# Hybrid 8j192 Traveler

February 9, 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 8J192 has die: 228-089 228-090 228-092 228-093 227-018 227-020 227-021 227-022

## 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 8j192 classification info. Created 09:28:32 02/09/00

Hybrid 8j192 quality: fair
Chip classification: good good good fair good good good fair
Bad channels (chip-channel): 3-29
Bad cells: none
Random bad capacitors (chip-cell-channel): 3-17-14 3-3-30 3-4-13
   3-4-14 3-4-15 3-5-14 7-14-50
Channels at pedestal needed for DCMS: 32.7 33.6 33.2 32.6 32.5 32.6 31.6 31.6
```

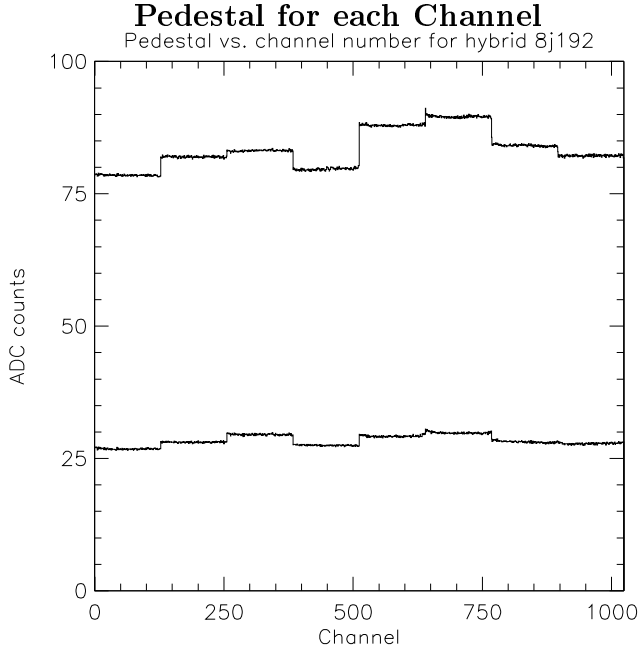
## 4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

# 5 Pedestal

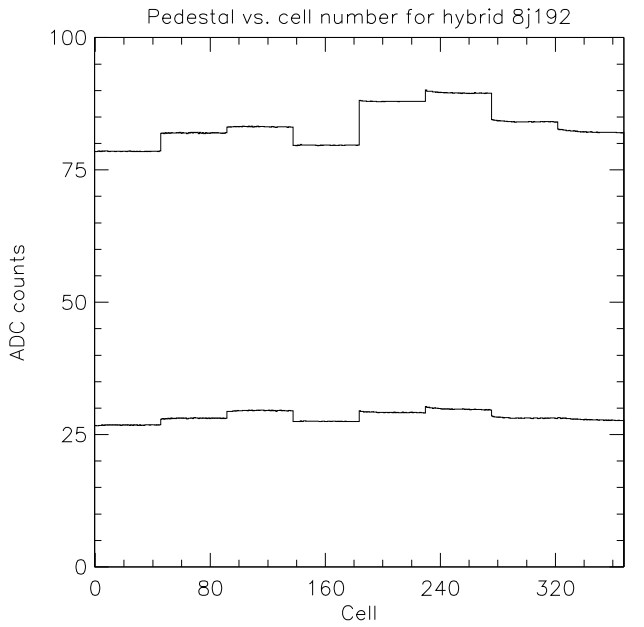
The following plot shows the pedestals vs. channel number with and without charge injection:

**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.

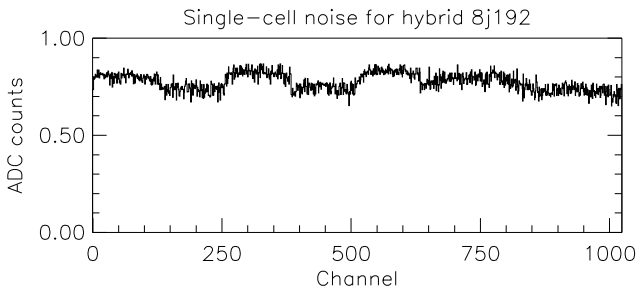
**Pedestal vs. Pipeline Cell ID**

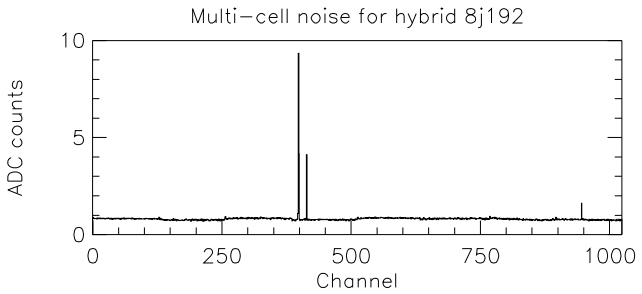


# 6 Noise

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

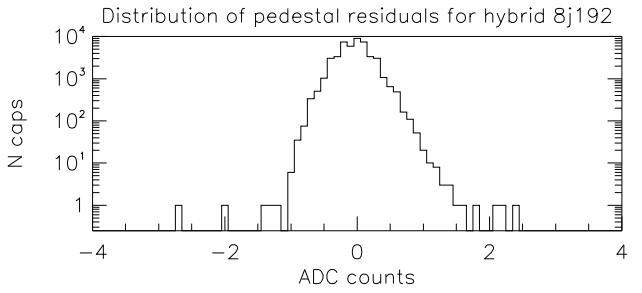
**RMS Noise**

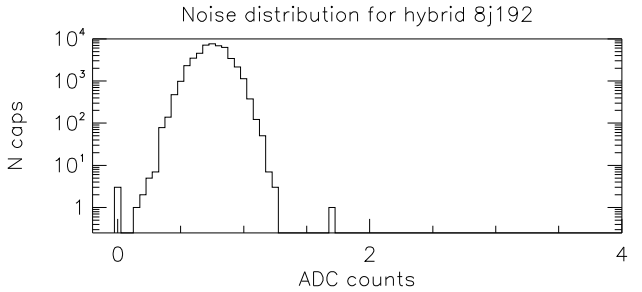


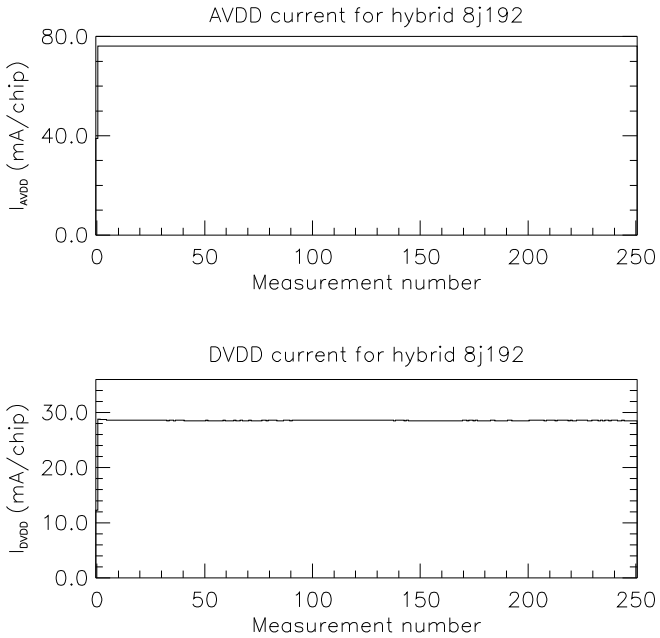

The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

**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**