Hybrid 8j149 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 8J149 has die: 200-019 200-021 200-024 200-028 215-015 215-016 215-017 215-018

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 8j149 classification info. Created 14:51:49 01/07/00

Hybrid 8j149 quality: fair
Chip classification: fair fair good fair fair good good fair
Bad channels (chip-channel): 1-29 3-9 3-83 4-120 4-121 7-74
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-11-9 0-13-9 0-24-8
   0-24-9 0-25-8 0-25-9 0-26-8 0-26-9 0-27-9 0-28-9 0-37-9
   0-38-8 0-38-9 0-39-8 0-39-9 0-5-9 0-9-9 3-26-9 3-28-9
   3-32-9 3-33-9 3-39-9 3-40-9 3-42-9 3-43-9 4-17-121 4-21-121
   4-26-121 4-37-120 4-37-121 4-38-121 4-4-121
Channels at pedestal needed for DCMS: 31.3 30.5 28.6 30.6 29.6 29.7 29.6 30.5
```

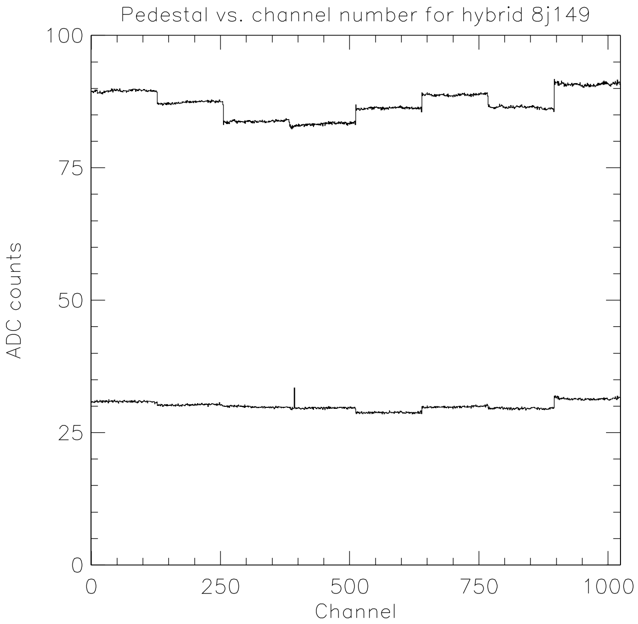
4 Comments

No comments.

5 Pedestal

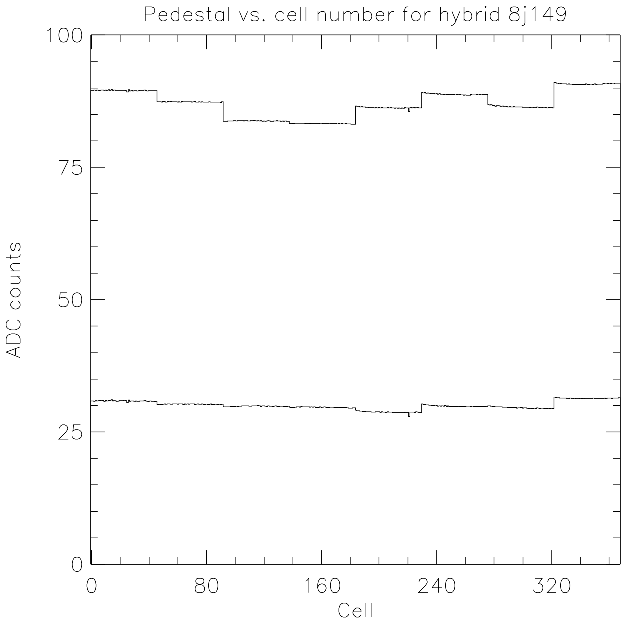
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

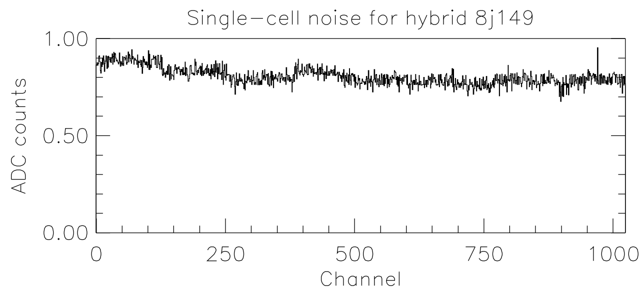
Pedestal vs. Pipeline Cell ID

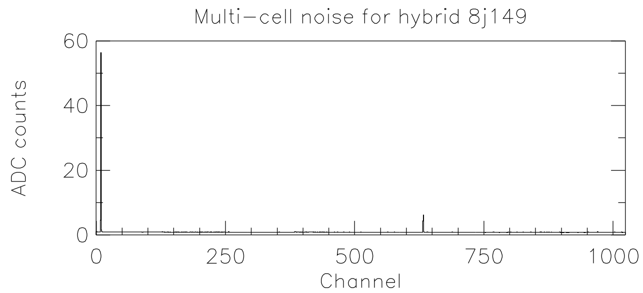


6 Noise

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

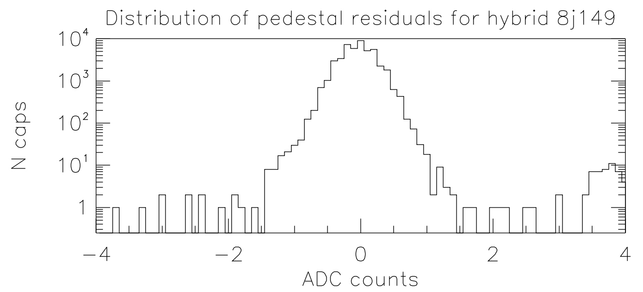
RMS Noise

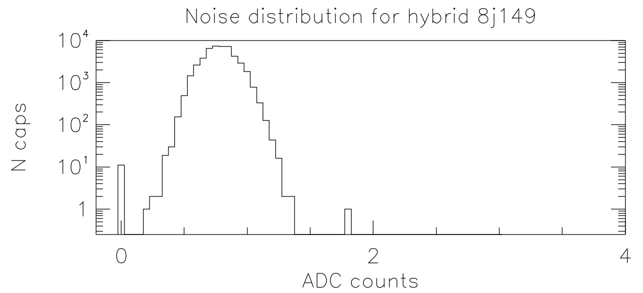




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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