Hybrid 8j339 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 8J339 has die: 165-085 165-092 165-094 165-095 165-001 165-002 165-009 165-011

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 8j339 classification info. Created 12:36:49 07/10/00

Hybrid 8j339 quality: fair
Chip classification: fair good good fair good fair fair good
Bad channels (chip-channel): 0-18 6-33 6-39
Bad cells: none
Random bad capacitors (chip-cell-channel): 3-35-94 3-36-83 3-37-1
   3-41-86 5-41-104 6-19-4 6-35-32 6-36-4 6-41-32 6-44-40 6-45-11
Channels at pedestal needed for DCMS: 32.7 34.6 34.6 35.6 31.6 32.3 32.3 31.6
```

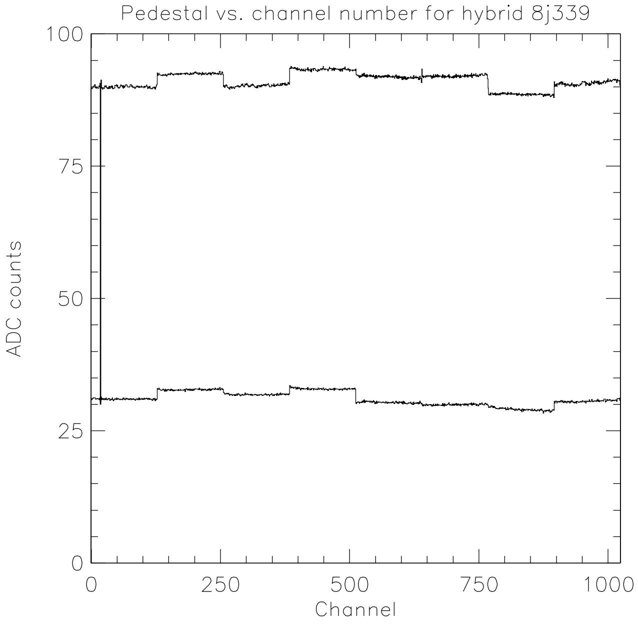
4 Comments

HV tested.

5 Pedestal

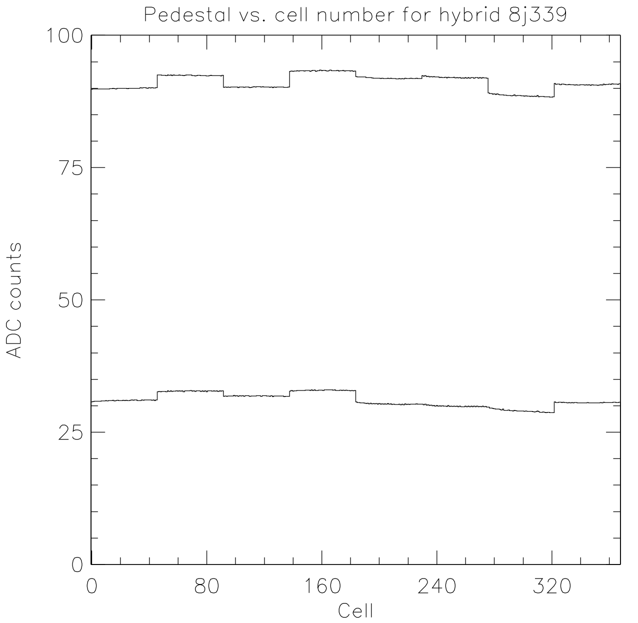
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

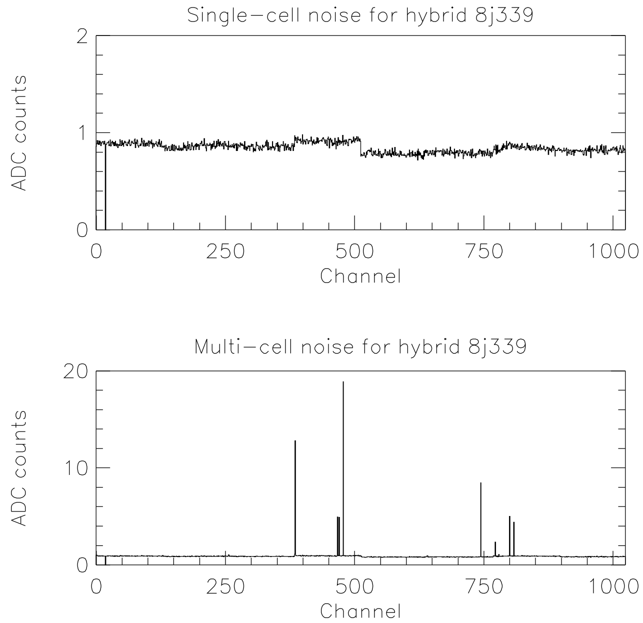
Pedestal vs. Pipeline Cell ID



6 Noise

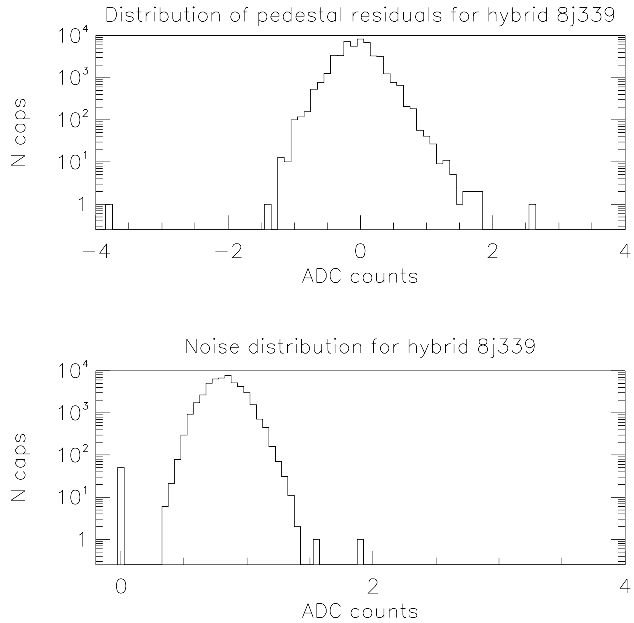
The following plots show the single-cell and multi-cell RMS noise:

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