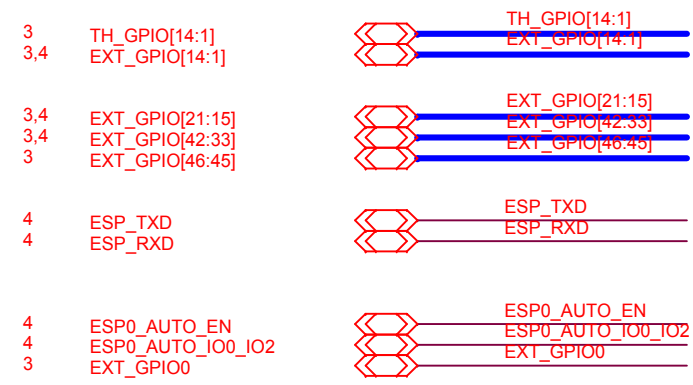


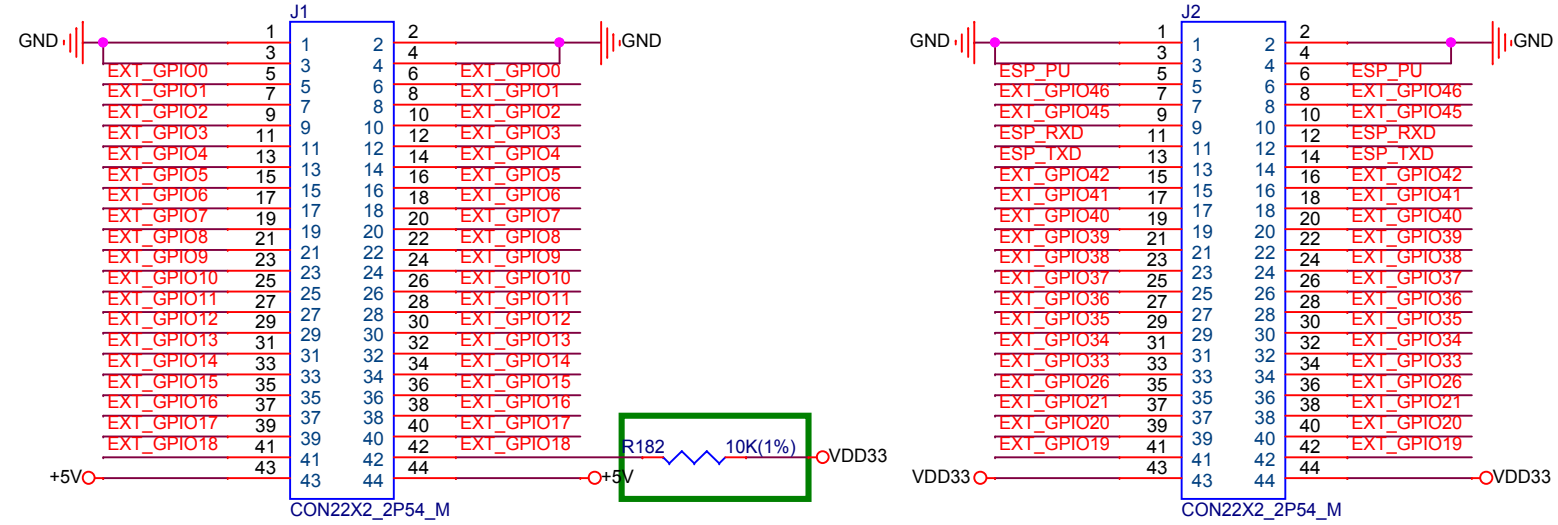
*System Block:*

*Leaving Blank . . . . .*

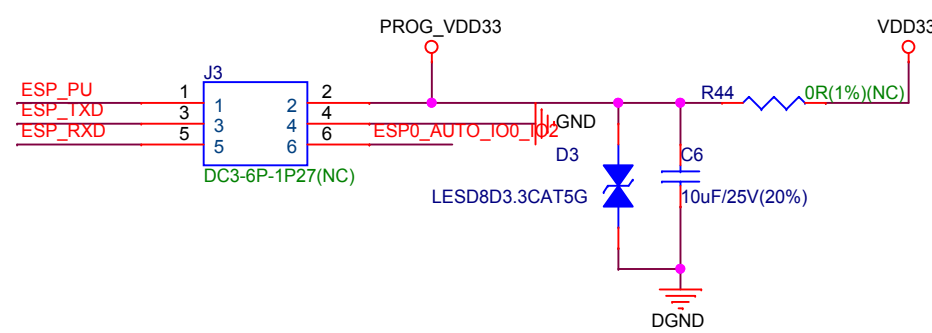
<b>ESPRESSIF</b>		
乐鑫信息科技(上海)股份有限公司		
Title ESP32-S2-Kaluga-1		
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**External Pin Header:** 1. Default 2.54mm Pin Header;

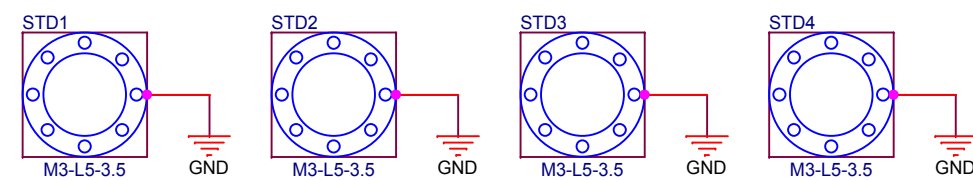


**Programming CNN Reserved:**

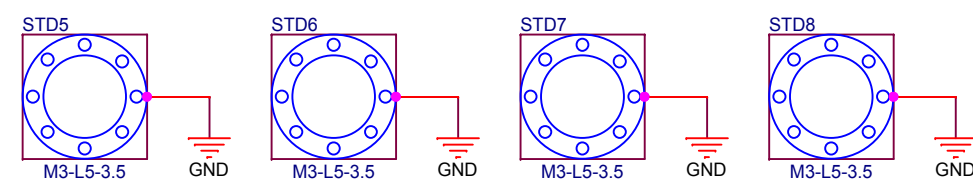


**Locating Holes:**

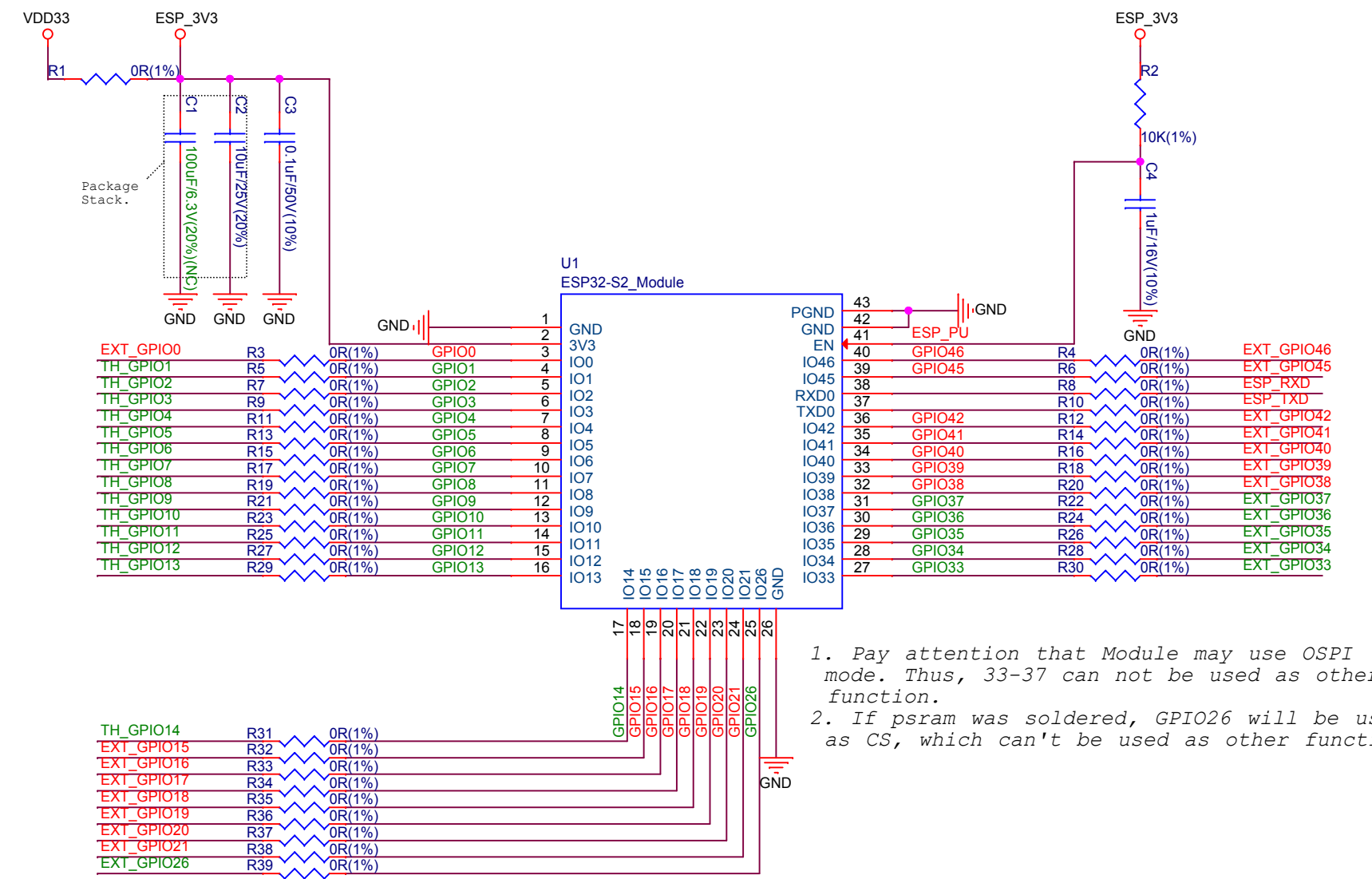
1. Supporting Motherboard;
2. Drilling vias around holes;
3. D = 3MM;



1. Supporting Daughterboards;
2. Drilling vias around holes;
3. D = 3MM;

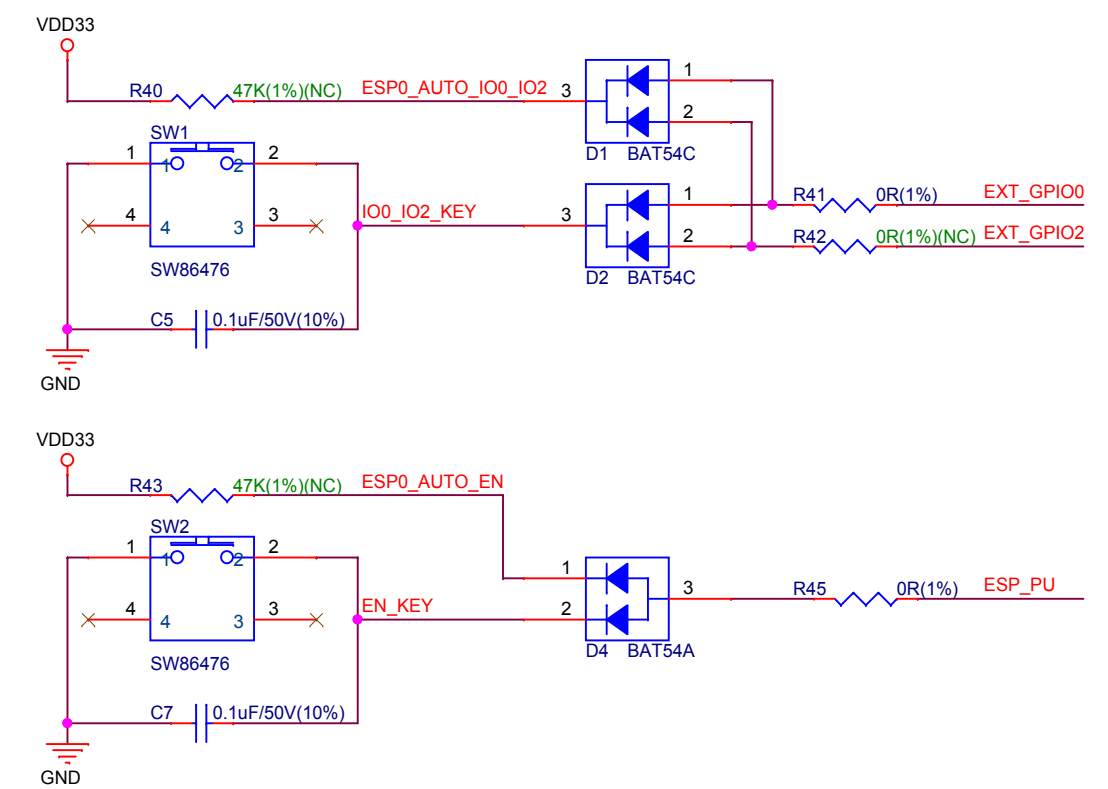


**ESP32-S2 Module:**



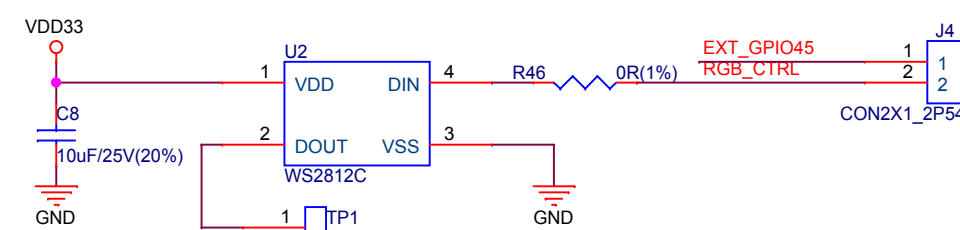
1. Pay attention that Module may use OSPI mode. Thus, 33-37 can not be used as other function.
2. If psram was soldered, GPIO26 will be used as CS, which can't be used as other functions.

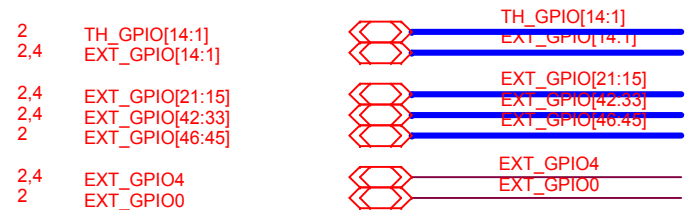
**Reset Download & Button:**



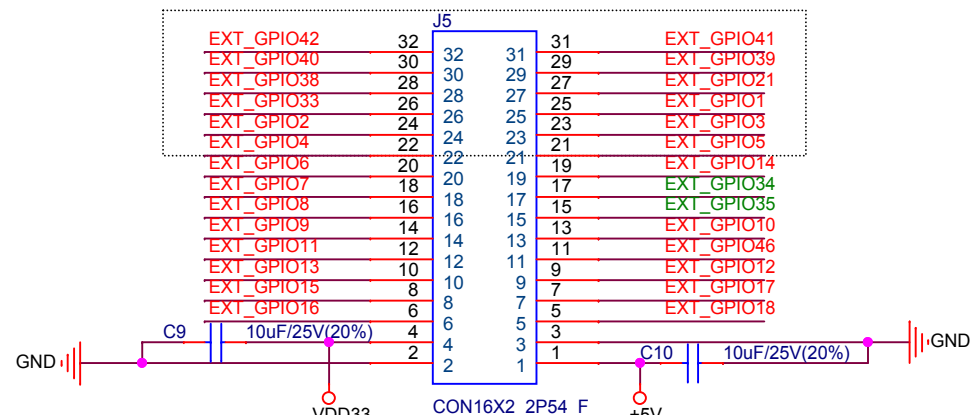
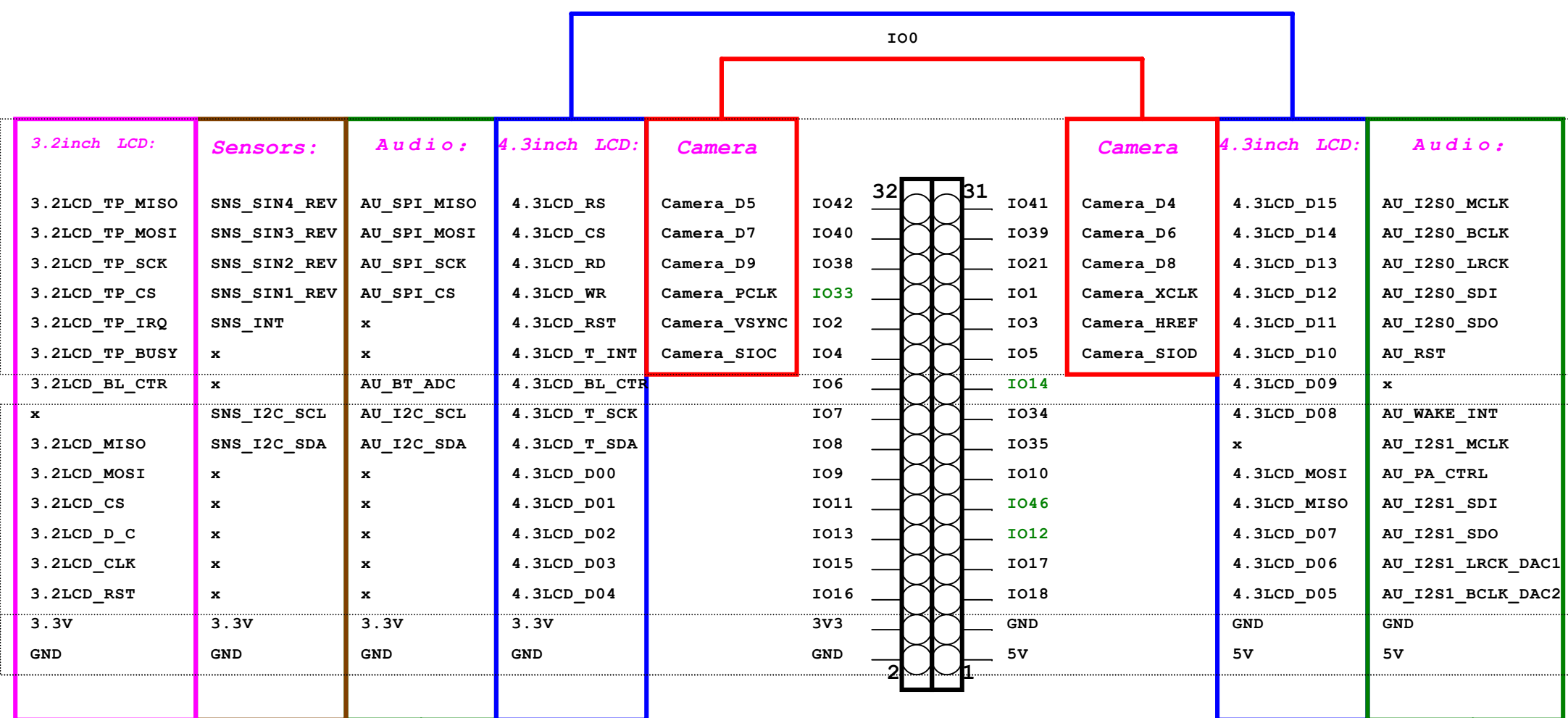
**RGB LED:**

1. Put J4 jumper on if wanna control RGB.



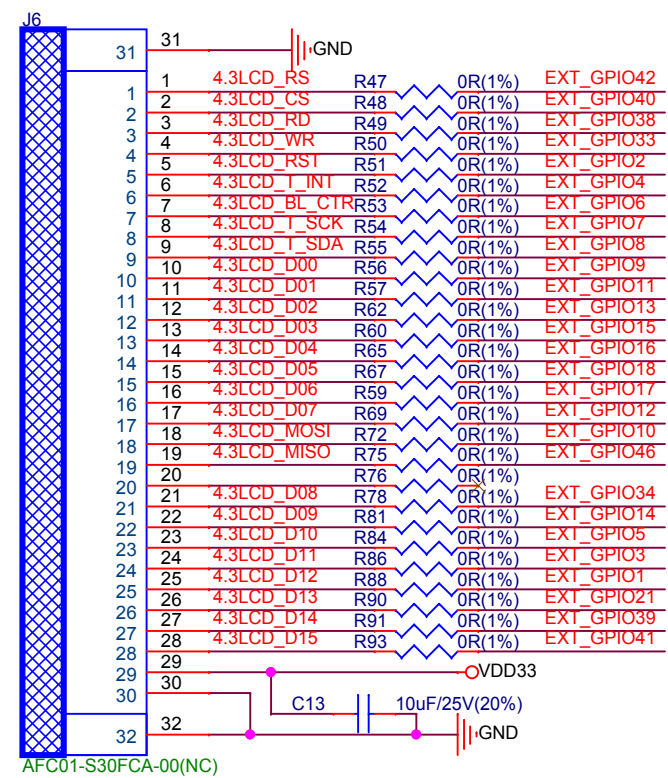


### Pin Configuration for Subboard:

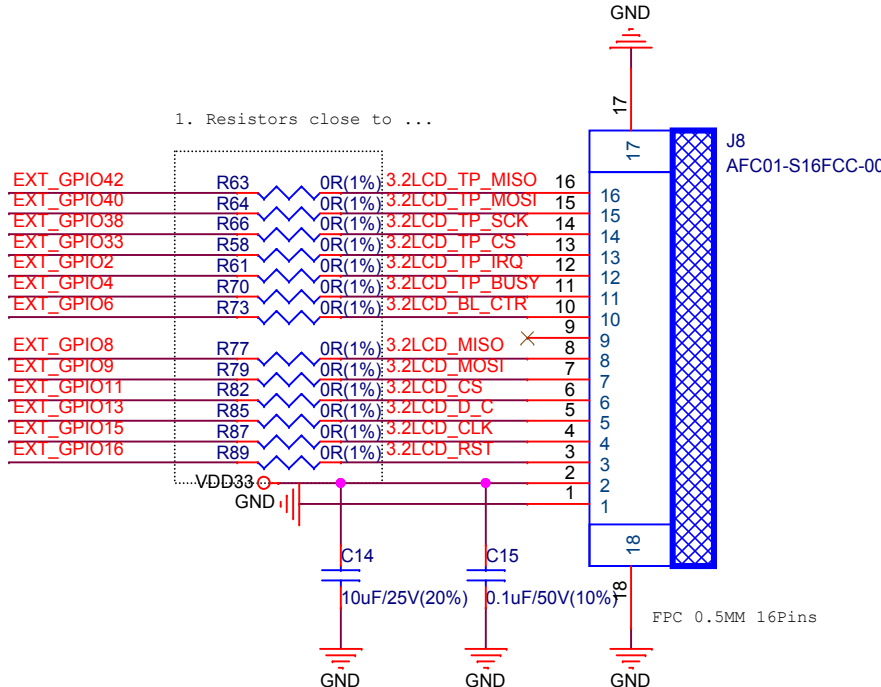


1. Block on right shows Pin configuration for different Subboard;

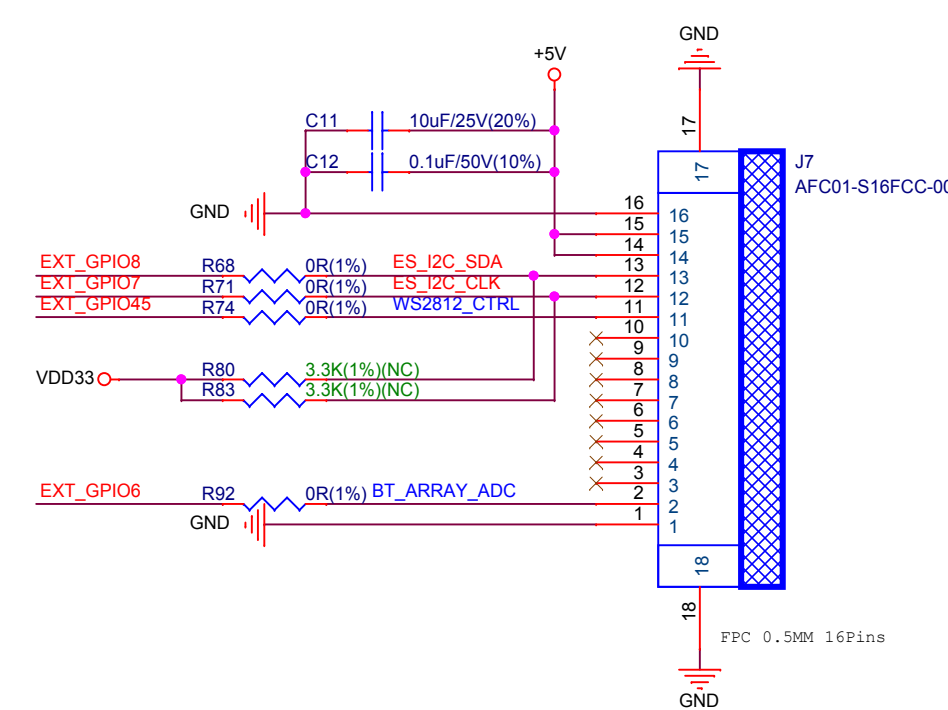
### FPC for 4.3inch LCD:



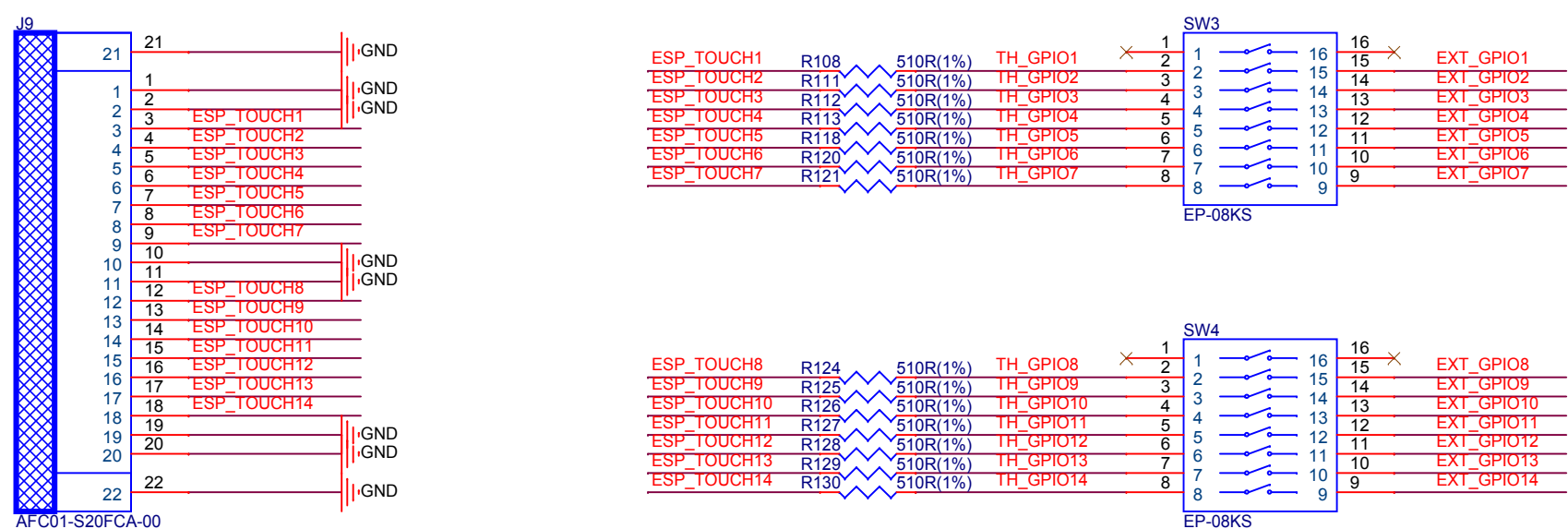
### FPC for 3.2inch LCD:



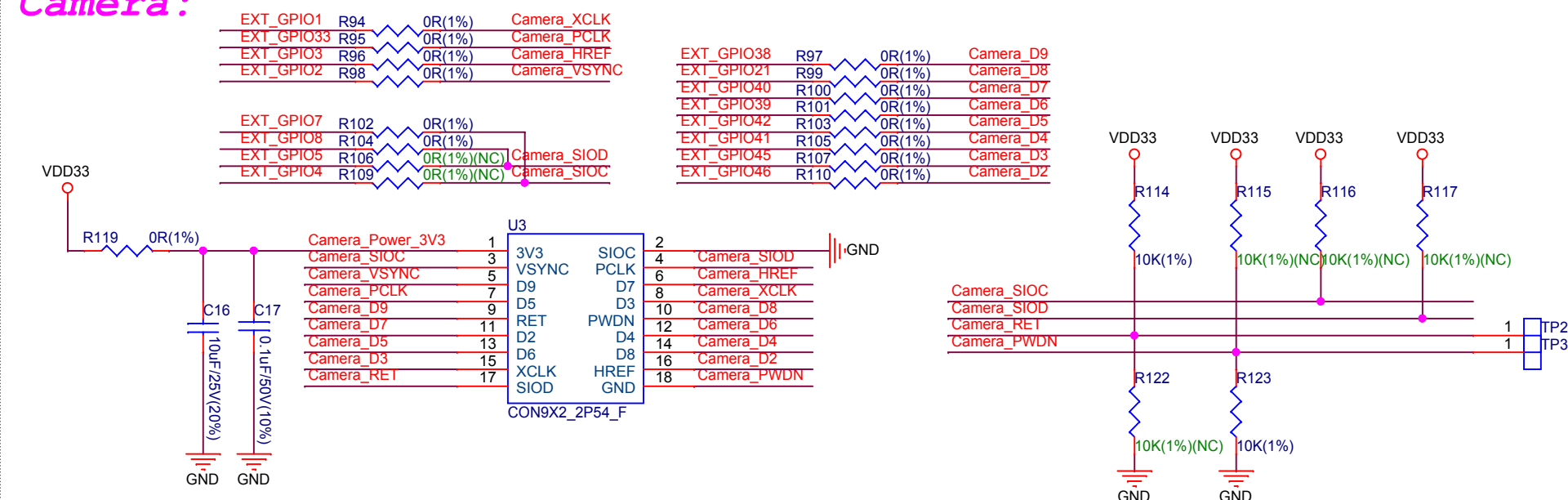
### FPC for LED Subboard:



### FPC Connector For Touch:



### Camera:



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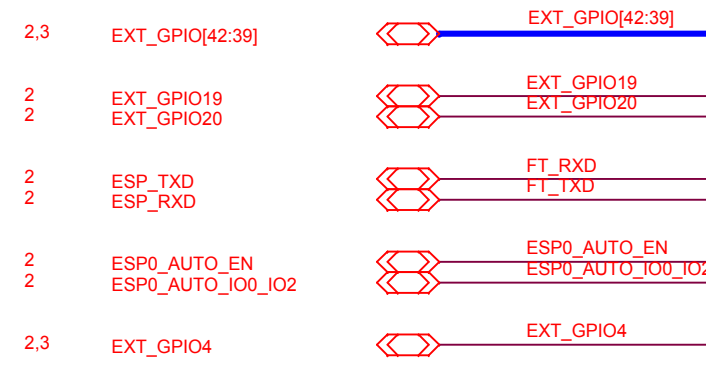
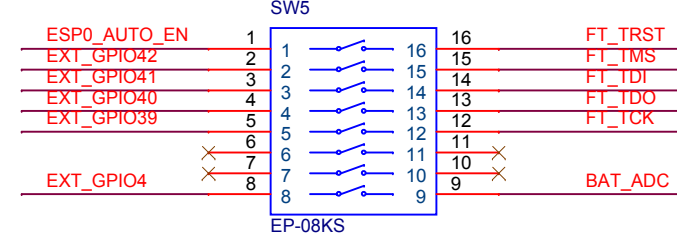
Title: ESP32-S2-Kaluga-1

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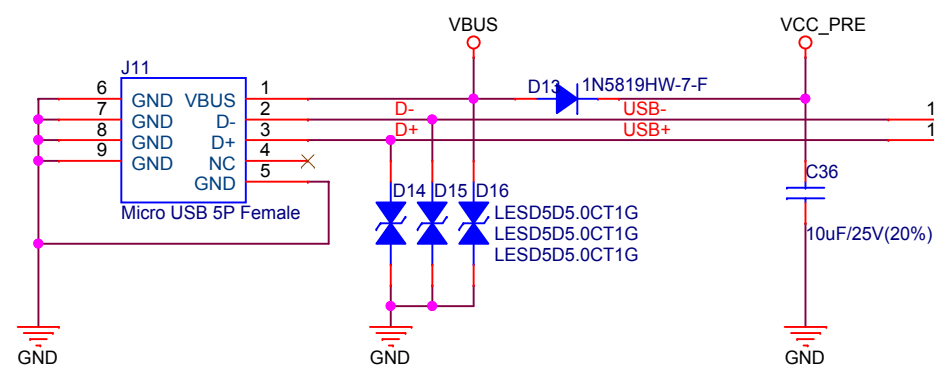
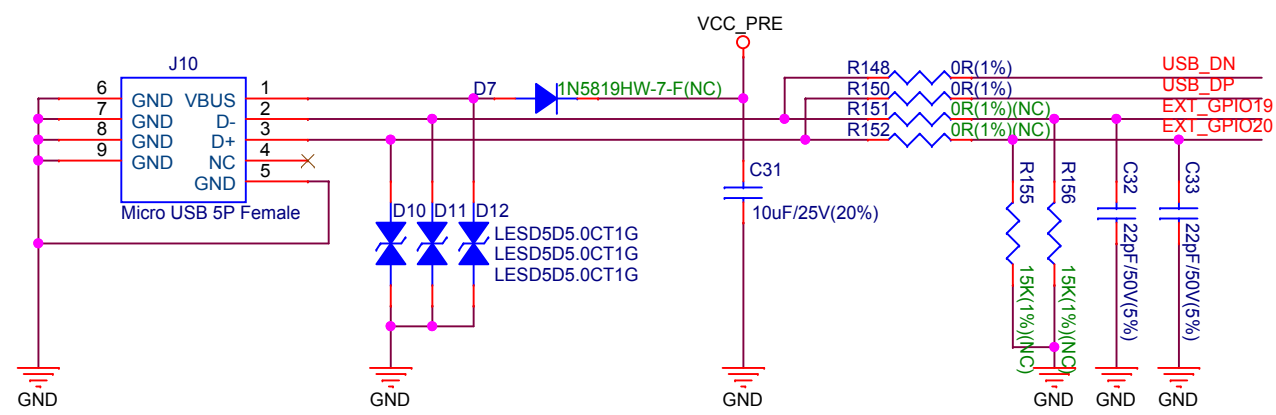
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### JTAG Switch:

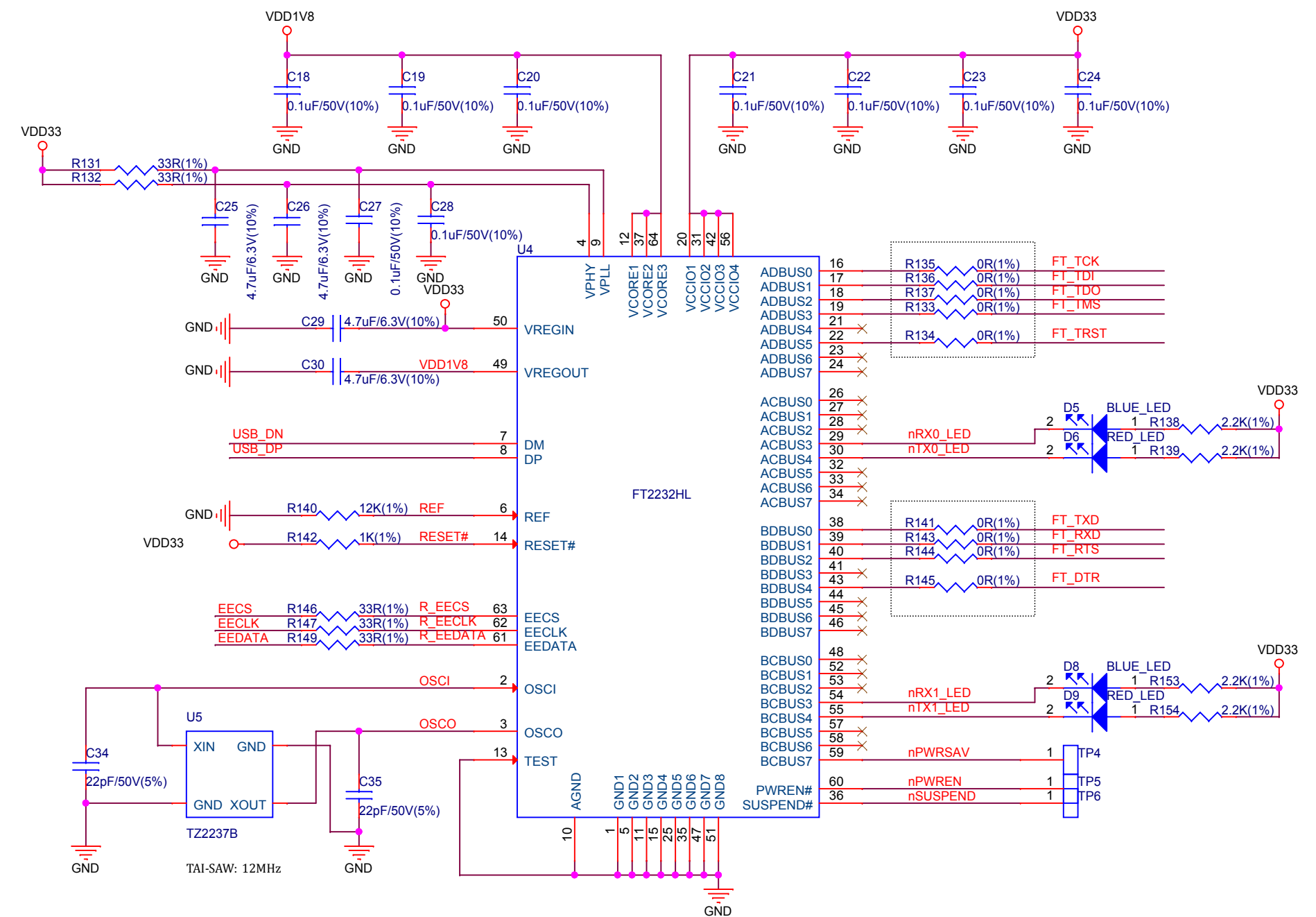
1. Switch for JTAG: default, JTAG off/NC.
2. Switch ON for JTAG debug;



### USB Power&Communication:

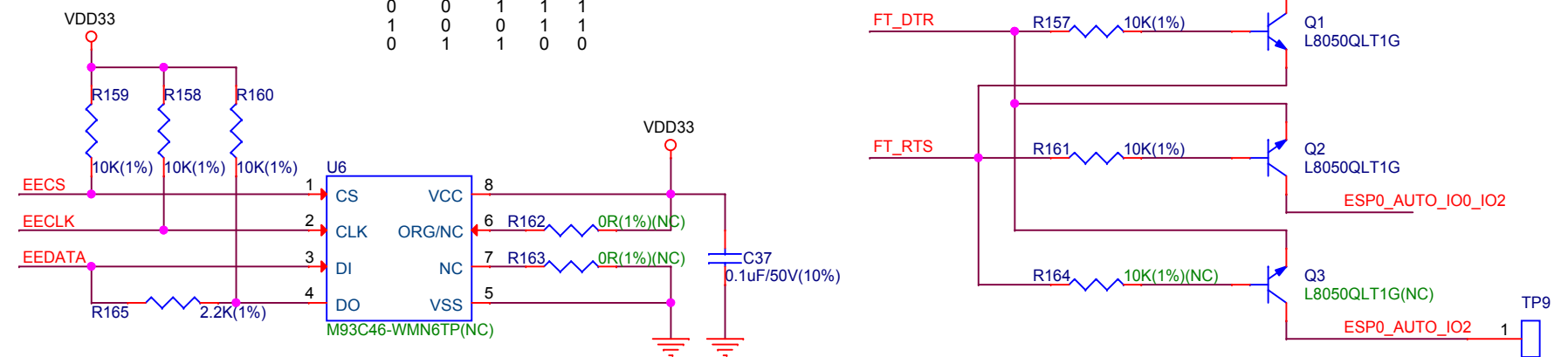


### FT2232HL:



Auto program

DTR	RTS	EN	IO0	IO2
1	1	1	1	1
0	0	1	1	1
1	0	0	1	1
0	1	1	0	0



### Power Charge:

