



中国科学院高能物理研究所
Institute of High Energy Physics
Chinese Academy of Sciences

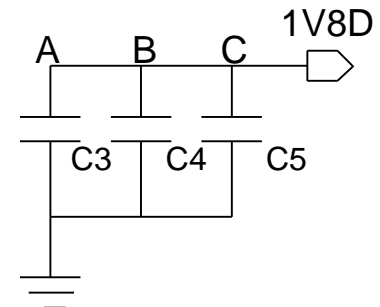
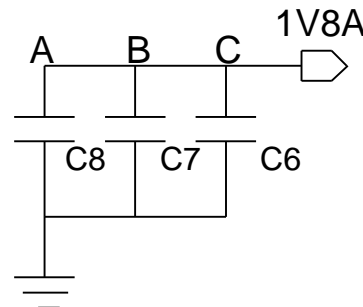
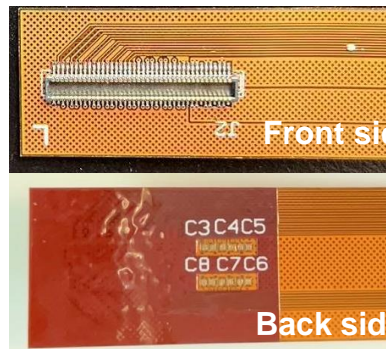
TaichuPix-3 test

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Investigation on issue of flex damage

- 5 flex boards work normally at the beginning, while show no output during the test, three possibilities under suspicion
 - Damage of socket
 - Tried to replace the socket on two flex boards, no output after replacement → hard to be replaced
 - Further investigation indicates incomplete solder and damage to the flex under the socket
 - Different resistances of power 1V8A/D to GND observed at different capacitance terminals (A/B/C)



- Damage of flex
 - Probably occurs on the flex under/close to the socket → need to be proved
- Effect of storage condition → no major effect
 - Performance of 3 chips on the single chip boards were verified to be as same as four months ago

Consideration for the following usage

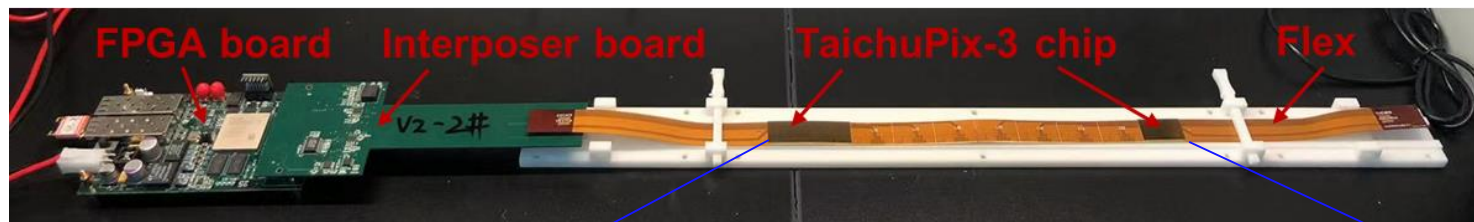
- Using the protection tool to plug in/out the socket



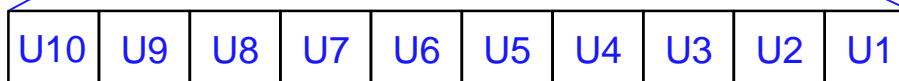
Designed by Jingyu Fu

- Limiting the times of plug-in/out

- Do NOT change interposer board during the test
 - 25 more interposer boards available this week



Ladder readout system



New bunch of flex boards

- **25 2-layer flex from FASTPRINT company received**
 - Sent 5 to solder the socket
- **15 2-layer flex and 15 4-layer flex from SCC company received**
 - Sent 3 to solder the socket
- **Expected to bond chips on Friday**