Hybrid 7p161 Traveler

July 10, 2000

1 Connectivity

Repairs on shorts: L1A shorted AVDD. Fixed.
Fixes for opens:

2 Chips

The following chips were assembled on this hybrid (in the order that the chips get read out):
Hybrid 7P161 has die: 239-130 239-134 223-063 223-074 240-006 240-007 240-012

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 7p161 classification info. Created 12:07:21 07/10/00

Hybrid 7p161 quality: fair
Chip classification: good good fair good fair fair fair
Bad channels (chip-channel): 2-116 4-46 4-102 5-14 6-48
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-40-1 4-43-117 4-43-118
   4-43-119 4-44-118
Channels at pedestal needed for DCMS: 30.6 32.6 30.2 28.7 27.8 30.6 30.6
```

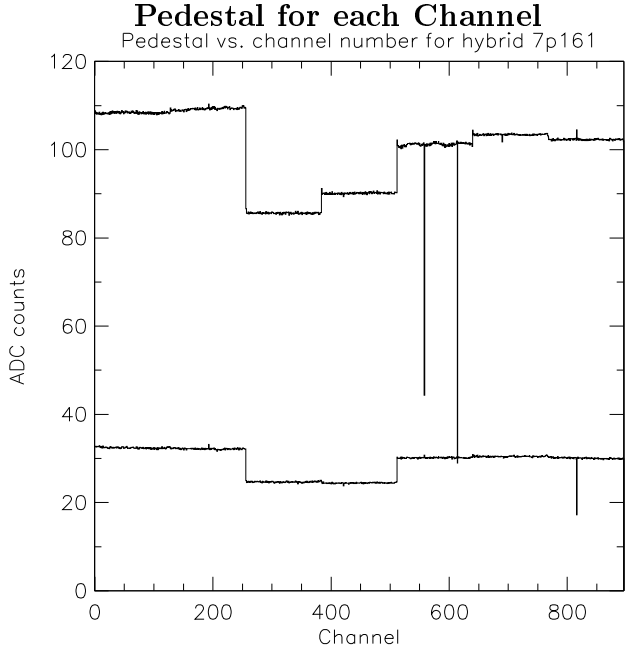
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.
Chips 3 and 4 Replaced.

5 Pedestal

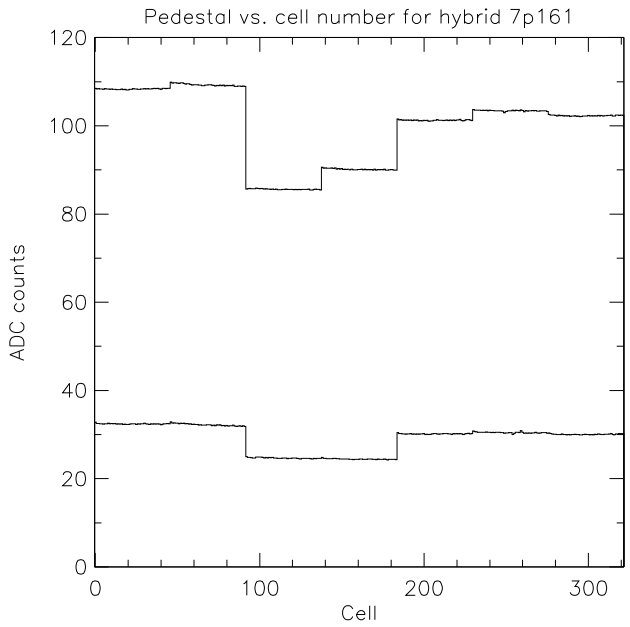
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

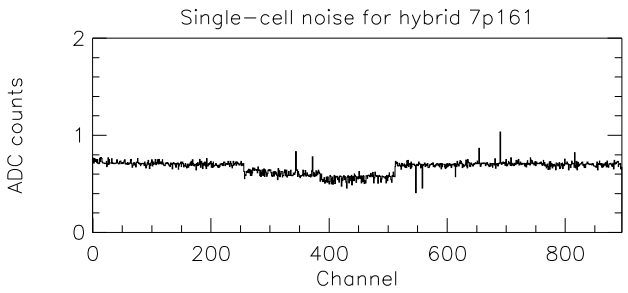
Pedestal vs. Pipeline Cell ID

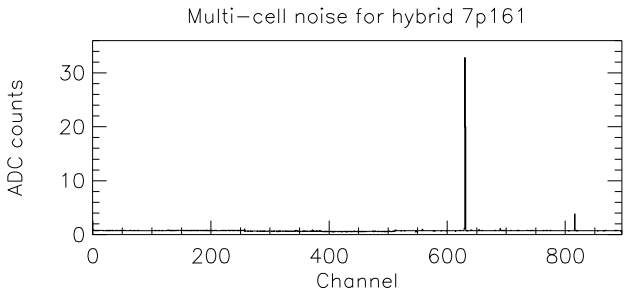


6 Noise

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

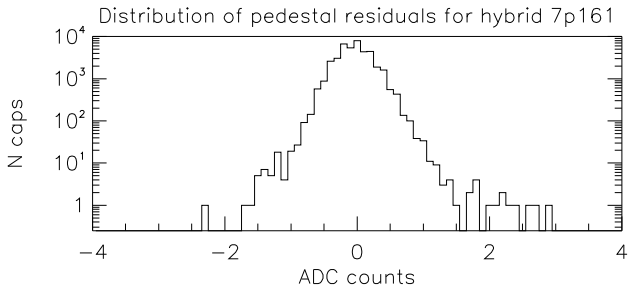
RMS Noise

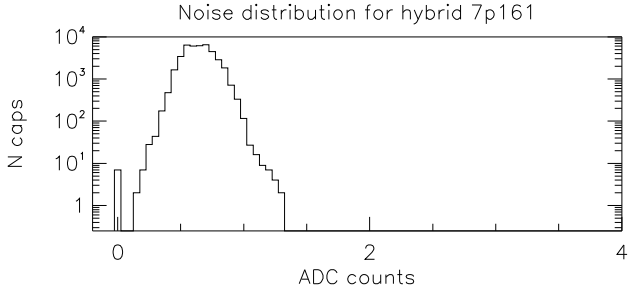




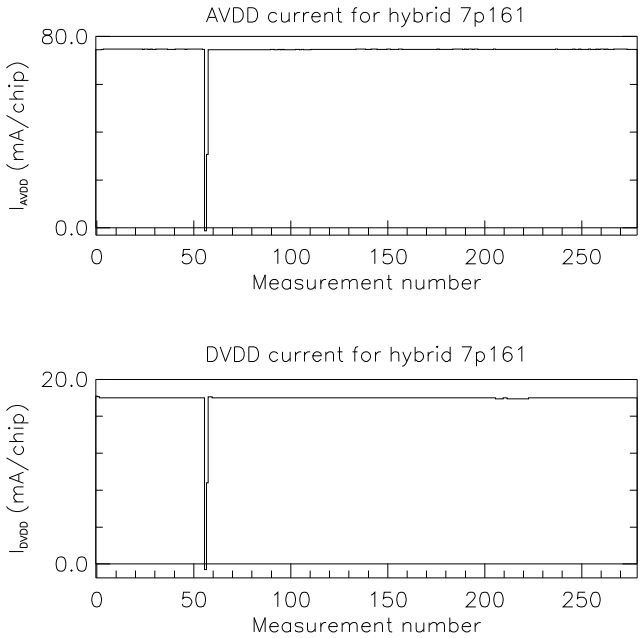
The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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