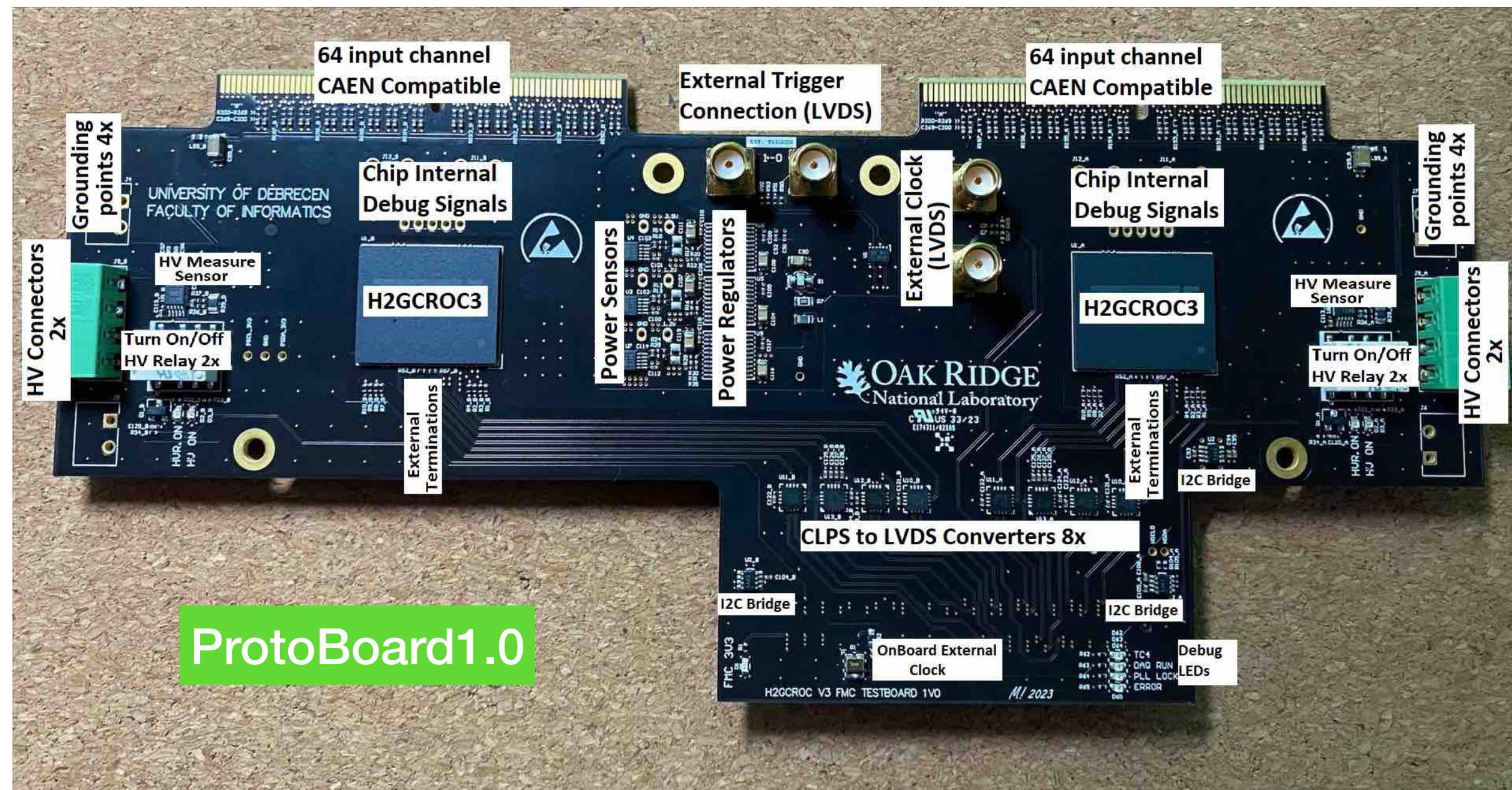


Readout progress

Norbert

HGCROC ProtoBoard2.0



H2GCROC3A arrived in Hungary for the new PCB production

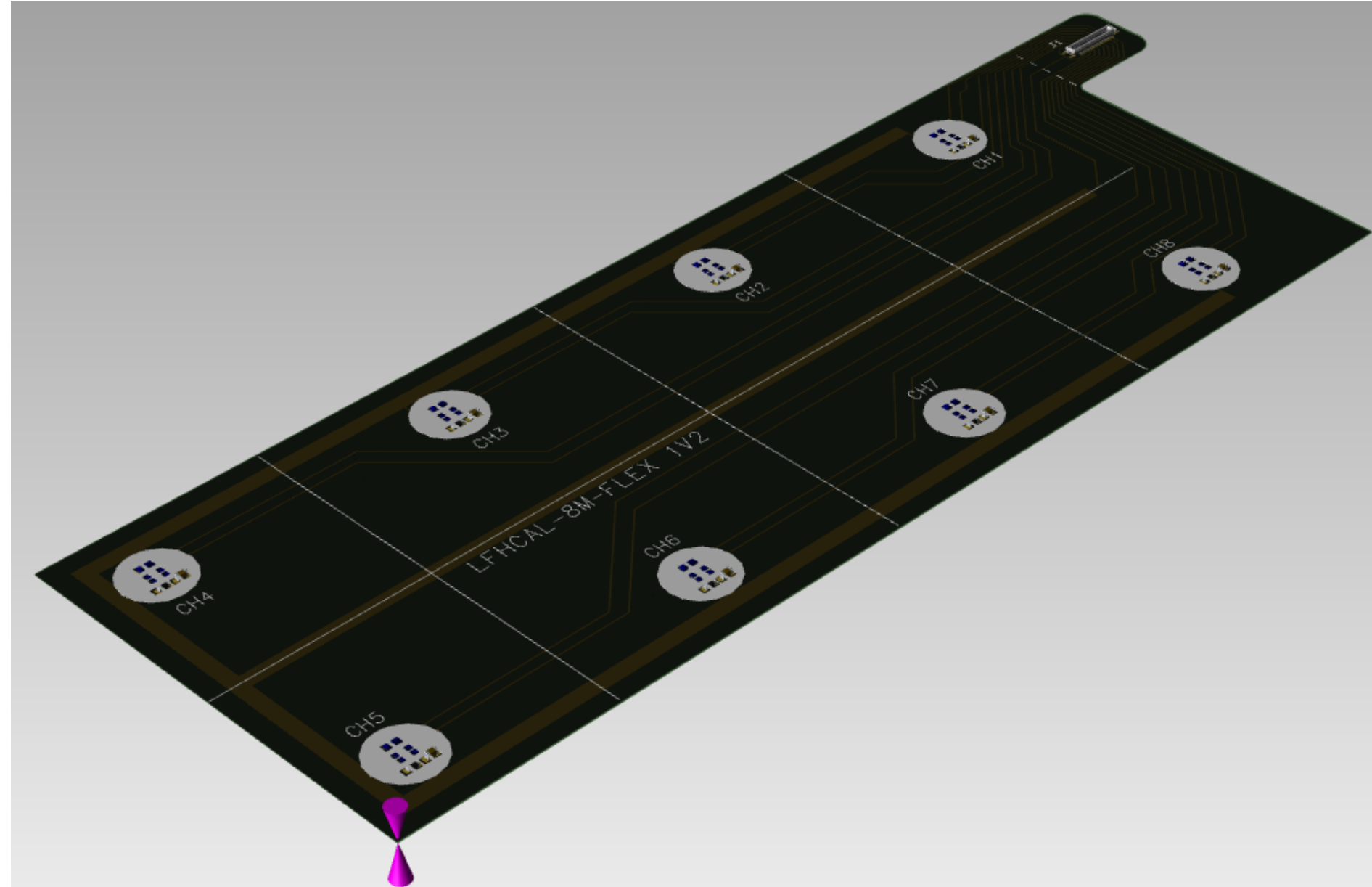
• H2GCROC3B:

- Currently under testing in Omega and CMS groups
- All the bugs from the 3A seems to be fixed, good data with 32 consecutive BX also
- There is a 'race condition' at the ADC-TOT transition:
 - Now reproduced in the simulation
 - Mitigation will be done by fixing the top metal layers of the wafer (under investigation)
- Then TSMC will keep the 2 engineering run
- 50+ wafer should be soon arriving

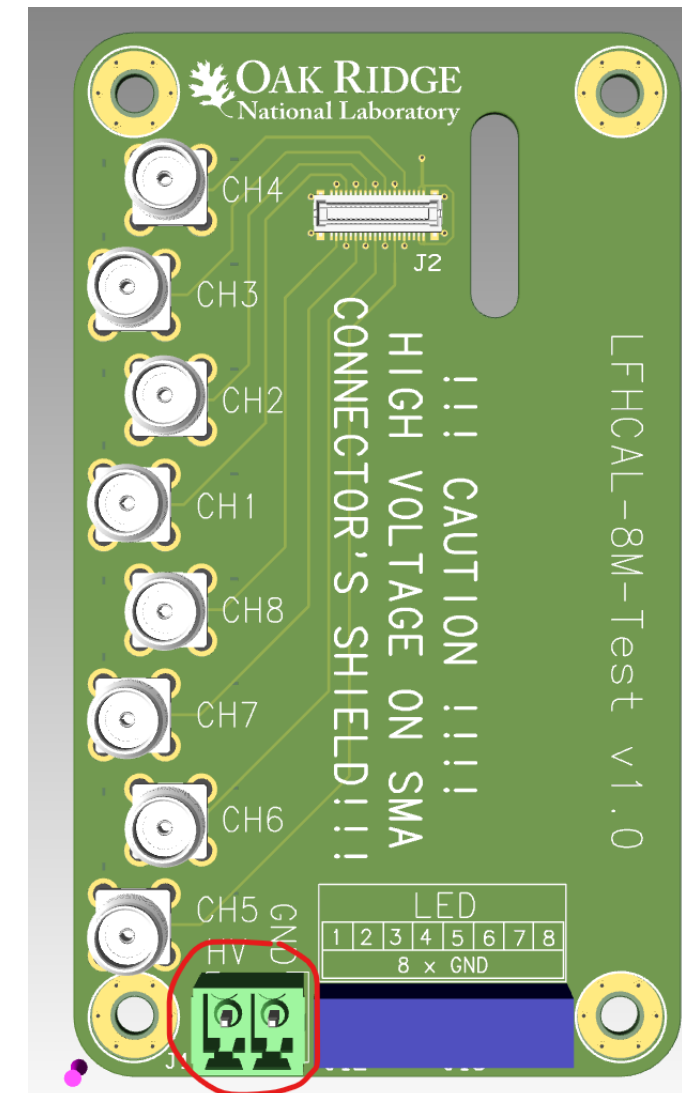
LFHCal readout electronics

Flex board

Board-to-Board connector



SMA breakout board



Flex board:

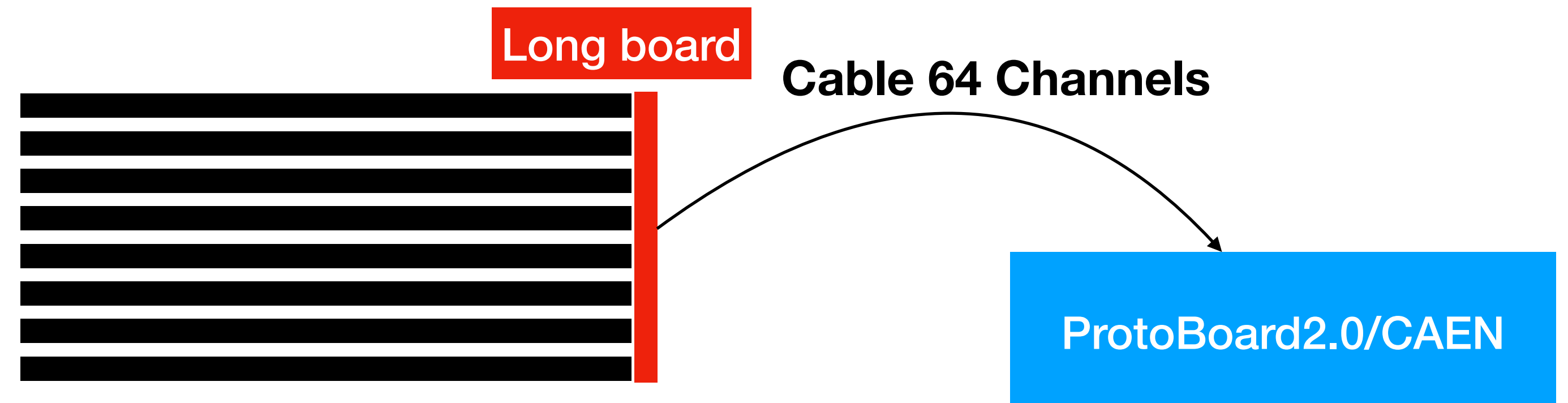
- 8xSiPM, 8x LED, connector
- Under production now

SMA breakout board:

- Compatibility with existing setup
- Under production

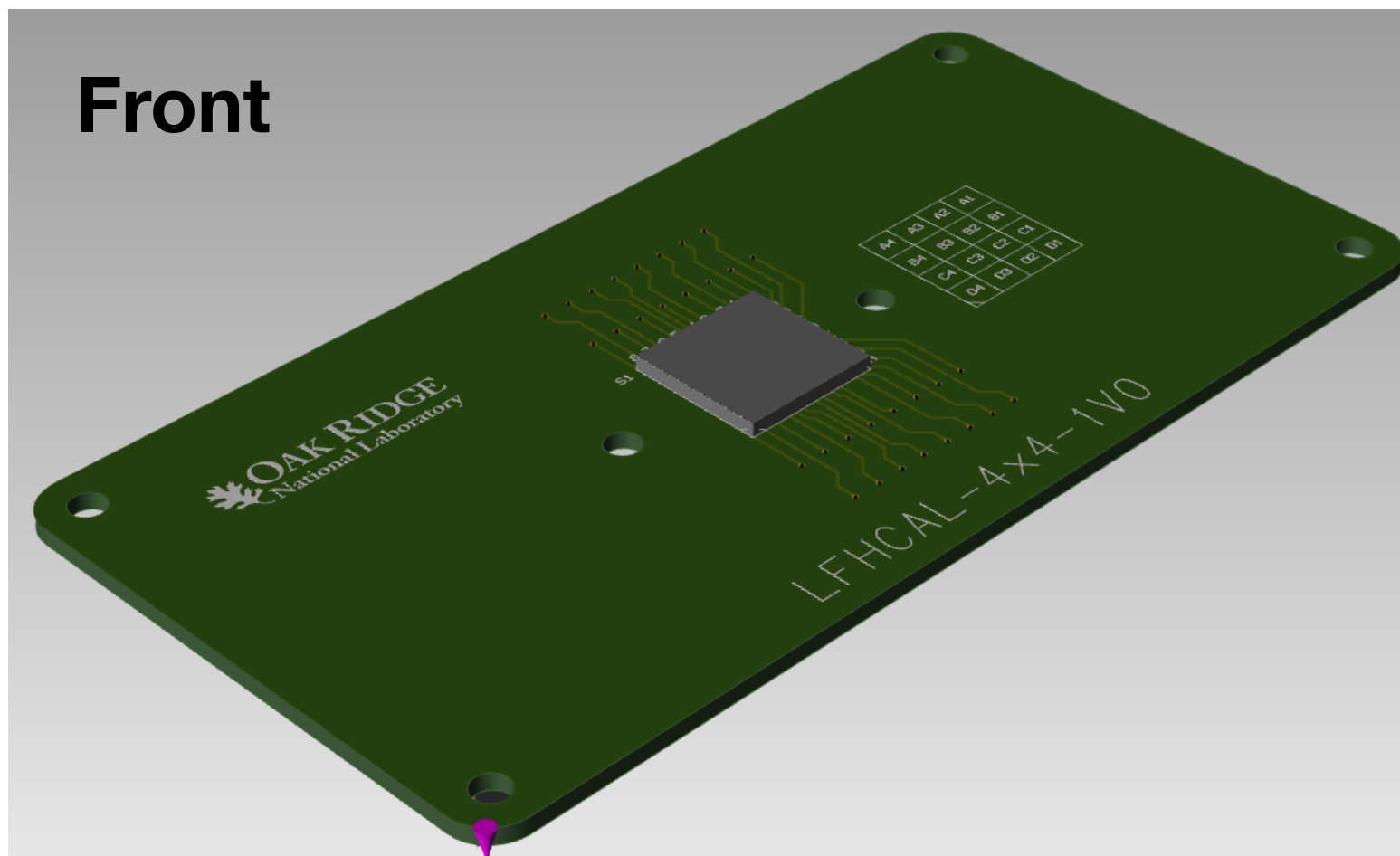
Long Board:

- v0 (8 channel) /May/:
 - just contains connector for a cable compatible with CAEN, ProtoBoard2.0
 - One input for LED drive (compatible with HGCROC)
- v1 (520 channels) /Aug/:
 - Careful traces towards the end of the detector



Summing board and prototyping

Front



Received a 4x4 3x3 mm² SiPM from Barrel Ecal group:

- Reconstructed by Hamamatsu
- Perfect for testing:
 - 16 individual channels, should be easy to read with both CAEN/HGCROC
 - Individual board, make modular test:
 1. Individual channels (16 channel setup)
 2. Summing 2x2 SiPMs (4 channel setup):
 - Different summing schemes will be explored
 3. Summing 4x4 SiPM (1 channel final[?] setup)

Back

