

Tonko, 6-Apr-2024

ppRDO Board Locations & Associated Effort

- Mike, Rice
 - 0th Q/A: power on smoke test [now]
 - FPGA load over JTAG – blinking LED? [now]
 - PROM burn and powercycle – blinking LED still? [now]
 - current/voltage measurements [now with 0th FW, later with various FW iterations]
 - general potential problem scope probing and fixing [as required]
 - remote setup for Tonko with ETL board [to be discussed]
- William, JLab
 - fiber MGT firmware [now; status?]
 - at least basic setup with simple clock recovery in fiber loopback mode
SFP Aux ↔ SFP FELIX?
 - jitter measurements for various scenarios [now]
- Zhenyu, LBL
 - ETROC firmware & integration [???
 - radiation tests [???
 - later, outside of eRD109 scope: FCFD integration [once FCFD board available]
- Tonko, Croatia
 - firmware framework [now]
 - soft core CPU controlled over USB
 - I2C: 2 PLLs [priority]
 - ETL, 4x FMC, SFP [later]
 - PCB temp sensor read
 - SPI PROM write/read [not urgent]
 - XADC read: internal voltages
 - read/write to MGT FIFOs: FELIX and Aux
 - Aux FIFO
 - set-up as if FELIX
 - write a SYNC command every 1ms
 - read data
 - ASIC framework
 - write fast command to all ASICs
 - read ASICs and write to FELIX FIFO
 - later: use ETROC as example ASIC and setup DAQ-like readout
 - later: EICROC1+ integration [when EICROC1 board available]
- Prashanth & Tim, BNL
 - timing, current & voltage measurements [once fw available, and scope]
 - later: EICROC1+ integration [once EICROC1 board available]

- 6th copy
 - TBD. E.g. Gerard, for Fwd ECAL integration?
 - Norbert for H2GCROC?
 - Someone for possible Flex cable testing via FMC?
 - Others?