Hybrid 8j293 Traveler

April 5, 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 8J293 has die: 185-029 185-031 185-032 185-033 137-108 137-112 137-114 137-115

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 8j293 classification info. Created 09:04:11 04/03/00

Hybrid 8j293 quality: fair
Chip classification: good good good good fair good good good
Bad channels (chip-channel): 4-16
Bad cells: none
Random bad capacitors (chip-cell-channel): 4-1-16 4-10-16 4-14-16
   4-15-16 4-17-16 4-18-16 4-2-16 4-21-16 4-22-16 4-23-16 4-24-16
   4-25-16 4-26-16 4-27-16 4-28-16 4-3-16 4-30-16 4-31-16 4-32-16
   4-33-16 4-34-16 4-35-16 4-37-16 4-38-16 4-39-16 4-4-16 4-41-16
   4-42-16 4-43-16 4-6-16 4-8-16 4-9-16
Channels at pedestal needed for DCMS: 33.6 33.6 34.5 32.6 35.7 35.6 36.7 34.7
```

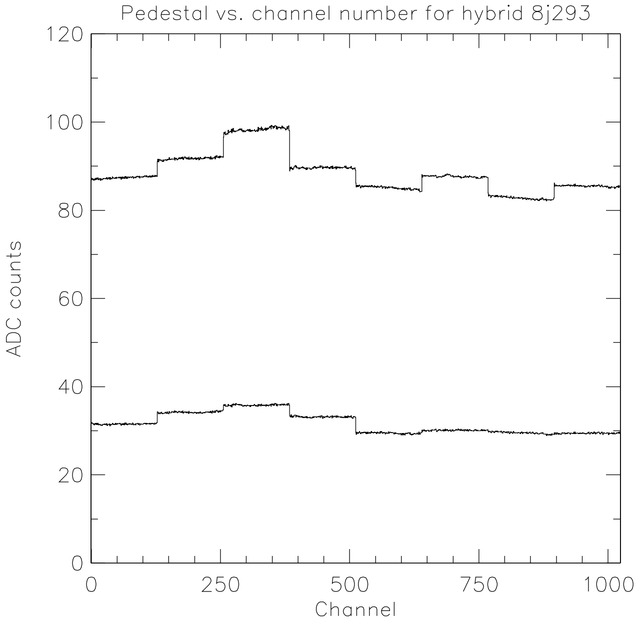
4 Comments

HV tested.

5 Pedestal

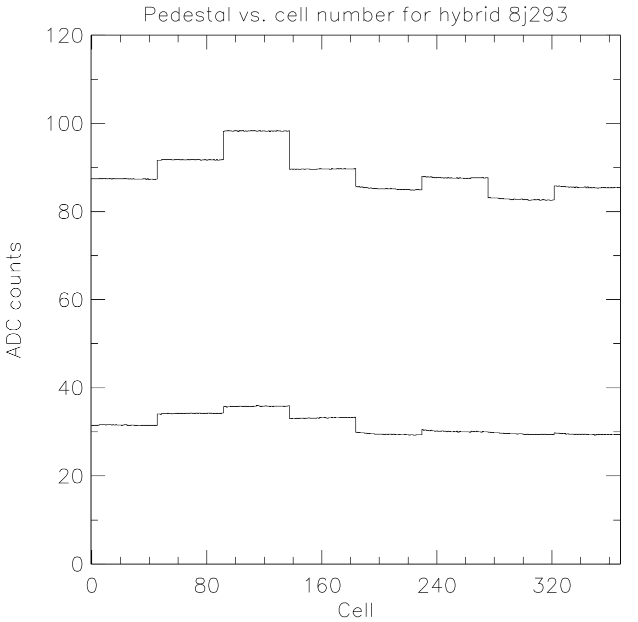
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

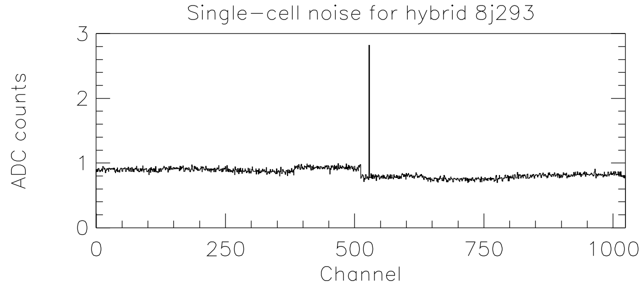
Pedestal vs. Pipeline Cell ID

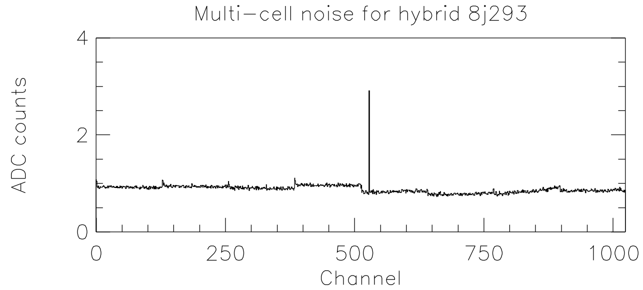


6 Noise

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

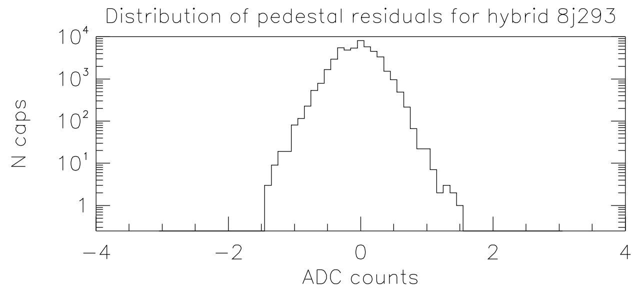
RMS Noise

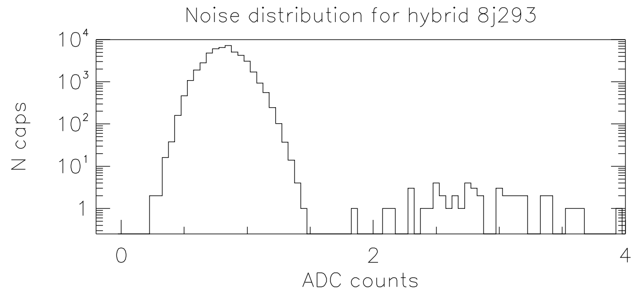




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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