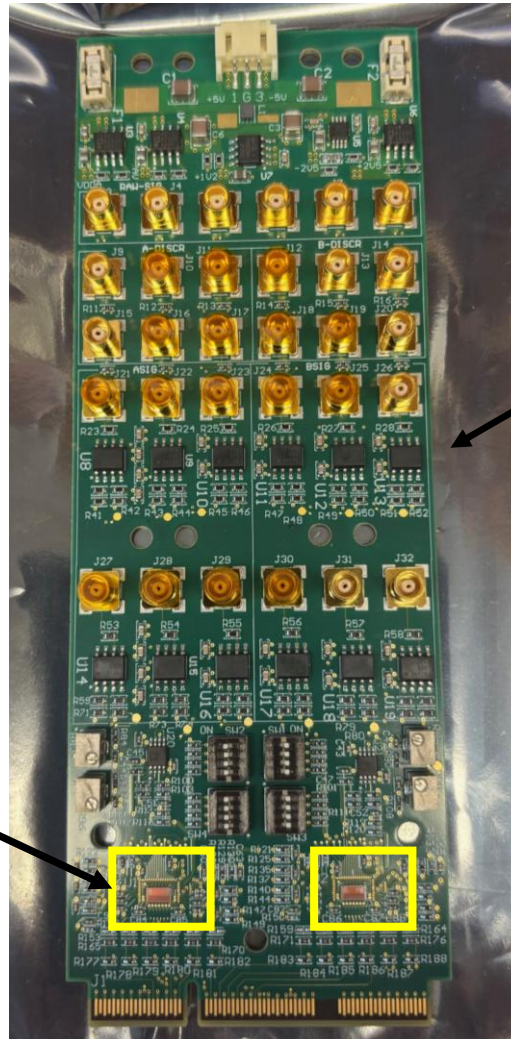
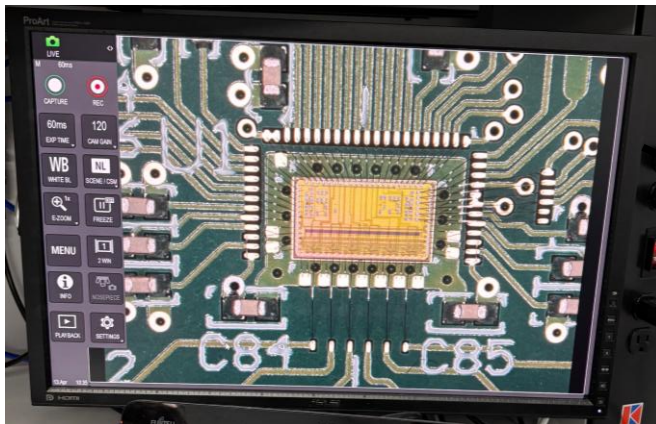
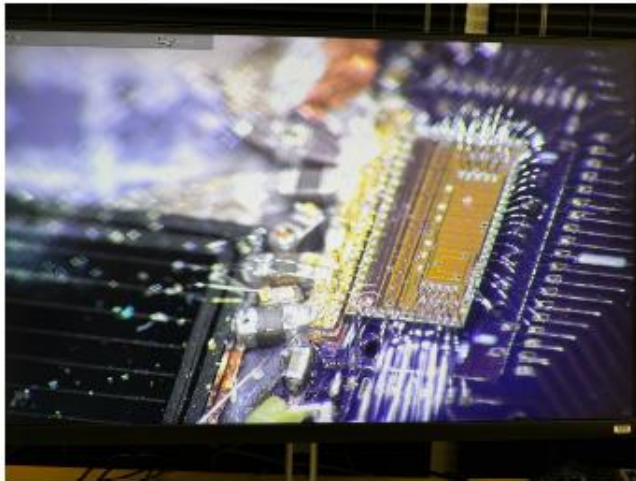


FCFD chip and testcard status

Takao Sakaguchi, BNL

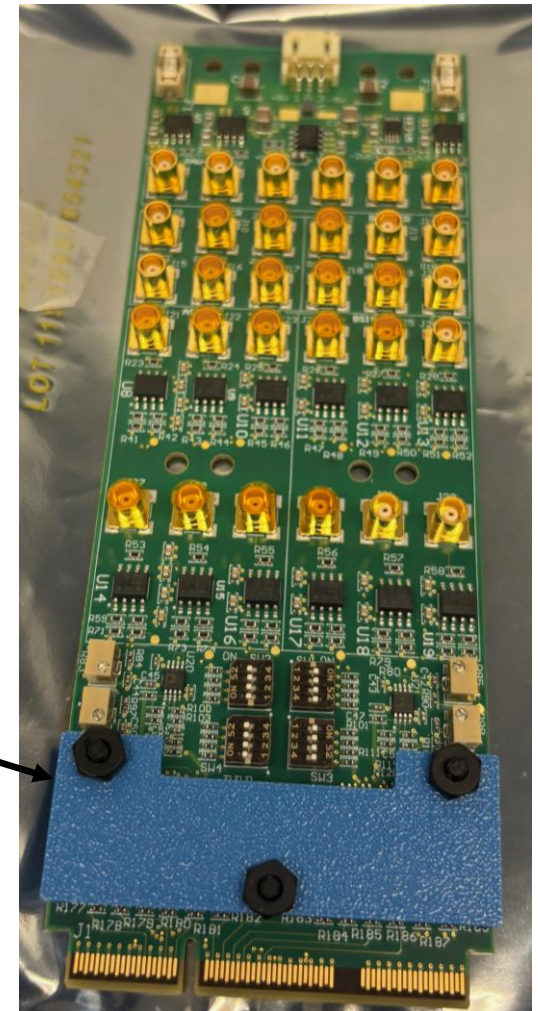
FCFDv1.1 has 6 channels of Analog-amp and CFD output (No ADC/TAC)

Picture of FCFD chips from Artur (FNAL)



Test board with chips wire-bonded at the IO at BNL. Board produced by Raymond

Thanks to Alexander and Jihee for producing the cover!



Testing status and next steps

- Testing status
 - Initial smoke test (power-on and check currents/voltage) passed.
 - Make a simple charge injection circuit and connected to the connector.
 - Generated pulse (rise time $\sim 10\text{nsec}$) to be fed to the card.
- As of last night
 - No analog output (amplitudes) has been seen.
 - When I adjusted charge threshold for arming comparator, I saw many pulses from discriminator outputs.
 - It means that the FCFD chips are powered on, but the signal is not fed properly. Many discriminator pulses maybe due to intrinsic noise.
- Next steps
 - Raymond gave me suggestion to do a quick modification on the board. I will try this and see if the pulse comes out.
 - If not, I might send the card to Raymond so that he can play with the card. Meanwhile, I will ask IO to produced one more card for additional test here.
 - If it worked, I would give go to IO for the rest five cards.
 - Hope the test is complete by the end of next week.

