Hybrid 7z75 Traveler

June 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 7Z75 has die: 171-006 171-007 171-012 171-013 171-018 171-019 171-026

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.

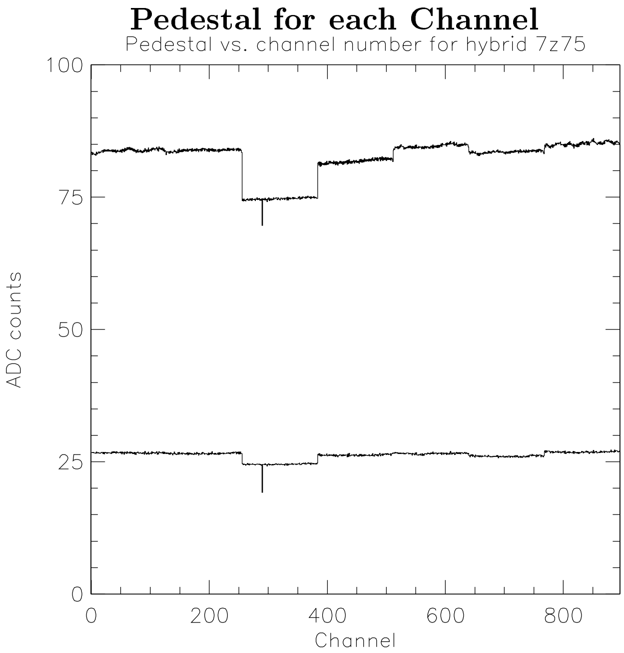
```
% Hybrid 7z75 classification info. Created 08:44:16 06/19/00

Hybrid 7z75 quality: fair
Chip classification: fair good fair fair good fair good
Bad channels (chip-channel): 2-34 2-58 5-19 5-22
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-27-108 0-29-123 3-22-77
   3-42-24 5-10-20 5-10-21 5-11-21 5-14-20 5-14-21 5-15-21 5-17-20
   5-17-21 5-19-20 5-19-21 5-21-20 5-21-21 5-30-20 5-30-21 5-31-21
   5-43-21
Channels at pedestal needed for DCMS: 32.7 32.7 31.5 33.7 30.7 31.5 31.6
```

4 Comments

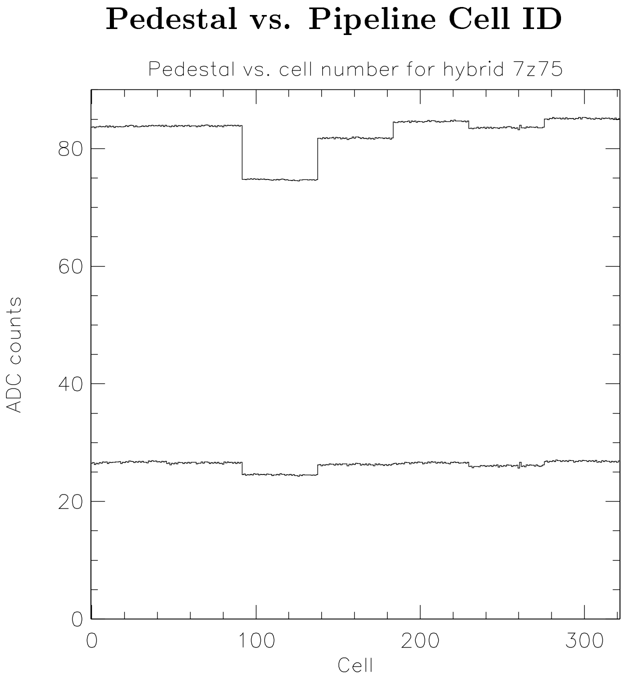
Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

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



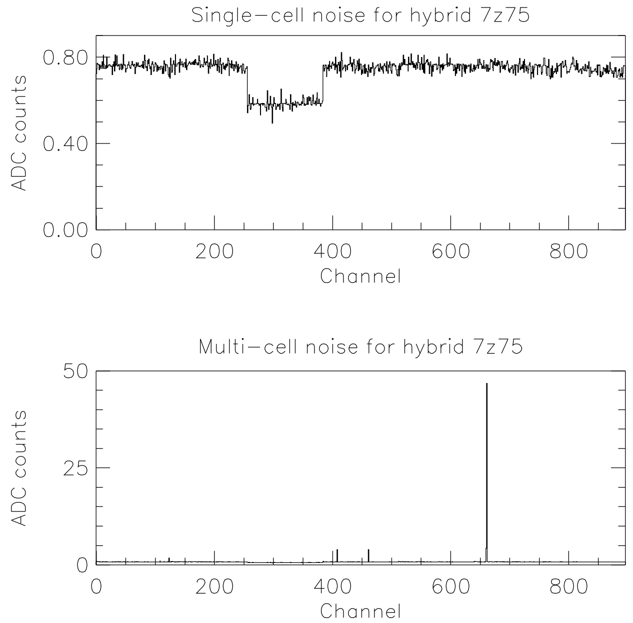
The following plot shows the average pedestal vs. pipeline cell ID with and without charge injection. The x-axis is cell ID offset by 46 for each chip. Thus cell ID 5 for chip 1 is at x=5, chip 2 at x=51, chip 3 at x=97, etc.



6 Noise

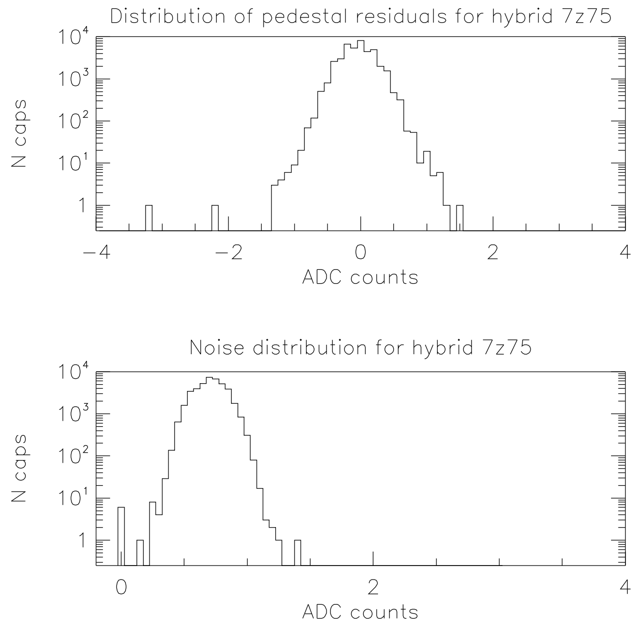
The following plots show the single-cell and multi-cell RMS noise:

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