

A few items...

- Our PED request

- Fernando read our preliminary document and is favourable
 - expects us to add more details in the cost and schedule so we should wrap this up
- I would like us to standardize on the FELIX-lite
 - we said it will be a KCU105 but I'd like to change that to the **AXAU15** which is far more elegant (smaller, cheaper \$600)
 - BTW, I purchased 1 and I have it in Zagreb
 - other groups started to use it as well!
 - I will implement IpGBT protocols (from Zhengwei) and PCIe master interface in due time...
 - goal is the full readout chain
- The MPGD Detector (Irakli et al) are interested in our SHv1 for their SALSA readout chain
 - they are thinking amongst themselves but the expectation is that they would ask for 2 sets (both RBv1 and PBv1)
 - I think that helping them is in our interest as well... (the more the merrier)

- BNL EICROC0 testing

- I started looking into providing the FW *to learn how this ASIC behaves*
- currently using a ZCU106 in the BNL lab (Prashanth) to get myself off the ground quickly but hope that we can continue with AXAU15 (it has a FMC connector!) or ppRDO – TBD
- we seem to have a small amount of engineering manpower available to make an adaptor card from the EICROC0 testboard to ppRDO – again, TBD
 - or the engineer can help Tim with the PB – TBD



ASICs (news from various presentations and chats)

- FCFD will be supported from R&D for FY25
 - my understanding is that significant funds have been released to Artur so things should get moving...
- EICROC1 is still on schedule:
 - submission early March, delivery Jun/Jul
- EICROC1A of interest to BNL testing
- **EICROC1B of interest for our SHv1**
 - **lpGBT readout will be supported**
 - we need to start preparing
 - How do we get it? Who is “we”?
ASIC module? Who makes it?
 - what about bump-bonding a sensor??
 - Who? How? When?
 - I think we need some more “formal” organization within TOF

EICROC1s

- EICROC1A : 4x32 : ready **DRC/LVS OK**
 - Same pinout as EICROC0 => same testboard
 - Column ADC/TDCs can be switched off
 - Modifications were needed to read full columns
 - Same column as 32x32, allows detailed tests with small sensor
- EICROC1B : 32x32 : balcony still in layout
 - Readout by groups of 4 columns => 8x40 MHz outputs
 - Same controls as EICROC0 : start_acq/start_readout
 - New : also fast commands inputs (as in HGCROC)
 - Cmd_pulse, start_acq, start_readout
 - New : serialized 320 MHz output

BTOF

- we should try to provide more details for the BTOF
- what we know so far
 - 64 FCFD ASICs per RB
 - spread over 4 IpGBTs (16 ASICs per IpGBT)
 - 1 master IpGBT, 3 slave IpGBTs
 - 1 VTRX+ with all 4 uplink fibers used
 - IpGBTs and VTRX+s are in Fernando's order
 - VTRX+ with the shortest pigtail
- What we need to know “soon”
 - location/space/size
 - power needs of the ASICs
 - cooling???
 - connection scheme to the stave FPC
- Japanese funding resources potentially available
 - this needs more formal interfacing and organization (in progress)