Hybrid 7z171 Traveler

May 30, 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 7Z171 has die: 170-008 170-009 170-012 170-014 170-015 170-017 170-018

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 7z171 classification info. Created 11:27:15 05/29/00

Hybrid 7z171 quality: fair
Chip classification: good good good fair good good good
Bad channels: none
Bad cells: none
Random bad capacitors (chip-cell-channel): 3-15-27 3-2-26 3-2-27
   3-28-26 3-28-27 3-3-27 3-32-26 3-32-27 3-33-27 3-35-26 3-35-27
   3-37-26 3-37-27 3-39-26 3-39-27
Channels at pedestal needed for DCMS: 32.7 31.7 31.2 30.7 32.6 31.7 30.7
```

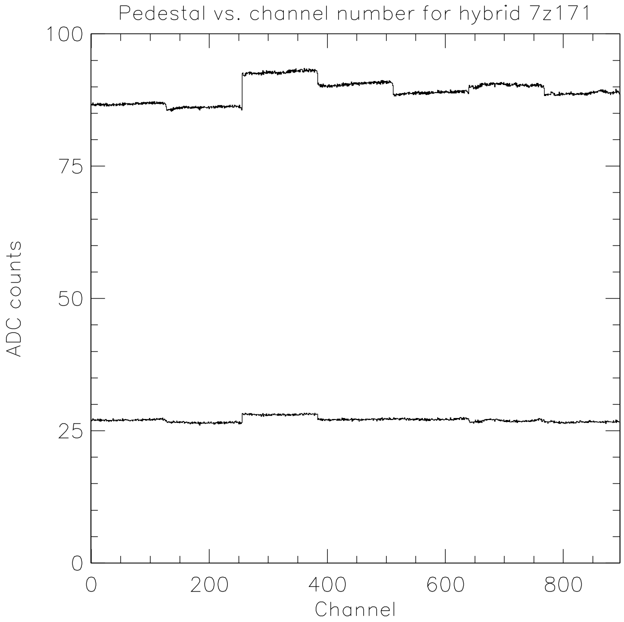
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

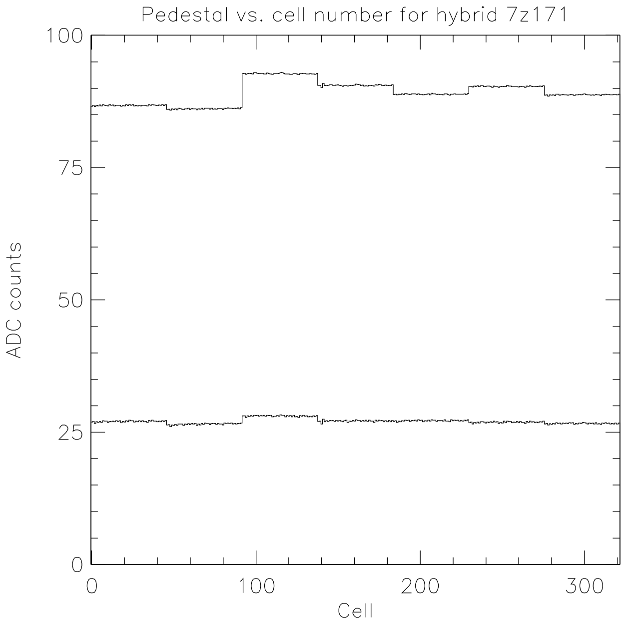
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

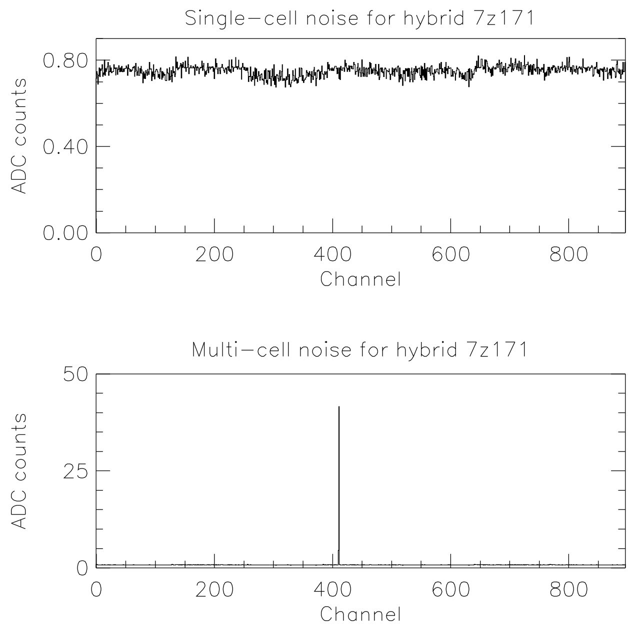
Pedestal vs. Pipeline Cell ID



6 Noise

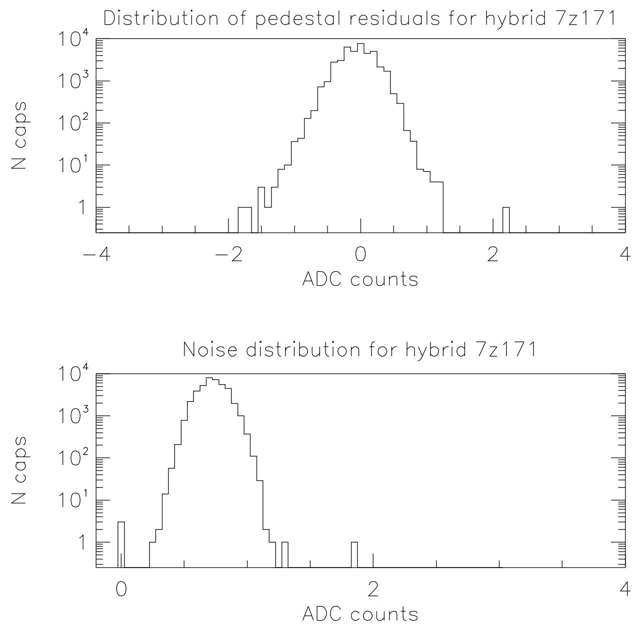
The following plots show the single-cell and multi-cell RMS noise:

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