Source Scans with ItkPix

Update

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ITKPIX SOURCE SCAN ISSUE

- Task: Check if changing the tag_base helps after chip is stuck

- Use source scan (trigger on HITOR, uses TAG_BASE 0 - 7)

- Wait until chip is stuck (no data anymore, only FPGA trigger words)

- Switch to random triggers based on FPGA pulser (pre-load CMD and repeat)
  - 32 consecutive triggers + starting from tag_base 12 (completely different tags compared to regular source scan)

→ Chip is still stuck, no data from chip

- Cross-check: this procedure (changing tag base) is working if chip is not stuck
ITKPIX SOURCE SCAN ISSUE

- Task: Check if skipped triggers are reasons that chip gets stuck

- Use source scan (trigger on HITOR)

- Force skipped triggers by sending $n = 16$ triggers with different tag bases + 1 trigger with same tag base as last trigger
  - As expected $n$ triggers are counted + 1 is skipped

- Collect data with regular source scan

→ This works, still can collect data: Skipped trigger counter is not making chip stuck