Minicrate test status in Bologna site
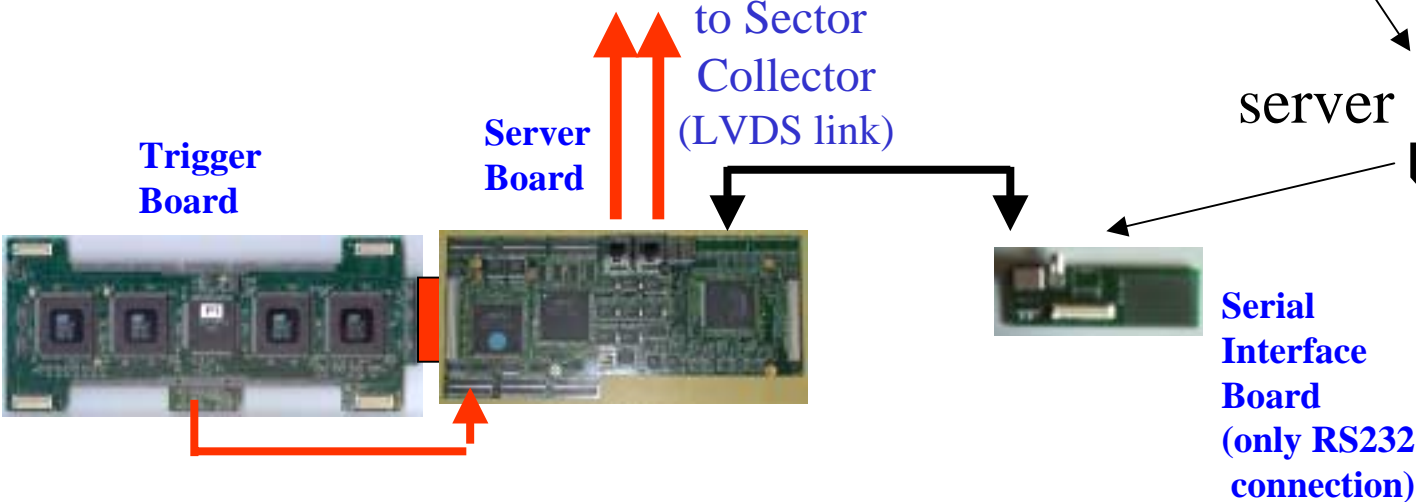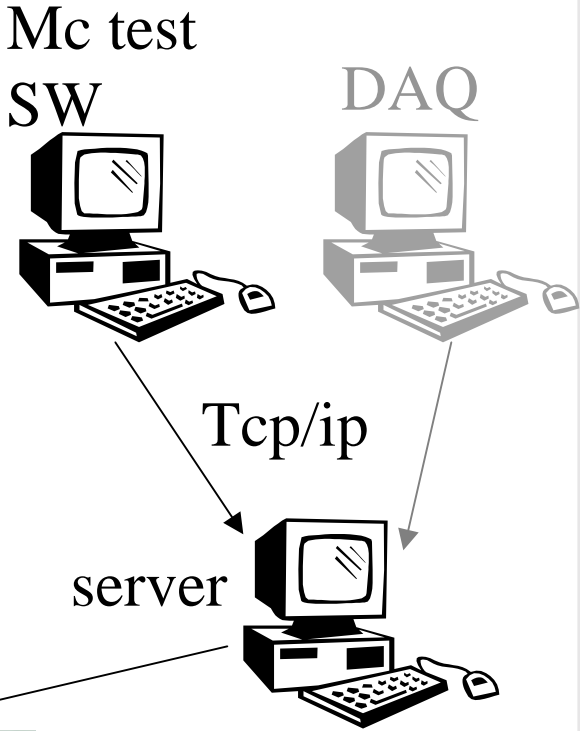
Three successive steps of setup preparation:

➢ Power, clock distribution and connectivity test between TRBs and SB:

✓ Setup is being assembled, all parts are in or in procurement (optical fibers, 500W power supply)

✓ Connectivity test SW by using JTAG Boundary Scan is in preparation

➢ Connectivity test between TRBs and ROBs (using test pulser):

➢ needs FE of (dummy) test chamber tewith -> still missing

➢ Needs Pattern Unit and read-out SW -> OK

➢ Alternative method by using TRBs and ROBs Jtag in under study (…?)

➢ run the full system trigger+DAQ+TTC..., adjust clock phase TRB-TRB and RO-TRB, vary thresholds….

full DAQ system still not available

Boards connections

Mc test SW

DAQ

Tcp/ip

server

to Sector Collector (LVDS link)

Server Board

Trigger Board

Serial Interface Board (only RS232 connection)

Software Status

- Automatic SW (Visual C++) for connectivity test between TRBs and SB is being prepared and it will be used in the final test suite for minicrates validation.

- Manpower: A.Perrotta, T.Rovelli, R.Travaglini

- Status: check 1 TRB internal connection and TRB-SB cable integrity.

- Performance: about 3 minutes (main limitation: tcp/ip)

  Expected: 15-20 min. per minicrate (depending on the number of boards)

- To be done:
  - debug sw for TRB-TRB connection check and scalability for all minicrates type;
  - integrate in the final system;
  - define user interfaces, bookkeeping and debug procedures in case of failure detection