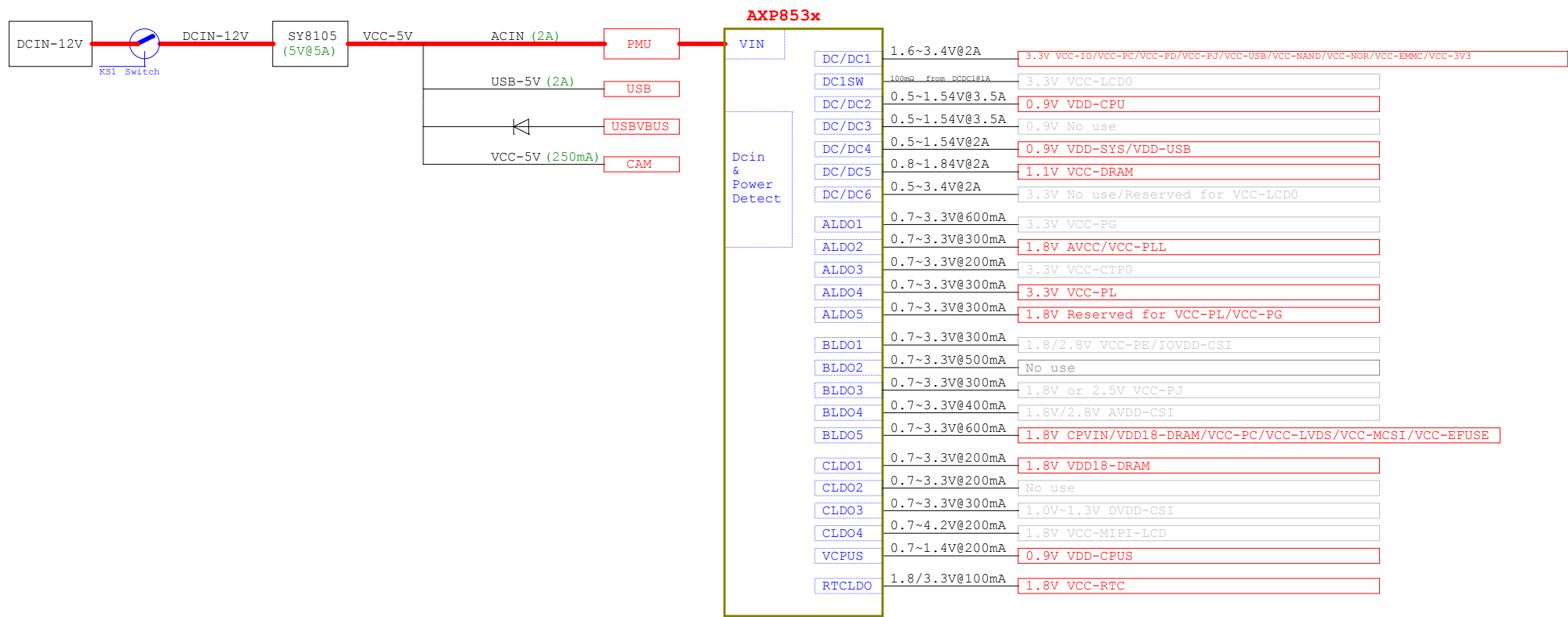


D

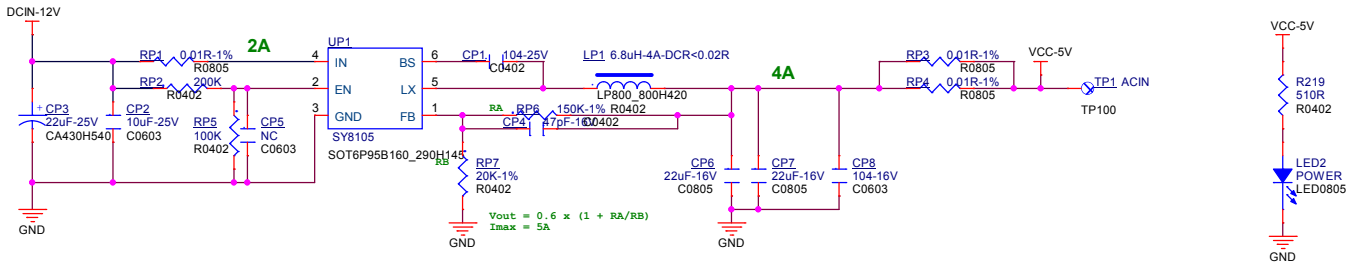
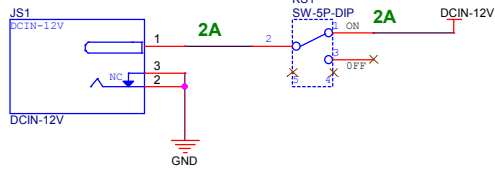
C

B

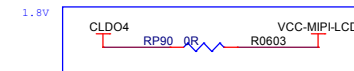
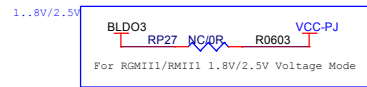
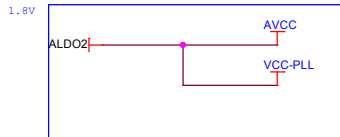
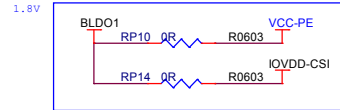
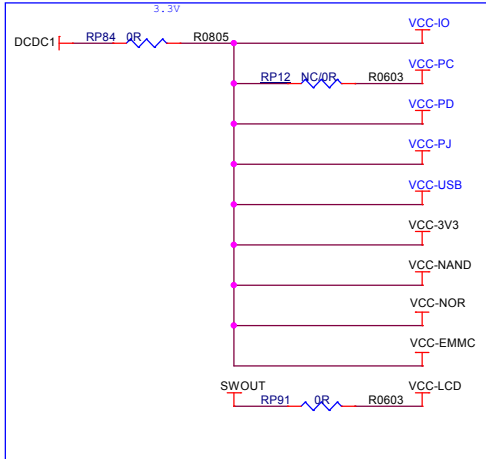
A



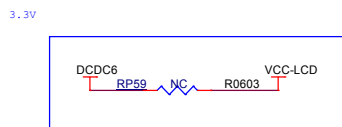
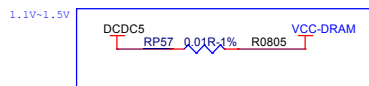
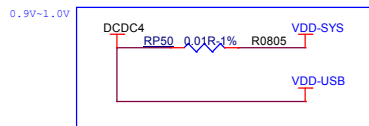
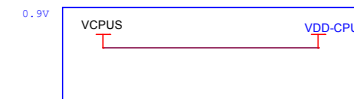
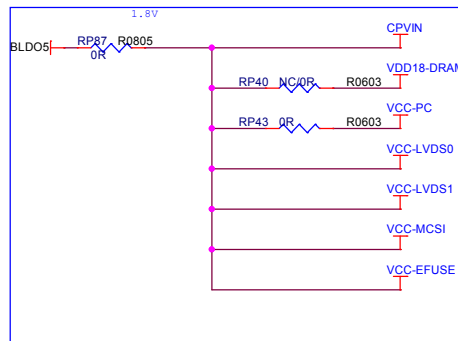
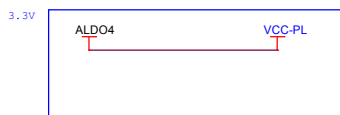
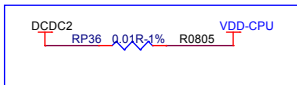
DC IN



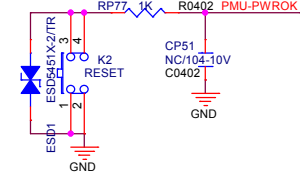
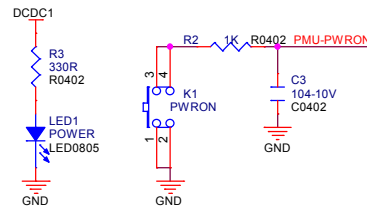
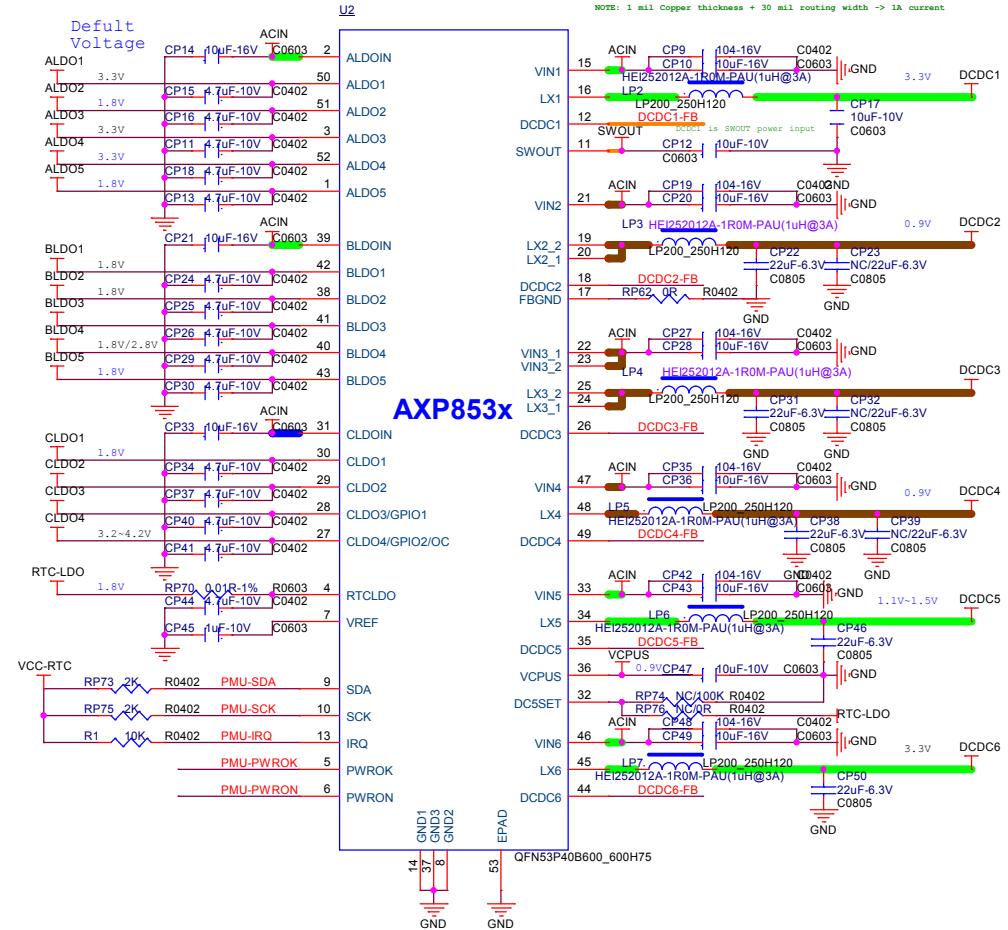
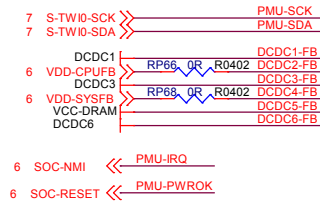
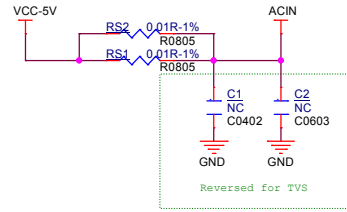
蓝色电源 是so c需求



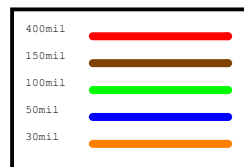
0.9V~1.0V the 0.01R resistance used for measure current



PMIC AXP85x

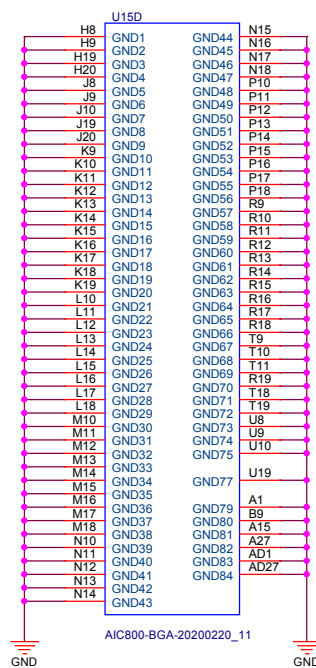
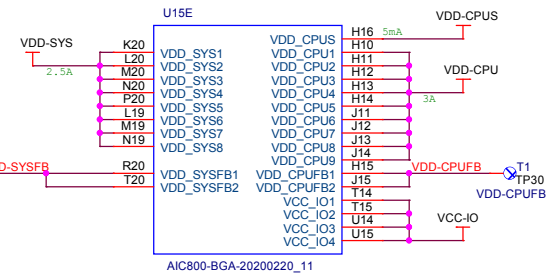
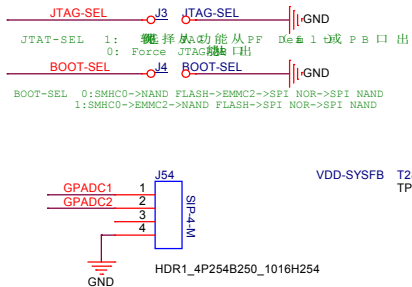
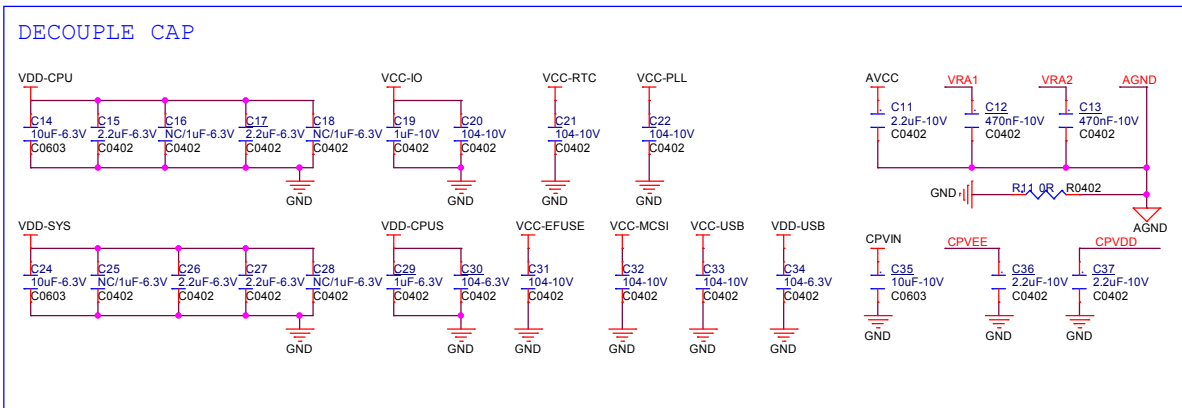
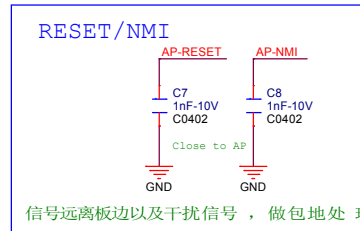
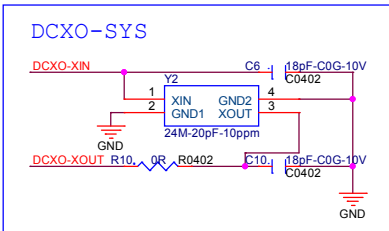
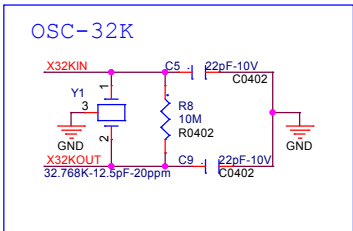
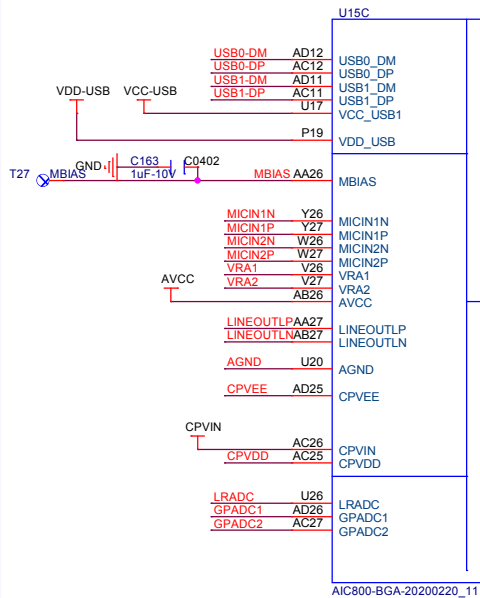
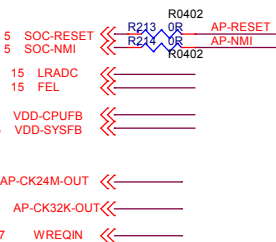
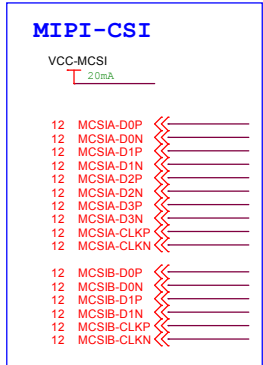
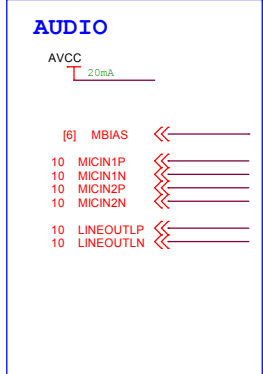
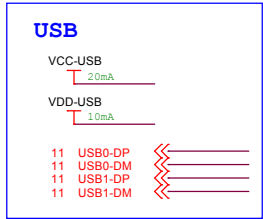


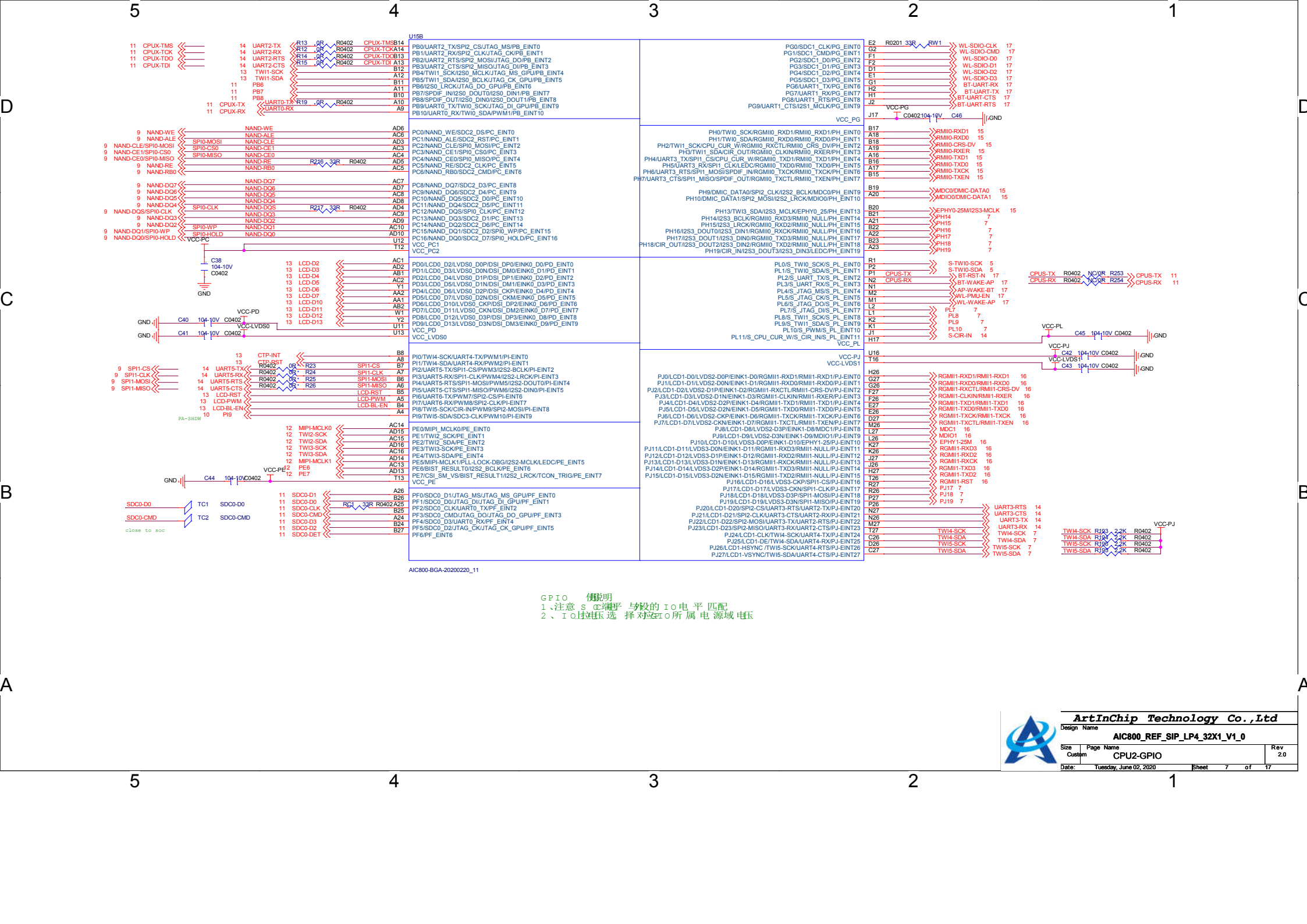
DCSSET select	DCDC5 default
Connect to GND	1.2V
Pull Down to GND with 20K-200K R	1.1V
Connect to RTCLDO	1.5V
Floating	decide by OTP Default 1.1V



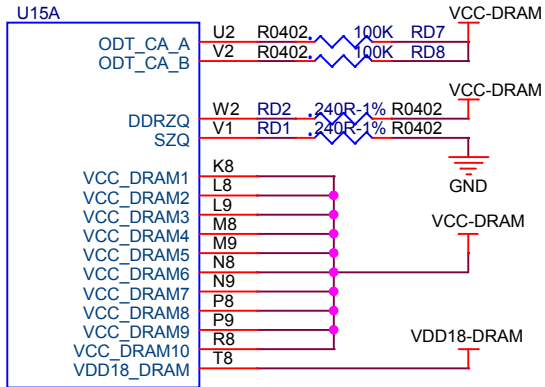
place several GND TEST POINTs around the board



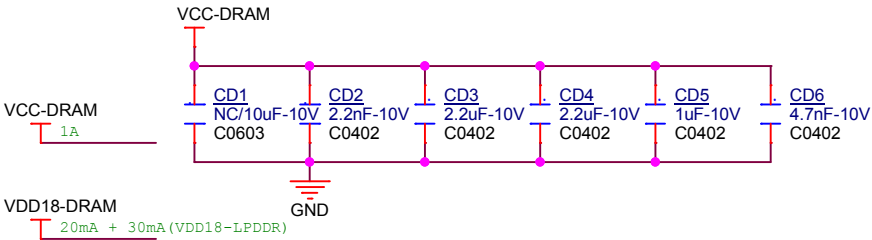




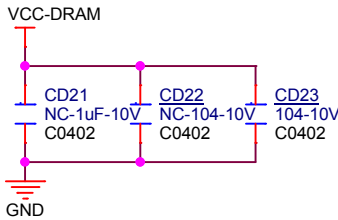
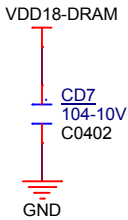
LPDDR4



AIC800-BGA-20200220_11

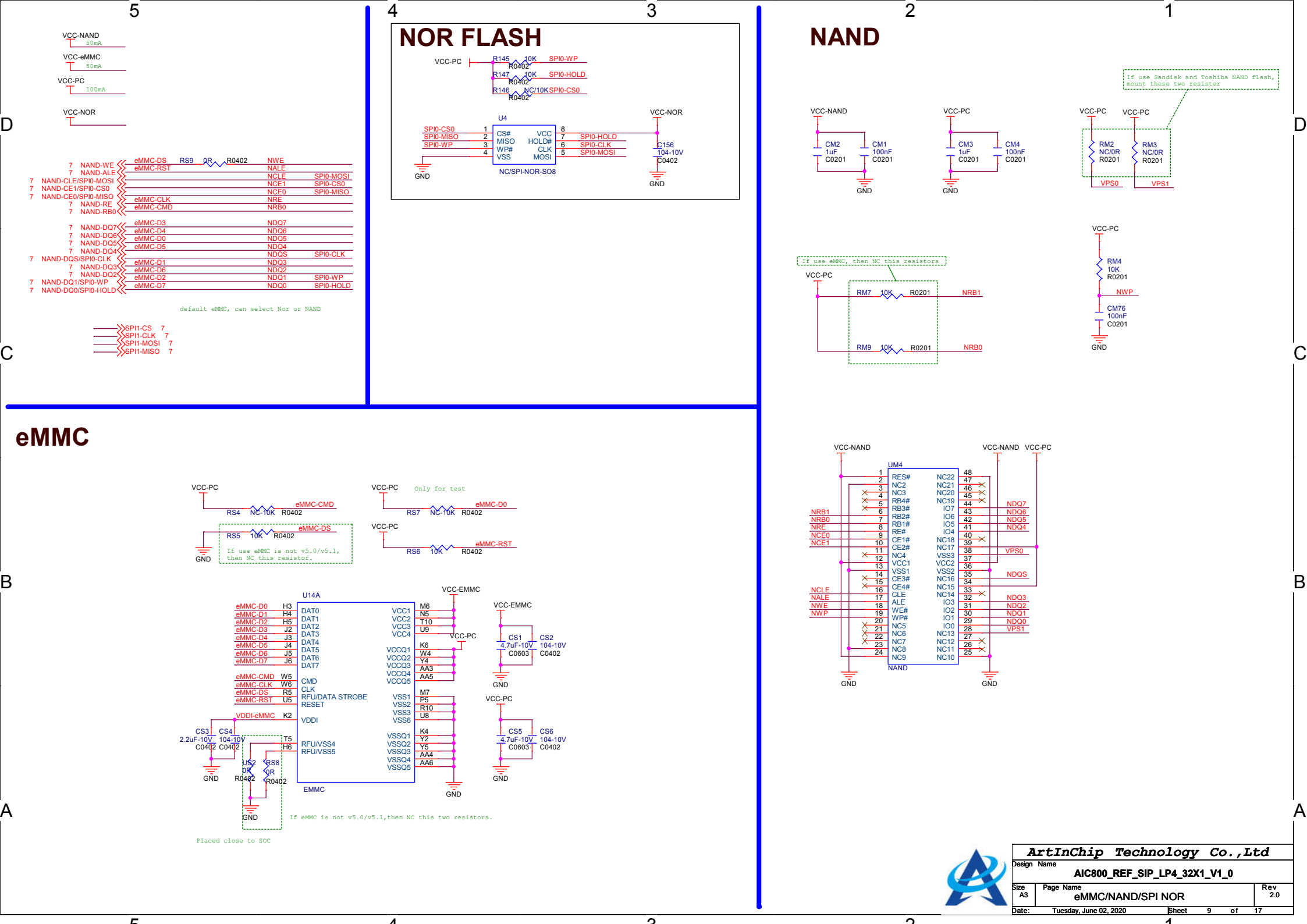


Placed close to SOC
Placed on bottom



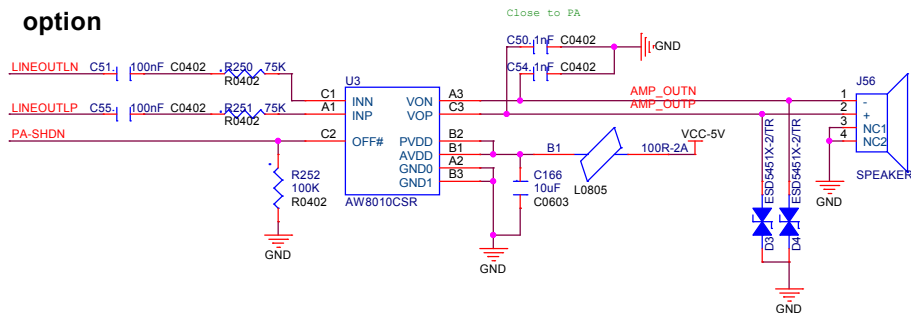
Placed on bottom



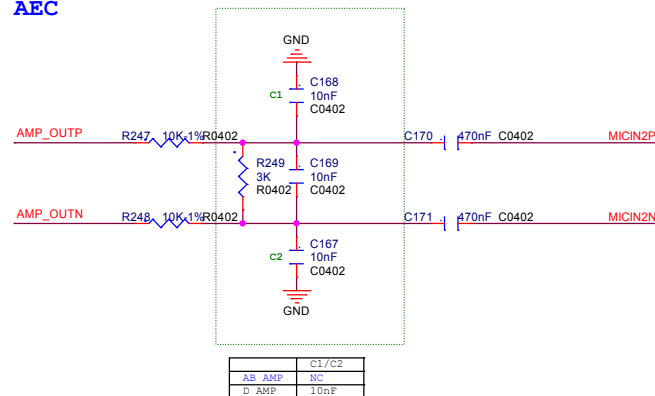


SPEAKER

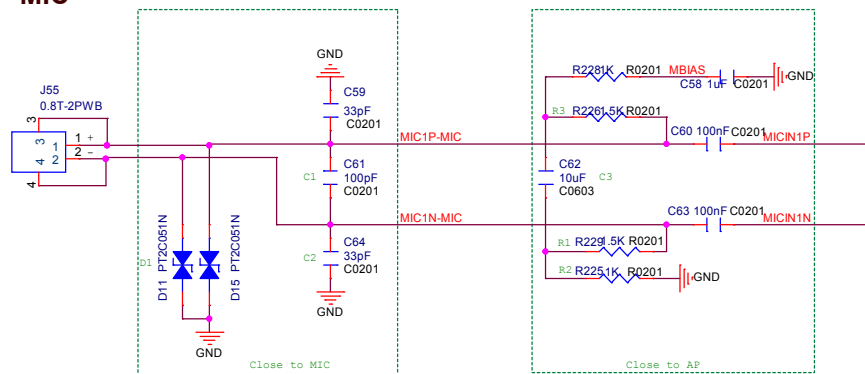
D 类
option



AEC



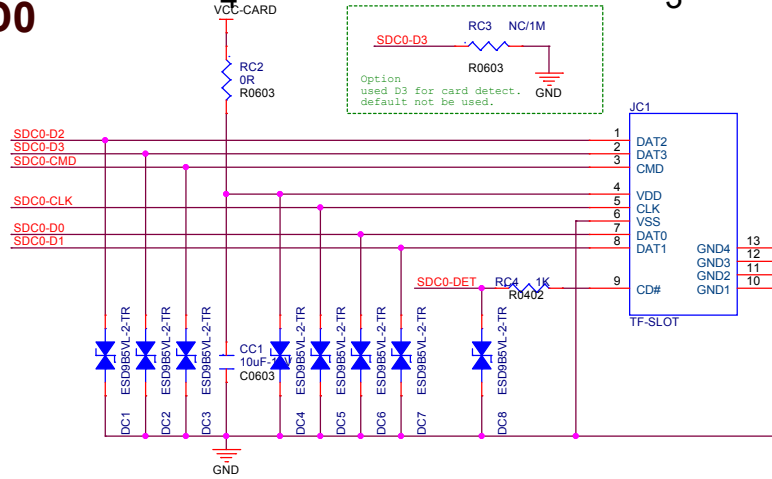
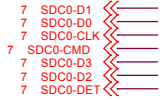
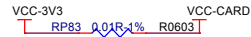
MIC



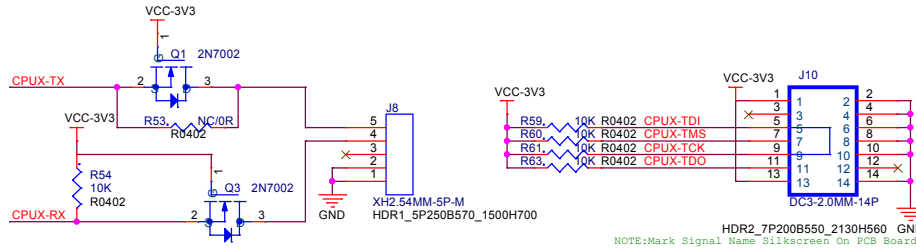
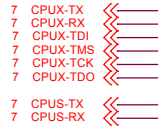
Component	Differential	single-ended
R1 R2 C1 C3 D1	USE	NC
C2	33pF	0R
R3	1.5K	1K



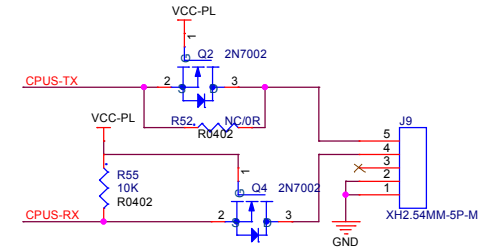
CARD0



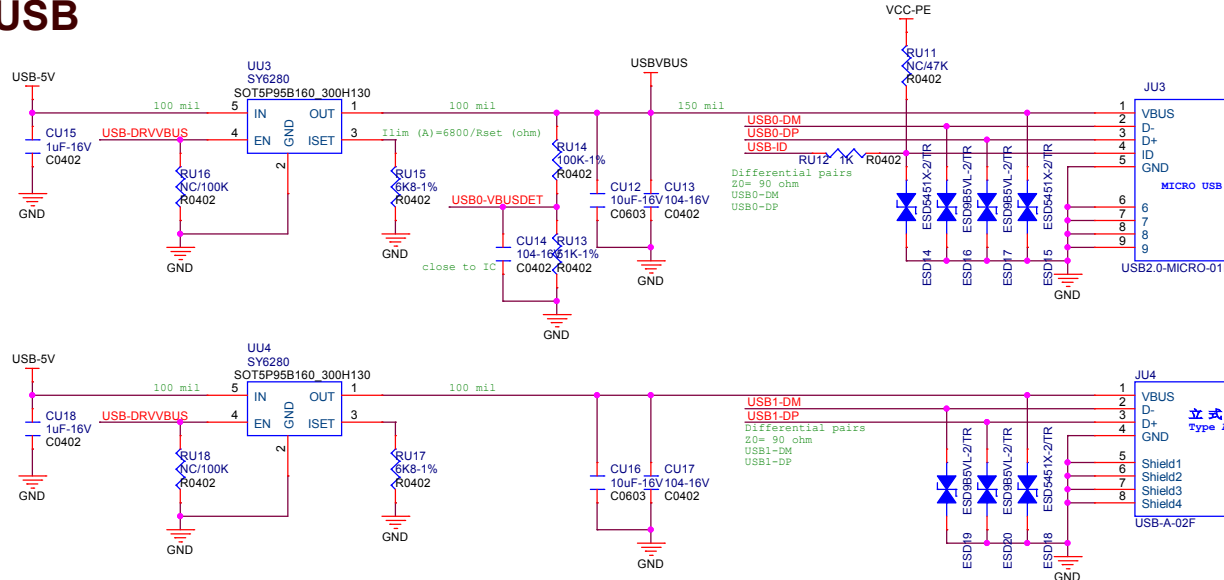
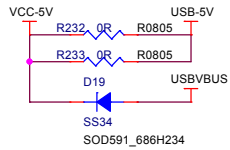
CPUX DEBUG



CPUS DEBUG



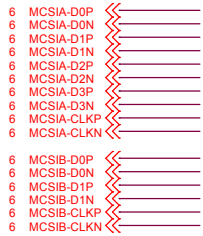
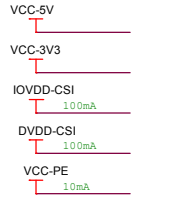
USB



MIPI-CSI

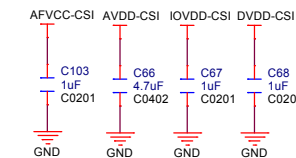
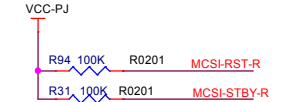
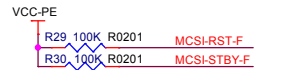
NOTE:

Because GC2385 and GC5025 has the same I2C address, GC2385 and GC5025 cannot be used at the same time.



MCSIA-D0[P/N]
MCSIA-D1[P/N]
MCSIA-D2[P/N]
MCSIA-D3[P/N]
MCSIA-CLK[P/N]
Differential pairs
Z0= 100 ohm

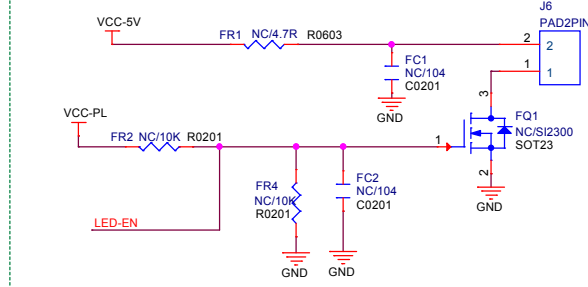
MCSIB-D0[P/N]
MCSIB-D1[P/N]
MCSIB-CLK[P/N]
Differential pairs
Z0= 100 ohm



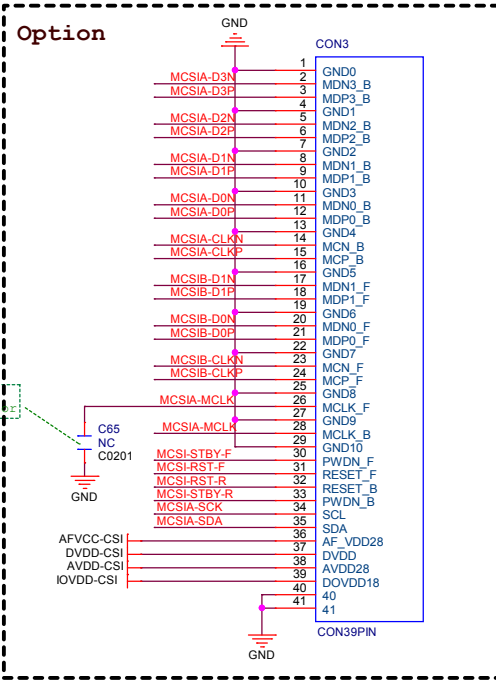
NOTE:

- 1.The working voltage and current of power need determine according to the peripheral specification.
- 2.AFVCC-CSI has timing requirements, don't share the same power with DVDD-CSI.
- 3.The front and rear cameras need to consider the compatibility of DVDD-CSI voltage.

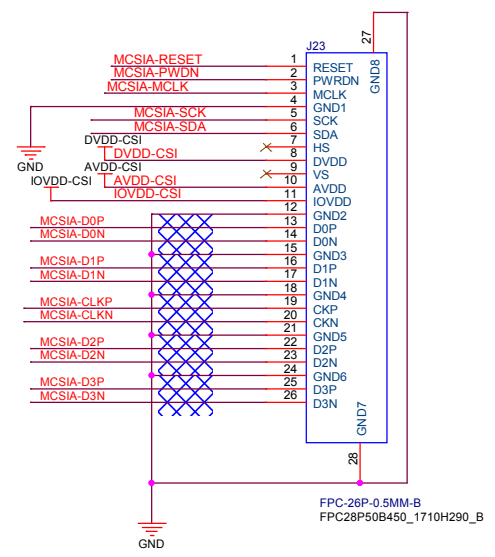
FLASH_LED



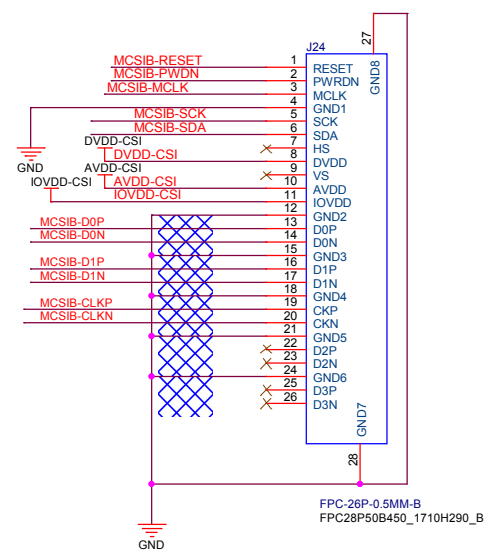
Option

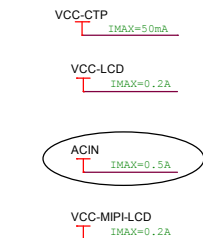


Connet IMX278 Sensor Module

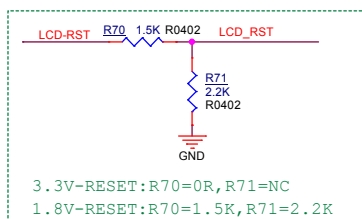
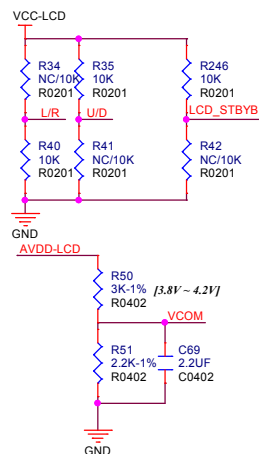


Connet IMX278 Sensor Module

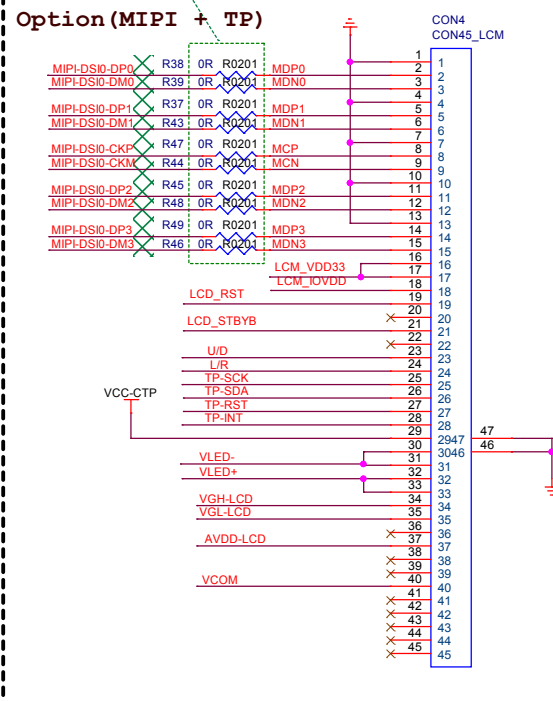




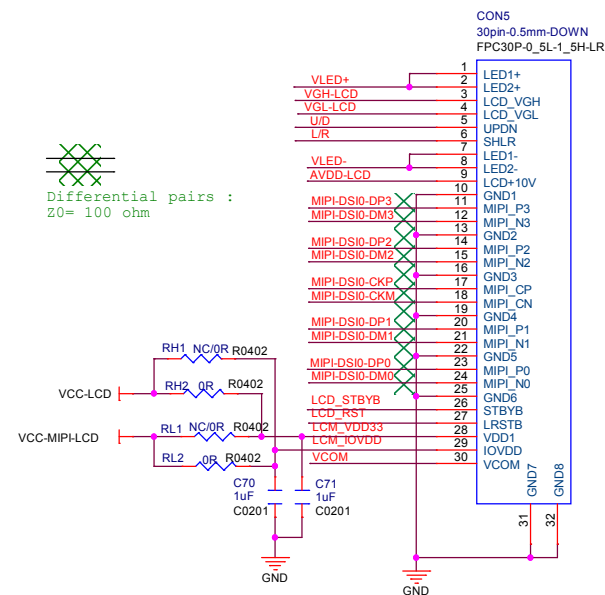
LCD



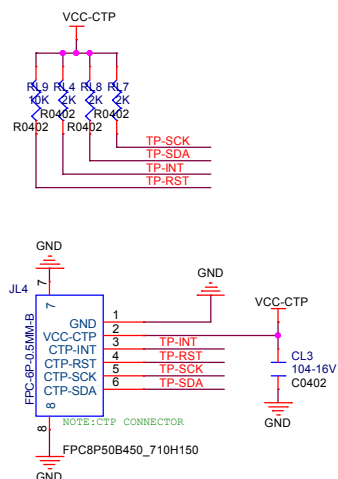
These resistors are placed under the seat to reduce PCB trace branching



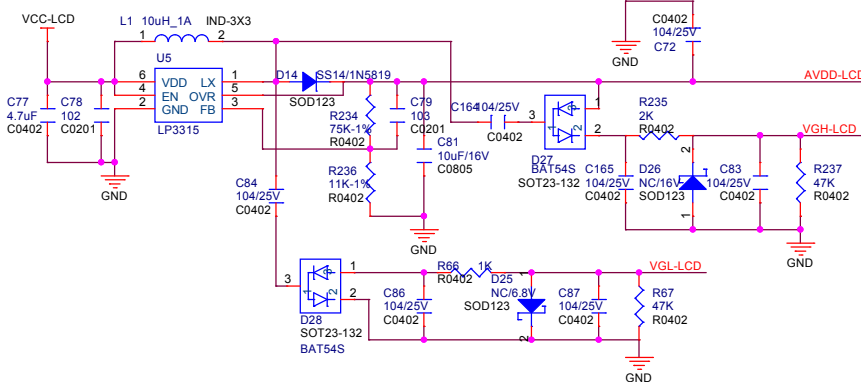
Differential pairs :
 $Z_0 = 100 \text{ ohm}$



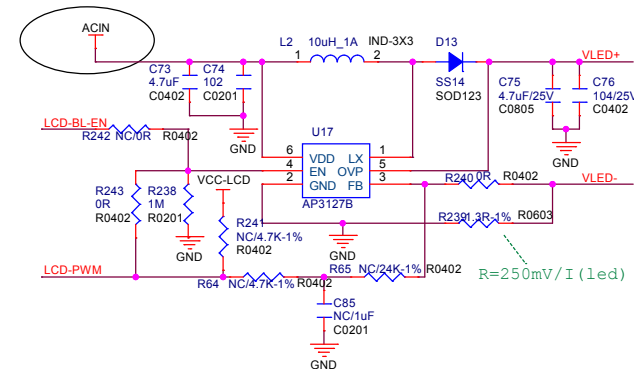
CTP



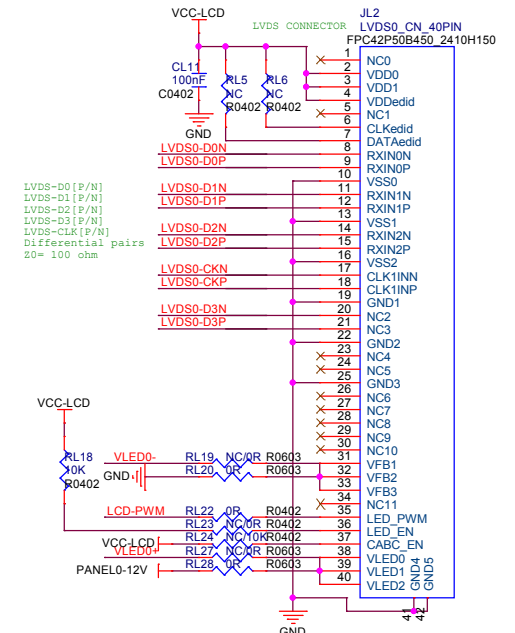
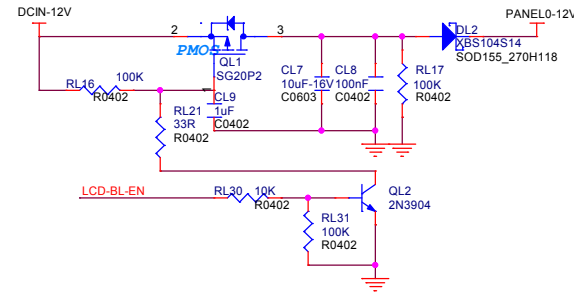
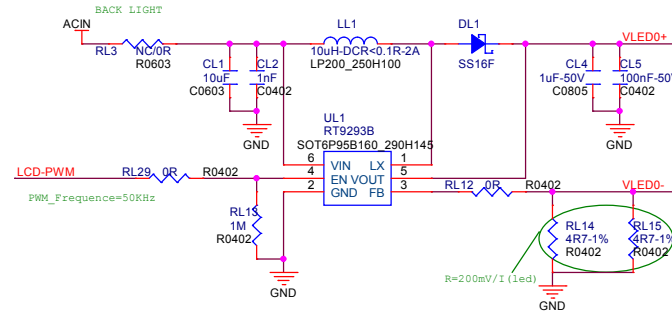
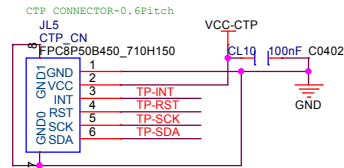
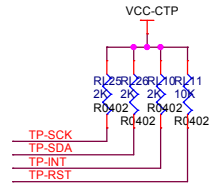
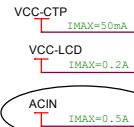
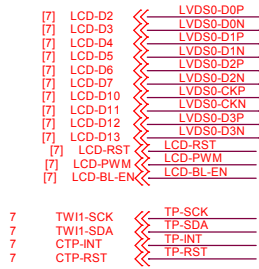
LCD POWER

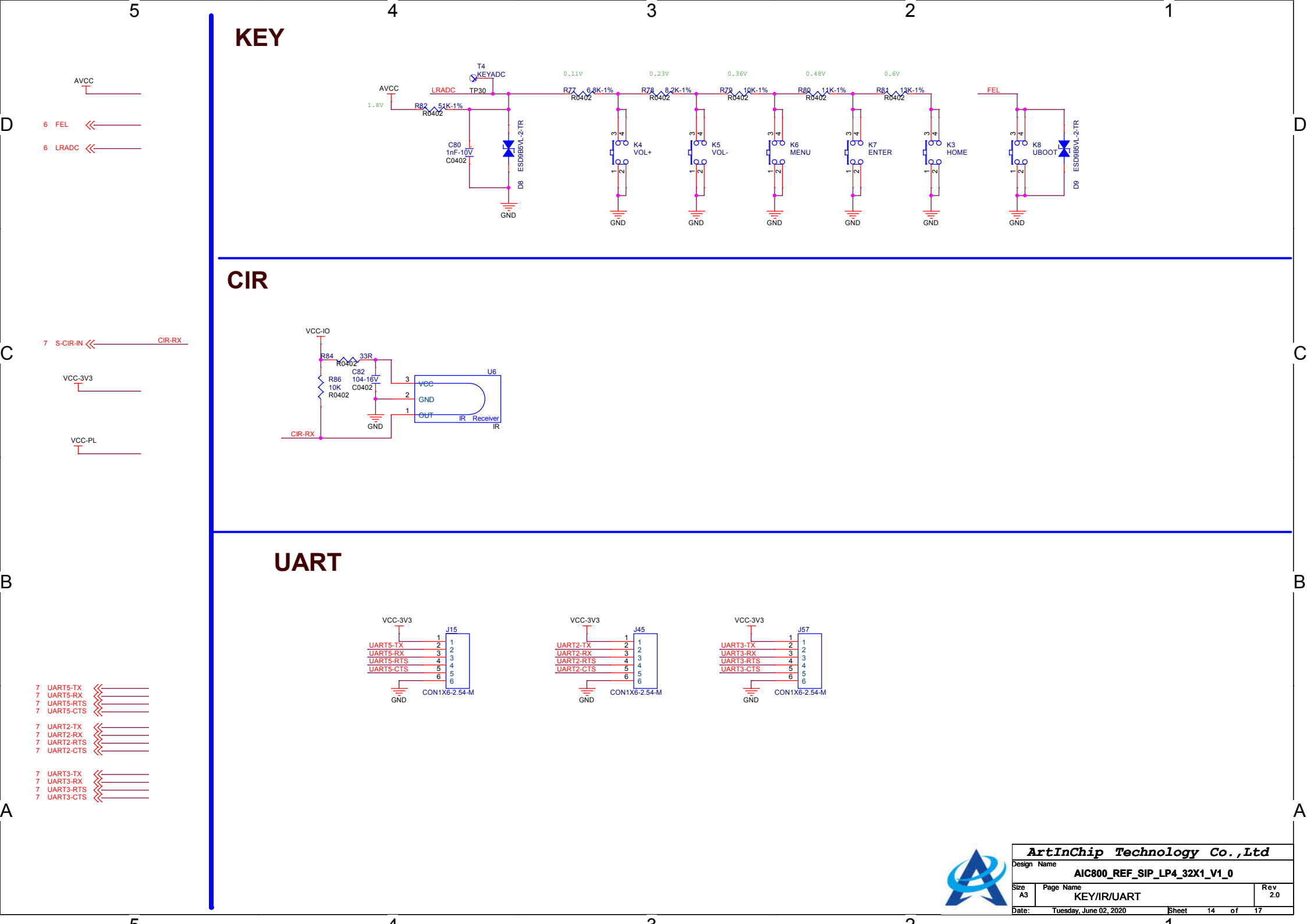


BACKLIGHT

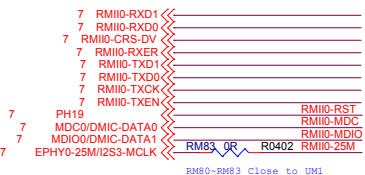


LVDS(Optional)



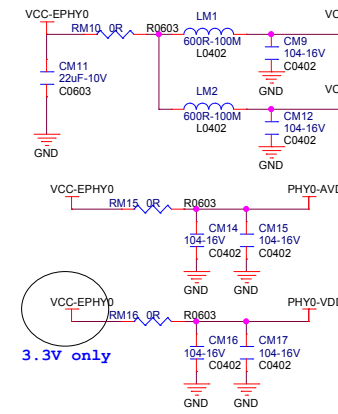


RMII

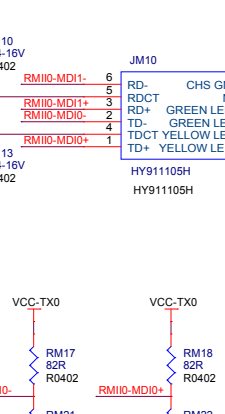
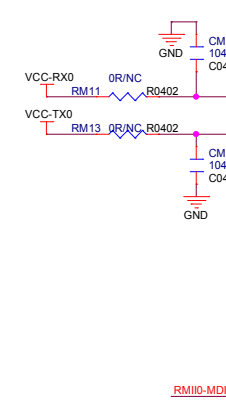
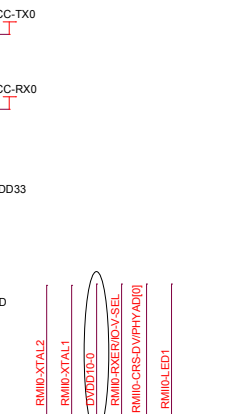


VCC-3V3 RM8 0.01R-1% R0603 VCC-EPHY0

RM80-RM83 Close to UM1

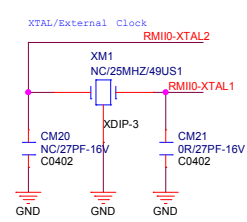


3.3V only

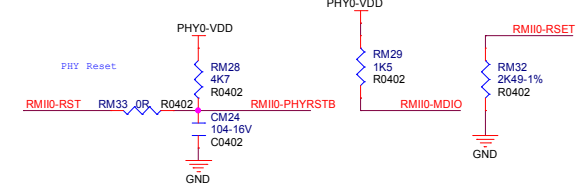


RMII0-RXER RMII0-RXER/IO-V-SEL
RMII0-CRS-DV RMII0-CRS-DV/PHYAD[0]
RMII0-RXD0 RMII0-RXD0/CLK-CTL

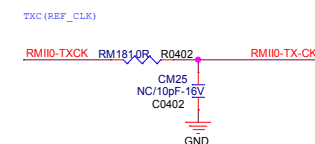
RMII0-25M RM25 0R R0402 RMII0-XTAL2
RMII0-25M network Ground Shielded



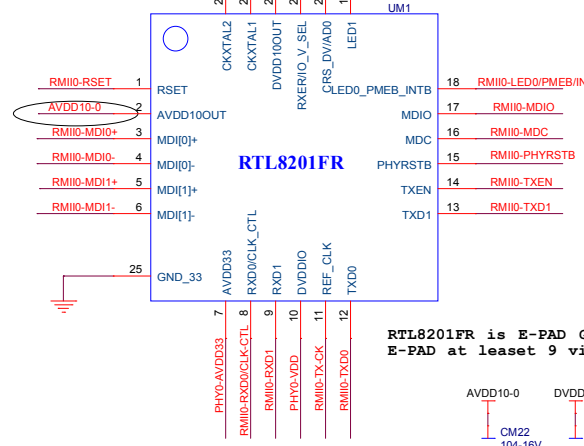
The XTAL1 needs to be connected to GND if the external 25MHz clock used.



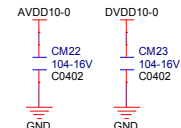
RMII-PHYRSTB pin is 5V tolerance.



Place filter network close to TX CLK PHY Site Pin.
Reserved for EMI(RMII Mode and REF_CLK is output use)

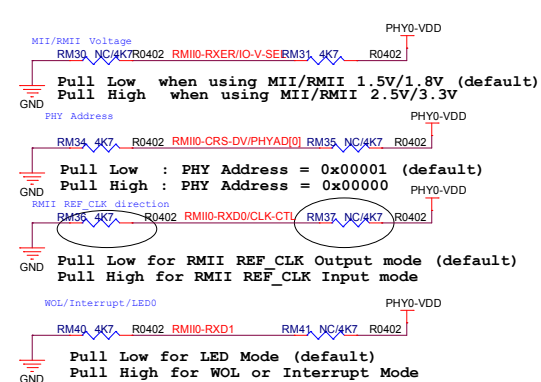
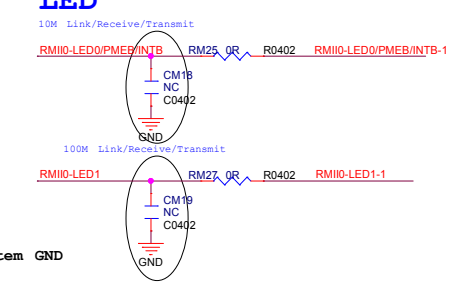


RTL8201FR is E-PAD GND.
E-PAD at leaset 9 via to system GND

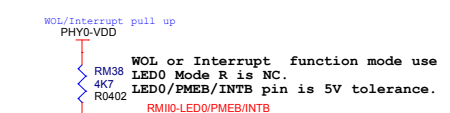


Note1 : LED need to drive by VCC-EPHY with 510 ohm current limit resistor.
Note2 : LED only support low active.
Note3 : LED0/PMEB/INTB and LED1 pins are 5V tolerance.

LED

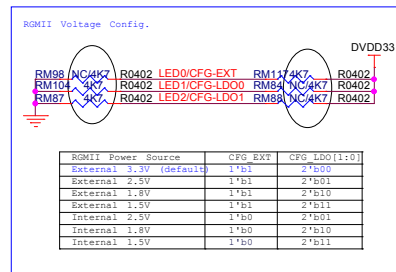
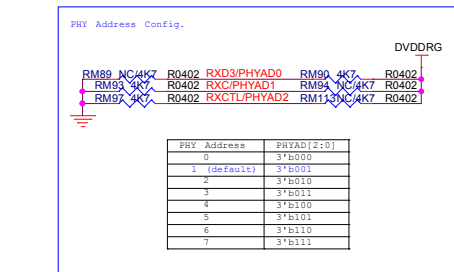
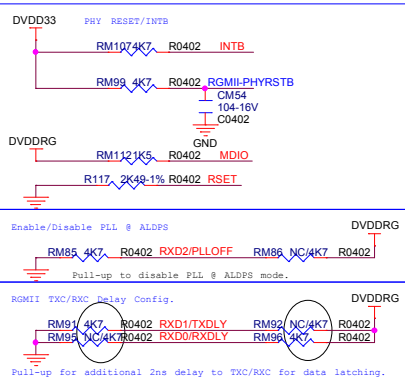
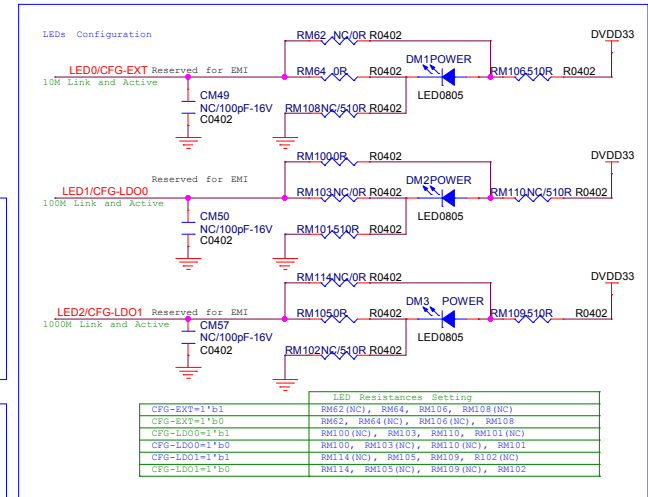
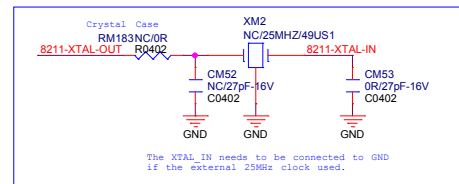
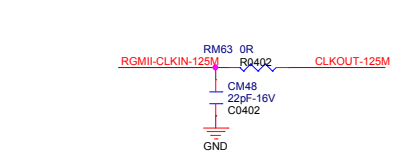
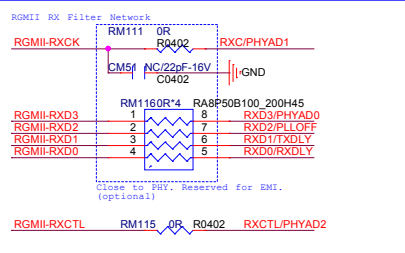
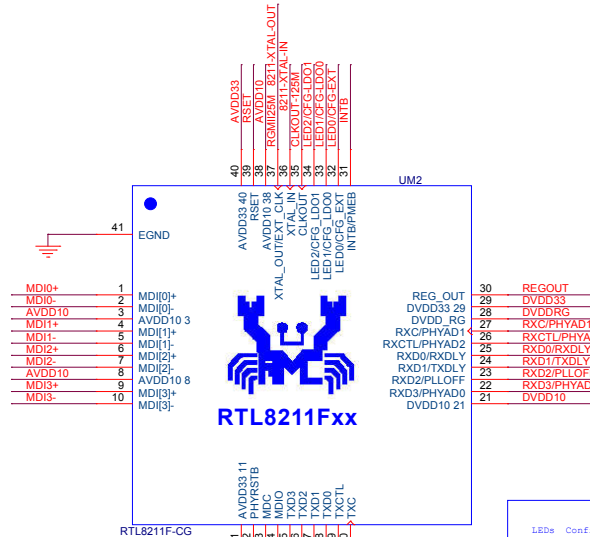
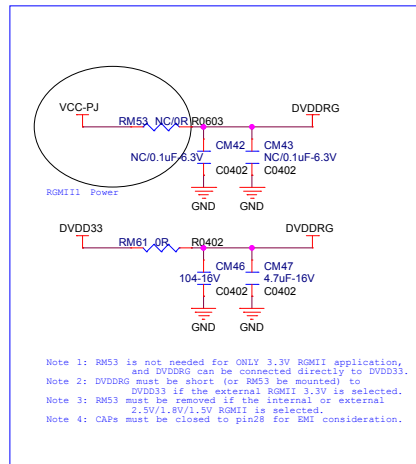
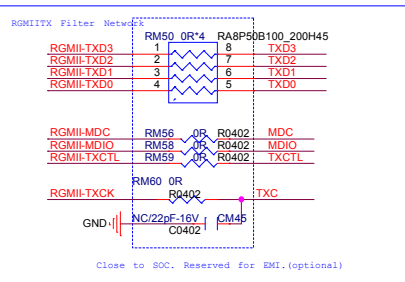
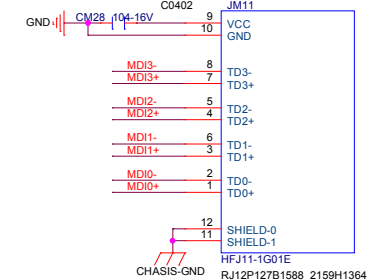
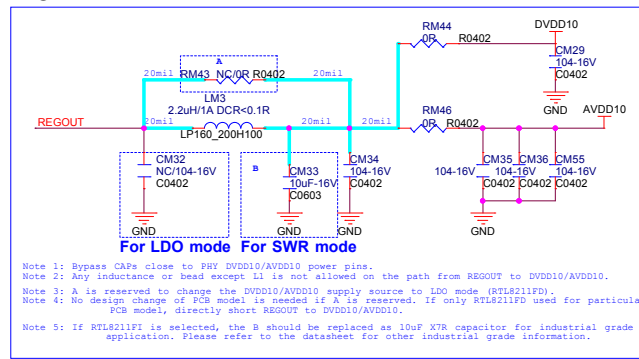
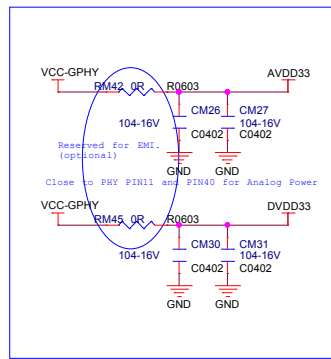
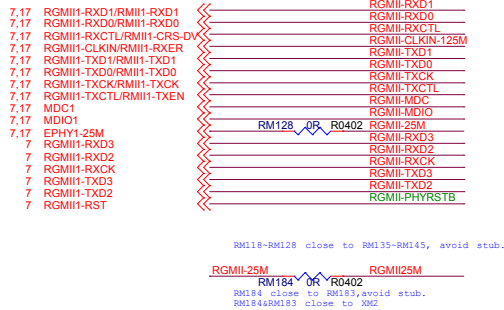


MII/RMII Voltage
Pull Low when using MII/RMII 1.5V/1.8V (default)
Pull High when using MII/RMII 2.5V/3.3V
PHY Address
Pull Low : PHY Address = 0x00001 (default)
Pull High : PHY Address = 0x00000
RMII REF CLK direction
Pull Low for RMII REF_CLK Output mode (default)
Pull High for RMII REF_CLK Input mode
WOL/Interrupt/LED0
Pull Low for LED Mode (default)
Pull High for WOL or Interrupt Mode



WOL or Interrupt function mode use
LED0 Mode R is NC.
LED0/PMEB/INTB pin is 5V tolerance.

RGMII1

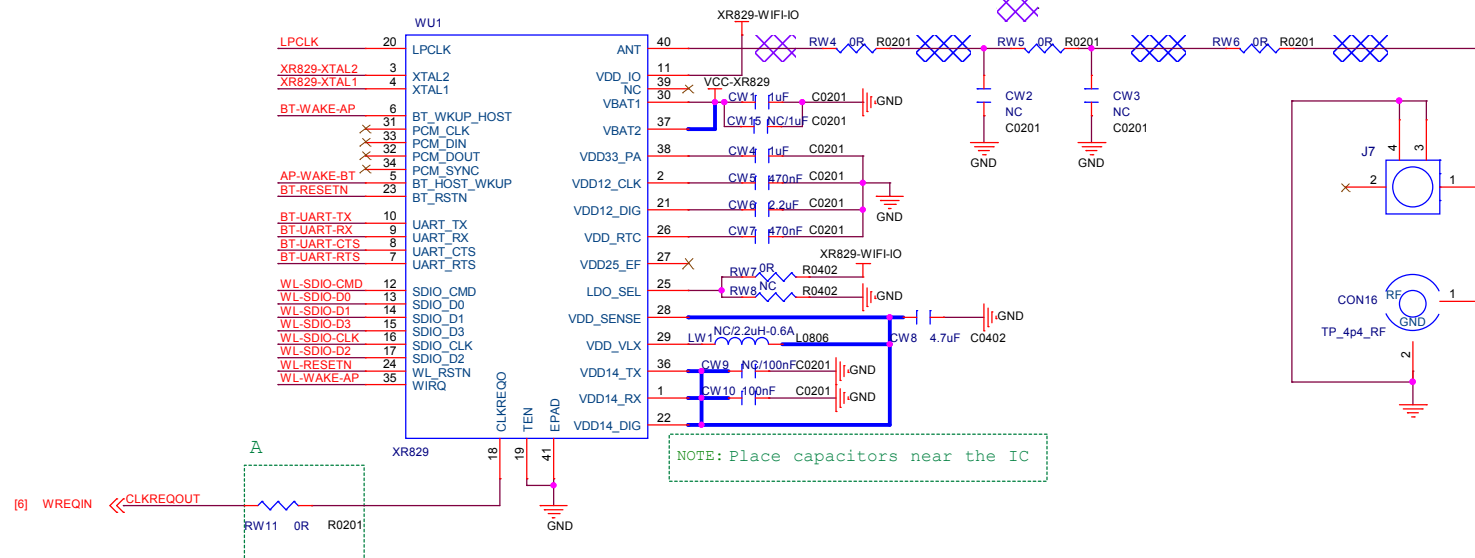
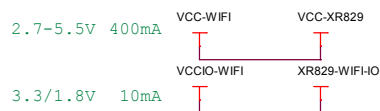


XR829

[7] WL-SDIO-CMD << WL-SDIO-CMD
[7] WL-SDIO-D0 << WL-SDIO-D0
[7] WL-SDIO-D1 << WL-SDIO-D1
[7] WL-SDIO-D2 << WL-SDIO-D2
[7] WL-SDIO-D3 << WL-SDIO-D3
[7] WL-SDIO-CLK << WL-SDIO-CLK
[7] BT-UART-TX << BT-UART-TX
[7] BT-UART-RX << BT-UART-RX
[7] BT-UART-RTS << BT-UART-RTS
[7] BT-UART-CTS << BT-UART-CTS

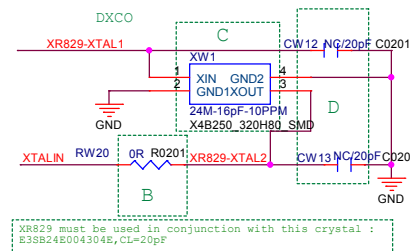
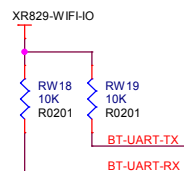
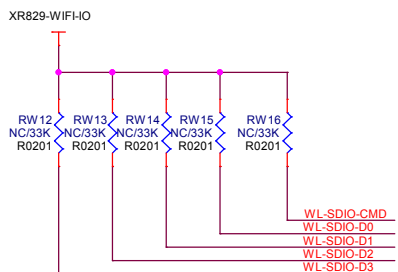
7 WL-PMU-EN << WL-RESETN
7 WL-WAKE-AP << WL-WAKE-AP
7 BT-WAKE-AP << BT-WAKE-AP
7 AP-WAKE-BT << AP-WAKE-BT
7 BT-RST-N << BT-RESETN

[6] AP-CK32K-OUT << AP-CK32KO
[6] AP-CK24M-OUT << XTALIN



NOTE:

XR829 24M Crystal source	A	B	C	D
Crystal	NC	NC	24M-16pF-10PPM	CW12=20pF, CW13=20pF
DCX0-RFCLK	0R	0R	NC	CW12=0R, CW13=NC



XR829 must be used in conjunction with this crystal :
E33824B004304B, CL=20pF



ArtInChip Technology Co., Ltd

Design Name AIC800_REF_SIP_LP4_32X1_V1_0

Size A3 Page Name WIFI+BT

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