Hybrid 5p8 Traveler

November 29, 1999

1 Connectivity

Repairs on shorts:

Fixes for opens: PRD2 open to chip 5, fixed with w/b jump. Open in HV-fixed with an extra wire from cable solder field to left-hand (unused) solder field.

2 Chips

The following chips were assembled on this hybrid (in the order that the chips get read out):
Hybrid 5P8 has die: 094-041 094-042 094-046 094-048 094-051

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 5p8 classification info. Created 14:19:51 11/29/99

Hybrid 5p8 quality: fair
Chip classification: fair good good good good
Bad channels (chip-channel): 0-20 0-21 0-22 0-23
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-25-20 0-25-21 0-25-22
   0-25-23 0-26-21 0-26-22
Channels at pedestal needed for DCMS: 38.6 36.6 41.6 36.6 39.5
```

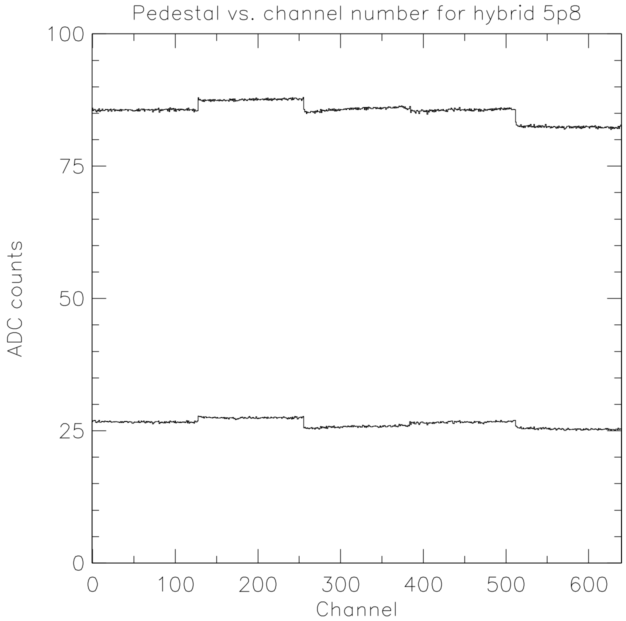
4 Comments

Has automatic chip-to-same-chip Al wirebonds.

5 Pedestal

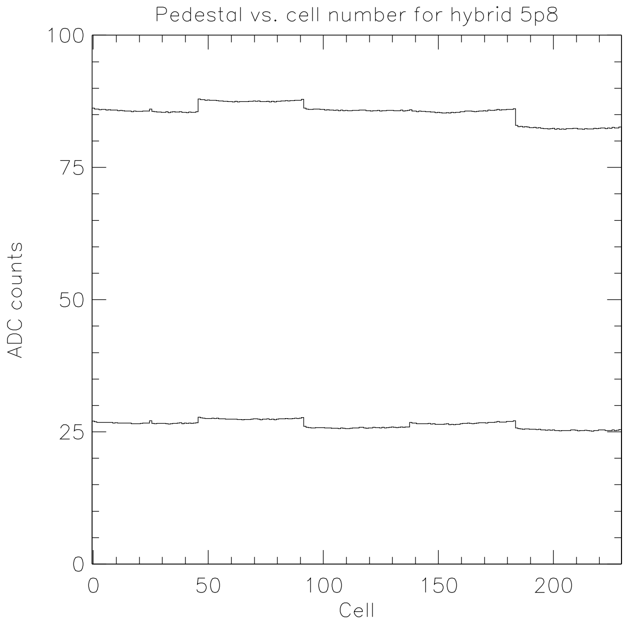
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

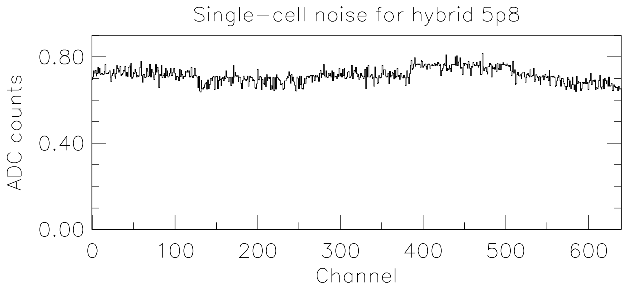
Pedestal vs. Pipeline Cell ID

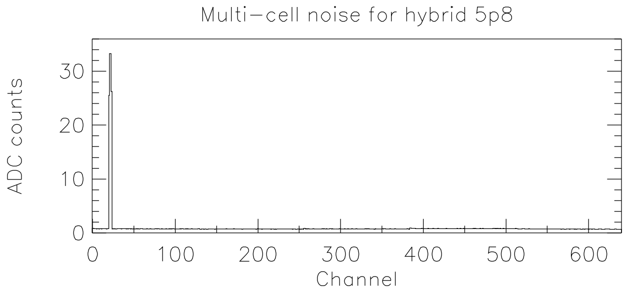


6 Noise

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

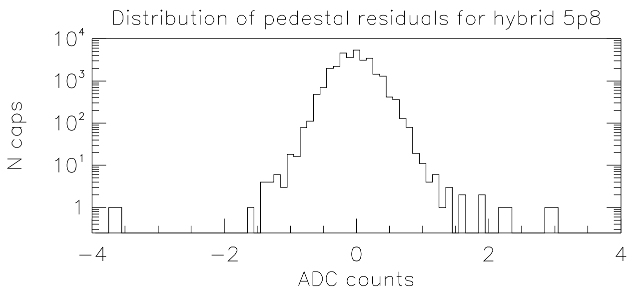
RMS Noise

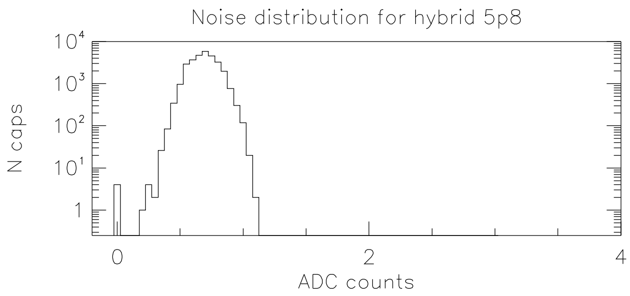




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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