Hybrid 8j245 Traveler

February 17, 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 8J245 has die: 143-027 143-028 143-029 143-032 176-081 176-082 176-083 176-084

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 8j245 classification info. Created 09:46:35 02/17/00

Hybrid 8j245 quality: fair
Chip classification: good good good good fair good good fair
Bad channels (chip-channel): 4-7 7-76
Bad cells: none
Random bad capacitors (chip-cell-channel): 4-11-119 4-19-87 4-25-110
   4-28-122 4-30-96 4-34-92 4-35-60 4-43-69 7-0-75 7-1-75 7-2-75
   7-3-75 7-30-78 7-4-75 7-5-75 7-6-75
Channels at pedestal needed for DCMS: 30.6 30.5 30.7 28.7 33.6 34.6 33.6 30.6
```

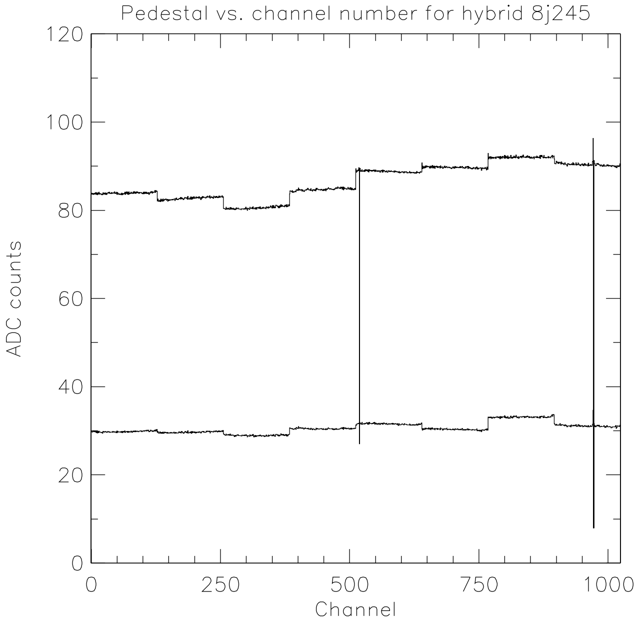
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

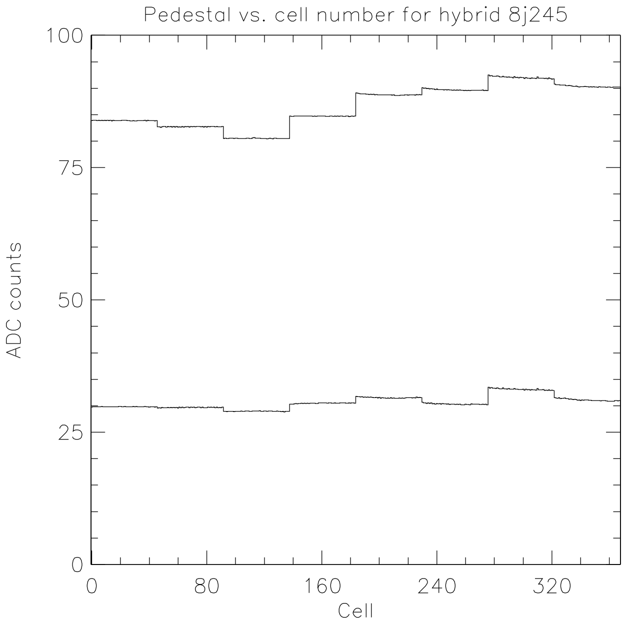
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

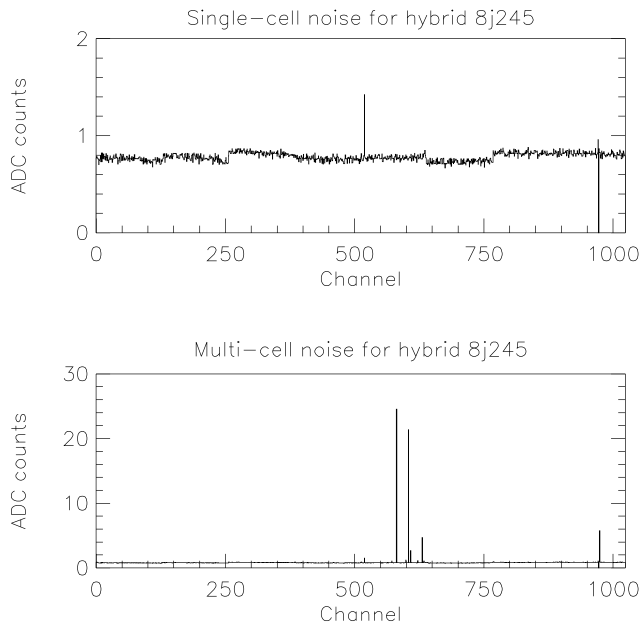
Pedestal vs. Pipeline Cell ID



6 Noise

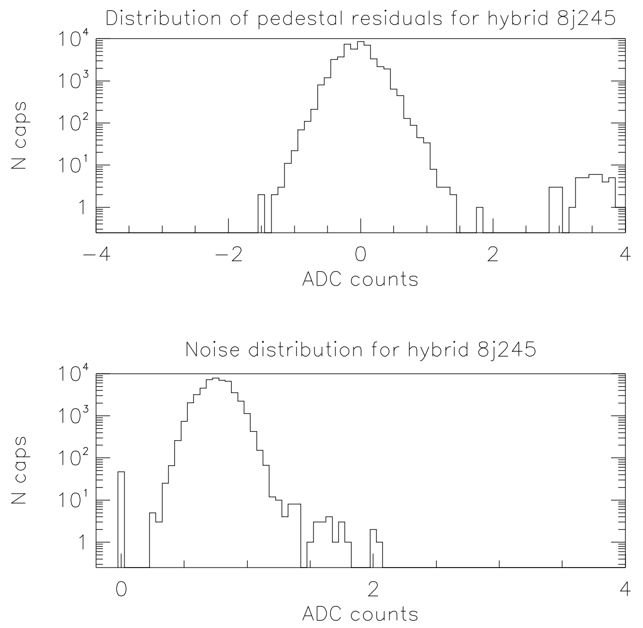
The following plots show the single-cell and multi-cell RMS noise:

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