

MSM8937 GPIO Configuration

GPIO_0	NC	GPIO_41	SCAM_ID	GPIO_82	FM_DATA
GPIO_1	NC	GPIO_42	ACCL_INT1_N	GPIO_83	BT_CTL
GPIO_2	NC	GPIO_43	ALSP_INT_N	GPIO_84	BT_DATA
GPIO_3	WDOG_DISABLE	GPIO_44	MAG_RST_N	GPIO_85	NC
GPIO_4	UART_MSM_TX	GPIO_45	NC	GPIO_86	NC
GPIO_5	UART_MSM_RX	GPIO_46	NC	GPIO_87	NC
GPIO_6	NC	GPIO_47	NC	GPIO_88	NC
GPIO_7	NC	GPIO_48	NC	GPIO_89	NC
GPIO_8	NC	GPIO_49	UIM_BATT_ALM	GPIO_90	NC
GPIO_9	NC	GPIO_50	NC	GPIO_91	KEY_VOL_UP_N
GPIO_10	TP_I2C_SDA	GPIO_51	UIM1_DATA	GPIO_92	NC
GPIO_11	TP_I2C_SCL	GPIO_52	UIM1_CLK	GPIO_93	NC
GPIO_12	NC	GPIO_53	UIM1_RESET	GPIO_94	NC
GPIO_13	NC	GPIO_54	NC	GPIO_95	NC
GPIO_14	SENSOR_I2C_SDA	GPIO_55	UIM2_DATA	GPIO_96	NC
GPIO_15	SENSOR_I2C_SCL	GPIO_56	UIM2_CLK	GPIO_97	NC
GPIO_16	NC	GPIO_57	UIM2_RESET	GPIO_98	NC
GPIO_17	NC	GPIO_58	NC	GPIO_99	NC
GPIO_18	NC	GPIO_59	NC	GPIO_100	RFFE1_CLK
GPIO_19	NC	GPIO_60	LCD_RST_N	GPIO_101	RFFE1_DATA
GPIO_20	ACC_SPI_MOSI	GPIO_61	LCD_ID	GPIO_102	NC
GPIO_21	ACC_SPI_MISO	GPIO_62	NC	GPIO_103	NC
GPIO_22	ACC_SPI_CS	GPIO_63	APP_BOOT_FROM_ROM	GPIO_104	NC
GPIO_23	ACC_SPI_CLK	GPIO_64	TP_RST_N	GPIO_105	GRFC1_SEL
GPIO_24	LCD_TE0	GPIO_65	TP_INT_N	GPIO_106	NC
GPIO_25	NC	GPIO_66	GP_PDM_A0	GPIO_107	GRFC3_SEL
GPIO_26	CAM_MCLK0	GPIO_67	SDCARD_DET_N	GPIO_108	NC
GPIO_27	NC	GPIO_68	NC	GPIO_109	GRFC5_SEL
GPIO_28	CAM_MCLK2	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	NC	GPIO_72	CDC_PDM_RX0	GPIO_113	GRFC9_SEL
GPIO_32	NC	GPIO_73	CDC_PDM_RX1	GPIO_114	GRFC10_SEL
GPIO_33	NC	GPIO_74	CDC_PDM_RX2	GPIO_115	GRFC11_SEL
GPIO_34	FLASH_STROBE_NOW	GPIO_75	BT_SSBI	GPIO_116	GRFC12_SEL
GPIO_35	MCAM1_PWDN	GPIO_76	WL_CMD_DATA_2	GPIO_117	NC
GPIO_36	NC	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	NC	GPIO_79	WL_CMD_SET	GPIO_120	RFFE5_CLK
GPIO_39	SCAM_PWDN	GPIO_80	WL_CMD_CLK	GPIO_121	RFFE5_DATA
GPIO_40	SCAM_RST_N	GPIO_81	FM_SSBI	GPIO_122	NC

GPIO_123	NC
GPIO_124	NC
GPIO_125	NC
GPIO_126	NC
GPIO_127	NC
GPIO_128	NC
GPIO_129	NC
GPIO_130	NC
GPIO_131	NC
GPIO_132	NC
GPIO_133	NC

PMI8937 MPP Configuration

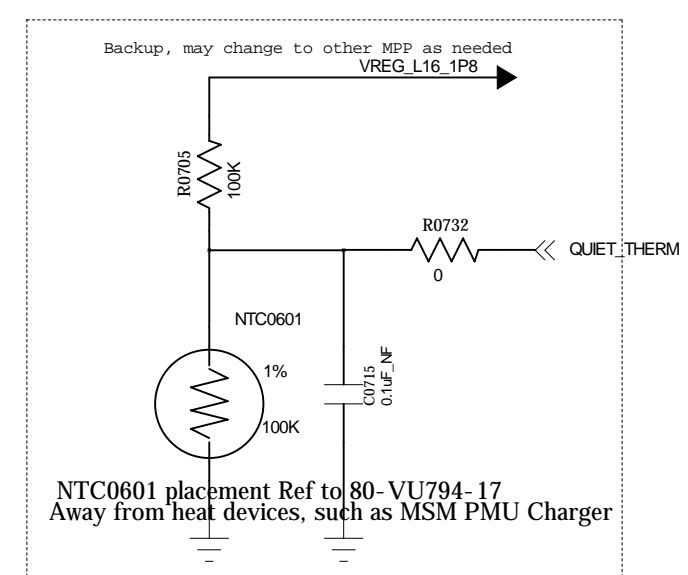
MPP_1	NC
MPP_2	GREEN_LED
MPP_4	FLASH_STROBE_NOW

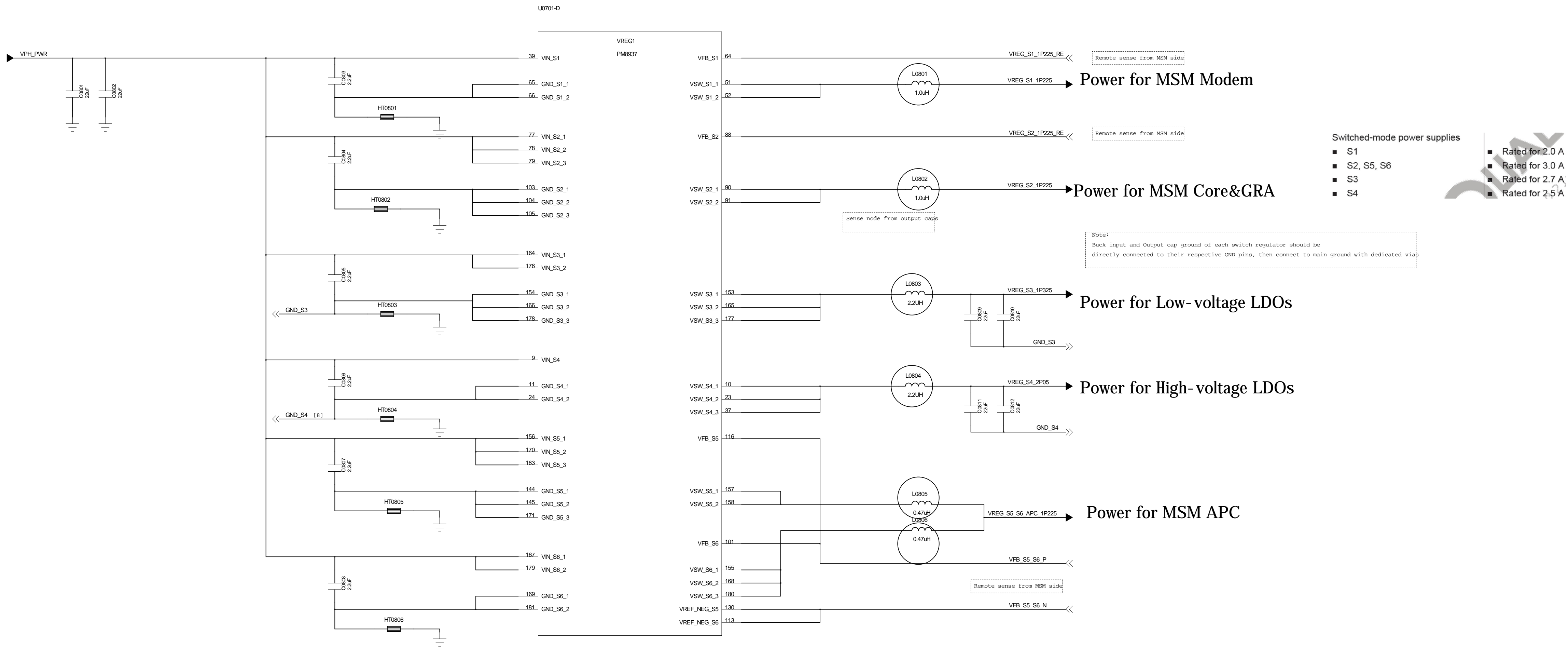
PM8937 GPIO/MPP Configuration

GPIO_1	NC	MPP_1	VDD_FX_BIAS_MPP_1
GPIO_2	SDCARD_DET_N	MPP_2	NC
GPIO_3	UIM_BATT_ALM	MPP_3	VREF_DAC_MPP_3
GPIO_4	NC	MPP_4	QUIET_THERM
GPIO_5	NC		
GPIO_6	NC		
GPIO_7	NC		
GPIO_8	NC		

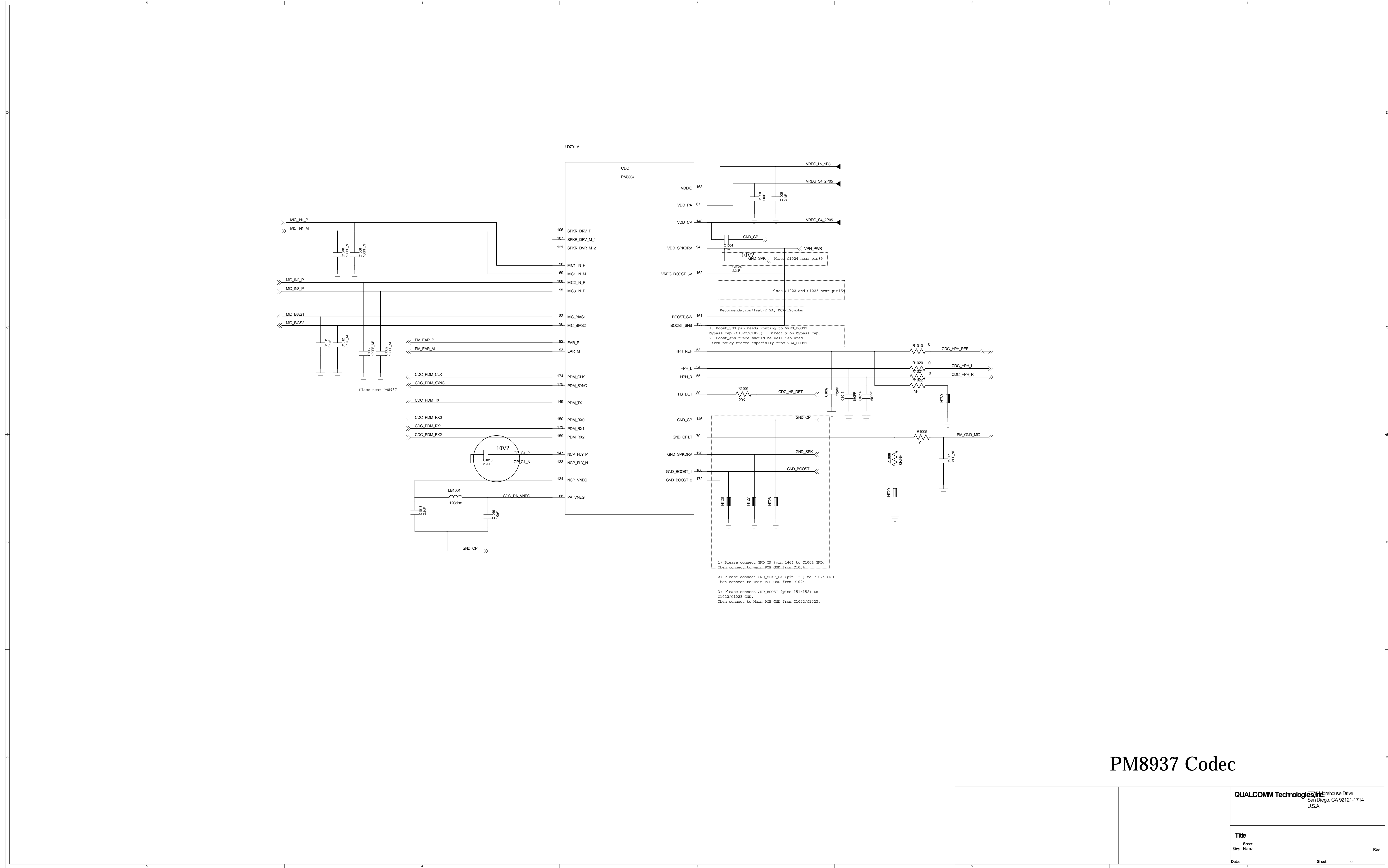
GPIO MAP

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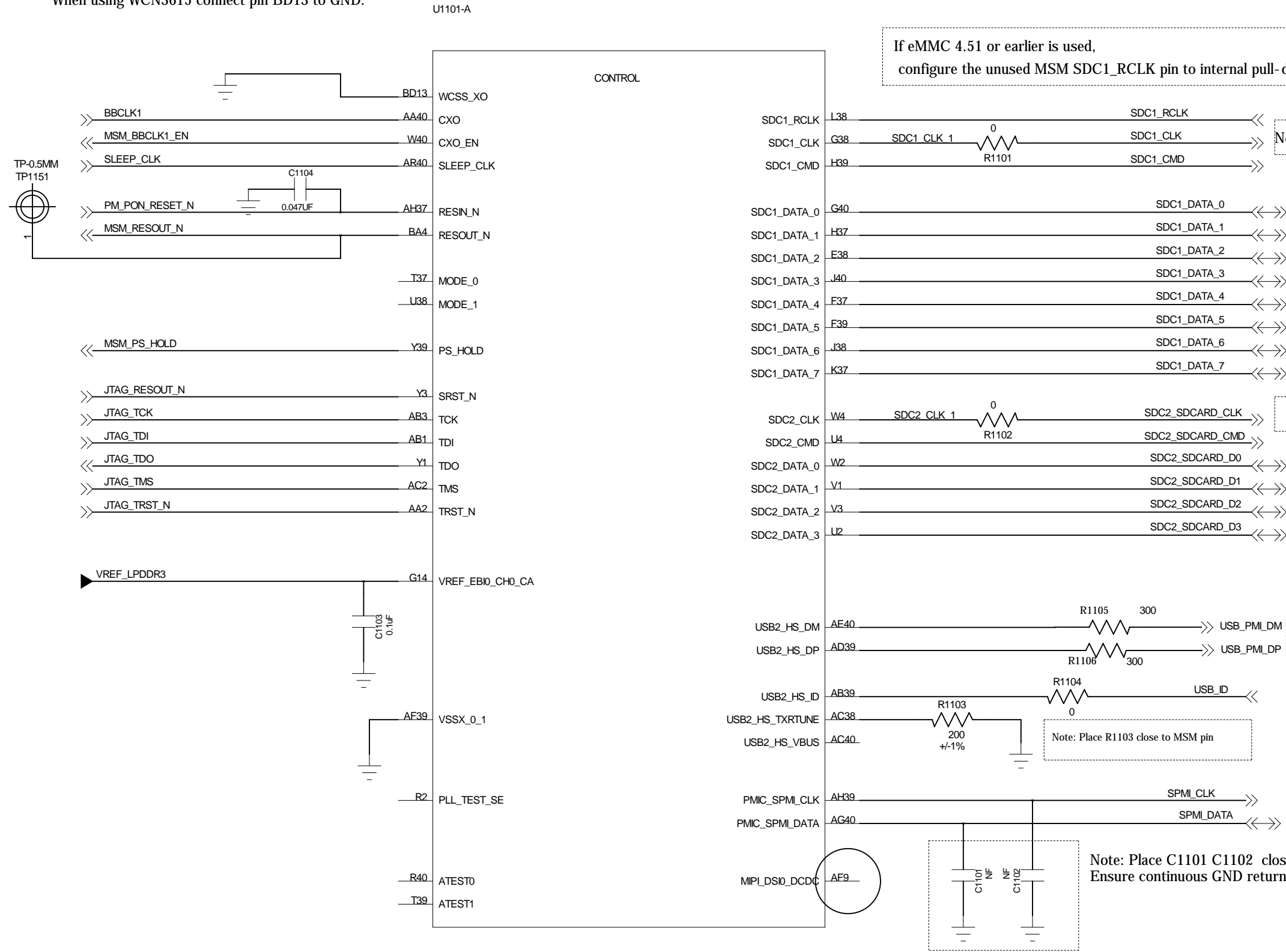




PM8937 Buck converter



Note: WCSS_XO signal required only for 5GHZ.
When using WCN3615 connect pin BD13 to GND.



If eMMC 4.51 or earlier is used,
configure the unused MSM SDC1_RCLK pin to internal pull-down to prevent the bus from floating.

Note: Place R1101 on CLK lines close to MSM

Note: Place R1102 on CLK lines close to MSM

Note: 90ohm Diff Imp routing for USB

Note: Place R1103 close to MSM pin

Note: Place C1101 C1102 close to MSM
Ensure continuous GND return path with 50 mil Z0.

L1101 (MPL1100S)S22MET1:
IND-MULTI-LAYER 2.2uH, ±20% 750mA 0603

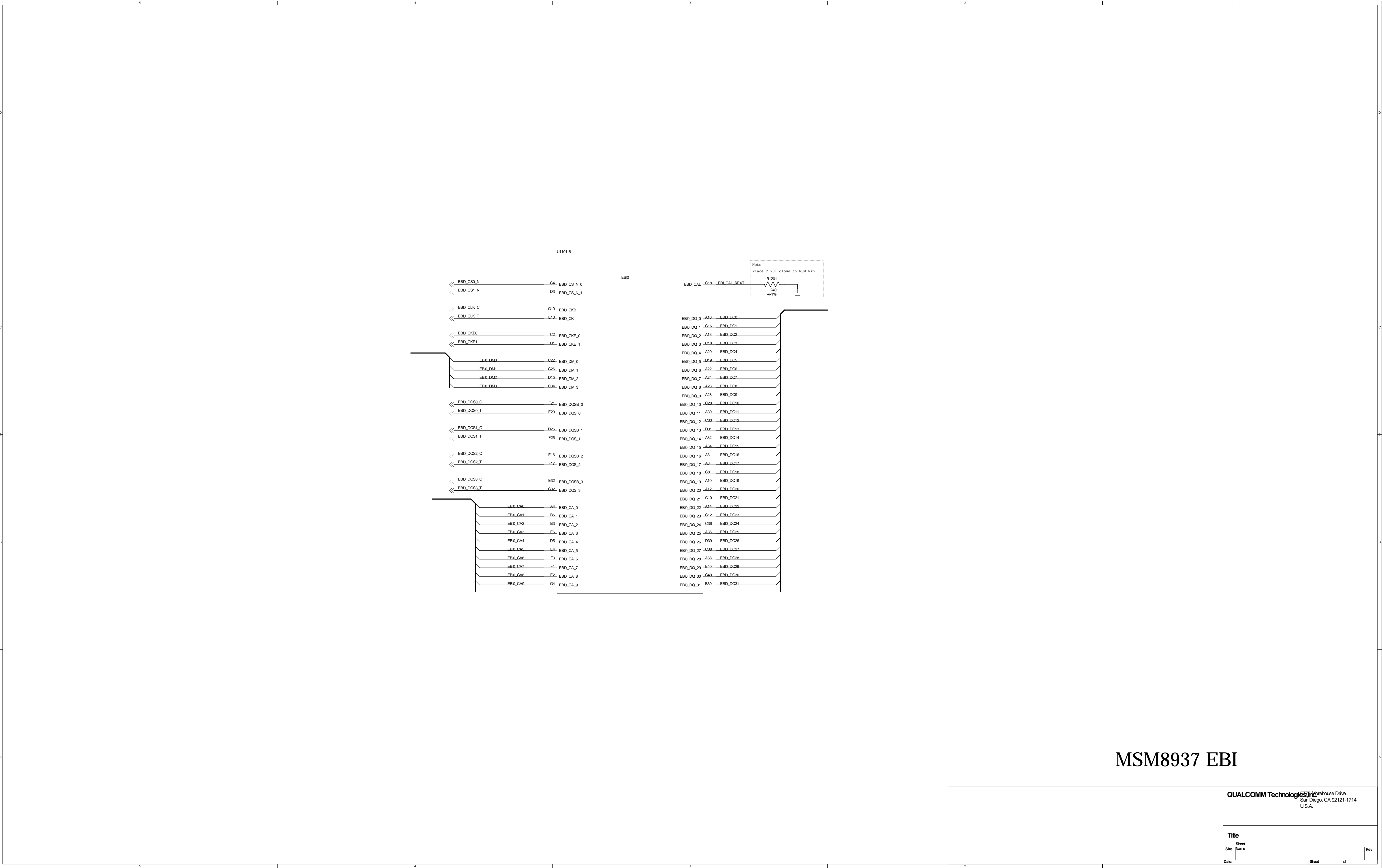
Note
MPL1_DSI can be configured as DCDC or LDO mode.
When configured as LDO mode, pin AF9 should be left floating and L1101 should be IN1.

DC-DC mode "C For better power ~3 mA lower

MSM8937 Control

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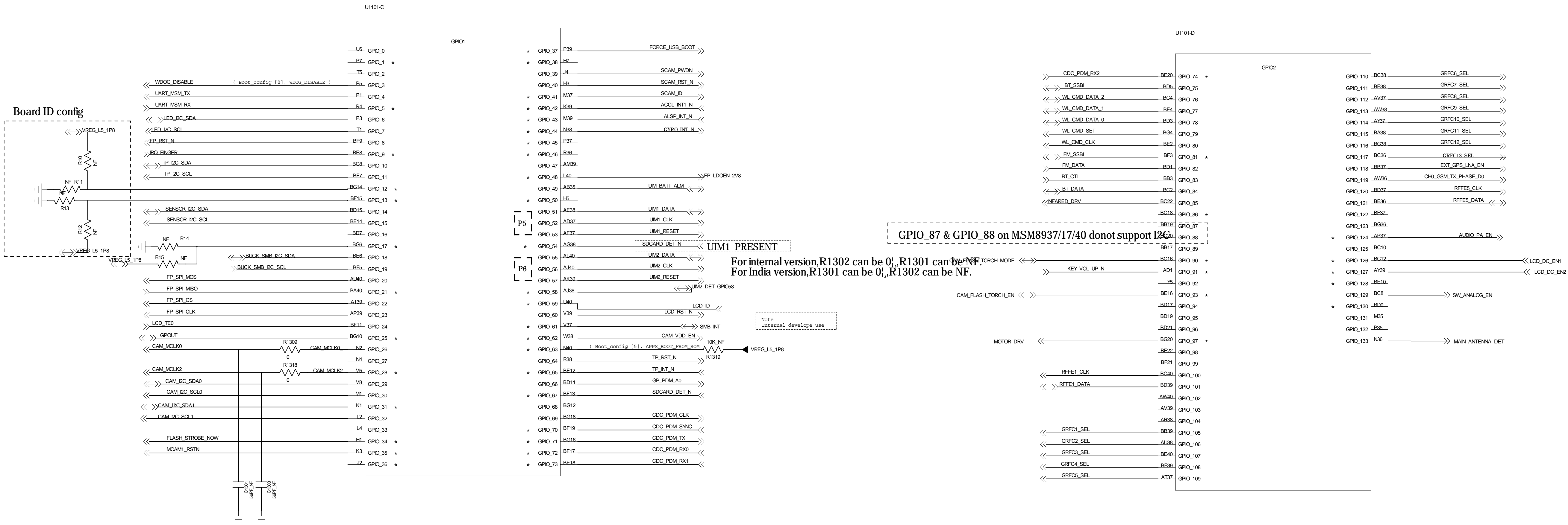


MSM8937 EBI

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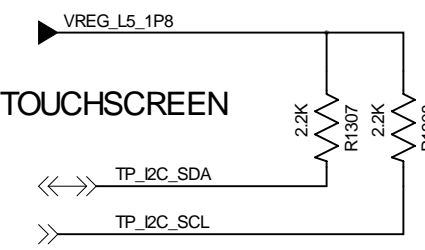
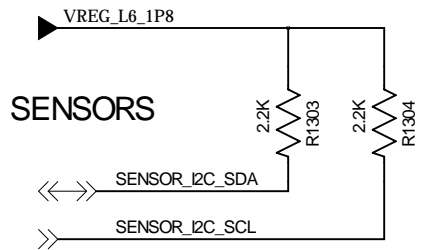
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Note: Asterisks (*) indicate modem power management (MPM) wake-up pins

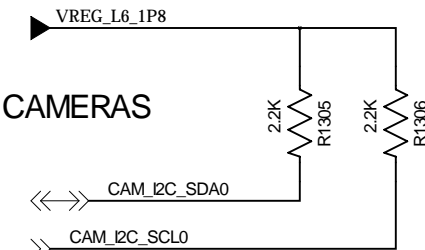


Note: Do not have pull-ups on the following GPIOs unless intend for boot or secure- boot related configurations:
GPIO_91, 107, 109

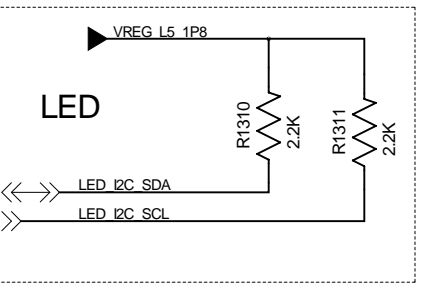
I2C PULL-UP RESISTORS



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.



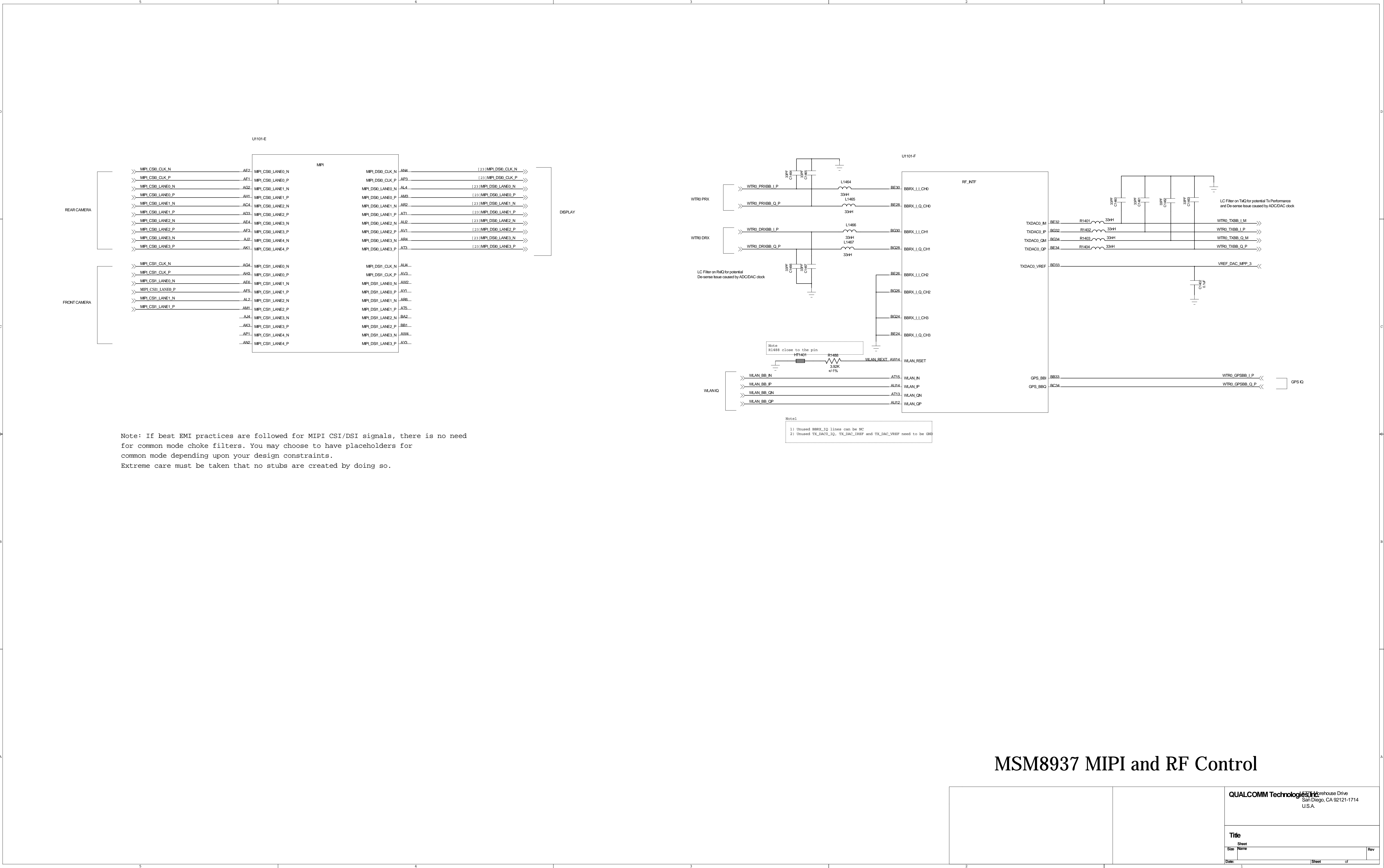
Depth CAMERAS



MSM8937 GPIO

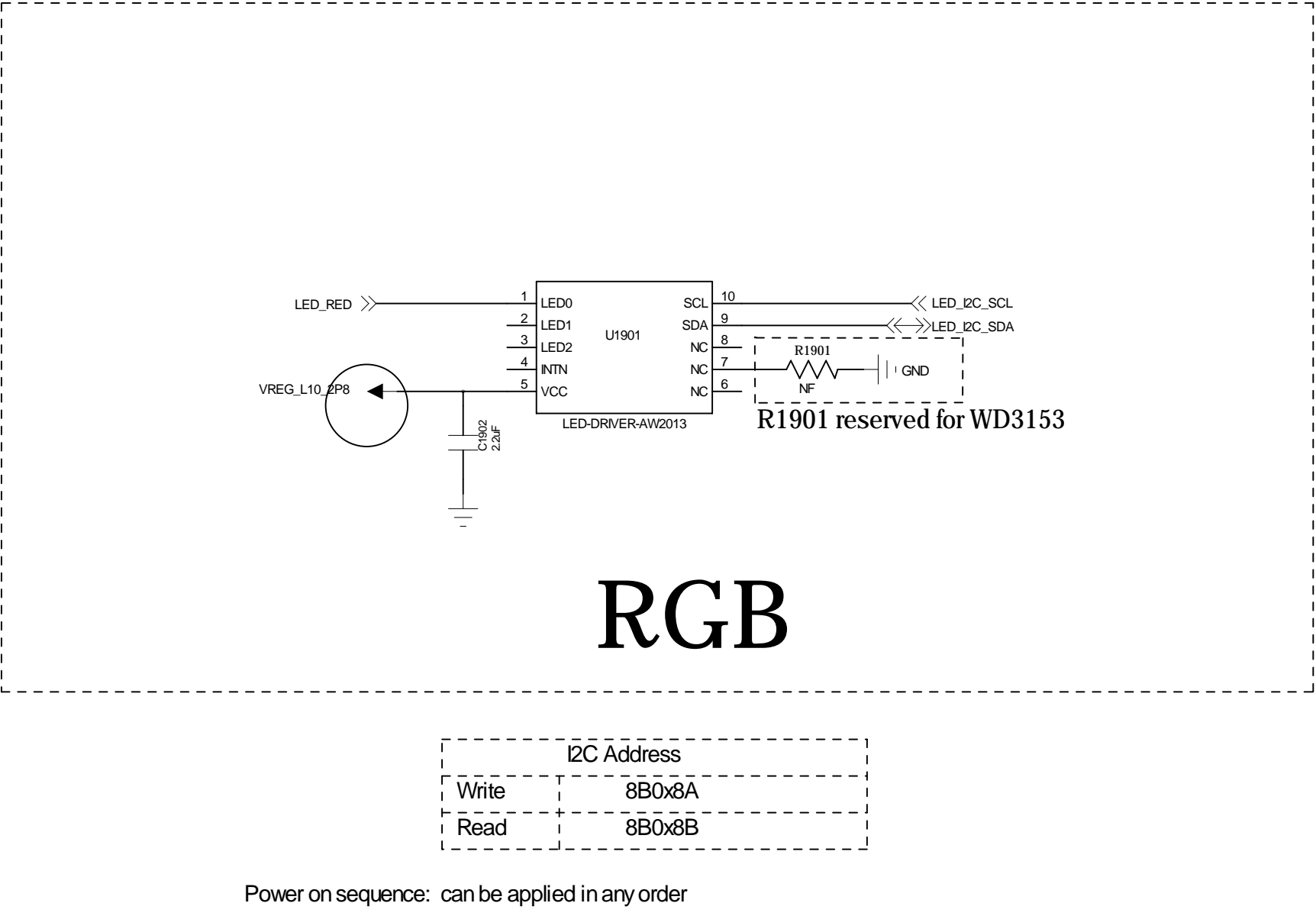
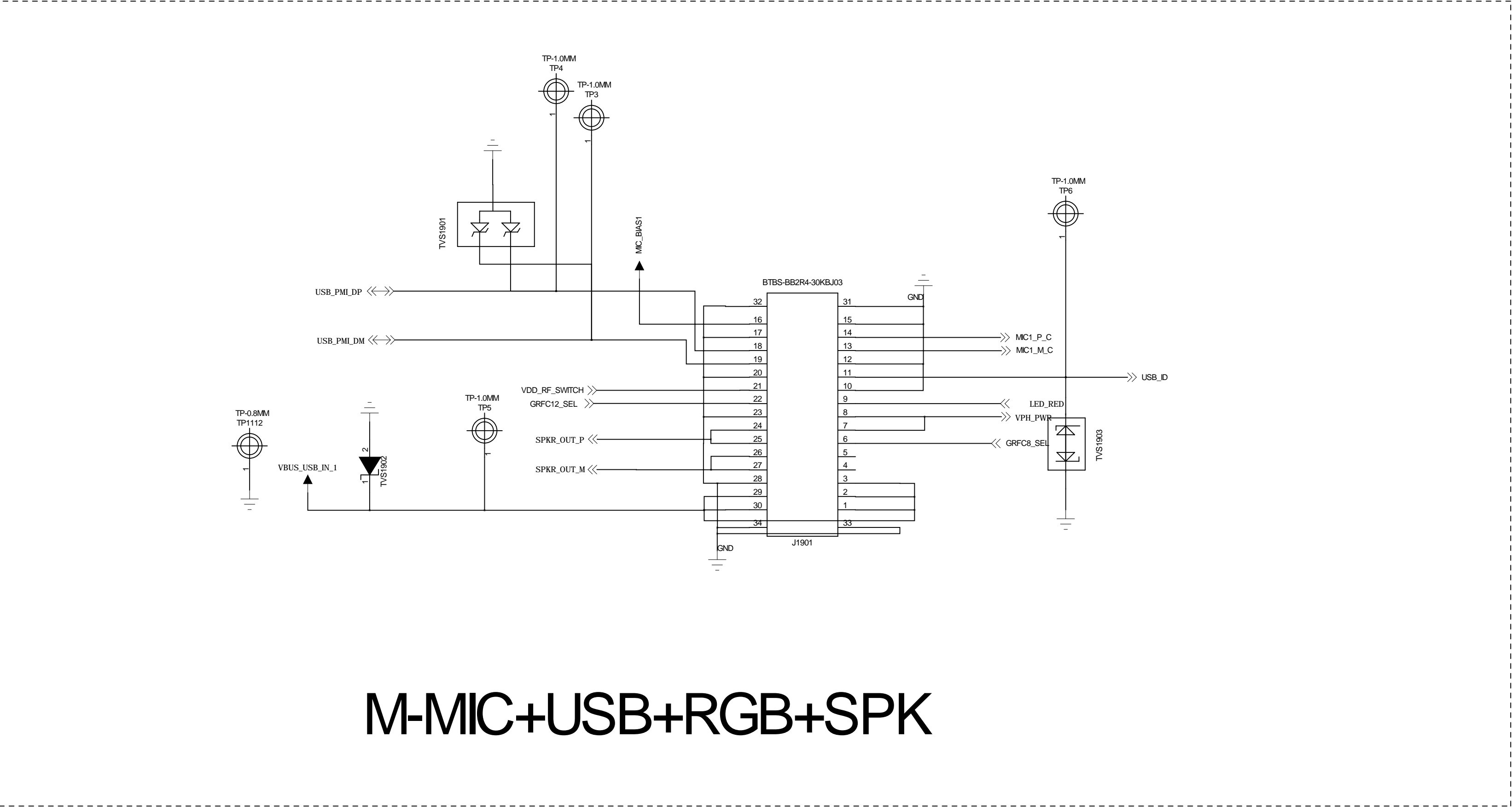
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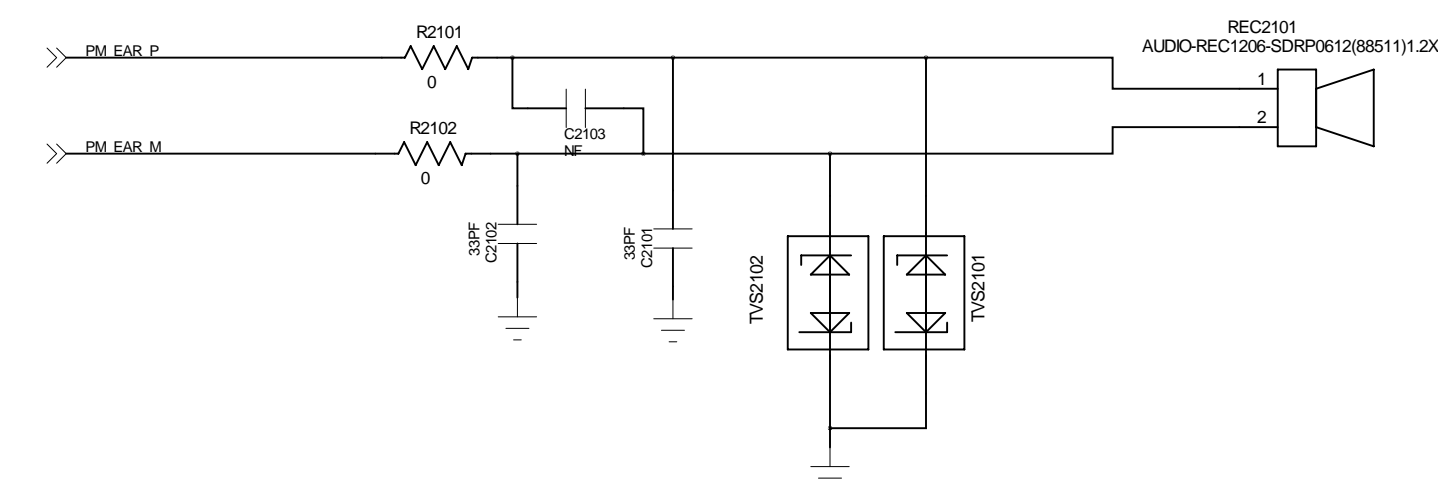
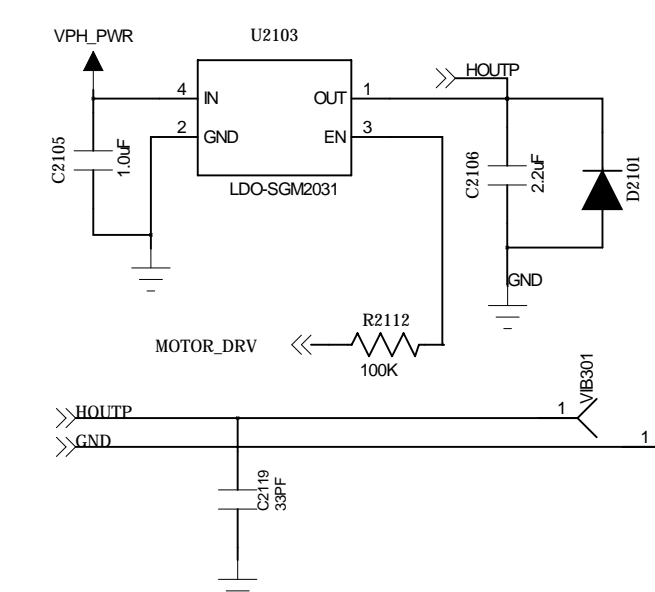
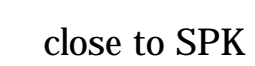


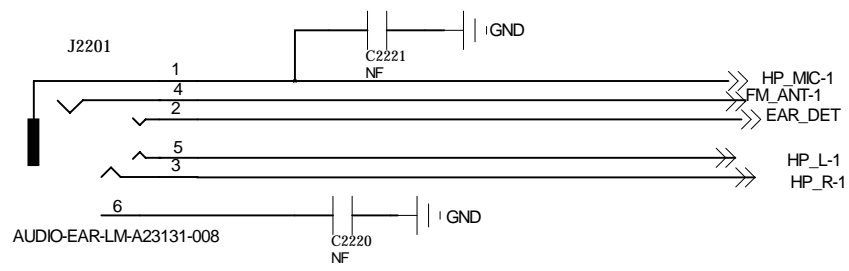


MSM8937 POWER2

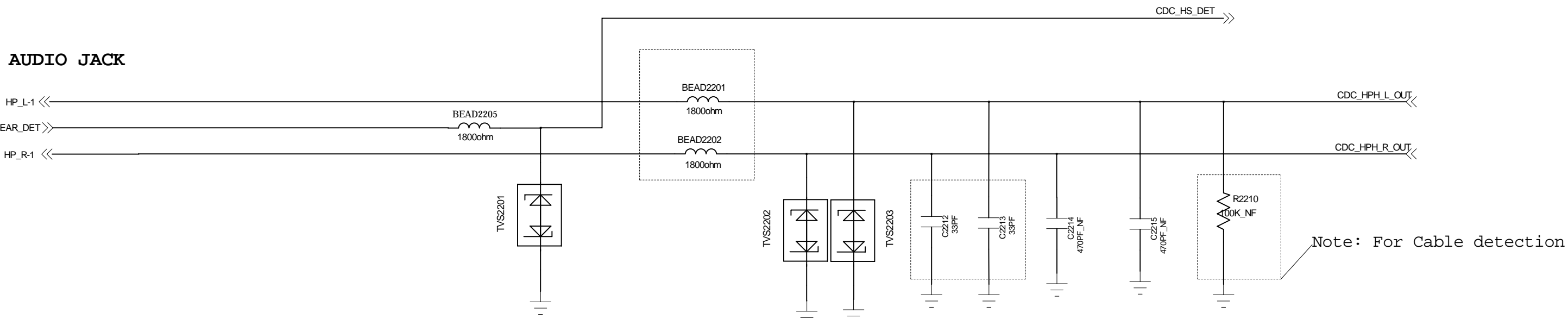


USB/SUB BOARD CONNECTOR

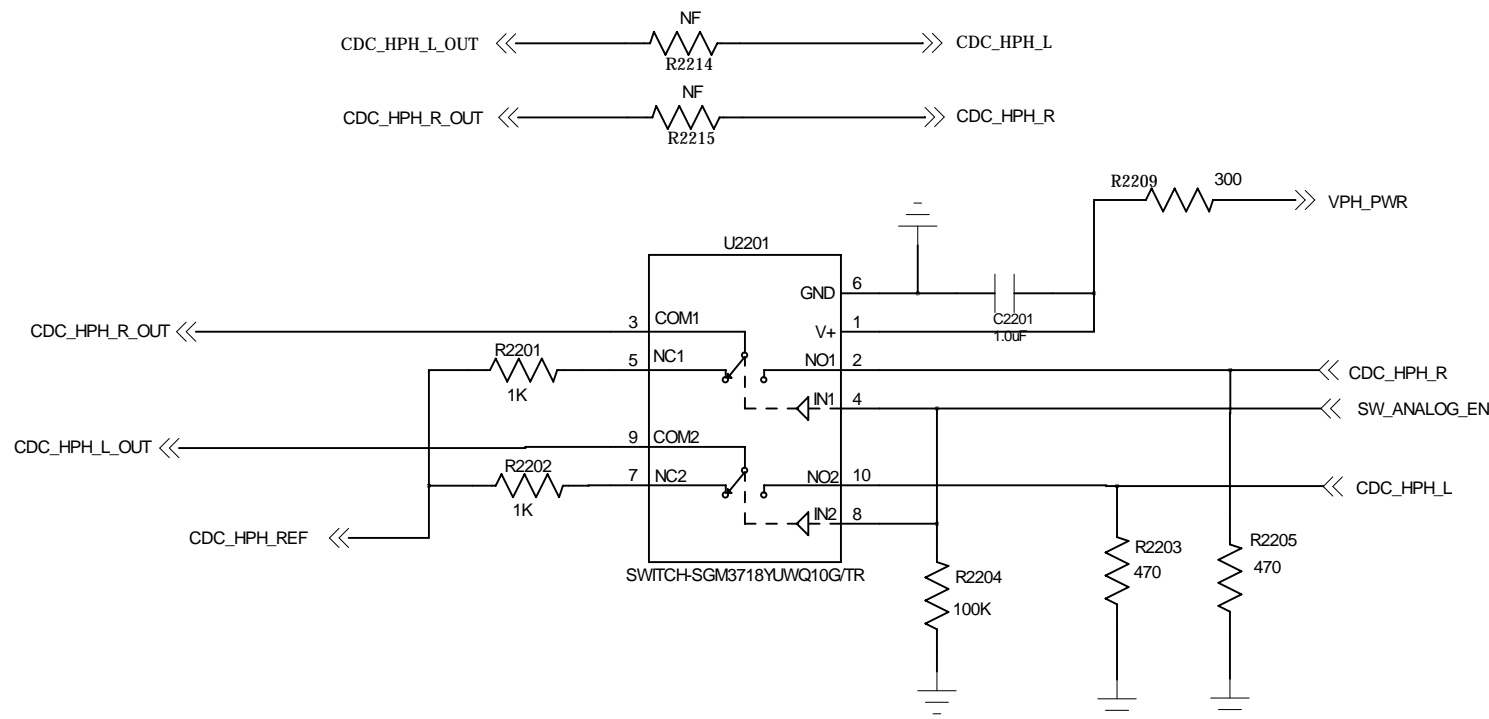




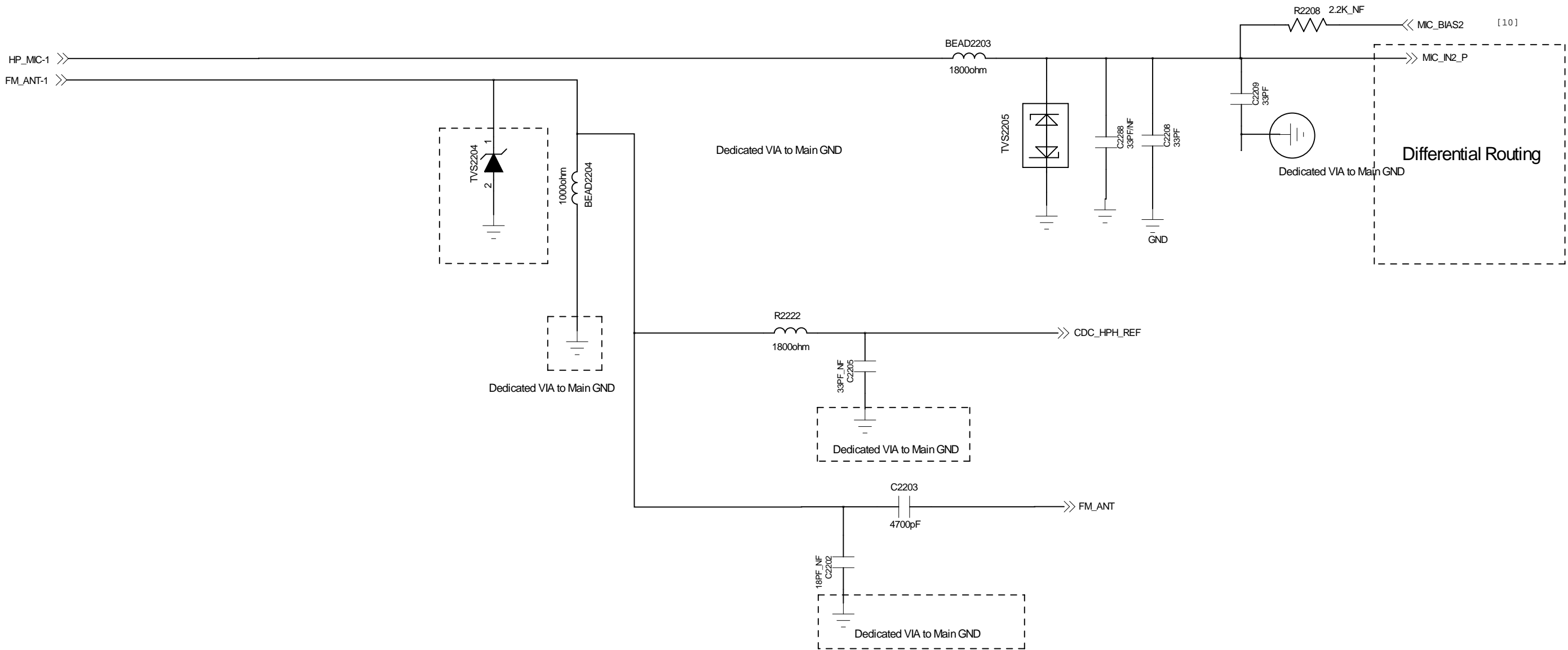
AUDIO JACK



Note: Ferrite beads and their corresponding bypass capacitors on CDC_HPH_L, CDC_HPH_R and CDC_HPH_REF are needed to reduce noise generated by audio/FM concurrency



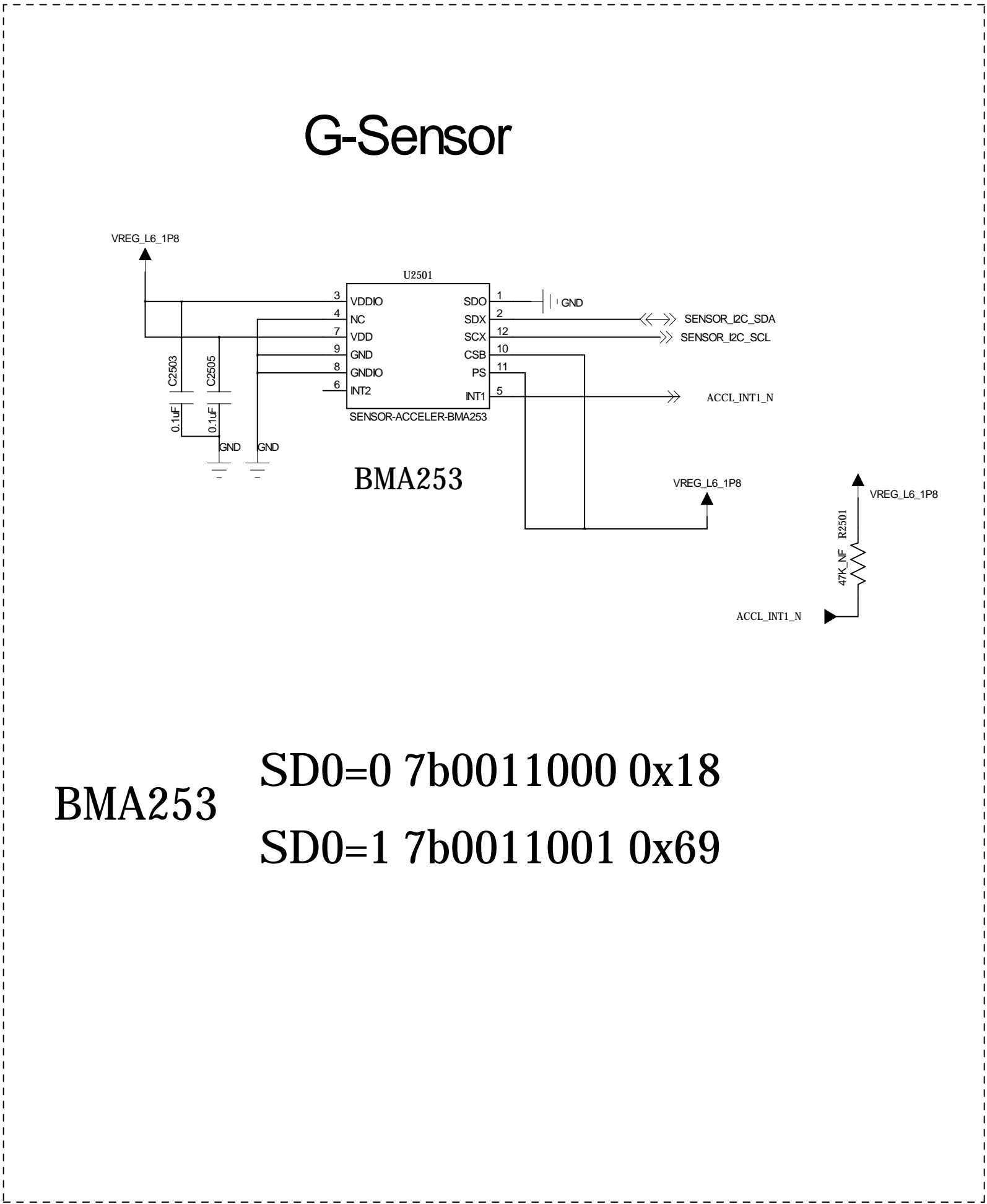
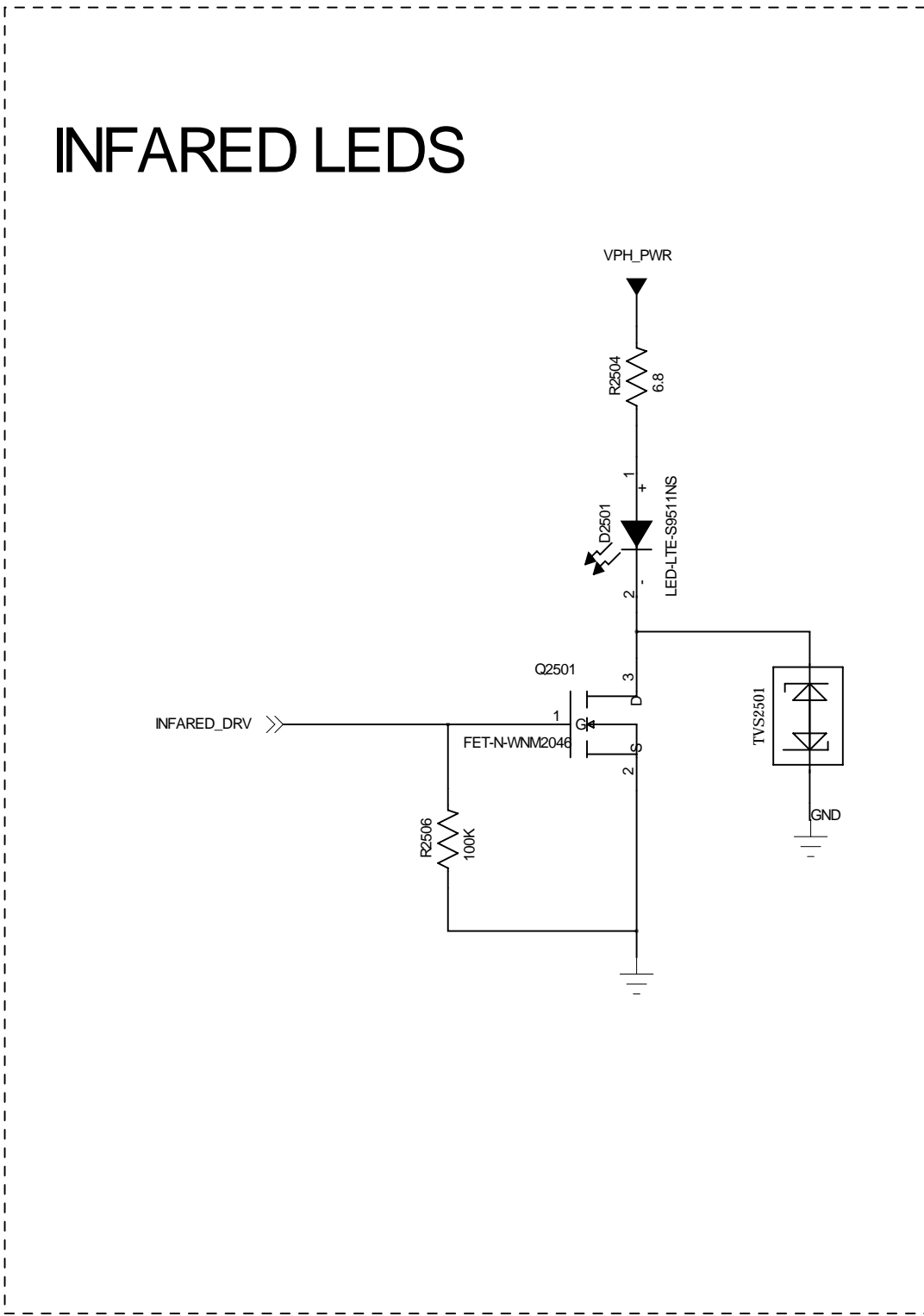
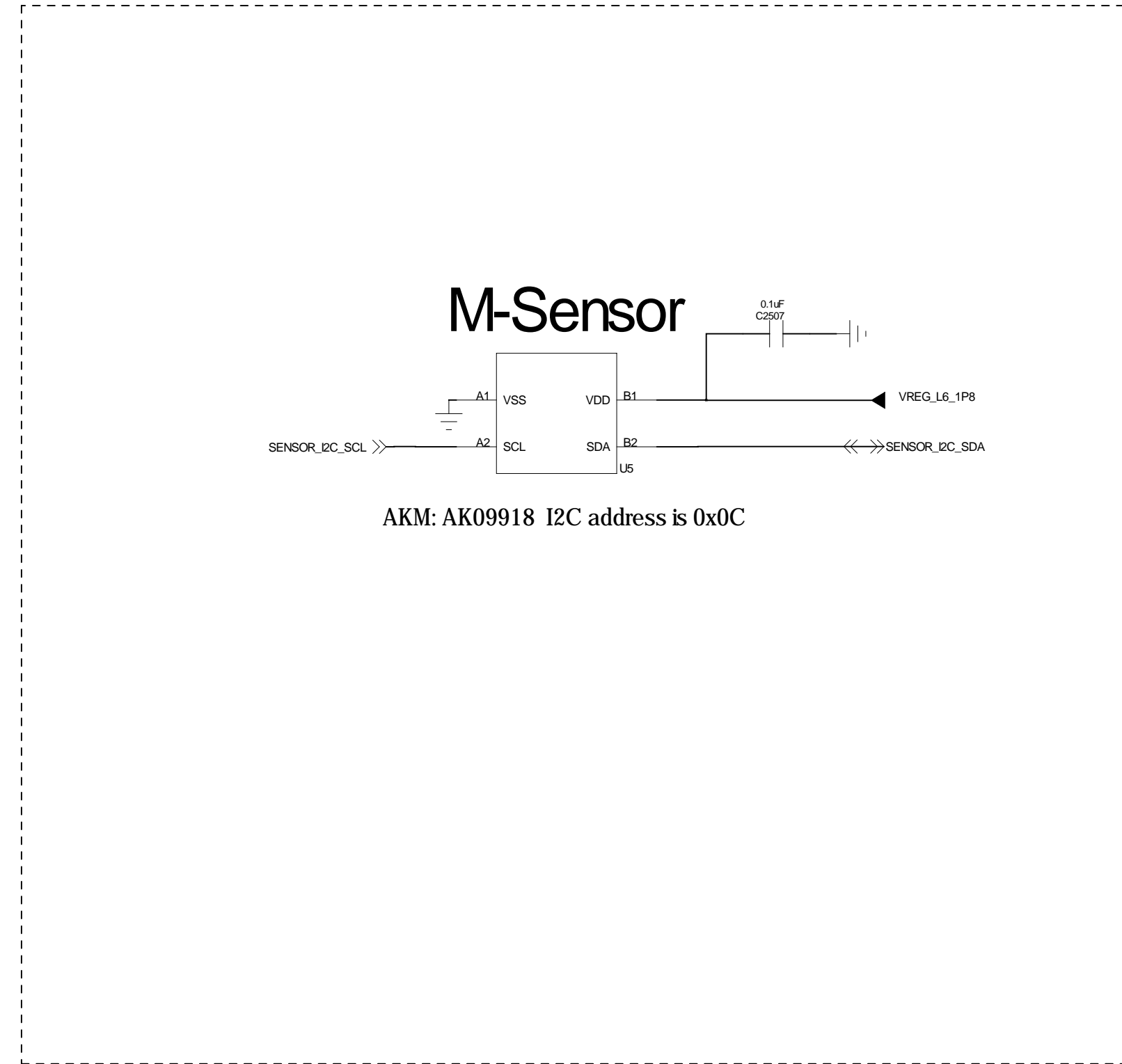
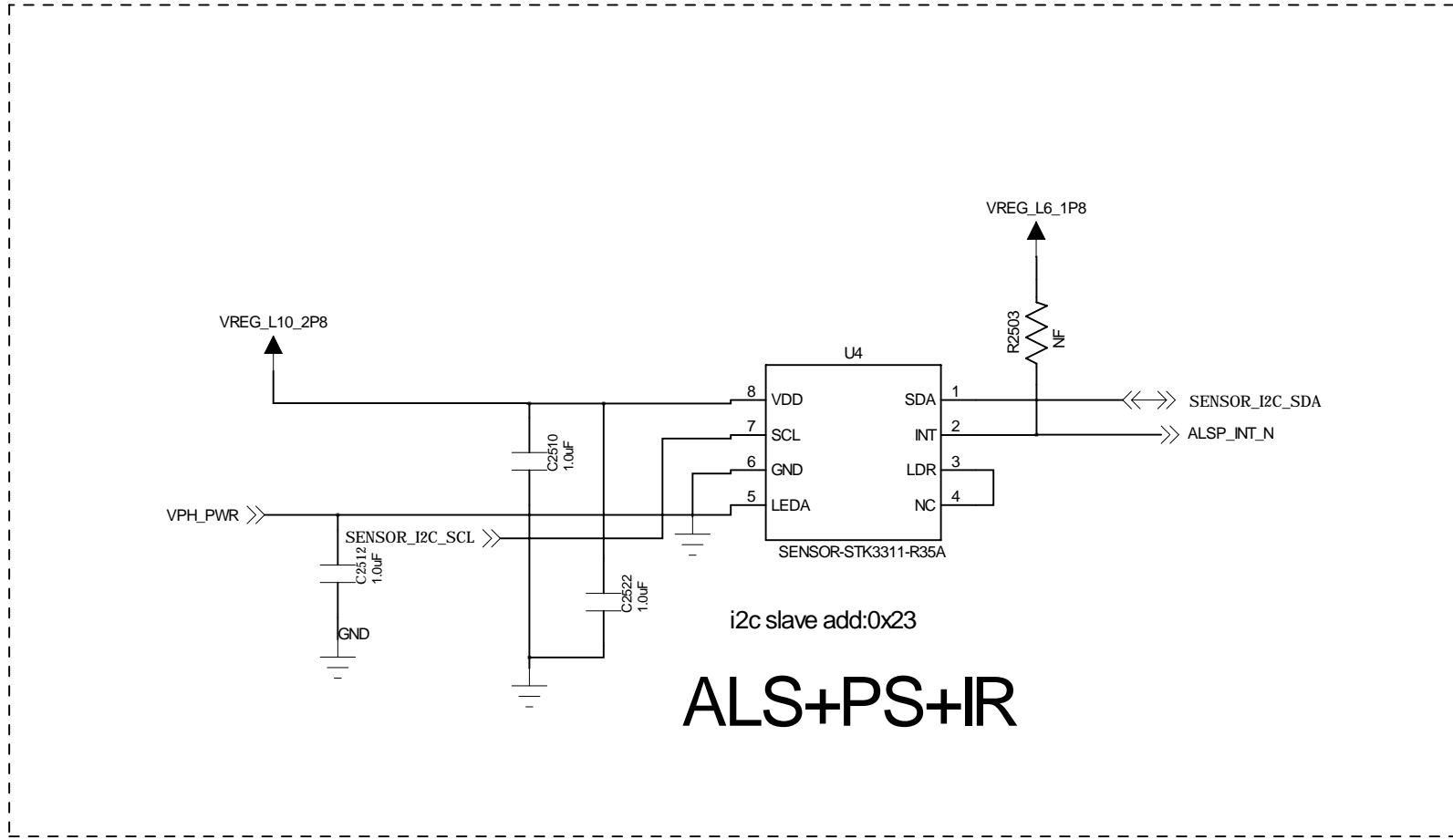
IN=0, COM Connected to NC;
IN=1, COM Connected to NO;



EARPHONE

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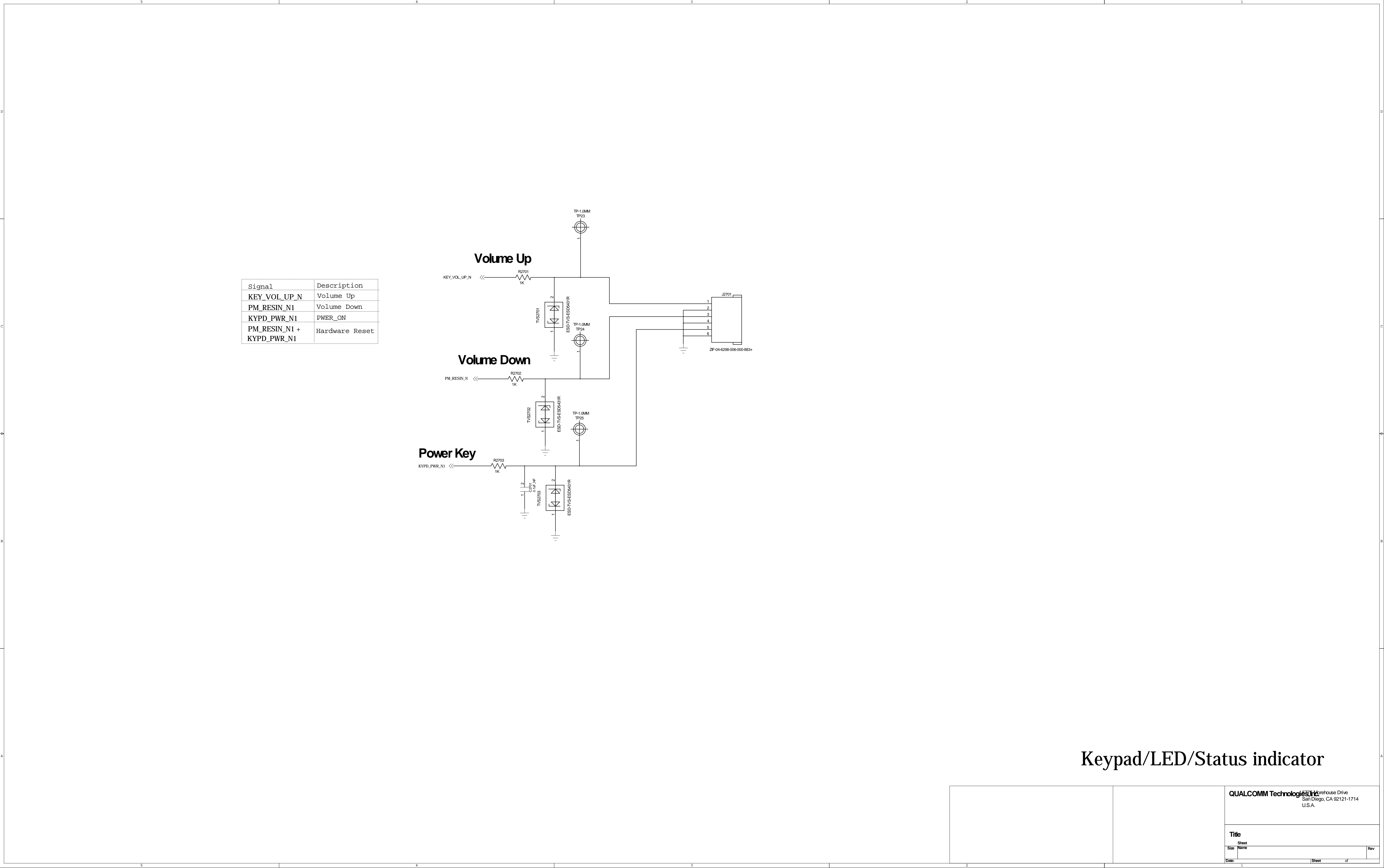


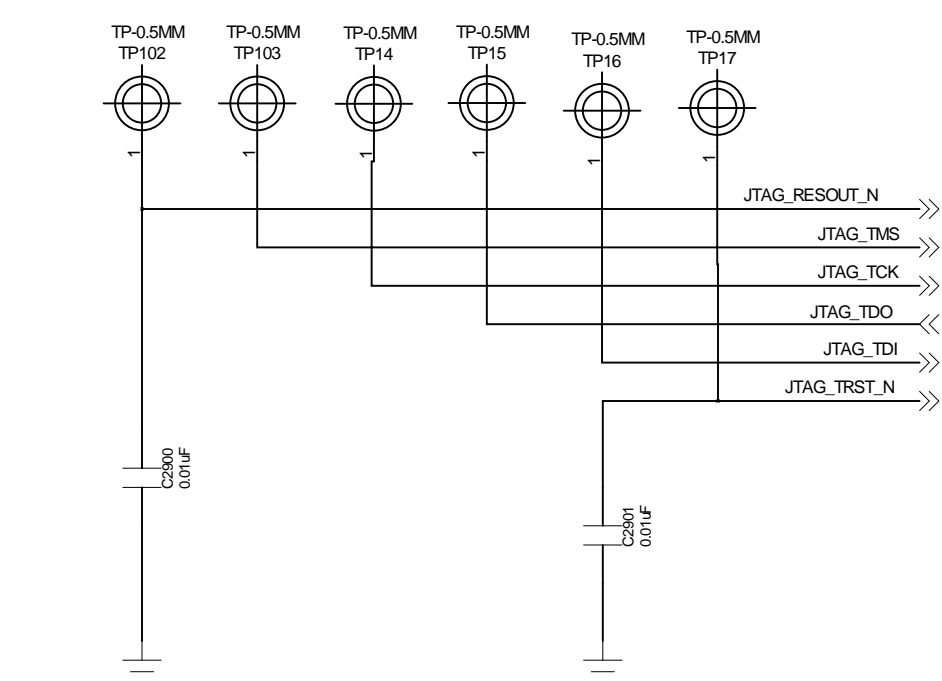
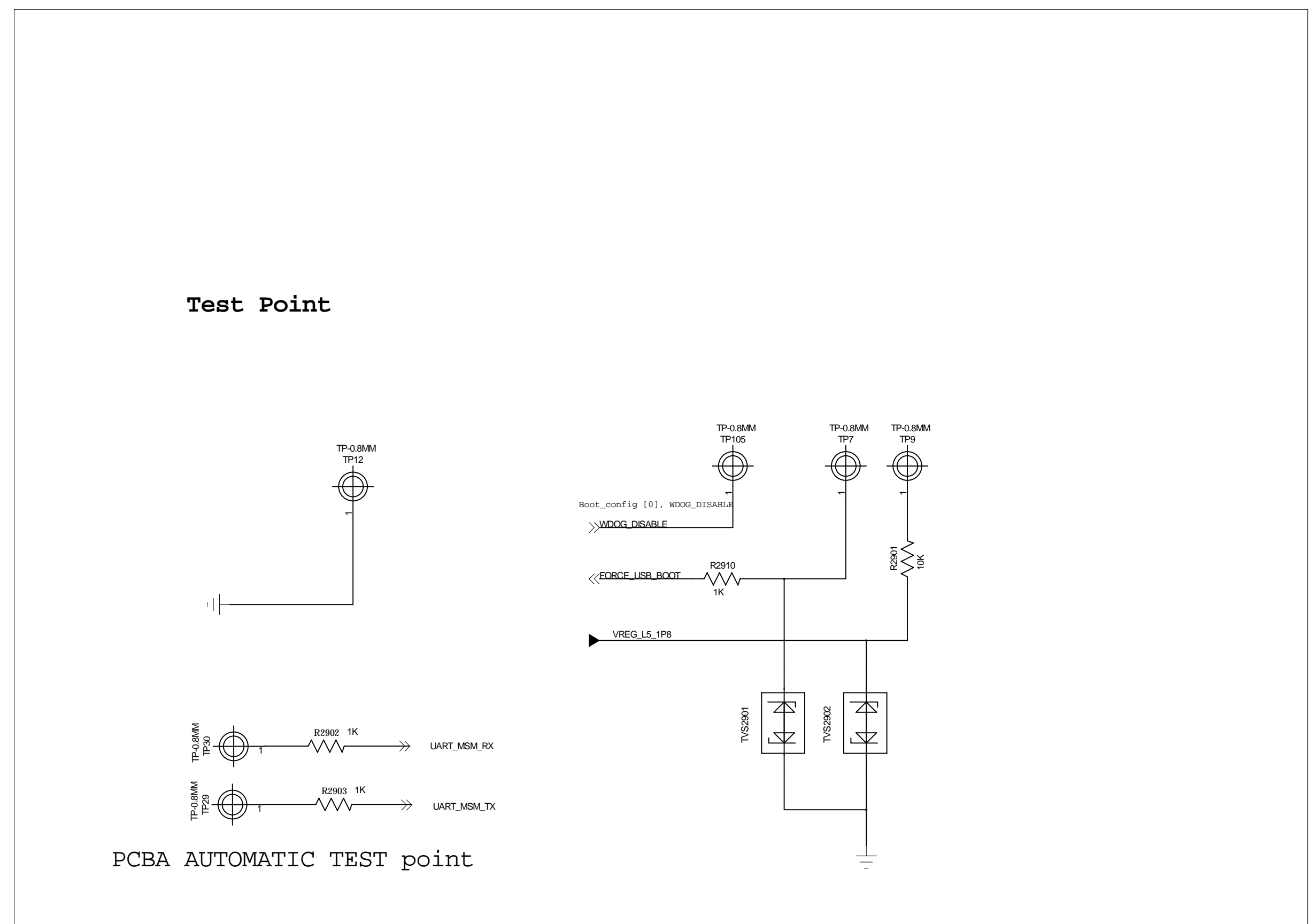
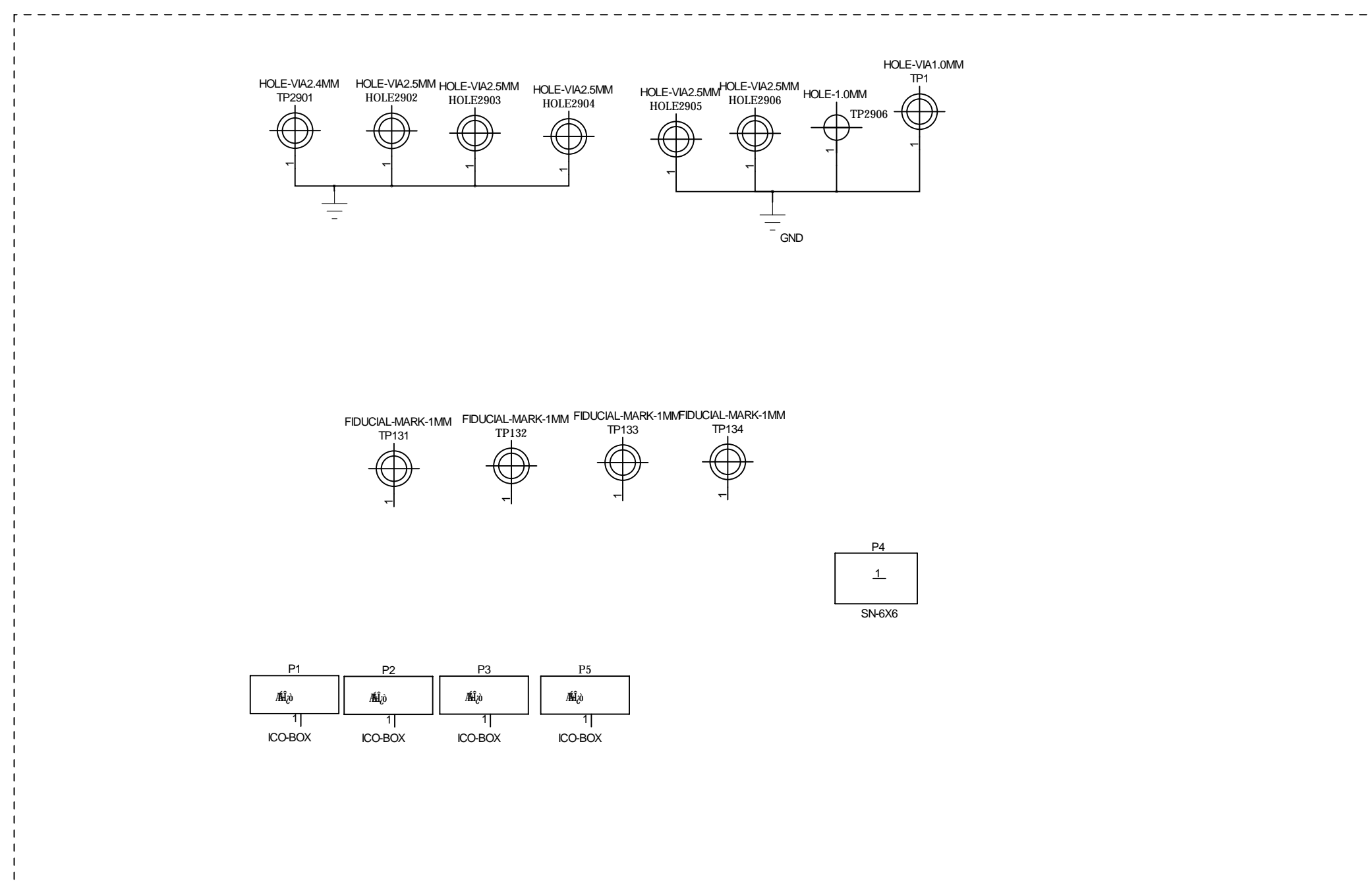
BMA253 SD0=0 7b0011000 0x18
SD0=1 7b0011001 0x69

SENSORS

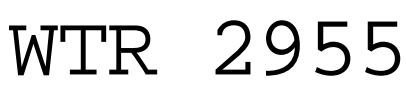
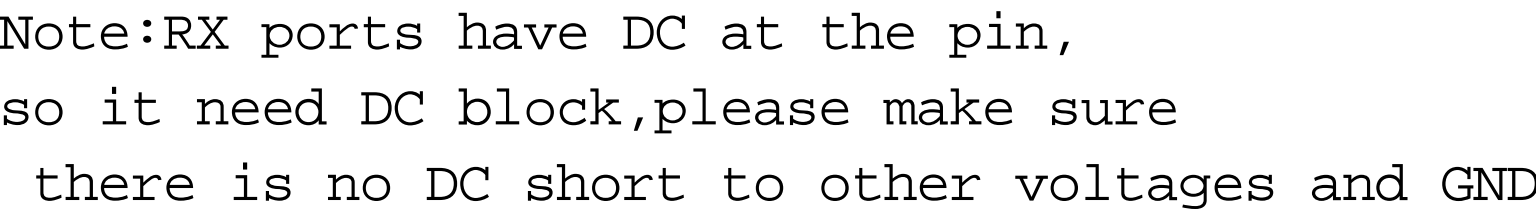
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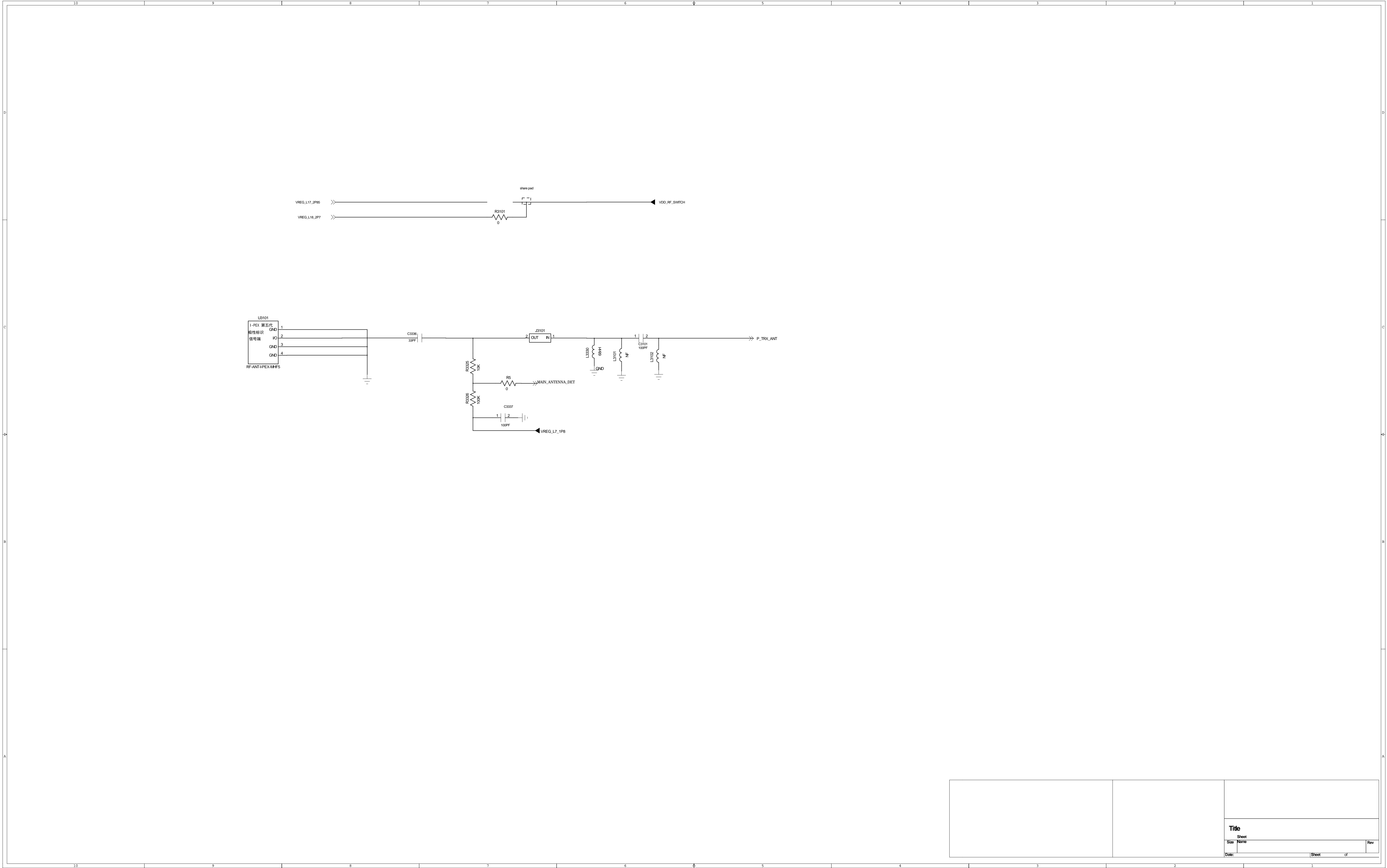
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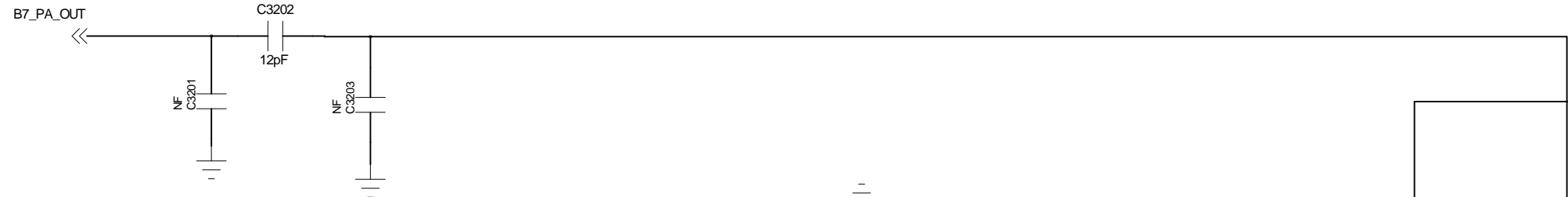
Test Point/Shields



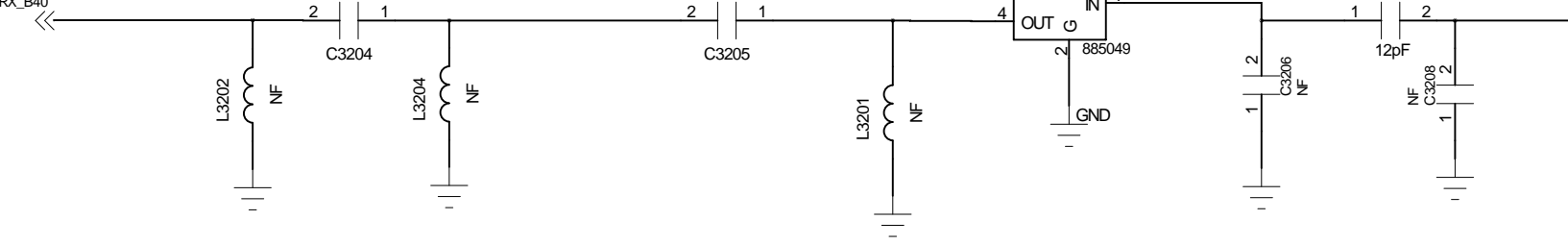


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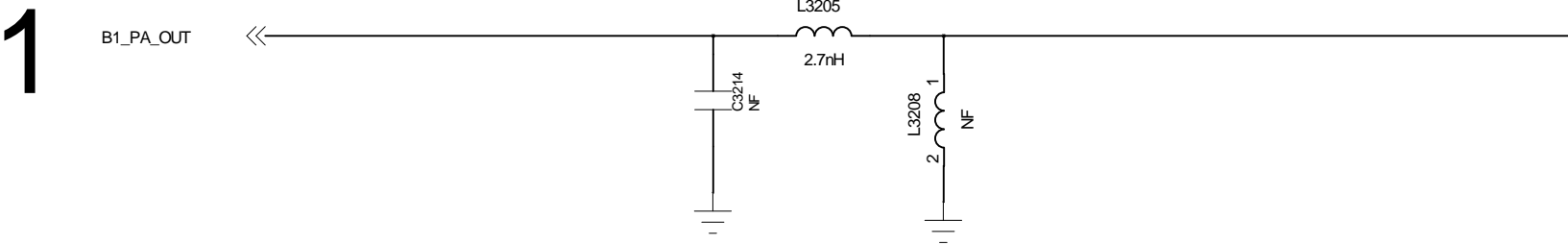
Band7



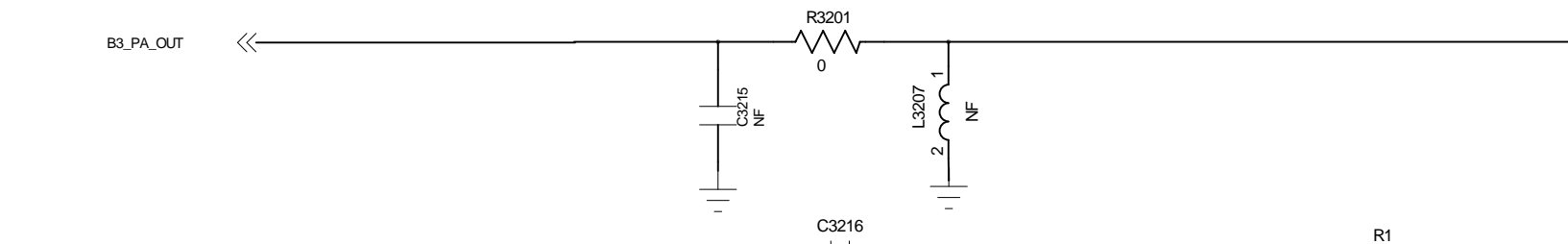
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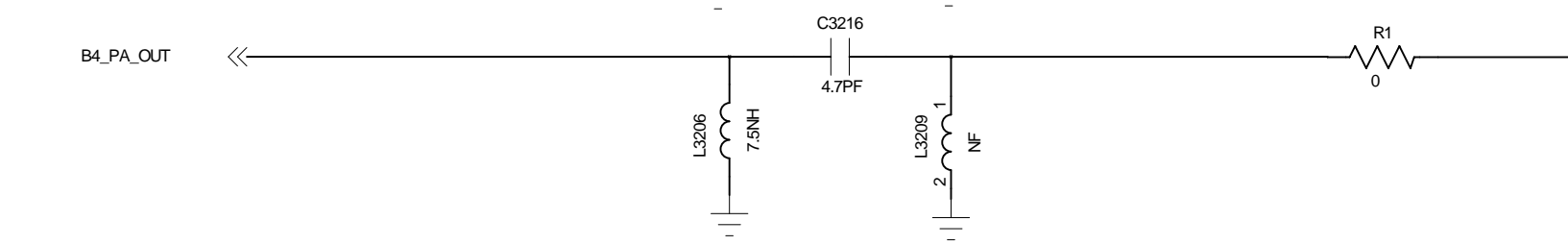
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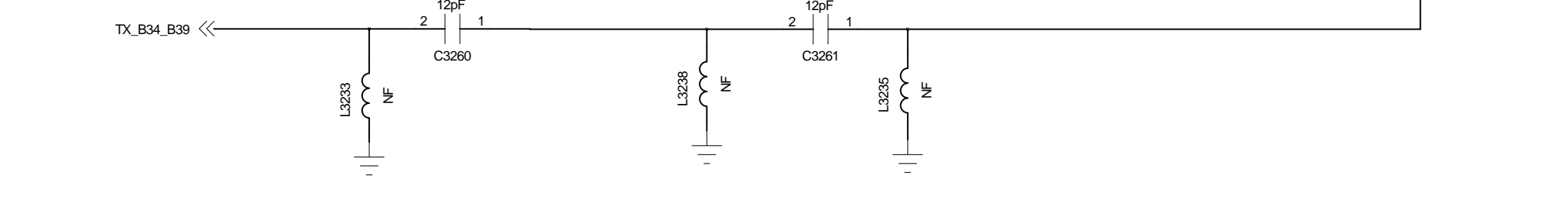
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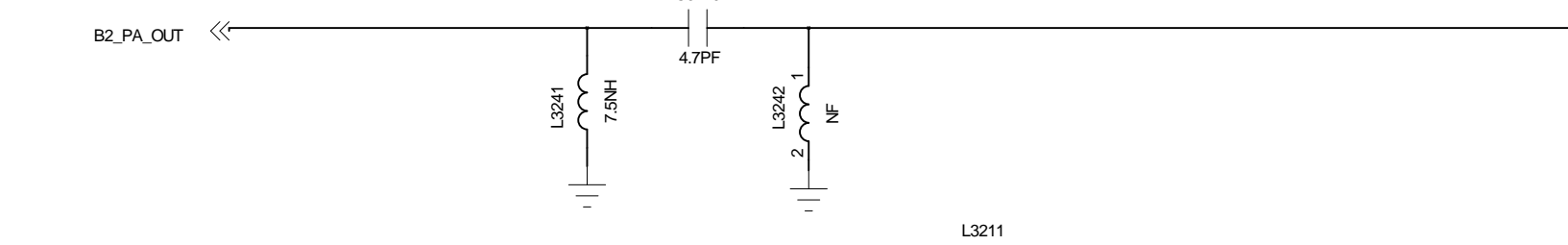
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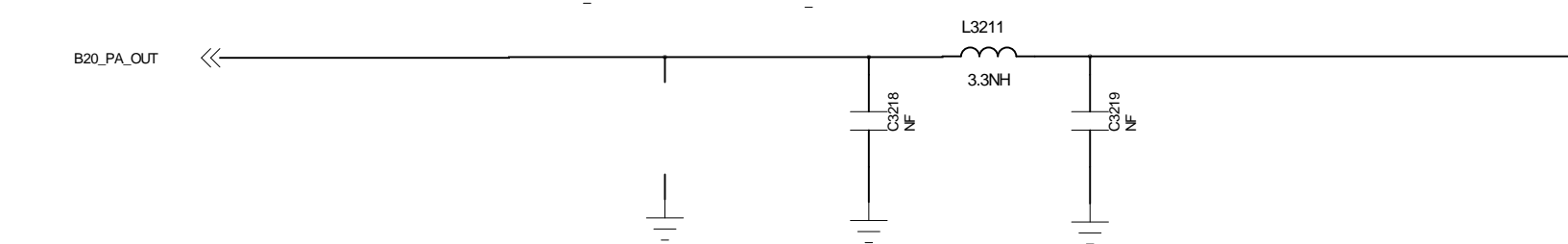
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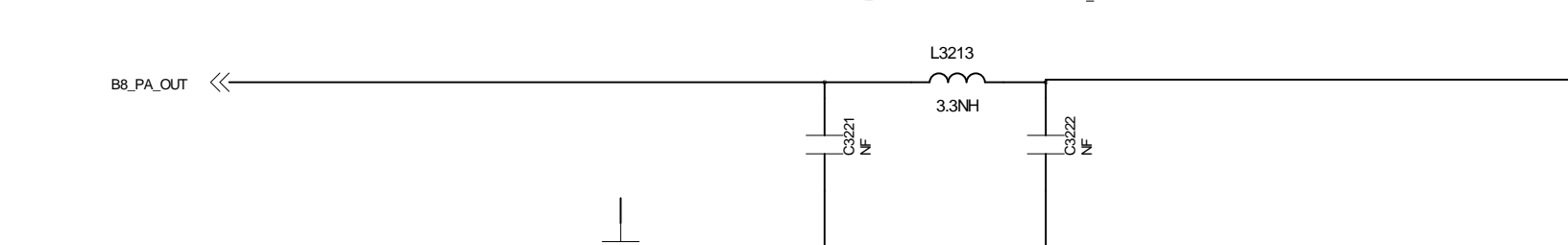
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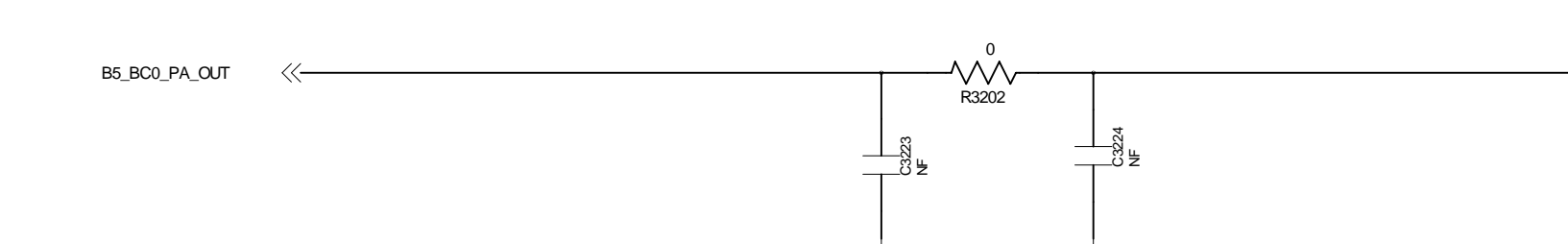
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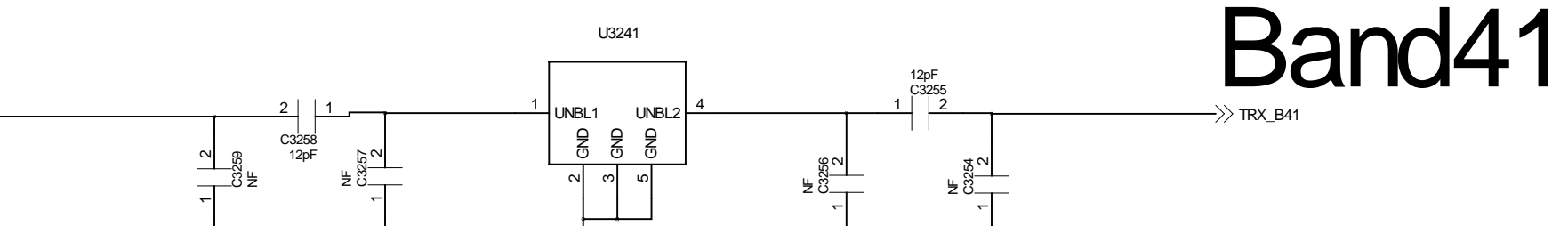
Band8



Band5



Band41

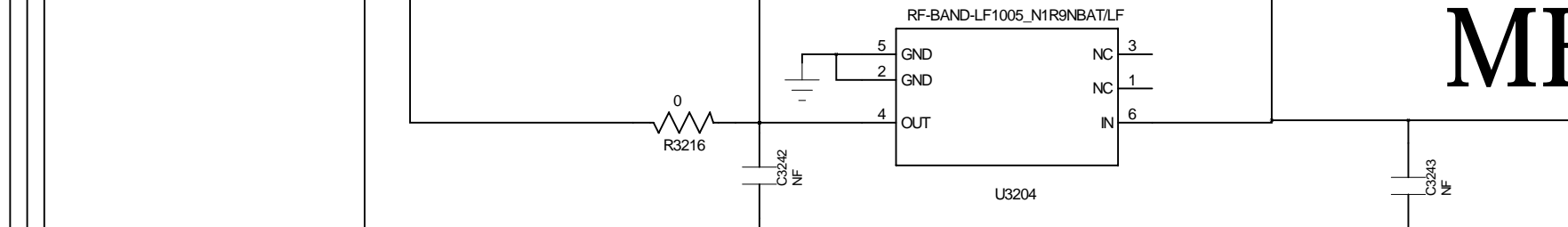


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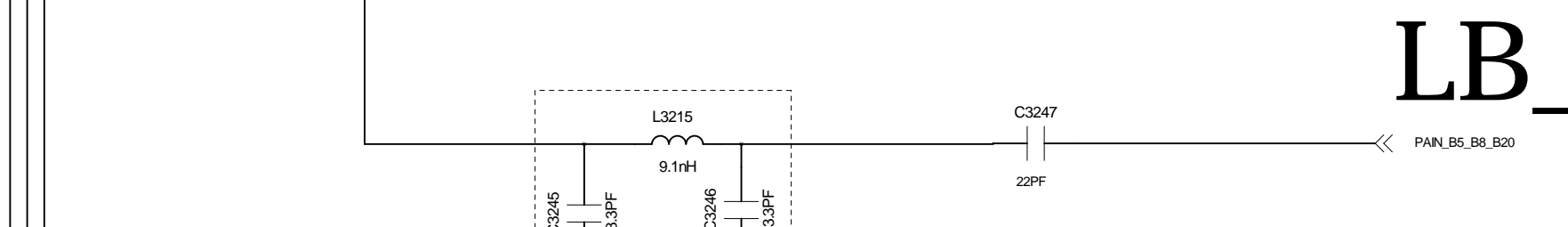
HB_IN



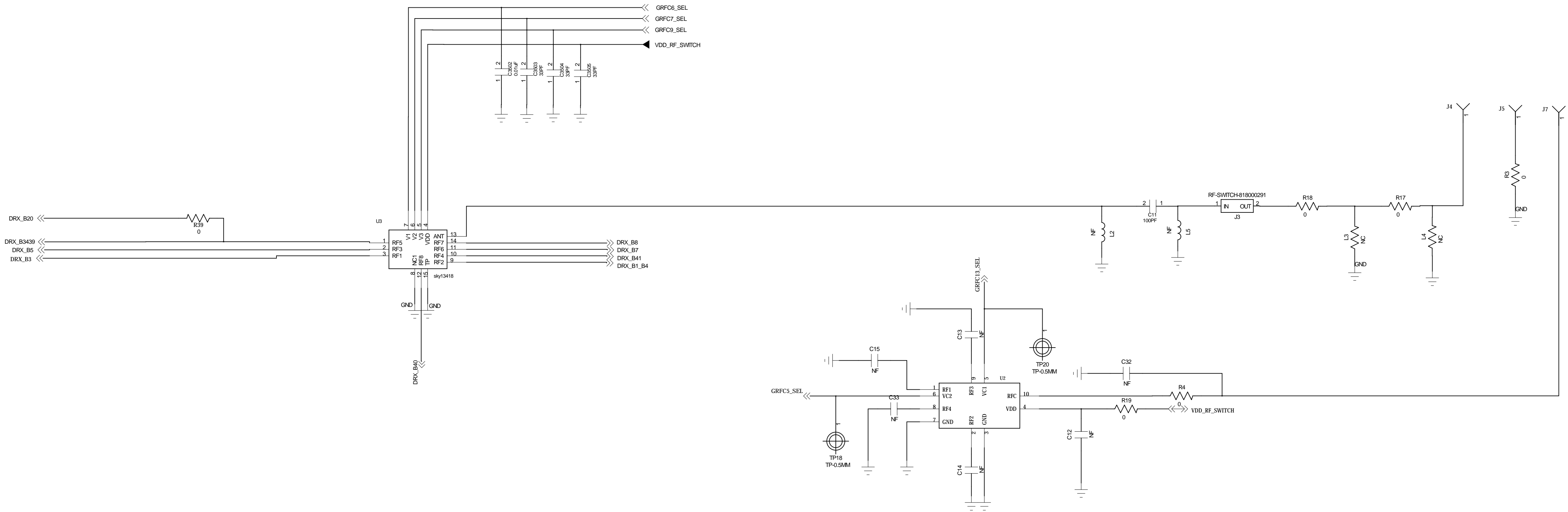
MB_IN



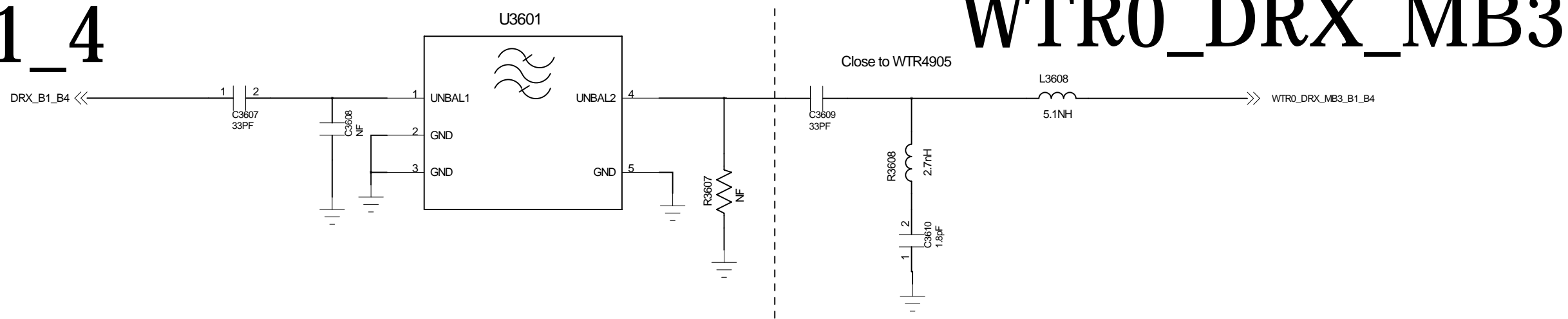
LB_IN



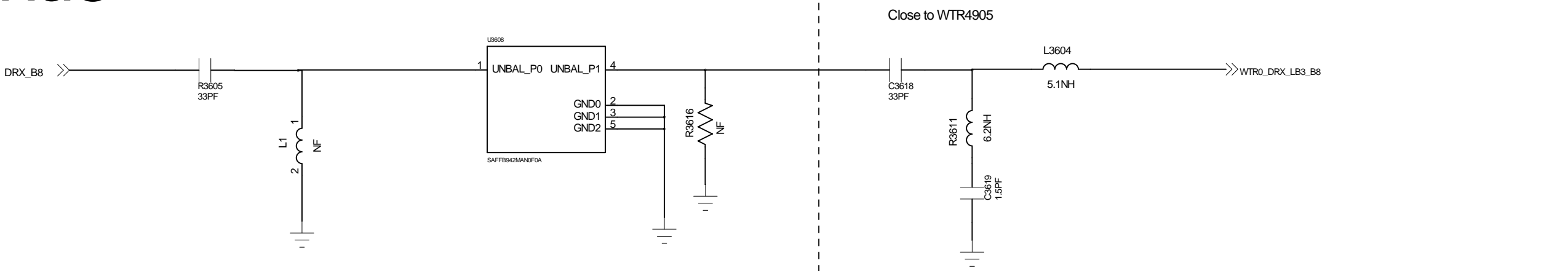
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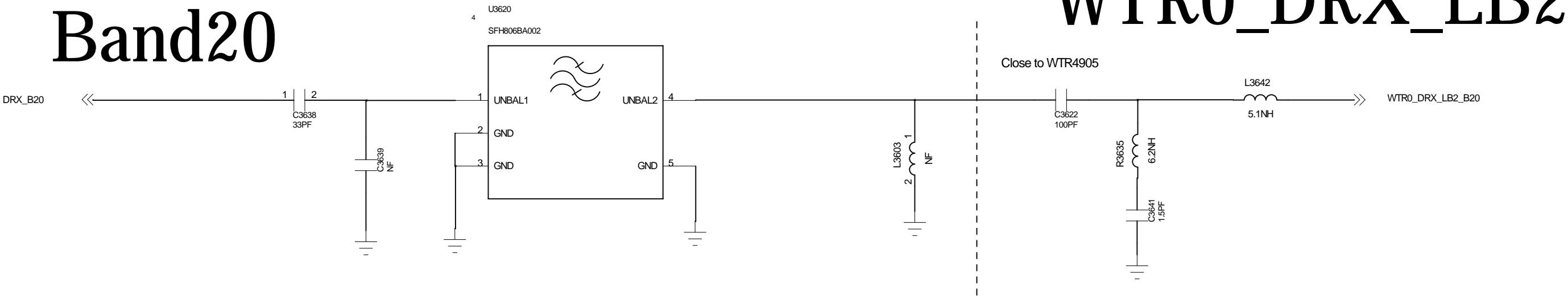
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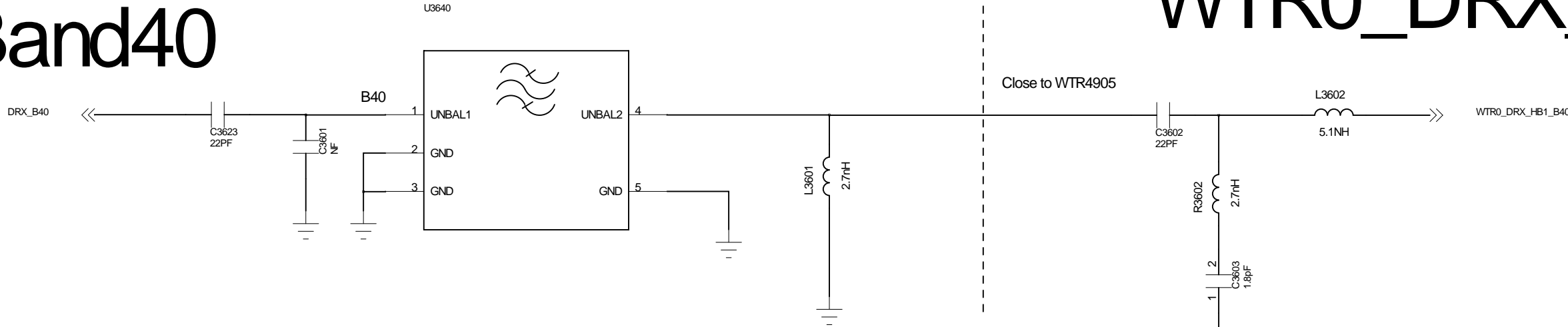
Band8



Band20

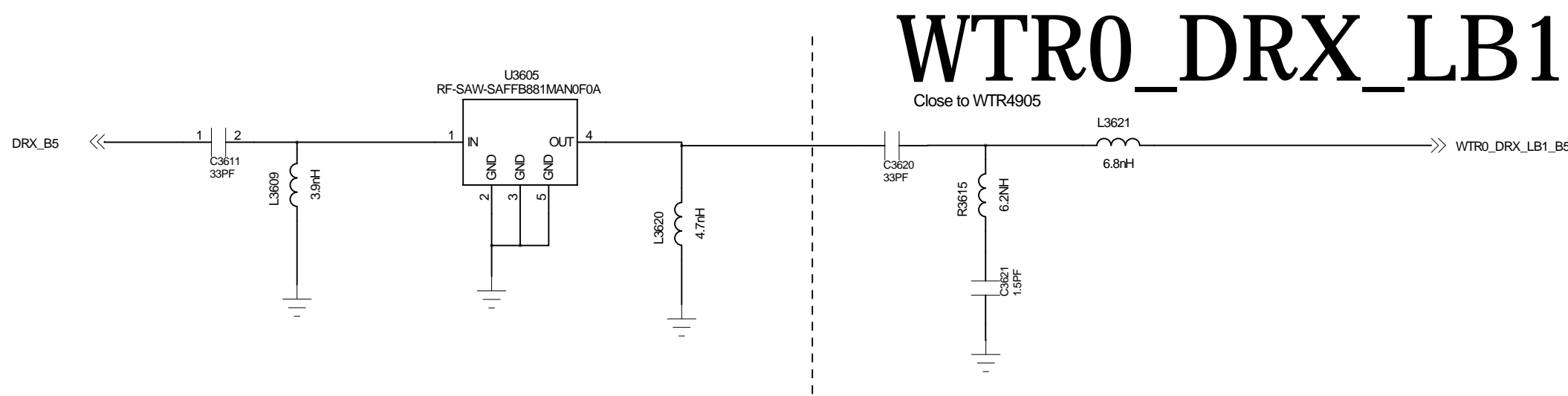


Band40



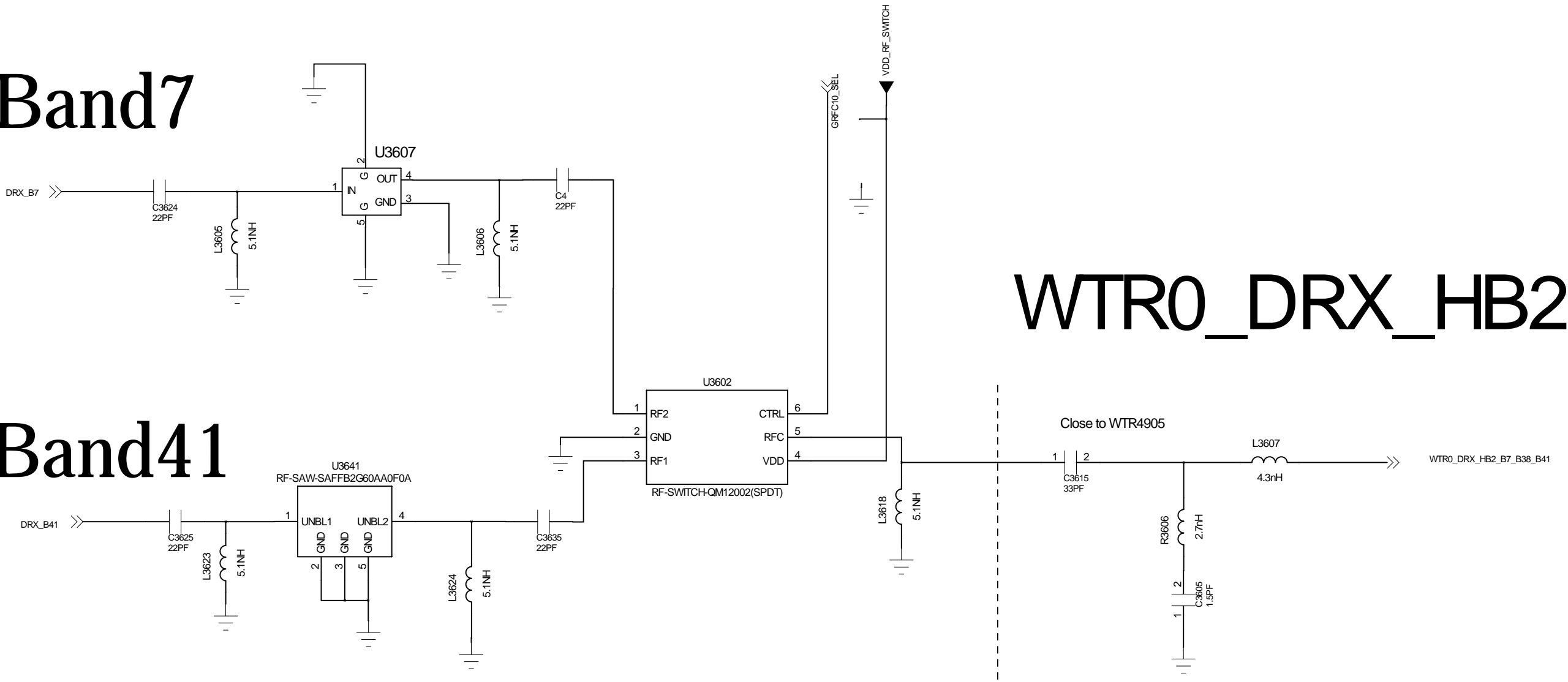
WTR0_DRX_HB1

Band5



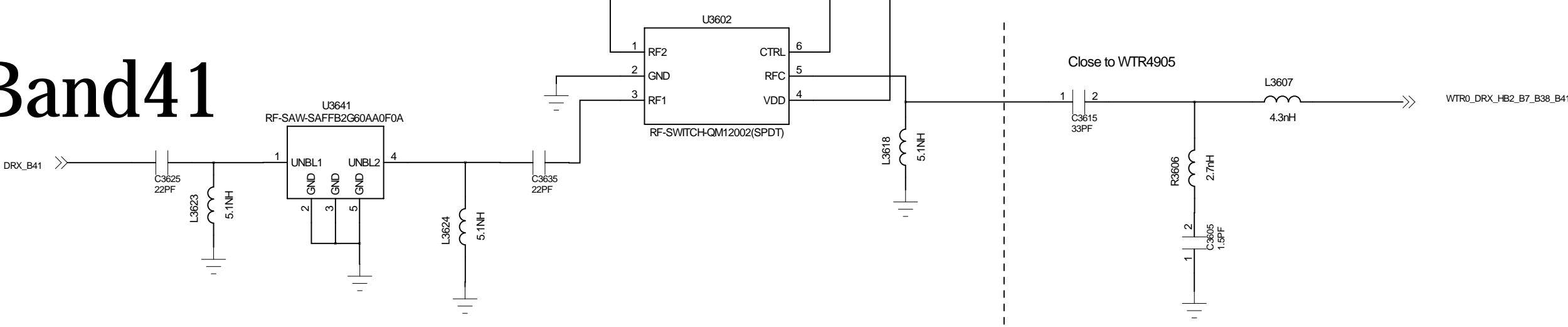
WTR0_DRX_LB1

Band7



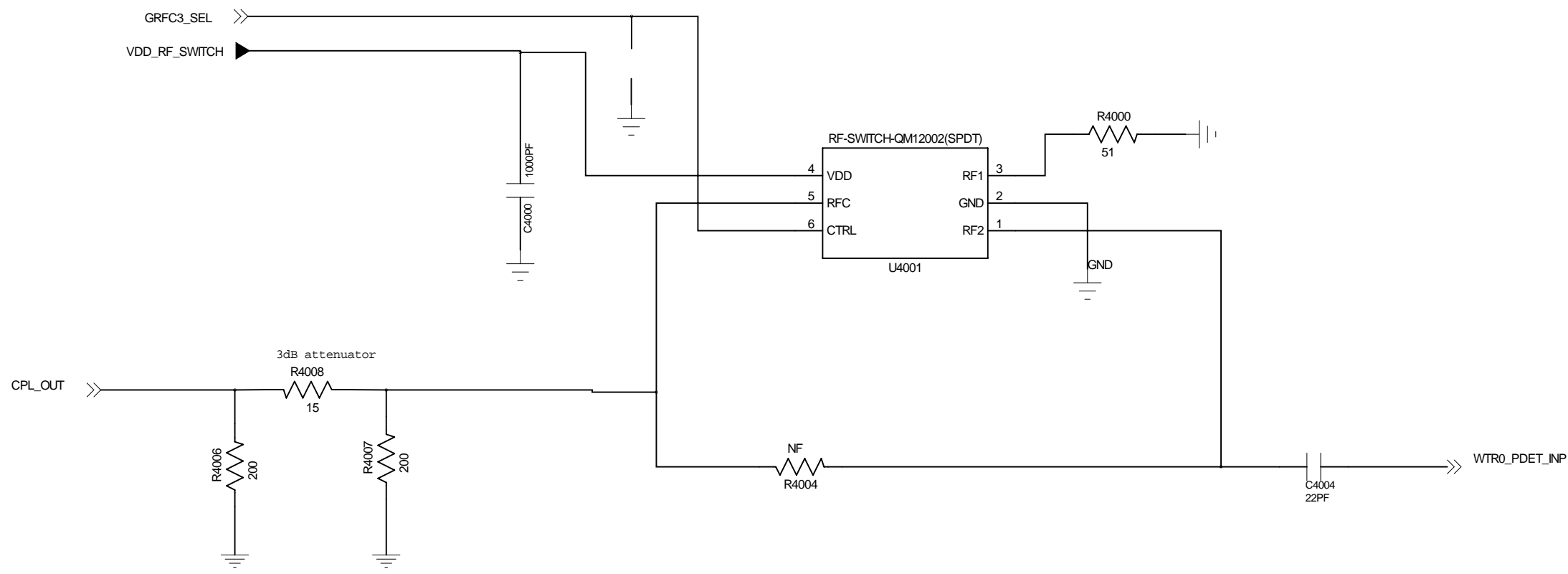
WTR0_DRX_HB2

Band41



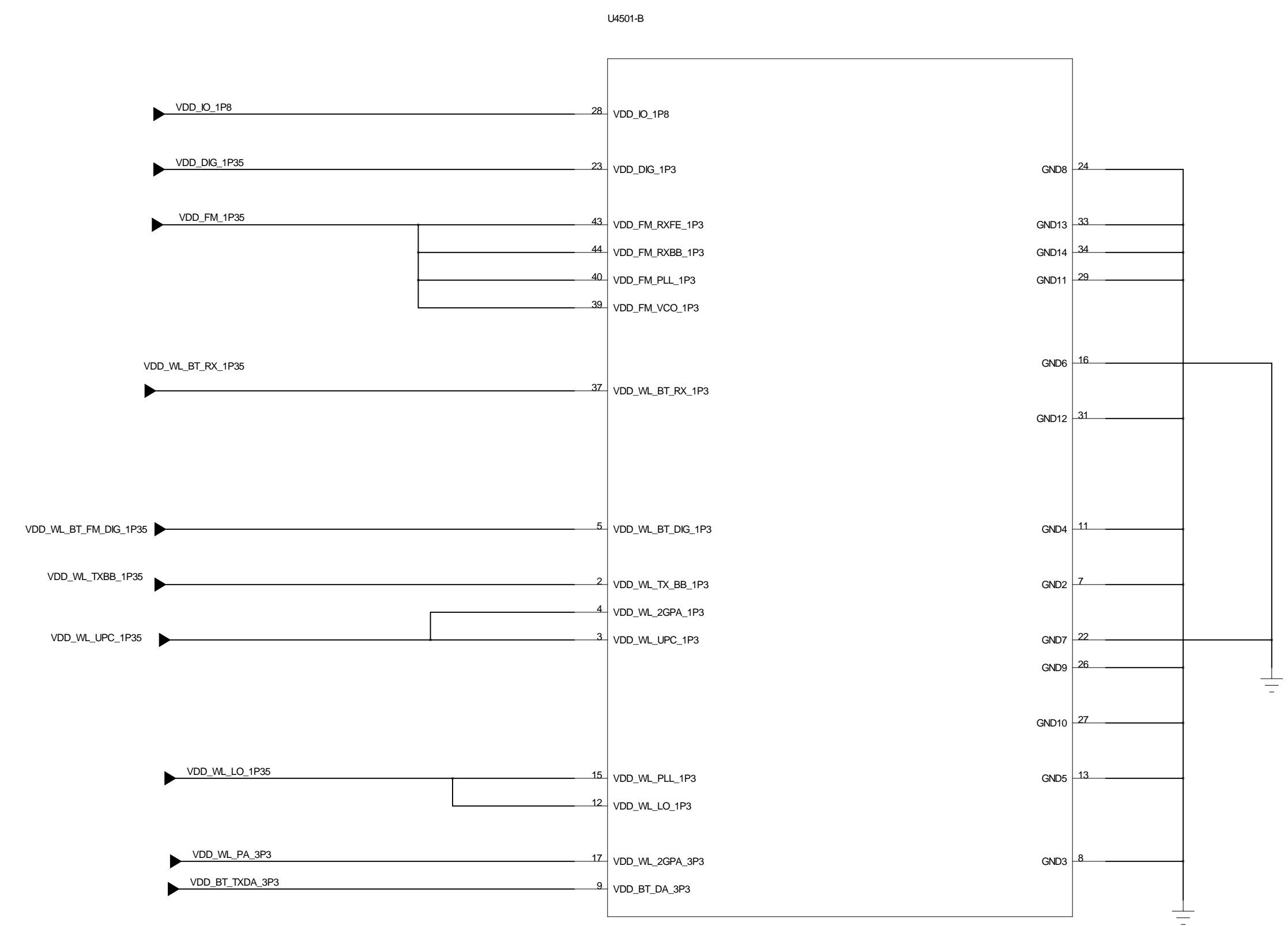
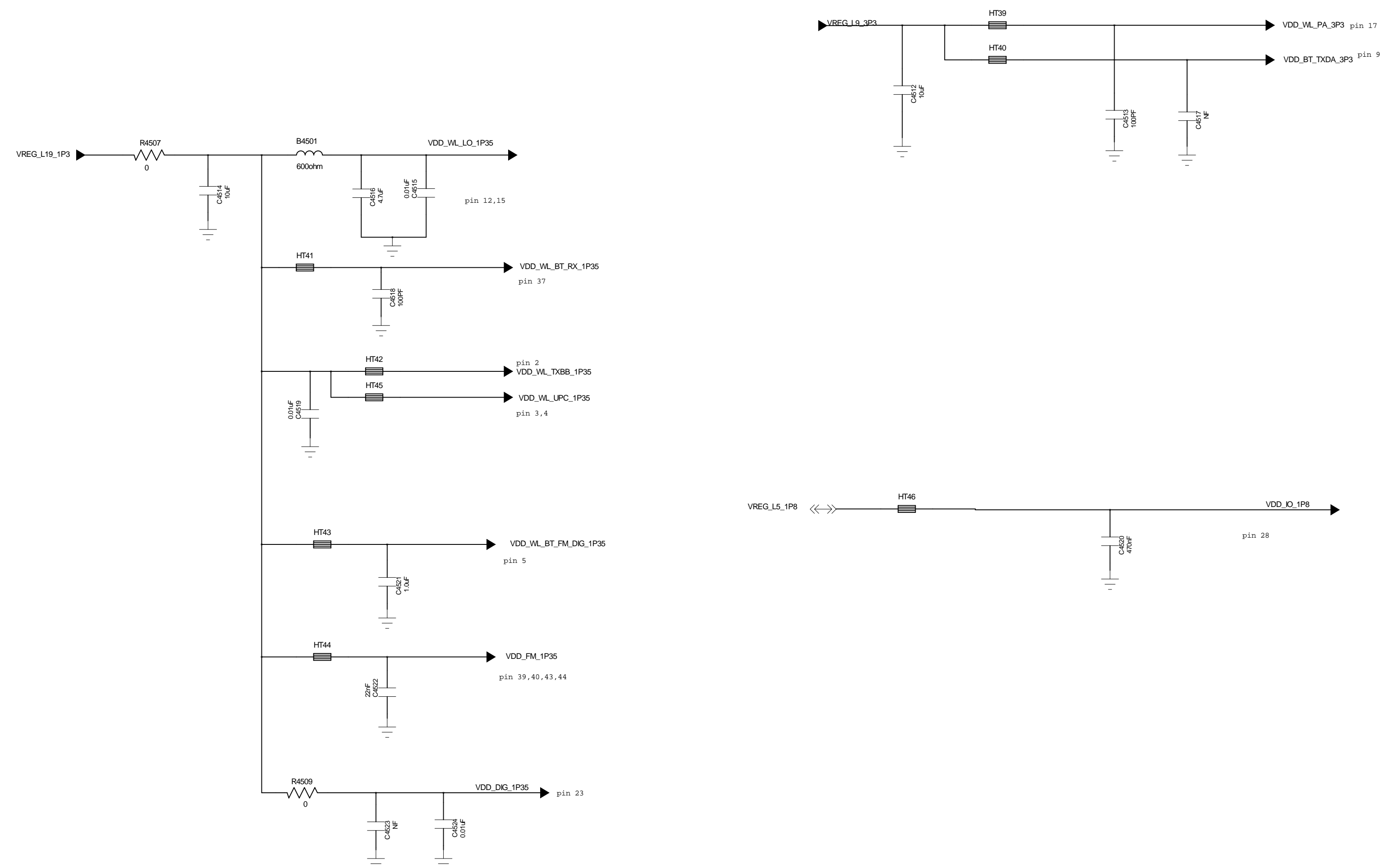
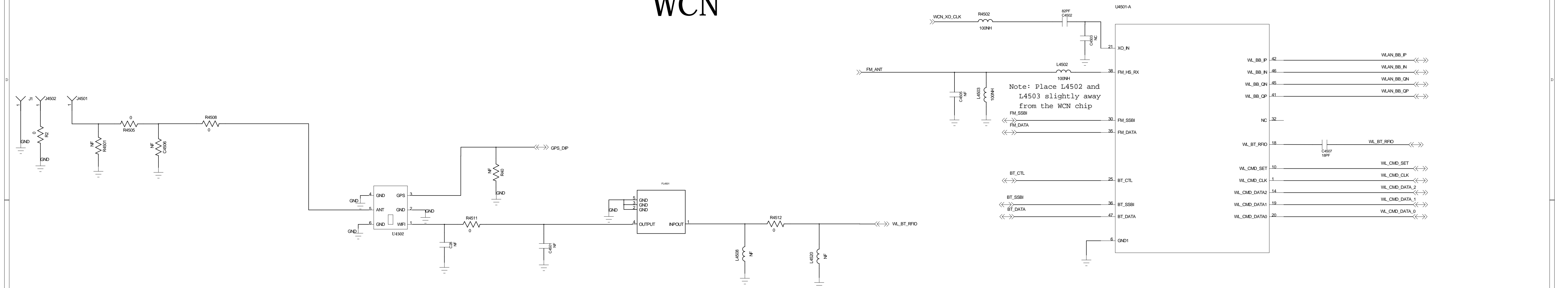
Note:The matching need close to WTR, RX ports have DC at the pin, so it need DC block,

SPDT

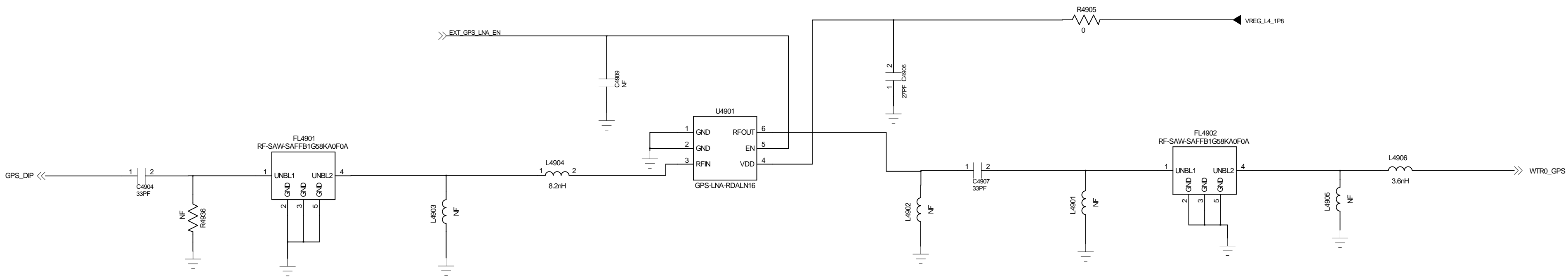


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WCN



GPS



GPS

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