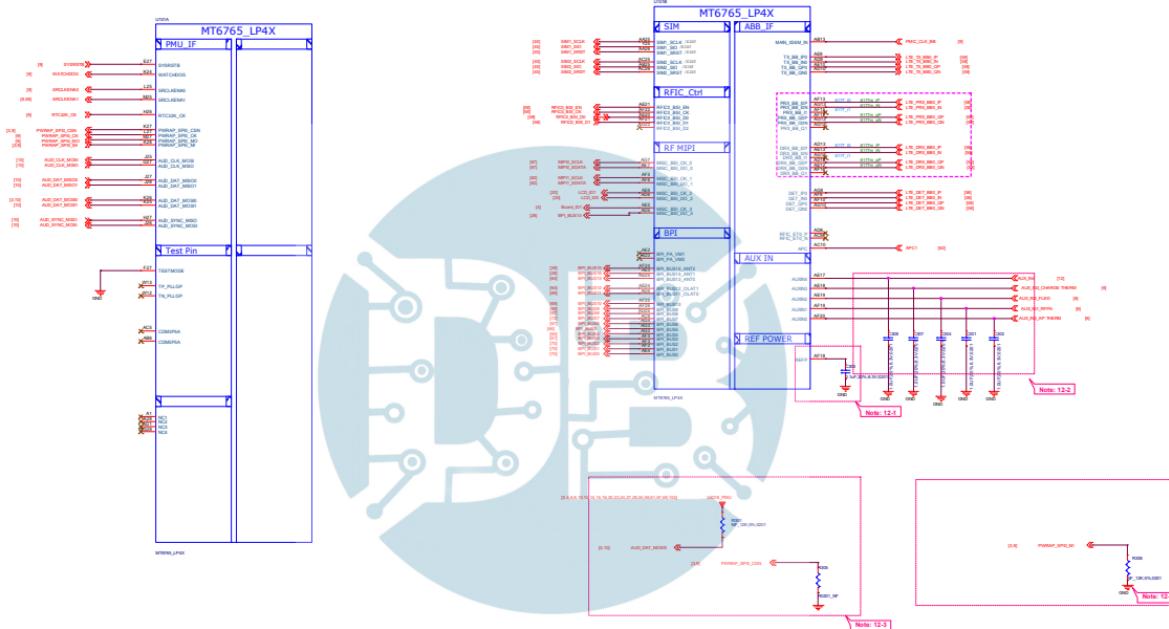


Schematic design notice of "11_BB_POWER_IO" page.

Note 11-1: C214 closed DVD018_MSDC0 150mH

Note 11-2: C215 closed DVD028_MSDC1 150mH

Note 11-3: C218 closed DVD018_MSDC1 150mH



Schematic design notice of "12_BB_1" page.

Note 12-1: The de-coupling cap, for REFP (AF18 ball) have to be placed as close to B8 as possible.

Note 12-2: To shield a C_{dec} capacitor in the AUXIN ADC input to prevent noise coupling, it should be placed as close to B8 as possible. Connect the unused AUX ADC input to the JTAG pin as shown.

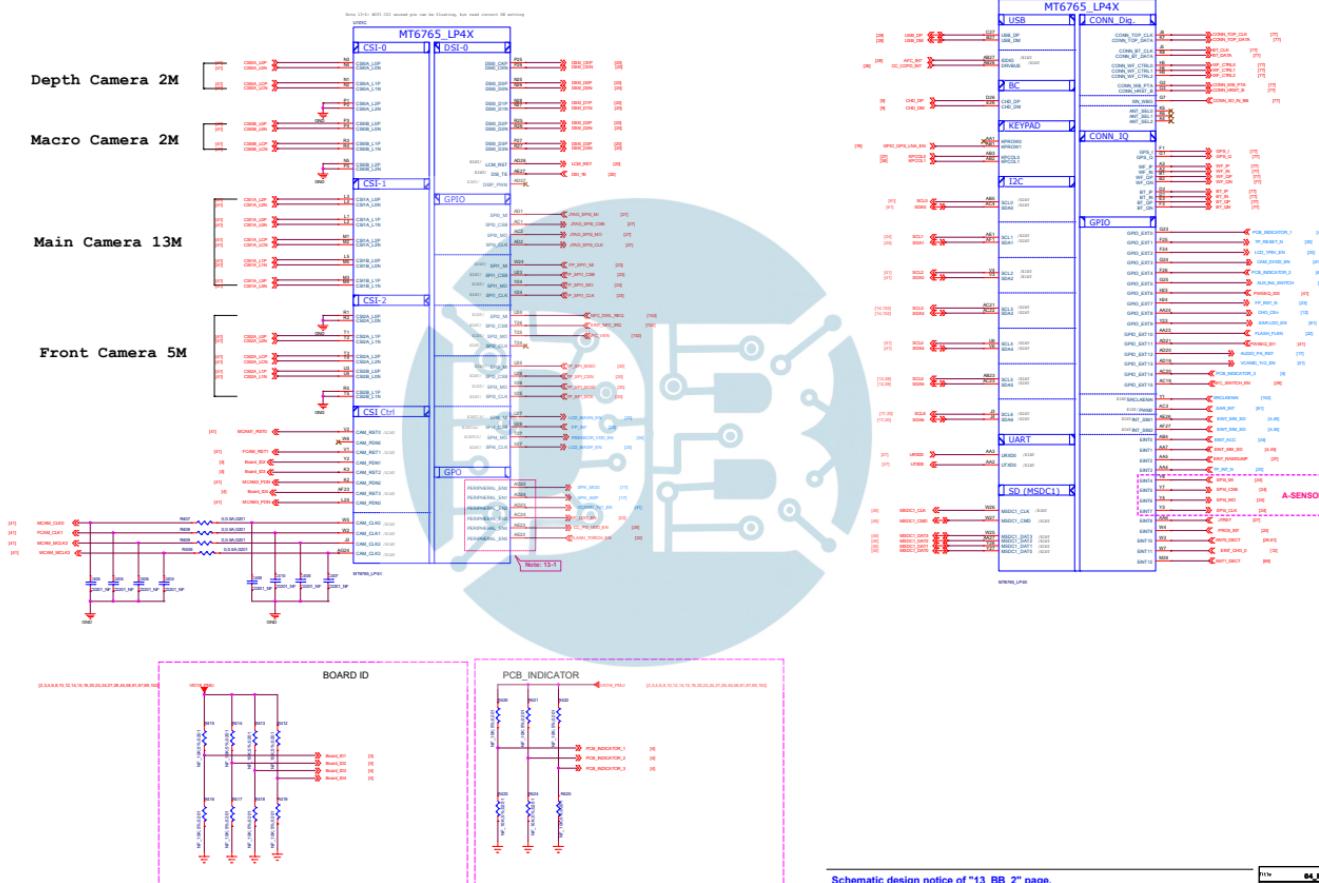
Note 12-3: "PWRAP_SPIO_CSN" and "AUD_DAT_MOSB" are bootstrap pins to select which interface will be the JTAG pin as shown.

JTAG Function			
PWRAP_SPIO_CSN	AUD_DAT_MOSB	AP_JTAG	MD_JTAG
default(HI)	HI	HI	HI
HI	HI	SPD4_EINT5	SPD4_SP3
LO	LO	SPD4_EINT6	N/A
LO	HI	SPD4_EINT7	N/A
LO	HI	MSDC1	N/A

Note 12-4: PWRAP_SPIO_M1 / PWRAP_SPIO_MO is DDR type feature in bootstrap

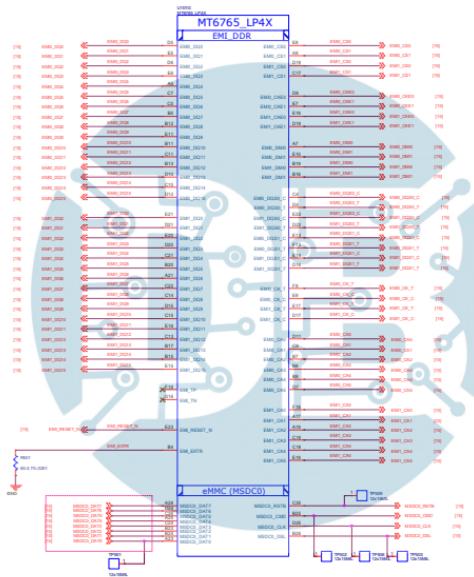
PWRAP_SPIO_M1	PWRAP_SPIO_MO	Bootstrap interface		
default(HI)	default(HI)	set default		
HI	HI	UD00R3	N/A	MSDC0 pin max
LO	HI	UD00R4	N/A	UD00R2 Ref SOC
HI	LO	UD00RAX	follow LP4KLM Ref SOC	
LO	LO	UD00RA4	follow LP4NLH4 Ref SOC	
HI	LO	UD00R4	N/A	

Note 12-5: Please set unused IO pins in NC



Schematic design notice of "13_BB_2" page.

Note 13-1: The enable pin of acoustic or optoelectronic devices (e.g. SPK AMP/Backlight/Charger OCP/DVP) suggest to use Peripheral_EN[0:5]. If use other GPIOs as enable pin, suggest to reserve 0201 NC to GND

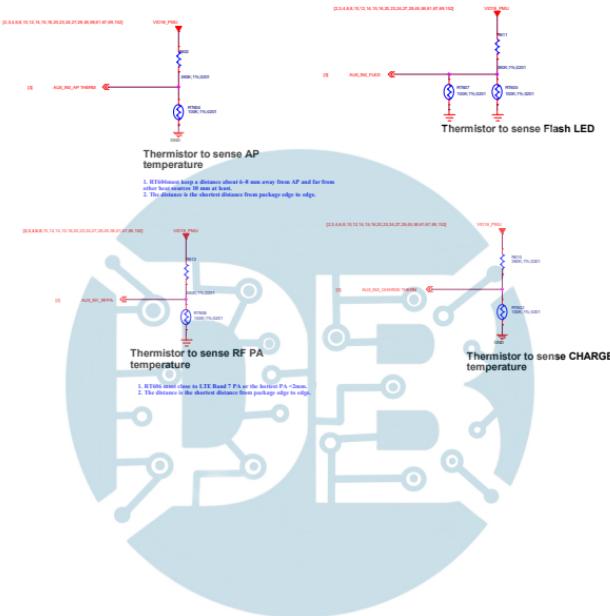


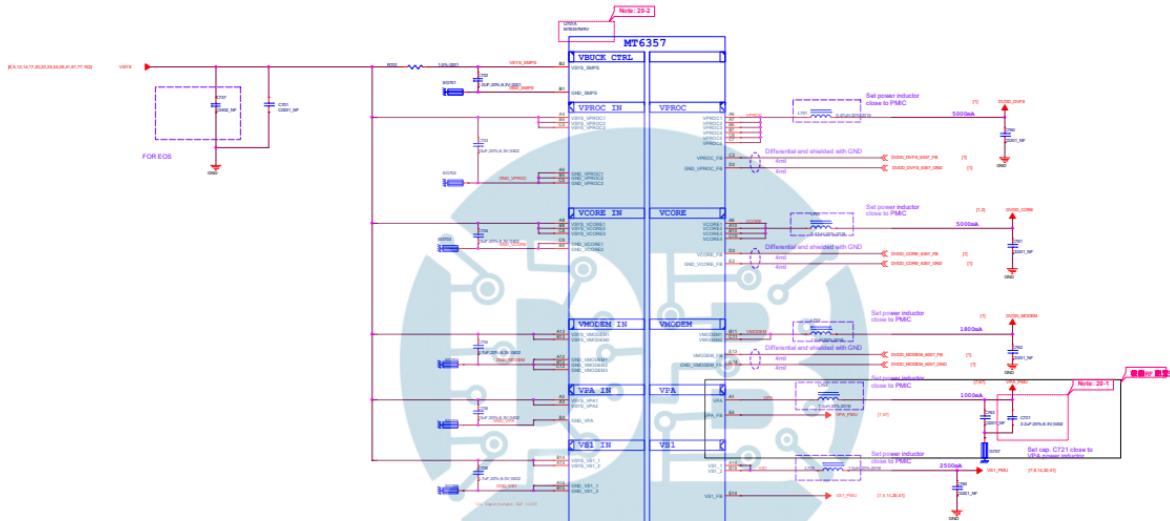
Schematic design notice of "14_BB_3" page.

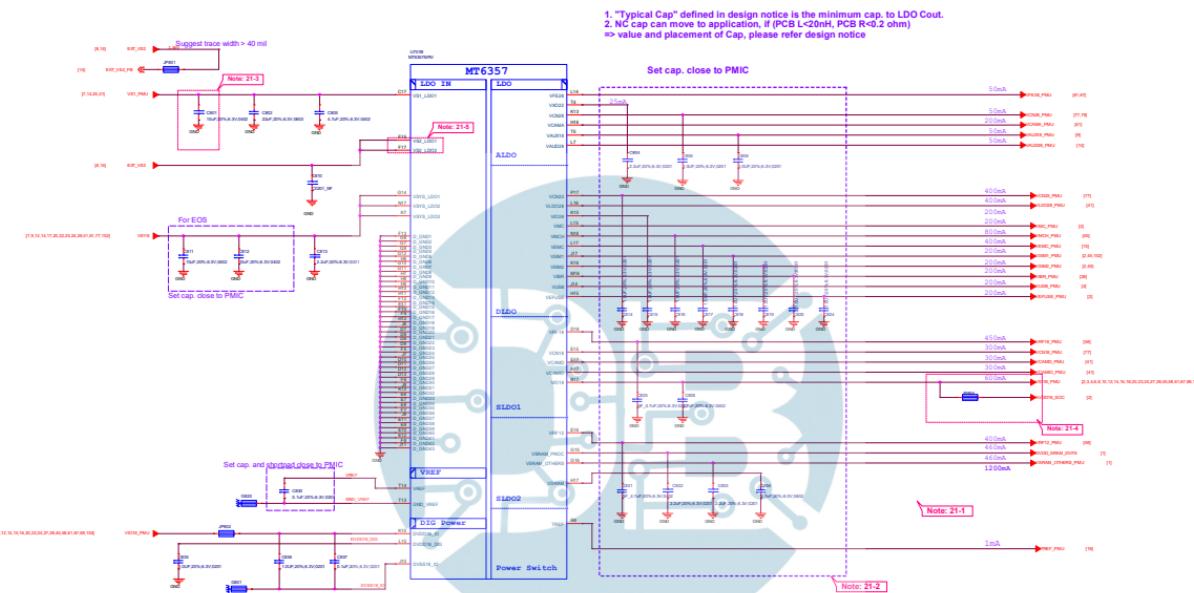
Note 14-1: R501 please select 34.8 ohm (1%) resistor

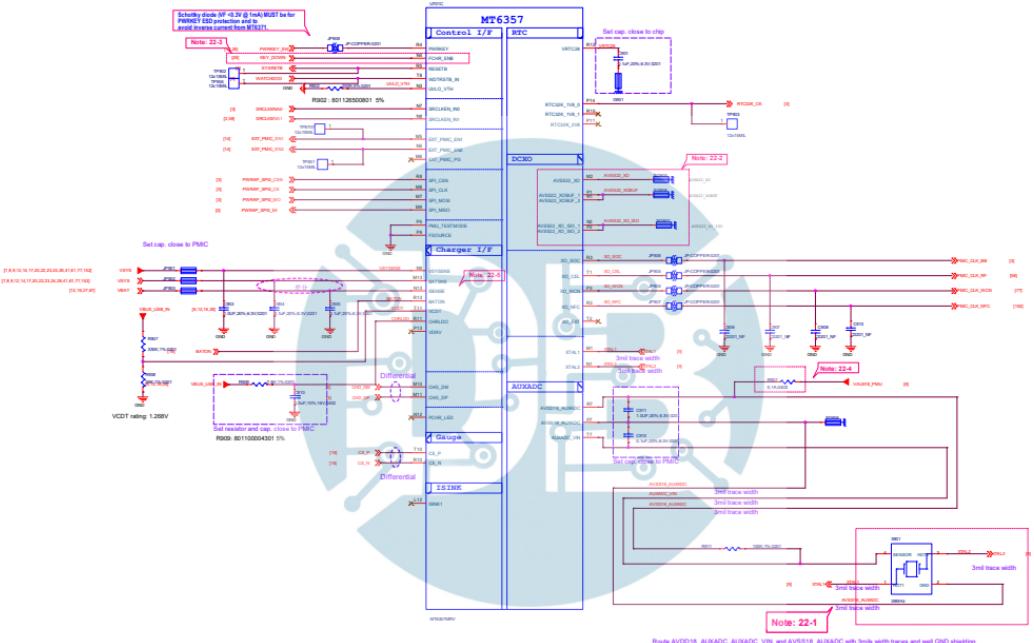
Note 14-2: Please check eMCP LP3 and eMCP LP4X pin mux

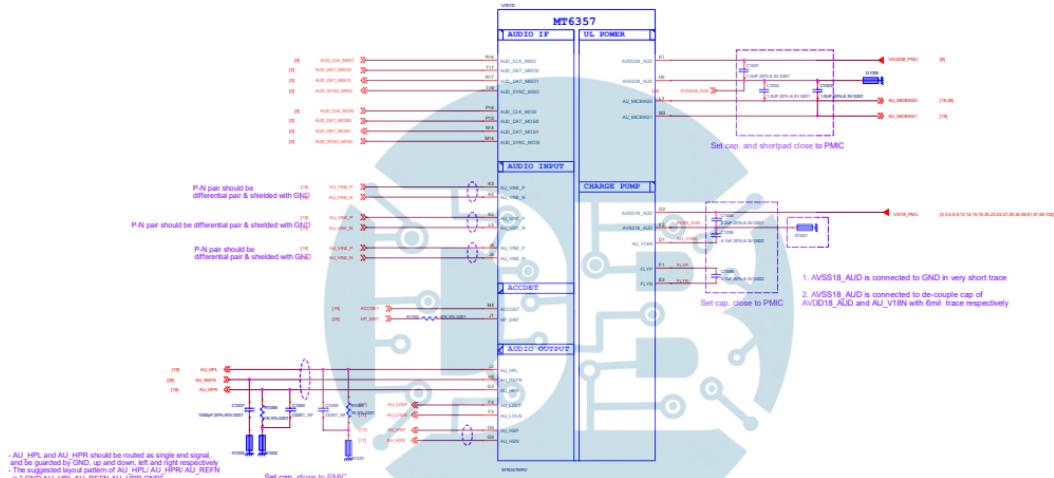
The pull up resistor need to be 1% accuracy NTC=100K

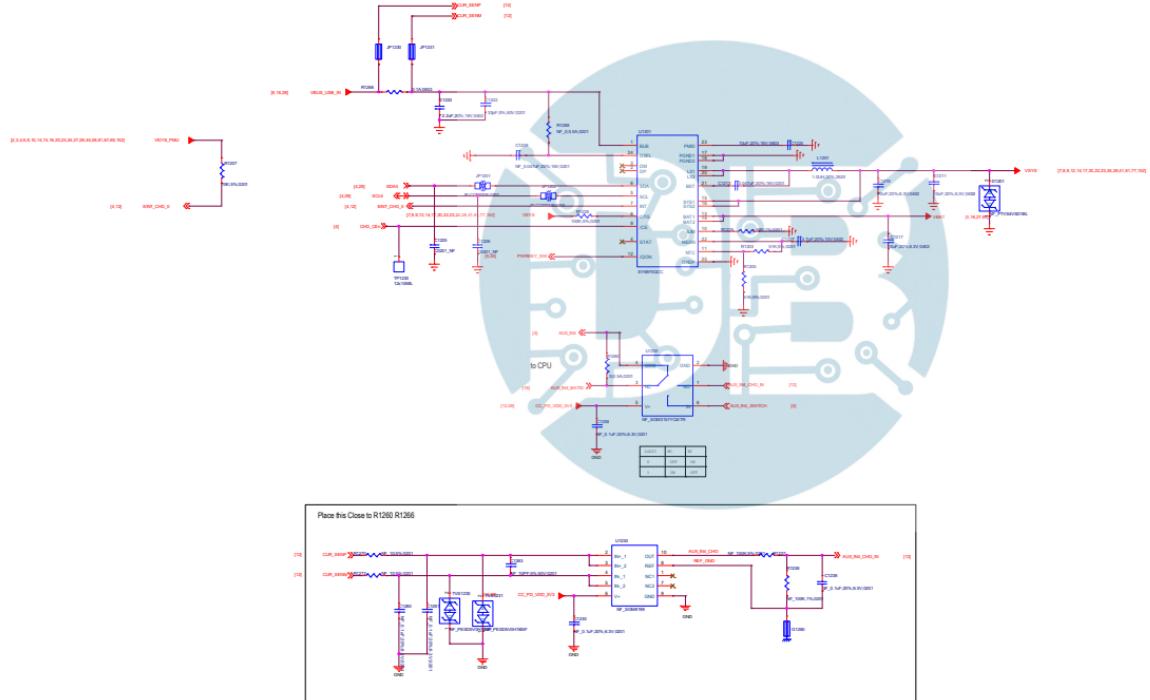


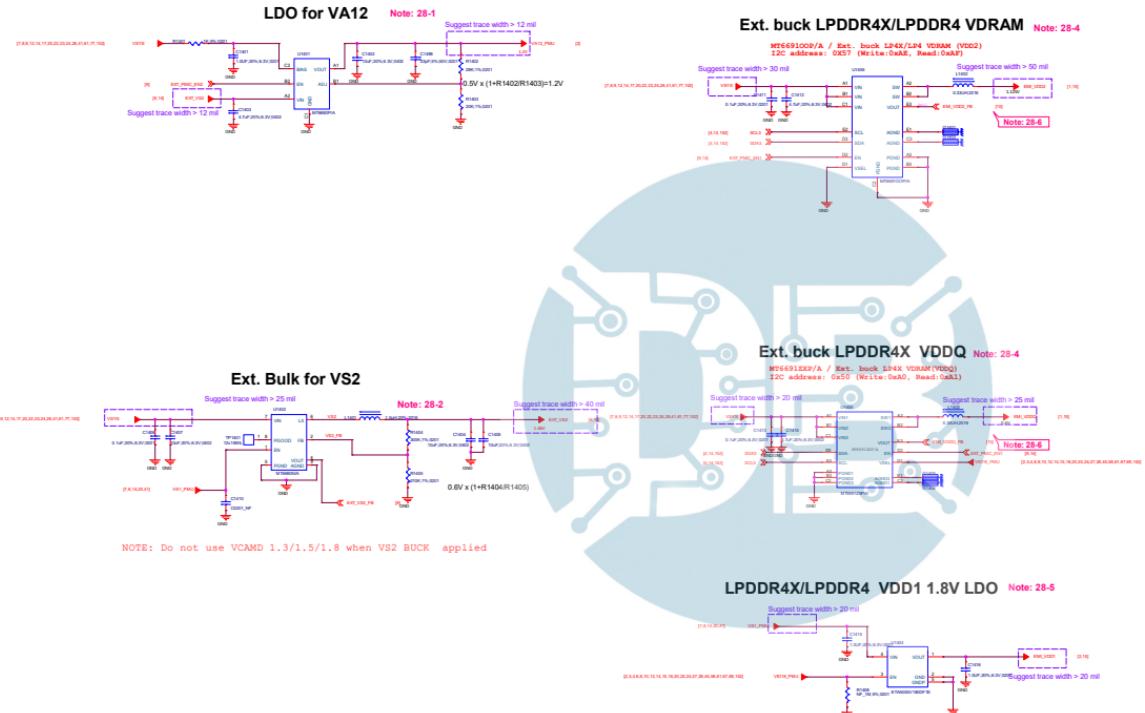












Schematic design notice of "28_POWER_ThirdParty-Power"

Note 28-1: VA12 Layout placement please close to AP

Note 28-2: VS2 Buck Layout placement please close to PMC MT8357

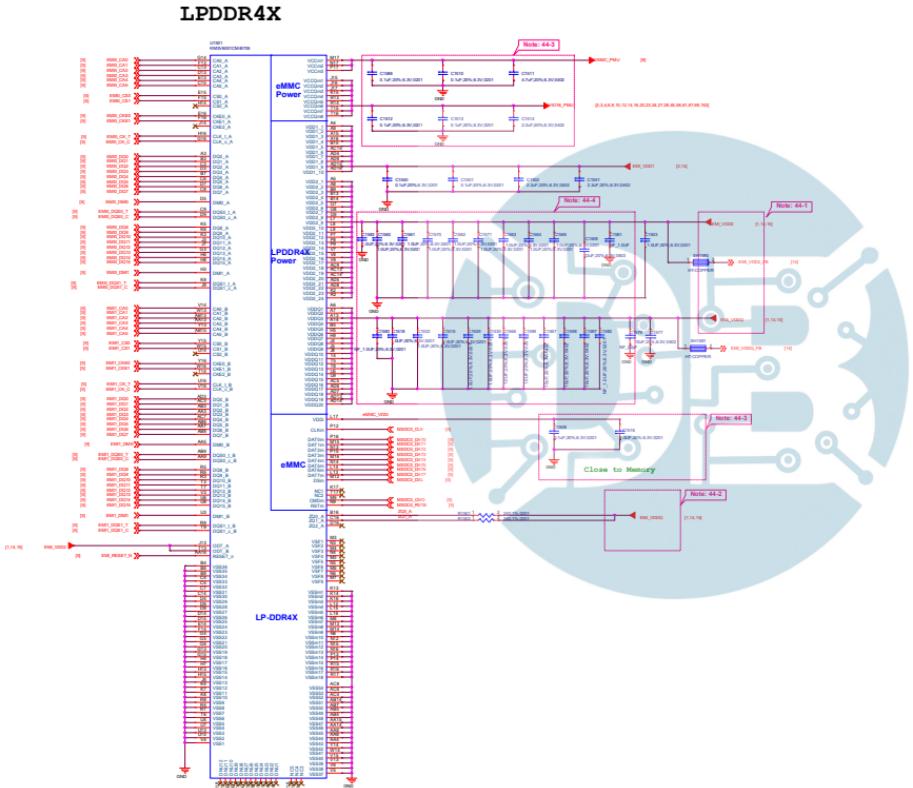
Note 28-3: VCN33 LDO Layout placement please close to MT8631

Note 28-4: 1. MT88910CPA Buck Layout Placement please close to LP40/UL4
2. MT8891ZCPA Buck Layout Placement please close to LP4X

3. If DRAM Application is LPDDR4, MT8891ZCPA INC

Note 28-5: U2810 LDO Layout Placement Please close to LPDDR4X/LPDDR4 VDD1 power ball

Note 28-6: For EMI_VDD2_FB and EMI_VDD3_FB, please follow MMD rule



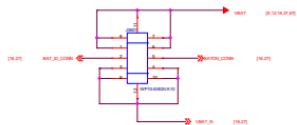
Schematic design notice of "44_Memory_eMMC_LPDDR4X_LPDDR4"

- Note 44-1: Please refer to power supply related page select output voltage property for LP4X/LP4.
- Note 44-2: DRAM ZQx resistor = 240ohm (1%) that must be connected to VDDQ.
- Note 44-3: Please refer to eMCP vendor's datasheet or MTK common design notice to get the recommendation bypass cap. value for VCC/VCCQ/VDDI power domains of eMMC.
- Note 44-4: VDD2 VDD0 decoupling cap: closed to DRAM ball. For other cap for PMIC [-10uF, at PMIC page]: please also refer to MMD and layout guide for placement.

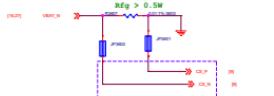
Note 44-5: Please check MT6765, MT6762 and MT6761's capacitor value.



Battery Connector

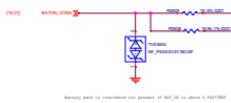


Guage Resistor



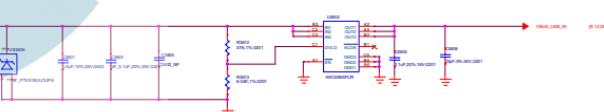
VBUS OVP

Battery NTC



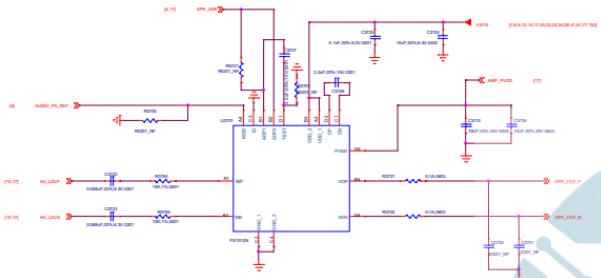
Battery ID

ADC 0.05-1.45 with 0.3 gap



Surge VBUS2: ±100V with Overvoltage Protection up to 29V DC
Vovp=10.5V when R3612=47K R3613=6.04K
Vovp=1.2*(1+ R3612/ R3613)

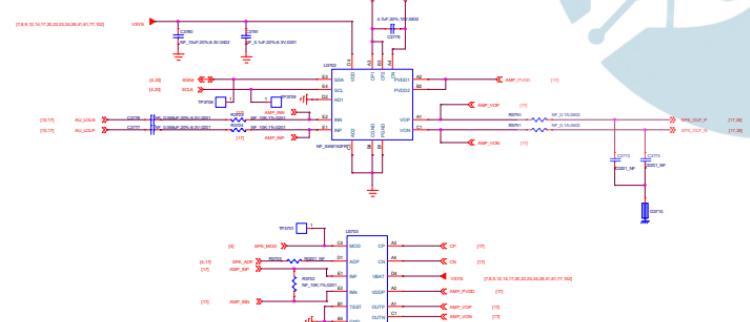
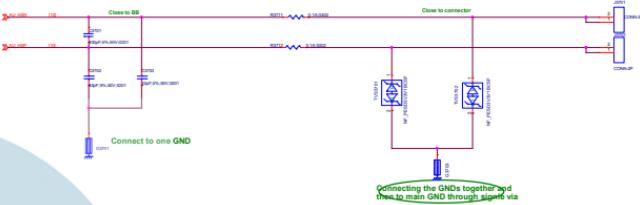
Audio PA-Selection



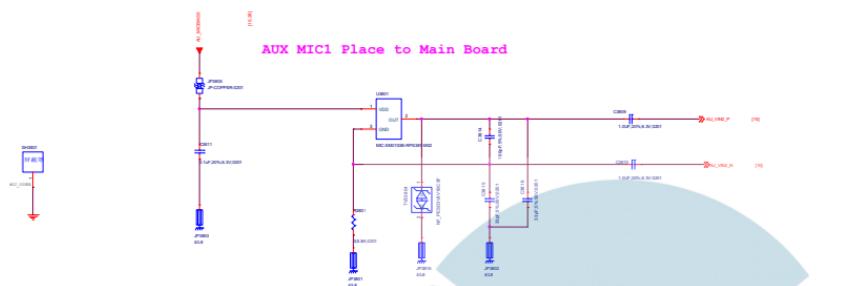
For FS1512N, R3741=0ohm, C3727=NC, R3701=0ohm

For SIA8102A & AW87318L, R3741=NC, C3727=2.2uF, R3701=NC.

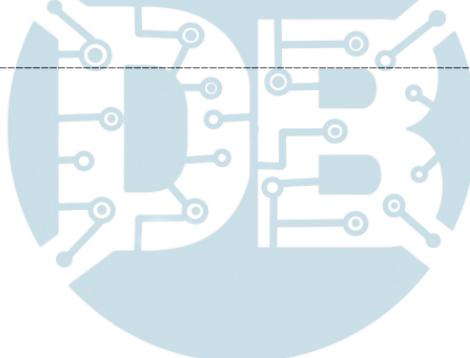
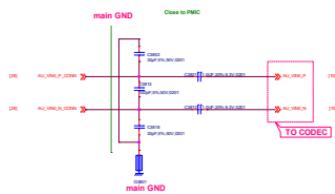
Receiver



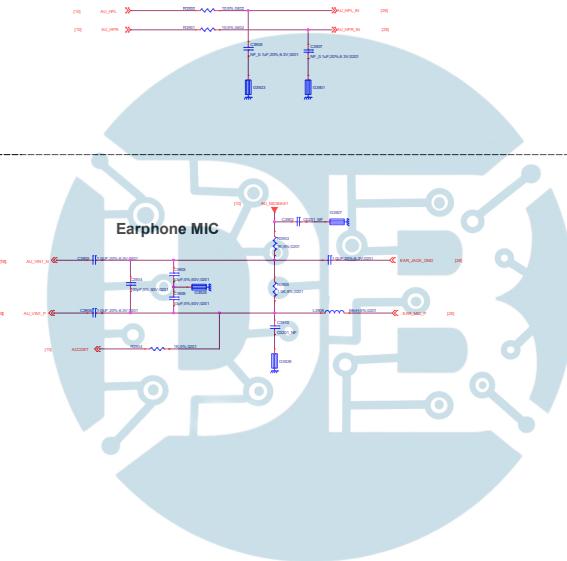
AUX MIC



MAIN MIC



Earphone L/R



114	38_Earphone	REV. 00
DOCUMENT NO.	Design Name	Rev. 0
WINGTECH	DEPARTMENT	DATE
WINGTECH	DEPARTMENT	DATE

Note 62-1: Part # of BEAD6202, BEAD6203, BEAD6204 and BEAD6205 needs changed to "BLM18BDI02SN1" for high THD performance (-90dB) but this BOM change will results in Rssi value Degraded.

Note 62-2: Reserved Cap for CS/RS test, please double check multi-key function when used

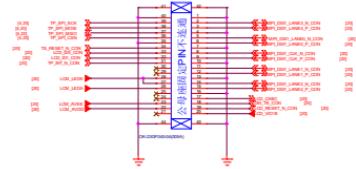
Note 62-3:

Earphone Jack	Earphone Jack
0402	0402

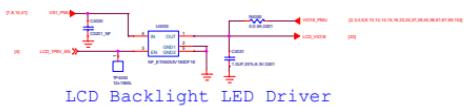
Note 62-4: Please Select ACC Mode for Operator Project to Pass Electrical MOS Test; More Information refer to Audio/Speech Design Notice

Note 62-5: Please select R6231 with 0402 size

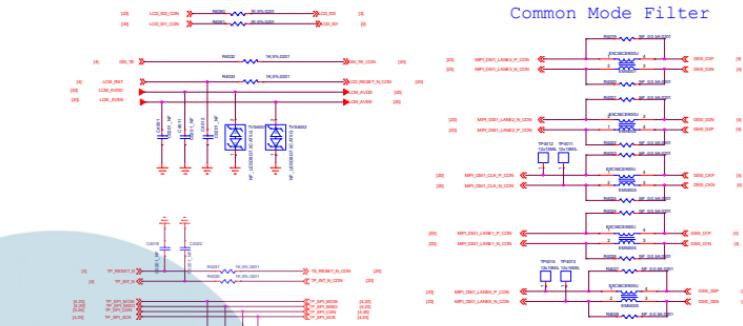
LCM BTB



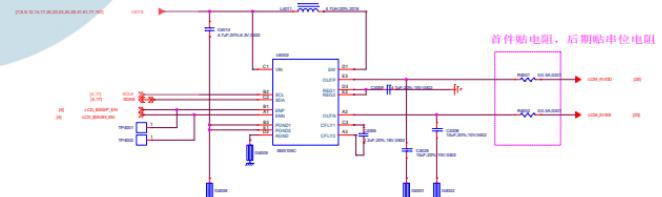
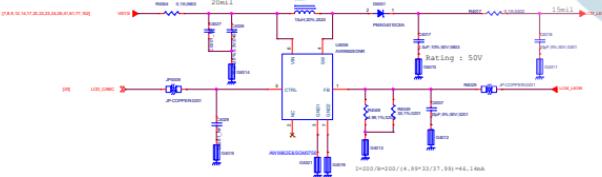
Reserve for ESD



LCD Backlight LED Driver

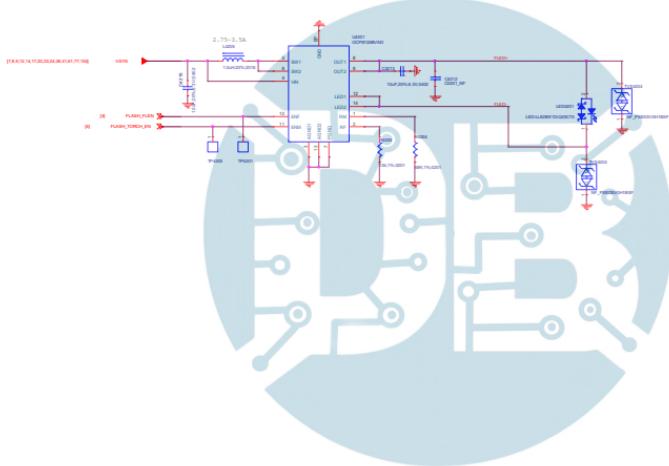


LCD Gate Drive

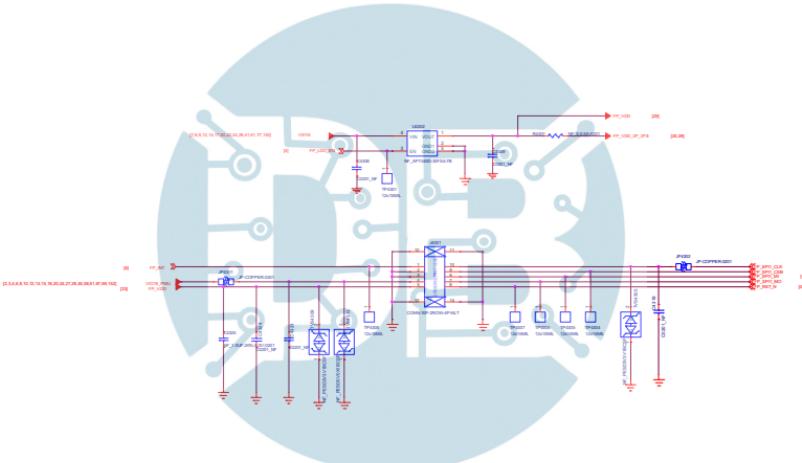


首件贴电阻，后期贴片单位电阻

Flash driver



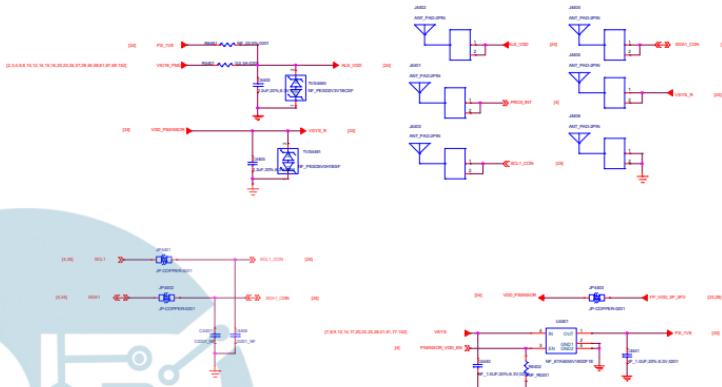
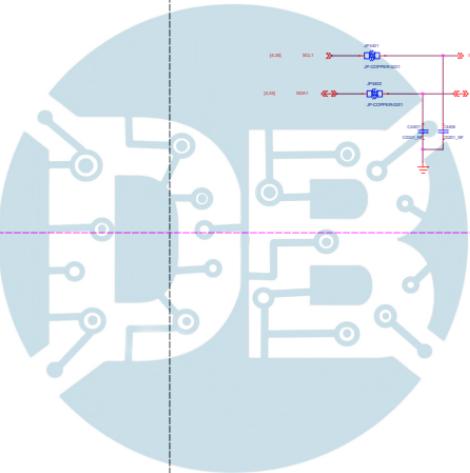
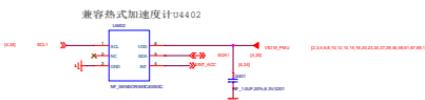
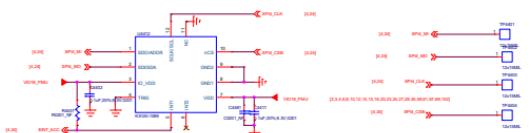
Fingerprint



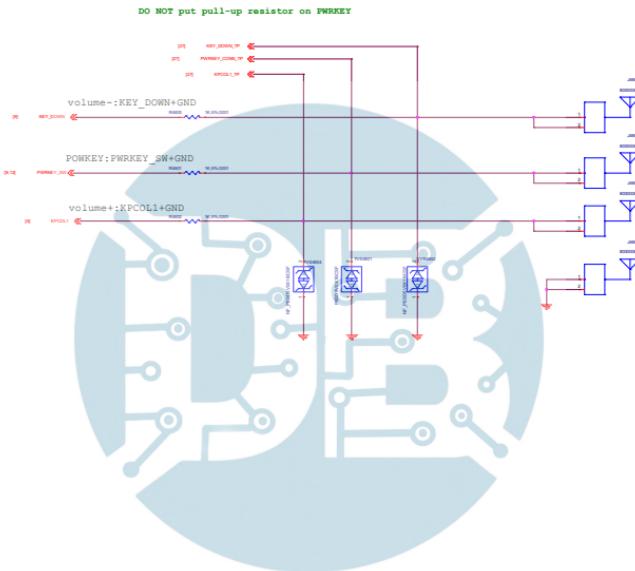
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DOCUMENT NO.	Design Name	Rev. 0
APPROVED	DESIGNED BY	REVIEWED BY
SUPERVISED	INITIALS	INITIALS
DATE: Monday, May 21, 2007	Sheet	Page 1 of 1
WINGTECH		

ALS/PROXIMITY SENSOR

A Sensor



Power Key / Key Pad



SIDEKEY



FORCE DOWNLOAD



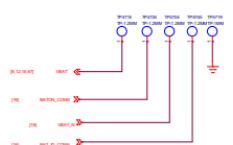
USB



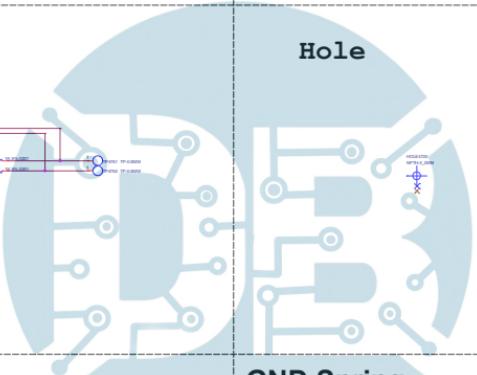
MARK



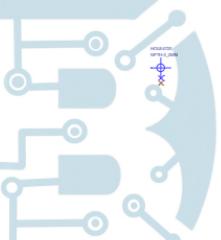
Battery



UART



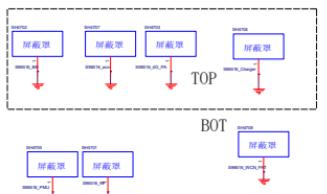
Hole



SN



Shield



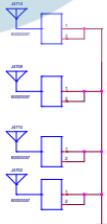
PCB/Lable



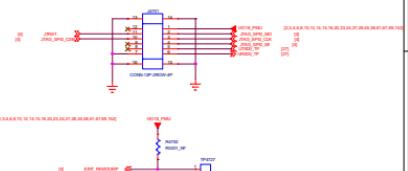
Water proof



GND Spring

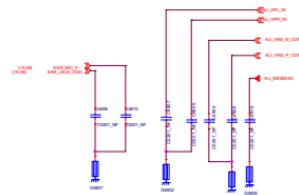
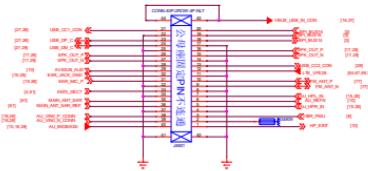


JTAG

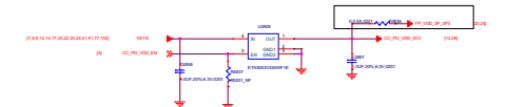


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Version:	Revision:
WINGTECH	Date:

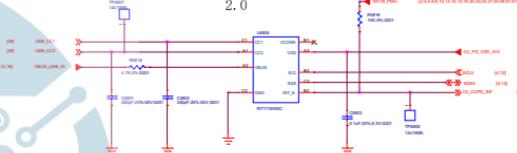
SUB CONNECTOR



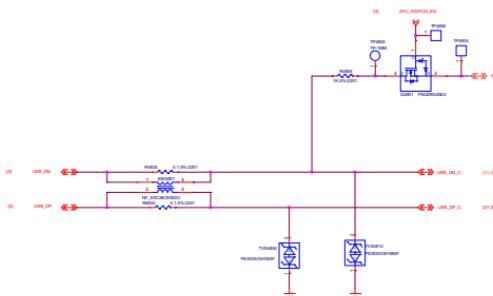
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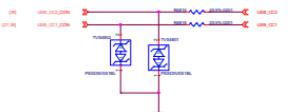
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2.0



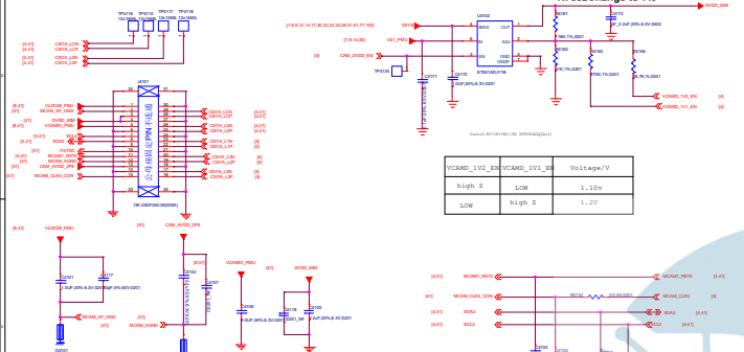
USB_DP DM



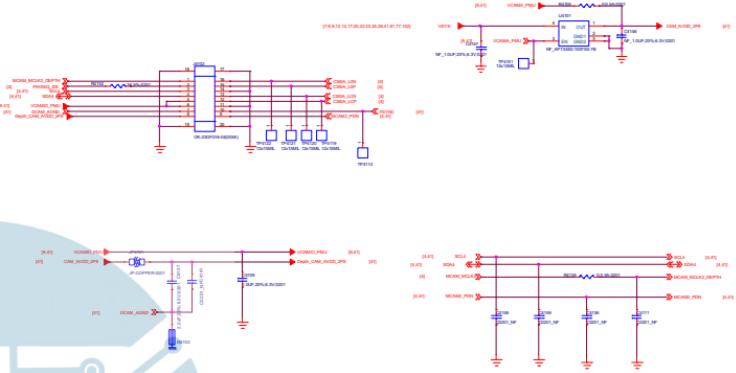
USB CC



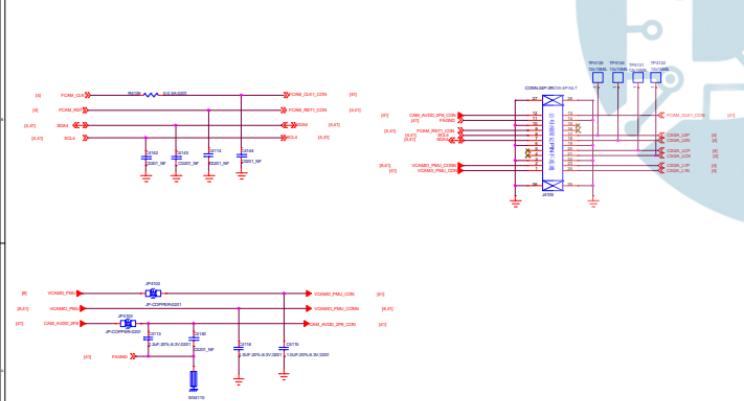
Main Camera 50M



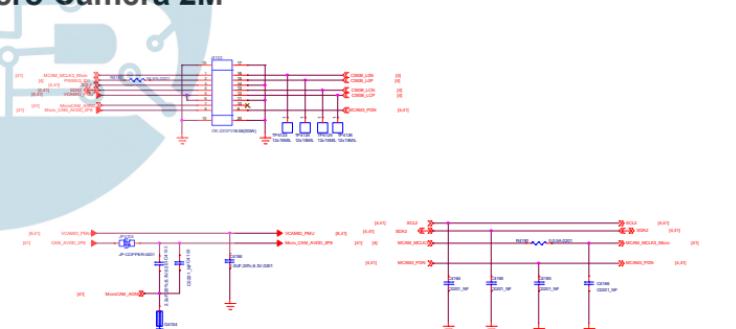
Depth Camera 2M

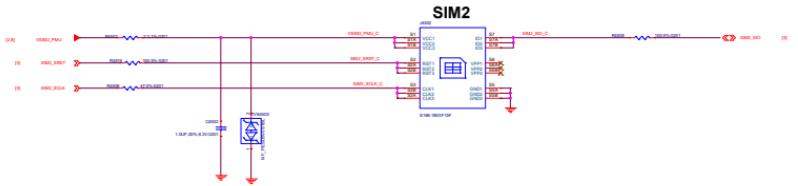


Front Camera 5M

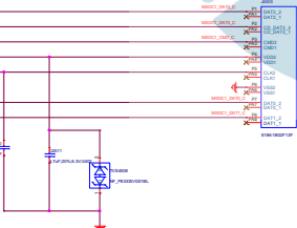
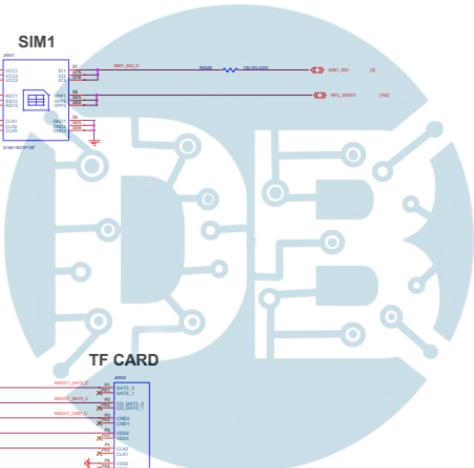
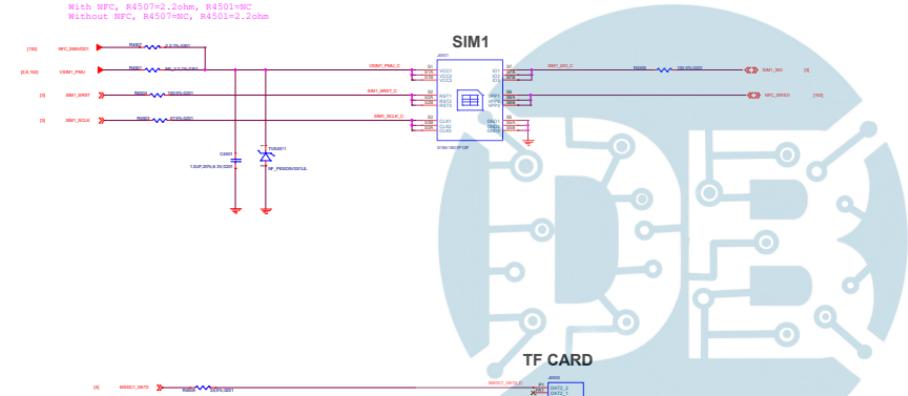
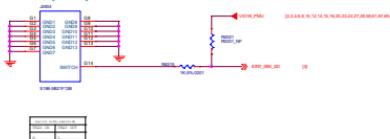


Micro Camera 2M

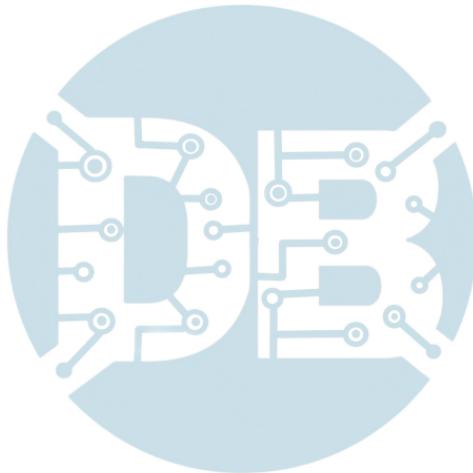


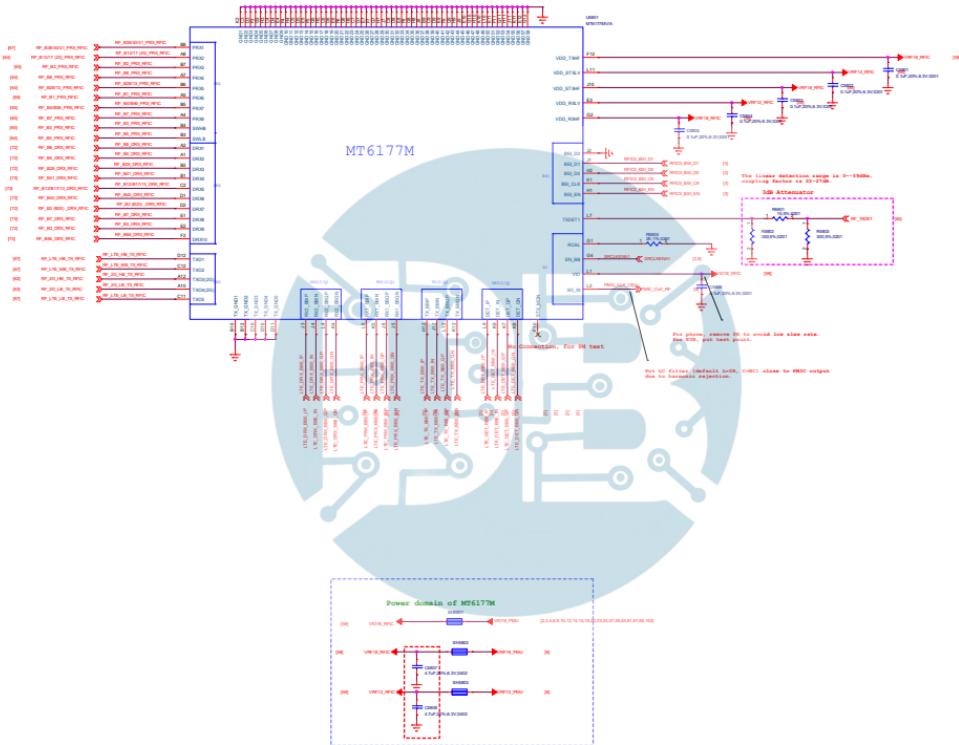


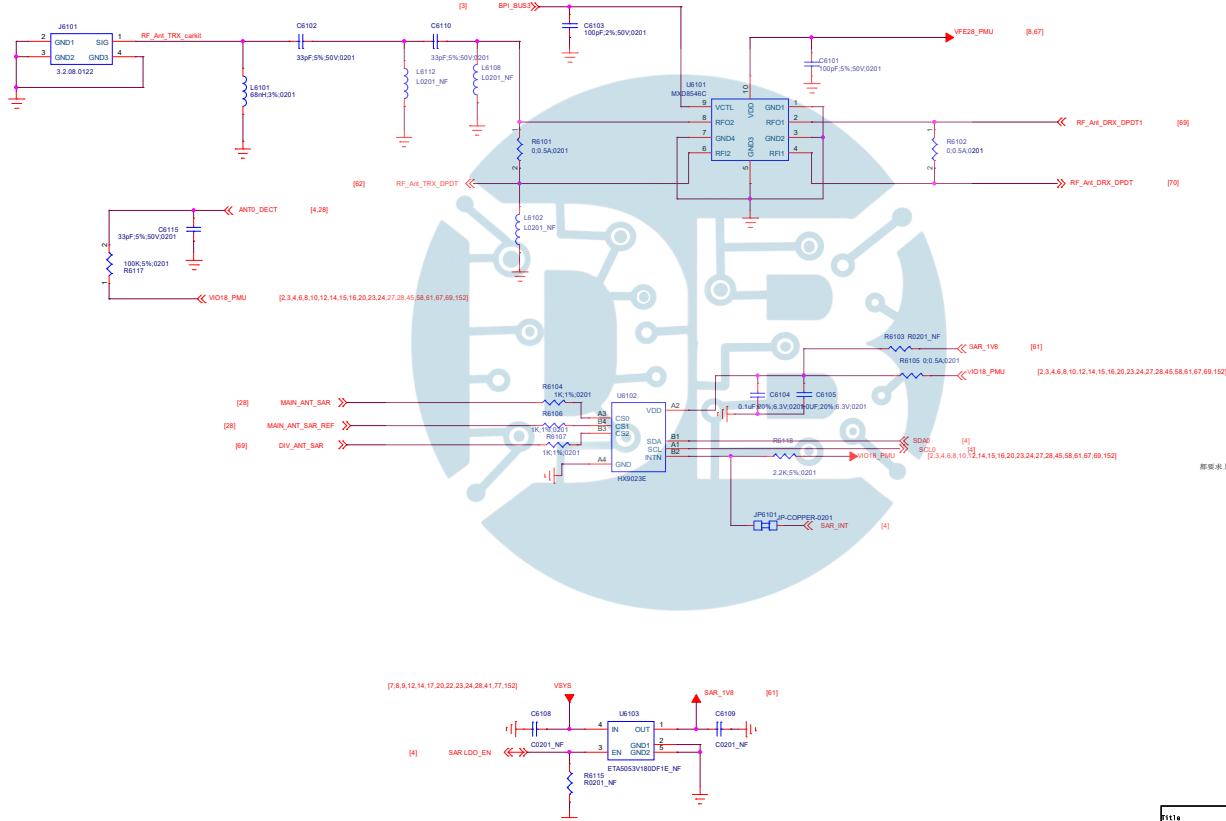
Shielding



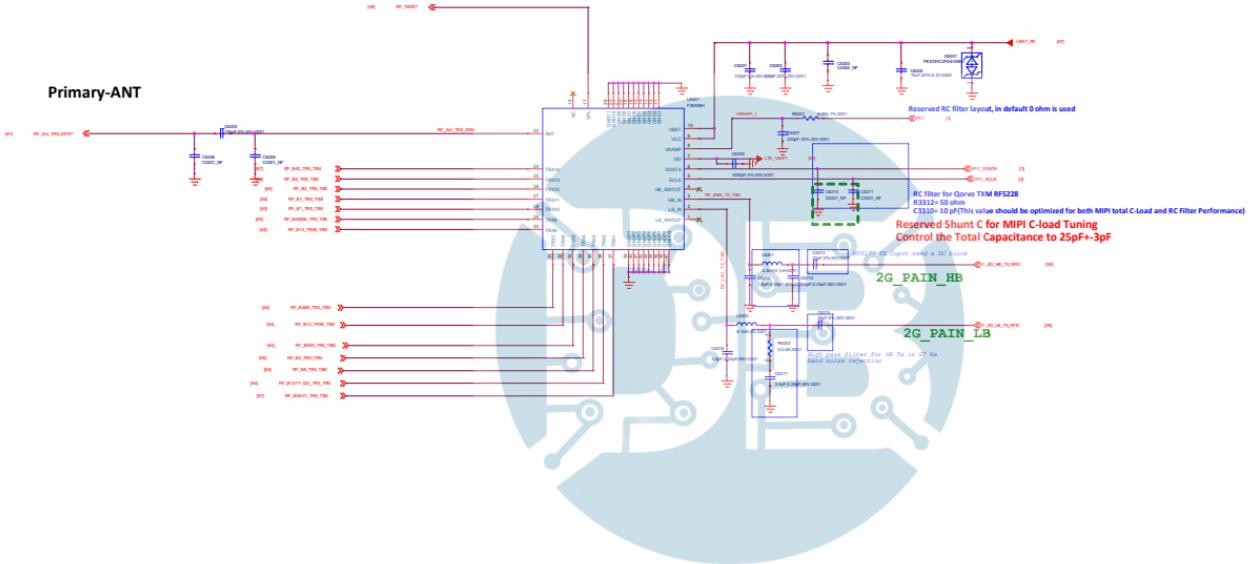
- 56. RF Interface
- 58. RF_MT6177_Pin_Out
- 61. Primary_ANT
- 62. Primary_ASM
- 64. TRX_LB
- 65. TRX_MHB
- 67. RF_MMPA_RF_TX
- 69. Diversity_ANT
- 70. Diversity ASM
- 72. DRX_LMB
- 73. DRX_HB
- 77. WCN_MT6631
- 78. TCC303
- 79. NFC_PN553

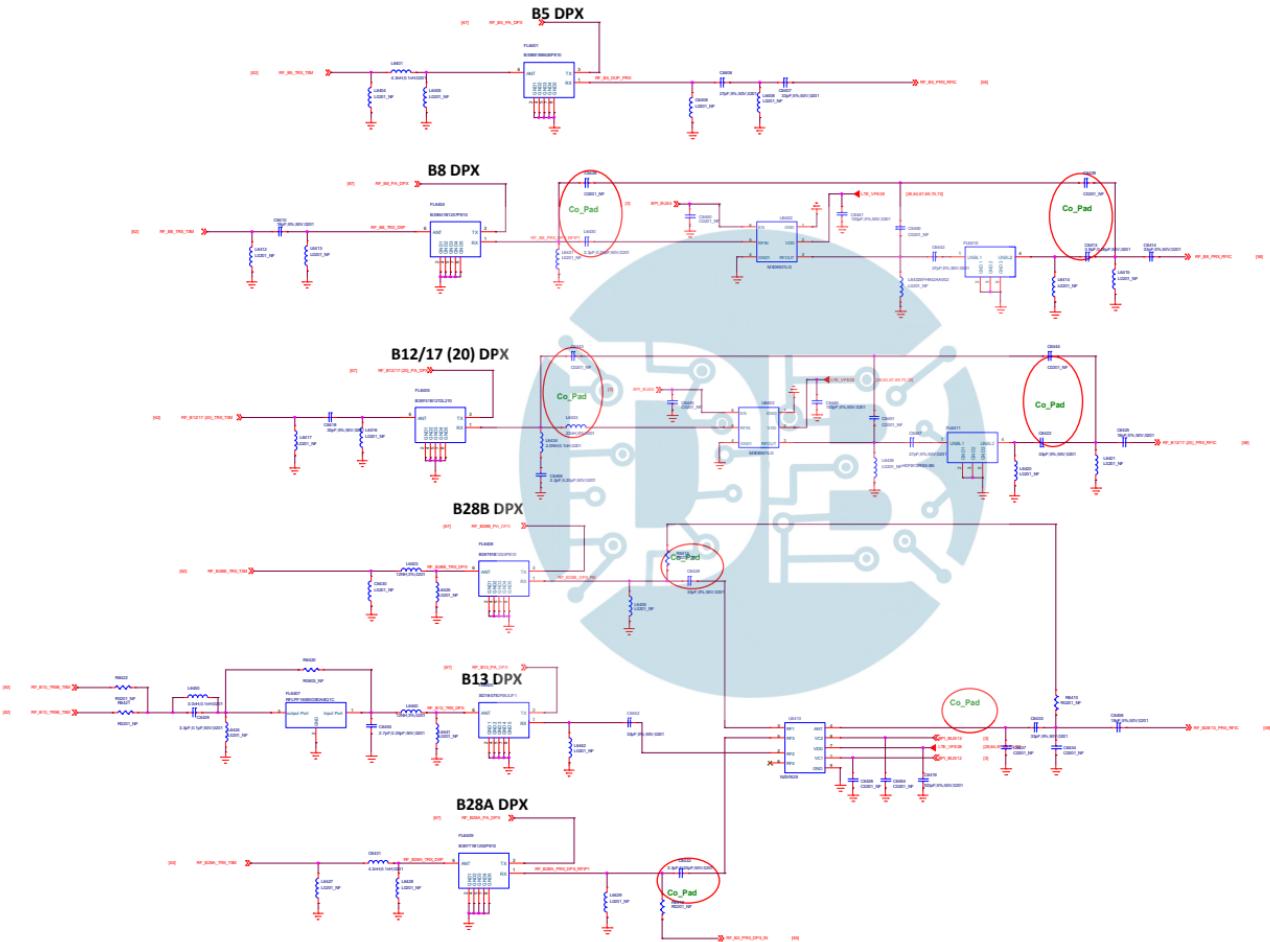


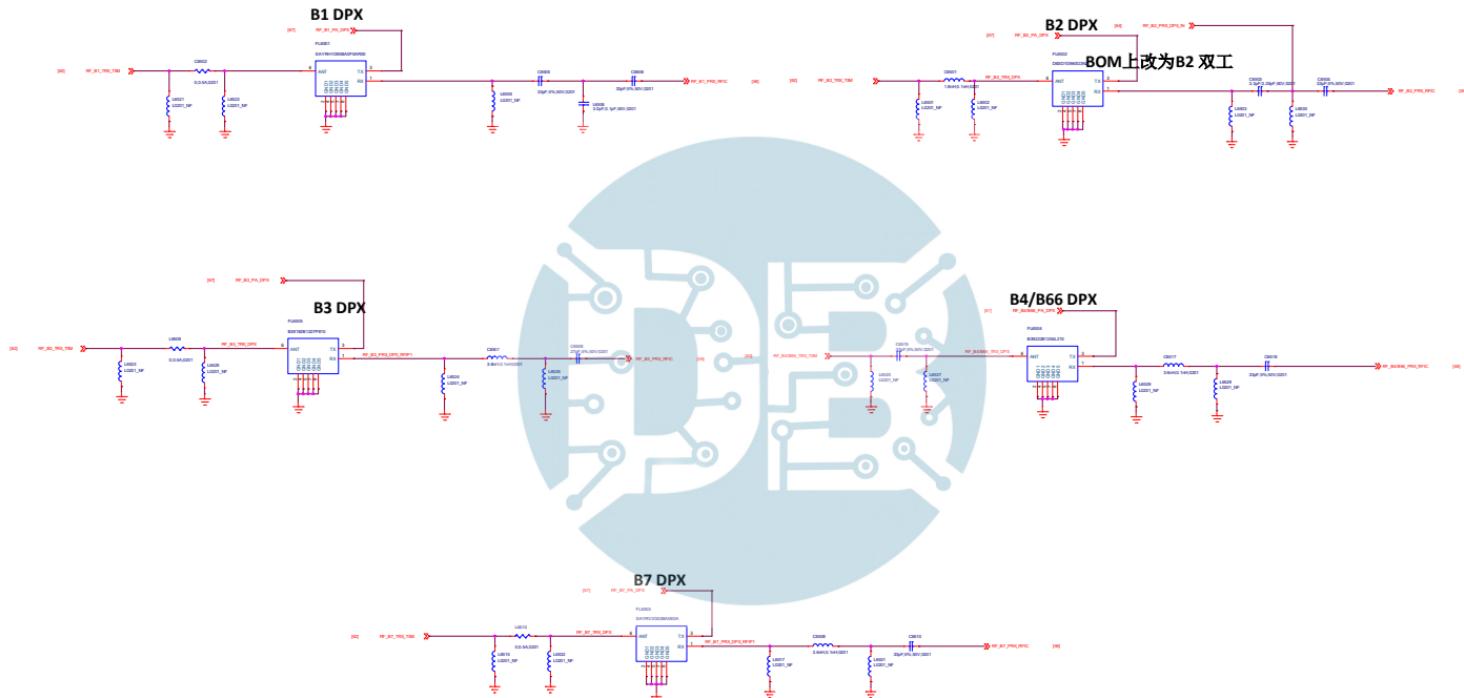




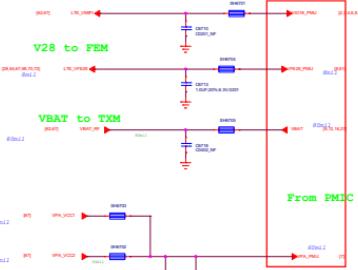
都要求上拉 FV







Power Net Connection



Note:
Refer to design notice

Note:
Reserve at least one tuning cap. For PMIC VPA total cap required by **B1/TX**
the total cap at RF side should be in 6.2uF +/-5%.

B28B TX

B28A TX

B5 TX

B2 TX

B3 TX

B4/B66 TX

B38/41 TRX

B7 TX

B40 TRX

B8 TX

B13 TX

3/4G_PAIN_LB

3/4G_PAIN_MB

3/4G_PAIN_HB

Close to MT6177M

B38/40/41 PRX

B28B TX

B28A TX

B5 TX

B2 TX

B3 TX

B4/B66 TX

B38/41 TRX

B7 TX

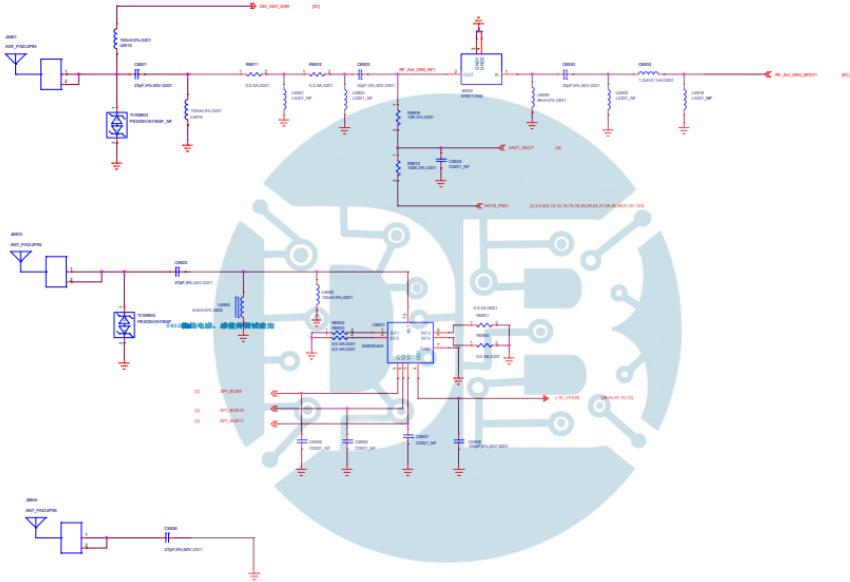
B40 TRX

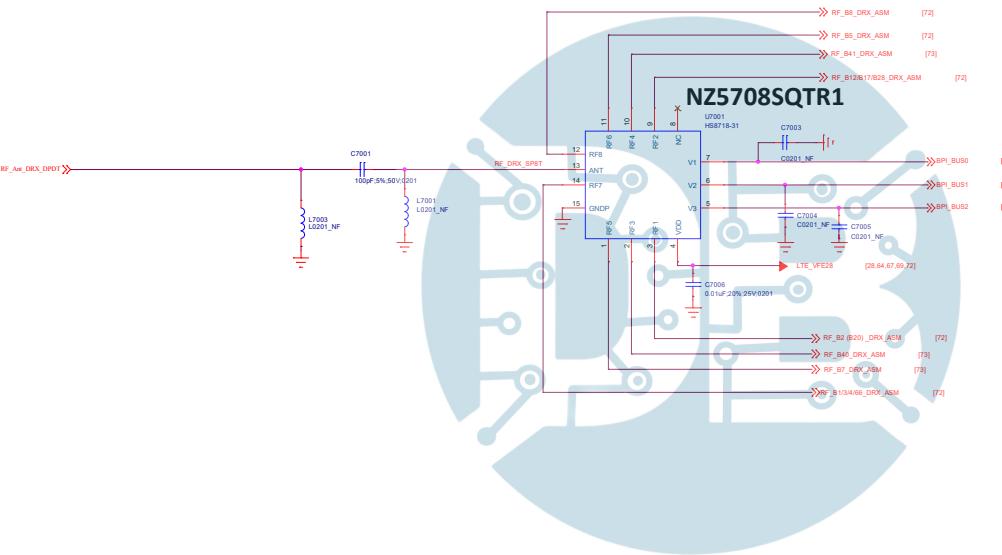
B8 TX

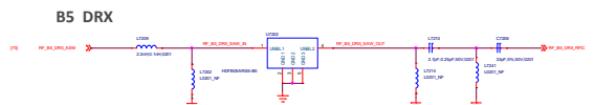
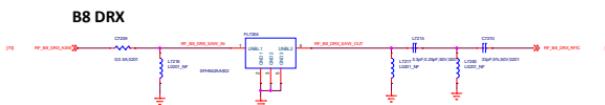
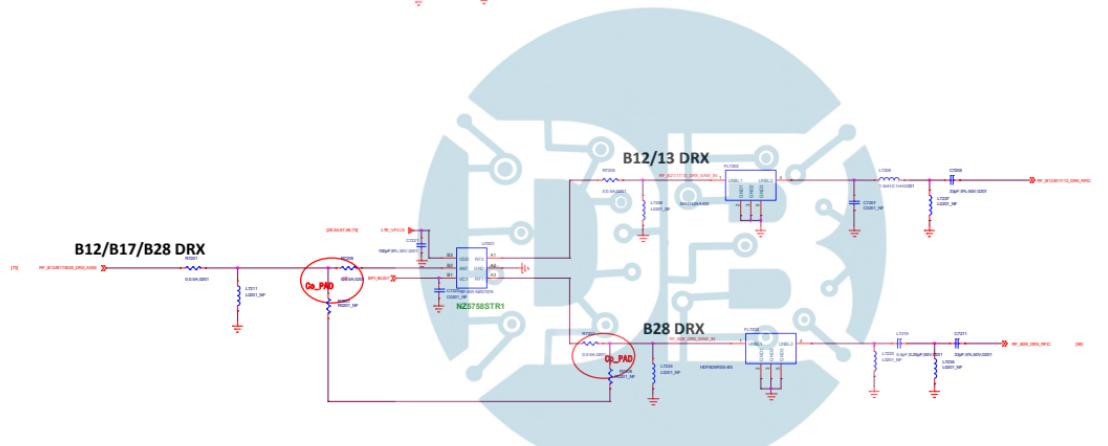
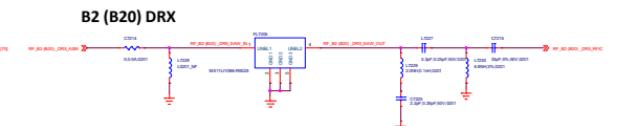
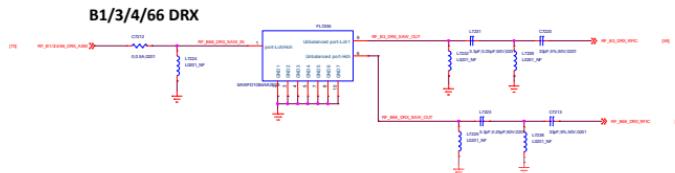
B13 TX

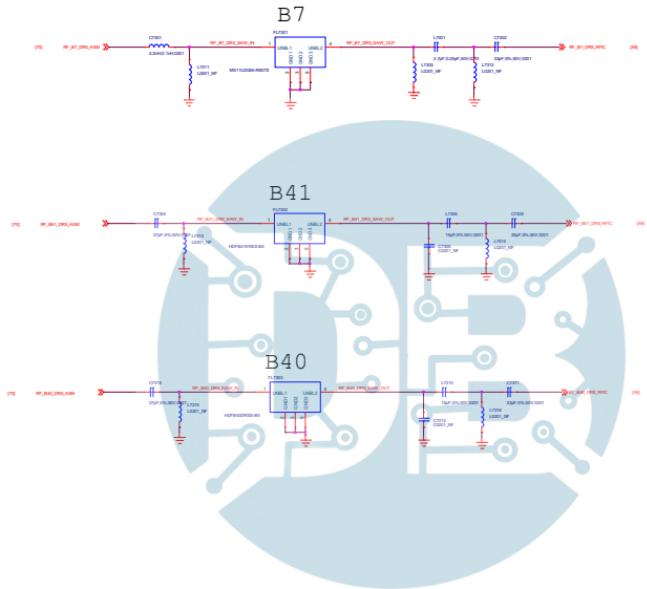
B12/17 (20) TX

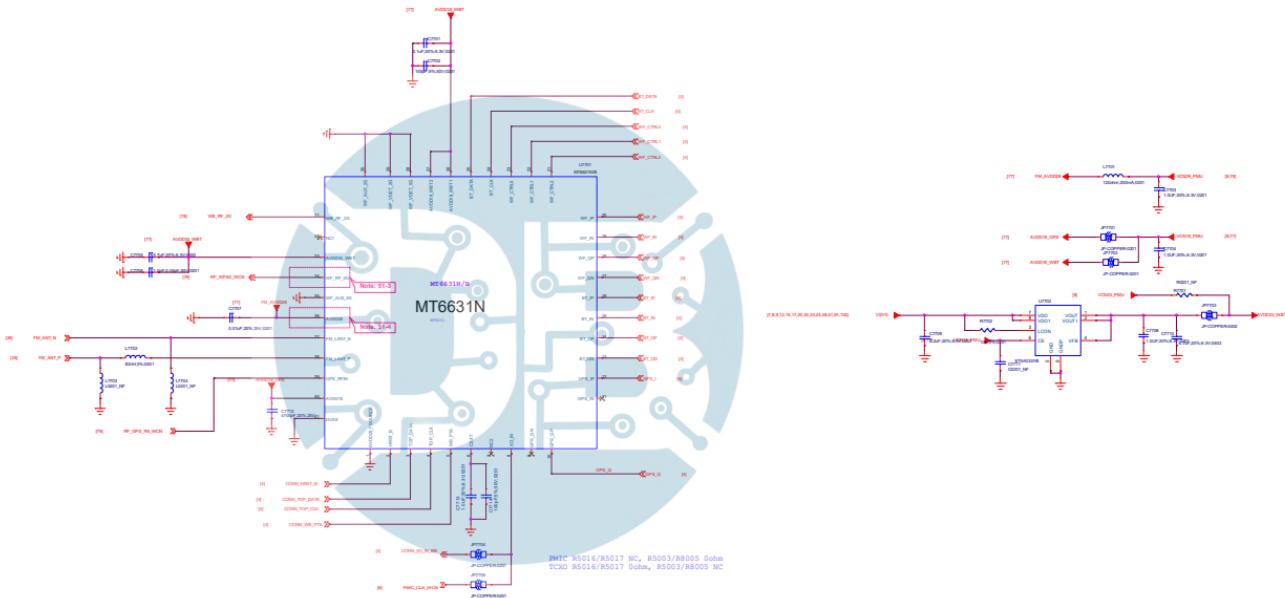
Note:
Please use the phase3 HML PA to support B1/3 CA
all Rx Input need LDP for harmonic rejection











Schematic design notice of "51_CONNECTIVITY_CONSYS_MT6631"

- Note 51-1: For R5015 size, please select Q402 size or larger one
- Note 51-2: Please refer to MT6762 Baseband 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 (AVOD22_FM) must be connected to VCN28 even if FM not support
- Note 51-5: If WiFi 5G were no need, VCN33 could be chosen from PMIC output (VCN33_PMU)

5

4

3

2

1

D

D

C

C

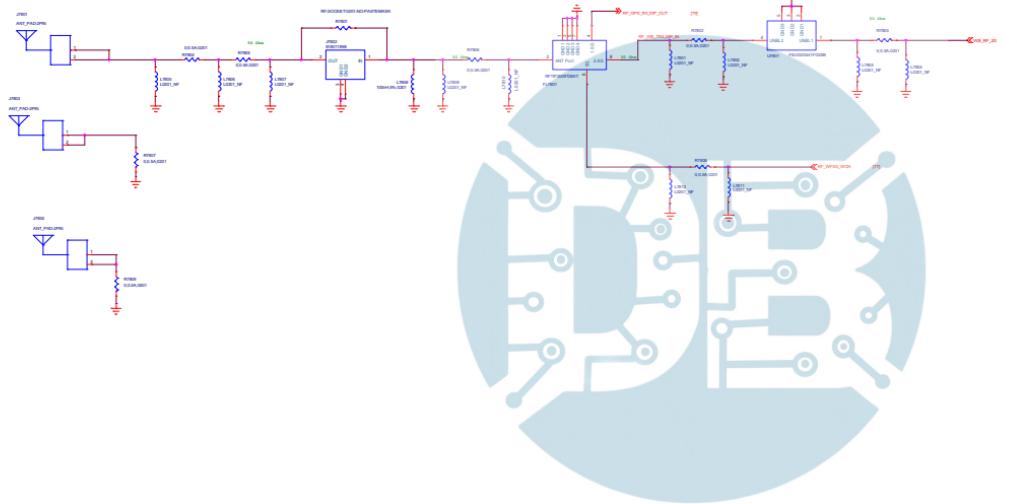
B

B

A

A

2.4G Wi-Fi BT GPS



5

4

3

2

1

D

D

C

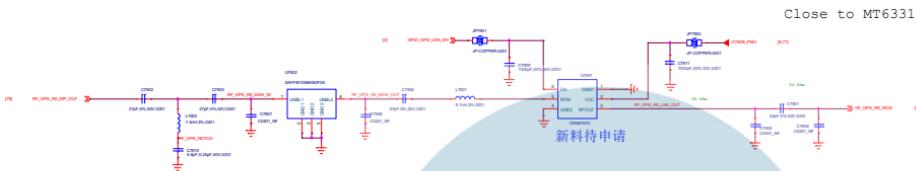
C

B

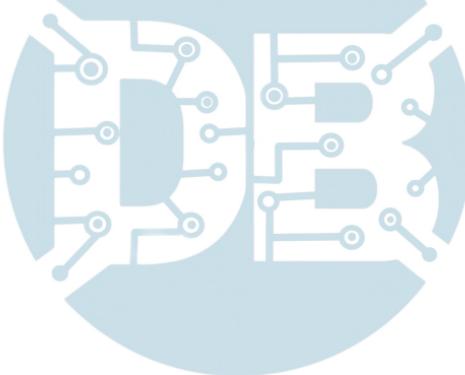
B

A

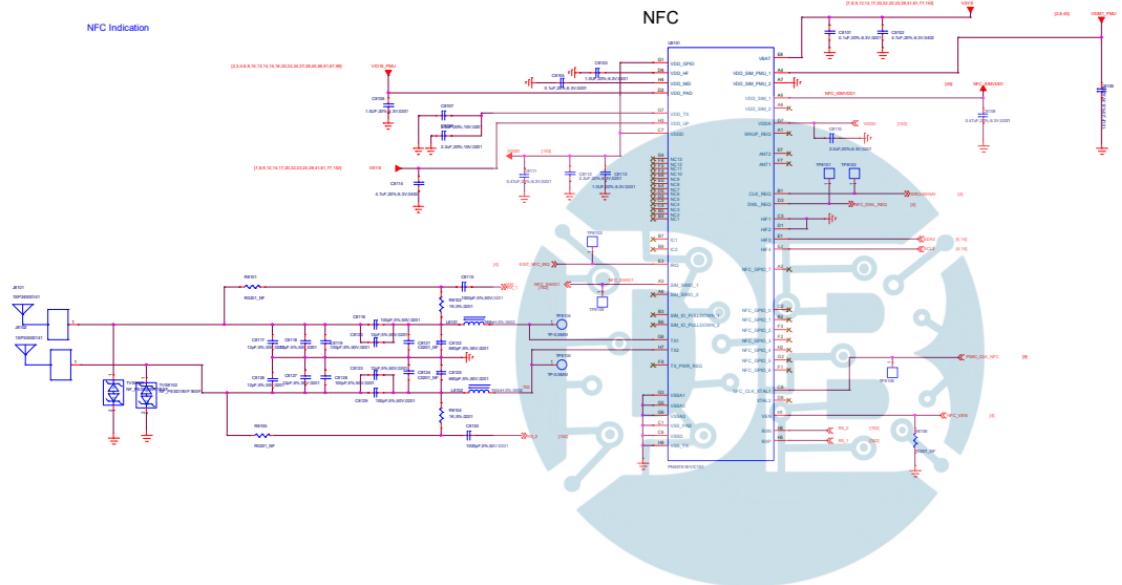
A



Close to MT6331

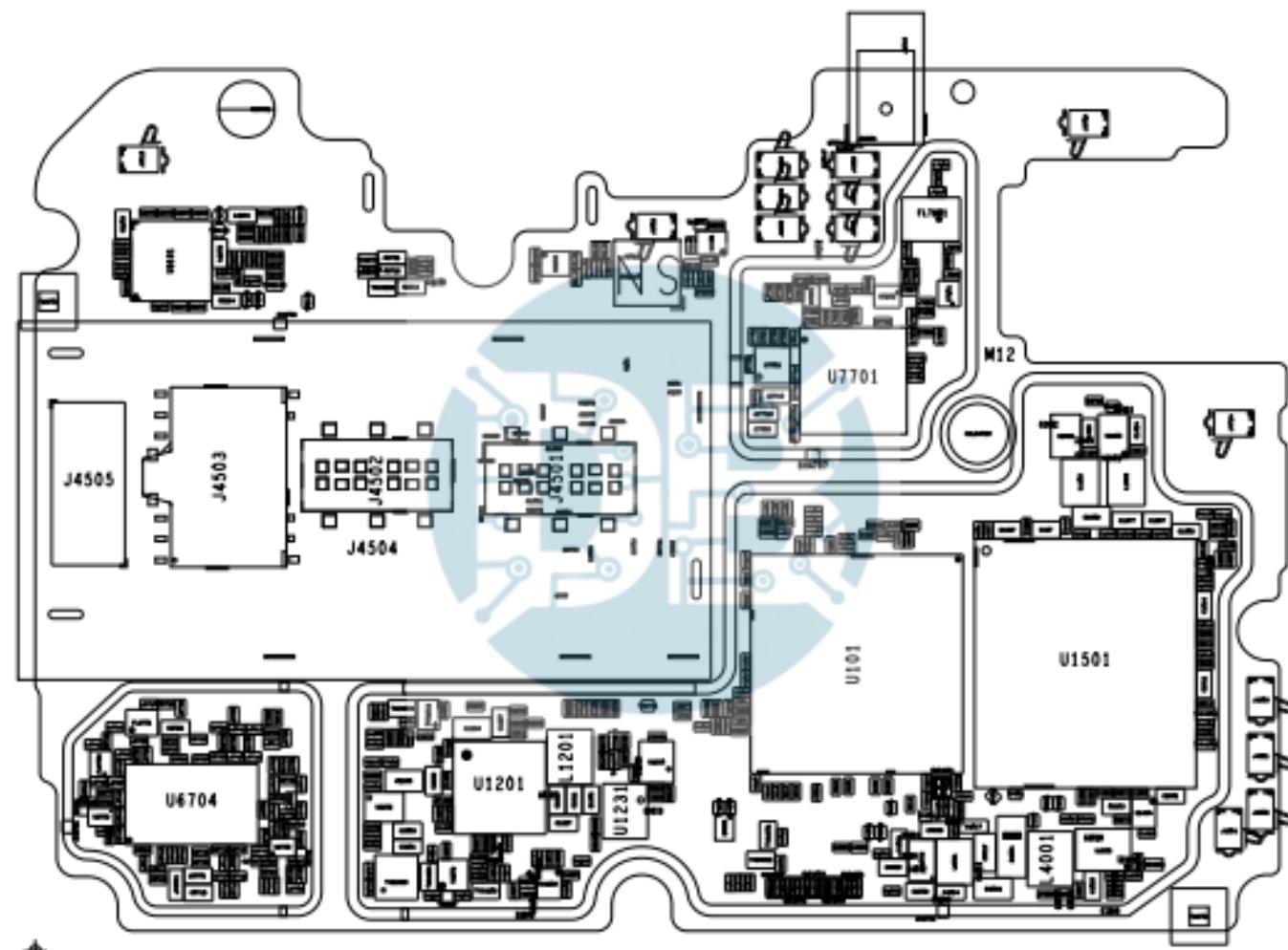


NFC Indication



NFC

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