

2014-01-22

Wednesday, January 22, 2014
8:10 AM

Kabir, Christ, Seppo, David, Paul, me.

* DAQ

- 2MSB between Analog & chassis ground. on old system
- 6 units x 2 ACQ435ELF - 24 modules.
- VHDCI-68 connector

* email: about isolation to Peter

- David will measure new system
- CRC-32 checksum? right now: CRC-8
- most important firmware mod: n-samples.

* Firmware mods:

- RGM with n (programmable) samples.
- Trigger resync ~ 30 ns jitter
- Sum & decimate filter - run at 52 or 128 kHz.
- Checksum: modulo sum raw + CRC filtered data.
- disable channels.

* Kabir - Asymmetry system

- optoisolators for signal & ethernet.
- radiating RFSR - Chris contribution.
- 18 pF cap across input: 10x noise increase
 - 2 pF OK. ratio output impedance / feedback resistance
 - want to minimize capacitance < 2 pF?
 - no ground planes & thin traces. $\omega C \cdot R \approx 1$
- mockup W.C. with current source. "60 Hz.
- preamp enclosures at UT shop? not yet.
 - Seppo working w/ cooling in enclosure. / preamps.