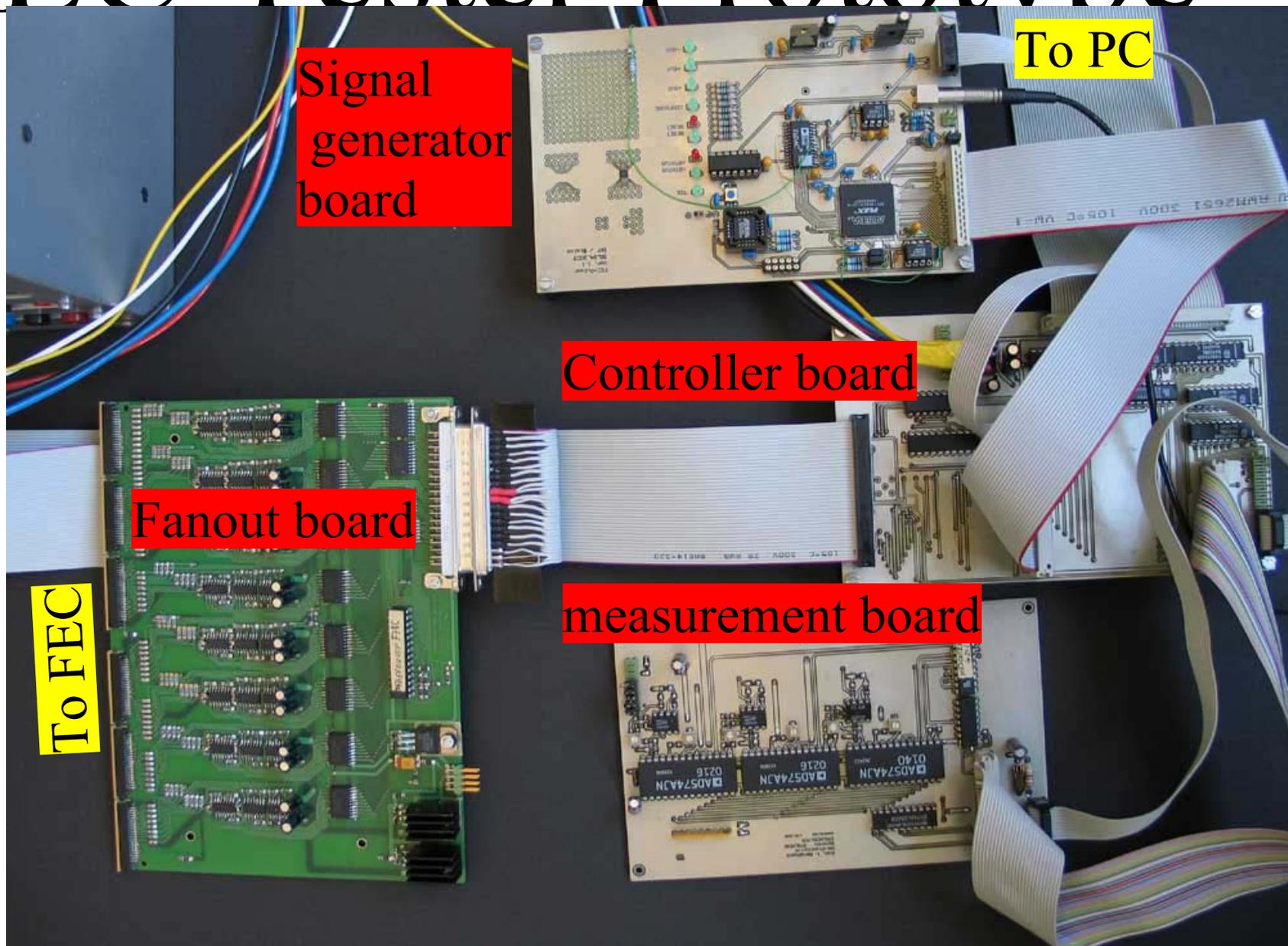


# Status FEC tester

## Topics:

- electronics: prototype finished
- Mechanics: prototype finished
- burn in tester
- readout: RCU II

# FEC Tester Prototype



# FEC Tester Prototype



# FEC Tester Prototype

Subcards of tester are tested individually

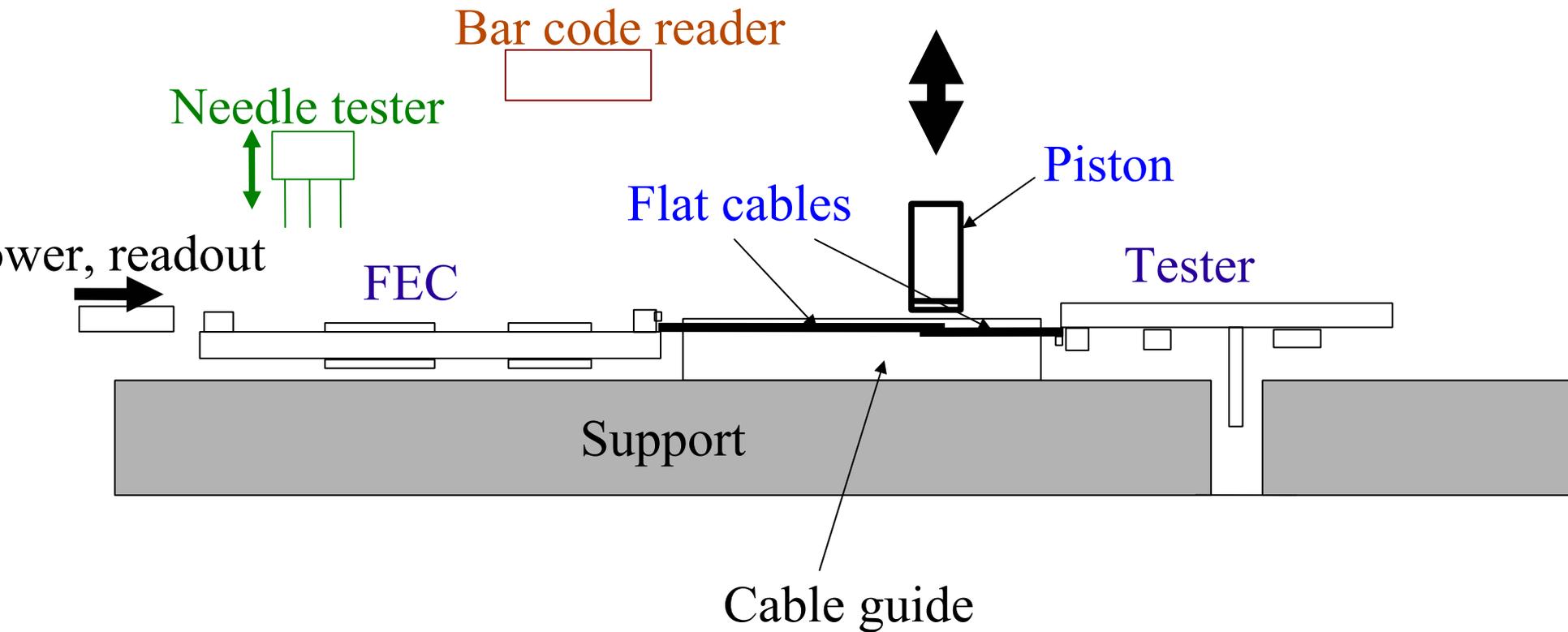
Final test of complete system pending: delay due to inadvertant connection to power with reversed polarity.

Still missing: bar code reader: in the process of beeing purchased

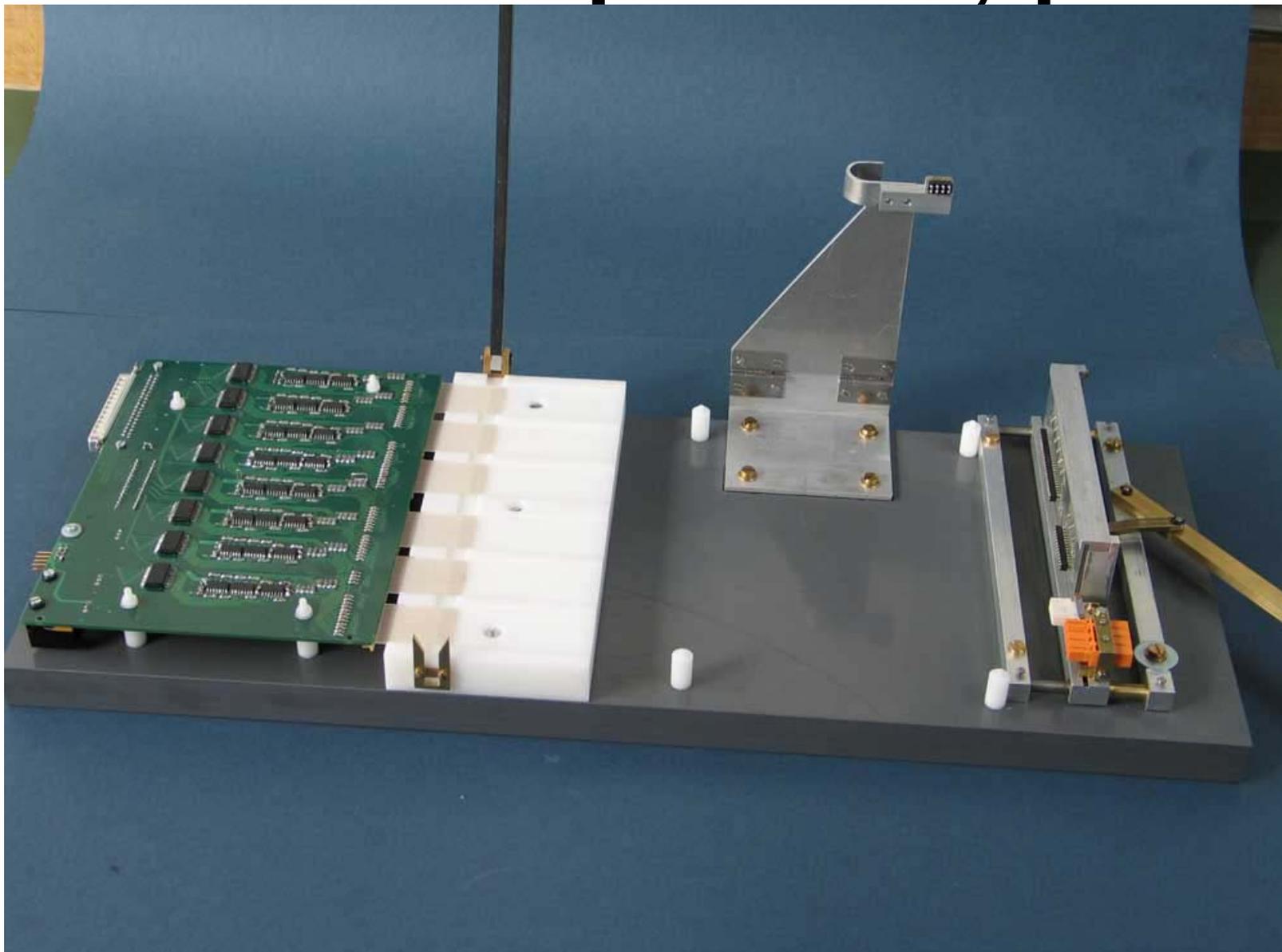
question: at the test points only one voltage accessible  
Is it sufficient to read out the other voltages via the DCS features of the FEC? Otherwise we need an additional needle tester.

# Mechanics

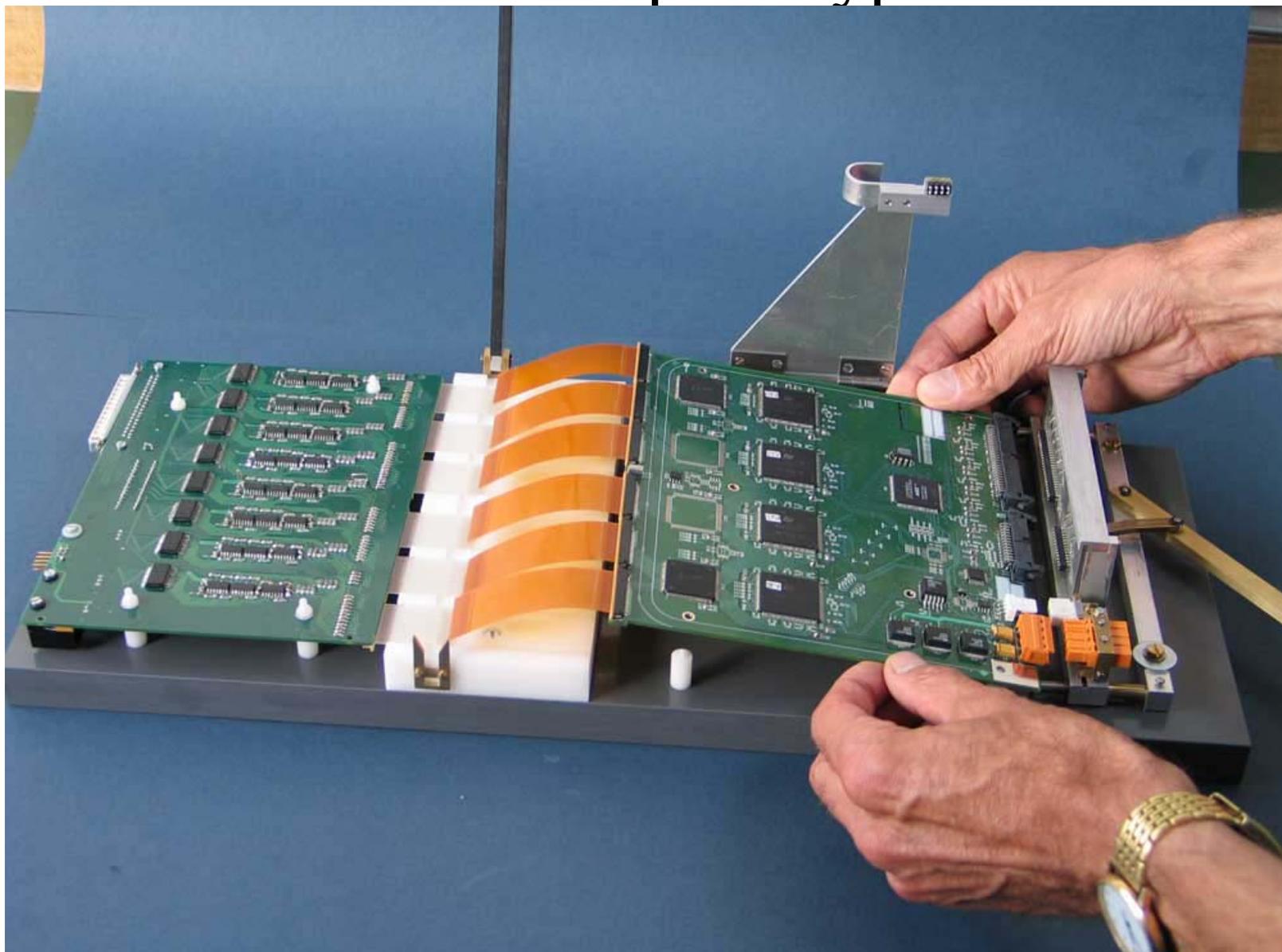
Original idea:



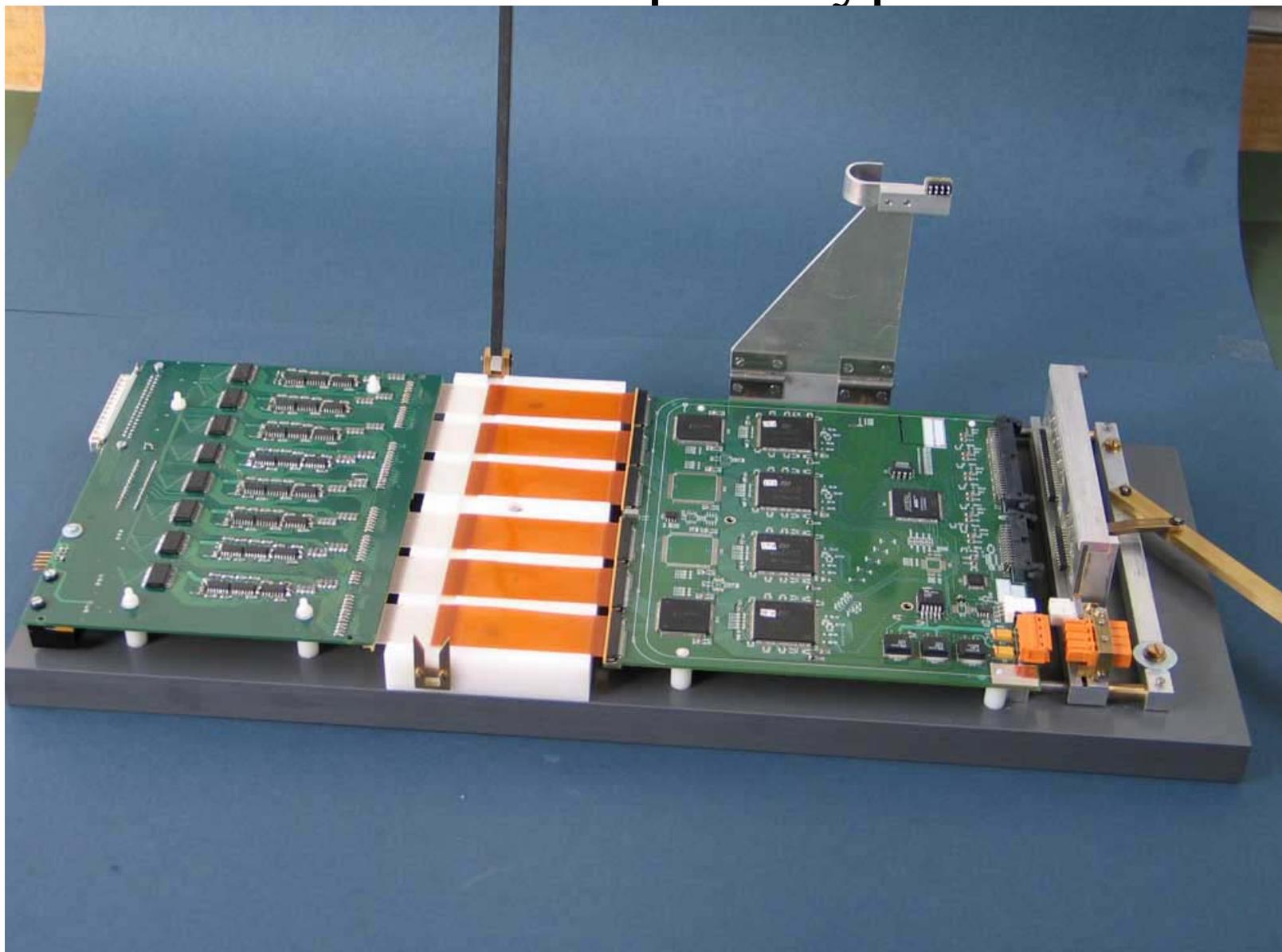
# FEC tester prototype



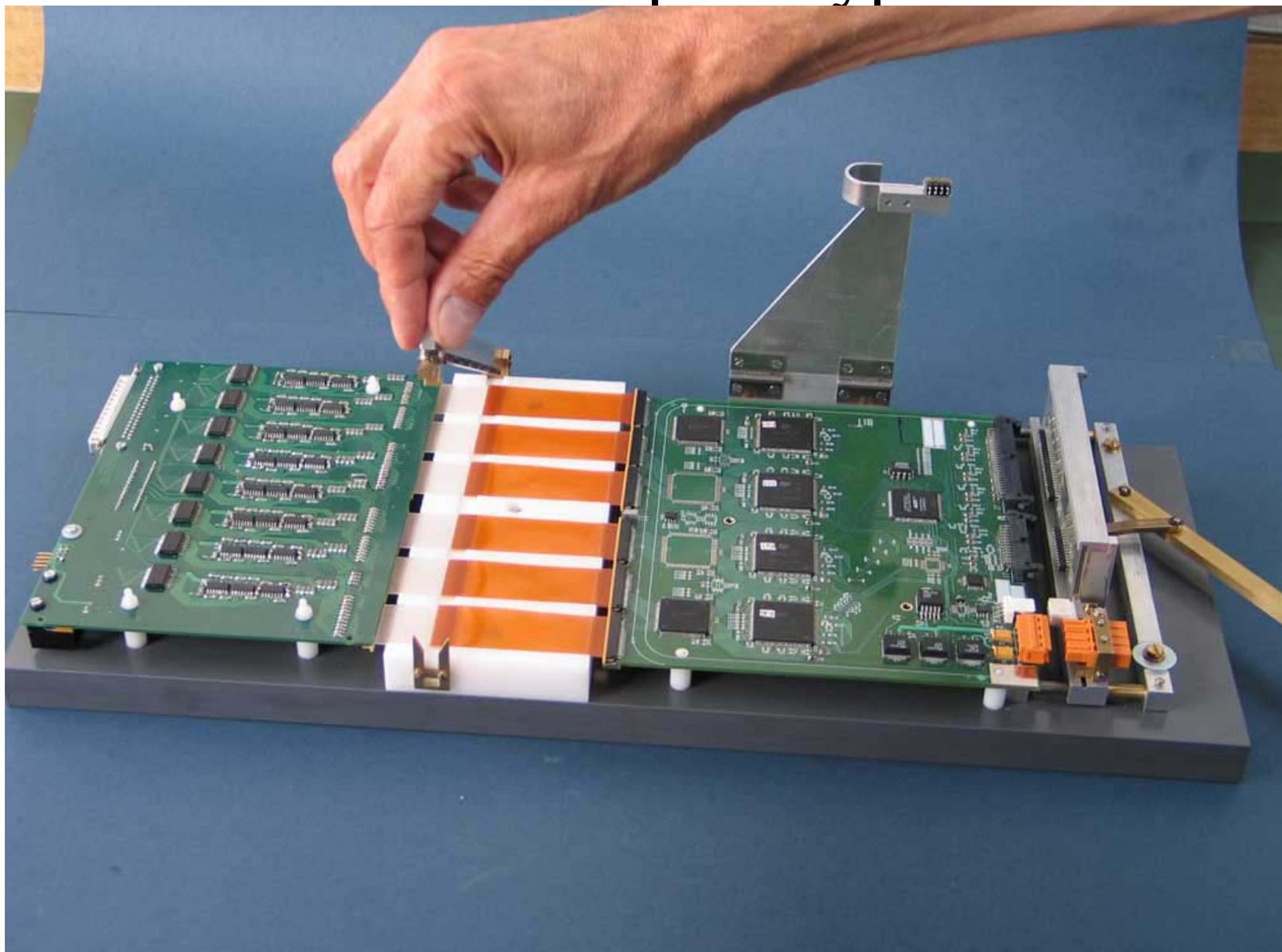
# FEC tester prototype



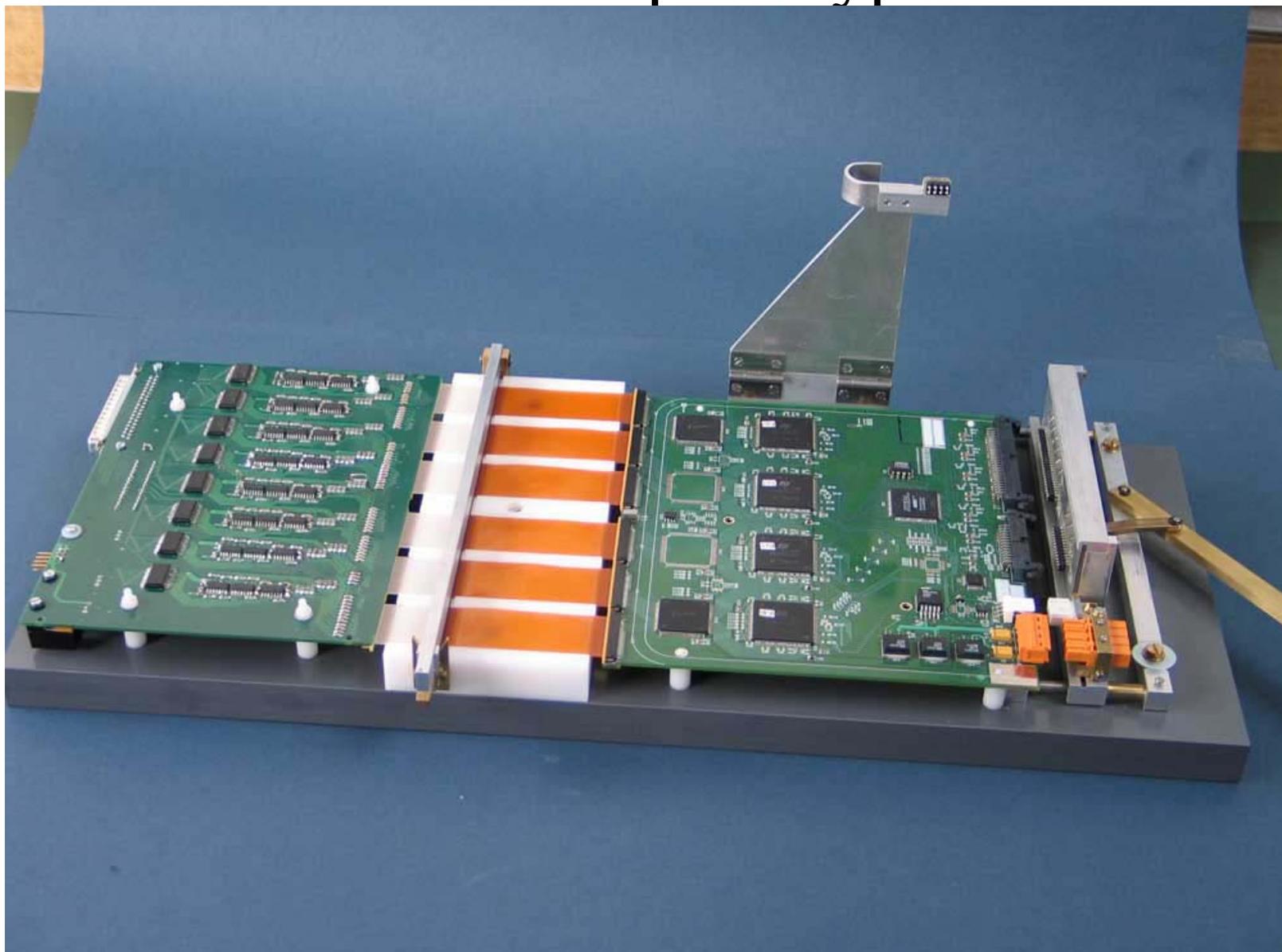
# FEC tester prototype



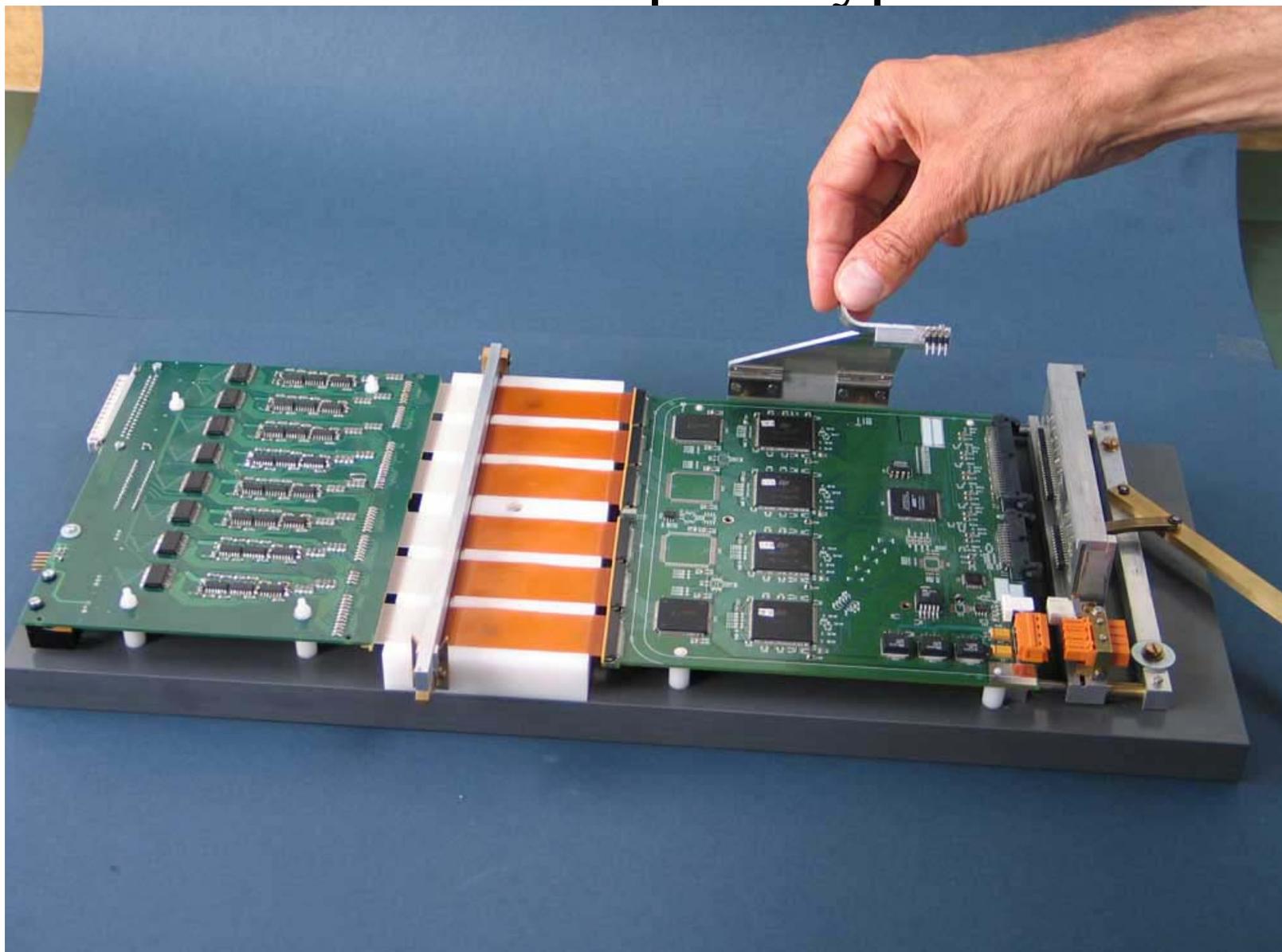
# FEC tester prototype



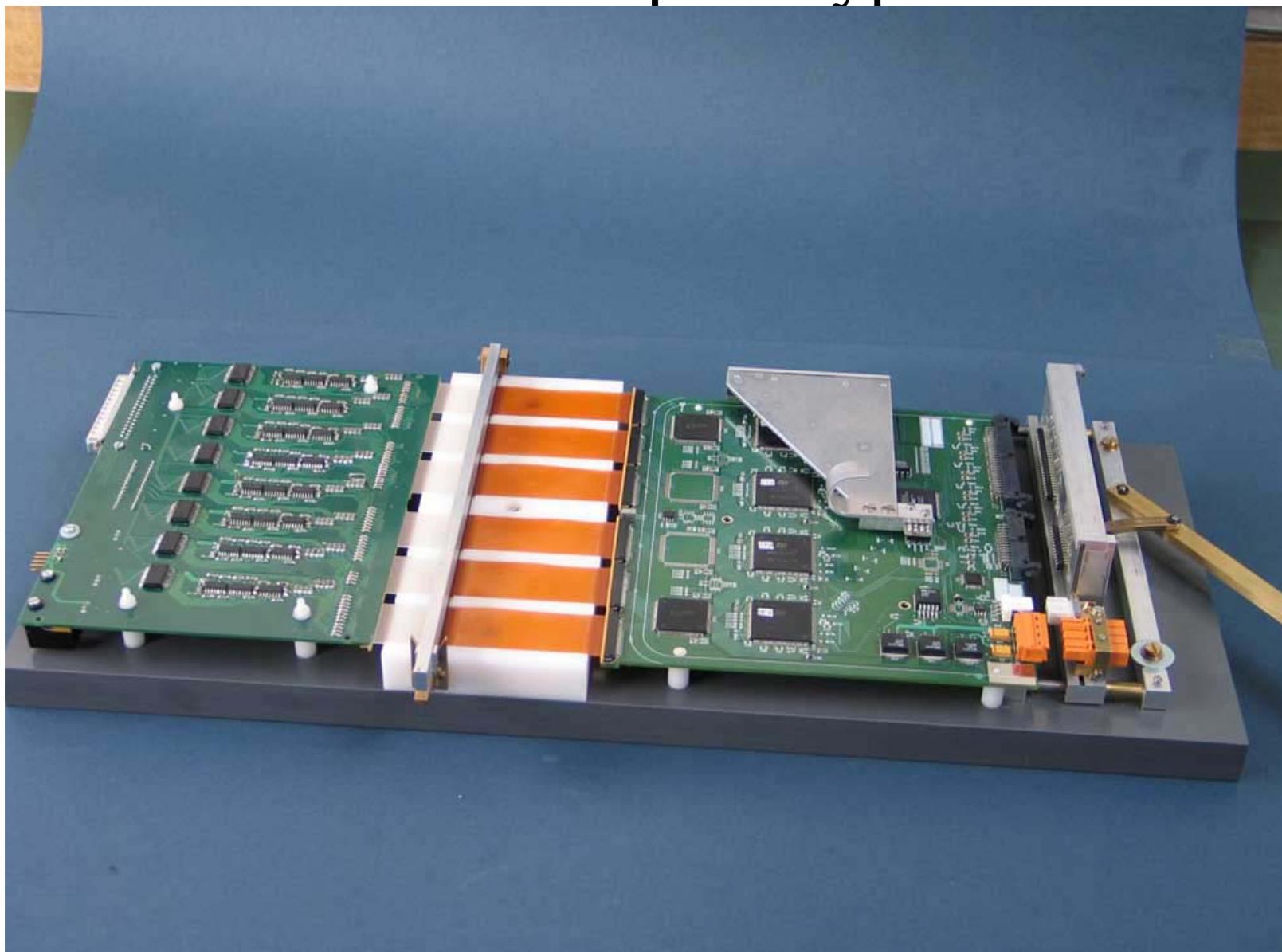
# FEC tester prototype



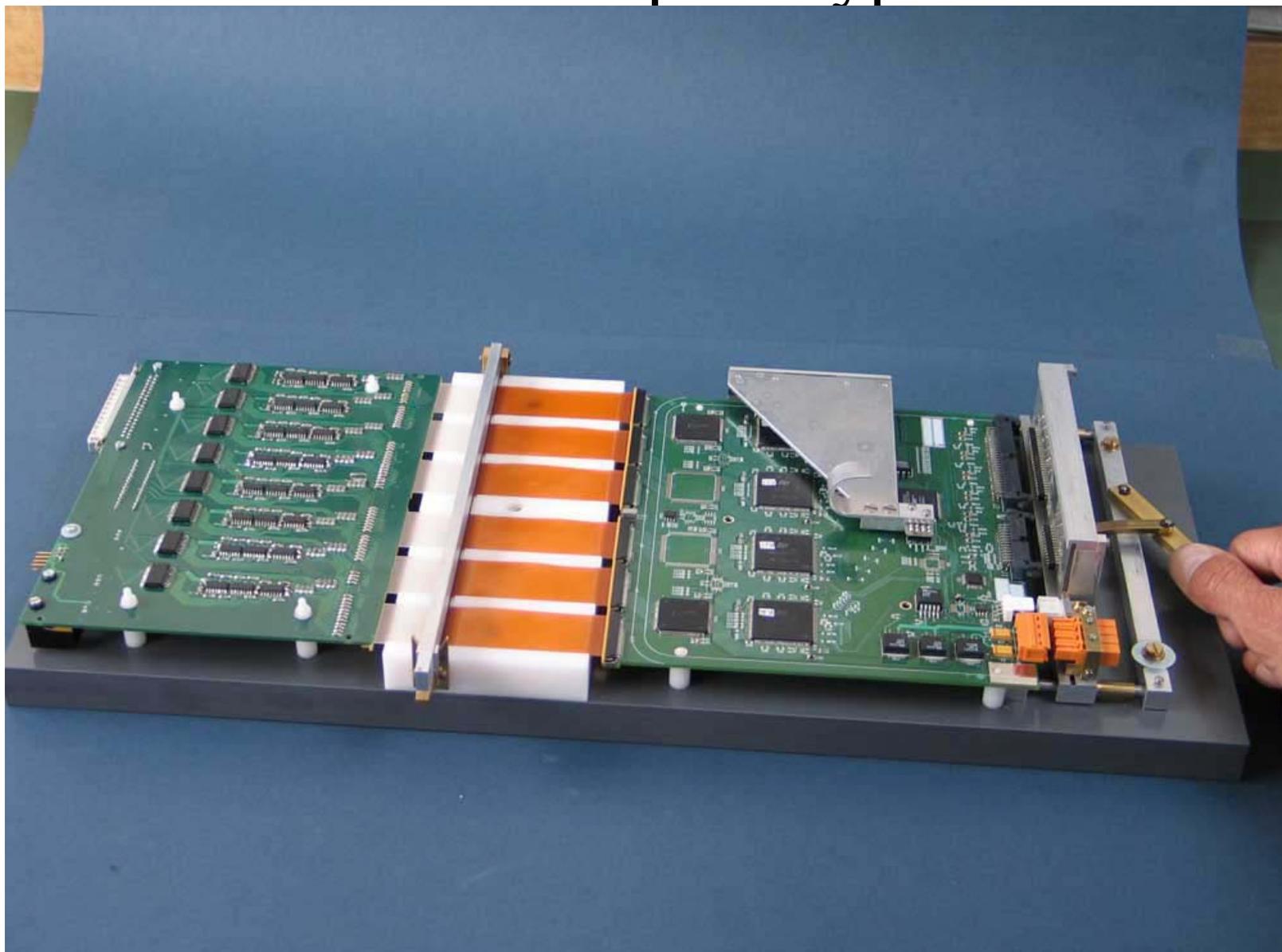
# FEC tester prototype



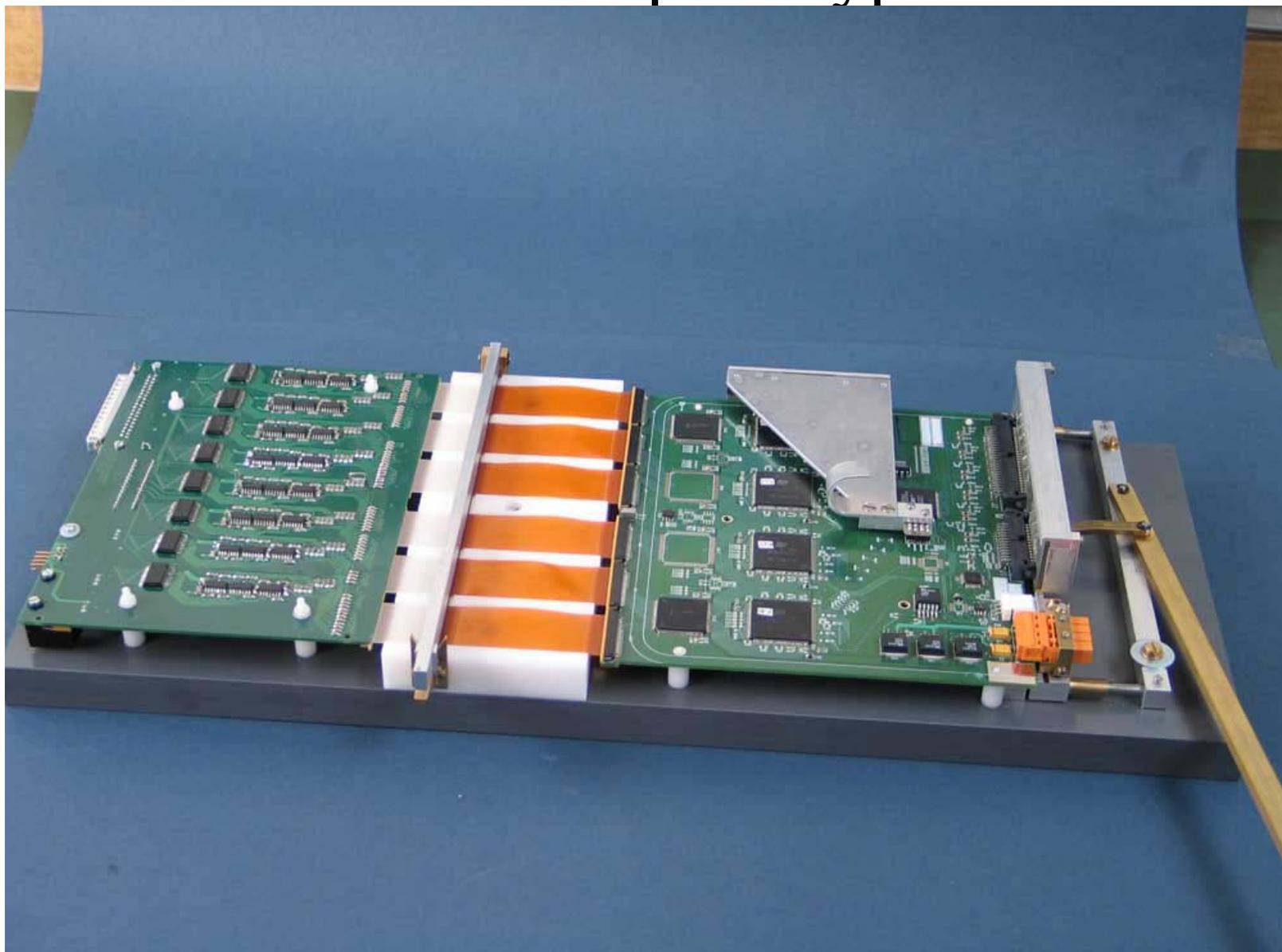
# FEC tester prototype



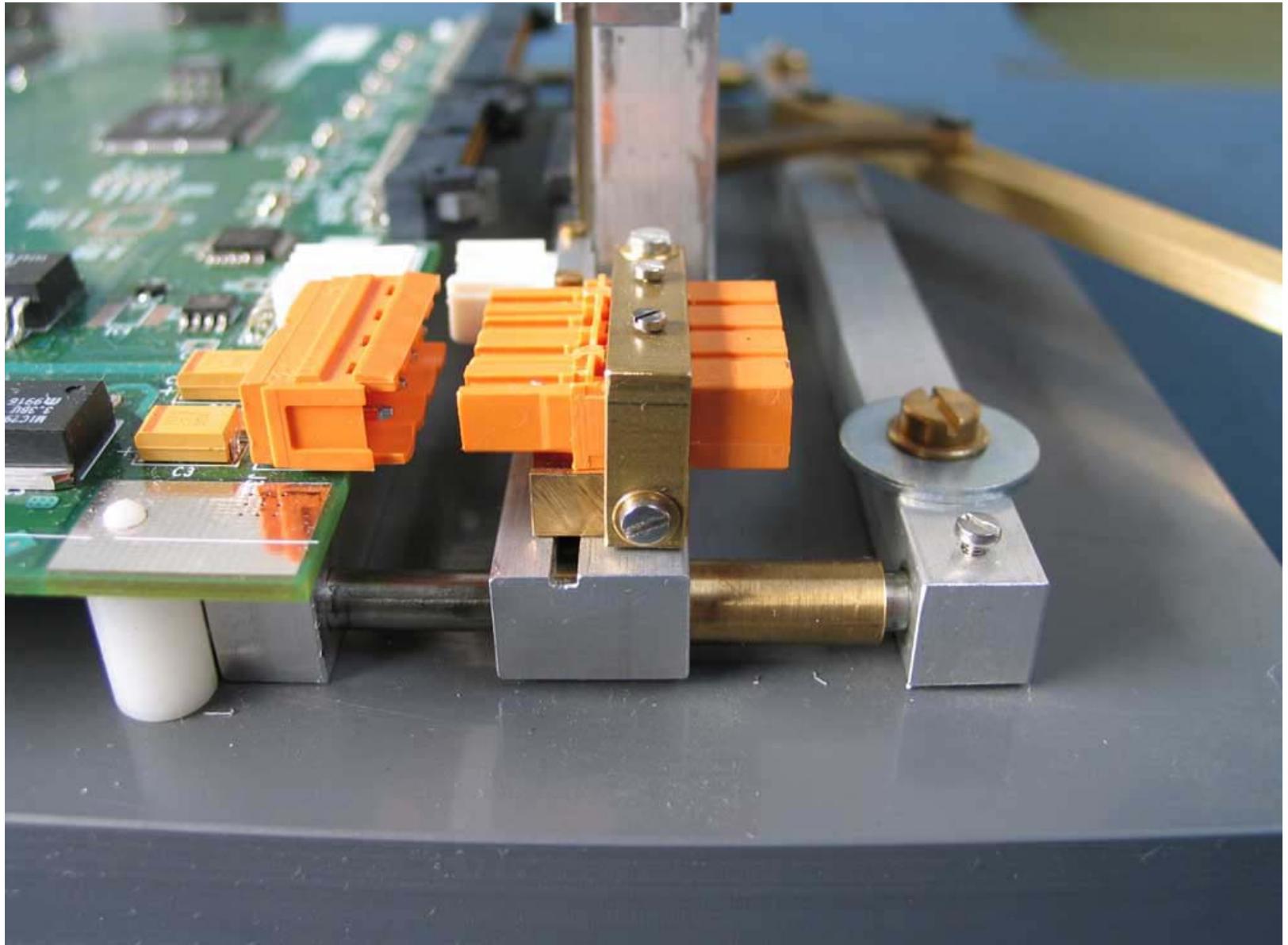
# FEC tester prototype



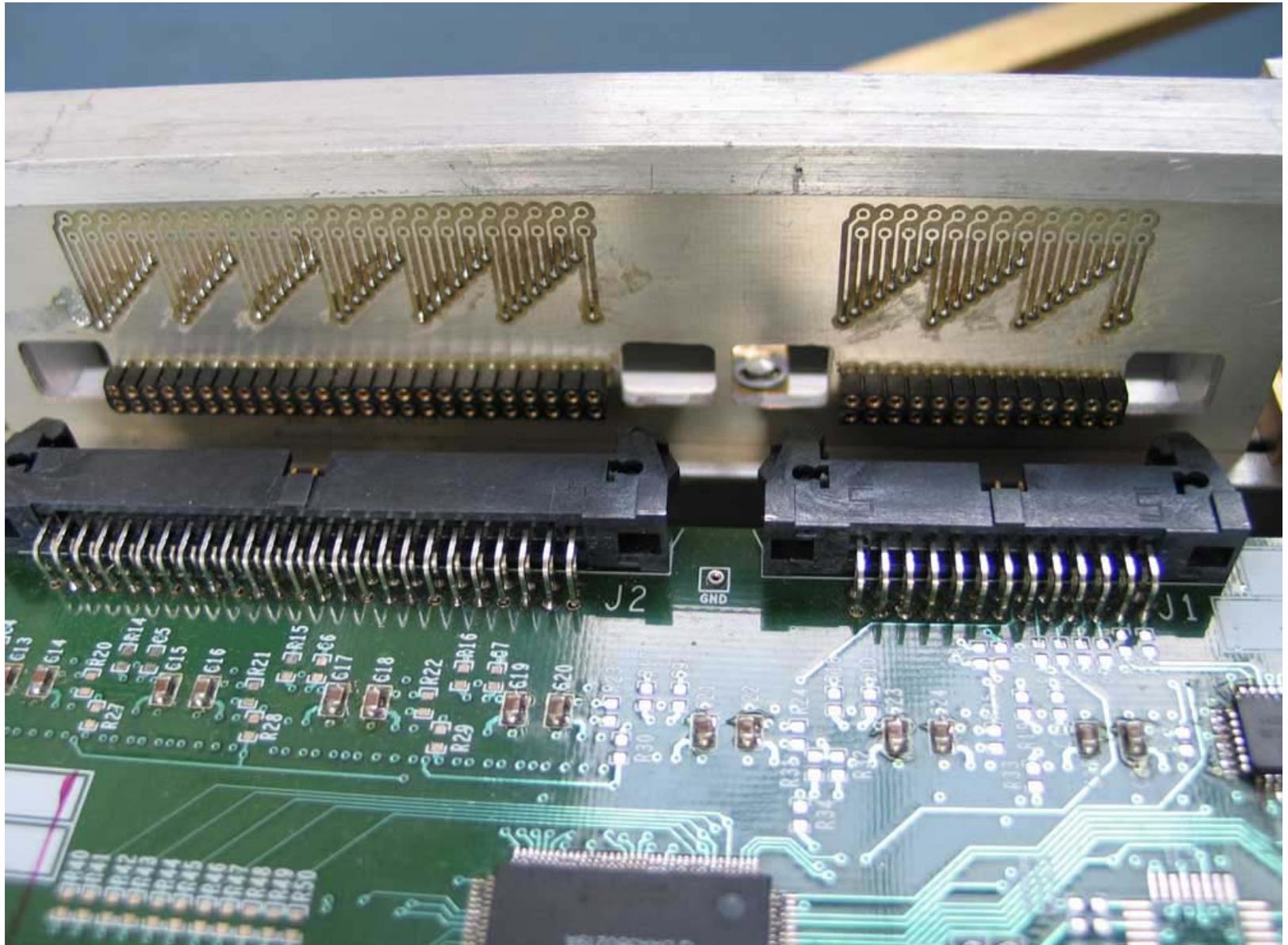
# FEC tester prototype



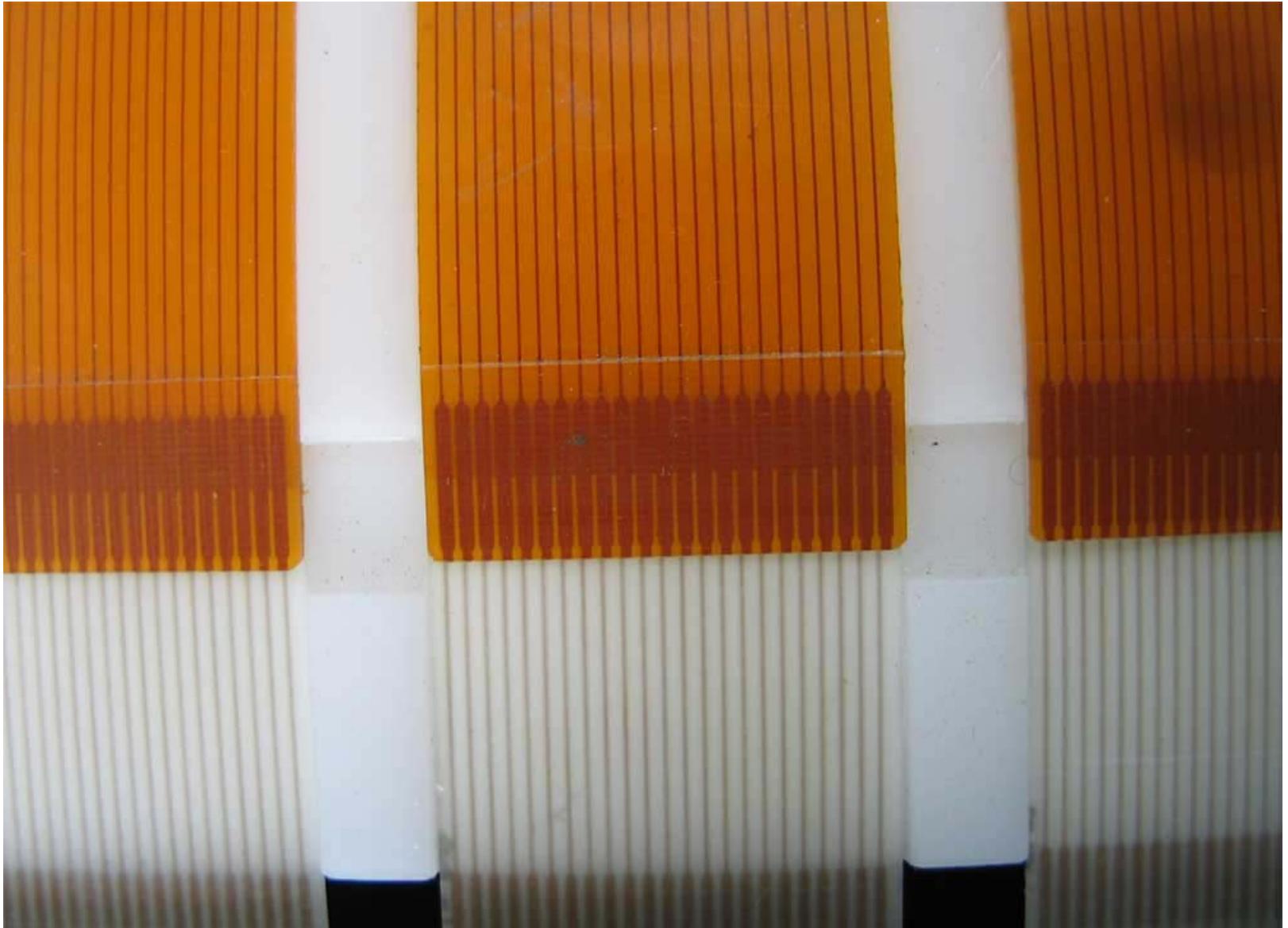
# Detail 1



# Detail 2



# Detail: cables



# Burn in Tester

Problem: mechanics gets very elaborate with 20 – 30 cards to connect  
> size problem

Proposal: get away from burnin test under power  
> do only passive burnin before cards are tested.

# Readout: RCU II

The problem solved with firmware: program for flash PROM (permanent memory) was different from version used for non permanent storage (loaded via AG connection and “Jamplayer”/”Byteblaster” software).

The RCU II had problem with a trigger signal not being there. The daughtercard had contact problems. More daughter cards are available from Bergen/Oslo.

At the time being there are 4 RCU II + 1 spare for GSI/Da/FRA foreseen (more motherboards would be helpful but not available)

The pulser part of the tester at the moment operated with LabView under WINDOWS has to be migrated to LINUX since driver for RCU II readout exists only under LINUX. It was a bit tedious to install the software for the control of the Natl. Contr. Card which controls the pulser part of the tester (open source software, not directly supported by LabView).  
The system is still not finally tested.

# Conclusions

Progressing well

test software still needs attention

should be ready for larger scale test in ~ December