Hybrid 7p3 Traveler

May 23, 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 7P3 has die: 076-006 076-008 076-009 076-010 076-011 076-012 076-013

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 7p3 classification info. Created 14:47:24 05/22/00

Hybrid 7p3 quality: fair
Chip classification: fair good good fair fair good fair
Bad channels (chip-channel): 0-67 3-113 6-44
Bad cells: none
Random bad capacitors (chip-cell-channel): 4-10-127 6-18-43 6-28-15
   6-38-43 6-40-43 6-42-43 6-5-42 6-5-43
Channels at pedestal needed for DCMS: 31.6 30.6 29.7 28.8 31.6 29.7 31.7
```

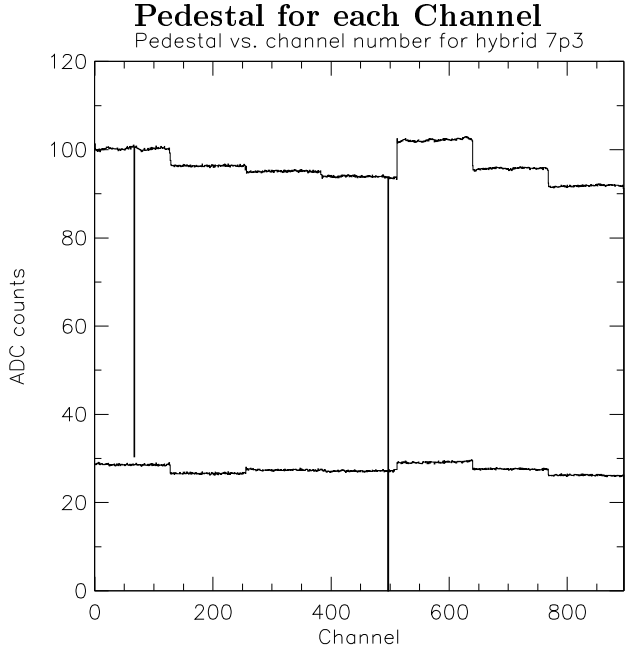
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

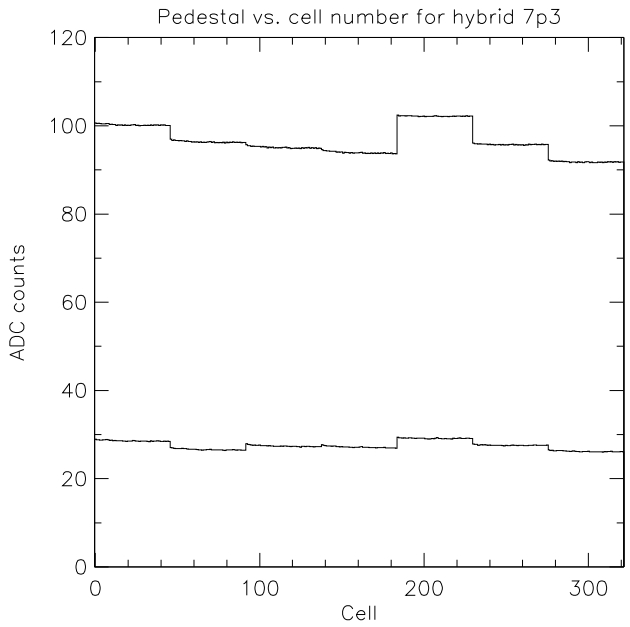
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

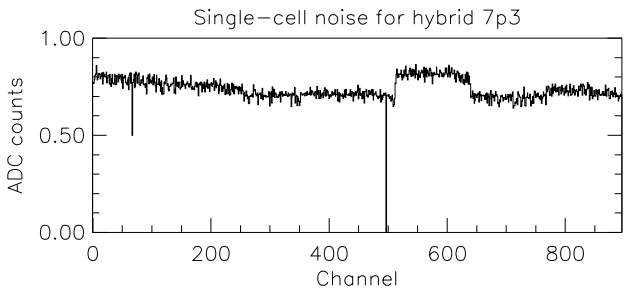
Pedestal vs. Pipeline Cell ID

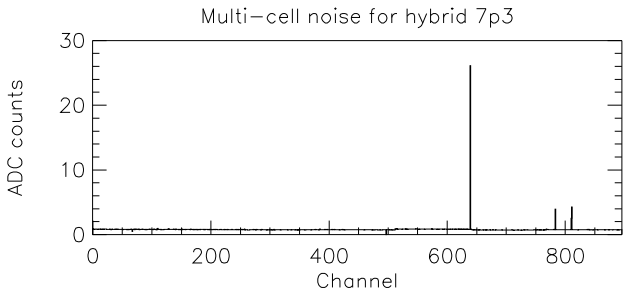


6 Noise

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

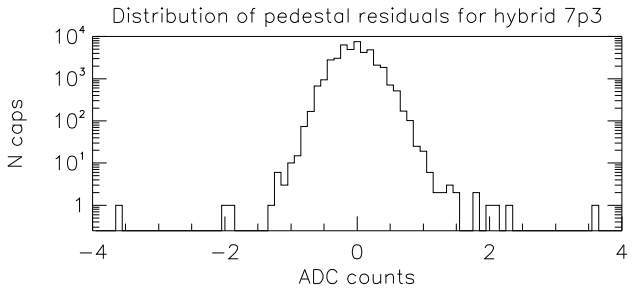
RMS Noise

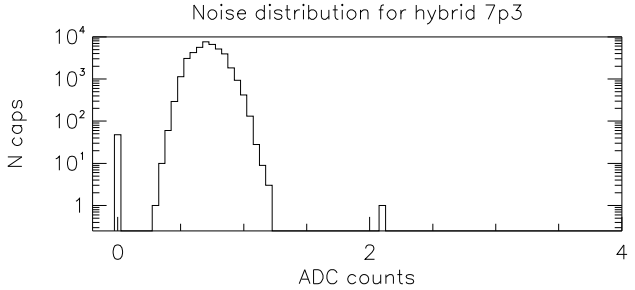




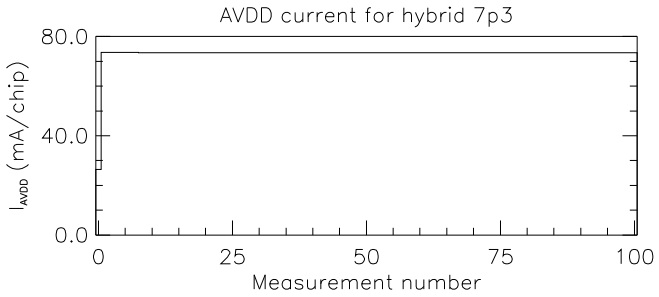
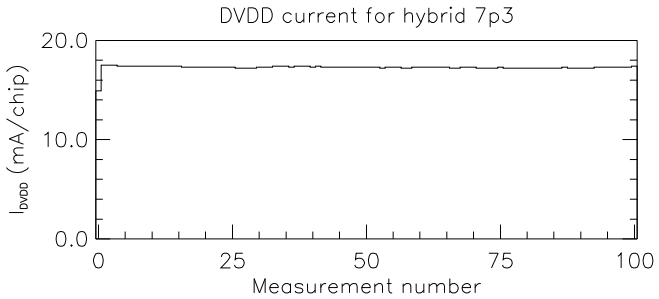
The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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