

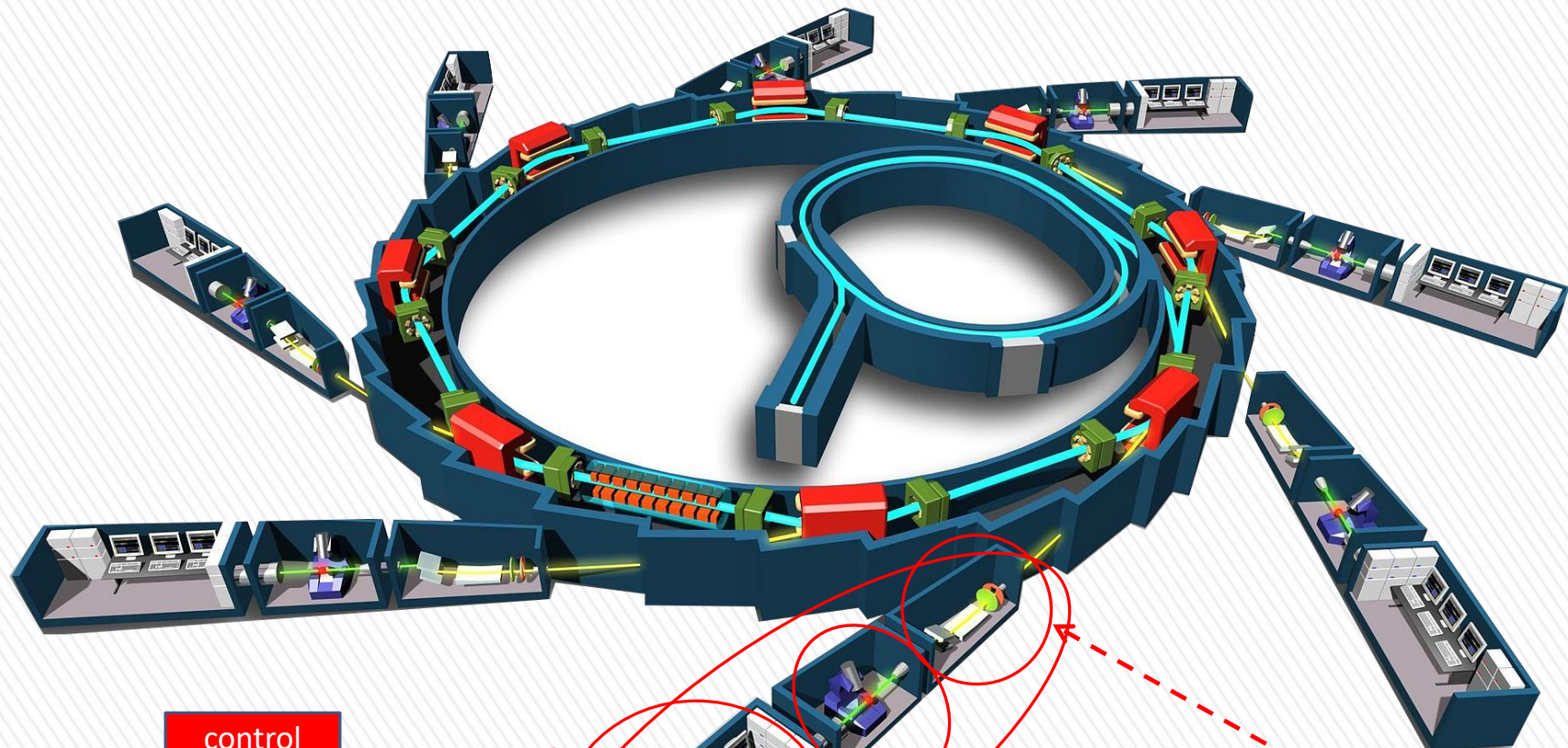


MicroTCA motion card



Nikola Radakovic

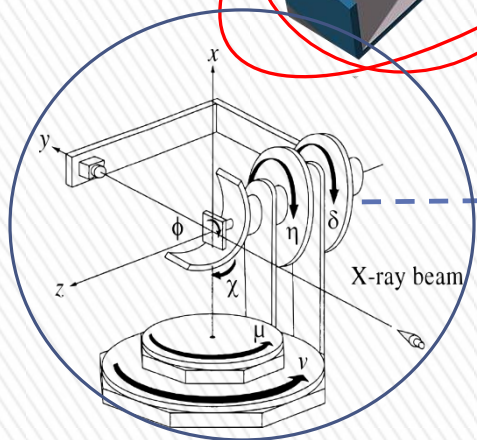




control
cabin

beamline

robot

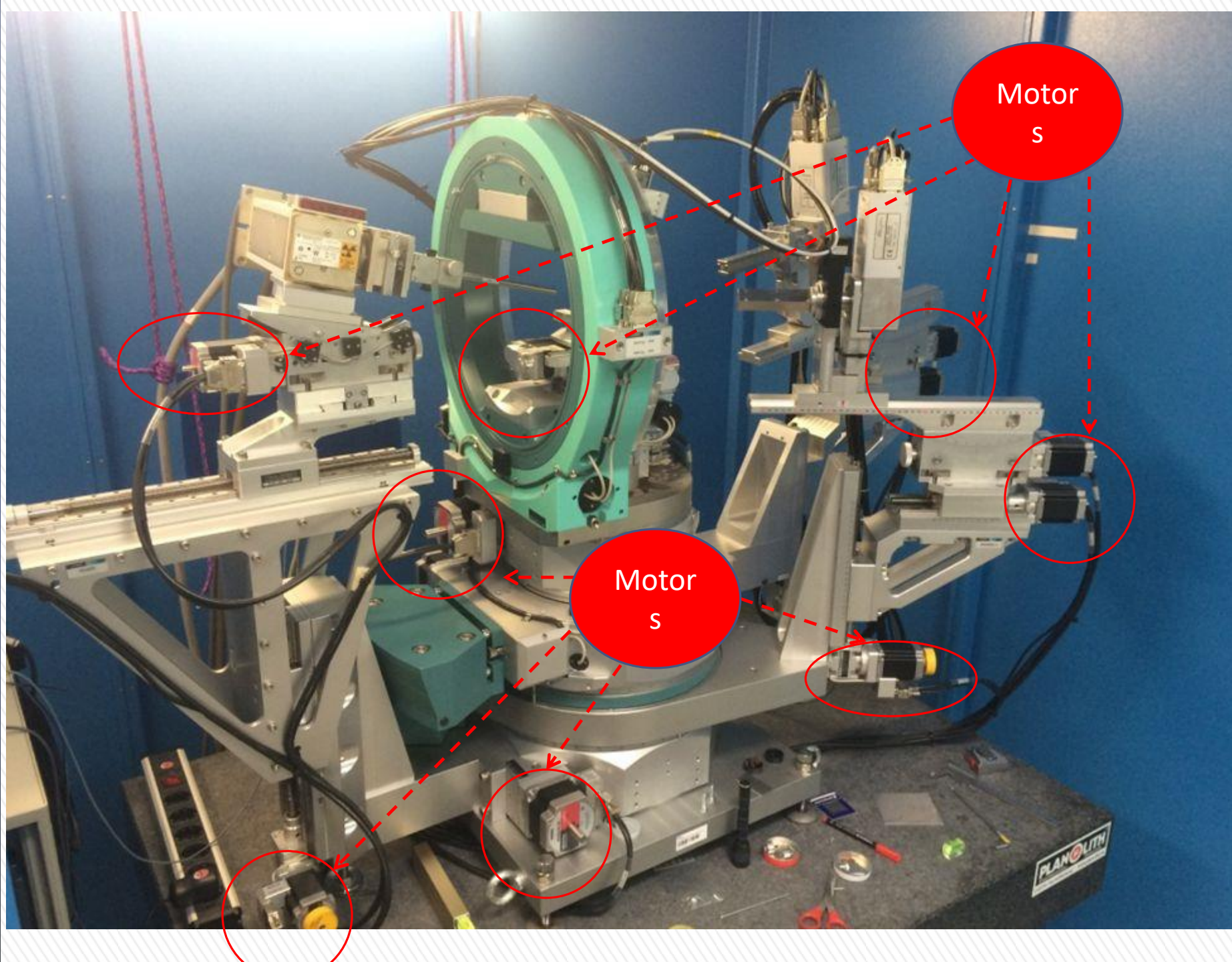


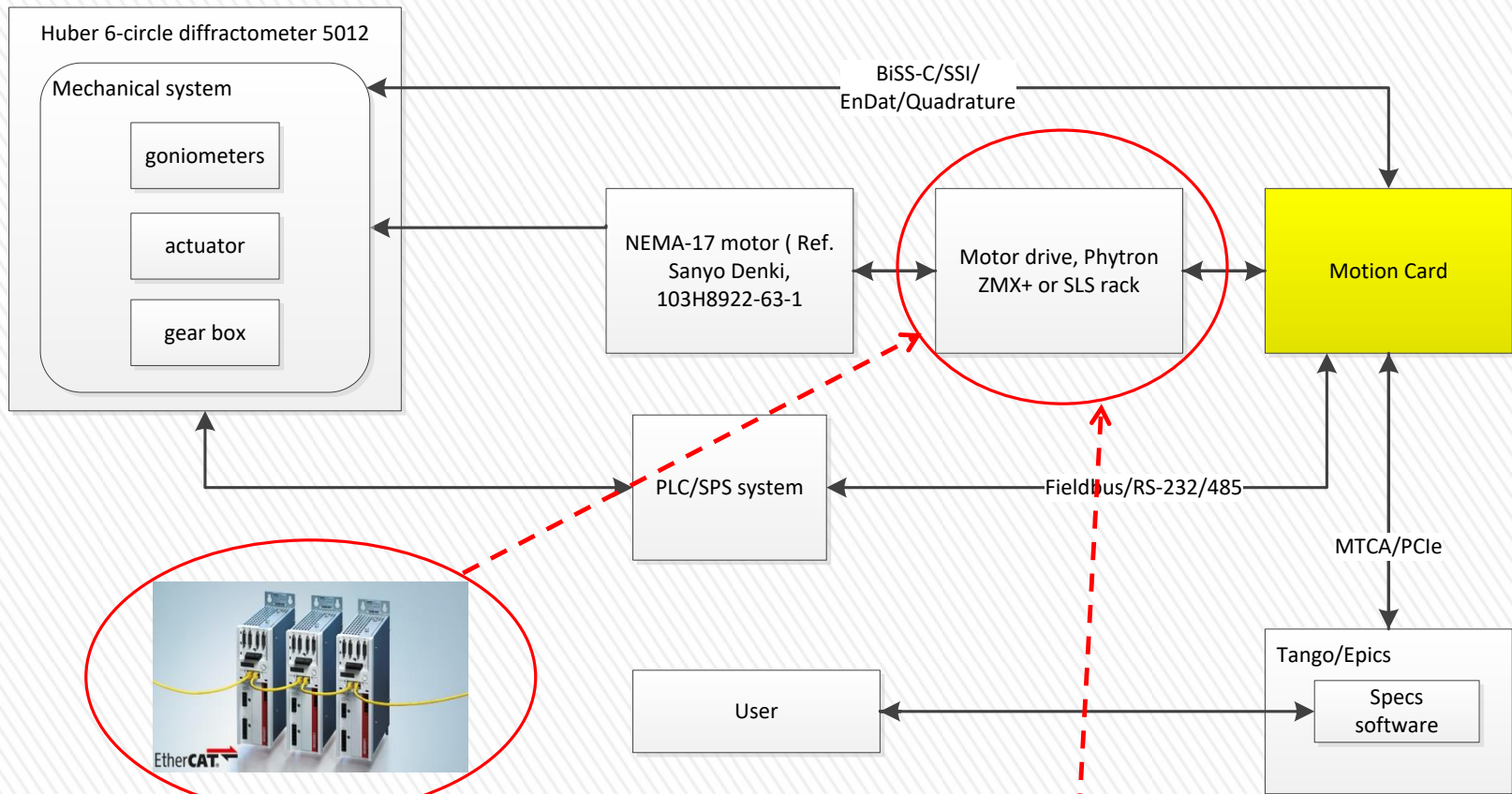
diffractometer

optics cabin

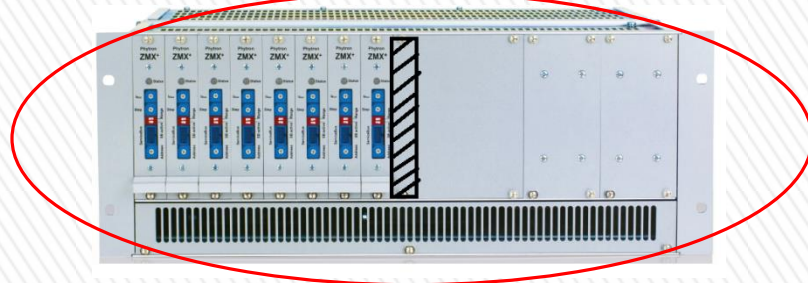
experimental cabin







fieldbus



parallel interface



OBJECTIVES

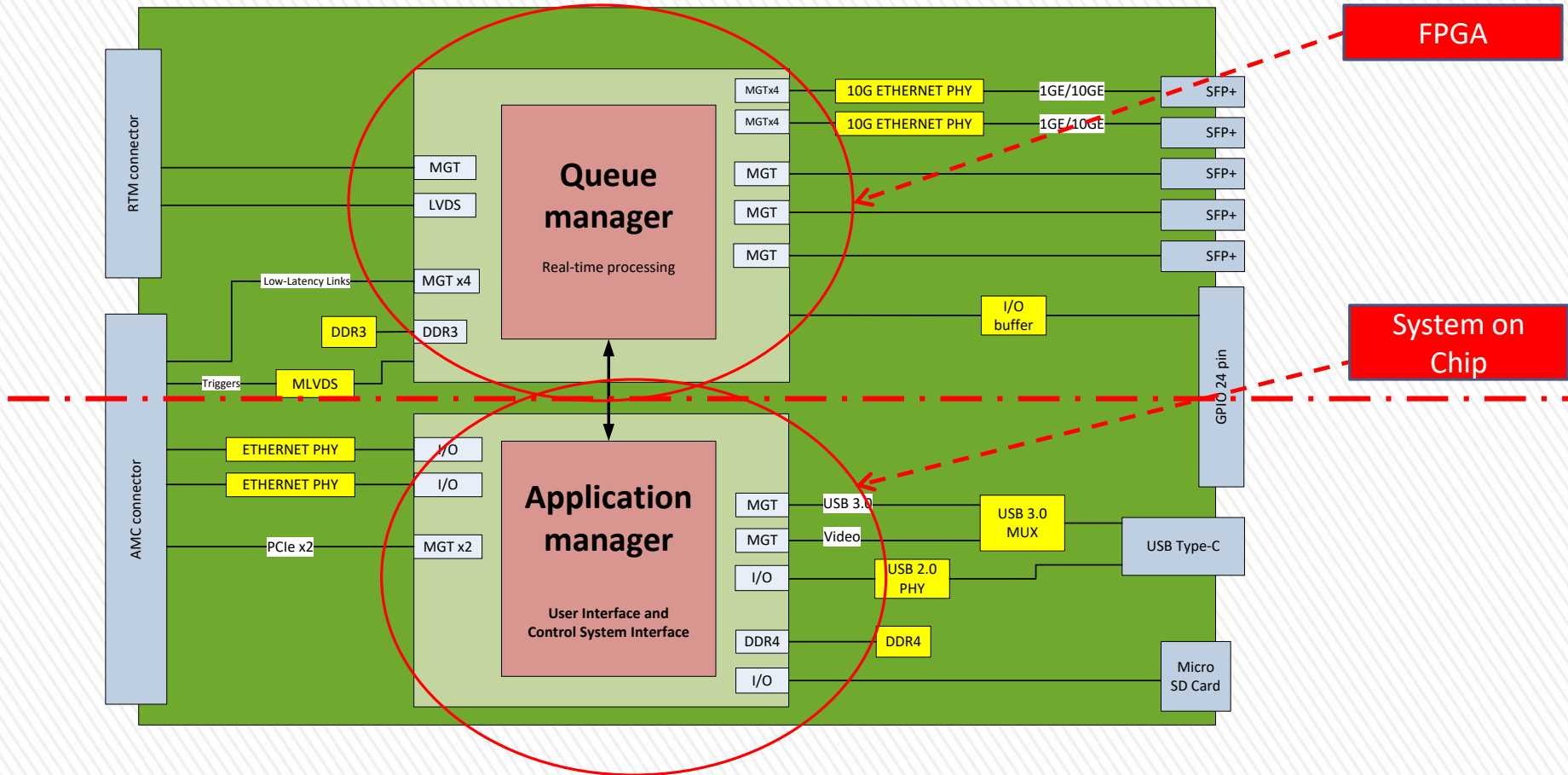
Not provided by the cards
that we presently use

» Build a card that:

1. is future proof
2. provides high I/O count
3. is scalable
4. is distributed
5. supports existing DESY beamlines

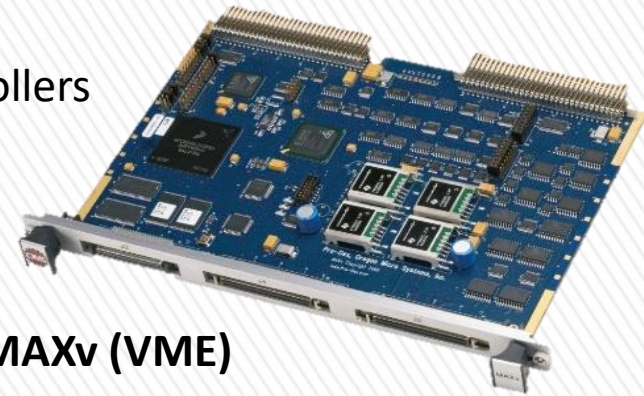


Motion Controller Card Overview

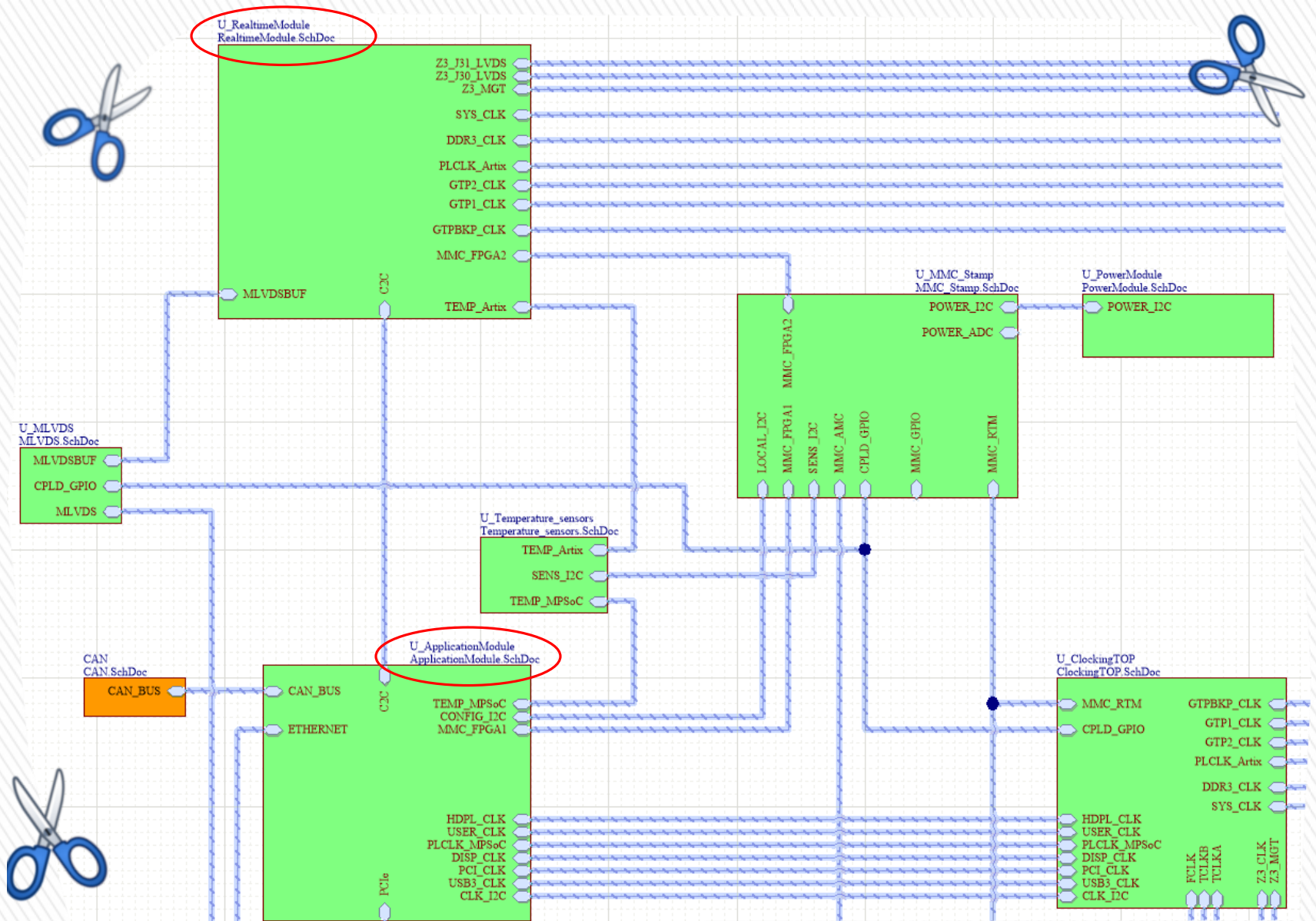


In development: DAMC-MOTCTRL

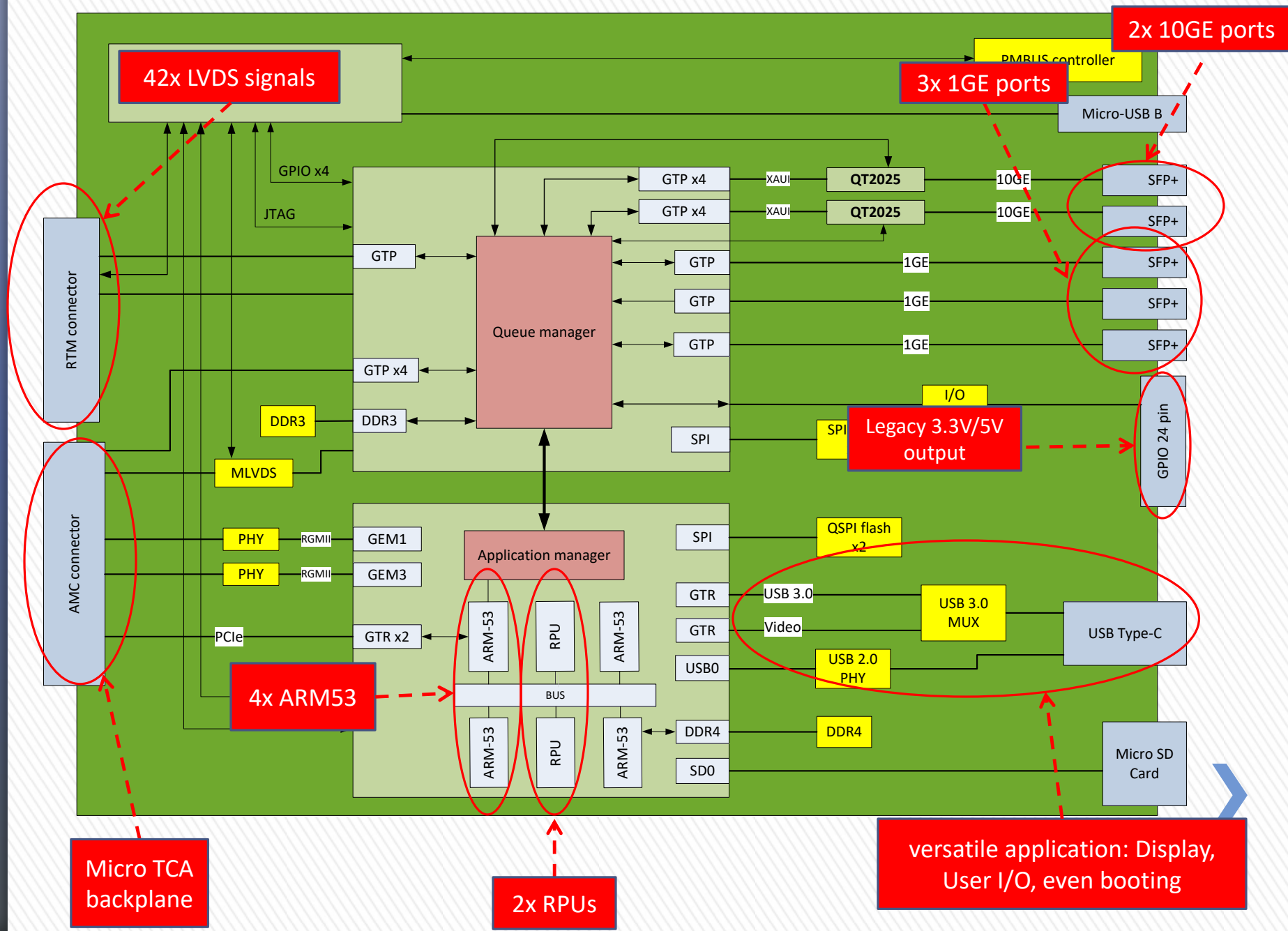
- MicroTCA.4 based; compatible to existing motion controllers
- Stand-alone/ local/ distributed installation scheme
- 16 axis per card
- Modern serial interfaces and legacy parallel interfaces



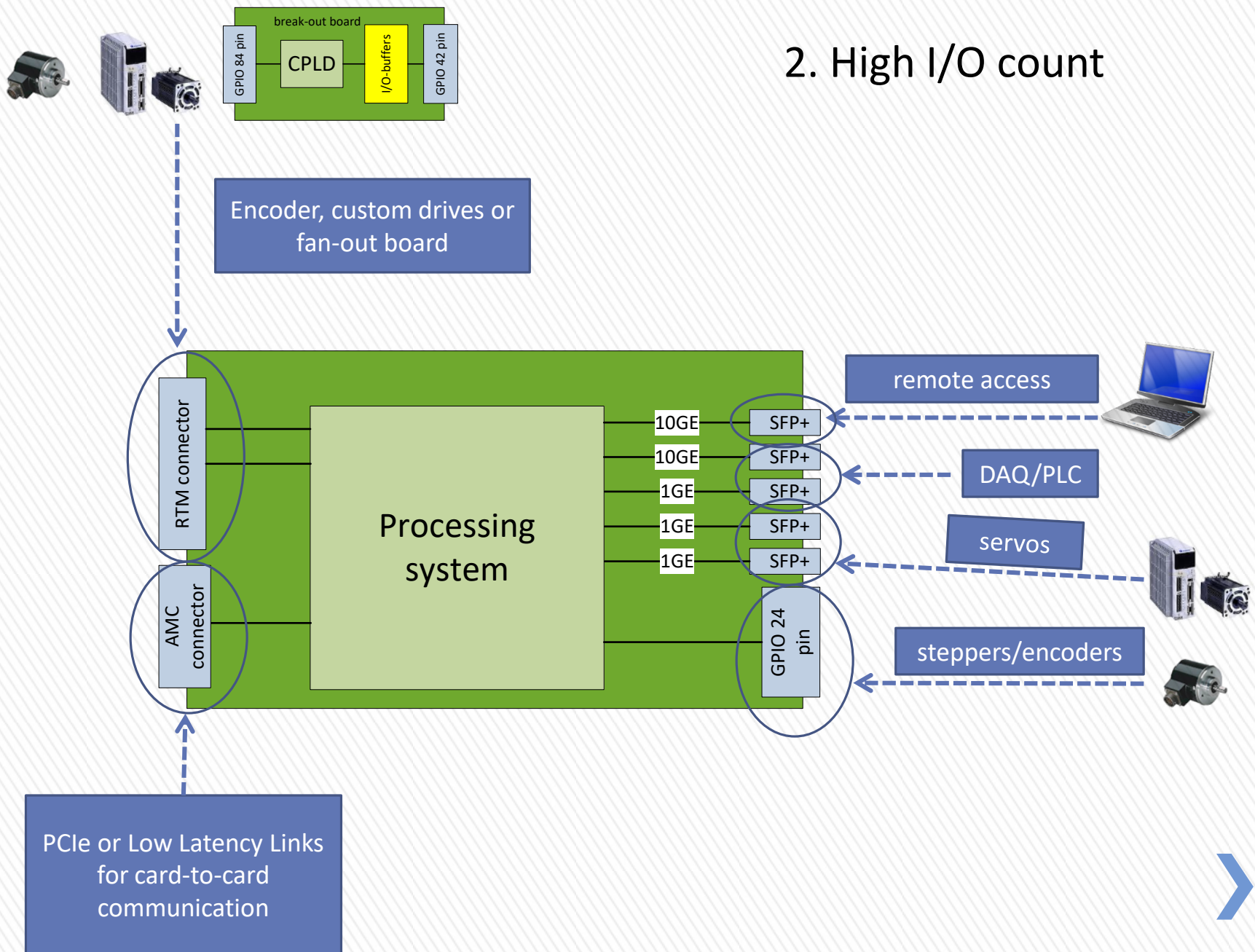
Reference: OMS MAXv (VME)



1. Future proof



2. High I/O count

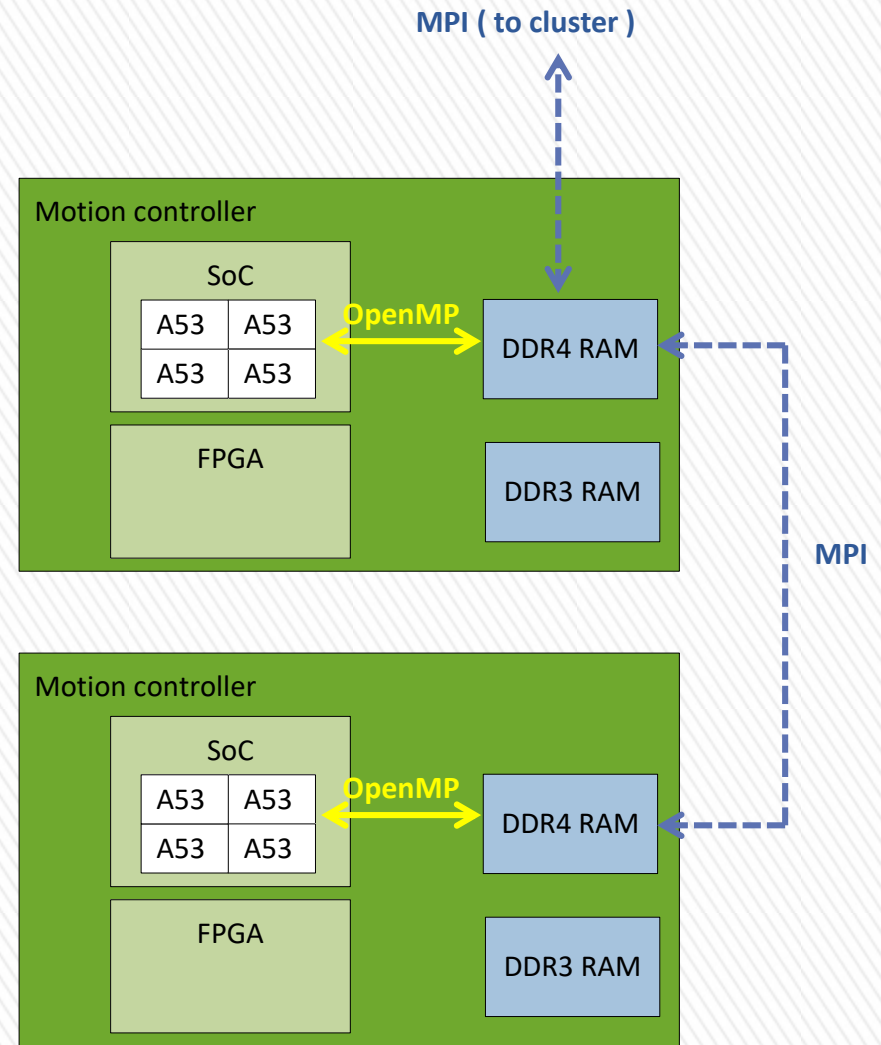
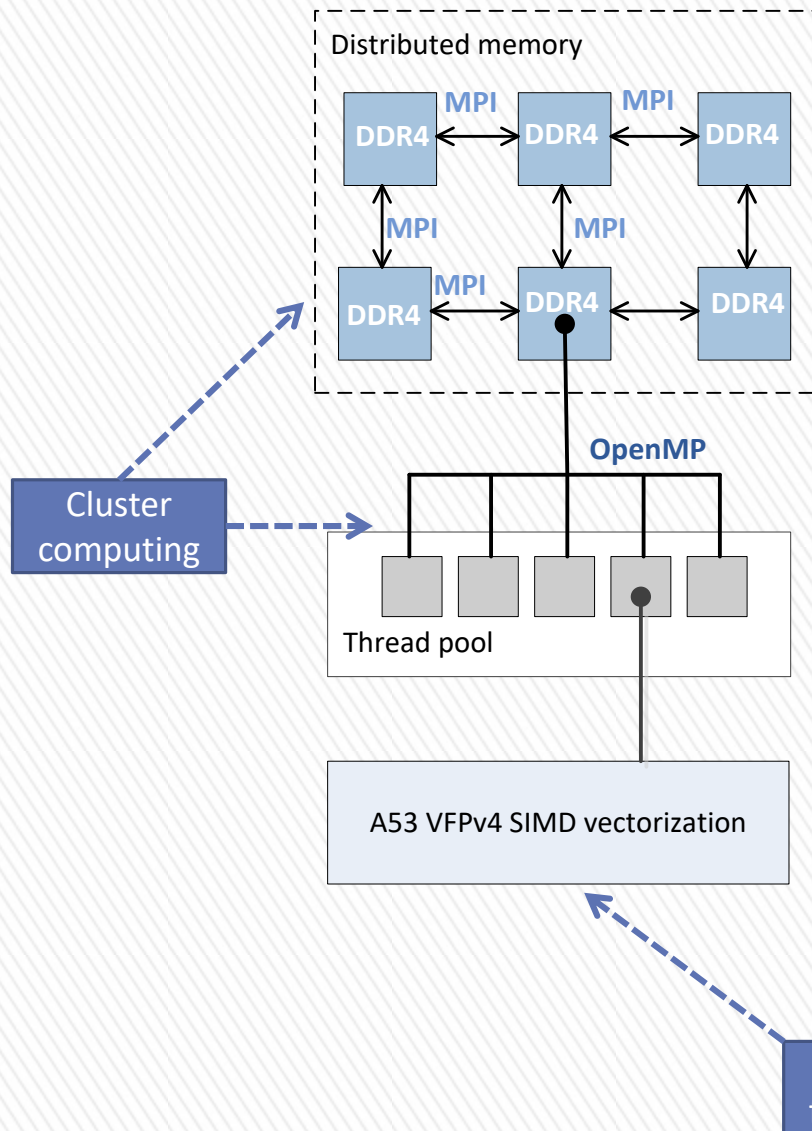


02.11.2020

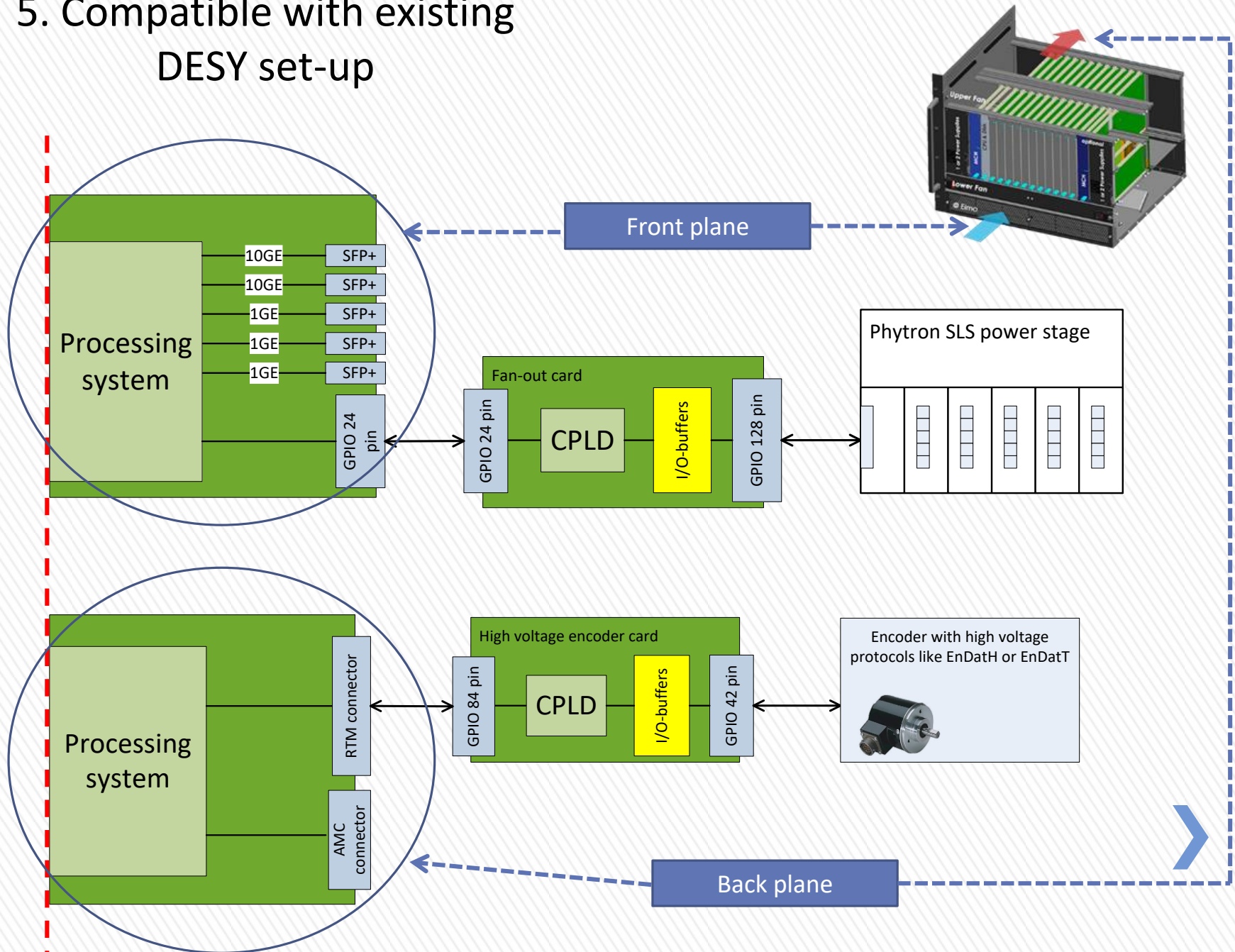


4. Distributed architecture

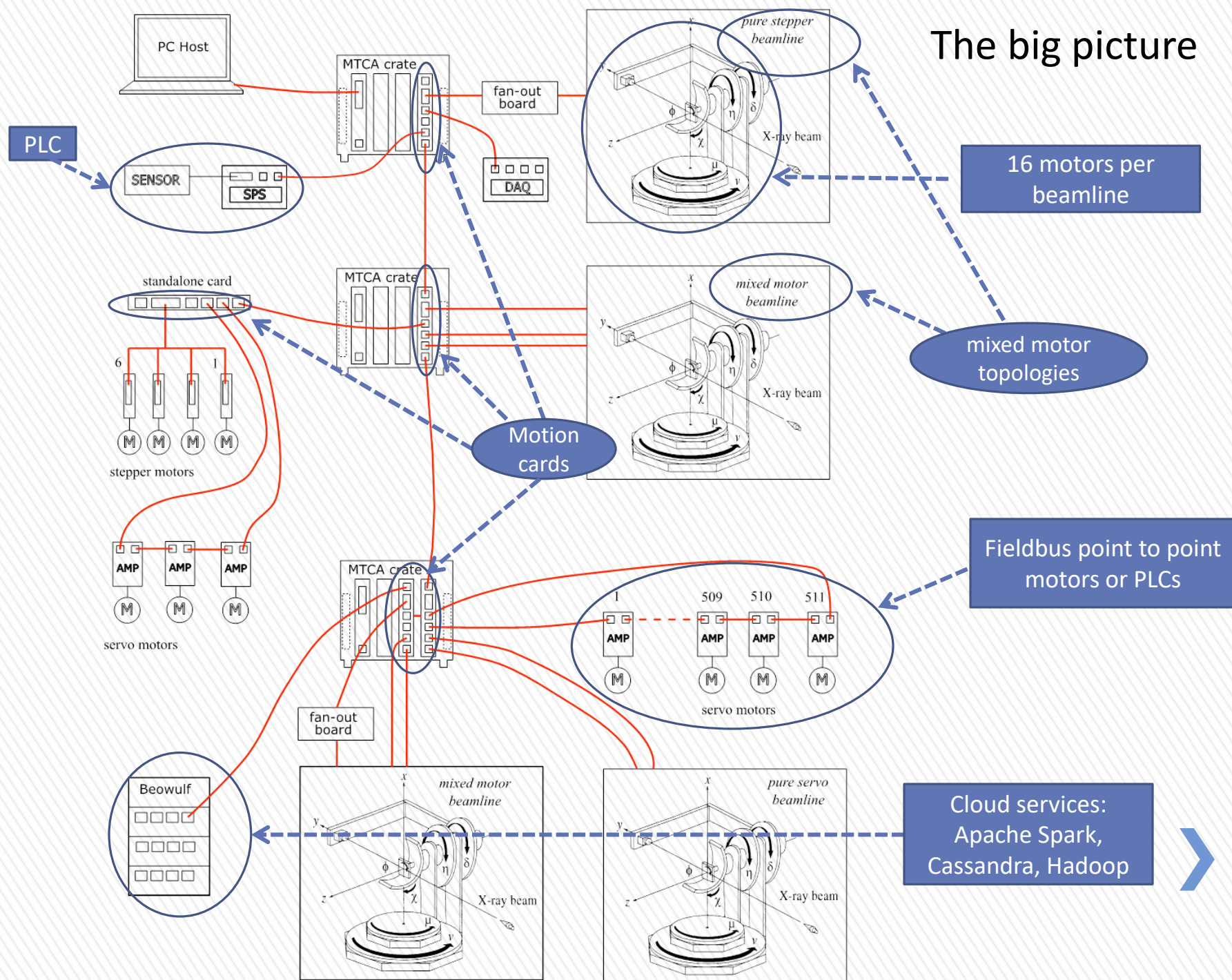
Parallel computing stack



5. Compatible with existing DESY set-up



The big picture



» Thank you

