Hybrid 8j312 Traveler

July 14, 2000

1 Connectivity

Repairs on shorts:
Fixes for opens:

2 Chips

The following chips were assembled on this hybrid (in the order that the chips get read out):
Hybrid 8J312 has die: 247-059 247-061 232-111 247-068 247-039 247-040 247-043 247-044

3 Data Analysis Summary

The following summarizes the findings of the Burn-in data analysis program. The first chip in the readout name is numbered 0.

```
% Hybrid 8j312 classification info. Created 11:11:58 06/05/00

Hybrid 8j312 quality: fair
Chip classification: good good good fair good good fair good
Bad channels (chip-channel): 3-65 6-46
Bad cells: none
Random bad capacitors (chip-cell-channel): 6-10-45 6-10-47 6-11-47
   6-12-47 6-12-52 6-12-54 6-13-47 6-13-55 6-13-56 6-14-47 6-15-47
   6-17-47 6-18-45 6-18-47 6-19-47 6-2-45 6-26-45 6-26-47 6-28-47
   6-29-47 6-9-47
Channels at pedestal needed for DCMS: 32.1 31.7 32.7 31.7 32.6 31.7 30.6 32.6
```

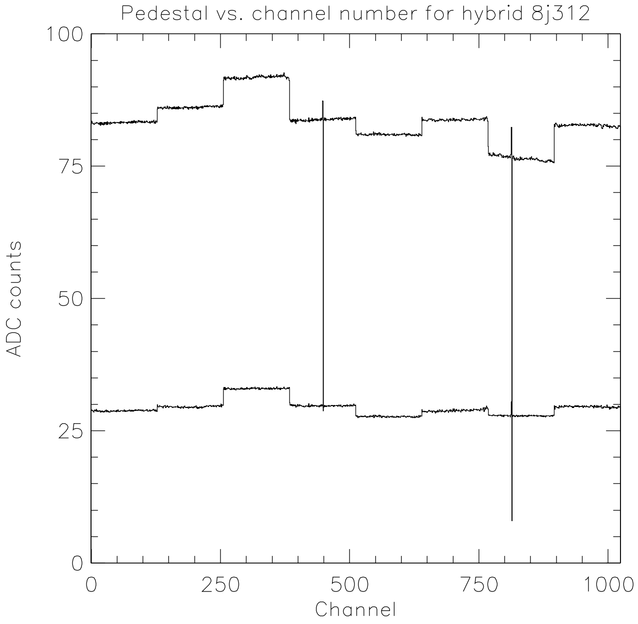
4 Comments

HV tested.

5 Pedestal

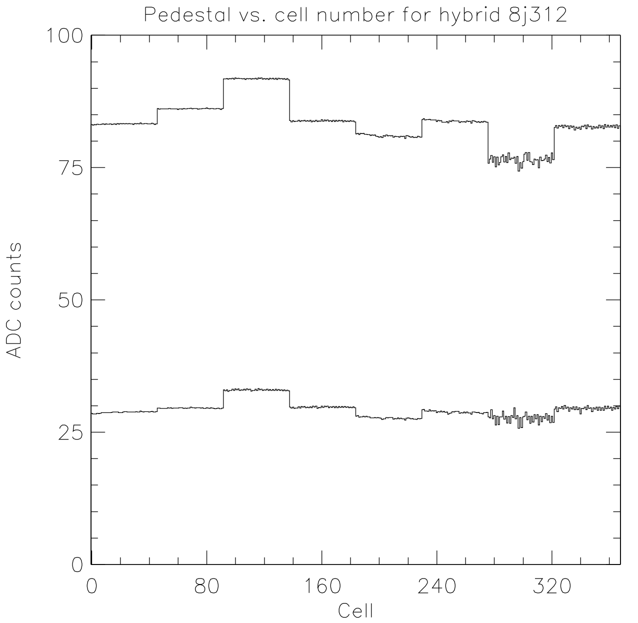
The following plot shows the pedestals vs. channel number with and without charge injection:

Pedestal for each Channel



The following plot shows the average pedestal vs. pipeline cell ID with and without charge injection. The x-axis is cell ID offset by 46 for each chip. Thus cell ID 5 for chip 1 is at x=5, chip 2 at x=51, chip 3 at x=97, etc.

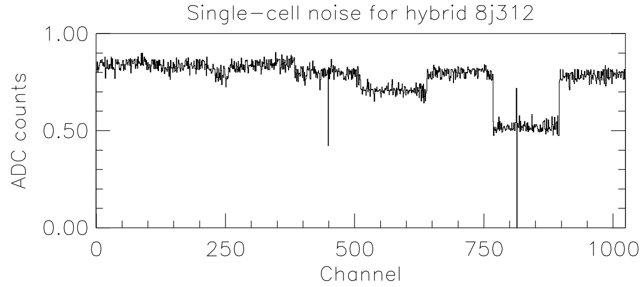
Pedestal vs. Pipeline Cell ID

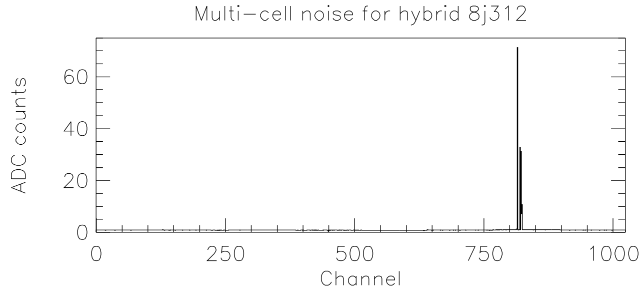


6 Noise

The following plots show the single-cell and multi-cell RMS noise:

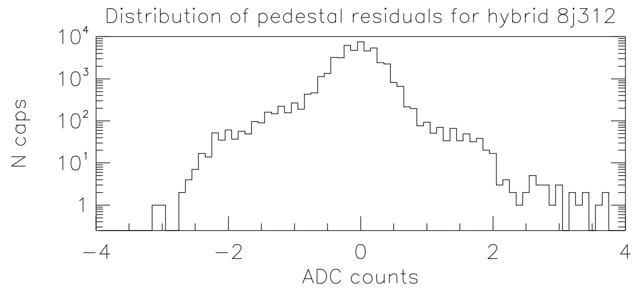
RMS Noise

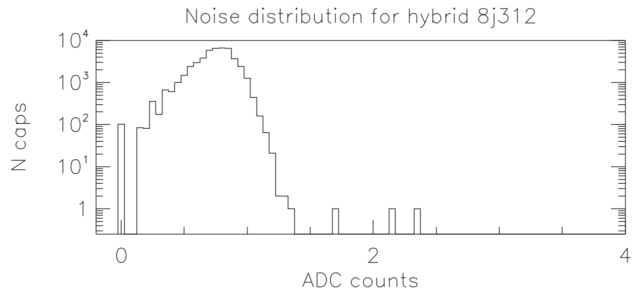




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

Distribution of Pedestals and Noise





7 Currents

The following plots show the supply currents per chip as a function of measurment number. Currents are measured approximately every 10 minutes:

Supply Currents During Burn-in