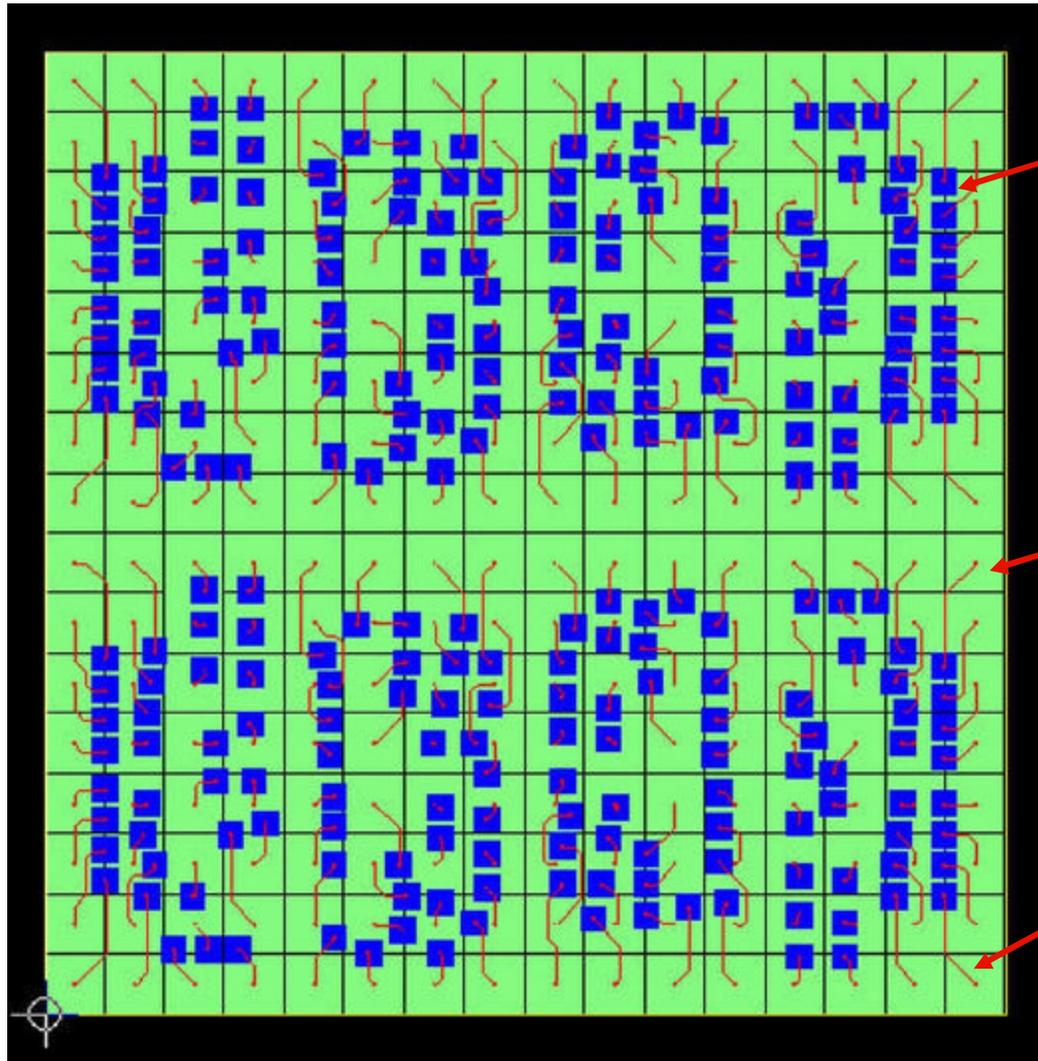


# **Design & Layout of** **Front-End Board**

**Tim Cundiff & Gary Drake**  
**Dec. 20, 2006**

# 4-Layer Pad Board



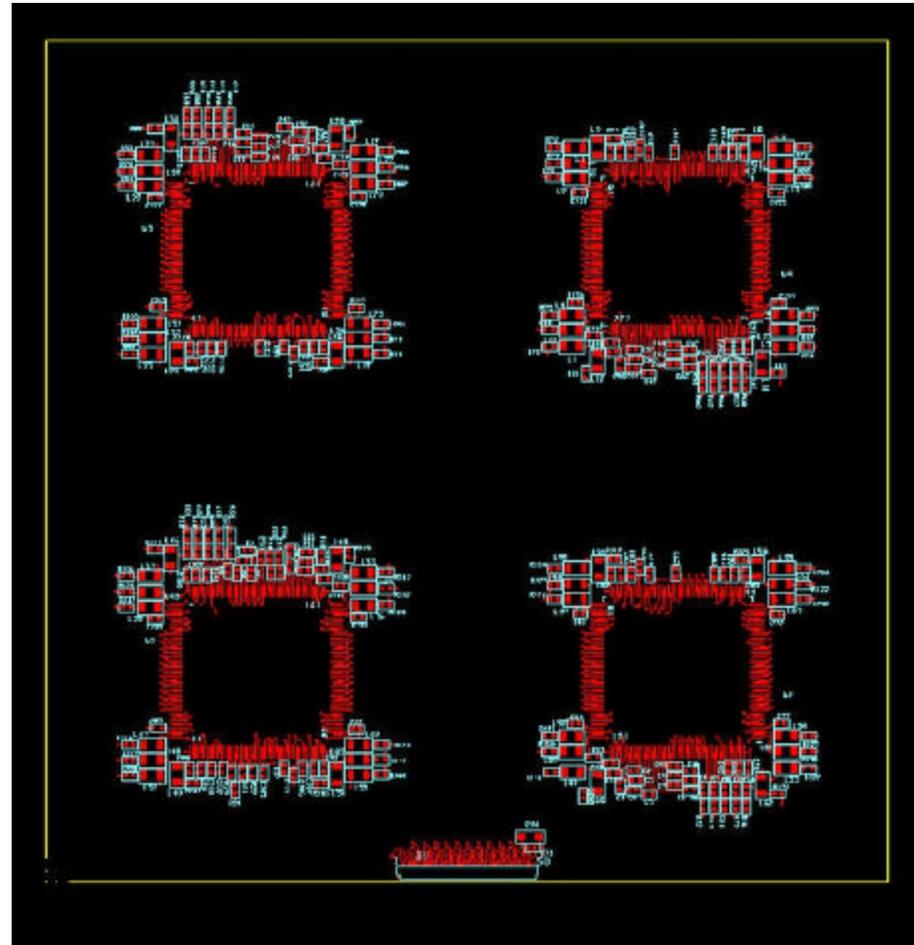
Top Pads for  
Conductive Epoxy

1 cm x 1 cm Pads  
On Bottom

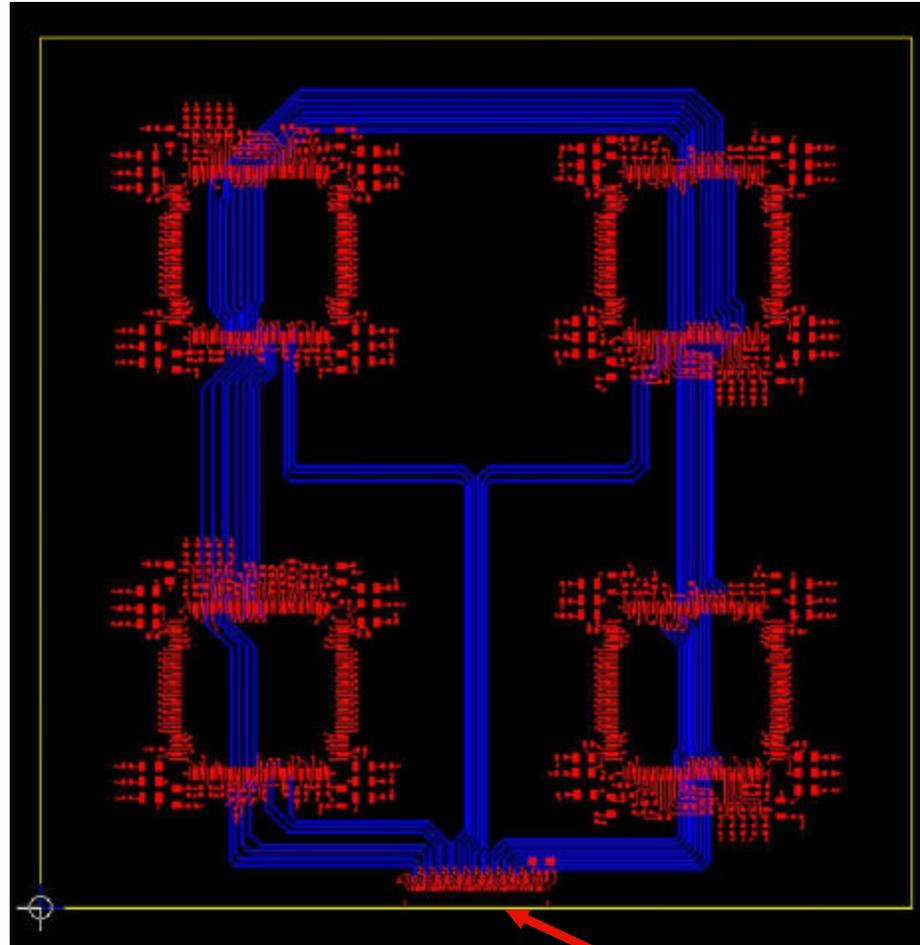
Traces on  
Inner Layer

Layout is Done!

# 8-Layer Front-End Board Top Layer

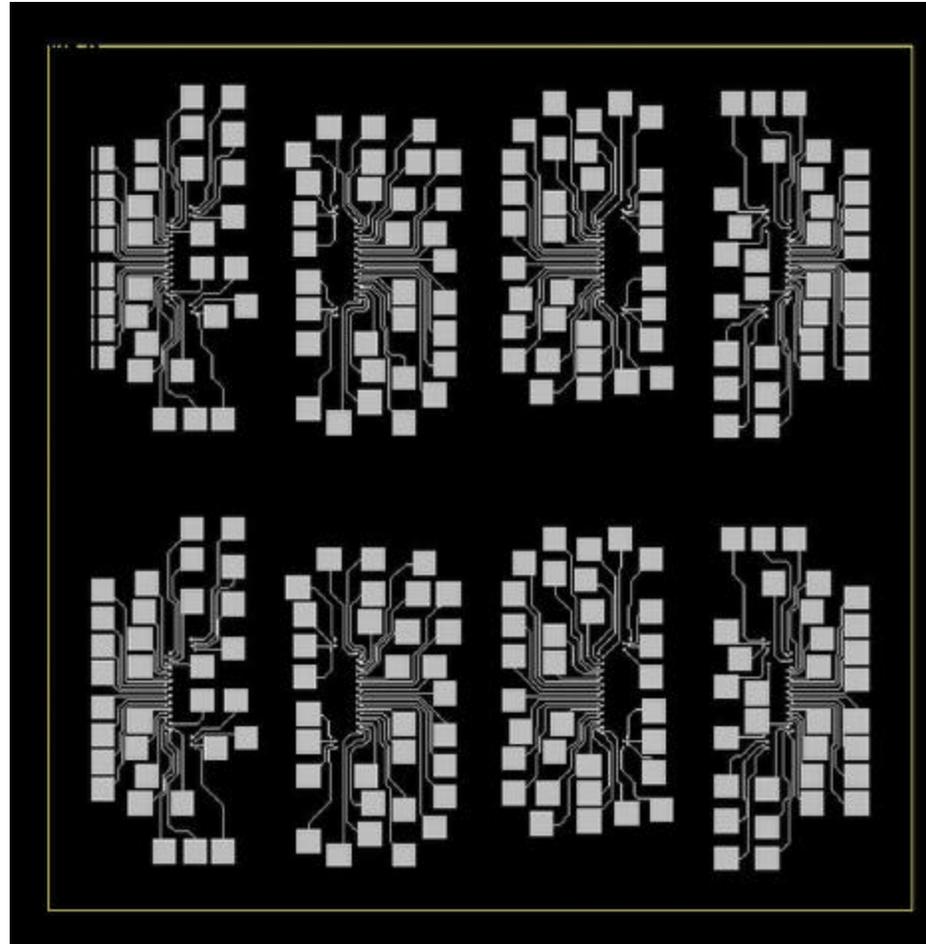


# 8-Layer Front-End Board Top & Digital Trace Layers

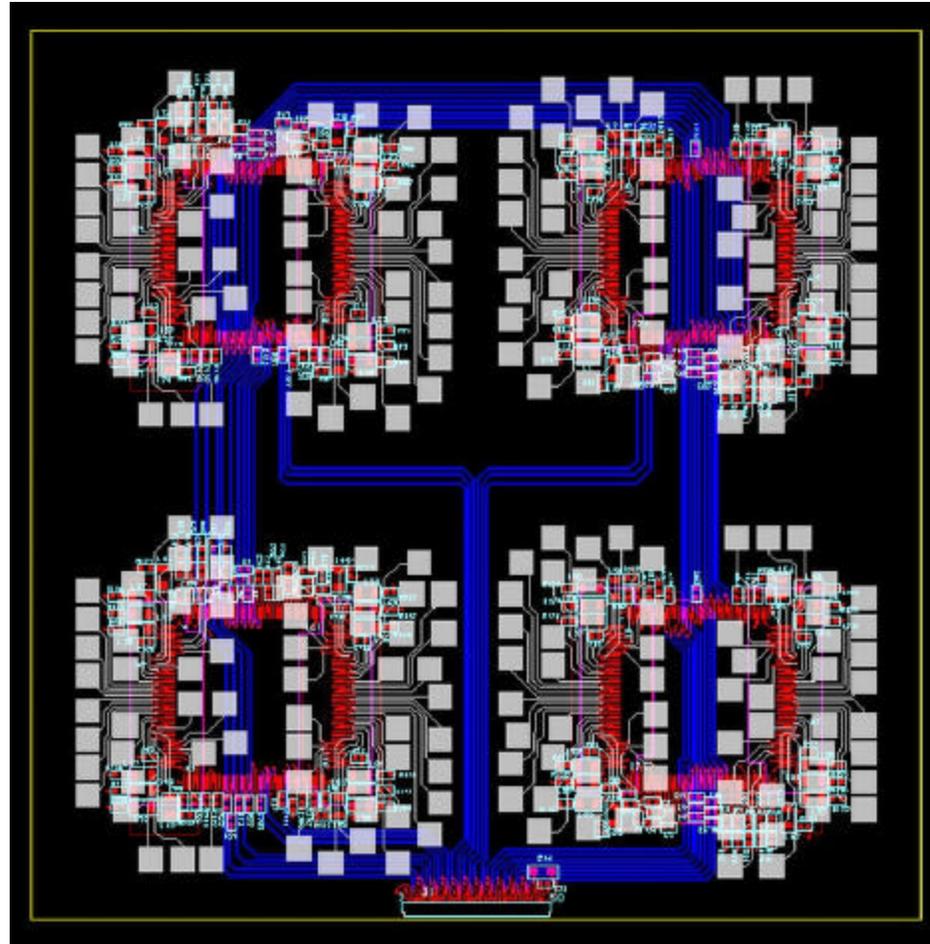


Connector for Flex Cable

# 8-Layer Front-End Board Bottom Layer (Glue Pads)



# 8-Layer Front-End Board All (Most) Layers



# Status

- Layout of Pad Board is Done
    - Need to Make Correct Size for Both Detectors (Add Blank Spaces)
    - Need Final Pass at Minimizing Warpage
  - Layout of FE Board is Mostly Done
    - Have Addressed Manufacturability Issues
    - Board is Expensive Currently... Optimize Design Later
    - Need to Select Connector
    - Need Design Review
    - Need to Do Glue Tests
    - Waiting for Final Tests of DCAL Chip
- Expect to Fab Boards in Early January**