Hybrid 7z47 Traveler

March 27, 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 7Z47 has die: 148-041 148-045 148-047 077-034 077-037 084-012 079-008

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 7z47 classification info. Created 12:12:15 03/24/00

Hybrid 7z47 quality: fair
Chip classification: fair fair fair fair fair fair fair
Bad channels (chip-channel): 0-110 2-63 2-127 3-77 4-102 5-83 6-38
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-39-47
Channels at pedestal needed for DCMS: 35.5 37.6 35.4 41.6 40.6 38.7 35.7
```

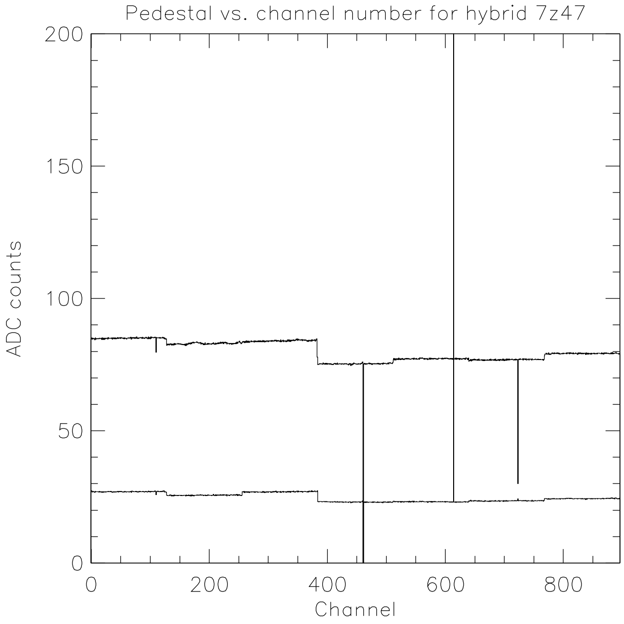
4 Comments

Channels 461, 614 bad. Encapsulated. HV tested. Has Au FE DVDD and DGND wirebonds.

5 Pedestal

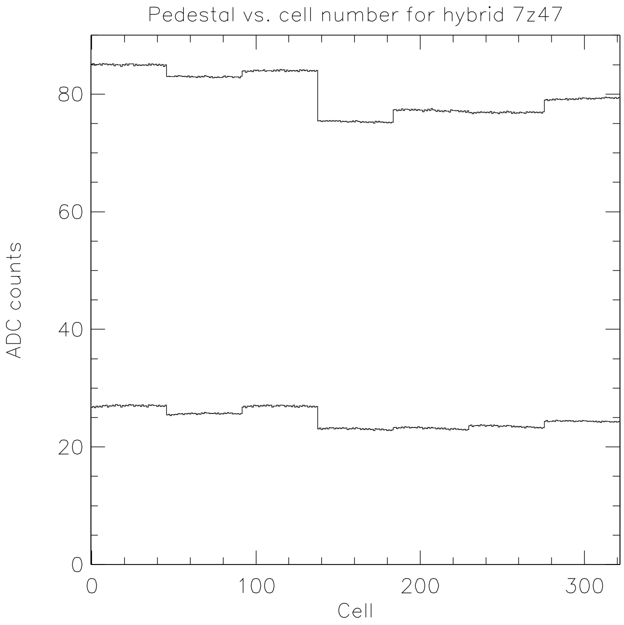
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

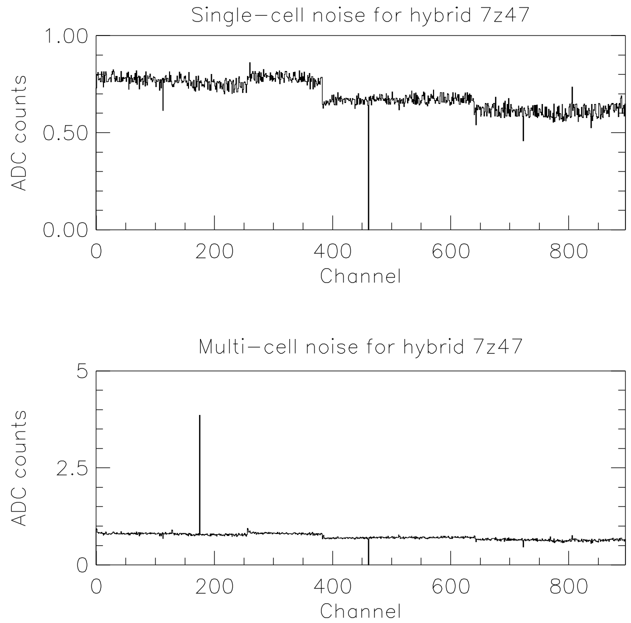
Pedestal vs. Pipeline Cell ID



6 Noise

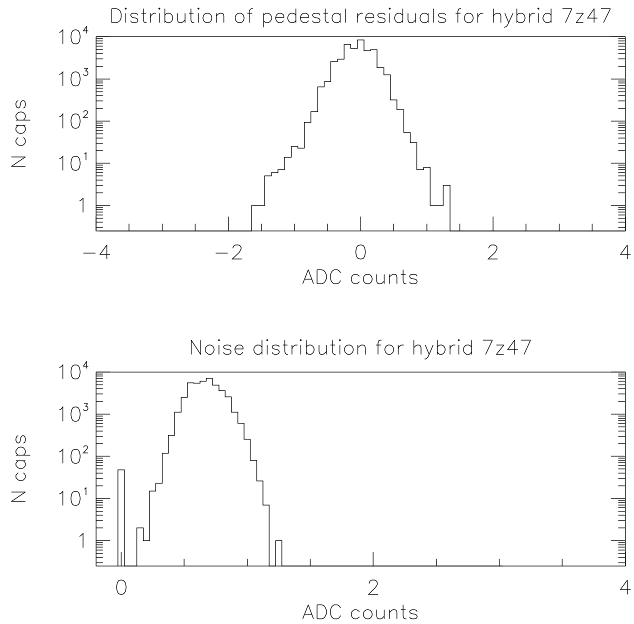
The following plots show the single-cell and multi-cell RMS noise:

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