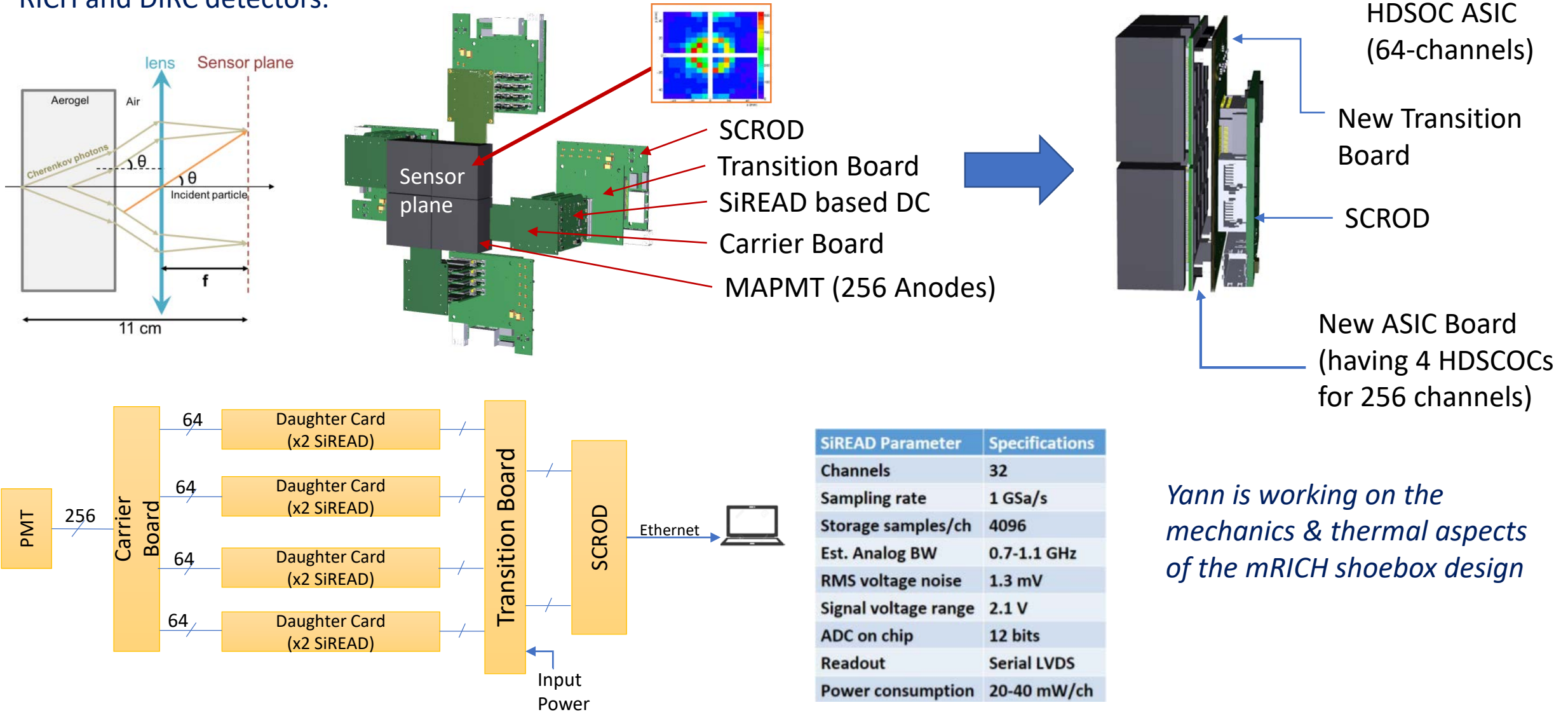


# Readout Electronics for the EIC-PID detectors (eRD14)

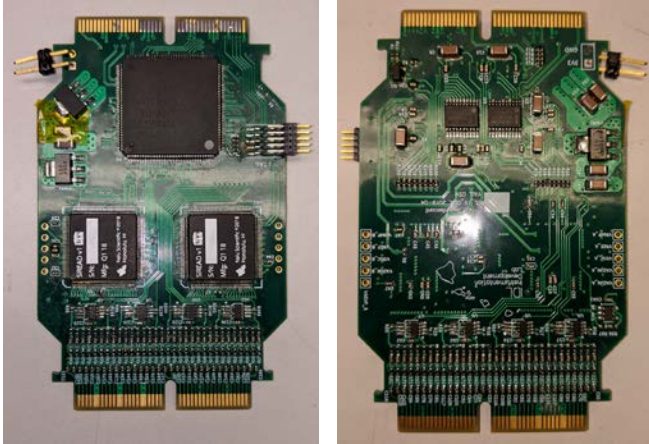
Common solution for the read out of all the photosensors (MaPMT, MCP-PMT, SiPM) that are being considered for various RICH and DIRC detectors.



*Yann is working on the mechanics & thermal aspects of the mRICH shoebox design*

## Resources Available:

- SiREAD based DCs (> 20#) (IDL\_19\_004) (Y. Ali)
- Transition Board (18#)
- SCROD RevA5
- Carrier Board



## Present Status:

- First version of SiREAD DC FW (from Ben @Nalu) is being tested with Nathan's SCROD FW
- QBlink module is used in both FW. We are trying to sync & lock SCROD & DC
- Certain issues were identified in the design of DC & Transition Board

## HMB

HMB DC is based on TARGETX ASIC (16-channels) Total #8 DCs (2/scintillating planes) => SiREAD DC (1/plane) ??

How SiREAD DC is planned to be used in HMB:

- Replacing the TX DCs
- Parallel/Redundant Readout System
- DUT (aRICH, cRICH) in HMB

Similar Readout FW for existing Hardware?

## Recommendations from the 2<sup>nd</sup> Gen. BMD project (Khanh Le):

Upgrade Center DC with low power amplifiers instead of RC gain circuit

- Lots of opportunities, many things to Learn!!
- Open to work including field/manual jobs