Hybrid 8j347 Traveler

May 22, 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 8J347 has die: 246-096 246-097 246-098 246-102 246-012 246-018 246-020 246-021

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 8j347 classification info. Created 09:00:39 05/12/00

Hybrid 8j347 quality: fair
Chip classification: fair fair fair good fair fair fair fair
Bad channels (chip-channel): 0-91 1-70 2-123 4-59 6-1 7-2 7-3
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-0-90 0-26-90 0-30-90
   0-33-90 0-35-90 0-37-90 5-10-28 5-11-28 5-12-28 5-14-28 5-15-28
   5-19-28 5-20-28 5-21-28 5-28-28 5-30-28 5-32-28 5-35-28 5-44-28
   5-8-28
Channels at pedestal needed for DCMS: 30.7 30.8 32.7 34.6 31.6 31.5 32.2 29.6
```

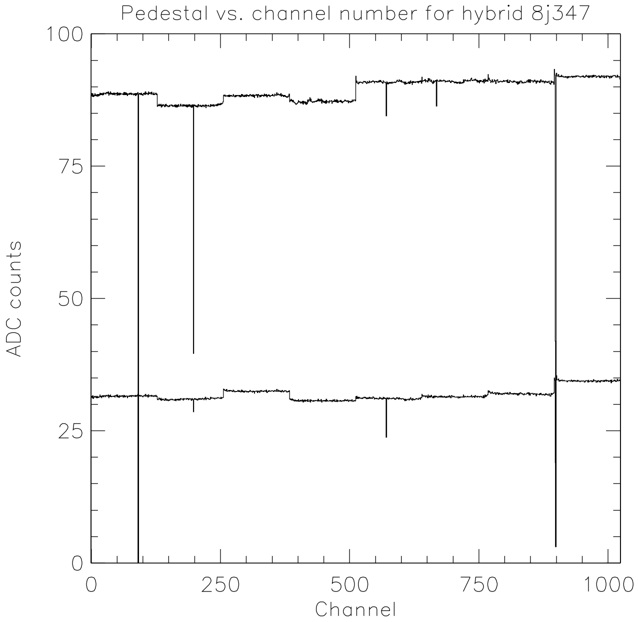
4 Comments

HV tested.

5 Pedestal

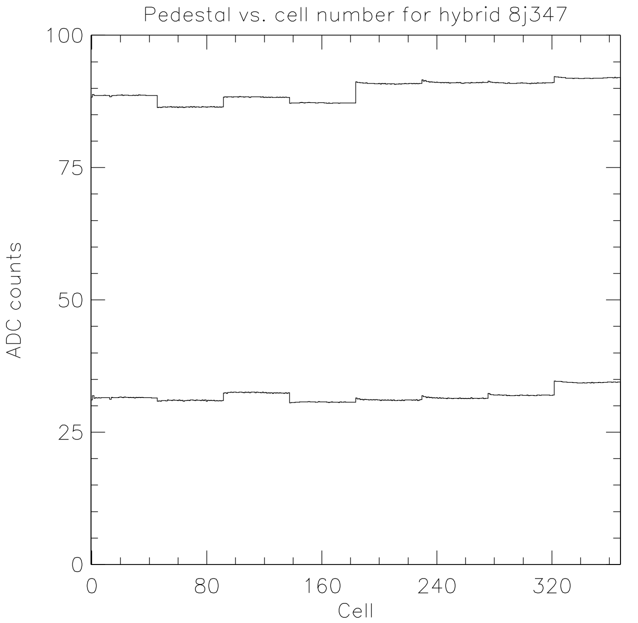
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

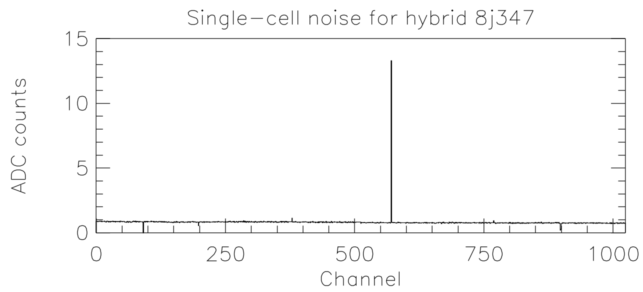
Pedestal vs. Pipeline Cell ID

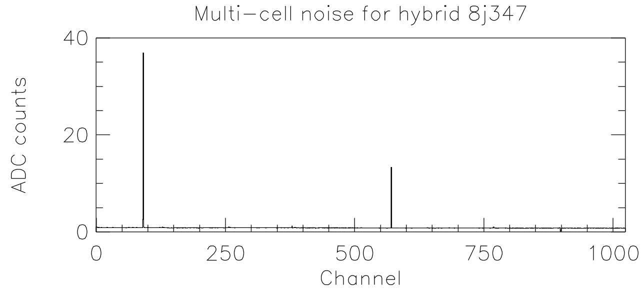


6 Noise

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

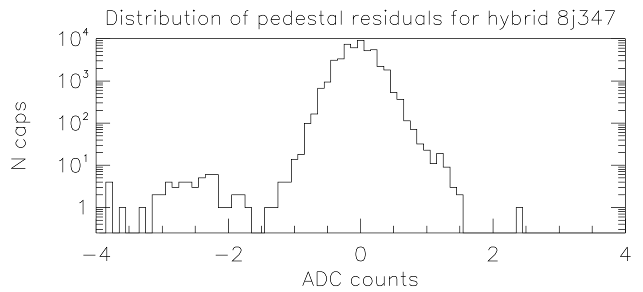
RMS Noise

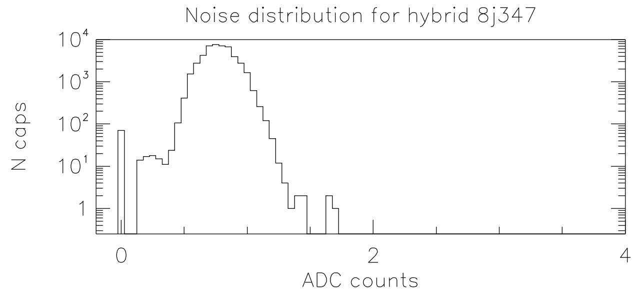




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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