Hybrid 8j385 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 8J385 has die: 224-113 222-001 222-002 222-005 234-128 234-129 234-130 234-132

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 8j385 classification info. Created 11:20:15 07/24/00

Hybrid 8j385 quality: bad
Chip classification: bad fair good fair fair fair good fair
Bad channels (chip-channel): 0-0 0-15 0-36 0-37 1-46 1-47 3-44 3-49 4-58 5-29
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-0-24 0-11-24 0-44-24
   0-9-24 1-13-112 1-41-102 3-39-103 3-41-66 4-37-19 4-37-20 4-39-18
   4-41-24 7-36-123 7-36-124 7-38-117 7-39-108
Channels at pedestal needed for DCMS: 31.4 27.7 34.6 29.6 32.6 30.6 29.6 30.3
```

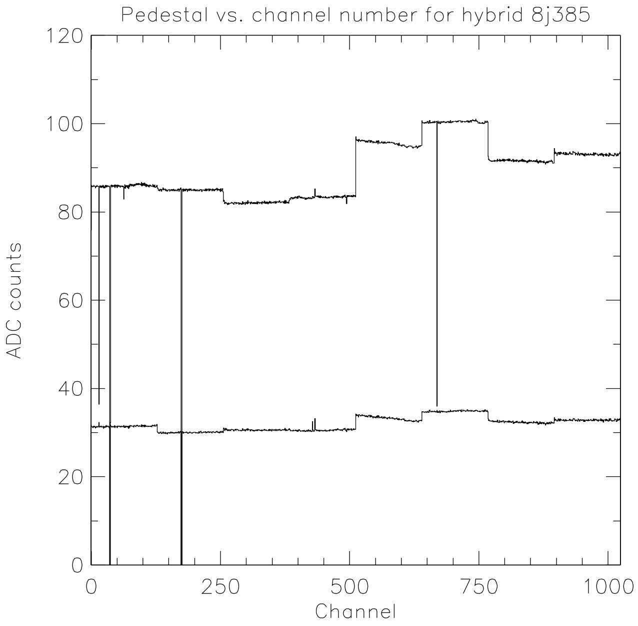
4 Comments

HV tested.

5 Pedestal

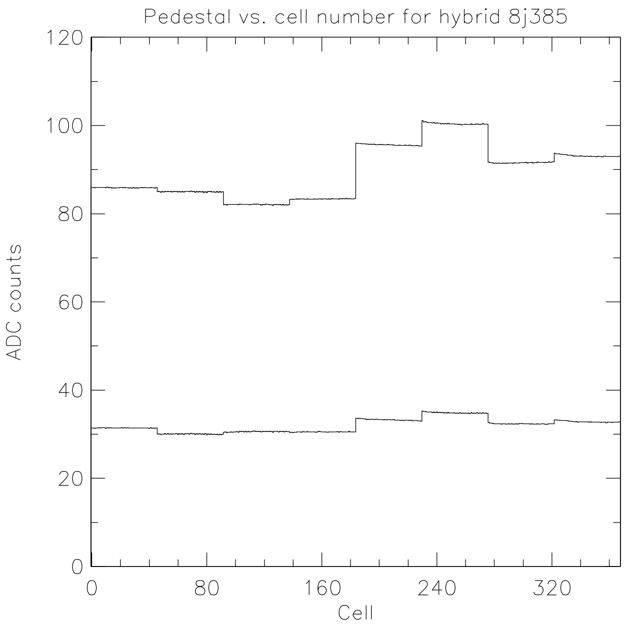
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

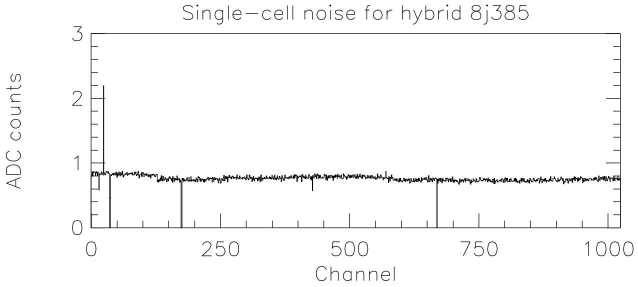
Pedestal vs. Pipeline Cell ID

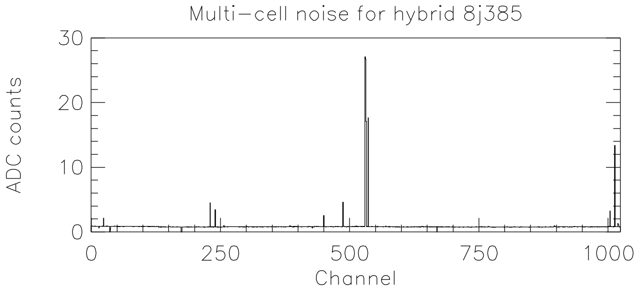


6 Noise

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

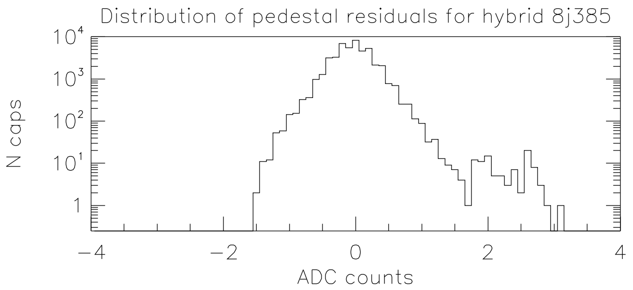
RMS Noise

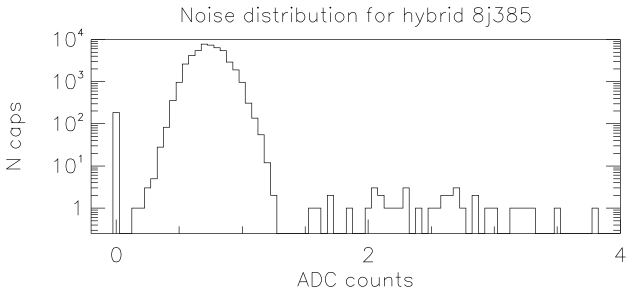




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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