

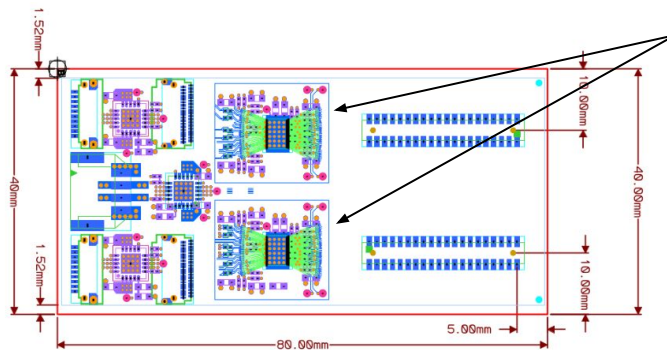
Front-End Electronics

Roberto Preghenella
INFN Bologna

on behalf of the sipm4eic-elettronica group
<https://lists.infn.it/sympa/info/sipm4eic-elettronica>

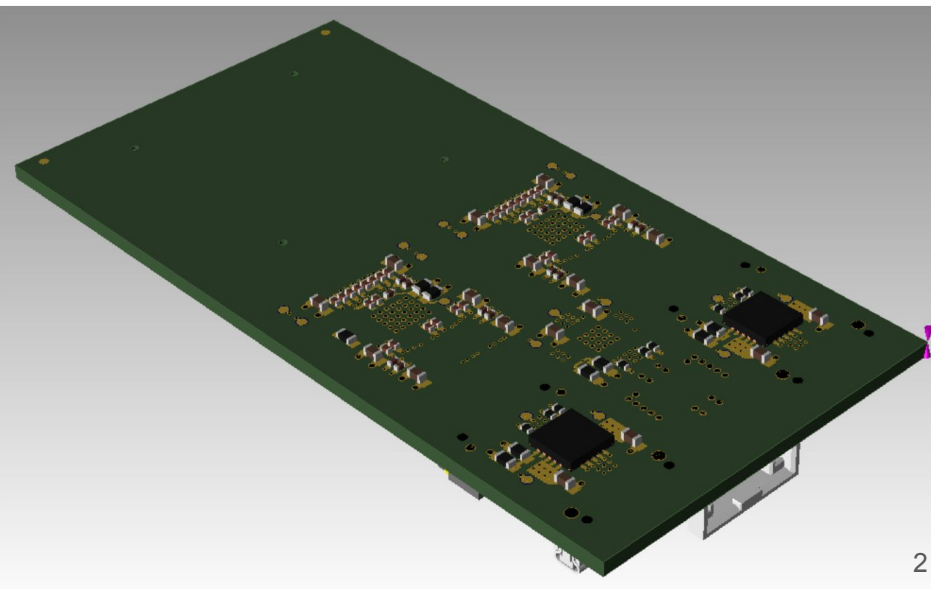
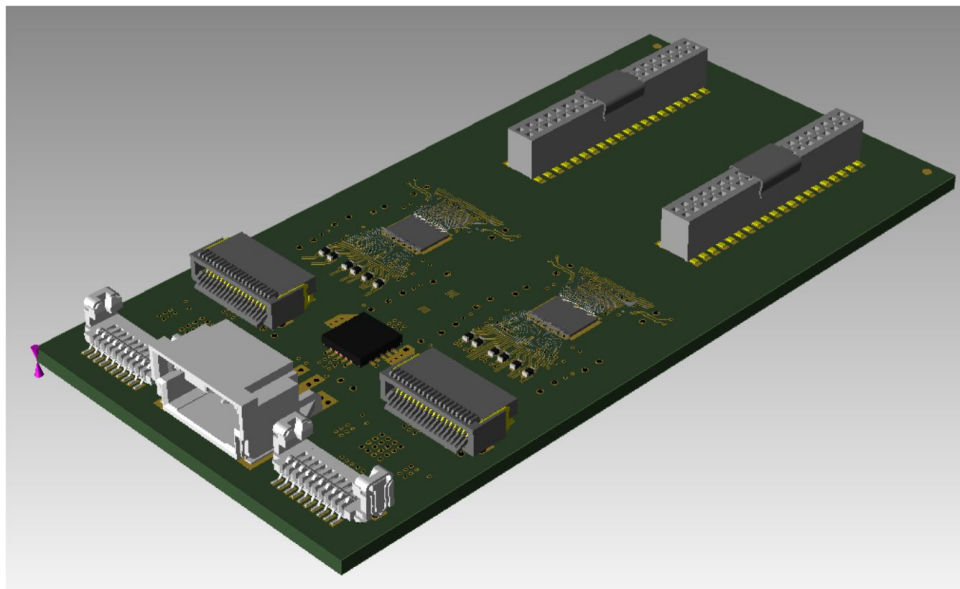
ALCOR-FE-DUAL (aka ALCOR board V2)

2x ALCOR-v2 ASICs (2x 32 channels)
future ALCOR-v3 will be 64 channels

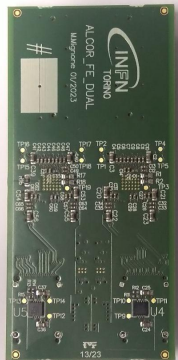


project completed
boards received

designed in Torino
Marco Mignone

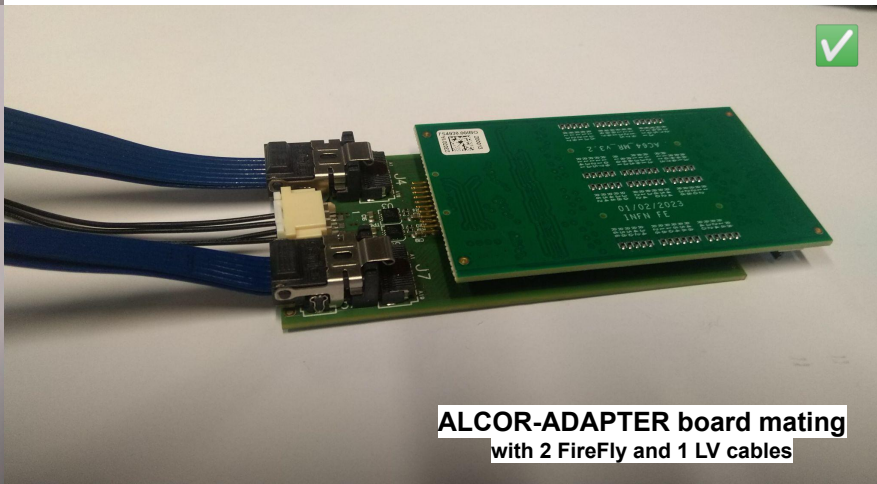
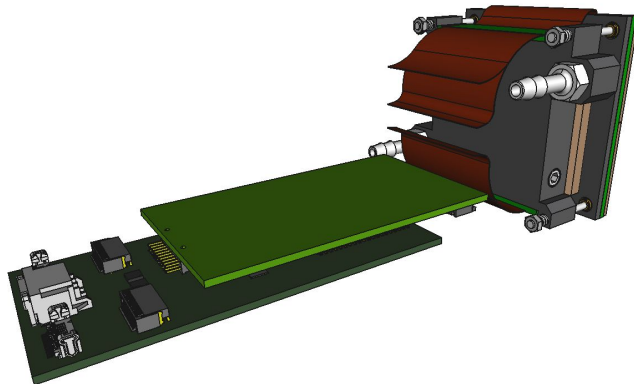


ALCOR-FE-DUAL exists

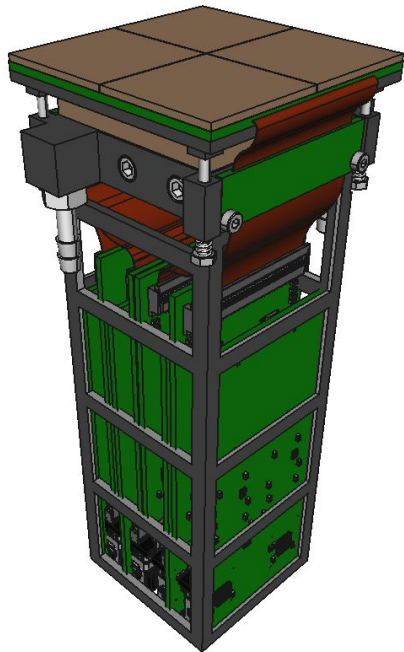


ALCOR board
M.Mignone – INFN TO

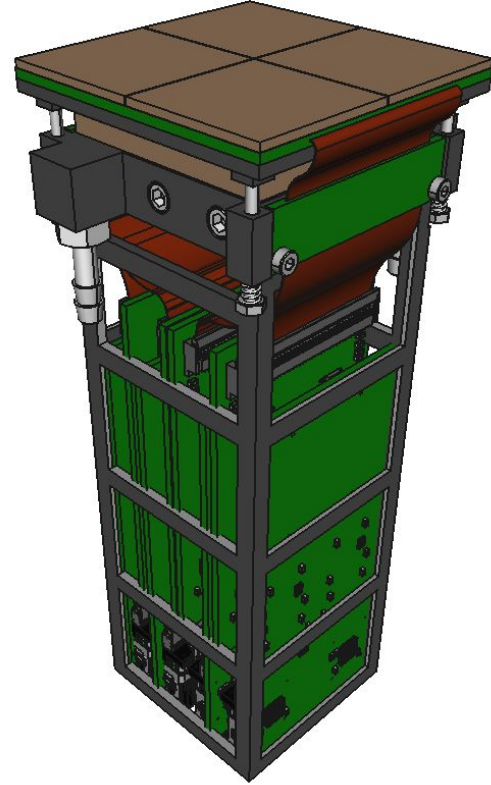
ADAPTER board
R.Malaguti – INFN FE



ALCOR-ADAPTER board mating
with 2 FireFly and 1 LV cables

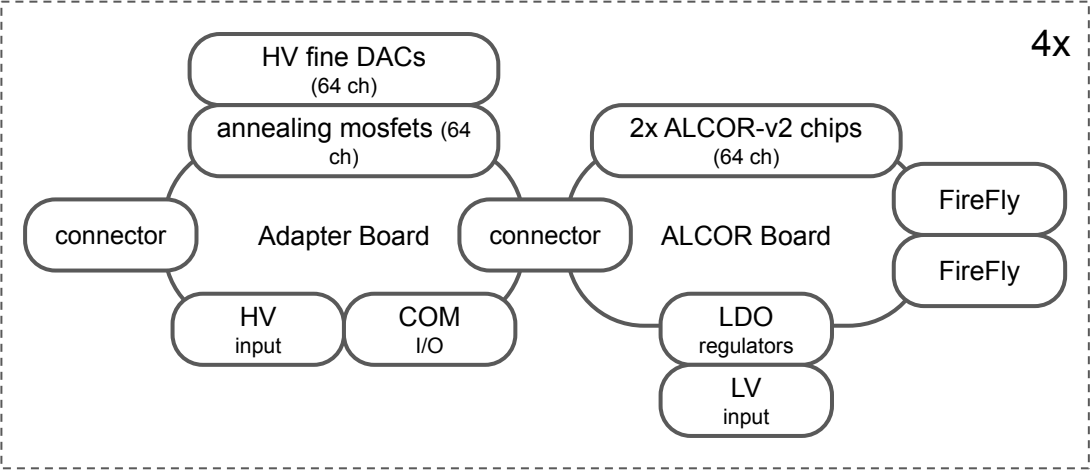
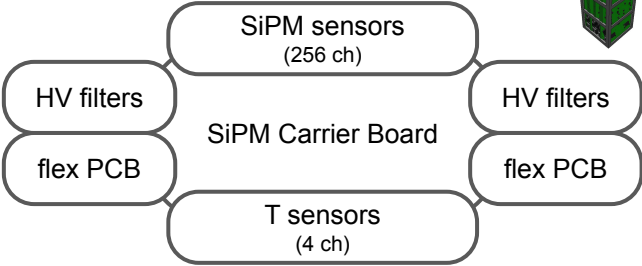


electronics scheme in
the dRICH prototype

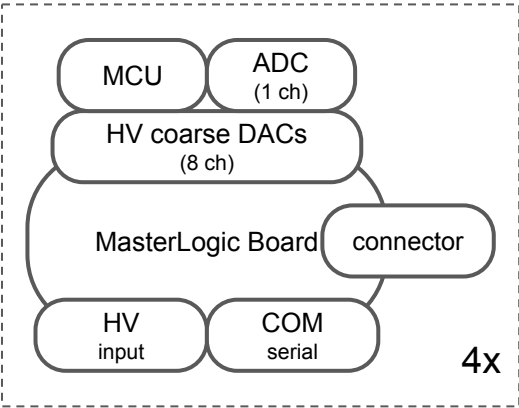
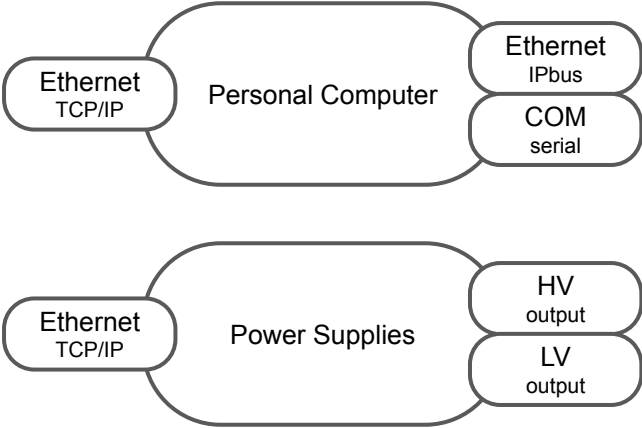


prototype photodetector unit

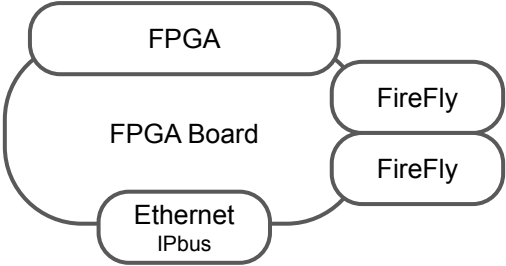
main components and devices



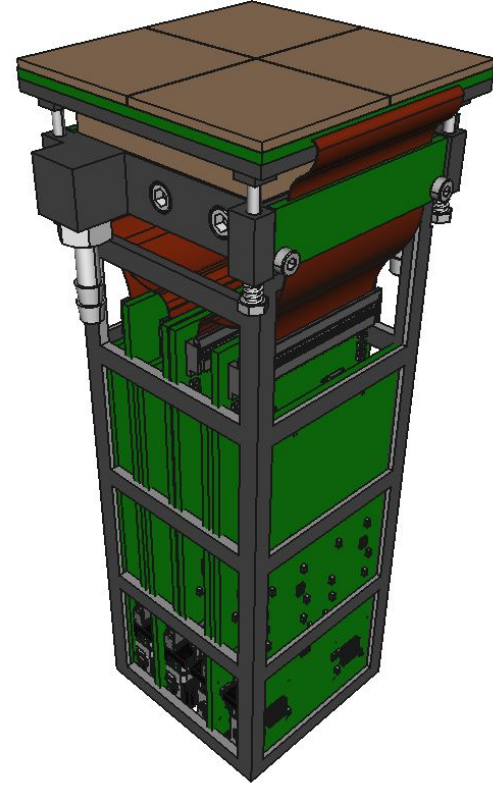
inside



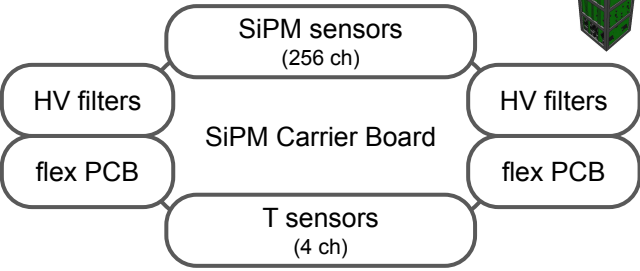
outside



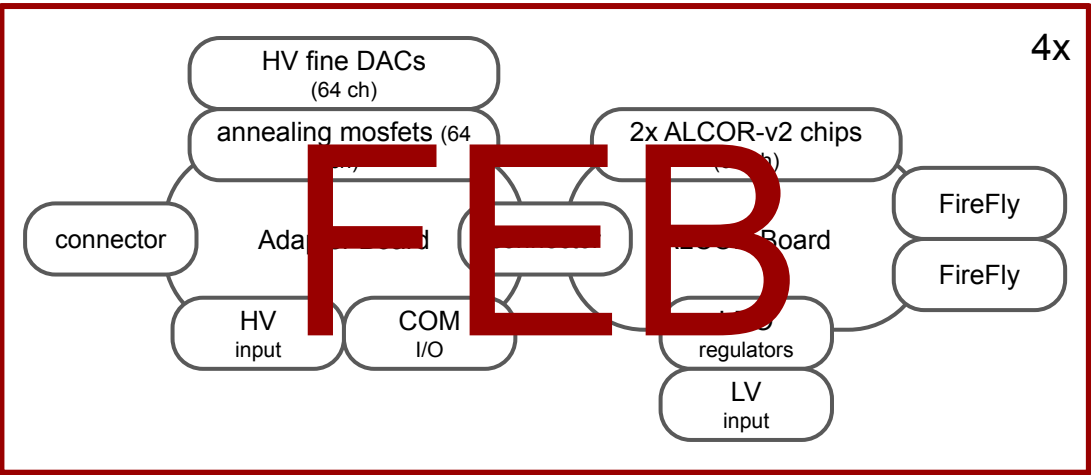
electronics scheme in the dRICH detector



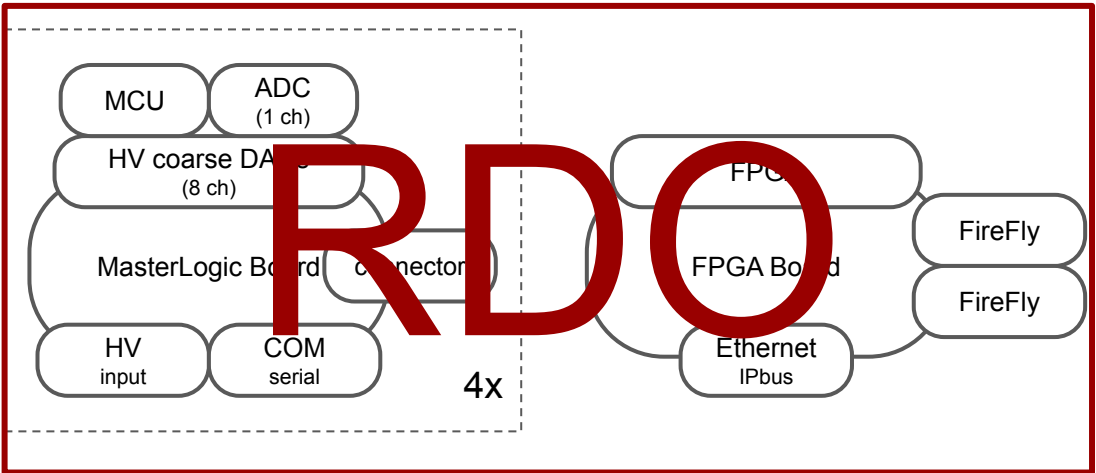
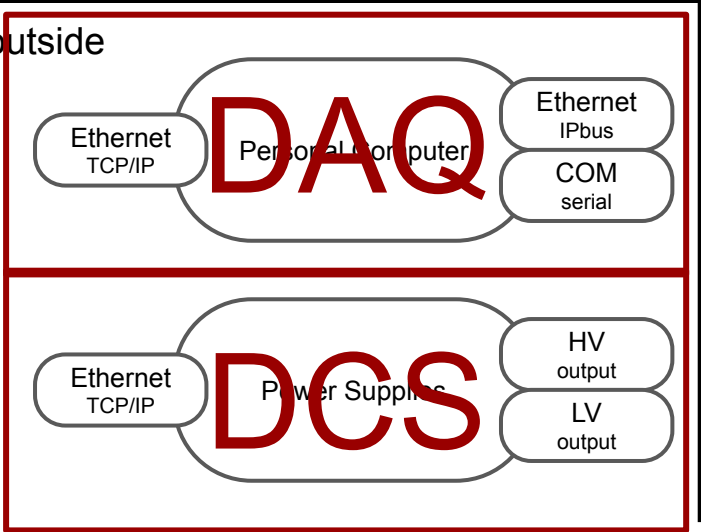
several changes needed
with respect to current prototype



inside

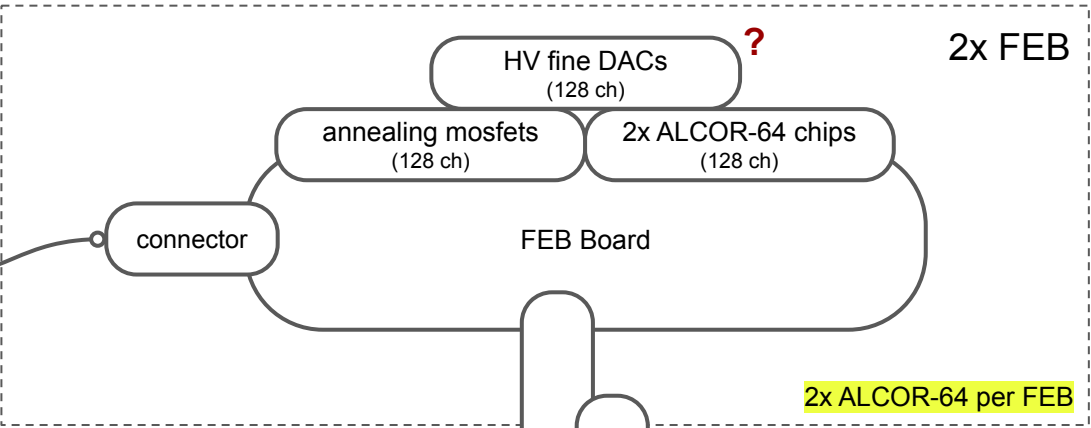
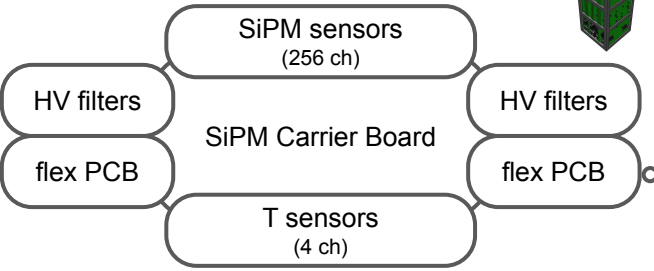


outside

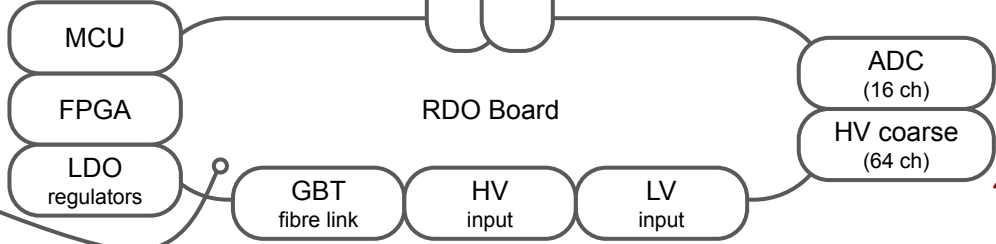
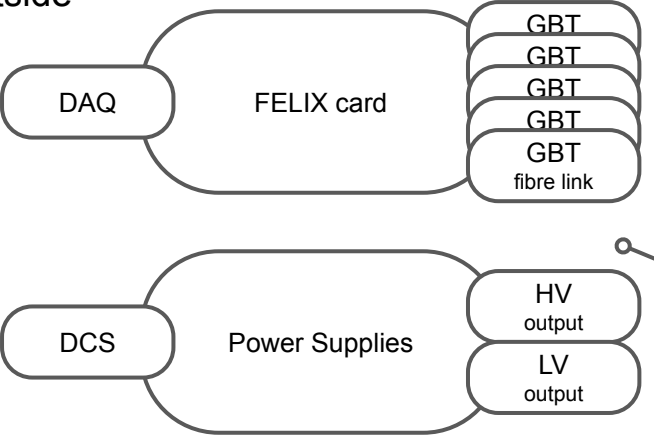


general interconnections

inside and outside the readout box



outside

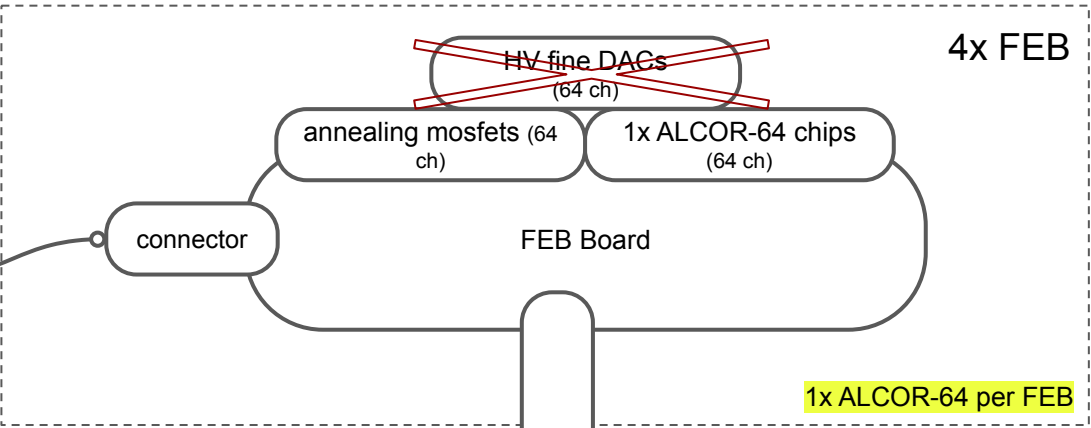
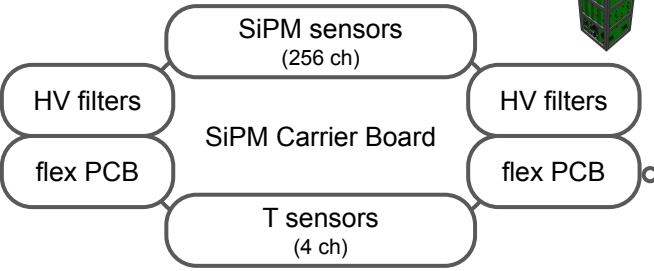


option with 1x RDO serving 1x PDU (direct connection)

inside

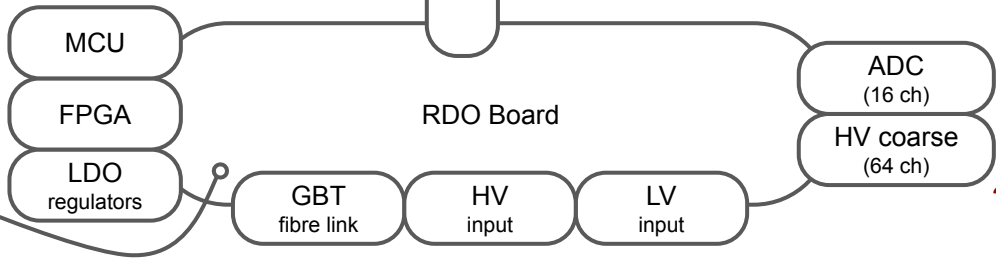
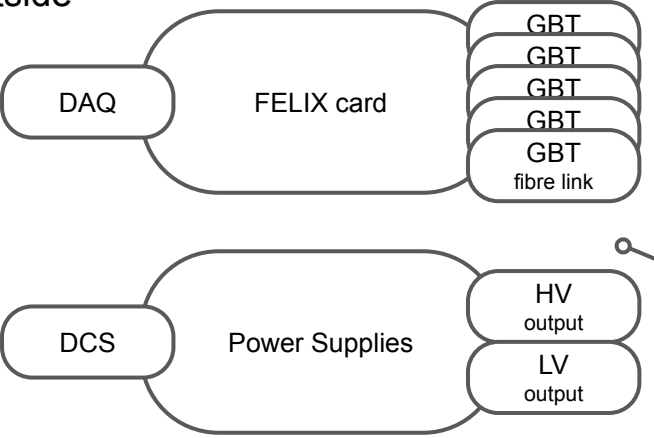
general interconnections

inside and outside the readout box



1x ALCOR-64 per FEB

outside



option with 1x RDO serving 1x PDU (direct connection)

inside

256-channels RDO, 2+2 ALCOR-64 mezzanines

