Hybrid 8j167 Traveler

January 11, 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 8J167 has die: 205-089 205-090 205-092 205-094 200-088 200-089 200-090 200-094

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 8j167 classification info. Created 18:04:22 01/07/00

Hybrid 8j167 quality: fair
Chip classification: good good fair good good fair good good
Bad channels (chip-channel): 2-80 5-72
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-0-79 2-10-113 2-11-79
   2-12-105 2-12-113 2-12-79 2-14-113 2-14-79 2-15-113 2-15-79 2-22-79
   2-24-113 2-26-105 2-29-79 2-30-113 2-32-79 2-36-113 2-38-79 2-4-79
   2-41-79 2-42-113 2-5-113 2-7-79 2-9-79 5-26-71 5-26-73
Channels at pedestal needed for DCMS: 33.7 32.6 32.5 33.6 32.6 31.2 33.6 34.7
```

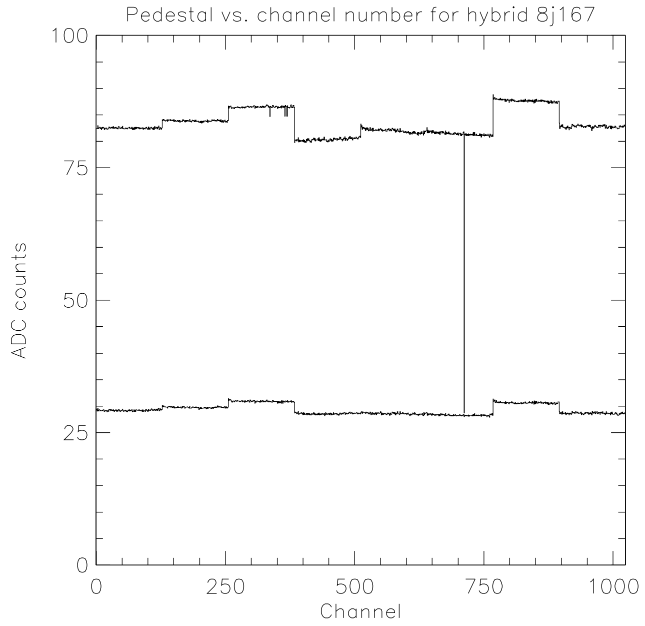
4 Comments

No comments.

5 Pedestal

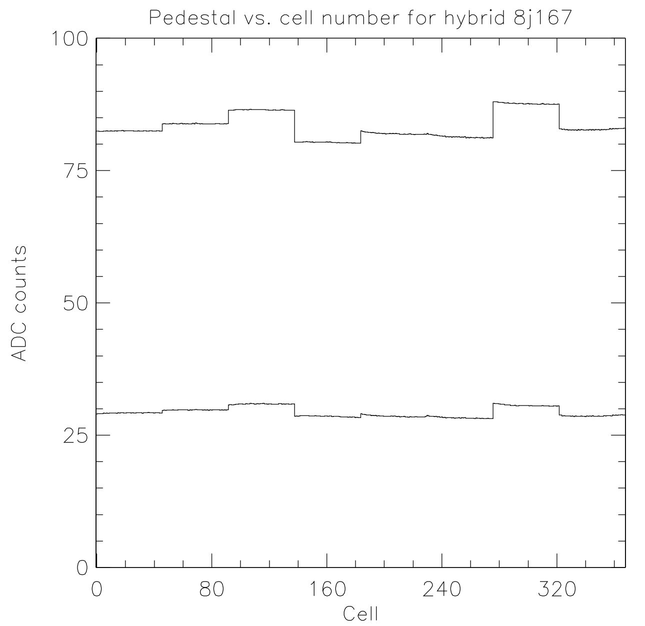
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

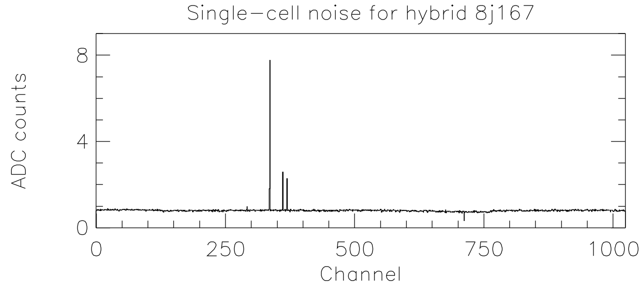
Pedestal vs. Pipeline Cell ID

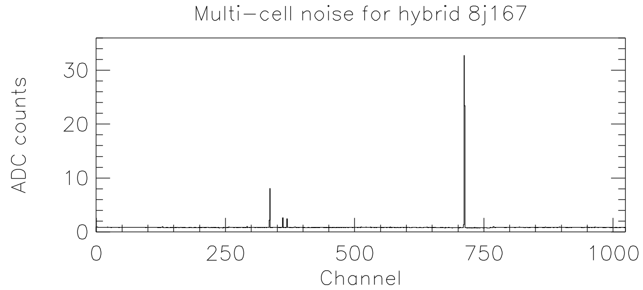


6 Noise

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

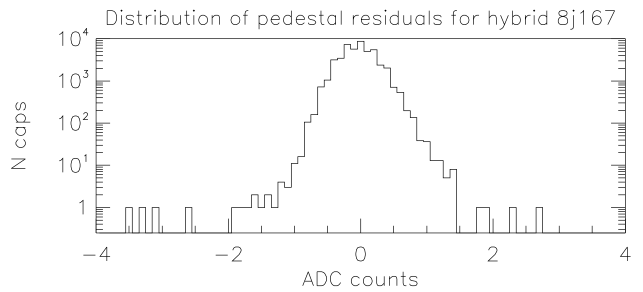
RMS Noise

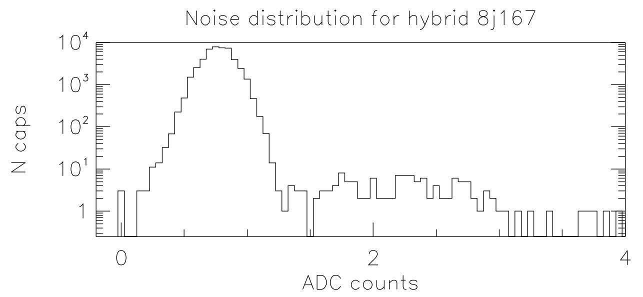




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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