Hybrid 8j409 Traveler

August 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 8J409 has die: 188-018 188-020 188-021 188-022 074-075 074-105 074-107 074-108

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 8j409 classification info. Created 11:48:33 08/10/00

Hybrid 8j409 quality: fair
Chip classification: fair good good fair good fair good fair
Bad channels (chip-channel): 0-35 0-36 3-62 3-127 5-39 5-52 7-109
Bad cells: none
Random bad capacitors (chip-cell-channel): 5-30-34 5-40-40 5-42-45
   5-43-53 5-45-62 7-22-102 7-22-110 7-39-93 7-5-114
Channels at pedestal needed for DCMS: 30.6 34.6 34.6 31.5 35.6 33.8 36.6 35.7
```

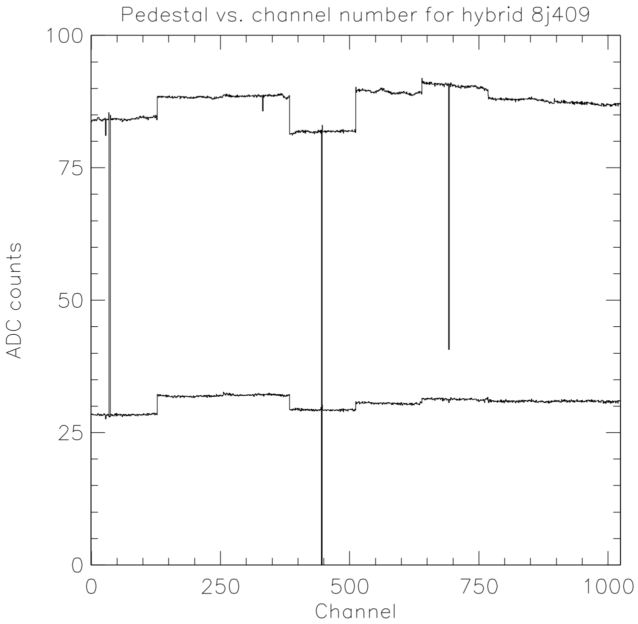
4 Comments

HV tested.

5 Pedestal

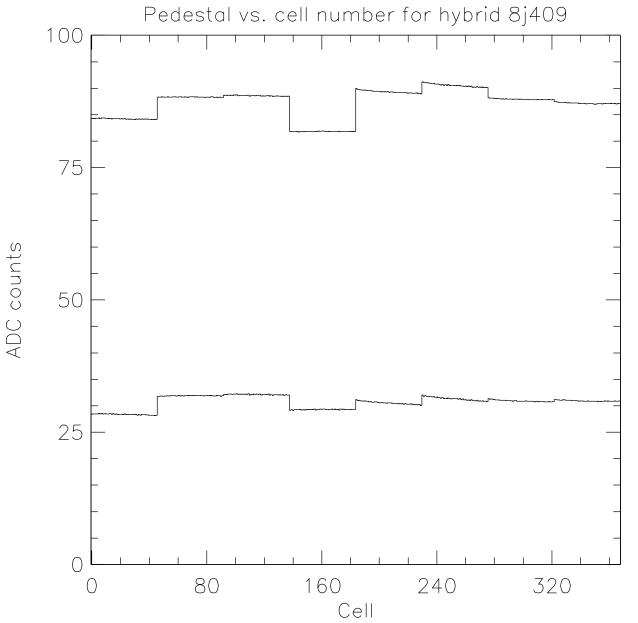
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

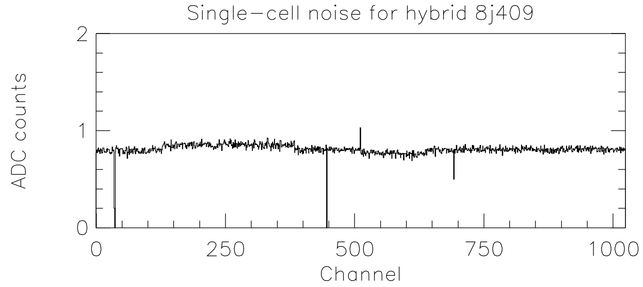
Pedestal vs. Pipeline Cell ID

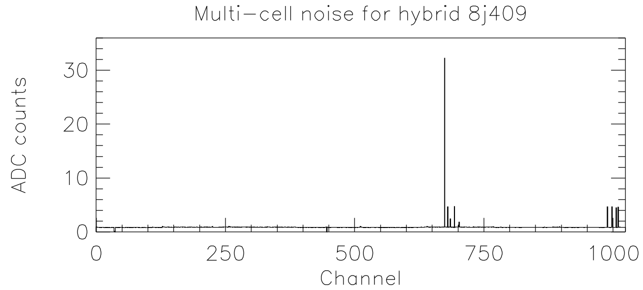


6 Noise

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

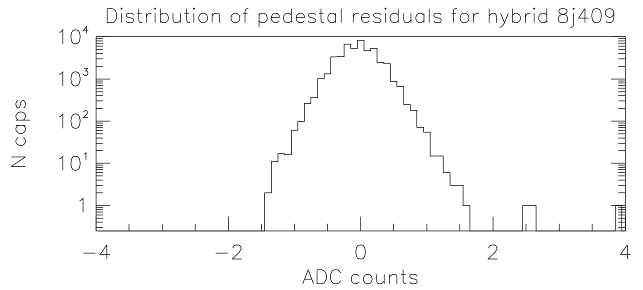
RMS Noise

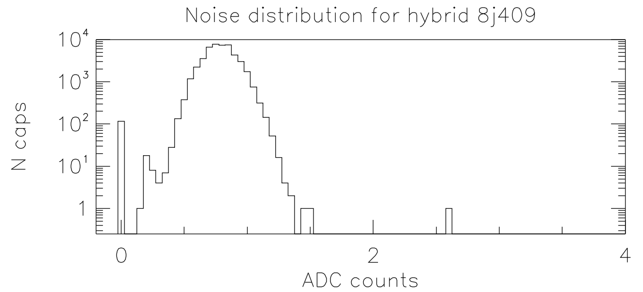




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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