Hybrid 8j160 Traveler

January 17, 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 8J160 has die: 215-004 215-006 215-008 215-010 205-046 205-047 205-048 205-050

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 8j160 classification info. Created 16:24:34 01/12/00

Hybrid 8j160 quality: fair
Chip classification: good good good fair good good fair fair
Bad channels (chip-channel): 3-112 7-6
Bad cells: none
Random bad capacitors (chip-cell-channel): 3-6-111 6-19-30 7-11-6
   7-12-6 7-13-6 7-18-6 7-2-6 7-21-6 7-23-6 7-26-6 7-27-6
   7-29-6 7-3-6 7-30-6 7-32-6 7-35-6 7-39-6 7-41-6 7-44-6
   7-45-6 7-6-6 7-9-6
Channels at pedestal needed for DCMS: 30.7 30.6 31.6 30.6 31.6 31.2 31.6 31.6
```

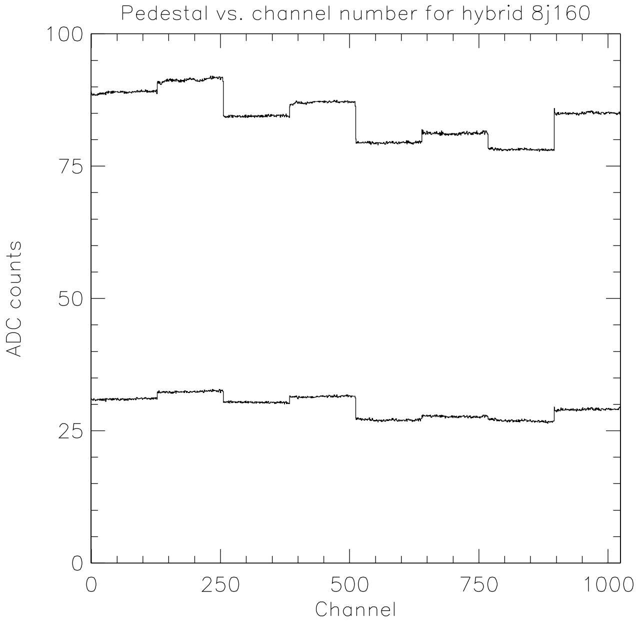
4 Comments

No comments.

5 Pedestal

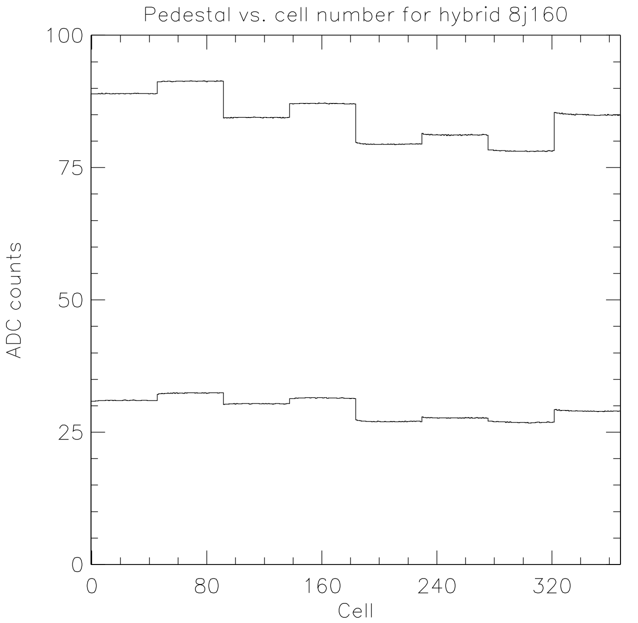
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

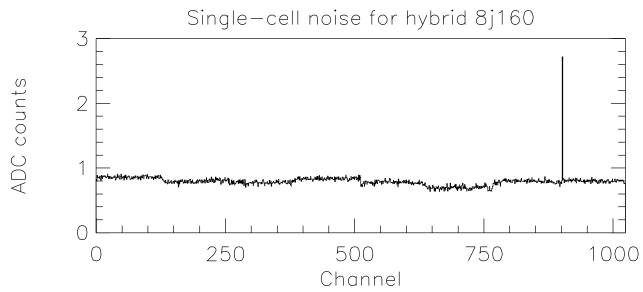
Pedestal vs. Pipeline Cell ID

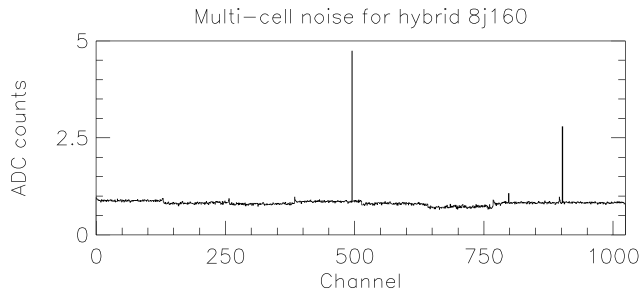


6 Noise

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

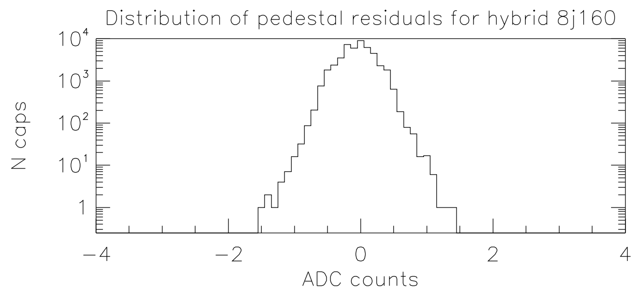
RMS Noise

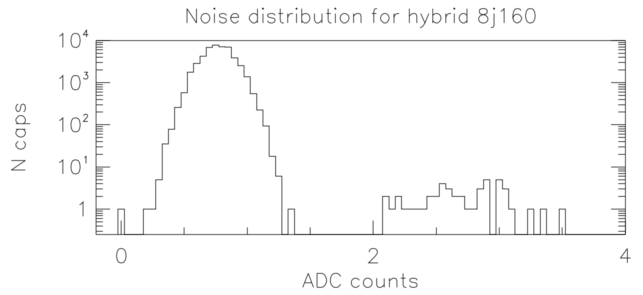




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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