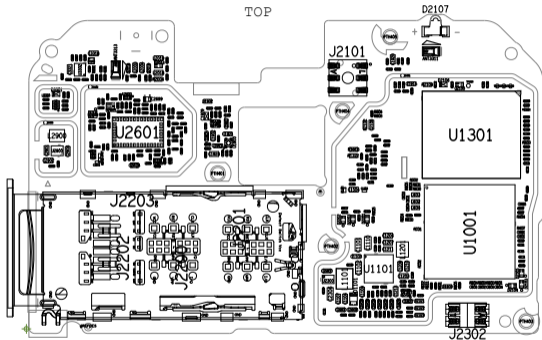


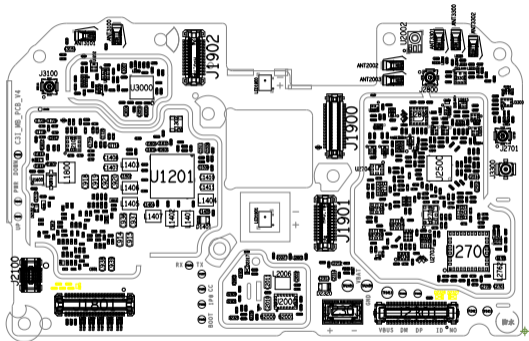
(VIETMOBILE.VN)



ART FILM - Assembly\_Top

Bottom

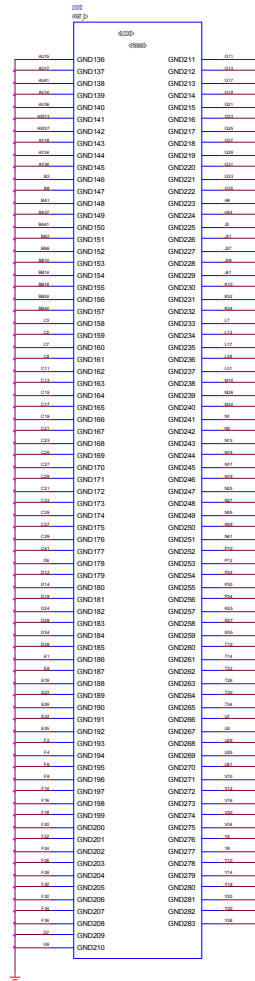
(VIETMOBILE.VN)



Bottom

### SDM439 GPIO Configuration For QRD439+PMI632

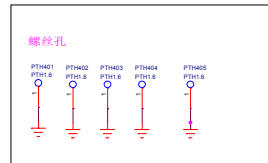
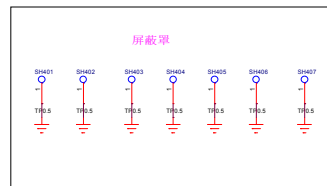
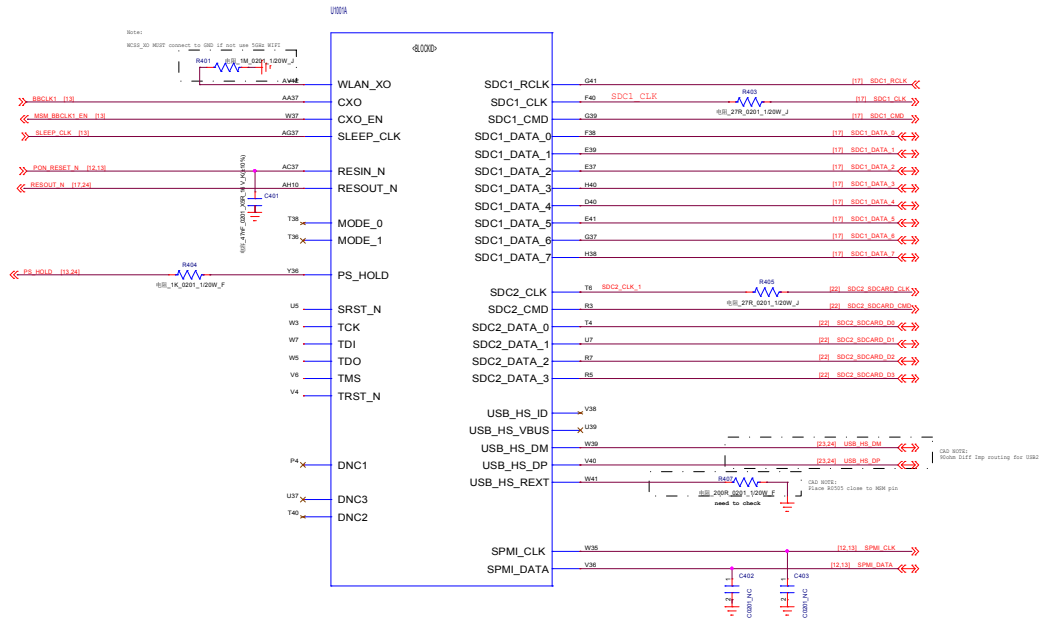
GPIO_0	NFC_SPI_ESE_MOSI	GPIO_41		GPIO_82	FM_DATA
GPIO_1	NFC_SPI_ESE_MISO	GPIO_42	ACCL_INT1	GPIO_83	BT_CTL
GPIO_2	NFC_SPI_CS_N_0	GPIO_43	ALSP_INT_N	GPIO_84	BT_DATA
GPIO_3	NFC_SPI_ESE_CLK	GPIO_44	MAG_DRDY_INT	GPIO_85	FP_SPI_MOSI
GPIO_4	QUP_UART_TX_2	GPIO_45	GYRO_INT	GPIO_86	FP_SPI_MISO
GPIO_5	QUP_UART_RX_2	GPIO_46		GPIO_87	FP_SPI_CS
GPIO_6	WSA_SMB_I2C_SDA	GPIO_47	SENSOR_SPI_CS2_N	GPIO_88	FP_SPI_CLK
GPIO_7	WSA_SMB_I2C_SCL	GPIO_48	FP_INT_N1	GPIO_89	
GPIO_8	TP_SPI_MOSI	GPIO_49	UIM_BATT_ALARM	GPIO_90	
GPIO_9	TP_SPI_MISO	GPIO_50		GPIO_91	KEY_VOL_UP_N
GPIO_10	TP_SPI_CS_SDA	GPIO_51	UIM1_DATA	GPIO_92	
GPIO_11	TP_SPI_CLK_SCL	GPIO_52	UIM1_CLK	GPIO_93	NFC_ESE_PWR_REQ
GPIO_12	WSA_INTR	GPIO_53	UIM1_RESET	GPIO_94	WSA_IO_DATA
GPIO_13	LCD_ID	GPIO_54	UIM1_PRESENT	GPIO_95	WSA_IO_CLK
GPIO_14	SENSOR_I2C_SDA	GPIO_55	UIM2_DATA	GPIO_96	WSA_EN
GPIO_15	SENSOR_I2C_SCL	GPIO_56	UIM2_CLK	GPIO_97	HomeKey_FP_INT
GPIO_16	NFC_DISABLE	GPIO_57	UIM2_RESET	GPIO_98	
GPIO_17	NFC_IRQ	GPIO_58	UIM2_PRESENT	GPIO_99	
GPIO_18	NFC_I2C_SDA	GPIO_59		GPIO_100	RFFE1_CLK
GPIO_19	NFC_I2C_SCL	GPIO_60	LCDO_RESET_N	GPIO_101	RFFE1_DATA
GPIO_20	SENSOR_SPI_MOSI	GPIO_61	SMB_INT	GPIO_102	RFFE2_CLK
GPIO_21	SENSOR_SPI_MISO	GPIO_62		GPIO_103	RFFE2_DATA
GPIO_22	SENSOR_SPI_CS0_N	GPIO_63		GPIO_104	
GPIO_23	SENSOR_SPI_CLK	GPIO_64	TP_RST_N	GPIO_105	
GPIO_24	LCD_TE0	GPIO_65	TP_INT_N	GPIO_106	
GPIO_25	WSA_MCLK	GPIO_66		GPIO_107	GRFC3_SEL
GPIO_26	CAM_MCLK0	GPIO_67	SDCARD_DET_N	GPIO_108	
GPIO_27	CAM_MCLK1	GPIO_68		GPIO_109	GRFC5_SEL
GPIO_28		GPIO_69	CDC_PDM_CLK	GPIO_110	GRFC6_SEL
GPIO_29	CAM_I2C_SDA0	GPIO_70	CDC_PDM_SYNC	GPIO_111	GRFC7_SEL
GPIO_30	CAM_I2C_SCL0	GPIO_71	CDC_PDM_TX	GPIO_112	GRFC8_SEL
GPIO_31	CAM_I2C_SDA1	GPIO_72	CDC_PDM_RX0	GPIO_113	GRFC9_SEL
GPIO_32	CAM_I2C_SCL1	GPIO_73	CDC_PDM_RX1	GPIO_114	GRFC10_SEL
GPIO_33		GPIO_74	CDC_PDM_RX2	GPIO_115	
GPIO_34	FLASH_STROBE_NOW	GPIO_75	BT_SSBI	GPIO_116	
GPIO_35	CAM_AVDD_LDO_EN	GPIO_76	WL_CMD_DATA_2	GPIO_117	
GPIO_36	MCAM_RST_N	GPIO_77	WL_CMD_DATA_1	GPIO_118	EXT_GPS_LNA_EN
GPIO_37	FORCE_USB_BOOT	GPIO_78	WL_CMD_DATA_0	GPIO_119	CH0_GSM_TX_PHASE_D0
GPIO_38	SCAM_RST_N	GPIO_79	WL_CMD_SET	GPIO_120	RFFE5_CLK
GPIO_39		GPIO_80	WL_CMD_CLK	GPIO_121	RFFE5_DATA
GPIO_40		GPIO_81	FM_SSBI	GPIO_122	



GPIO_123			
GPIO_124	FP_RESET		
GPIO_125			
GPIO_126			
GPIO_127			
GPIO_128			
GPIO_129			
GPIO_130	NFC_DWL_REQ		
GPIO_131			
GPIO_132	RCM_MARKER1		
GPIO_133	RCM_MARKER2		

<b>PMI632 GPIO/MPP Configuration</b>			
GPIO_1	CONNECTOR_THERMAL	GPIO_5	FLASH_STROBE_NOW
GPIO_2	SMB_PARALLEL_CHG_EN	GPIO_6	NEBULA_PWM
GPIO_3	SKIN_THEREMAL	GPIO_7	SMB_VCHG_P
GPIO_4	SMB_THEREMAL	GPIO_8	SMB_VCHG_M

<b>PM439 GPIO/MPP Configuration</b>			
GPIO_1		MPP_1	VDD_PX_BIAS_MPP_1
GPIO_2	NFC_CLK_REQ		
GPIO_3	UIM_BATT_ALARM	MPP_3	VREF_DAC_MPP_3
GPIO_4	WLED_EN	MPP_4	QUIET_THERM_TP_LED_K
GPIO_5			
GPIO_6			
GPIO_7			
GPIO_8	LCM_BL_PWM		





# SDM439 EB1

<p>NOT TO BE USED, COPIED, REPRODUCED IN WHOLE OR IN PART, NOR THE CONTENTS REVEALED IN ANY MANNER TO OTHERS WITHOUT THE EXPRESS WRITTEN PERMISSION OF QUALCOMM.</p> <p>THIS TECHNICAL DATA MAY BE SUBJECT TO U.S. AND INTERNATIONAL EXPORT, REEXPORT OR TRANSFER RESTRICTIONS, VIOLATION OF WHICH IS CONTRARY TO U.S. AND INTERNATIONAL LAW IS STRICTLY PROHIBITED.</p> <p>Copyright © 2018 QUALCOMM Technologies, Inc. All rights reserved.</p>	<p>QUALCOMM Technologies, Inc. 5775 Morehouse Drive San Diego, CA 92121-1714 U.S.A.</p>	<p><b>Title</b> SCHEMATIC, OCA, BULK ORDER_2-4.2, REV1.0</p>
		<p><b>Rev</b> 0</p> <p><b>Doc</b> L228-PP33</p> <p><b>Rev</b> Tuesday, June 27, 2018</p>



GPIO_10	DRM2D_VIO_P007
GPIO_3	MOD_T01004
GPIO_33	AT2A_BOOT_P200_P206
GPIO_111	BOOT_C0NF01111
GPIO_102	BOOT_C0NF01121
GPIO_88	BOOT_C0NF01131

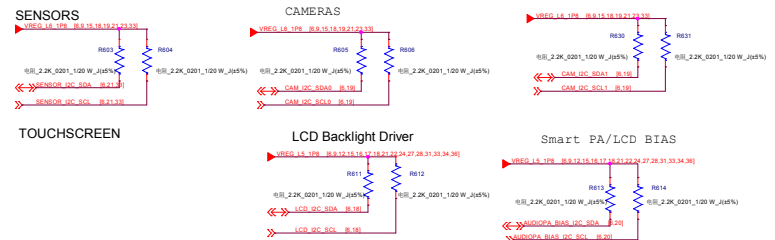
  

BOOT_C0NF01111	BOOT_C0NF01
08000	SDC1 -> EDC2 -> USB2.0
08001	SDC2 -> SDC1 -> USB2.0
08010	SDC1 -> USB2.0
08011	USB2.0

Default boot Config (08000) is SDC1+USB2



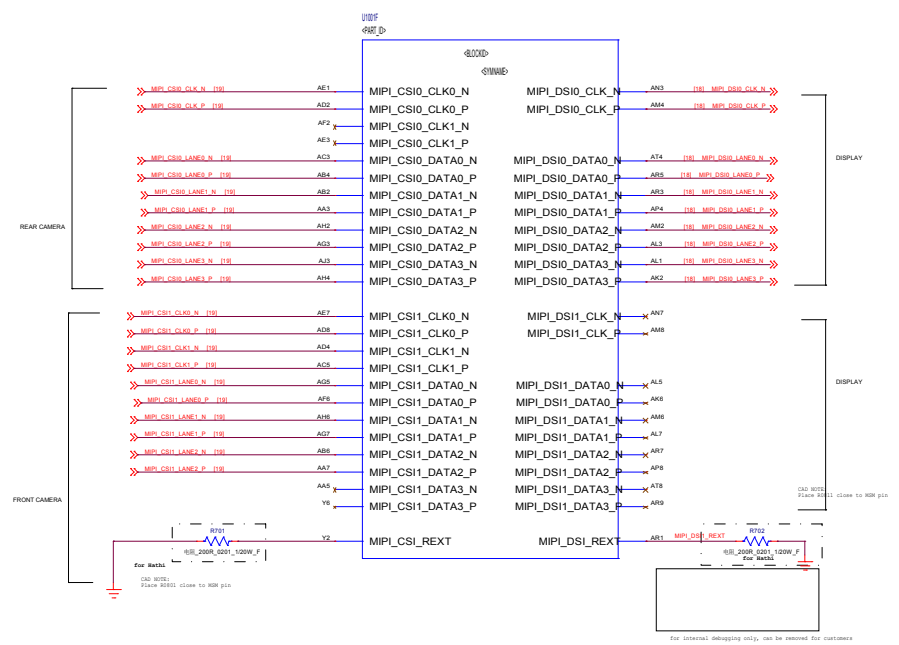
I2C PULL-UP RESISTORS

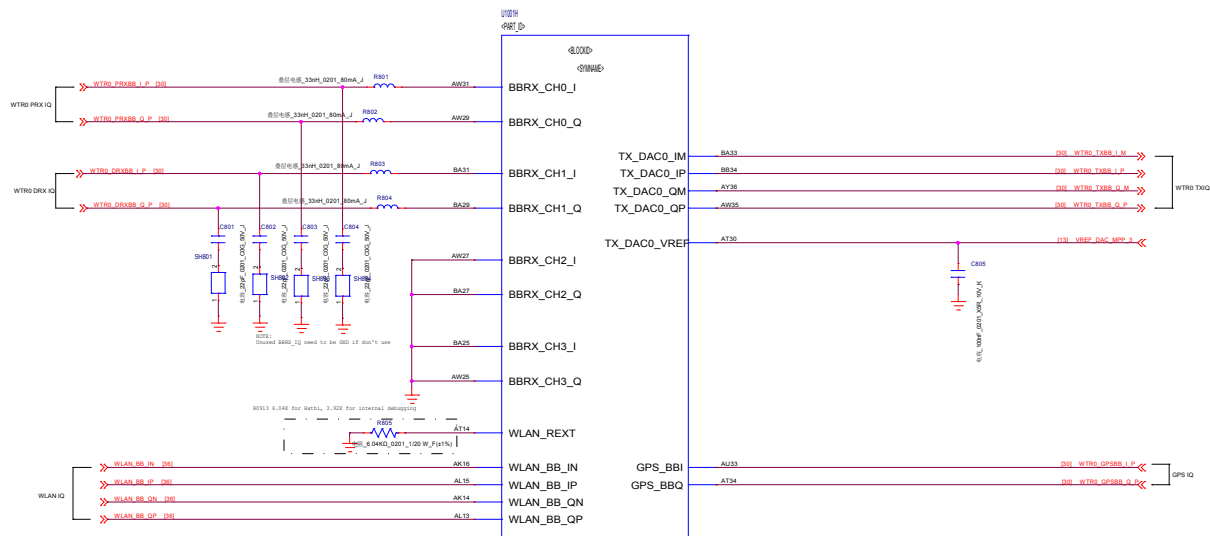


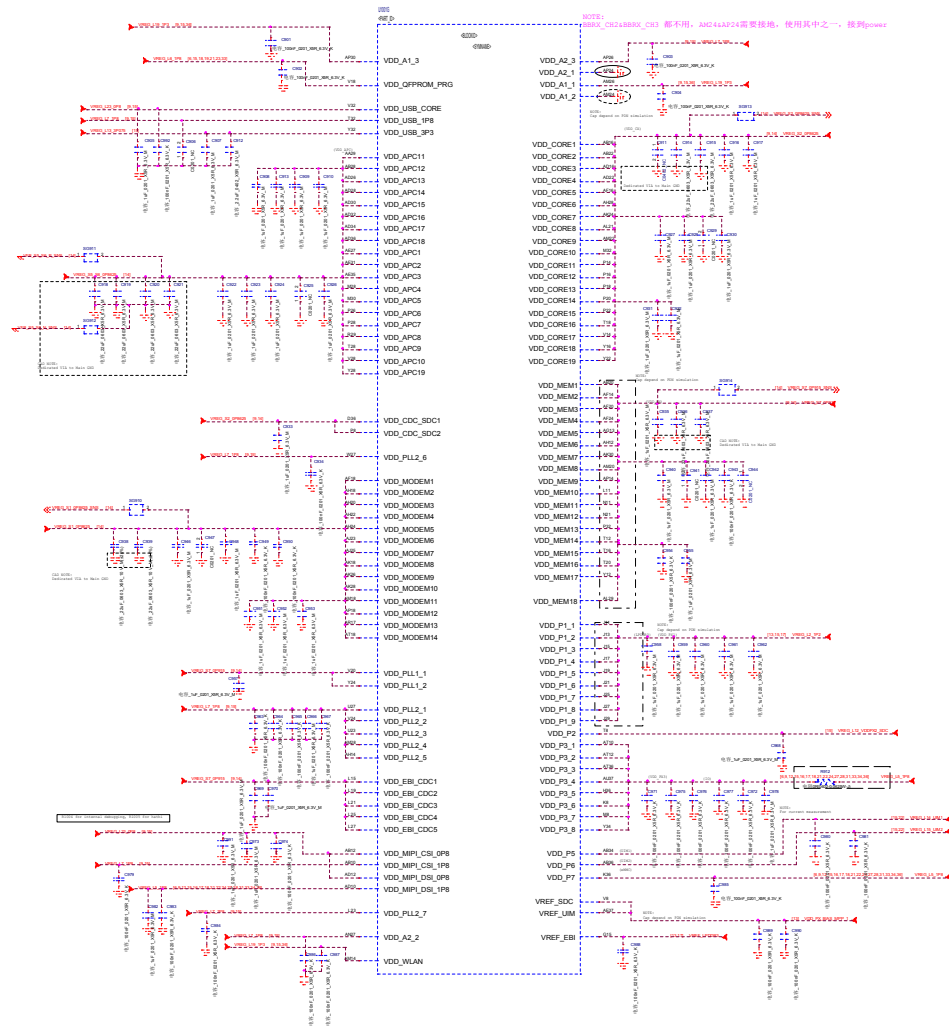
NOTE:  
Ensure SW sets these GPIOs (Sensor, CTP and Camera I2C bus) to inout pull down when the peripherals are powered off to eliminate leakage.

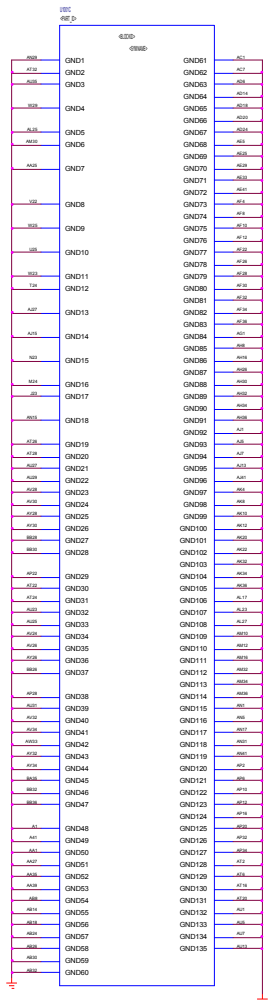
SDM439

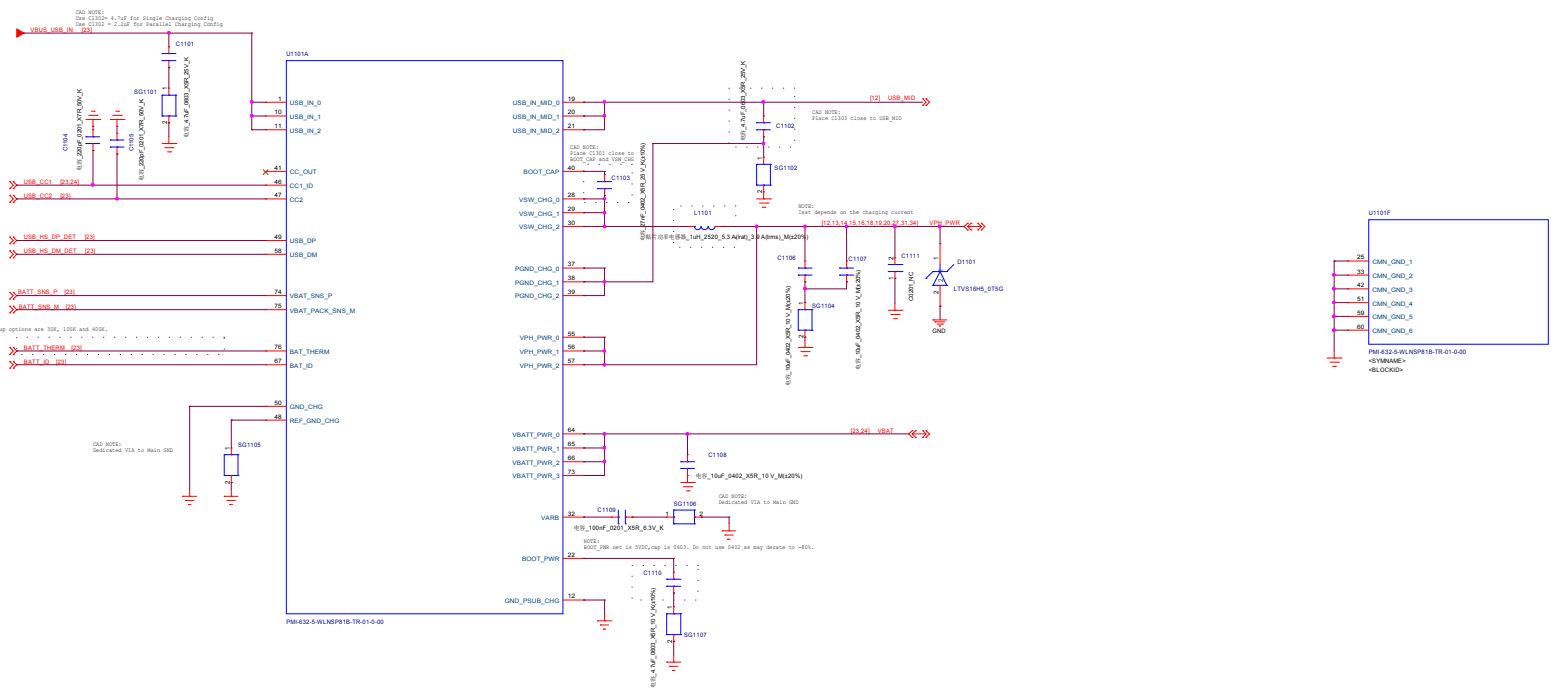








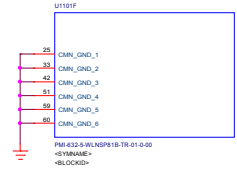




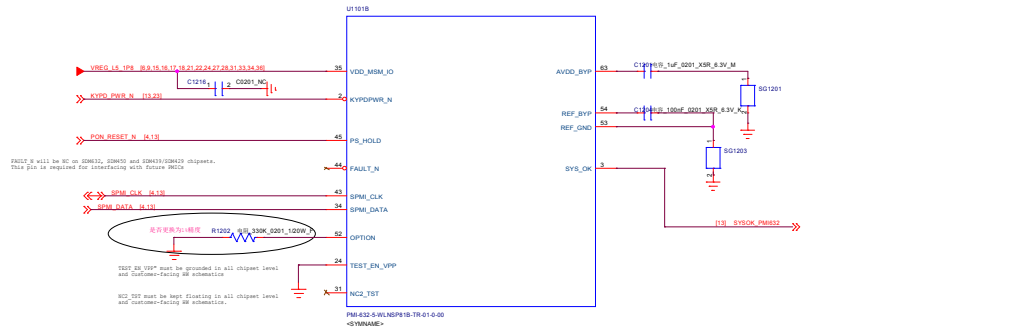
NOTE:  
 1. Use C1109 = 4.7µF For Single-Charging Config  
 Use C1109 = 2.2µF For Back-to-Back Charging Config

NOTE:  
 1. For USB, use the standard pull-up resistor. The pull-up resistor value depends on the USB version (USB 2.0, USB 3.0, USB 3.1, USB 3.2).

NOTE:  
 1. Do not use a battery with a voltage below 1.0V. Do not use a battery with a voltage above 4.2V.



PM652-5 WLNSP18-TR-01-0-00



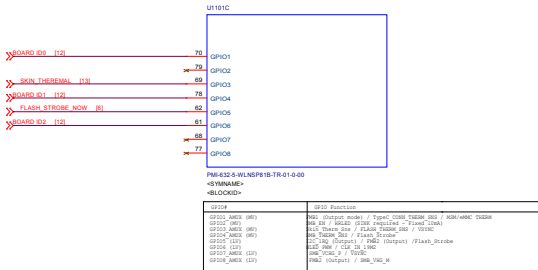
SW Adapter	Option Resistor
SW1	3K
SW2	3K
SW3	3K
SW4	3K

PM642-5-WLNSP818-TR-01-0-00 <SYNNAME>

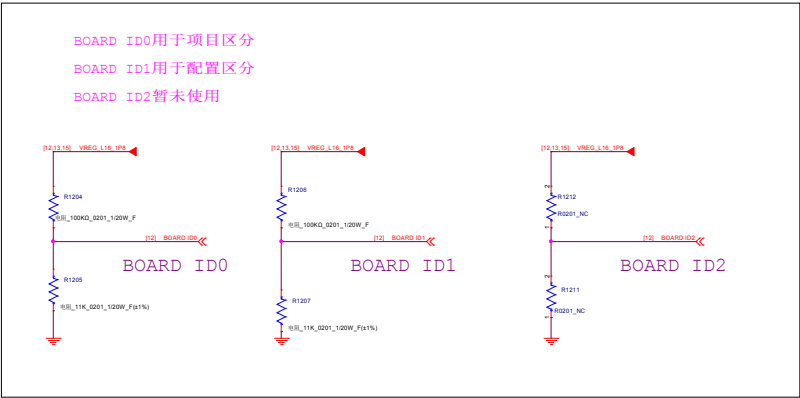
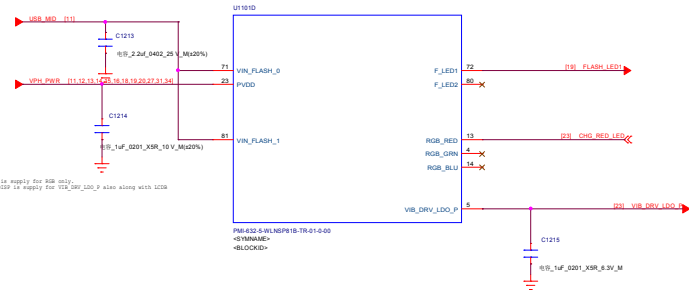
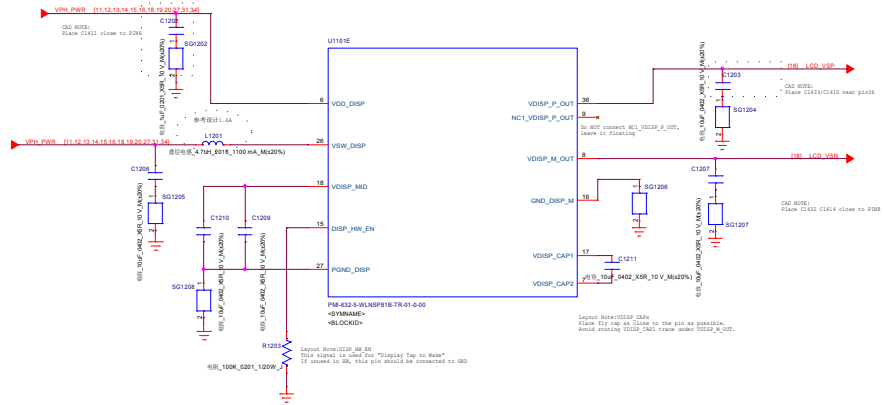
SW Adapter	Option Resistor
SW1	3K
SW2	3K
SW3	3K
SW4	3K

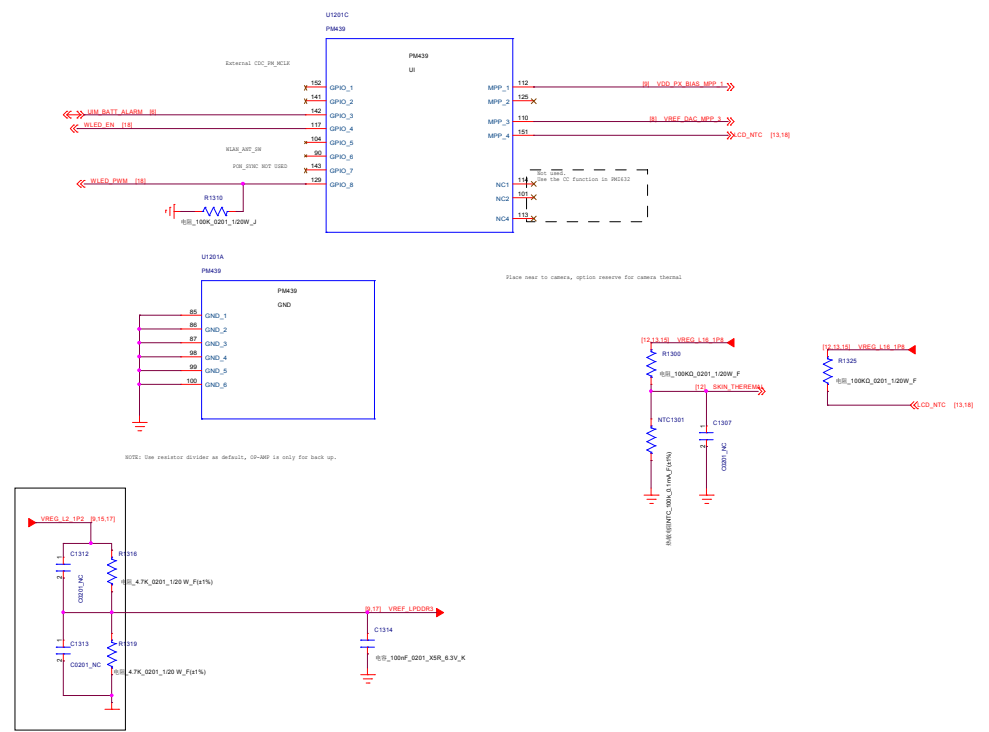
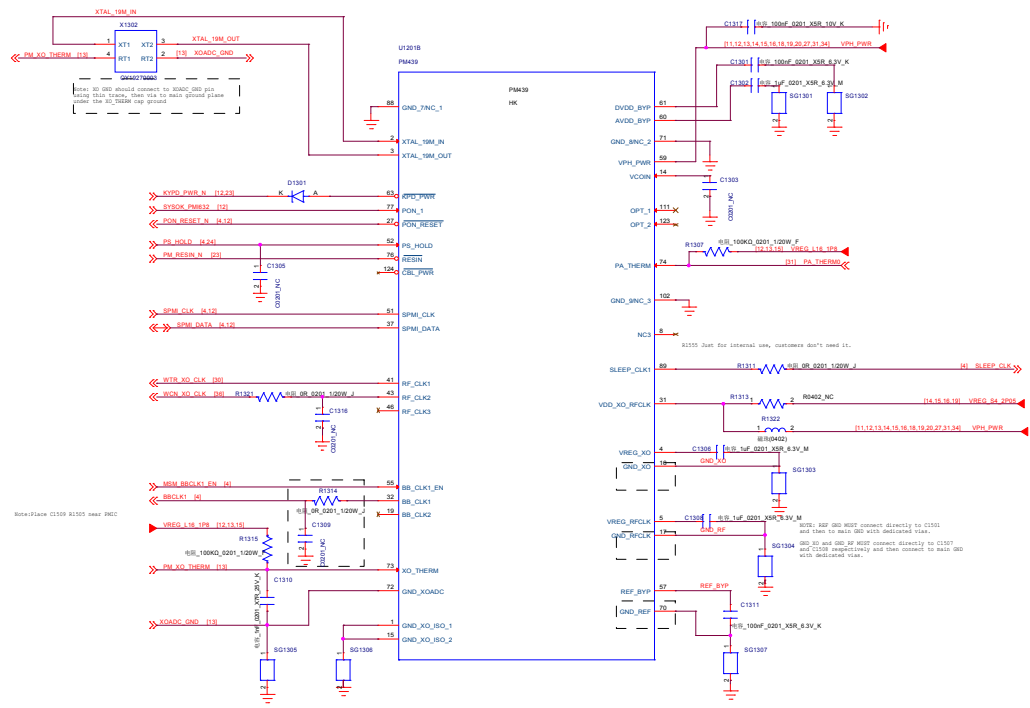
PON CONFIGURATIONS

PON Configuration	Option resistor range
SPMI, Micro USB, FMB_DIS	R = (Ground, 1K, 1.2K, 1.5K, 1.8K, and 2.2K)
SPMI, Micro USB, FMB_EN	R = (3.3K, 3.9K, 4.7K, and 5.6K)
I2C, Micro USB, FMB_DIS	R = (18.2K, 10K, 12K, and 15K)
I2C, Micro USB, FMB_EN	R = (22K, 27K, 33K, and 39K)
I2C, Type-C, FMB_DIS	R = (56K, 68K, 82K, and 100K)
I2C, Type-C, FMB_EN	R = (150K, 180K, and 220K)
SPMI, Type-C, FMB_DIS	R = (330K, 390K, and 470K)
SPMI, Type-C, FMB_EN	R = (820K, 1M, 1.2M, and Open)



GPIO	Function
GPIO0 (SW)	SW1_HOLD
GPIO1 (SW)	BOARD_ID0
GPIO2 (SW)	SW1_HOLD
GPIO3 (SW)	BOARD_ID1
GPIO4 (SW)	FLASH_STROBE_NOW
GPIO5 (SW)	BOARD_ID2
GPIO6 (SW)	SW1_HOLD
GPIO7 (SW)	BOARD_ID0
GPIO8 (SW)	BOARD_ID1



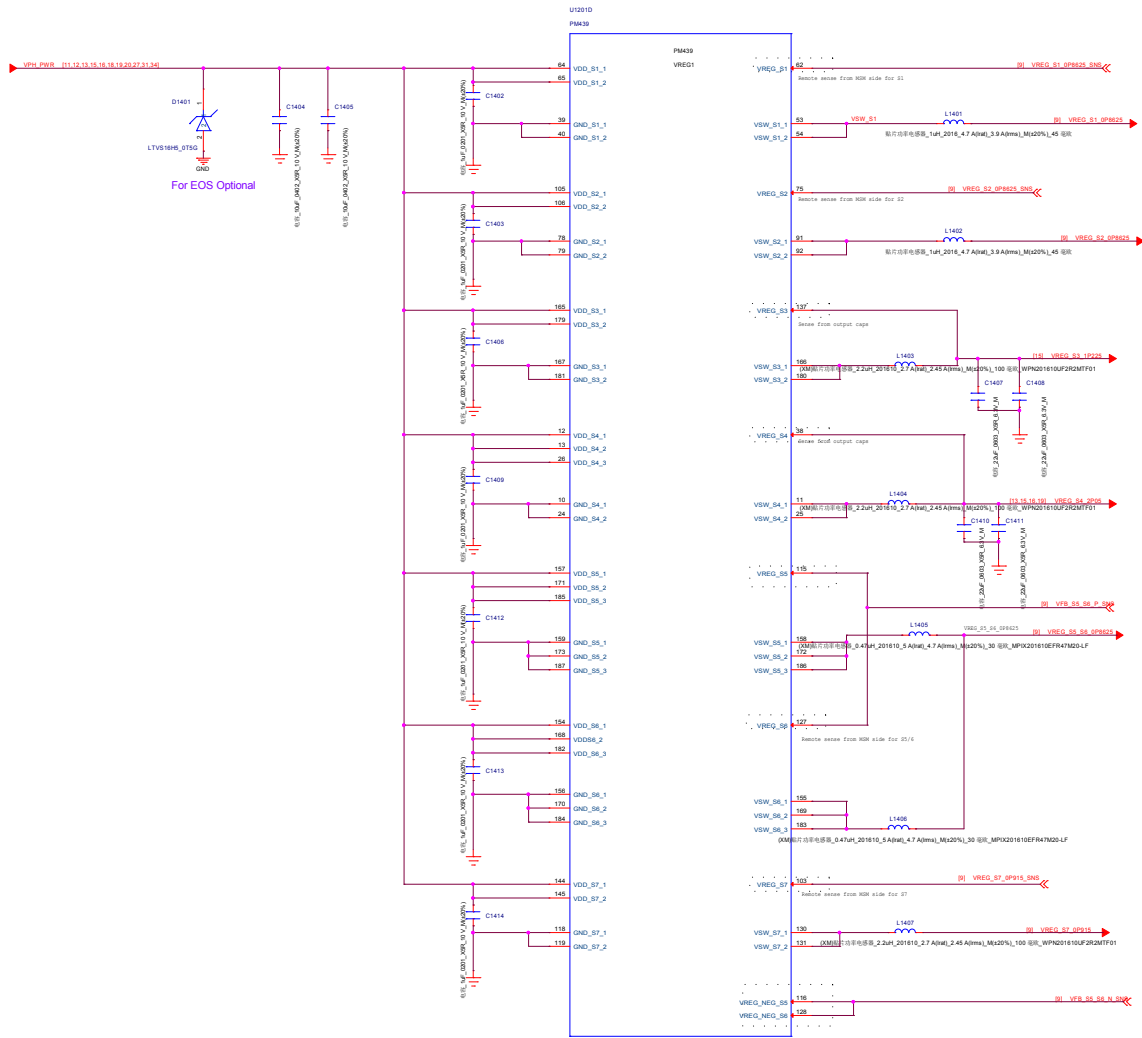


Note: Place C1305 100nF near MPP

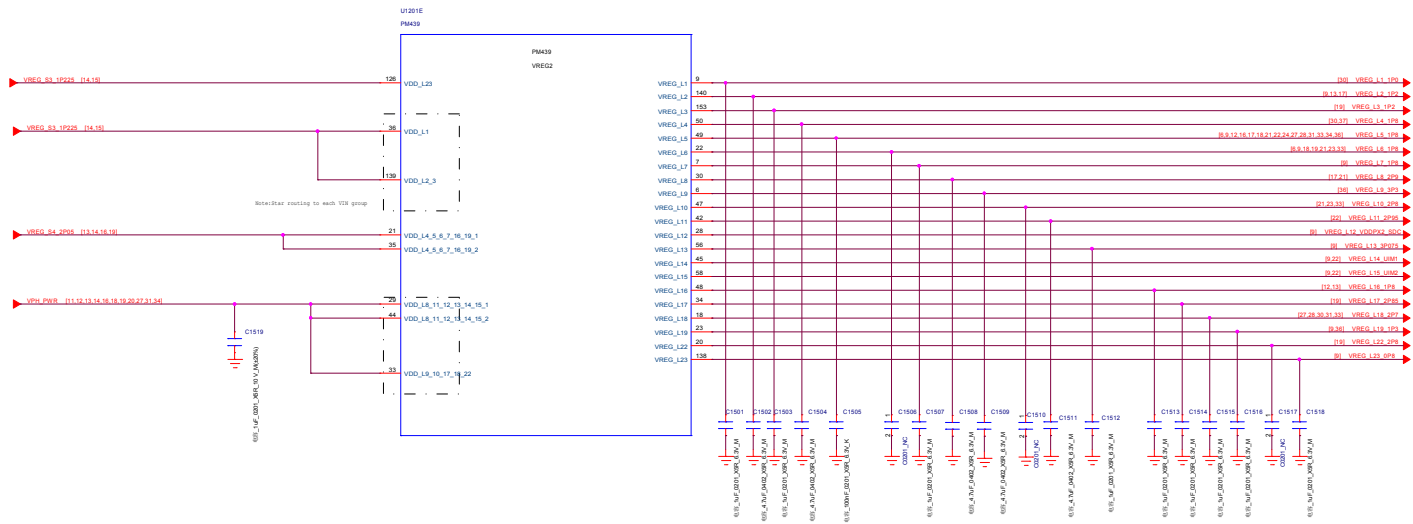
NOTE: 100nF cap MUST connect directly to C1101 and then to main GND with dedicated trace.

Place next to camera, option reserve for camera thermal

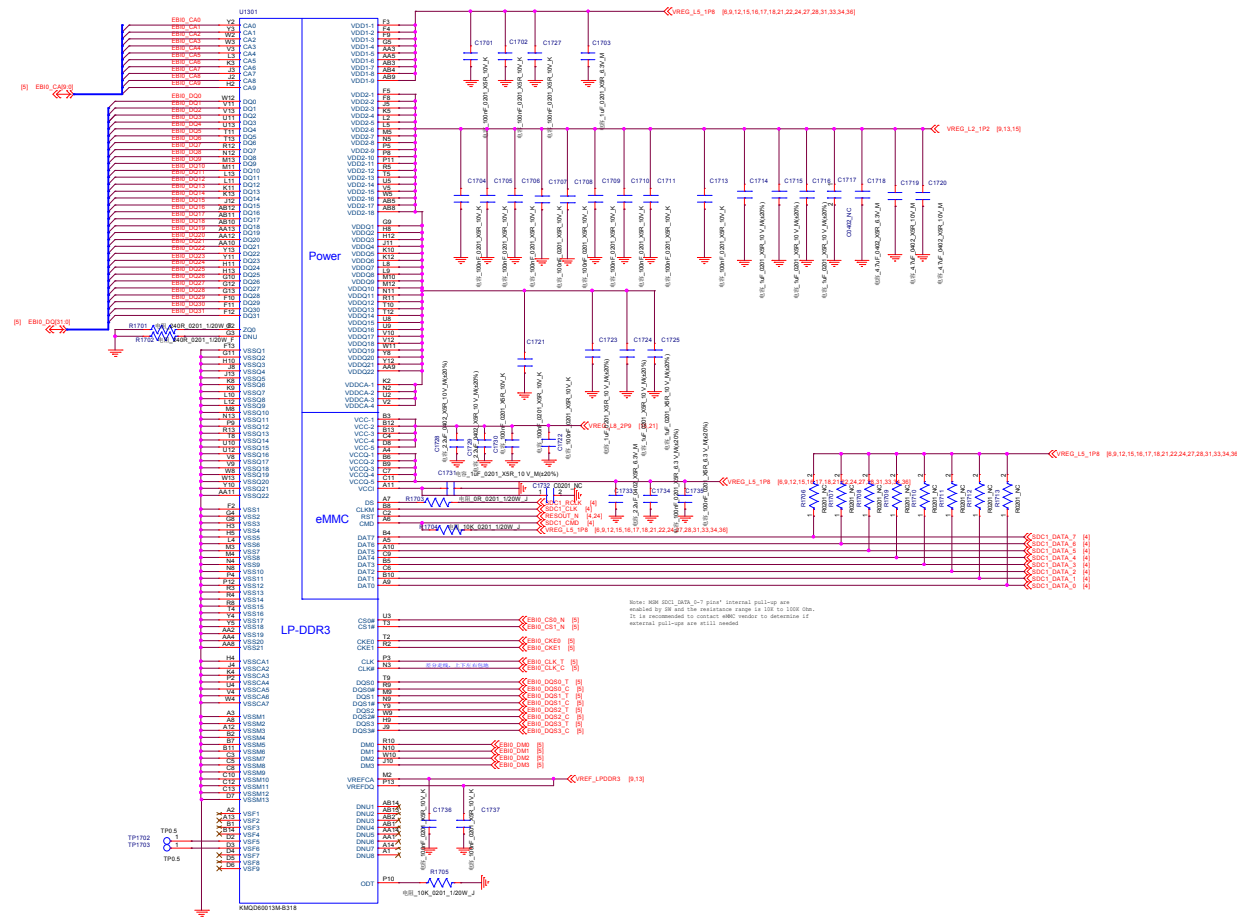
NOTE: Use resistor divider as default, CO-NMP is only for back up.





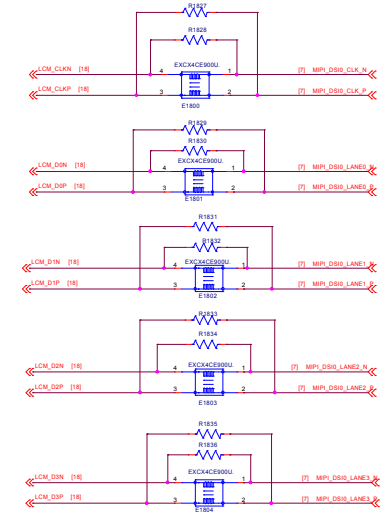
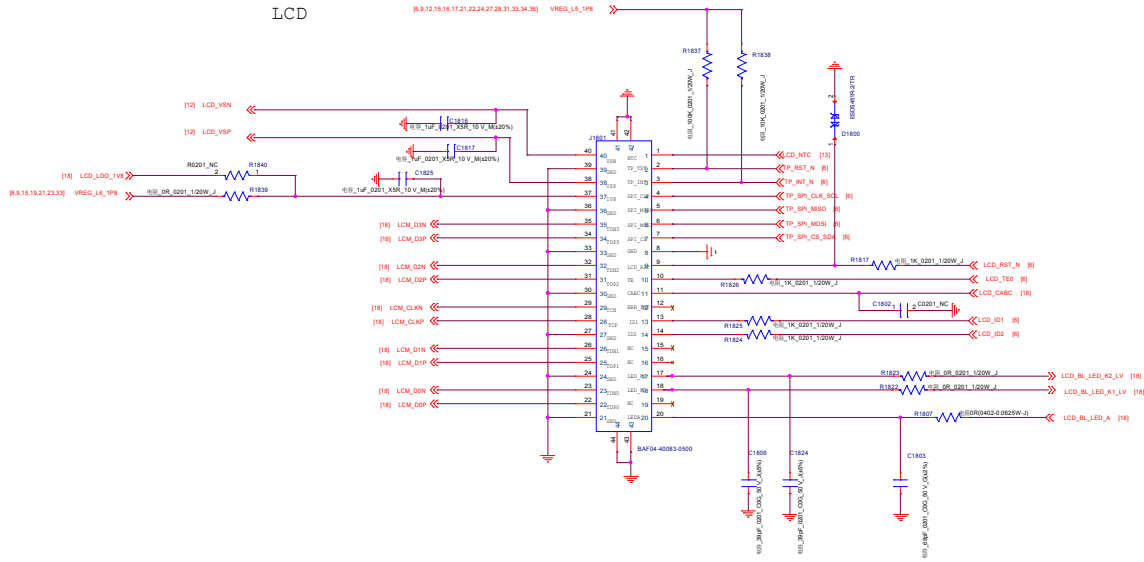






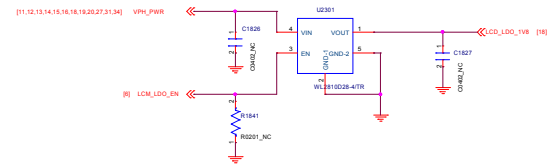
Note: When SDCI\_DATA\_7 pin's internal pullup are enabled by 08 bit the maximum scope is 10k to 100k Ohm. It is recommended to contact Micron vendor to determine if external pullup are still needed.

### LCD

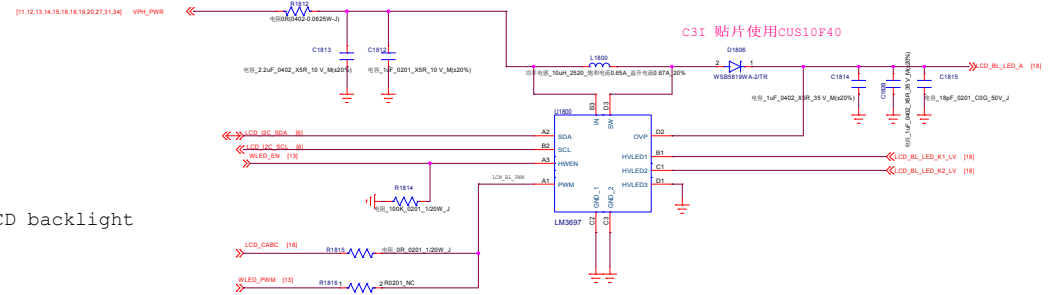


厂家	IC ADDRESS	88888 IC
XYS	0X 3E-211010	210114
YI	0X 3E-211010	06057

### LCD-BACKLIGHT



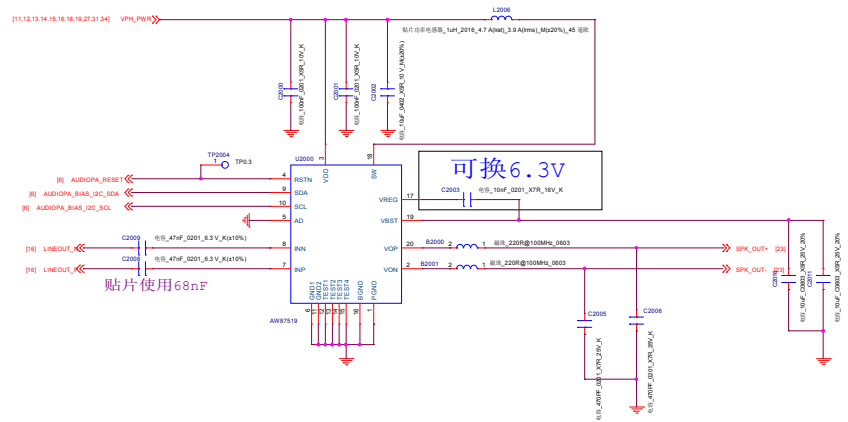
### LCD backlight



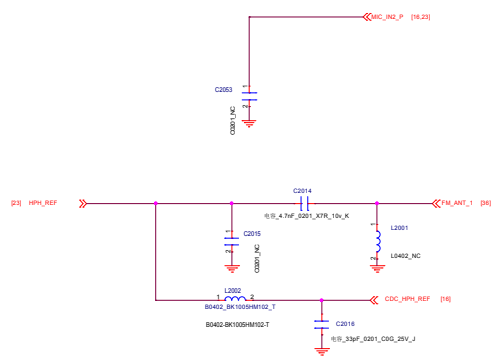


# AUDIO PA

厂家	100 ADDRESS
AW8719 ADDRESS	0058-1011000

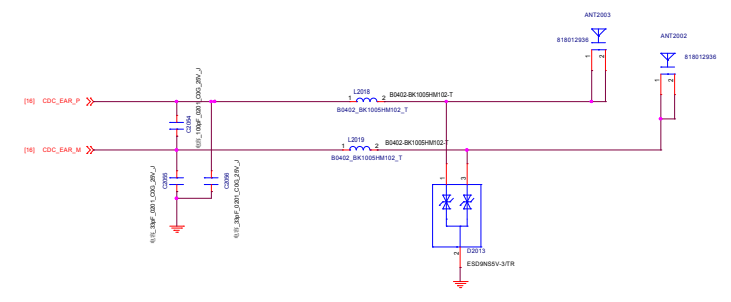


# American Standard EARPHONE

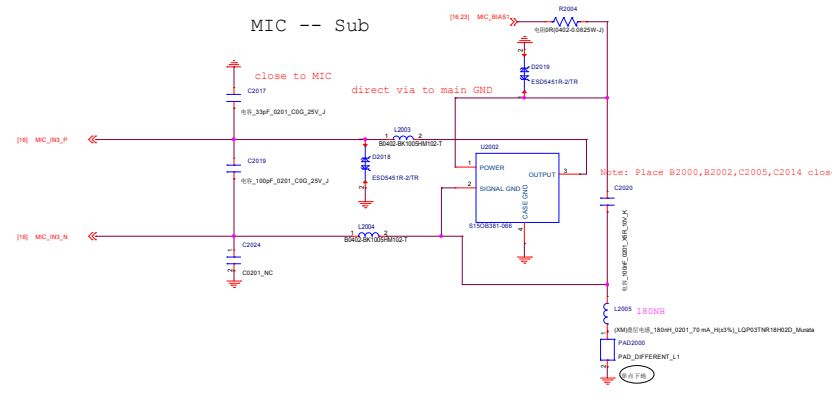


Note: Place B2000, B2002, C2005, C2014 close to headset jack connector

# RECEIVER



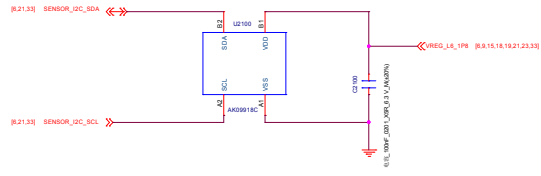
# MIC -- Sub



Note: Place B2000, B2002, C2005, C2014 close to headset jack connector

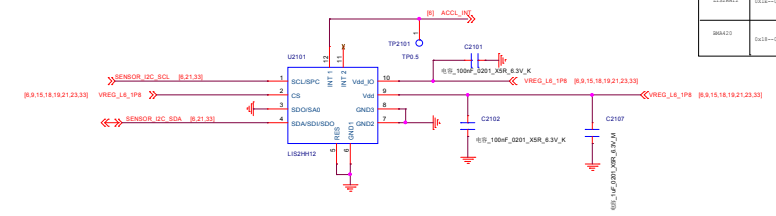
### E-compass

厂家	12C A09603
A09603	000-0001100



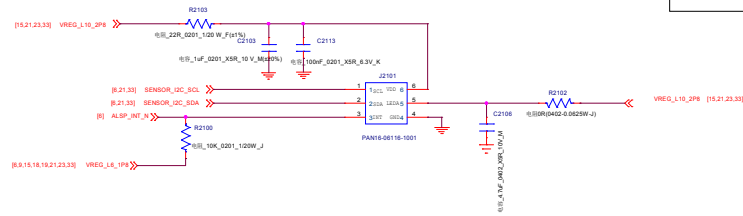
### A sensor

厂家	12C A09603
A09603	000-0001100

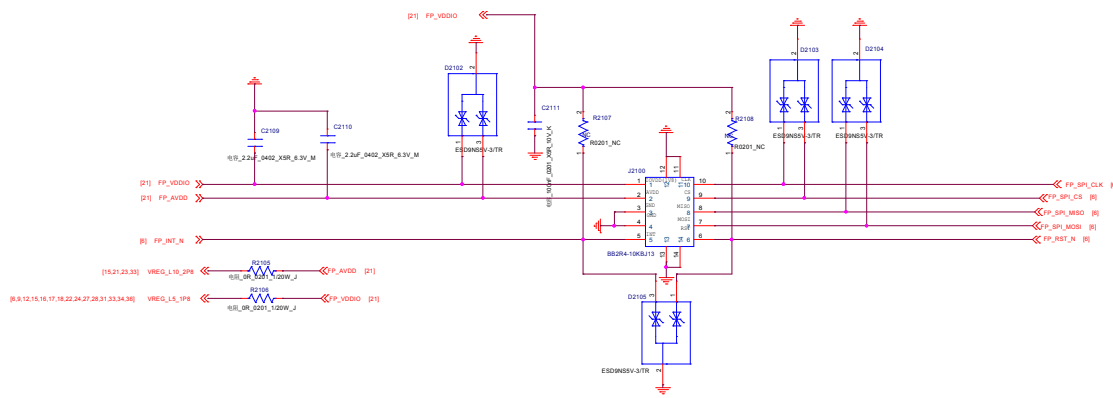


### ALS PS LTR2568

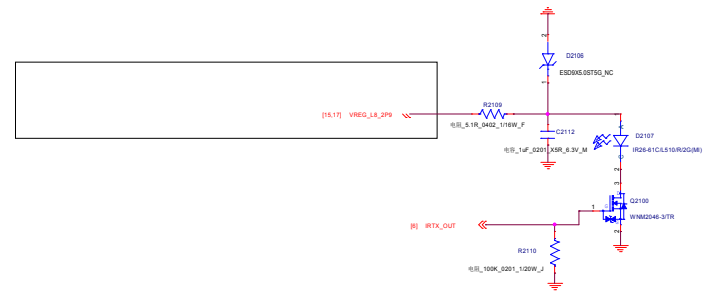
厂家	12C A09603
LTR-2568ALS-00	003-0000011



### Finger Print



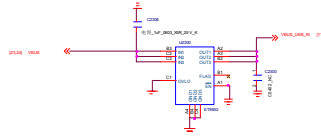
### IR







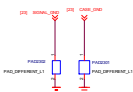
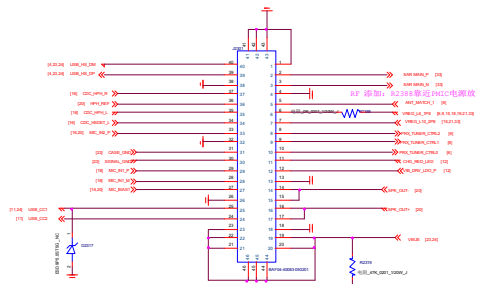
OVP 6.8V ET9552L  
 OVP 10.5V ET9552



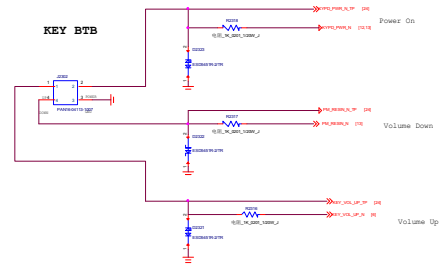
$$V_{OVP} = V_{REF} * (1 + R1/R2)$$

Note: VREF=1.2V(TYP)

### MAIN FPC BTB

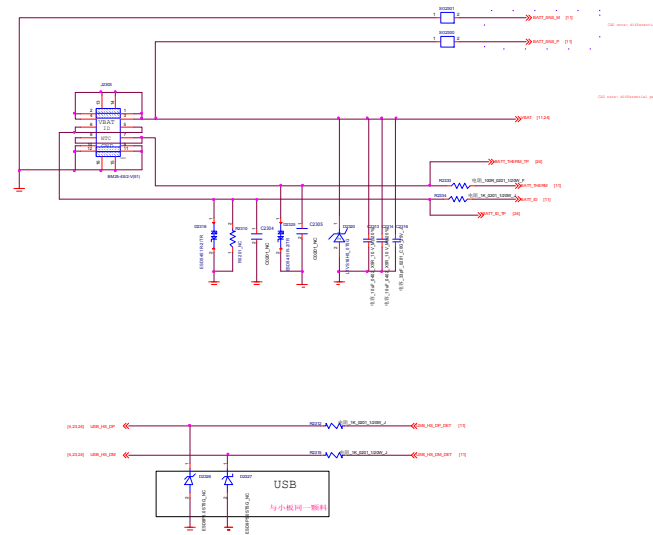


### KEY BTB



Signal	Description
KEY_VOL_UP_N	Volume Up
KEY_VOL_DN_N	Volume Down
KEY_PWR_ON_N	POWER ON
KEY_A1	XIAOMI A1

### Battery Connector



### VBAT TEST POINT



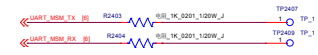
### USB TEST POINT



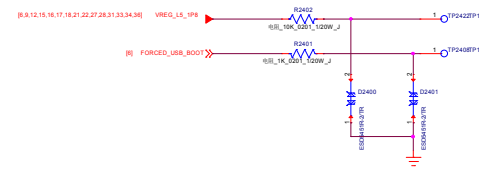
### KEY TEST point

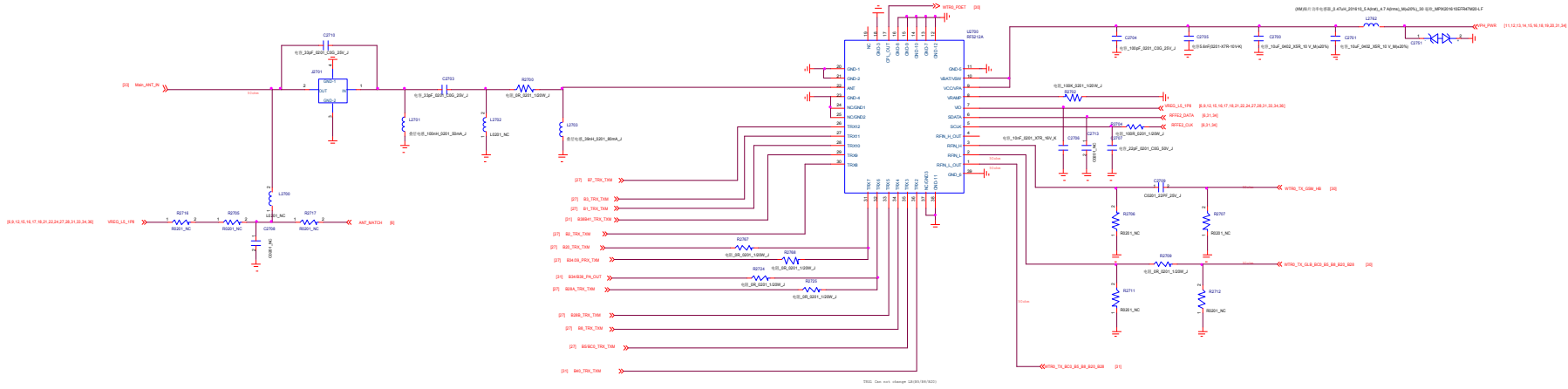


### UART TEST point

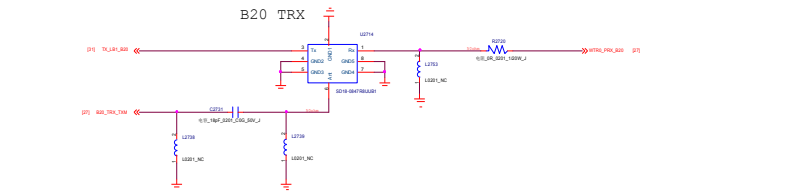
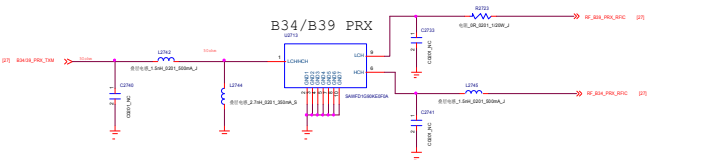
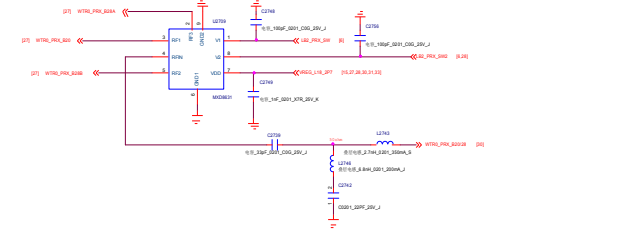
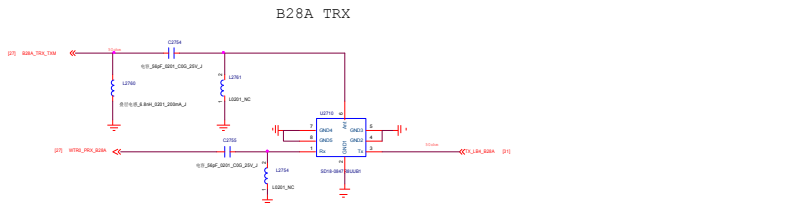
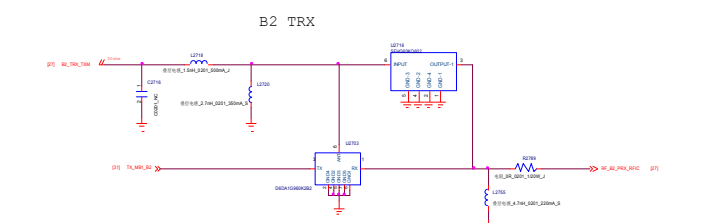
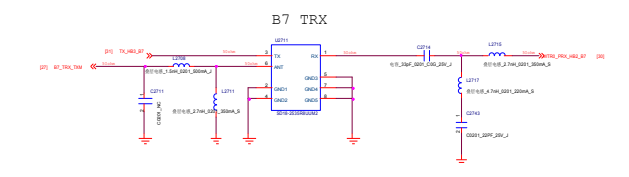
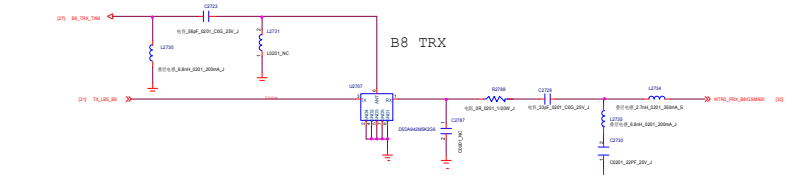
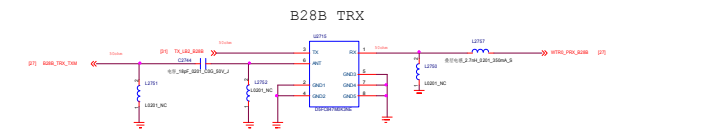
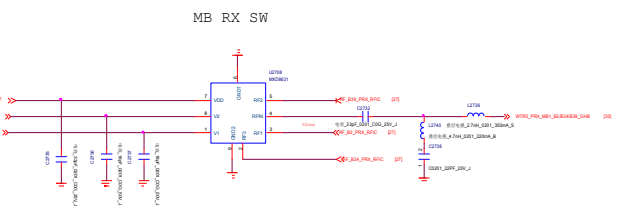
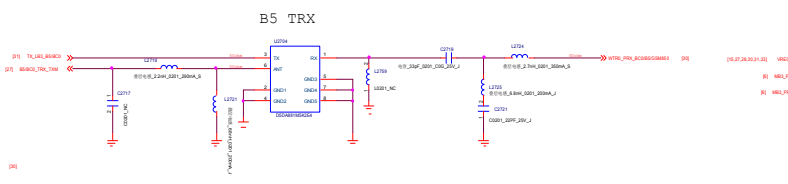
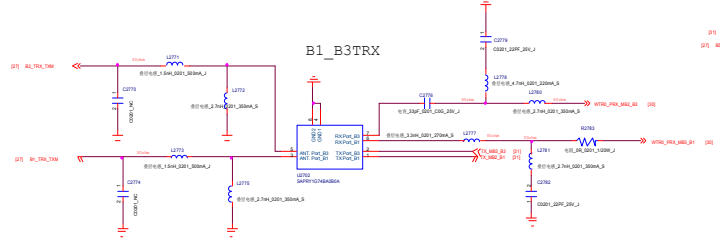


### Force USB boot





B1+3四工器兼容双功pin to pin. 1) 国内版双双功, L277&0R对地, L2771断开; 2) 国际版使用四工器, B1+3, B4共用此网络;



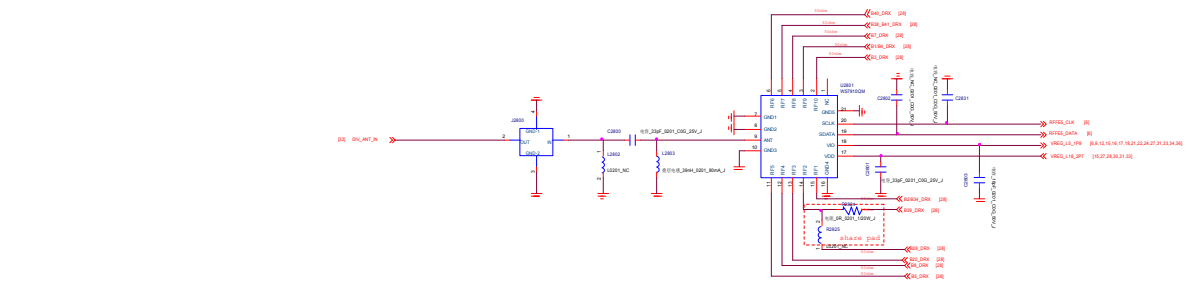
5

4

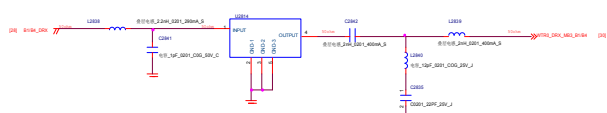
3

2

HW0503-000004



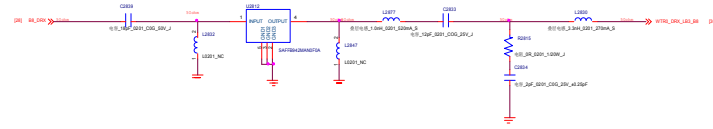
B1/B4 DRX



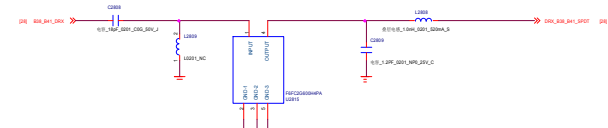
B5 DRX



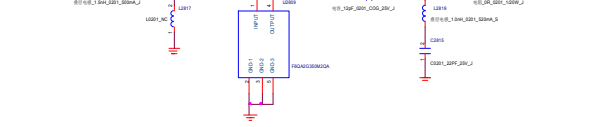
B8 DRX



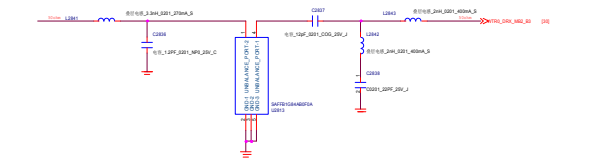
B38\_B41 DRX



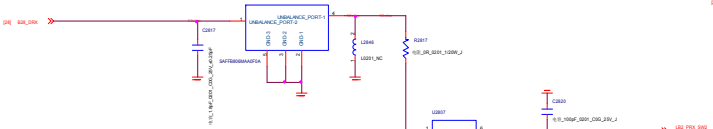
B40 DRX



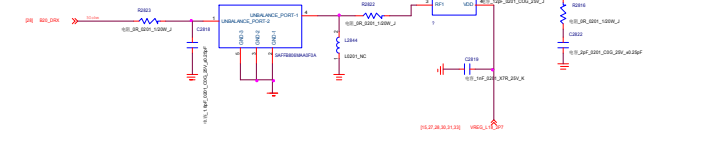
B3 DRX



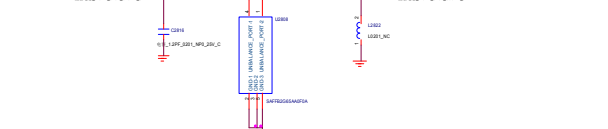
B28 DRX



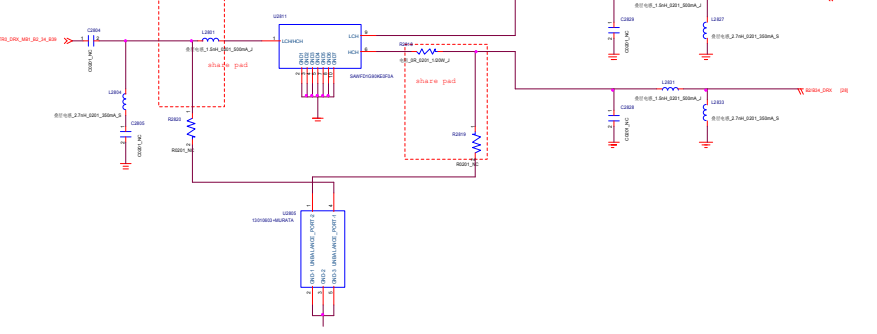
B20 DRX



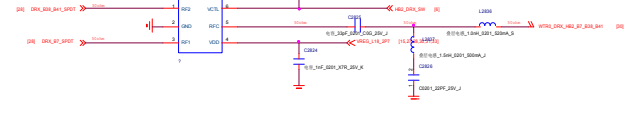
B7 DRX

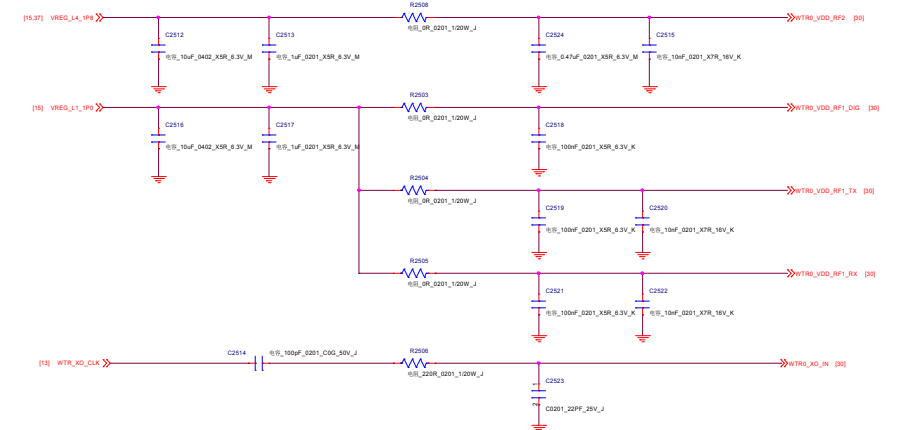
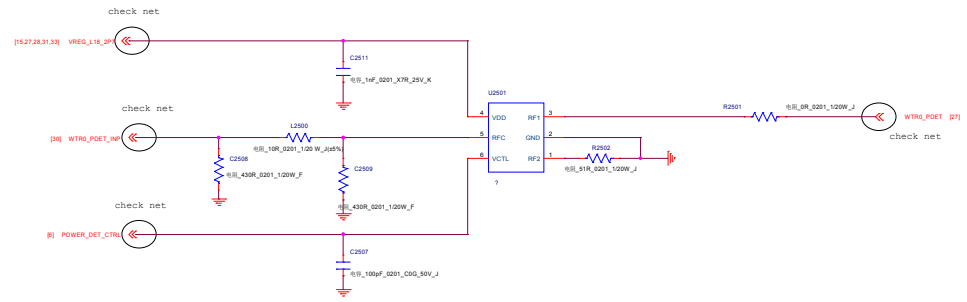
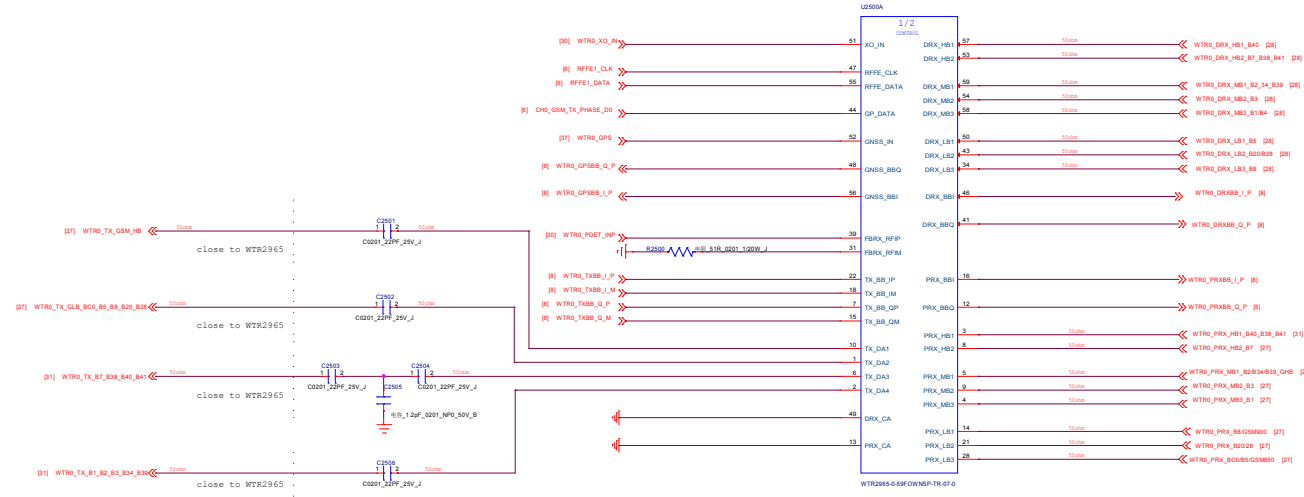
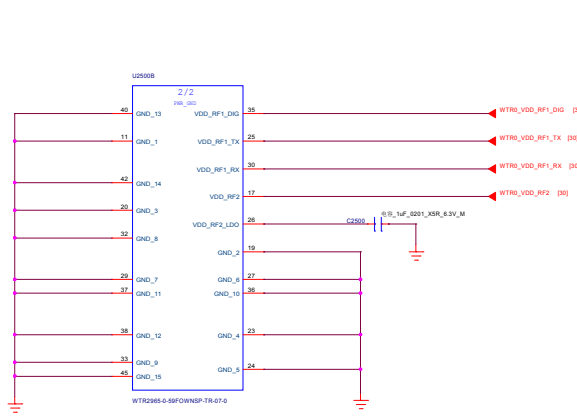


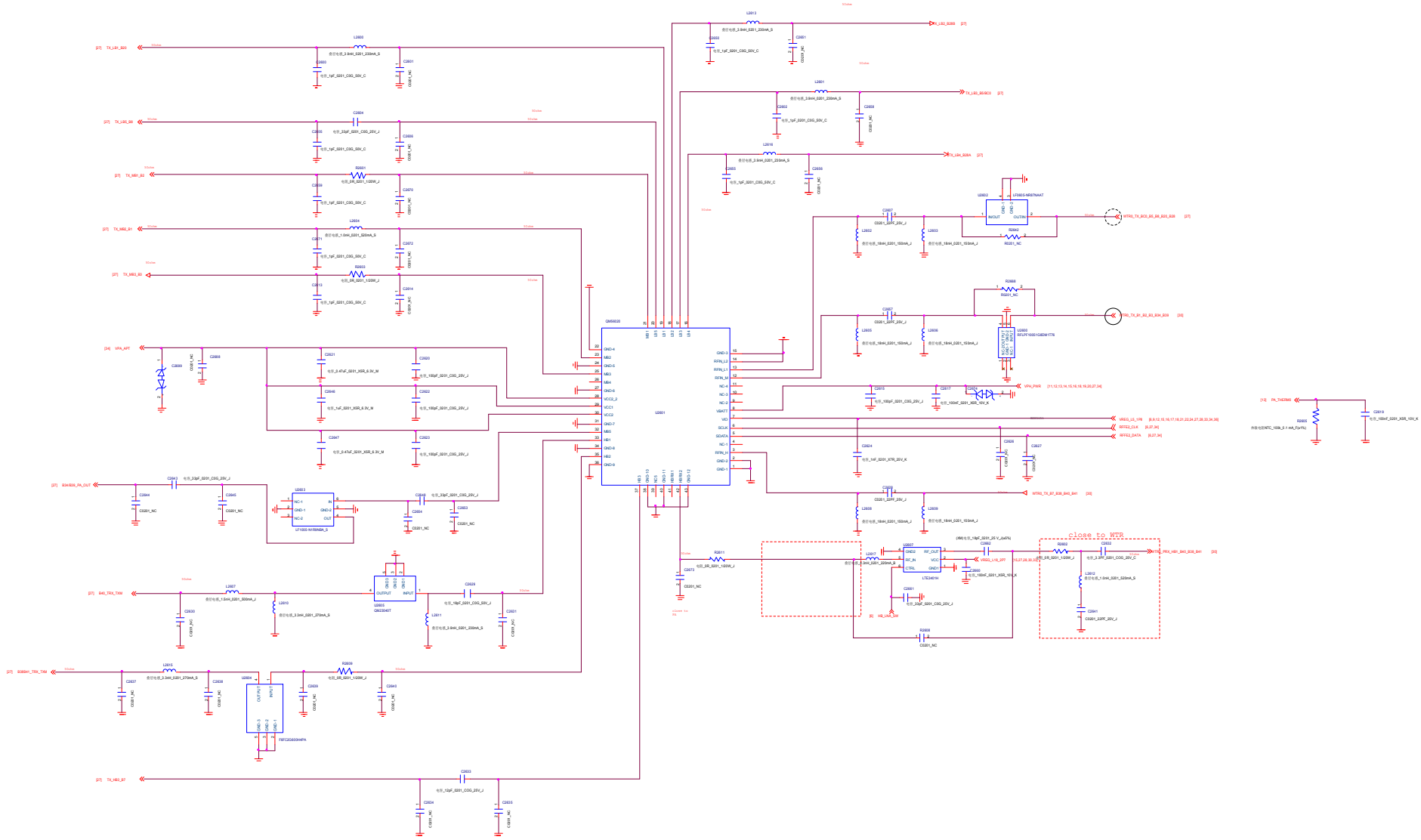
B2/34/B39 DRX



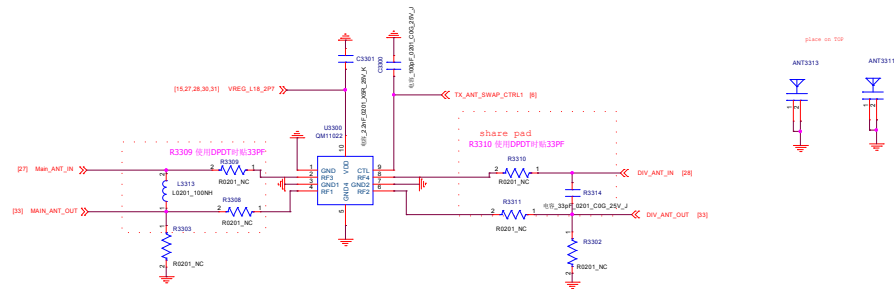
HB RX SW



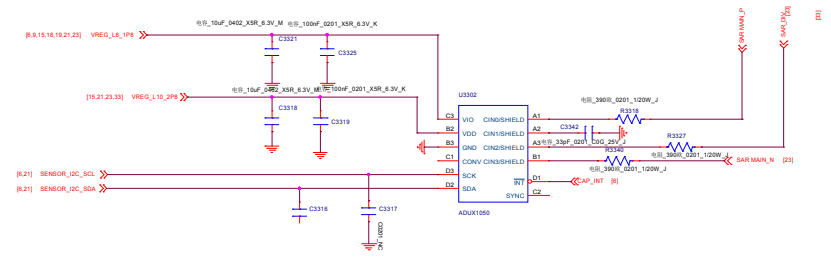




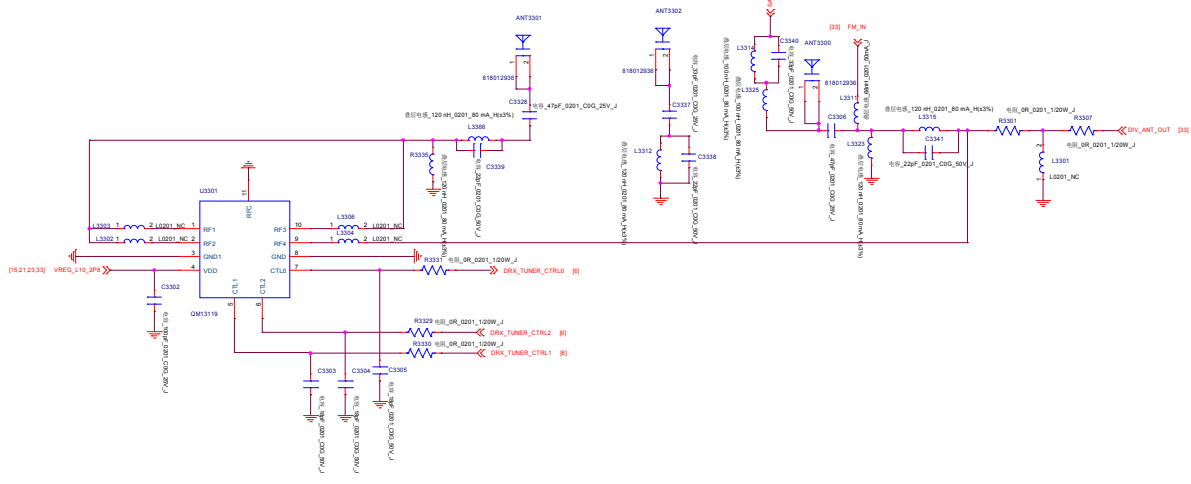
### DPDT SWITCH

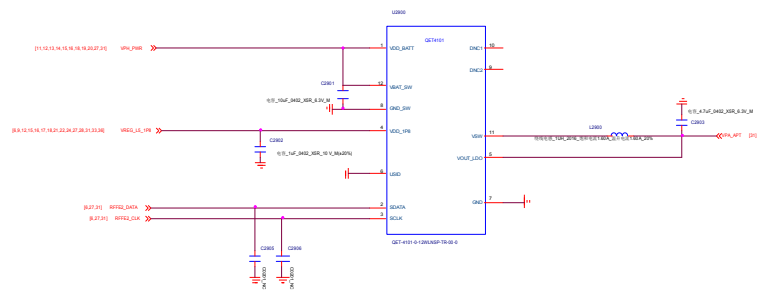


### SAR Sensor



### DIV ANT





### Main ANT





