

DT/CSC Interface

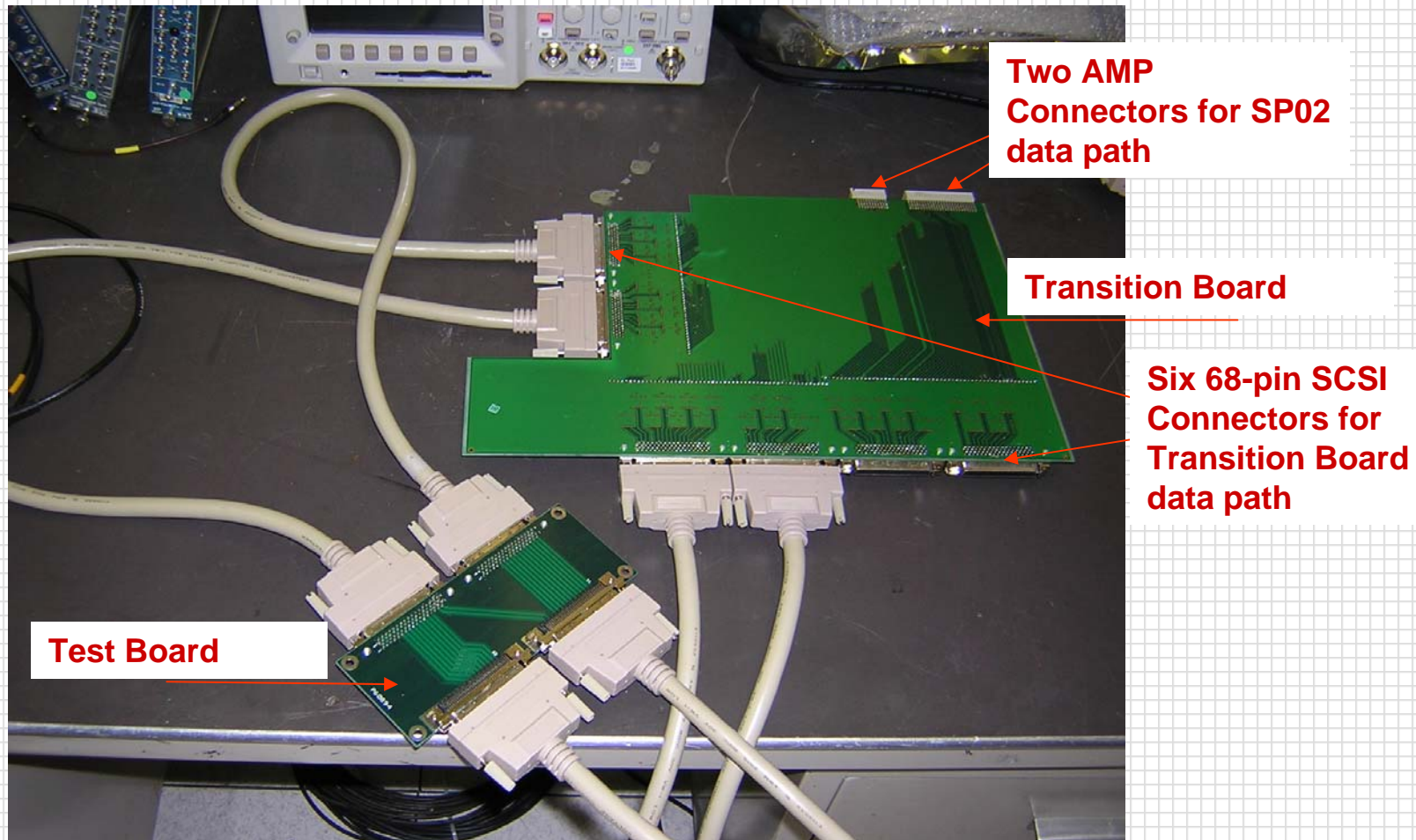
Data is exchanged between the two systems for efficient coverage of the region

$$0.9 < |\eta| < 1.2$$

- CSC sends 3 LCT's/BX (52 bits) from ME1 to two 30° DT sectors
- DT sends 1 segment/BX (26 bits) from each 30° sector
- Signaling standard is LVDS at 40 MHz through SCSI cables and connectors

Special Transition Board has been produced to provide the data exchange between CSC_SP and DT_SP

SP02 Transition Board and Test Board

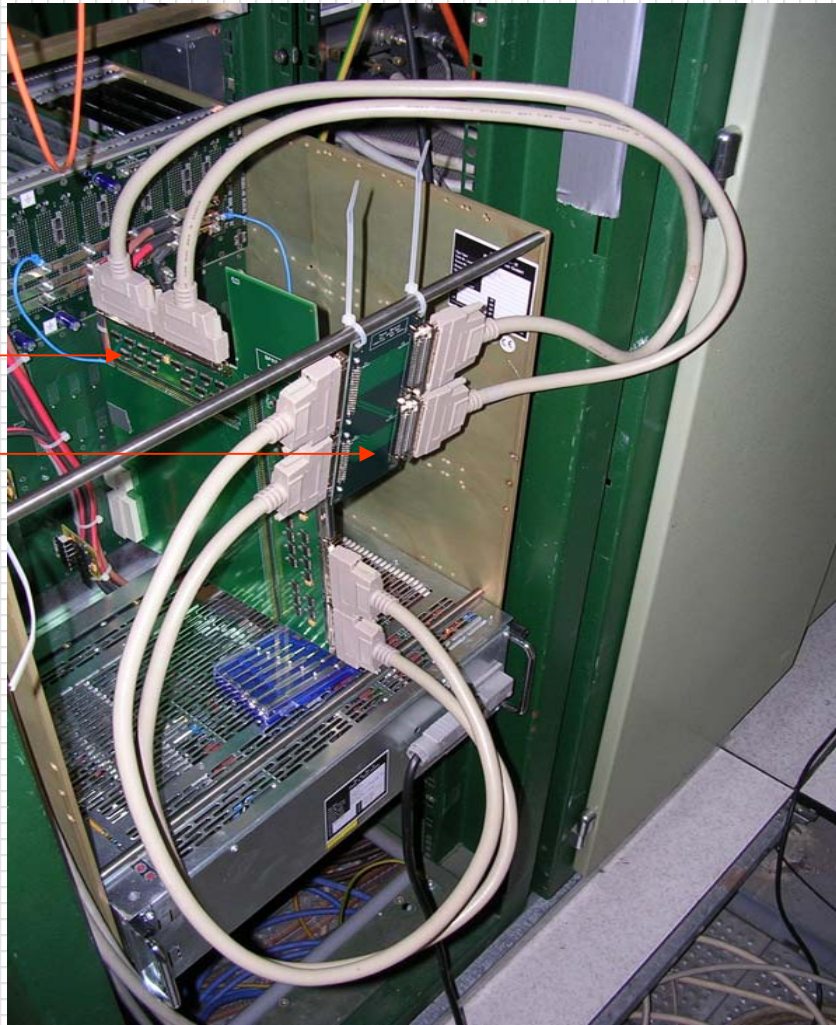


Test Board allows SP02 DT Interface stand alone test using connection between Transition Board B outputs and inputs

June 04 Stand Alone Test Connection

**Transition Board
connected to SP02
input/ output**

**Test Board
connected to
Transition Board
input/ output**



June 04 Stand Alone Test at CERN

SP02 FIFO Out → Transition Board Out → Test Board → Transition Board In → SP02 FIFO In

- Data was received in a FIFO in the main FPGA of the SP mezzanine card
- Tested walking 1's, walking 0's

All bits and clock were received except one bit due to Backplane broken pin

SP02 Transition Board Test Conclusions

Initial tests show that DT Interface of the CSC Track-Finder can exchange data

Tests should be repeated with longer cables

More tests of synchronization procedure and Track-Finding with both CSC and DT data should be performed just after DT SP is ready for test