Dear all,

Here are minutes from today's meeting.

o DAQ stability study <Genki>

- FVTX also showed inefficient data taking efficiency, which reads to the suspect of the cause to be the DAQ environment rather than the series of INTT readout cables. Try to improve the cooling conditions of the ROC and the ladder.

- **Rachid** will measure the temperature of FPGA on ROC during the operation with the thermal camera using the cooling aluminum plate.

- **Rachid** send the aluminum cooling plate and thermal pads to RIKEN so that the stability tests can be done at RIKEN x 2 (for NWU) and Taiwan.

- Need to buy a chiller for NWU.

o BNL assembly <Rachid>

- HDI batch-1 frequently causes trouble, so stop using them.

- 49 ladders are assembled FPHX by now 10 batch-3 staves are in assembly now.

- 50 HDIs from batch-3 should be in BNL by now and availalbe for the assembly.

- **Rachid** will send the ladder assembly summary to Itaru. **Itar**u will negotiate with Yamashita for to produce 80 more HDI's to compensate entire batch-1 HDIs.

o BCLK distribution board and source test <Takashi>

- In the last readout review, Jin suggested to make a new BCLK board to have the independent for each ROC board as the one of the possible solution of the packet drop off issue annoyed FVTX operation. He also suggested keep the BCLK cable as short as possible.

- **Itaru** will contact with Steve Boose regarding re-design of the BCLK distribution board cc: rachid.

- **Rachid** will ask John Haggerty if there is any unique cabling configuratiton in the BCLK board for 1008 setup using GTM.

- We'll have a separate session to discuss about INTT BCLK board location/design with experts once we have materials of various constraints of the ROC upgrade.

- **Rachid** will consult with Steve if it is feasible to replace BCLK port on the ROC board with the optical driver on the daughter board.

- **Takashi** will announce the final DAC setting values for the ladder QA soon. This value should be shared with the ladder.

- Source test should be done without the trigger scintillators to gain more statistics. Collimater radius can be customized in each institute and don't require universal one because it won't affect on the dead/alive information of the strips.

o Production status <Itaru>

- Hold off batch-4 stave production until middle of September to have reasonable estimate in the yield rate of the assembly in Taiwan.

- Confirmed with FNAL engineers who designed FPHX chips that it is still within the safe range to operate the FPHX at <2.7V.

o High Frequency Signal Transmission Performance of the micro-Coax cable <Itaru>

- Compared the performance with 20cm conversion cable and macro-coax. Although it is not necessary exact comparison with the same condition, didn't seem to have significantly degraded performance in the micro-Coax cable. More strict comparison will be made once the prototype is made by performing the exact test.

- Got 3 bandles of micro-Coax cables from J-Park group for free. Try to make the first prototype using them once the both ends connectors are designed and fabricated. We will perform the actual measurements right away and make a judgement whether if we want to go for the micro-Coax or resume FPC solution.

Regarrds,

-itaru

On 2021/08/17 16:27, Itaru Nakagawa wrote:

> Dear all,
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> We'll have weekly INTT meeting on
>
> **Aug 17th Tuesday 9PM evening in BNL = Aug. 18th Wednesday 10AM in Japan = Wednesday 9AM in Taiwan**
>
> Please be ware, the new meeting day/time starts from this meeting.
>
> *indico
>
> https://indico.bnl.gov/event/12762/
>
> *Zoom
>
> https://zoom.us/j/92149923535

> Best regards,
>
> -itaru