Hybrid 6p242 Traveler

March 15, 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 6P242 has die: 174-082 174-085 174-088 174-089 174-090 174-092

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.

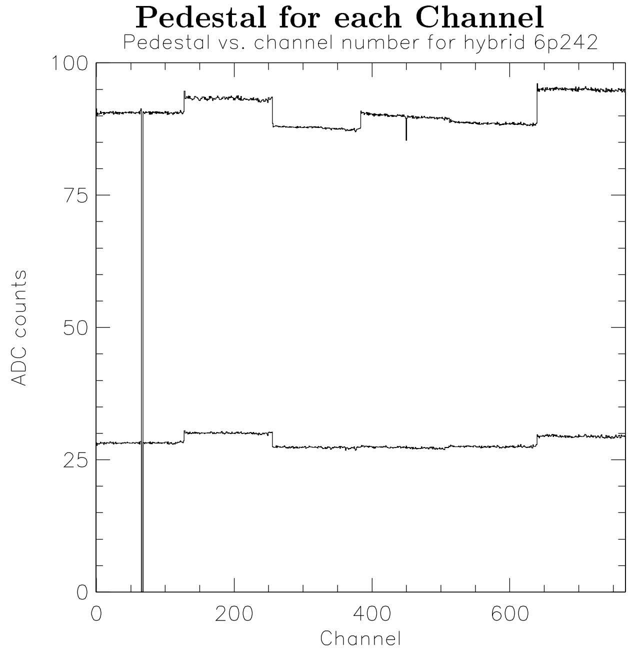
```
% Hybrid 6p242 classification info. Created 11:38:13 03/10/00

Hybrid 6p242 quality: fair
Chip classification: fair good good fair good good
Bad channels (chip-channel): 0-66 0-67
Bad cells: none
Random bad capacitors (chip-cell-channel): 3-15-66 3-17-66 3-19-66
   3-20-66 3-21-66 3-22-66 3-23-66 3-25-66 3-27-66 3-30-66 3-31-66
   3-33-66 3-34-66 3-35-66 3-36-66 3-37-66 3-39-66 3-40-66 3-42-66
   3-43-66 3-44-66 3-45-66
Channels at pedestal needed for DCMS: 32.7 36.6 35.6 36.7 33.7 36.6
```

4 Comments

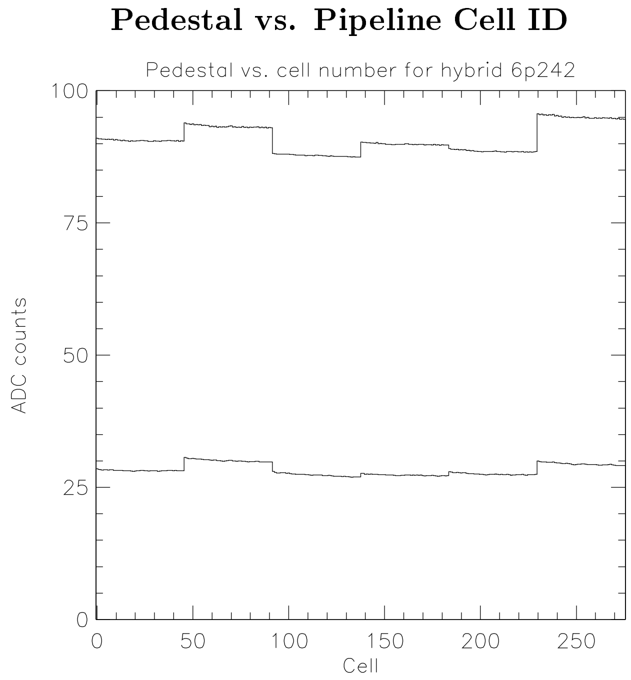
Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

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



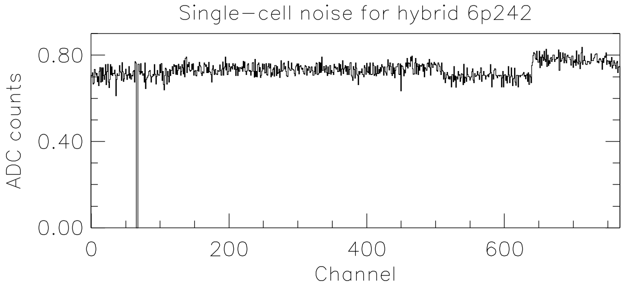
The following plot shows the average pedestal vs. pipeline cell ID with and without charge injection. The x-axis is cell ID offset by 46 for each chip. Thus cell ID 5 for chip 1 is at x=5, chip 2 at x=51, chip 3 at x=97, etc.

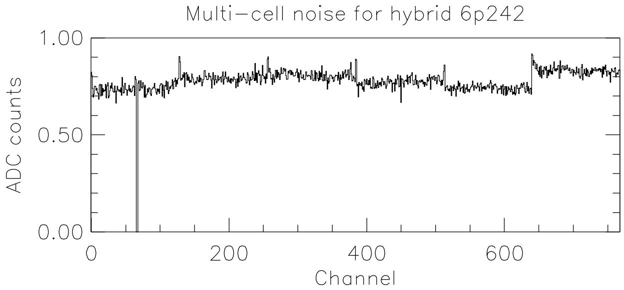


6 Noise

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

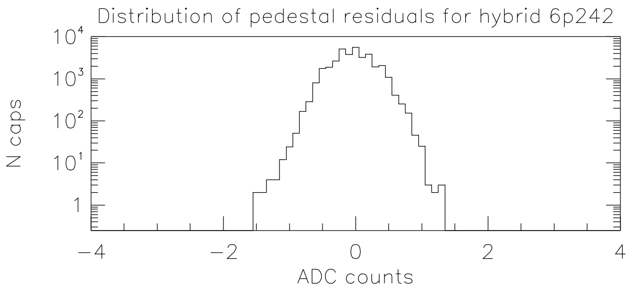
RMS Noise

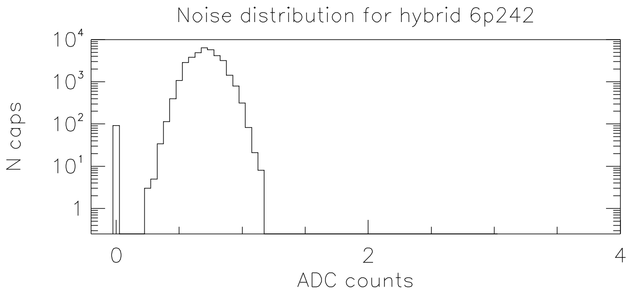




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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