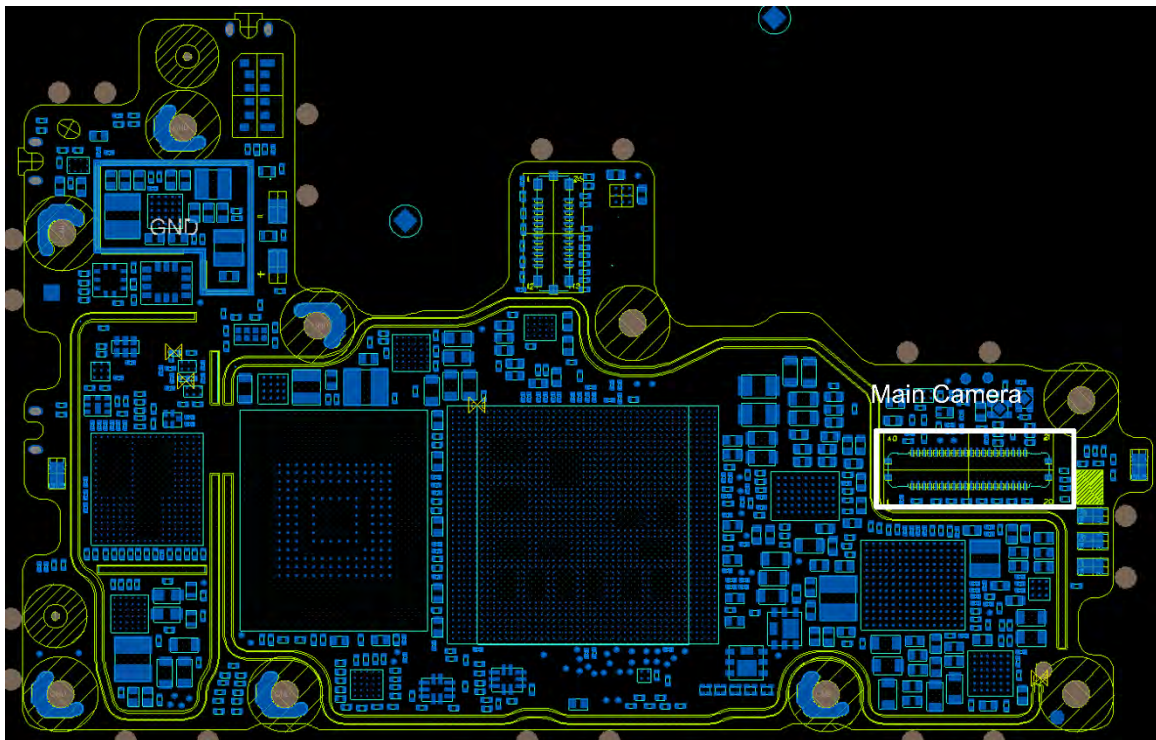
APPROVALS	 MOTOROLA MOBILE DEVICES
ENGINEER: MOTOROLA	BLOCK TITLE:
LAST MODIFIED BY: MOTOROLA Thu Dec 19 09:09:10 2024	multimedia PROJECT NAME orion_smb750_mbg.cpm
MOTOROLA CONFIDENTIAL-RESTRICTED THE CONTENTS OF THIS REPORT AND INFORMATION CONTAINED HEREIN ARE UNCLASSIFIED BY DATE 01/25/2011	

IMG: UW CAM
REFDES: 3200-3249

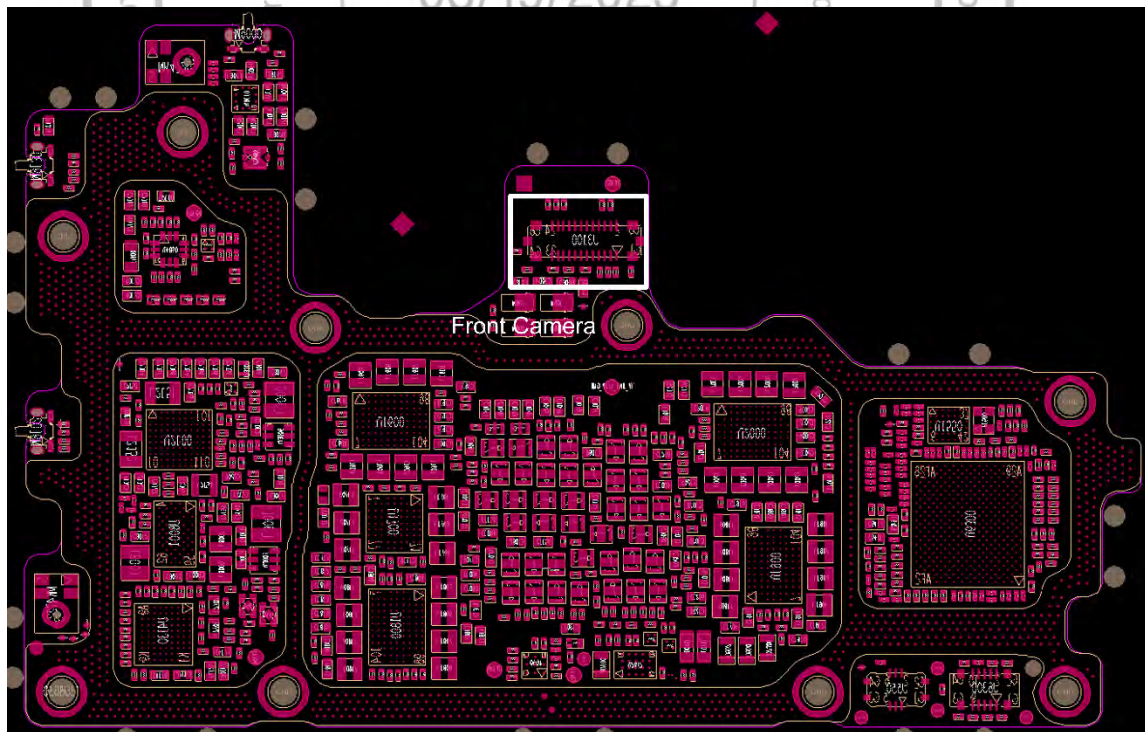


APPROVALS		 MOTOROLA MOBILE DEVICES	
ENGINEER: MOTOROLA		BLOCK TITLE:	
LAST MODIFIED BY: MOTOROLA Fri Nov 22 15:00:28 2024		interposer	
MOTOROLA CONFIDENTIAL RESTRICTED THE CONTENTS ON THIS FRONT AND INFORMATION CONTAINED HEREIN ARE UNCLASSIFIED BY MOTOROLA-USA.		PROJECT NAME: orion_mb8750_mbc.pcm	

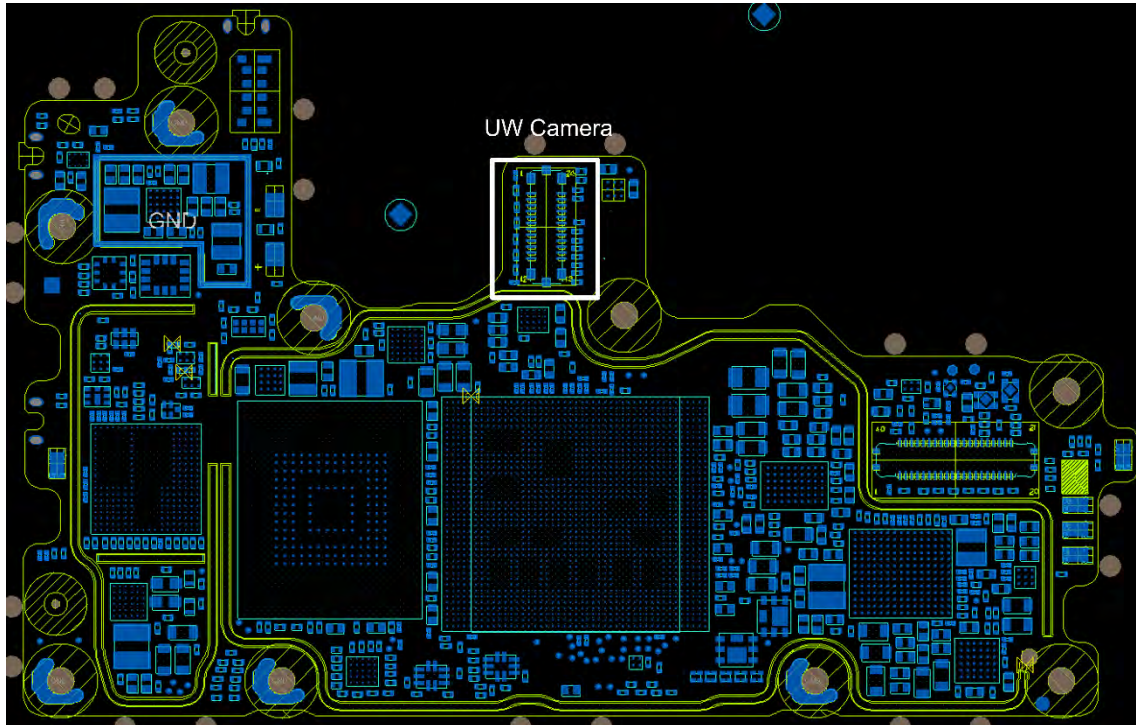
Rear Main Camera PCB



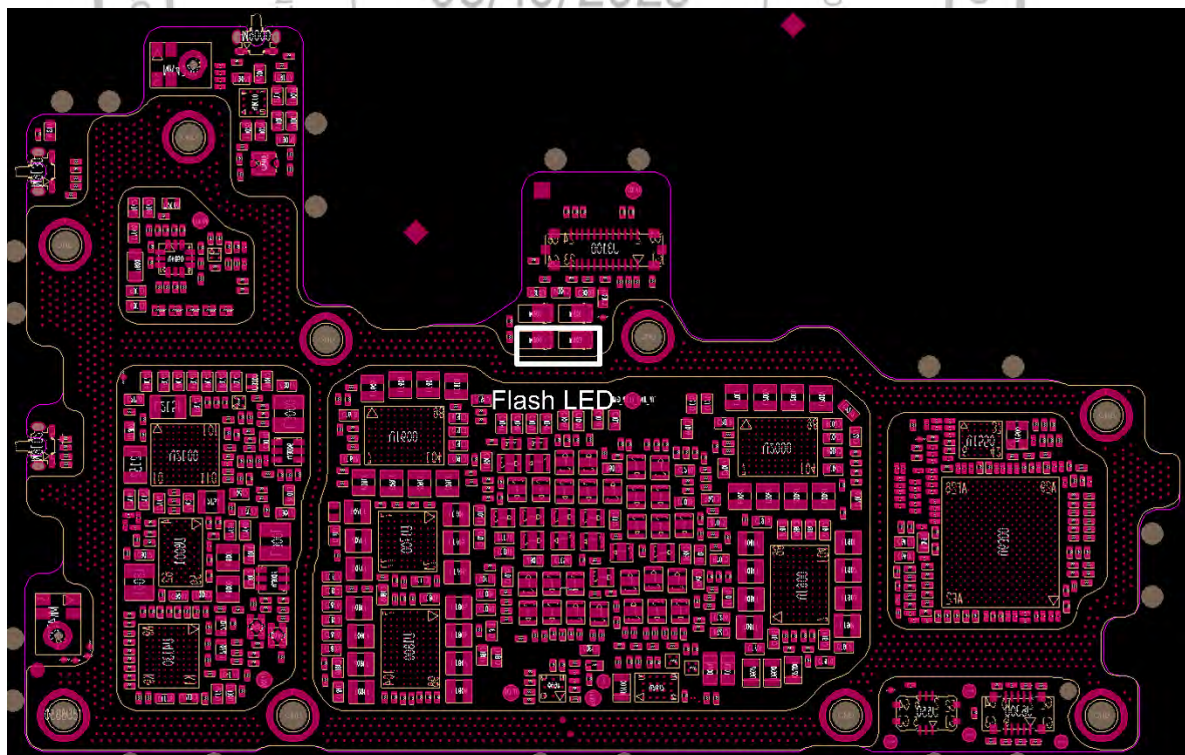
Front Camera PCB



Rear UW Camera PCB



FLASH LED



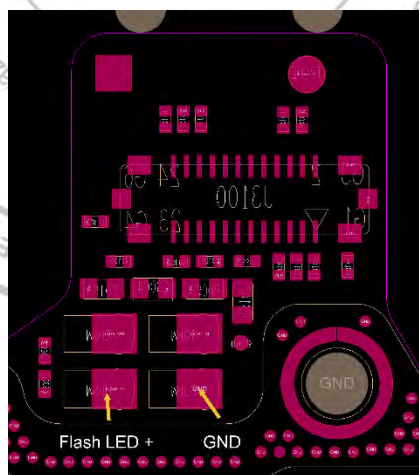
Camera Troubleshooting

1. Do visual inspection on Camera module Connector and main board camera connector to make sure the connector is not damaged.
2. Replace a new camera module to try if the issue reoccur or not to rule out the camera module problem.
3. Check the all the power voltage of the camera having trouble to check if the voltage matches in table below.
 - Note: the power only supplied when open the camera app if the camera has trouble. So you need the oscilloscope to capture the voltage.
4. Capture the related MCLK if it is generated or not.
5. Capture corresponding I2C if there are waveform captured or not.

All cameras Voltage

Camera	Camera	Power	Location	IC	Voltage		
					Min	Typ	Max
Main GNJ	Main	AVDD	U3004	SGM2045	2.1	2.2	2.3
	Main	DVDD	U4154	WL2834CA	0.9	1.0	1.1
	Main	DOVDD	U3000	PM8010_L5	1.7	1.8	1.9
	Main	AFVDD	U3000	PM8010_L4	2.3	2.8	4.8
	Main	OISVDD	U3005	SGM2045-2.80XXD	2.6	2.8	3.3
UW IMX816	Tele	AVDD	U3000	PM8010_L3	1.8	2.8	3.312
	Tele	DVDD	U3000	PM8010_L1	0.528	1.1	1.504
	Tele	DOVDD	U2000	PM8550VE_I_L1I	1.2	1.2	1.2
	Tele	AFVDD	U3000	PM8010_L7	2.3	2.8	4.8
Front JN5	Front	AVDD	U3000	PM8010_L6	1.8	2.8	3.312
	Front	DVDD	U3000	PM8010_L2	0.528	1.0	1.504
	Front	DOVDD	U3000	PM8010_L5	1.504	1.8	3.544

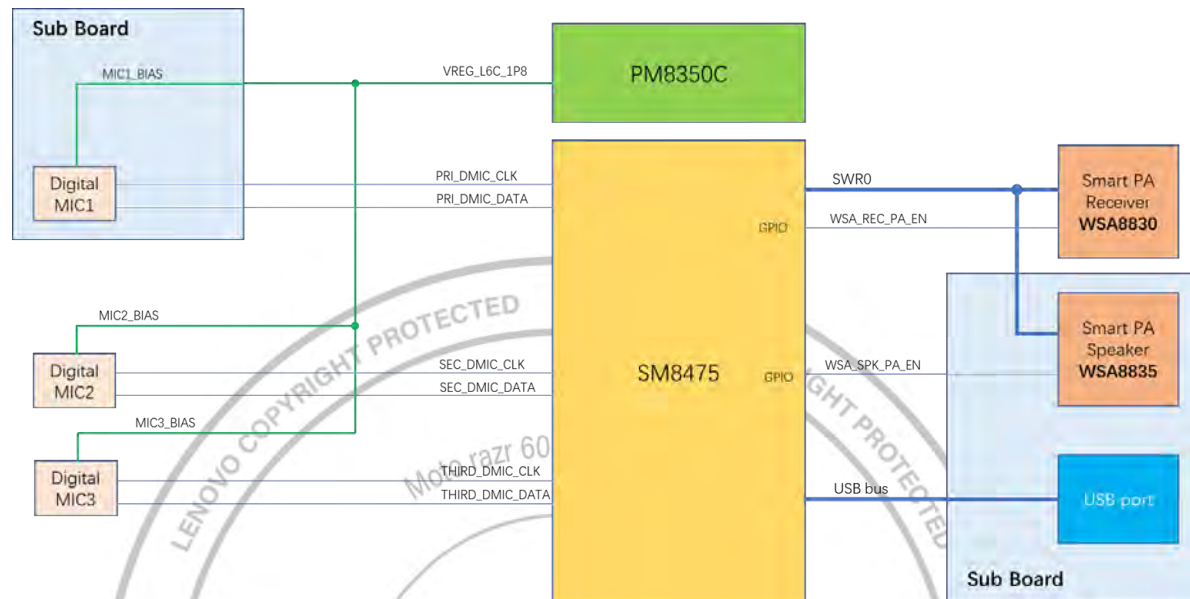
Flash LED Troubleshooting



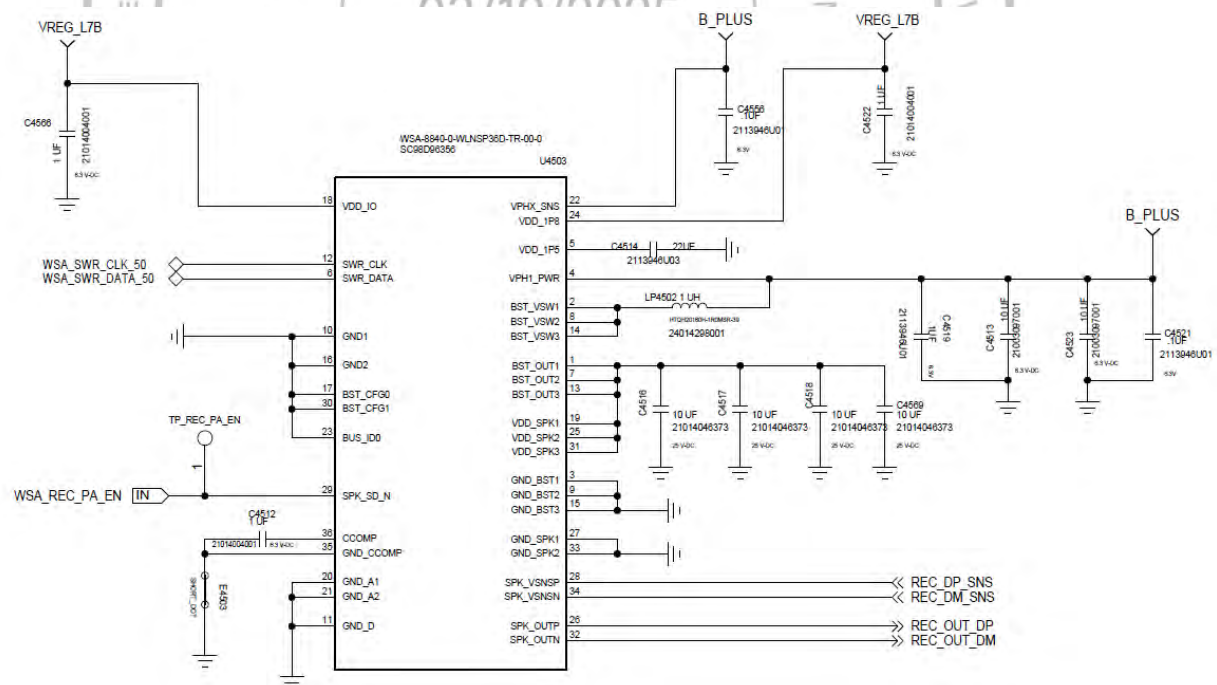
1. Do visual inspection on Flash LED PCB to make sure the Flash LED SMT is OK.
2. Check the voltage of Flash Led + And GND, the voltage should be in the range of 2.7V ~ 3.5V.
3. Replace Flash LED.

AUDIO TROUBLESHOOTING

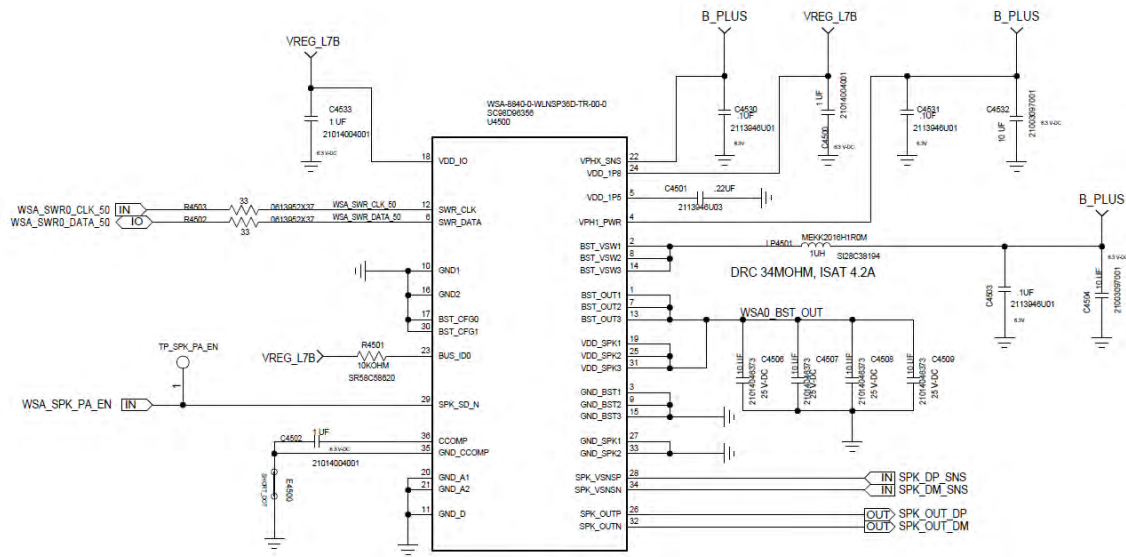
Audio Block Diagrams



Receiver Smart PA (WSA8840)

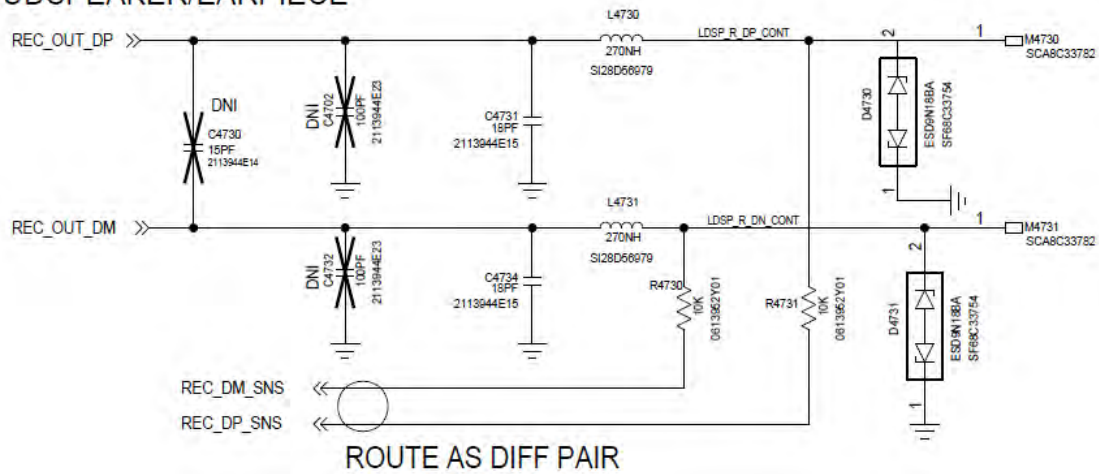


Speaker Smart PA (WSA8840)



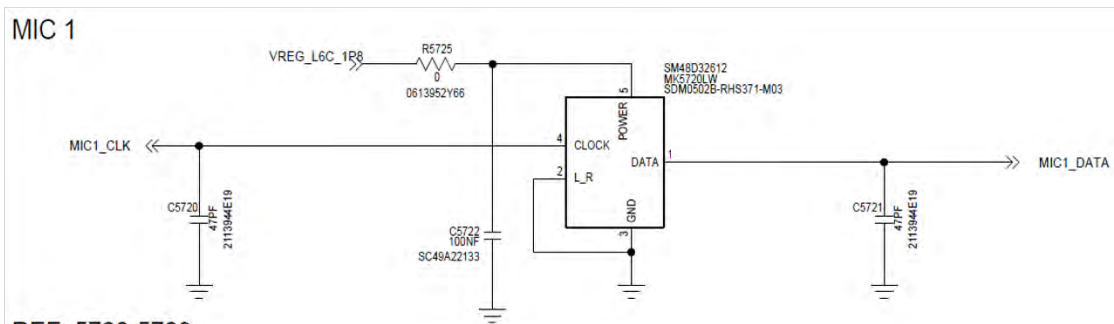
Receiver/Speaker matching circuit:

LOUDSPEAKER/EARPIECE



MIC Schematics: Mic-1

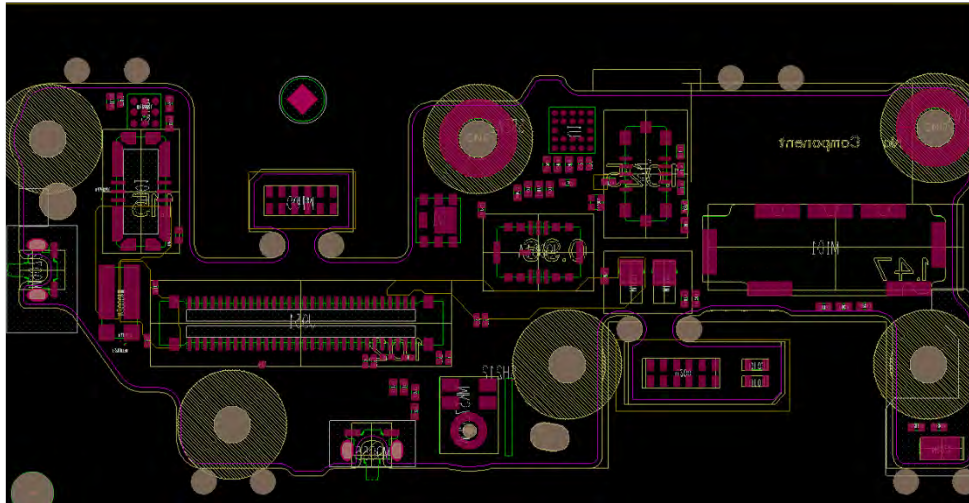
Mic-1 part is on sub board



REF: 5720-5729

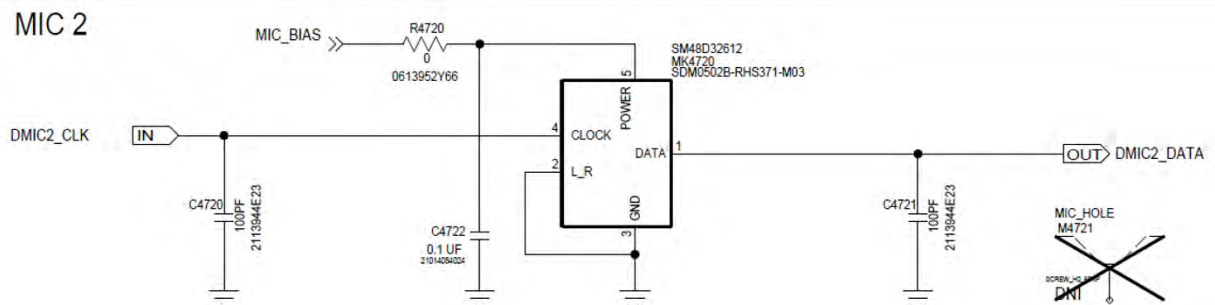
MIC PCB: Mic-1

Mic-1 part is on USB PCB.



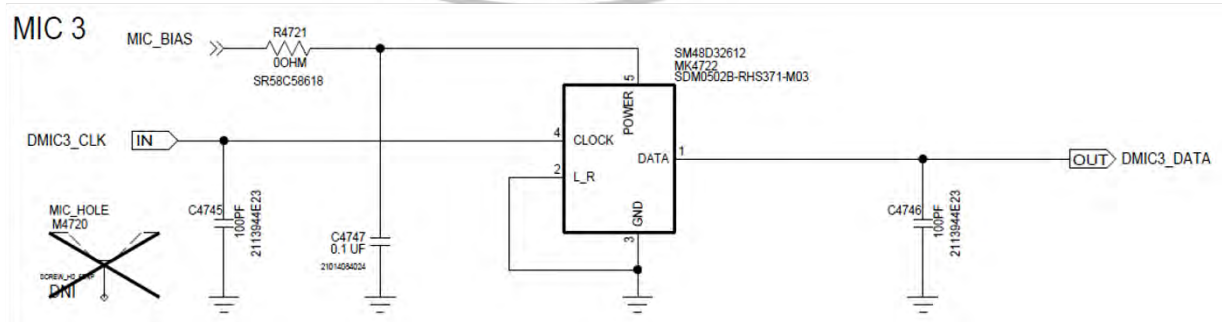
MIC Schematics: Mic-2

MIC-2 part is on main board PCB.



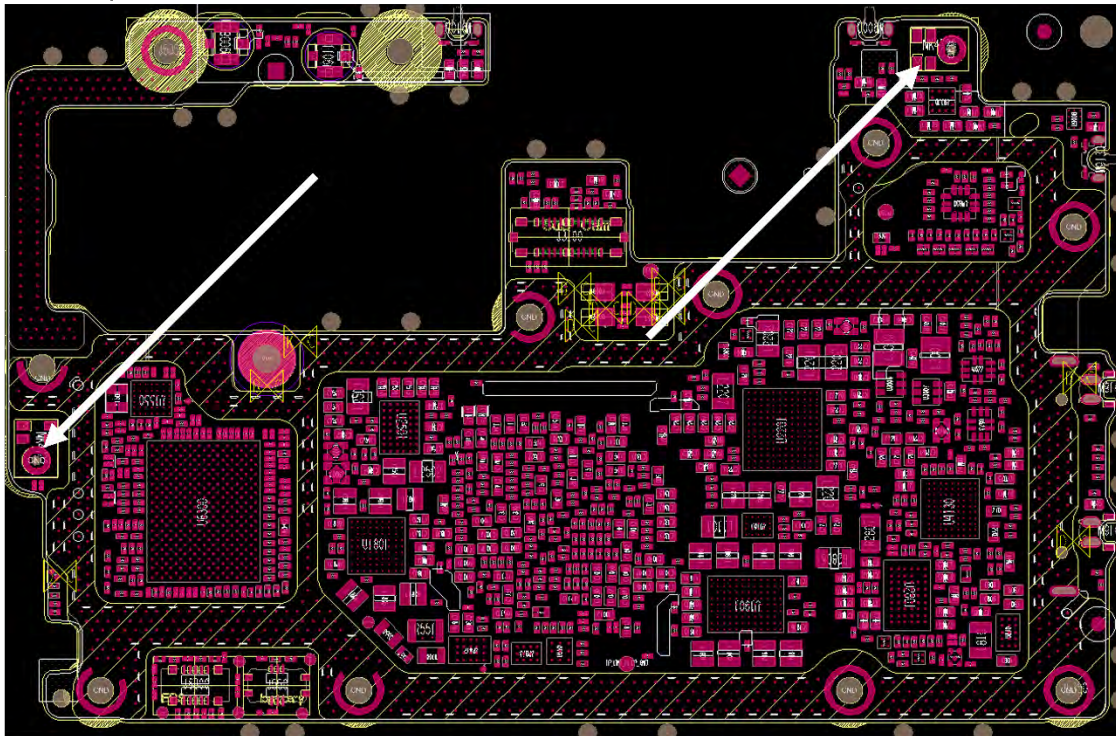
MIC Schematics: Mic-3

MIC-3 part is on main board PCB.



MIC PCB: Mic-2/3

Mic-2/3 part is on mainboard PCB.



Debugging Audio Failure

1. Speaker

- Check and make sure that the Speaker is not damaged.
- Check if the connection between the phone and the Speaker are correctly done.
- Check for any visible damage around the Speaker matching components.
- Check for any visible damage around the Smart PA IC U4500/U4503 and its matching components.

2. MIC

- Check and make sure that the MIC is not damaged.
- Check for any visible damage around the MIC.
- Check MIC_BIAS voltage is 1.8V.

3. Headset

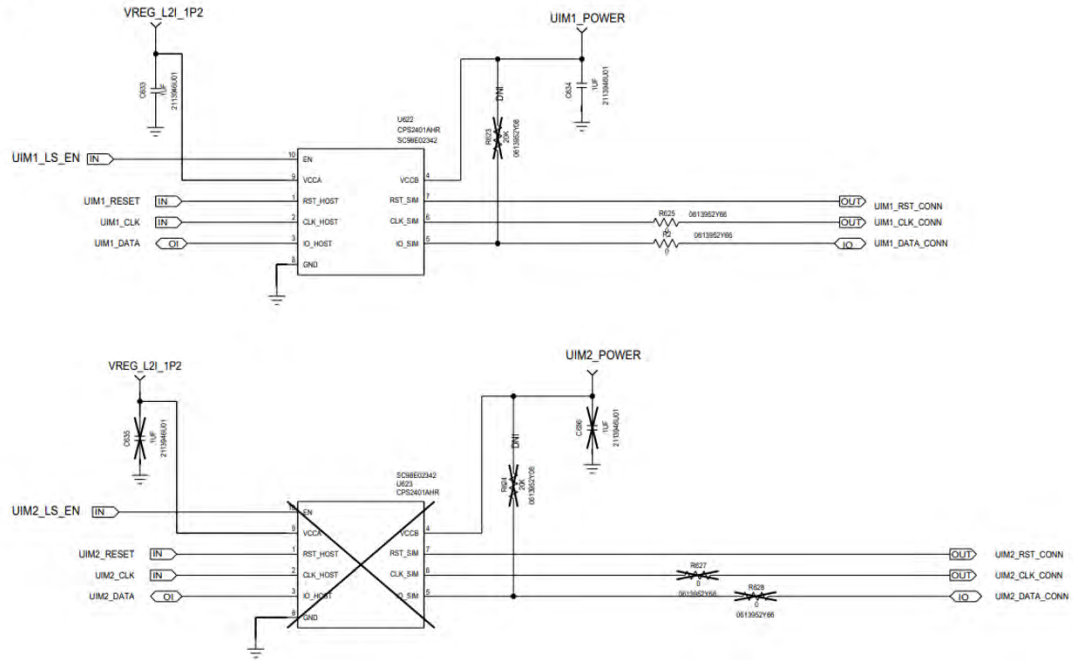
- Juno only support digital headset.
- Check and make sure that USB-connector is not damaged.
- Check the USB function is well.

SIM TROUBLESHOOTING

SIM Schematic

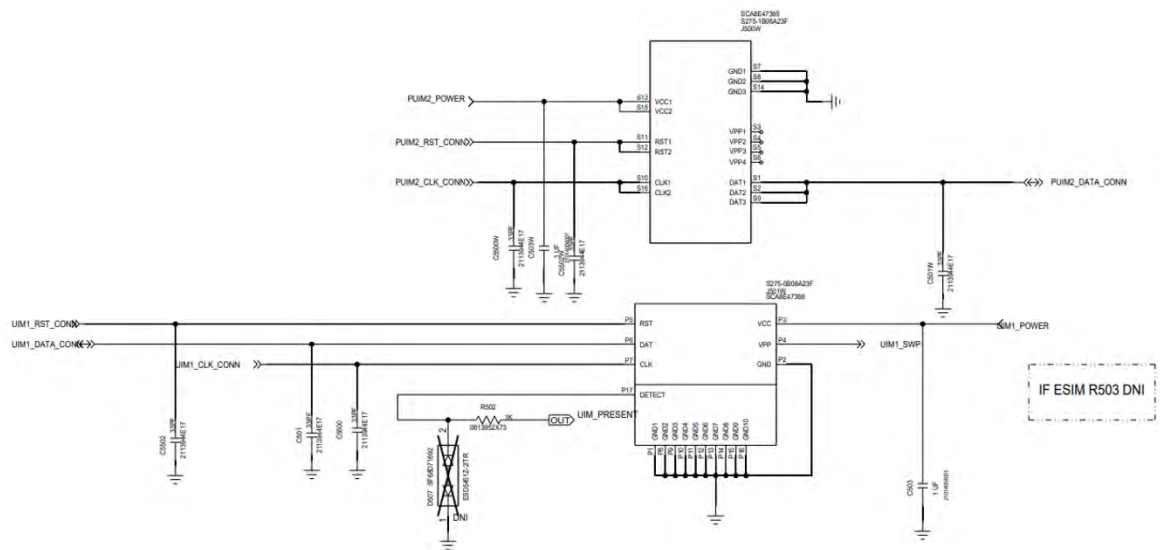
SIM1&SIM2

REF:621-699



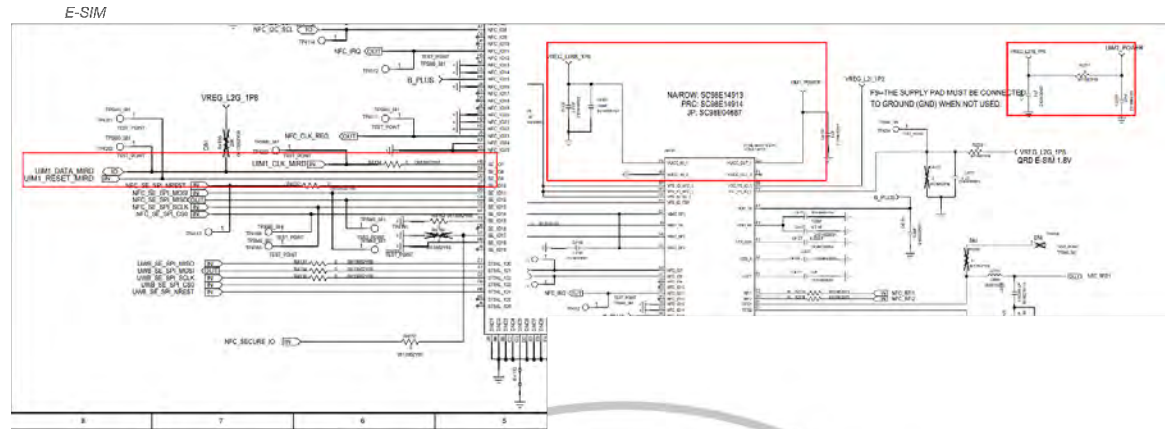
SIM CONN

SS: SCARF09405
DS: SCARF19574



Moto razr 60 ultra/razr ultra

Level 3 – Service Manual



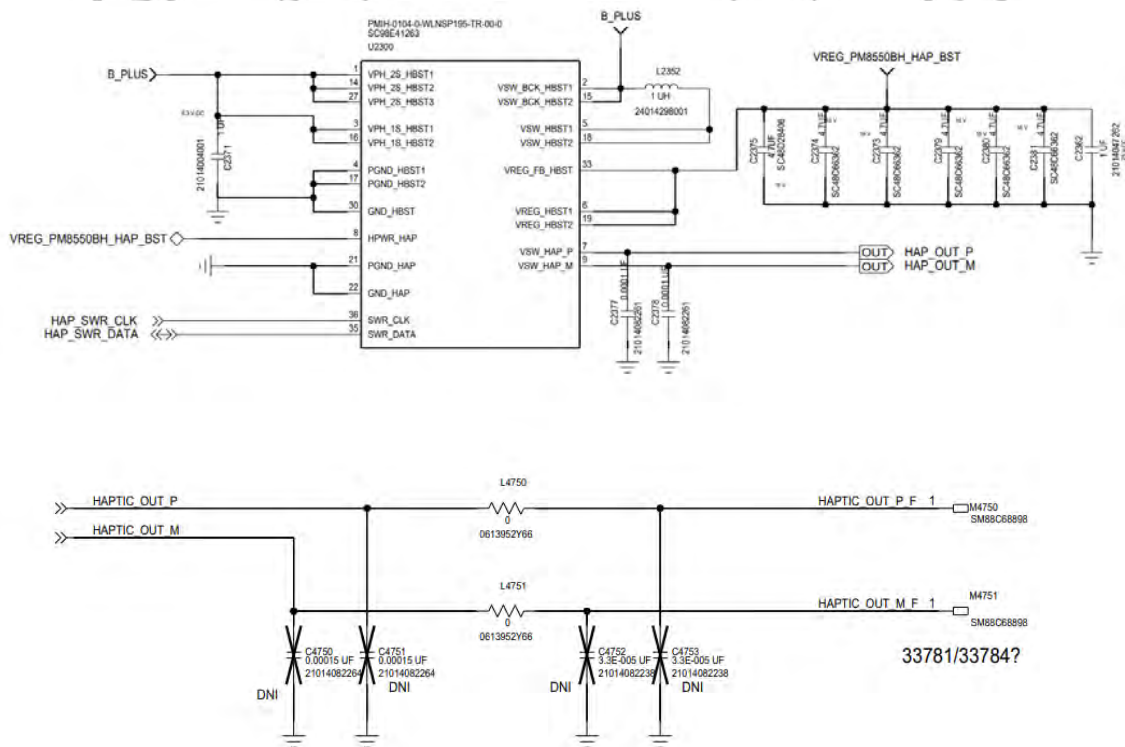
SIM Path – Troubleshooting

In the event of SIM issues:

1. Do a thorough visual check on SIM connector J500W(for SIM1,SIM2) for any sign of mechanical contact issues.
2. Inspect all SIM circuit components on PCB.
3. Do visual inspection on SIM slot.
4. Check SIM power VREG_L06B (For SIM1) and VREG_L06B (For SIM2) and VREG_L2G_1P8 (ESIM).
5. Check SIM bus interface signal activities during SIM access (UIMx_RST, UIMx_CLK, UIMx_DATA).

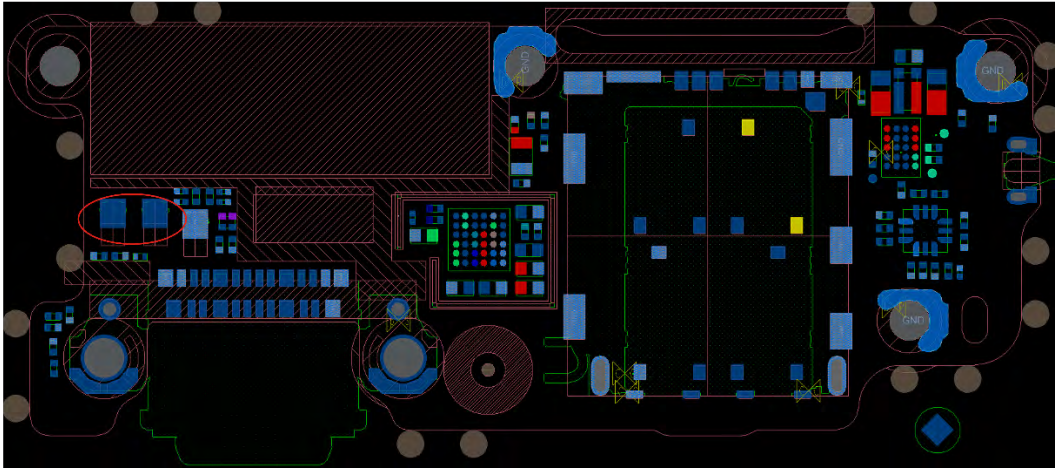
Vibrator/USB TROUBLESHOOTING

Vibrator Schematics



Vibrator Layout-USB board

M4750 / M4751



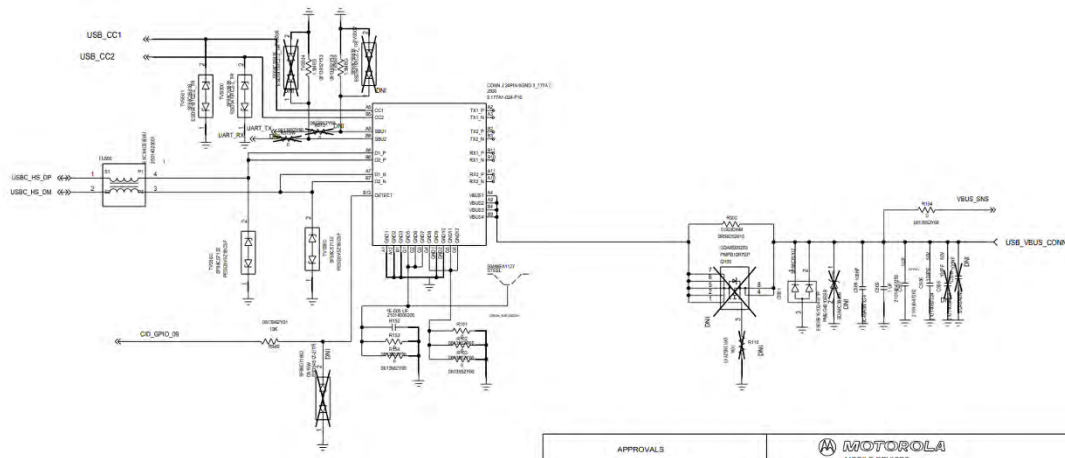
Debugging Vibrator Failure

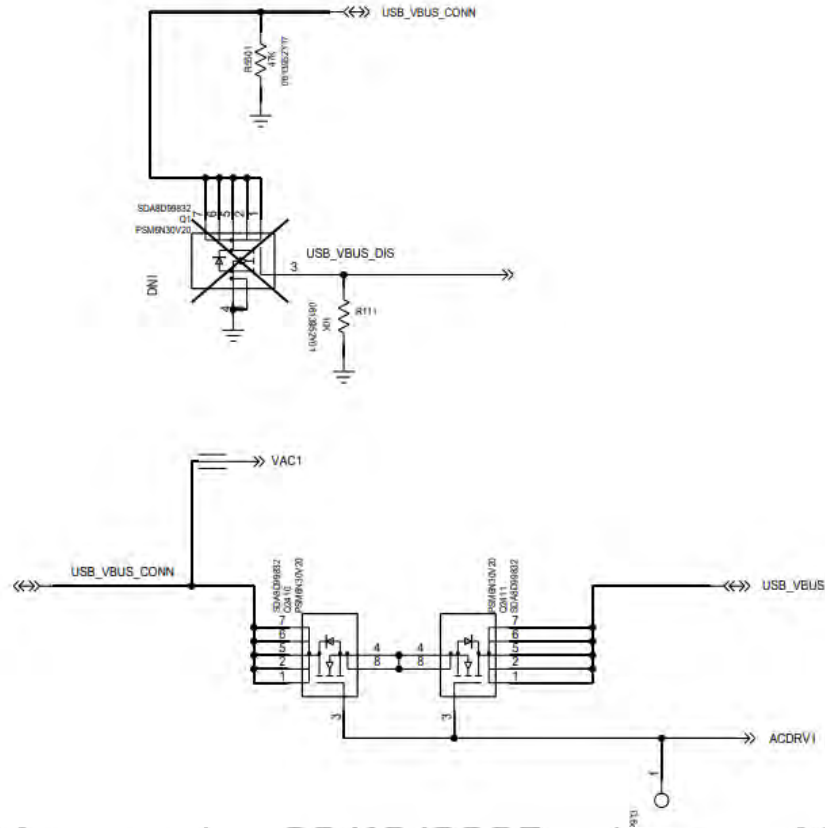
1. Do Check and make sure that the vibrator is not damaged.
2. Check the signal across L4750/L4751 close to Vibrator spring.
3. Check if the FPC connector is well connected.

USB Schematics

At USB SUB board

REF:500-550





Debugging USB Failure

1. Do visual inspection on USB connector, make sure there is no damage on the component.
2. Check if the FPC connector is well connected.

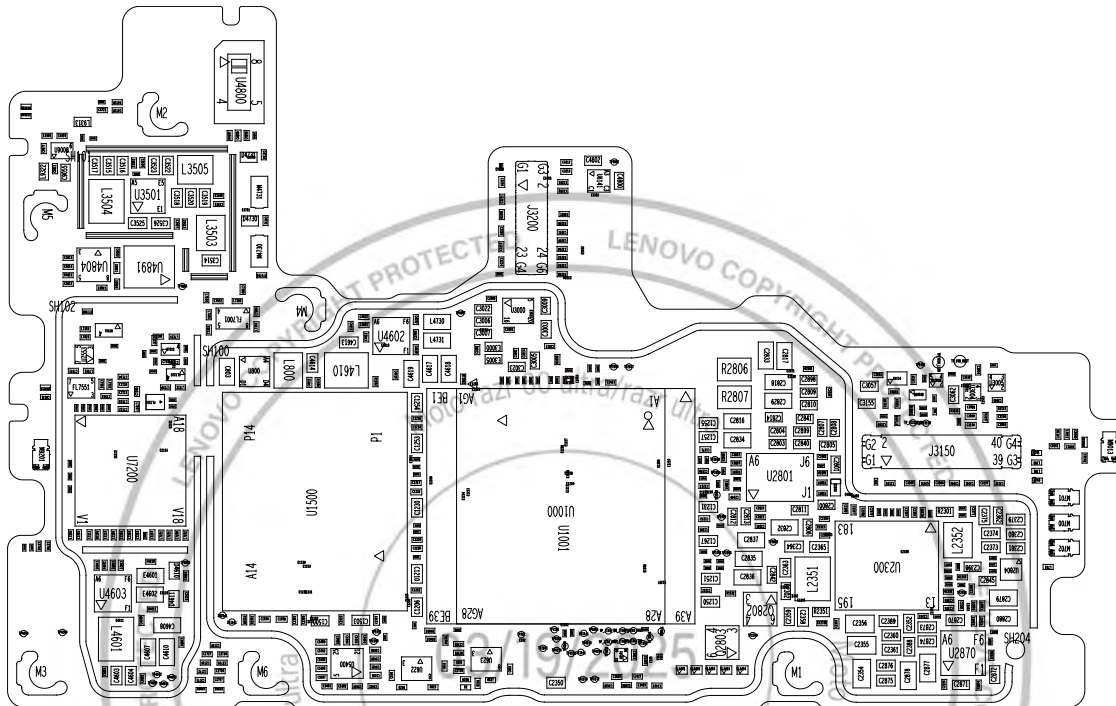
SERVICE CODE

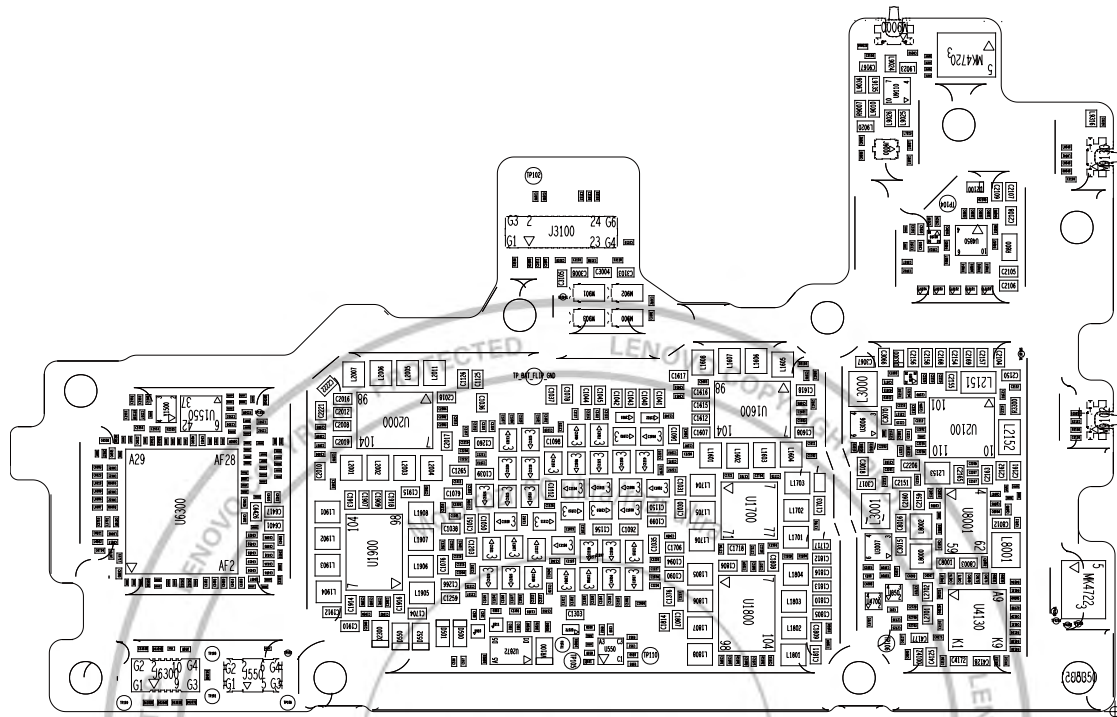
Commonly used Service codes, for your reference.

<i>Service Code</i>	<i>Function</i>
*#06#	View your phone's IMEI number.
***#4636#**	Display battery information, WLAN status, and usage statis.
***#225#**	Display Calendar data stored on your phone.
**#426#*	Run Google Play Services diagnostics.
*#67#	Display call forwarding information on your phone.
*#61#	See how long it takes to forward calls.
*31#	Turn on caller ID.
#31#	Turn off caller ID.
*43#	Turn on call waiting.
#43#	Turn off call waiting.

BOARD LAYOUT

Front Diagram

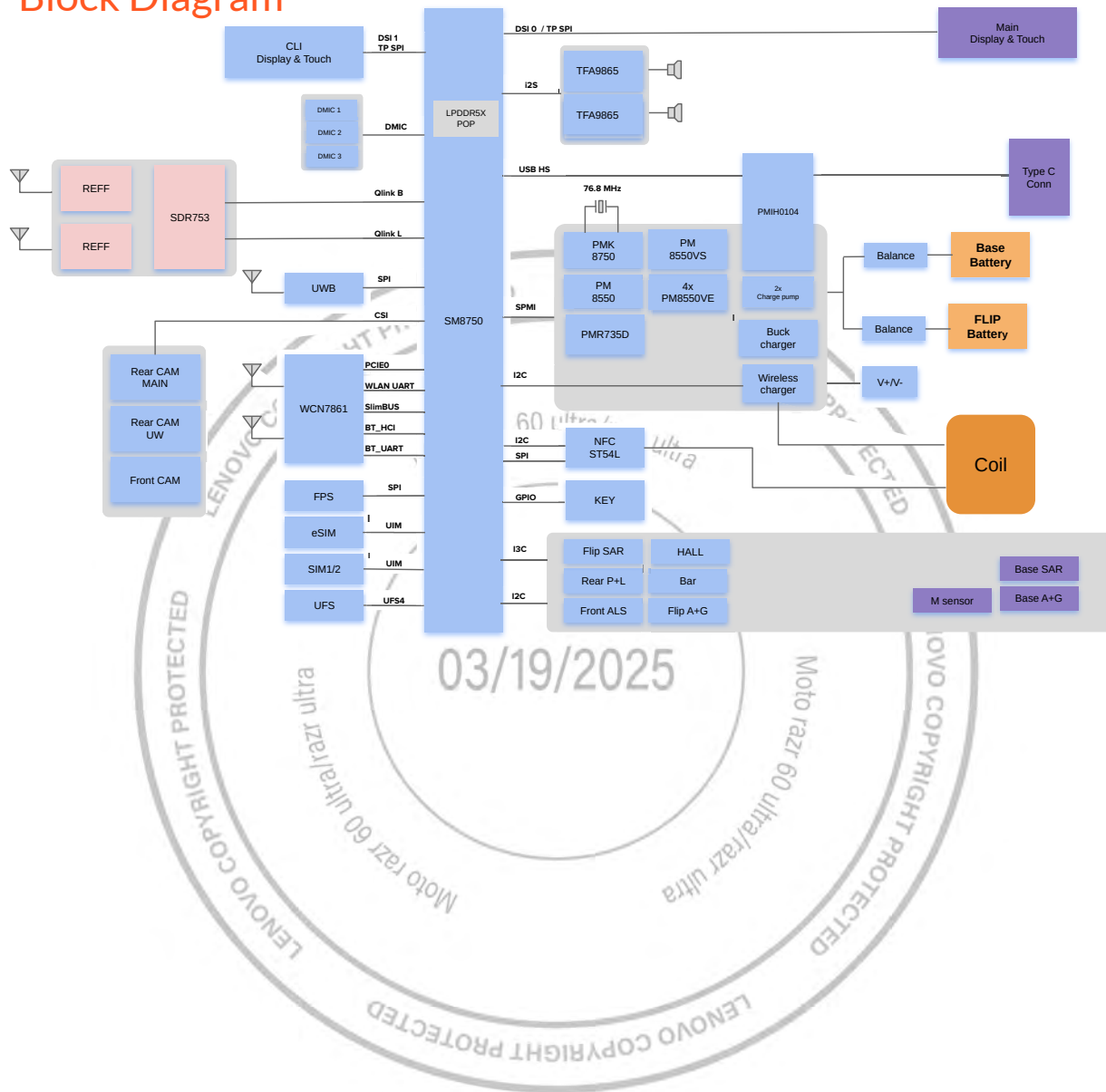




03/19/2025

BLOCK DIAGRAM

Block Diagram



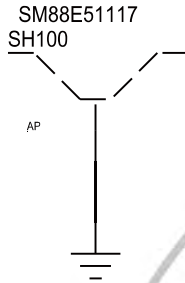
SCHEMATIC

If you need or involve the key component schematics (e.g., PMIC/CPU), please contact SVCPE@lenovo.com directly.

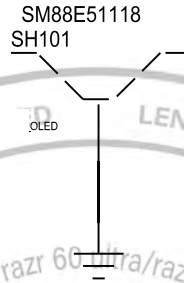
sm8750_mb

PCB SHIELD

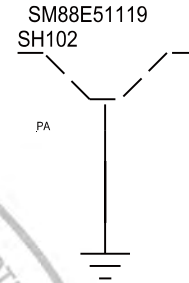
SHIELDING_AP



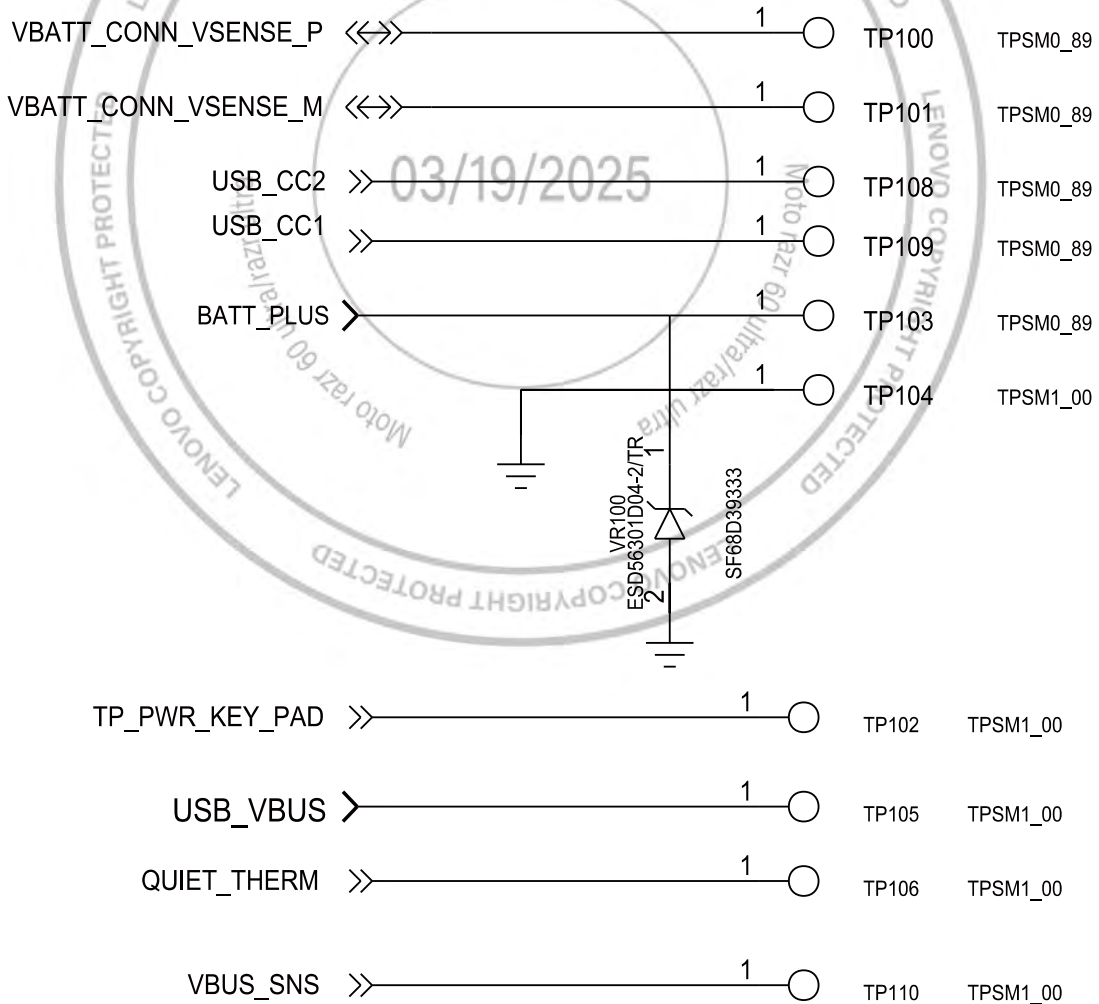
SHIELDING_OLED



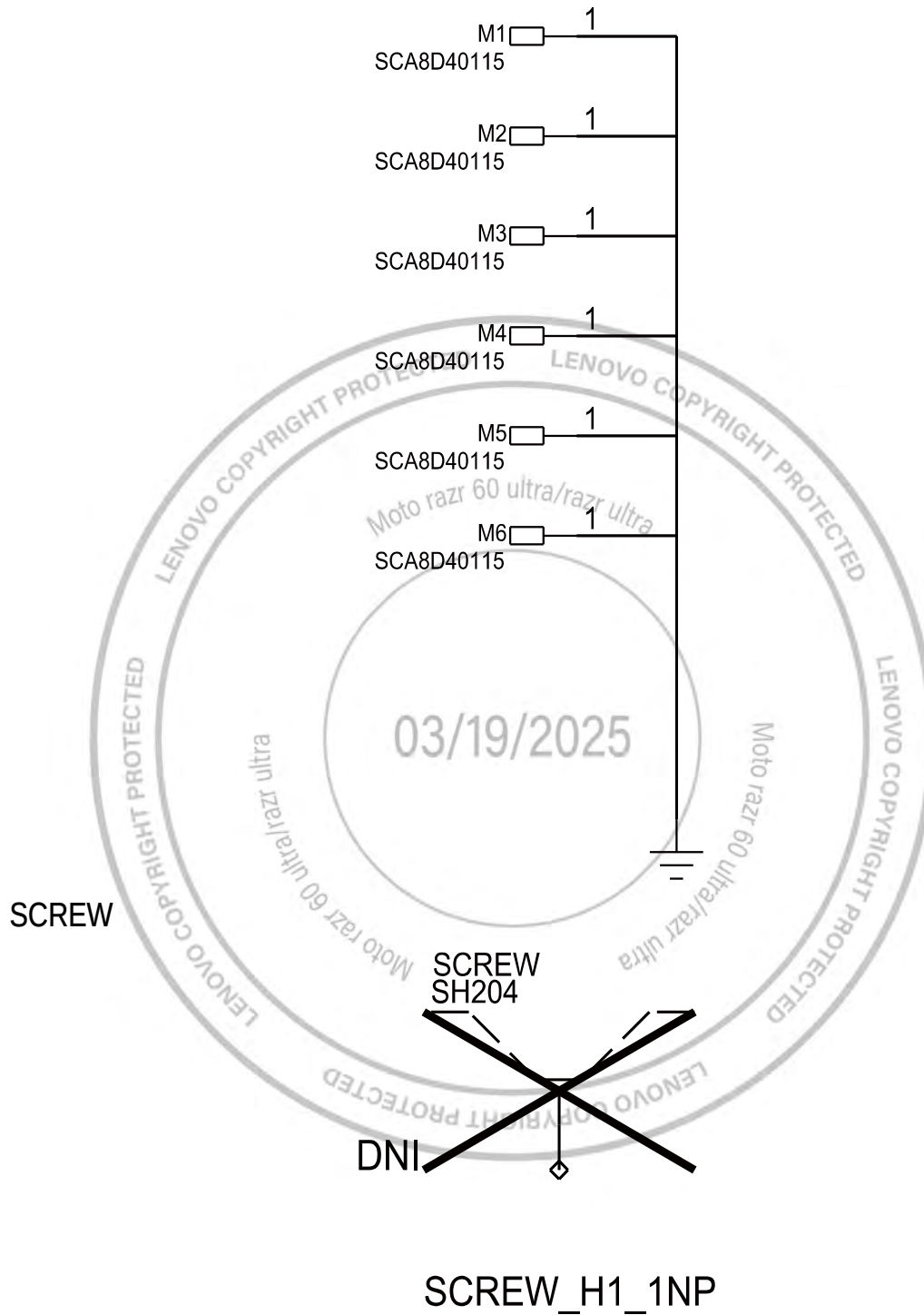
SHIELDING_SMT_PA

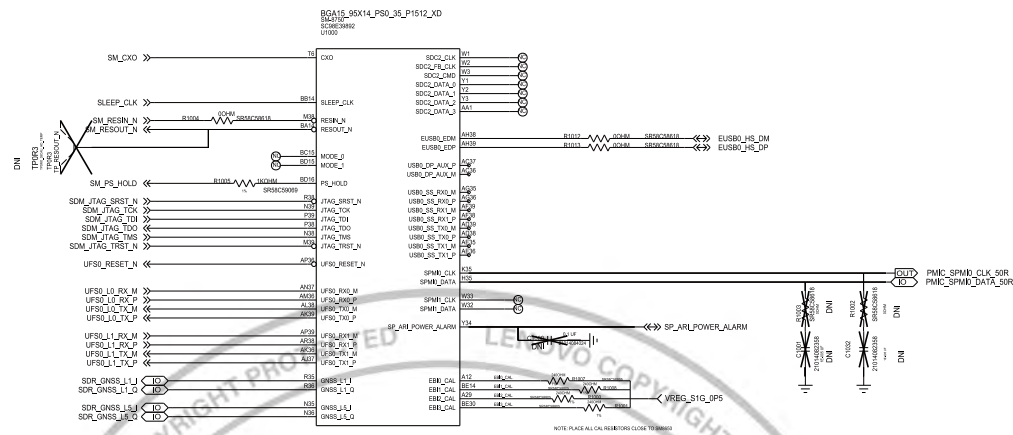


TEST POINT FOR FACTORY

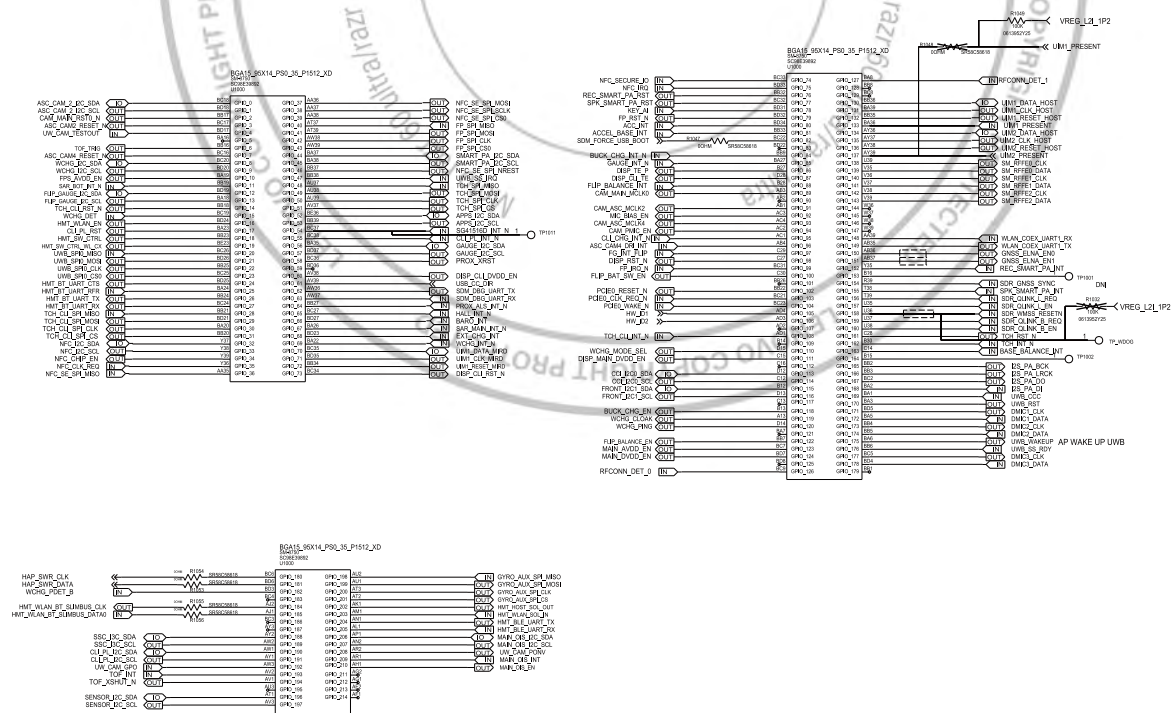


GROUND CONTACTS





REFDES:1000-1099

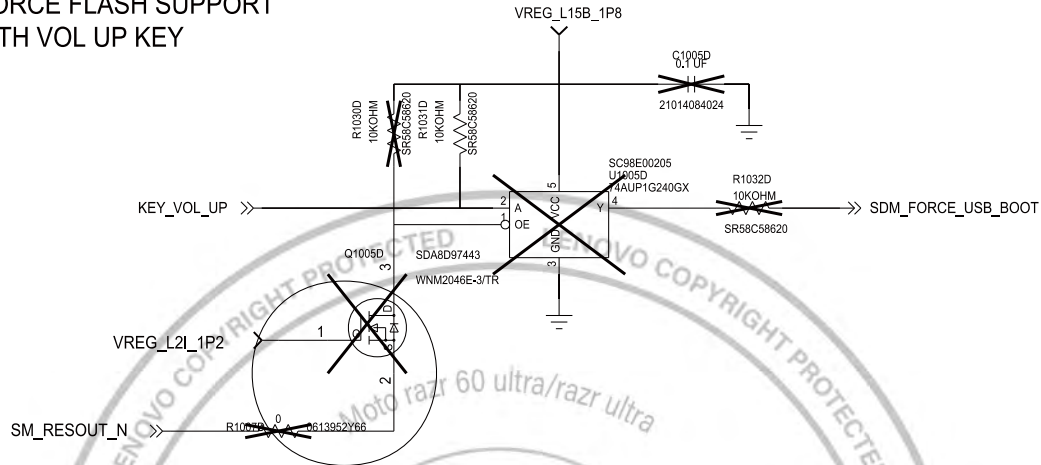


SM8750: SUPPORT

REFDES: 1000-1099

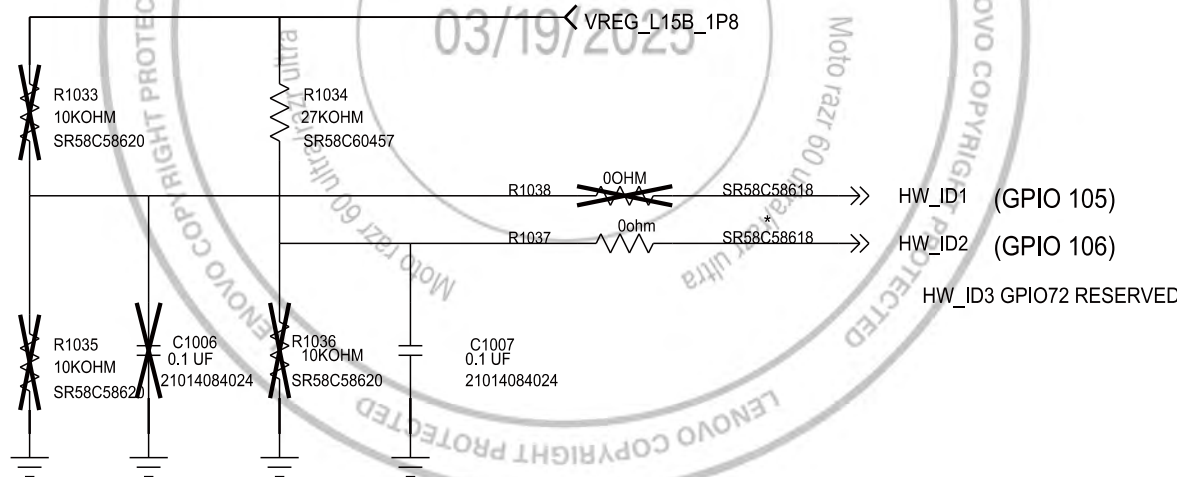
I2C PULL-UP RESISTORS

(DNI FOR PRODUCTION AND LAB ENTRY)
FORCE FLASH SUPPORT
WITH VOL UP KEY

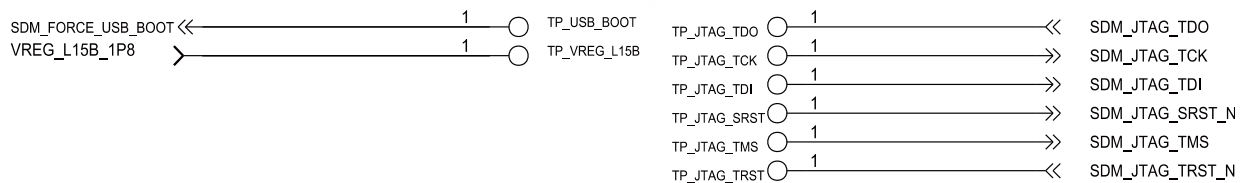


PRODUCT HW ID

THESE 2 SIGNALS ARE USED TO IDENTIFY
THE REVISION OF THE BOARD
FOR RUNTIME REVISION INFORMATION, REFER TO:

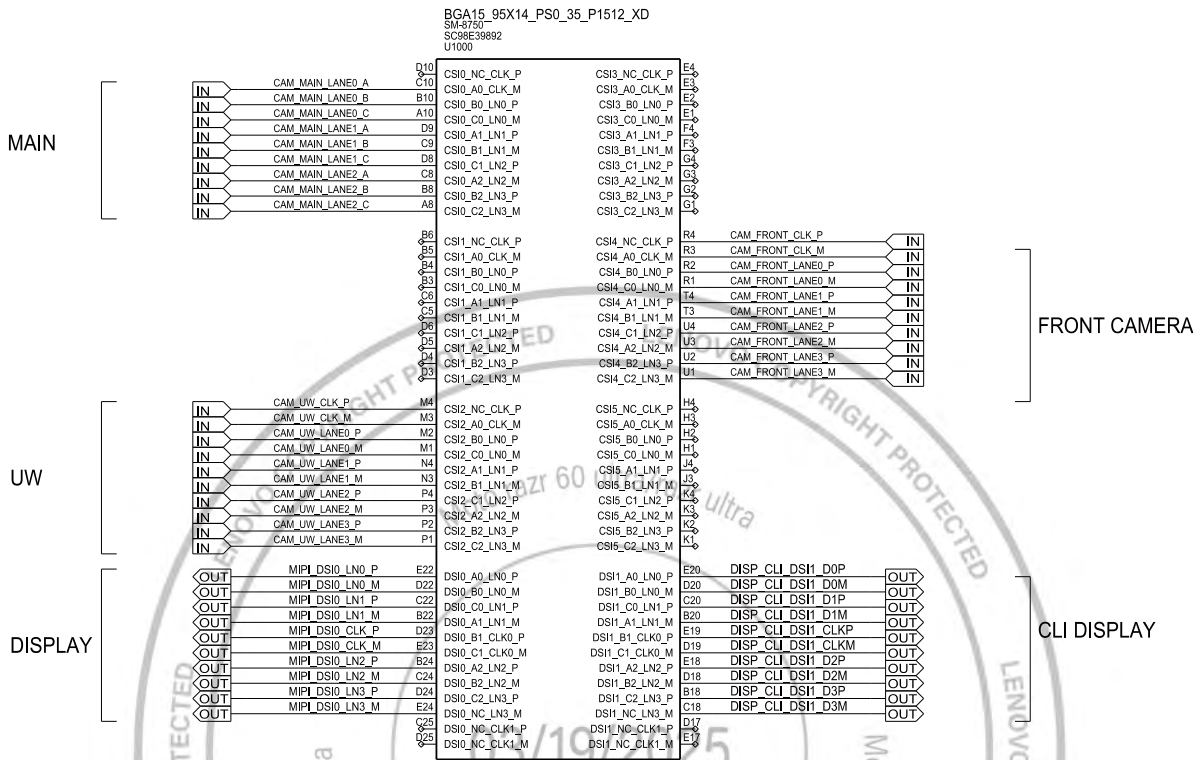


JTAG CONNECTOR

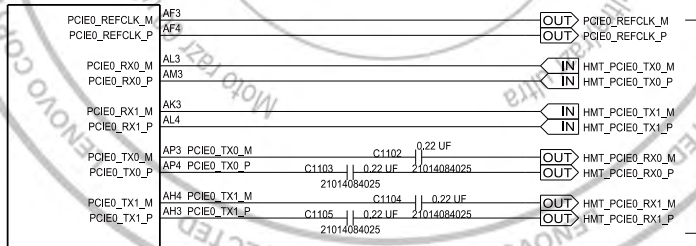


SM8750: MIPI/PCIE

REFDES: 1000-1099

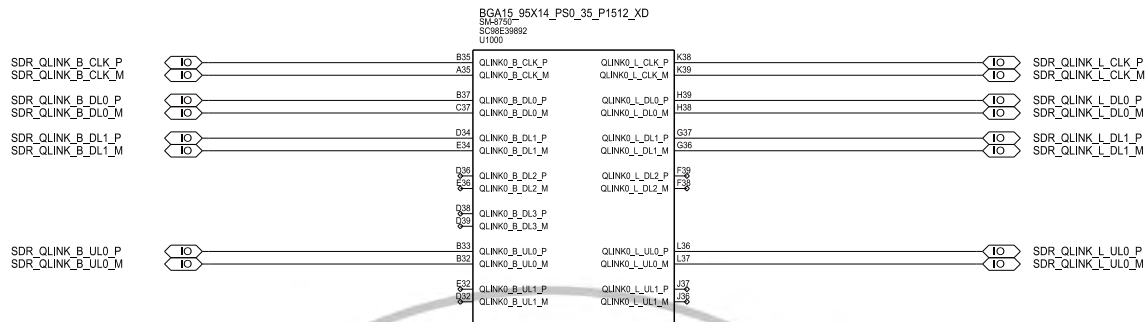


BGA15_95X14_PS0_35_P1512_XD
SM8750
SC98E39892
U1000



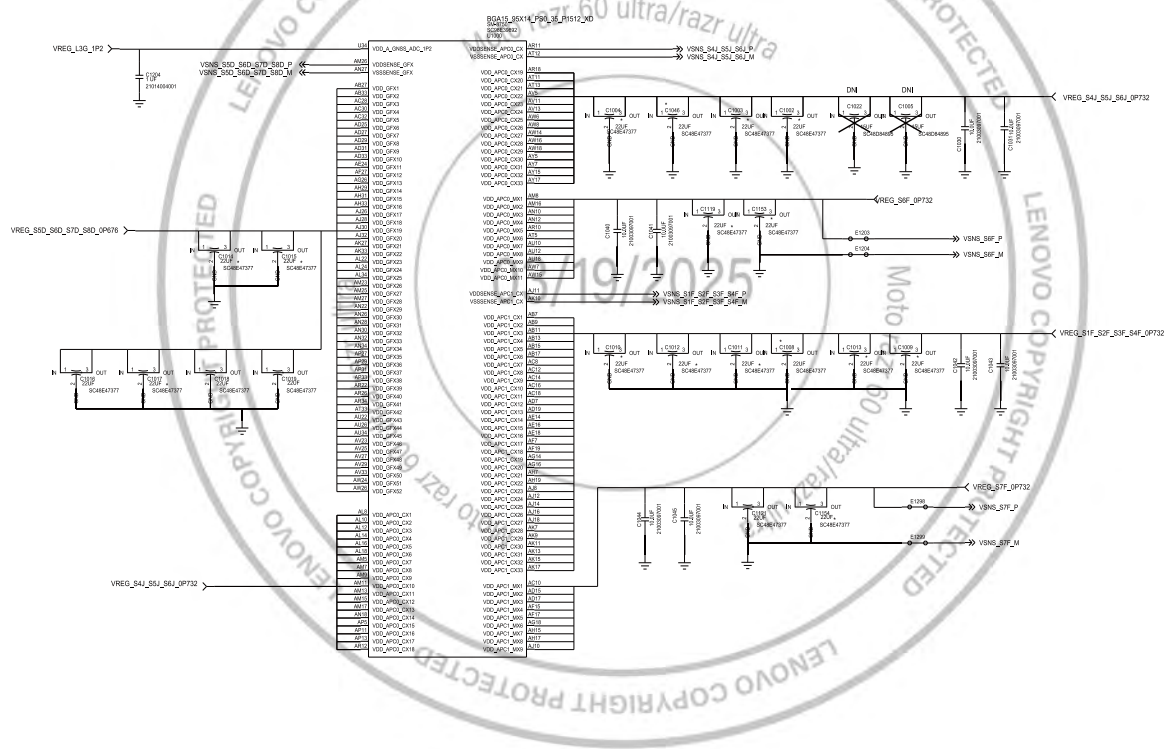
SM8750: QLINK

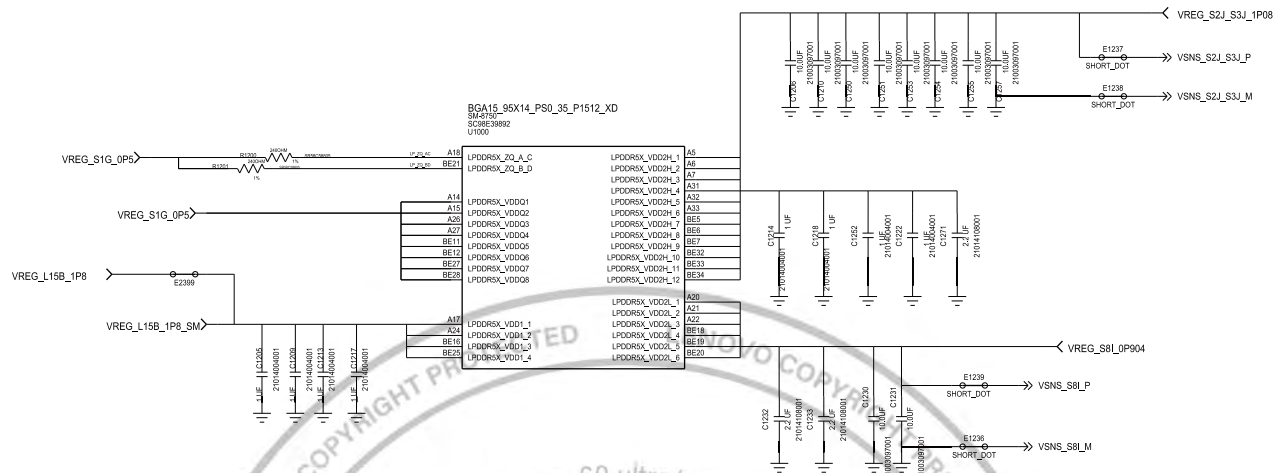
REFDES: 1000-1099



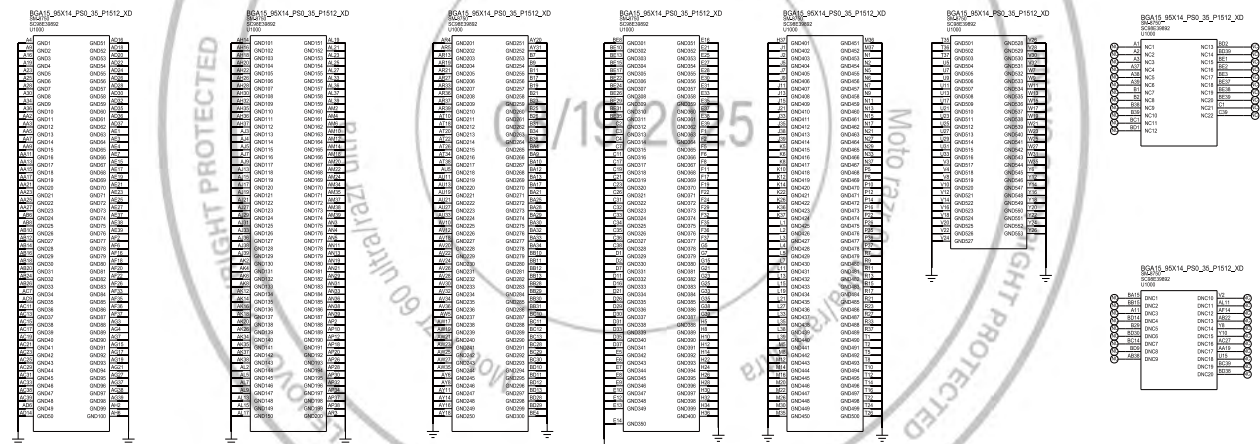
SM8750: PWR 1

REFDES: 1200-1499



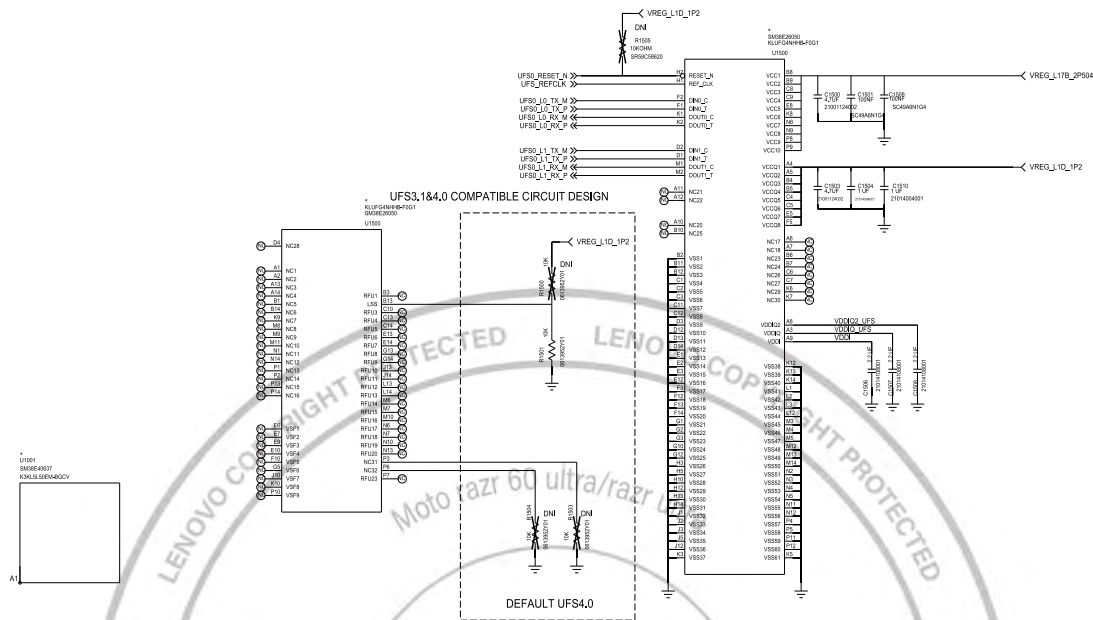


REFDES: 1200-1499



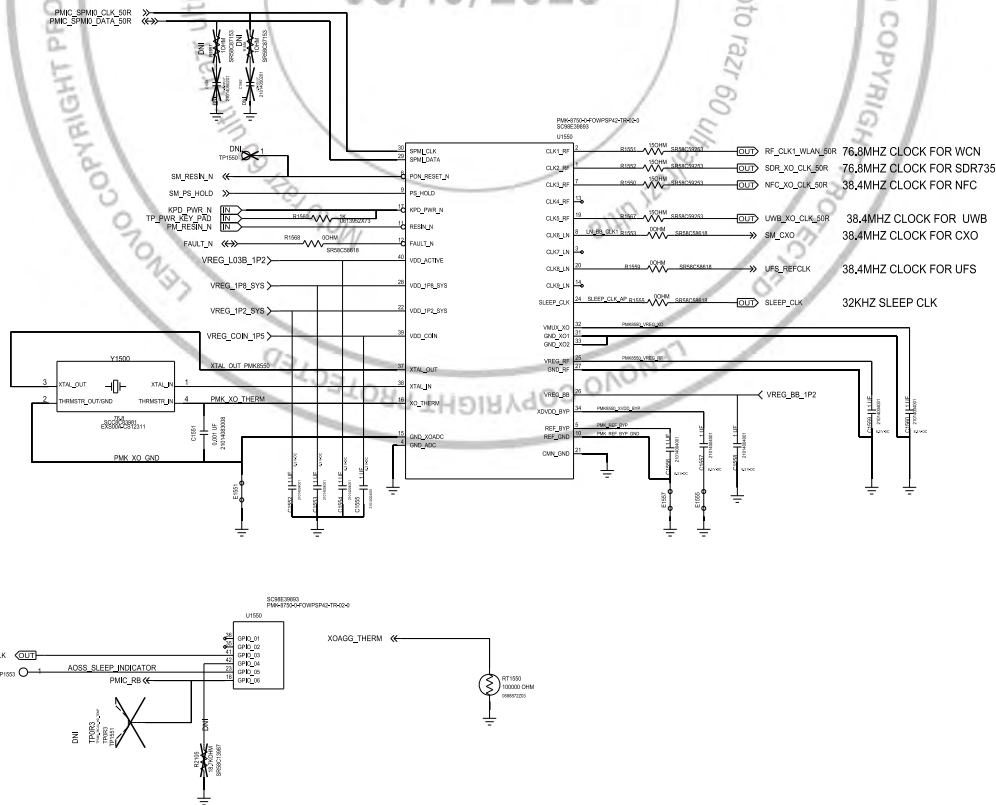
MEMORY: UFS/LPDDR5X

REFDES: 1500-1549



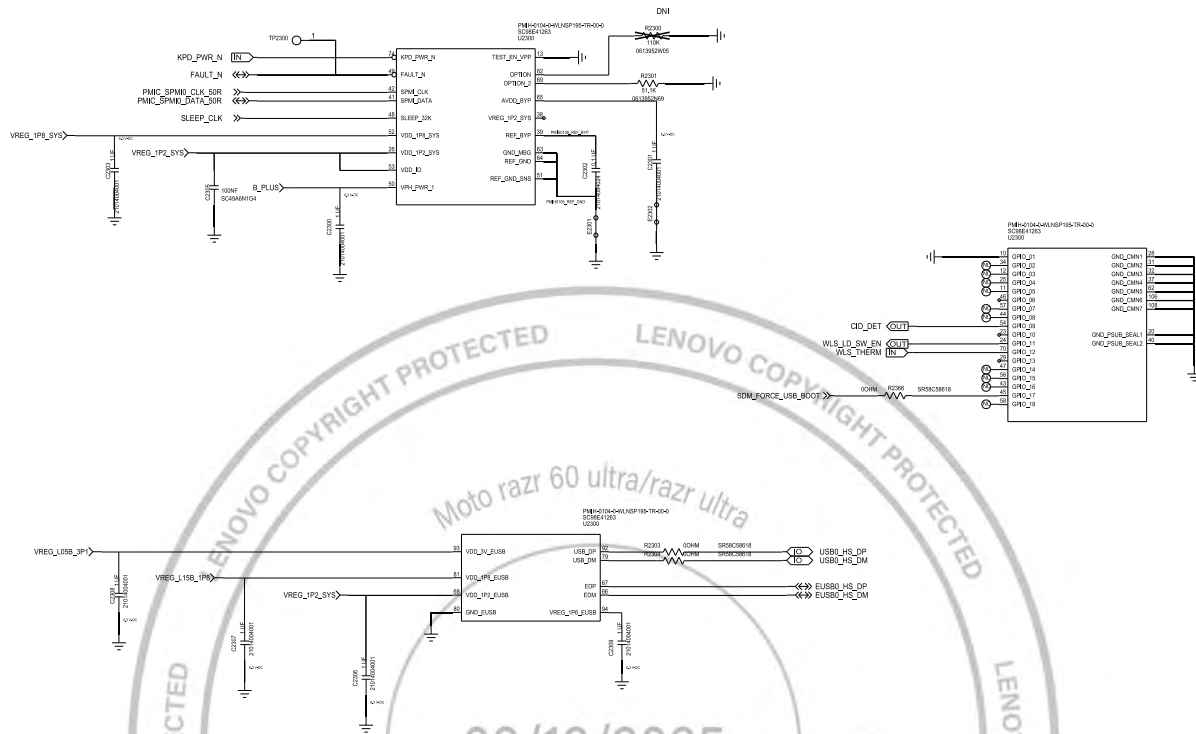
PMK8750

REFDES: 1550-1599



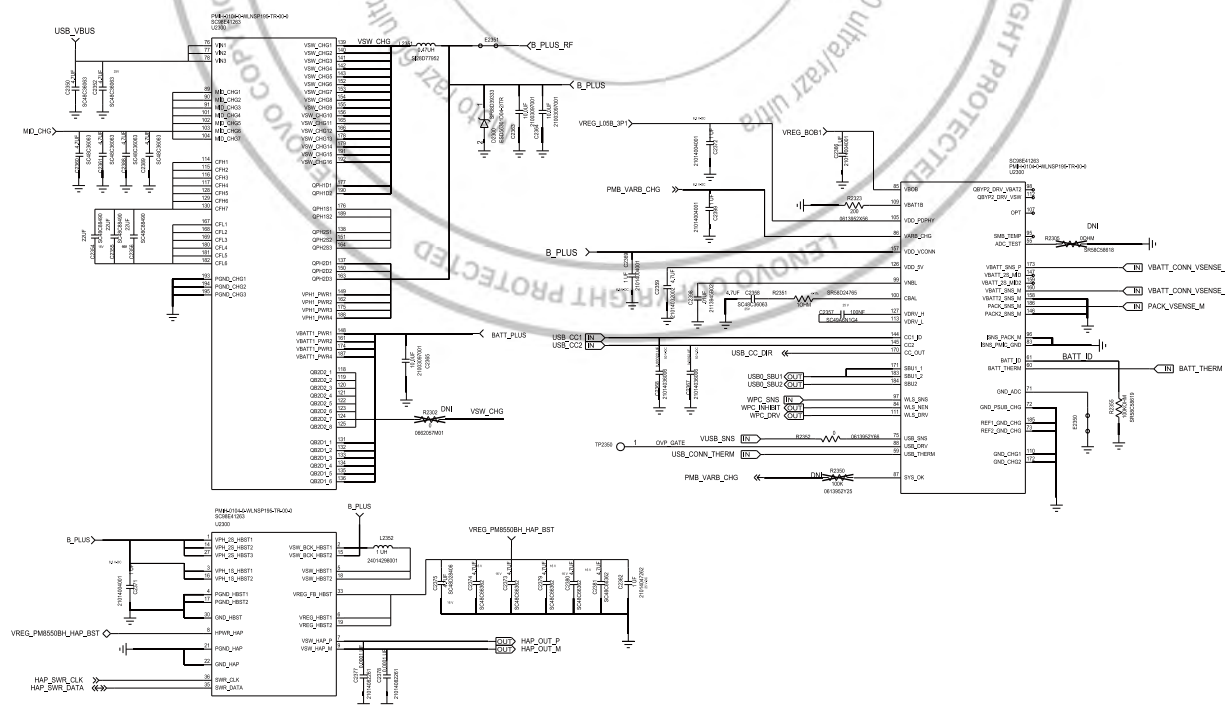
PMIH04: CTRL/HAPTICS

REFDES: 2300-2349



PMIH04: CHARGE/FG

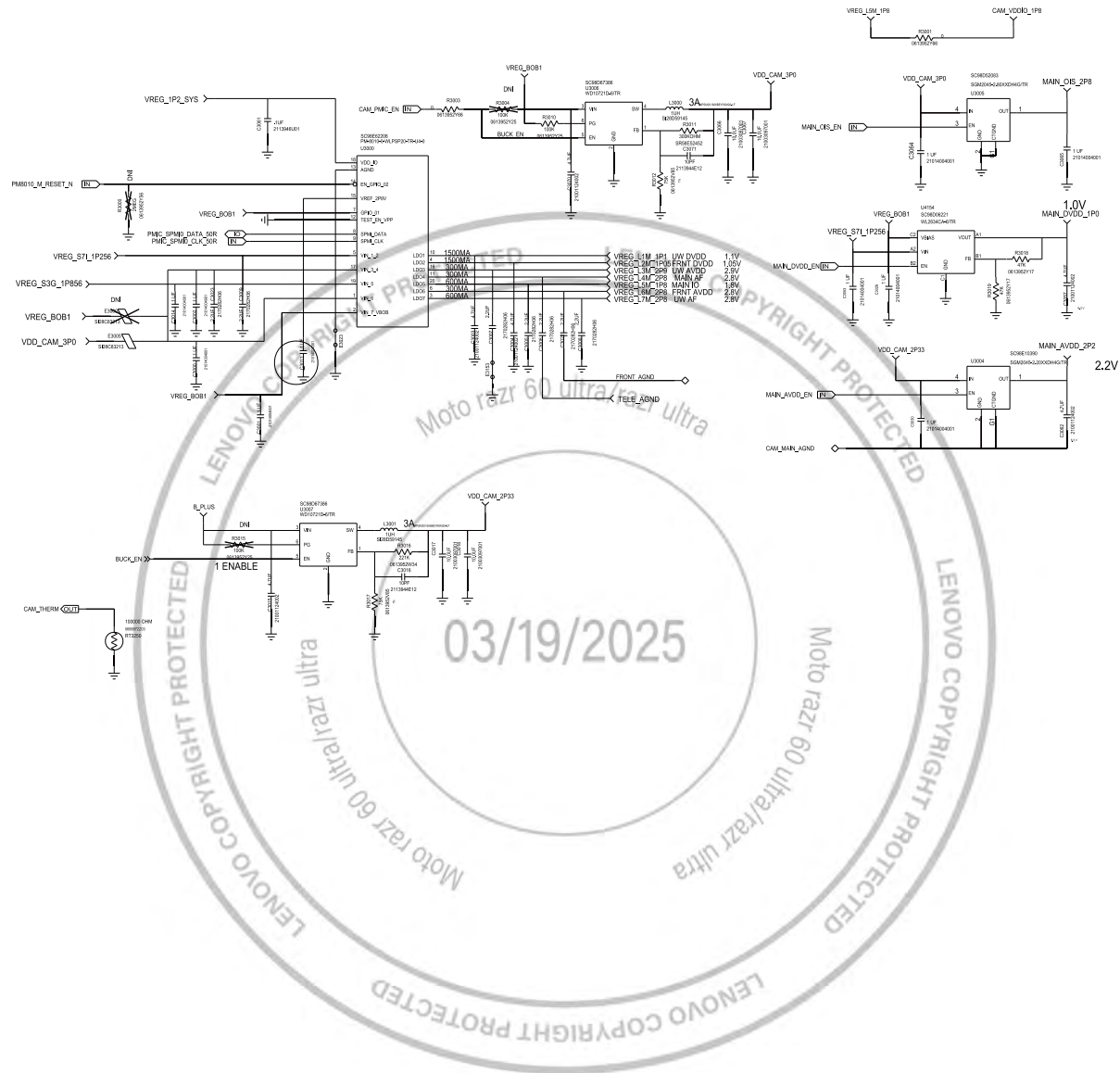
REFDES: 2350-2399



IMG: POWER MANAGEMENT

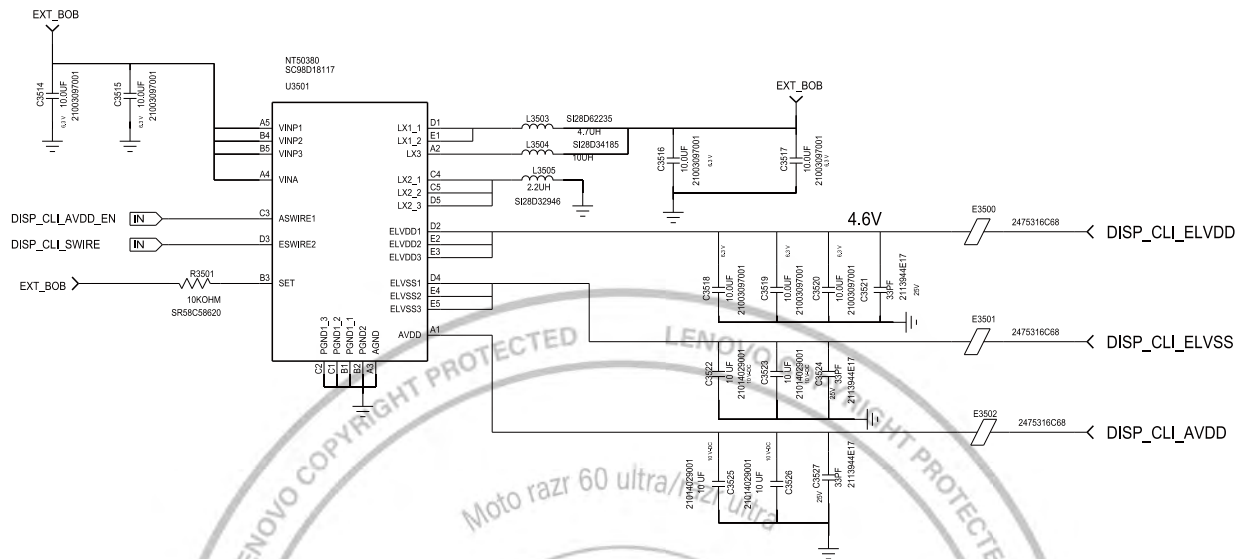
REFDES: 3000-3099

SLG5BM43670 I2C ADDRESS: 0XEA/0XEB



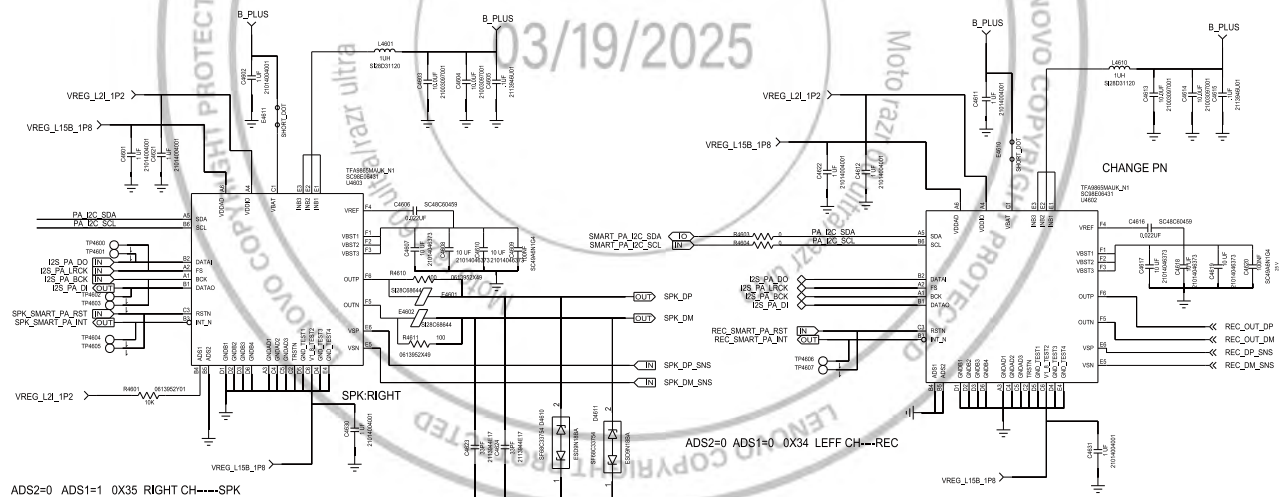
DISP: OLED DRIVER

REFDES: 3500-3599



SMART PA

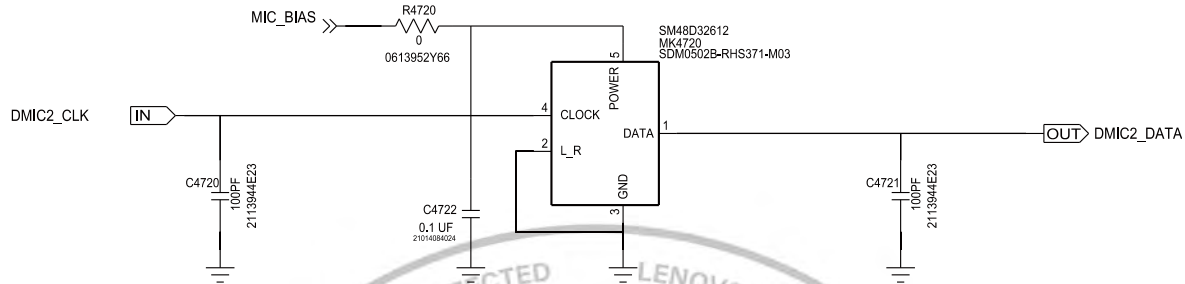
REF: 4601-4649



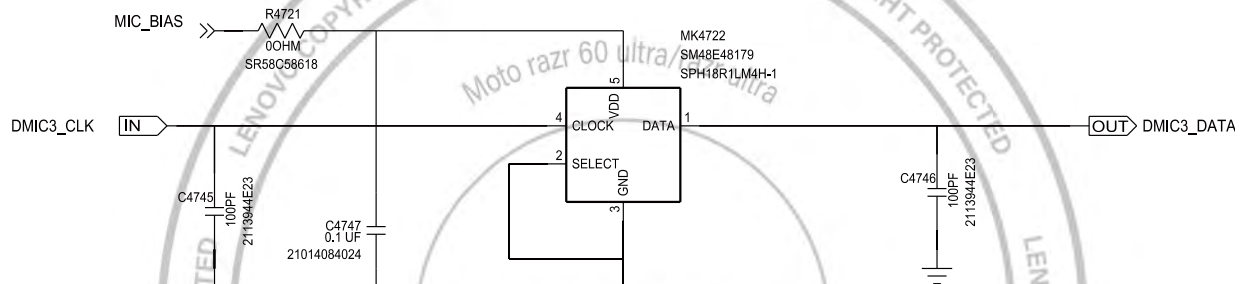
AUDIO: D-MIC/SPEAKER

REFDES: 4700-4749

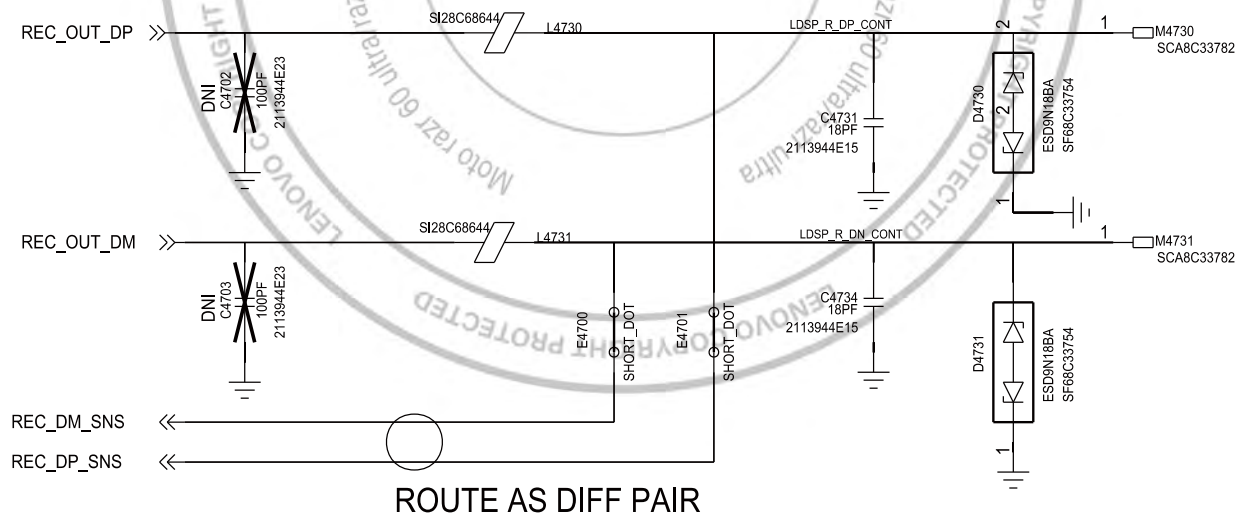
MIC 2



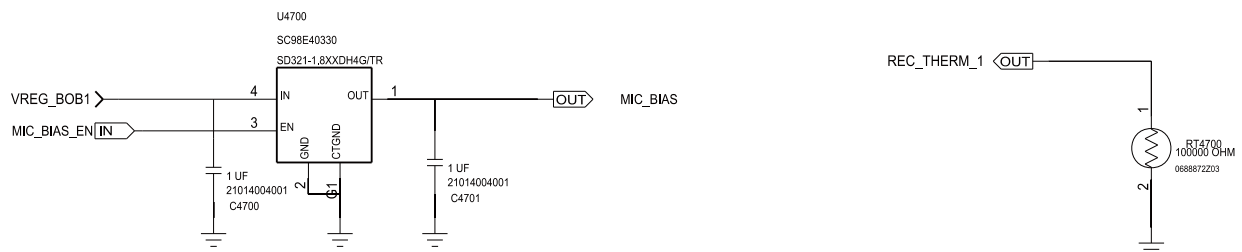
MIC 3



LOUDSPEAKER/EARPIECE

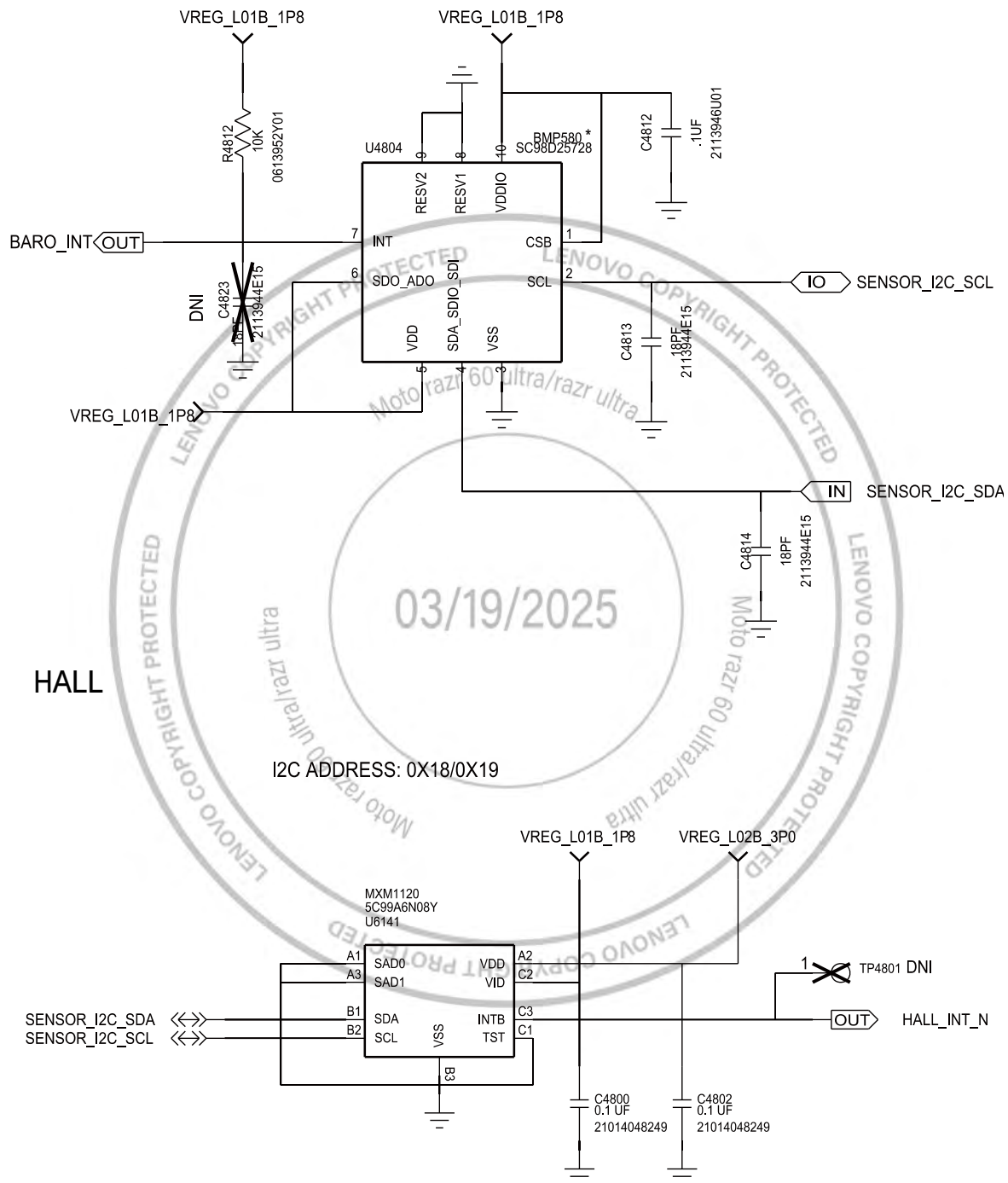


ROUTE AS DIFF PAIR



BAROMETER

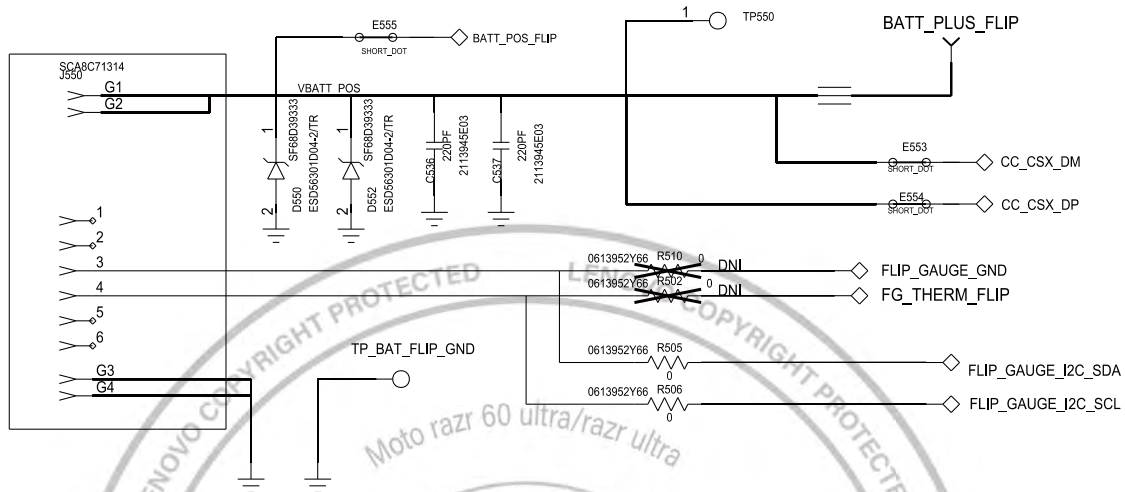
ICP-20100 I2C ADDRESS: 0XC8/0XC9
BMP580 I2C ADDRESS: 0X8E/0X8F



PWR: BATT_FLIP

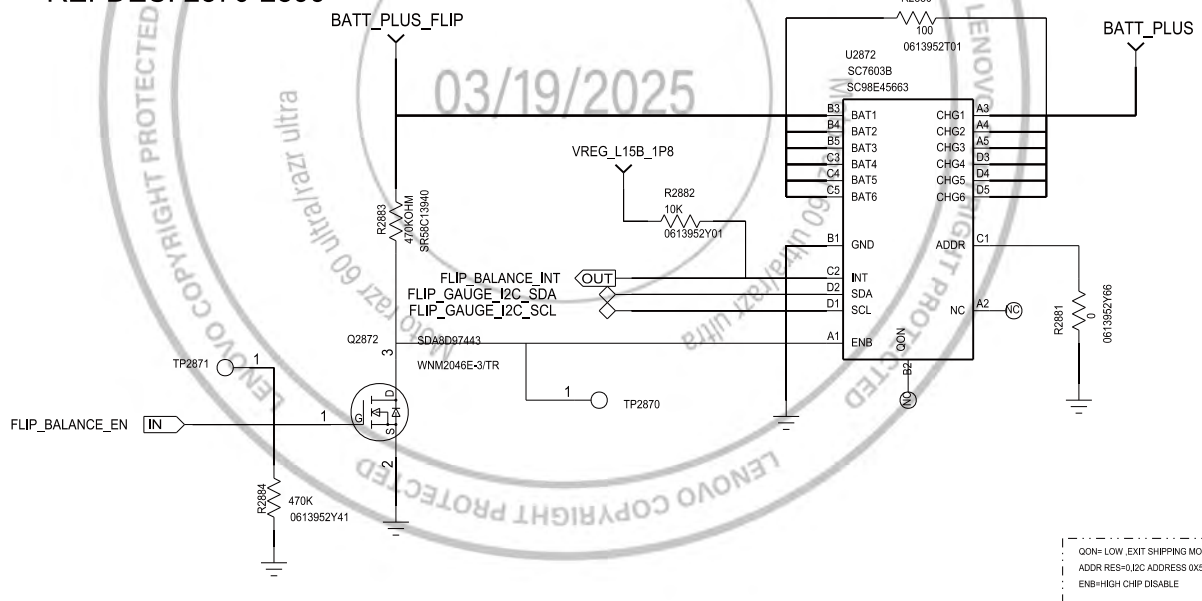
REF: 550-559

BATTERY CONN

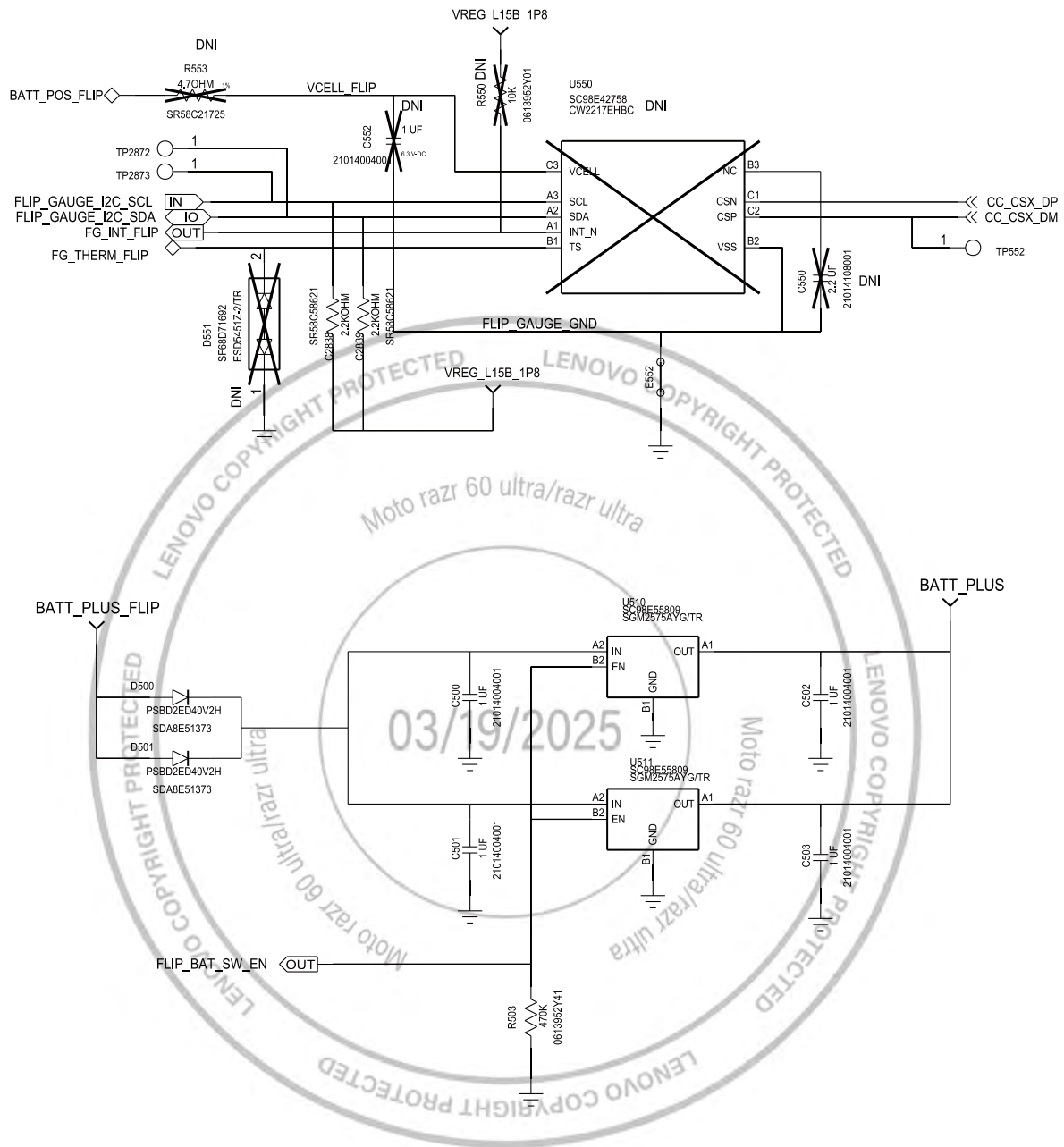


BALANCE IC

REFDES: 2870-2899

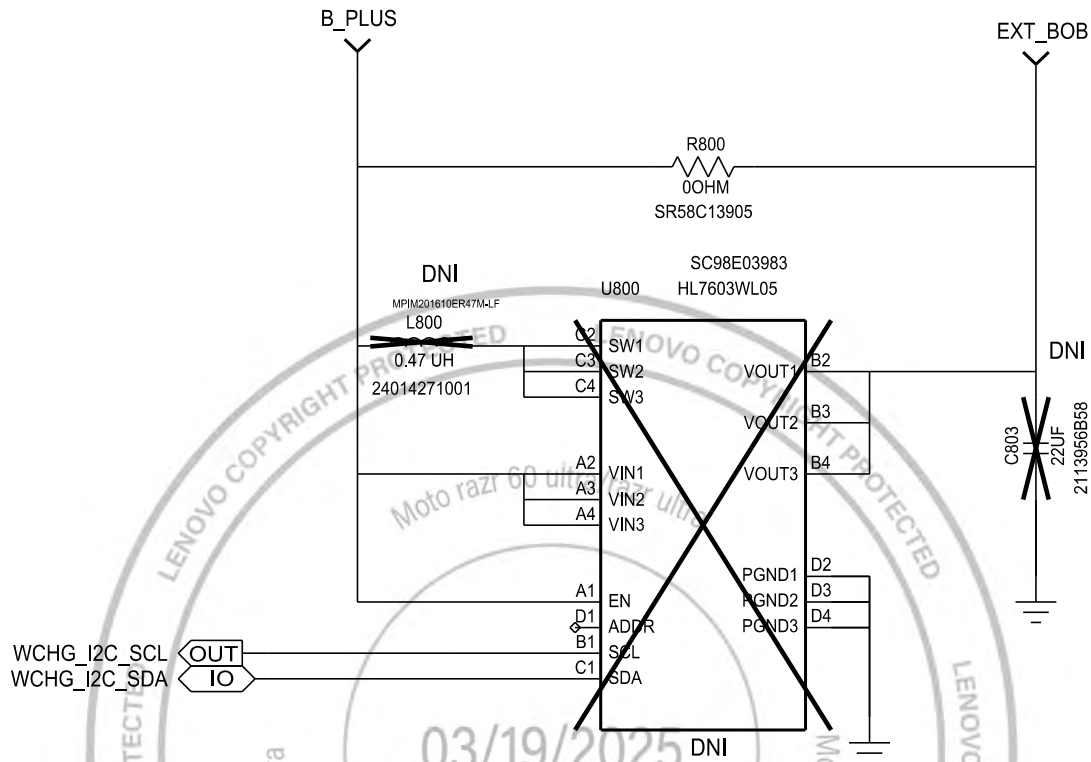


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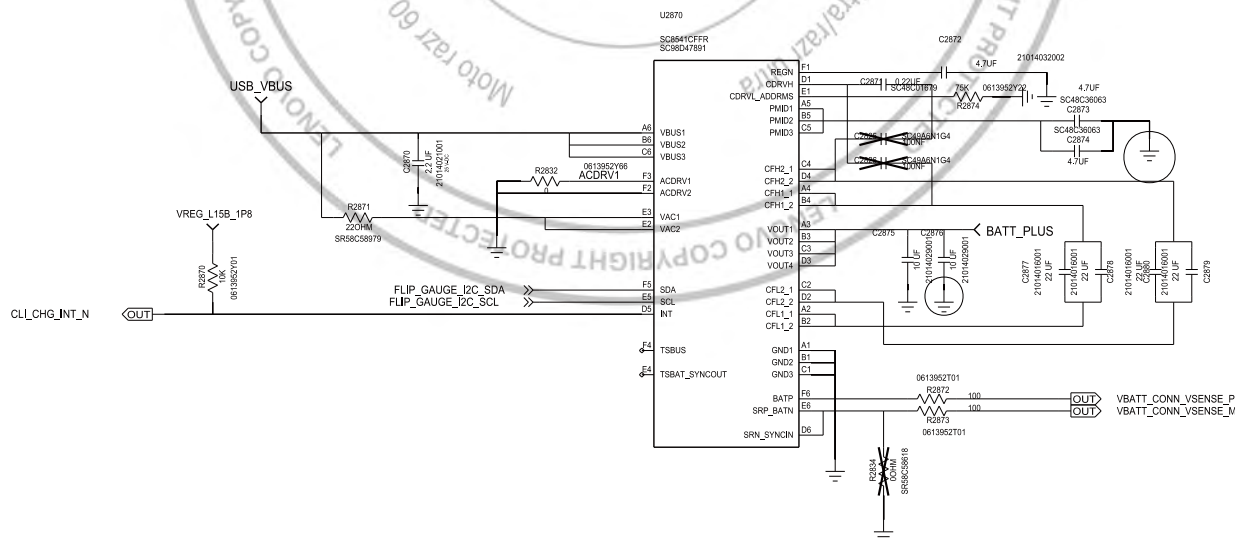
PWR: BUCK/BOOST

REF: 800-810



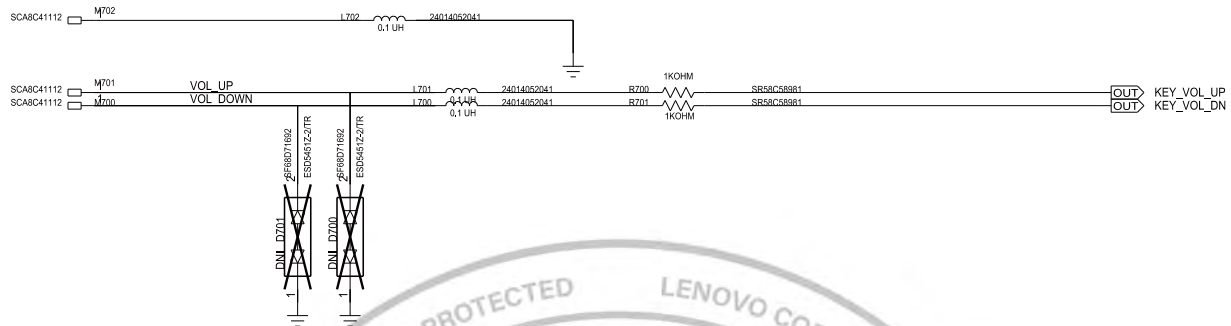
PWR: CHARGE PUMP

REFDES: 2870-2899



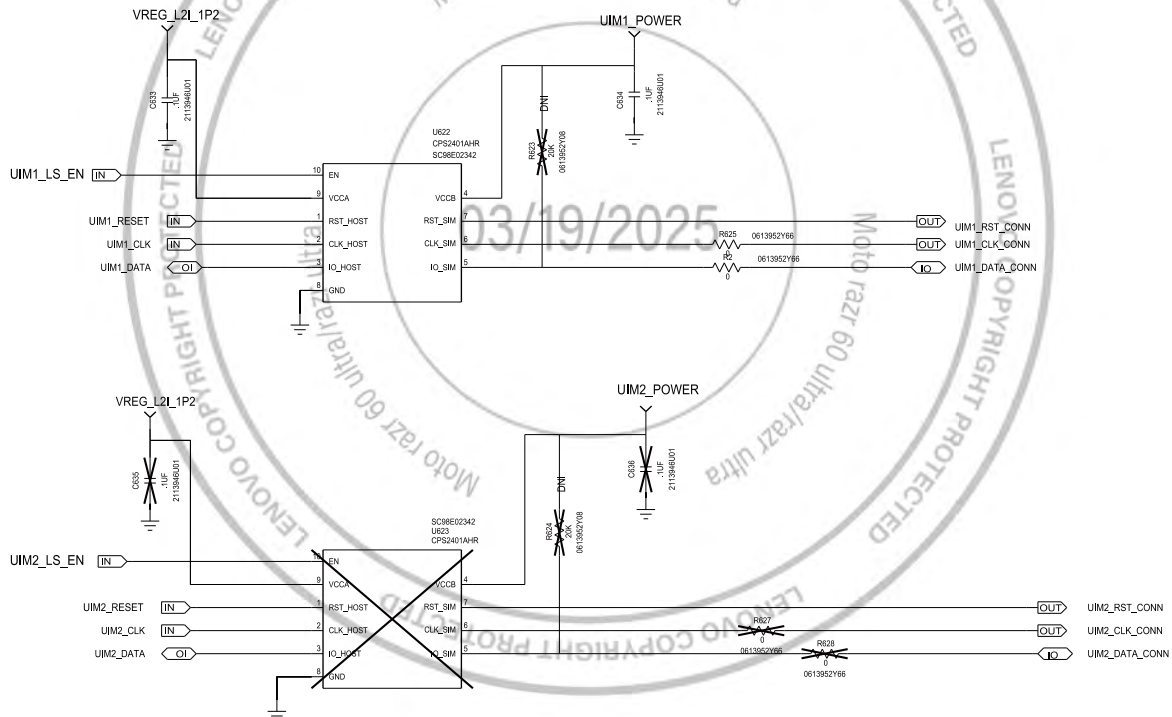
SIDEKEY

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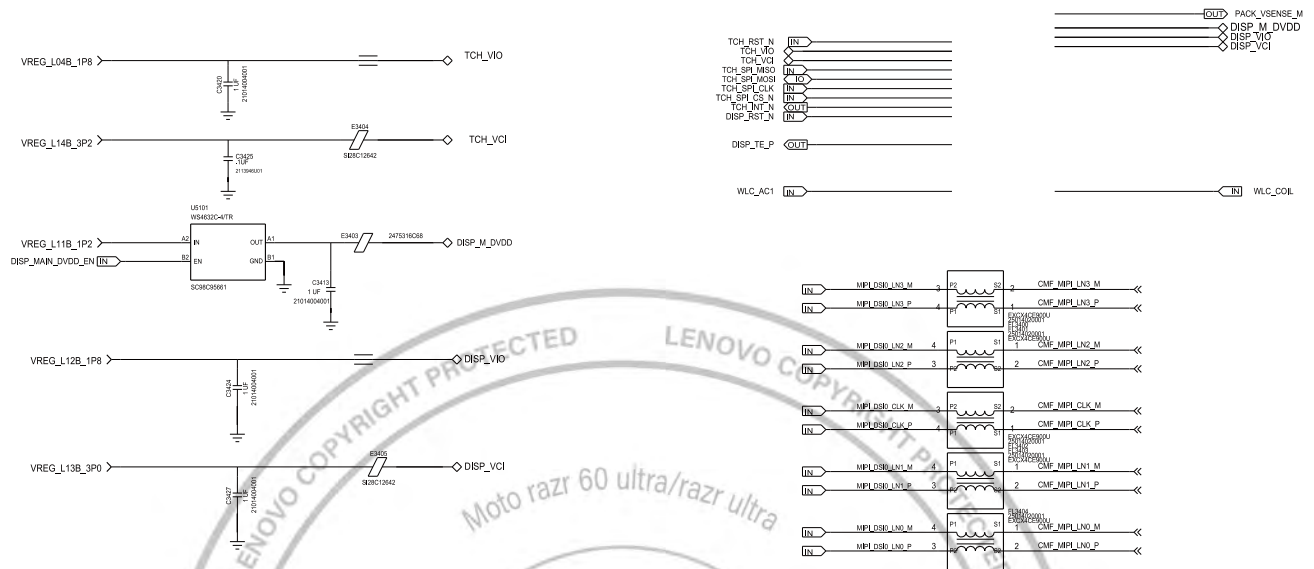
SIM LS/e-SIM

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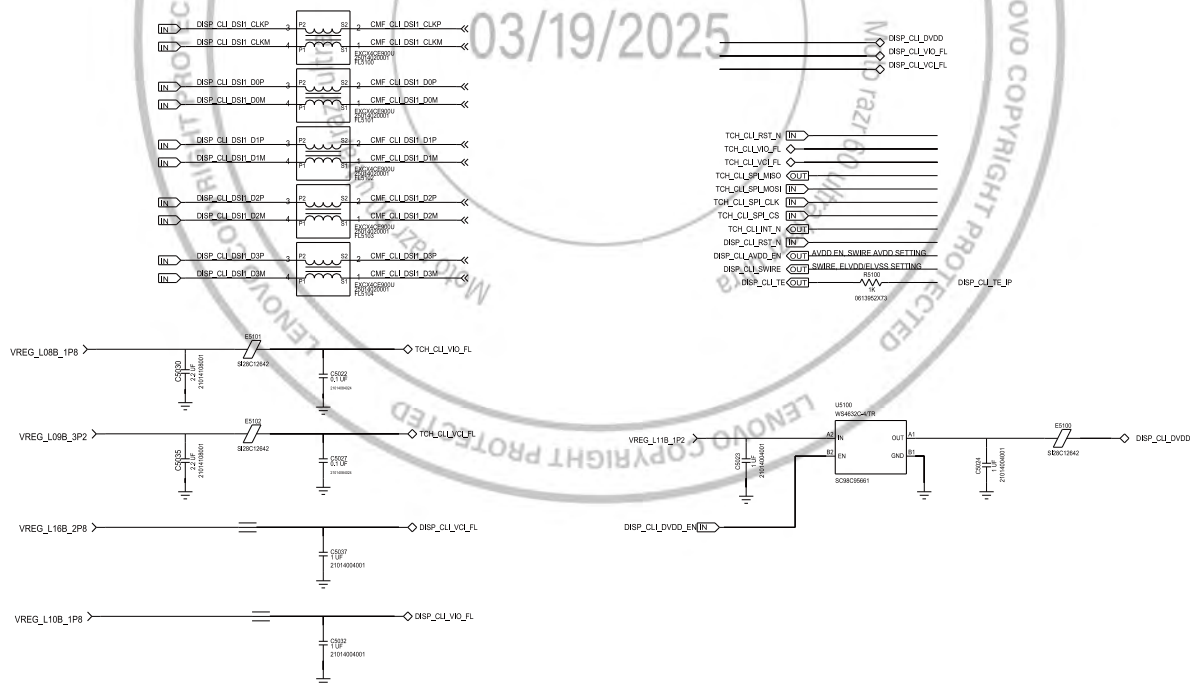
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REFDES: 3400-3499



Port: CLI

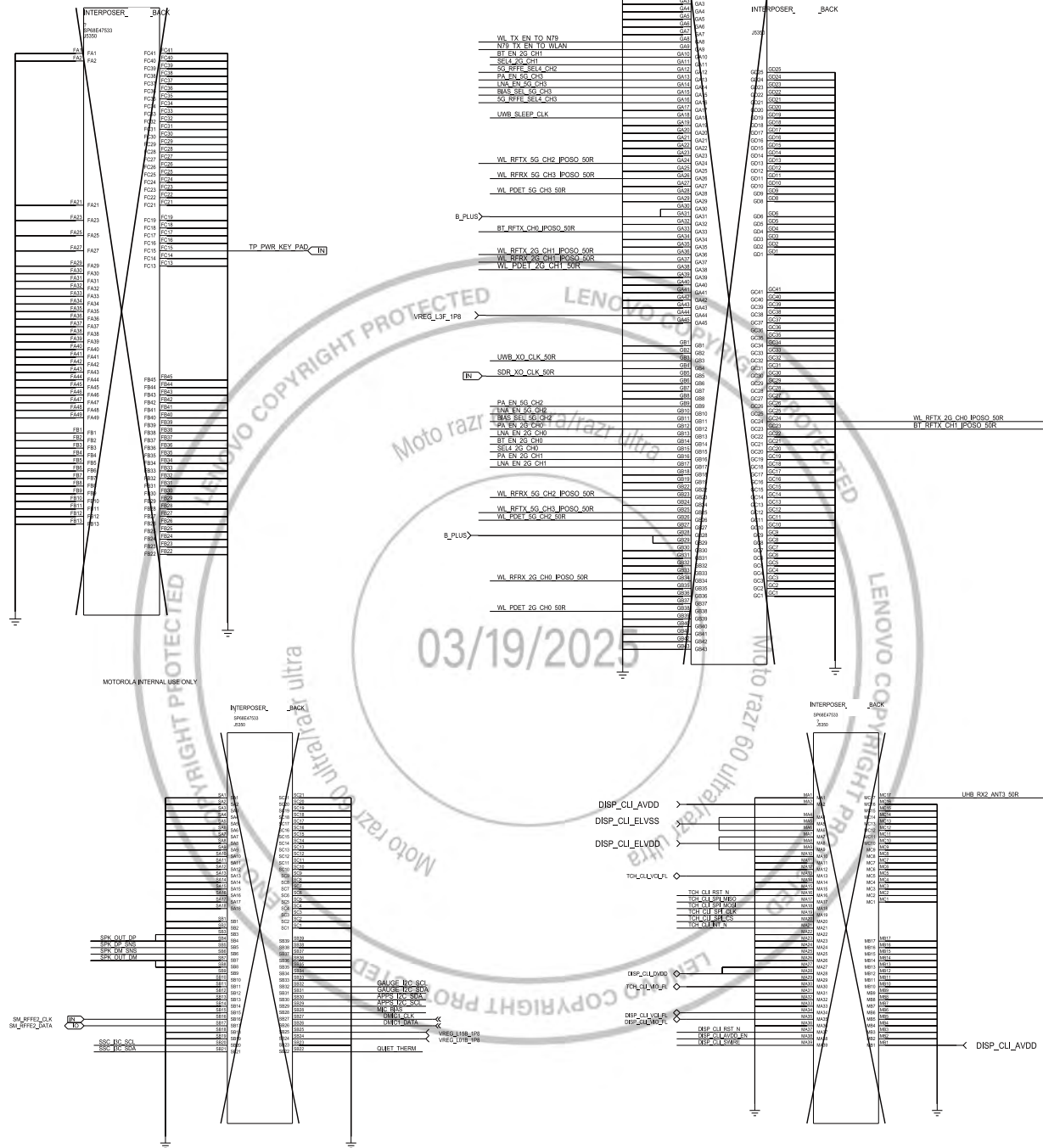
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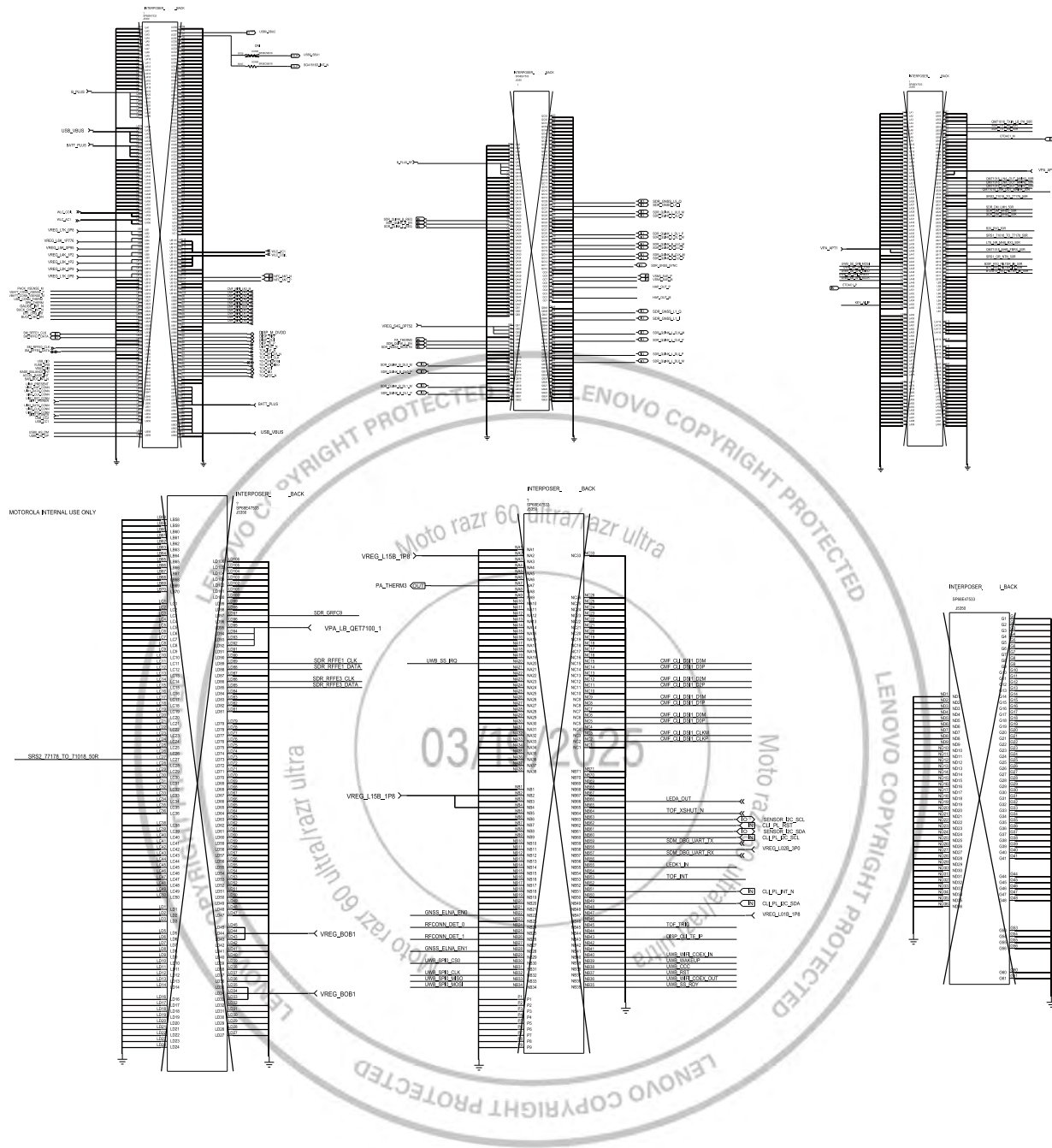
Moto razr 60 ultra/razr ultra

Level 3 – Service Manual

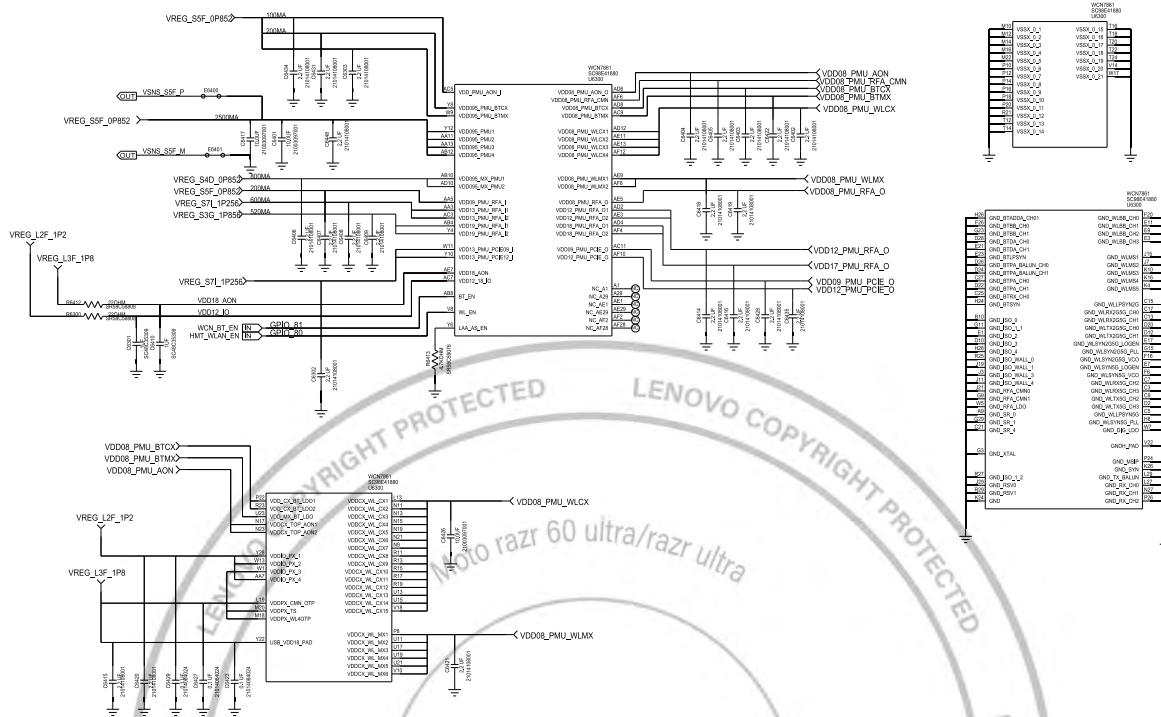
MOTOROLA INTERNAL USE ONLY
SUPER: SP68E47533
PRC: SP68E47534



Moto razr 60 ultra/razr ultra Level 3 – Service Manual

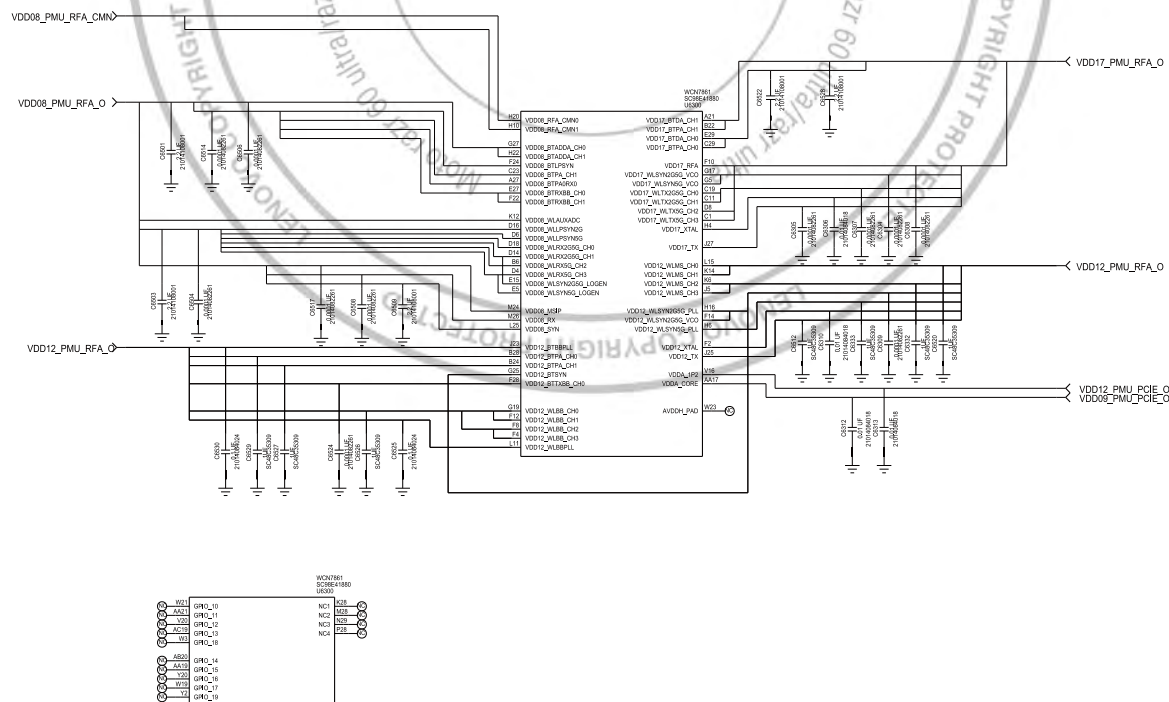


CONN: WCN7861 PWR/GND1



CONN: WCN7861 PWR/GND2

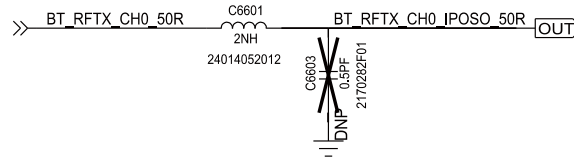
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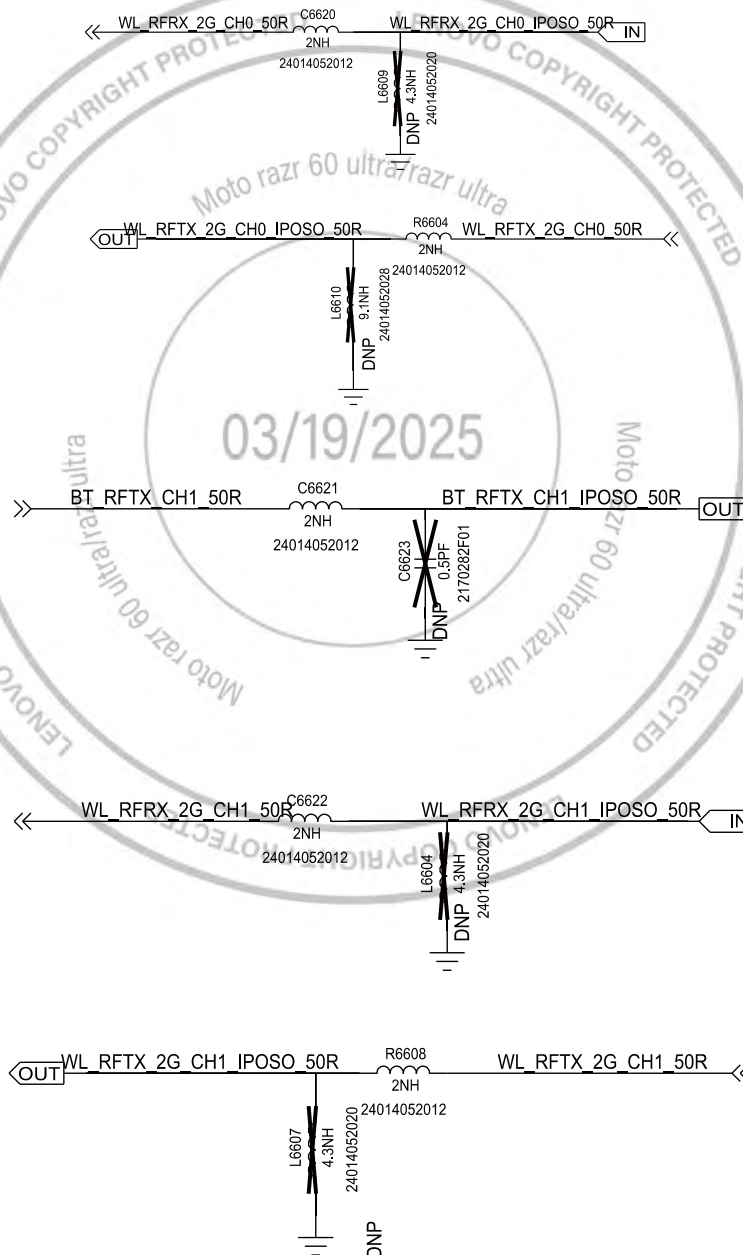
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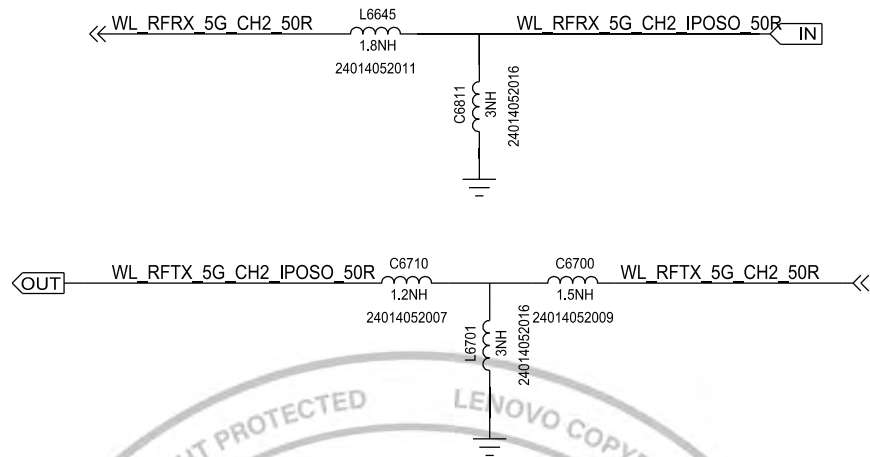
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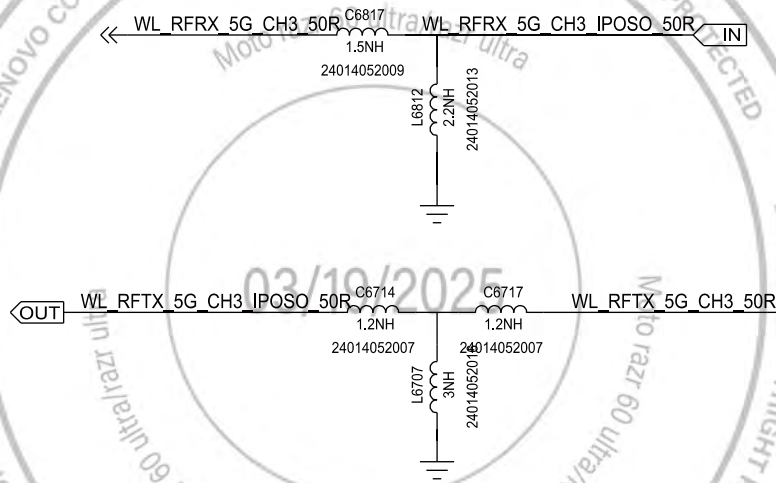
CH1



CH2

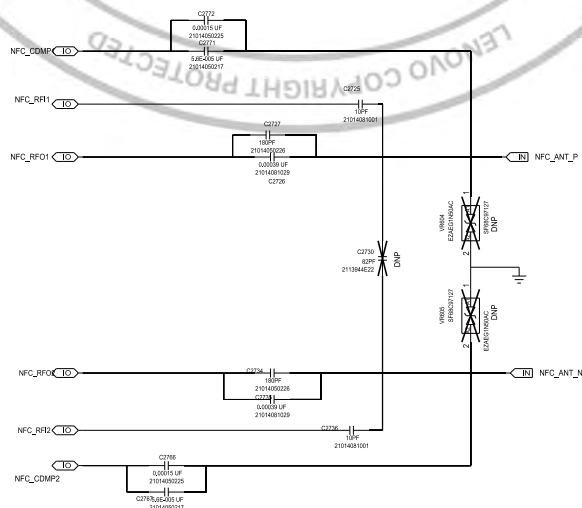


CH3



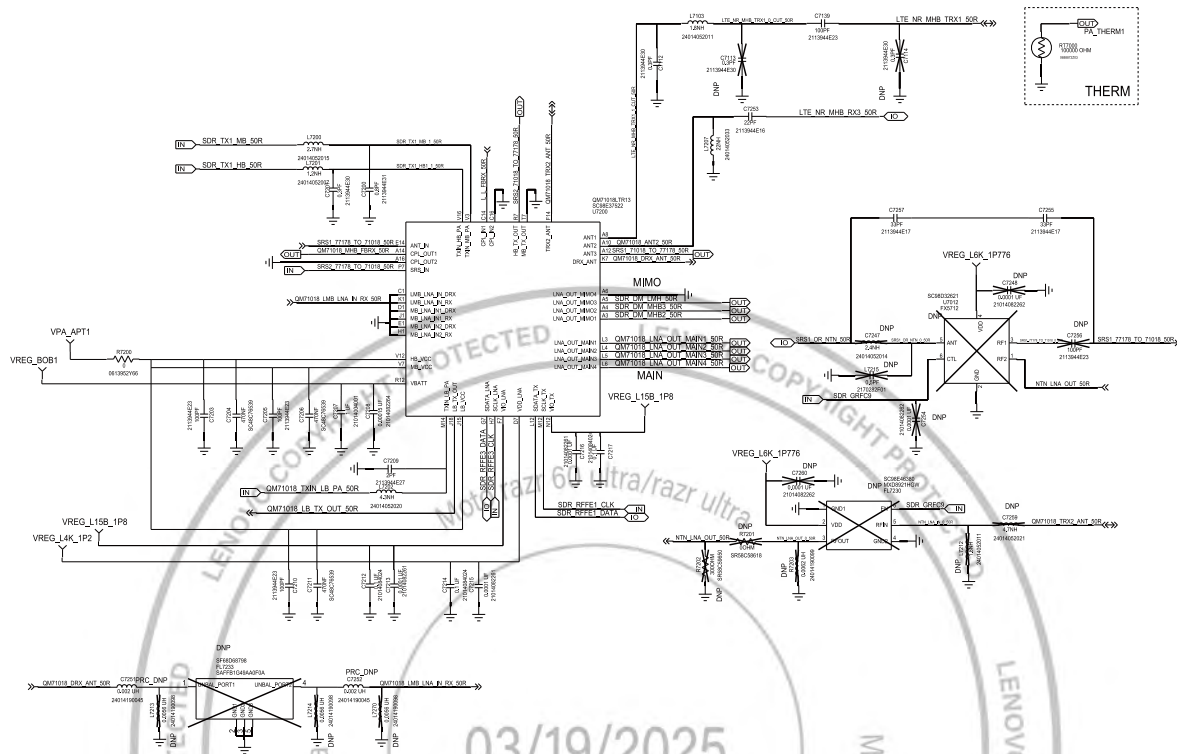
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RFFE: MHB_LPAMID-QM71018_TRX0

REF 7200-7299



RFFE: QET7100_1#

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