Hybrid 8j169 Traveler

January 27, 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 8J169 has die: 204-079 204-080 204-081 204-082 211-063 211-064 211-068 211-080

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 8j169 classification info. Created 16:40:19 01/18/00

Hybrid 8j169 quality: bad
Chip classification: good good good good fair fair bad good
Bad channels (chip-channel): 4-103 5-108 5-114 6-5 6-34 6-59
Bad cells: none
Random bad capacitors (chip-cell-channel): 5-10-61 6-2-59
Channels at pedestal needed for DCMS: 32.6 33.6 32.6 32.7 29.8 30.7 28.9 31.7
```

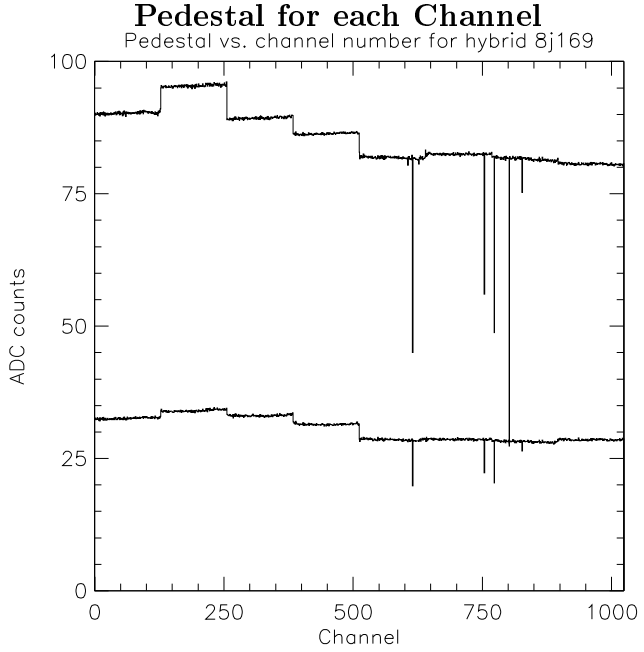
4 Comments

After burn-in was judged OKAY (Igor).

5 Pedestal

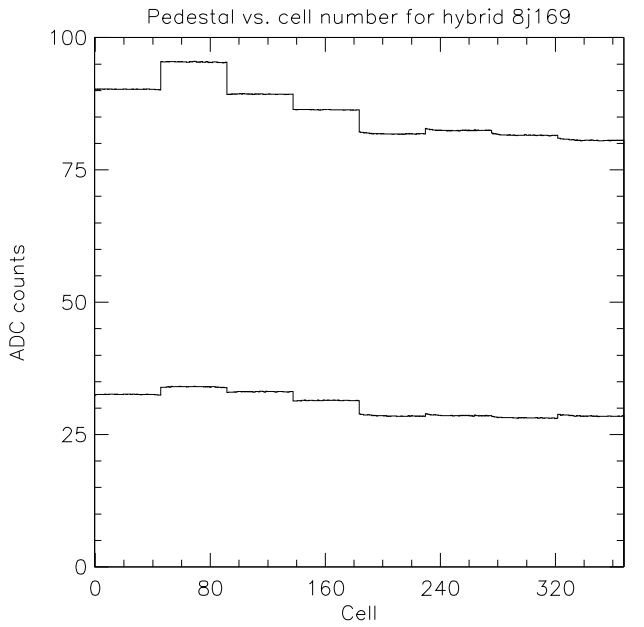
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

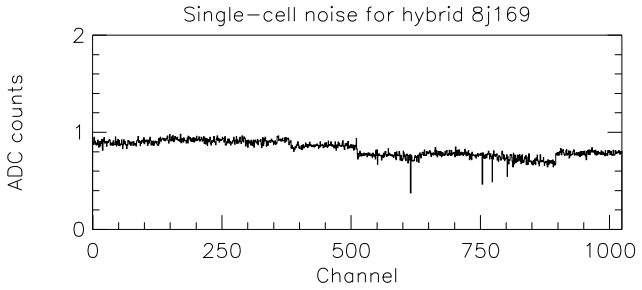
Pedestal vs. Pipeline Cell ID

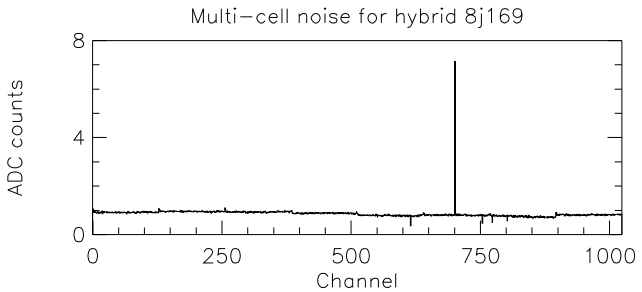


6 Noise

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

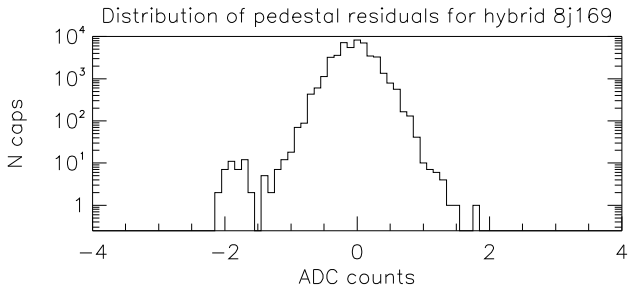
RMS Noise

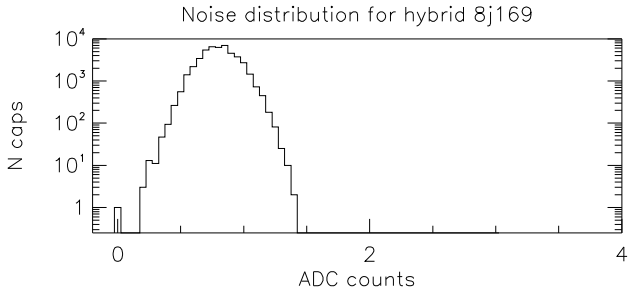




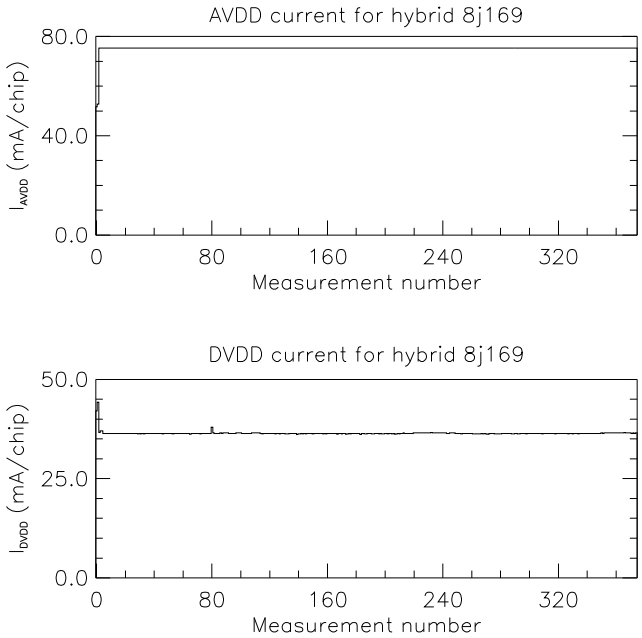
The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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