Hybrid 7p85 Traveler

May 19, 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 7P85 has die: 231-118 236-132 238-001 238-002 238-003 238-006 238-007

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 7p85 classification info. Created 11:21:45 05/18/00

Hybrid 7p85 quality: fair
Chip classification: good fair good good good good fair
Bad channels (chip-channel): 1-124 6-98
Bad cells: none
Random bad capacitors (chip-cell-channel): 6-1-98 6-12-98 6-14-98
   6-16-98 6-17-98 6-18-98 6-21-98 6-23-98 6-24-98 6-28-98 6-29-98
   6-3-98 6-31-98 6-32-98 6-33-98 6-36-98 6-37-98 6-41-98 6-43-98
   6-6-98 6-7-98
Channels at pedestal needed for DCMS: 30.7 30.6 31.6 30.5 30.6 30.2 32.4
```

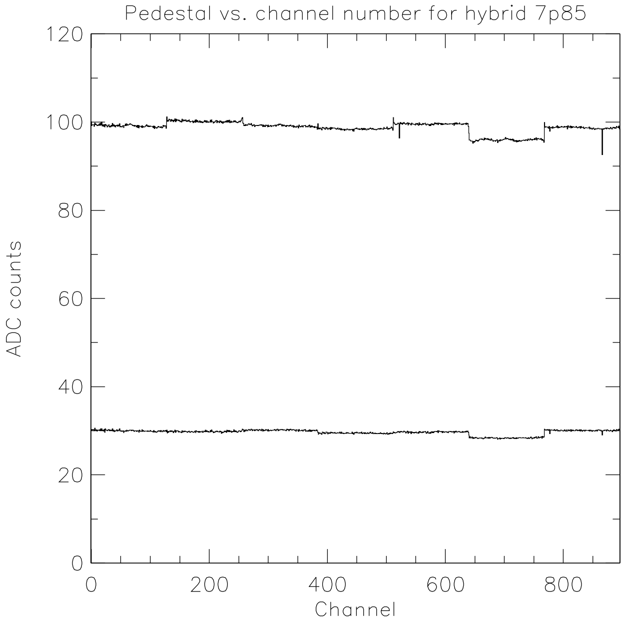
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

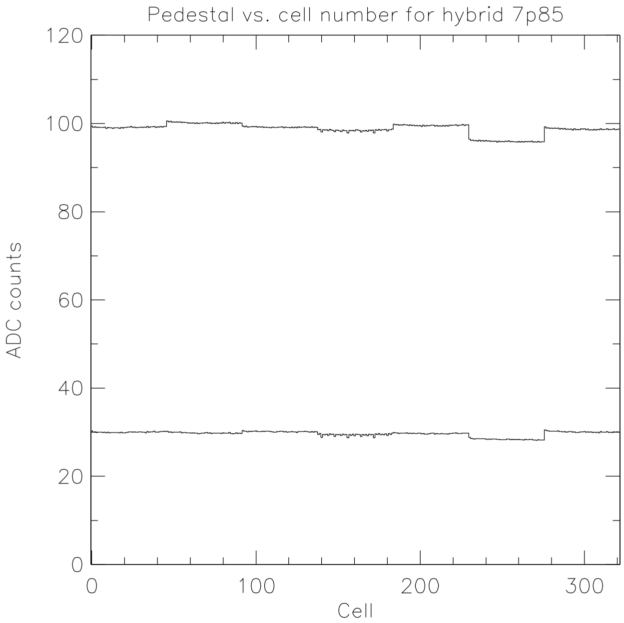
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

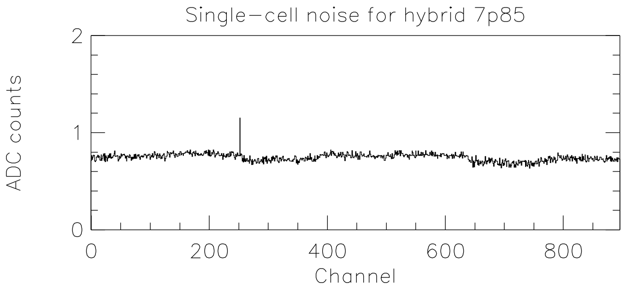
Pedestal vs. Pipeline Cell ID

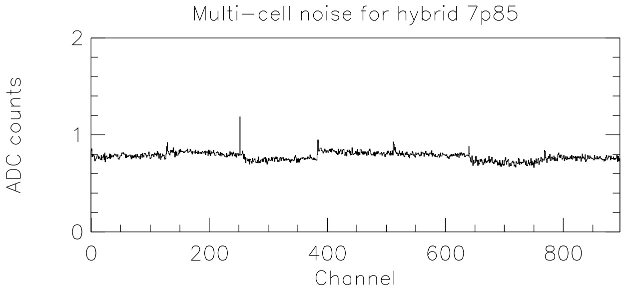


6 Noise

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

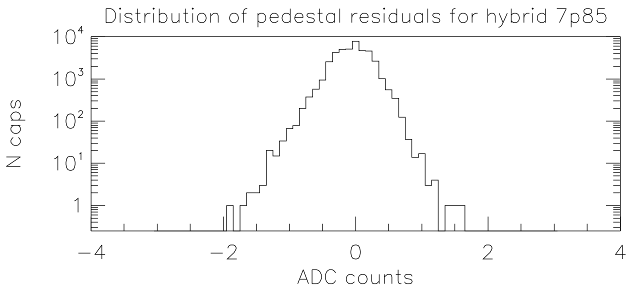
RMS Noise

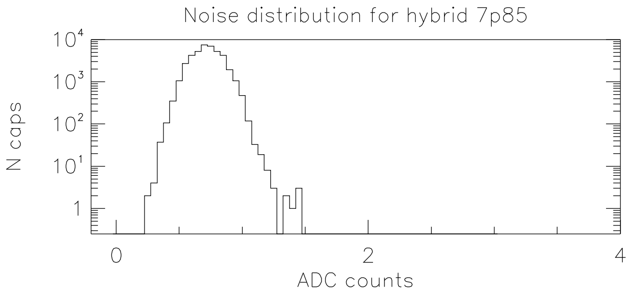




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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