November 25, 2004 Barrel Electronics VC minutes

Agenda Items:
-Discuss options for tracking shipping/re-work/burn-in
-Status of designs
-News on type 3B

Options for tracking shipping/re-work/burn-in of boards

Penn was asked what they are doing currently to track re-work.
-run a threshold ramp on all channels and record offsets and other anomalies
-write these results in an excel spreadsheet.
-do the same with a low threshold test pulse scan.
-do the same for the high threshold.
-test shaper select
-test DLL lock
-test voltage and temperature read-back
-report pass/fail of all of the above in the spreadsheet

They are also still trying to get Ole's board test software up and running.
Ole mentions that the 'Visual' table in the board test database could easily be used to track re-work operations. This just receives a comment that is attached to a board and an operator. Mogens mentions that it would be helpful to have comments to go along with the actual tests as well. This might give us a clue as to why one board was tested 15 times and another board 1, for instance. Ole mentions that it should be "a couple of afternoons" worth of work to get this running with the web interface. Fido had mentioned last week that we might think about some sort of traveler to go with the boards. PENN is already doing this internally with a simple sheet of paper but these have been discarded. They have also started recording all of the same information in an ASCII log since last week. Ole mentions that there are too many end cap boards for it to make sense to have a separate traveler for each one. This is the consensus for that barrel as well. Brig feels that if we use the board test database properly, it can stand in for all of this. Finally, Mogens feels that we need a tool to extract all of the latest info about a given board to serve as a sort of passport.
So, the actions from this discussion are:

-implement re-work comment in database and web interface
-add operator comment for board test
-add pass/fail mark as quick check of board status
-implement a tool to extract a board passport from the board test database.

Status of Designs

AR3F: The latest version arrived yesterday. It was correct in all of the important ways. It was returned to Bjorn with 3 minor corrections and he was told to make the corrections and then produce gerbers. PENN will review the "final" design just to be safe. Based on this, there is a real chance that the files will be complete by the middle of next week.

AR2F: Still need a Bill of Materials and proper Schematic. PENN is going to update this as a PDF file rather than having Bjorn cycle through it again.

AR3B: pre-series stuffing is starting this week.

AR3B Issues:

A mistake was found this past week on the AR3BL board that results in the test pulse not being properly transmitted from the DTMROC to the ASDBLR in two positions. This can be easily fixed by soldering a jumper from the test pulse filtering capacitor to ground once the components are stuffed on the board. This will need to be done at CERN.

Miscellaneous issues:

Ben was asked to prepare a list of which boards are where so that PENN can prioritize the re-work activities accordingly.

Anatoly reports that we don't have to move out of the test beam area until the beginning of January. He asked if there is any reason not to turn off the power and cooling (to save fluid, since there is a small leak) and none was found. The test beam setup will be turned off until Mitch and Co. arrive on the 12th of December for the TRT half-week.