Hybrid 8j134 Traveler

December 20, 1999

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 8J134 has die: 196-057 196-064 196-065 196-070 197-020 197-022 197-023 197-027

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 8j134 classification info. Created 14:10:23 12/17/99

Hybrid 8j134 quality: fair
Chip classification: fair fair fair fair good good fair good
Bad channels (chip-channel): 1-44 3-83 6-46
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-40-109 2-45-119 6-17-29
   6-32-47 6-35-47 6-36-47 6-37-34 6-37-35 6-39-47 6-41-47 6-43-47
   6-6-45 6-7-45
Channels at pedestal needed for DCMS: 30.7 31.7 31.5 30.6 30.6 31.6 29.7 31.6
```

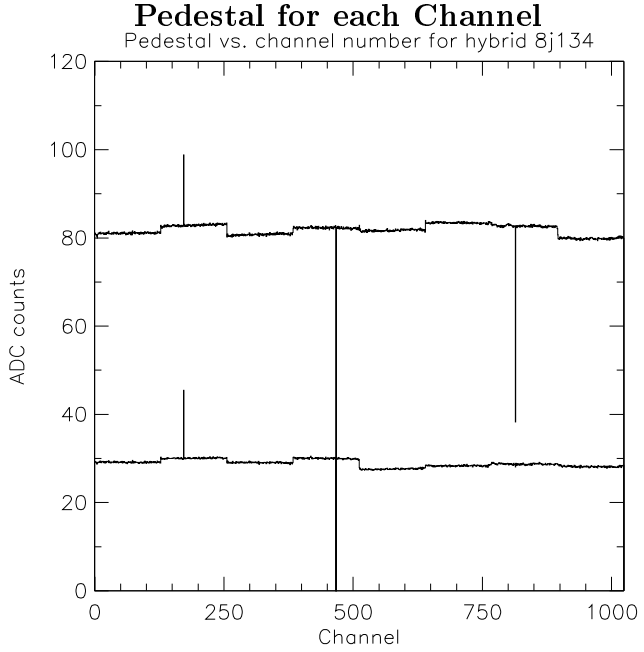
4 Comments

No comments.

5 Pedestal

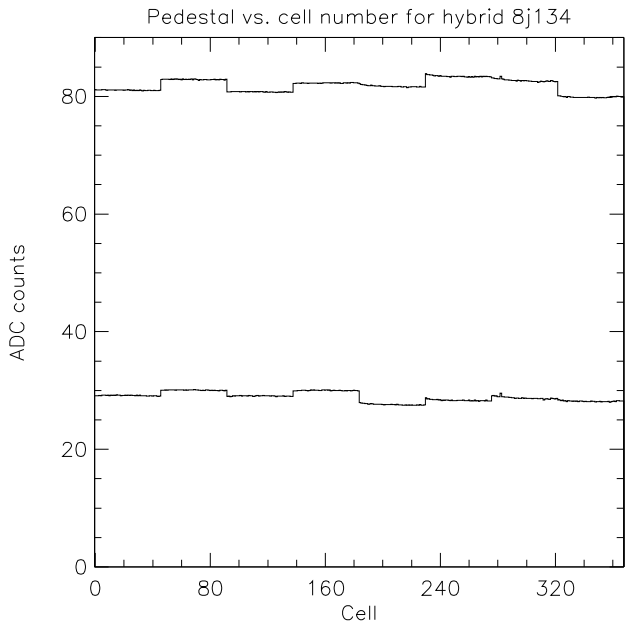
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

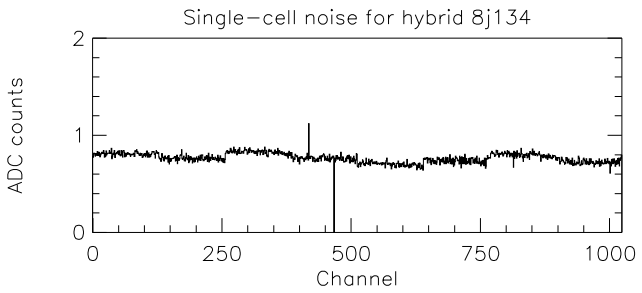
Pedestal vs. Pipeline Cell ID

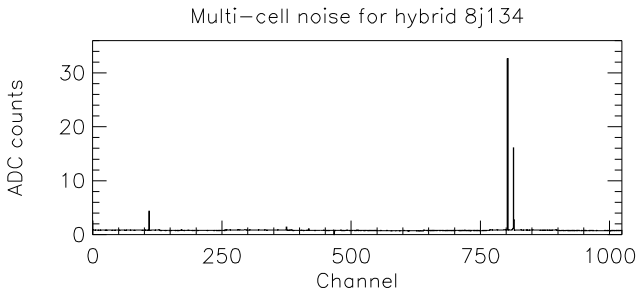


6 Noise

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

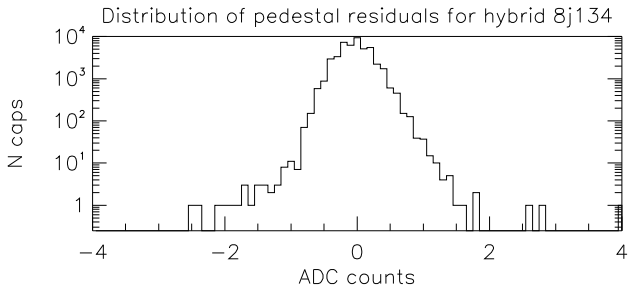
RMS Noise

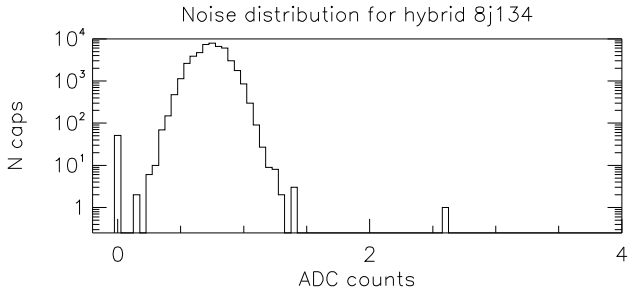




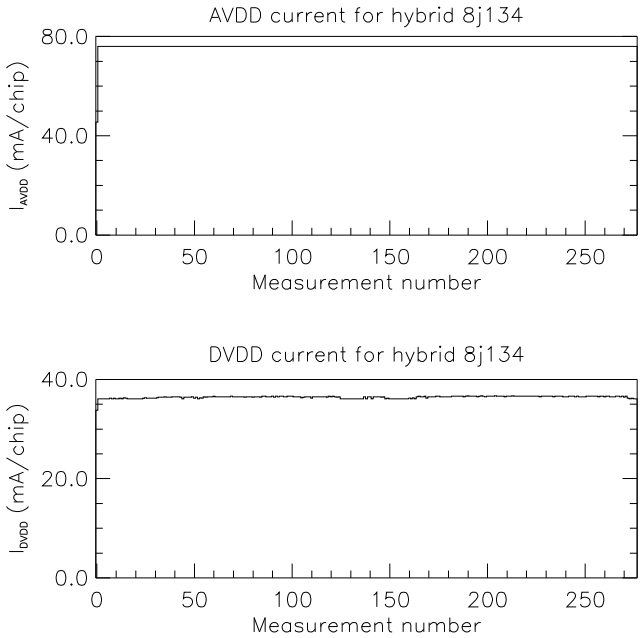
The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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