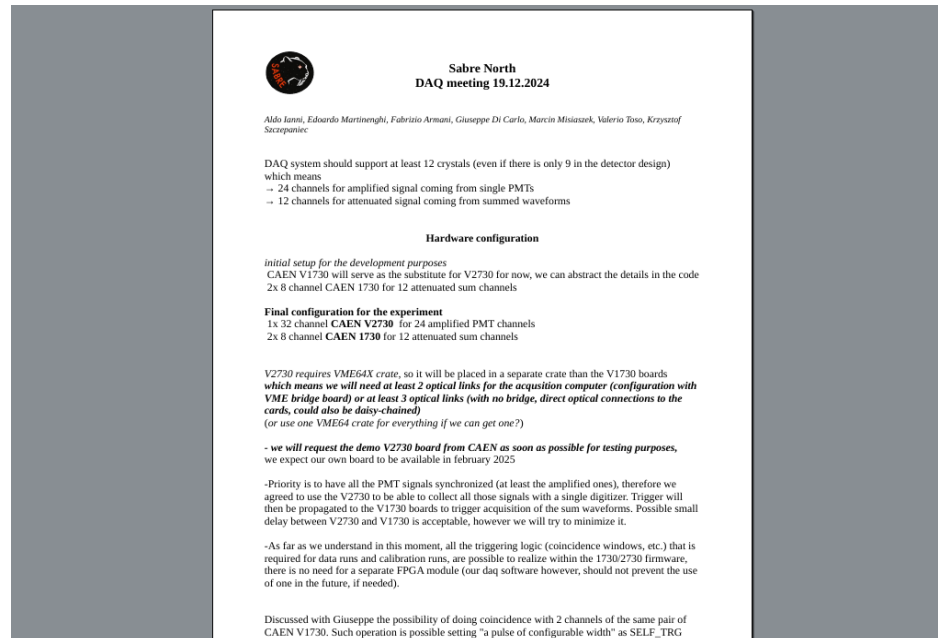




DAQ updates

DAQ team updates

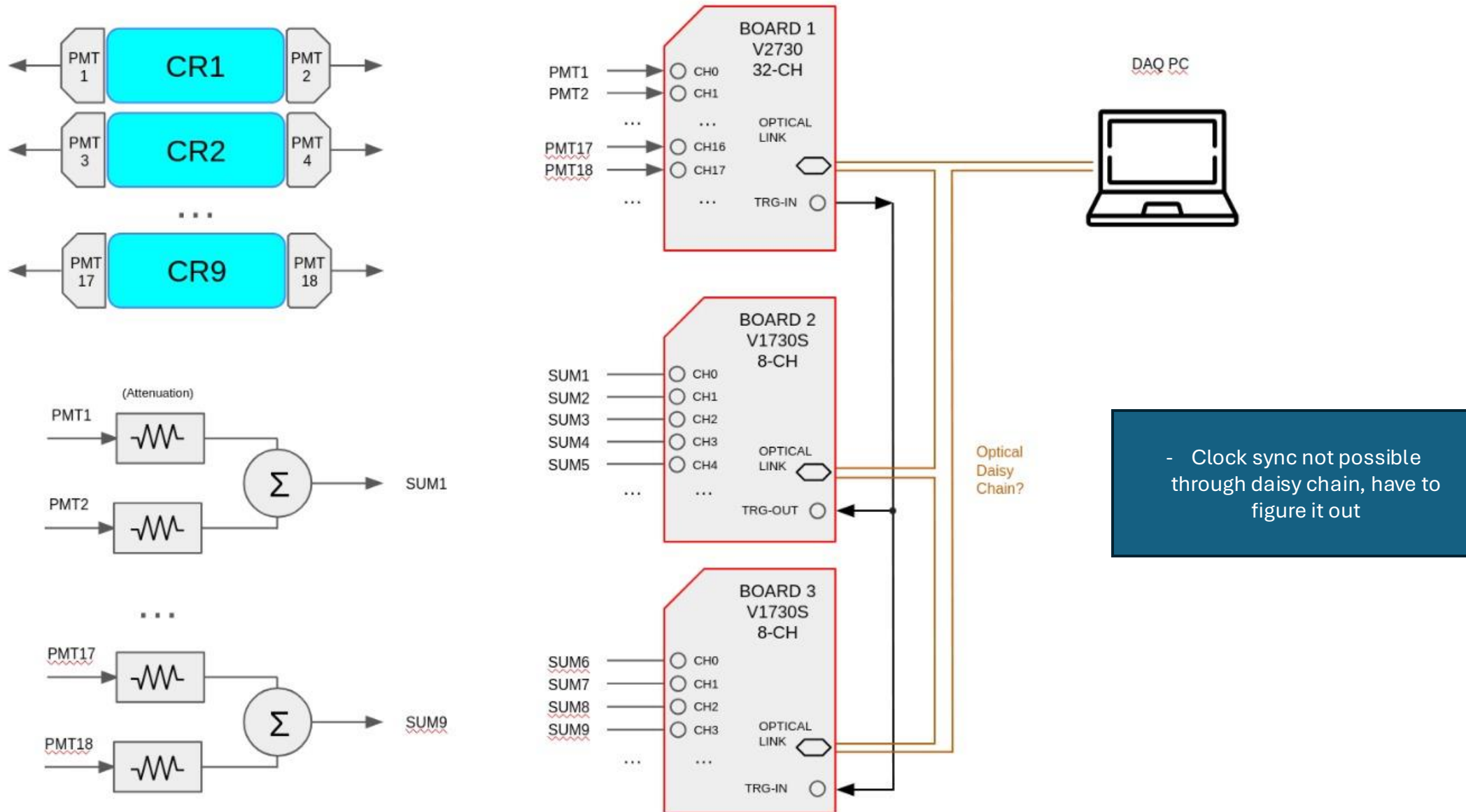
DAQ Team meeting @LNGS on 19th december



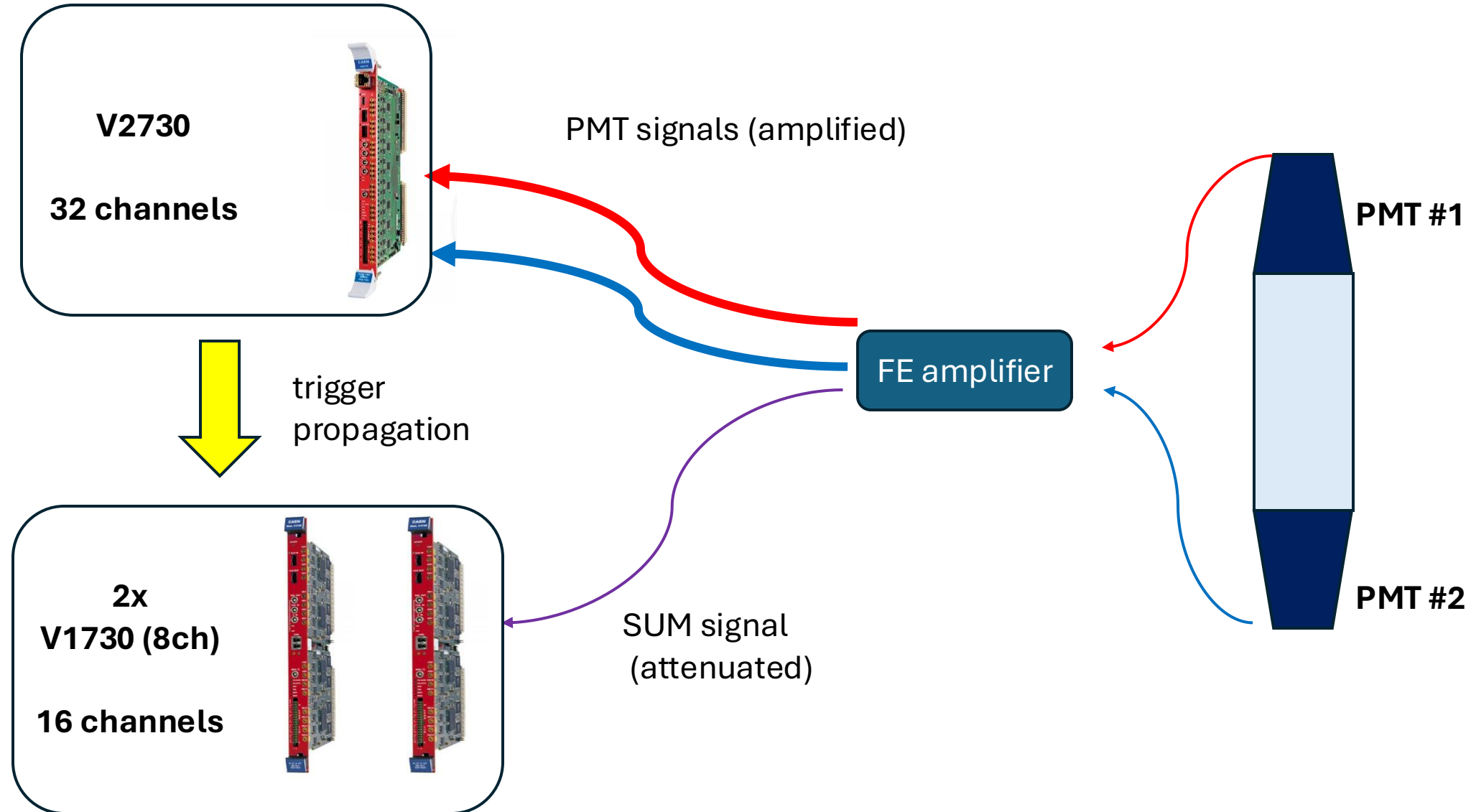
4 pages of meeting notes



SABRE NORTH DAQ - Draft Layout



DAQ team updates



DAQ team updates

V2730

32 channels



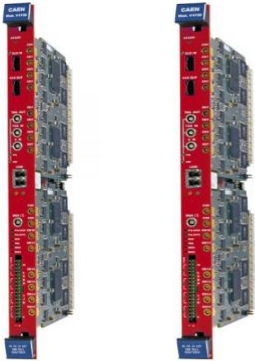
18 used

14 spare

Designed setup: 9 crystals
+ room for (at least) 3 more

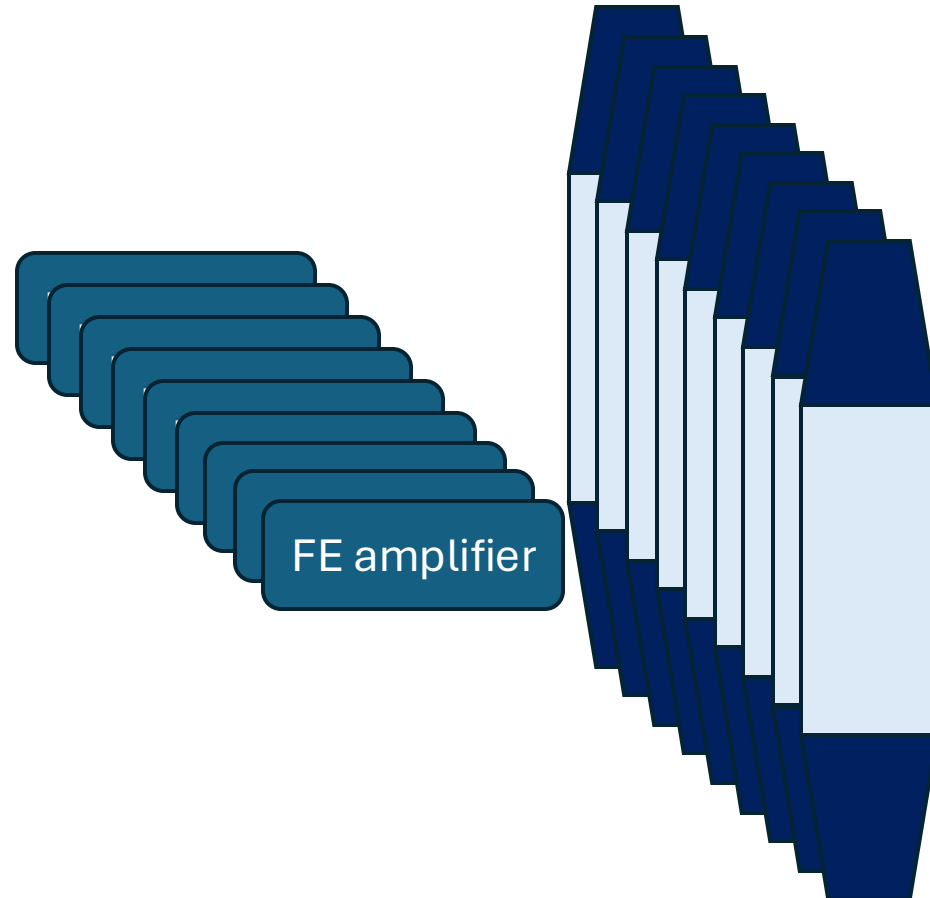
2x
V1730 (8ch)

16 channels



9 used

7 spare



DAQ team updates

Minimalistic setup: 9 crystals, all on 1 card

+room for 1 more

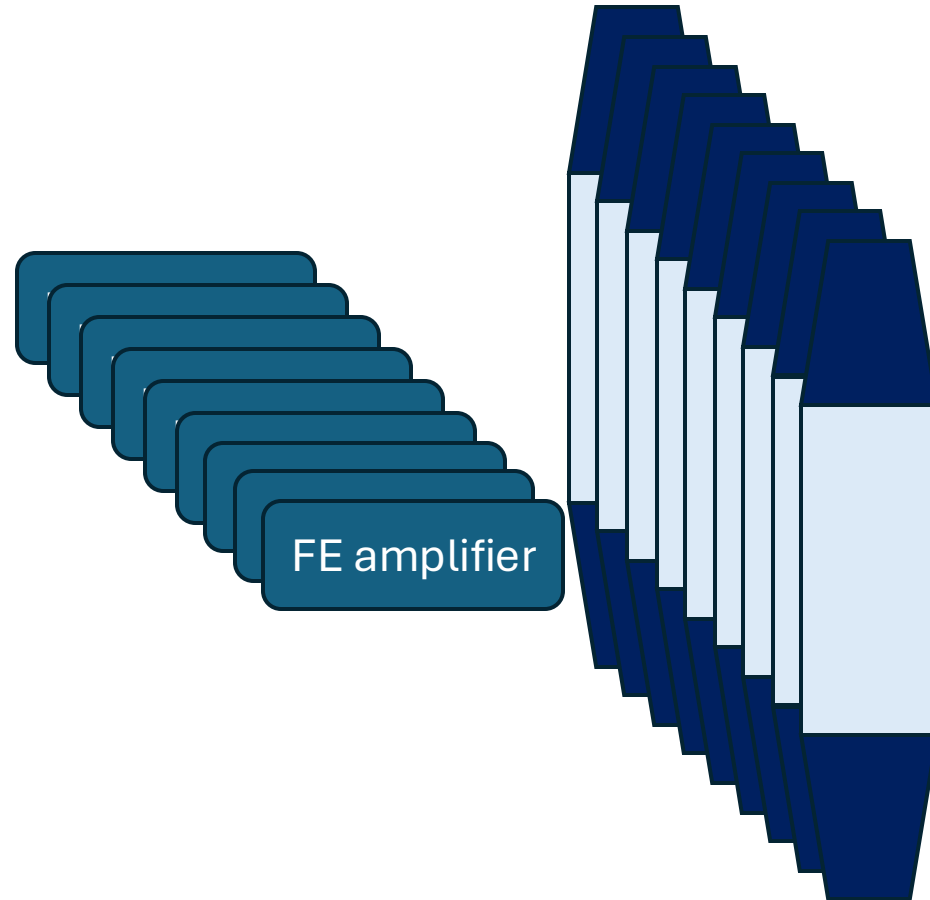
V2730

32 channels



27 used

5 spare



DAQ team updates

Maximum setup: 16 crystals , 3 cards

V2730



32 used

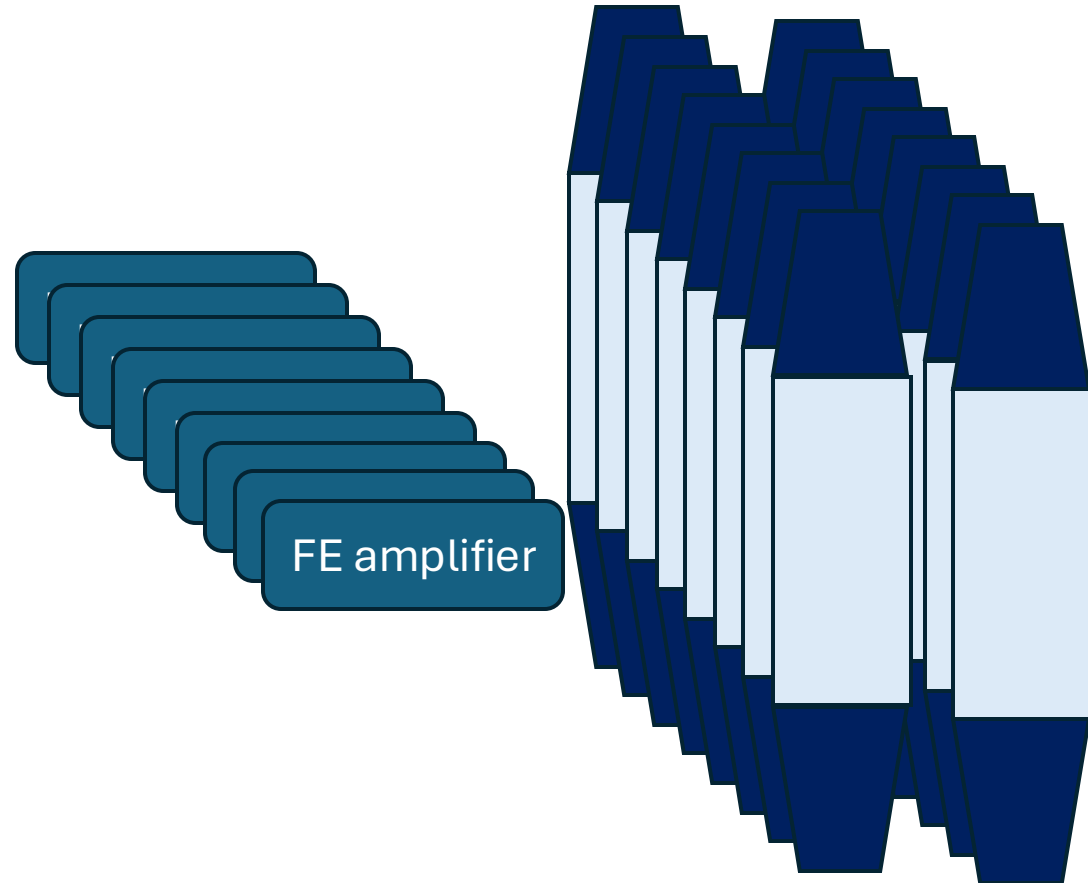
32 channels

2x
V1730 (8ch)



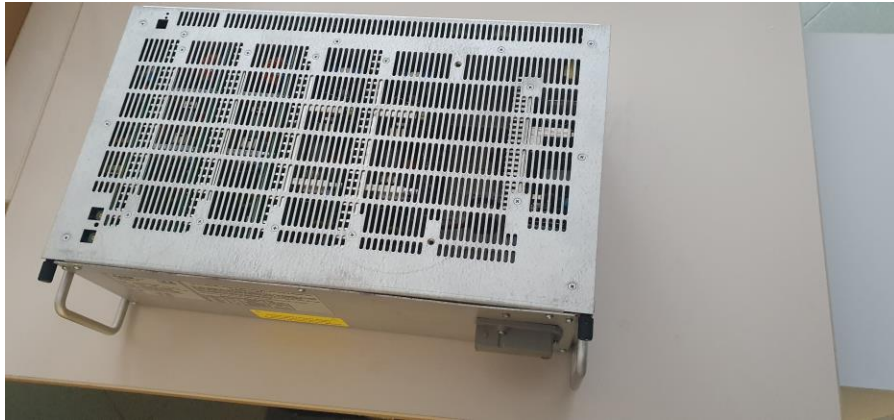
16 channels

16 used



Hardware updates

Hardware updates



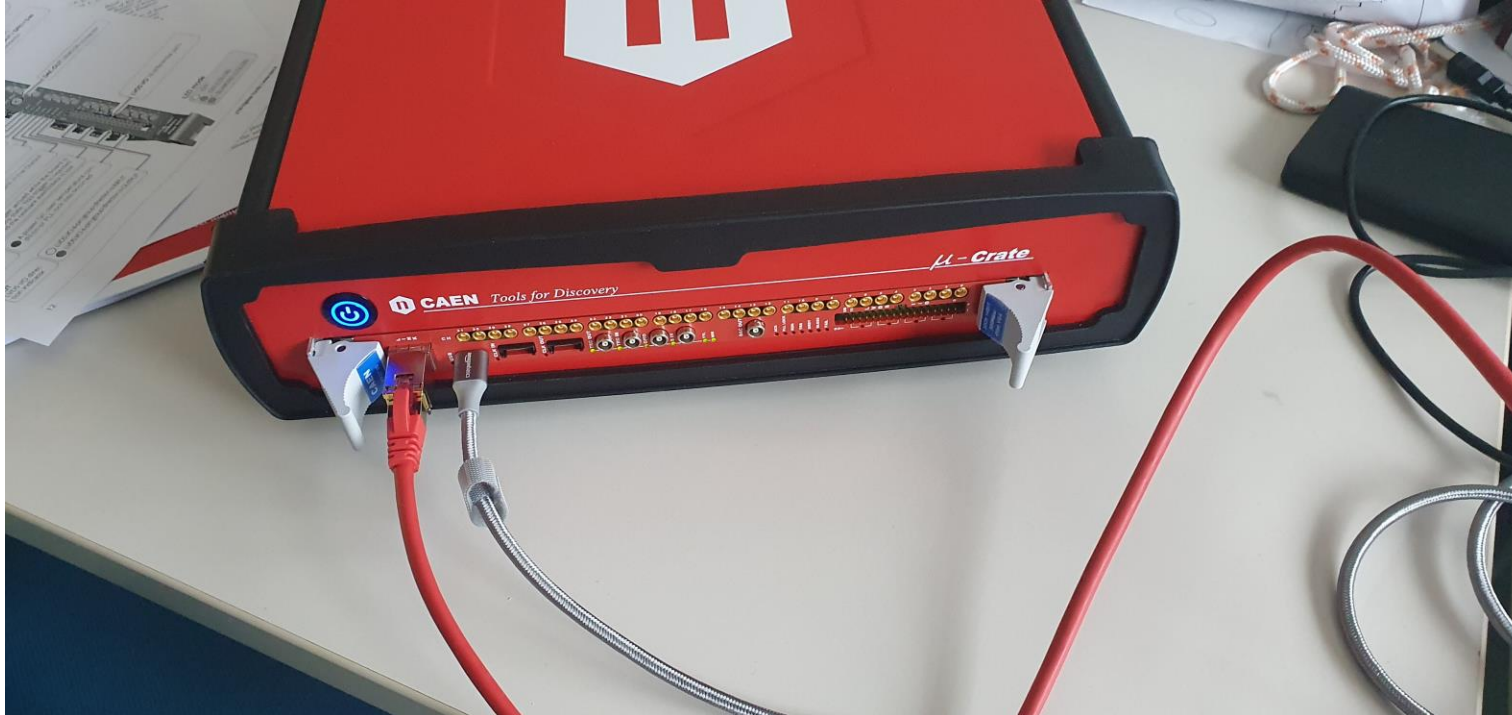
VME crate power supply
failed during christmas break

Now fixed



Modules survived, no problems

Hardware updates

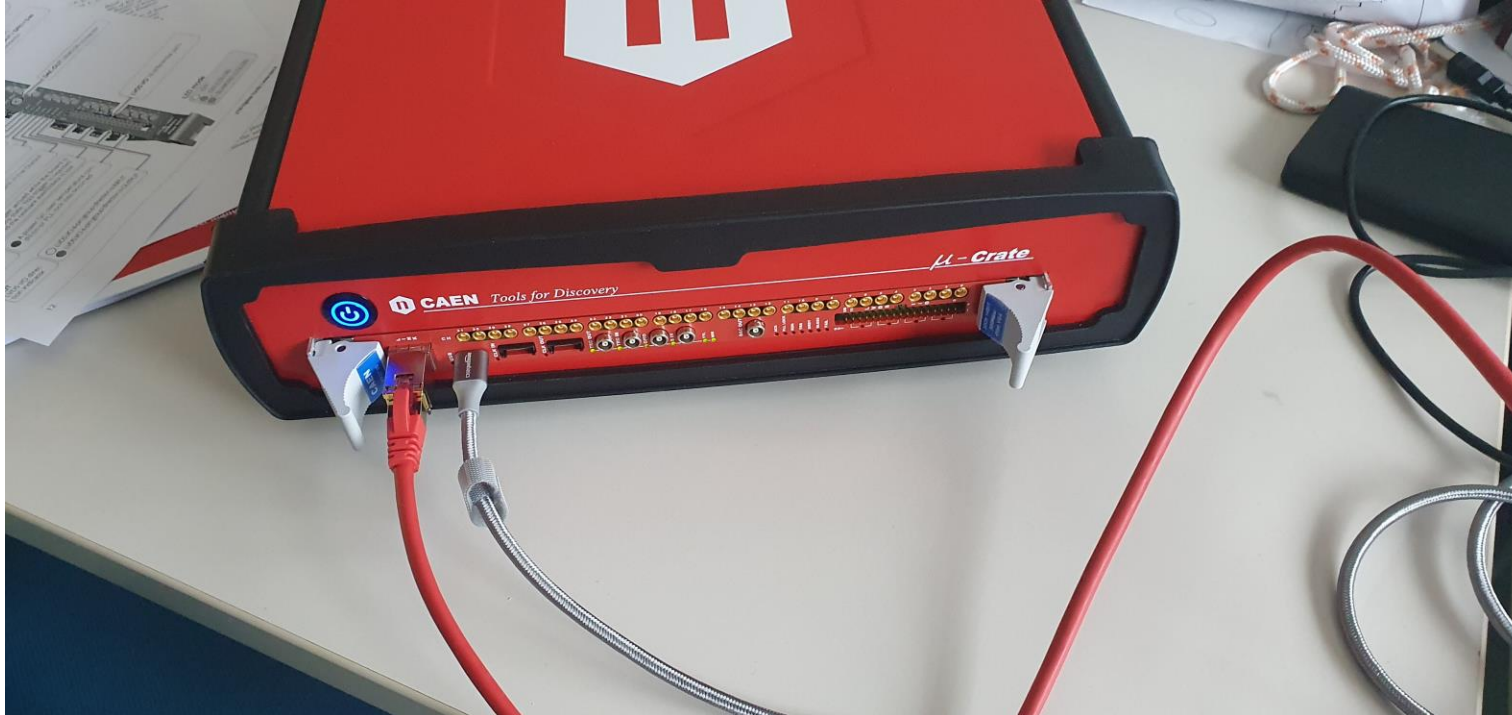


μCrate
and
V2730 digitizer
arrived

Hardware updates



Hardware updates



**μCrate
and
V2730 digitizer**

Now fixed

Hardware updates

V2730 possible data connections

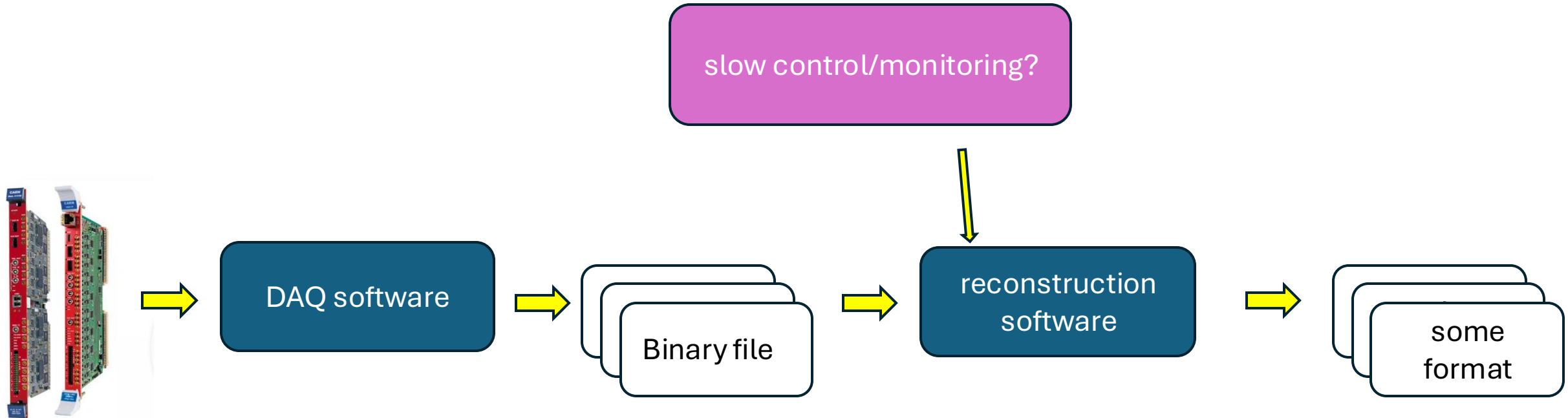
type	Data speed	notes
OPTICAL	80 MB/S	galvanic isolation
USB 3.0	280MB/S	short cable (~3m)
ETHERNET 1Gb	110 MB/S	
ETHERNET 10Gb	280 MB/S	not available yet

Hardware updates

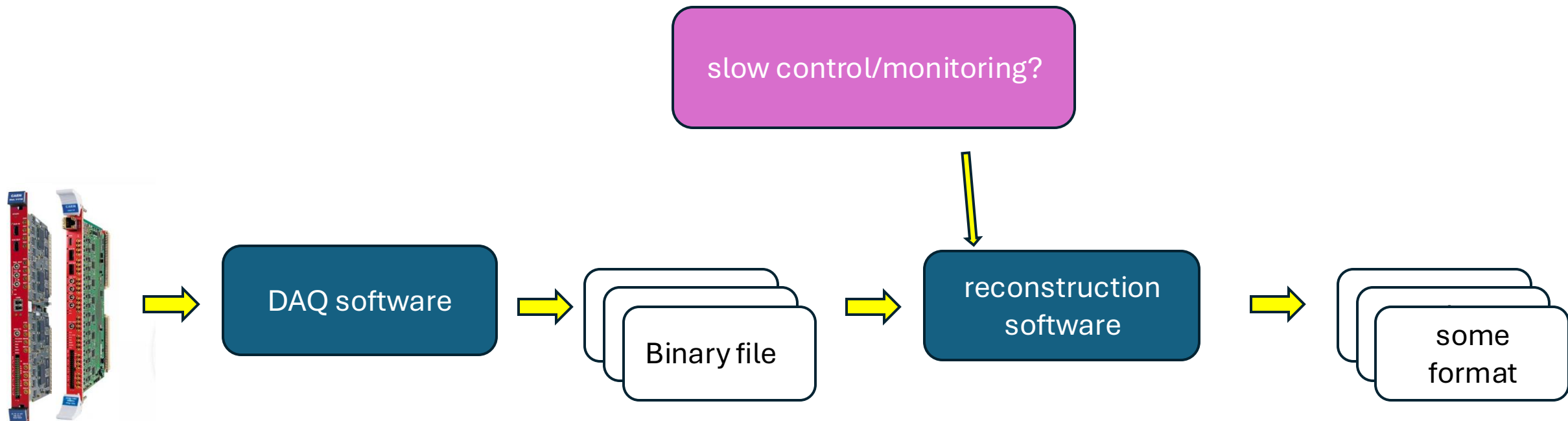
- VME crate power supply **fixed**
- V2730 digitizer **fixed**
- μ Crate create (VME64X) **ready**
- Acquisition PC **need to be done**
- FE Amplifiers **need to be done**

Software updates

Software updates



Software updates



sabredaq ("old daq")

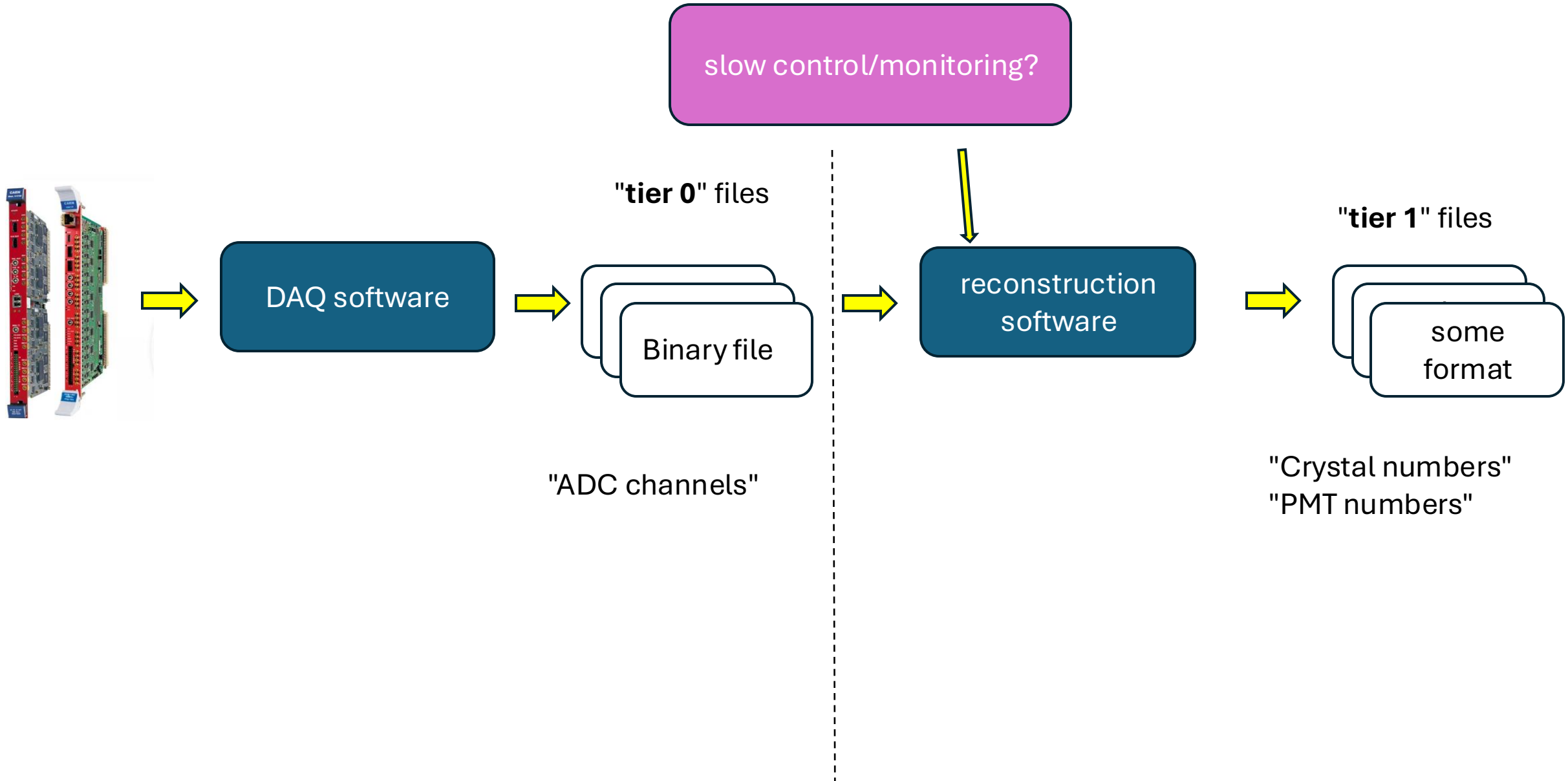
EPICS DAQ ("sabre south daq")

"new daq"

Chimera

pyrate

Software updates



Software updates

Code repository for "new daq" <https://gitlab.com/SABRE-EXPERIMENT/sabre-acquisition>



using new CAEN library for *Digitizers 2.0*

- **VX2730** **working**
- **V1730** **working**
- **V1720** **not working** (I can implement with old libraries if ever needed)

DAQ summary

- Digitizers are ready
- Amplifiers? **to be done**
- Acquisition PC needs to be prepared (maybe buy some HDD?)
- Databases, backups, monitoring **to be done**
- Software is growing steadily