Hybrid 8j298 Traveler

July 24, 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 8J298 has die: 137-008 137-009 137-010 242-095 162-109 162-110 162-111 137-070

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 8j298 classification info. Created 12:44:11 07/21/00

Hybrid 8j298 quality: fair
Chip classification: good fair good fair fair good fair fair
Bad channels (chip-channel): 1-50 3-73 7-22
Bad cells: none
Random bad capacitors (chip-cell-channel): 4-18-121 4-18-122 4-18-123
   4-19-122 4-2-122 4-20-122 4-7-122 6-1-77 6-12-76 6-12-77 6-13-77
   6-14-77 6-42-77 7-25-68 7-34-21 7-36-93 7-39-73 7-39-74
Channels at pedestal needed for DCMS: 32.6 31.5 32.6 31.6 34.1 33.7 33.6 34.6
```

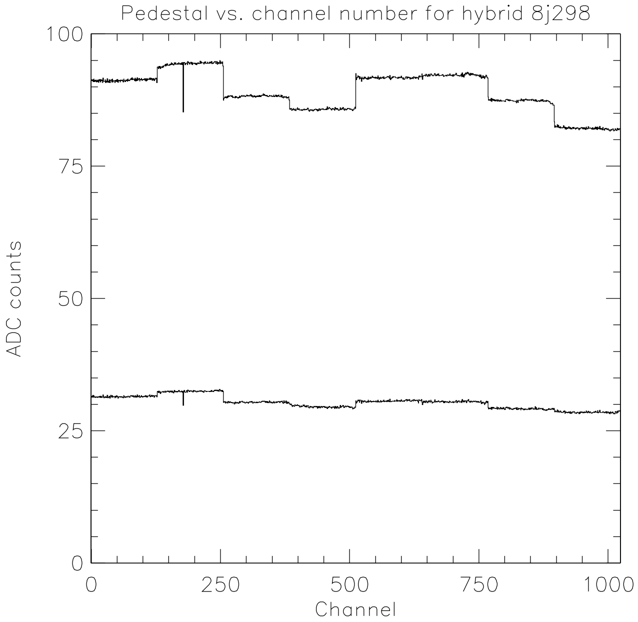
4 Comments

HV tested.

5 Pedestal

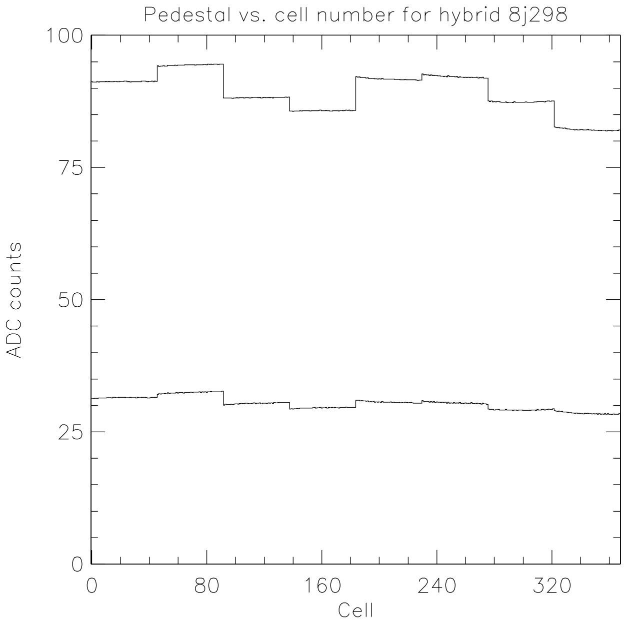
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

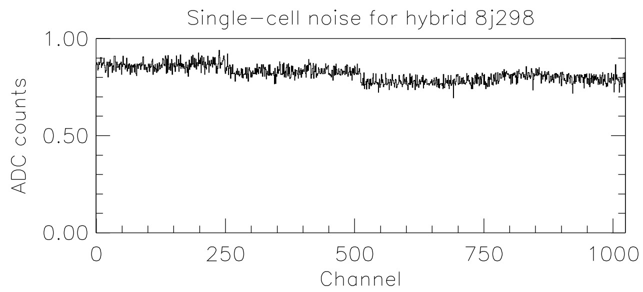
Pedestal vs. Pipeline Cell ID

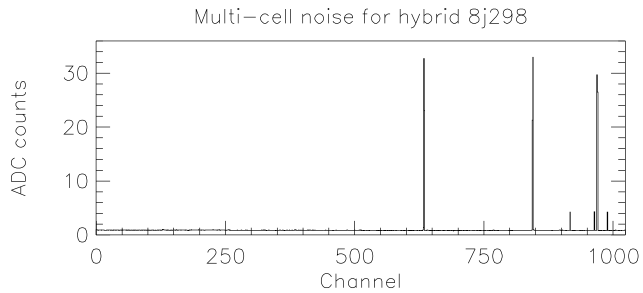


6 Noise

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

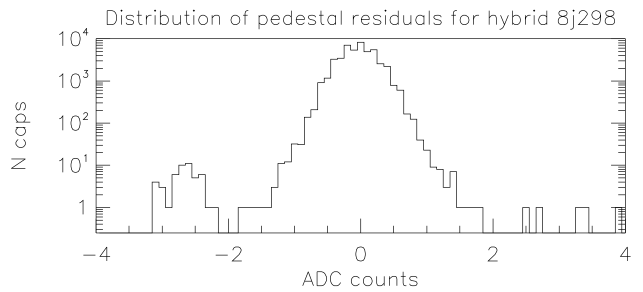
RMS Noise

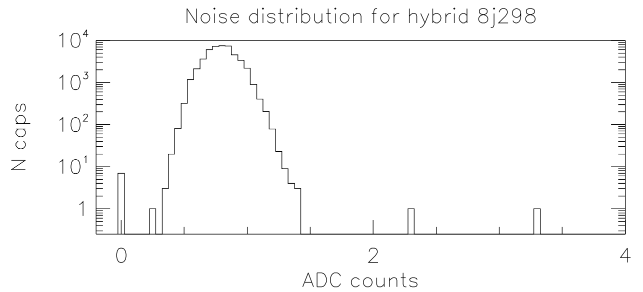




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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