

Electronics for the PPAC readout in the PRISMA SED

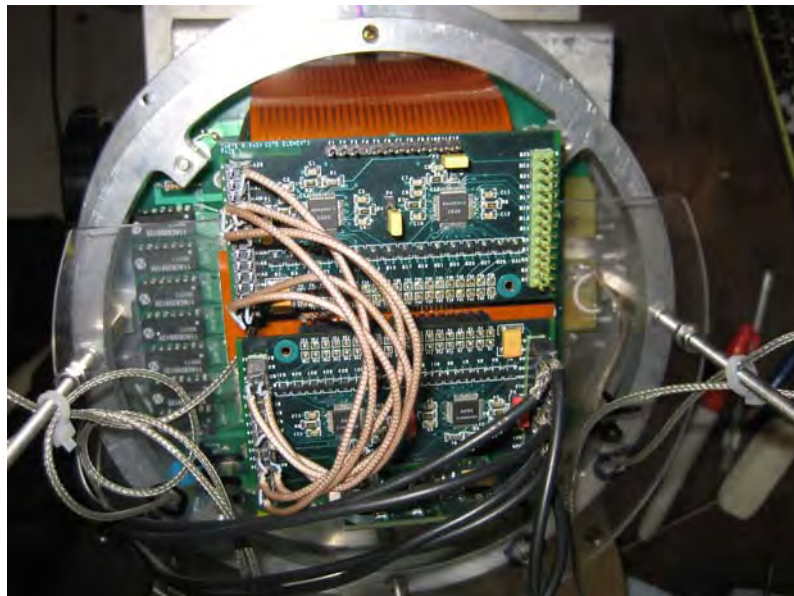
Readout electronics required to collect data from the PPAC used in a secondary electron detector (SED), being developed for use in the PRISMA experiment at Legnaro in Italy, has been designed and installed in the prototype SED test chamber.

The electronics comprises two Gas32 (developed at Saclay, France) cards and a flash ADC based readout card. The Gas32 card contains two 16 channel Gassiplex ASICs take charge from the PPAC wires. Each Gassiplex channel has a preamp, shaping amp, and a track and hold. The analogue signal from all the cards is multiplexed out in turn to the readout card at 5Mhz.

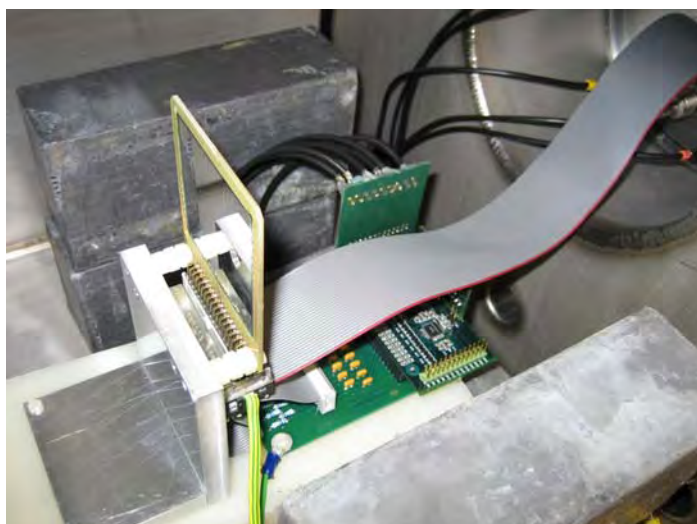
The acquisition system was tested with a DSSSD before being installed in the SED test chamber.



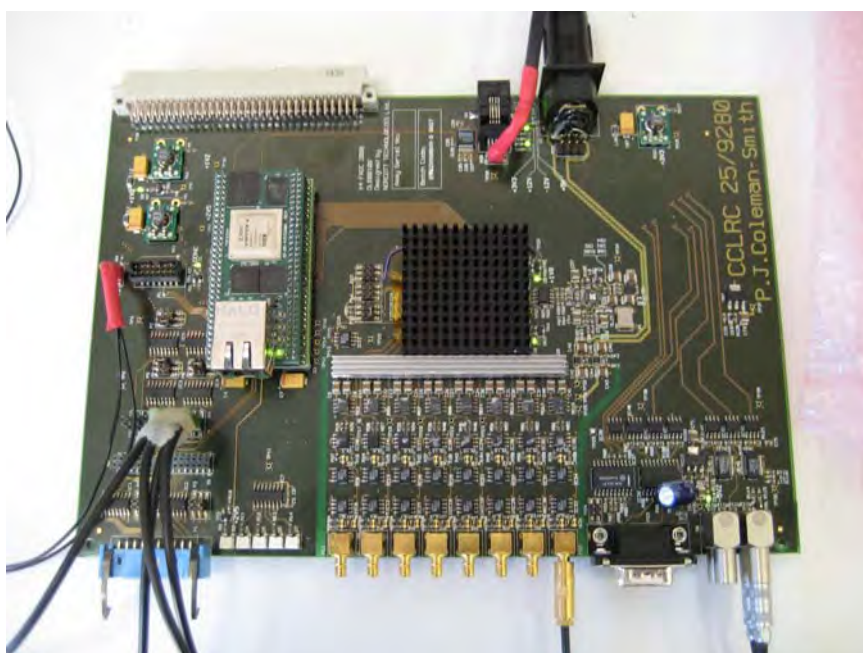
Prototype SED test chamber.



Two Gas32 Gassiplex ASIC cards reading 64 PPAC wires in place behind the PPAC.



Using a DSSSD to test the data acquisition before installation with the PPAC.



Eight channel FADC - ASIC readout module in the laboratory during development.