# Hybrid 8j177 Traveler

January 26, 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 8J177 has die: 204-126 204-127 204-129 204-132 187-026 187-028 187-030 187-033

## 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 8j177 classification info. Created 15:55:18 01/20/00

Hybrid 8j177 quality: bad
Chip classification: fair fair bad fair fair good fair bad
Bad channels (chip-channel): 0-119 1-92 2-29 2-59 2-89 6-21 6-22 7-25 7-59 7-61 7-
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-37-30 2-37-31 3-43-112
   3-43-113 4-28-98 6-12-24 7-1-59 7-1-61 7-12-61 7-2-61 7-24-61
   7-42-61 7-44-61 7-8-61
Channels at pedestal needed for DCMS: 34.7 32.2 34.7 33.6 31.7 31.6 33.4 30.7
```

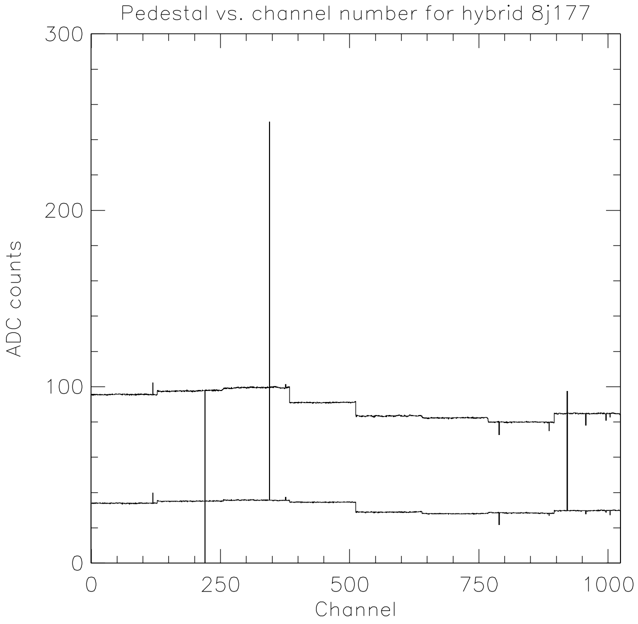
# 4 Comments

Encapsulated. FE DV finger gold bonds. HV tested. Has bad channels but the number is judged tollerable. Okay

# 5 Pedestal

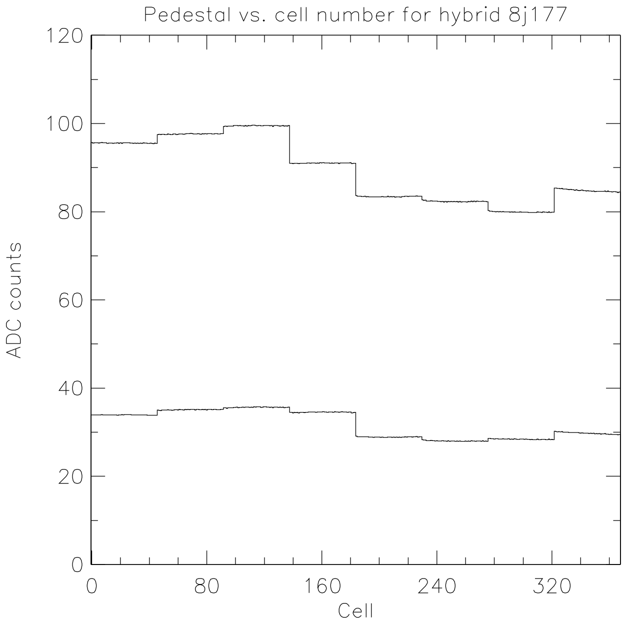
The following plot shows the pedestals vs. channel number with and without charge injection:

**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.

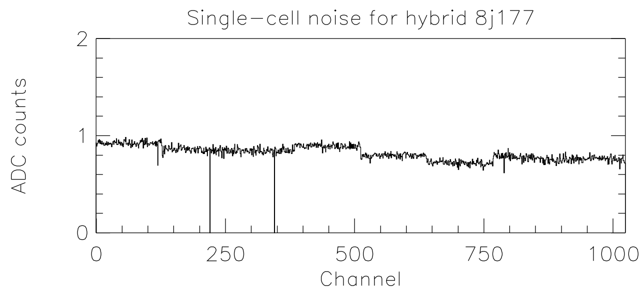
**Pedestal vs. Pipeline Cell ID**

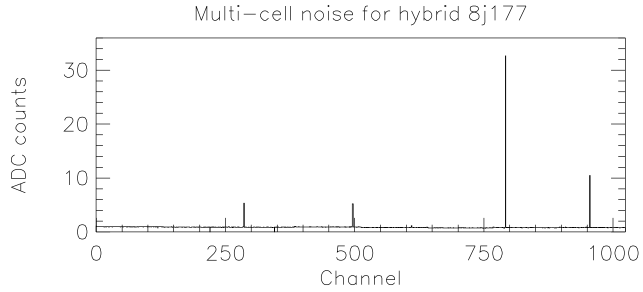


# 6 Noise

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

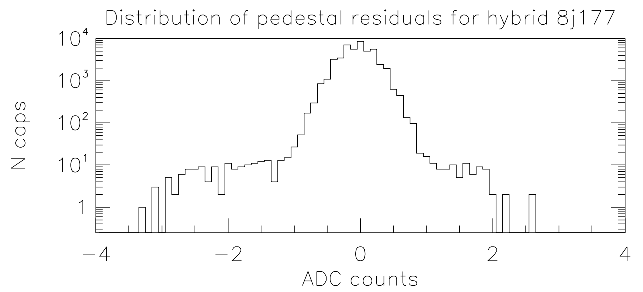
**RMS Noise**

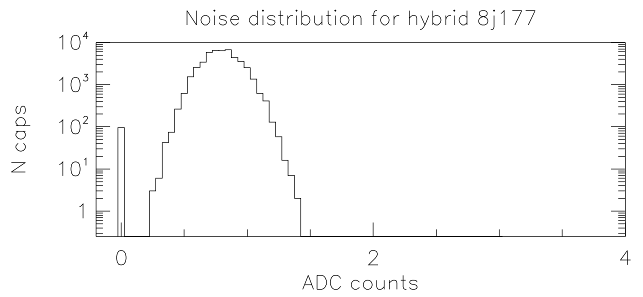



The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

**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**