Hybrid 5z67 Traveler

January 31, 2000

1 Connectivity

Shorts: Bus 2B was shorted to G. Repaired by cutting trace and jumping from chip 3 to chip 4 to chip 5.

Fixes for opens:Bus3 open to chips 4 and 5, fixed with w/b's. Bus 3 open on hybrid; fixed with added wire. Bus 2B open between chips 2 3; fixed with w/b's.

2 Chips

The following chips were assembled on this hybrid (in the order that the chips get read out):
Hybrid 5Z67 has die: 101-012 101-013 101-016 101-017 101-018

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 5z67 classification info. Created 09:20:41 01/27/00

Hybrid 5z67 quality: good
Chip classification: good good good good good
Bad channels: none
Bad cells: none
Random bad capacitors: none
Channels at pedestal needed for DCMS: 39.6 33.7 39.7 35.6 35.6
```

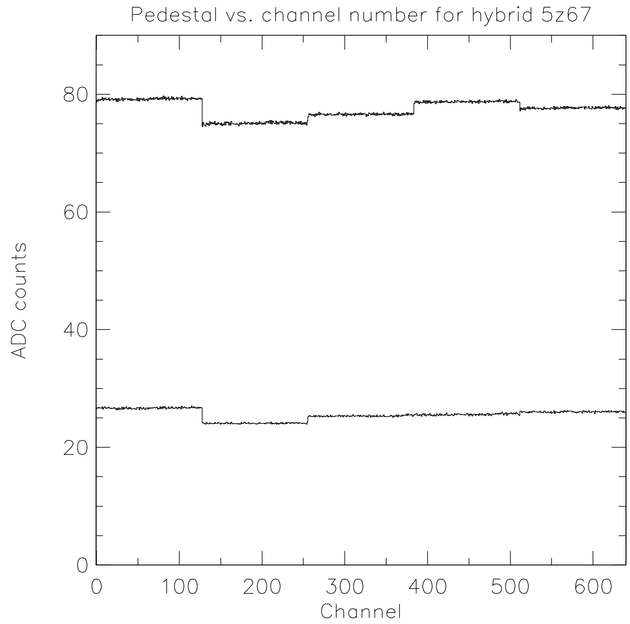
4 Comments

Encapsulated. Has FE Au DVDD and DGND wirebonds. HV tested.

5 Pedestal

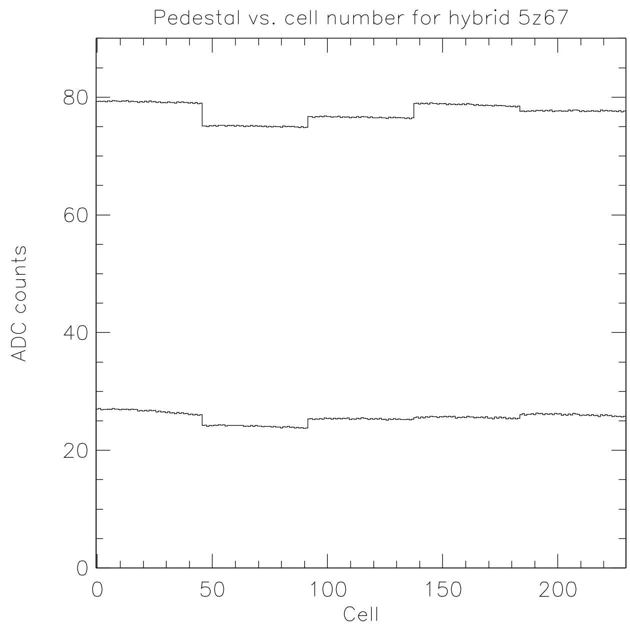
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

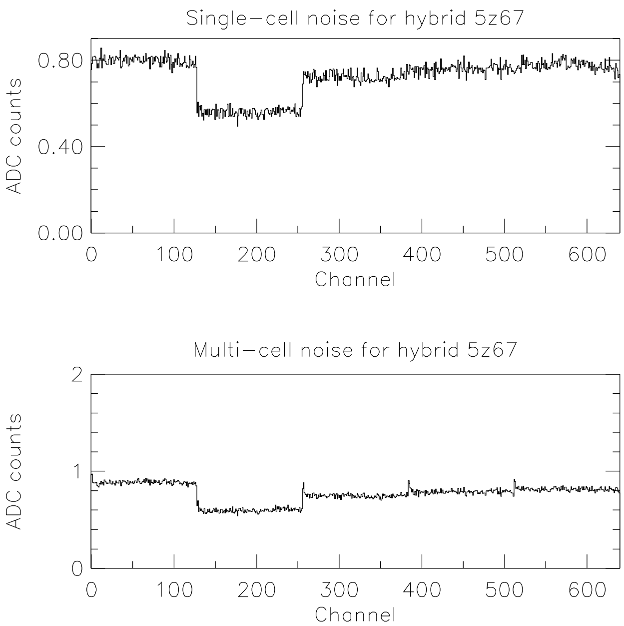
Pedestal vs. Pipeline Cell ID



6 Noise

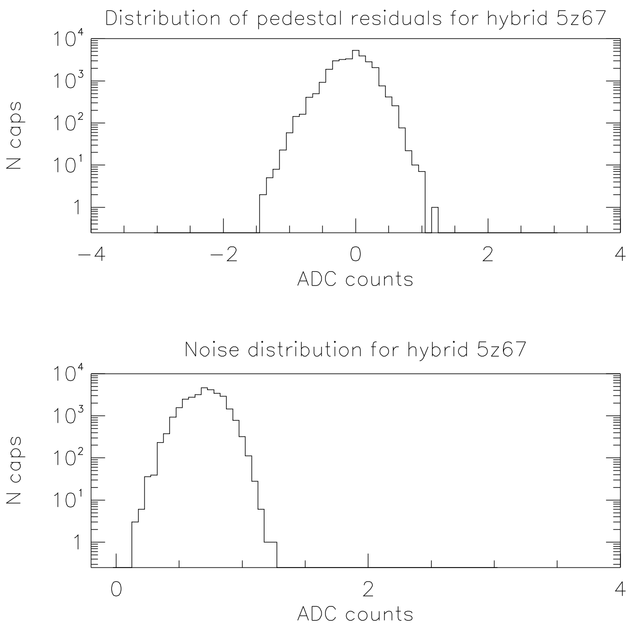
The following plots show the single-cell and multi-cell RMS noise:

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