Hybrid 8j209 Traveler

May 31, 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 8J209 has die: 179-066 179-067 179-071 179-072 179-114 179-116 179-117 179-118

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 8j209 classification info. Created 14:56:24 05/29/00

Hybrid 8j209 quality: fair
Chip classification: fair good good good good good fair fair
Bad channels (chip-channel): 7-53
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-0-31 0-15-30 0-15-31
   0-16-31 0-2-30 0-2-31 0-28-31 0-3-31 0-4-30 0-4-31 0-41-30
   0-41-31 0-45-30 0-45-31 0-6-30 0-6-31 6-35-53 6-35-54 7-11-17
   7-11-18 7-13-17 7-13-18 7-2-17 7-22-16 7-22-17 7-22-18 7-22-19
   7-23-17 7-35-17 7-35-18 7-6-17 7-6-18 7-9-17 7-9-18
Channels at pedestal needed for DCMS: 33.6 33.7 33.7 34.5 35.7 34.6 30.7 31.6
```

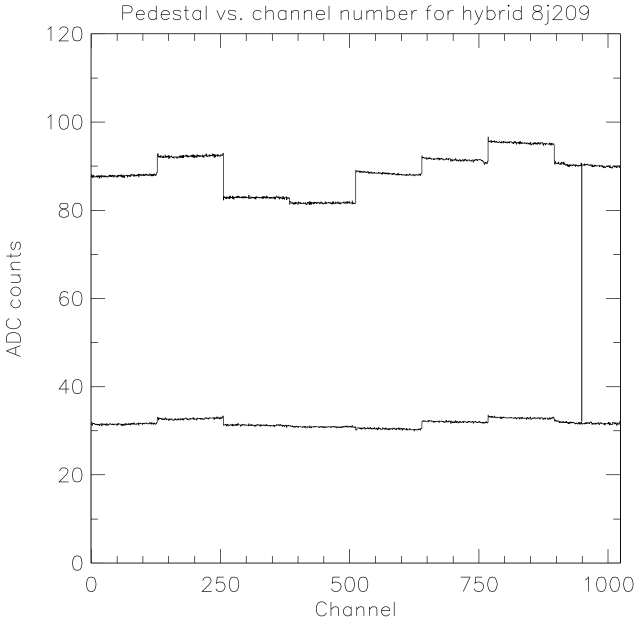
4 Comments

HV tested.

5 Pedestal

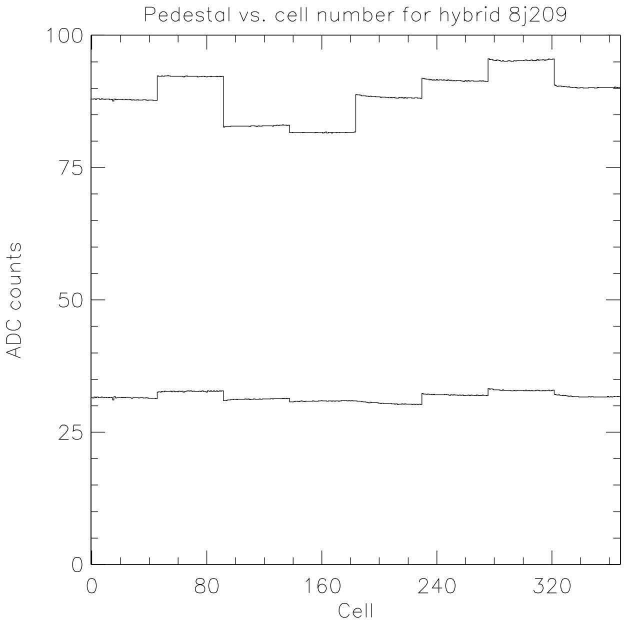
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

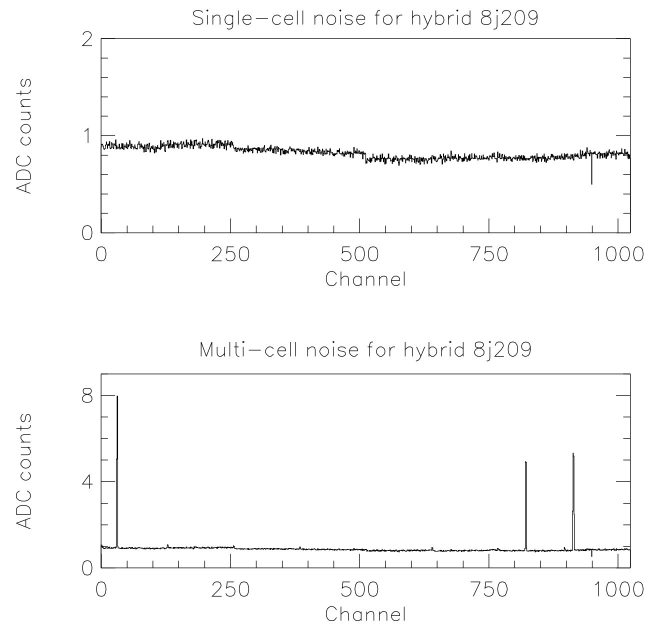
Pedestal vs. Pipeline Cell ID



6 Noise

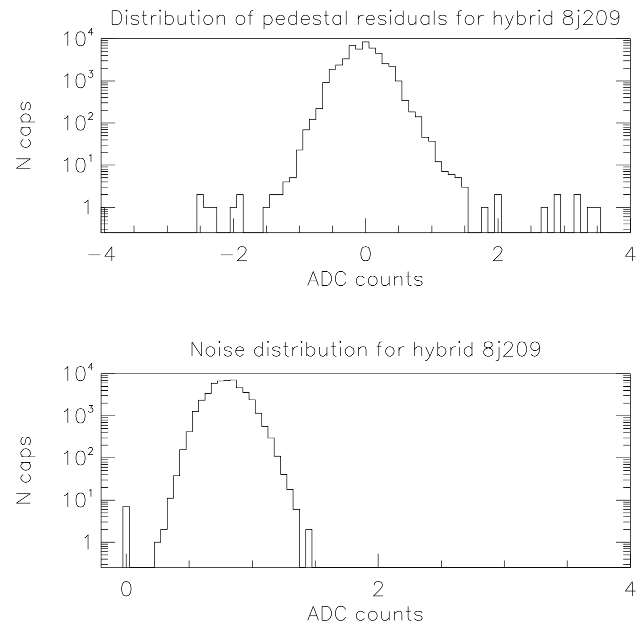
The following plots show the single-cell and multi-cell RMS noise:

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