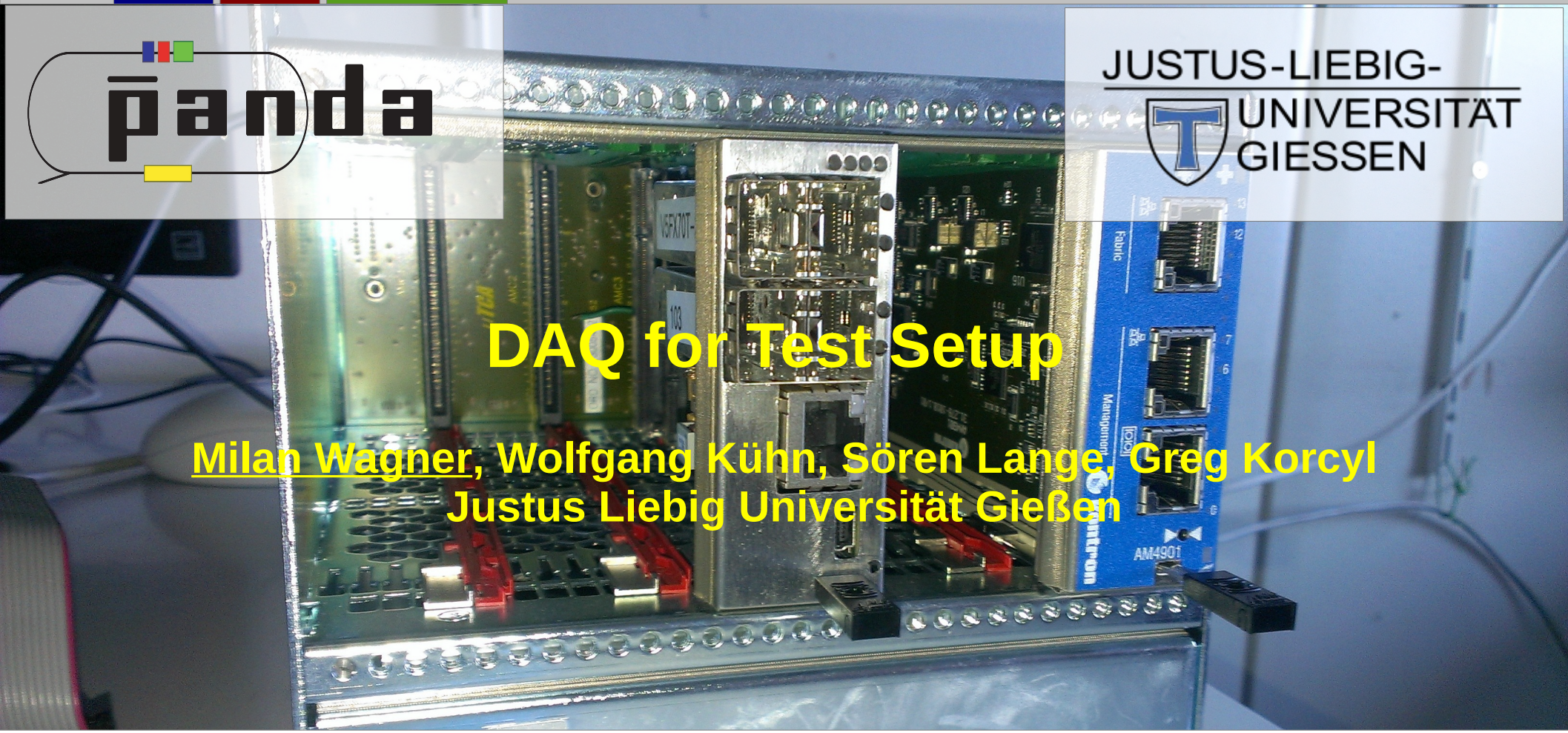
XLVI PANDA Collaboration Meeting (Bochum)



DAQ for Test Setup

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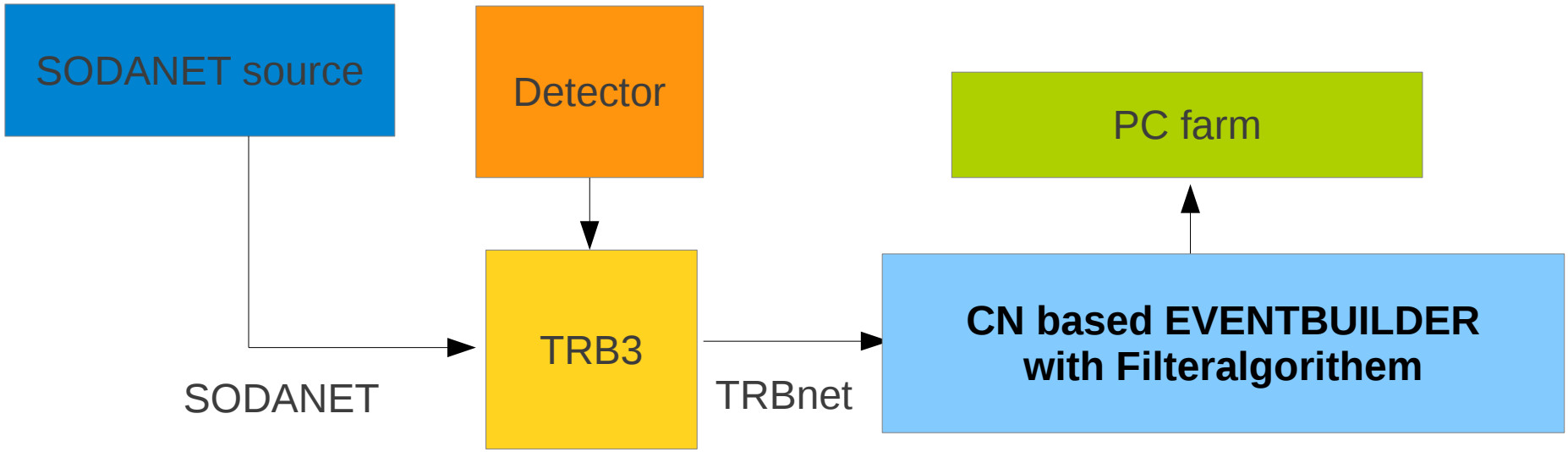
HIC for FAIR
Helmholtz International Center

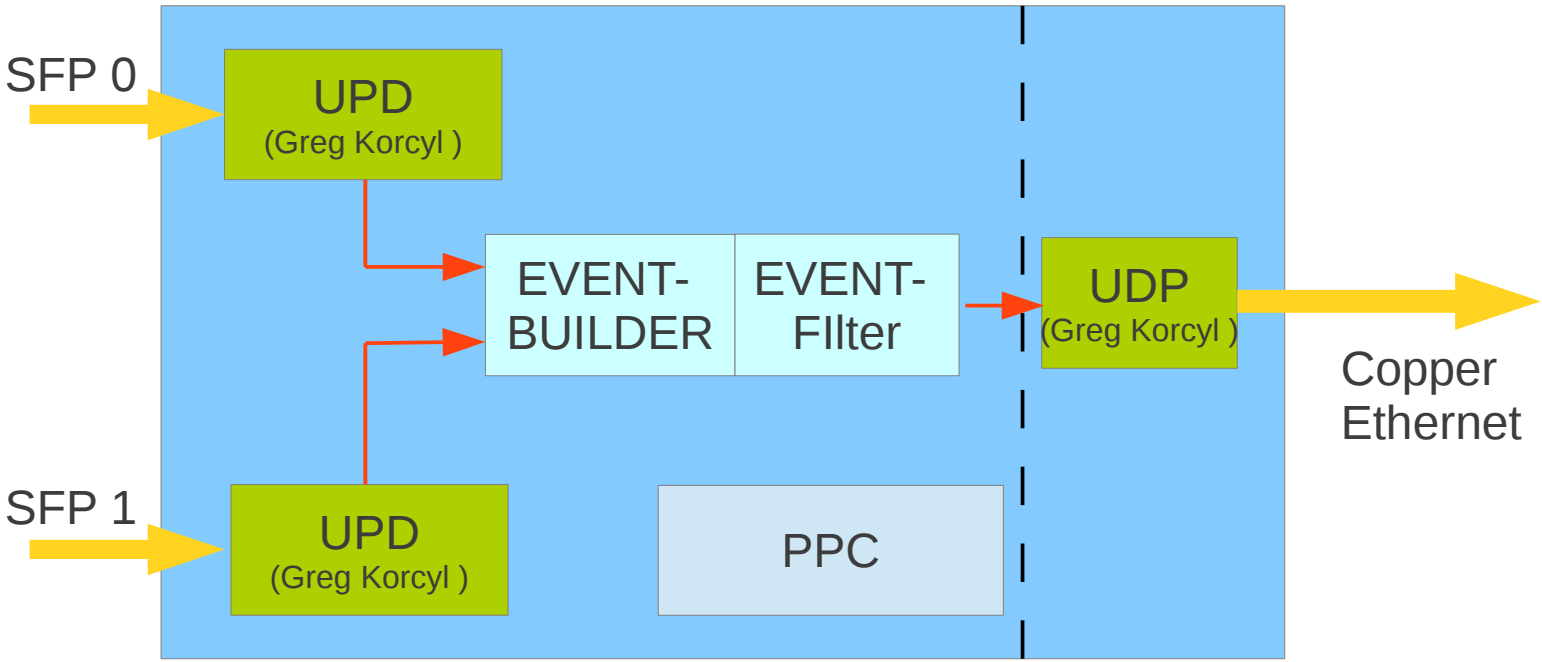
HGS-HIRe for FAIR
Helmholtz Graduate School for Hadron and Ion Research

Bundesministerium
für Bildung
und Forschung



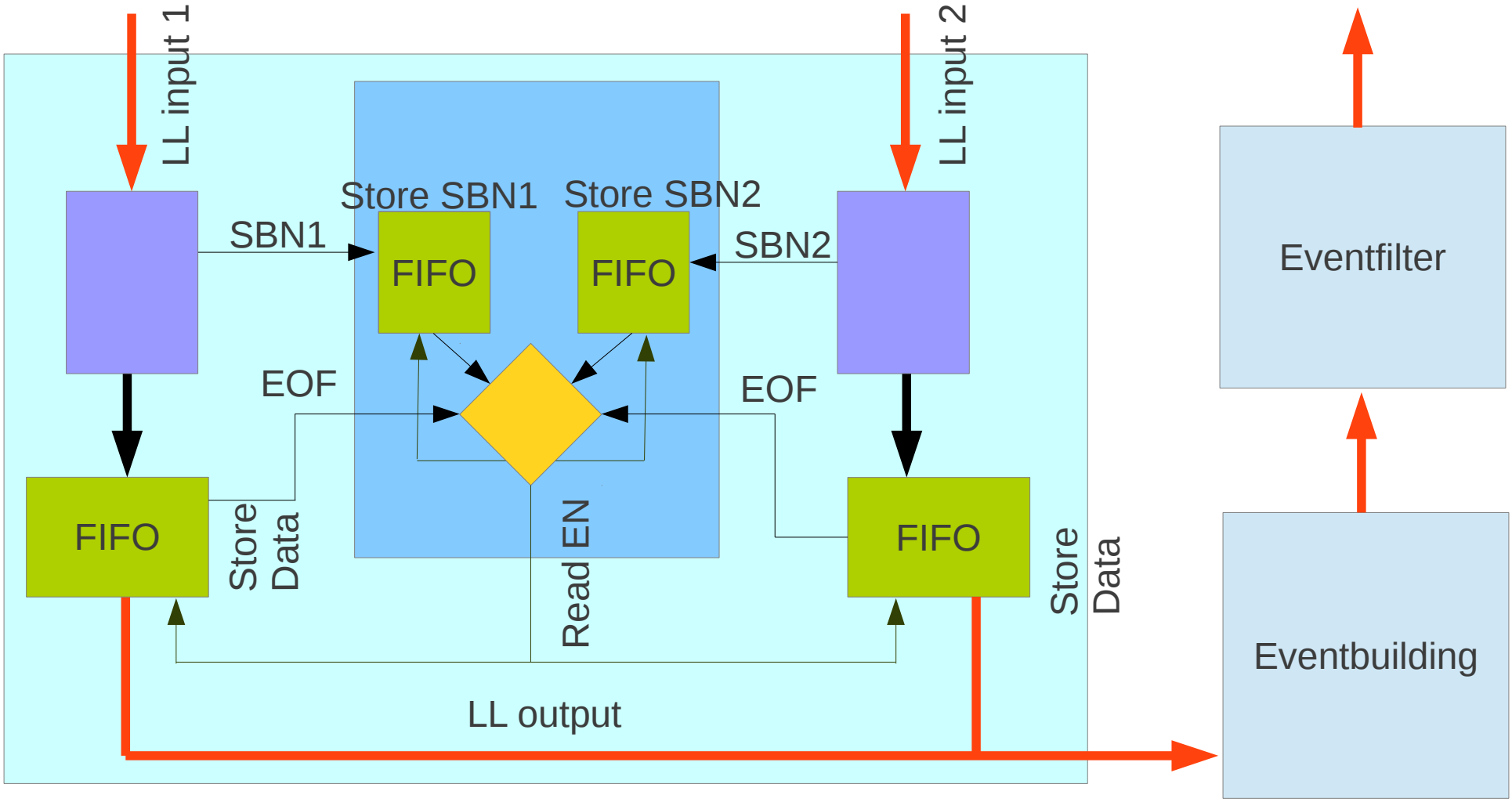
31	16	15	0
last-packet flag		data size	
not used		not used	
status and error		System ID	
Super-burst number			
Data			
Data			
Data			

First Step

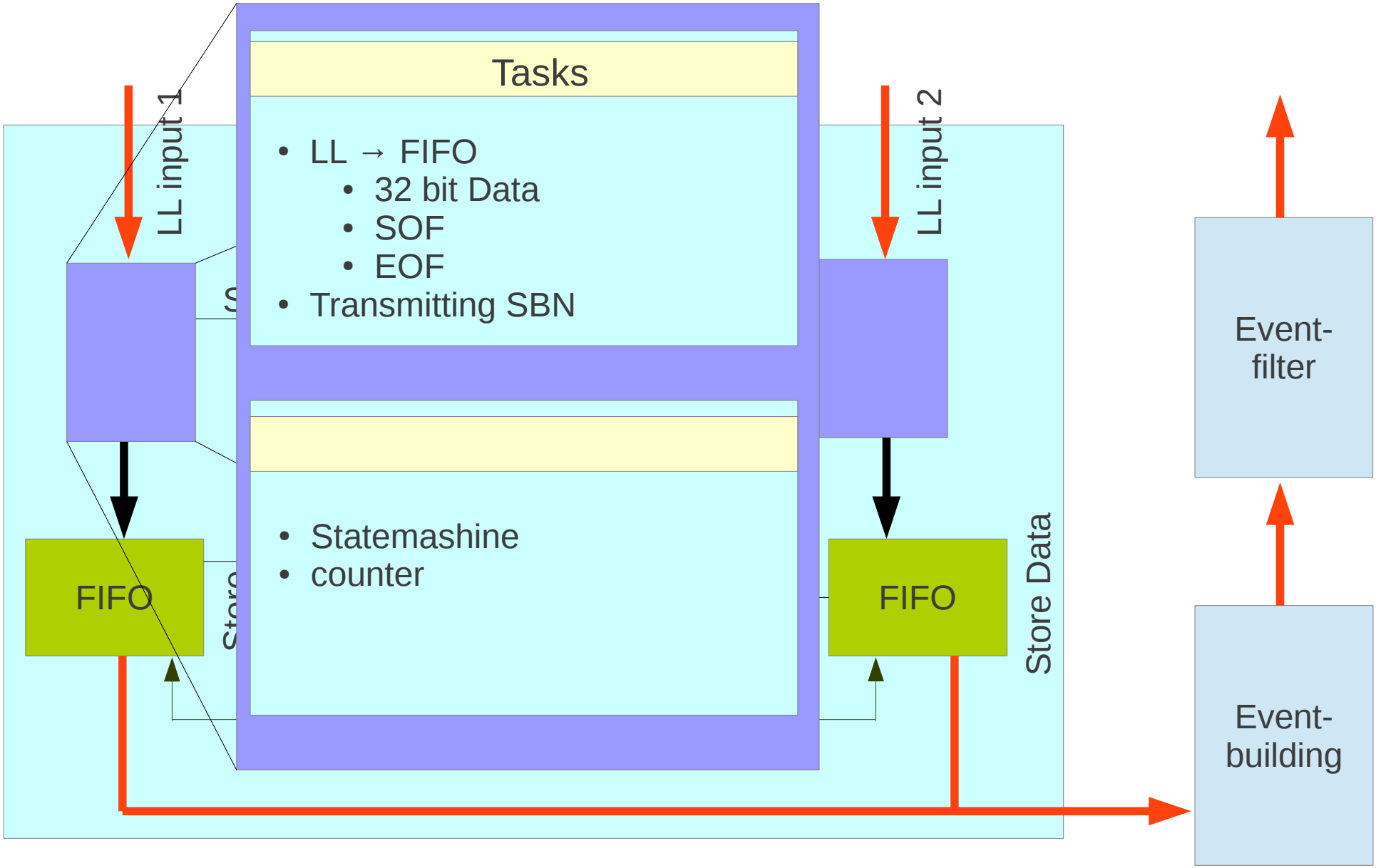


- 2 UDP-resever-cors (Greg Korcyl)
- 1 UDP-sender-cors (Greg Korcyl)
- Local Link interphase

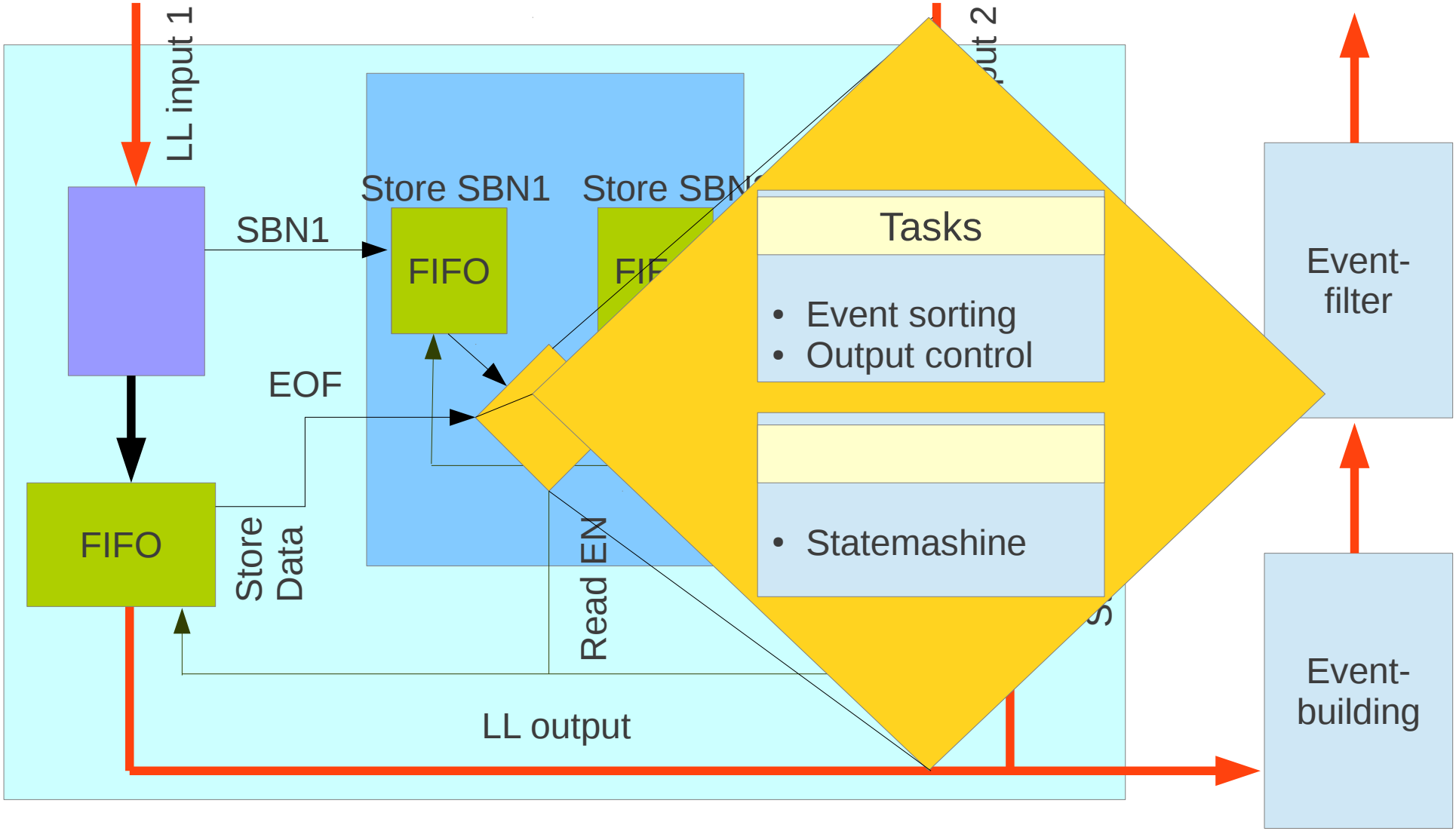
Event Sorting



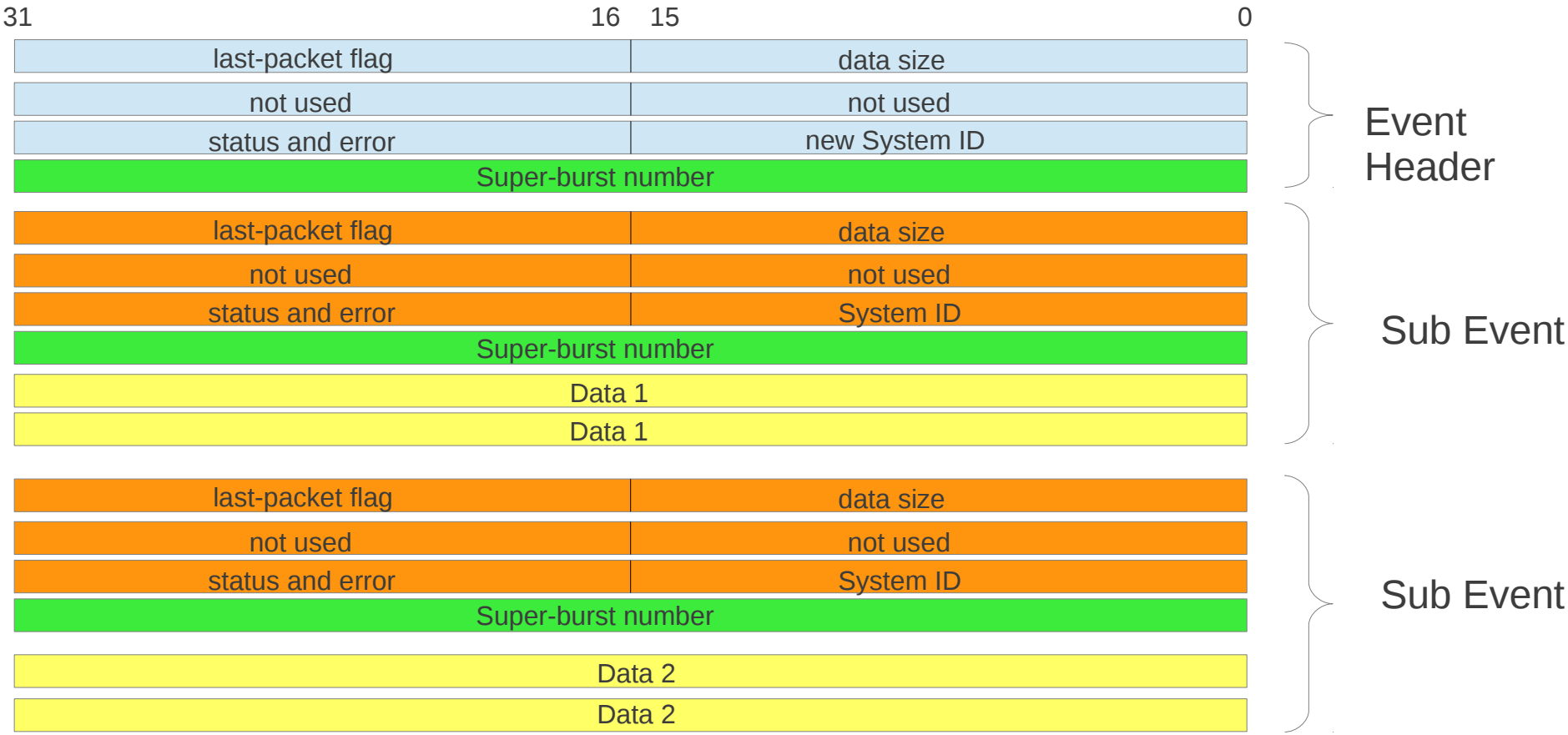
Event Sorting



Event Sorting



Output Dataformat



Next Steps

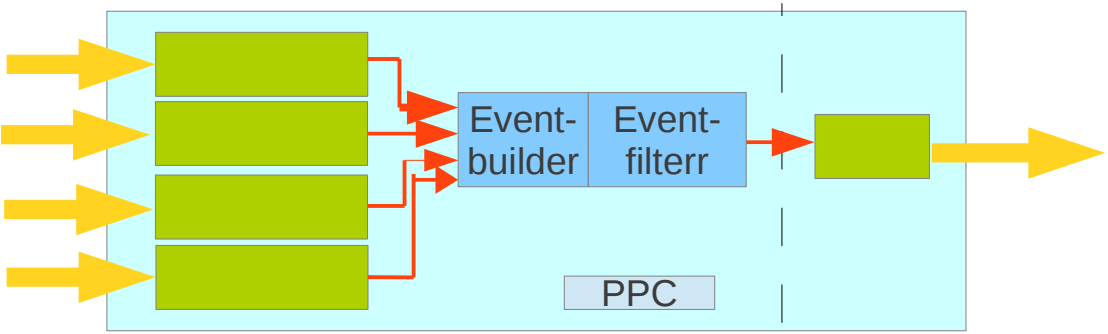
- Eventbuilding
- Implementing on Hardware
- Extend to 4 inputs
- Implement Filteralgorithms

Preassembly DAQ Version I

µTCA

- I xFP v3
  - 4 Inputs 6.25Gb/s
  - 1 Output Gb-ethernet

MicroTCA.0 System, Cube(Schroff)
Including one xFP and 1 MCH



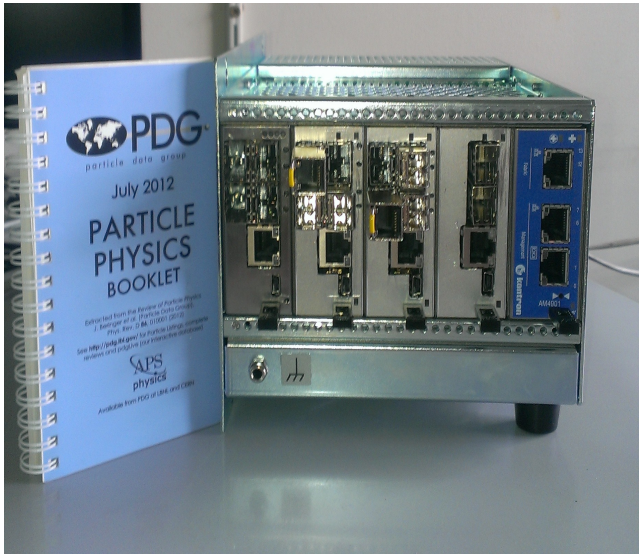
CP xFPv3

Kontron AM4901 MCH

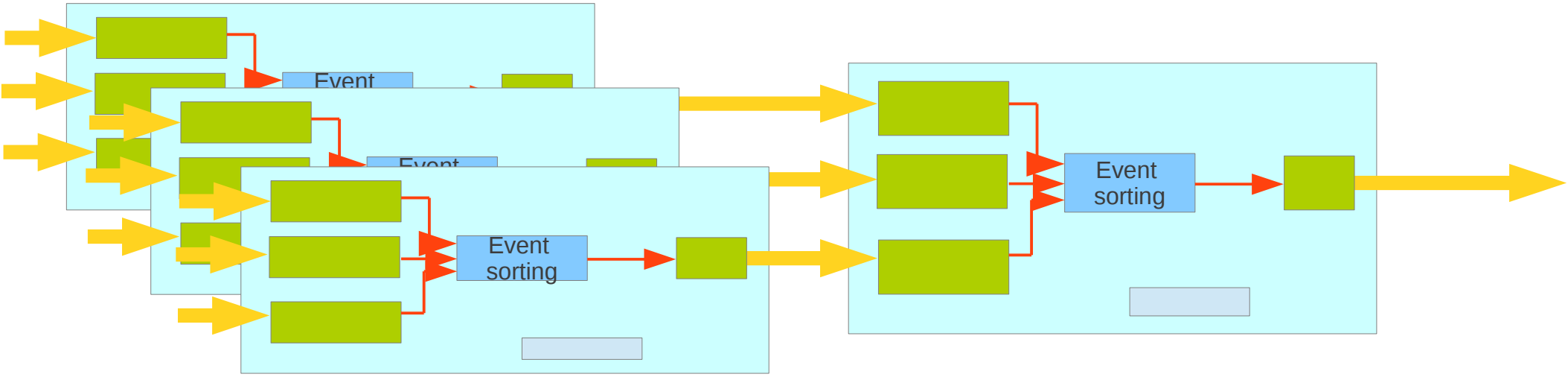
Preassembly DAQ Version II

µTCA

- 4 xFP v3
  - 9 Inputs 6.25Gb/s
  - 1Output 1 Gb-ethernet



MicroTCA.0 System, Cube(Schroff)
Including 4 xFP and a MCH



Comparison

Single card	4 Cards
• MicroTCA.0 System, Cube • AM4901 MCH • 1 CP xFP card • 4 Optical 6.25Gb/s Inputs • 1 Gb-ethernet Output	• MicroTCA.0 System, Cube • AM4901 MCH • 4 CP xFP cards • 9 Optical 6.25Gb/s Inputs • 1 Gb-ethernet Output

Summary

- Status
- 2 preassembly DAQ Versions

Outlook

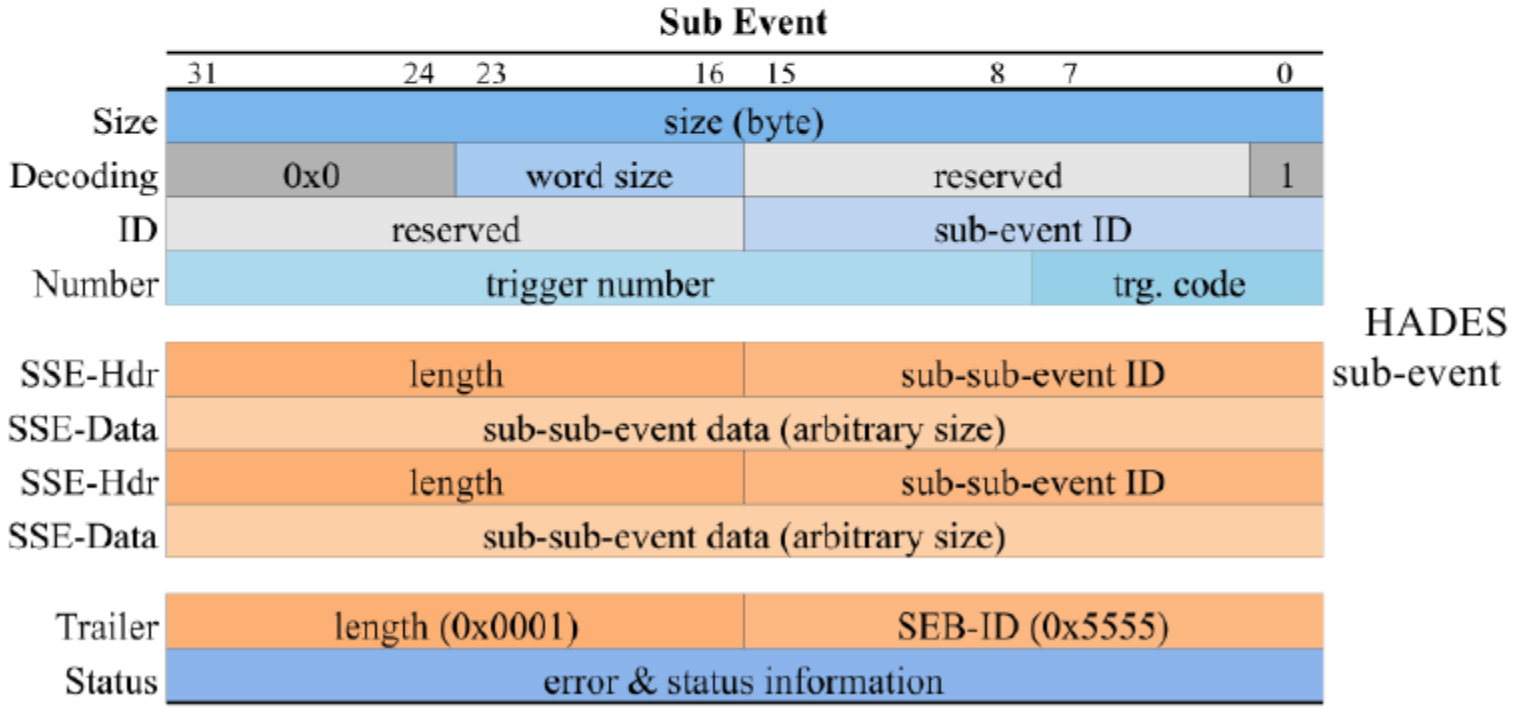
- Eventbuilding
- Implementing on Hardware
- Extend to 4 inputs
- Implement Filteralgorithms
- Futher Tests

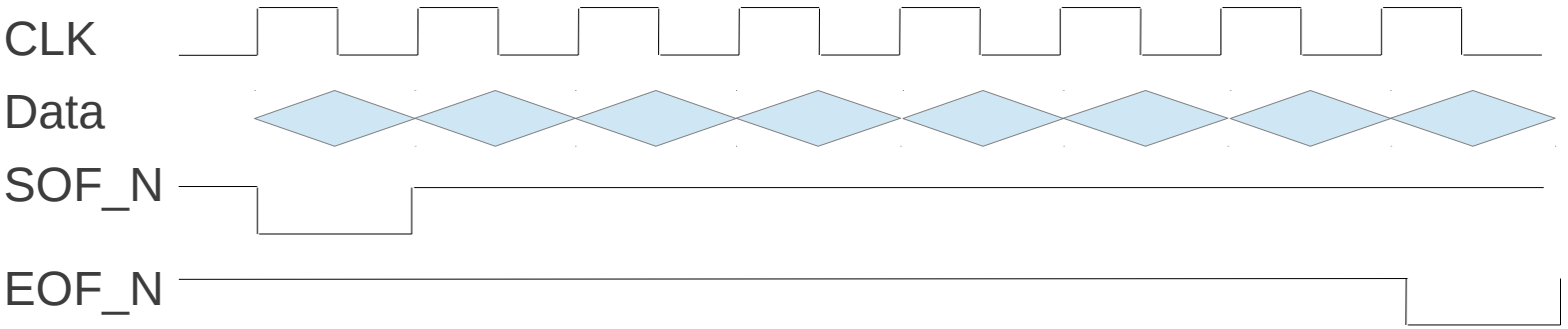
Thanks for your attention

Backup Slides

31 16	15 0
last-packet flag; packet number	data size in bytes
Not used (same as HADES)	Not used (same as HADES)
Status and error	System ID
Super-burst number	
Data	

PANDA data-header




CLK
Data
SOF_N
EOF_N