

REVISION_HISTORY

ASR8601_PM813S_EMCP_WATCH_REF_V1R0_20230710

ASR Microelectronics (Shanghai) Co., Ltd		
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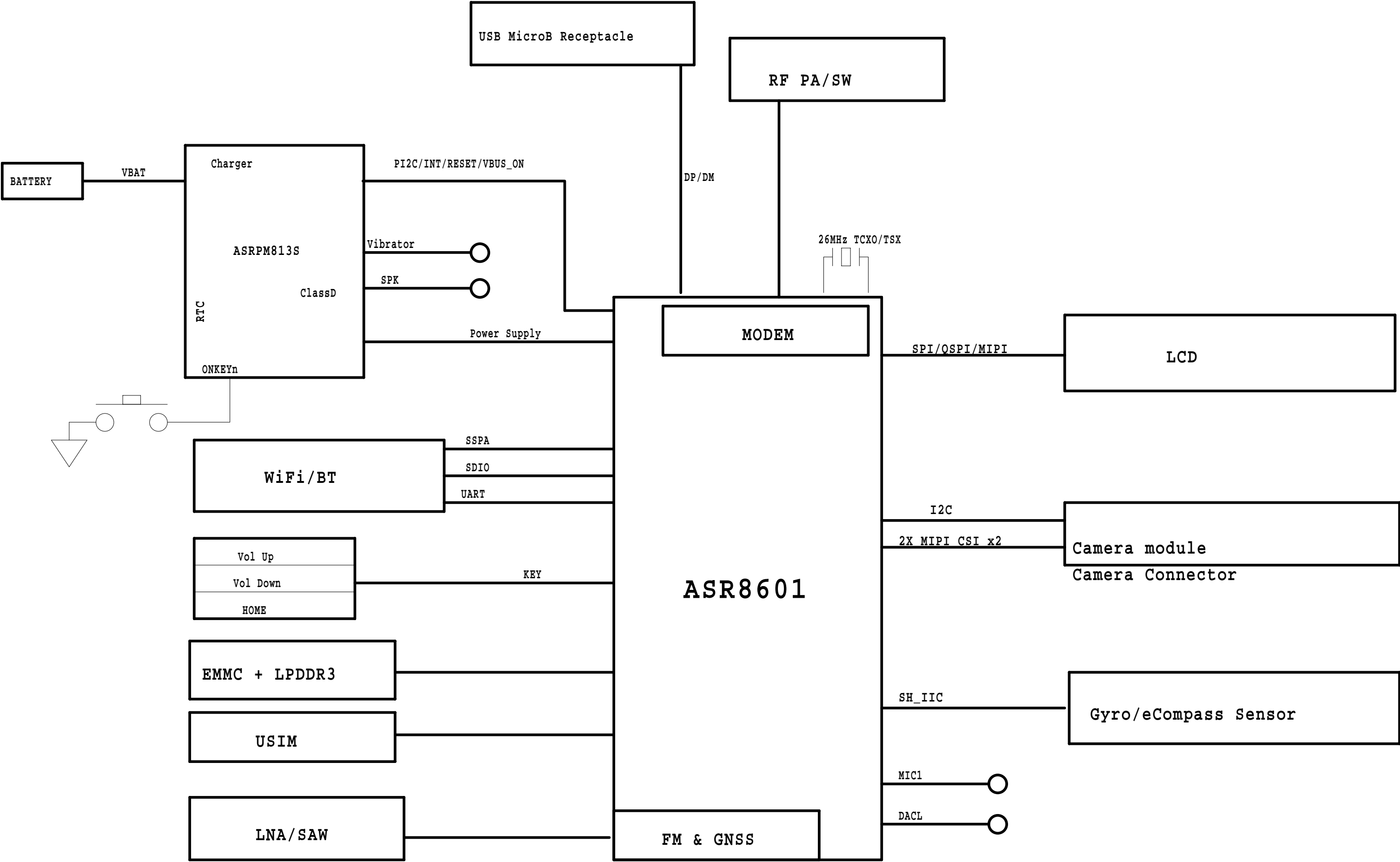
11 USIM_USB_LCD_CAM

12 WCN_ASR5803

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CAM0->CSI1->Rear_CAM

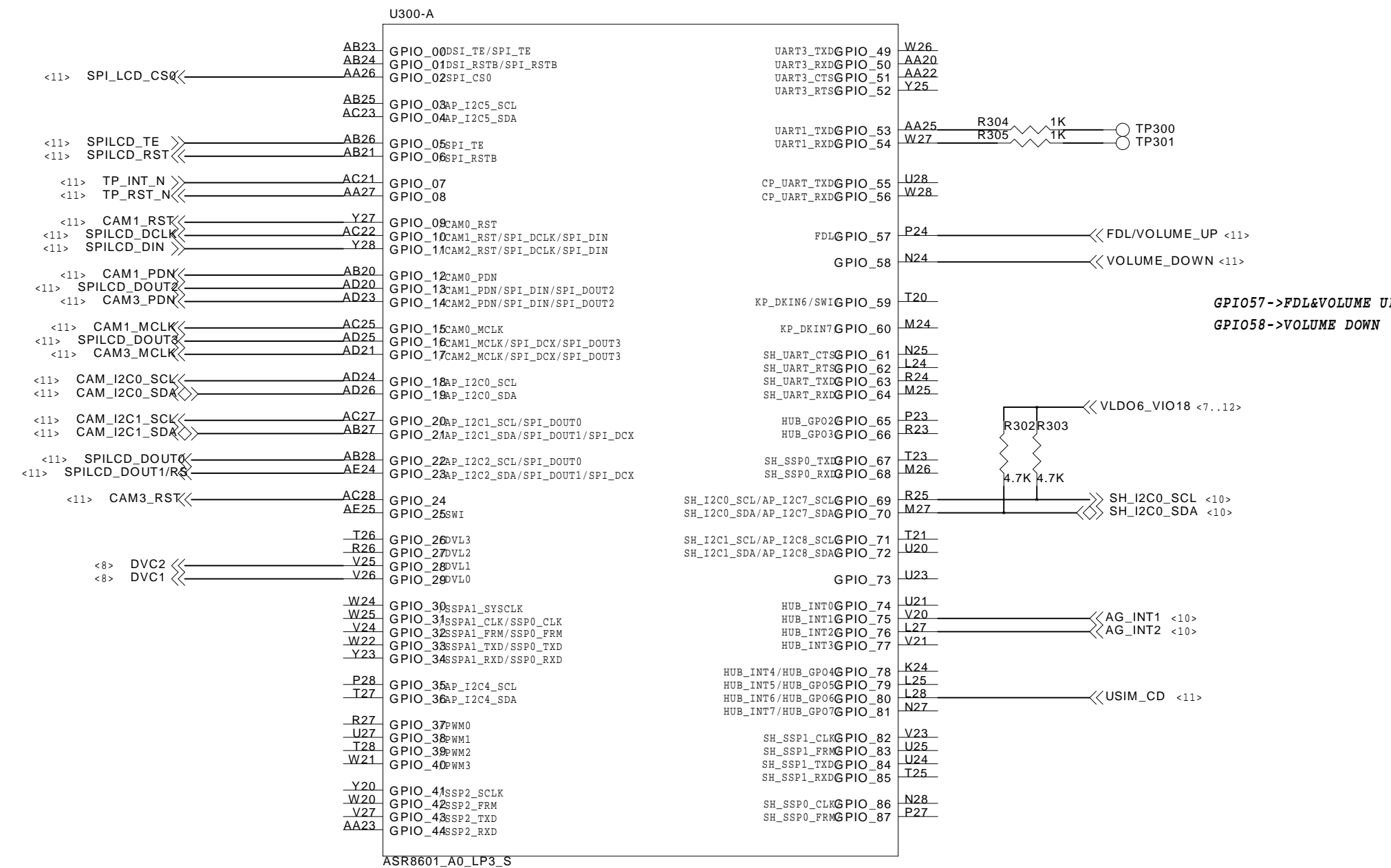
CAM1->CSI2->AUX_CAM

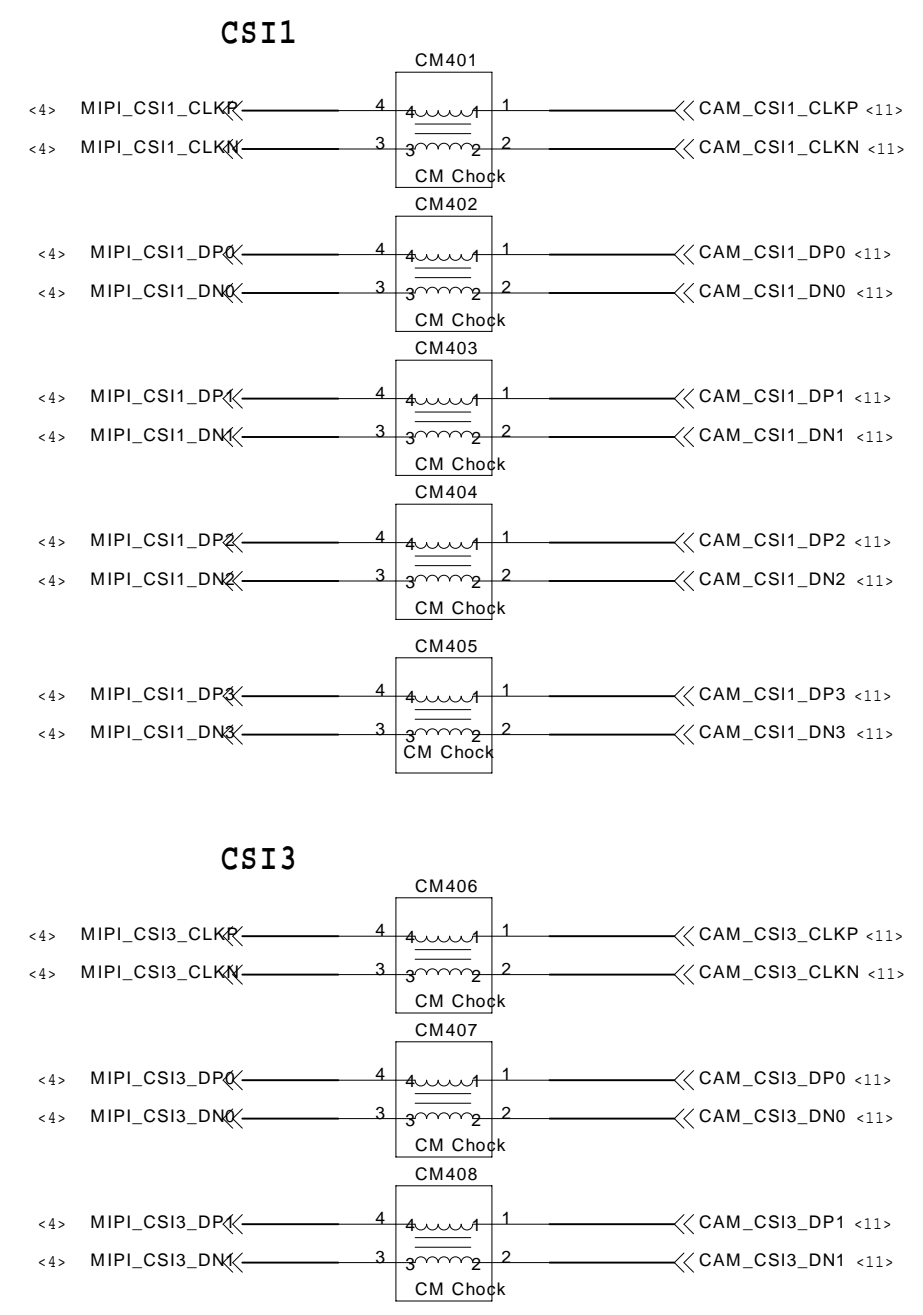
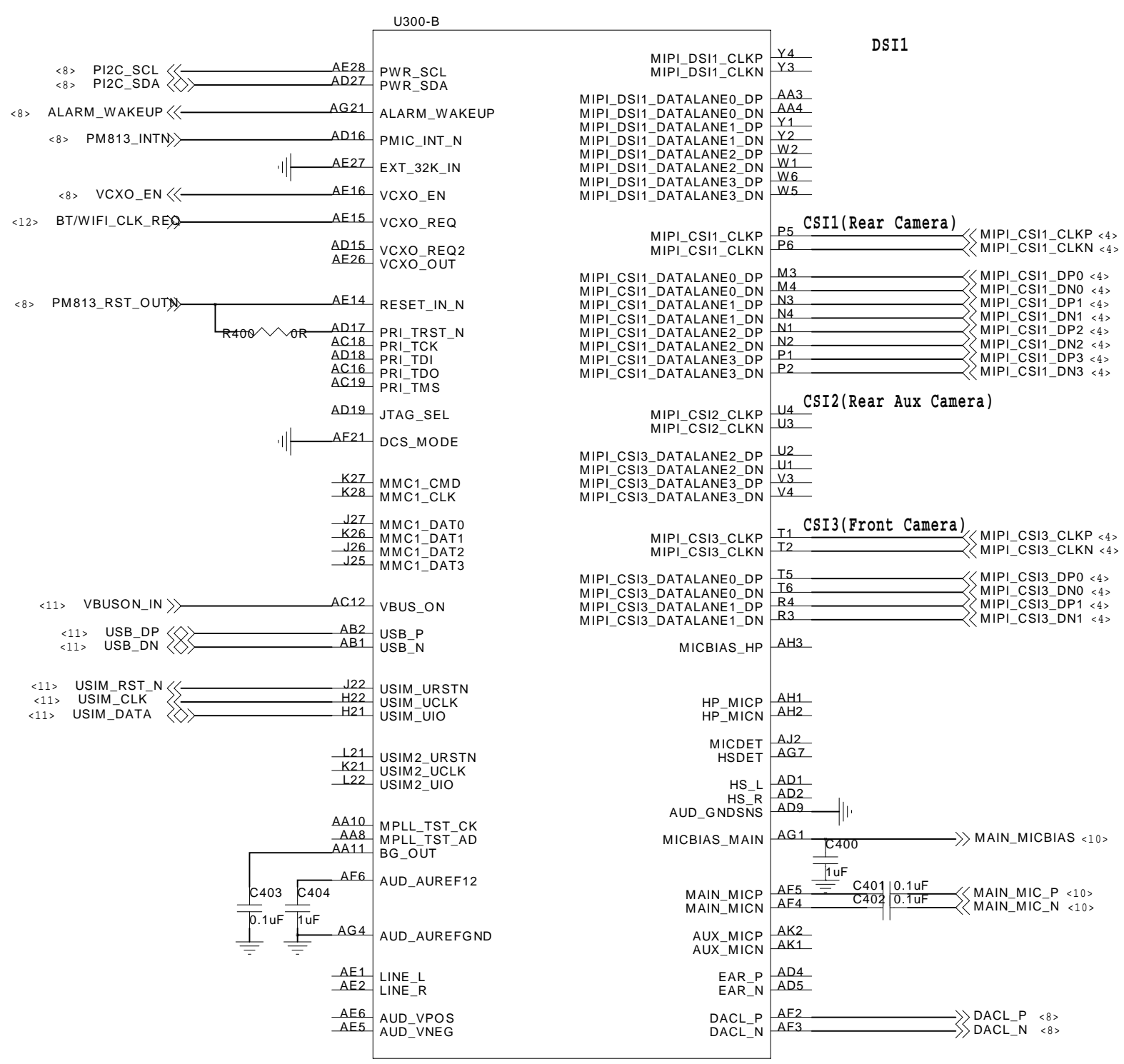
CAM2->CSI3->Front_CAM

AP_I2C0->Rear_CAM

AP_I2C1->AUX_CAM+Front_CAM

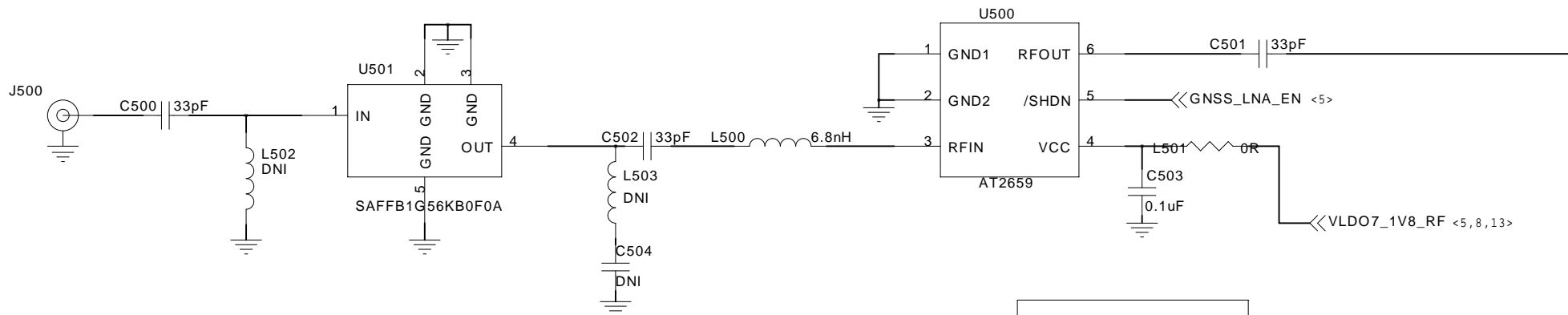
AP_I2C2->FLASH



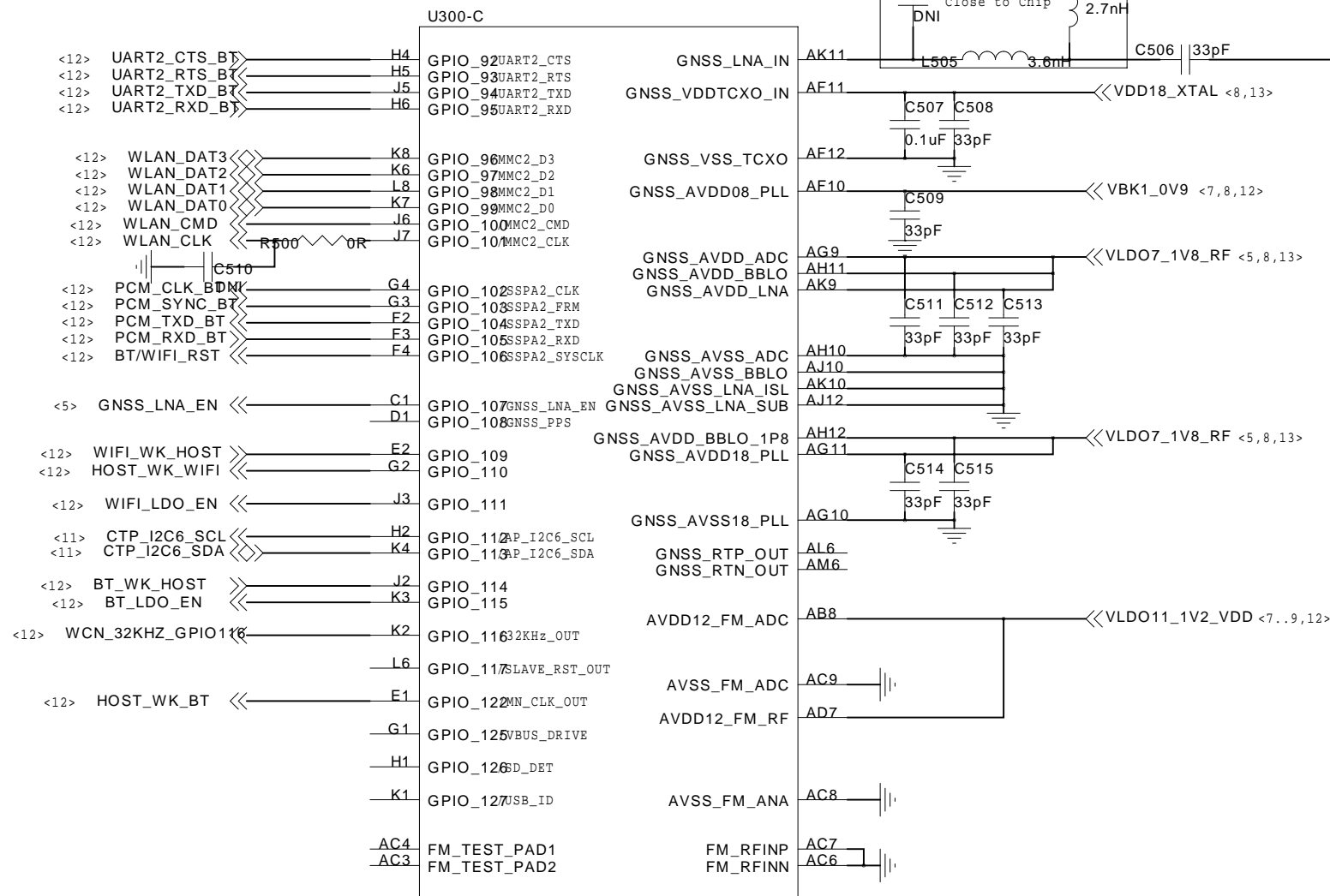


CSI3 WORK MODE:

- 1,CSI3 supports both 2 datalanes and 4 datalanes.
- 2,When 2 datalanes are supported,
datalane 2 and 3 can be configured for CSI2_CLK
to form a new interface CSI2.

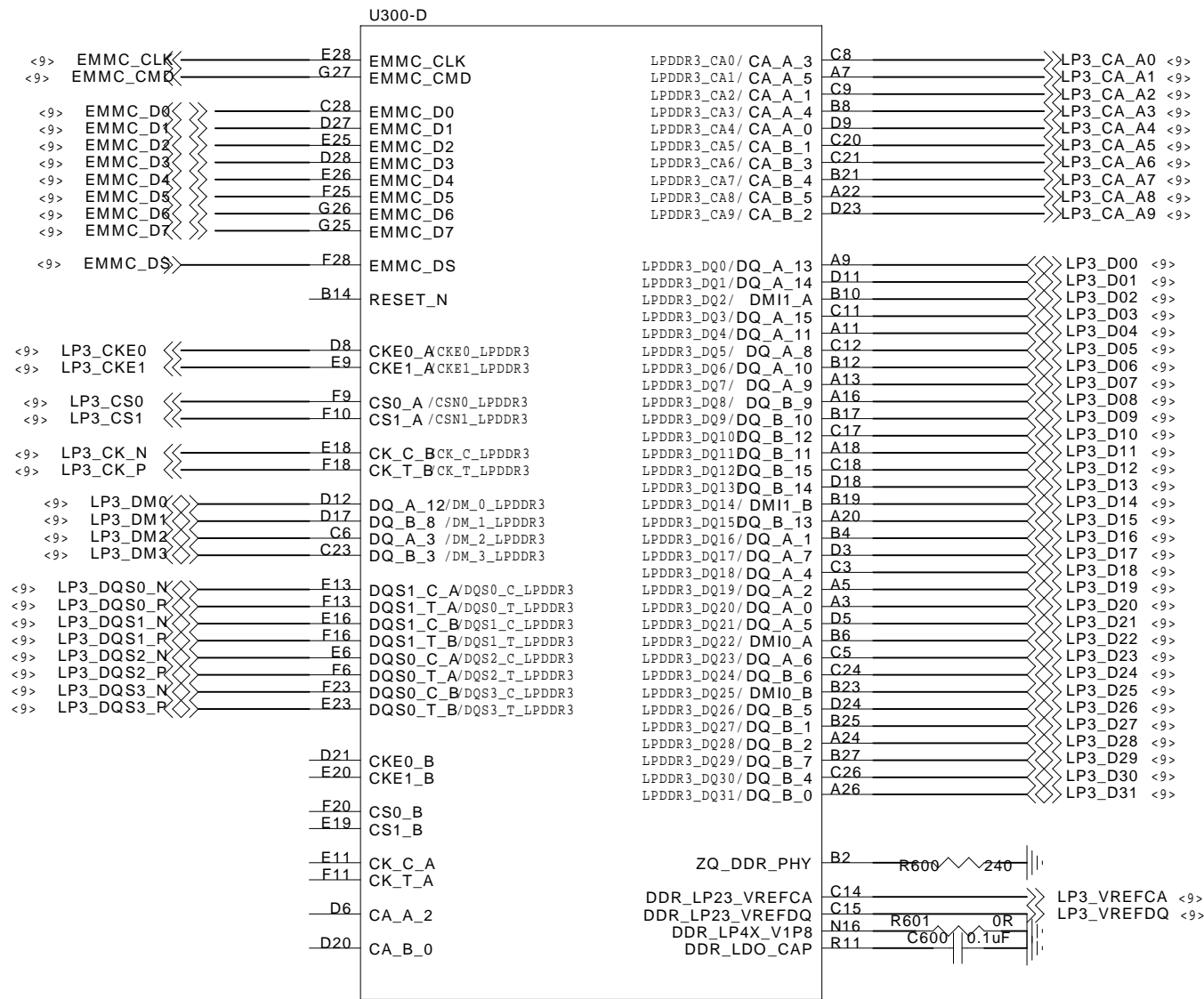


L502,C507 NC if RF band has no band13
L502=7.5nH,C507=4.7pF



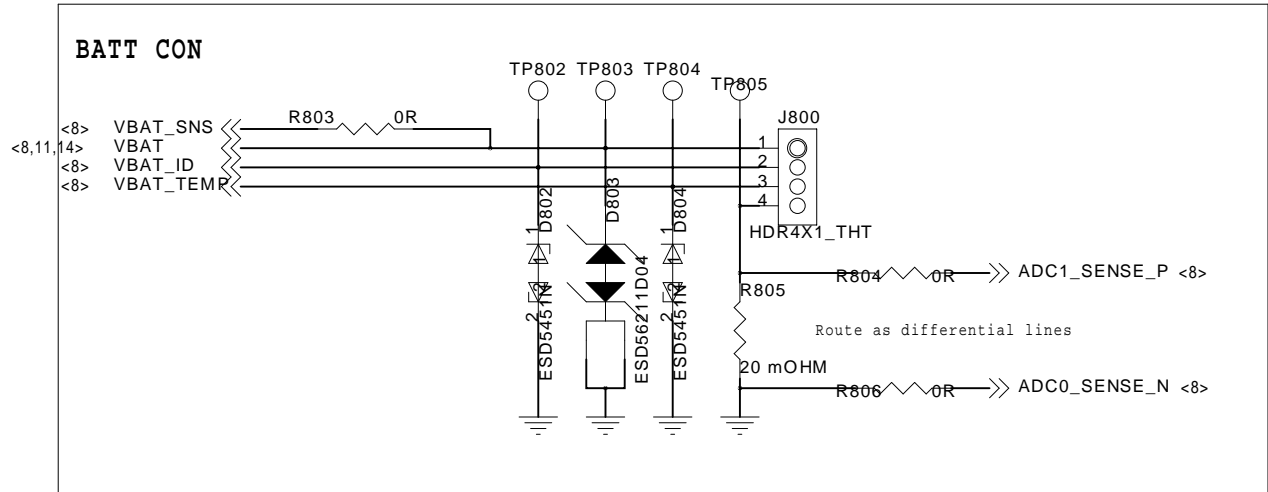
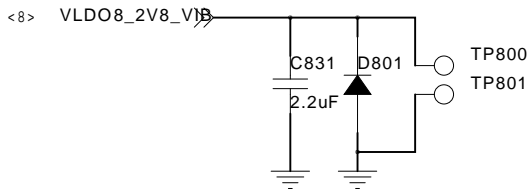
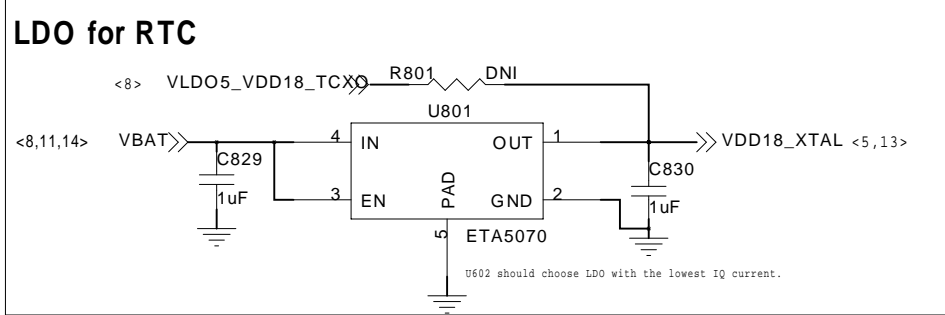
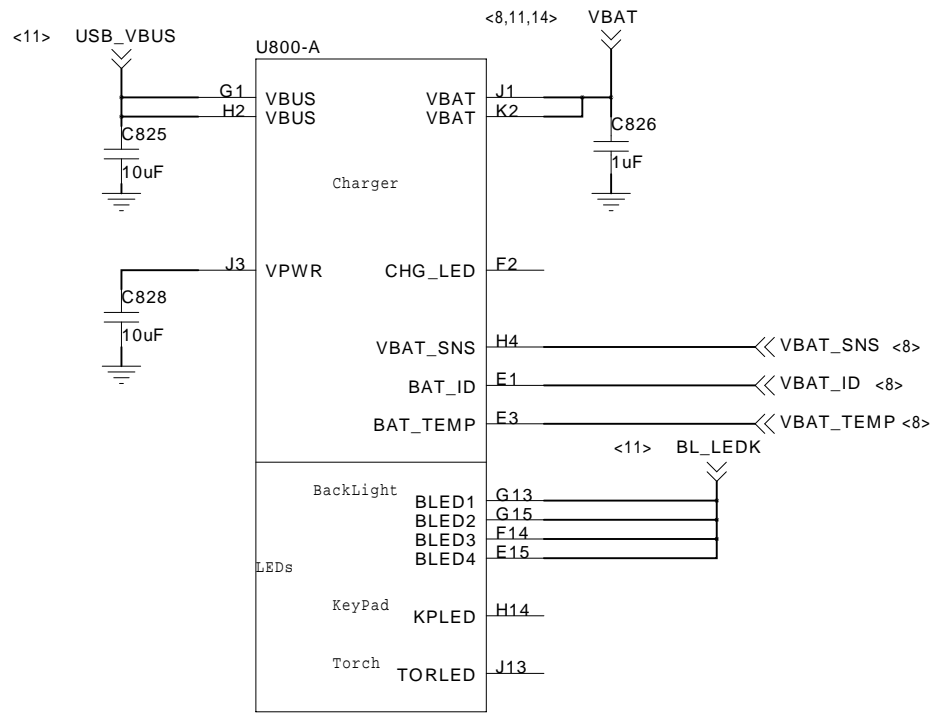
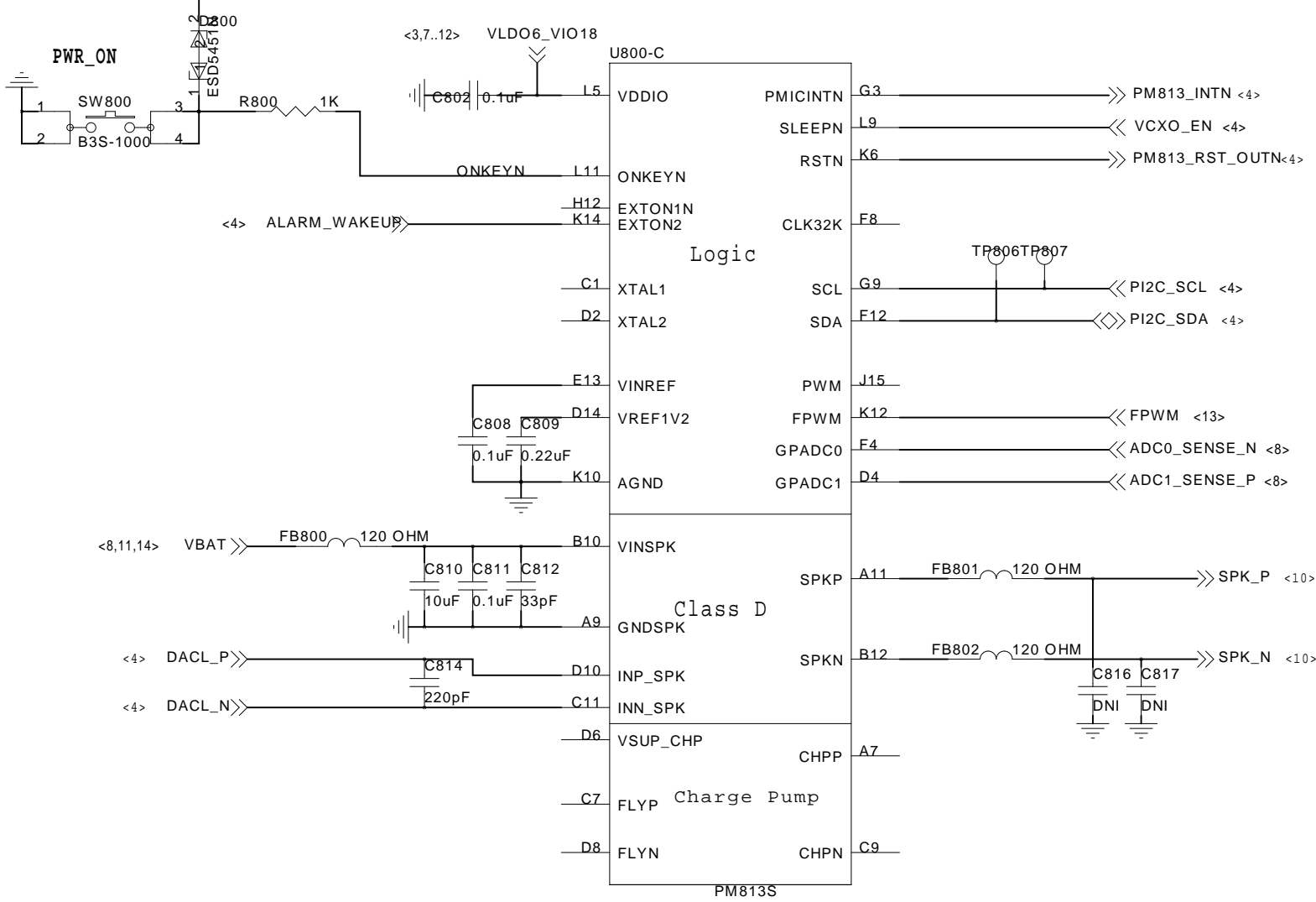
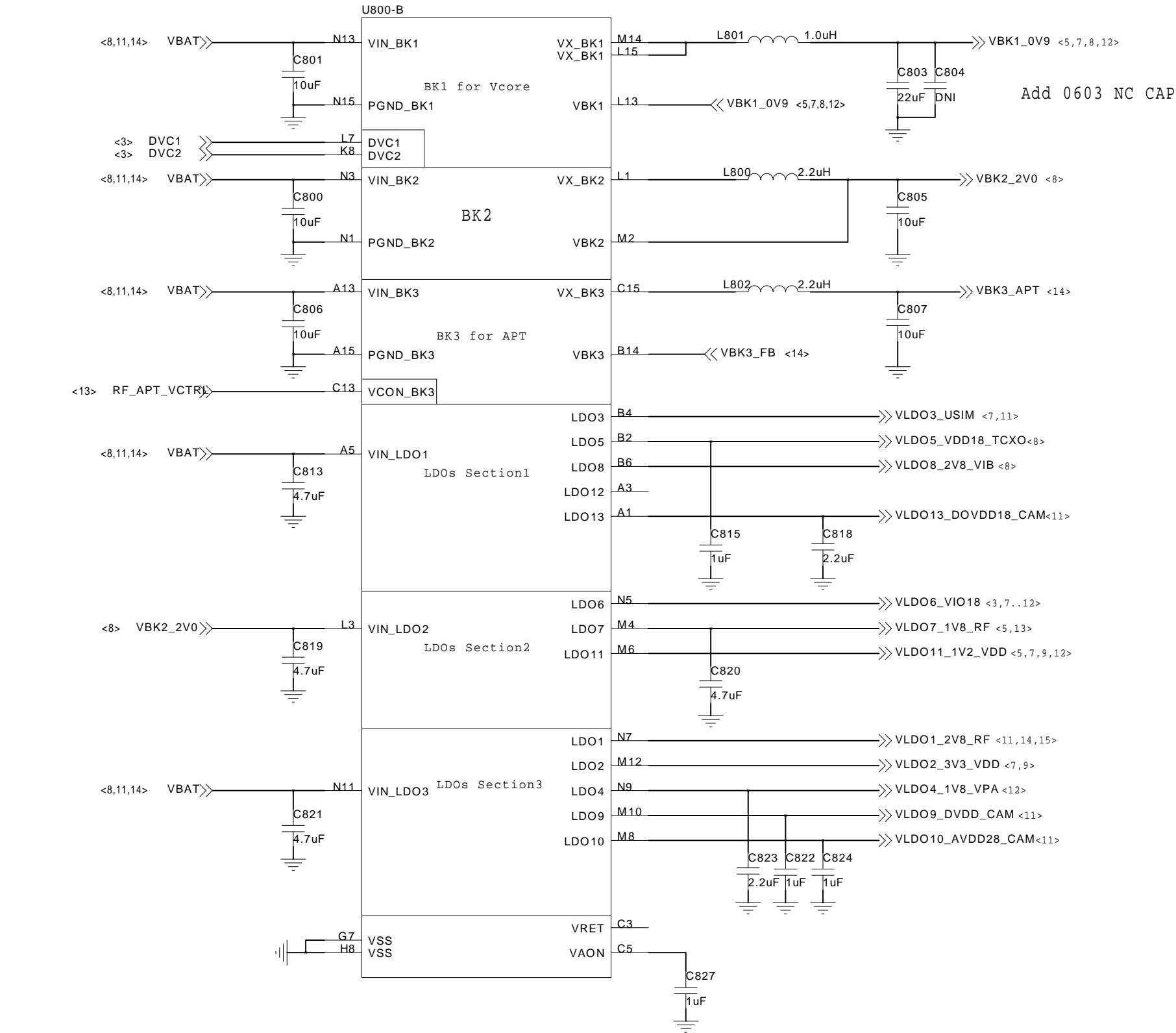
When FM is not needed, FM_RFINP/FM_RFINN are recommended short to GND.

SOC_eMMC_LPDDR



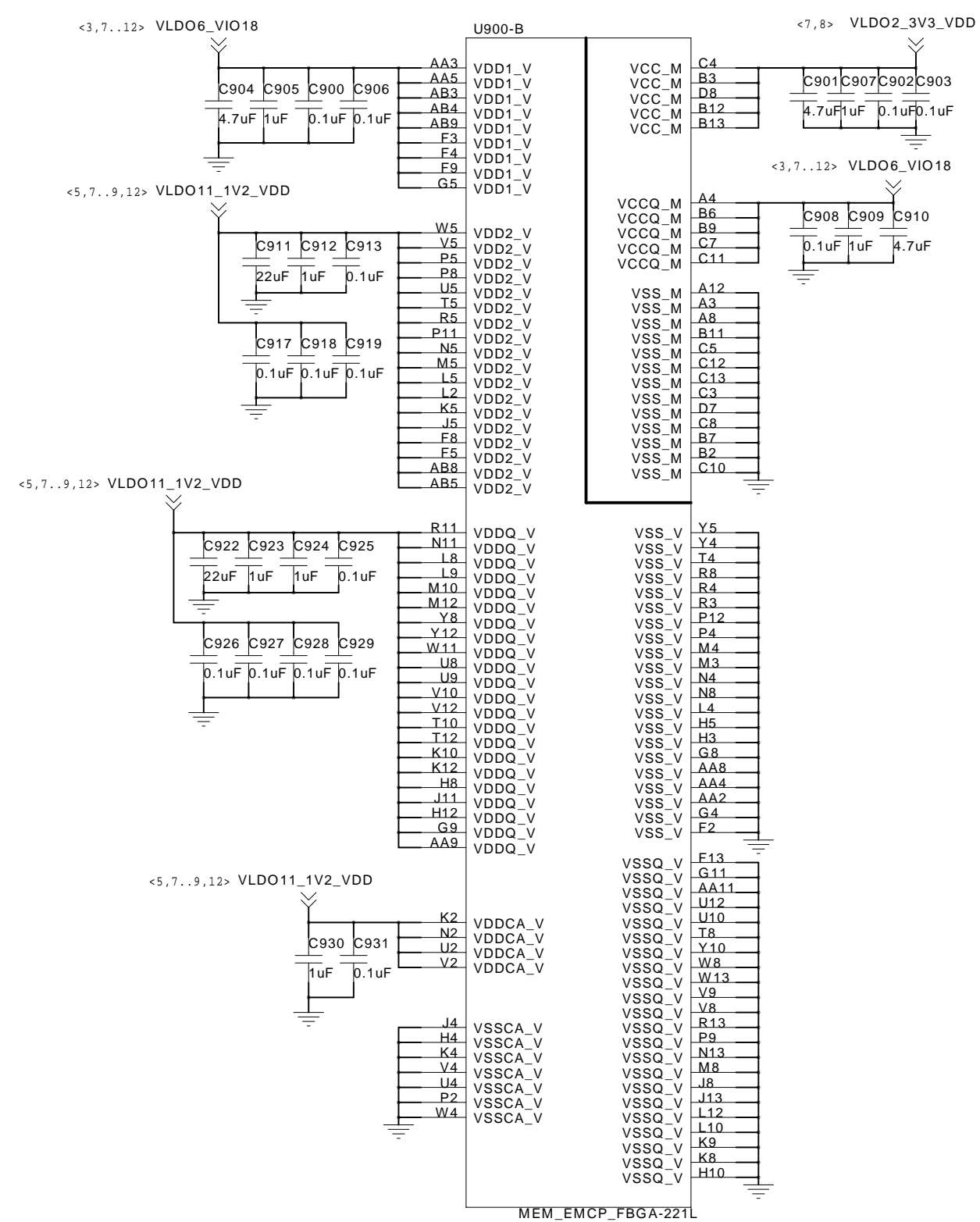
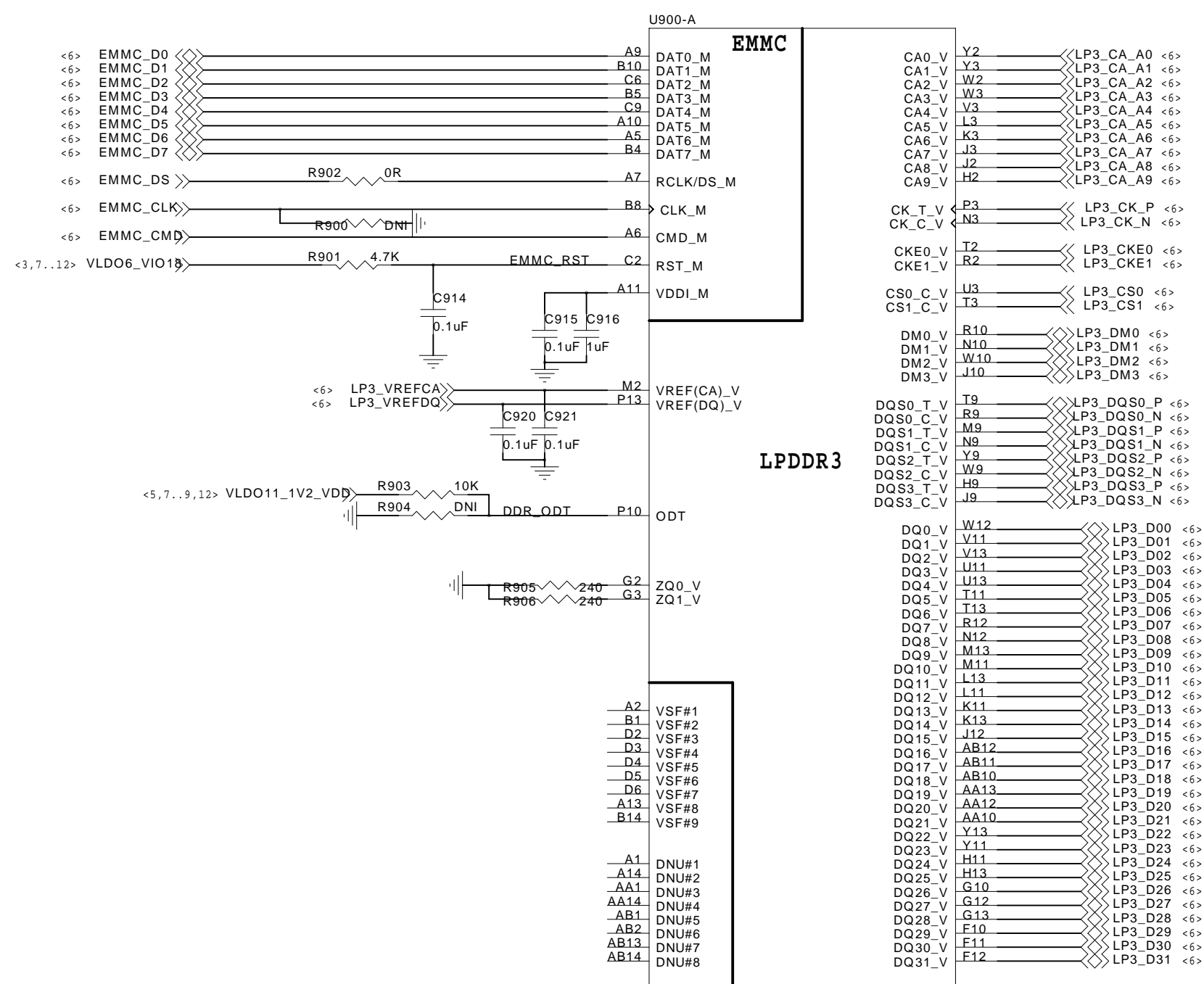
- 1,ZQ_DDR_PHY: Connect to GND through a 240 ohm1% resistor.
- 2,DDR_LP4x_V1P8: LP4x: connect to V18. LP234: connect to GND.
- 3,DDR_LP234_VREFCA/DQ: Only used in LP23 mode,Connect to device.
LP4/4x,Keep the pin NC.
- 4,DDR_LDO_CAP: Connect a 100nF capacitor in parallel.

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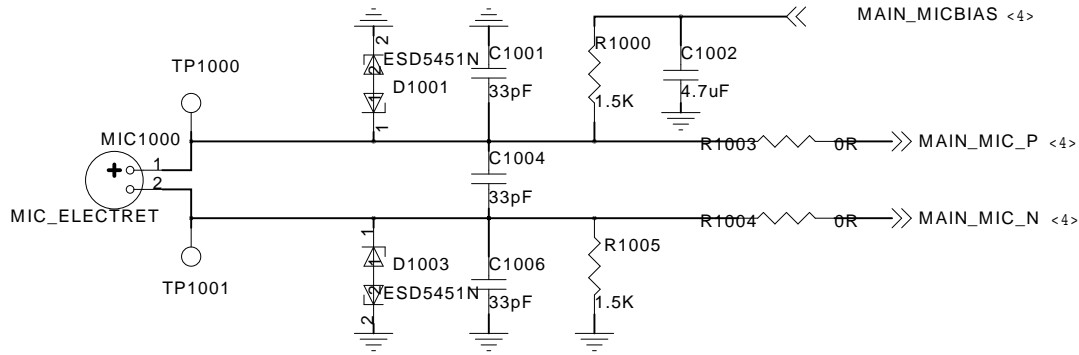


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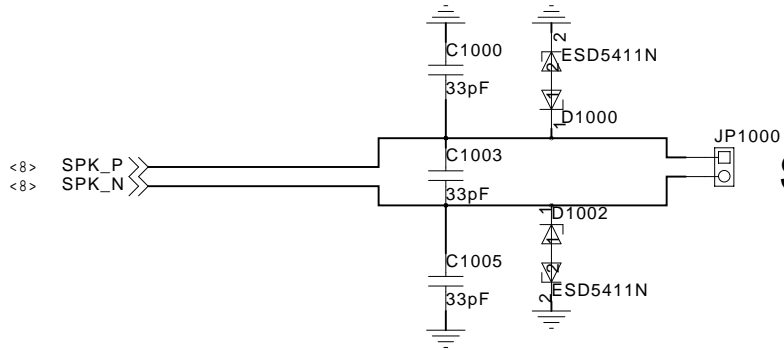
eMMC+LPDDR3



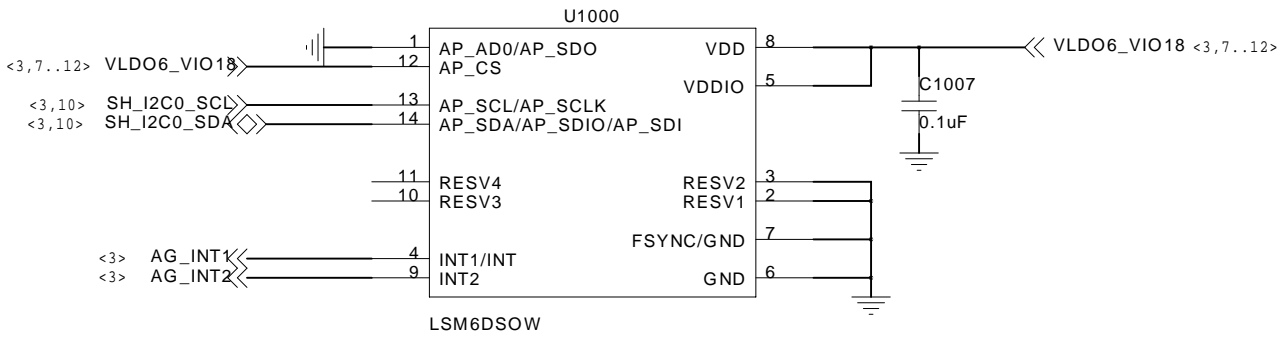
MAIN MIC



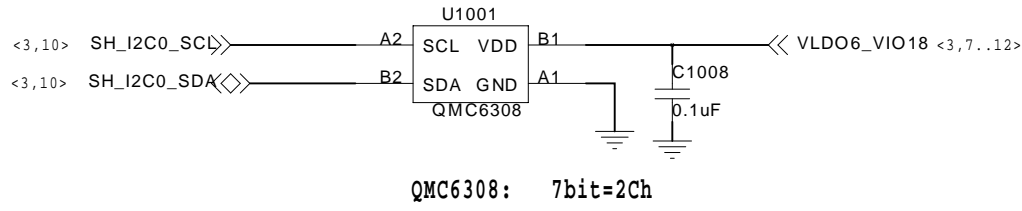
Speaker



A+G

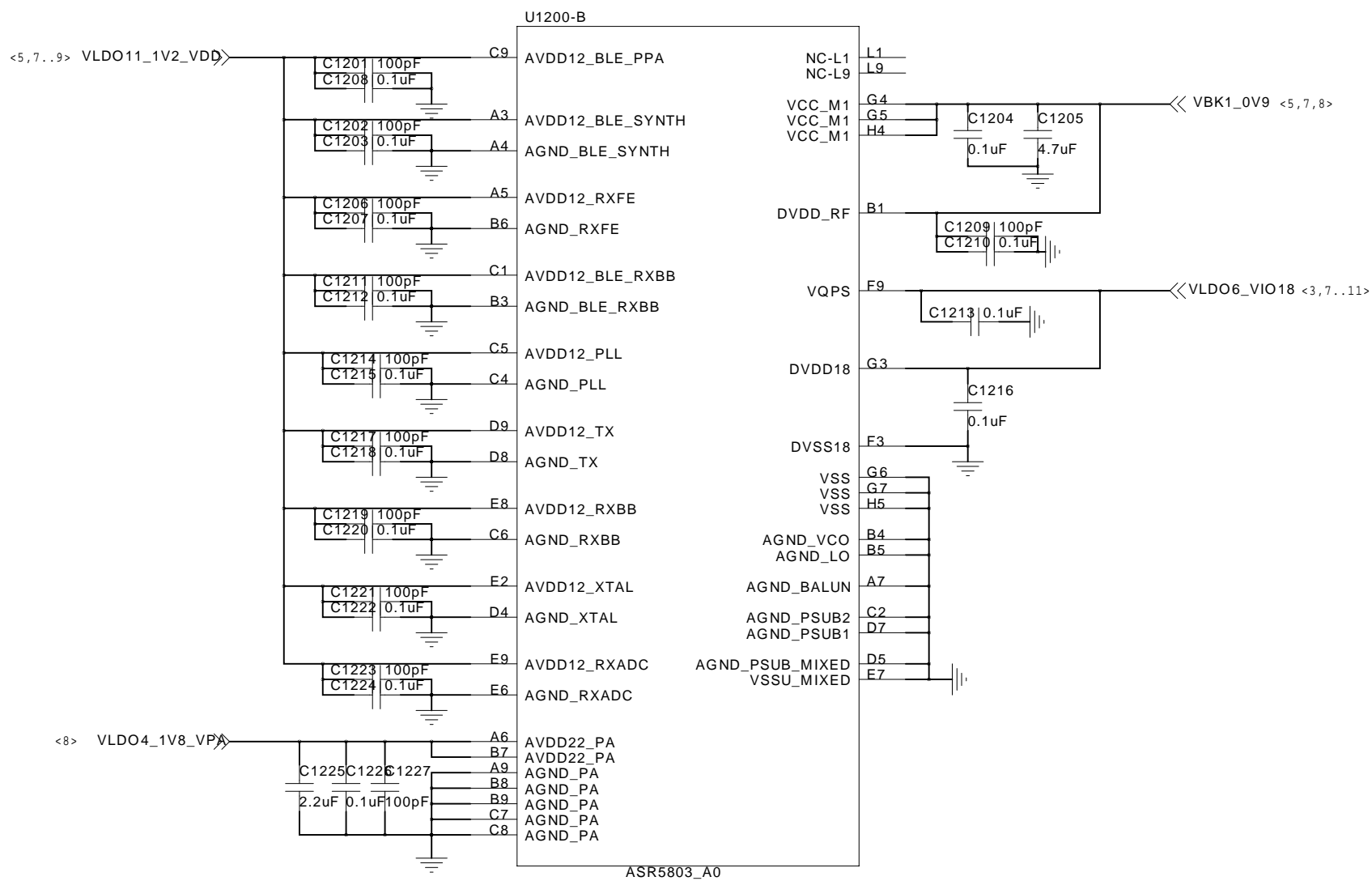
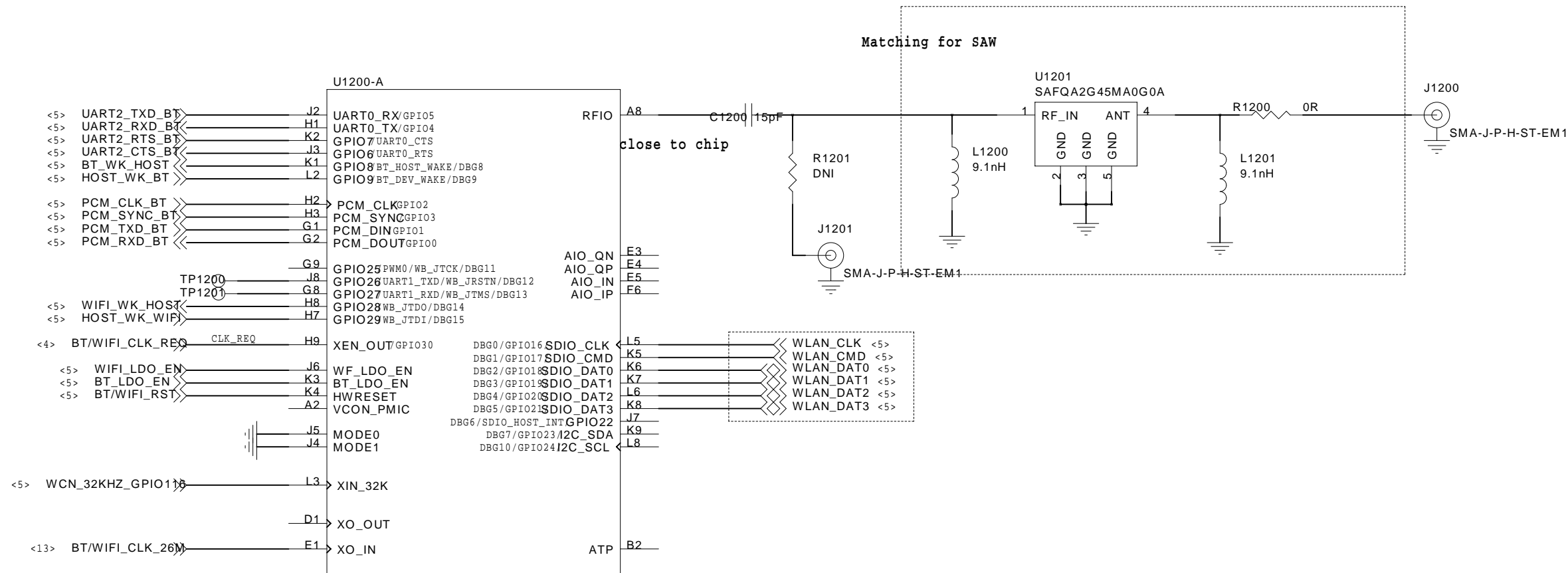


Compass



LSM6DSOW PIN2PIN ICM-42607-P
ICM-42607-P: SA0=0 7bit=68h
LSM6DSOW: SA0=0 7bit=35h

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WCDMA 1, 2, 5, 8

The diagram illustrates the PCB layout of the U300-G module, showing various components, connectors, and signal traces. The layout is organized into several sections, including power and ground connections, signal and control lines, and a detailed component list.

Power and Ground Connections:

- VDD18_RX_BB** (Pin 13) connects to **VDD18_RX_BB**.
- VDD18_RX_LNA** (Pin 13) connects to **VDD18_RX_LNA**.
- VDD18_RX_PLL** (Pin 13) connects to **VDD18_RX_PLL**.
- VDD18_TX_PLL** (Pin 13) connects to **VDD18_TX_PLL**.
- VDD18_TX_ANA** (Pin 13) connects to **VDD18_TX_ANA**.
- VDD18_RF_DIG** (Pin 13) connects to **VDD18_RF_DIG**.

Signal and Control Lines:

- U300-G** (Pin 1) connects to **U300-G**.
- VDD18_TCXOIN** (Pin 1) connects to **VDD18_TCXOIN**.
- VDD18_PLLRX** (Pin 1) connects to **VDD18_PLLRX**.
- VDD18_RX_LNA_DIV** (Pin 1) connects to **VDD18_RX_LNA_DIV**.
- VDD18_RX_LNA_PRI** (Pin 1) connects to **VDD18_RX_LNA_PRI**.
- VDD18_RX_BB_DIV** (Pin 1) connects to **VDD18_RX_BB_DIV**.
- VDD18_RX_BB_PRI** (Pin 1) connects to **VDD18_RX_BB_PRI**.
- VDD18_RX_ADC** (Pin 1) connects to **VDD18_RX_ADC**.
- VDD18_PLLTX** (Pin 1) connects to **VDD18_PLLTX**.
- VDD18_TX_ANA** (Pin 1) connects to **VDD18_TX_ANA**.
- VDD18_RF_DIG** (Pin 1) connects to **VDD18_RF_DIG**.
- VDD18_PLLTX** (Pin 1) connects to **VDD18_PLLTX**.

Component List and Pin Connections:

Component	Pin	Function
R1300	0R	Resistor
C1307	1uF	Capacitor
C1308	10nF	Capacitor
U1301	4	IC
R1309	10K	Resistor
C1309	10K	Capacitor
R1302	0R	Resistor
C1310	10nF	Capacitor
U1302	4	IC
R1305	0R	Resistor
C1315	4.7uF	Capacitor
R1304	10K	Resistor
R1303	100K	Resistor
C1316	10nF	Capacitor
R1306	0R	Resistor
C1318	10nF	Capacitor
R1307	0R	Resistor
R1308	10K	Resistor
C1319	10nF	Capacitor
R1309	1K	Resistor

The diagram also shows various other components and their connections, including resistors, capacitors, and integrated circuits, along with their respective pin numbers and functions.

<5,8,13> VLD07_1V8_RF

AG1300 DNI_AG

AG1305 DNI_AG

C1300 1uF

C1301 33pF

VDD18_RF_DIG <13>

VDD18_RF_VIO <14>

<5,8,13> VLD07_1V8_RF

AG1300 DNI_AG

AG1305 DNI_AG

C1304 1uF

C1305 33pF

C1306 33pF

VDD18_TX_ANA <13>

VDD18_TX_PLL <13>

<5,8,13> VLD07_1V8_RF

AG1300 DNI_AG

AG1305 DNI_AG

AG1307 DNI_AG

AG1306 DNI_AG

C1310 1uF

C1311 33pF

C1312 33pF

C1313 33pF

C1314 33pF

VDD18_RX_PLL <13>

VDD18_RX_ADC <13>

VDD18_RX_BB <13>

VDD18_RX_LNA <13>



PRI FILTER

