Hybrid 8j179 Traveler

January 26, 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 8J179 has die: 211-020 211-029 211-035 211-037 187-044 187-045 187-046 187-049

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 8j179 classification info. Created 11:44:43 01/24/00

Hybrid 8j179 quality: fair
Chip classification: fair fair fair fair fair good good fair
Bad channels (chip-channel): 1-88 2-108 3-27 4-25 7-15 7-92
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-1-70 2-0-23 2-12-22
   2-12-23 2-25-22 2-25-23 2-26-23 2-29-22 2-29-23 2-30-23 2-32-22
   2-32-23 2-34-22 2-34-23 2-36-22 2-36-23 2-4-23 2-45-22 2-45-23
   4-20-25
Channels at pedestal needed for DCMS: 31.6 31.6 29.8 31.7 33.6 32.8 33.7 33.3
```

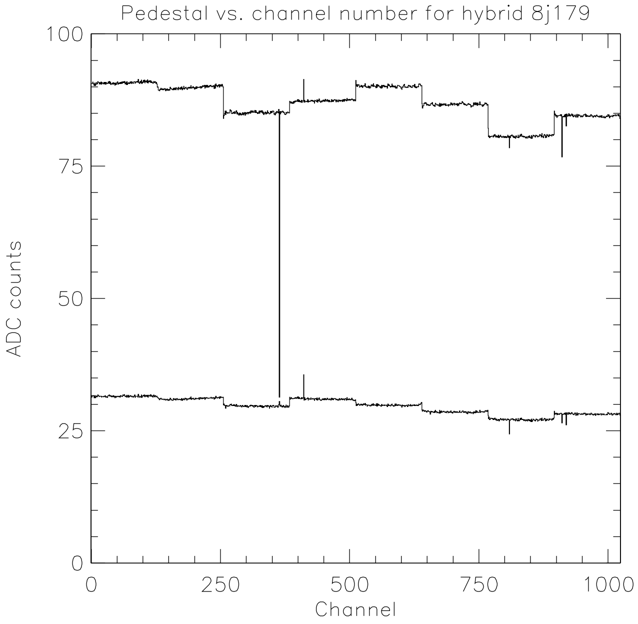
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

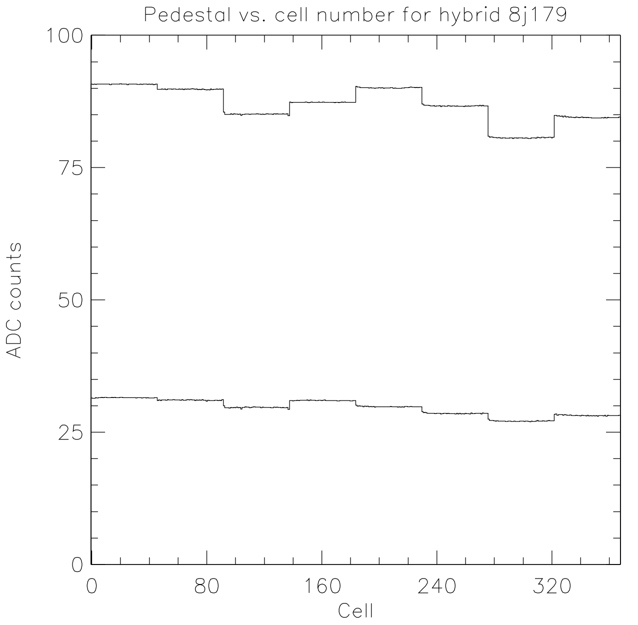
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

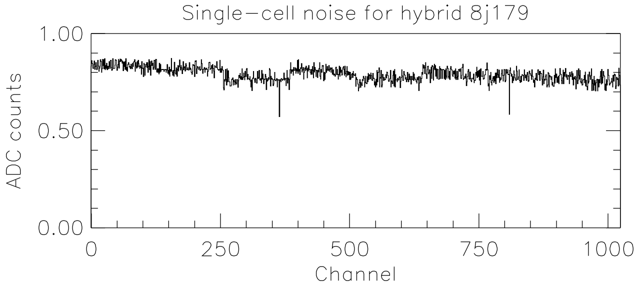
Pedestal vs. Pipeline Cell ID

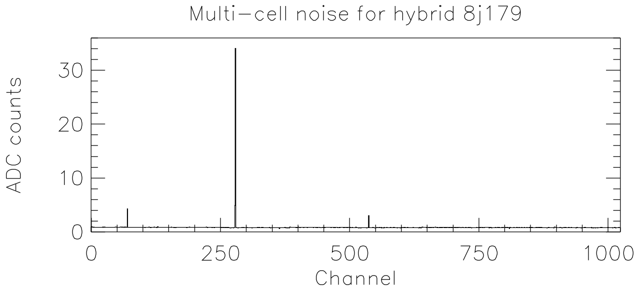


6 Noise

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

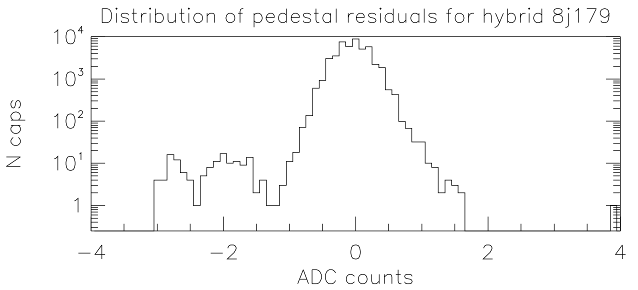
RMS Noise

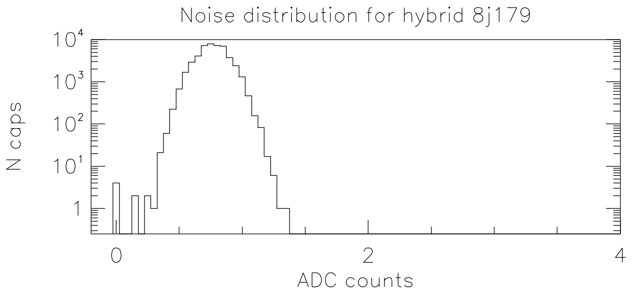




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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