



Tests with many MiniDAQs

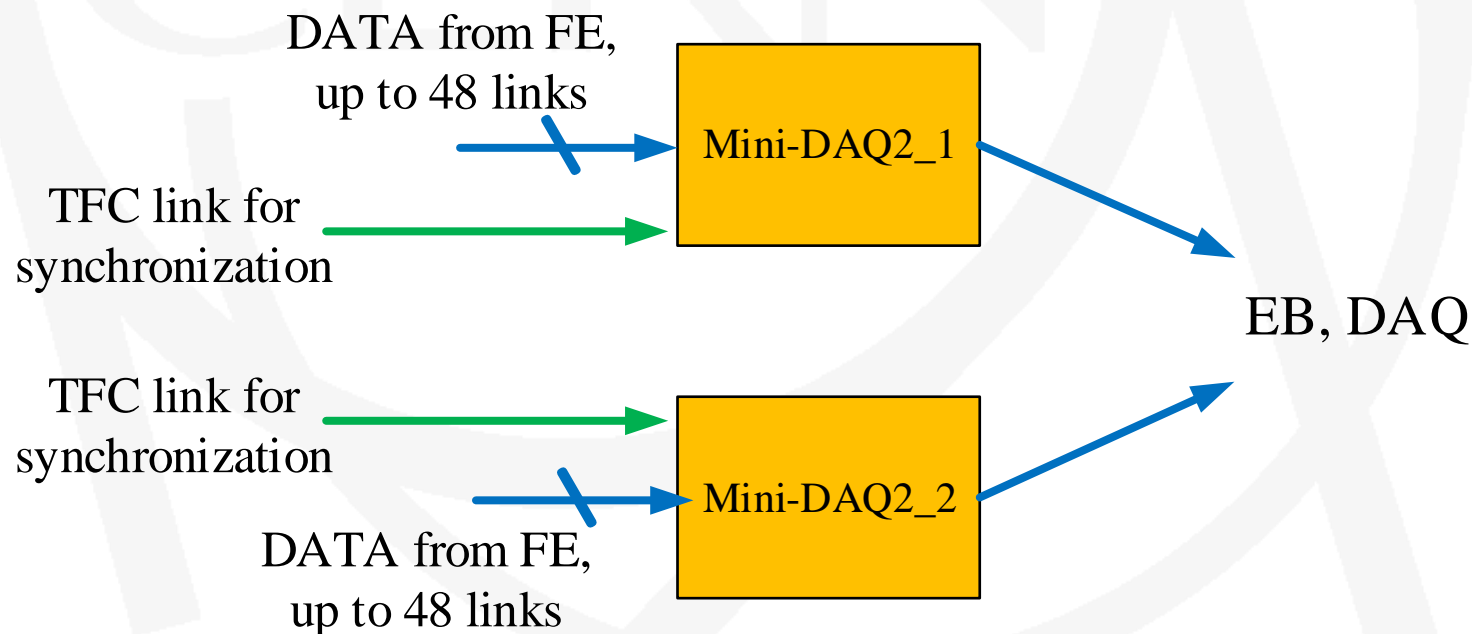
MiniDAQ workshop
31 July 2017

Everybody, CERN, CPPM, LAPP, you

Tests

Eventually, we will setup a simple testbench consisting of:

- 2 (or more) MiniDAQs2 connected to a mock-up DAQ
- FE generators (internal/external)
- TFC centralized synchronization

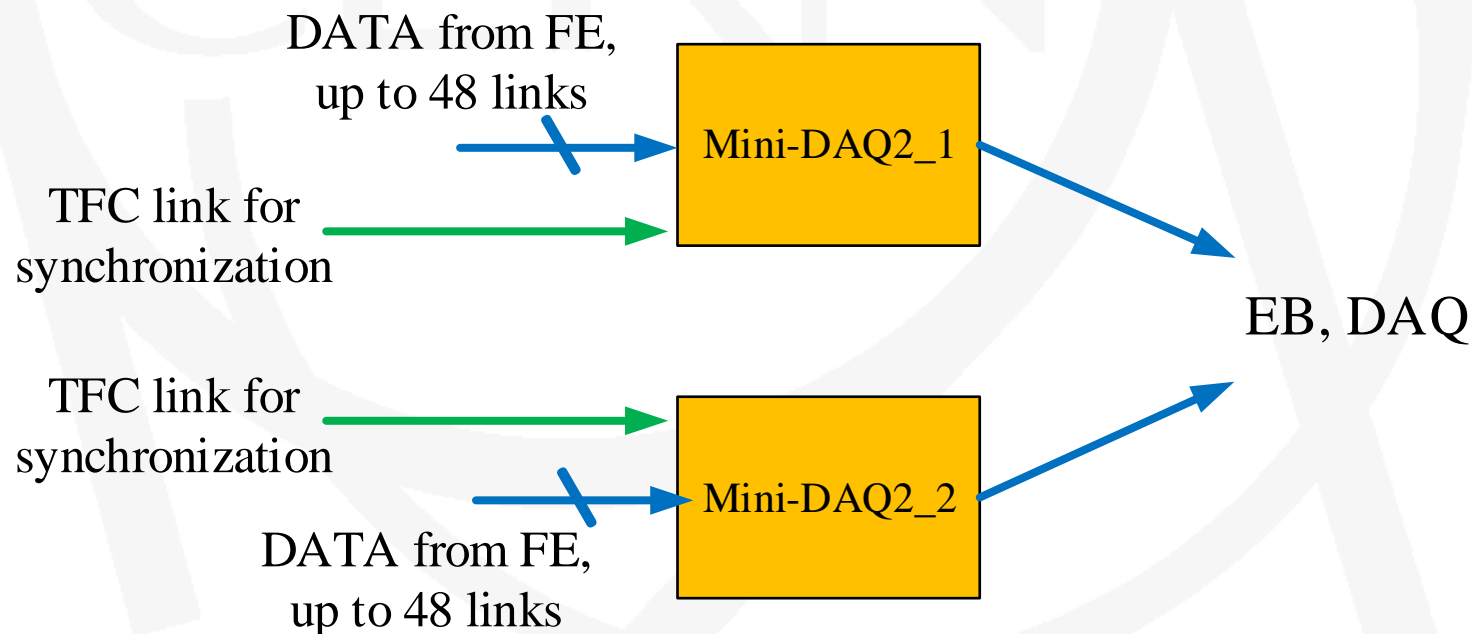


Of course the easiest test is to use MiniDAQ2s in loopback...

Now we have also MiniDAQs 2!

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- 2 (or more) MiniDAQs2 connected to a mock-up DAQ
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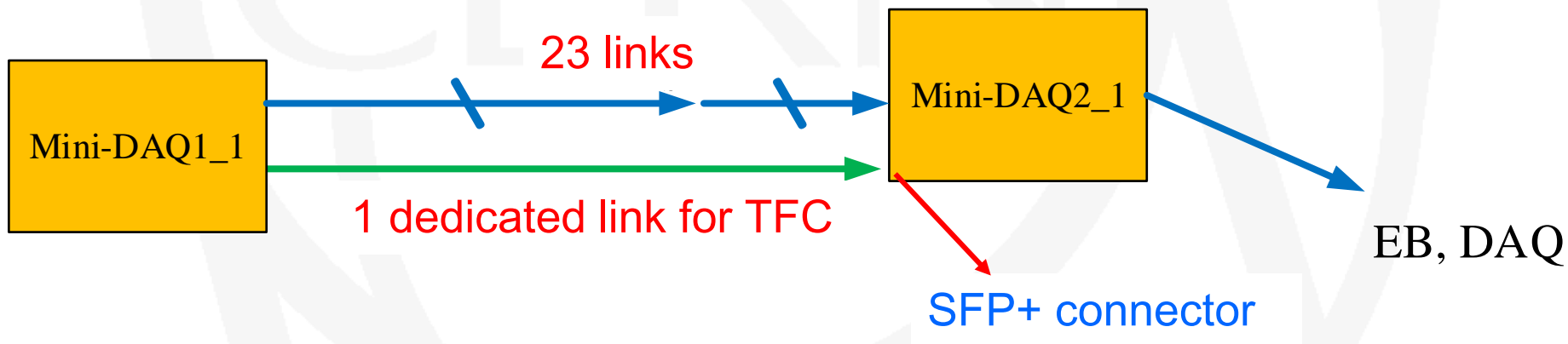


Of course the easiest test is to use MiniDAQ2s in loopback...

Test 1 using MiniDAQ1 for FE generators

Use 1 MiniDAQ1s to generate data for 1 MiniDAQ2

- 1 MiniDAQ1 is the TFC Master + FE generators
- 1 MiniDAQ2 is the TELL40



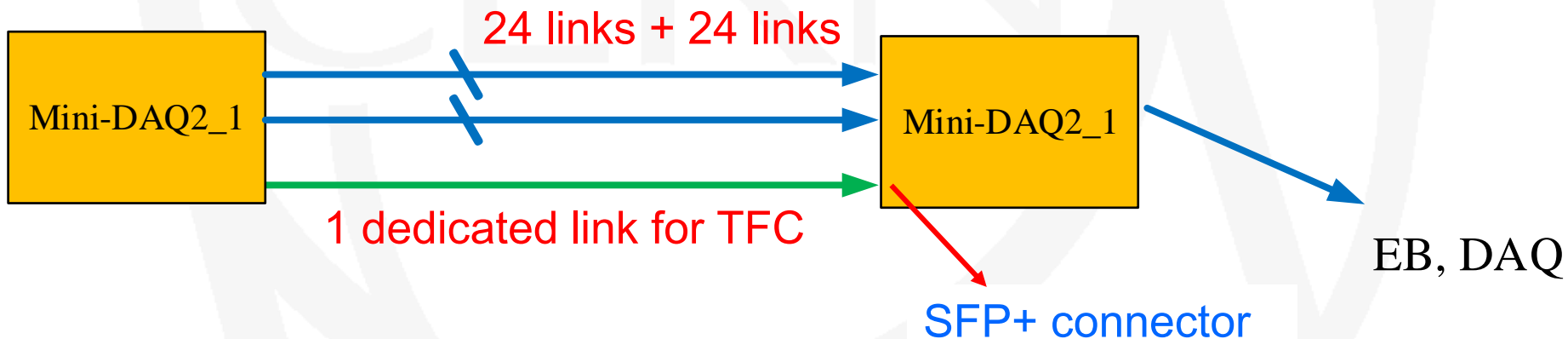
Can readout 24 links in a MiniDAQ2

- TFC RX clock recovered directly from TFC link

Test 2 using only MiniDAQ2

Use 1 MiniDAQ2 to generate data for 1 MiniDAQ2

- 1 MiniDAQ2 is the TFC Master + FE generators
- 1 MiniDAQ2 is the TELL40



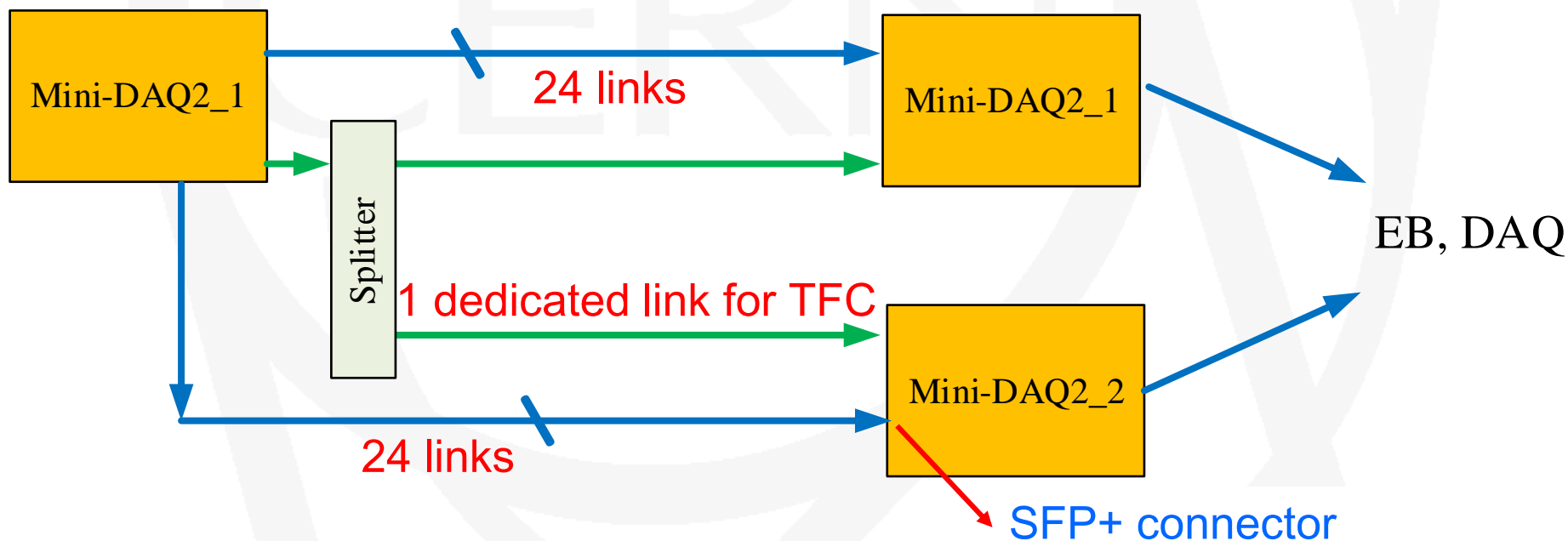
Can readout 48 links in a MiniDAQ2 (!!)

- TFC RX clock recovered directly from TFC link

Test 3 using many DAQ MiniDAQ2

Use 1 MiniDAQ2 to generate data for 2 or more MiniDAQ2

- 1 MiniDAQ2 is the TFC Master + FE generators
- 2 MiniDAQ2 are the TELL40

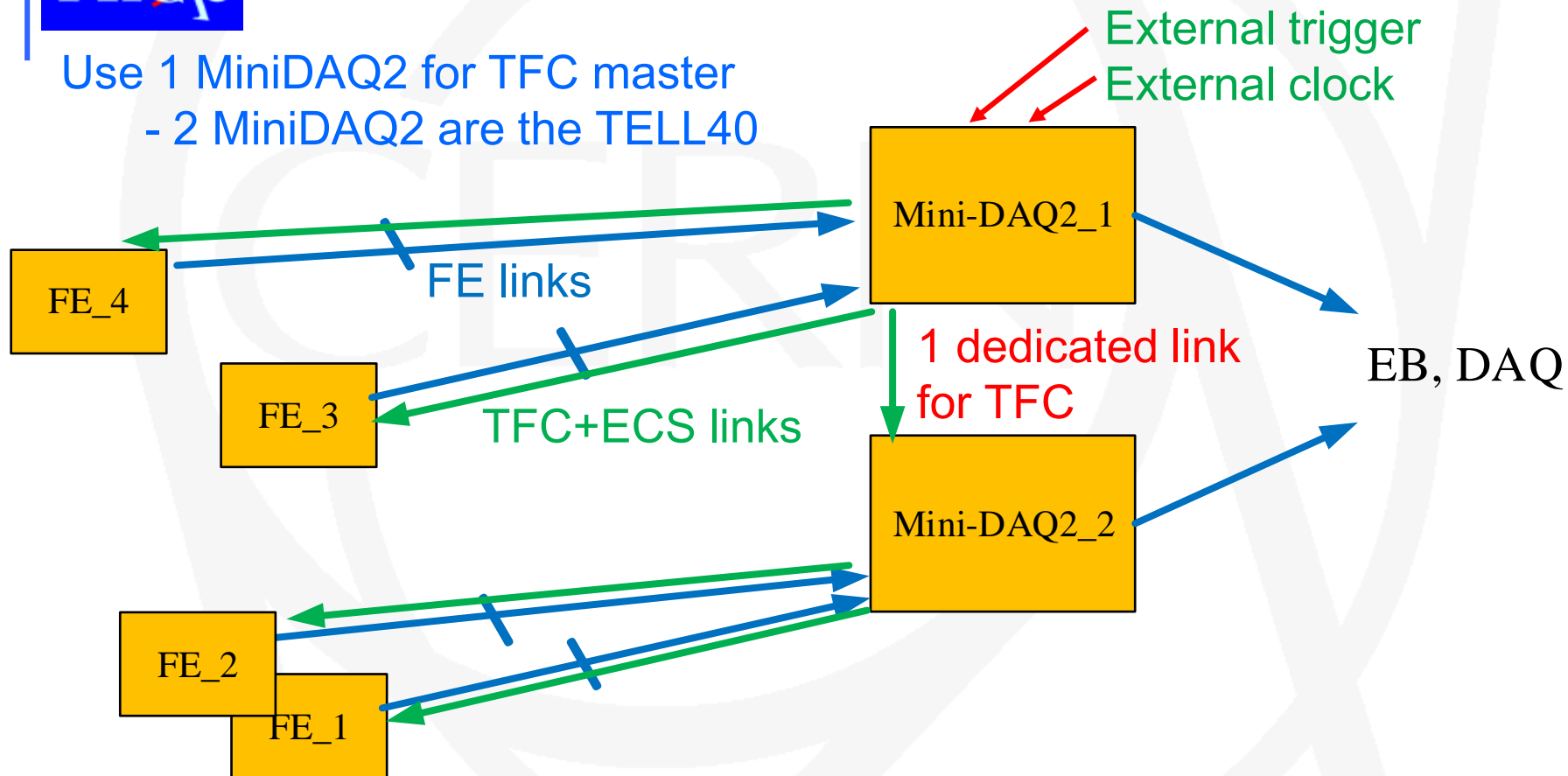


Can readout 48 links in 2 MiniDAQ2 (!!)

- TFC RX clock recovered directly from TFC link through a splitter

Final test using FEs

Use 1 MiniDAQ2 for TFC master
 - 2 MiniDAQ2 are the TELL40



Can readout FEs 2 MiniDAQ2 (!!)

- TFC RX clock recovered directly from TFC link through a splitter
- FE synchronized to one of the two MiniDAQs