

ETH0 100M

SD3.0-TF

UART0-1V8

AUDIO

SENSOR0-1V8

SENSOR1-1V8

MIPI0-1V8-4Lane

U1A  
gf\_mxm2\_p230h6

U1B  
gf\_mxm2\_p230h6

M1

M2

I2C2-1V8

IO-1V8

UART1-3V3

UART2-3V3

DSI-1V8

USB3.0

BT656

MIPI1-1V8-2Lane

UART3-1V8

HDMI

USB/PCIE

UART1-3V3

SPI-1V8

I2C3-1V8

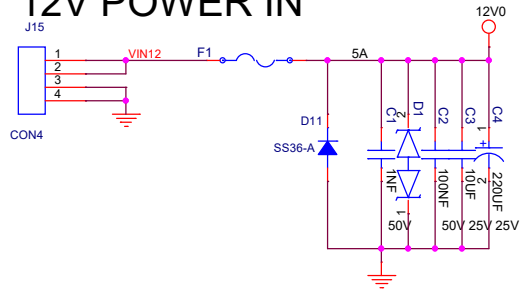
CVBS

SPI-1V8

U1B  
gf\_mxm2\_p230h6

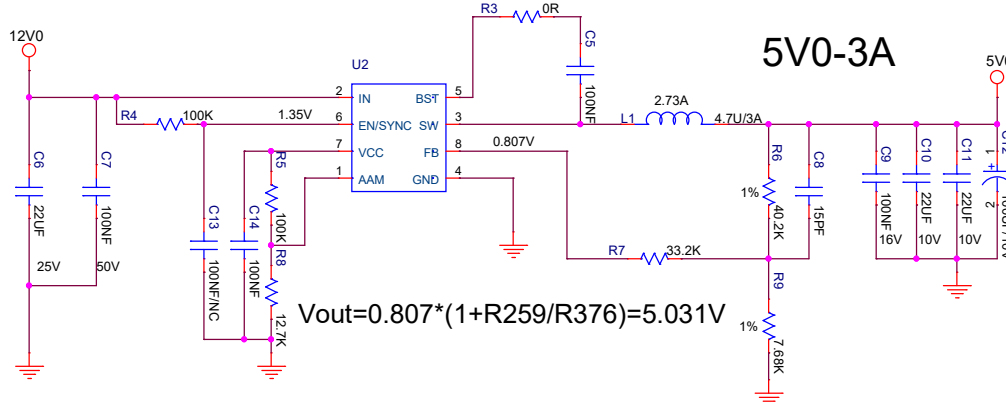
VIN\_5V0

## 12V POWER IN



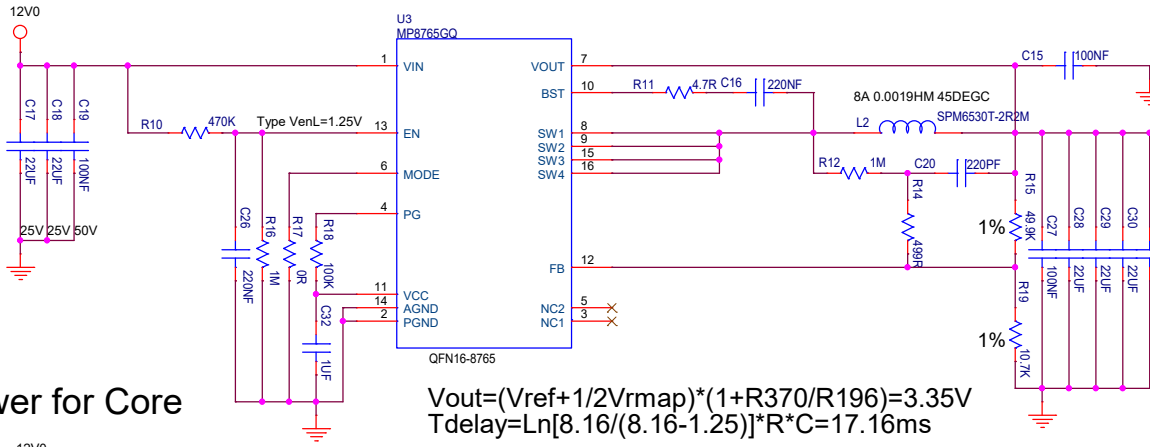
12V --> 5V0

## Power Supply



$$V_{out} = 0.807 \times (1 + R_{259}/R_{376}) = 5.031V$$

## Power for Board

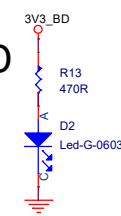


$$V_{out} = (V_{ref} + 1/2 V_{rmap}) \times (1 + R_{370}/R_{196}) = 3.35V$$

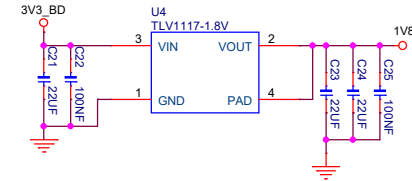
$$T_{delay} = \ln[8.16/(8.16 - 1.25)] \times R \times C = 17.16ms$$

3.3V-4.5A

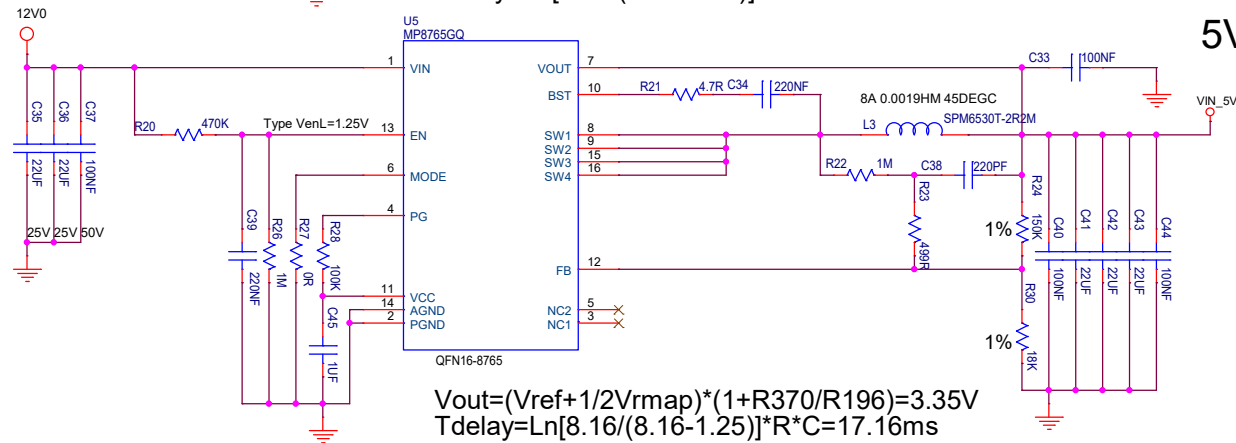
LED



1.8V



## Power for Core

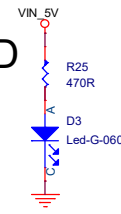


$$V_{out} = (V_{ref} + 1/2 V_{rmap}) \times (1 + R_{370}/R_{196}) = 3.35V$$

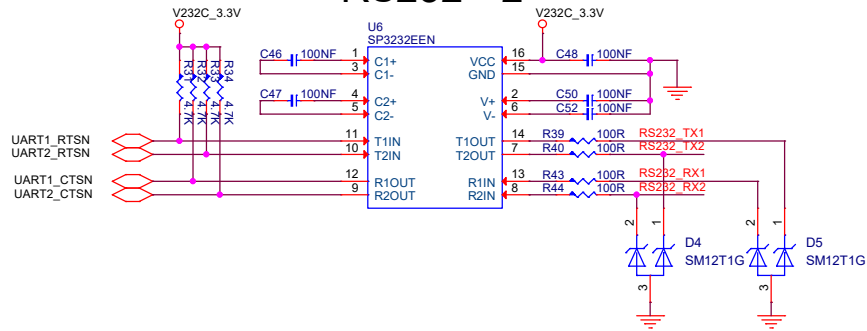
$$T_{delay} = \ln[8.16/(8.16 - 1.25)] \times R \times C = 17.16ms$$

5V-4.5A

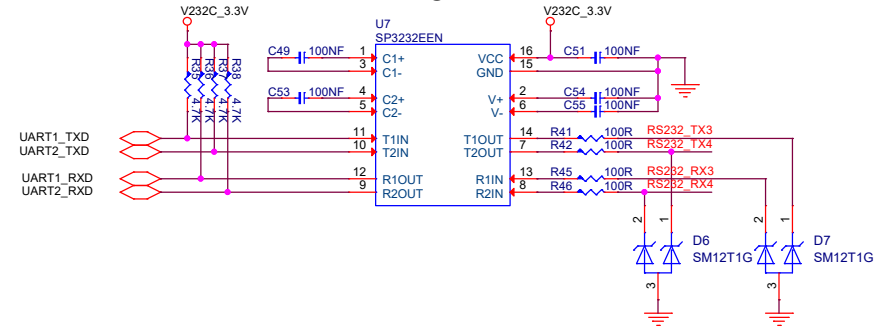
LED



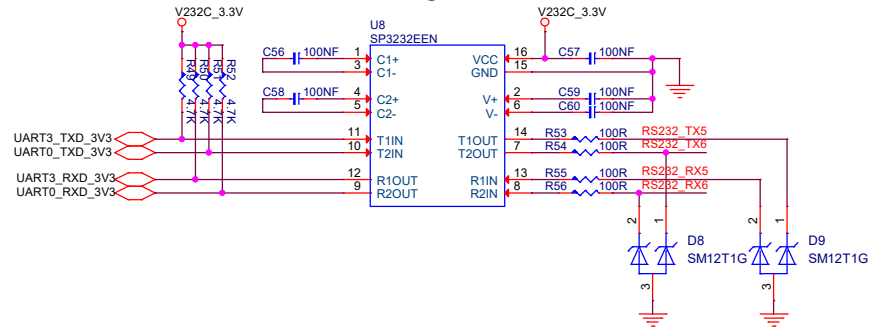
## RS232 \* 2



## RS232 \* 2

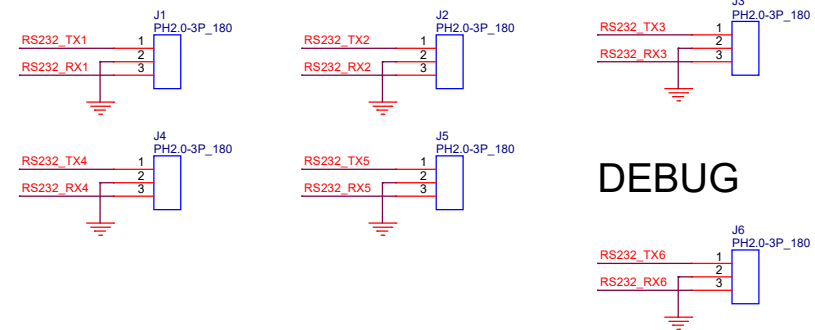


## RS232 \* 2



3V3\_BD R47 0R V232C\_3.3V

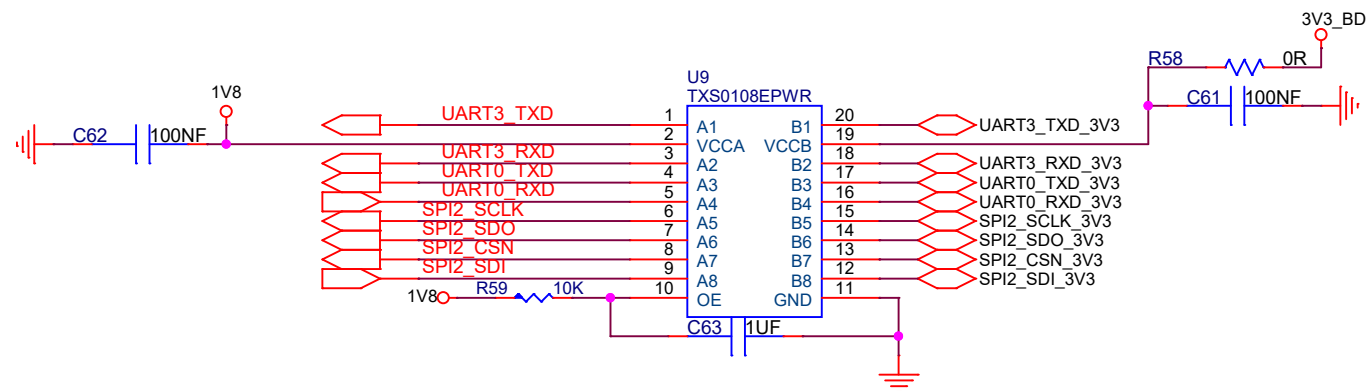
## RS232 \* 6



## DEBUG

<b>HaiTu</b>		Title	C00PD035-SD3403-CUSTOM-A01
Page Function		MCU POWER CTL & WDG	Designed By Xu
Size	A3	Document Number	Rev A01
Date:	Friday, September 09, 2022	Sheet	4 of 9

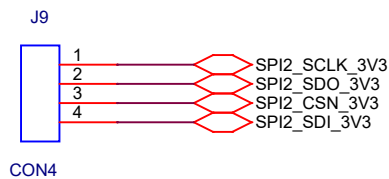
# Level Shift



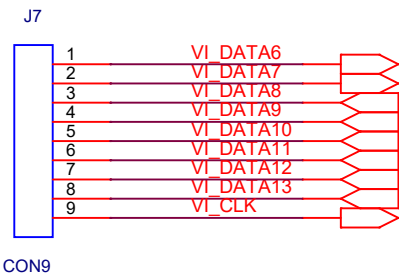
## I2C



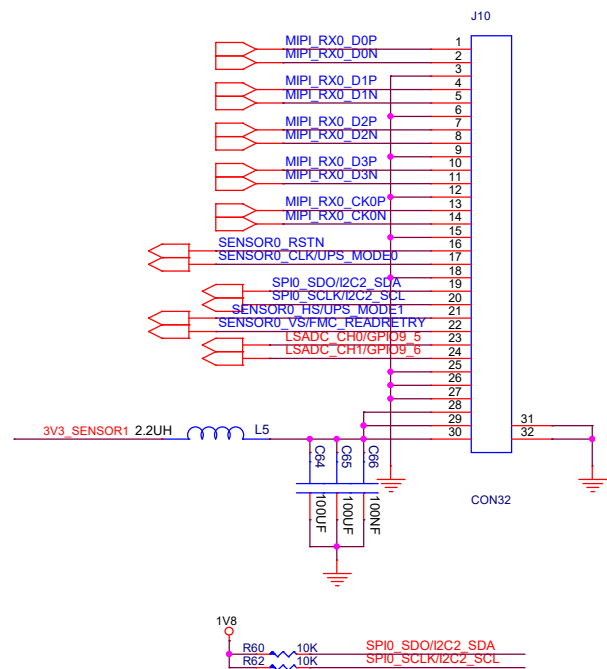
## SPI



## BT656

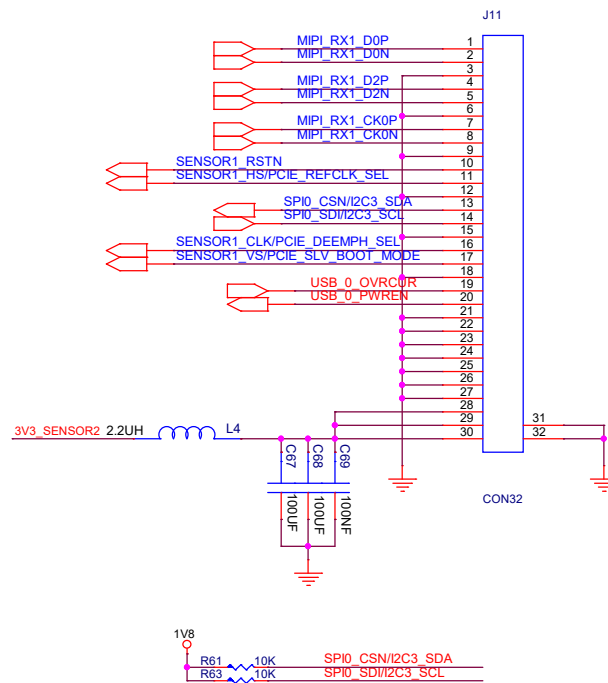


# Sensor1-4Lane



Power\_EN = 0: Active

# Sensor2-2Lane



Power\_EN = 0: Active

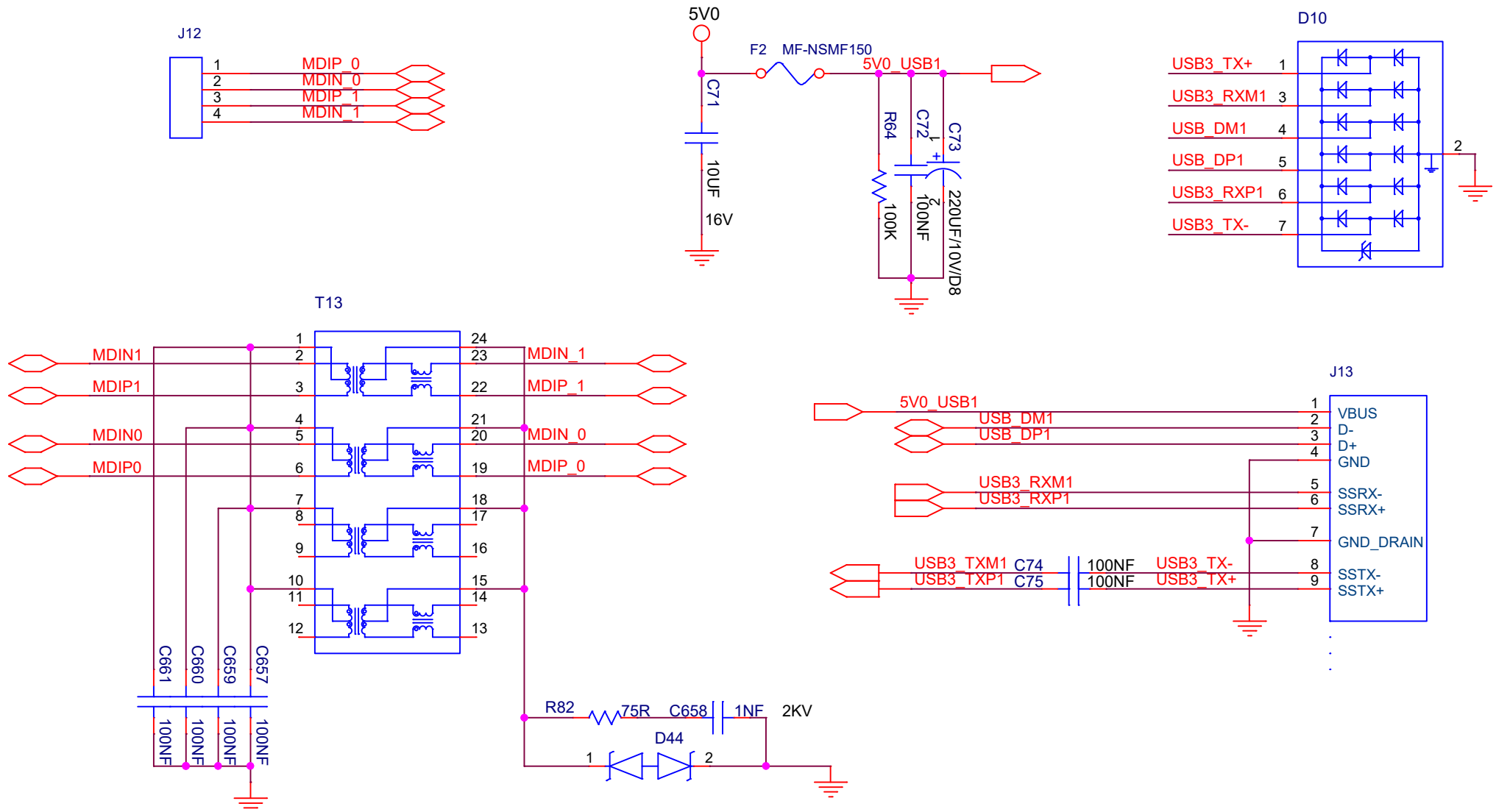
# USB3.0

## NOTES:

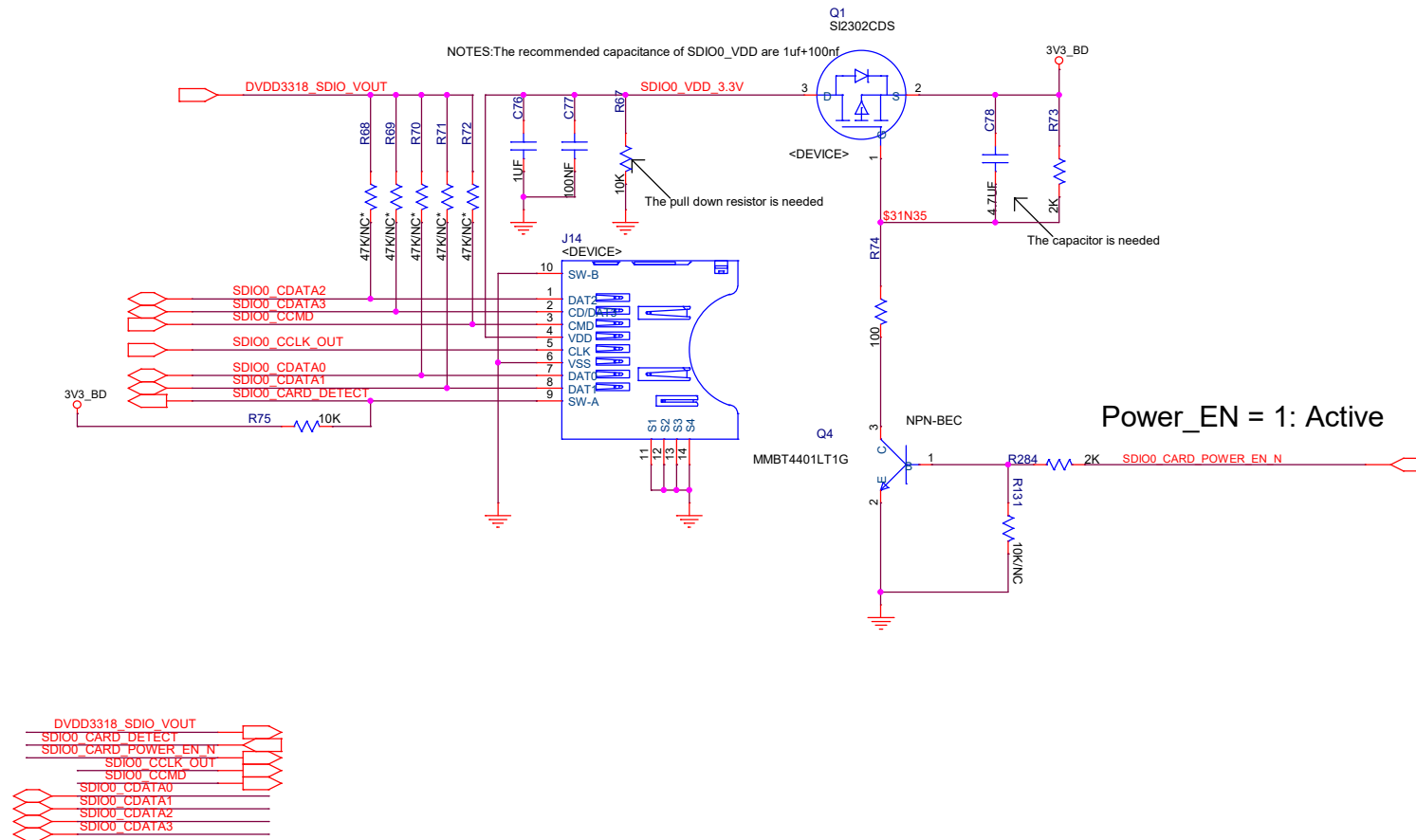
The USB differential trace impedance is 90 OHM.

The USB3.0 trace length is less than 10 inch when chip to chip.

### ETH0 100M



# Micro-SD Card



## NOTE:

If you use the function of SD card, strongly recommended to use the power switch circuit.

If DVDD3318\_UART1\_2=1.8V,SDIO0\_CARD\_POWER\_EN\_N

high level is 1.8V,it is recommended to be connected a level shift that can convert 1.8 V to 3.3 V.



