Hybrid 6p121 Traveler

March 29, 2000

1 Connectivity

Repairs on shorts:

Fixes for opens: FECLKH open on hybrid; fixed with wire from solder field to resistor. Bus 7 open between solder field and connector field; fixed with wire.

2 Chips

The following chips were assembled on this hybrid (in the order that the chips get read out):
Hybrid 6P121 has die: 194-040 194-041 247-129 194-045 194-046 194-047

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 6p121 classification info. Created 09:42:08 03/29/00

Hybrid 6p121 quality: fair
Chip classification: good good good fair good fair
Bad channels (chip-channel): 3-28 3-29
Bad cells: none
Random bad capacitors (chip-cell-channel): 5-22-111
Channels at pedestal needed for DCMS: 28.7 31.6 34.6 33.5 32.6 30.7
```

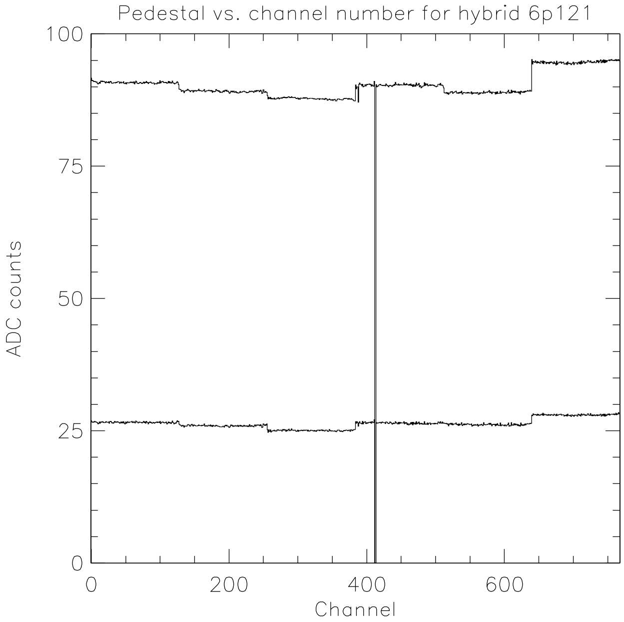
4 Comments

Encapsulated. FE DV finger gold bonds. HV tested.

5 Pedestal

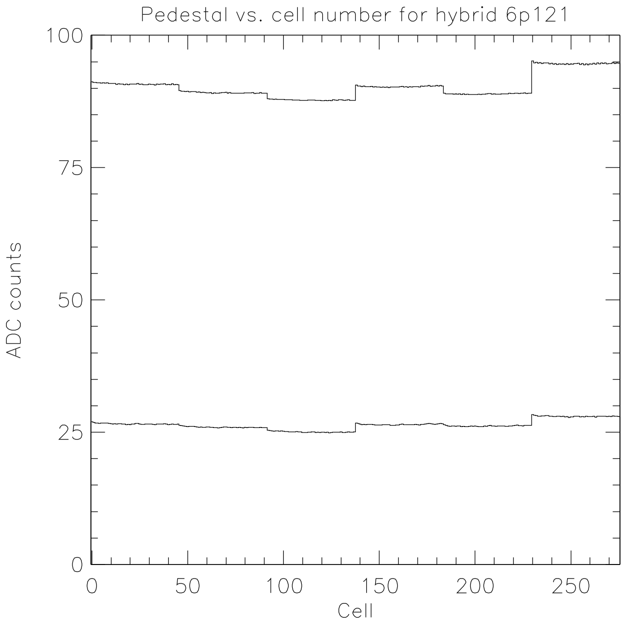
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

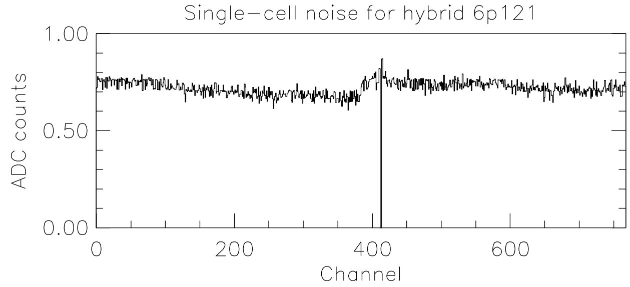
Pedestal vs. Pipeline Cell ID

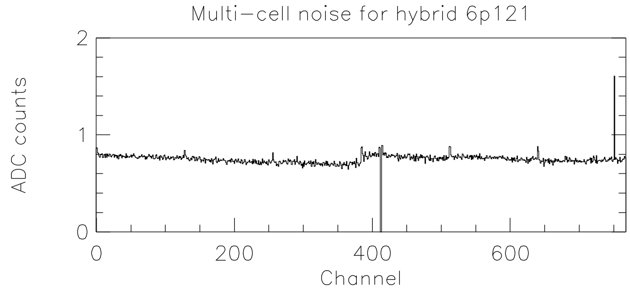


6 Noise

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

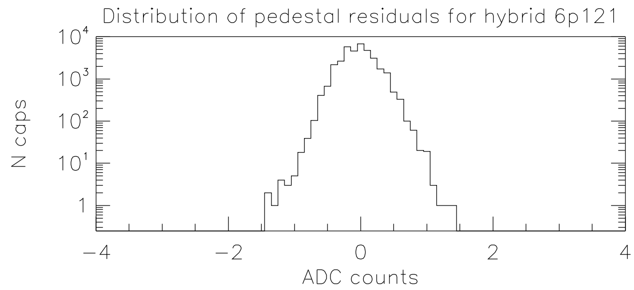
RMS Noise

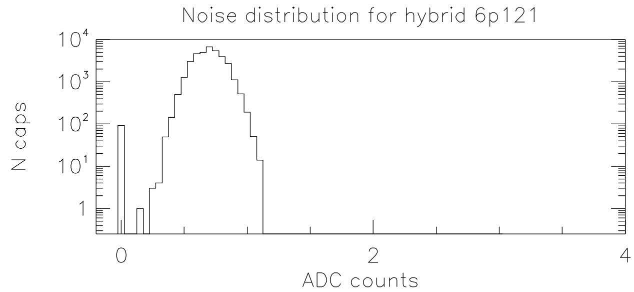




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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