Hybrid 6p245 Traveler

May 9, 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 6P245 has die: 181-061 181-068 181-074 181-075 181-083 181-085

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 6p245 classification info. Created 09:40:47 05/04/00

Hybrid 6p245 quality: fair
Chip classification: good fair fair fair good fair
Bad channels (chip-channel): 3-62 5-94 5-95
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-45-114 2-3-1 5-18-94
   5-23-94 5-26-94 5-26-95 5-28-94 5-28-95 5-29-120 5-30-94 5-30-95
   5-39-94 5-39-95 5-40-123 5-40-94
Channels at pedestal needed for DCMS: 30.7 31.7 30.7 31.4 30.6 30.6
```

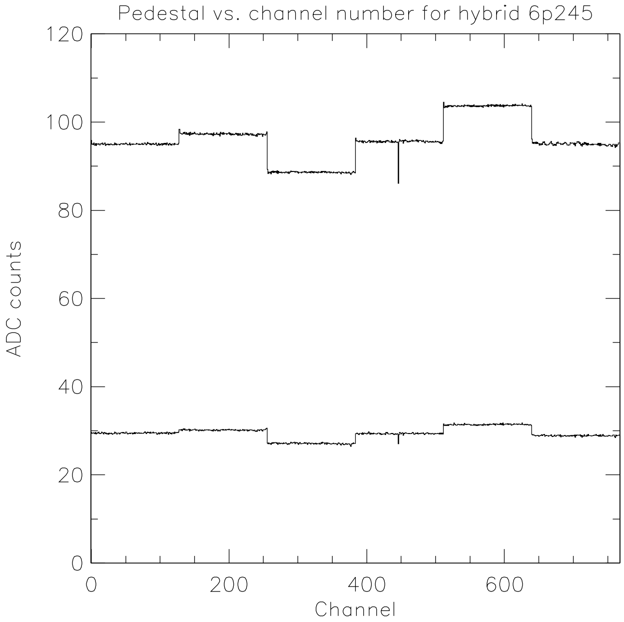
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

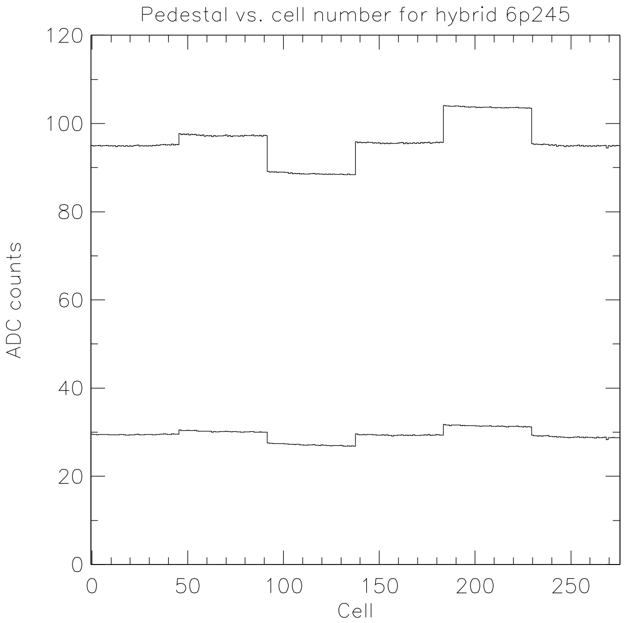
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

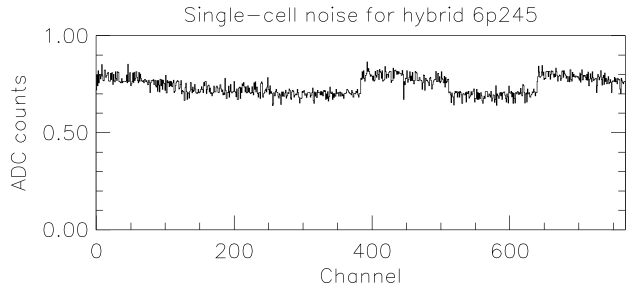
Pedestal vs. Pipeline Cell ID

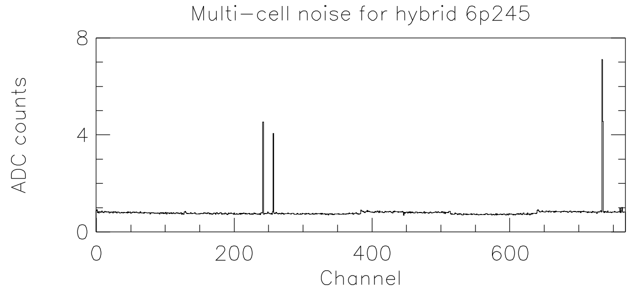


6 Noise

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

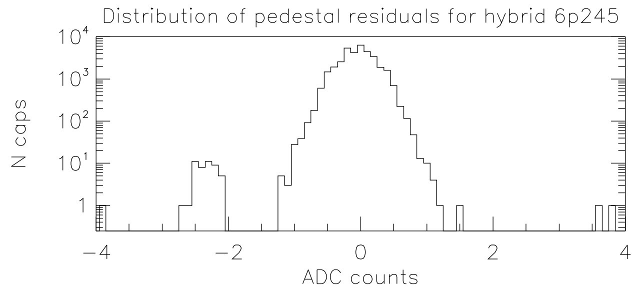
RMS Noise

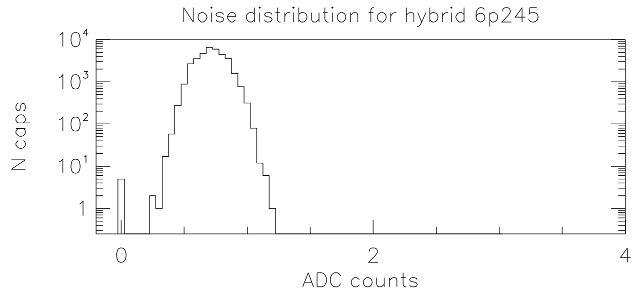




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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