

Equipment

| Triplet | Chip 1 | Chip 2 | Chip 3 | Example localdb config |
|--------------------------------------|--------|--------|--------|------------------------|
| digital triplet in carrier "Genova" | 426B | 4298 | 4299 | link |
| triplet with 3D sensors "3DB" | 2144 | 2151 | 2142 | link |
| digital triplet on pseudoquad "1105" | 1F93 | 1F68 | 1F43 | link |

- LBL localdb: <https://itk-pixel-modules.lbl.gov/localdb/scan>

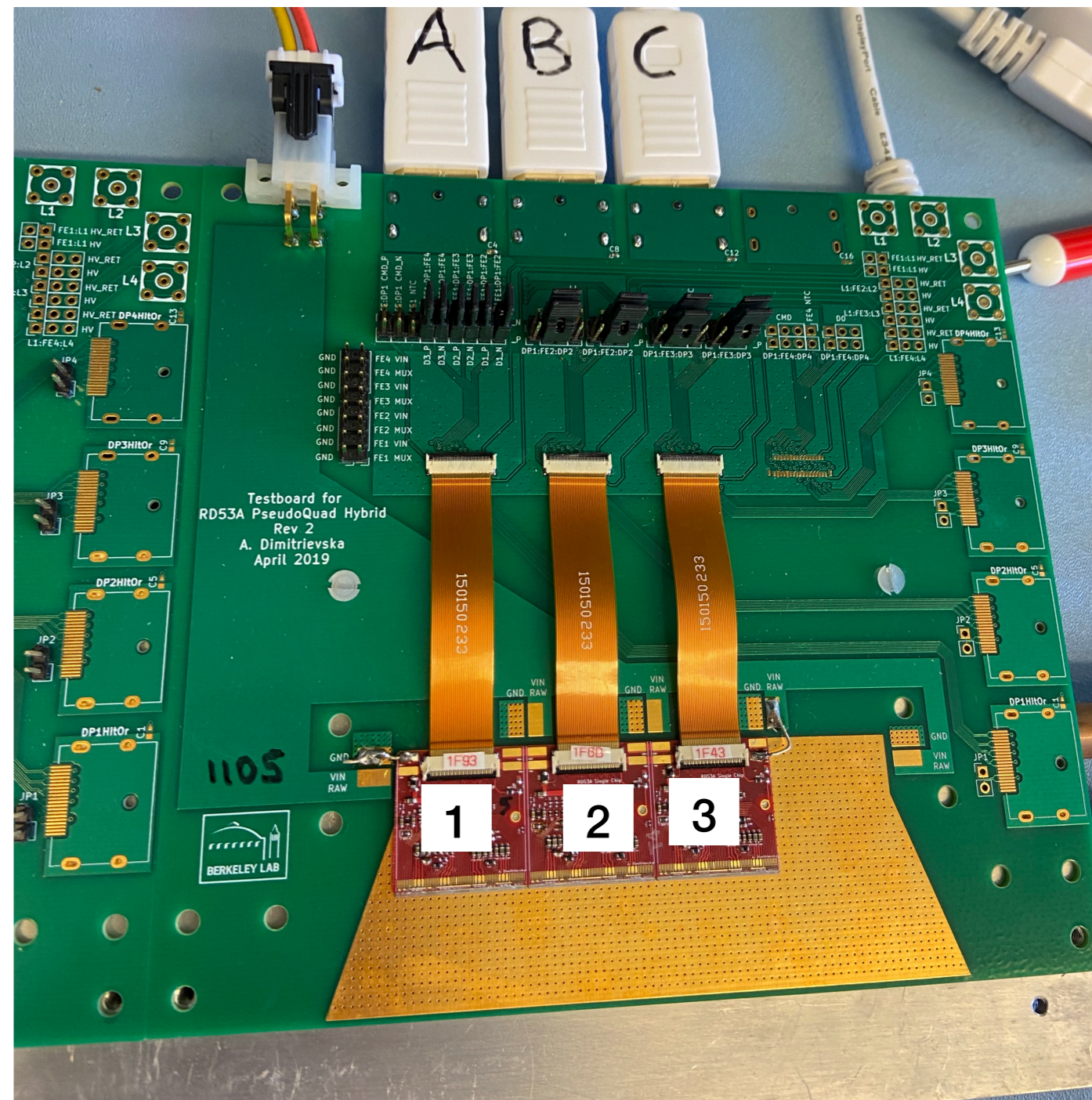
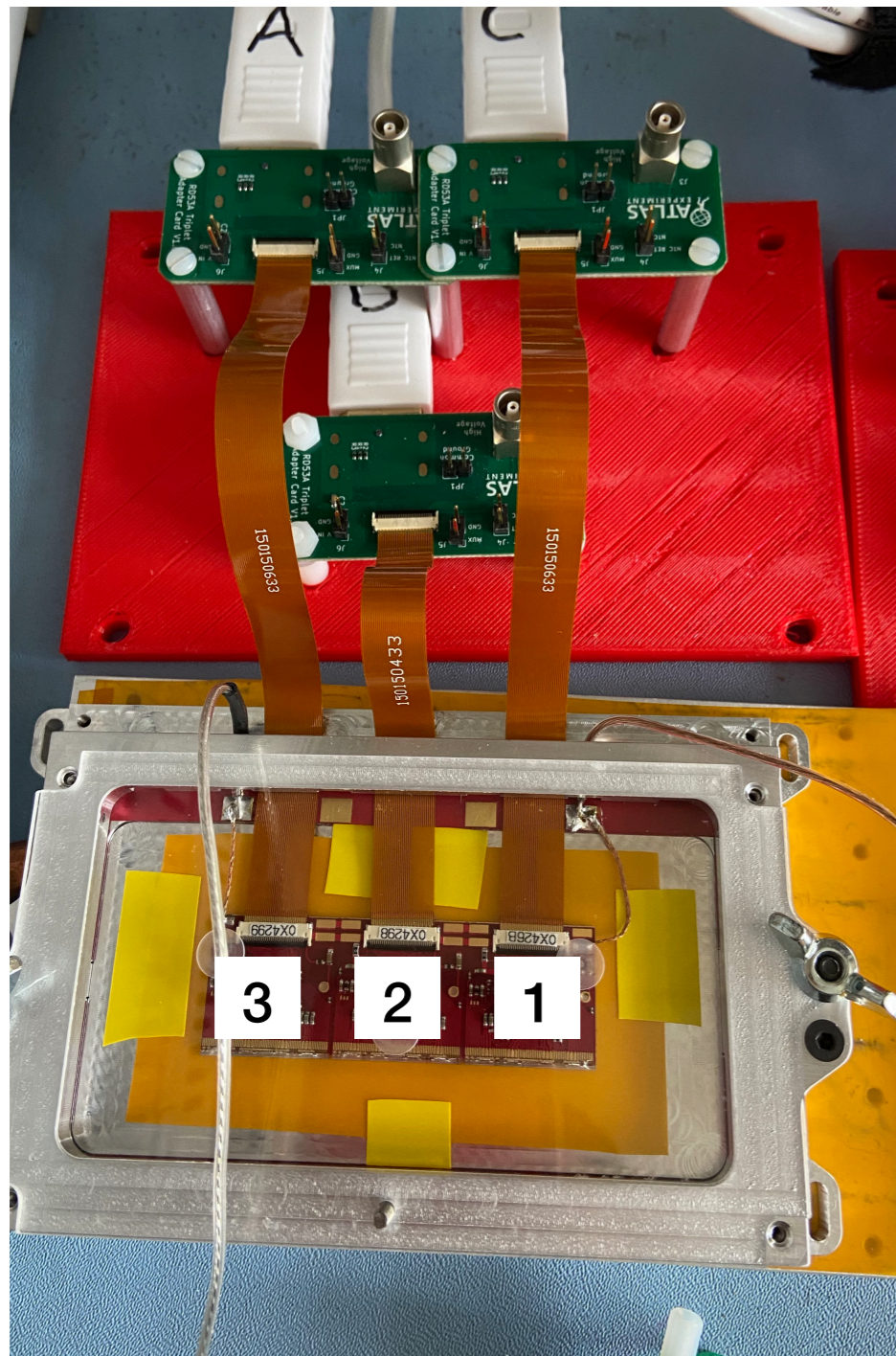
Testing setup: DAQ

- Common to both pseudo quad + carriers
 - Firmware: [YARR-FW](#)
 - RX speed: 640 Mbps
 - Channel configuration: 4 DP adapter card (4x4)
 - Software: [YARR](#) (v1.3 tag)
- Specific to triplets in carriers only (not for pseudo quad!)
 - Readout: [triplet adapter card](#)
 - For easier routing, polarity of lines reversed
 - Need to make change in software
 - Software: [YARR](#) (v1.3 tag)
 - configs/controller/specCfg-rd53a-4x4.json
 - "txPolarity" : 15,
 - "rxPolarity" : 65535

Run conditions

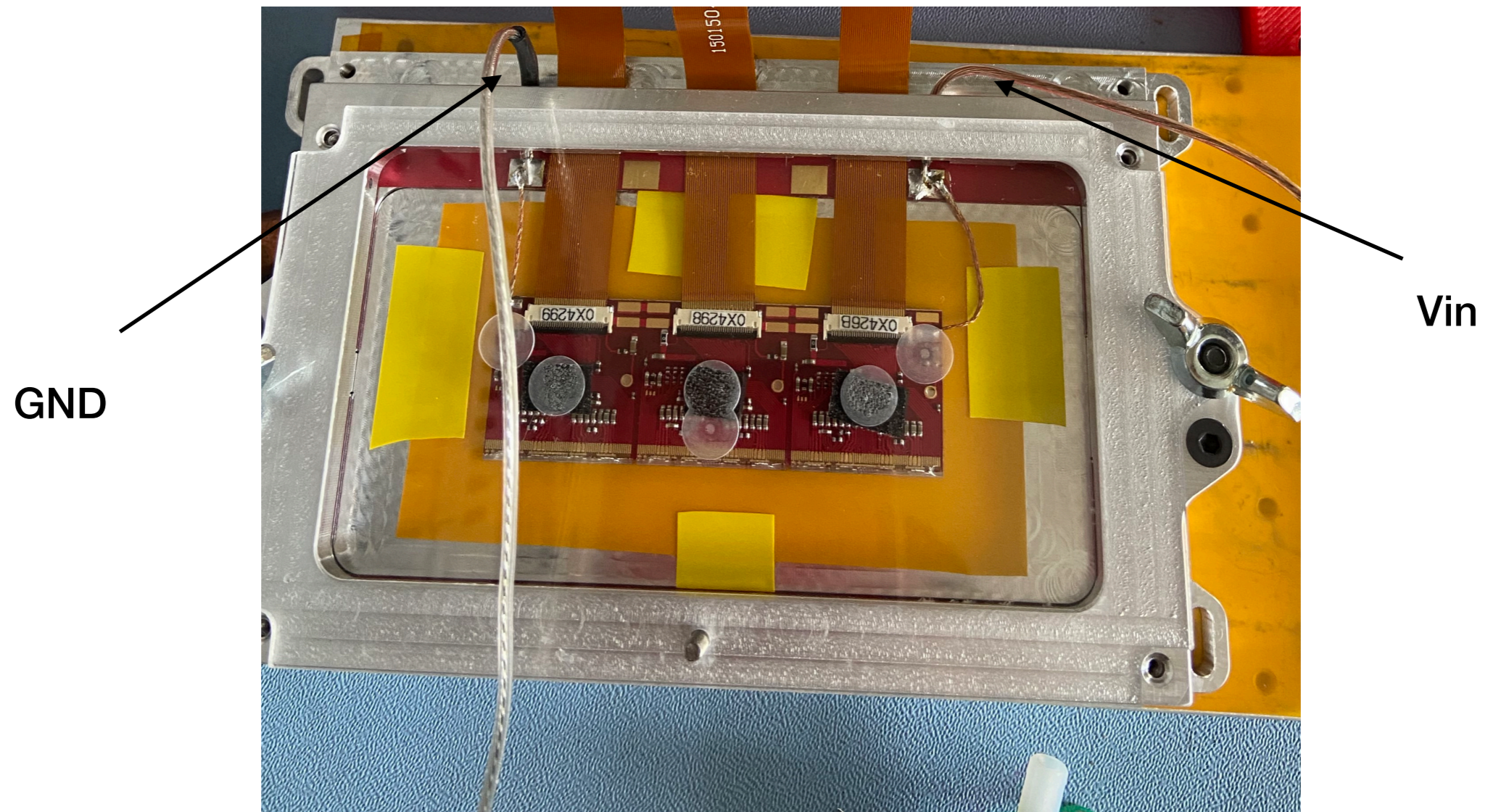
- Low voltage PS:
 - Operation: **constant current**
 - Set current to 3.3 A (max current **3.5A**)
 - Set voltage limit to 1.9 V: voltage read by PS will be lower than the limit
 - Might need to set voltage limit higher if there's a large drop on the cable
- High voltage PS (if want to test sensor)
 - Current limit: 10 μ A
- For more information, refer to these [slides](#)

Triplets in carriers vs. pseudoquads



- Chip ID in different order for triplets in carriers and for pseudoquads

Triplets in carriers power cables



- Ground cables labelled with black electrical tape or wire