Hybrid 6p213 Traveler

May 22, 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 6P213 has die: 166-098 166-100 166-101 172-033 166-104 166-106

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 6p213 classification info. Created 12:06:06 05/19/00

Hybrid 6p213 quality: fair
Chip classification: fair good good good fair fair
Bad channels (chip-channel): 0-82 4-0
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-30-100 0-30-99 0-42-98
   0-6-106 4-18-1 4-20-1 4-26-1 4-30-1 4-32-1 4-33-1 4-34-1
   4-40-1 4-42-1 4-44-1 5-18-77
Channels at pedestal needed for DCMS: 34.6 31.7 32.6 29.6 32.7 33.7
```

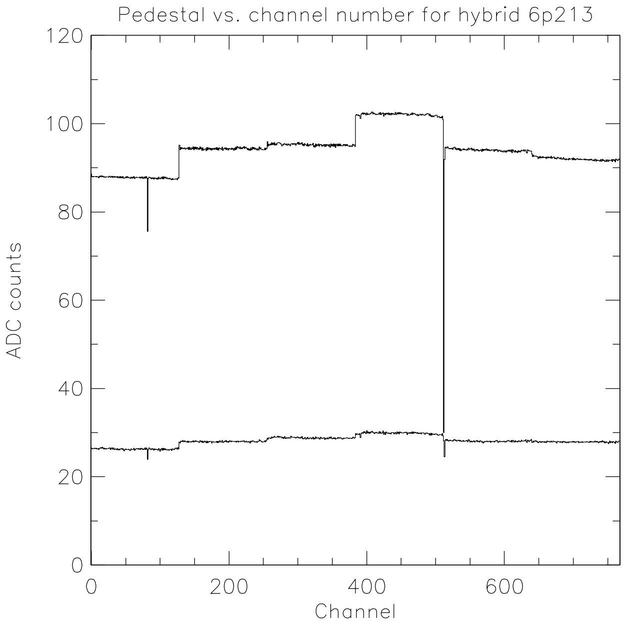
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

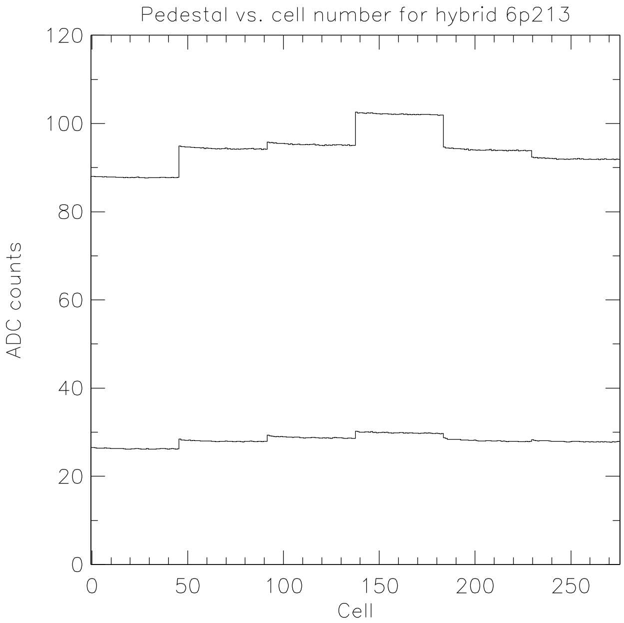
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

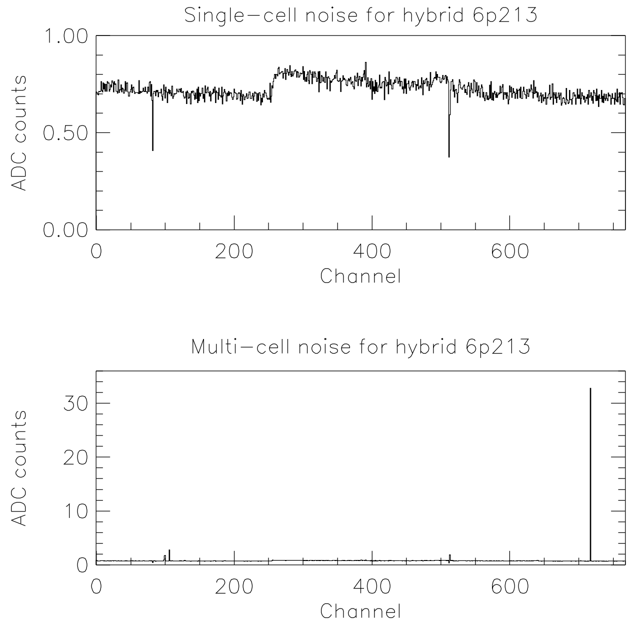
Pedestal vs. Pipeline Cell ID



6 Noise

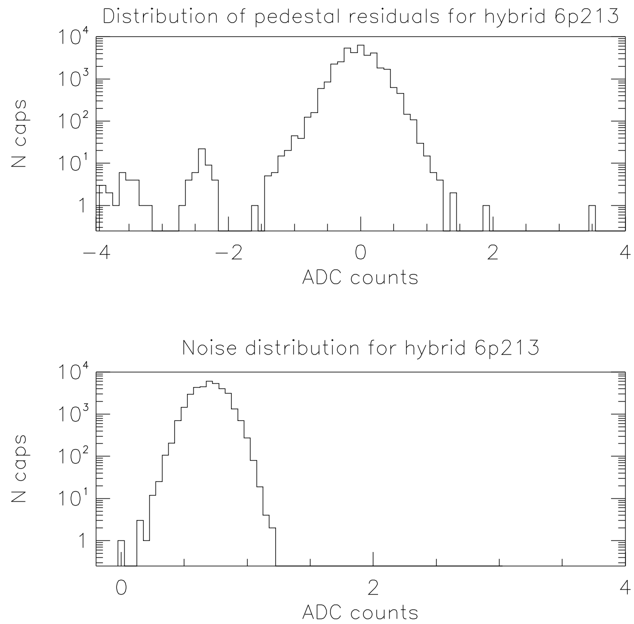
The following plots show the single-cell and multi-cell RMS noise:

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