Hybrid 8j348 Traveler

July 20, 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 8J348 has die: 246-103 246-104 236-028 236-029 246-025 246-027 246-028 246-034

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 8j348 classification info. Created 10:37:45 07/17/00

Hybrid 8j348 quality: bad
Chip classification: fair good good fair bad good fair good
Bad channels (chip-channel): 3-0 4-112 4-113 4-114 6-36
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-0-24 0-0-25 0-1-25
   0-10-25 0-22-25 0-35-25 0-39-24 0-39-25 0-40-25 0-42-24 0-42-25
   0-43-25 0-44-24 0-44-25 0-9-24 0-9-25
Channels at pedestal needed for DCMS: 32.7 32.6 30.6 30.6 28.6 31.5 31.7 31.6
```

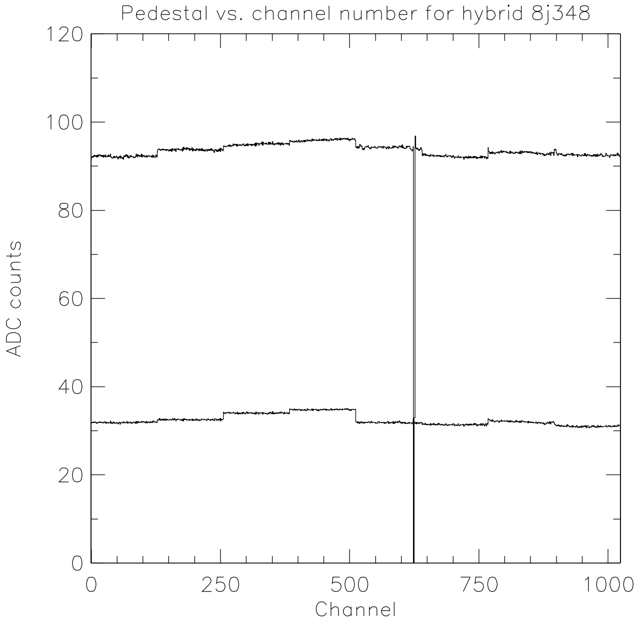
4 Comments

HV tested.

5 Pedestal

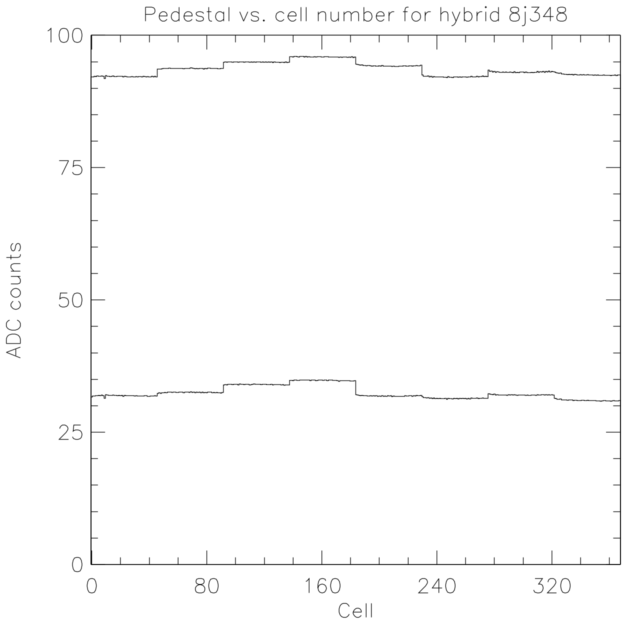
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

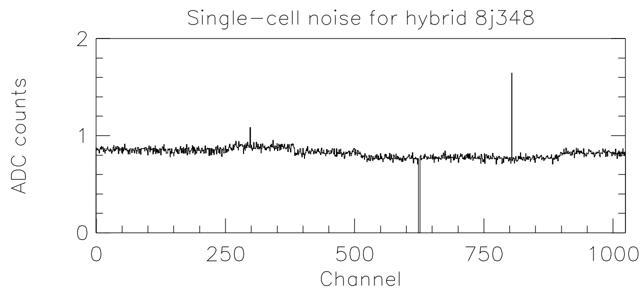
Pedestal vs. Pipeline Cell ID

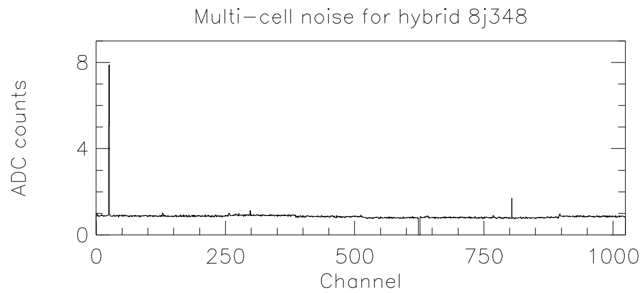


6 Noise

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

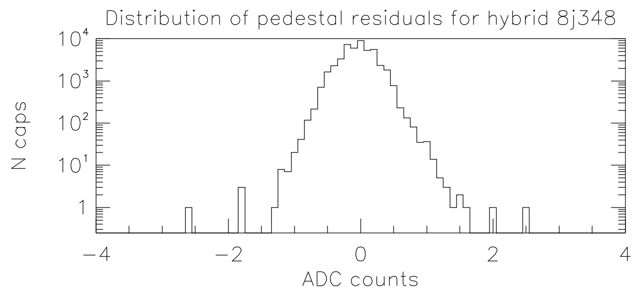
RMS Noise

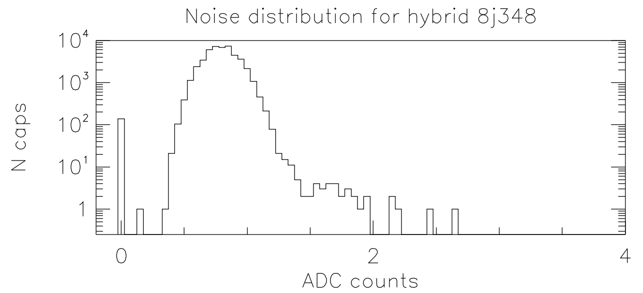




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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