Hybrid 8j272 Traveler

June 19, 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 8J272 has die: 183-115 183-116 183-121 183-122 142-066 142-067 142-070 142-071

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.

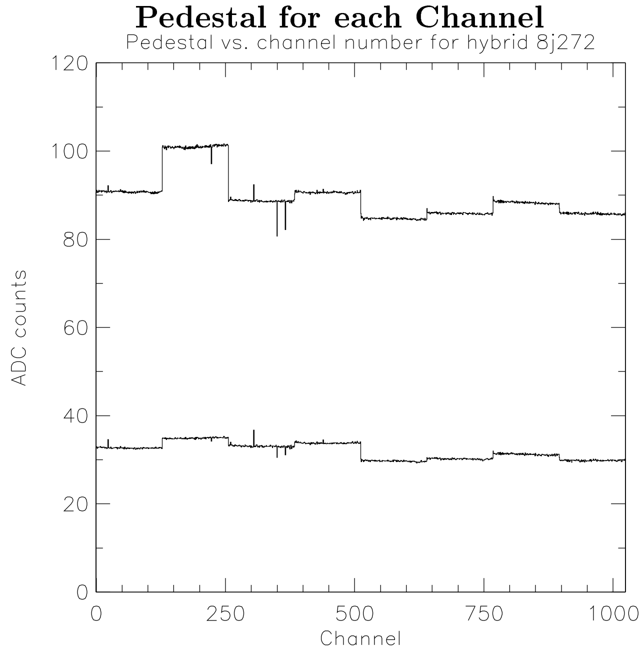
```
% Hybrid 8j272 classification info. Created 09:04:32 06/19/00

Hybrid 8j272 quality: fair
Chip classification: fair good fair fair good fair good good
Bad channels (chip-channel): 0-23 2-29 2-94 2-110 3-55 5-0
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-10-94 2-12-94 2-13-94
   2-14-94 2-16-30 2-17-94 2-19-94 2-20-94 2-22-94 2-23-49 2-24-94
   2-26-94 2-29-94 2-3-94 2-31-94 2-37-94 2-38-94 2-39-94 2-4-78
   2-43-49 2-44-94 2-45-94 2-8-94 2-9-94 3-17-24 3-23-47
Channels at pedestal needed for DCMS: 33.6 29.7 34.2 34.6 32.6 31.6 30.6 33.6
```

4 Comments

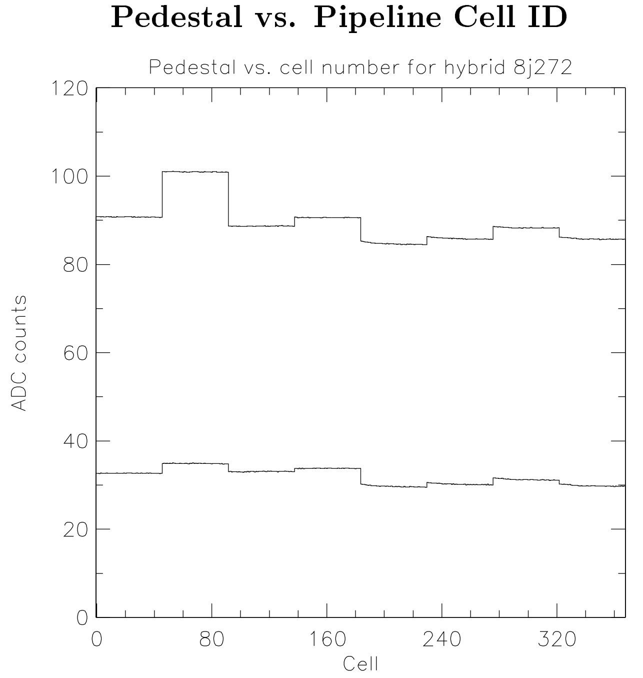
HV tested.

5 Pedestal

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



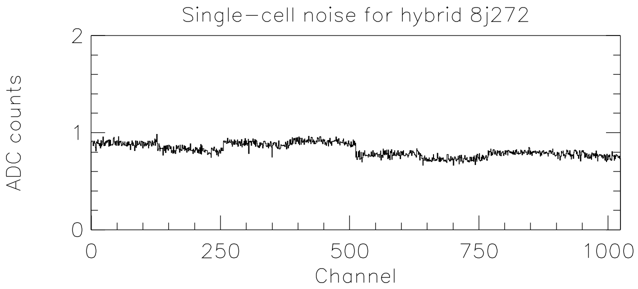
The following plot shows the average pedestal vs. pipeline cell ID with and without charge injection. The x-axis is cell ID offset by 46 for each chip. Thus cell ID 5 for chip 1 is at x=5, chip 2 at x=51, chip 3 at x=97, etc.

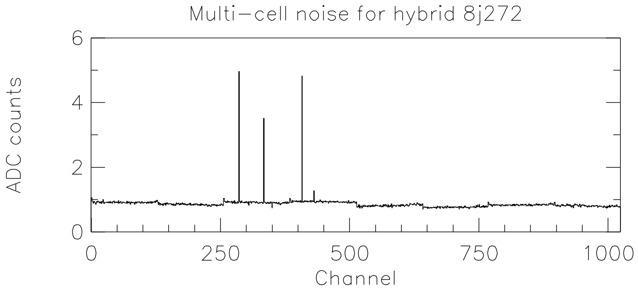


6 Noise

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

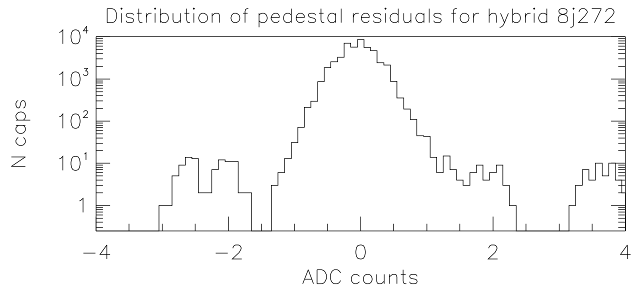
RMS Noise

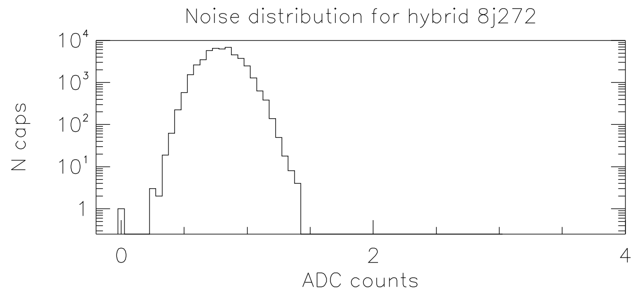




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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