Available hardware:
- **Detector**: 2CBC2
- **FMC**: CBC2 and RD53A FMC Adapter Cards
- **FPGA**: FC7 R2
- **µTCA Crate**: MicroTCA.4 Cube crate is available but the backplane has only star topology and is not suitable for AMC13. PM module is currently not functioning. Temporarily we are using a µTCA Test Card V2.0 instead.

Waiting list:
- **Chip**: RD53A Single Chip Card (SCC)
- **FMC**: RD53A FMC adapter card with 4 lanes

Tried so far:
- We have assembled a complete test setup with a 2CBC2 module: 2CBC2 + FMC + FC7 + PC (middle-ware) for a better understanding of the entire CMS DAQ system.
- We have tested the test setup with a calibration and it seems to provide meaningful data.
- We generated bitstream from µDTC firmware and tested it.
- We implemented registers in µDTC firmware and tested read/write processes through IPBus.
- We also generated a bitstream from the FC7 golden firmware.
- Implementing an IP Bus Slave for BDAQ firmware is in progress...
Future Development Plan

- mapping and fixing IT-µDTC firmware register addresses
- creating and testing IPBus slave
- porting Laurent Charles’s firmware to FC7
- testing with python scripts
- porting RD53A simulator to IT-µDTC firmware
- porting RD53A FMC Adapter Card to FC7
- I would like to ask for an FC7 schematics if someone already has it
- I am eager to collaborate with the other developers by sharing tasks and especially to test the latest the FW+SW on our system as the development progresses. E-mail: tamas.balazs@cern.ch