Hybrid 8j109 Traveler

July 14, 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 8J109 has die: 028-044 191-042 191-044 191-047 191-105 191-106 221-007 191-113

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 8j109 classification info. Created 12:16:59 07/10/00

Hybrid 8j109 quality: bad
Chip classification: fair good fair good fair good bad fair
Bad channels (chip-channel): 2-74 4-39 6-67 6-105 6-120
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-12-126 0-12-127 0-13-127
   0-15-126 0-15-127 0-16-127 0-17-126 0-17-127 0-19-126 0-19-127 0-20-127
   0-28-125 0-28-126 0-28-127 0-29-127 0-8-127 2-10-74 2-11-74 2-12-74
   2-13-74 2-14-74 2-15-74 2-16-74 2-17-74 2-18-74 2-19-74 2-20-74
   2-21-74 2-29-74 2-29-75 2-30-74 2-42-74 7-2-44 7-2-45
Channels at pedestal needed for DCMS: 33.6 30.4 31.7 33.6 32.4 33.7 28.7 34.7
```

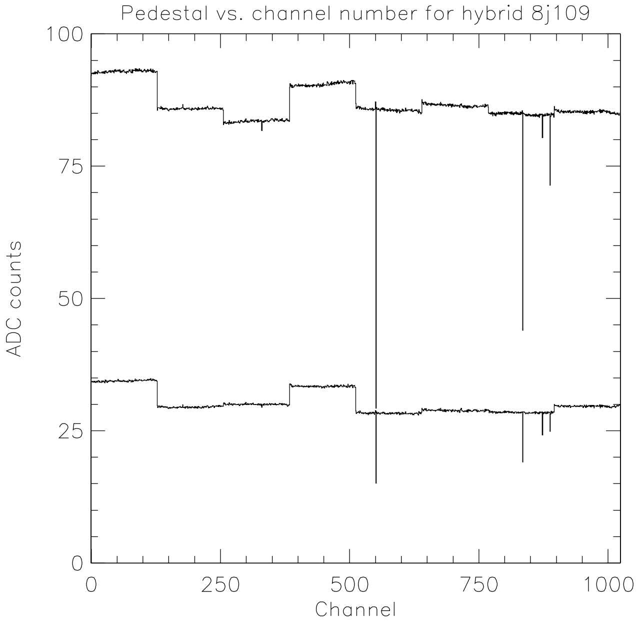
4 Comments

No comments.

5 Pedestal

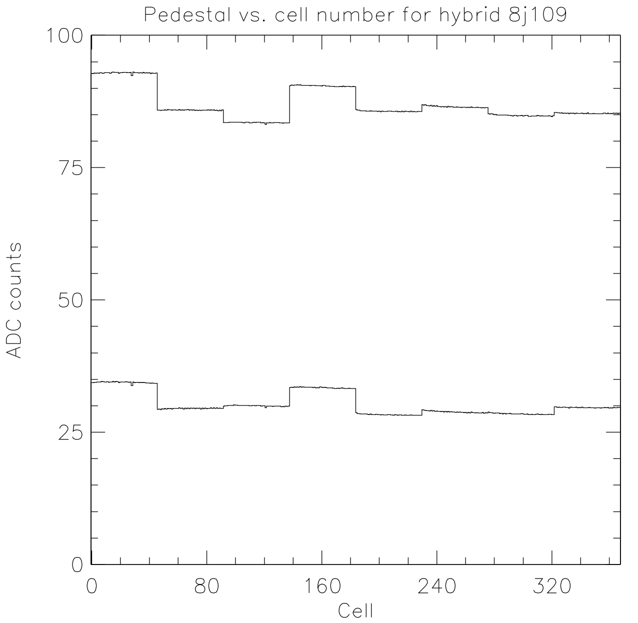
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

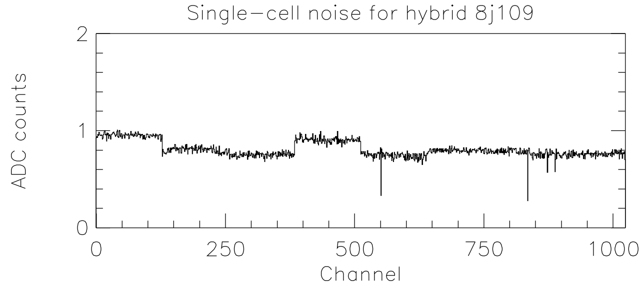
Pedestal vs. Pipeline Cell ID

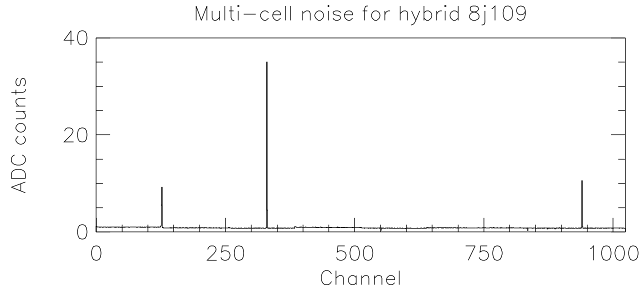


6 Noise

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

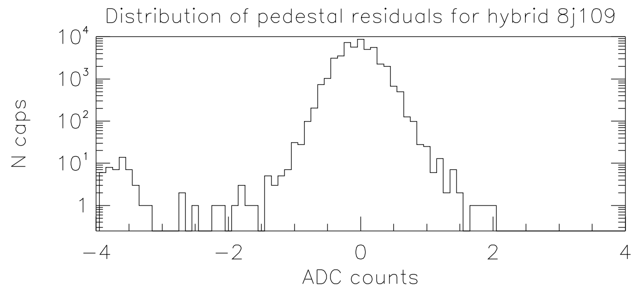
RMS Noise

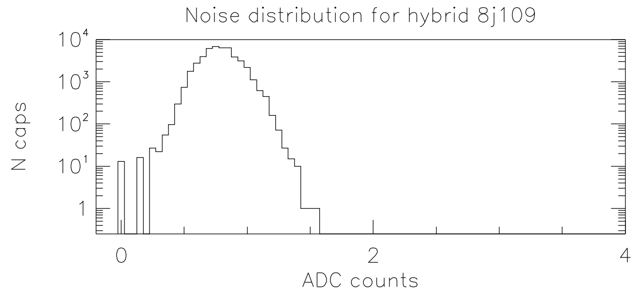




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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