



LHCb Upgrade Electronics

Mailing list:

Go to simba.cern.ch, search for lhcb-upgrade-electronics

Link to upgrade electronics meetings:

<http://lhcb-elec.web.cern.ch/lhcb-elec/html/upgrade.htm>

Meetings in 2011:

10th February (TFC for discussion)

14th April

9th June

11th August

13th October

8th December

Reminder:

Working group on FPGAs in radiation environment:

See mail from Jorgen

If you are interested to join, please contact me

ACTEL FPGA irradiations:

1st tests by Syracuse

2nd run in planning for early 2011

Parallel irradiation (at CERN?) to be investigated

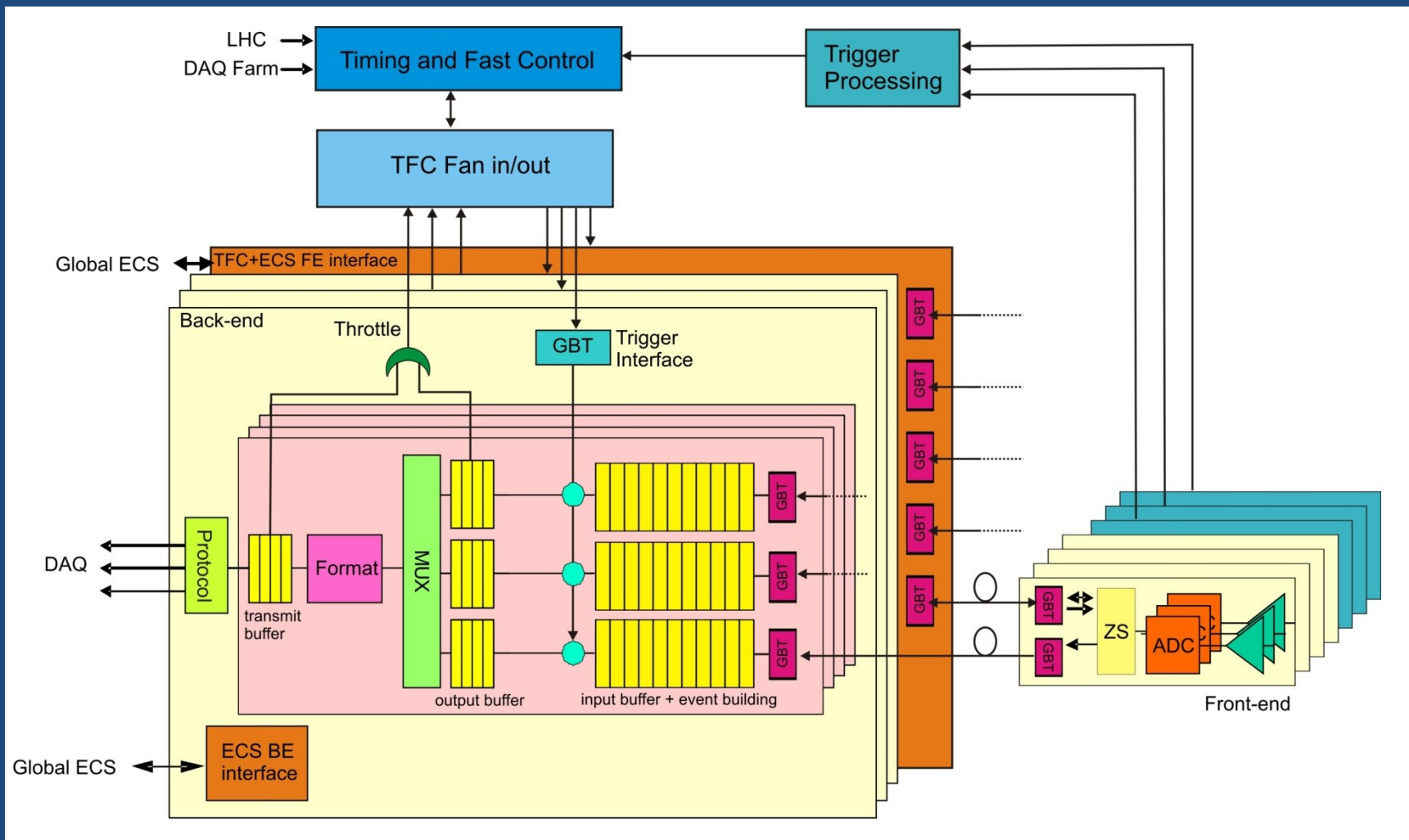
OT + Calo interested so far (maybe also CMS HCAL): anyone else?

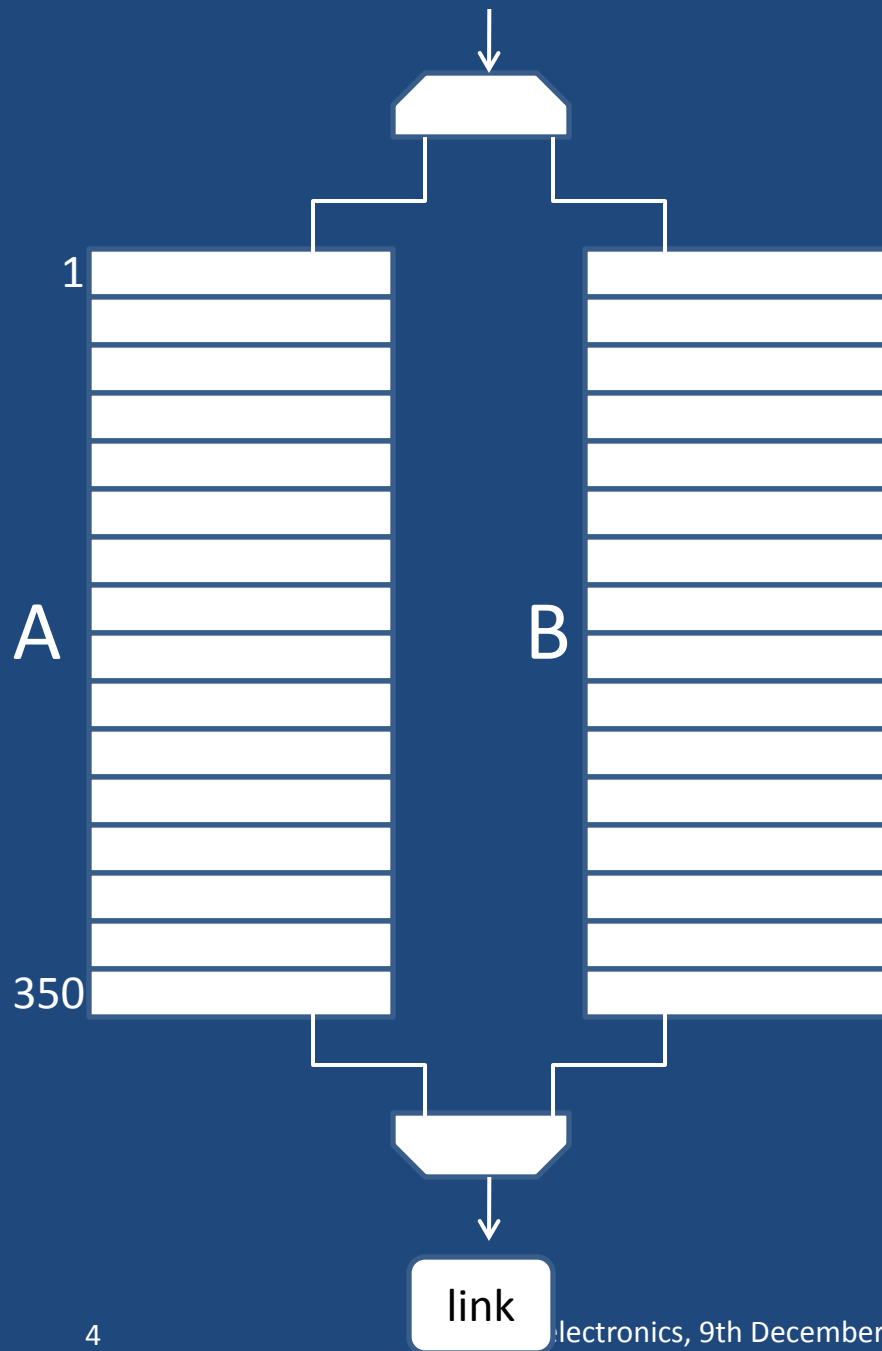
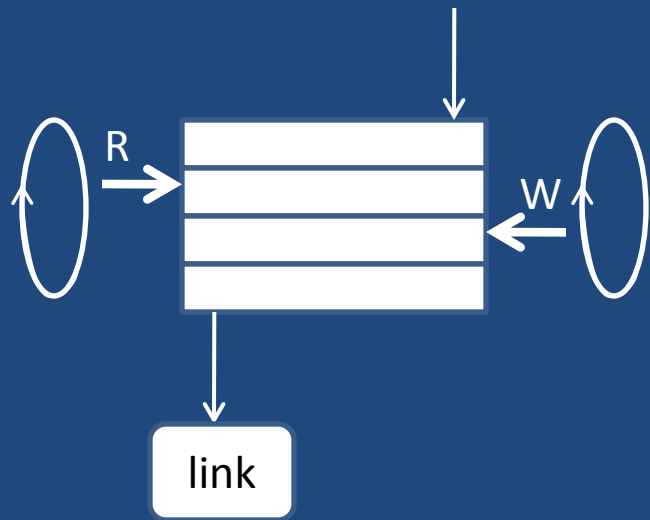
Front-end simulations (Tomasz Skwarnicki):

Data available (contact Tomasz)

Sub-detectors starting: Velo well advanced & already producing output for TELL40 simulations – next meeting in January

Architecture: Agree on separation of DAQ from TFC/ECS





Front-end buffer implementation

Traditional FIFO or RAM (a la Calo)



Introduces some synchronicity within and between sub-detectors (later BXs in the 350 will be the truncated ones)

Dependent on bunch time structure

ACTEL users can re-configure 'easily', but others.....?

Large RAM not so easy to implement in FE ASICs

Adds latency to data (350 cycles on average).....

if trigger latency is still 160 cycles, we'll need to buffer triggers

