Hybrid 8j289 Traveler

March 1, 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 8J289 has die: 163-054 163-056 163-057 163-059 180-067 180-068 180-069 180-070

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 8j289 classification info. Created 10:28:12 03/01/00

Hybrid 8j289 quality: fair
Chip classification: good fair fair fair good good fair good
Bad channels (chip-channel): 3-90 6-120
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-26-52 1-28-4 1-33-9
   1-41-29 2-36-11 2-40-60 6-43-67
Channels at pedestal needed for DCMS: 33.6 34.6 33.2 32.2 32.7 31.6 30.7 32.6
```

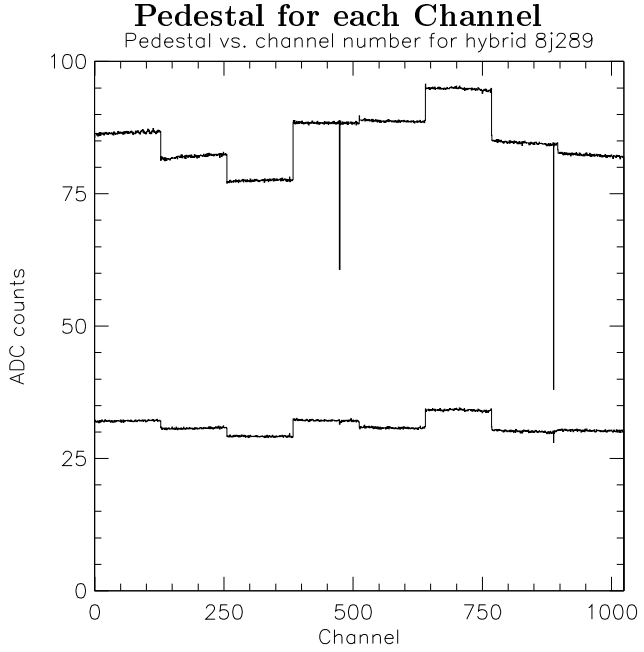
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

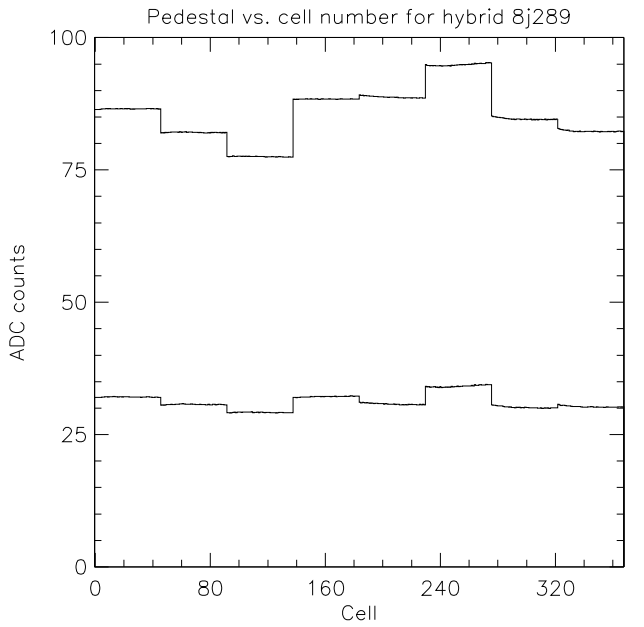
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

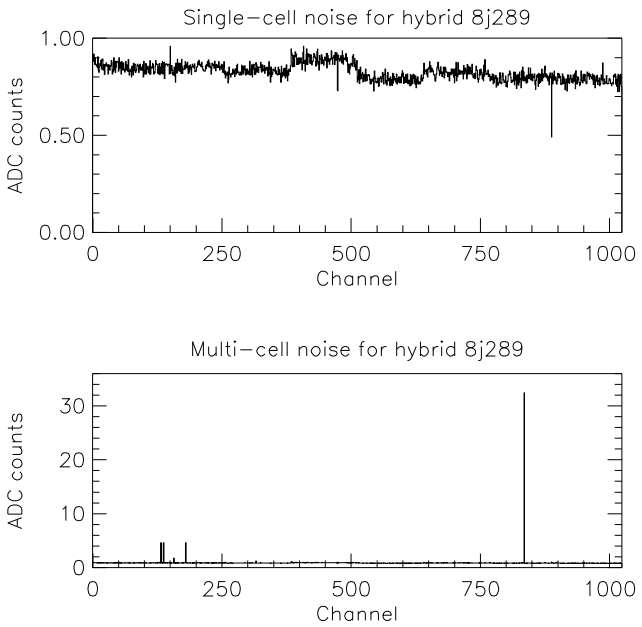
Pedestal vs. Pipeline Cell ID



6 Noise

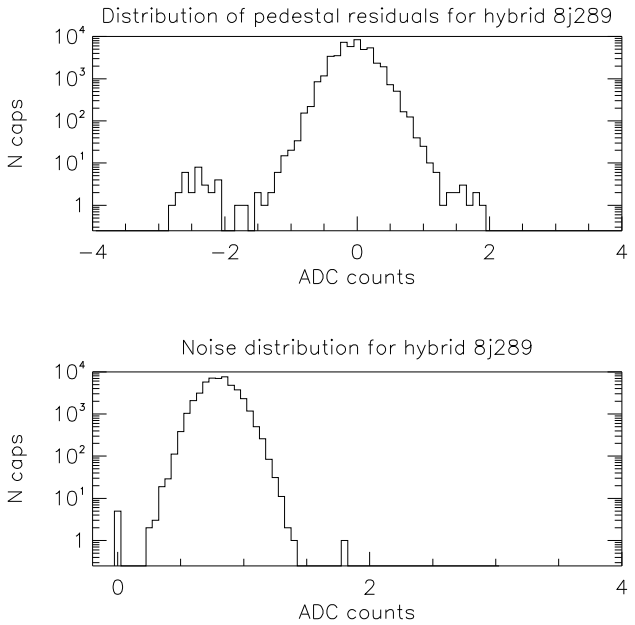
The following plots show the single-cell and multi-cell RMS noise:

RMS Noise

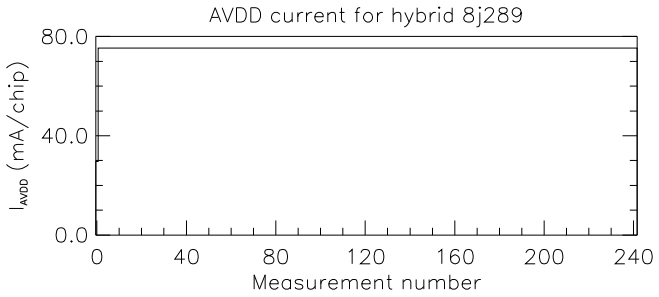
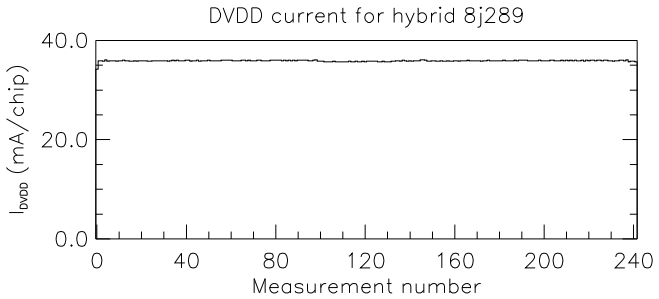


The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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