News from "DAQ/Electronics Group"

- ASIC Meeting held in France, June 2 & 3
 - https://indico.bnl.gov/event/28161/
 - FCFD 32 ch version expected Summer 2026
 - EICROC1 ready for submission but STILL administrative issues
 - note that this is the flavor that we can readout with IpGBT
 - full 1024 channels, 320 Mbs single data output link, etc
 - but not yet streaming nor zero-suppression
 - EICROC2 design & verification expected to take ~1 year
 - early 2027?
 - with streaming and zero-suppression

Rice News (Mike, Tao, TL)

- AXAU15 installed in the PCle bus of bonner-muon [Mike, Tao]
 - o works well ✓ [TL]
 - o bonner-muon Linux kernel prepared for streaming readout ✓ [Thanks Tao!]
- AXAU15 USB chip died
 - sent for chip swap [Mike] FIXED ✓
- Alinx FMC SFP+ carrier mounted on AXAU15 [Mike, Tao]
 - works well ✓ [TL]
- 2 more AXAU15 on order from China [Mike]
 - BTW, what about the 4th? And what about the Alinx FMC SFP? Mike?
- AXAU15 development with RB2.2 connected in 10.24/FEC12 mode [TL]
 - lpGBT read/write registers, ADC readout, GPIO, I2C to e.g. VTRX+, loopback modes → all work ✓
 - continuing with PC-side DAQ software for initialization, configuration, monitoring etc.
 - clock used is the EIC clock (39.6 MHz) and everything seems to work well ← Important!
- RB3 with ETROC installed and connected to AXAU15 [Mike, Tao]
 - Continue commissioning control/monitor software [TL]
 - IpGBT on RB3 works fine ✓
 - ETROC found at I2C address 0x64 and the default register values read correctly ✓
- Next days
 - Continue commissioning with ETROC... [TL]
 - o can we set IpGBT to 10.24/FEC5 (as expected for FTOF & EIC)
- Future
- I would need a passive breakout board from the AXAU15 connector (see →) to ~6 SMA (or Lemo) pins
 - 4 as outputs from the FPGA for precise timing/jitter measurement with a scope
 - 39.6 clock, FastCommand, etc
 - 2 as inputs for external triggers
 - Can we make such a simple board? Are there any commercial breakouts available?
 - Quantity 3-4-5
- we will need a passive FMC-to-RBv1 board to adapt the future EICROC1 Test Board to our RBv1
 - Who can make such a board? Volunteers?
 - We don't have the pinouts yet; expected within a ~month but we could start setting up
 - Quantity 3-4-5

communication and video in



Other News

- RBv1 status Mike?
- PBv1 status Steve?
 - status of the passive power "dissipator" board?
- ASIC Module Mathieu?
- Other? AOB?