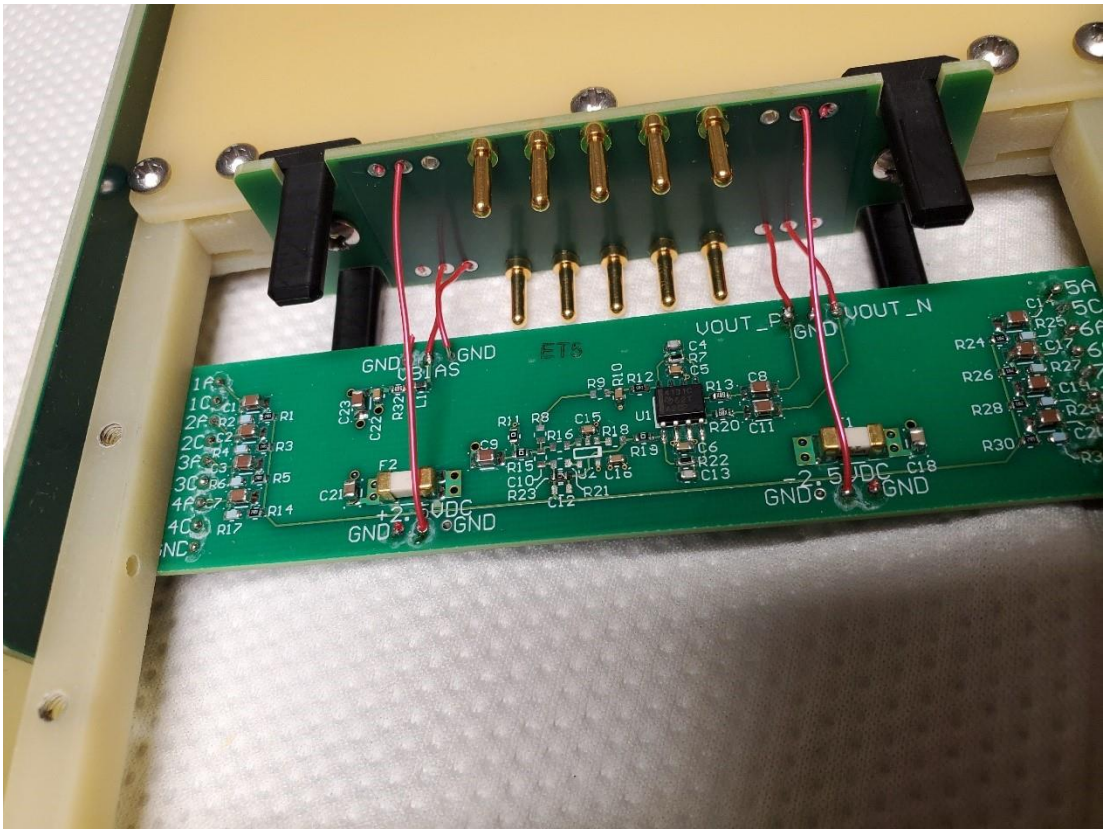
Status of PD in ICEBERG January 9, 2020

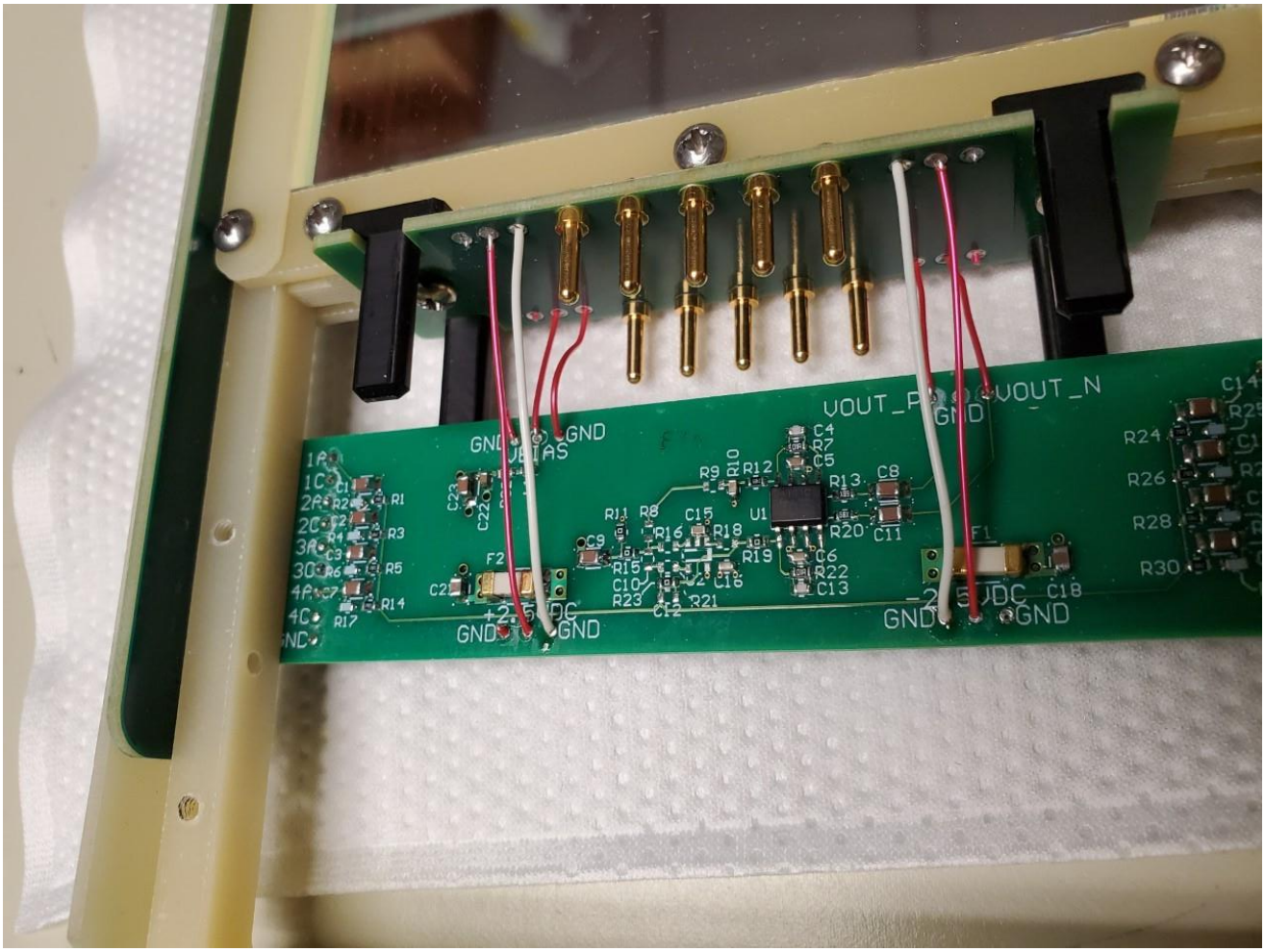
Carlos Escobar

- Modifications to the PD cold electronics pinout numbering.
- Changed the way the CE connector is connected to the active ganging board on the Arapuca module as illustrated in the pictures below:

BEFORE



AFTER



Thank you Terri, Miguelangel and Brian! All this is being documented (thank you Miguel).

NEXT:

- Understand how the flange has been designed (is it the same design as for ProtoDune?) so that the shield can be connected through the pin on the flange that is connected to the cryostat thus avoiding the shield connection coming out of the cryostat via a pin.

This will be done today by Terri, Miguel and Brian

- Power supplies: Wiener MPODs for +2.5/-2.5 V for CE and bias for the MPPCs. *Due to arrive Friday 01/10* (thanks Shekhar).

Status of the Arapuca modules

As reported before white flakes were seen inside Iceberg and had been identified as TPB (here at PAB and in Brazil from samples Ana Amelia took when she was here).

Only the standard Arapucas have coated TPB elements (Vikuiti foils). The array was opened and confirmed extensive flaking as pictures below show.

Given the lack of time to coat more vikuiti with TPB and the fact that this Arapuca model has been supplanted, only the X-Arapuca array will be inserted for the next and subsequent runs.

IMPORTANT: the filters on both arrays are fine, no loss of pTp coating.

READOUT:

- No plans to use the SSP
- DAPHNE: I have not heard of any plans for DAPHNE upgrades.