Discussion on a dedicated FC7-based TTC board

Trigger and Clock Distribution System (TCDS)

→ No TCDS System foreseen for prototyping and production stages
→ We need something for test beams probably and eventually for large lab setups
→ Propose to implement a controller card on FC7, compatible with AMC13 for distribution and implementing all needed features

Questions related to the tas

• What ideas do we start from?
• What kind of existing system can you start from?
• Do we have any useful documentation?
• What functions should the FC7-based TTC board be able to provide?
• What about porting the Trigger Simulator from AMC13 firmware to the FC7’s firmware?
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- Useful links
  → NAT-MCH - Mezzanine Modules
  → AMC13 firmware repository
    http://gauss.bu.edu/svn/amc13-firmware/
  → AMC13 for CMS Tracker Upgrades
    https://twiki.cern.ch/twiki/bin/view/Main/AMC13forTrackerUpgrade
  → Documentation of the post-LS1 Trigger Distribution and Control System for CMS
    https://twiki.cern.ch/twiki/bin/viewauth/CMS/TcdsNotes

Custom TCDS FMCs