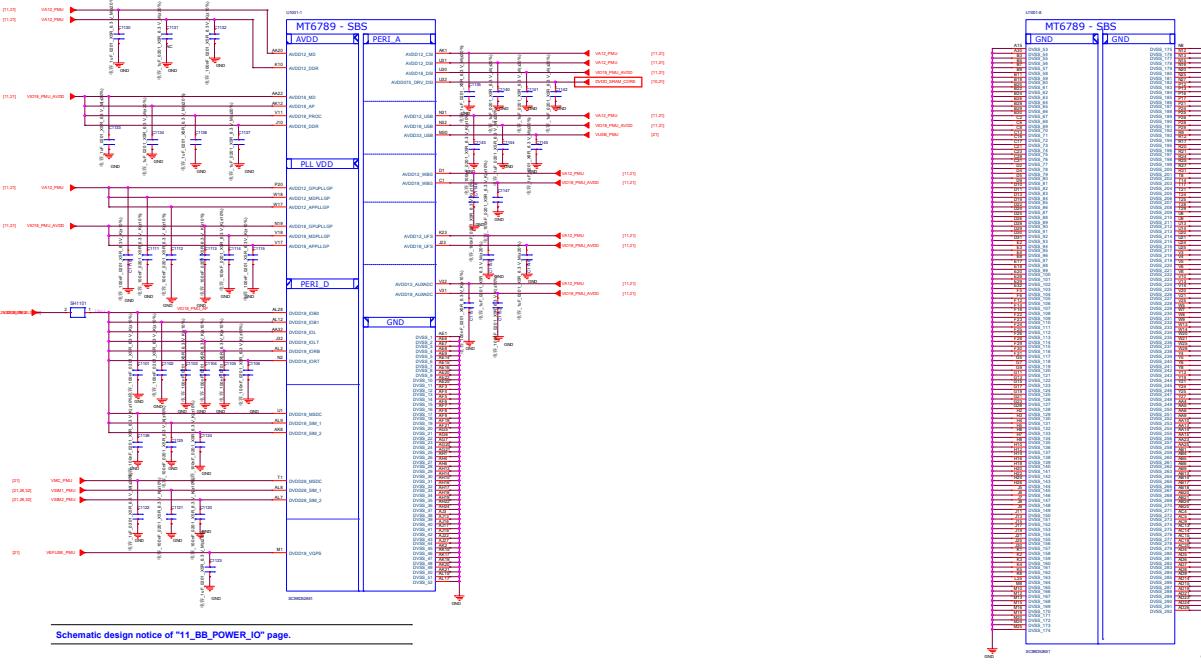
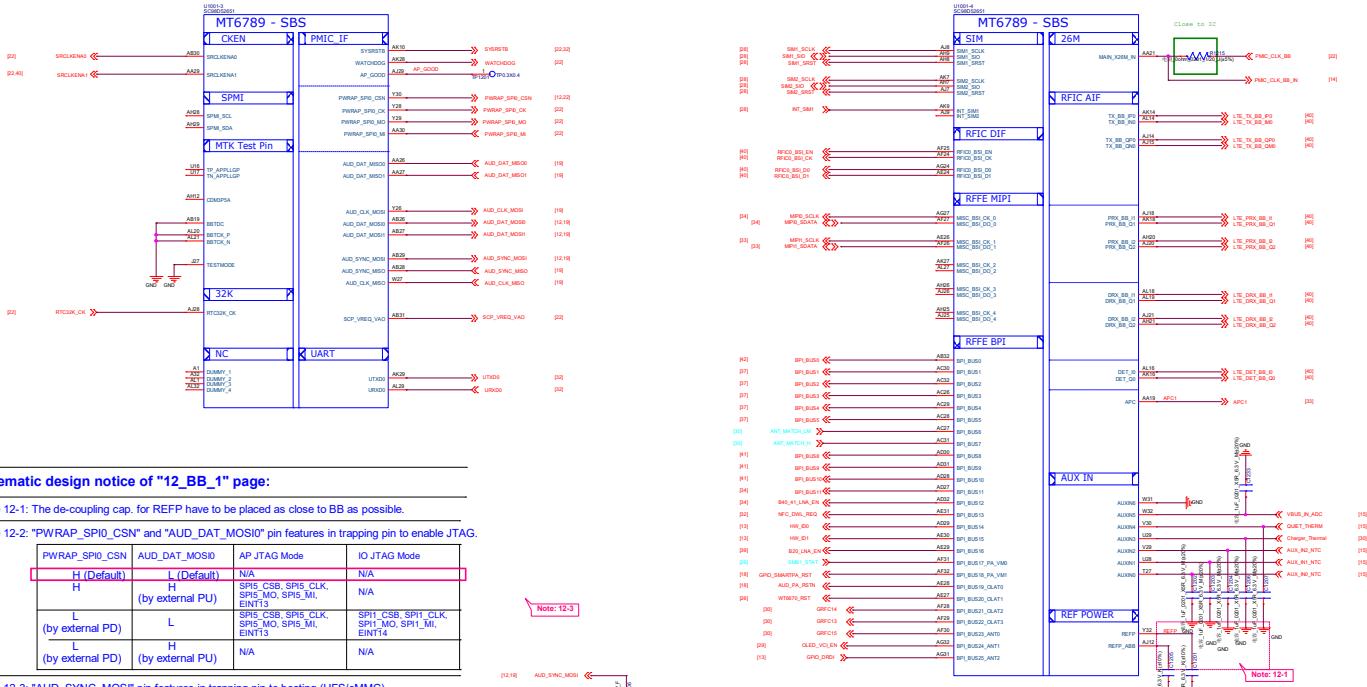


Schematic design notice of "10_BB_POWER_PDN" page.

Note 10-1: Differential pair of PMIC remote sense must be close to BB's ball.
Remote sense trace with GND shielding to PMIC (Differential)



Schematic design notice of "11_BB_POWER_IO" page.



Schematic design notice of "12_BB_1" page:

Note 12-1: The de-coupling cap. for REFP have to be placed as close to BB as possible.

Note 12-2: "PWRAP_SPI0_CSN" and "AUD_DAT_MOSI0" pin features in trapping pin to enable JTAG.

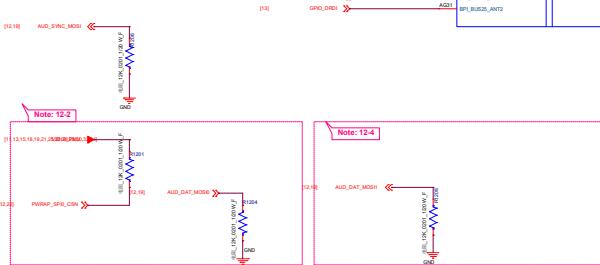
PWRAP_SPI0_CSN	AUD_DAT_MOSI0	AP JTAG Mode	IO JTAG Mode
H (Default)	L (Default)	N/A	N/A
H	H (by external PU)	SP1_CS0, SP1_CLK, SP1_M0, SP1_M1, EINT13	N/A
L (by external PD)	L	SP1_CS0, SP1_CLK, SP1_M0, SP1_M1, EINT13	N/A
L (by external PD)	H (by external PU)	N/A	N/A

Note 12-3: "AUD_SYNC_MOSI" pin features in trapping pin to booting (UFS/eMMC).

AUD_SYNC_MOSI	Storage Booting Mode
L (Default)	Only UFS boot
H	Only eMMC boot

Note 12-4 "AUD_DAT_MOSI1" pin features in trapping pin for SW co-load.

AUD_DAT_MOSI1	Mode
L (Default) (by external PU)	LP4xMCP LP4xDiscrete



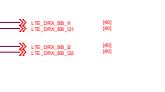
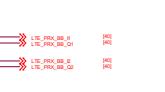
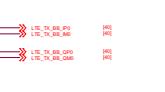
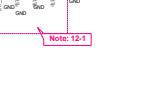
Note 12-3



Note 12-4

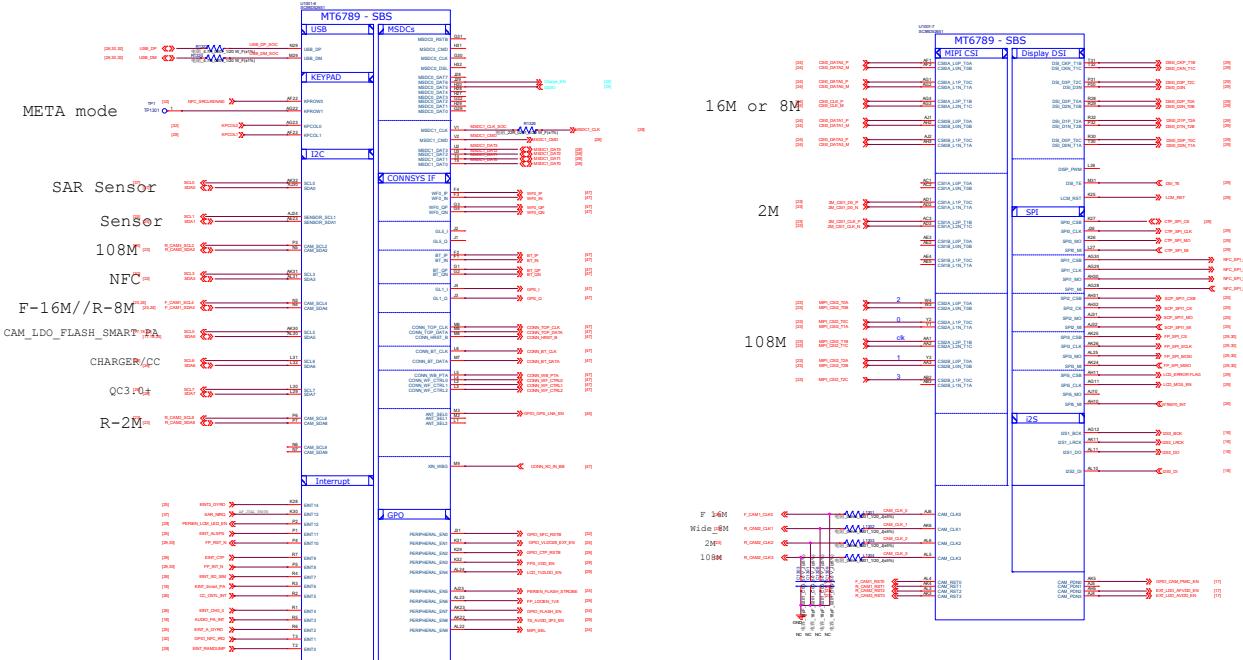


REF POWER

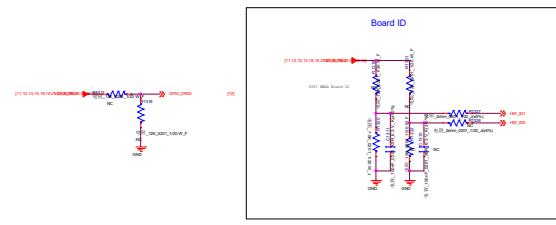


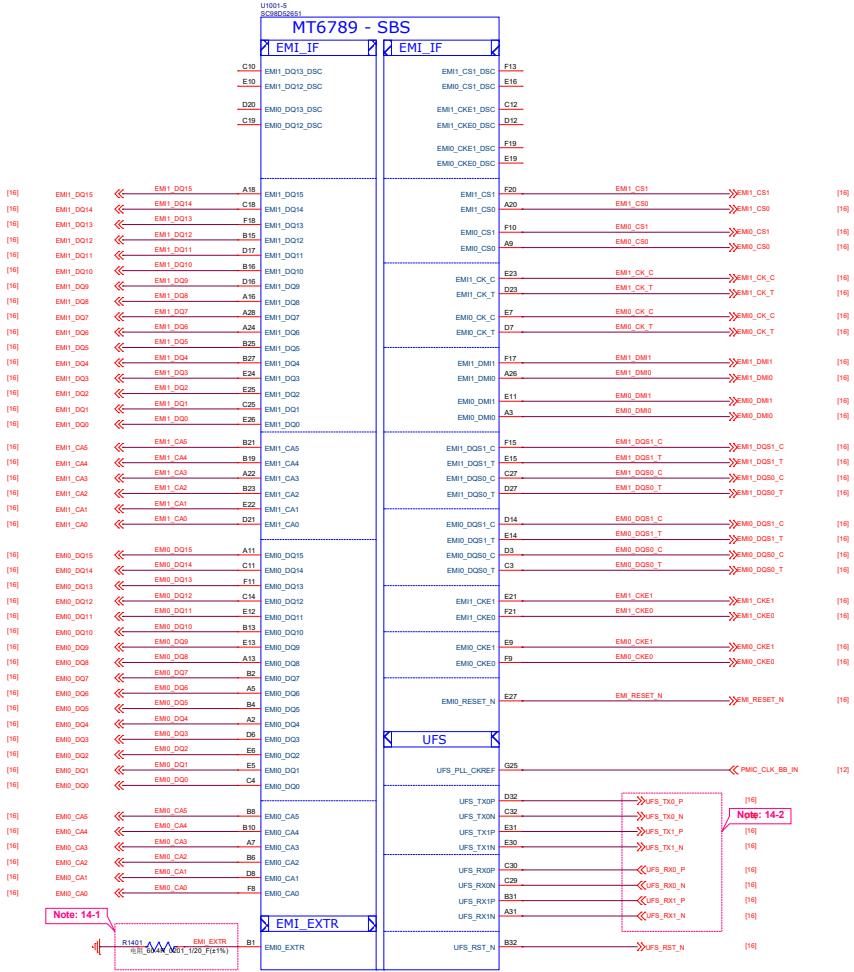
REF POWER

12_BB_1
MTK Confidential



GPIO159 (GPIO_DR0)	GPIO201 (HW_ID0)	GPIO200 (HW_ID0)	PCB ID
Lo	Lo	Lo	Internal phone (Note: DP DTB detected via I2C ID)(MTKxxxx) with MT6631 china SKU
Lo	Lo	Hi	
Lo	Hi	Lo	Internal phone (Note: DP DTB detected via I2C ID)(MTKxxxx) with MT6635 china SKU
Lo	Hi	Hi	
Hi	Lo	Lo	EVB (MTKxxxx) + MTK internal DTBs
Hi	Lo	Hi	EVB (MTKxxxx) + Customer's DTBs



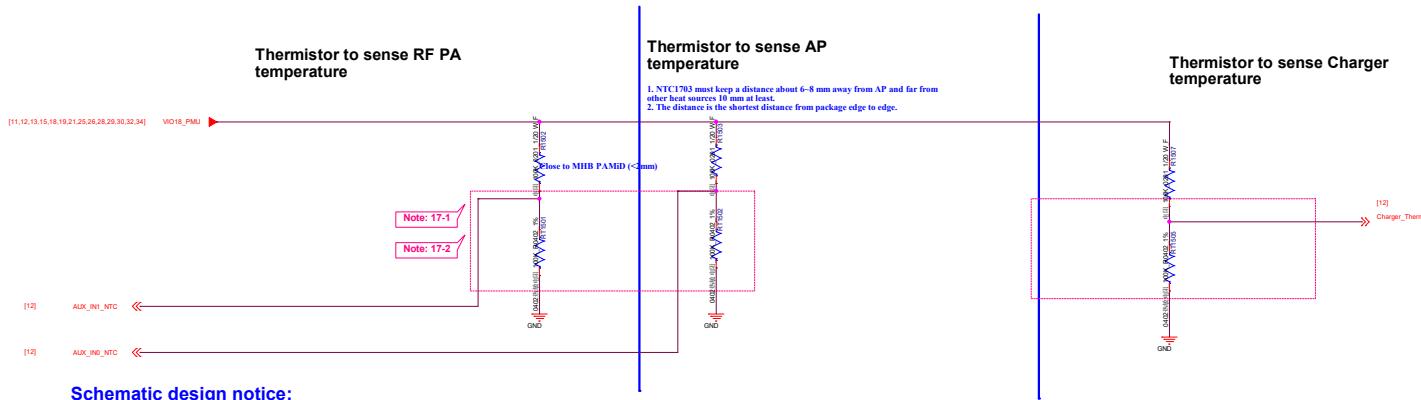


Schematic design notice of "14_BB_3_Interface" page:

Note 14-1: R4001 please select 60.4 ohm (1%) resistor

Note 14-2: Make sure TX/RX connection (T to in, R to out and P to t, N to c)

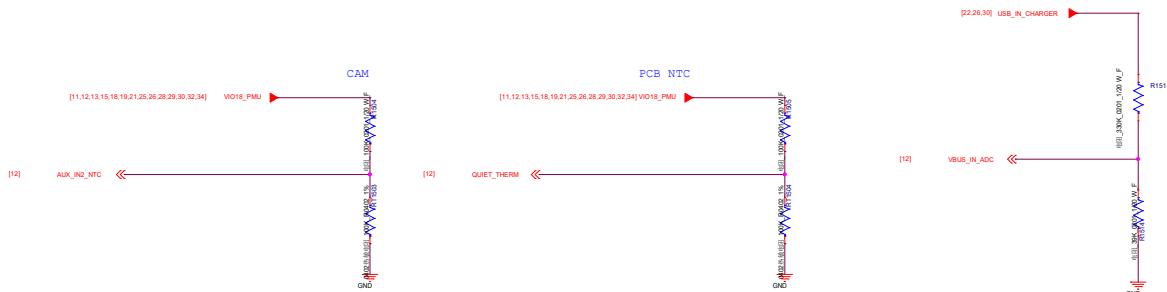
<Variant Name>	
Name	14_BB_3
Rev	MTK Confidential
Date	Friday, May 27, 2022

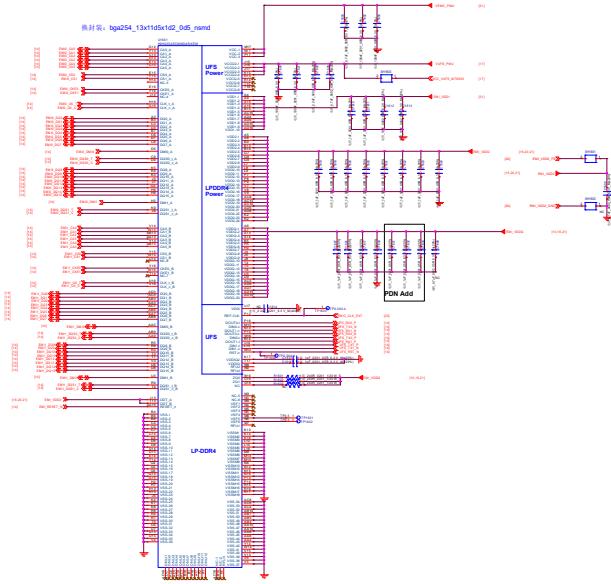


Schematic design notice:

Note 17-1: SW Default Configuration is as followings
AUX_IN0_NTC is for AP Temp.
AUX_IN1_NTC is for MHB PAMID Temp.

Note 17-2: If your design or placement is different with SW Default Config.
Please refer to "MTXXXX Thermal User Manual.docx" and modify SW setting.





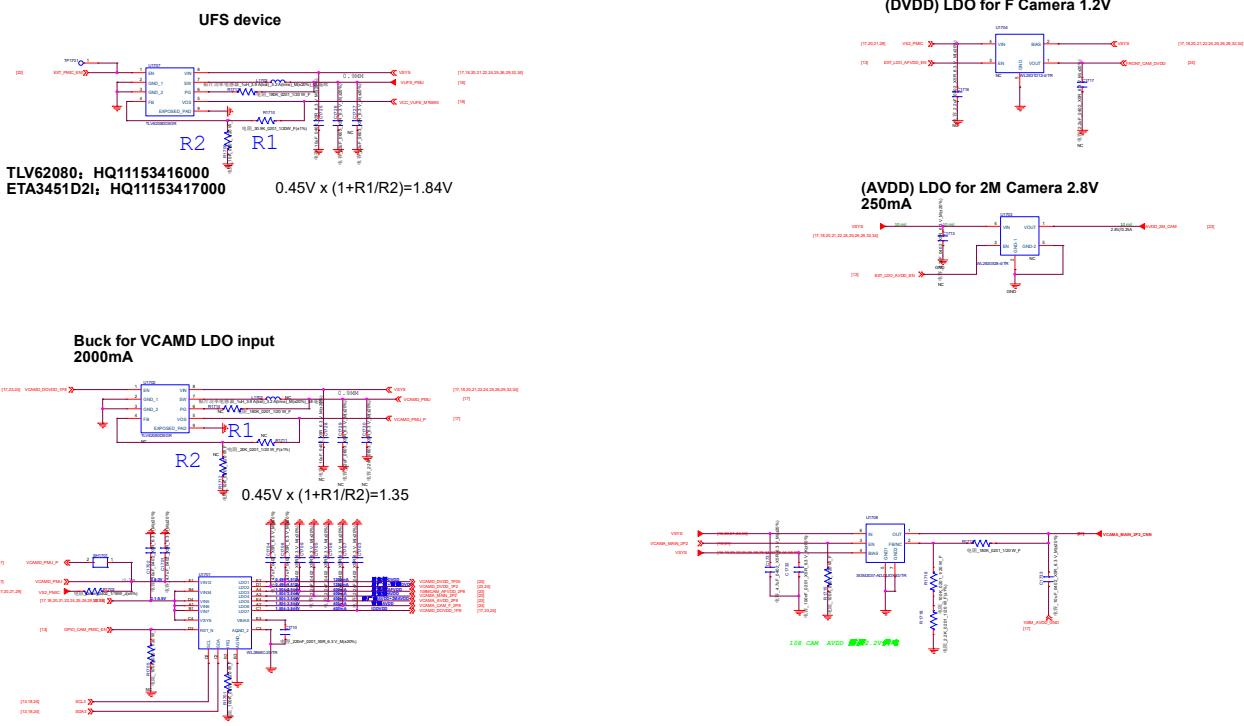
Schematic design notice of "44_Memory_UFS_LPDORAX" page.

Note 44-1: Please refer to UFS memory PMC page select
and UFS memory property for LPDDR4X.

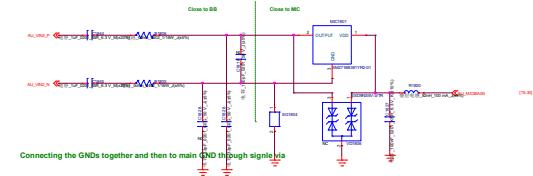
Note 44-2: DRAM ZQs resistor = 240Ω/nm (1%) that must be connected to VDDQ.

Note 44-3: Please refer to AMP's vendor's datasheet or MTK common design notice to get the recommendation bypass cap value for VCC/VCCQ/VDDI power domains of UFS.

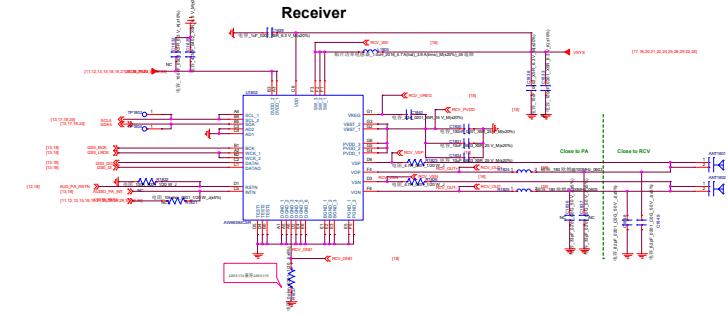
Note 44-4: VDDQ VDDQ decoupling cap closed to DRAM init.
For other cap for PMIC -> UFS, at PMC page
please also refer to MTD and layout guide for placement.



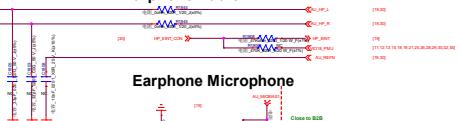
Reference Microphone, AMIC



Receiver



Earphone Audio



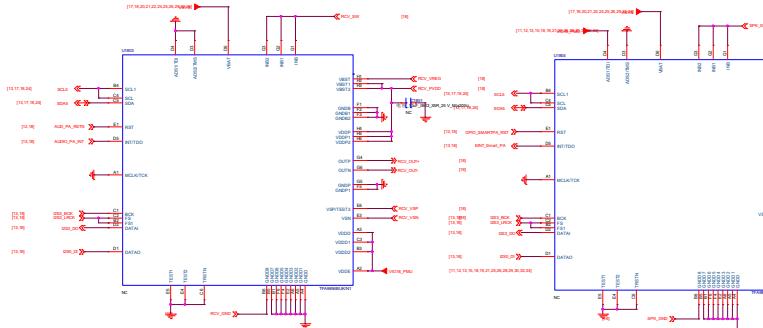
Connecting the GNDs together and then to main GND through signal via

Close to BB

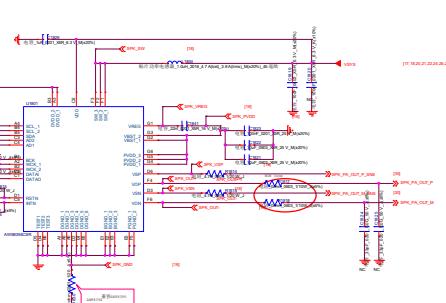
Earphone Microphone

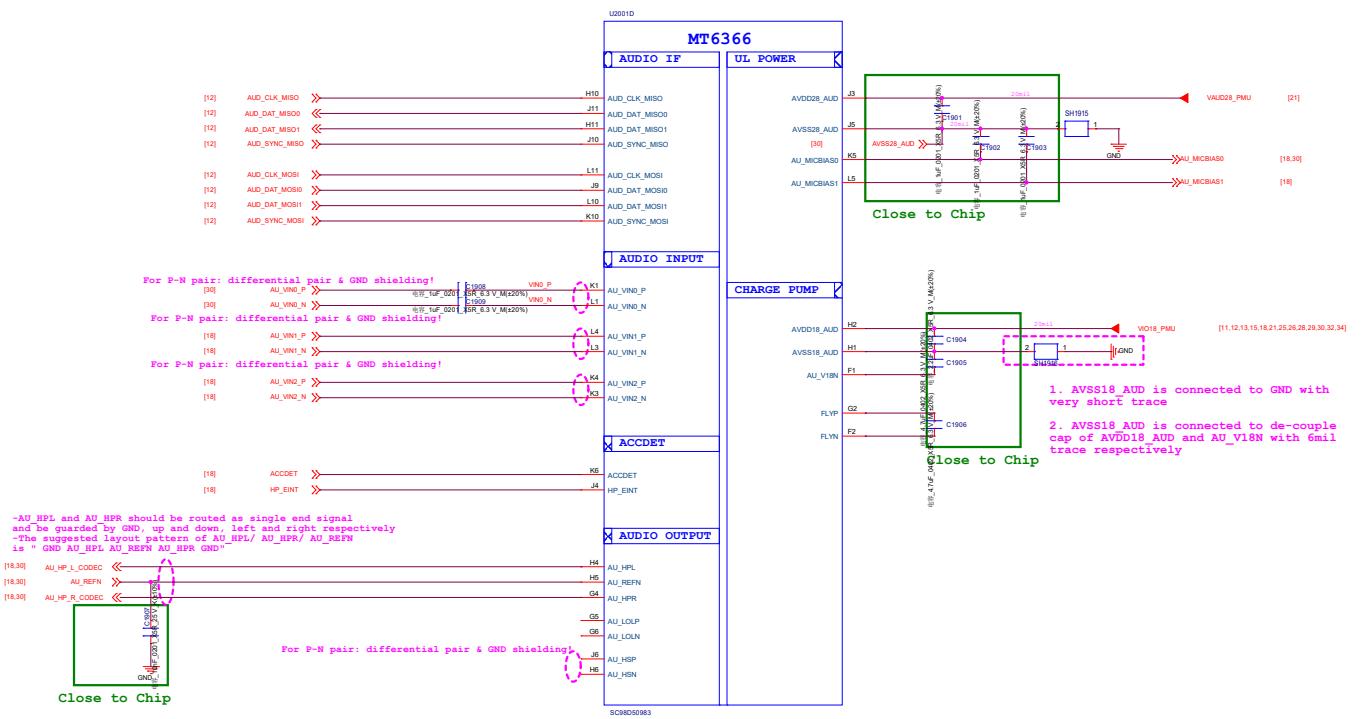


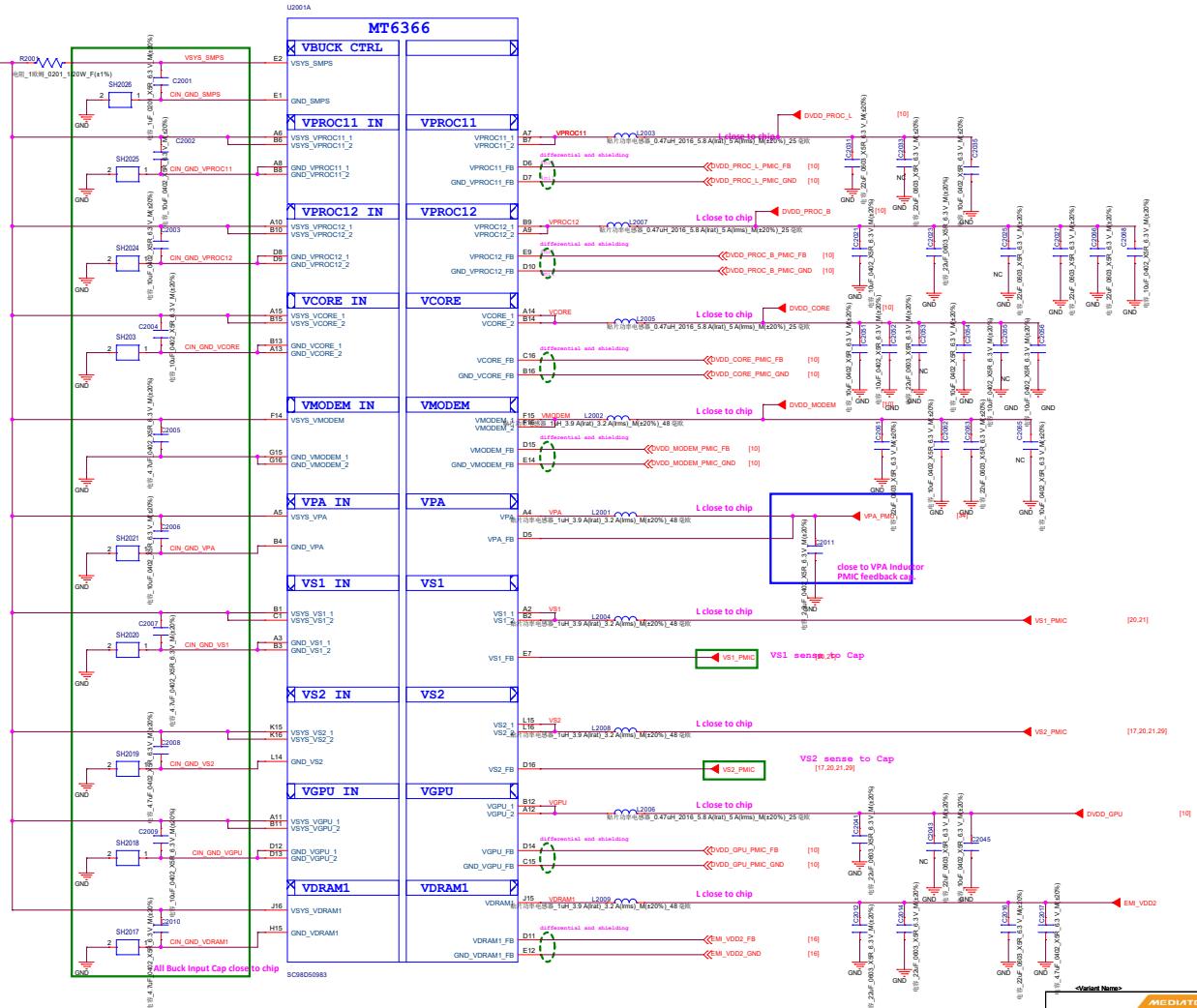
Receiver兼容



Speaker Amplifier



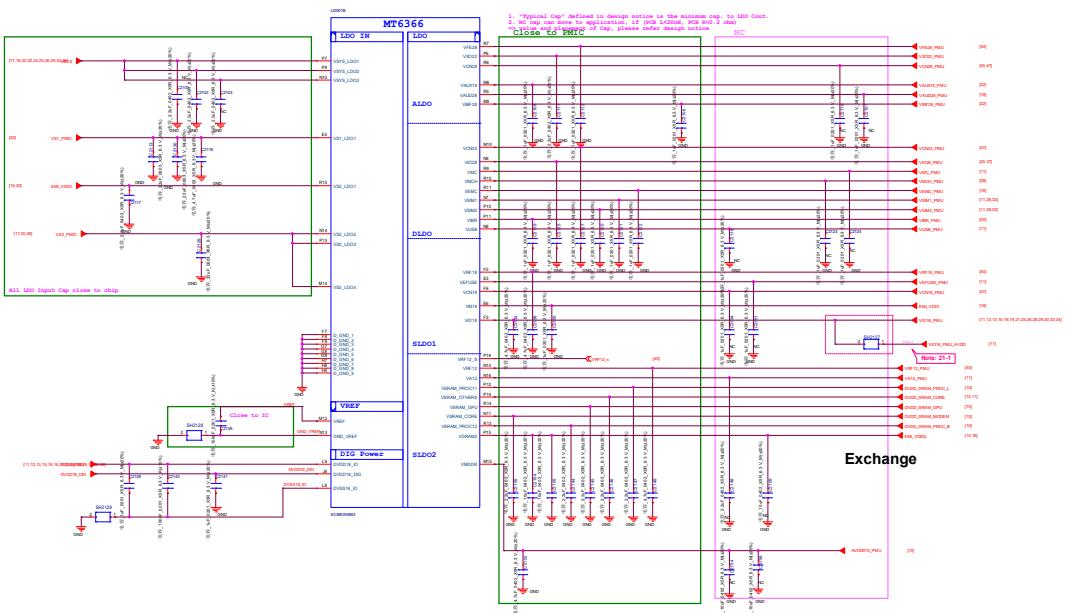


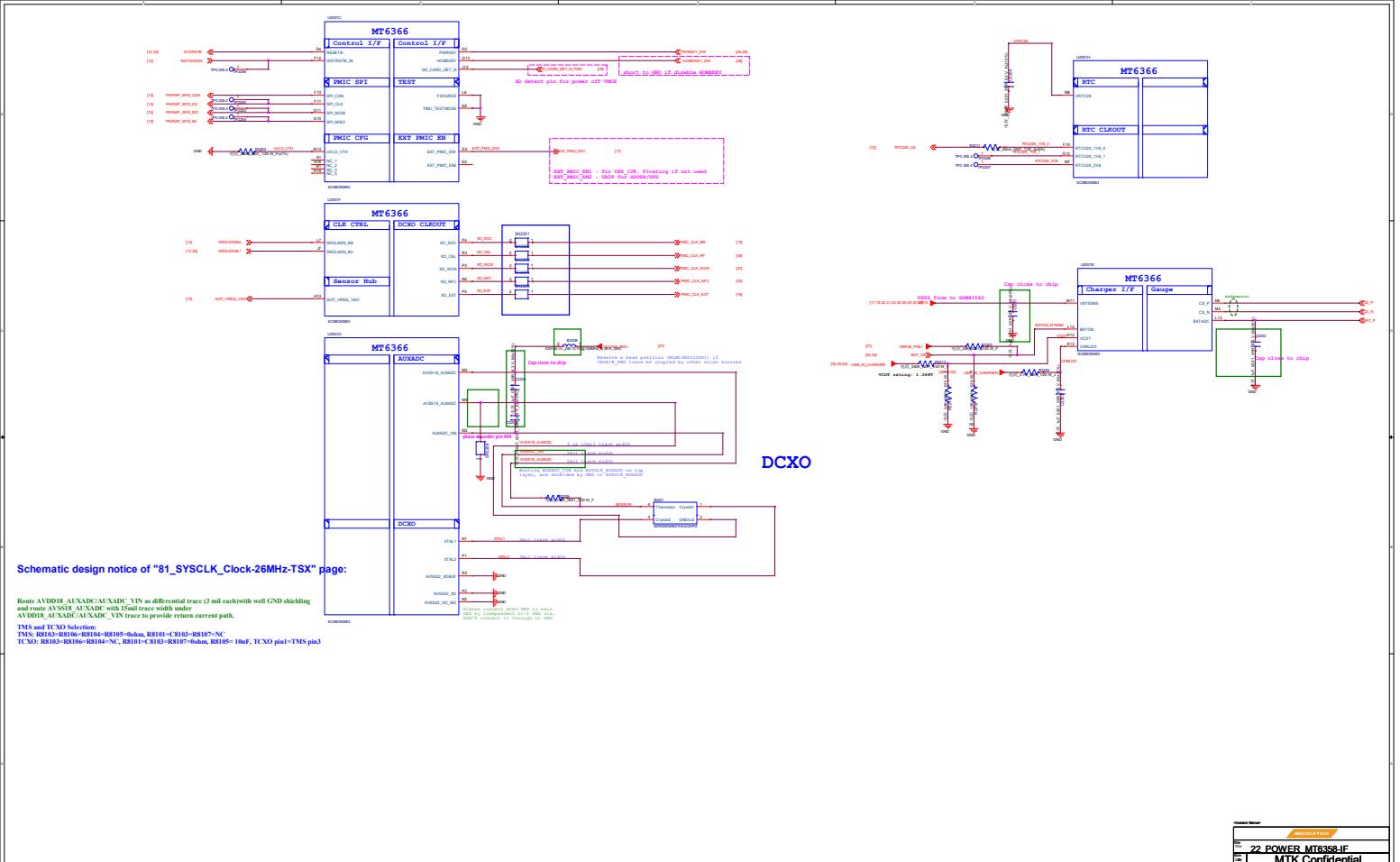


<Variant Name>		MEDIATEK
20_POWER_MT6358-Buck		
MTK Confidential		

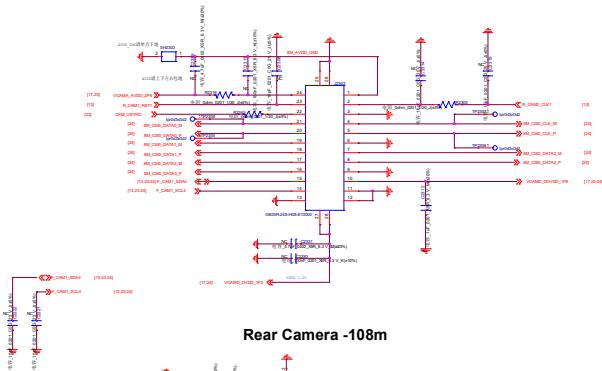
Date: Friday, May 27, 2022

Sheet 20 of 98



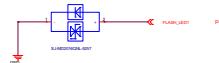


Rear Camera - Wide _8M

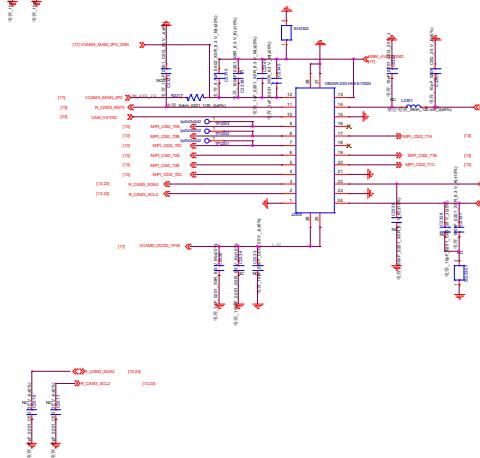


HQ11211049000:SJ

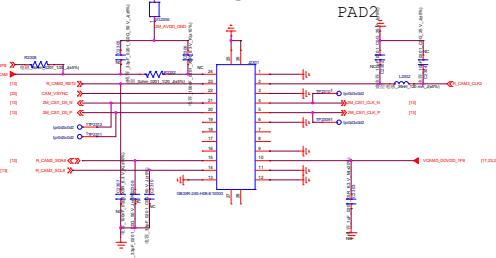
FLASH LED



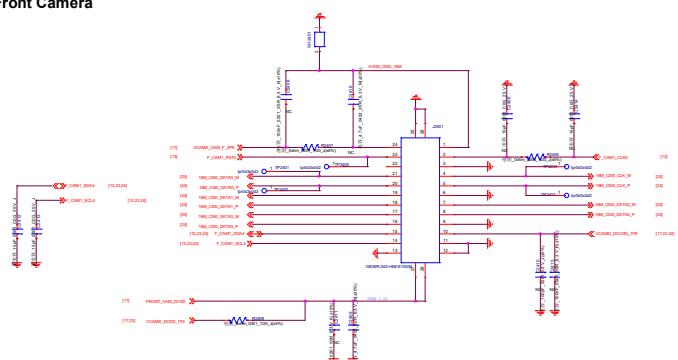
Rear Camera - 108m



2M Depth Camera



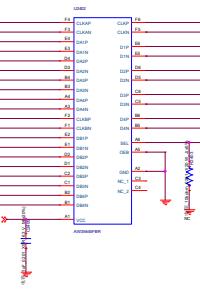
Front Camera



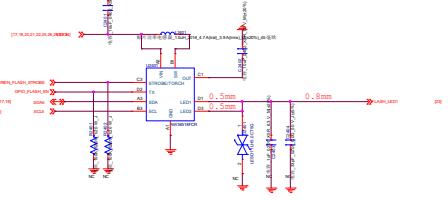
MIPI SWITCH:HQ11151900000二供

16M CAM

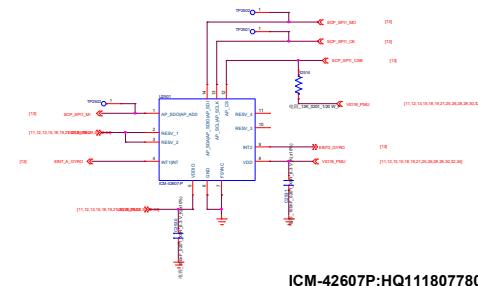
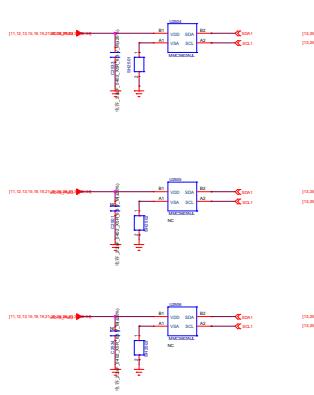
8M CAM



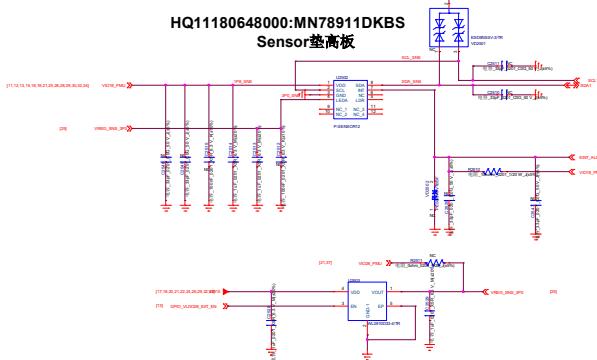
Flash LED 5V Boost



PRODUCTION
24PPI Camera StereoCAM
MTK Confidential
MTK Confidential © 2015 Mediatek Inc. All rights reserved.

M-Sensor

ICM-42607P:HQ11180778000

ALS + Proximity SensorHQ11180648000:MN78911DKBS
Sensor 基板

PRODUCTION
DS_Perisensor_Mem_Alsps
MTK Confidential

Schematic design notice of "77_PERI_SENSORS_MEMs_ALS/PS" page.

Note 77-1: [M sensor] Keep a minimum distance of 15mm from power ICs / PCB traces of more than 100mA / magnet component. Check HW design notice for more detail

Note 77-2: [A+G] For optimized GPS performance, please check HW design notice for Sensor selection guide

Note 77-3: [A+G] MUST use SPI for optimized sensor hub performance **DO NOT USE I2C**

Note 77-4: [A+G] Suggest choose sensor support FIFO watermark interrupt otherwise we cannot support Hi-sensor, daydream VR. And Sensor-location accuracy will become worse.

Note 77-5: [Baro] Reserve Baro sensor for LPPe feature (Must for North America Operator / NA SKU)

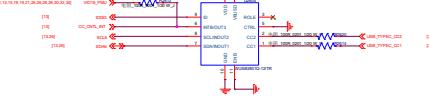
Note 77-6: DO NOT share Sensor hub I2C to other non-SCP device

Note 77-7: Interrupt pin of MEMS sensor must be assign to ball EINT12_0

VBUS	REGN 电压	QON 电压
9V	6V	5.8V
5V	4.8V	4.3V

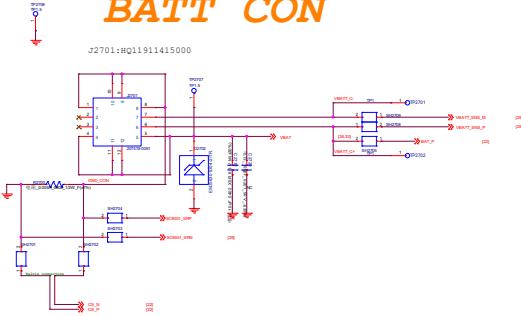
Note 20-1:		
I2C Slave Address / Write / Read (7-bit mode)		
SGM41542 0x0B Read:0xD7 / Write:0xD6		
BQ25900H 0x0A Read:0xD9/ Write:0xD4		

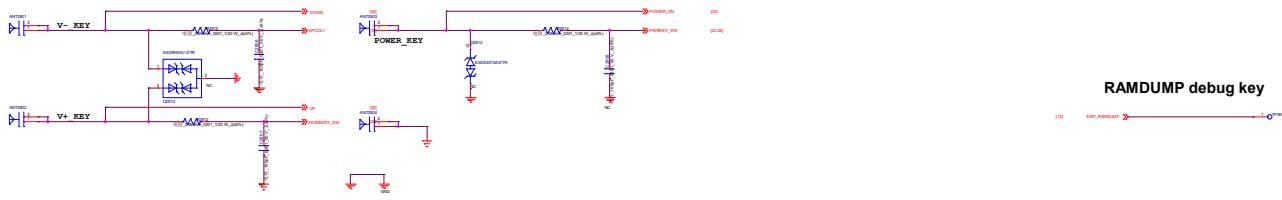
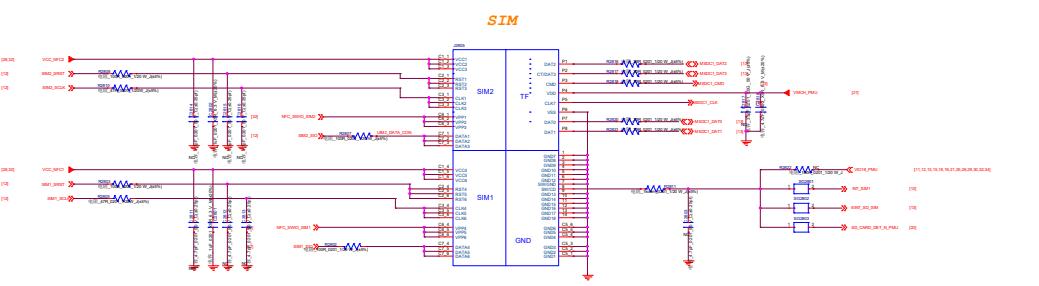
CC logic



Note 17-4:		
I2C Slave Address / Write / Read (7-bit mode)		
SGM7220 0x47 Read:0x0F / Write:0x0E		
FUSB3801ATMX 0x21 Read:0x43 / Write:0x42		

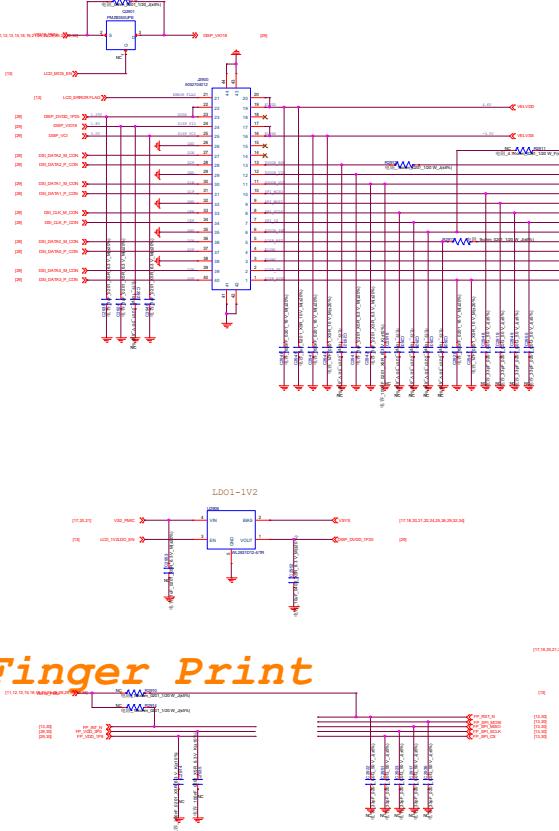
BATT CON



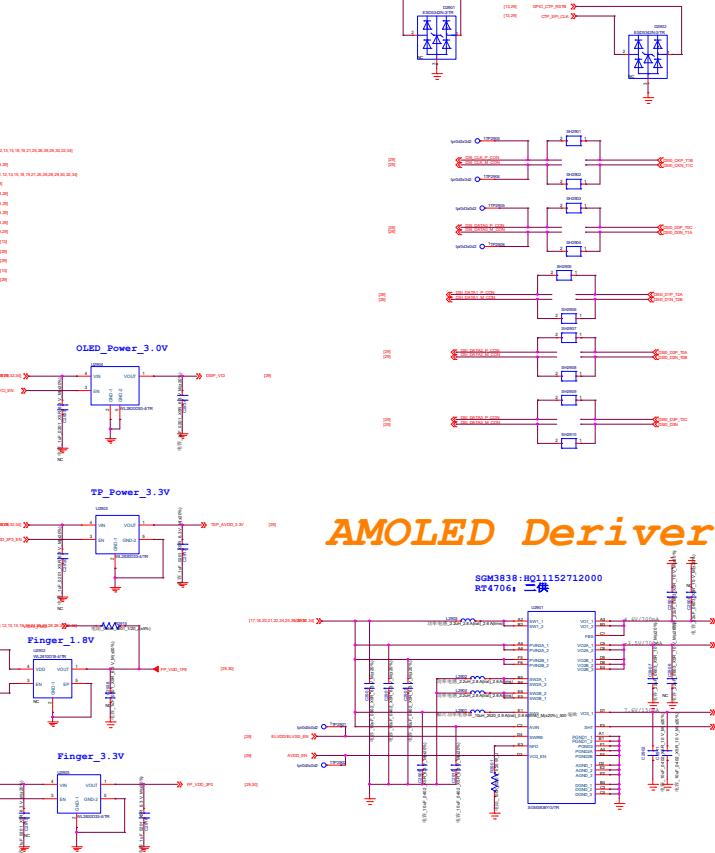


Schematic design notice of "67_PERI_LCD" page.
Note1: D-PHY Application, D2 and D3 need swap
Note2: CD_PHY_SEL, 0=D-PHY, 1=C-PHY
Note3: EN_EXT_VDD, 0=Inter VDD, 1=Ext VDD

Main LCM



Finger Print



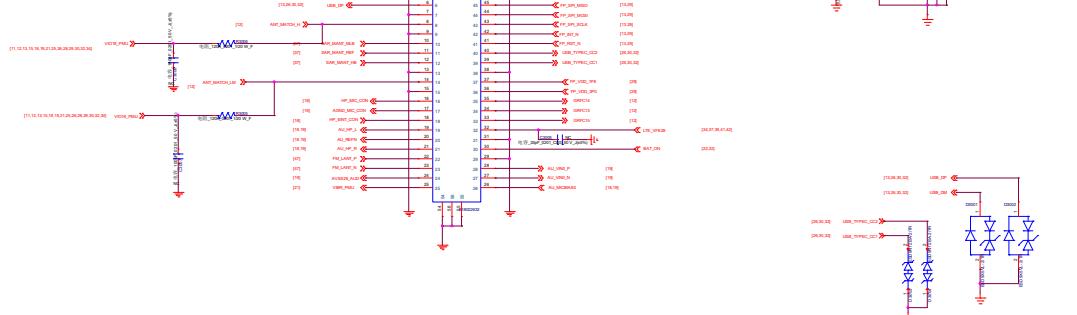
AMOLED Deriver

PRODUCTION
Rev. 29 PERI_LCD
MEDIATEK Confidential

OVP set 13.2V = 1.2 * (1+R2707/R2708)

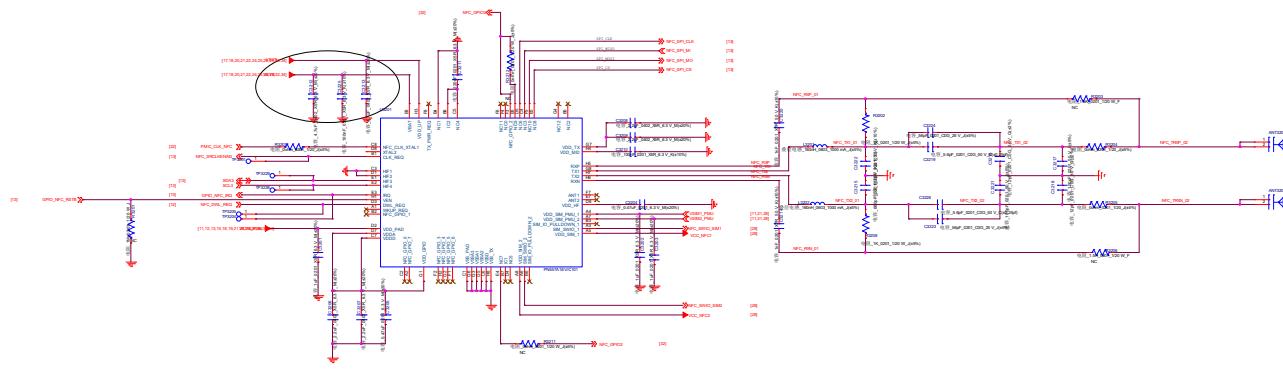
KEY_LINK_BATT

link: HQ11911337000



Schematic design notice of "71_PERI_USB_DTB" page.

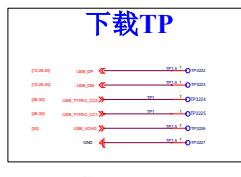
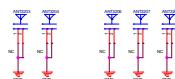
Note 71-1: For better ESD & surge performance we need choose suitable device for system protection.
Please refer to the latest version of [Surge device selection guide] provided by MTK.



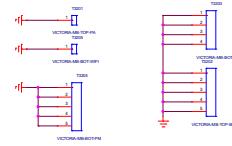
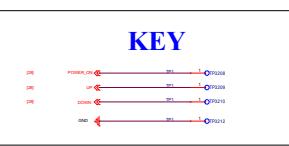
UART

Shield

预留接地弹片



KEY

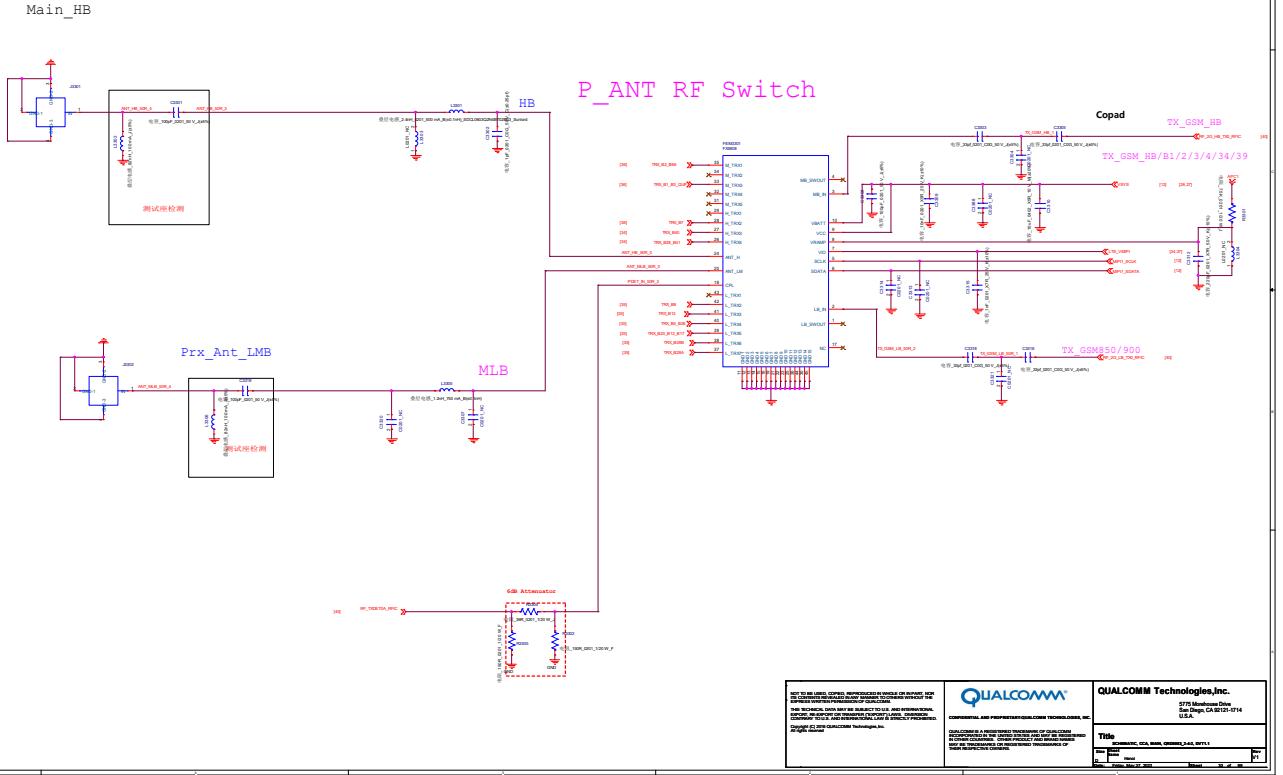


Schematic design notice of "90_DEBUG_IO" page.

Note 90-1: UART Default support : UART0.
JTAG Default support : AP_JTAG/MD_IO_JTAG

PRODUCTION
No. 32_DEBUG_IO
MTK Confidential

PRIMARY_ANTEENNA



5

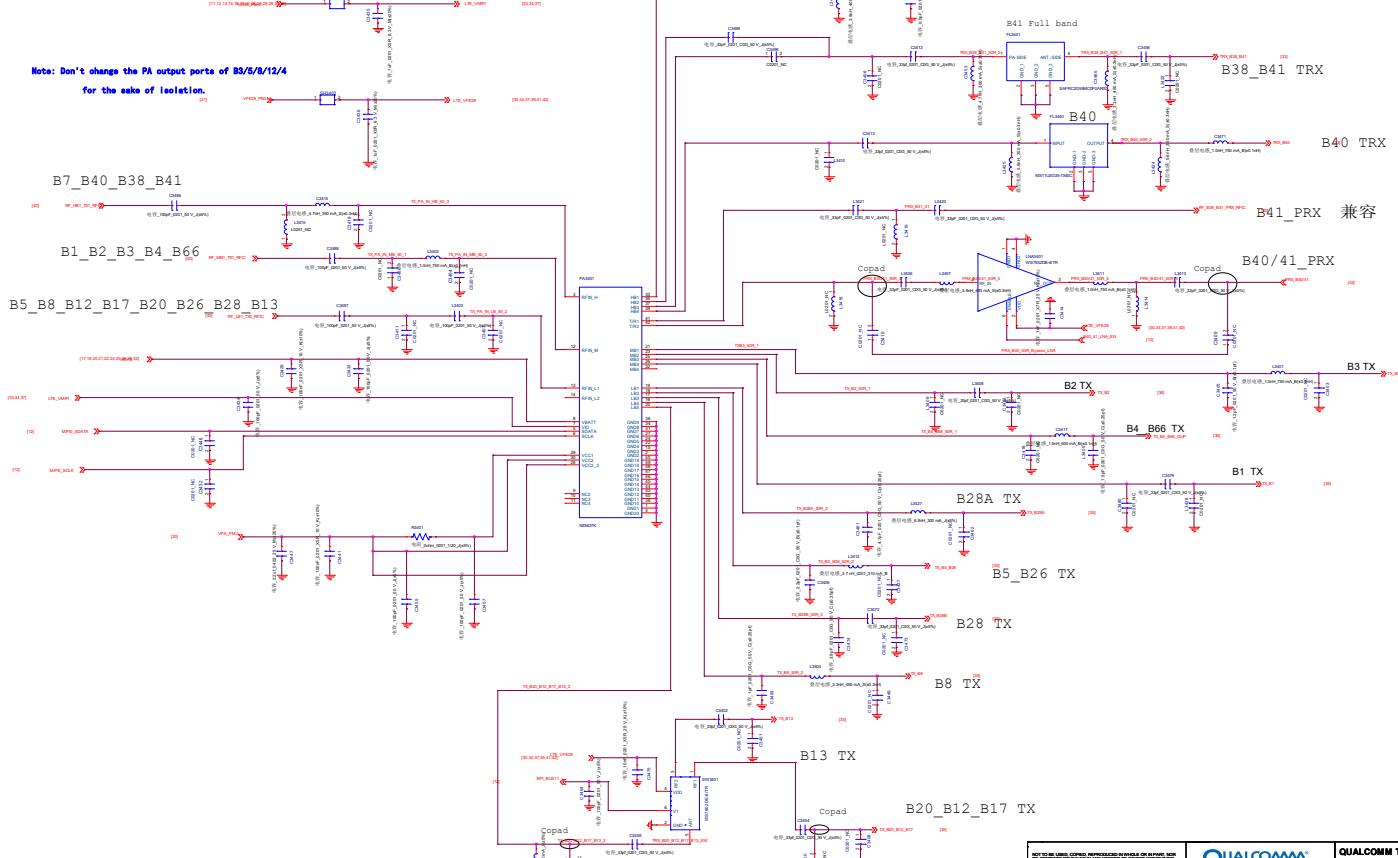
4

3

2

1

Note: Don't change the PA output ports of B3/5/6/12/4
for the sake of isolation.



PA NTC电阻在基带15页[RT1501]，摆件时需放到PA处

5

4

3

2

1

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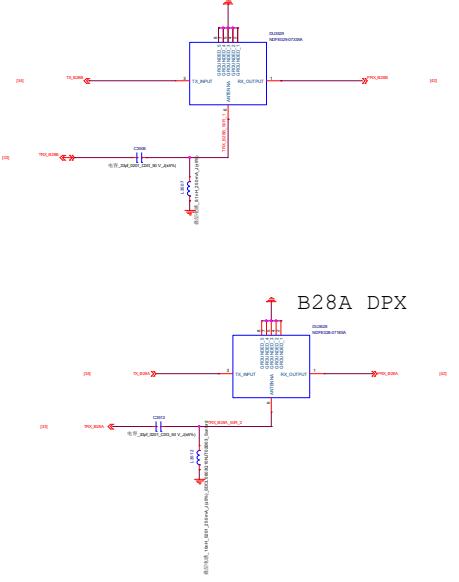
Title: **ROUTING_CCA_RAIL_ODEME_2A.0.DYL1**

Page: **1**

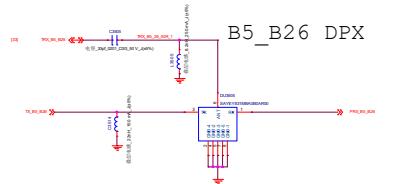
Ver: **1**



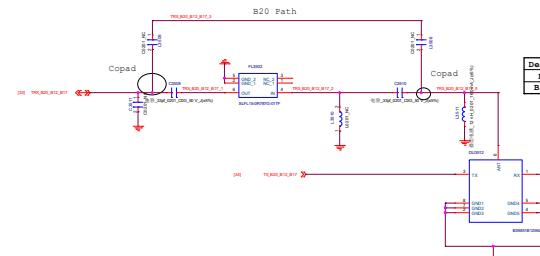
B28B DPX



B5_B26 DPX



B20 Path



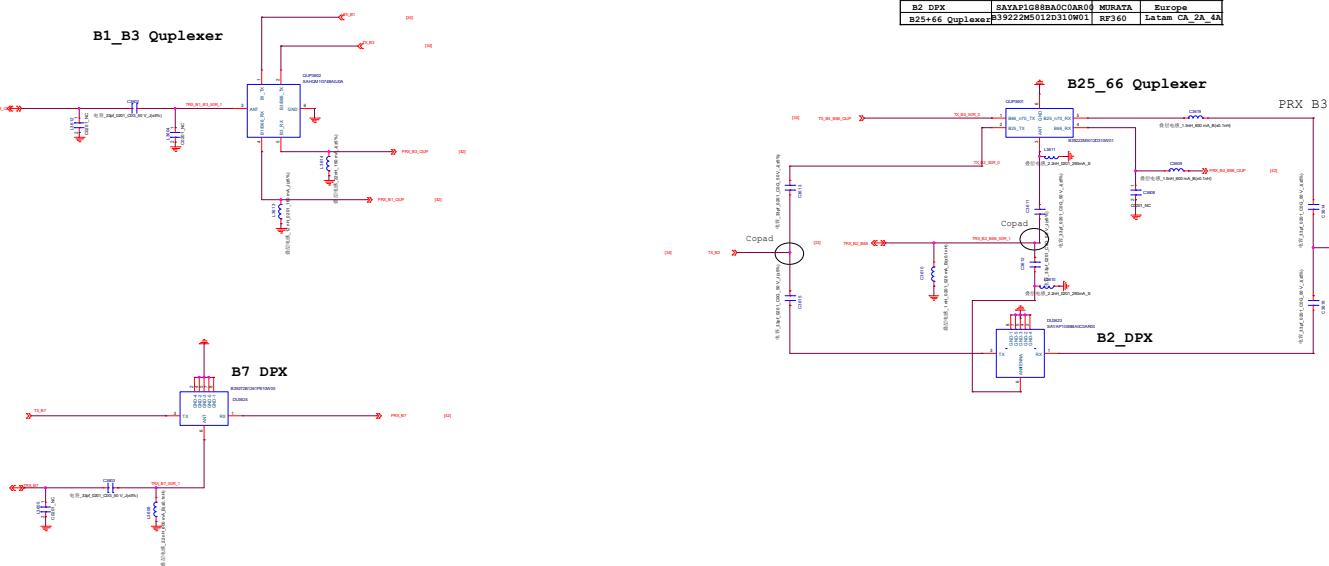
B20/B12_17 DPX

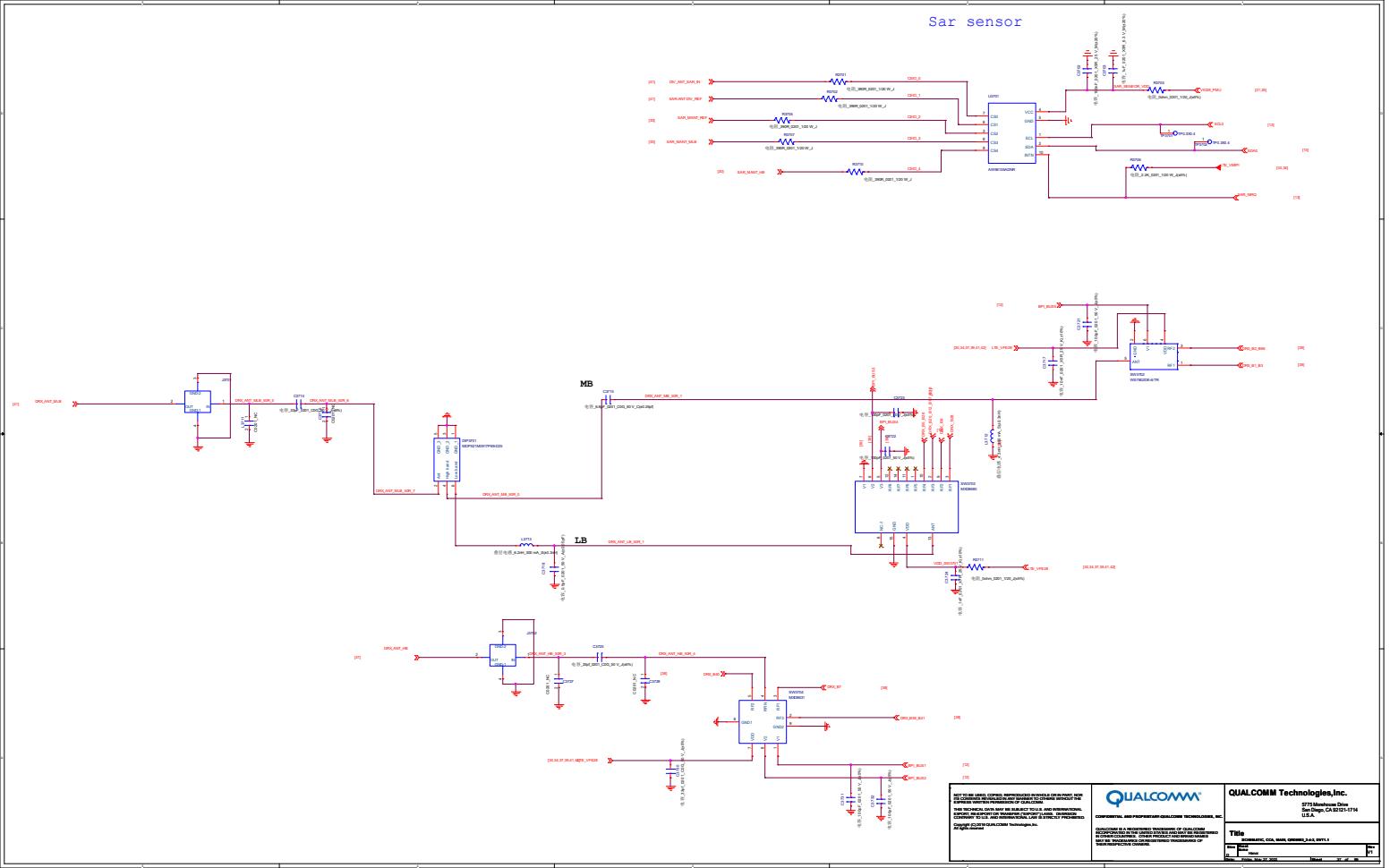
Description	型号/型号	Vendor	EGO
B20 DPX	B12_17 / SQ114T0002000	RF360	Europe+IPM
B12_17 DPX	B12_17 / SQ114T01014000	RF360	LATAM&Brazil

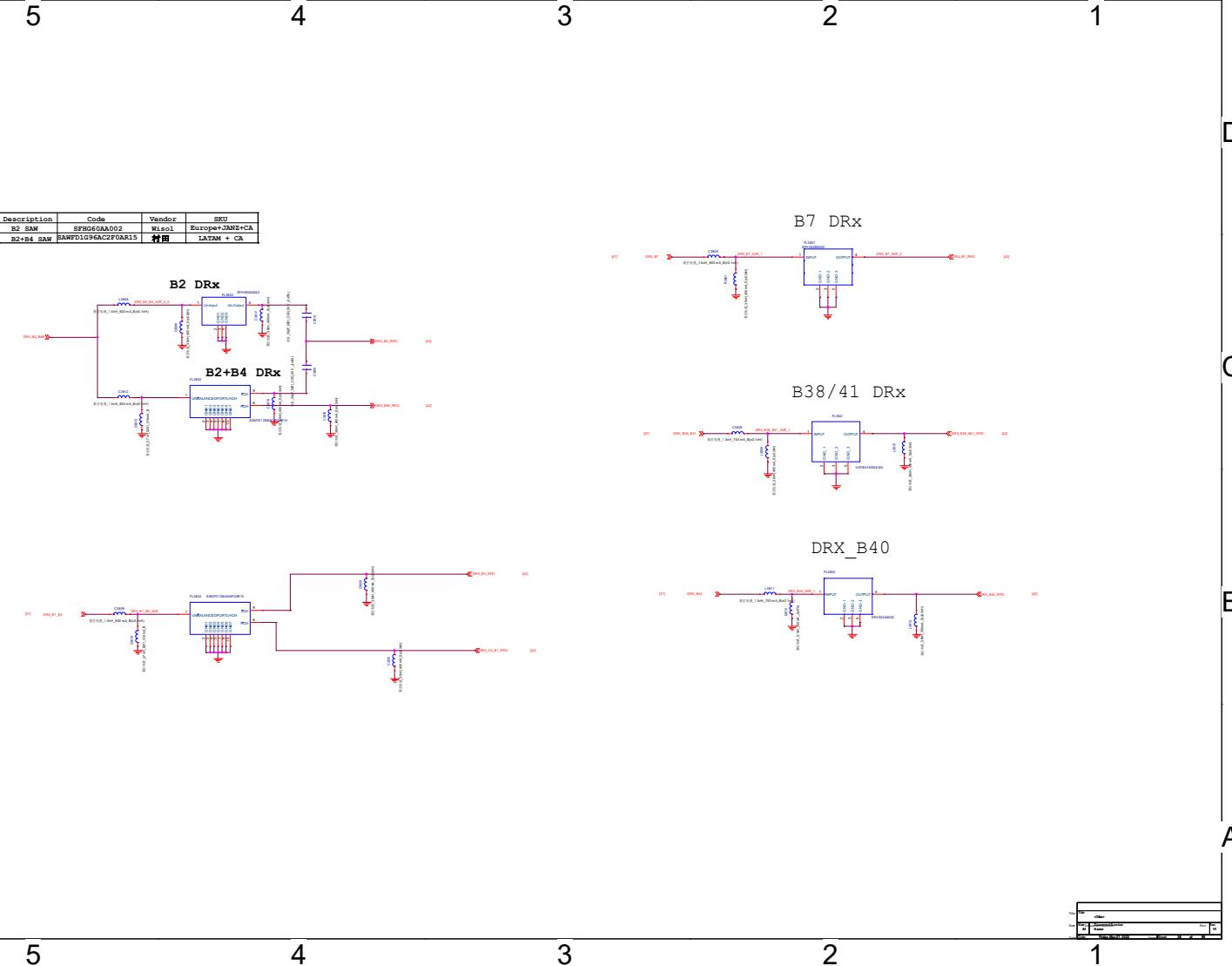


QPX3601

Description	Code	Vendor	SKU
B2_DPX	SAYAPIG88BAOCDA00	MURATA	Europe
B25+66 Duplexer	B3922M5012D310W01	RF360	Latam CA 2A_4A

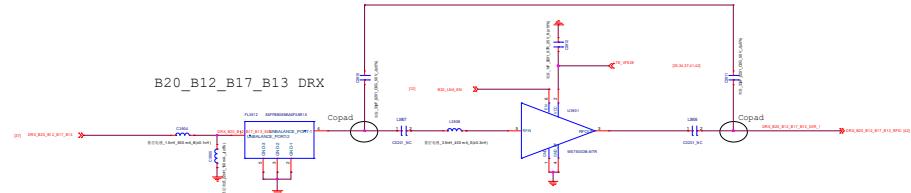






Description	Code	Vendor	SKU
B20 DRX	SAFT800MA00FOAIX	MORATA	Europe+JAN2+CA
B12_13 DRX	SAFT874MA0GFOA	MORATA	SATAM + CA

B20_B12_B17_B13 DRX



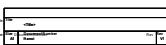
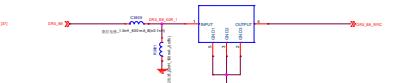
B28_DRX

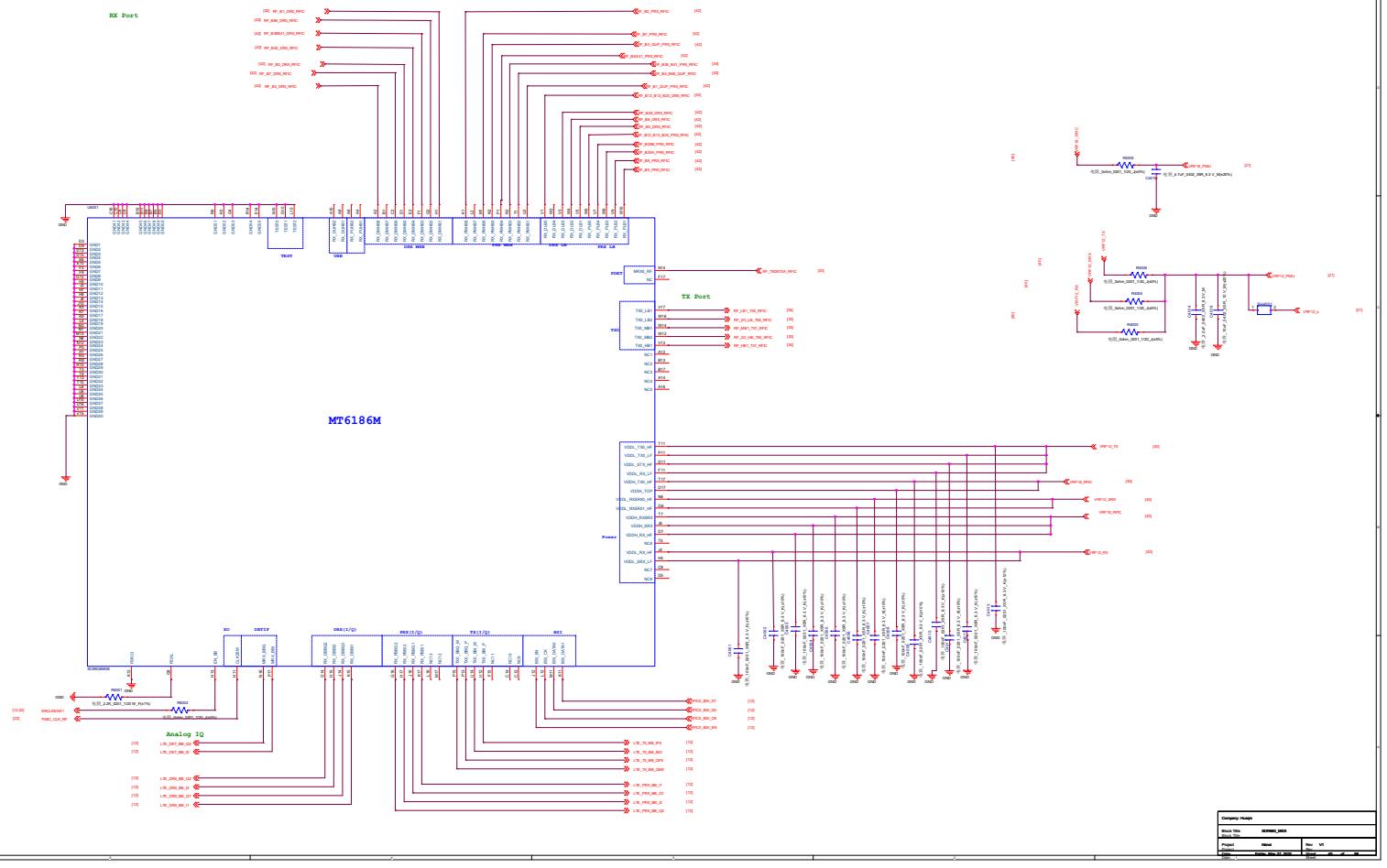


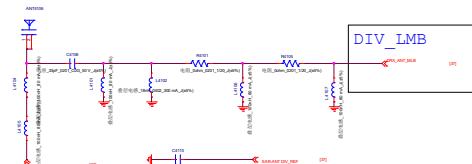
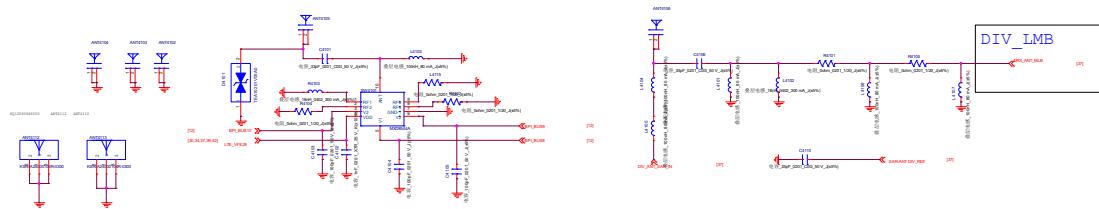
B5_B26 DRX



B8_DRX

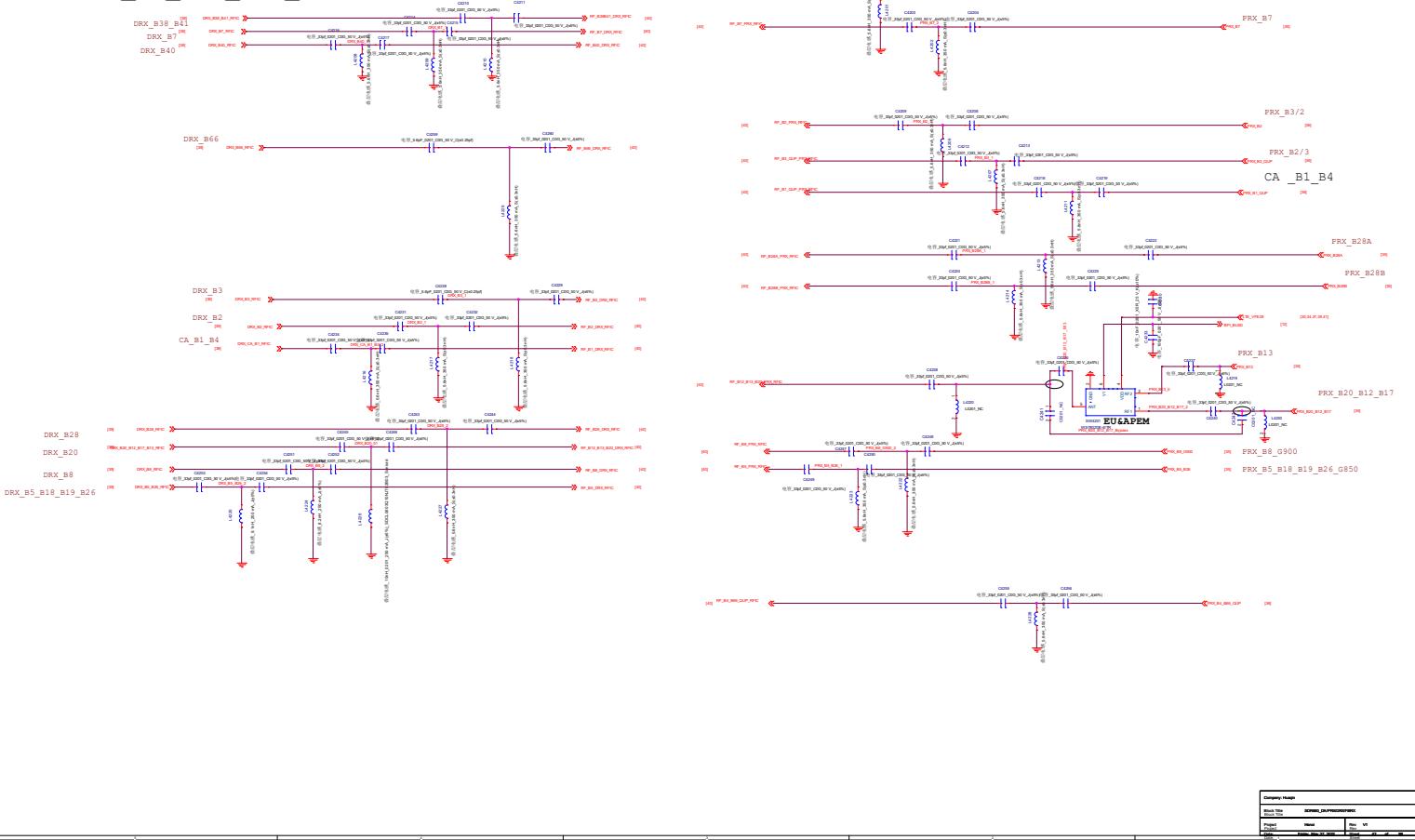






Company Name:	
Print Type:	Normal Print
Print Date:	2024-01-15 10:00:00
Print Time:	10:00:00
Printed By:	John Doe

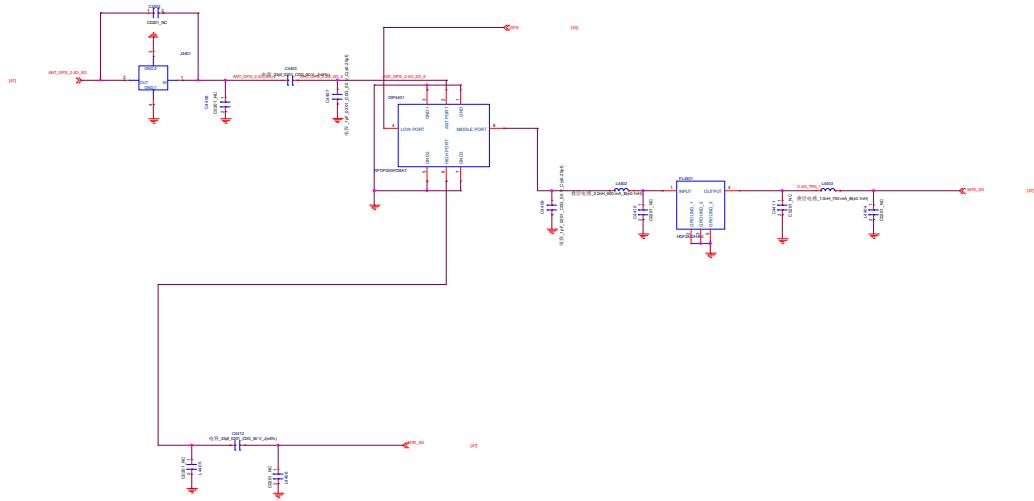
MT6186_DA_PRX_DRX_FBRX



Company Name:	
Print Type	Normal (Recommended)
Print Scale	100%
Print Date	2023-08-10 10:45:50

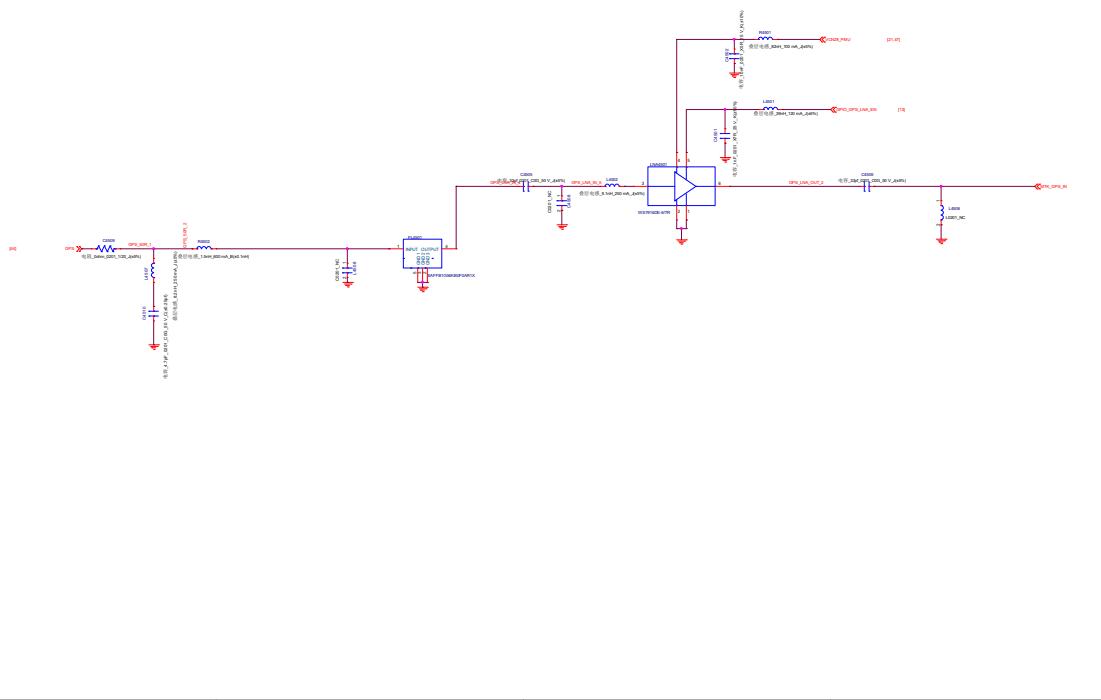


WIFI 2.4G_BT_5G_GPS



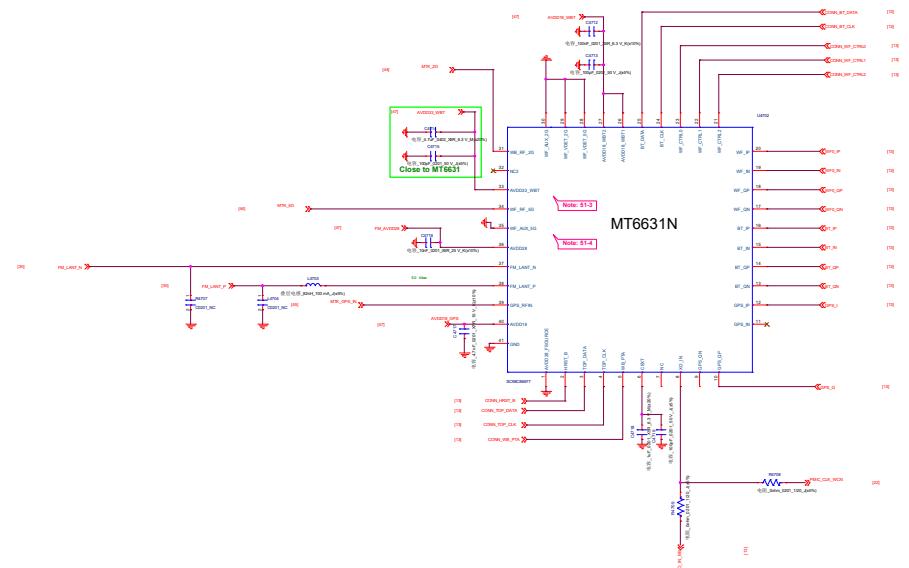
Comments	
None	None

GPS



Component Name	
Supply Volt	Vcc
Power	Watt
Current	mA

Company Name
State Tax
Print
Print


Schematic design notice of "51_CONNECTIVITY_CONSYS_MT6631"

Note 51-1: For R5015 size, please select 0402 size or larger one

Note 51-2: Please refer to MT6765 Basestation design notice for VCN33 LDO selection guide

Note 51-3: If WiFi 5G not support, connect pin 34(WF_RF_5G) to GND

Note 51-4: Pin 36 (AVDD29_FM) must be connected to VCN28 even if FM not support

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