

# We need to agree on consistent names for components!

626

## 11.10. READOUT ELECTRONICS AND DATA ACQUISITION

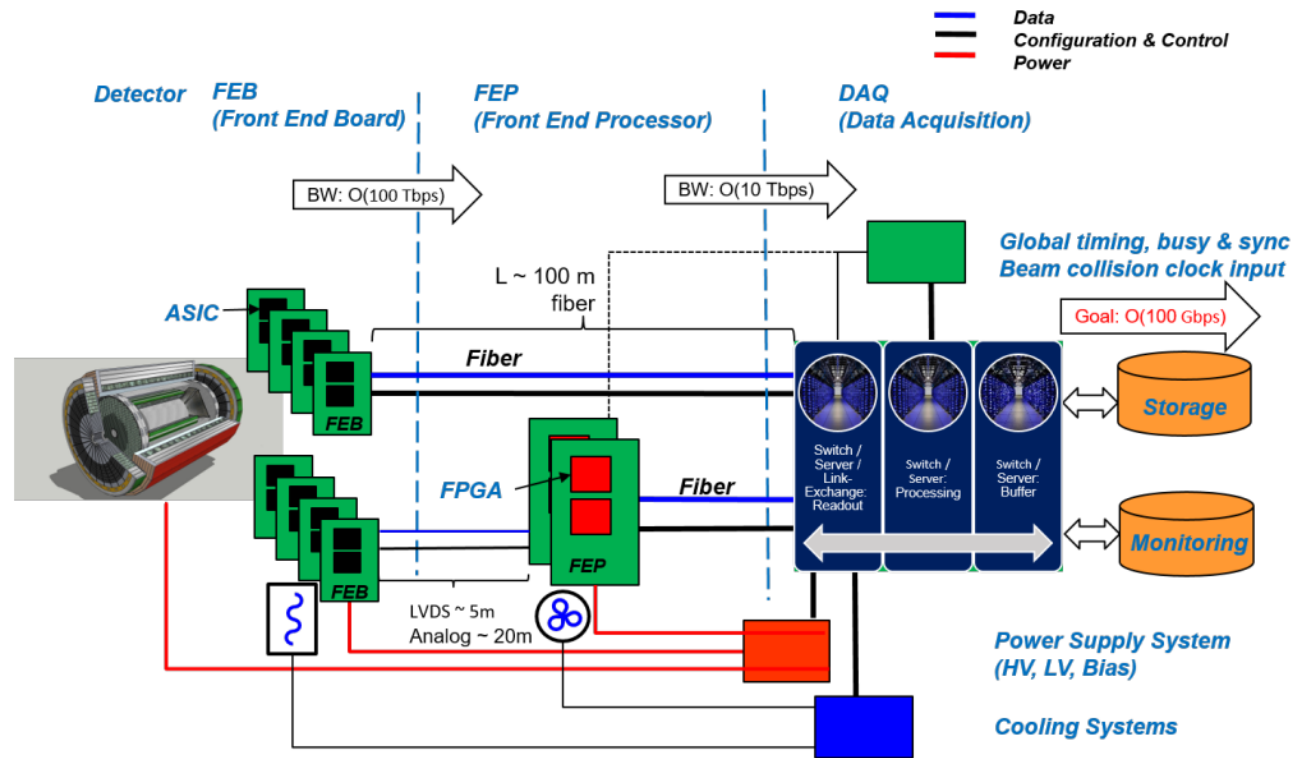
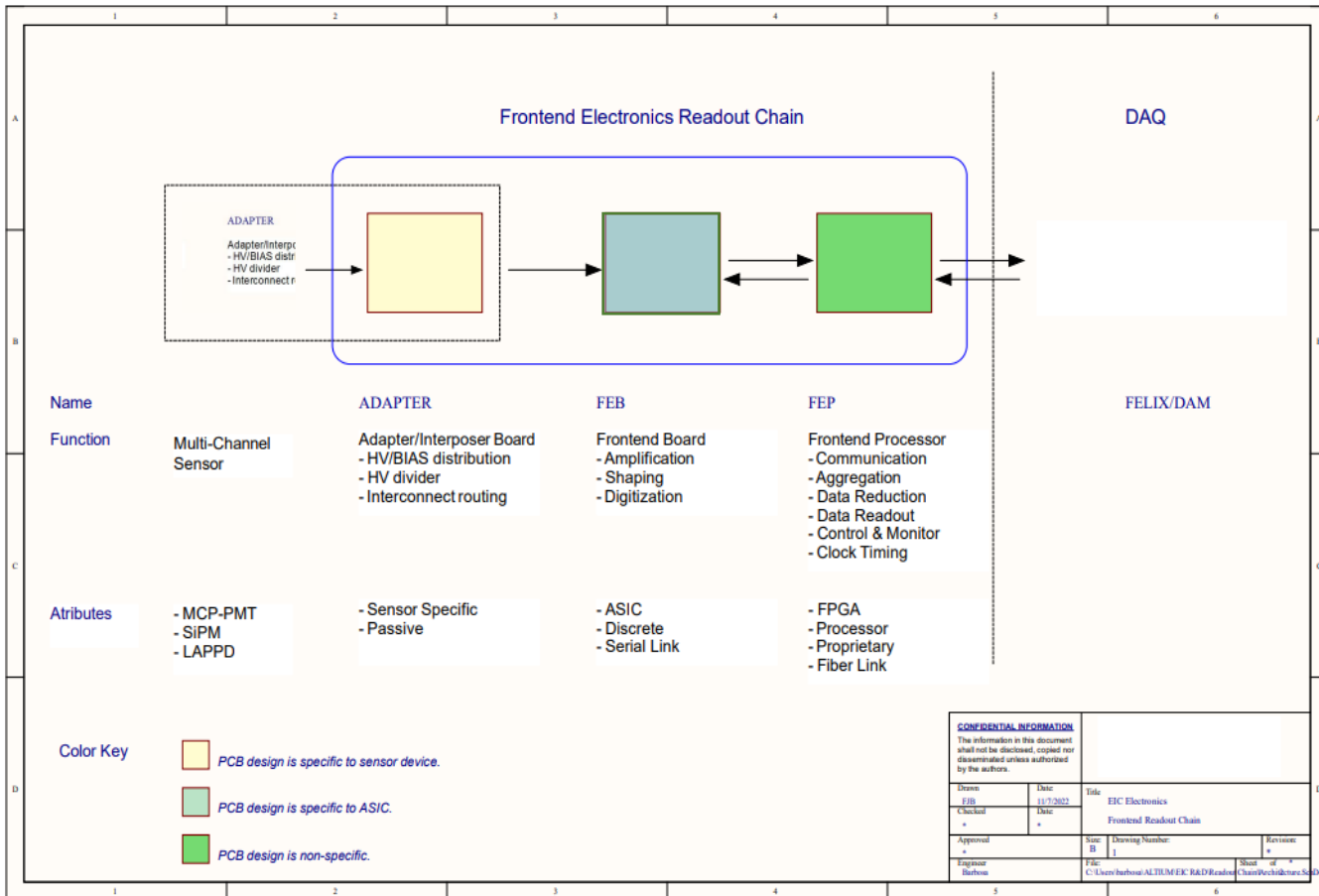


Figure 11.134: Possible scheme for the EIC Readout Architecture

Athena interpretation was that the detector side of the fiber must be a common interface existing for each detector... so FEB is that interface with potential additional boards with large FPGA dedicated to AI/ML called the FEP.

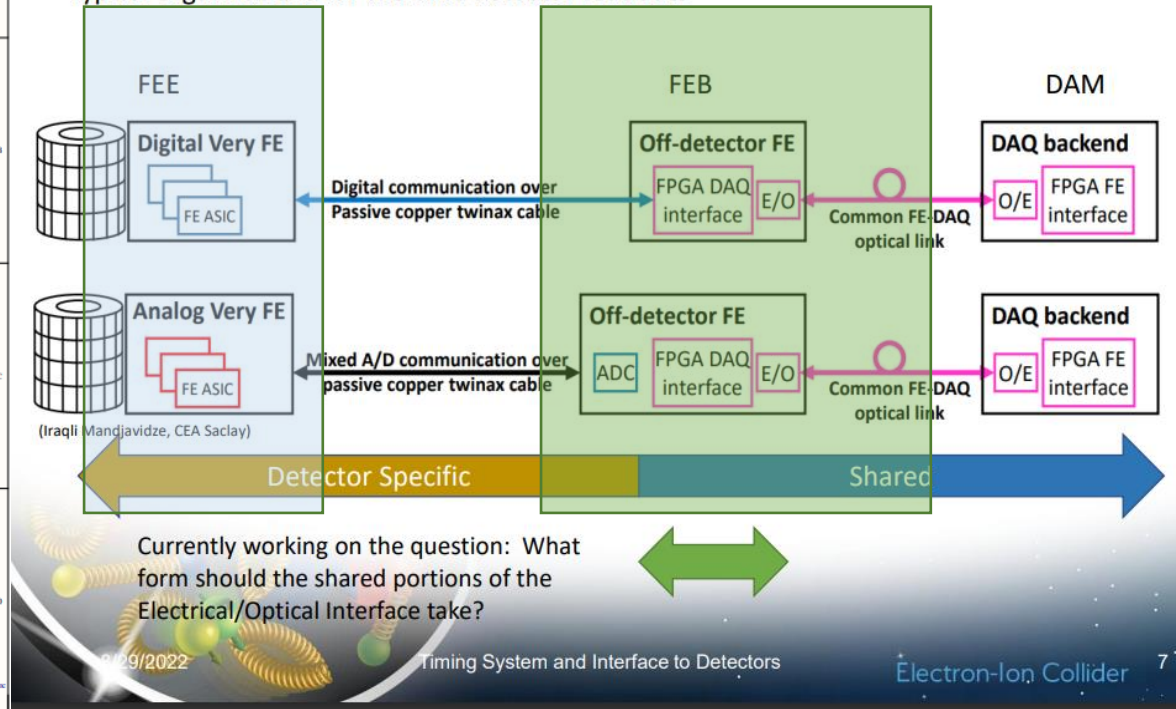
Another interpretation is that some detectors would house the common interface on the digitizing PCBs and others would need another aggregation step. Here the FEP is “just” the aggregator and fiber interface though might have more capability.

We are all trying to make this more specific which led to:



# Detector Interface Organization

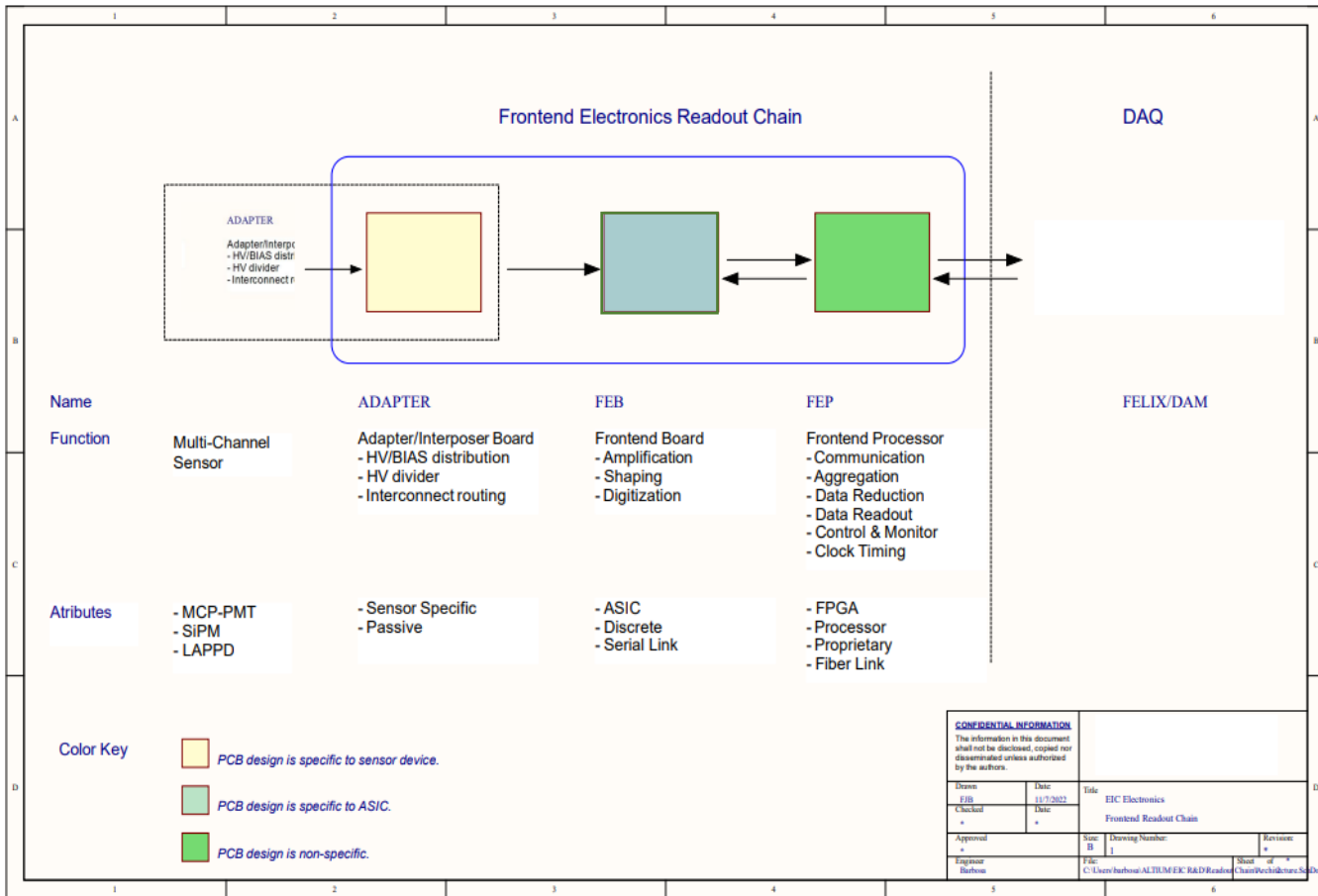
Typical organizations for the ePIC detector readouts



## My Proposal:

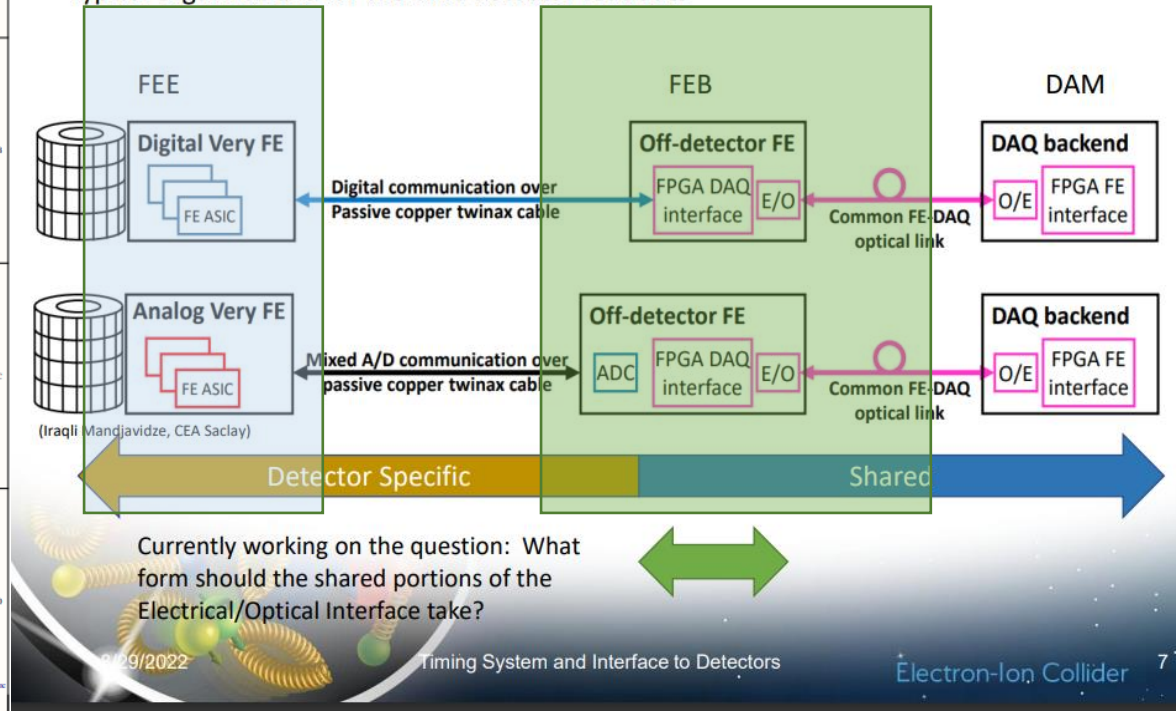
1. Leave Adapter as Adapter
2. Leave Blue box as FEB as defined by Fernando. The name is general and logical, and in addition these components are detector specific, may have multiple components, and will likely have detector specific names when fully defined in any case.

We are all trying to make this more specific which led to:



# Detector Interface Organization

Typical organizations for the ePIC detector readouts



- Vote on the green component's name. I had originally envisioned an online poll for this, however Elke and Rolf intend to push a project of compilation of the specific readout chains for each detector at the EPIC meeting tonight, so it would be helpful to decide now if we can.

4. There is no confusion regarding the DAM or the Timing system but I also propose setting canonical, general names for these boards as well
5. Here is a palletete of names to consider:

“Green” Board	“DAM Board”	“Timing System”
Electrical Optical Interface Board (EOB)	FELIX	Timing System
Front End Processor (FEP)	Data Aggregation Module (DAM)	Timing and Control System (TACS)
Readout Board (RDO)	Sample Aggregation Module (SAM)	Clock and Control Distribution System (CCDS)
Readout Unit (ROI)	Receiver Board (RB)	Global Timing Unit (GTU)
Aggregator (AGG)		

Online Poll:

[https://forms.office.com/Pages/ResponsePage.aspx?id=YB5WiXXcKEyhyS6NiHAZa\\_7VRQLHUcpLoalCAOB7wxhUNTRRS1FHOVNJVfQ4U09QQkZLQTRWNDVPTi4u](https://forms.office.com/Pages/ResponsePage.aspx?id=YB5WiXXcKEyhyS6NiHAZa_7VRQLHUcpLoalCAOB7wxhUNTRRS1FHOVNJVfQ4U09QQkZLQTRWNDVPTi4u)

Please Vote ASAP. I’ll leave the poll open through next Wednesday