# Hybrid 6p231 Traveler

May 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 6P231 has die: 181-010 181-011 181-012 181-019 181-020 181-026

## 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 6p231 classification info. Created 08:51:38 05/12/00

Hybrid 6p231 quality: fair
Chip classification: fair fair good good fair good
Bad channels (chip-channel): 1-52 1-72 4-8
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-28-5 1-0-73 1-1-73
   1-17-73 1-18-73 1-21-73 1-29-52 1-30-52 1-31-52 1-32-52 1-32-73
   1-33-52 1-34-52 1-35-52 1-36-52 1-37-52 1-39-52 1-4-52 1-40-52
   1-41-52 4-0-96 4-15-82 4-2-100 4-20-8 4-27-9
Channels at pedestal needed for DCMS: 31.6 28.7 31.2 30.7 30.7 32.5
```

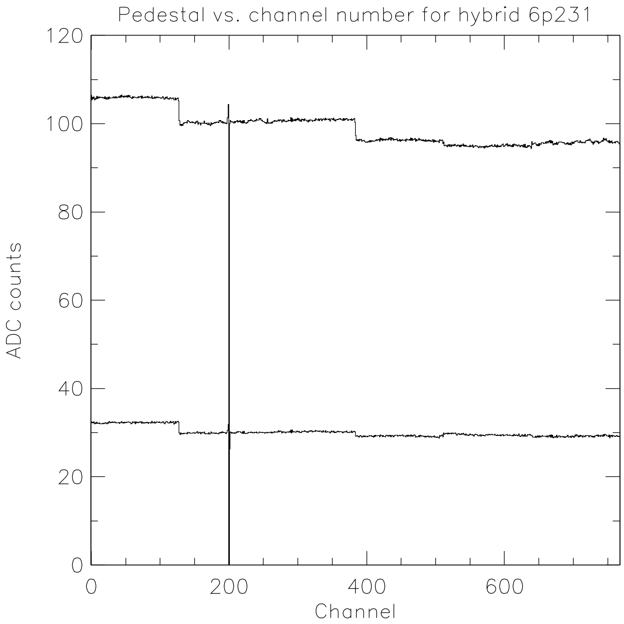
## 4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

# 5 Pedestal

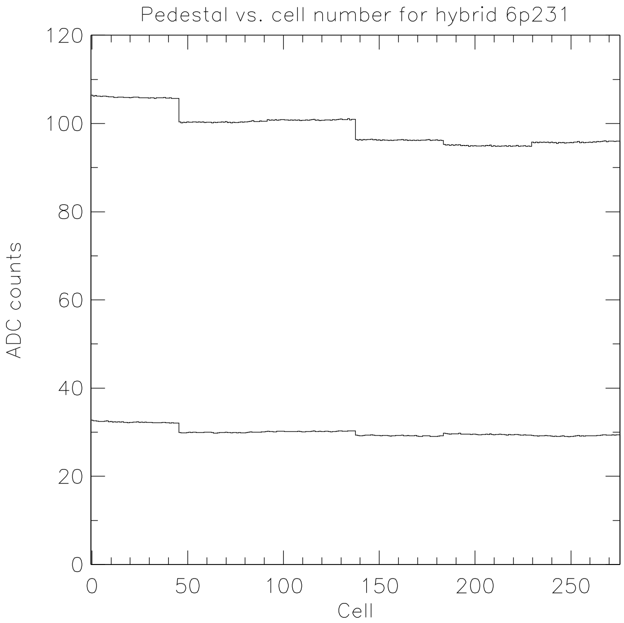
The following plot shows the pedestals vs. channel number with and without charge injection:

**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.

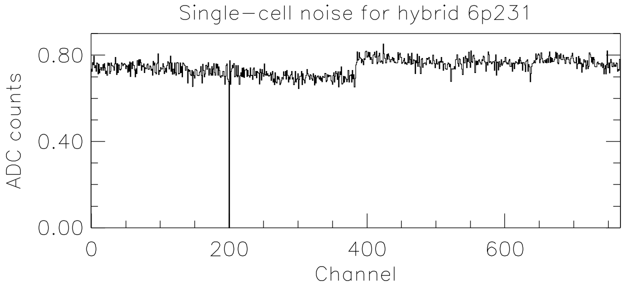
**Pedestal vs. Pipeline Cell ID**

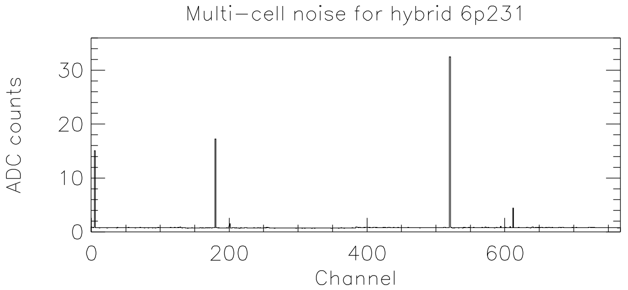


# 6 Noise

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

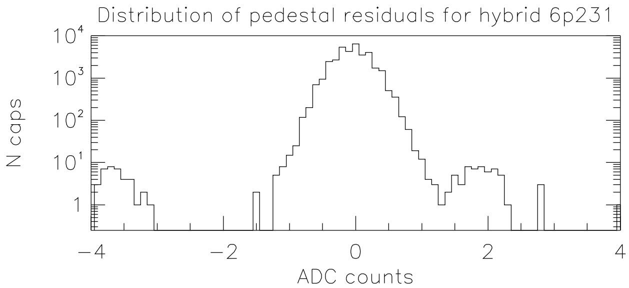
**RMS Noise**

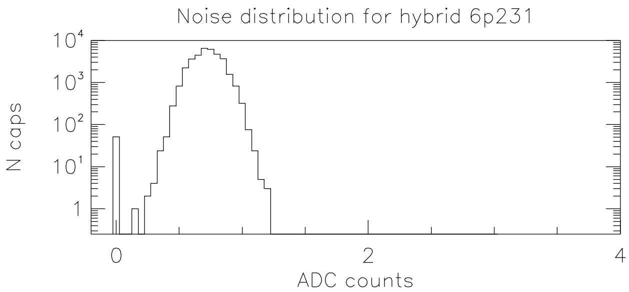



The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

**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**