

Correlator Control and Implementation Meeting

Tuesday November 9, 10.30, Colloquium zaal

present: Jonathan, Salvatore, Harro, Des, Paul, Arpad

No agenda

Jonathan explains that 4×16 MHz each need 1024 points. Question is 1 or 4 banks, in the case of 1 bank a FIR filter is needed which is computationally expensive. Salvatore has been looking at Raj's FFT, but it does not like gaps (which are needed to save resources). Should be fixable, but Raj only has time after half November to look at it. Arpad does not think it a very good idea to wait for fixes from Raj.

Alternatively there is the Altera FFT, which claims to handle gaps (inside blocks). However, it is Altera specific of course. Besides, nobody seems to know if it is free, and if not how much it would cost. Or if it is fast. Needs to be investigated asap.

Long discussion followed on whether correlator should be synchronous or not. Harro and Des working from assumption that it would not be, do not like necessity for feedback to playback units. Future will bring many different recording systems, speeds can not be counted on being constant (enough), intervention will be needed to synchronise them, feedback anyway. Consensus is that system should not be synchronous, will need some signal sent to control computer when memory banks are half empty (or something of that order) to issue command to playback units to send other time sample.

Next meeting Tuesday 23 November, 11, Muller