Hybrid 8j280 Traveler

July 13, 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 8J280 has die: 159-100 221-011 183-069 183-080 182-113 182-114 182-115 182-116

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 8j280 classification info. Created 11:40:56 07/12/00

Hybrid 8j280 quality: bad
Chip classification: bad good fair fair good fair good good
Bad channels (chip-channel): 0-8 0-83 0-90 0-99 2-19 3-17
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-1-99 0-10-99 0-13-99
   0-14-99 0-15-99 0-23-99 0-26-99 0-28-99 0-29-99 0-3-99 0-33-99
   0-35-99 0-42-99 0-44-99 0-5-99 0-7-99 0-9-99 5-23-112
Channels at pedestal needed for DCMS: 31.6 30.6 32.6 33.6 35.6 36.1 35.6 34.7
```

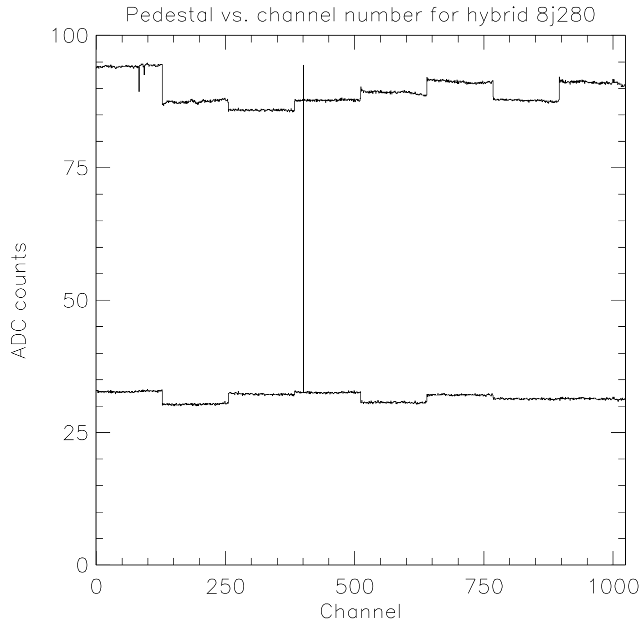
4 Comments

HV tested.

5 Pedestal

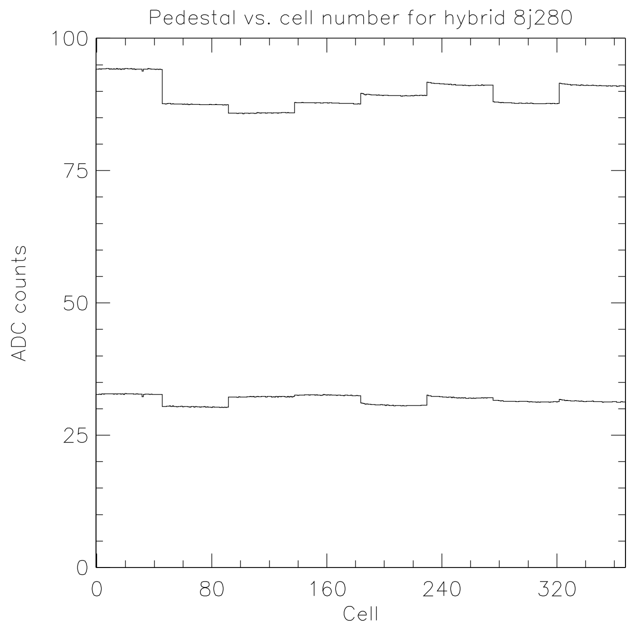
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

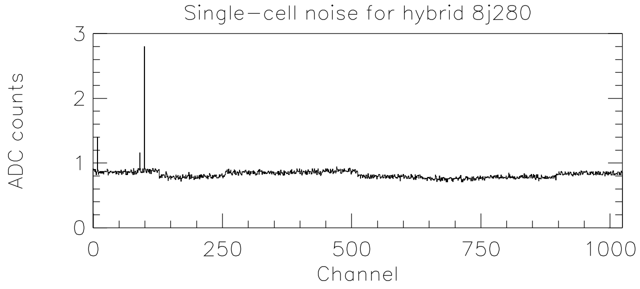
Pedestal vs. Pipeline Cell ID

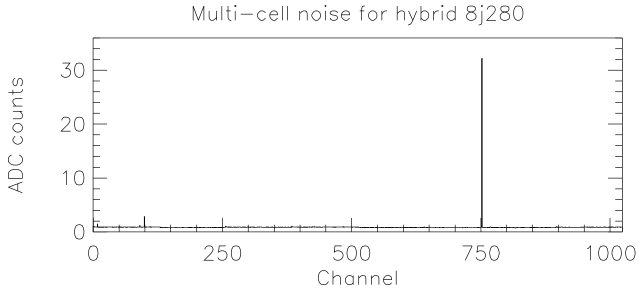


6 Noise

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

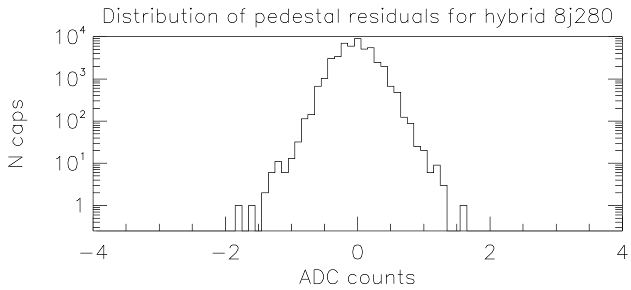
RMS Noise

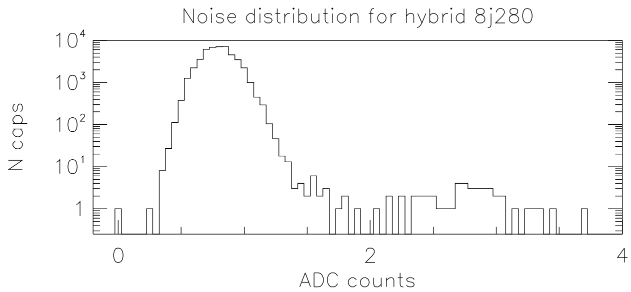




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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