SiW ECAL DAQ: plans

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Warning/Disclaimer: I am new to the DAQ business, and still have a lot to learn...
Apologies for mistakes & omissions

As you know, CALICE DAQ system is developed mainly by our U.K. Collaborators
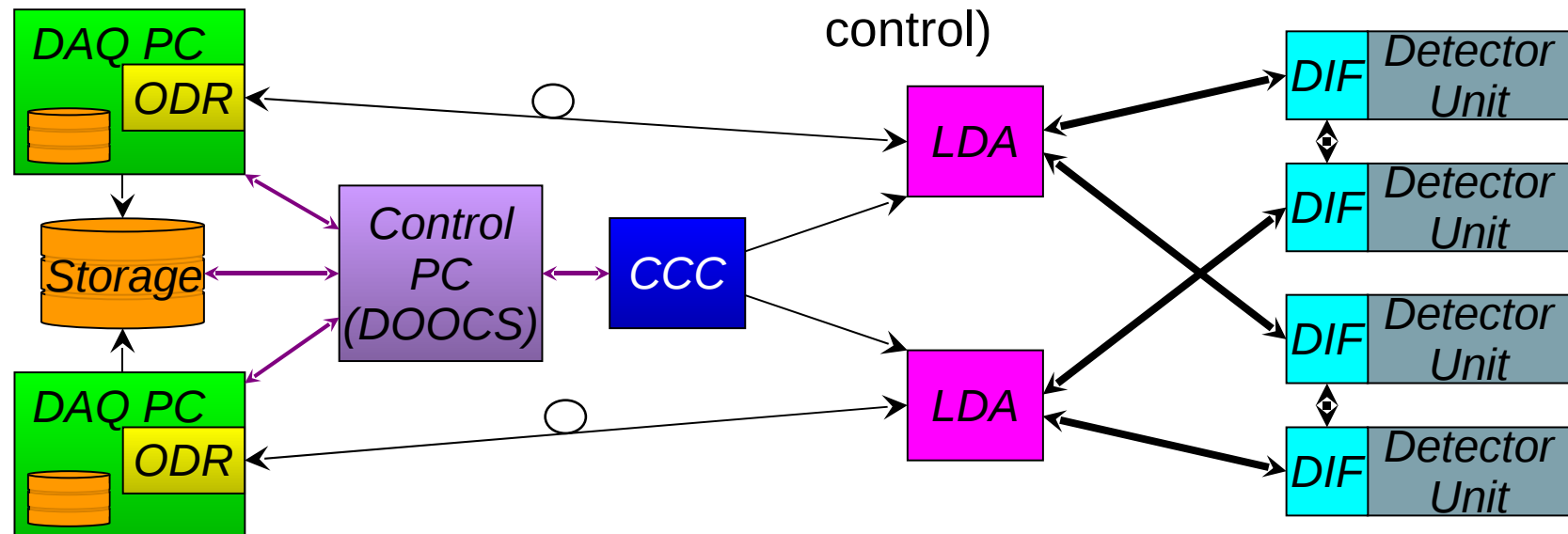
Detector Unit: ASICs

DIF: Detector InterFace connects Generic DAQ and services

LDA: Link/Data Aggregator – fanout/ in DIFs and drives link to ODR

ODR: Off Detector Receiver – PC interface for system.

CCC: Clock & Control Card: Fanout to ODRs (or LDAs)

CONTROL PC: DOOCS GUI (run-control)

Matthew Wing (UCL) will give a talk on DAQ status this afternoon

Hope to have all DAQ hardware components available by ~ April

Need to have working cosmic test-bench system by June for EUDET contract
    This will be done at LLR

ECAL DIF card
prototype ready; EUDET
version to be produced soon...

Other hardware exists
in some form, some still
preliminary

Firmware for various
pieces is under
development

Remi Cornat has developed
simulation of various parts
of DAQ chain: he will present
it this afternoon

To detector slab

To LDA
(HDMI)
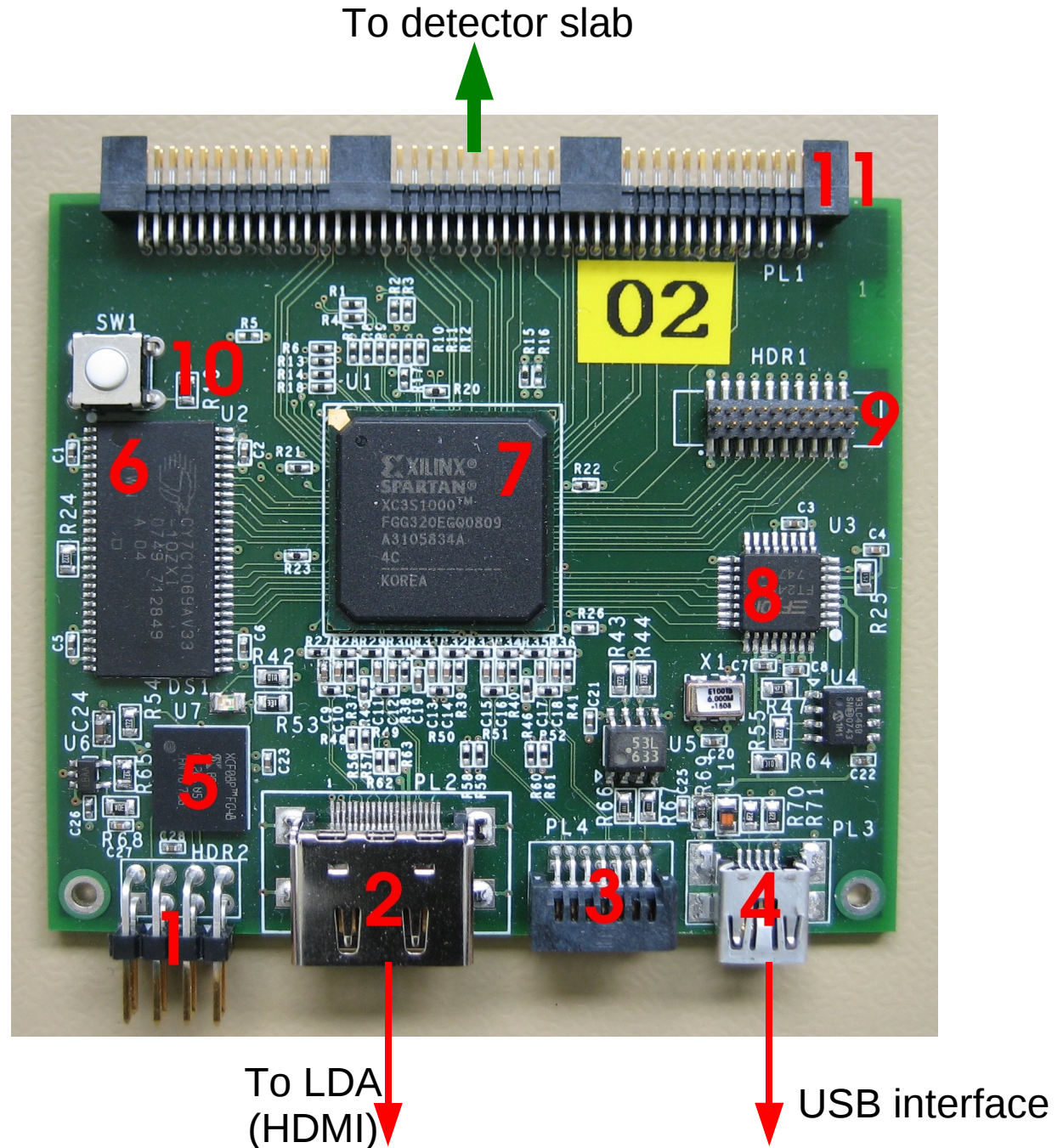
USB interface

For EUDET contract, need to detect cosmics
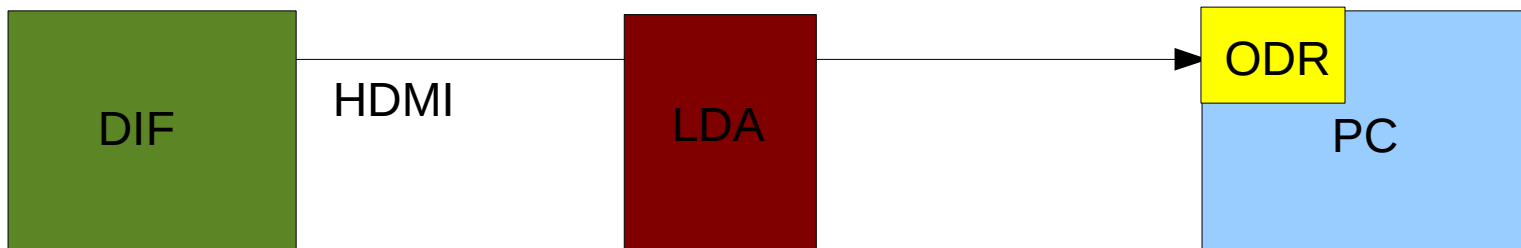   Wafer + SPIROC chip (in SKIROC mode) on ASU + DAQ ....

We plan to setup cosmic test-bench at LLR for this measurement

2 possible options:

- run via the USB interface on the DIF card
    easier (less useful), but "single-use"

- use the whole DIF – LDA – ODR chain
    more work, but much more useful in long-term

Summary

Need to have working cosmic test-bench by June

DAQ hardware required are approaching completion

The firmware for these is being developed in parallel

Time is rather short...

More up-to-date & detailed information in this afternoon's session