

Plan for the EMCAL trigger board check

H.Torii, Kyoto Univ.

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ERT Level1 Meeting

What did we earned from Test Bench

- Test bench setup
 - At the first moment, we found 4 noisy tiles.
 - After replacing some ACIS cards and adjusting the parameters for AMU/ADC chips, the noisy tiles have gone and the offline readout became fine.
 - We tried “enable/disable switch” and “CalDAC”
 - At the threshold of 30 or 31 for 2x2,4x4A,B,C
- Enable/disable switch
 - Set all 144 towers as disable,
 - The trigger output appeared →Noise !!!
 - Set 4towers(1tile) as disable
 - One tile shows random trigger output
 - Another tile shows no trigger output, but shows the output in very low efficiency when we put test pulses. Cross talk???
 - Set the threshold from 30 to 40
 - The trigger output have gone.

Cont.

- CALDAC (pulsar inside the ASIC)
 - Basic setup
 - Modified the serial data for the MONDO chip
 - Set the CALDAC to the maximum(63) setting for all 36 MONDO chips.
 - Modified the GTM code
 - To send the correct mode bit.
 - Set 144 channels as CALDAC enable.
 - Shows the trigger output
 - Set 4 channels(1tile) as CALDAC enable.
 - Shows the trigger output
- **Work very fine!!!!** Will use for the noisy ASIC search

Plan for the noisy ASIC search

- Need timing coincidence
 - GTM for EMC
 - GTM for ERT
- Will use PPG
- EMCal Trigger board works like an analog board, not digital.
 - It's enough to send the mode bit from GTM in the appropriate timing.
- Plan to start from next week

