Hybrid 8j236 Traveler

February 15, 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 8J236 has die: 000-000 000-000 000-000 000-000 000-000 000-000 000-000 000-000

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 8j236 classification info. Created 10:35:10 02/14/00

Hybrid 8j236 quality: fair
Chip classification: fair good good good good fair good fair
Bad channels (chip-channel): 5-16 7-32
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-11-66 0-11-67 0-13-66
   0-13-67 0-2-66 0-2-67 0-22-65 0-22-66 0-22-67 0-23-66 0-3-66
   0-35-66 0-6-66 0-6-67 0-7-66 0-9-66 0-9-67 5-44-70
Channels at pedestal needed for DCMS: 29.6 31.6 31.7 30.7 32.5 32.7 32.7 30.8
```

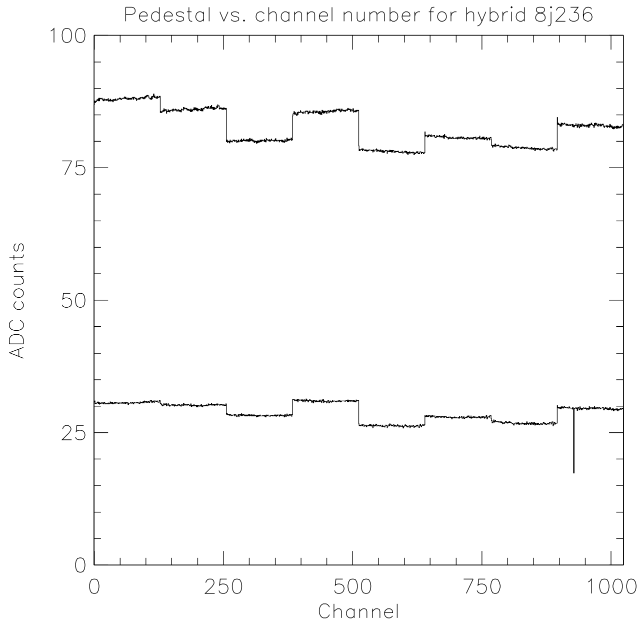
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

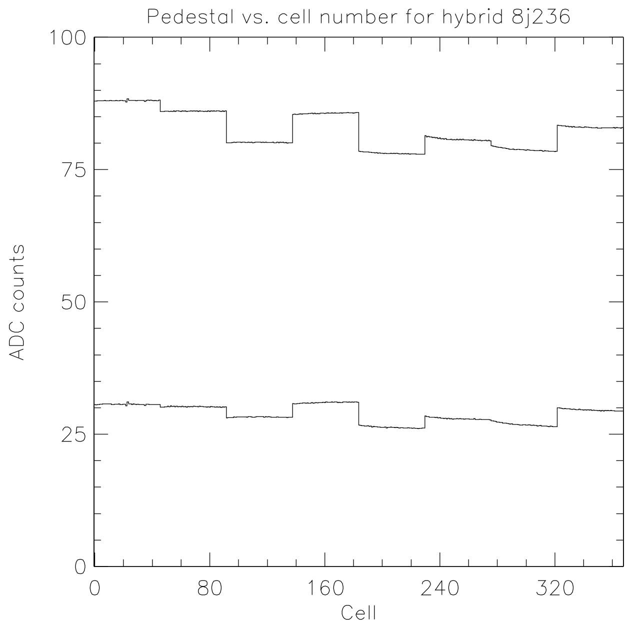
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

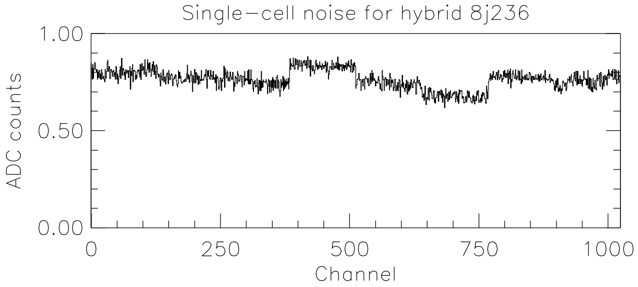
Pedestal vs. Pipeline Cell ID

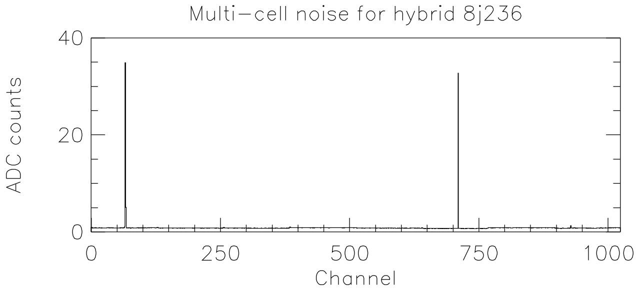


6 Noise

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

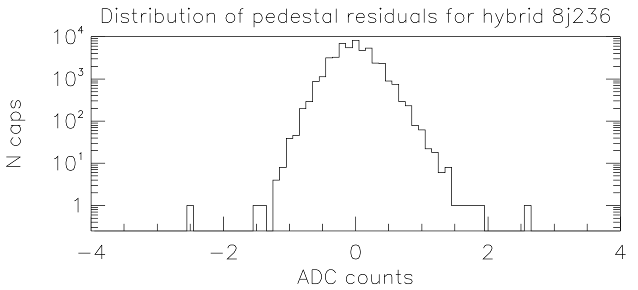
RMS Noise

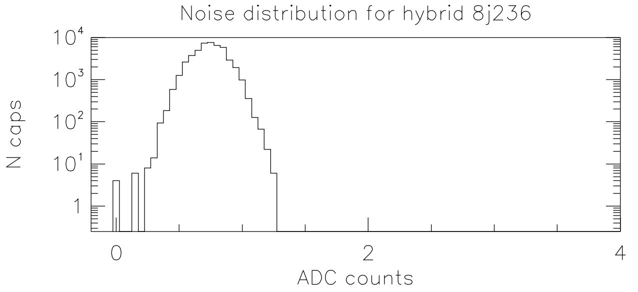




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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