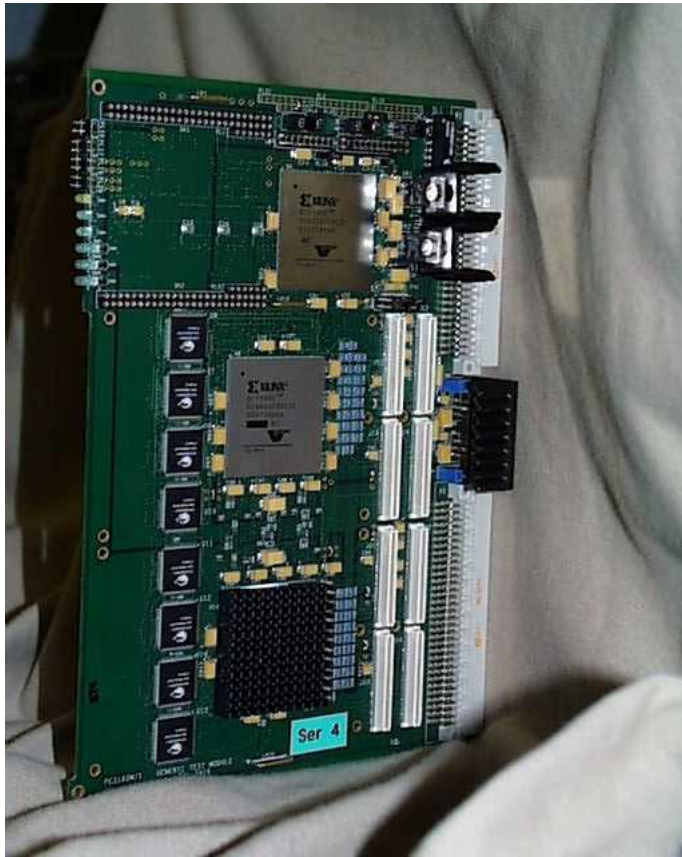# CP "chip" tests using the Generic Test Module (GTM)

**James Edwards**

**RAL**

# Test setup on GTM



- **FPGA 1 (Two Configs)**
  - Small set of vectors loaded into BlockRAM. (James)
  - Reads test vectors loaded into memory. (Ian)
- **FPGA 2**
  - CP chip

# Initial Results - Calibration

- ## All 108 channels calibrate.
  - ### Debugged a number of minor problems.
  - ### Required the 160 MHz serial to parallel converters to be "hand placed".

# Data Tests

- **BlockRAM vectors**
  - All 256 vectors passed!

- **External memory vectors**
  - Some errors.  Nothing obvious!
  - Added "scan path" configuration to aid debugging!

# Summary

- GTM useful aid to debugging.

- Save time when we get the CPM.