

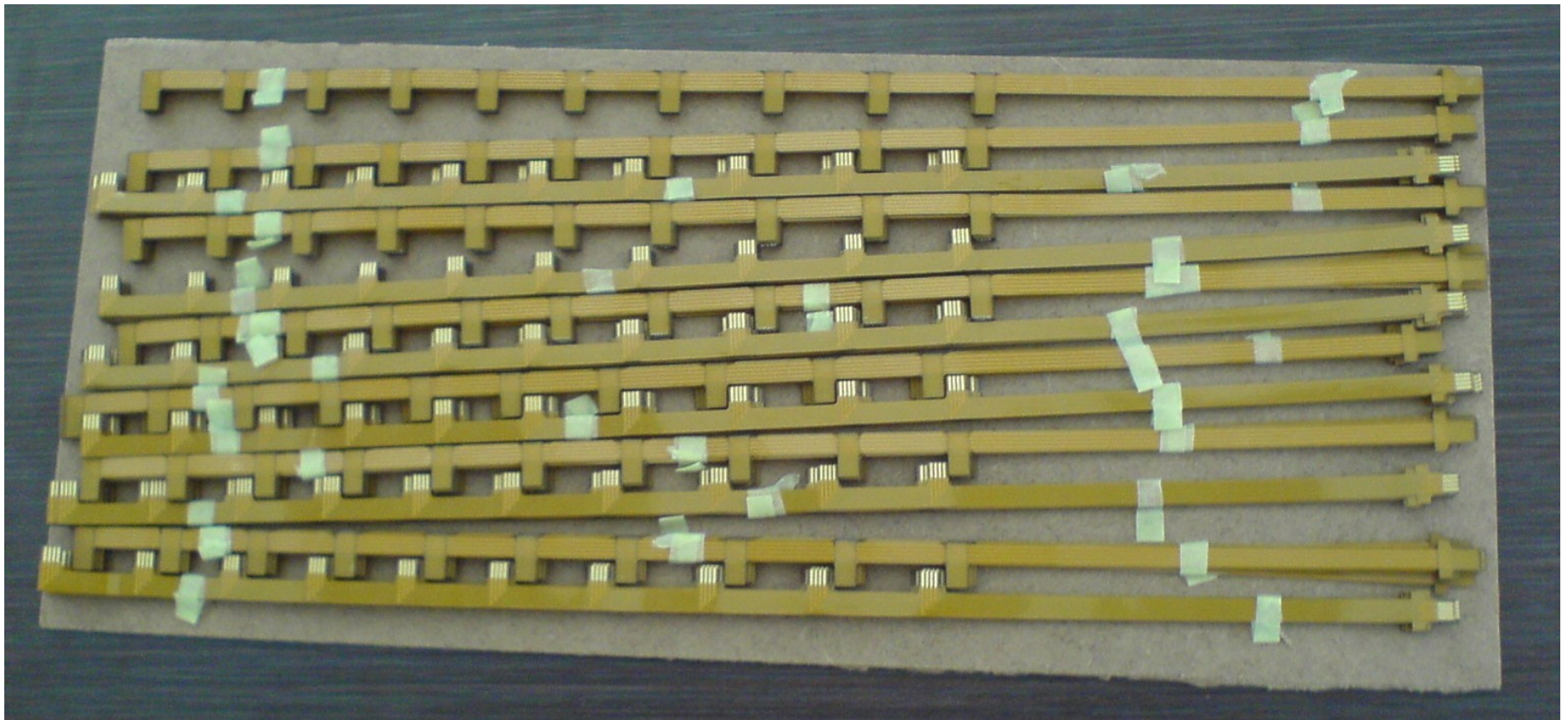
Athens, 3/9/2012

Progress on BCAL calibration construction

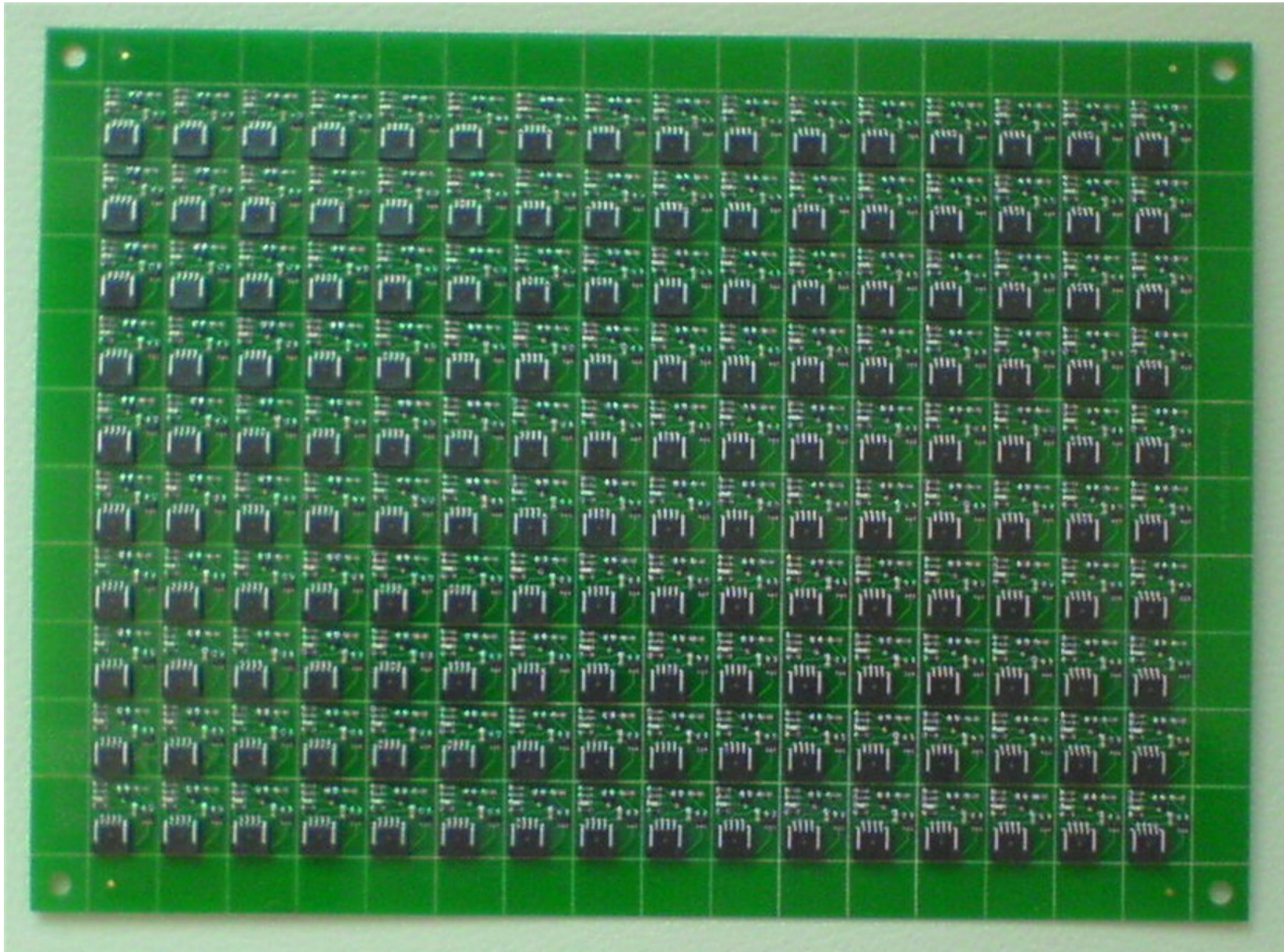
All are boards are stuffed, all flex
cables are manufactured, testing is
starting

E.Anassontzis,E.Kappos,P.Ioannou,CK

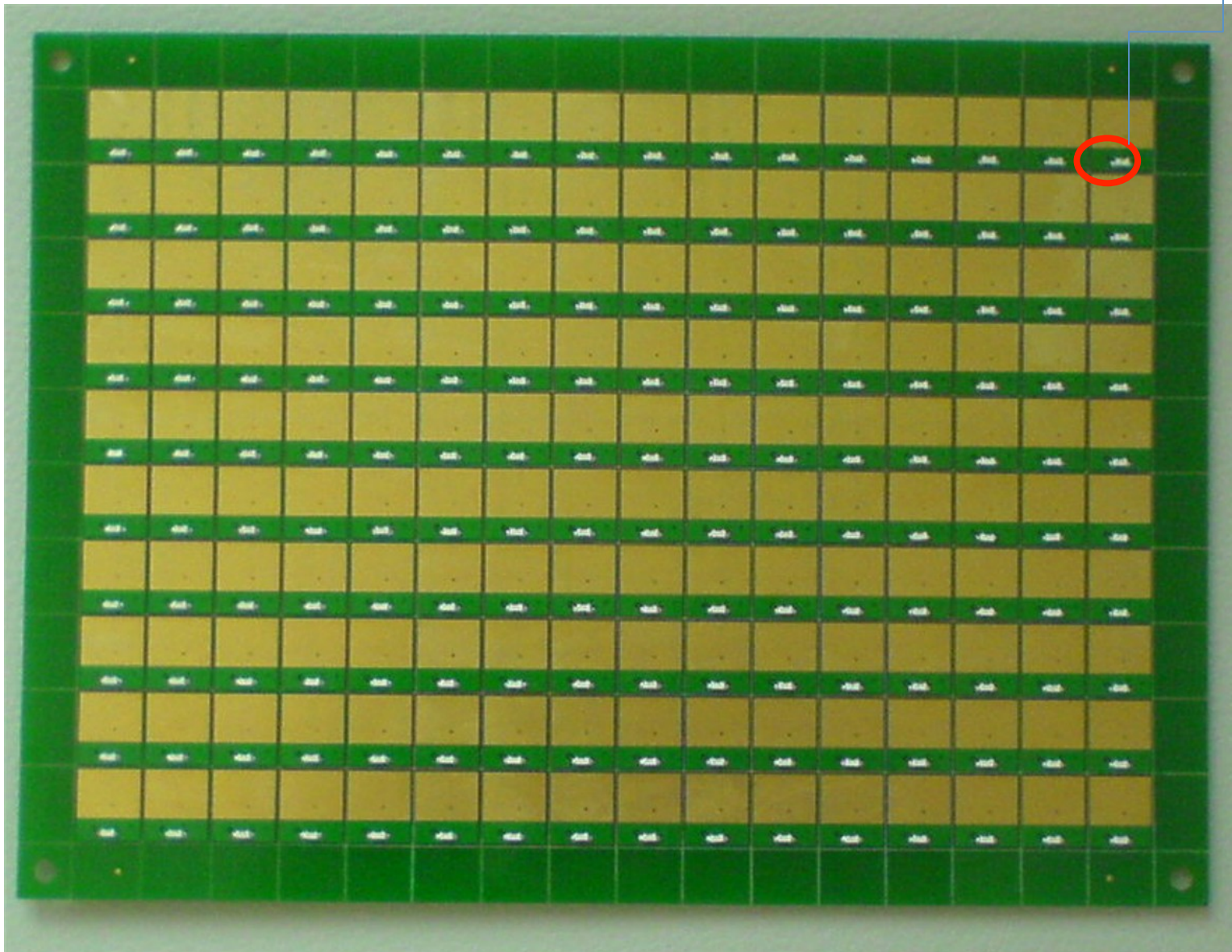
All 390 manufactured flex cables



A complete staffed apnel consisting of 160 minibboards



Reverse side of staffed board consisting of 160 minibboards (LED's are visible)



The test set-up: x-y table (old plotter)

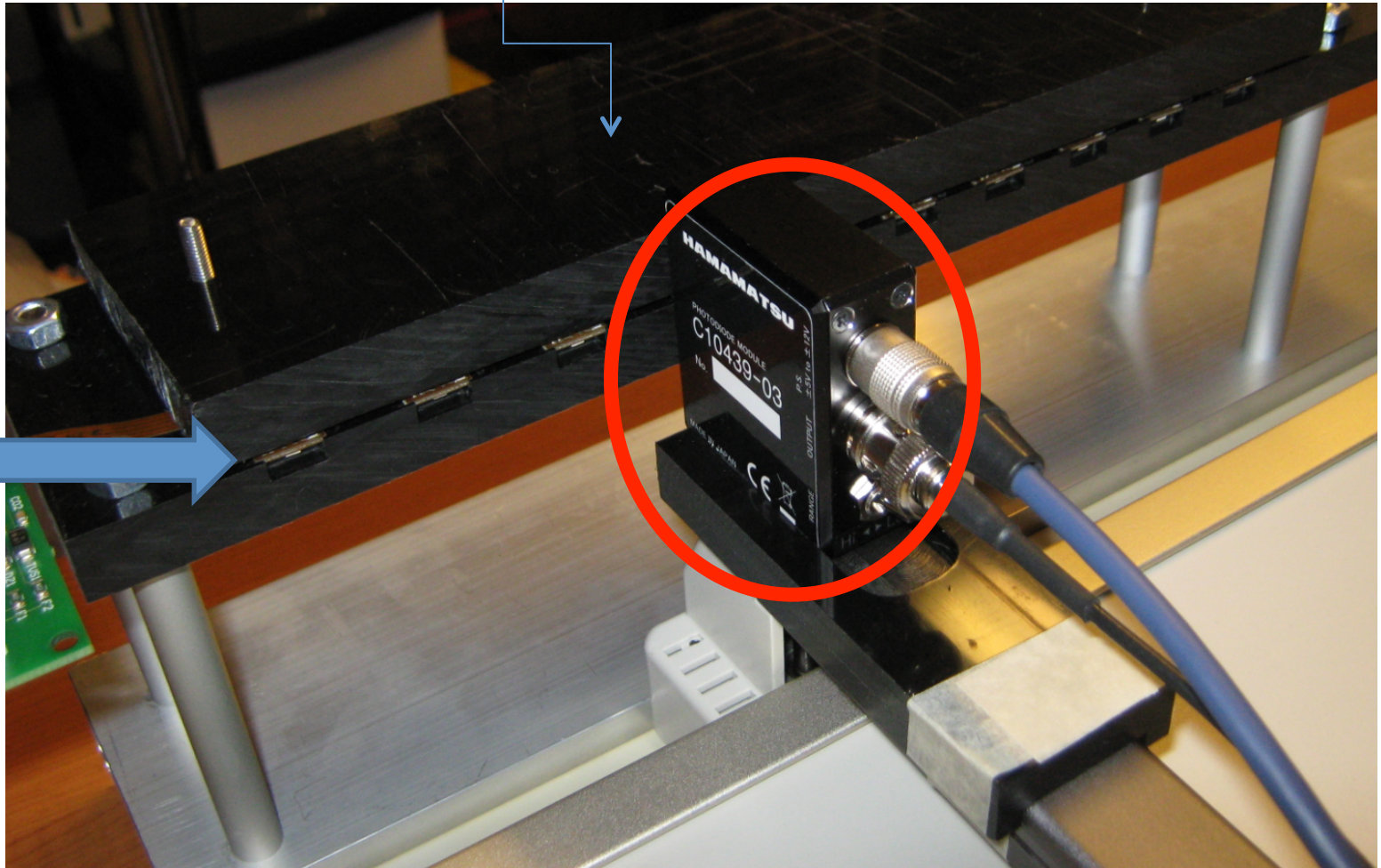
Boards



Test Set-up:

- A x-y table is used and the Hamamatsu photodiode moves with respect to the flex cable with the 10 minibboards.
- The test rig (flex+boards) will be housed in a box in such a way to be protected from ambient light.
- The bias voltage of the LED's will be 12.0V. The trigger frequency needs to be higher than 1kHz to get a stable DC reading from the photodiode. Not fixed yet, but 100kHz to 1MHz.
- The photodiode will be centered about 4mm from the LED. The positioning repetition accuracy (mechanical) is 0.1mm.
- The Yokogawa CA100 calibrator is used for reading out the LED.

Detail :Photodiode facing one miniboard



Flex
with
10 boards

Report:

The excel will contain

- the LED number
- the flex cable number
- the calibrator reading (DC voltage), i.e. proportional to light emitted.
- the average of 5 (10) reading and the rms

The raw data will be stored as well

If everything goes well we expect to ship the first bunch of tested flex+boards in about a week-10 days