Hybrid 8j299 Traveler

April 7, 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 8J299 has die: 137-020 137-021 137-022 137-024 162-113 162-114 162-115 162-116

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 8j299 classification info. Created 10:07:42 04/07/00

Hybrid 8j299 quality: fair
Chip classification: fair good fair fair fair good good fair
Bad channels (chip-channel): 0-4 2-112 7-78
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-1-85 0-1-86 0-1-87
   0-14-86 0-2-109 0-2-86 0-27-86 0-27-87 0-28-86 0-31-86 0-31-87
   0-32-86 0-34-86 0-34-87 0-36-86 0-36-87 0-38-86 0-38-87 3-5-100
   3-5-101 3-6-101 4-21-9
Channels at pedestal needed for DCMS: 30.5 32.2 31.7 30.7 33.6 34.7 34.6 34.6
```

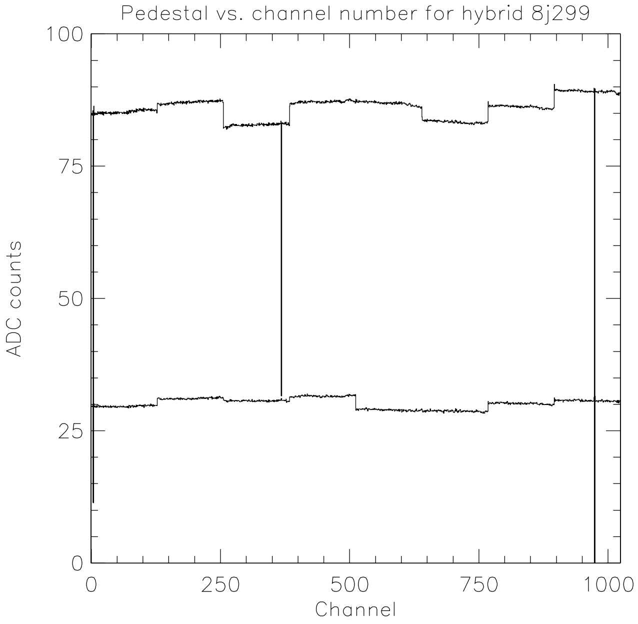
4 Comments

HV tested.

5 Pedestal

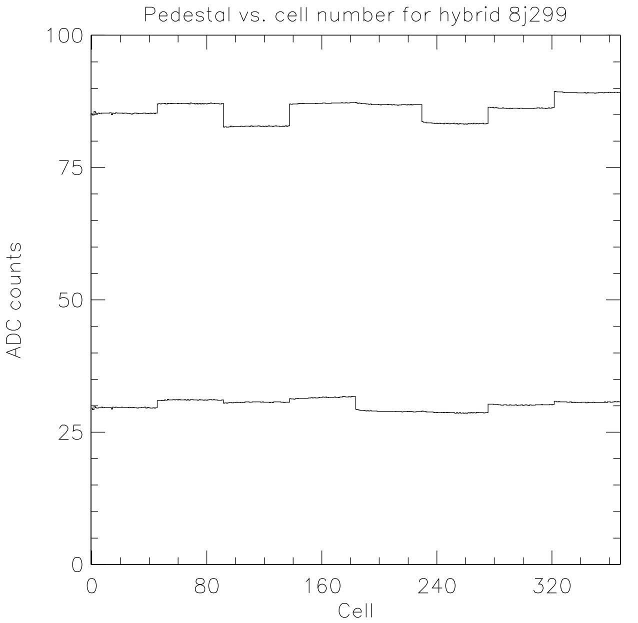
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

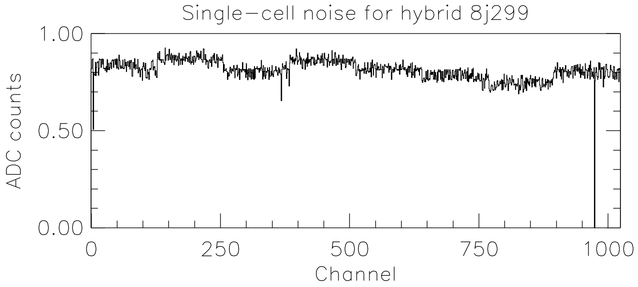
Pedestal vs. Pipeline Cell ID

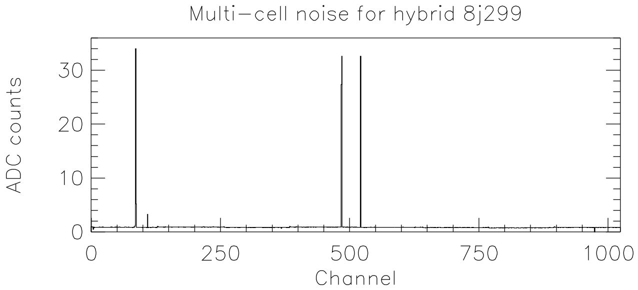


6 Noise

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

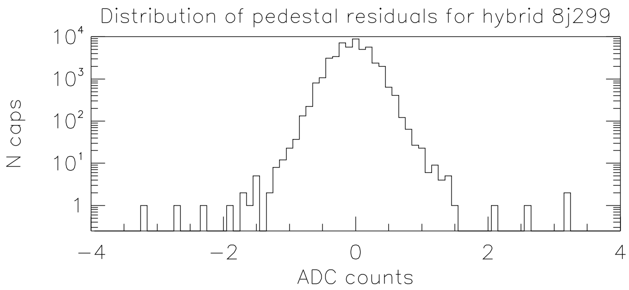
RMS Noise

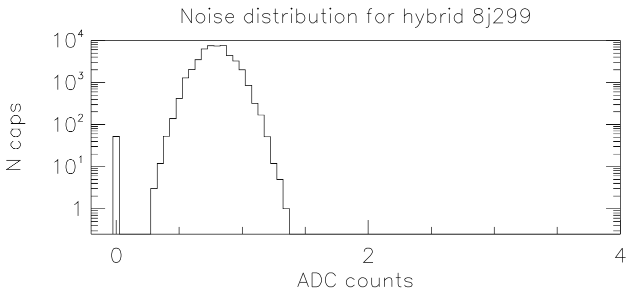




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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