Minutes of Strip CMOS sensor progress report meeting

*2014-09-30*

Matt presented DAQ development status. Atlys board seems to work out fine. He can send commands at 40 Mbps and read back data at 160 Mbps (loopback test). Would need more software development for histogramming implementation.

Craig presented status of testing development. Motherboard for Ivan’s chip is out for production. It seems we can order up to 300 additional chips, at around 25 Euro/chip. (Ivan’s getting a quote.) Ivan said that the delivery is usually quite fast, around 2 weeks.

* Decided to order additional 100 chips.

Jaya John talked about the front end board design. He shrank the board a bit at request of Geneva group. It is expected back on Oct 8th. Anticipate to do the initial testing around October 14th, and to assemble more boards after that (~ 1 week for loading). Want to produce 15 boards. There will be a user guide!

* People should let Jaya John know if they’d like to test with 0.1” headers or with Lemo connectors.

Oxford group started to look into mounting HV-CHESS chip. They corresponded with Herve regarding more detailed pad information. The chip has many pads, even just for the active pixel arrays. To be continued.

Robert Eber presented first measurements with Ivan’s chip. He looked at the waveforms with a scope, using Sr90 and Fe55 sources. He sees different median amplitudes for different pixels, and there might be a difference in noise as well. Irradiations are planned at KIT. Another step is to work on digital readout.

* Robert was asked to provide the chip configuration stream.

Sally Seidel from U. New Mexico described their capabilities of irradiating samples with gammas and neutrons at Sandia and with protons at Los Alamos. Gamma irradiations can be rather quick. Cooling of the samples is possible, except for the neutron irradiation.