Hybrid 8j308 Traveler

April 28, 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 8J308 has die: 156-049 156-050 156-051 156-054 158-126 156-002 156-003 156-004

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 8j308 classification info. Created 10:27:31 04/26/00

Hybrid 8j308 quality: fair
Chip classification: good good fair good good good good good
Bad channels (chip-channel): 2-109 2-112
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-0-110 2-0-111 2-13-110
   2-13-111 2-14-110 2-2-110 2-2-111 2-26-110 2-39-110 2-39-111 2-4-110
   2-4-111 2-40-110 2-43-110 2-43-111 2-44-110
Channels at pedestal needed for DCMS: 30.6 31.6 29.7 31.6 33.7 28.6 28.6 28.7
```

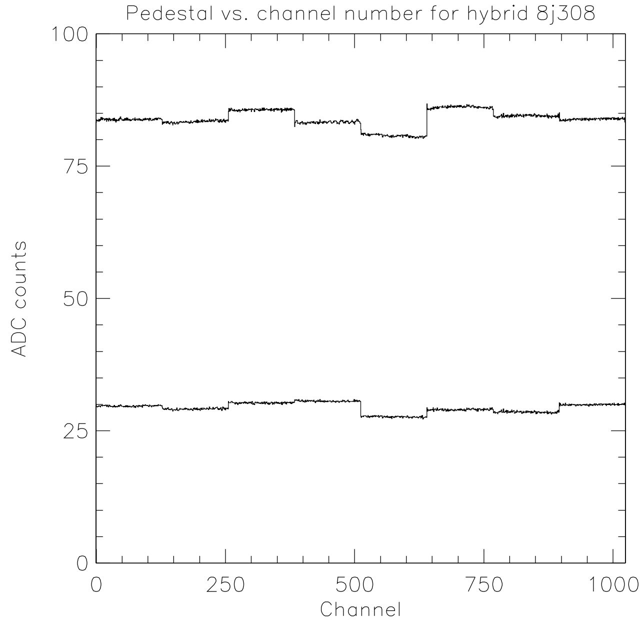
4 Comments

HV tested.

5 Pedestal

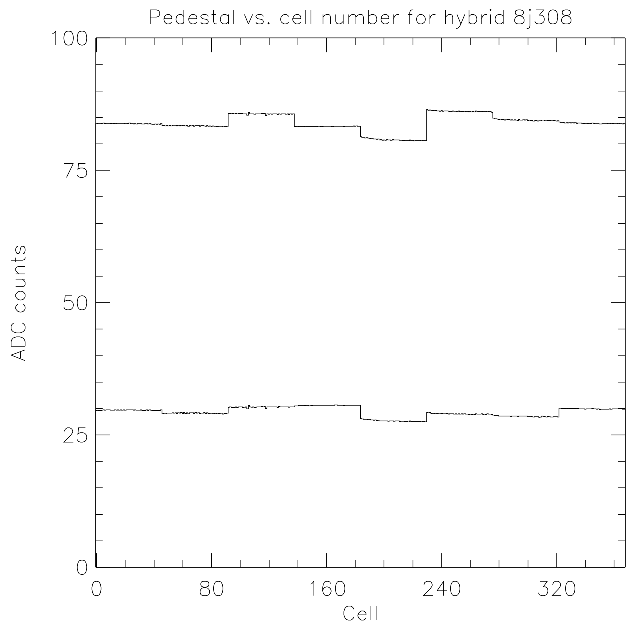
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

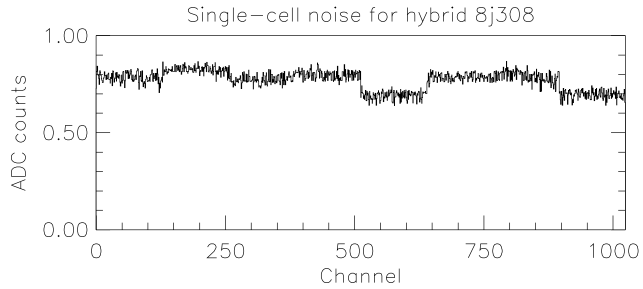
Pedestal vs. Pipeline Cell ID

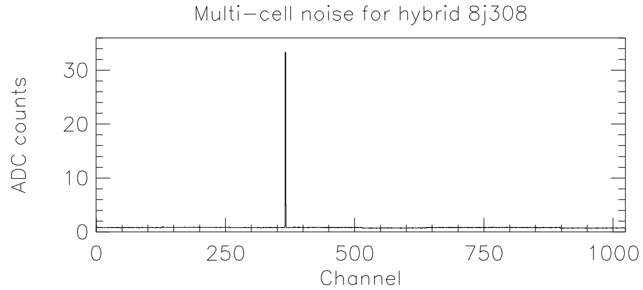


6 Noise

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

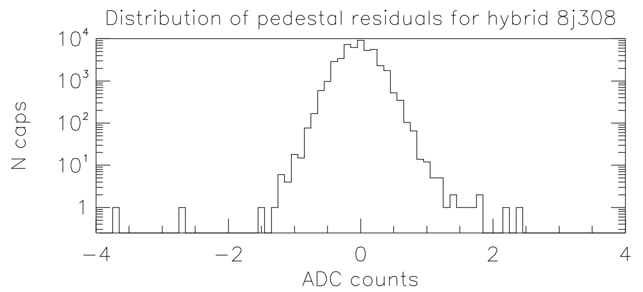
RMS Noise

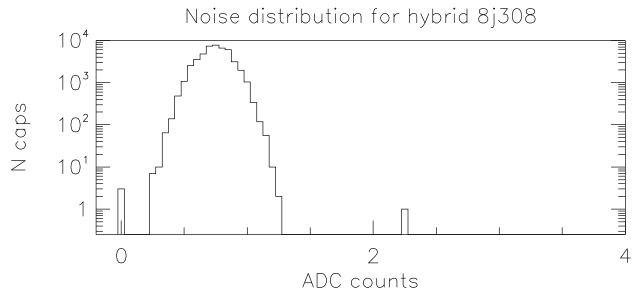




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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