

Lenovo

Moto g power 2025



Moto g power 2025
Level 3 – Service Manual

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REVISION HISTORY

Revision	Date	Notes
1	02/14/2025	Initial Release.

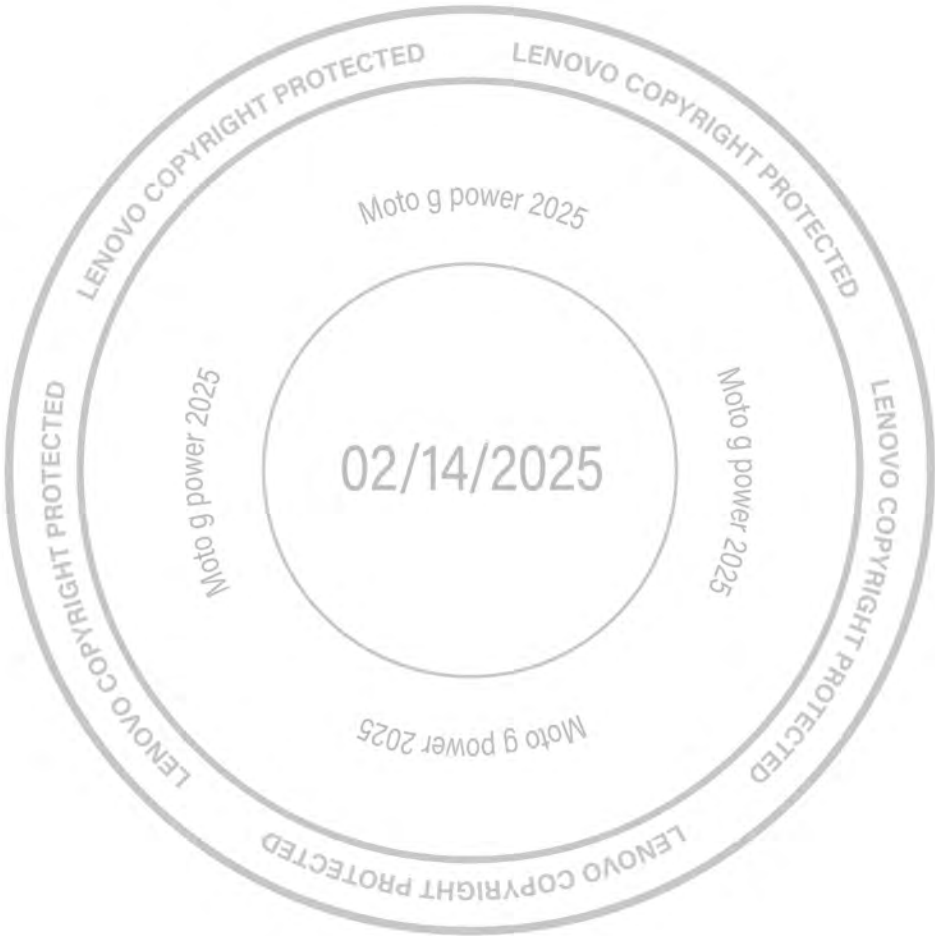


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L3 PARTS LIST AND IMAGE

Table 1. L3 Parts List

Location	Part Number	Ref.	Commodity	Qty	Part Level	Description	Function	Remark
1	SC98E37671	U1801	IC	1	L3	IC, PMIC, WFBGA, 207PINS, MT6377W/A	Power Management	
2	SC98E37672	U2201	IC	1	L3	IC, PMIC, WLCSP, 45PINS, MT6319NP/A	Integrated Circuits	
	S938C66937	J3502, J3503	Connector	2	L3	LC4312AA000107+CONN_24Pin		
	S938C84152	J3801	Connector	1	L2.5	LC4312AA000158+CONN, BB, Socket, 10 pin, P0.		
	S938D67757	J4004	Connector	1	L2.5	LC4320AA000125+ HOLDER, Nano+TF		
	S948D21192	J3501, J3900	Connector	2	L3	LC4312AA000120+CONN, BB, Socket, 40pin		
	S948D67715	J4001	Connector	1	L2.5	LC4320AA000070+CONN, Nano, SIM, PIN, PUSH		
3	S948D88394	J2901	Connector	1	L2.5	LC4312AA000442+CONN, BB, Socket, 10pin, 15A		Battery Connector
	S948E42607	J3901	Connector	1	L3	LC4312AA000536+CONN, BB, Socket, 50pin, 5A		
	S948E53970	J4003	Connector	1	L2.5	LC4320AA000181+CONN, Nano+SD, PIN PUSH		
	S948E13232	J1004	Connector	1	L2.5	LC4310AA000179+CONN, TypeCUSB, 24 pin, 7A		On USB Board
	S938E14994	MIC3301	Microphone	1	L2.5	LC2430AA000148+MIC, BOT2.75X1.85XH0.95mm		

NOTE

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

Front View

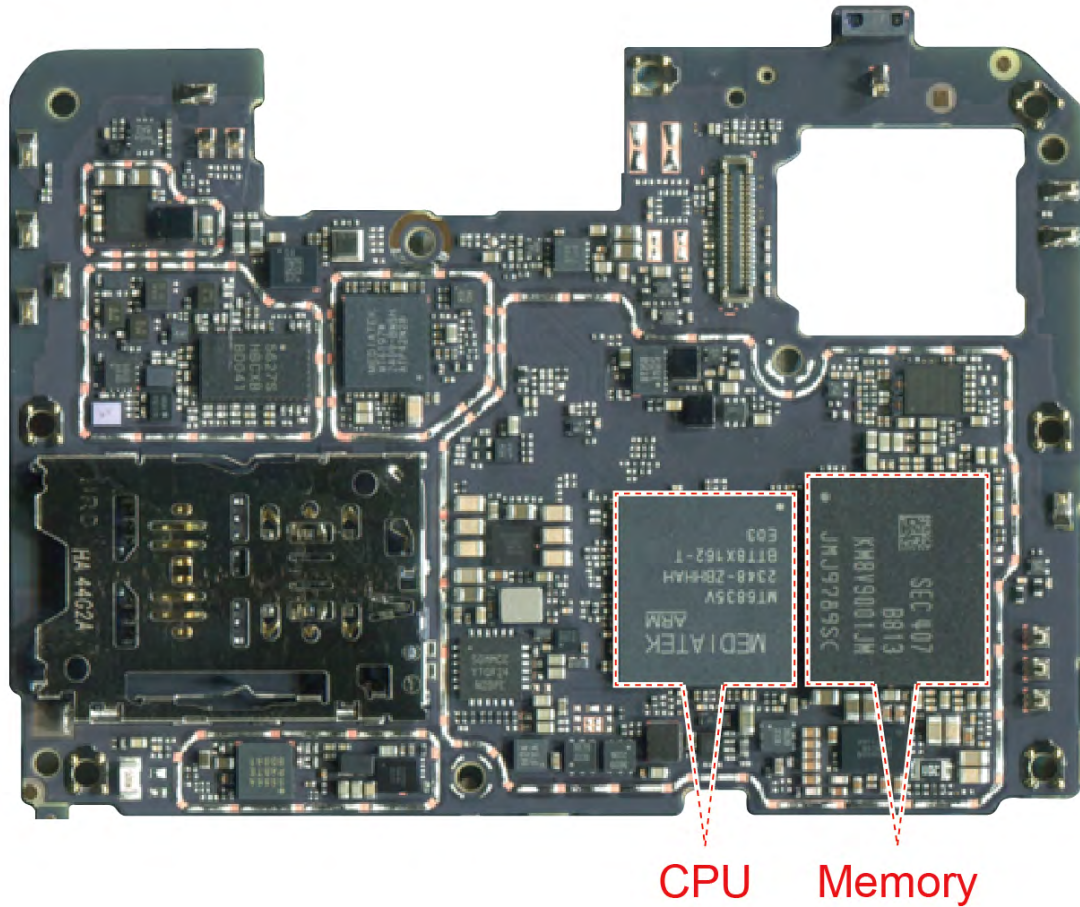


Figure 1. Front View

Back View

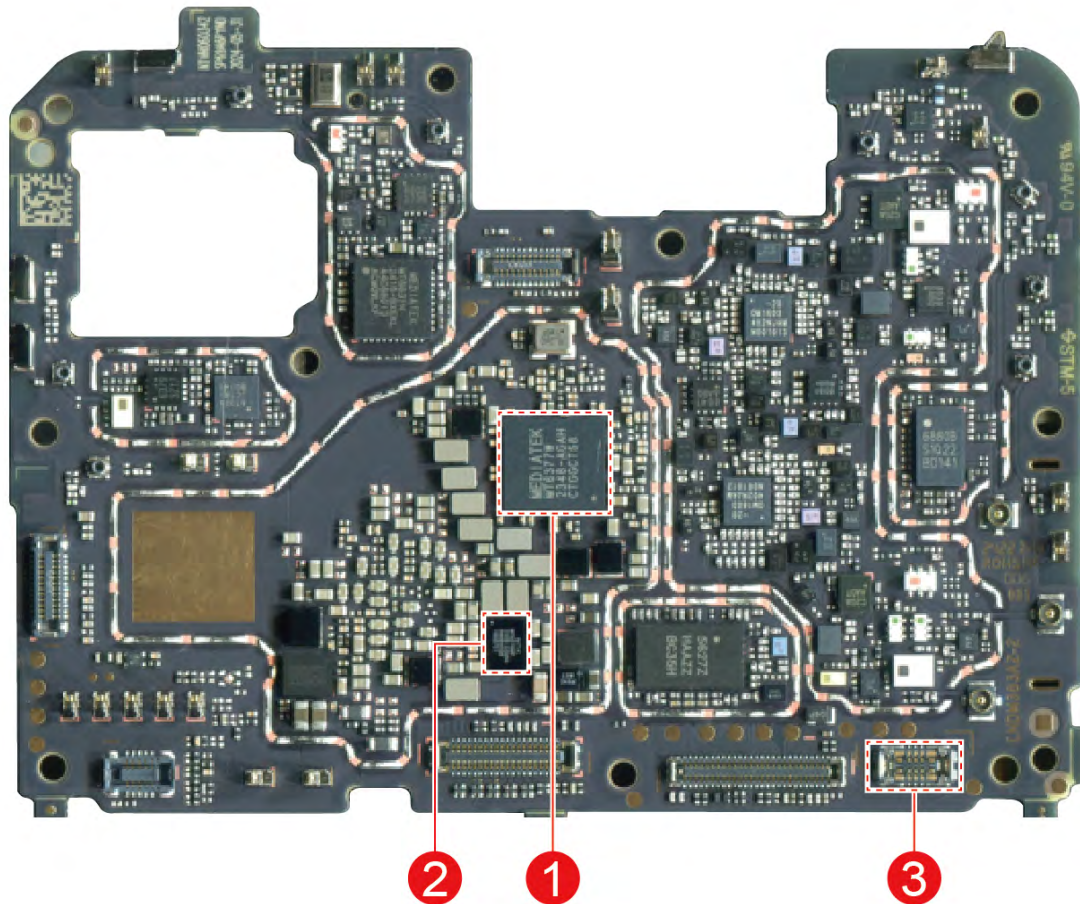


Figure 2. Back View

TROUBLE SHOOTING GUIDE

After the SMT of the production line is completed, X-RAY inspection will be carried out before cutting the board, according to the actual situation, X-RAY inspection cannot ensure 100% good products, so some faulty boards may be missed after X-RAY inspection. If a faulty board is found during the test, the first step is to re-conduct the X-RAY inspection, and carefully check whether there are problems such as continuous welding, lap welding, and virtual welding.

Power failure check

The main fault phenomena caused by power failure are: failure to turn on, large leakage current when shutdown, and large current when starting up. The main causes of this problem are: false soldering, power supply filtering or short circuit to ground of ESD devices, burning of devices connected to power supplies, etc.

The steps to locate and resolve such issues are as follows:

1. Check the soldering of the components connected to the power supply, whether they are virtual soldering, or connected to the surrounding devices.
2. Use a multimeter to eliminate whether there is a short circuit of the power supply to the ground, and check the cause of the short circuit step by step (mainly: tin, IC burnout, ESD protection device breakdown, capacitor breakdown, etc.).
3. Boot up to test whether the output of each power supply is normal.

If the output value of a power supply is abnormal, check whether there is a problem with the welding of the relevant filter capacitor and whether it is broken down, and replace it if the filter capacitor is broken; After eliminating them one by one, the damage to the main chip can finally be located.

The following table shows the test locations of each power supply and its normal boot value.

Table 3-2. Buck converter brief specifications

MT6377						
BUCK name	Default voltage (V)	Vout (V)	Voltage step (mV)	I _{max} (mA)	Default on (Y/N)	Application
BUCK1/2	0.75	0.4~1.193	6.25	10,000	Y	CPUB
BUCK3	0.725	0.4~1.193	6.25	5,000	Y	Digital core
BUCK4	0.75	0.4~1.193	6.25	5,000	Y	CPUL
BUCK5	0.7	0.4~1.193	6.25	1,200	Y	RF digital
BUCK6	1.125	0.4~1.193	6.25	2,500	Y	DRAM
VS1	2.0	1.8~2.2	12.5	2,200	Y	SYS LDOs power
VS2	1.45	1.2~1.5	12.5	2,500	Y	SYS LDOs power
VPA	0.6	0.6~3.4	50	1,500	N	LTE/NR PA

Table 3-3. LDO types and brief specifications

LDO name	Type	Controller power domain	Input power domain	Vo (V)	I _{rated} (mA)	Application
VA12	SLDO_600	VSYS_SMP5	VS2_LDO2	1.2	600	ABB
VAUD18	SLDO_300	VSYS_LDO1	VS1_LDO1	1.8	300	Audio
VAUD28	ALDO_200	VSYS_LDO1	VSYS_LDO1	2.8	200	Audio
VAUX18	ALDO_50	VSYS_LDO2	VSYS_LDO2	1.84	50	AUXADC
VBIF28	ALDO_50	VSYS_LDO2	VSYS_LDO2	2.8	50	Battery interface
VCN33_1	DLDO_800	VSYS_LDO1	VSYS_LDO1	3.3/3.4/3.5/3.6	800	Connectivity
VCN33_2	DLDO_800	VSYS_LDO1	VSYS_LDO1	3.3/3.4/3.5/3.6	800	Connectivity
VCN18	SLDO_1200	VSYS_LDO1	VS1_LDO2	1.8	1,200	Connectivity
VRFCX	VDCXO	VSYS_LDO2	VSYS_LDO2	1.6	5	DCXO
VBBCK	VDCXO	VSYS_LDO2	VIO18	1.2	5	DCXO
VXO22	VDCXO	VSYS_LDO2	VSYS_LDO2	2.24	25	DCXO
DVDD18_DIG	VDIG18	VSYS5NS	VSYS5NS	1.8	2	PMIC internal digital power
VM18	SLDO_300	VSYS_LDO1	VS1_LDO1	1.84	300	DRAM
VMDDR	SLDO_600	VSYS_SMP5	VDD2	0.75	600	DRAM
VMDDQ	SLDO_1200	VSYS_SMP5	VDD2	0.6	1,200	DRAM
VEFUSE	SLDO_300	VSYS_LDO1	VS1_LDO2	1.8	300	eFuse
VEMC	DLDO_800	VSYS_LDO2	VSYS_LDO2	2.55/2.9/3	800	eMMC and UFS
VUFS	SLDO_1200	VSYS_LDO1	VS1_LDO1	1.86	1,200	UFS
VIO18	SLDO_600	VSYS_LDO1	VS1_LDO2	1.8	600	I/O and eMMC
VSRAM_MD	SLDO_600	VSYS_SMP5	VS2_LDO1	0.85/0.55	600	SRAM
VRF18	SLDO_1200	VSYS_LDO1	VS1_LDO2	1.84	1,200	RF
VRF09	SLDO_800	VSYS_SMP5	VS2_LDO2	0.9	800	RF
VRF12	SLDO_800	VSYS_SMP5	VS2_LDO2	1.2	800	RF
VRFVA12	SLDO_600	VSYS_SMP5	VS2_LDO2	1.2	600	RF ABB
VRFO18	SLDO_300	VSYS_LDO1	VS1_LDO1	1.82	300	RF IO
VRTC28	VRTC	VSYS5NS	VSYS5NS	2.8	2	RTC
VMCH	DLDO_800	VSYS_LDO3	VSYS_LDO3	3/2.9/1.86	800	SD card
VMC	DLDO_200	VSYS_LDO3	VSYS_LDO3	3/2.9/1.86	200	SD card
VSIM1	DLDO_200	VSYS_LDO2	VSYS_LDO2	1.86/2.9/3	200	SIM1
VSIM2	DLDO_200	VSYS_LDO2	VSYS_LDO2	1.86/2.9/3	200	SIM2
VSRAM_PROC1	SLDO_600	VSYS_SMP5	VS2_LDO1	0.85/0.55	600	SRAM
VSRAM_PROC2	SLDO_600	VSYS_SMP5	VS2_LDO1	0.85/0.55	600	SRAM
VSRAM_OTHERS	SLDO_600	VSYS_SMP5	VS2_LDO1	0.75/0.55	600	SRAM
VUSB	ALDO_200	VSYS_LDO2	VSYS_LDO2	3.07	200	USB
VIBR	DLDO_200	VSYS_LDO1	VSYS_LDO1	1.8/1.2/2.8/3/3.3	200	Vibrator
VIO28	DLDO_200	VSYS_LDO1	VSYS_LDO1	1.8/1.2/2.8/3/3.3	200	I/O and sensor
VFP	DLDO_200	VSYS_LDO3	VSYS_LDO3	1.8/1.2/2.8/3/3.3	200	Fingerprint
VTP	DLDO_200	VSYS_LDO3	VSYS_LDO3	1.8/1.2/2.8/3/3.3	200	Touch panel

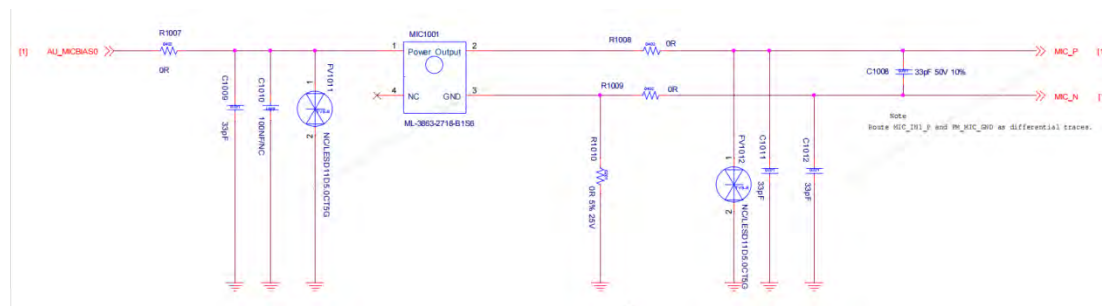
Audio glitches

The audio part mainly includes four parts: speaker, receiver, mic and headphones. First, according to the defective phenomenon, distinguish which part is the problem, and then analyze it according to the following modules.

(1) Speaker loop

The speaker of the M383 mobile phone is on a small board and is connected to the motherboard via FPC. External power amplifier is used, and the channel device is on the motherboard. The schematic diagram of the speaker audio output is as follows:

The schematic diagram of the main MIC of the small board is as follows:



Common faults and causes of MIC are:

1. MIC cannot send or record:

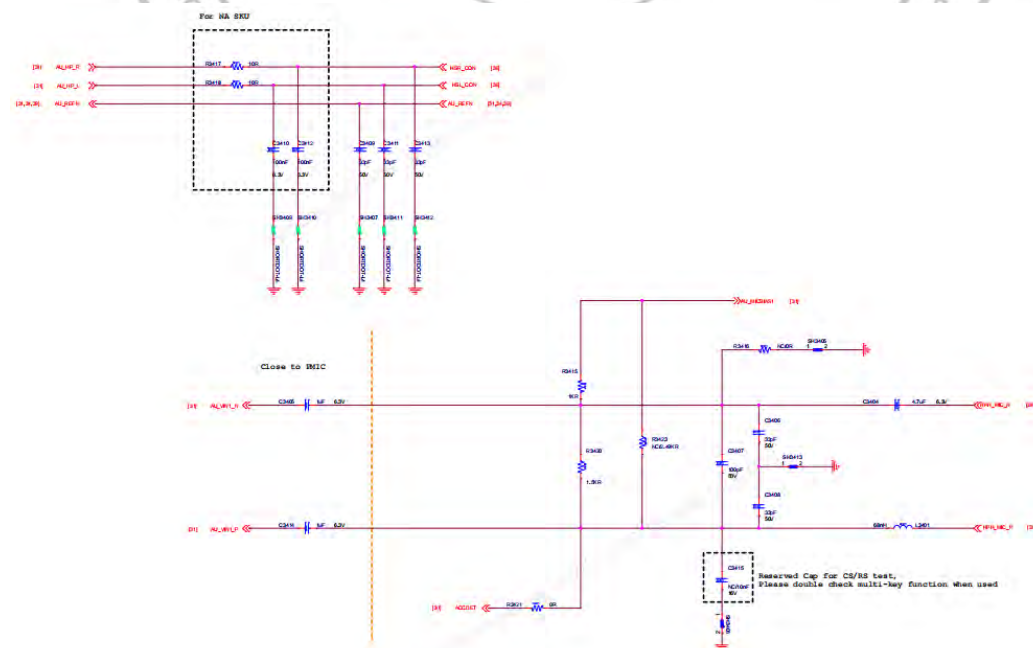
- MIC welding is poor;
- False soldering of devices on the motherboard MIC_P/N line;
- Ground filter capacitors and ESD devices are short-circuited to ground;
- The MIC body is bad; (If there is no sound after testing the MIC recording, it is also possible that the speaker channel is bad).

2. MIC has noise or low sound:

- MIC body is bad;
- The MIC dust filter is not pasted, and the sound inlet hole is dusted;
- The MIC sealant sleeve is not installed;
- Software problems;
- The conductive cloth on the small board is not pasted as required;

(4) Headphone circuit

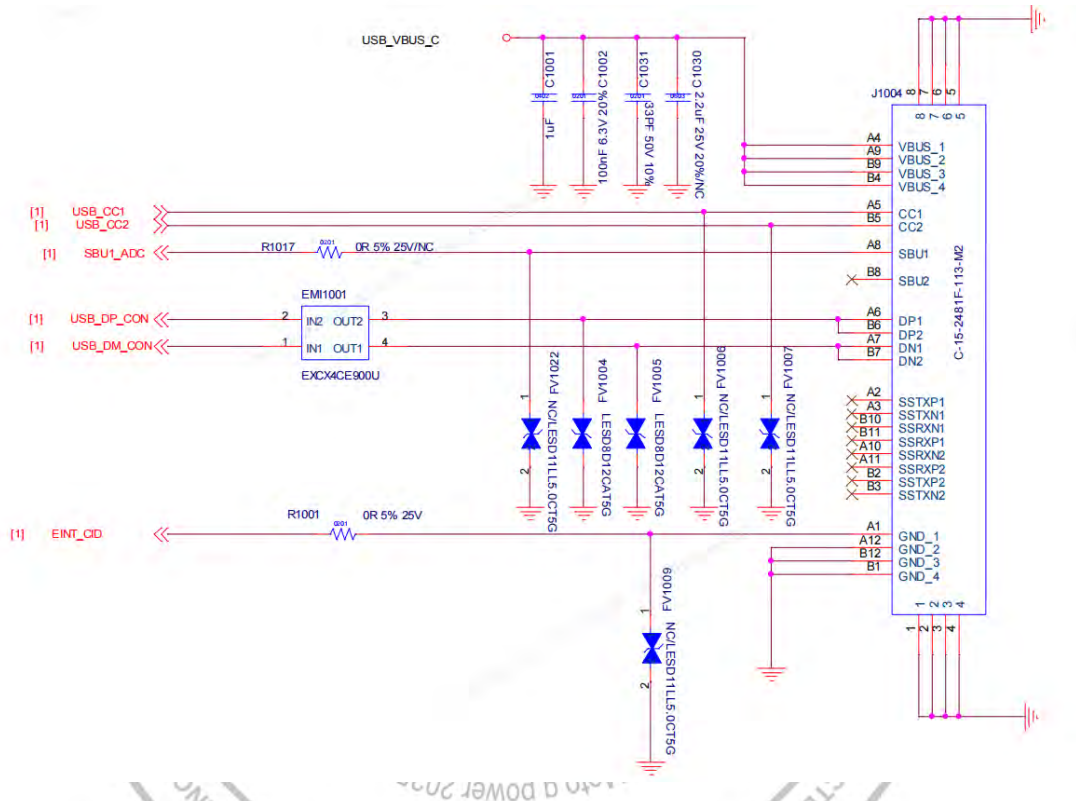
The headphones used in the M383 phone are standard 3.5mm headphones. The circuit schematic diagram is as follows:



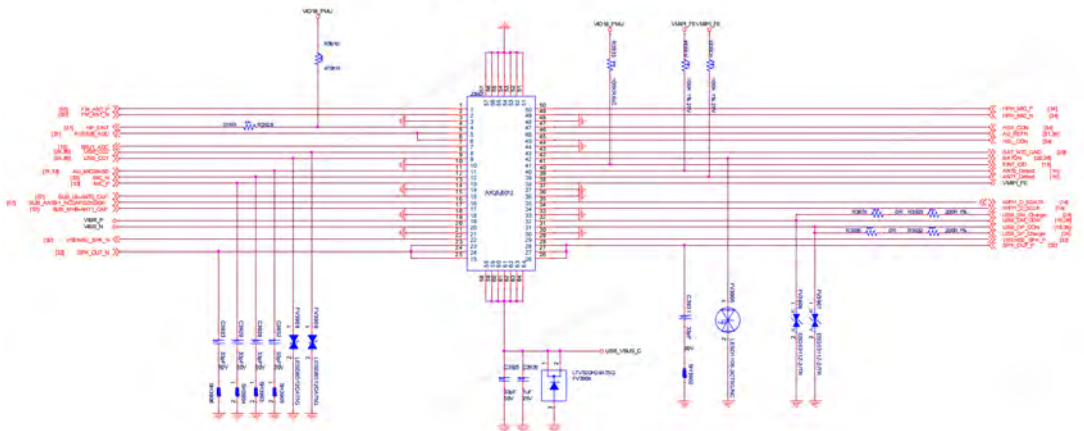
USB Fault

During the test, the fault of "failure to open the serial port" often occurs. The main reasons for this failure are:

1. The mobile phone cannot be turned on, please refer to the maintenance due to the failure to turn on;
2. The USB test point is oxidized, and there is no good contact with the fixture;
3. USB connector virtual welding;
4. Due to the USB circuit itself, please check whether the device is soldered and whether it is connected to the test point. Whether the TVS device and the surge device to the ground are reversed or broken down, resulting in a short circuit to the ground of USB_DM, USB_DP, and VBUS.

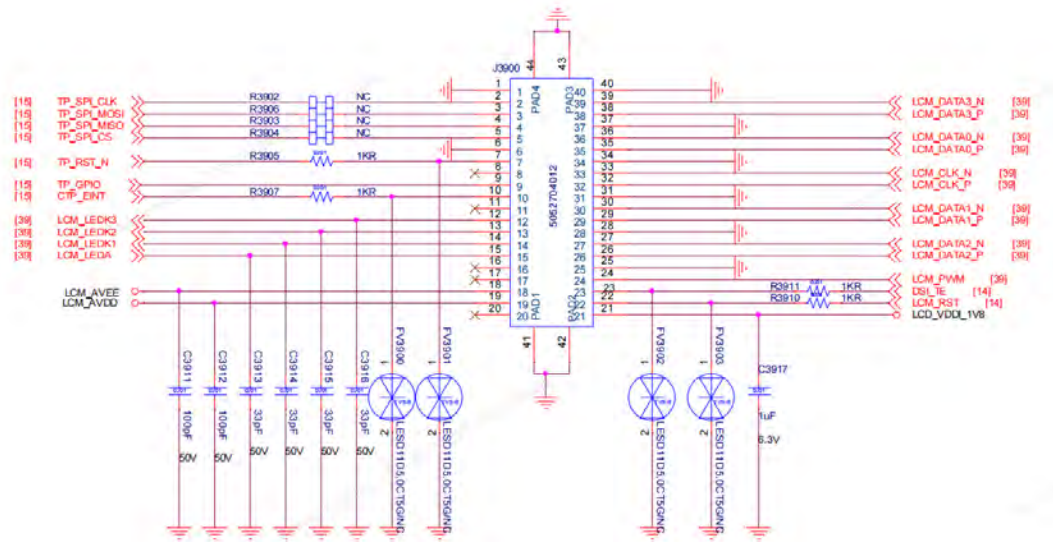


Sub Connector

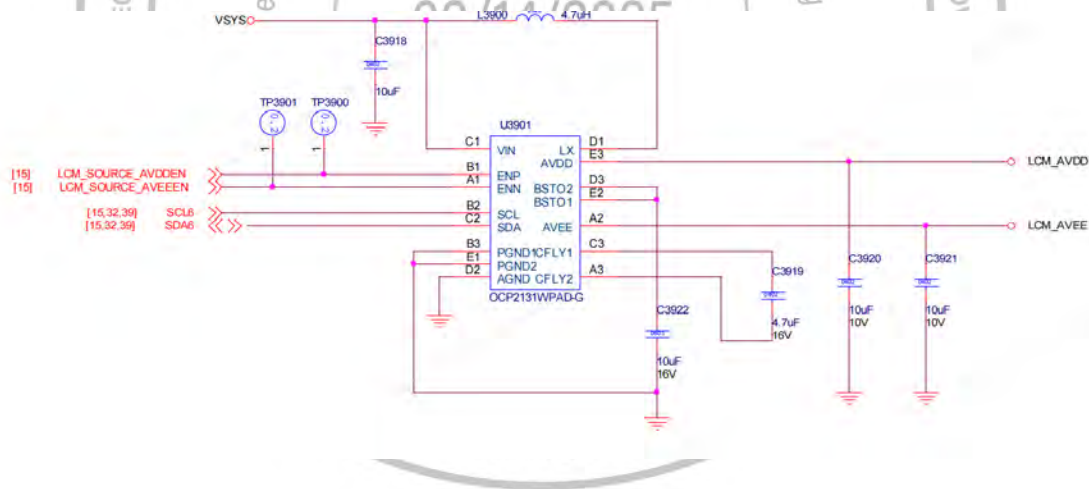


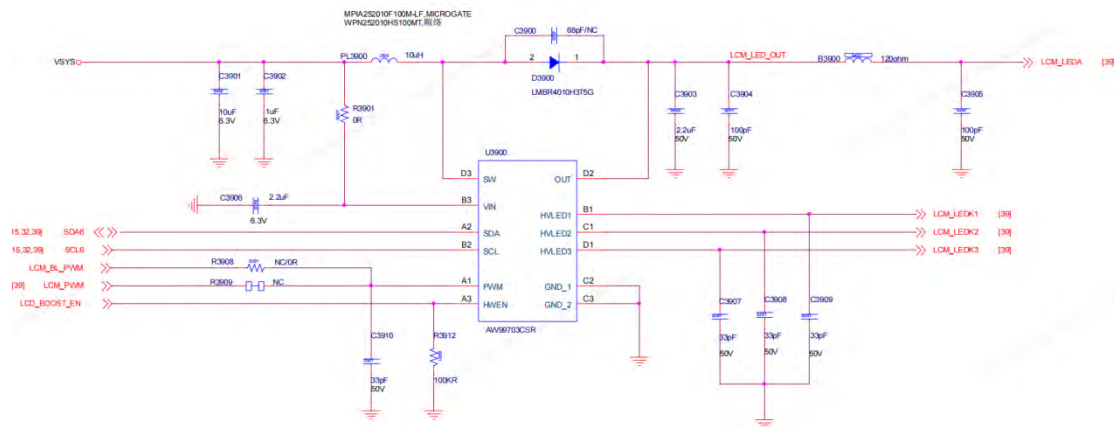
LCD Fault

The M383 uses a 6.78-inch LCD that is connected to the motherboard via a board connector. The schematic diagram of this part of the circuit is as follows:



LCD Interface circuits





Common faults and causes of LCD modules are:

1. LCD black screen:

- The LCD is not installed well or the contact with the fixture is poor;
- If the LCD backlight circuit is broken, check whether the backlight enable pin is pulled up, check whether the backlight chip circuit has soldering problems, and check whether the backlight IC input and output pin PWM control pin is normal;
- The LCD itself is faulty;
- The conductive cloth on the LCD has burrs that touch the LCD backbare feet;
- Whether the Schottky diode is broken down;
- The bias voltage output (VSP/VSN) is abnormal.

2. LCD white screen or blurred screen: It means that the LCD backlight circuit is OK, but the display part is abnormal. The causes of failure are usually as follows:

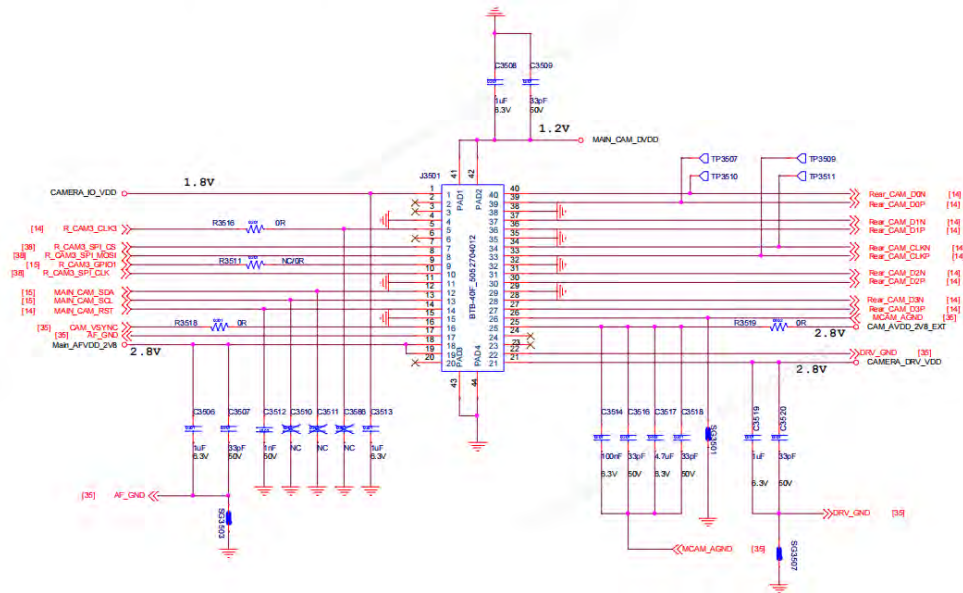
- Poor contact of LCD connectors, poor soldering or poor contact with fixtures;
- Whether the EMI device is soldered or short-circuited with tin;
- Software issues.

3. LCD black spots, bright spots, black lines, streaks Fault cause: LCD body is bad.

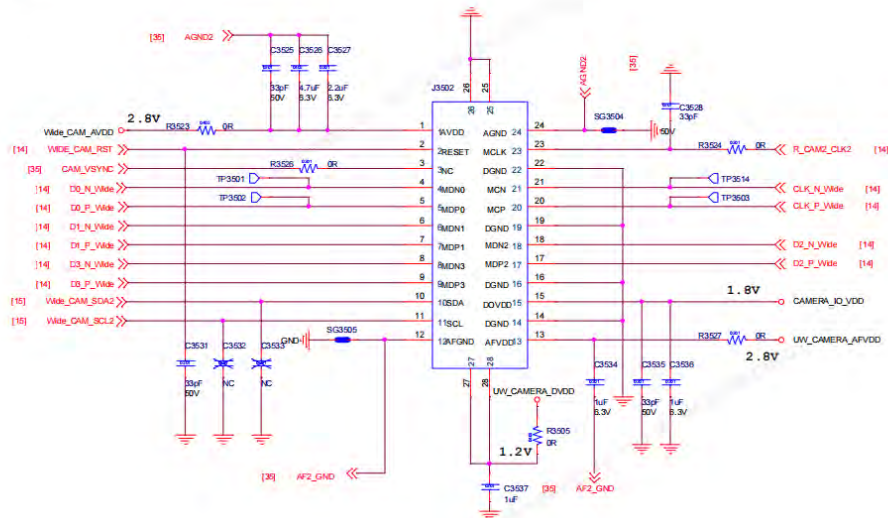
Camera Fault

M383 is designed for three cameras, one front camera is connected to the motherboard through connector J3503, one rear main camera is connected to the motherboard through connector J3501, and one rear auxiliary camera is connected to the motherboard through connector J3502. The control of the Camera is done via the I2C bus.

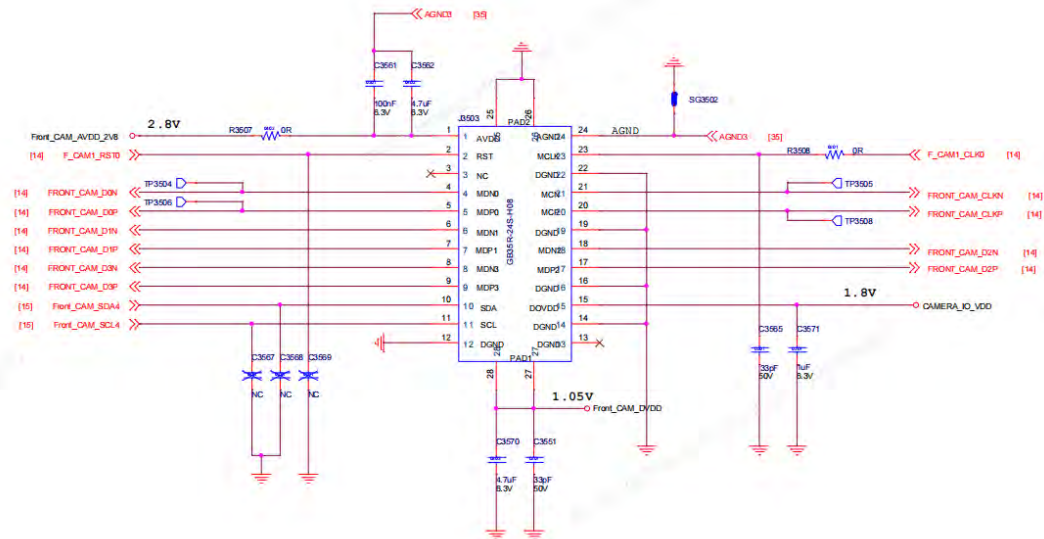
Rear Camera 50M(OIS)



8M UW AF



Front Camera 16M/32M

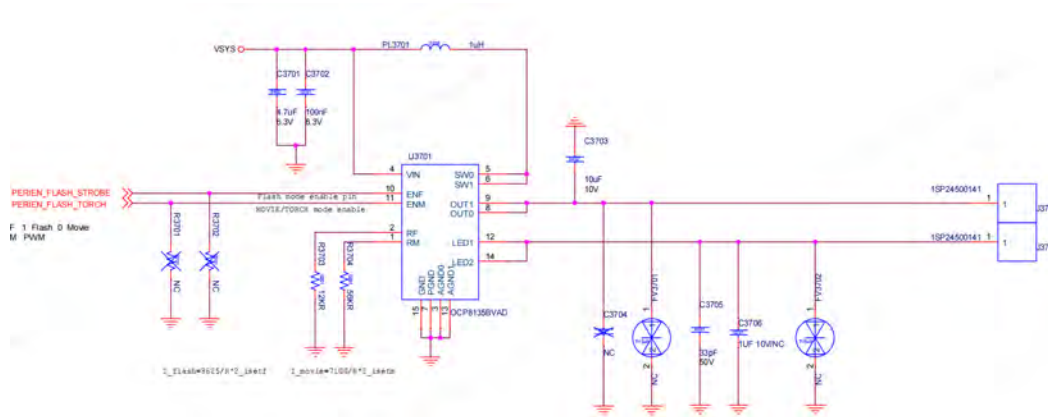


Common camera faults and causes are as follows:

1. Camera initialization failed, and the main interface of Camera cannot be entered:
 - Camera contact is poor;
 - Camera body failure;
 - The power supply of Camera Power is abnormal;
 - EMI device problems, virtual soldering or tin damage;
 - The software is abnormal.
2. The Camera preview screen or color is abnormal:
 - The Camera is not in good contact;
 - EMI device soldering problems;
 - Reboot after factory reset.
3. Camera can't store photos:
 - The memory of the body is insufficient, and there is no T card inserted;
 - The software is abnormal.
4. For other problems with the Camera, please replace the Camera and try to confirm whether the Camera itself is faulty.

Flash Fault

M383 rear flash:

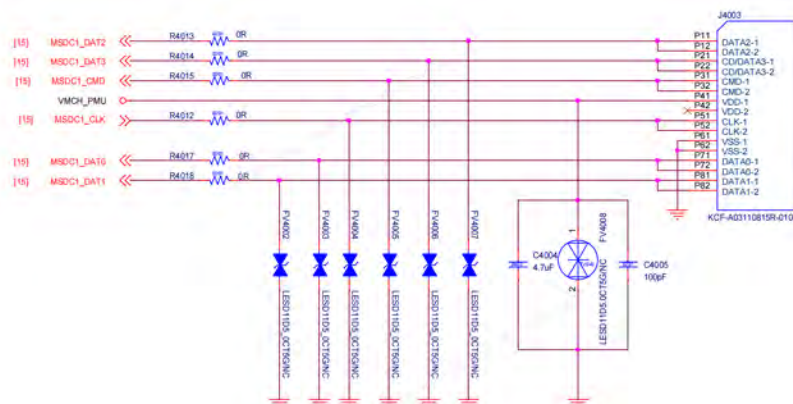
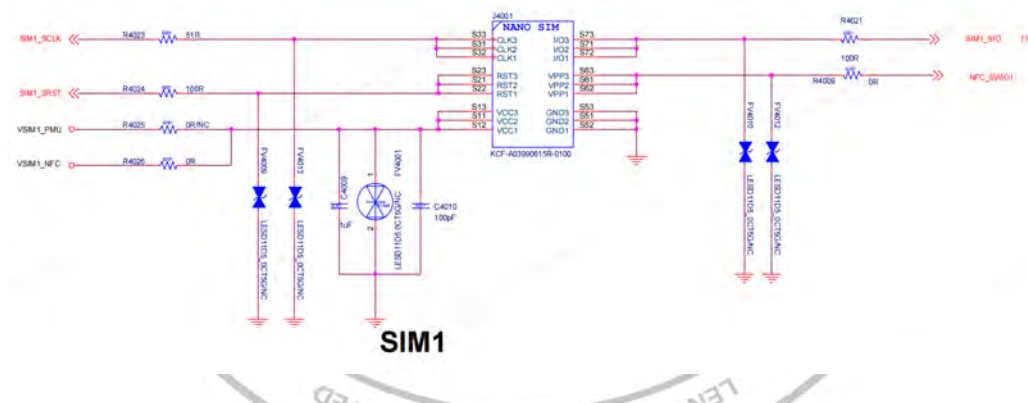


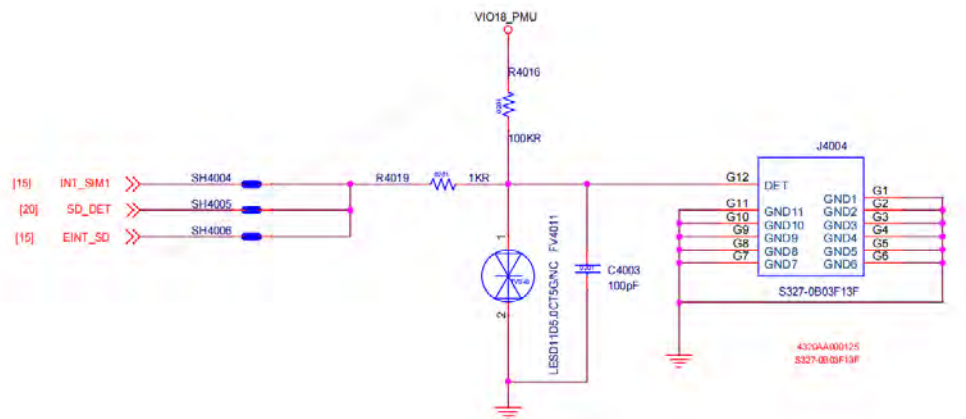
The reasons for flash test FAIL are as follows:

1. Chip virtual soldering;
2. The flash body is damaged or soldered.

USIM/T-Flash Fault

M383 with Nano+Nano/SD card holder; The signal that comes out is connected to the CPU.





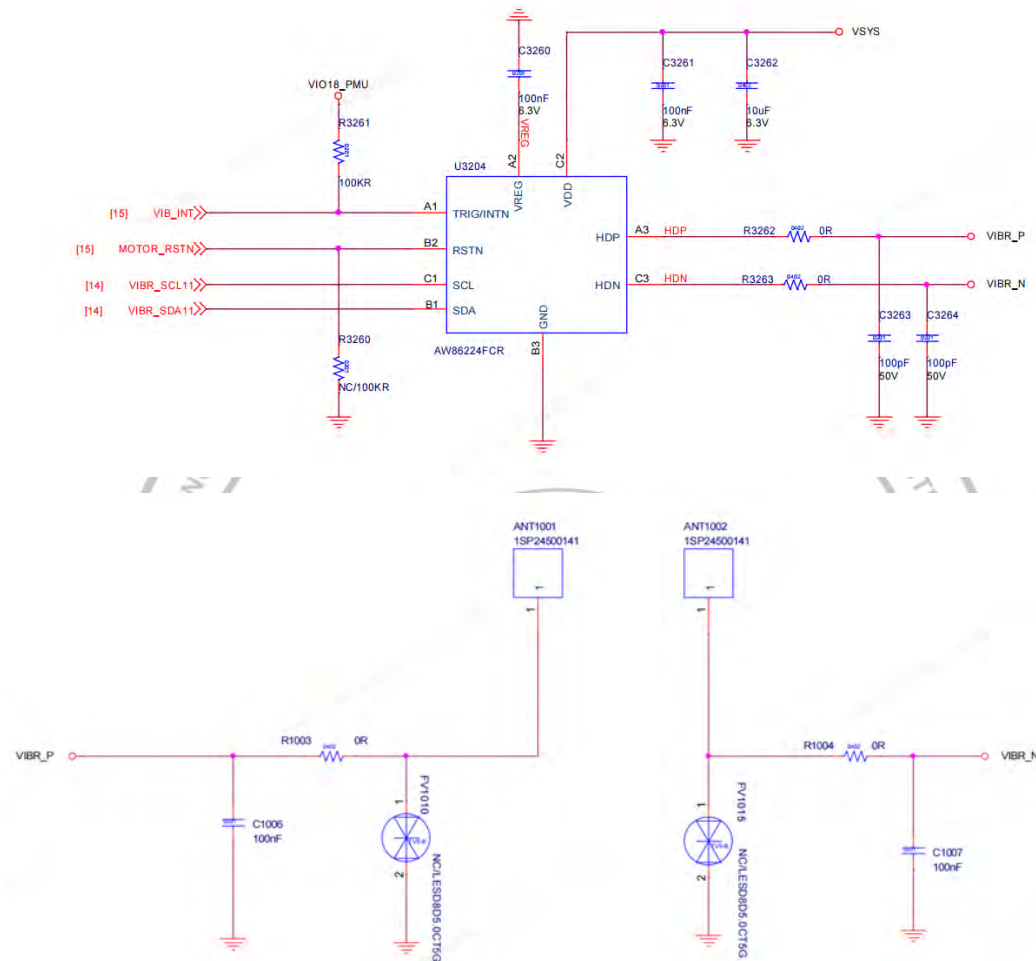
USIM/T-Flash circuit

The module is a major failure.

1. The reasons for not knowing the card are usually as follows:
 - Poor contact of the card seat;
 - The ESD protection device is broken down and short-circuited to the ground;
 - Whether there is virtual welding in the card seat;
 - Whether the card is inserted beyond the stroke or reversed.
2. T-Flash read and write test failure:
 - T-flash is a faulty card;
 - There may be a short circuit in the resistor, or a virtual soldering phenomenon;
 - Software reasons.
3. T-Flash cannot be transmitted via USB:
 - T-Flash itself fails to read and write test;
 - Software malfunction;
 - If the USB is faulty, check whether the USB path is normal.

The motor test is invalid

The M383 uses a linear motor, located on a small board, which is connected to the motherboard through FPC, and the motor drives the positive and negative outputs of the IC.



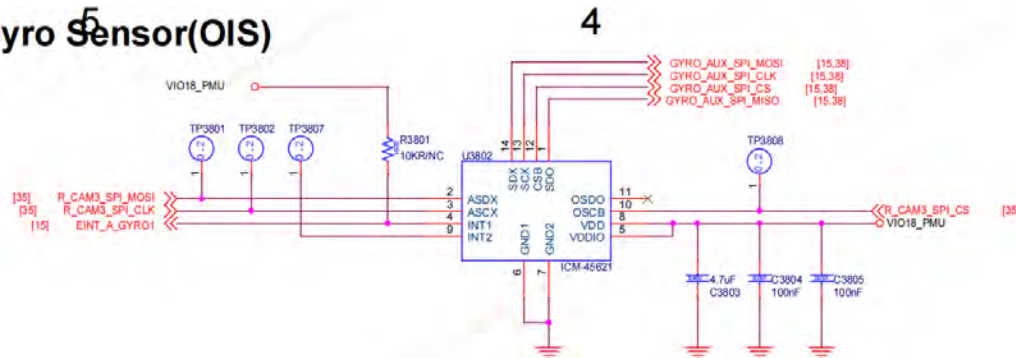
Common motor failures and causes are:

1. No vibration of the motor:
 - The shrapnel of the small plate is in poor contact with the motor;
 - The motor itself is bad.
2. The motor has a weak sense of vibration;
 - The motor body is bad;
 - Software setting reasons.
3. The motor vibrates from time to time: the motor body is a problem.
4. Motor vibration noise:
 - Structural assembly problems;
 - Motor ontology reasons.

A+G-Sensor Test Fail

M383 A+G-Sensor SPI Data reading communication.

A+Gyro Sensor(OIS)



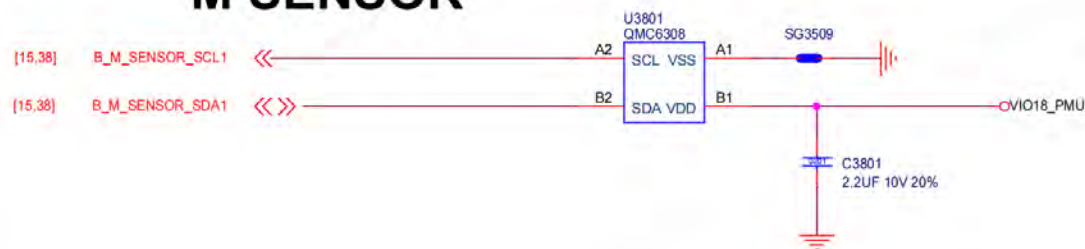
Common faults and their causes are:

1. Function NG: Check whether the module circuit has soldering or short circuit faults.
2. Check whether the IC power supply is normal.

M-Sensor Test Fail

M383 M-Sensor I2C data reads communication.

M SENSOR

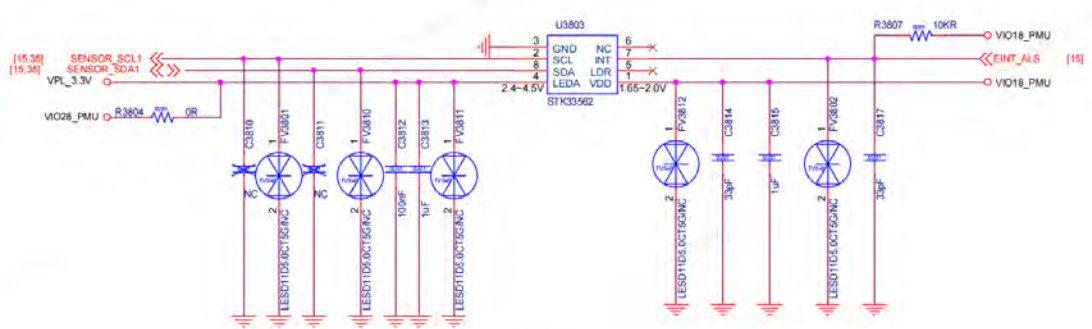


Common faults and their causes are:

1. Function NG: Check whether the module circuit has soldering or short circuit faults.
2. Check whether the IC power supply is normal.

PL-sensor Fault

M383 PL-Sensor, I2C Data reading communication.

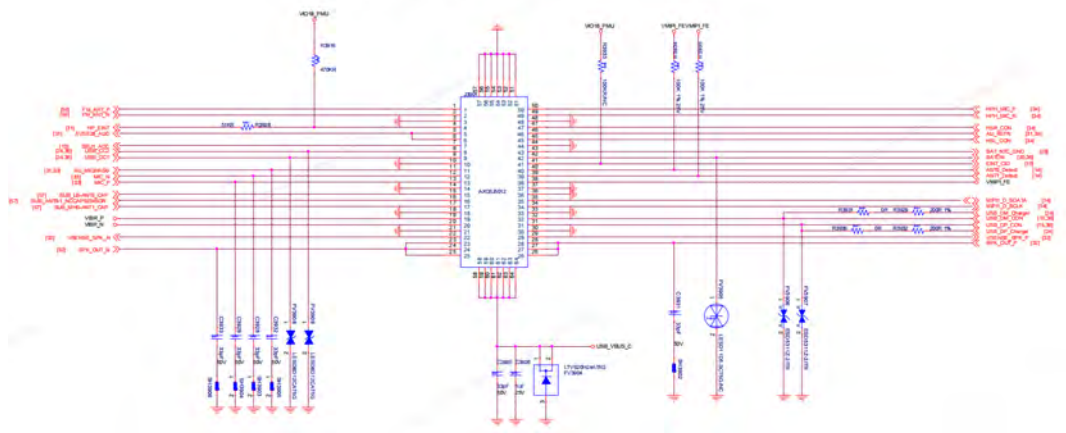


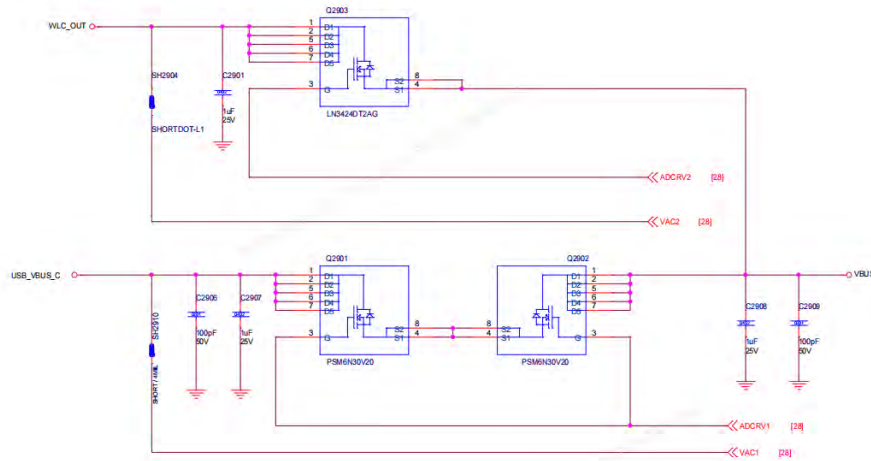
Common faults and their causes are function NG, and the causes are as follows:

1. Check whether the power supply is normal;
2. Whether the structural rubber sleeve falls off or enters the ash;
3. The welding of the PL-Sensor body is abnormal.

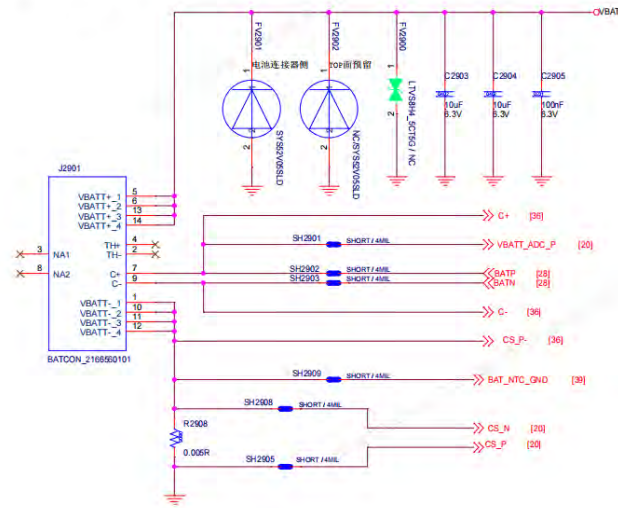
Unable To Charge Faulty

Sub Connector

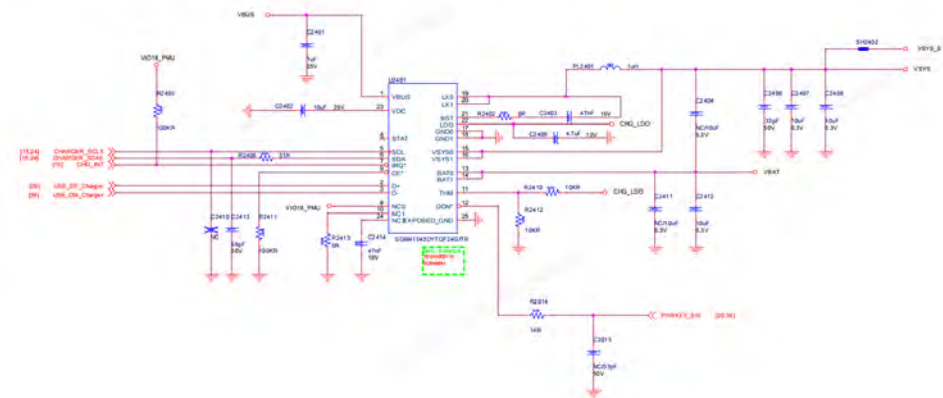


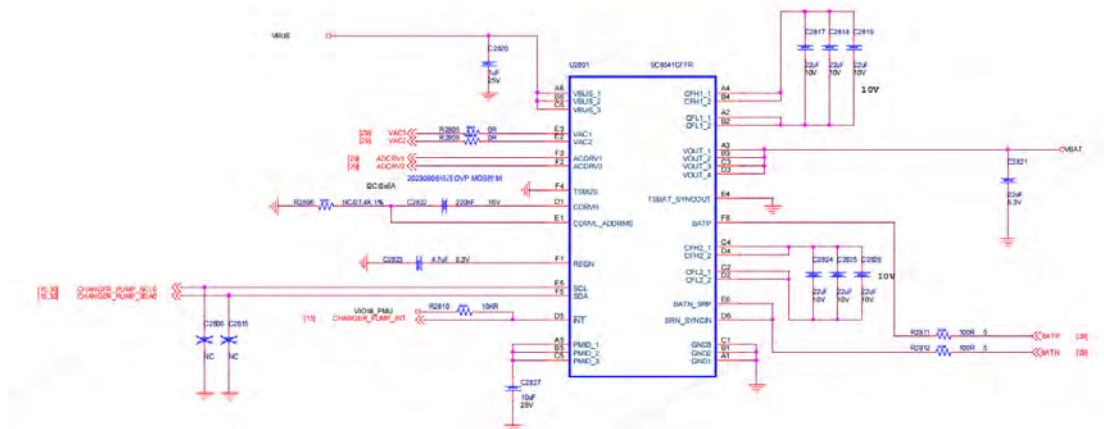


Battery⁴ Connector³



Switching Charger Power Path





Abnormal problems include problems such as not being able to charge, and the possible causes are as follows:

1. The surge protection device on the motherboard is abnormal and short-circuited to the ground;
2. The USB interface of the small board is loose and the contact is poor;
3. The OVP chip or Switching Charger is damaged or soldered;
4. The battery connector is in poor contact or deformed, and the software cannot identify the battery;
5. Poor contact of FPC of main and auxiliary boards.

Unable To Boot Fault

The failure to turn on fault is the fault with the highest probability of the mobile phone. Software problems, soldering problems, and device failures are the main factors that cause the machine to fail to boot. During the maintenance process, it can be roughly positioned with the LCD, the boot current, and the keyboard.

1. Large shutdown leakage current: The main fault reason is that the devices connected to VBAT have a short circuit to ground. It is usually caused by the burning or soldering of the TVS tube.
2. No current when booting up, no LCD display:
 - The boot button is not plugged in;
 - Poor contact of the battery connector (can be troubled by plugging and charging).
3. Static display of LCD when booted: usually due to software reasons, you need to re-download the software.
4. The LCD display is black when turned on; At present, it is found that it is mainly caused by memory air welding and virtual welding; or software problems, you need to re-download the software;
5. There is virtual welding in the FPC welding of the side key, and there is a fall off the boot button of the side key.

Auto-on

1. When the power supply is connected, the USB is plugged in, and the power is not turned on and the reboot does not stop: it is because the software needs to be connected to the power supply to turn on;
2. The FPC buckle of the motherboard and small board will also lead to automatic boot;
3. The FPC body of the side button is bad, and the PWRKEY will automatically start up due to a short circuit.

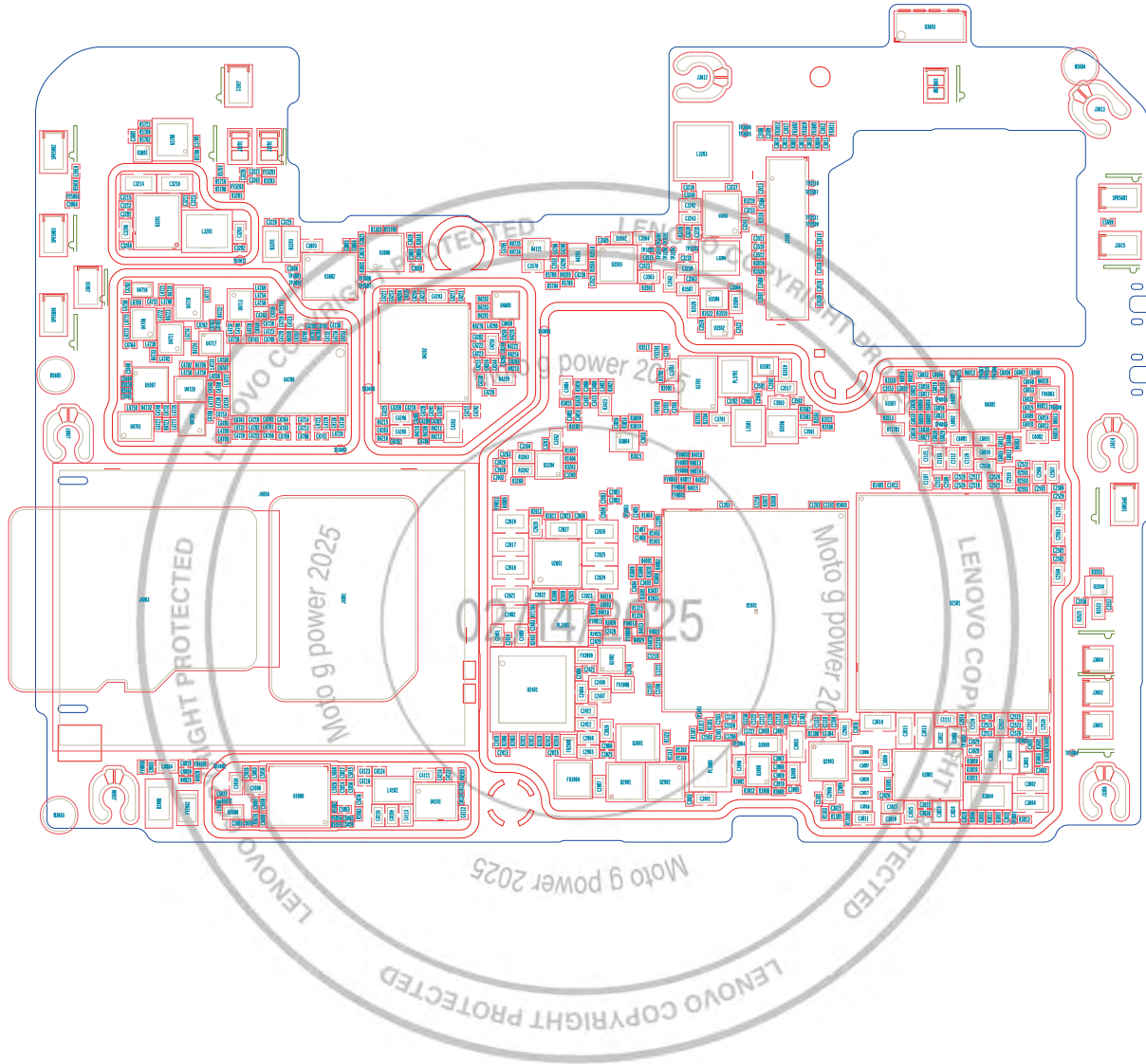
SERVICE CODE

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.

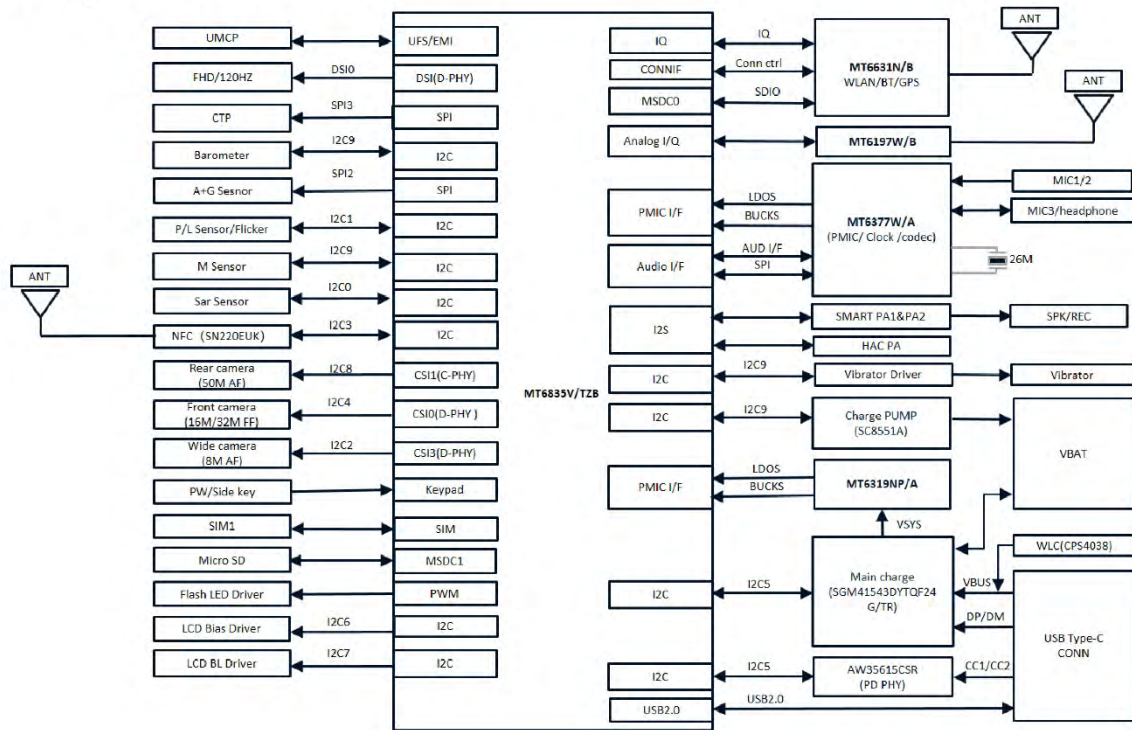
BOARD LAYOUT

Front Diagram



BLOCK DIAGRAM

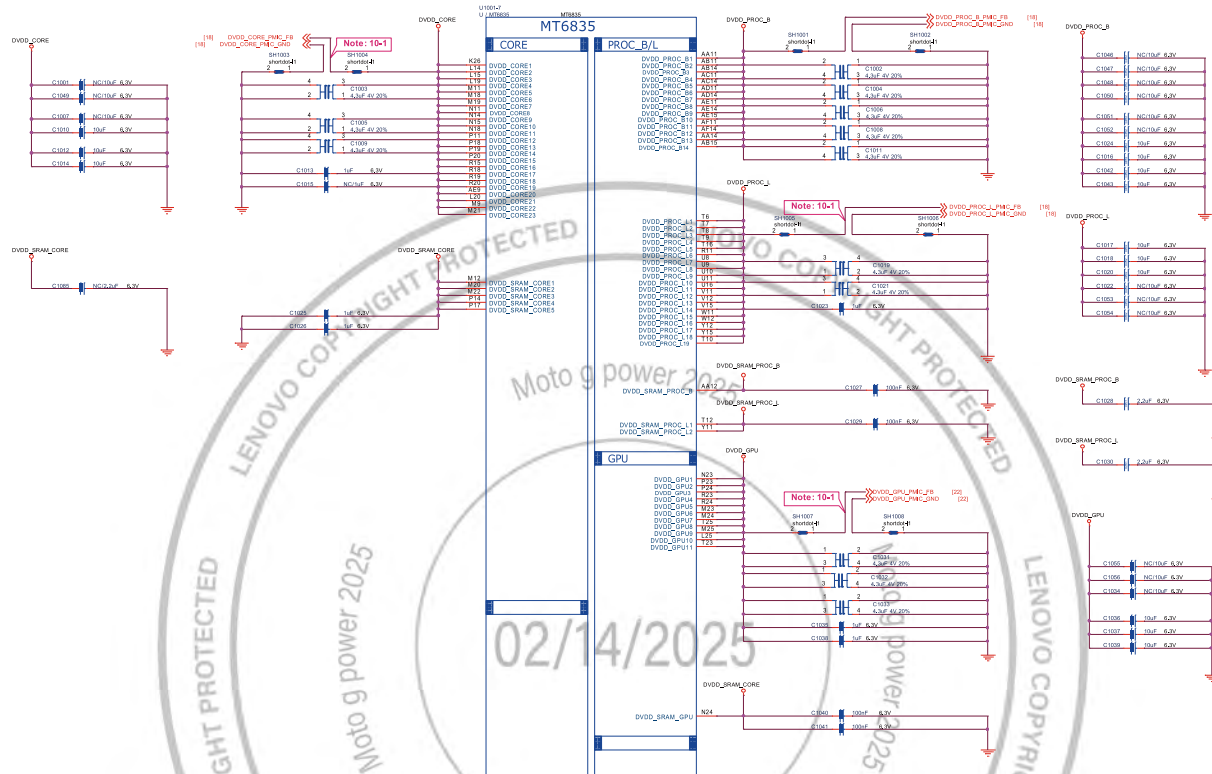
BB System Block



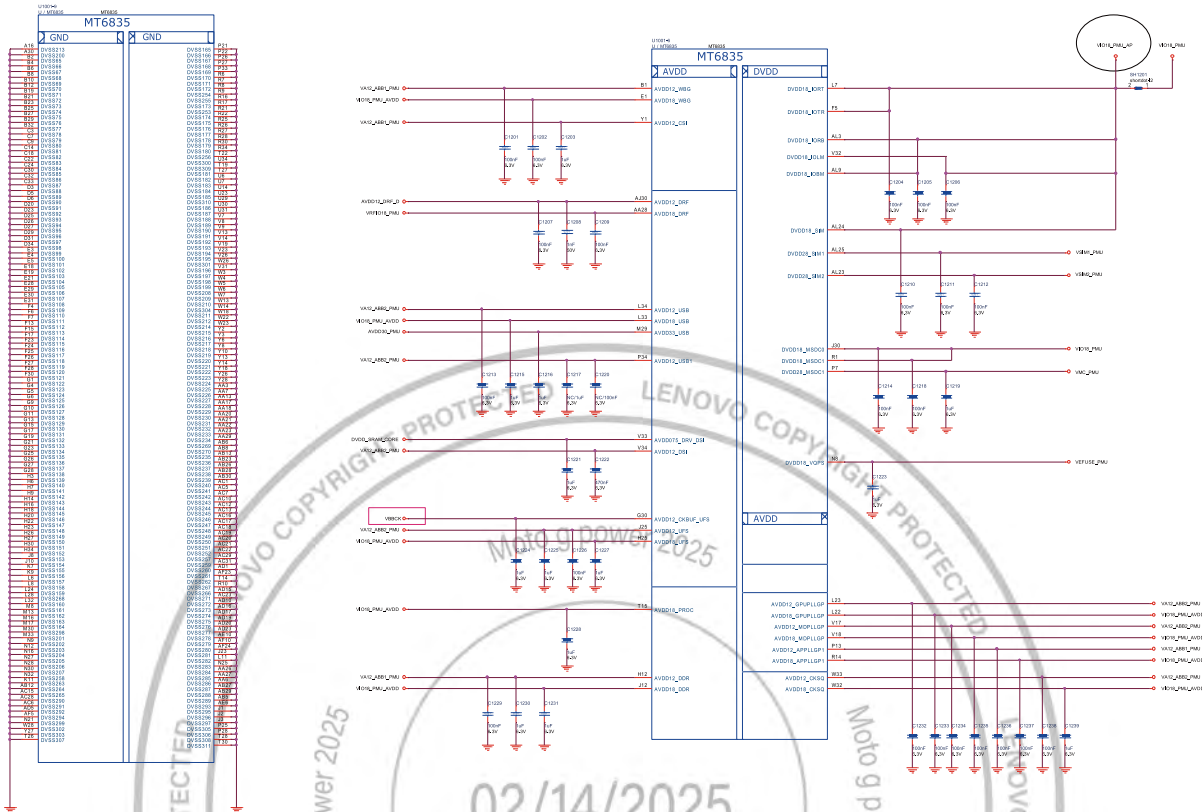
SCHEMATIC

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

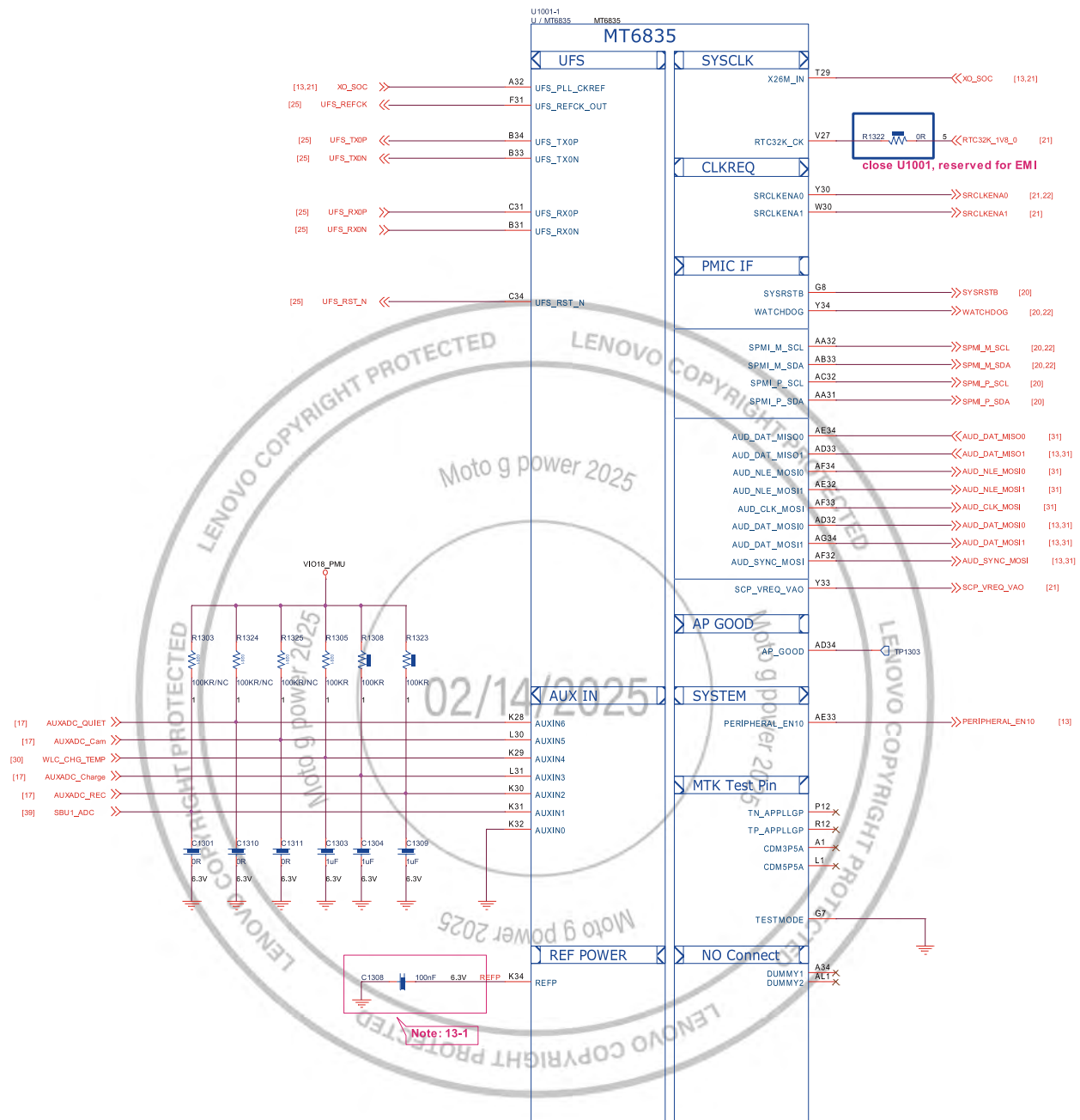
BB_POWER_PDN1



BB_POWER_IO

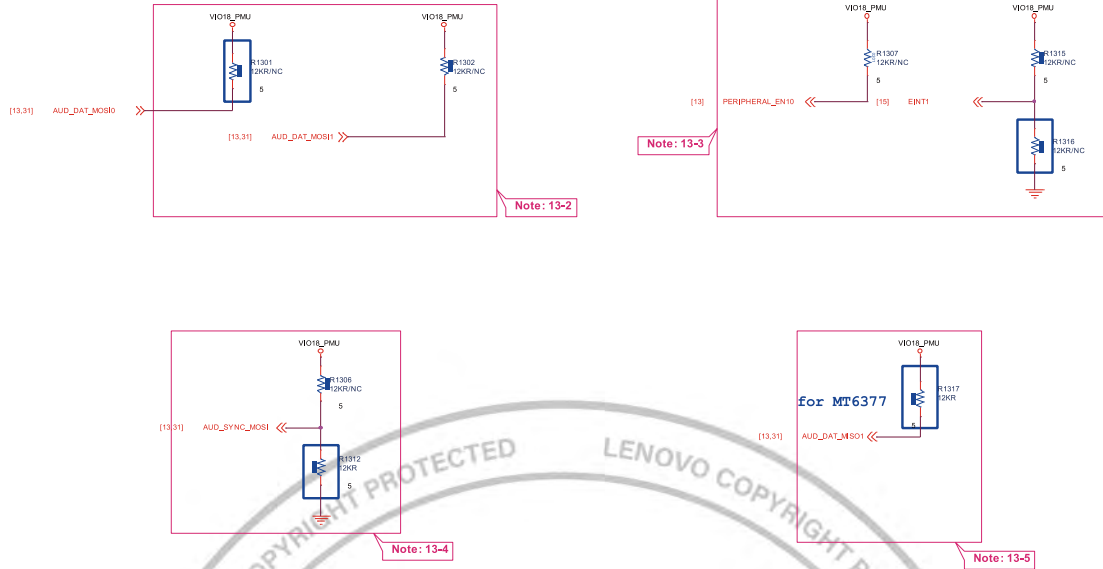


BB_1



Moto g power 2025

Level 3 – Service Manual



Schematic design notice of "BB_1" page.

Note 1: The load cap. have to be placed as close to REFP ball as possible.

Note 2: "AUD_DAT_MOSI0" and "AUD_DAT_MOSI1" pin features in strapping pin to enable JTAG.

AUD_DAT_MOSI0	AUD_DAT_MOSI1	AP JTAG	IO JTAG	DAP_SONIC/DAP_MD32
L (Default)	L (Default)	N/A	N/A	N/A
L (Default)	H (by external PU)	SPI0_CSB, SPI0_CLK, SPI0_MO, SPI0_MI, KPCOL1	N/A	N/A
H (by external PU)		SPI0_CSB, SPI0_CLK, SPI0_MO, SPI0_MI, KPCOL1	EINT[8:12]	N/A
H (by external PU)	H (by external PU)	N/A	N/A	N/A

Note 3: "EINT1" and "PERIPHERAL_EN10" pin features in strapping pin to booting (eMMC/UFS/Reserved).

EINT1	PERIPHERAL_EN10	Storage Booting
L (Default)	L (Default)	Only UFS boot
L (Default)	H (by external PU)	Only eMMC boot
H (by external PU)	H (by external PU)	Reserved

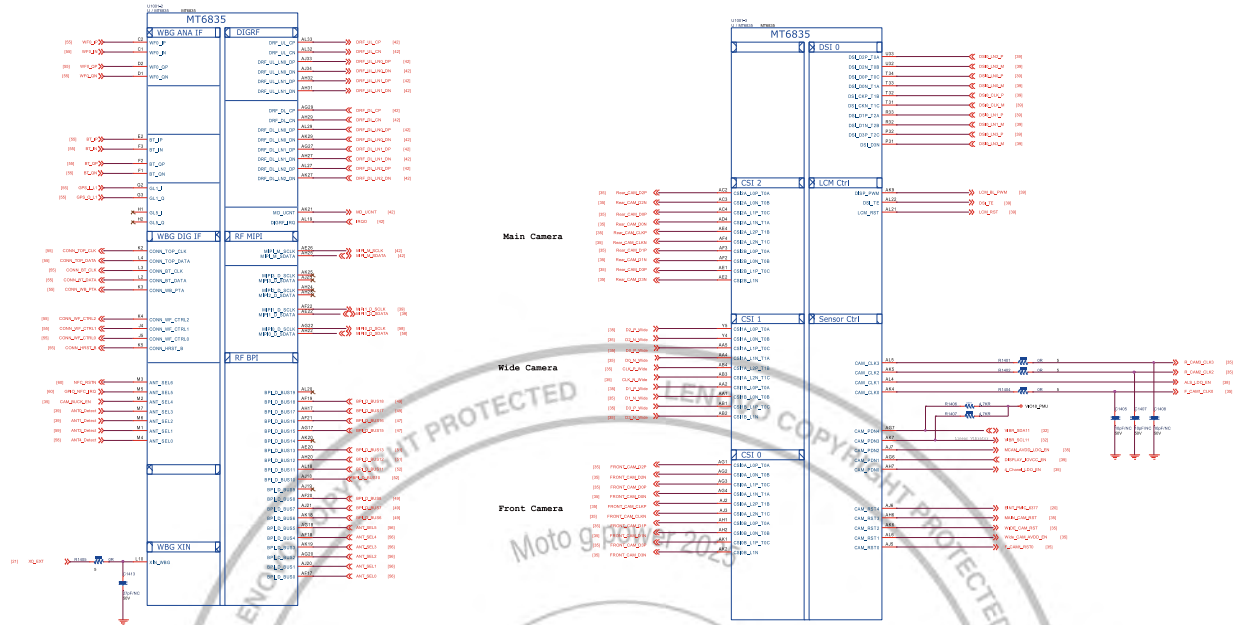
Note 4: "AUD_SYNC_MOSI" and HW strapping pin to enable DDR.

AUD_SYNC_MOSI	DDR
L (Default)	MCP
H (by external PU)	DSC

Note 5: "AUD_DAT_MISO1" is MT6377 strapping pin to select VEMC Voltage.

AUD_DAT_MISO1	VEMC	Application
L	2.5xV	UFS 3.1
H (by ext. PU)	3.0V	UFS 2.x

BB_2



BB_3

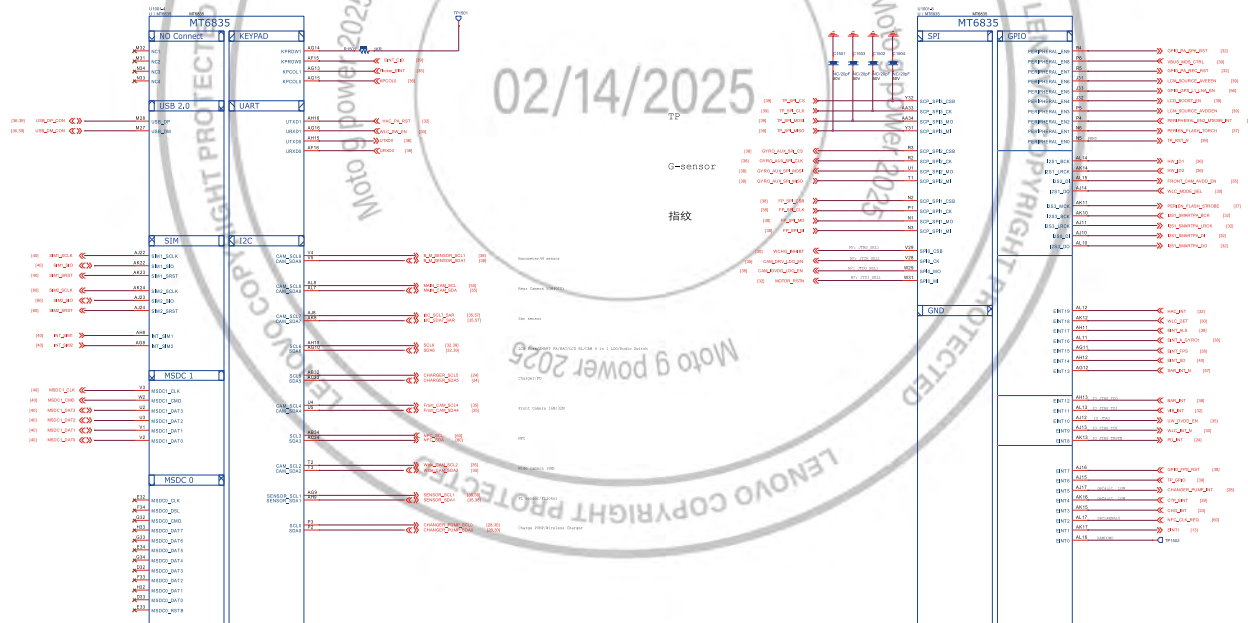
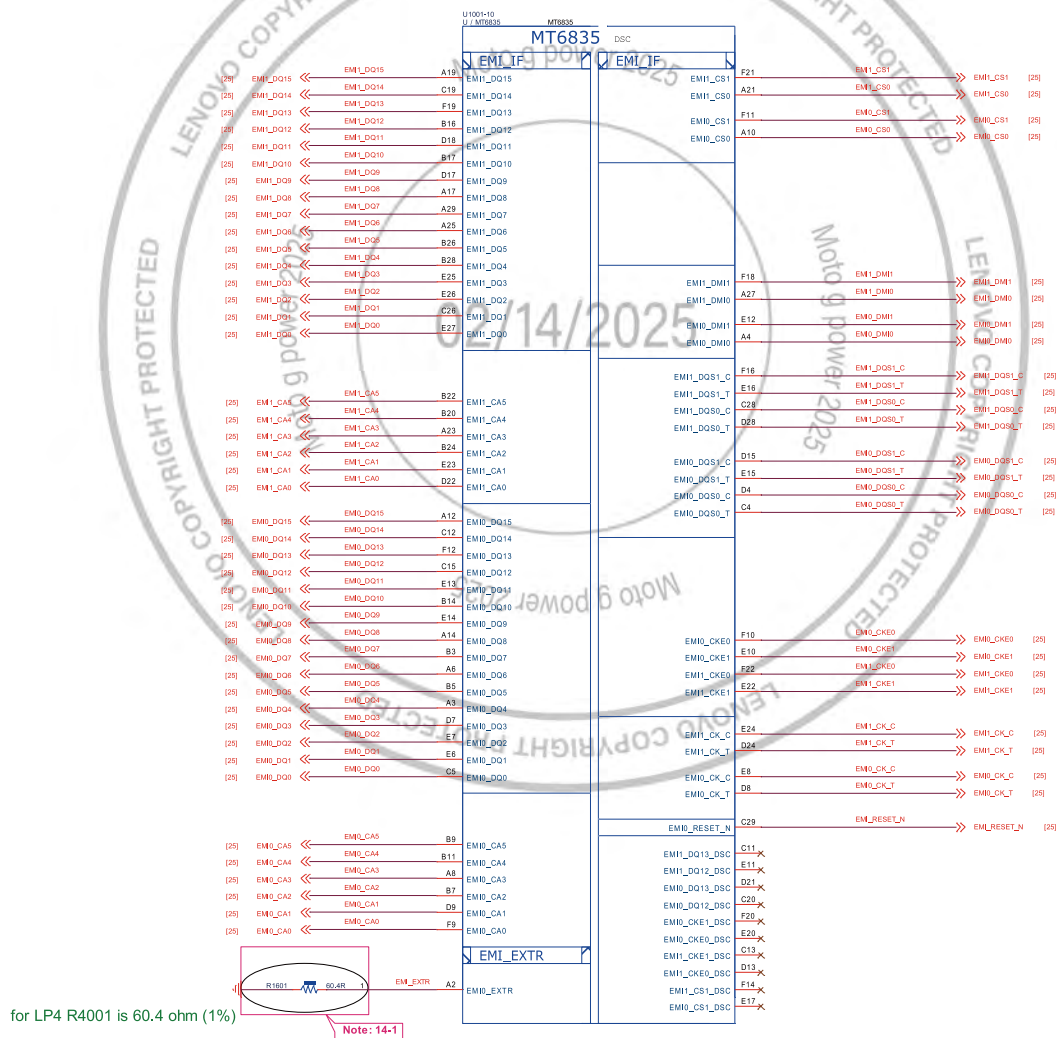


Table 2-26. Mode selection

Pin name	Description
[0] PERIPHERAL_EN10 [1] EINT1	00: UFS 01: eMMC 10: Forbidden 11: Forbidden
[0] AUD_DAT_MOSI1 [1] AUD_DAT_MOSI0	00: Default 01: AP_JTAG_VCORE 10: MD_JTAG 11: DAP
[0] AUD_SYNC_MOSI [1] EINT4 [2] EINT5	000: LP4x MCP 001: LP4x DSC

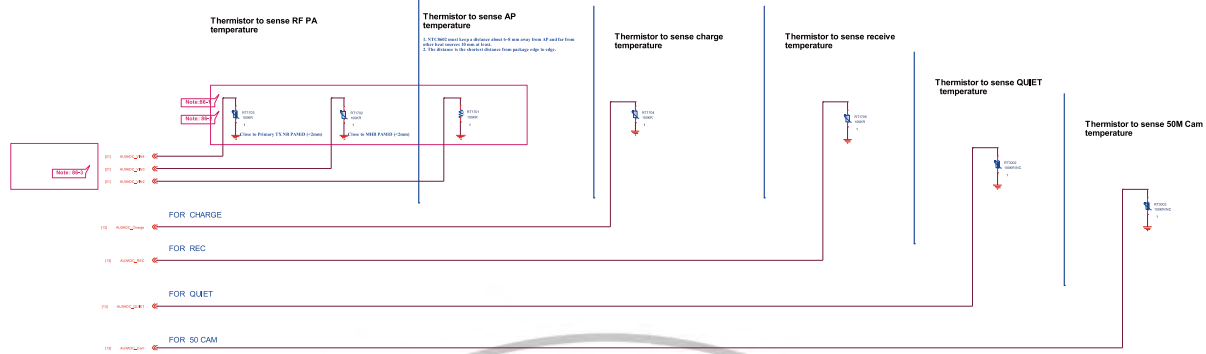
BB_4



Schematic design notice of "BB_4" page.

Note 1: for LP4 R4001 is 60.4 ohm (1%).

BB_AUXADC_Thermal



Schematic design notice of "BB_AUXADC_Thermal" page.

Note 1: SW Default Configuration is as followings:

AUXADC_VIN2: AP Temp.

AUXADC_VIN3: MHB PAMiD Temp.

AUXADC_VIN4: NR PAMiD Temp.

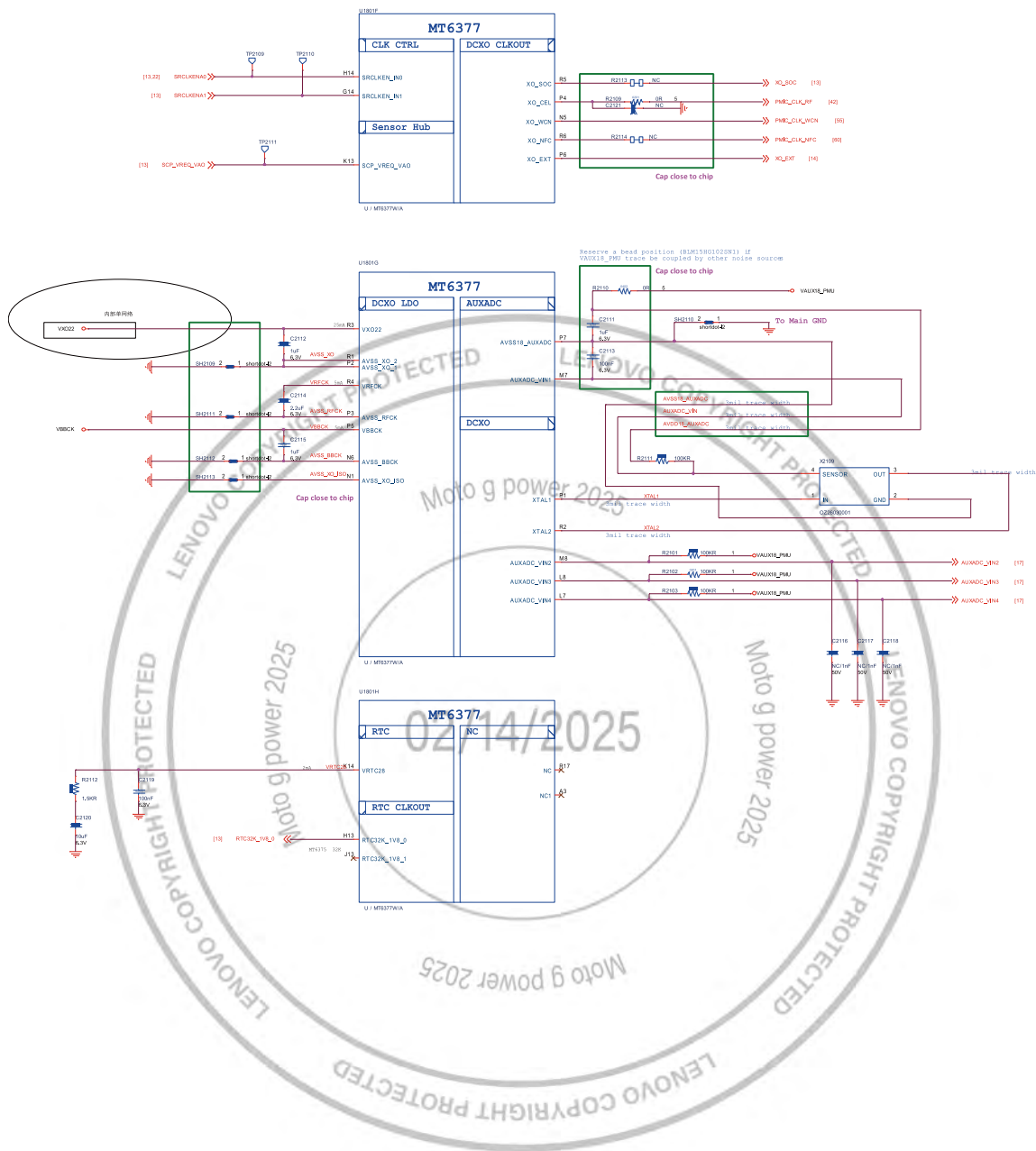
Note 2: If your design or placement is different with SW Default Config.

Please refer to "MT6835 Thermal User Manual.docx" and modify SW setting.

Note 3: AUXADC_VIN2 ~ 4 must connect to MT6377 owing to TIA2.0 Design Constraint.

If not, you will lose MD/GPS thermal protection and throttling function.

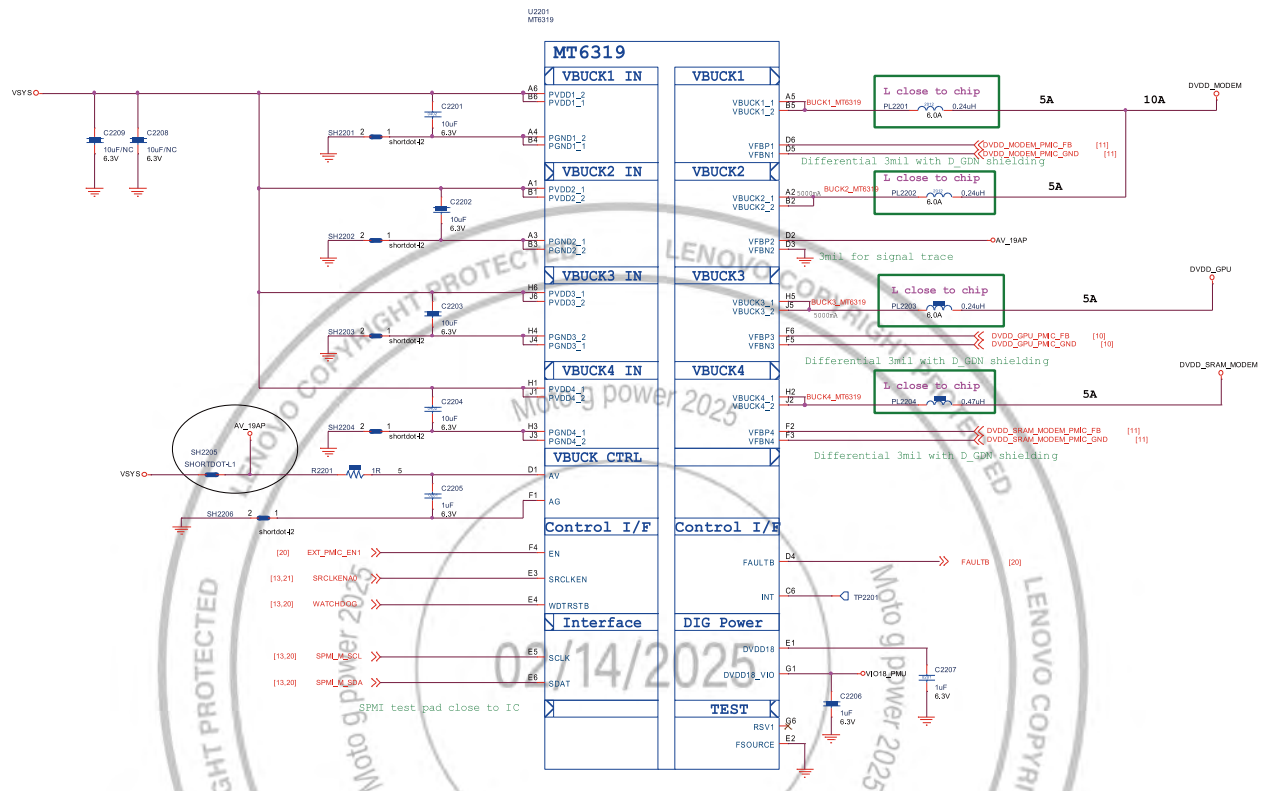
POWER_MT6377_Clock



POWER_MT6319_Buck

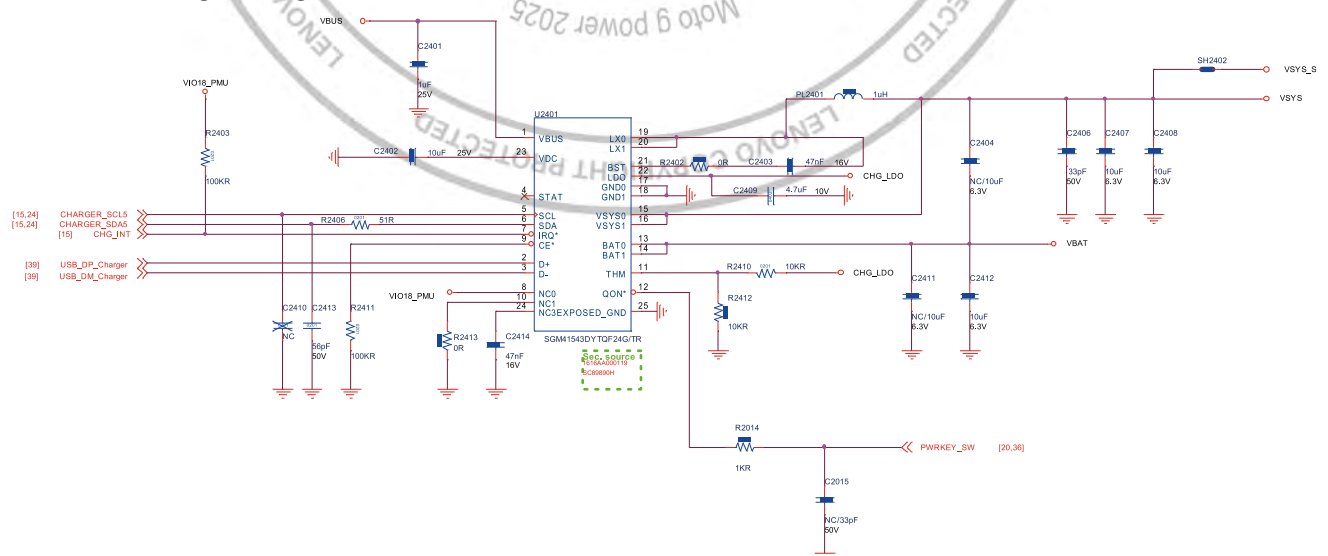
MT6319NP 4-Phase Buck (VMODEM, VSRAM_MODEM, VGPU)

PMIC GND-ball connect to input cap. GND-pad firstly.

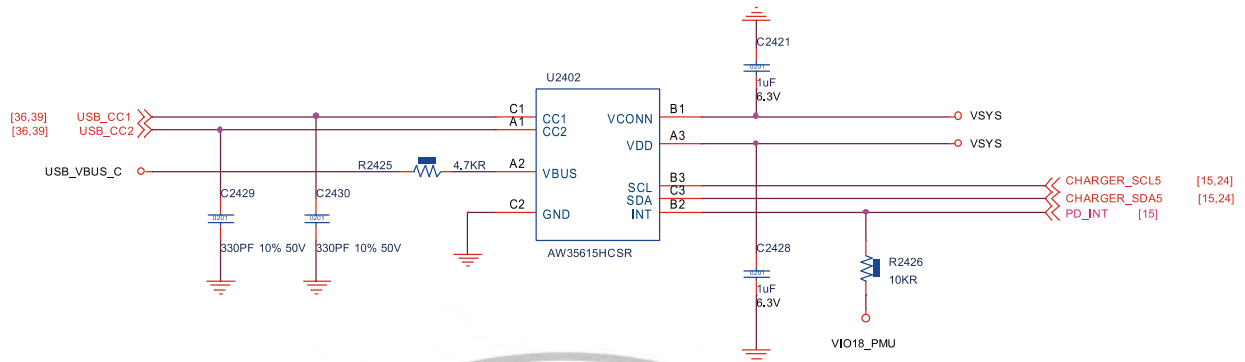


Main Charger_PD_Controller

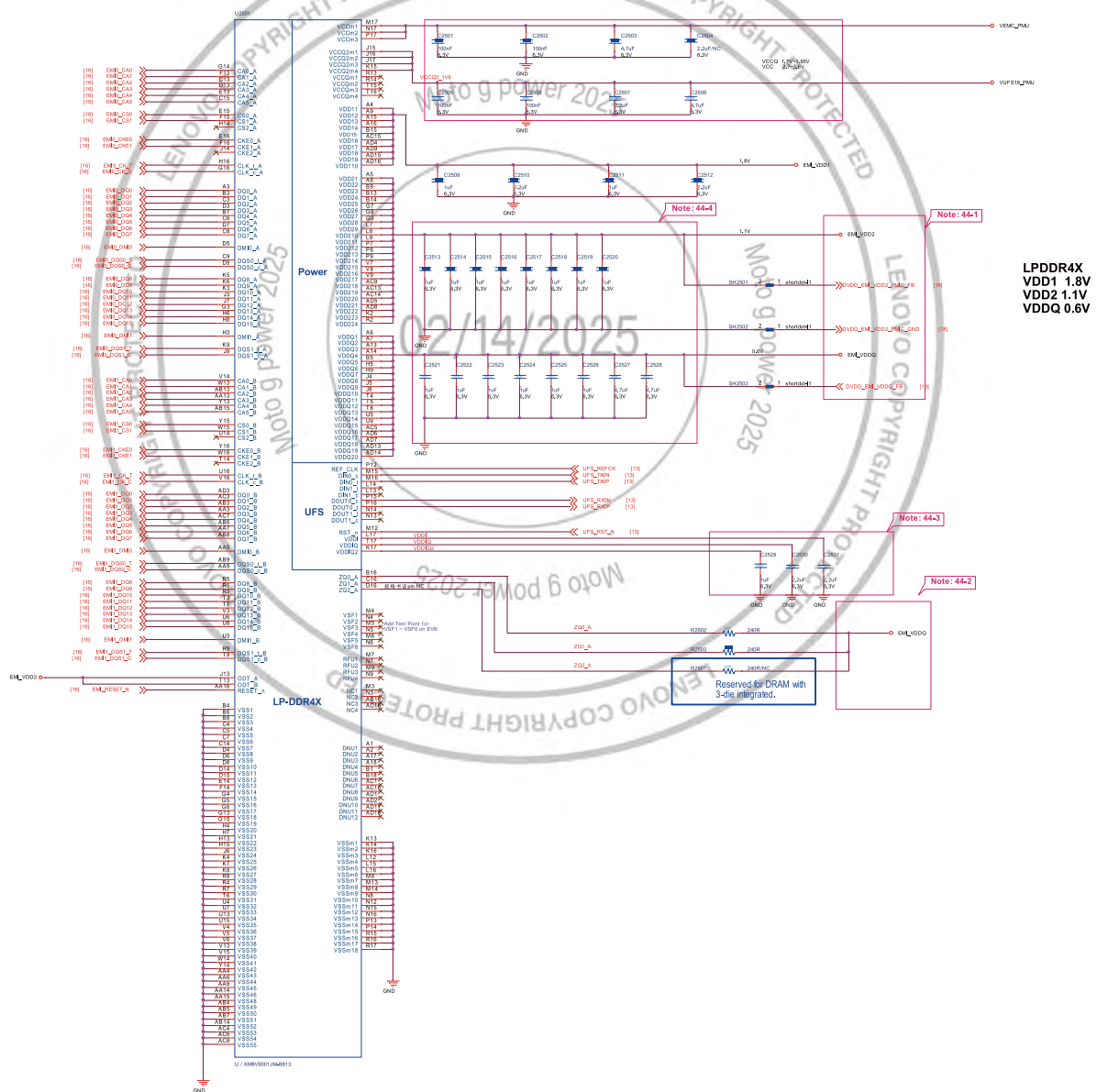
Switching Charger Power Path



PD PHY: AW35615HCSR



Memory_UFS_LPDDR4X



Schematic design notice of "Memory_UFS_LPDDR4X" page.

Note 1: Please refer to power supply related page select LDO_VOUT / BUCK_LX output voltage properly for LPDDR4X.

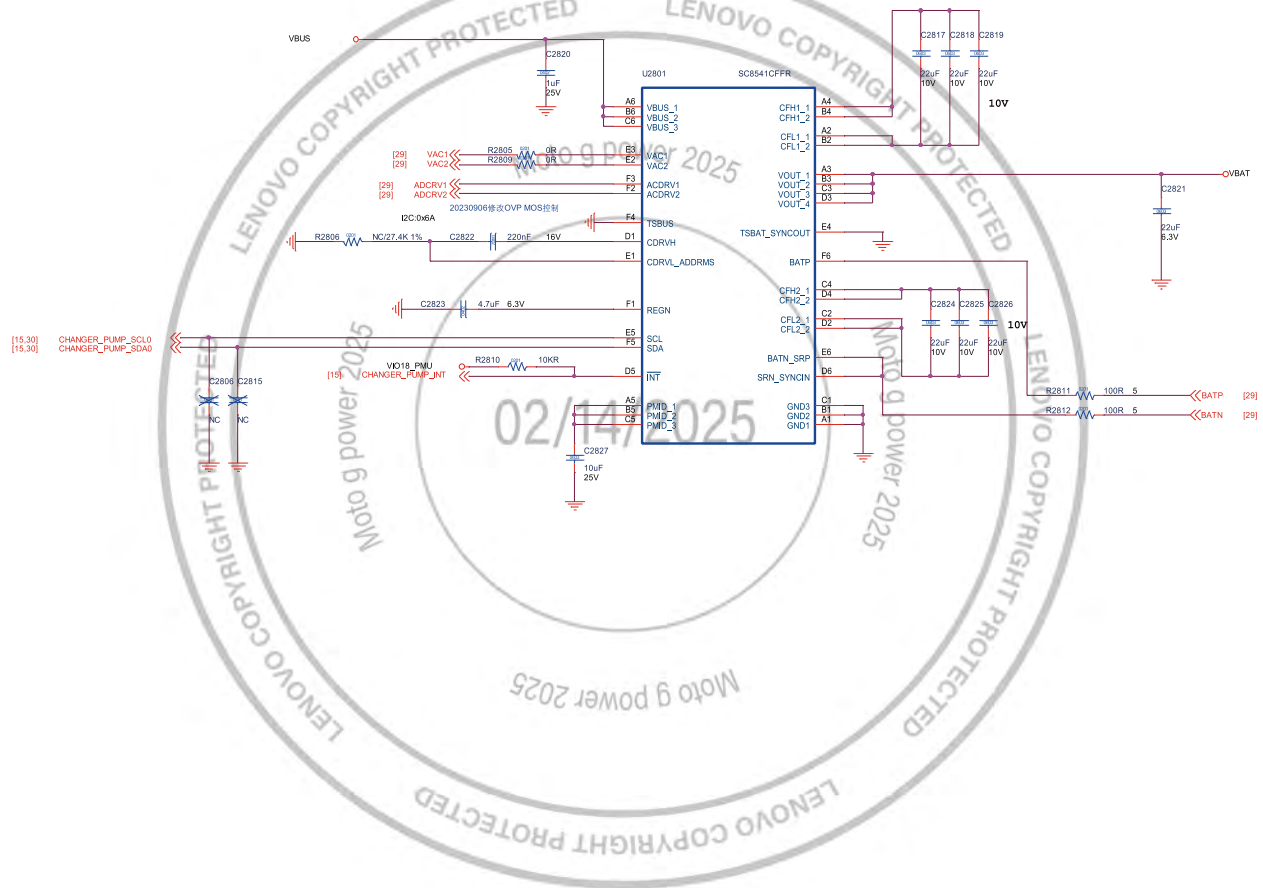
Note 2: DRAM ZQx resistor = 240ohm (1%) that must be connected to VDDQ.

Note 3: Please refer to uMCP vendor's datasheet or MTK common design notice to get the recommendation bypass cap.Value for VCC/VCCQ/VDDI power domains of UFS.

Note 4: VDD2 VDDQ decoupling cap: closed to DRAM ball.

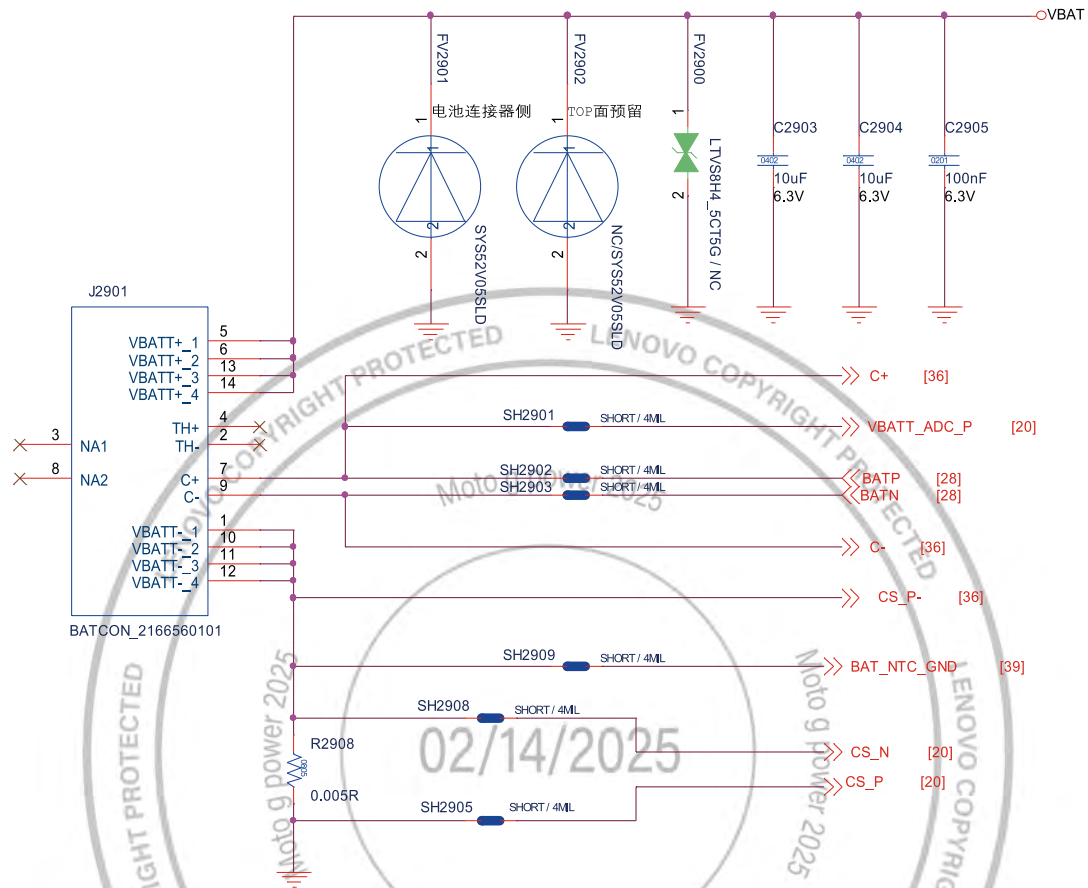
Please also refer to MMD and layout guide for placement.

Charge Pump

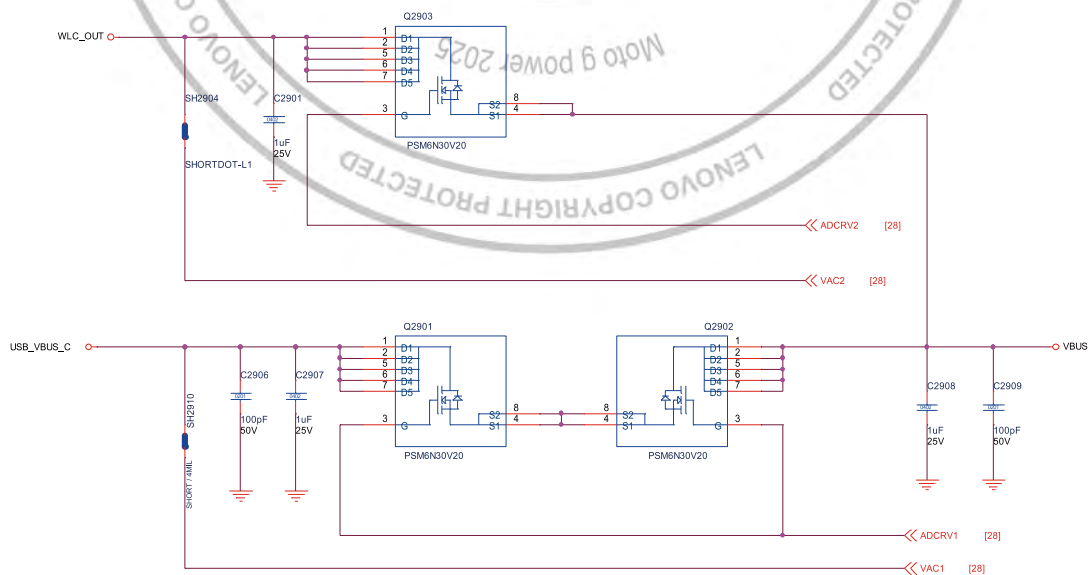


Bat_OVP

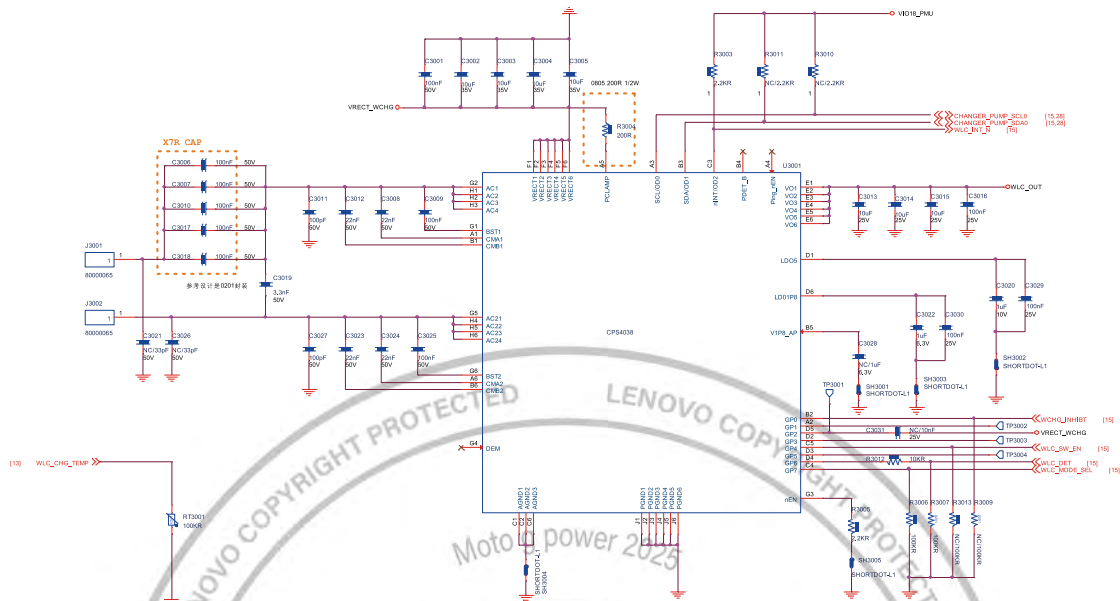
Battery Connector



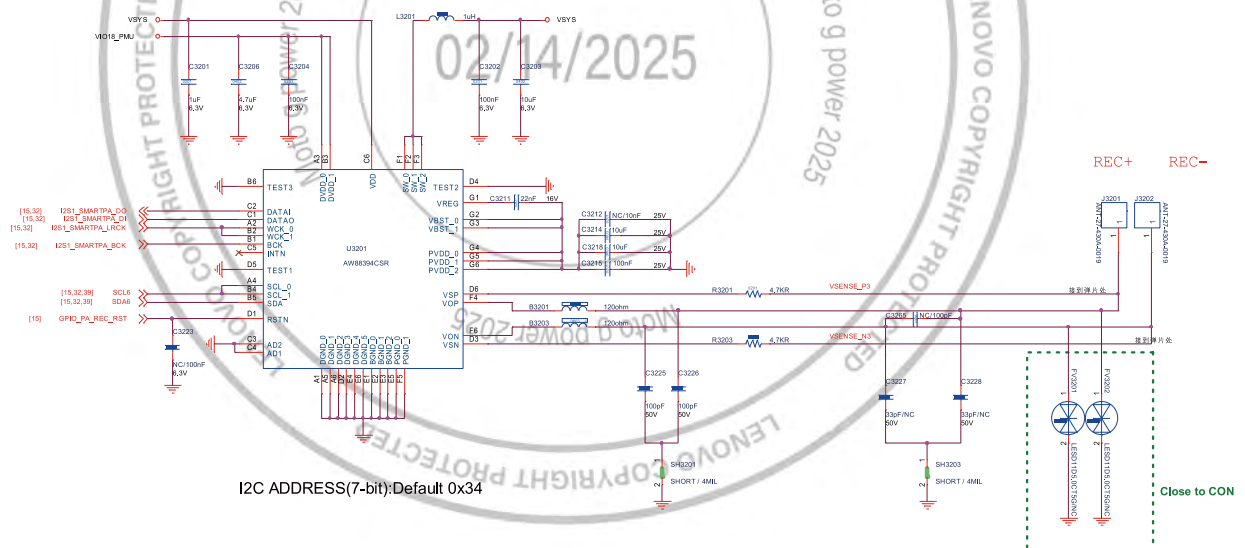
OVP



Wireless Charger

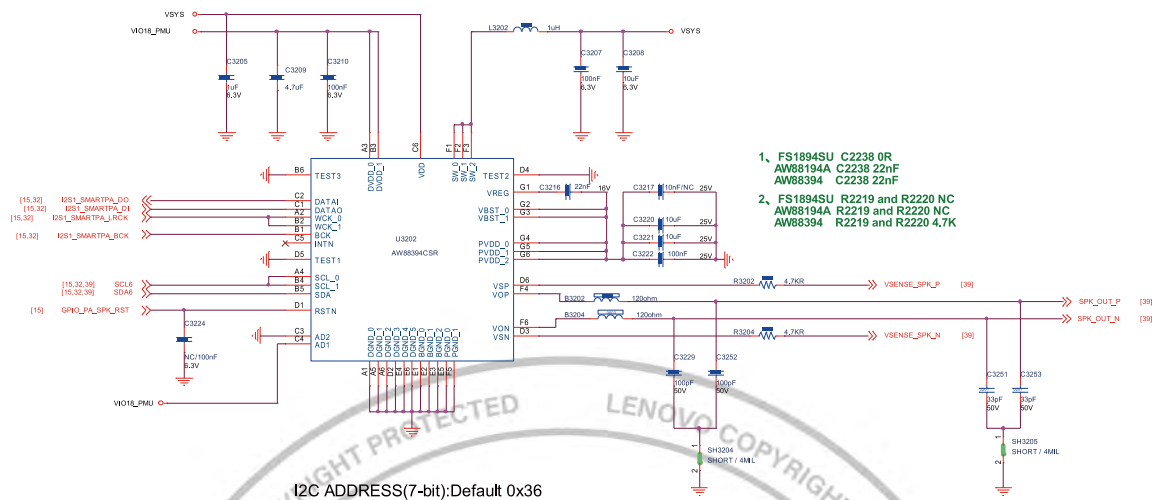


SPK PA/REC PA/MIC/HAC PA FOR REC

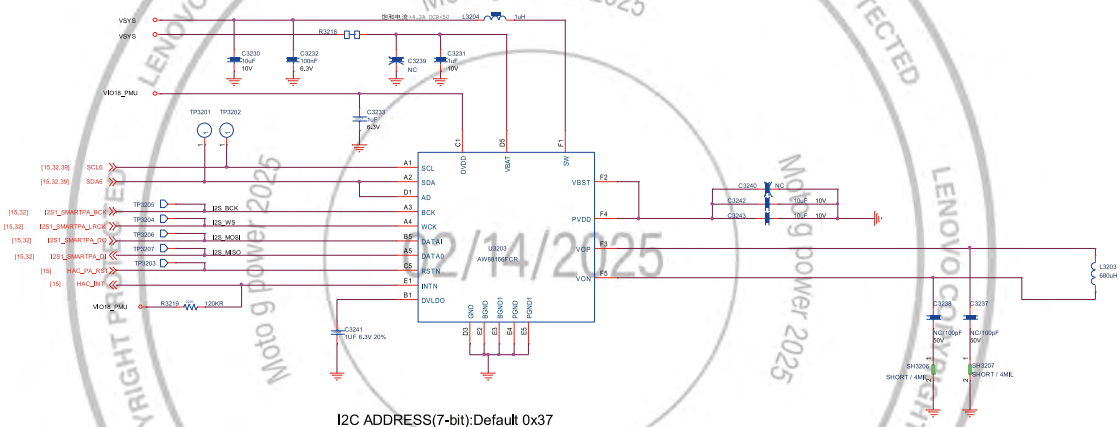


AD2	AD1	Address(7-bit)
GND	GND	0x34
GND	DVDD	0x35
DVDD	GND	0x36
DVDD	DVDD	0x37

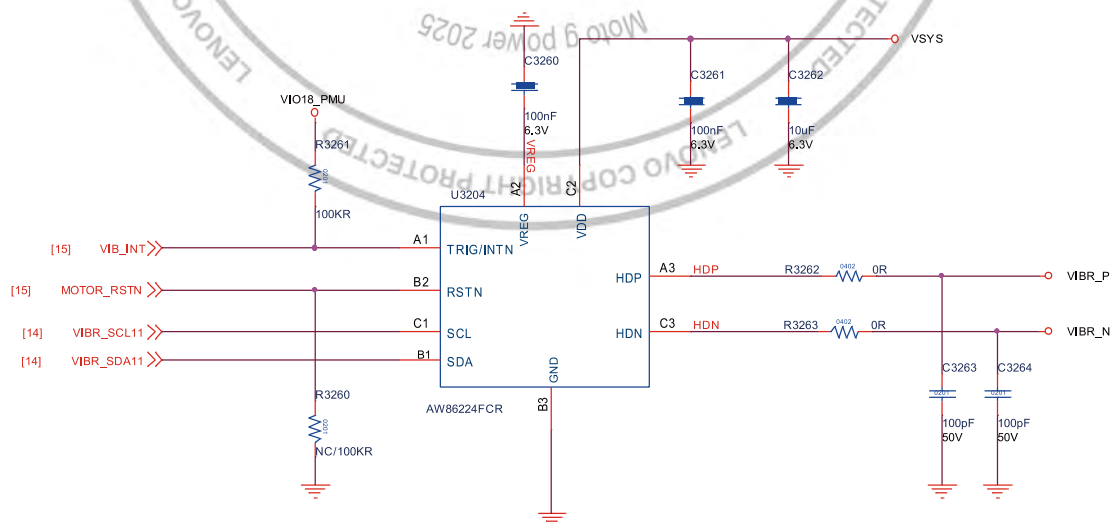
PA FOR SPK



PA FOR HAC



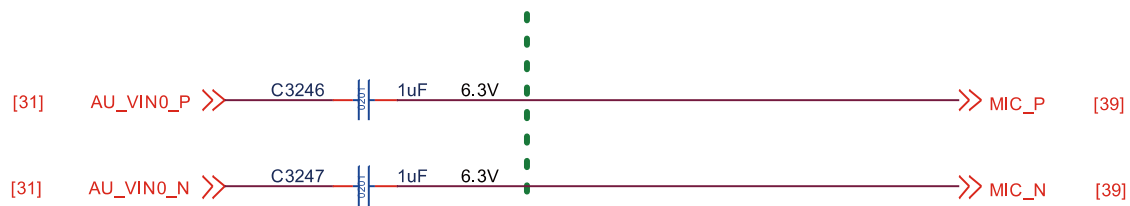
Motor



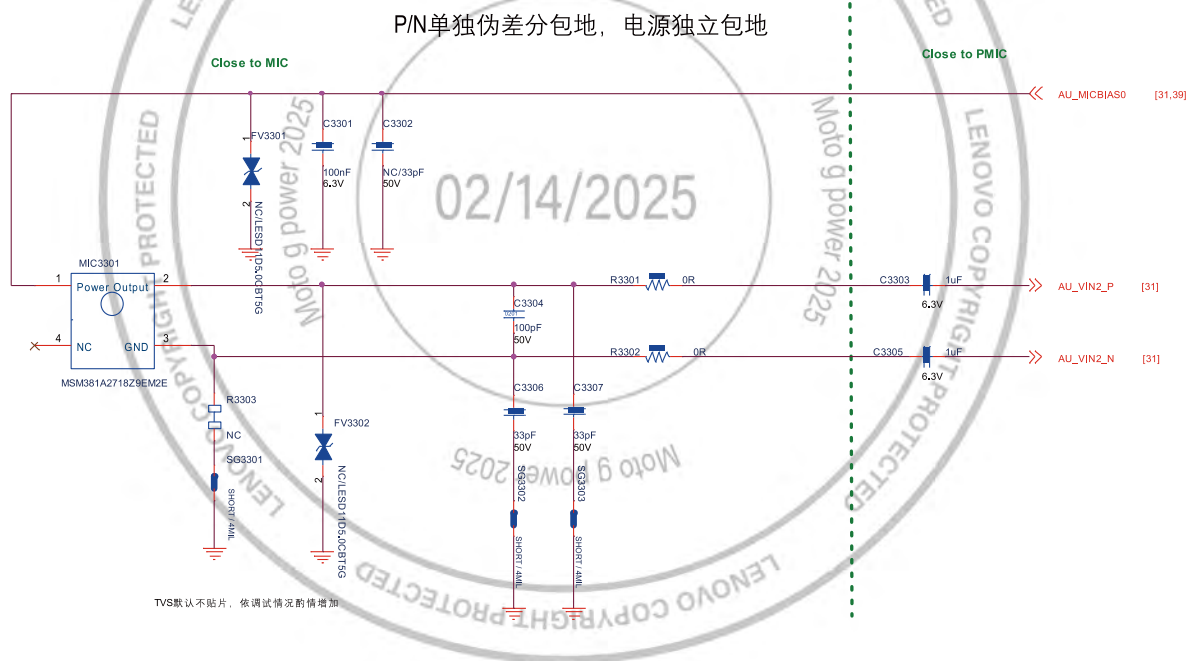
I2C ADDRESS(7-bit):Default 0x58

MIC

Main Microphone

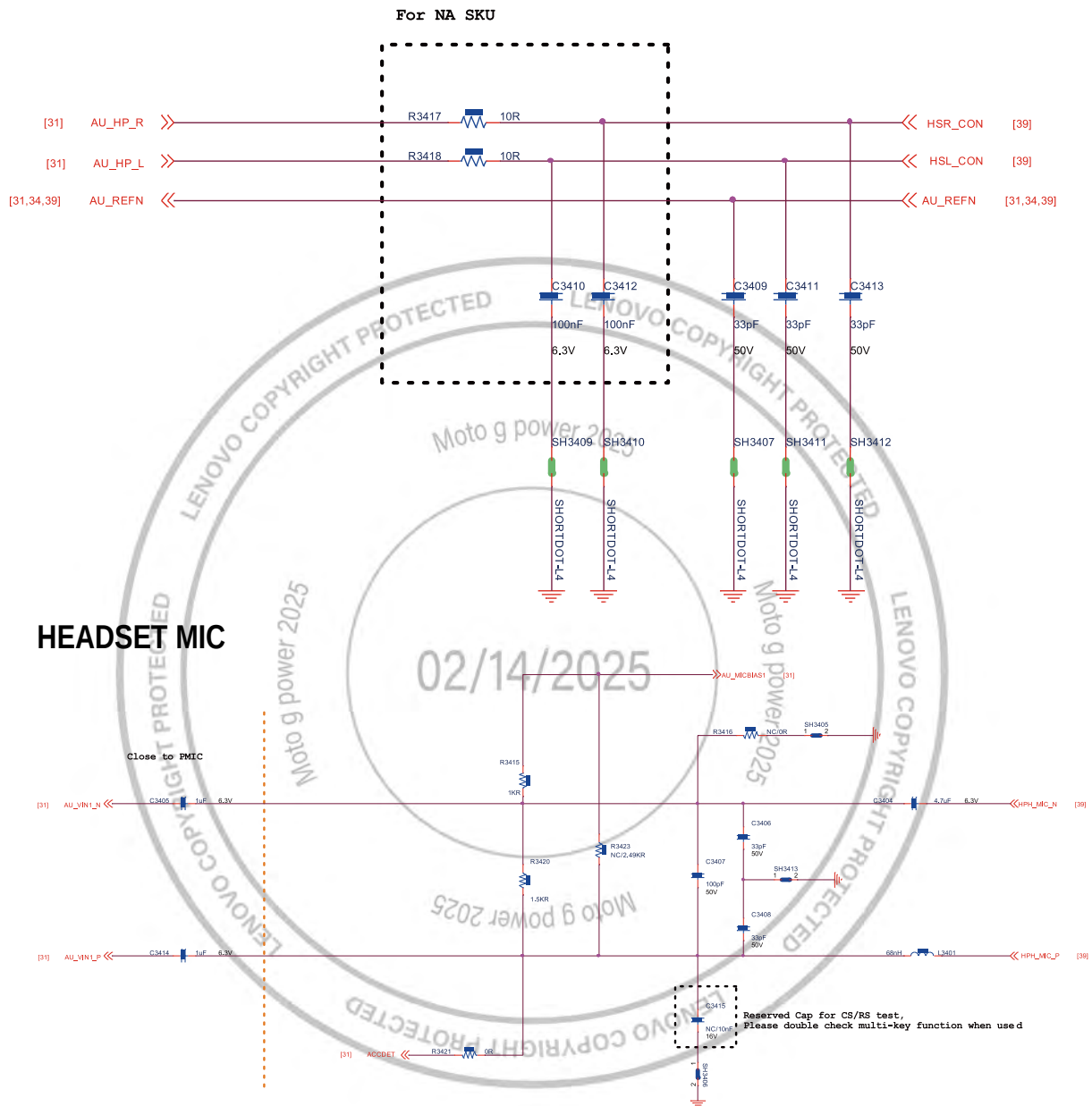


SUB MIC



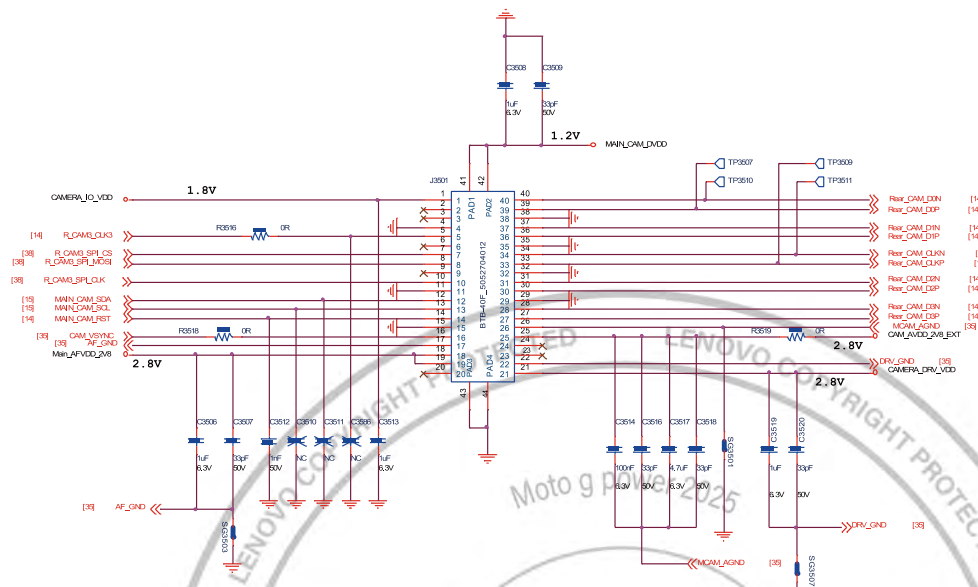
3.5mm_Earphone

AUDIO SWITCH



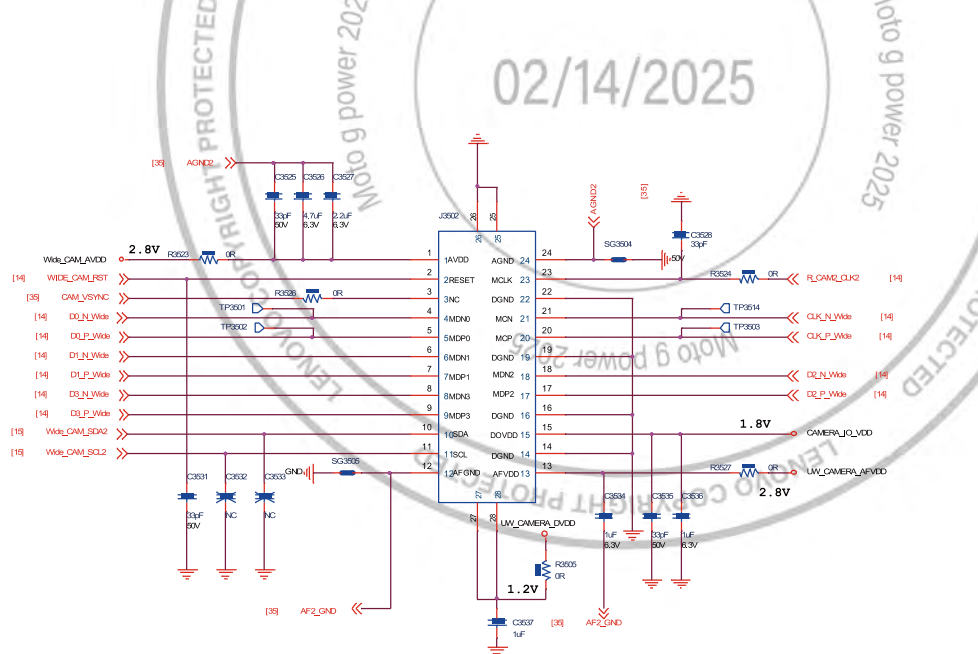
CAMERA_Rear_Front

Rear Camera 50M (OIS)



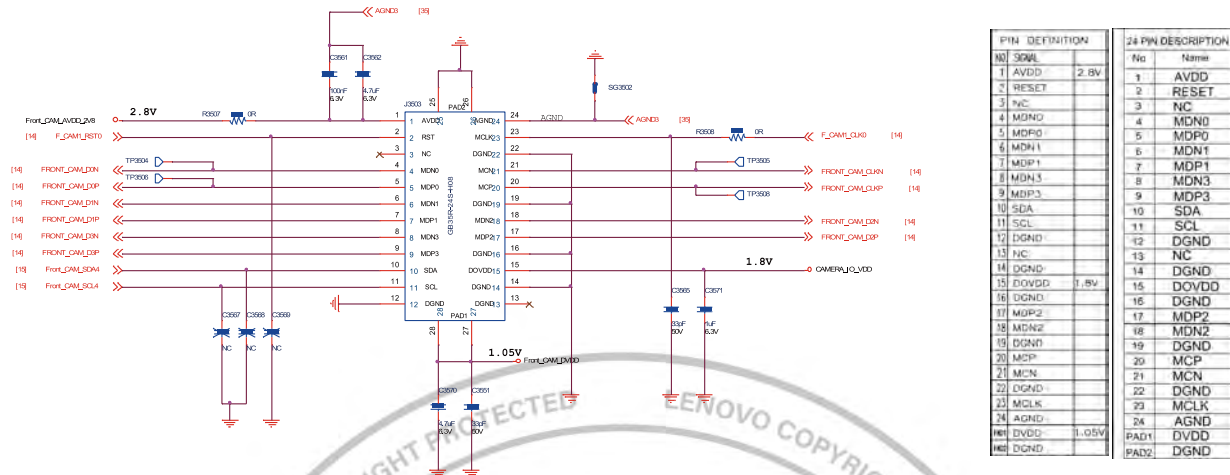
PIN MAP		
1	DOVDD	21 DRV_VDD
2	NC	22 DRV_GND
3	NC	23 NC
4	DGND	24 NC
5	MCLK	25 AVDD
6	NC	26 AGND
7	SPI_CS	27 MDP3
8	SPI_MOSI	28 MDN3
9	GPIO	29 DGND
10	SPI_CLK	30 MDP2
11	DGND	31 MDN2
12	SDA	32 DGND
13	SCL	33 MCP
14	RESET	34 MCN
15	DGND	35 DGND
16	VSYNC	36 MDP1
17	AF-GND	37 MDN1
18	AF-VDD	38 DGND
19	AF-VDD	39 MDP0
20	NC	40 MDN0
PA D1	DGND	PA D2 DVDD

8M UW AF

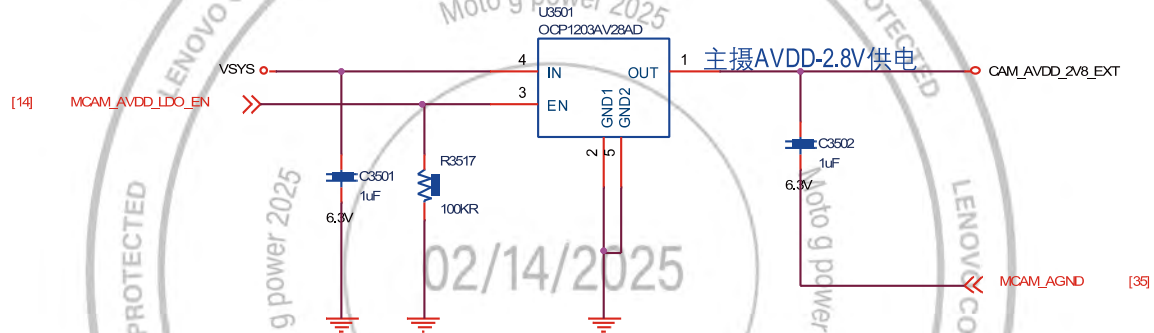


1	AVDD	2.8V
2	RESET	
3	VSYNC	
4	MDN0	
5	MDP0	
6	MDN1	
7	MDP1	
8	MDN3	NC
9	MDP3	NC
10	SDA	
11	SCL	
12	AF_GND	
13	AF_VDD	2.8V
14	DGND	
15	DOVDD	1.8V
16	DGND	
17	MDP2	NC
18	MDN2	NC
19	DGND	
20	MCP	
21	MCN	
22	DGND	
23	MCLK	
24	AGND	
PAD1	DVDD	1.2V
PAD2	DGND	

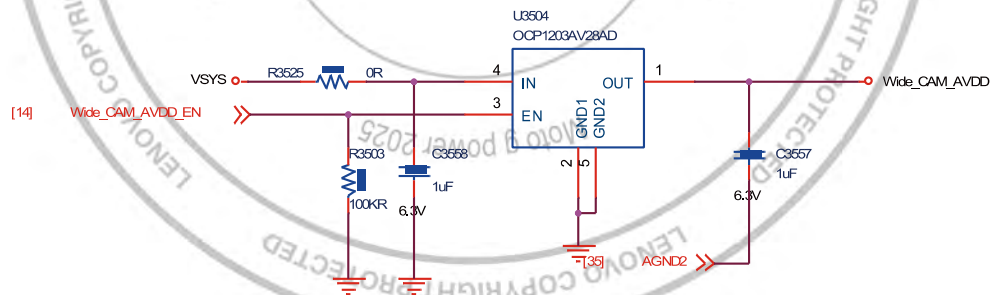
Front Camera 16M/32M



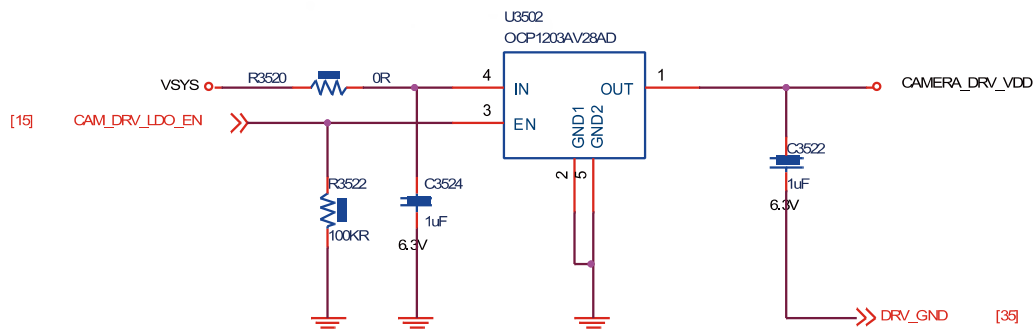
Main LDO AVDD 2.8V



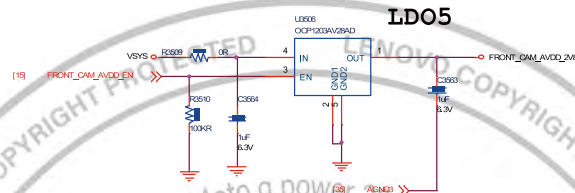
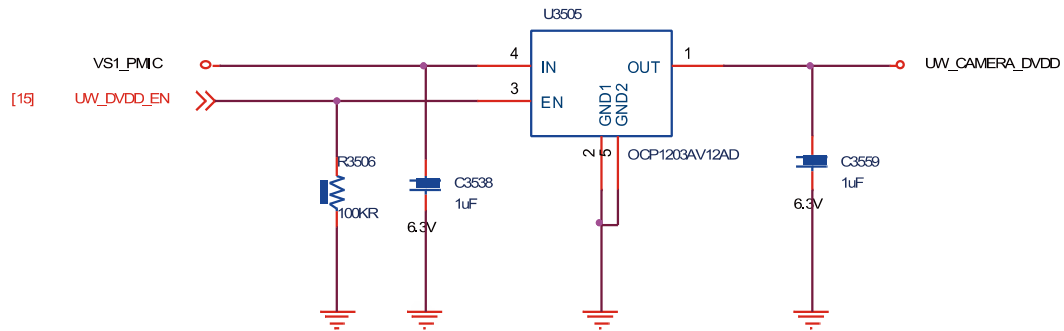
8M AVDD 2.8V



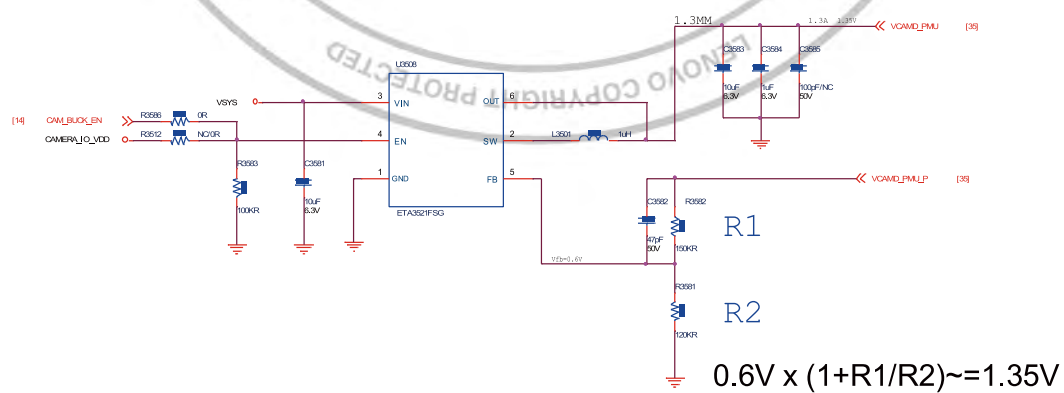
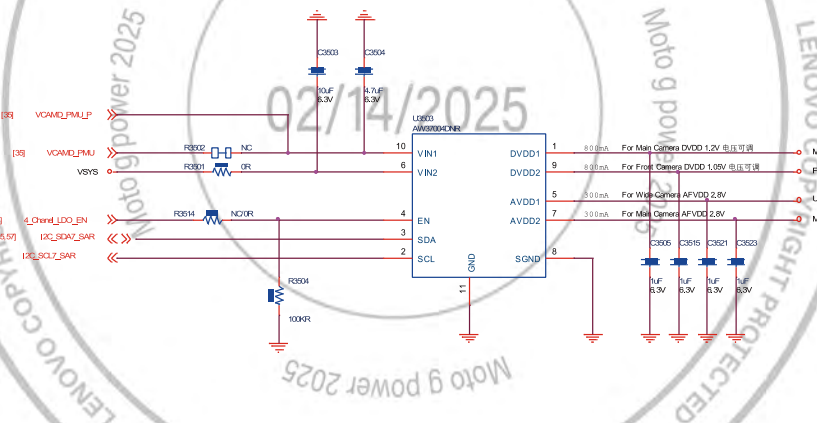
Main LDO DRV_VDD 2.8V



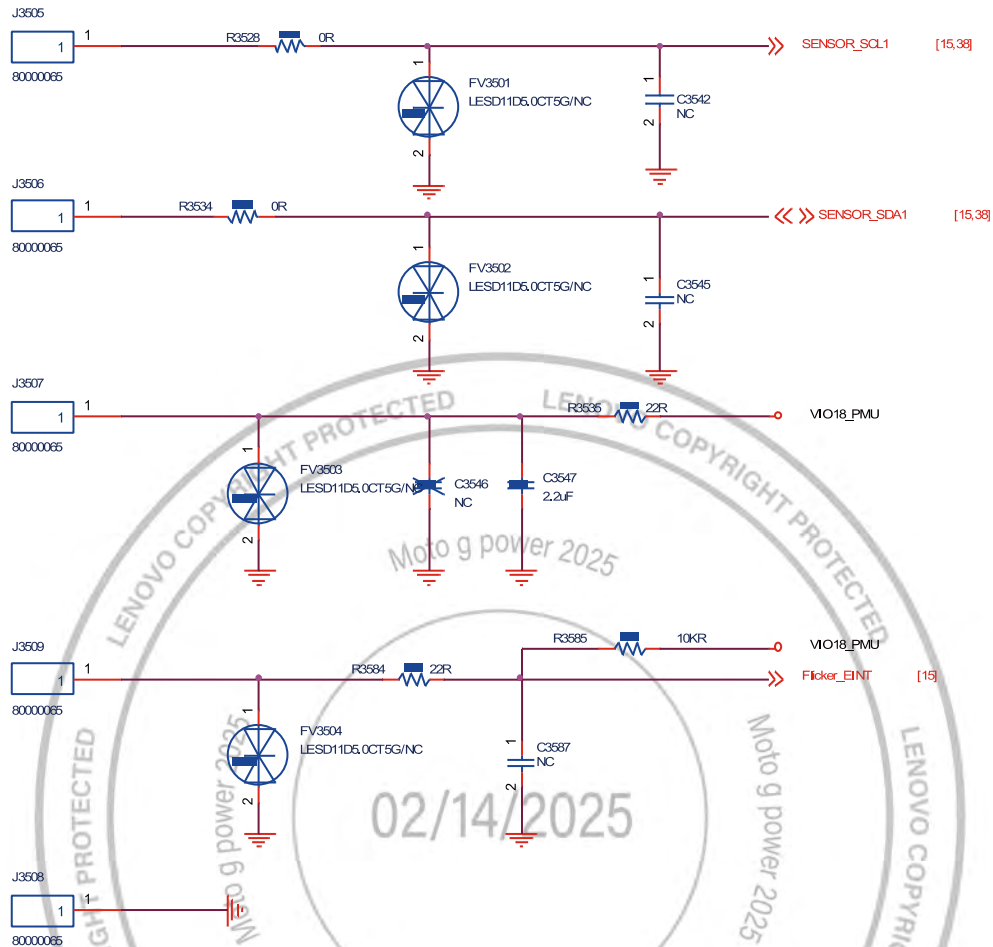
8M DVDD 1.2V



前摄 LDO AVDD 2.8V

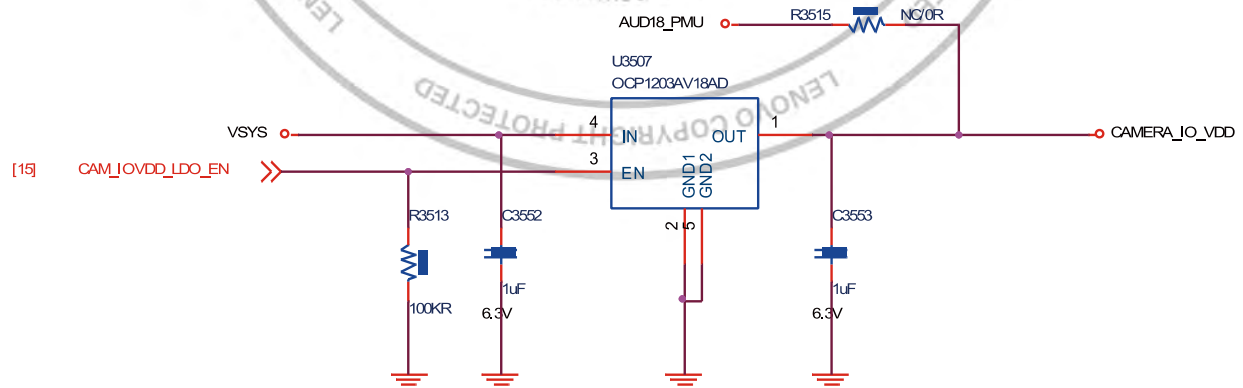


Flicker



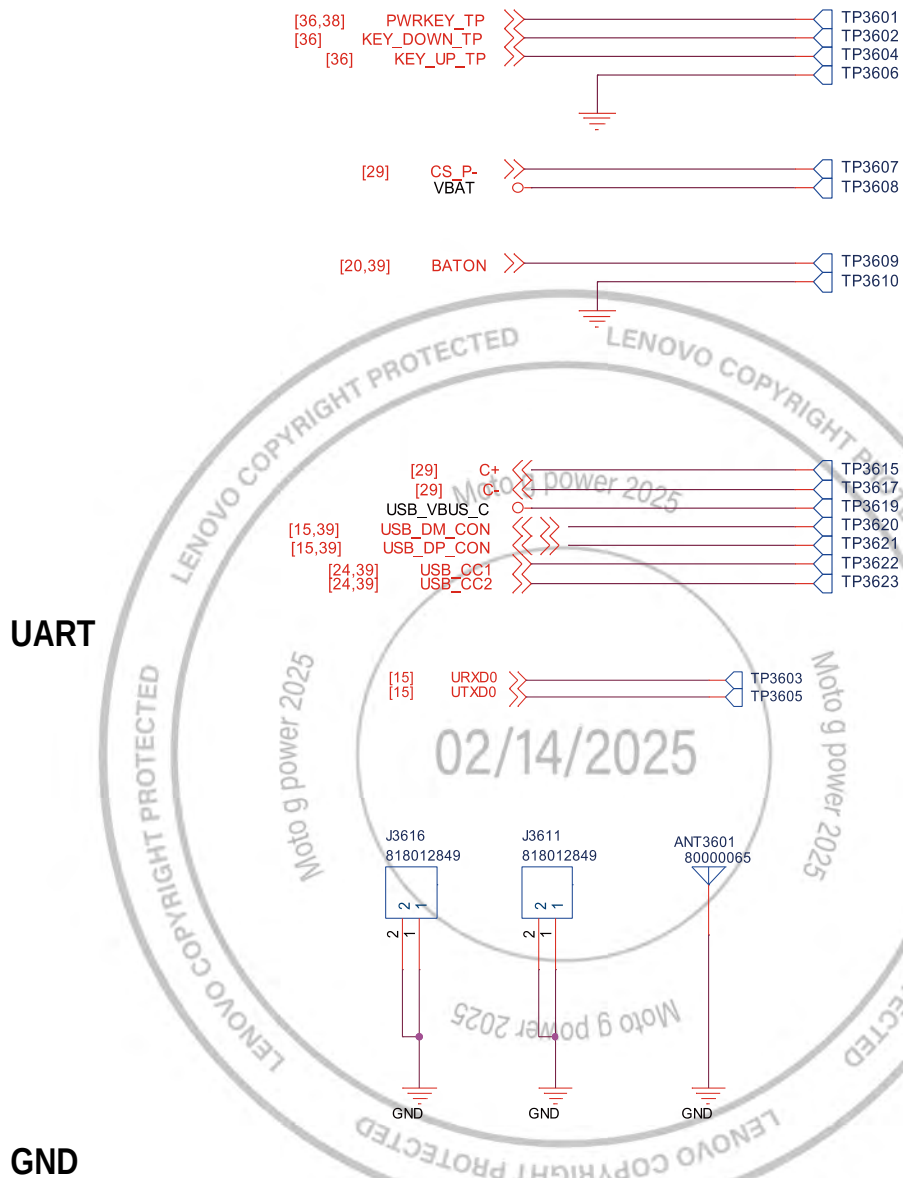
LDO CAM IOVDD 1.8V

LDO7



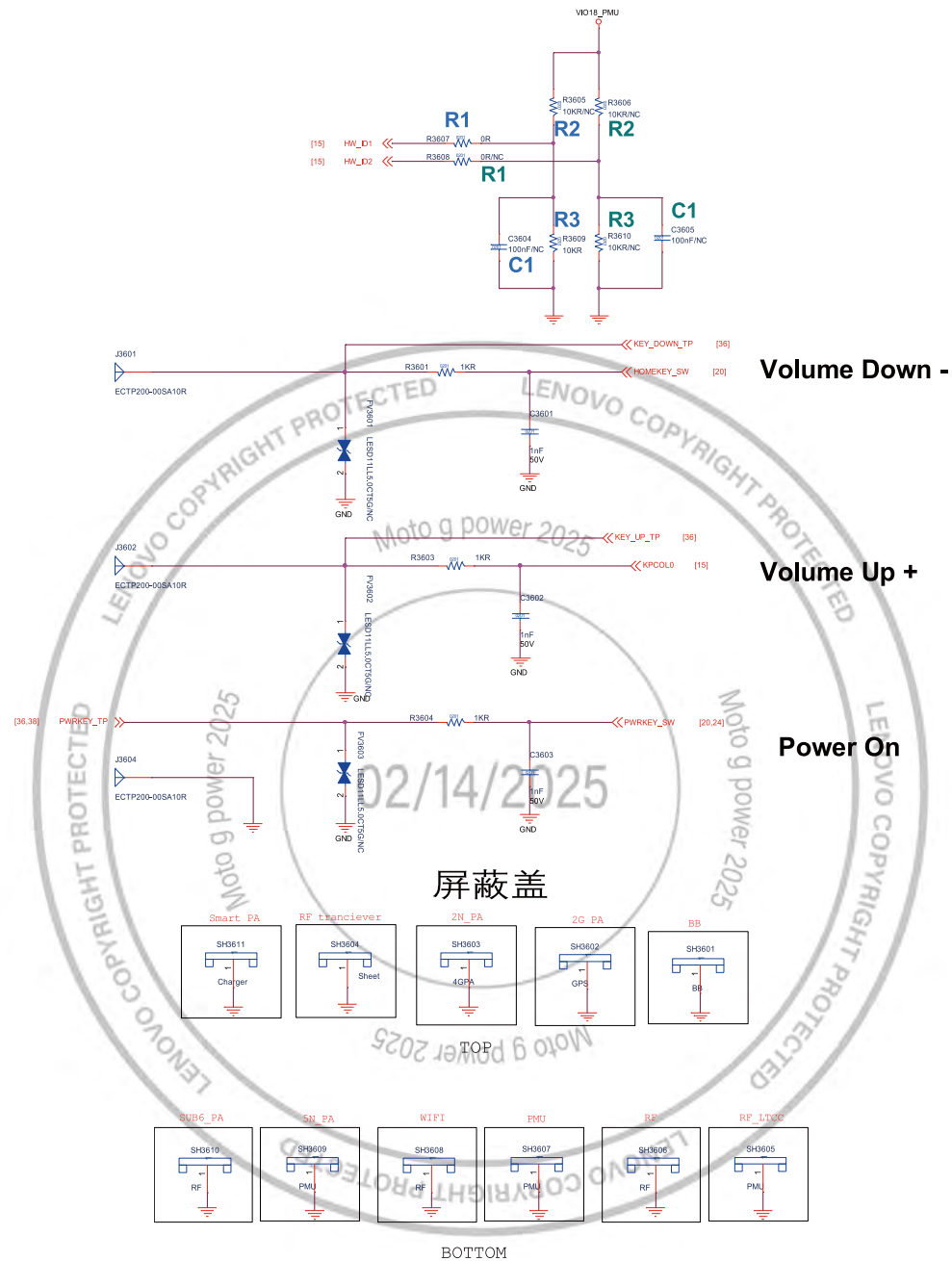
Test_Points

Debug Point

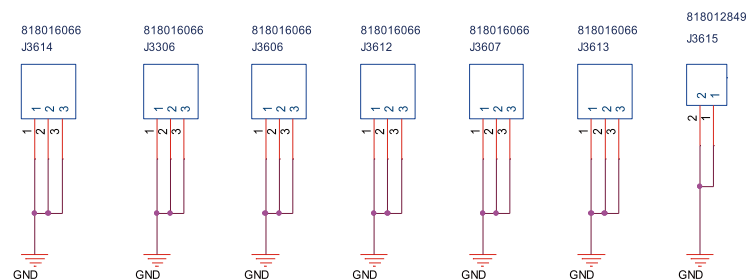


HW ID 1	HW ID 2								HW ID 1 (GPIO 32)				HW ID 2 (GPIO 33)			
GPIO 32	GPIO 33	Product	Model No.	HW revision	radio	RF SKU	PCB revision (Board Revision)	Notes	R3607 (R1)	R3605 (R2)	R3609 (R3)	C3604(C1)	R3608 (R1)	R3606 (R2)	R3610 (R3)	C3605 (C1)
B	A	Vegas NA		EVB(A100)	1	NA	1	EVB	0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	DNP	DNP	DNP	DNP
	B	Vegas NA		EVT(A200)	1	NA	2	EVT	0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP
	C	Vegas NA		DVT1(B100)	1	NA	3	DVT1	0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	0613952Y01	DNP	DNP
	D	Vegas NA		DVT2(B200)	1	NA	4	DVT2	0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	DNP	DNP	0.1uF - 2113946U01
	E	Vegas NA		PVT(C000)	1	NA	5	PVT	0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	DNP	0613952X79	0.1uF - 2113946U01
	F								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	DNP	0613952X94	0.1uF - 2113946U01
	G								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	DNP	27k - 0613952Y11	0.1uF - 2113946U01
	H								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	DNP	100k - 0613952Y25	0.1uF - 2113946U01
	I								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	1.8k - 0613952X79	DNP	0.1uF - 2113946U01
	J								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	7.5k - 0613952X94	DNP	0.1uF - 2113946U01
	K								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	27k - 0613952Y11	DNP	0.1uF - 2113946U01
	L								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	100k - 0613952Y25	DNP	0.1uF - 2113946U01
	M								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	1.8k - 0613952X79	DNP	0.1uF - 2113946U01
	N								0ohm - 0613952Y66	DNP	10k - 0613952Y01	DNP	0ohm - 0613952Y66	7.5k - 0613952X94	DNP	0.1uF - 2113946U01

GPIO_SKU_List



GND Spring

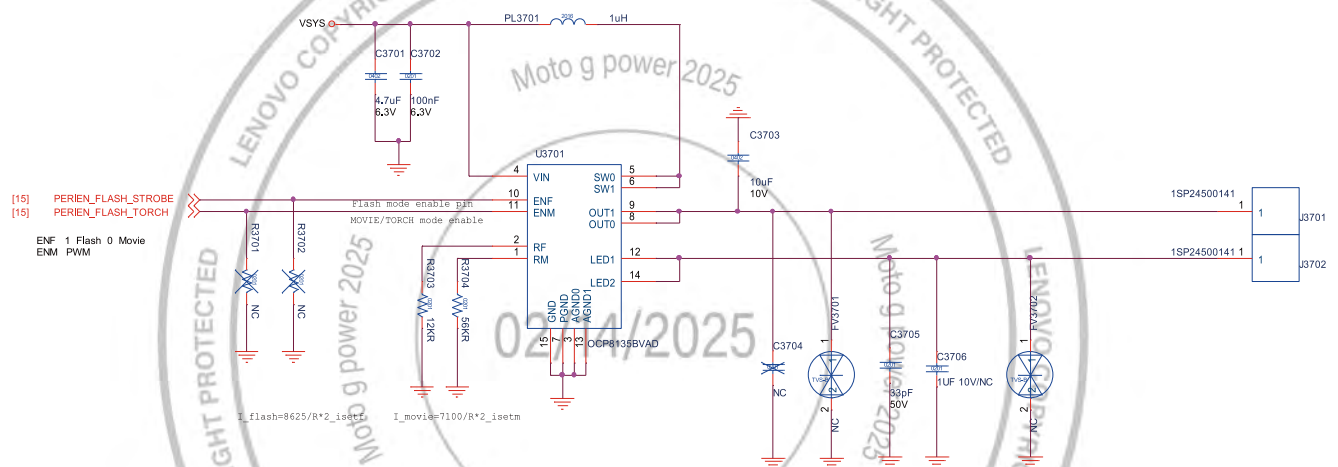


Marks point



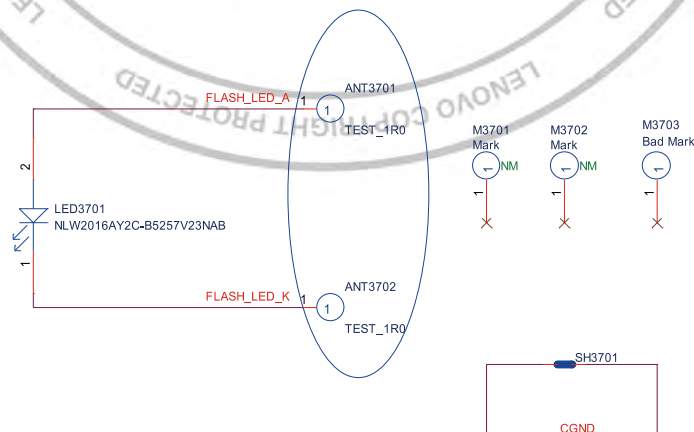
LED Flash

Flash LED Driver



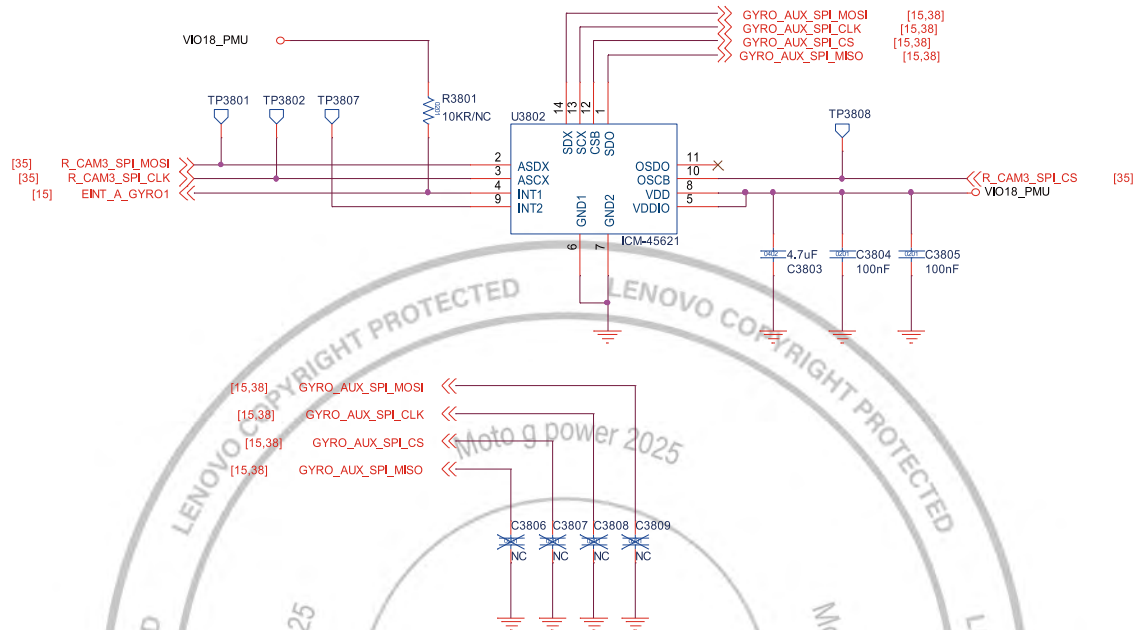
Flash LED PCB Doard

Pad形状和DXF保持一致

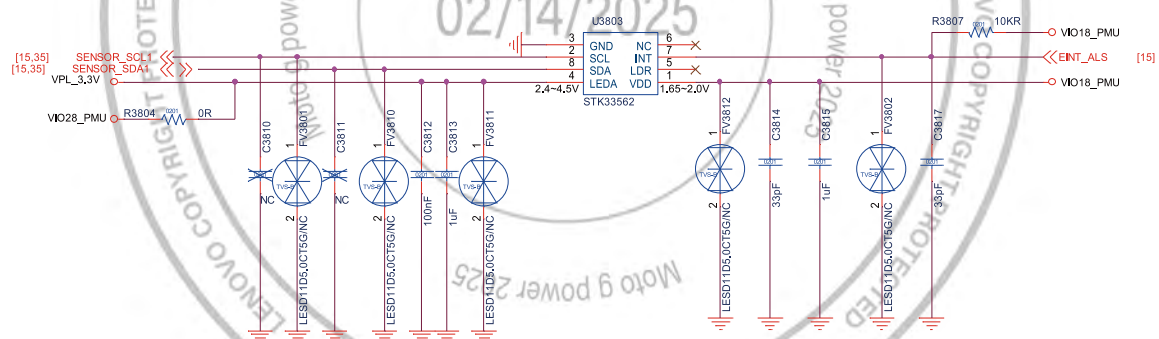


Sensor

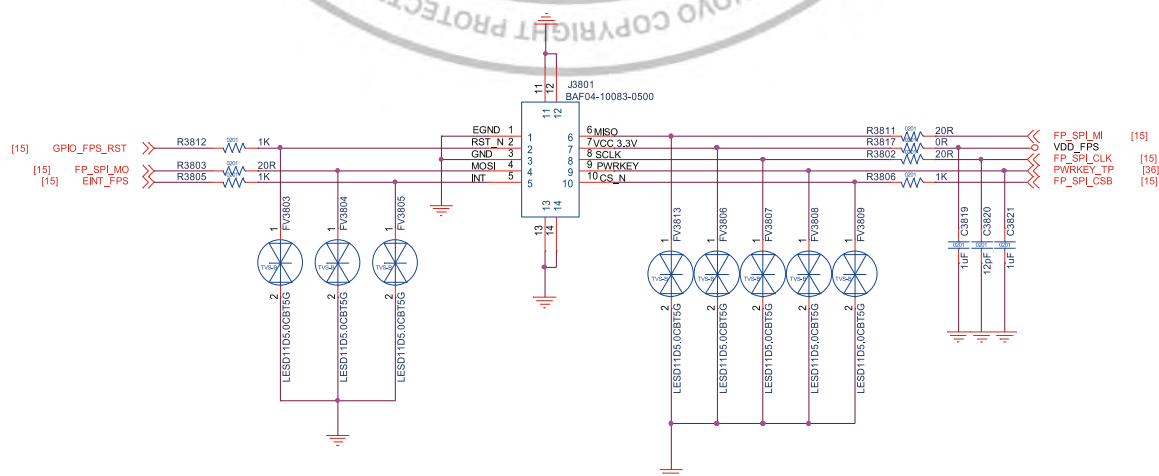
A+Gyro Sensor (OIS)



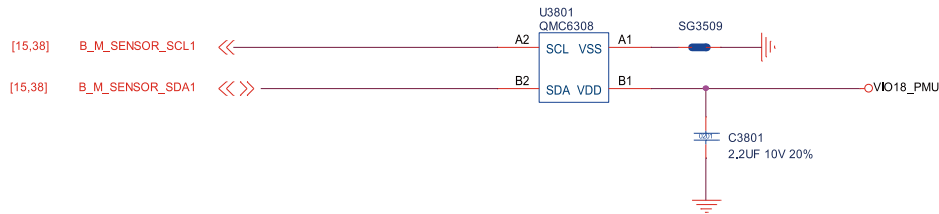
PL SENSOR



FPS Sensor Conn

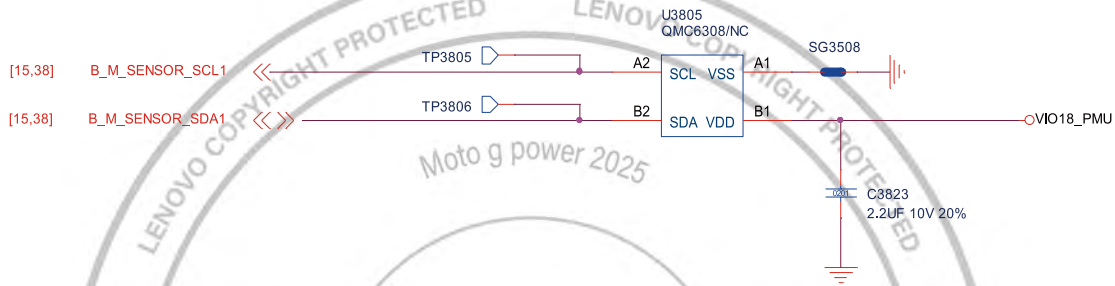


M SENSOR

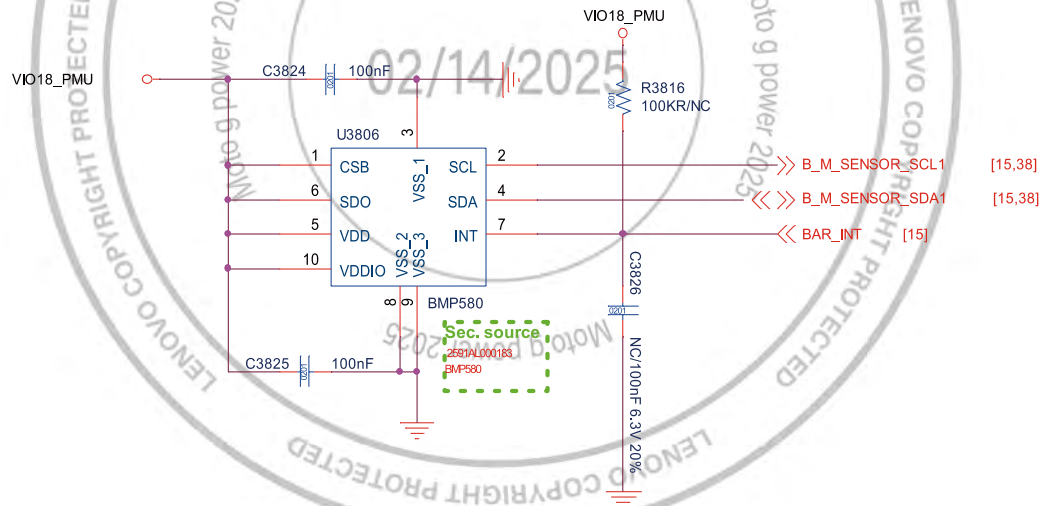


QMC6308P I2C slave address : (W) 0X58H, (R) 0X59H

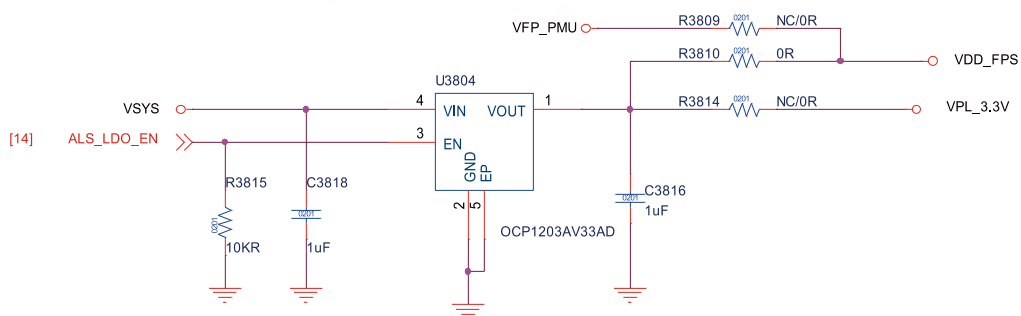
M SENSOR (NC)



Barometer

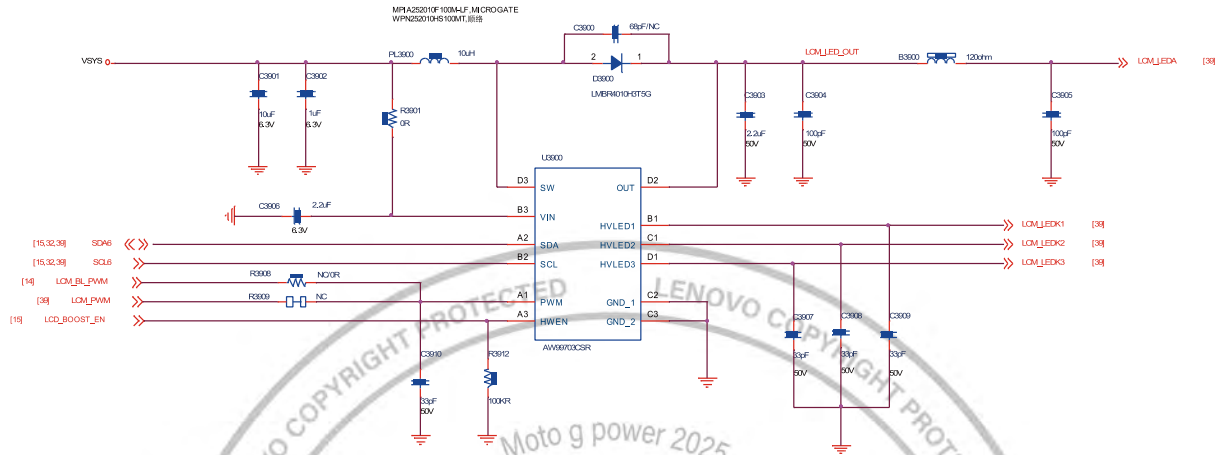


FPS VCC LDO 3.3V

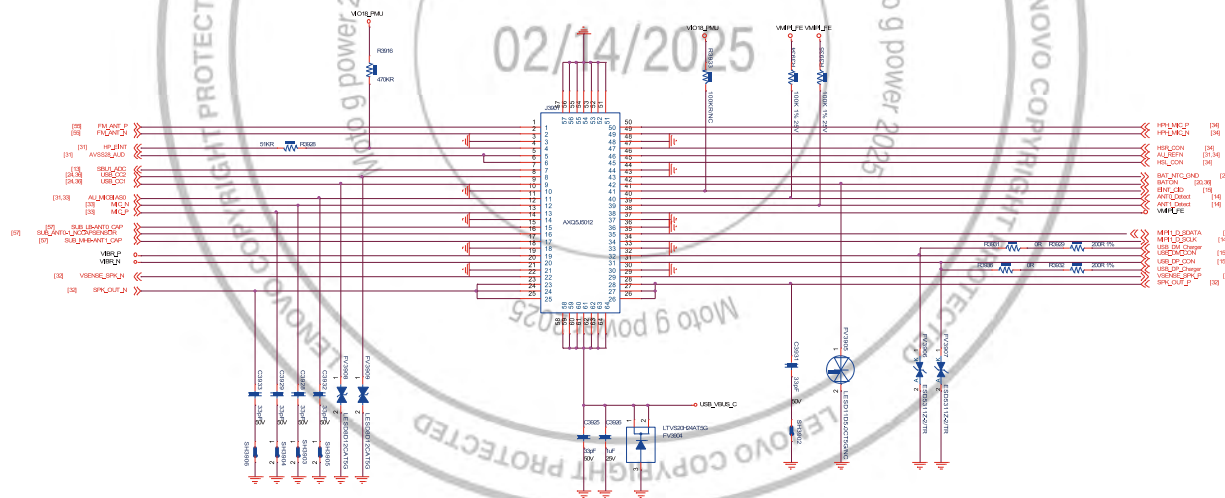


LCD Display_SUB CONN

LCM_Backlight

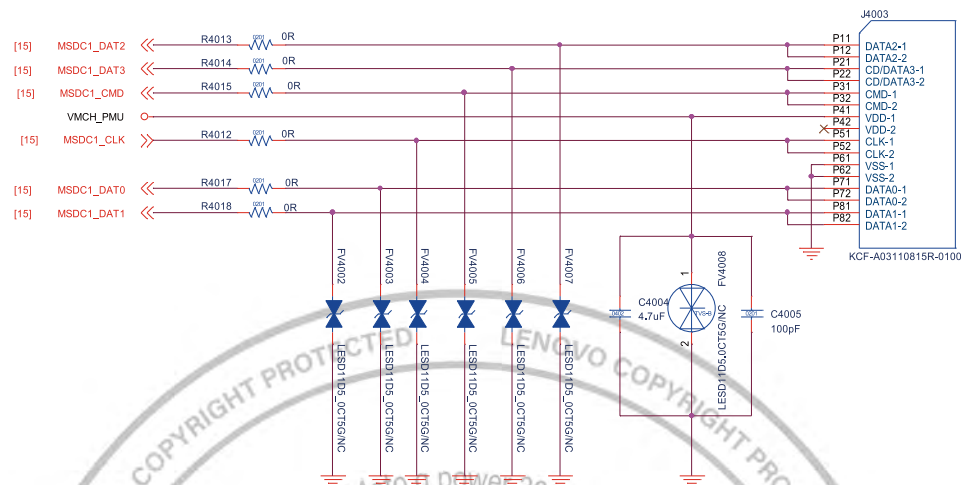


Sub Connector

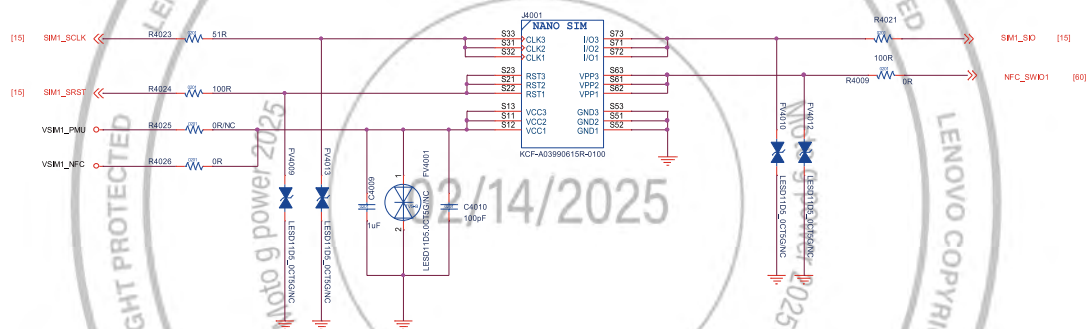


SIM_SD

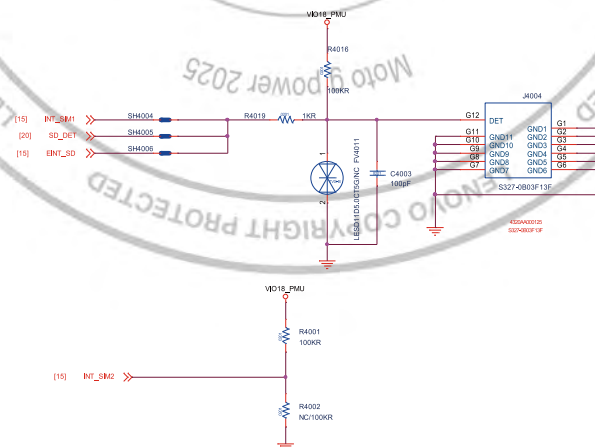
SD CARD



SIM1



CD & GND

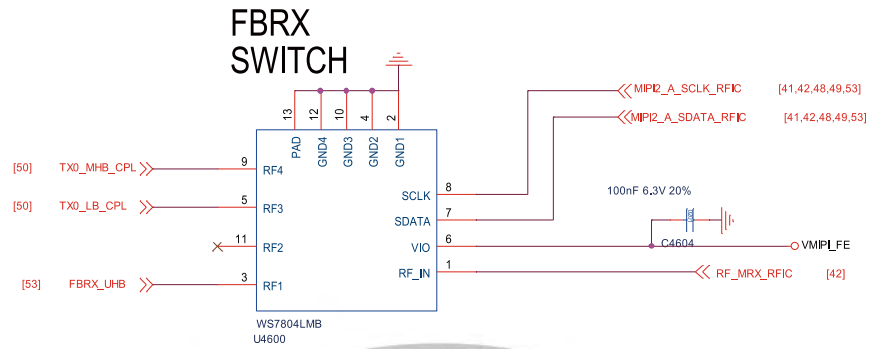


Schematic design notice of "SIM_SD" page.

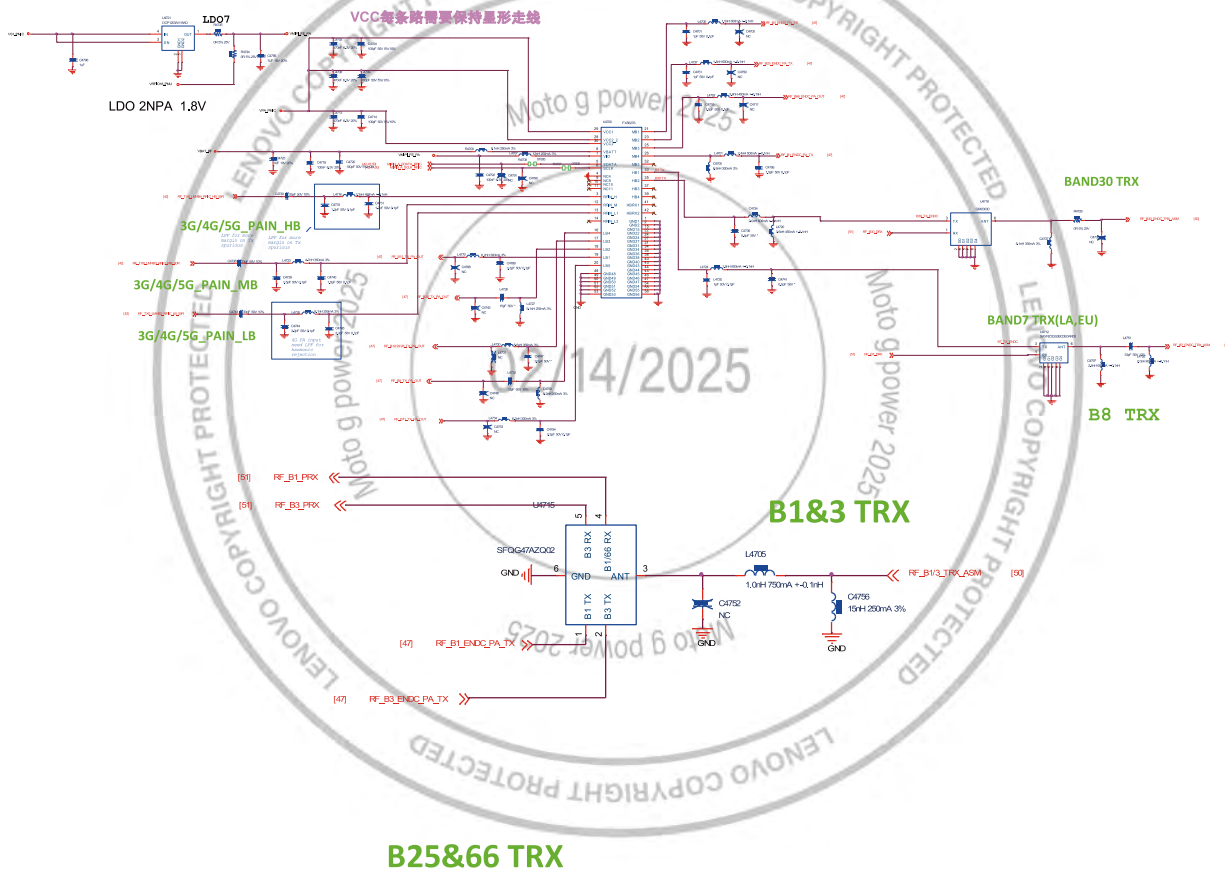
Note 1: Let Vpp pin no connect when NFC SIM function is not supported.

Note 2: For better ESD performance, please select suitable components for system protection.

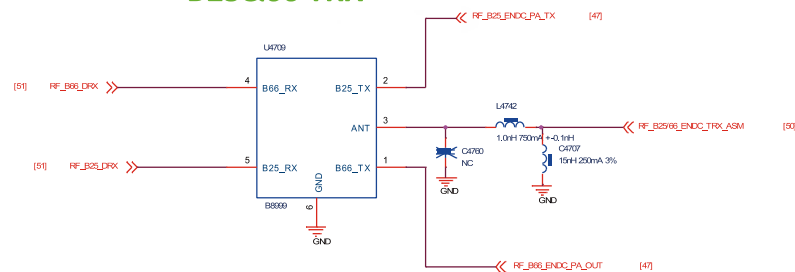
FBRX

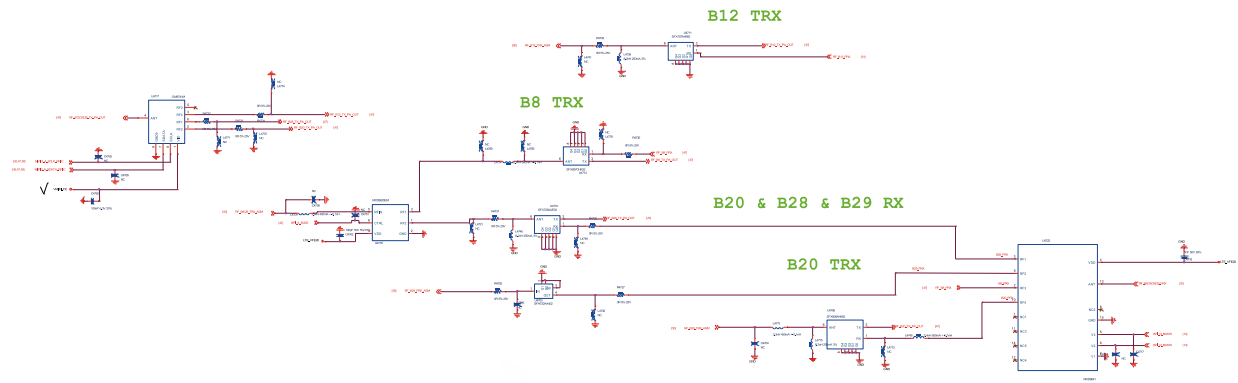


ENDC PA

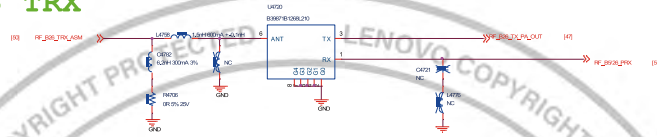


B25&66 TRX

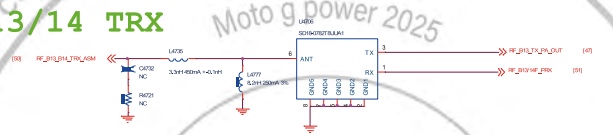




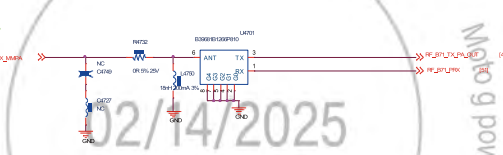
B26 TRX



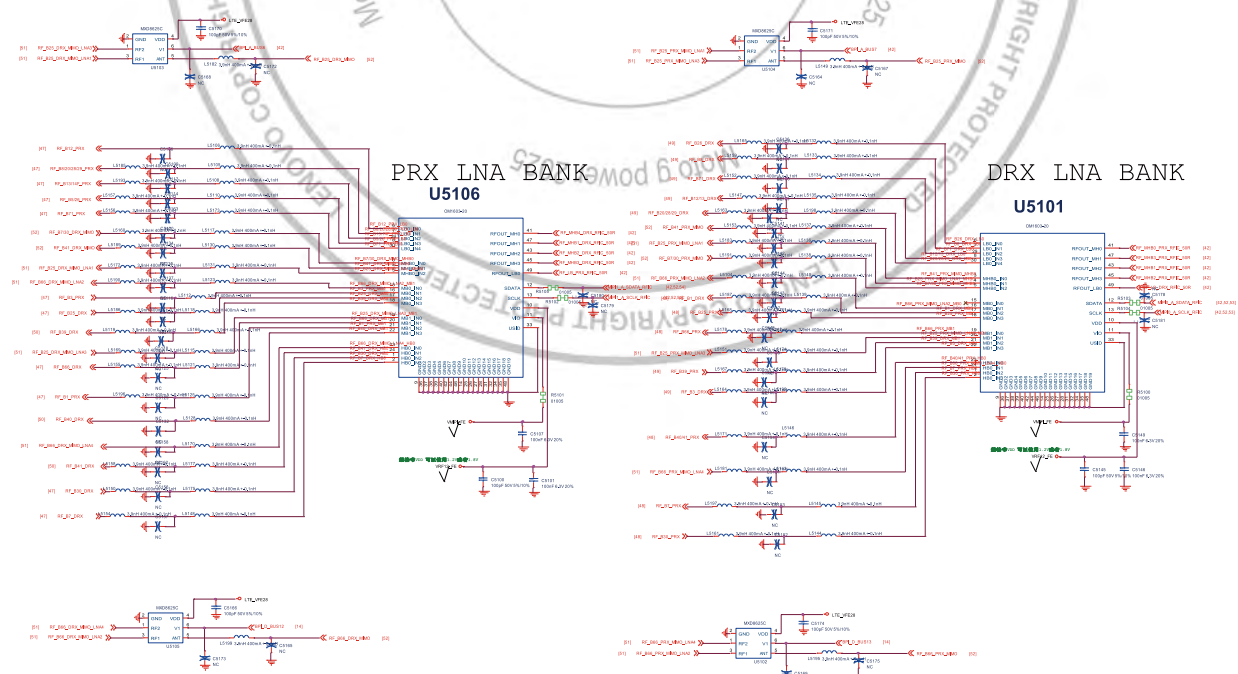
B13/14 TRX



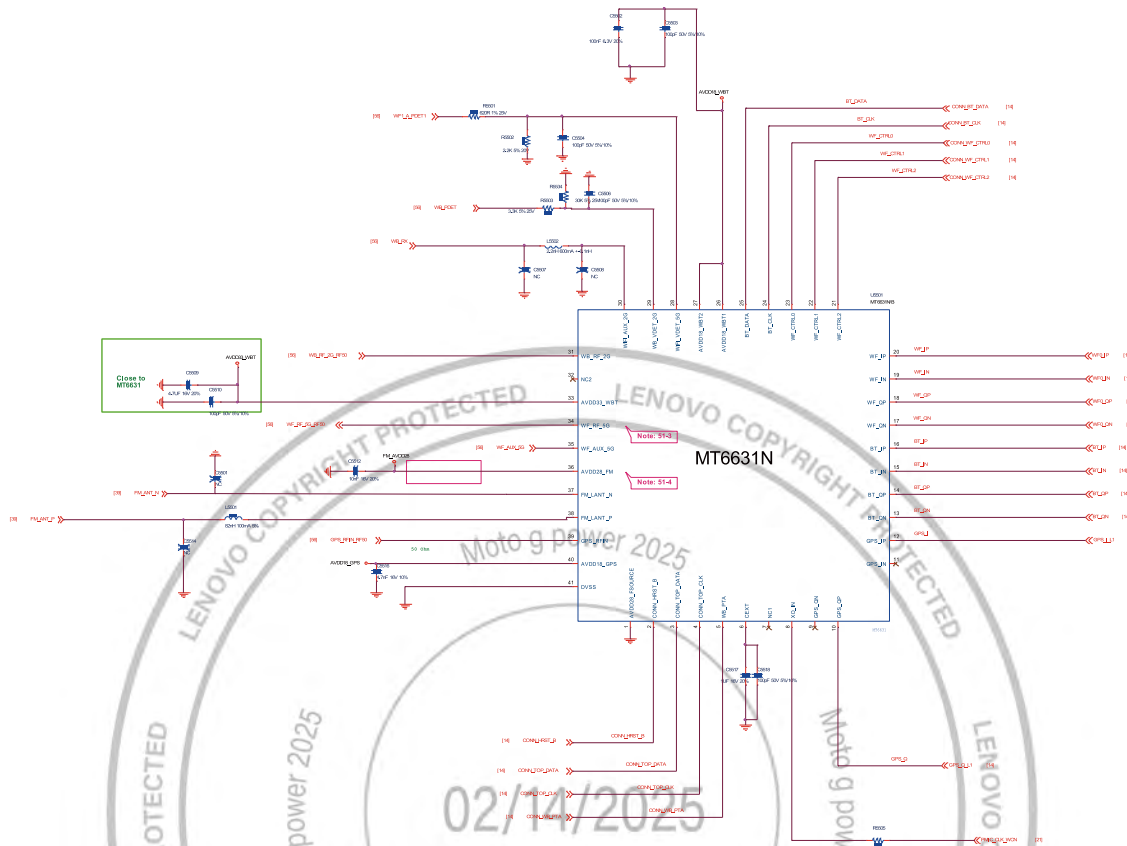
B71 TRX



PRX/DRX_LNABANK



WCN_MT6631



Rail	Pin Name	Pin Number	Peak current at pin(mA)
1.3V_RFA	VDD13 BT BB WL	26	120
	VDD13 WL SYNTH CH0	46	40
	VDD13 BT SYNTH	5	15
	VDD11D PM	43	20
	VDD13 FM	12	15
	VDD13 BT FM BBPLL	4	10
	VDD13 BT PM	29	20
3.3V_CH0	VDD33 WL CH0	55	450
	VDD33 WL 5GPA DRV CH0	61	70
	VDD33 WL BT DRV CH0	34	65
	VDD33 PM DLDO	71	5
	VDD33_FEM	2	1
1.8V IO	VDD18 IO	56	15
1.8V XO	VDD18 XTAL	32	60

NFC

