Hybrid 7p183 Traveler

May 30, 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 7P183 has die: 233-065 233-066 233-068 233-070 233-072 233-073 233-074

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 7p183 classification info. Created 09:31:29 05/30/00

Hybrid 7p183 quality: fair*
Chip classification: fair good good good fair good fair*
Bad channels (chip-channel): 0-46 4-13 6-26 6-27 6-70 6-71 6-91
Bad cells: none
Random bad capacitors (chip-cell-channel): 4-10-13 4-14-13 4-15-13
   4-16-13 4-17-13 4-2-13 4-22-13 4-24-13 4-25-13 4-28-13 4-3-13
   4-35-13 4-39-13 4-4-13 4-42-13 4-43-13 4-5-13
Channels at pedestal needed for DCMS: 29.7 30.6 34.1 29.7 31.6 30.7 30.7
```

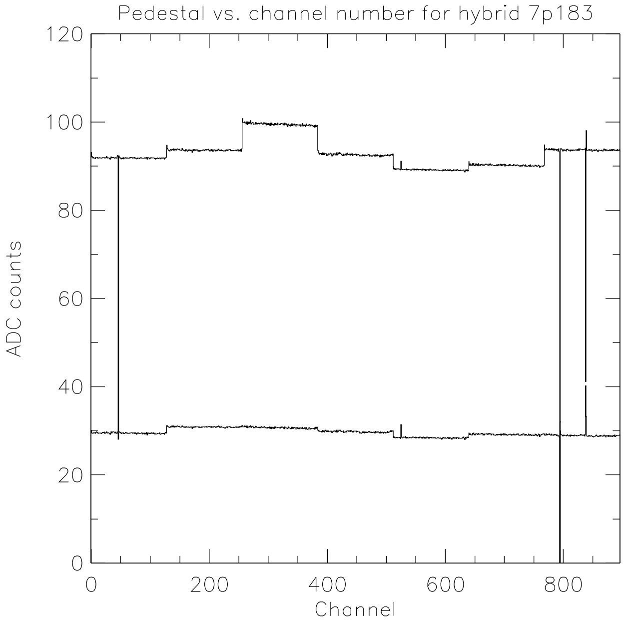
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

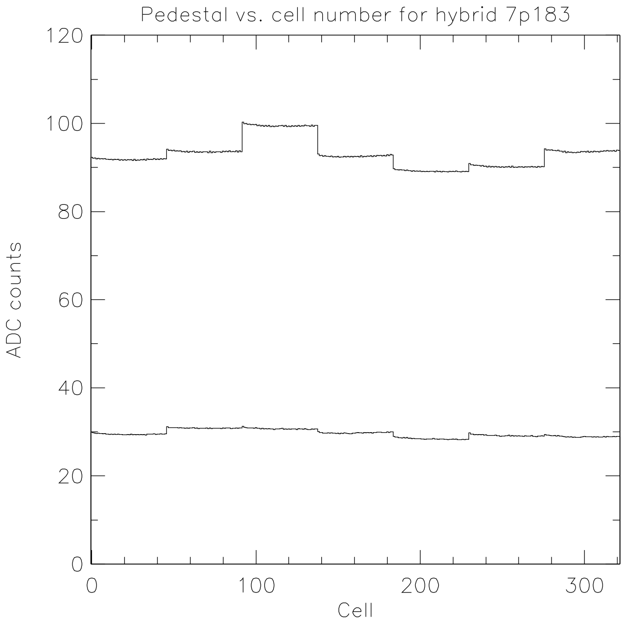
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

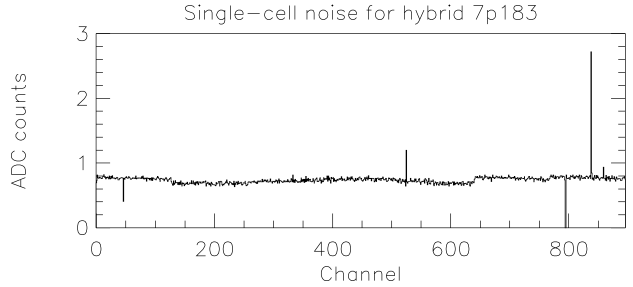
Pedestal vs. Pipeline Cell ID

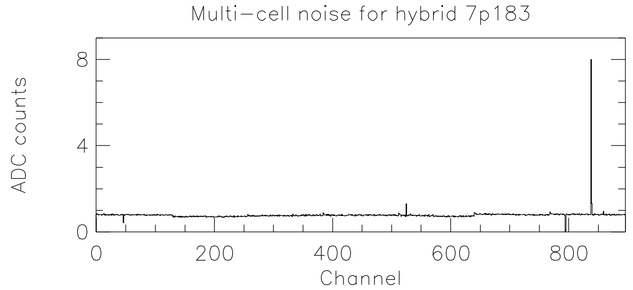


6 Noise

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

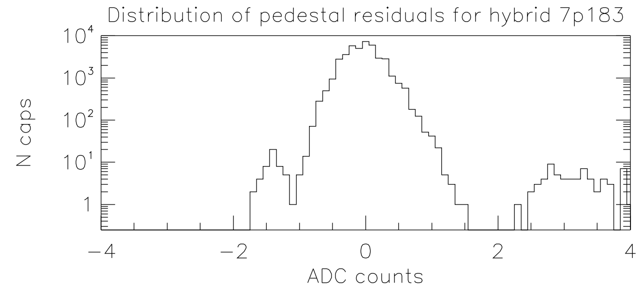
RMS Noise

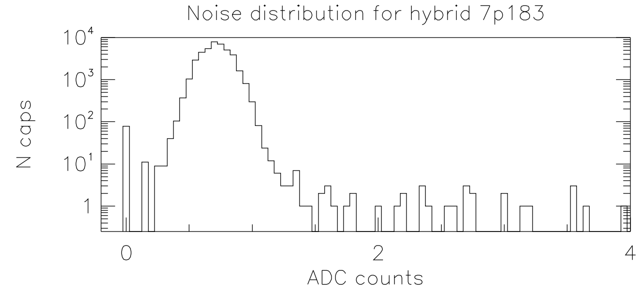




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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