Hybrid 8j290 Traveler

April 7, 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 8J290 has die: 163-060 159-087 163-062 163-066 180-074 180-076 180-077 180-079

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 8j290 classification info. Created 09:58:48 04/07/00

Hybrid 8j290 quality: fair
Chip classification: good good good fair good fair good good
Bad channels (chip-channel): 3-112 5-44
Bad cells: none
Random bad capacitors (chip-cell-channel): 3-32-113 3-36-113 3-40-113
   3-41-74 3-42-113 3-44-113 3-6-113 3-7-111 3-7-113 5-29-45 5-34-45
   5-45-45
Channels at pedestal needed for DCMS: 31.7 31.6 34.6 34.7 33.6 31.7 33.6 34.6
```

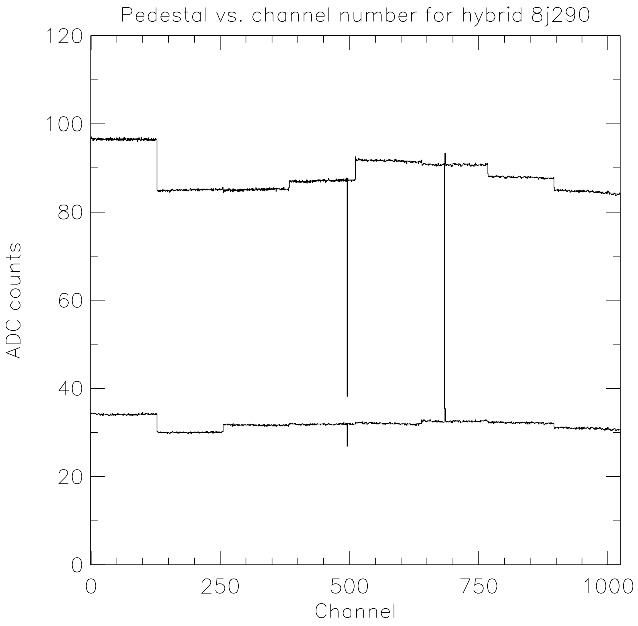
4 Comments

HV tested.

5 Pedestal

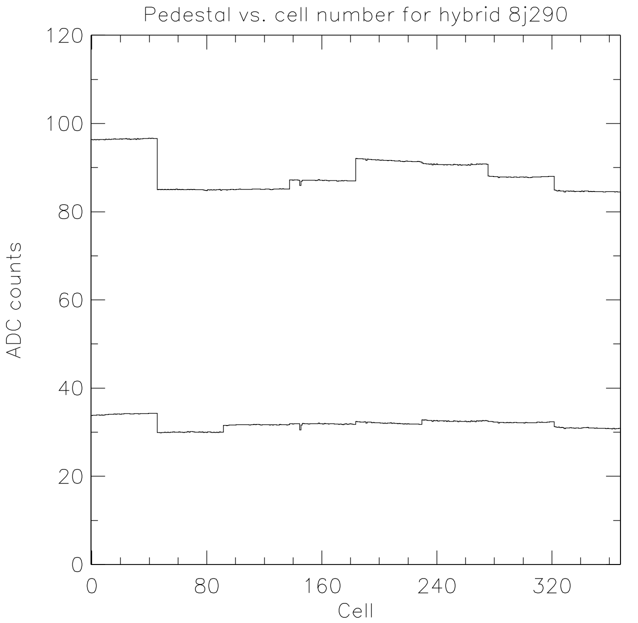
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

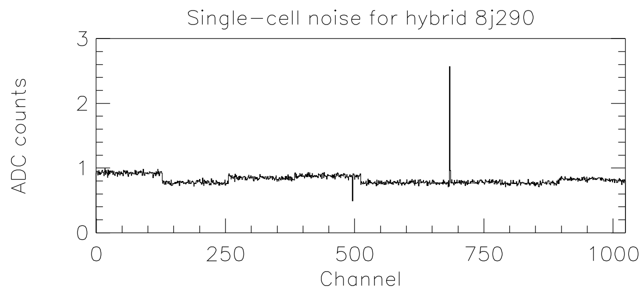
Pedestal vs. Pipeline Cell ID

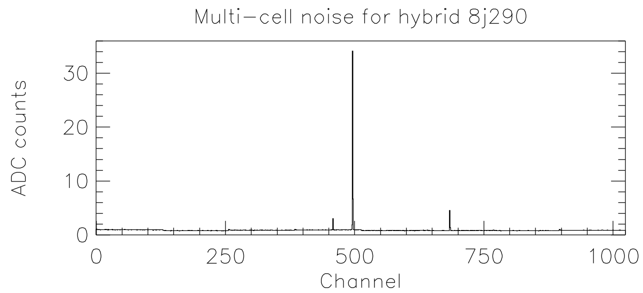


6 Noise

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

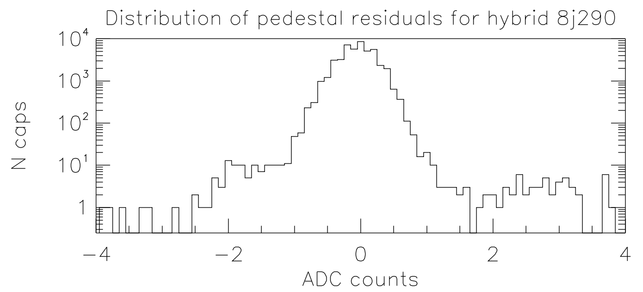
RMS Noise

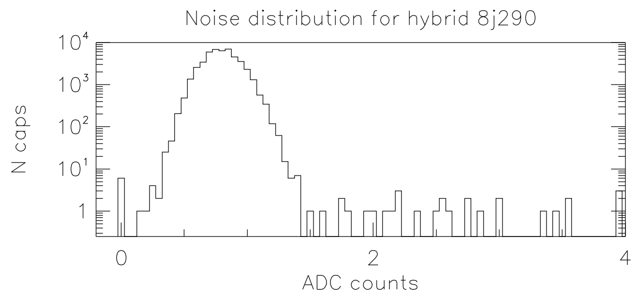




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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