Hybrid 8j322 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 8J322 has die: 207-097 207-099 207-102 207-103 154-040 154-041 154-045 154-046

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 8j322 classification info. Created 11:04:11 04/26/00

Hybrid 8j322 quality: fair
Chip classification: fair fair fair fair good good fair fair
Bad channels (chip-channel): 0-76 2-59 2-106 3-90 6-74
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-39-17 1-10-4 1-10-5
   1-2-45 1-2-46 1-2-47 2-0-122 2-1-59 2-22-34 2-28-93 7-11-65
Channels at pedestal needed for DCMS: 30.7 31.7 31.2 33.3 31.6 31.6 31.8 32.6
```

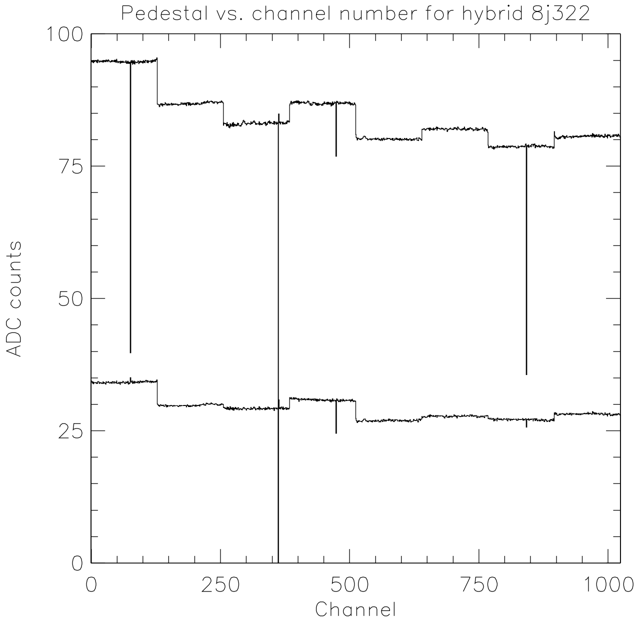
4 Comments

HV tested.

5 Pedestal

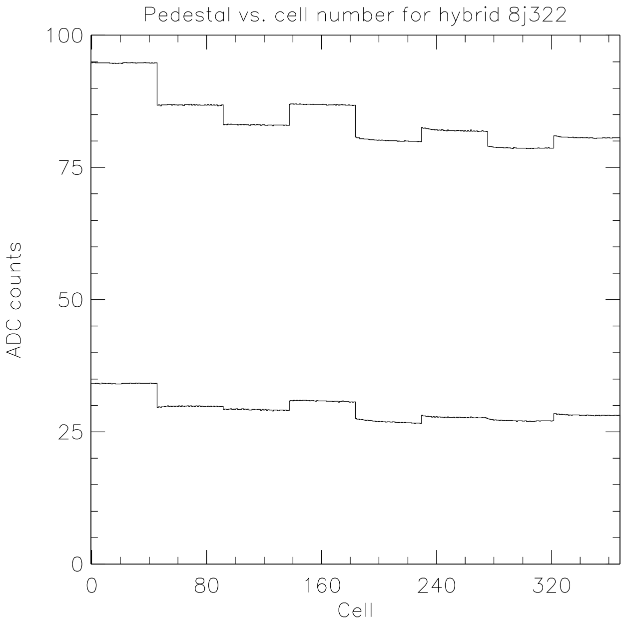
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

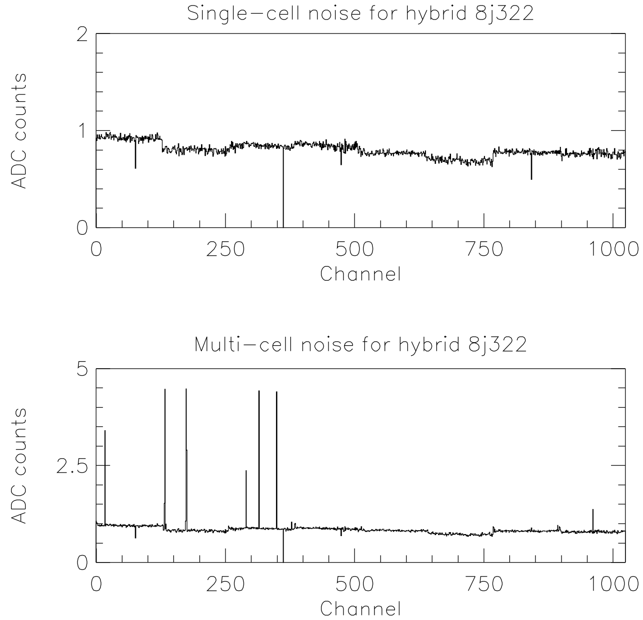
Pedestal vs. Pipeline Cell ID



6 Noise

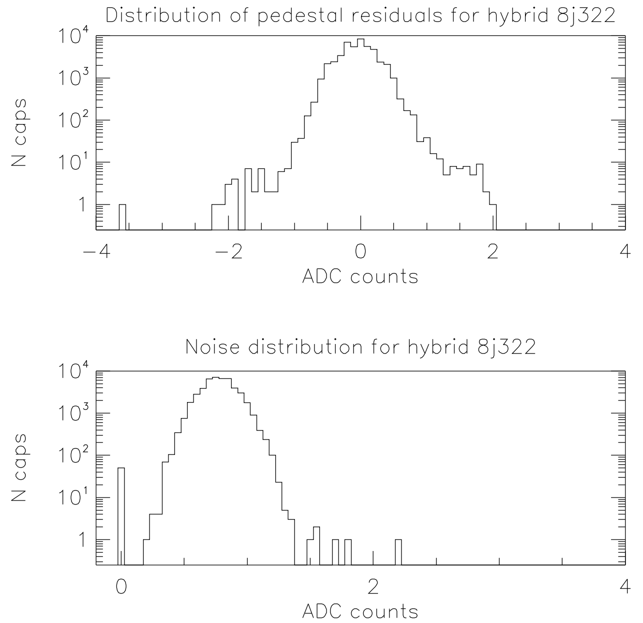
The following plots show the single-cell and multi-cell RMS noise:

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