Minutes of FPix DCS meeting on 12/15/05

Place: Fermilab WH8X

Date/Time: 12/15/05 9:30 Am

Attendance:

Muzaffer Atac, Lucien Cremaldi, Umesh Joshi, Dongwook Kim, Charles Newsom, David Sanders, Christian Veelken, JC Yun

News:

Umesh and Frank Hartman are the organizers of the DCS breakout session during the Tracker Workshop (Jan. 17-20). The DCS breakout session is to be held in the morning on Jan. 19 (wed). For more details, please refer to the CERN Agenda:
http://agenda.cern.ch/fullAgenda.php?ida=a058113

Umesh showed his slides on the issues related to the Tracker Workshop: DocDB 625

https://docdb.fnal.gov/CMS/DocDB/0006/000625/001/Tracker%20Workshop%2C%20DCS%2C%20%26%20DB%20Issues.ppt

Sensors:

Charles said he got some inputs from Sergey and Bruno on his previous baseline proposal presented at the Technical Board meeting, DocDB 547. His slides

with baseline changes can be found in the DocDB 628 titled 'FPix Sensor Placement – Baseline Design Changes'.

https://docdb.fnal.gov/CMS/DocDB/0006/000628/001/Sensor%20Plan.ppt

During the discussions we decided to switch the hardwired RTDs for the branched out cooling lines to DCU readout rtd's to free up wires.

We learned that humidity sensors are very sensitive to power level. Charles said the power should be regulated at 1% level. We have to decided how to get the power source. We can either tap it off from a port card or a power board. Otherwise we have to bring in cables from outside.

There was a talk on the lastDAC temperature readout during the CMS week. We were informed that it is working well enough to be useful. We have come up with a plan on how and where to store it. Most likely it will be stored in Oracle database. JC suggested that if it costs only one byte per hit, there might be some possibility to store it in data stream – at least for the initial data taking runs. This is very easy to implement but it will increase data size a bit.

Interlock System:

Christian talked on the Testbeam DCS Interlock system. Please refer to his slides (DocDB 562) titled 'Safety Mechanism for the Testbeam DCS'.

https://docdb.fnal.gov/CMS/DocDB/0005/000562/001/testbeamSafety.ppt

He also suggested that we should have a crash button to shut down everything for an emergency situation.

Others:

We went through the DCS related issues on Joel's documention (DocDB 572) titled as ` Organizing for Running FPix – an Initial Discussion'

https://docdb.fnal.gov/CMS/DocDB/0005/000572/003/organizing_for_running_V1.ppt

Umesh summed up the discussions at the DCS meeting on Joel's documentation in his e-mail to Joel below.

1. Naming convention: Sometime back I had suggested a change to what you already had in the manner the various components were named. Christian, in particular, was strongly in favour of retaining the older style where the F and B indicators were displayed at the end.

current: CMS_PIXEL_F+_HV_D1_Q2
preferred: CMS_PIXEL_HV_D1_Q2_F+

2. Everyone at the meeting was strongly in favour of NOT adopting the "octant" segments

3. DCS-RCMS integration: J.C. was strongly in favour of having the Pixel DCS Supervisor be a child of the DCS Supervisor. The powering up of the DCS system is under the control of the DCS processes, and it does make sense for the DCS system to communicate with the XDAQ framework after the system has been powered up. Those of us present at the meeting favoured this scheme.