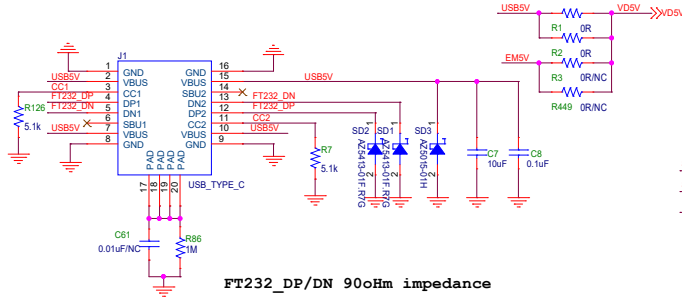
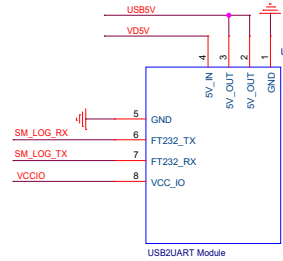


USB TypeC IF (Power and FT232)

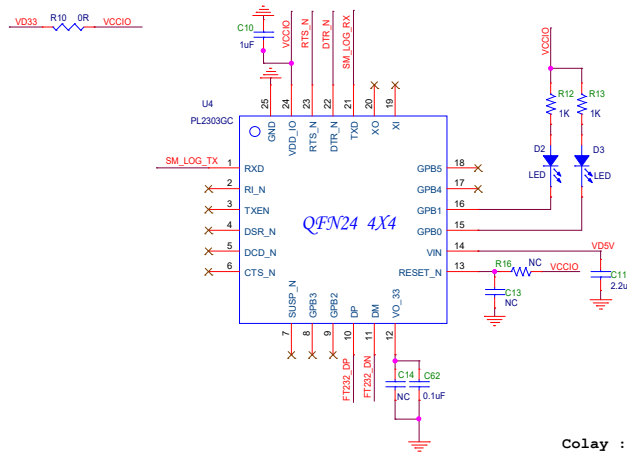


FT232_DP/DN 90ohm impedance

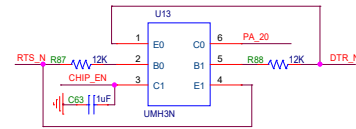
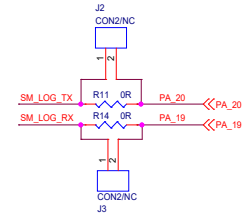


USB2UART M

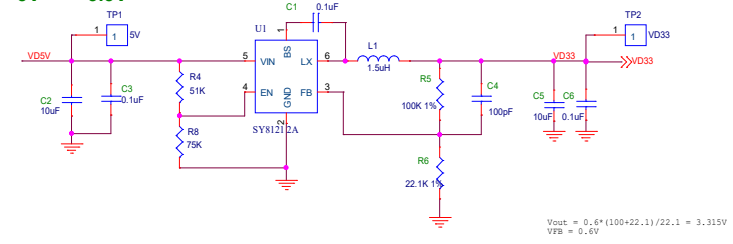
PL2303GC QFN24 4X4 USB TO UART



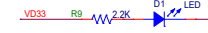
Colay : USB to UART circuit & USB2UART Module



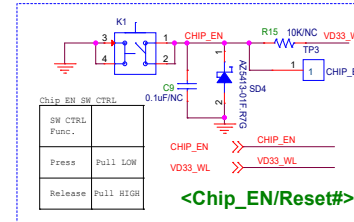
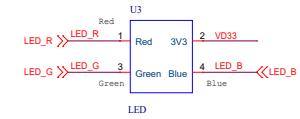
+5V --> +3.3V


$$V_{out} = 0.6 \cdot (100 + 22.1) / 22.1 = 3.315V$$
$$V_{FB} = 0.6V$$

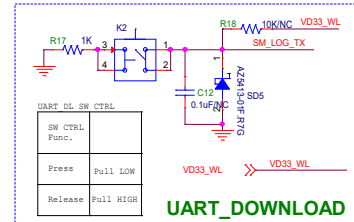
Power indicator



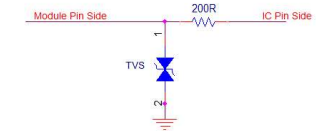
USER LED



<Chip_EN/Reset#>

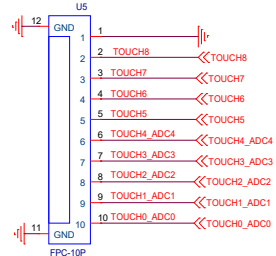


UART_DOWNLOAD

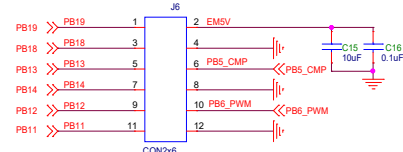


For module pins that require an E-gun test, such as `CHIP_EN` or `UART`, adding a TVS Diode and a serial resistor is recommended

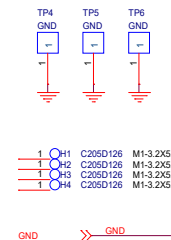
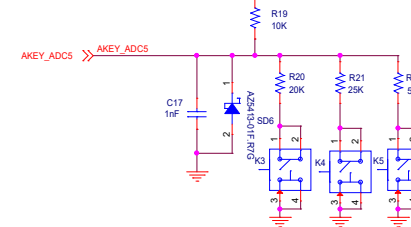
CAP TOUCH IF



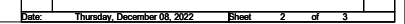
ENERGY METER IF



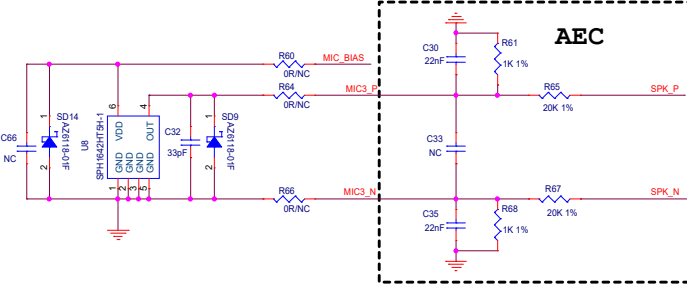
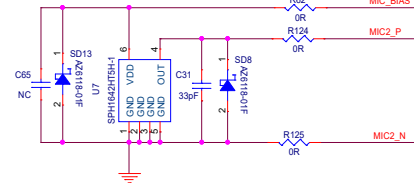
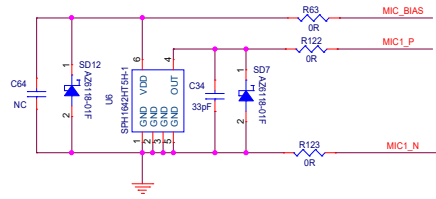
USER KEY



GND \gg GND



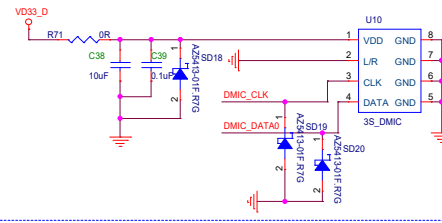
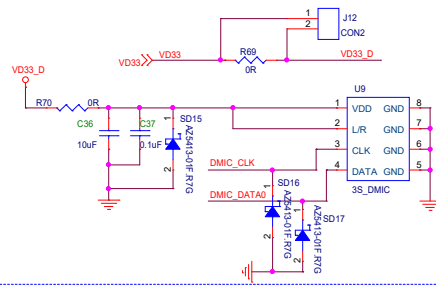
AMIC



DMIC

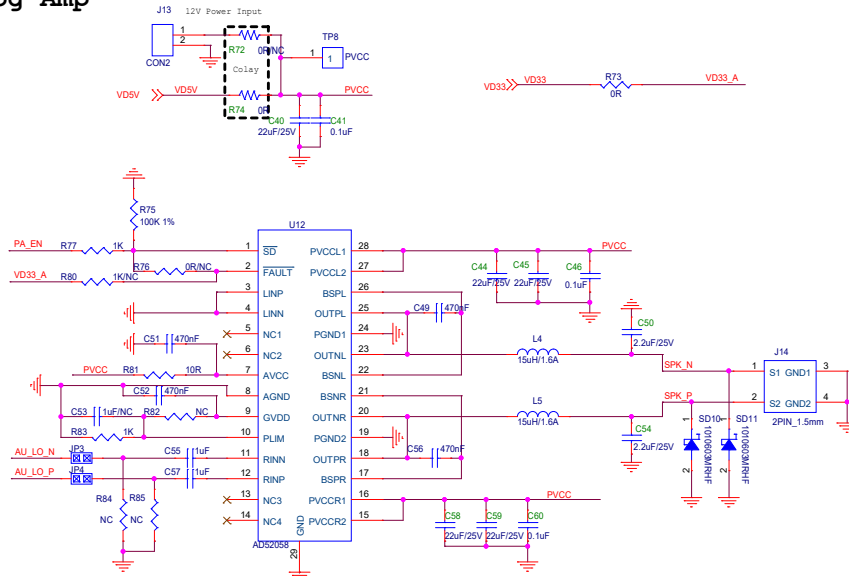
L/R=HIGH, CLK=HIGH, DATA=VALID

L/R=LOW, CLK=LOW, DATA=VALID



MIC1_P << MIC1_P
MIC1_N << MIC1_N
MIC2_P << MIC2_P
MIC2_N << MIC2_N
MIC_BIAS << MIC_BIAS
MIC3_P << MIC3_P
MIC3_N << MIC3_N
AU_LO_P << AU_LO_P
AU_LO_N << AU_LO_N
PA_EN << PA_EN
DMIC_CLK << DMIC_CLK
DMIC_DATA0 << DMIC_DATA0
GND << GND

Analog Amp



Layout Requirements:
Follow SCH requirement to place MIC and its peripheral devices;
Differential routing MICxP/MICxN, wire width 6mil and above, wire distance 4mil, surrounding by the GND and via, keep the integrity of GND;
Place and route of MIC far away form (>=200mil) RF, PA, SWR;
Route MBIAS parallelly to MICxP/MICxN, wire width 10mil;
Place ESD device to MIC device, route to ESD device first;
MIC3 as AEC loopback, place related components following SCH and keep orderly;
LO_P/N surrounding by GND, wire width 7mil, keep the routing and related via far from high-speed signals.

Lineout Jack (CTIA)

