Hybrid 8j328 Traveler

April 28, 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 8J328 has die: 155-016 155-021 155-024 155-027 154-057 154-065 154-066 154-073

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 8j328 classification info. Created 09:54:57 04/28/00

Hybrid 8j328 quality: fair
Chip classification: good fair fair good fair good fair fair
Bad channels (chip-channel): 1-54 1-55 2-53 2-54 6-57 7-111
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-17-54 2-18-54 2-19-54
   2-20-54 2-24-54 2-28-54 2-37-54 2-38-52 2-39-54 4-37-3 6-0-10
   6-16-10 6-16-11 6-16-9 6-17-10 6-20-57 6-41-91 6-5-10 7-35-96
Channels at pedestal needed for DCMS: 28.6 29.7 29.4 31.7 32.3 33.6 32.2 34.6
```

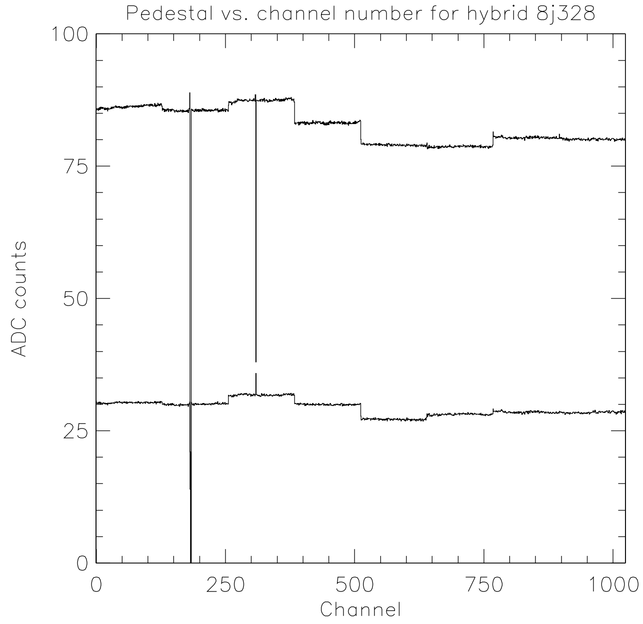
4 Comments

HV tested.

5 Pedestal

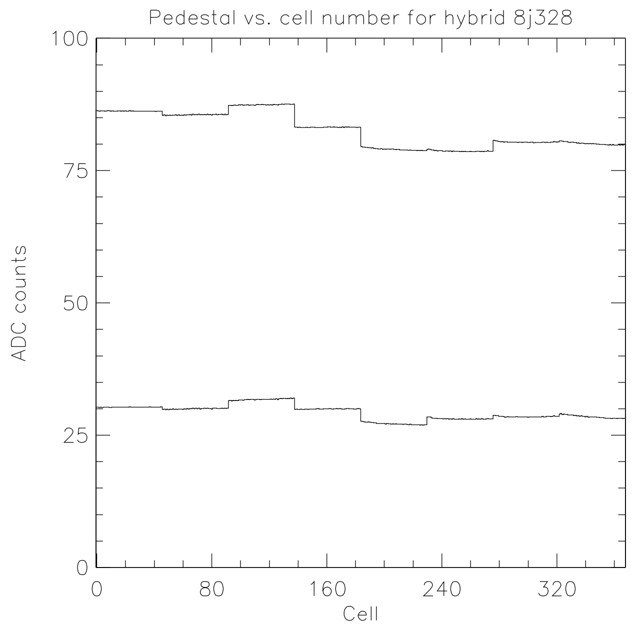
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

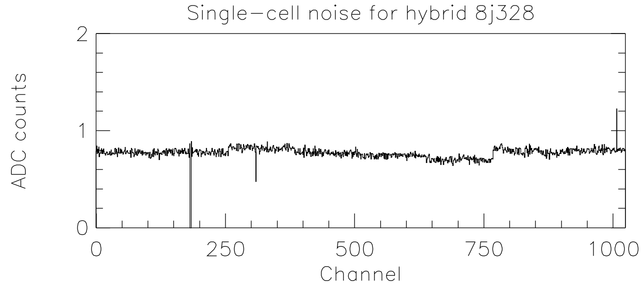
Pedestal vs. Pipeline Cell ID

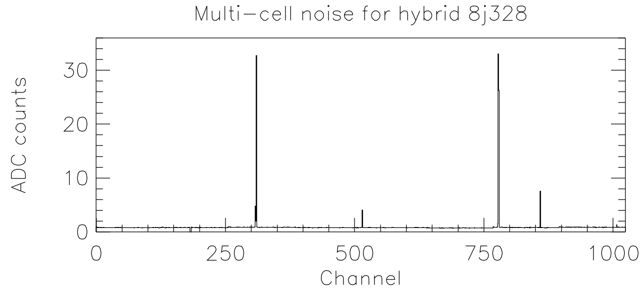


6 Noise

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

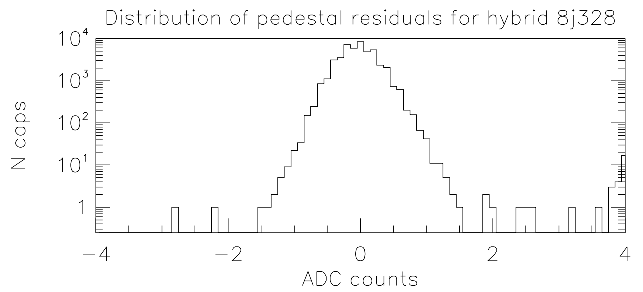
RMS Noise

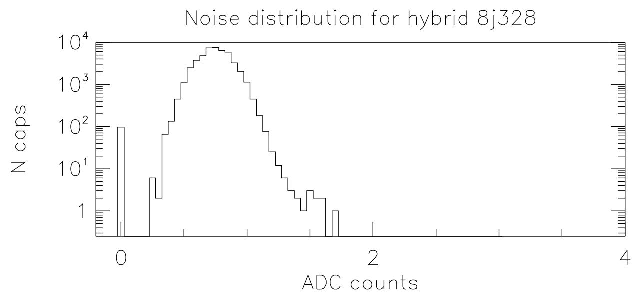




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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