Hybrid 8j287 Traveler

March 3, 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 8J287 has die: 163-028 163-032 163-037 163-039 141-040 141-041 141-044 141-045

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 8j287 classification info. Created 11:07:31 03/03/00

Hybrid 8j287 quality: bad
Chip classification: good good fair good good bad good good
Bad channels (chip-channel): 2-37 5-29 5-96 5-114
Bad cells: none
Random bad capacitors (chip-cell-channel): 5-0-30 5-16-30 5-16-31
   5-17-30 5-29-30 5-3-30 5-5-30 5-7-30
Channels at pedestal needed for DCMS: 31.7 32.6 33.7 32.8 30.8 29.7 31.3 31.6
```

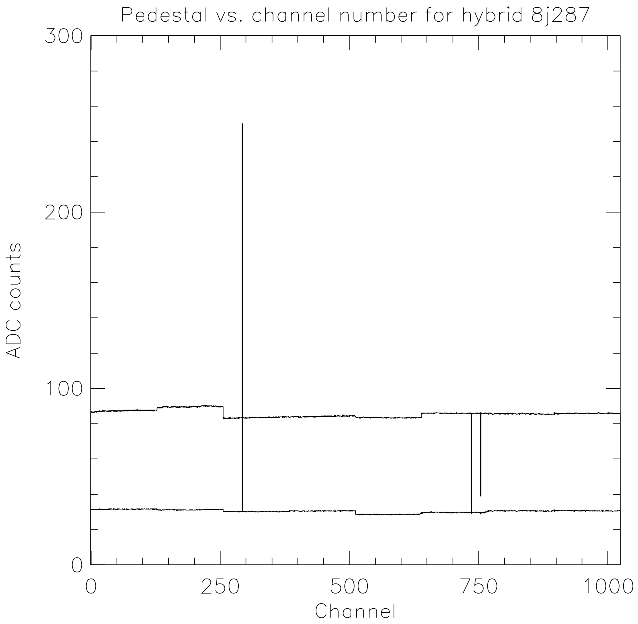
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

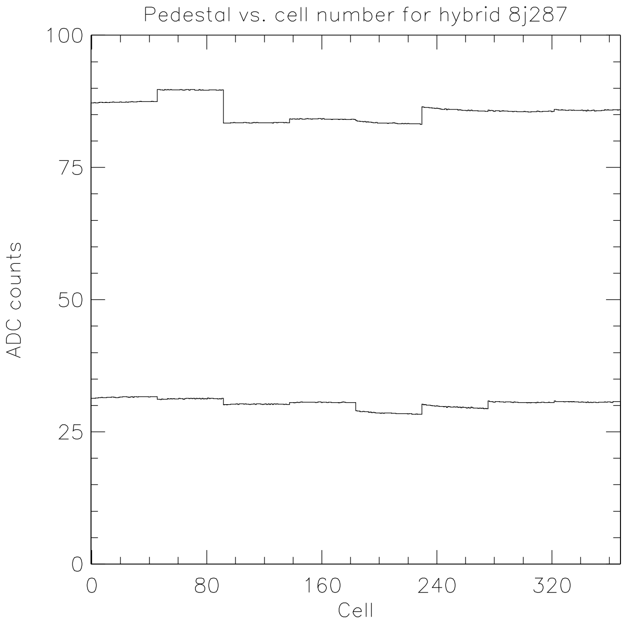
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

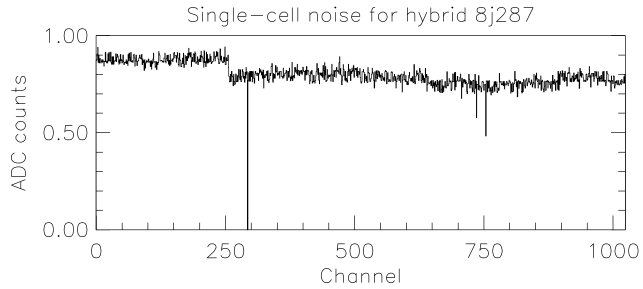
Pedestal vs. Pipeline Cell ID

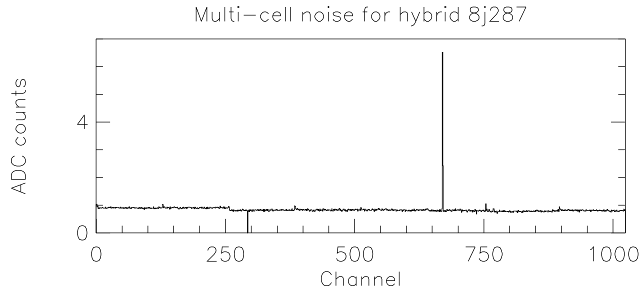


6 Noise

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

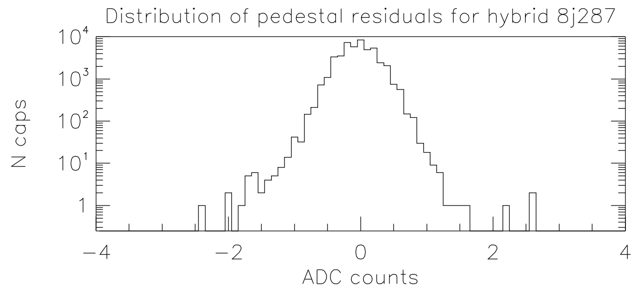
RMS Noise

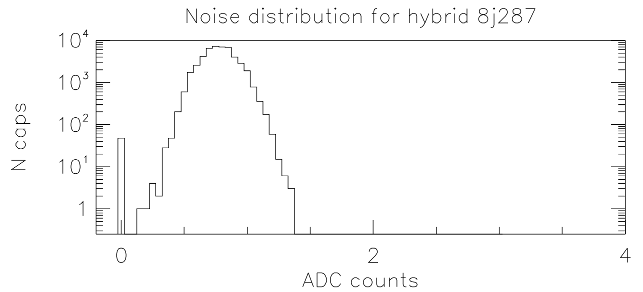




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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