

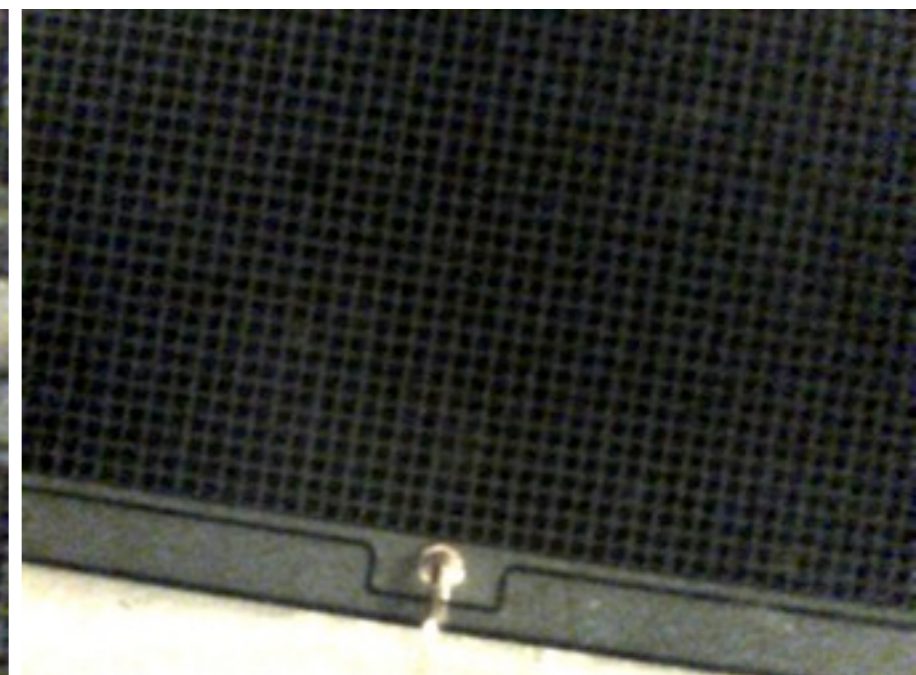
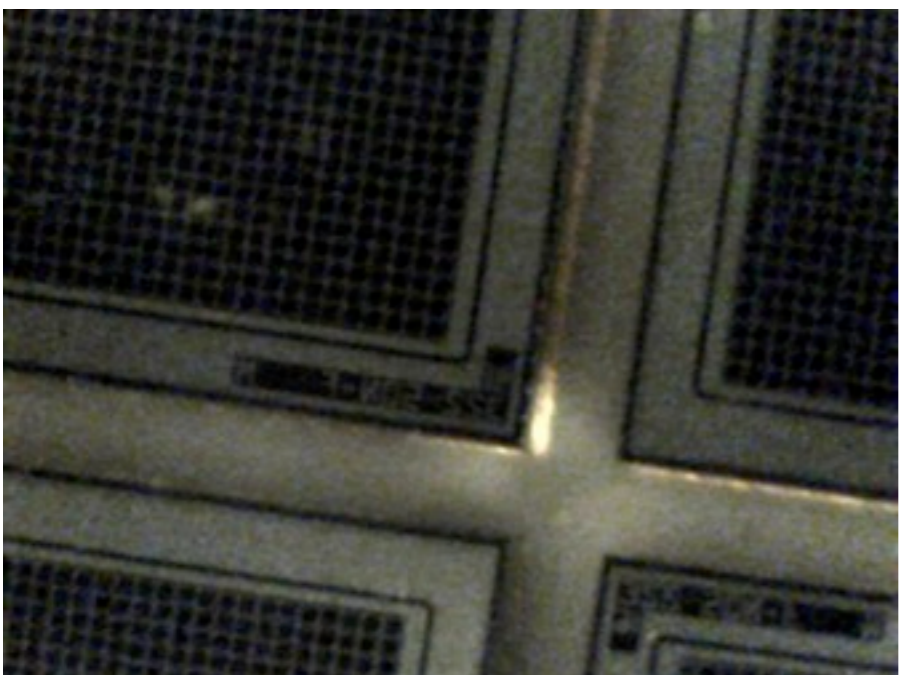
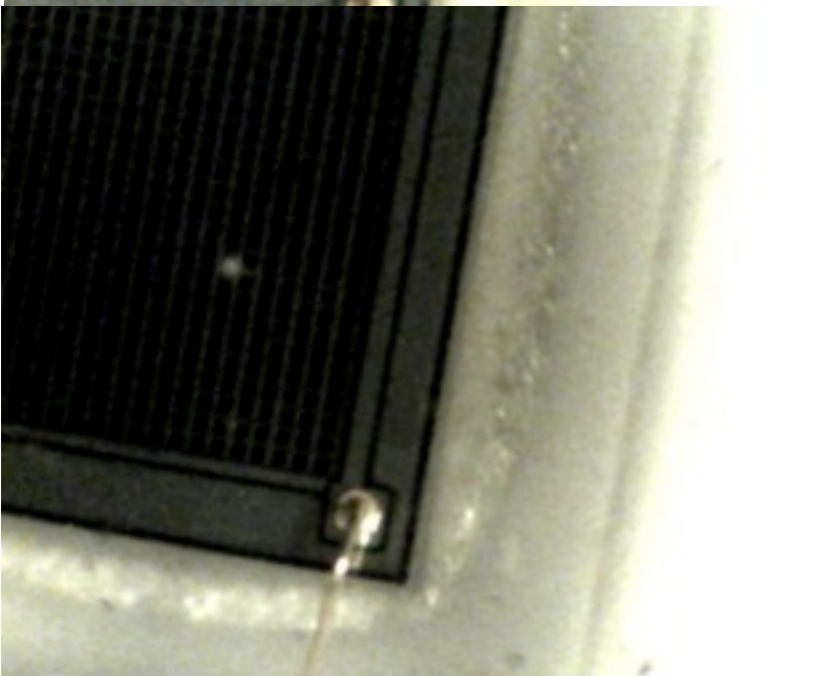
# USM Update

Will Brooks, Sergey Kuleshov, Alam Toro  
3 May 2011

# MPPC Tests

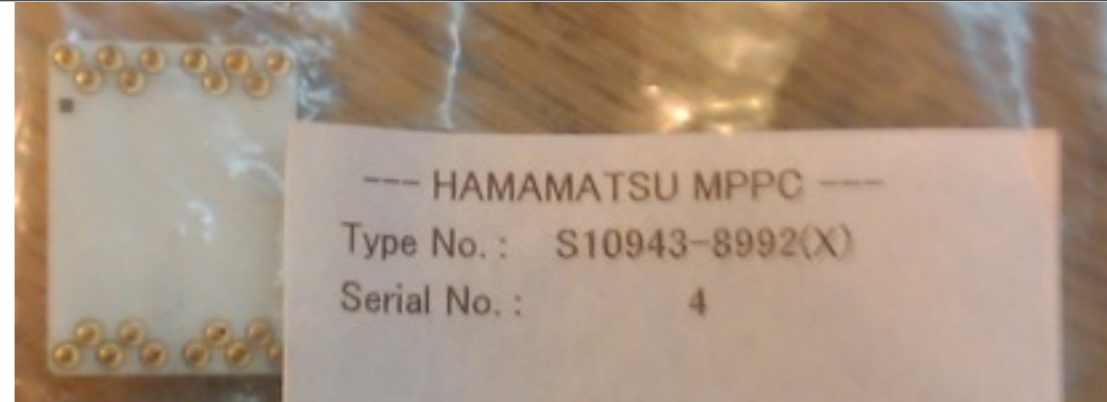
- Finally received MPPC last week, out of customs, with the JLab-built test board
- Finished the USM-built test board too
- First look at MPPC under microscope

Microscope  
pictures of  
JLab MPPC

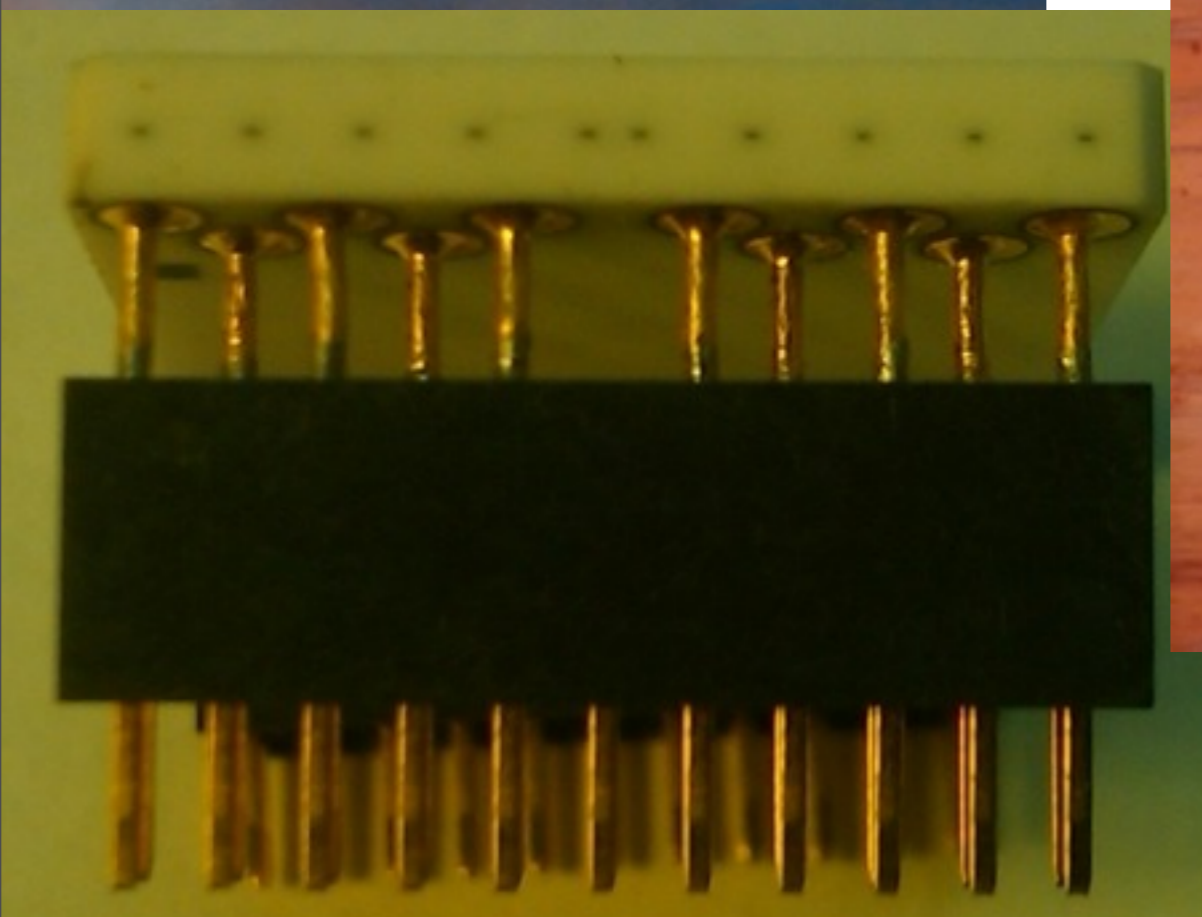




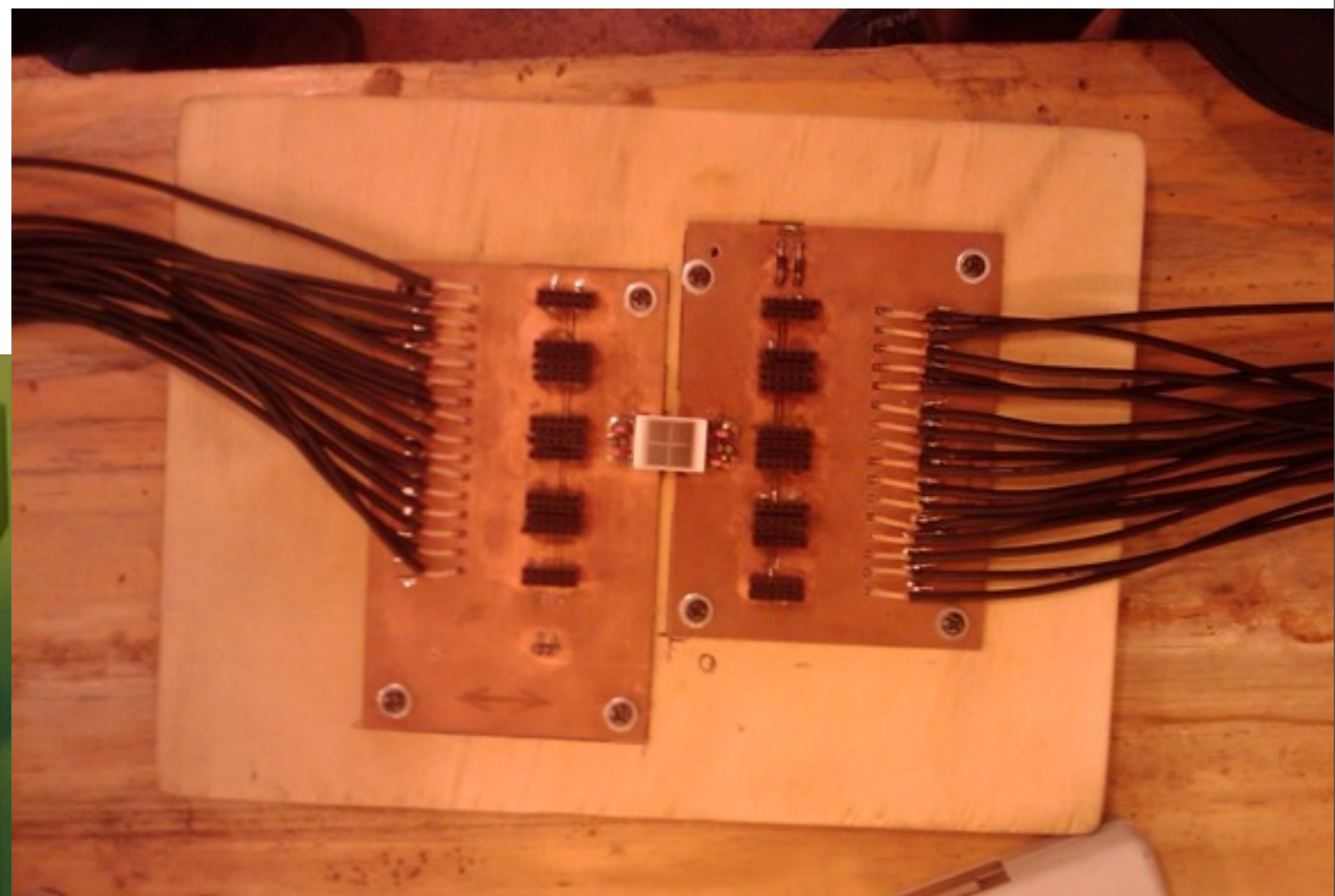
In the bag, as shipped



We have Number Four



Pins fit in connector...

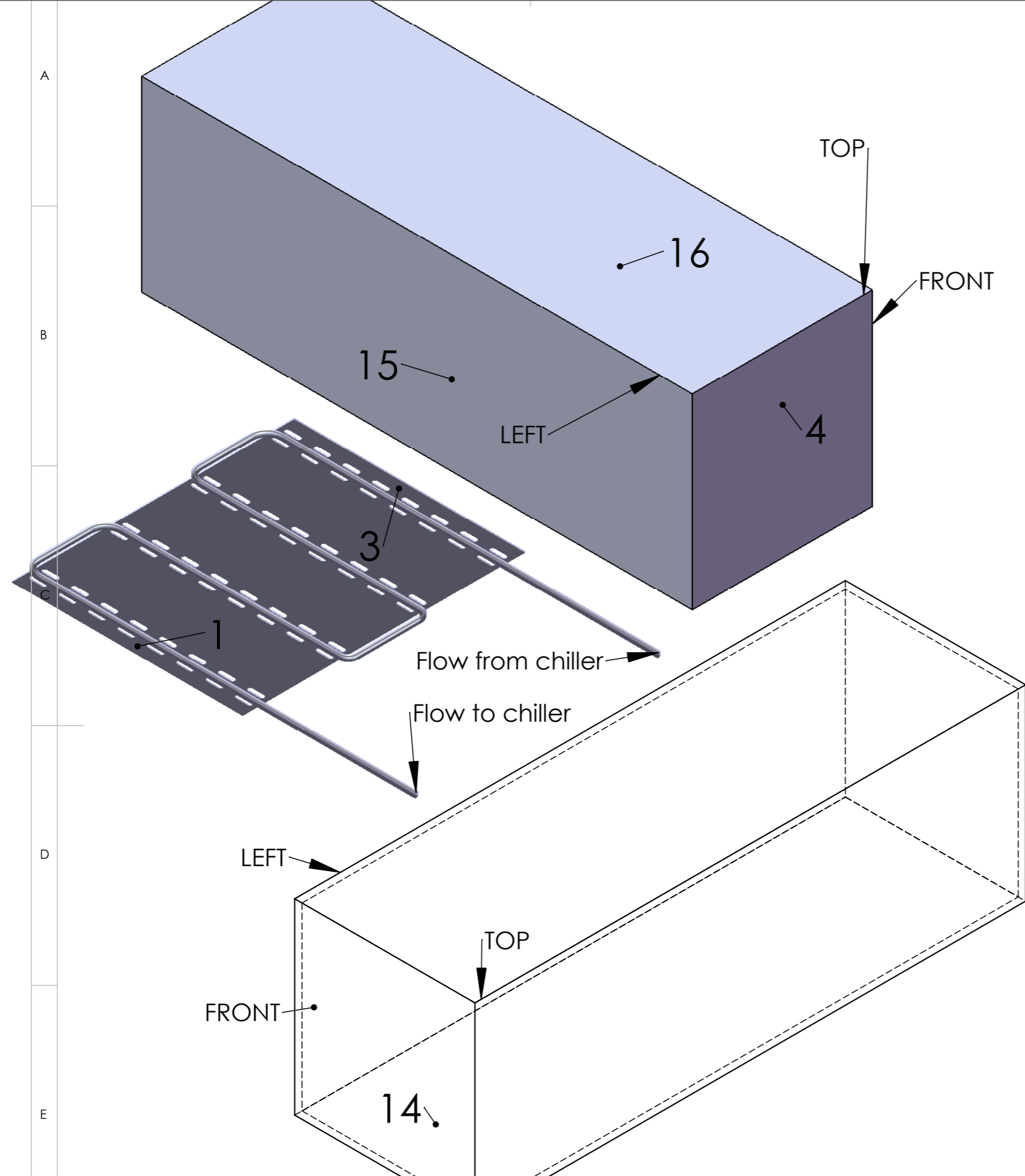


Ok, our test board may not be as pretty as the one from JLab, but the data will decide which one has more inner beauty..

# Progress on the test stand

- Performed 2 cool-down tests of copper plate, inside dark box
  - found and fixed a 6-degree C offset
  - real measurement with thermocouples
  - allegedly have a finite-element analysis calculation of the temperature distribution on the plate

# Temperature measurement points



UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN MILLIMETERS  
 SURFACE FINISH:  
 TOLERANCES:  
 LINEAR:  
 ANGULAR:

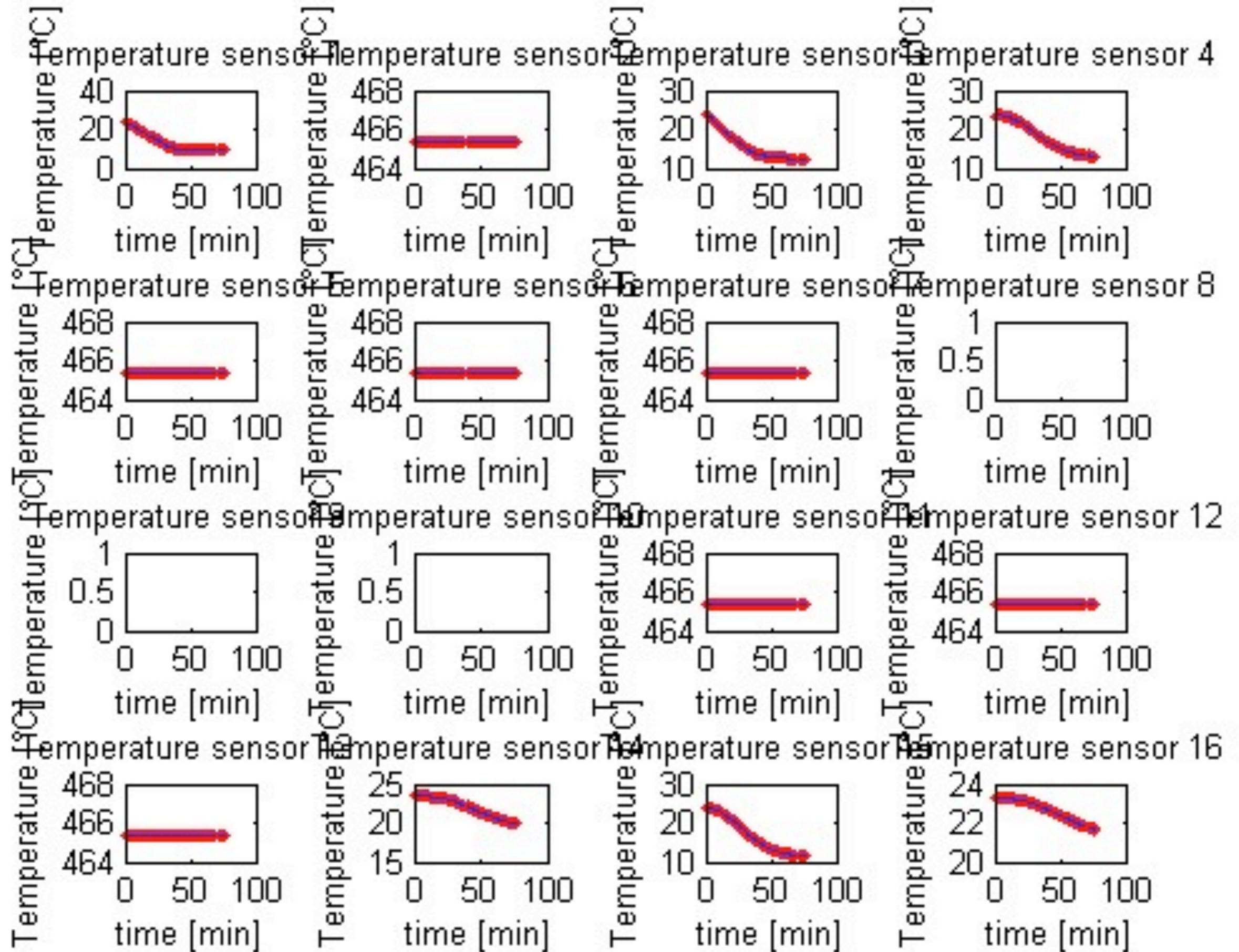
FINISH:

DEBUR AND  
 BREAK SHARP  
 EDGES

DO NOT SCALE DRAWING

REVISION

# First temperature measurements, cooldown tests of dark box

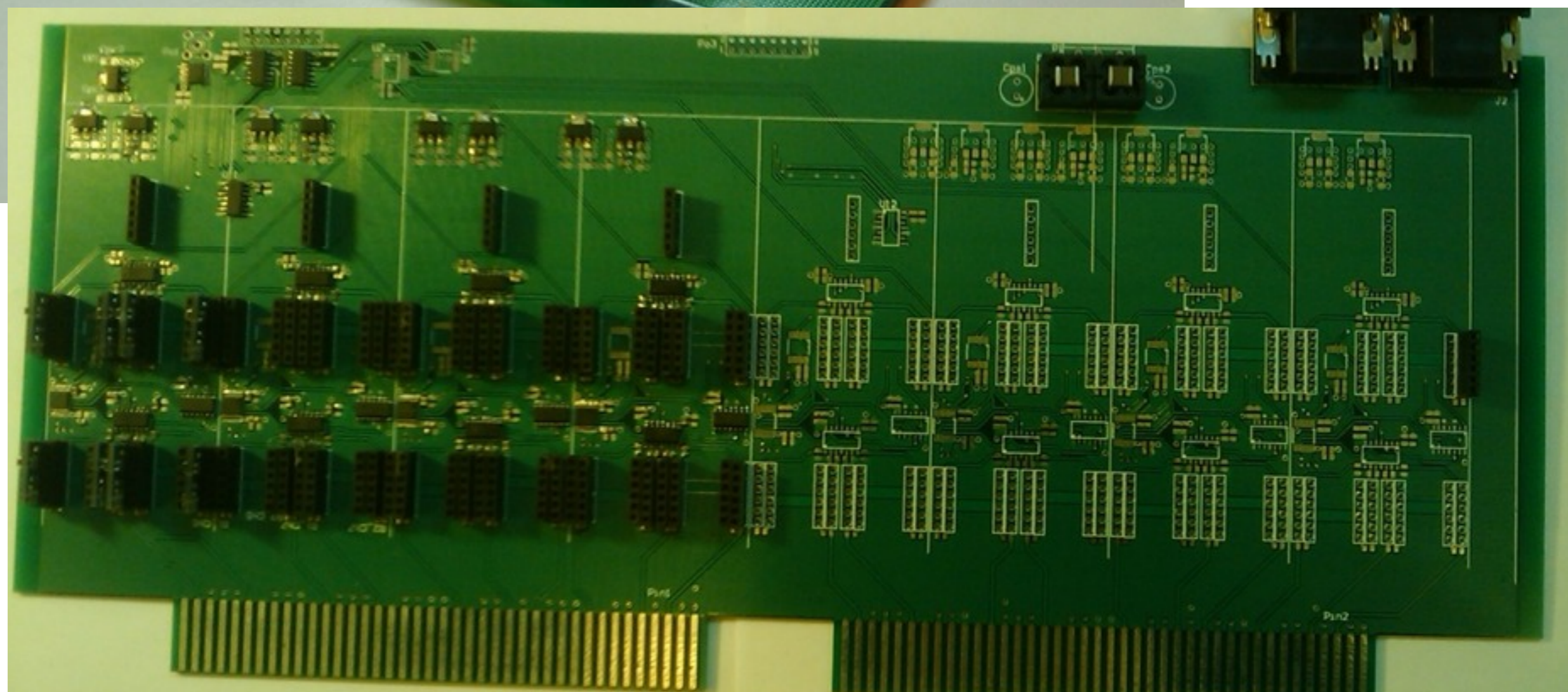
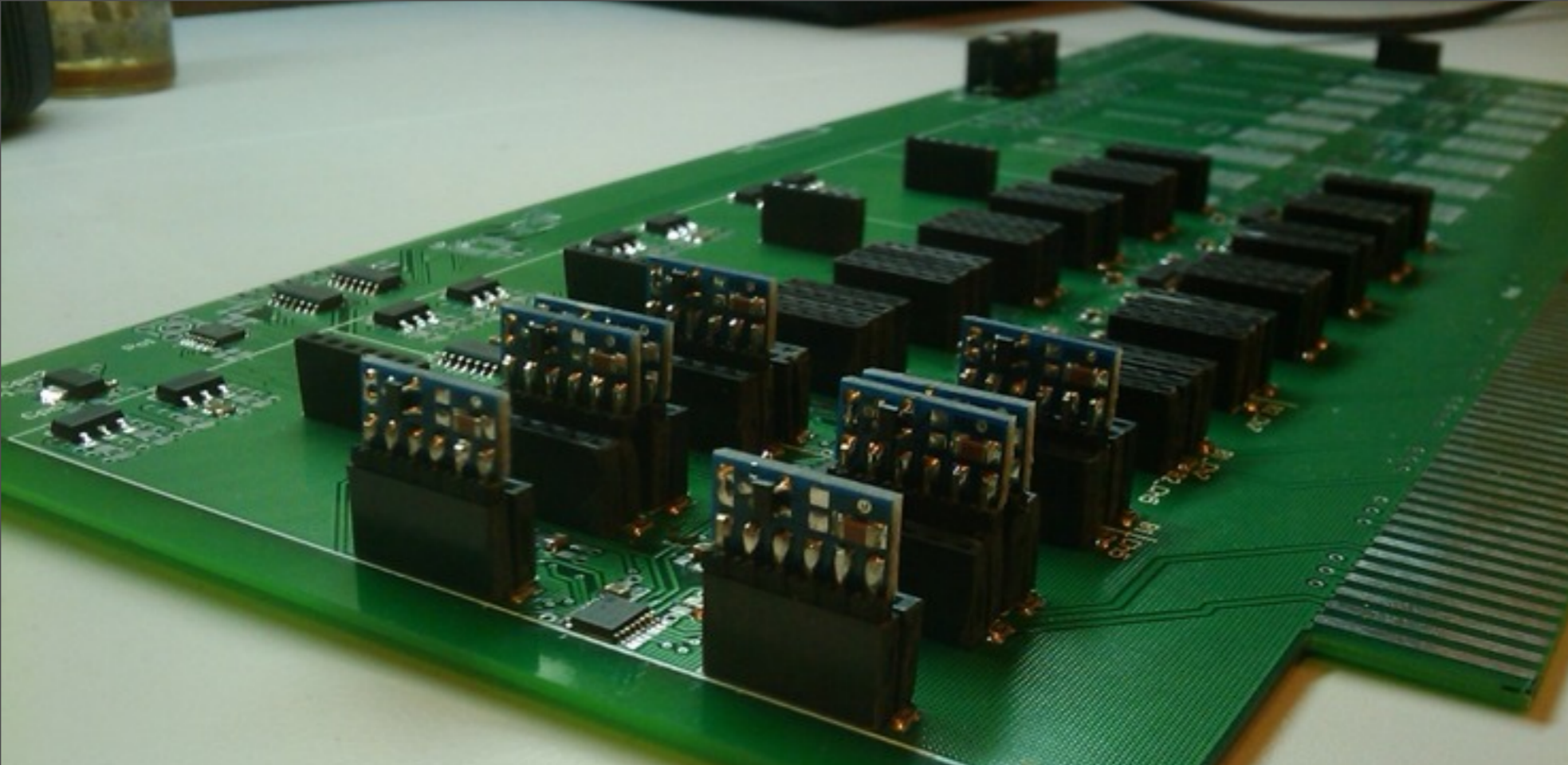


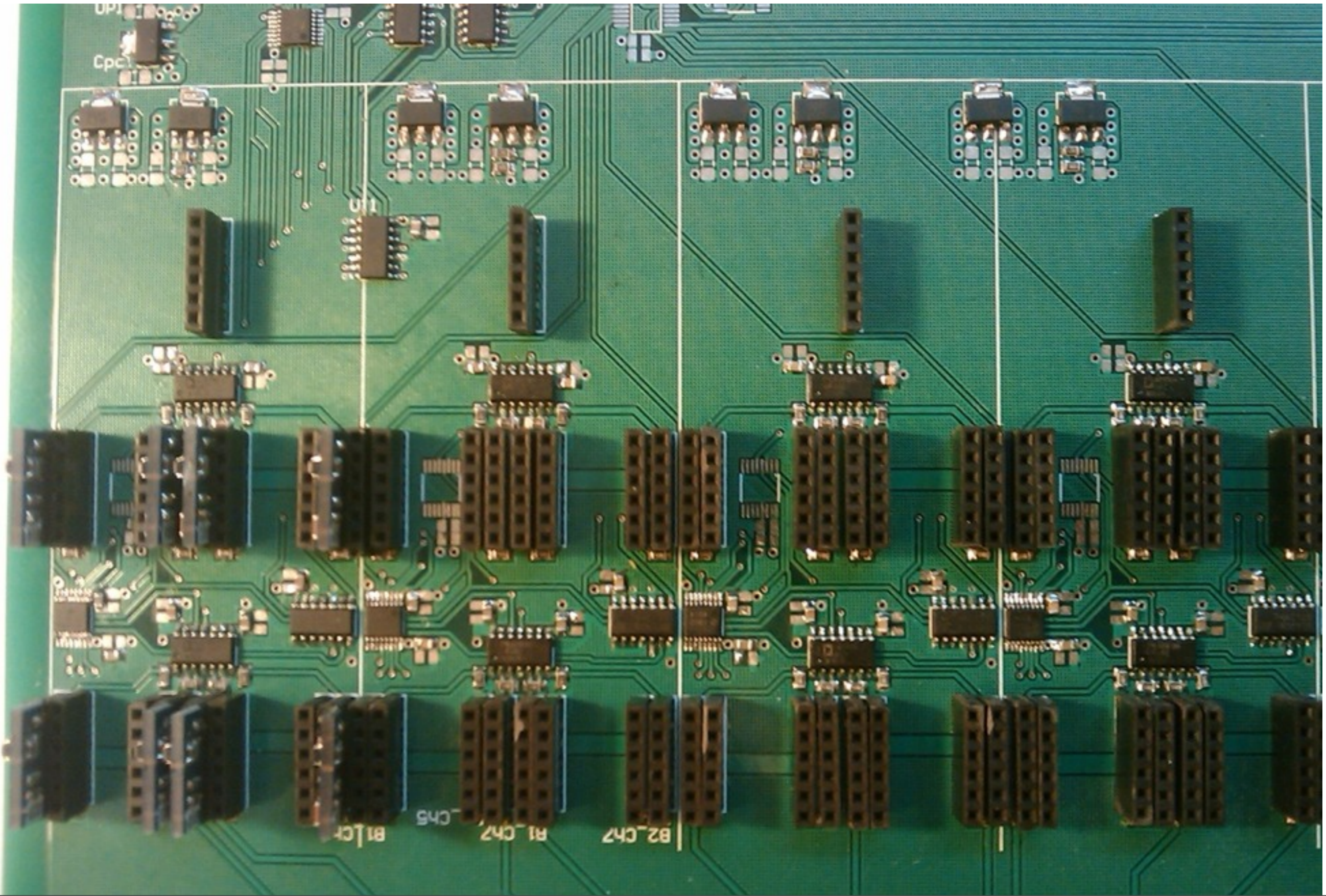
# Main signal board prototypes

- Installed sockets on one of the two 6-layer boards with enough components for 1 SiPM measurement
- Constructed charge-injection interface for first tests



# Signal board prototype



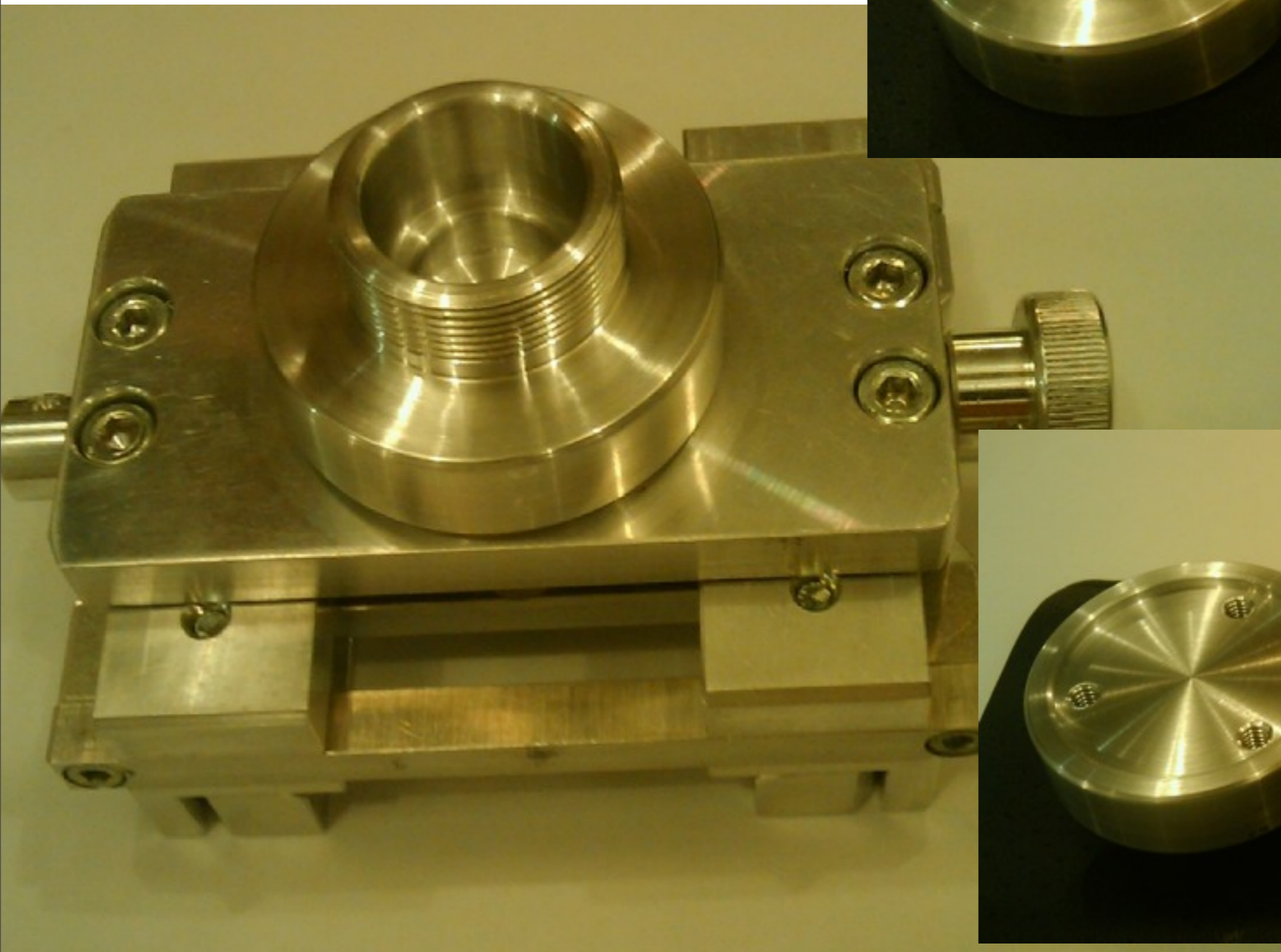


# Lightguide Fabrication for prototyping at Regina, Athens, JLab



# Lightguide Fabrication for prototyping at Regina, Athens, JLab

- missing part now fabricated, can speed production



# Kuka Robotic Arm Arrived

The rest of the CNC mill will come later...

