Subject: Re: Computer requirement for Pixirad-1 detector.
From: Massimo Minuti <massimo.minuti@pi.infn.it>
Date: 9/15/2015 11:09 AM
To: Eric Dufresne <dufresne@anl.gov>
CC: ronaldo.bellazzini <ronaldo.bellazzini@pi.infn.it>, Alec Sandy <asandy@aps.anl.gov>, Mark Rivers <rivers@cars.uchicago.edu>

Dear Eric,
I think you need some instructions to operate your new Pixirad-1 Detector. The loaded FW is fully compatible with older interfaces and the EPICS
driver that Mark already wrote. This means It can be operated like any other Pixirad-1 detector.
As promised (see attachment), I provided the detector with an additional commands ad a "run mode" (FTE) unknown before.
To run in the "FTE" mode, the original "start acquisition" command string must be modified including "FTE" in the "Run Mode" parameter field (**"2COL", "1COL0", "1COL1", "DTF", "FTE"**).

The "**DAQ:! SET_FTE_CONF cycles exp1dt exp2dt sepdt**" command is needed to set the acquisition timing configuration *exp1dt exp2dt sepdt* must be specified as float in ns units; resolution is 12ns.

The "**DAQ:! SET_SYNC Sync_in_pol *Sync_out_pol Sync_out_function*** " changed to "**DAQ:! SET_SYNC Sync_in_pol *Sync_out_pol Sync_out_function* < trigger_delay_ns>**". It means that if 3 parameters are provided the command works as before, if 4 are provided the last represents the trigger delay applied to the *sync_in* original trigger. Someone would like to use this feature when operating the detector in "EXT1" trigger mode.

My advice is to connect the scope and watch waveforms at sync-in, sync-out lemos when training to manage this new readout mode in all possible trigger configurations "**INT**", "**EXT1**", "**EXT2**".

I included a USB flash memory in the package. I flashed a new release of the classic LV interface that implements the FTE run mode and a side LV executable that you can use to manage the **"DAQ:! SET_FTE_CONF cycles exp1dt exp2dt sepdt"** command. Other stuff are stored in the flash, feel free to take a look or ignore them.

There is only one know bug: when running the detector in "EXT2" trigger mode, "sepdt" must be set to the minimum (12(ns), not 0!!).

Enjoy the detector and then feel free to contact me if any question.
Kind reagrds, Massimo Minuti.

Il 10/09/2015 17:58, Eric Dufresne ha scritto: