Hybrid 7p166 Traveler

February 17, 2000

1 Connectivity

Repairs on shorts: AVDD short to GND repaired.

Fixes for opens:

2 Chips

The following chips were assembled on this hybrid (in the order that the chips get read out):
Hybrid 7P166 has die: 093-088 093-089 093-090 093-092 093-093 093-094 024-041

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 7p166 classification info. Created 08:49:56 02/14/00

Hybrid 7p166 quality: fair
Chip classification: good fair good fair good good fair
Bad channels (chip-channel): 1-49 1-50 3-49 6-87
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-0-48 1-10-48 1-12-48
   1-18-48 1-22-48 1-23-48 1-27-48 1-3-48 1-36-48 1-37-48 1-4-48
   1-43-48 1-5-48 1-7-48 1-8-48 3-0-50 3-1-50 3-11-50 3-2-50
   3-36-50 3-37-50 3-38-50 3-39-50 3-40-50 3-41-50 3-42-50 3-43-50
   3-44-50
Channels at pedestal needed for DCMS: 35.6 35.9 34.7 33.7 33.6 34.6 36.6
```

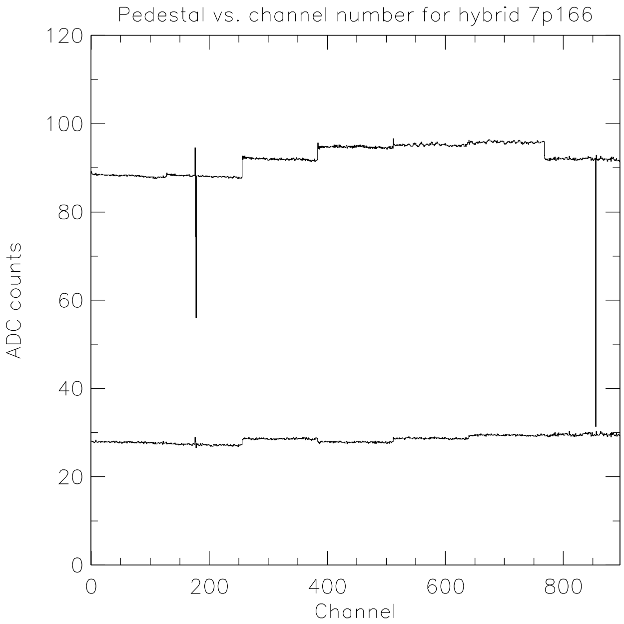
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

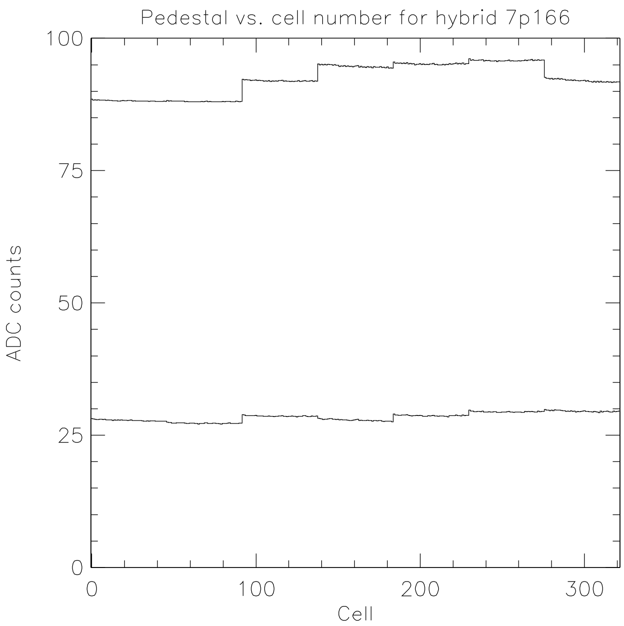
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

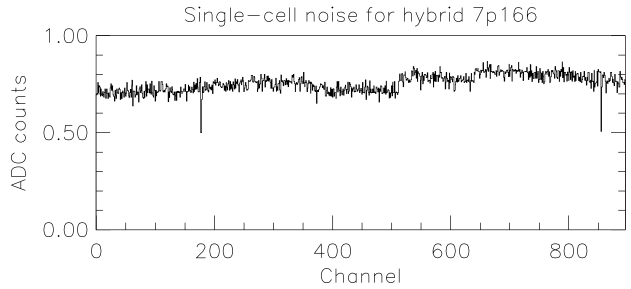
Pedestal vs. Pipeline Cell ID

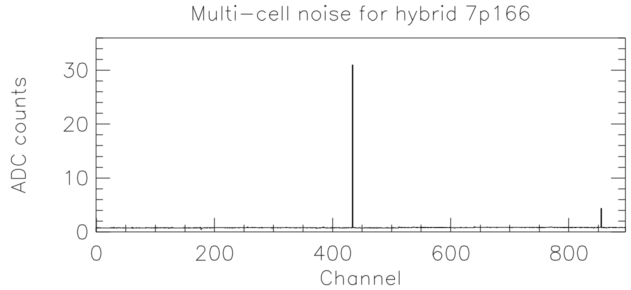


6 Noise

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

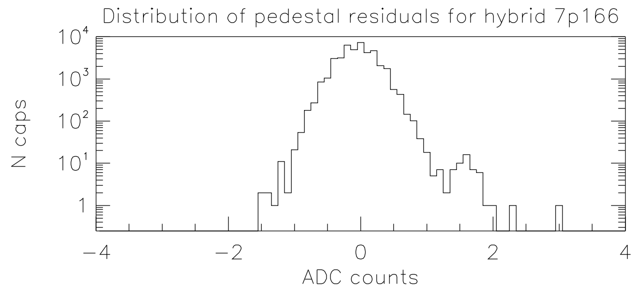
RMS Noise

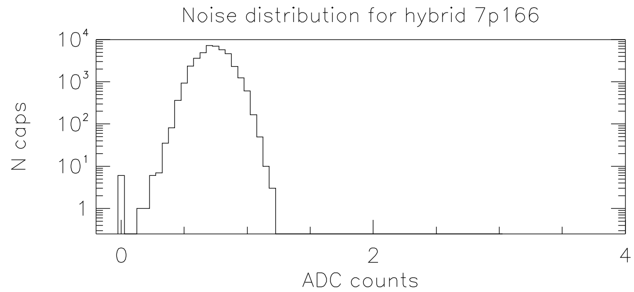




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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