

YUC meeting, December 5 2013, Arpads room

present: Jonathan, Salvatore, Harro, Arpad, Des via telephone

Jonathan: tested reversing phase (or rather removing previous phase reversal), now gets USB instead of LSB. Seems too simple, maybe something with fractional delay not right. USB fringes seem slightly less noisy than LSB. Longer baselines may show more differences. Svetloe was not in LSB, yet in USB. Arpad: pls check if this is in data, this is known after all, can also compare with SFXC results. When Jonathan understands a bit more what is going on, ask Sergei as sanity check. Then if all is well, implement LSB-USB conversion, before data gets to buffer.

Salvatore: new + old packetRX in test bench, comparisons look really good. Have to look at different delay values, boundary conditions. Some differences in data between old and new, looks like a bug in old version of serialiser (checked through hand calculations). New packetRX also delivers data earlier, due to a different counter setting. Could either change that, or simply compare outputs on file. Could also remove different bits of data for one on one comparison. Simplest solution.

After all tests, should integrate it into FNtop, do synthesis, check for timing problems.

Harro: changed erlang code of VDIF sender, small mods to jive5ab. Wrote a howto for config and corner turning.

Des: read howto, wrote sql query, next week could do test. Harro: still need to think of operational implementation, but test already possible.

Arpad: what about packet loss? Data from aribox into uniboard nearly in real time now, massive packet loss on outside. Harro: aribox reading and writing at same time, need other machine with 10G interface? Then calculates data rate to aribox is 40 Mbps, no way that that would be a problem. Must be erlang code. Need to write upgrade, not in erlang obviously, soonish.

Arpad: JIVE board critical of progress, some sort of evaluation will take place March-April 2014. We will have to have a "project scientist" to drive the comparison between SFXC and UB. Best would be if we can swat between SFXC and UB at will, reading from the same packs. Salvatore: need to know what steps to get there. Arpad: most of it is there, making it possible for project scientist to run correlation will take care of logistical issues.