

Subject: Re: [Sphenix-intt-l] Weekly INTT meeting <Minutes>
From: Itaru Nakagawa <itaru@riken.jp>
Date: 2022/01/21 14:15
To: sphenix-intt-l@lists.bnl.gov

Hi all,

Here is the minutes from today's meeting. Regarding the 50V operation, I quickly estimate the effect to the efficiency measurement using Cheng-Wei's DAC scan result. As you also impressed from his plot, we may expect 99.999% of the MIP peak at DAC0 threshold=15.

https://indico.bnl.gov/event/14384/contributions/59277/attachments/39393/65226/INTT_2022_01_21.pdf

You double check this estimate is appreciated.

o Nitrogen Vessel <Rachid>

- Itaru ask ASUKA to send us left over 24 sleeves from the production

o Beam Test Analysis <Cheng-Wei>

- **Cheng-wei** should confirm that there is no dead region between top and bottom cells in Hamamatsu's catalogue.

https://wiki.bnl.gov/sPHENIX/images/d/d1/SiliconCatalogue_S14629-01_320umt.pdf

It is expected to be no inefficiency in this boundary region, but **Cheng-Wei** should continue evaluating the efficiency in this region to make sure if it is true.

- **Cheng-Wei** should cross check with Genki regarding the cusp/valley around strip#127 to be consistent in treatment of clone events or so and make sure the transition is smooth not only in the beam test data but also for the source test data as well.

- The DAC scan result indicated about 1/2 of the MIP location in beam test 2021 compared to 2019. The silicons were operated at 50V in the last beam test and not 100V. The CV curves for the exact ladder used are to be investigated.

- A quick calculation based on Cheng-Wei's DAC scan result indicates 99.999% MIP should be still covered even at 50V operation at DAC0=15. Please confirm.

- Any evidence of hot channel origin has been observed for mysterious satellite peak in the slope I2-I0 distribution. Yasuyuki suggested to see if it has something to do with the chip boundary between the top/bottom cells.

- **Cheng-Wei** will report about the Taiwan assembly status in a next couple of week's meeting.

o Ladder Classification <Milan>

- **Rachid** Invites Jin to the INTT meeting next week to have the opportunity to understand his concern in terms of noise measurement of INTT.
- Milan will revisit Class-1 and Class-2 ladders based on Genki's new measurements.

o Production Status <Itaru>

- We will see the production cost for the production-III bus extender depending on how the inspection works of the signal layer patterning in production-II next week. Itaru will request the quote for production-III then. See if we can afford to fabricate 80 additional bus extenders as production-III. This way we will ends up with 28 spare cables.
- Testing micro coax conversion cable will soon be done in RIKEN. Then the cable is to be handed to TIRI for the electric property measurements together with 1.1m bus extender.

Regards,

-itaru

On 2022/01/20 17:32, Itaru Nakagawa wrote:

Dear all,

We'll have the weekly meeting in following time.

Jan. 20th Thursday 8PM in BNL = Jan. 21st Friday 10AM in Japan = Friday 9AM in Taiwan

*indico

<https://indico.bnl.gov/event/14384/>

*Zoom

<https://zoom.us/j/92149923535>

Best regards,

-itaru

Sphenix-intt-l mailing list

Sphenix-intt-l@lists.bnl.gov

<https://lists.bnl.gov/mailman/listinfo/sphenix-intt-l>