# Hybrid 7z119 Traveler

April 10, 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 7Z119 has die: 155-040 155-041 155-044 155-046 155-048 155-049 155-050

## 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 7z119 classification info. Created 09:00:57 04/10/00

Hybrid 7z119 quality: fair
Chip classification: good fair fair good good good good
Bad channels (chip-channel): 2-127
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-11-69 1-25-69 1-28-68
   1-28-69 1-29-69 1-31-68 1-31-69 1-33-68 1-33-69 1-35-68 1-35-69
   1-44-68 1-44-69 1-45-69
Channels at pedestal needed for DCMS: 31.6 29.7 30.7 32.7 33.7 32.6 37.7
```

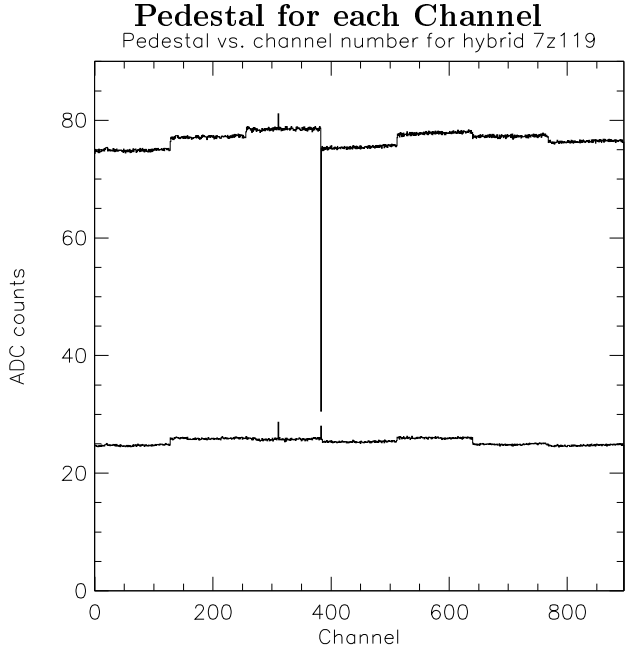
## 4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

# 5 Pedestal

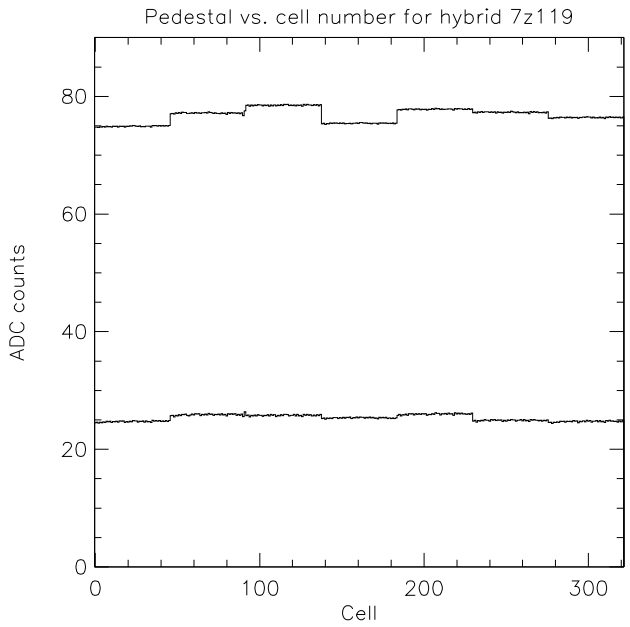
The following plot shows the pedestals vs. channel number with and without charge injection:

**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.

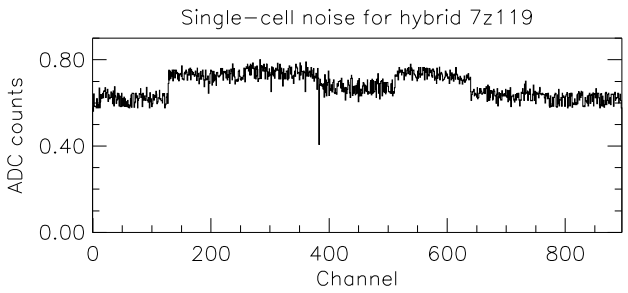
**Pedestal vs. Pipeline Cell ID**

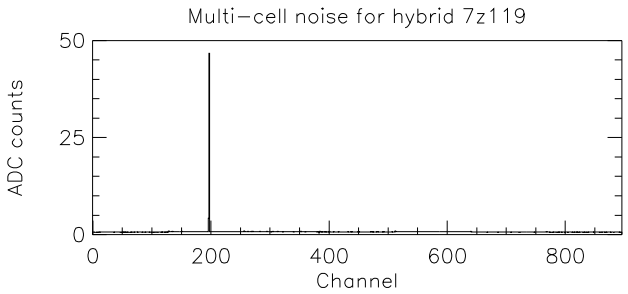


# 6 Noise

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

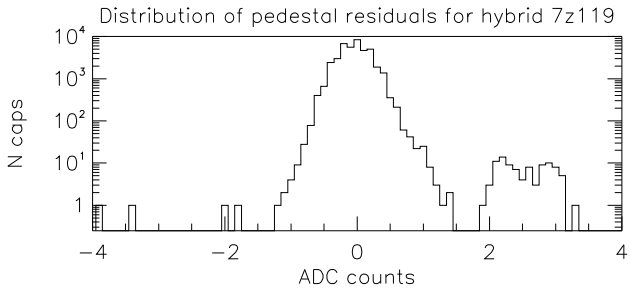
**RMS Noise**

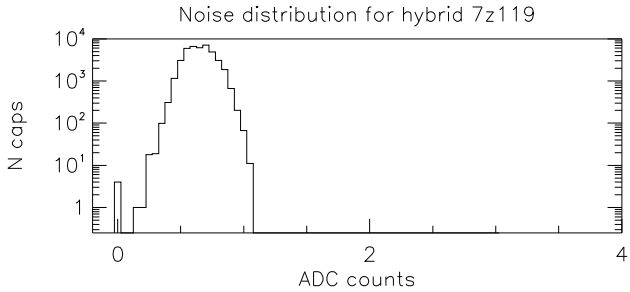


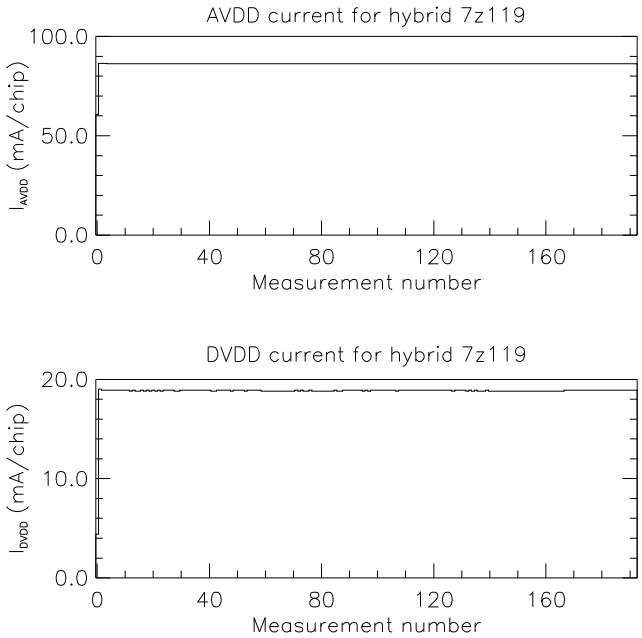

The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

**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**