# Hybrid 5z12 Traveler

May 1, 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 5Z12 has die: 164-115 164-116 181-122 181-132 180-010

## 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 5z12 classification info. Created 16:04:52 04/30/00

Hybrid 5z12 quality: fair
Chip classification: good good fair good fair
Bad channels (chip-channel): 2-9 4-95 4-108
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-4-37 4-14-94 4-16-94
   4-18-94 4-27-94
Channels at pedestal needed for DCMS: 35.6 35.6 34.6 34.7 30.7
```

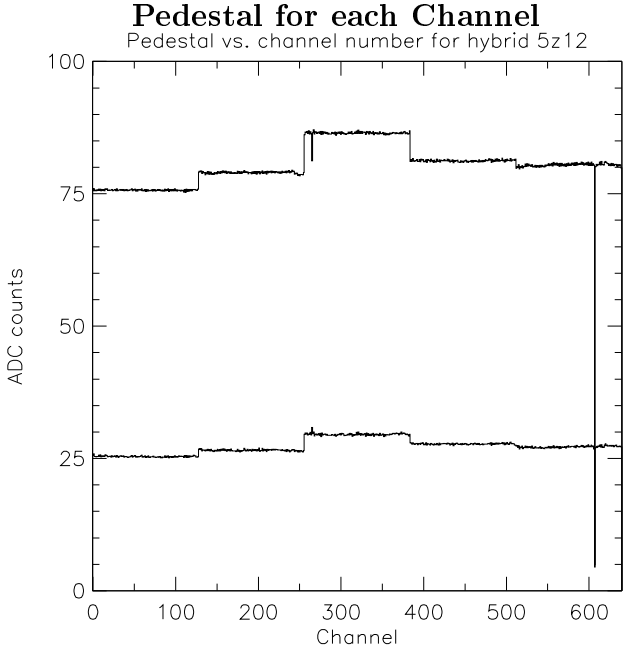
## 4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

# 5 Pedestal

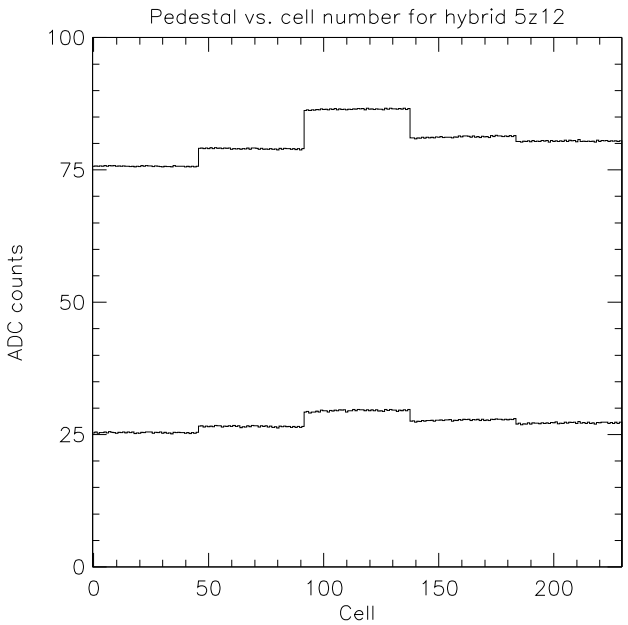
The following plot shows the pedestals vs. channel number with and without charge injection:

**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.

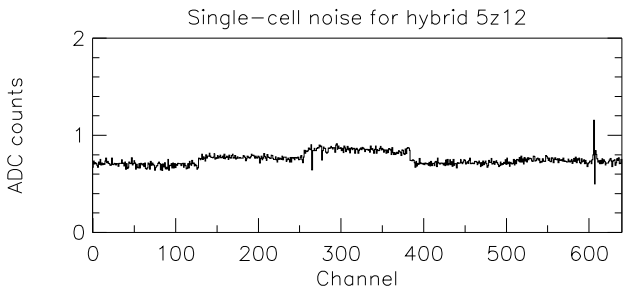
**Pedestal vs. Pipeline Cell ID**

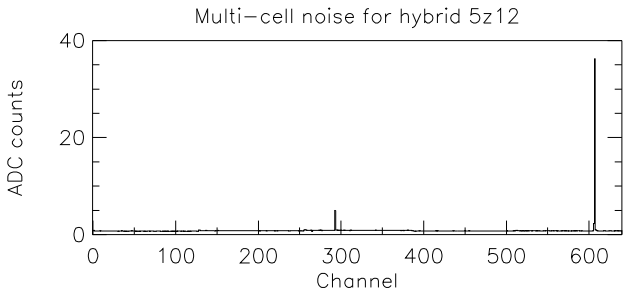


# 6 Noise

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

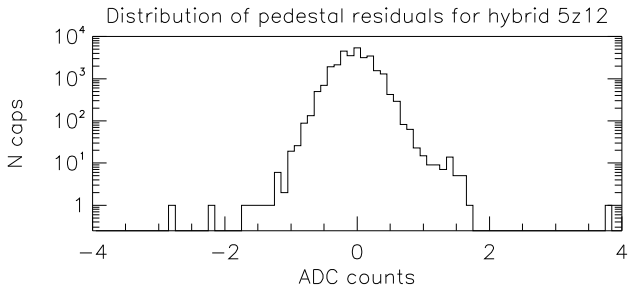
**RMS Noise**

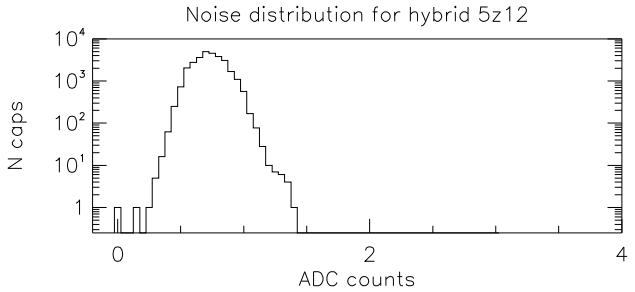


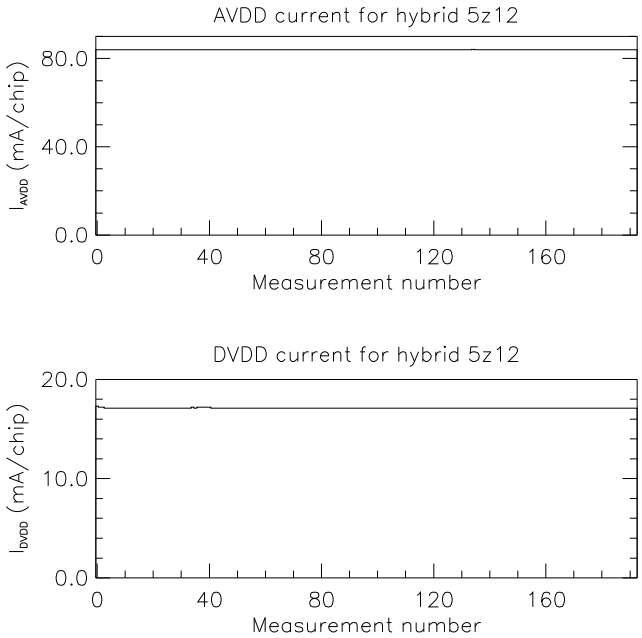

The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

**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**