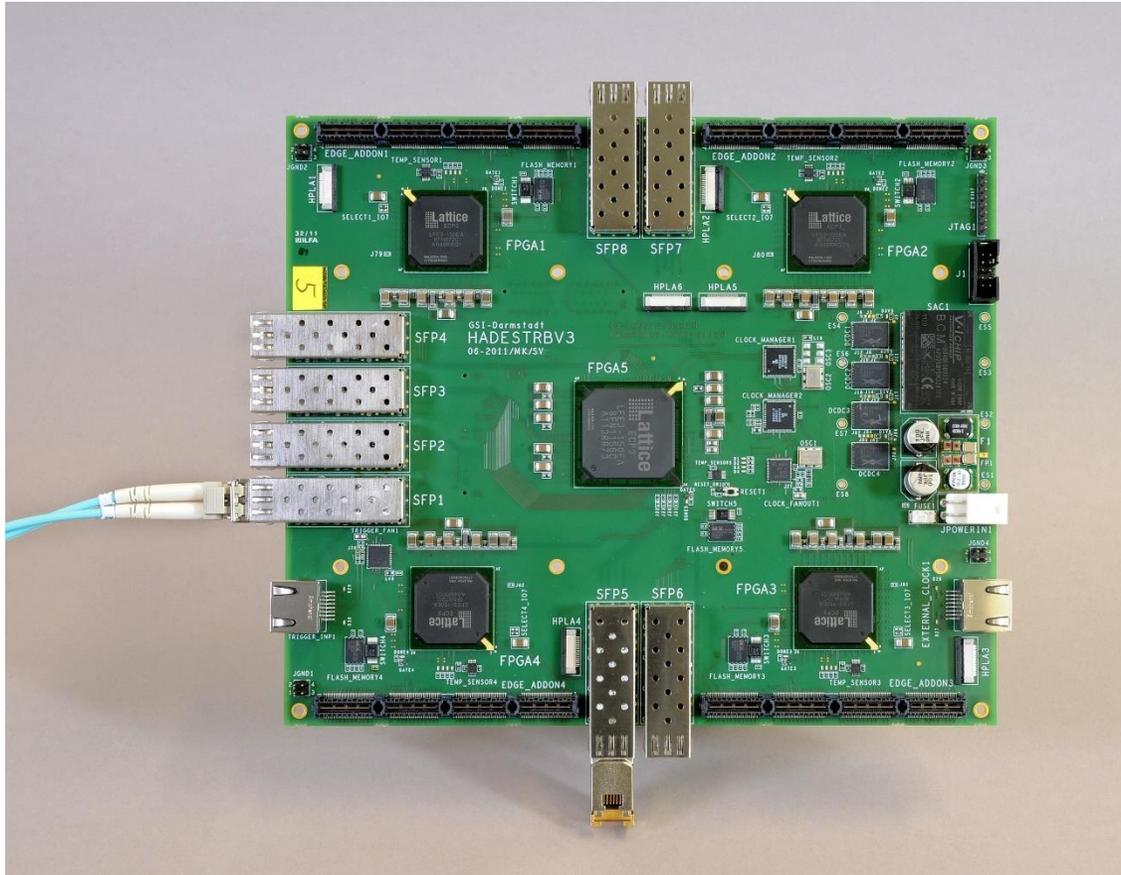


TRBv3 as SODANet Endpoint

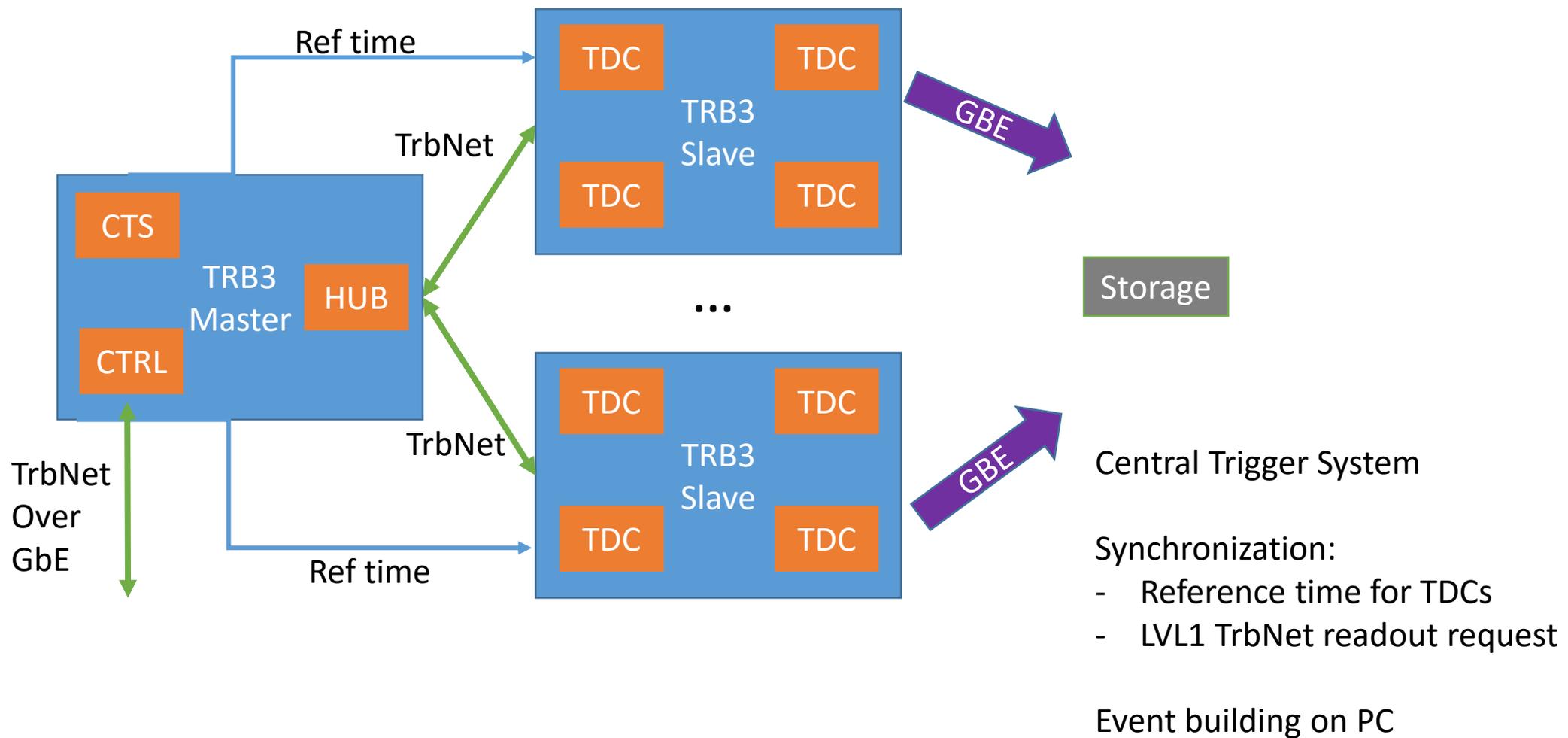
Greg Korcyl, Jagiellonian University Cracow, March 2016

TRBv3

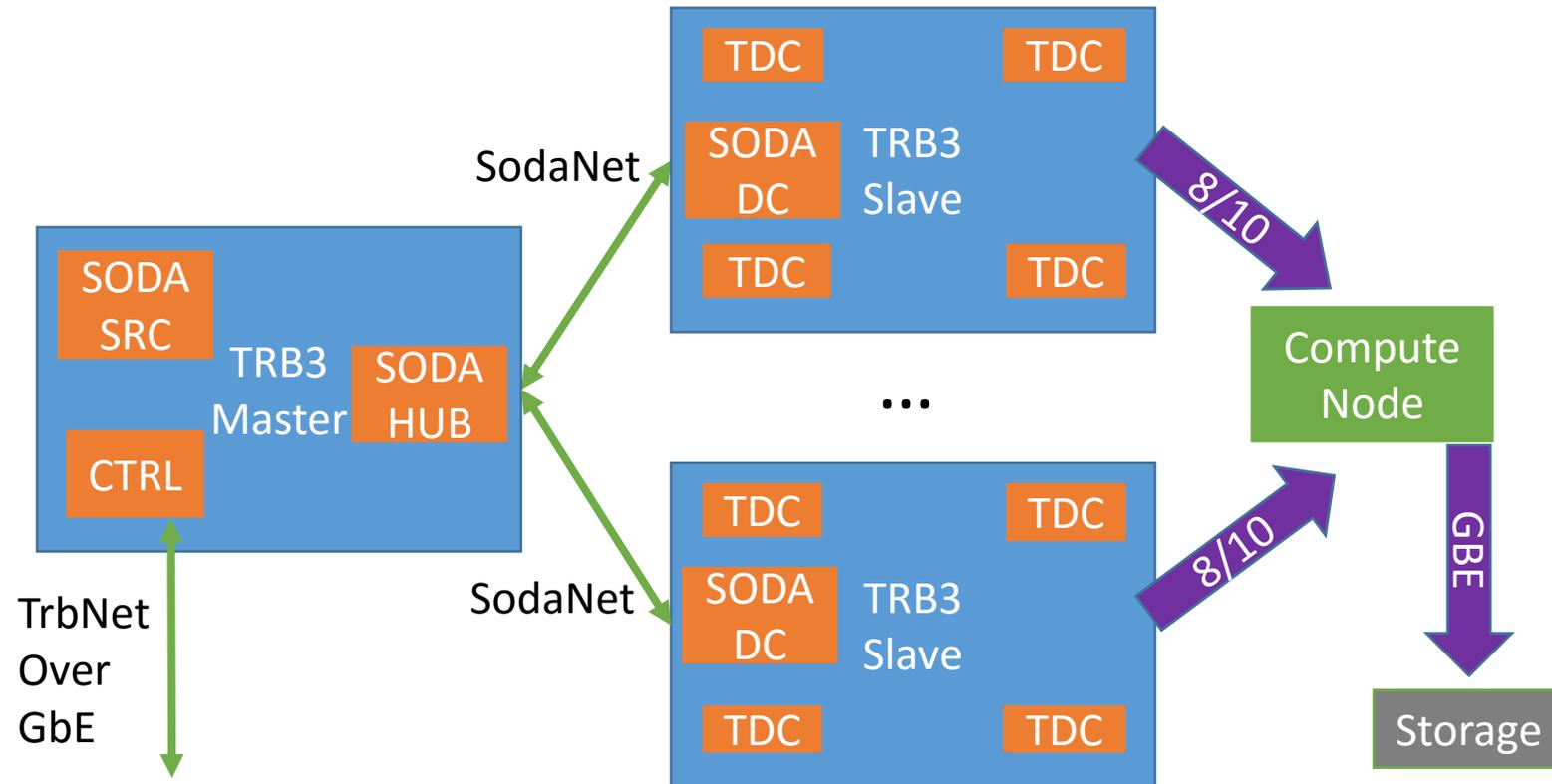


- 4 Edge FPGAs as TDCs
 - Up to 64 channels (+ 1 reference)
 - Double Edge
 - Multihit, configurable ring buffer size
 - TrbNet Endpoints
- 1 Central FPGA
 - Data collector from Edge devices
 - Optical links connection
 - TrbNet hub/endpoint
 - GbE/Custom output
 - Trigger logic
 - TrbNet Slow Control HUB

Multiple TRB3s – Master & Slave



Multiple TRB3s – SODANet

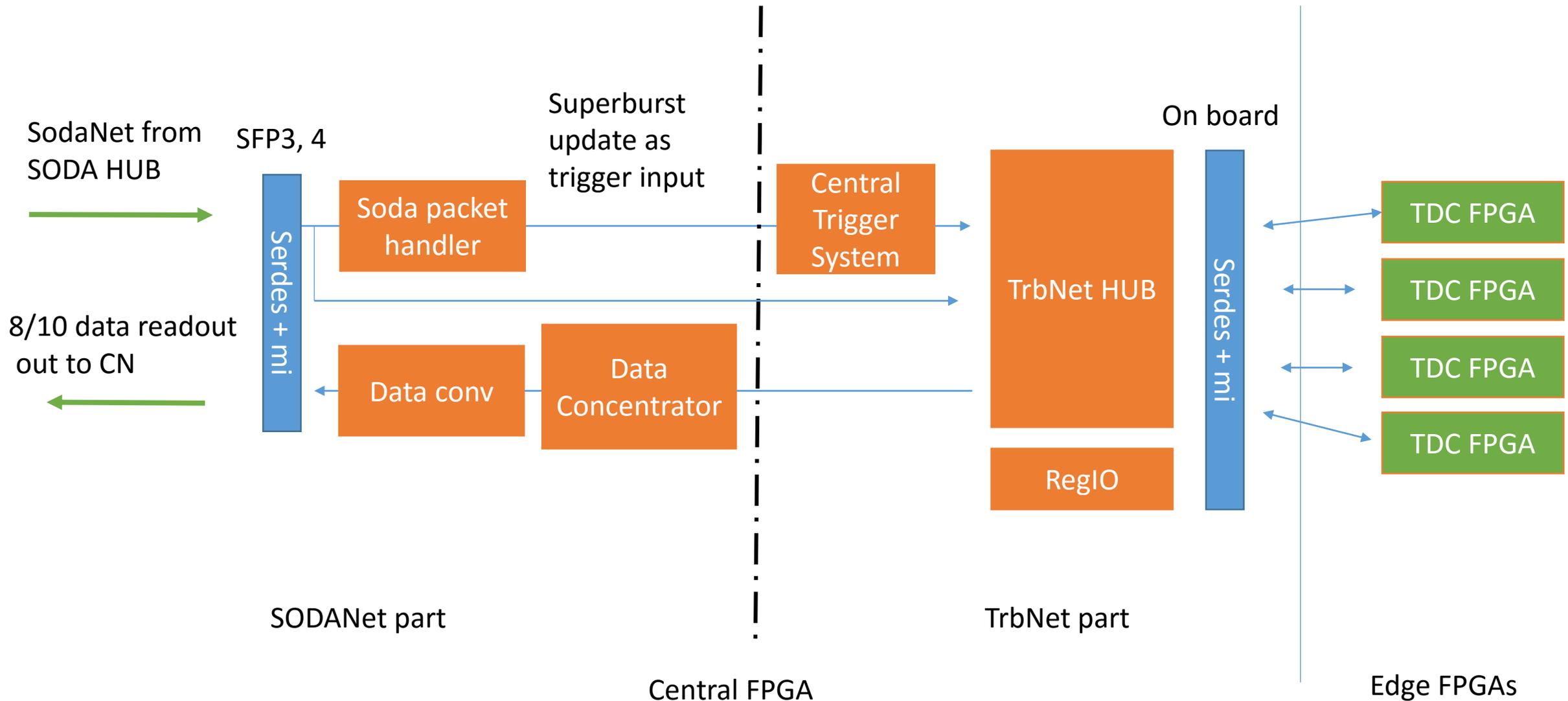


Fixed readout rate from SODA source

Synchronization by SODA superburst updates

Event building on CN

Slave TRBv3 as an Endpoint



TRBv3 as SODANet Endpoint

- Core components implemented
 - Mostly based on basic TrbNet modules and SODANet components for source and HUB
 - Data concentrator encapsulates the TDC data format with BCID headers
- Basic evaluation run performed with another subsystem (EMC) and Compute Node eventbuilding
- To be done:
 - Precise synchronization evaluation and long lasting runs
 - Real setup with STT and multiple TRBs