

Hi,

There was some typo and missing to do item in my last minutes. Thank you for Genki for point it out. Here is the updated one.

– GEANT model update <Genki>

o Estimated effective thickness of the silver epoxy based on the volume of the glue mask provided from Rachid in the last meeting. The resulting effective thickness is 14um which is 28% of full thickness 50um. As a consequence, the contribution of the silver epoxy is now 0.04% instead of 0.14%. The total material budget was 1.12% before his update, and now 1.14%, very tiny increase. Although the carbon fiber stave thickness and silver epoxy glue are increased, these additional thickness were pretty much compensated by effective Cu thickness of HDI.

o **Although the effective thickness based on the BNL mask is implemented to GEANT INTT model, NCU crews should also measure the amount of glue actually used in Taiwan assembly.** The contribution of the silver epoxy in the material budget is not negligible if the effective thickness is near 50um, we should know realistic amount for the Taiwan ladders as well.

o GEANT model update is now complete and it is ready to report to the tracking group. Once it is approved by them, then Genki will commit the change as an official version. **Itaru will arrange the occasion with the tracking group.**

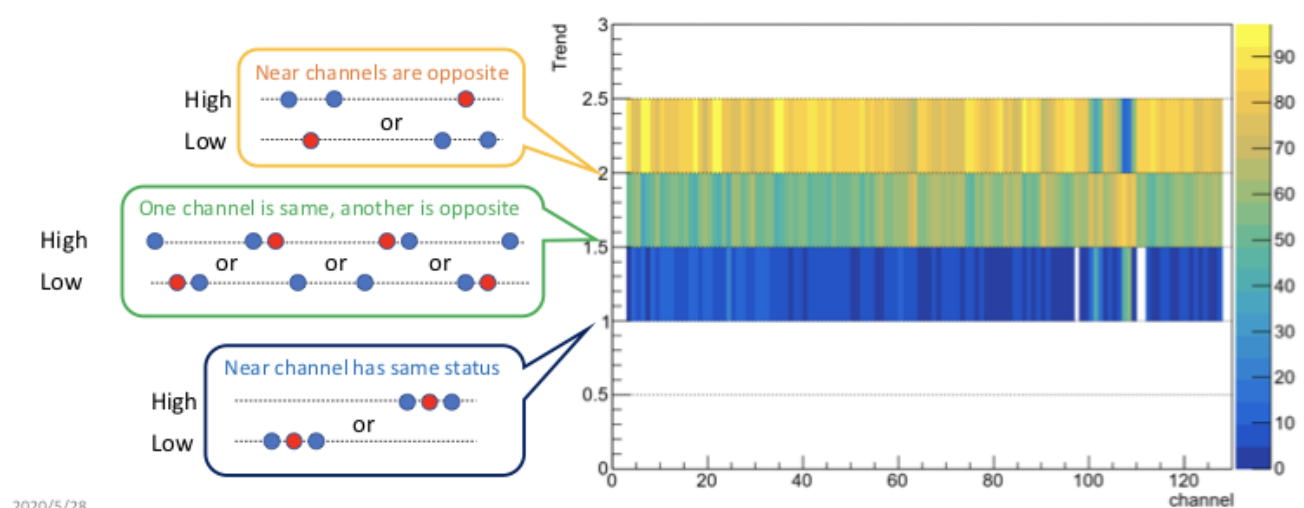
– Assembly in Taiwan <Cheng-Wei>

o Mounting wirebonded and encapsulated silicon module on to the stave is attempted. The pick up tool is tested this time. Will optimize the operation as the next step.

o A scintillator for the cosmic ray test was assembled and was checked the signal with a scope. Will assemble 2nd scintillator as the next step. The material preparation for the cosmic ray test in Taiwan will be ready in 2 weeks or so. **NWU will provide a guidance of the cosmic ray measurement by then.**

– Silicon QA <Kai-Yu>

o Evaluated 2nd method and confirmed multiple silicons behave similarly and distribute as Gaussian. The gap became much smaller in the 2nd method, but the oscillation still exists. To confirm it comes from the length difference between top and bottom pad in the silicon and the probe card, **Kei-Yu will run the pattern classification study again to the 2nd method data.**



– Production Status <Itaru>

o Will ship ~1600 good FPHX chips to NCU in August. (Rachid), paper work to be done by Itaru.

o Staves are to be shipped to BNL on July 31st. (Itaru)

o 100 HDI's from batch 1 are to be delivered next week. Itaru will ship ~30 HDI's to NCU in August.

The next meeting is July 29th.

Regards,

-itaru

On 2020/07/22 16:39, Itaru Nakagawa wrote:

Dear all,

Here is the meeting minutes for today.

- GEANT model update <Genki>

o Estimated effective thickness of the silver epoxy based on the volume of the glue mask provided from Rachid in the last meeting. The resulting effective thickness is 17 μ m which is 1/3 of full thickness 50 μ m. As a consequence, the contribution of the silver epoxy is now 0.04% instead of 0.14%. The total material budget was 1.12% before his update, and now 1.14%, very tiny increase. Although the carbon fiber stave thickness and silver epoxy glue are increased, these additional thickness were pretty much compensated by effective Cu thickness of HDI.

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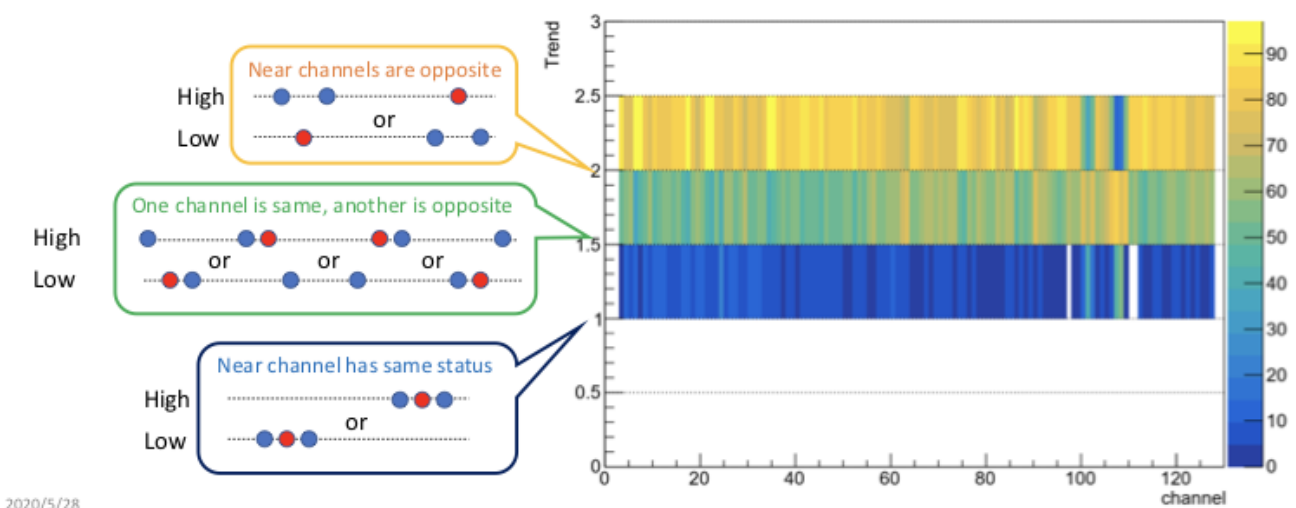
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Regards,

–itaru

On 2020/07/20 15:20, Itaru Nakagawa wrote:

Dear all,

We have INTT group meeting next week. Please make an entry of your topic to be reported in the indico page below (login to BNL indico required).

July (Tue) 21 9PM in EST@BNL = July 22 (Wed) 10AM in JST = Wed 9AM in Taiwan

<https://indico.bnl.gov/event/8978/>

Meeting URL:

<https://bluejeans.com/711990613>

Best regards,

–itaru

Sphenix-intt-l mailing list

Sphenix-intt-l@lists.bnl.gov

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

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