AXI Stream In Detail (RTL Flow)

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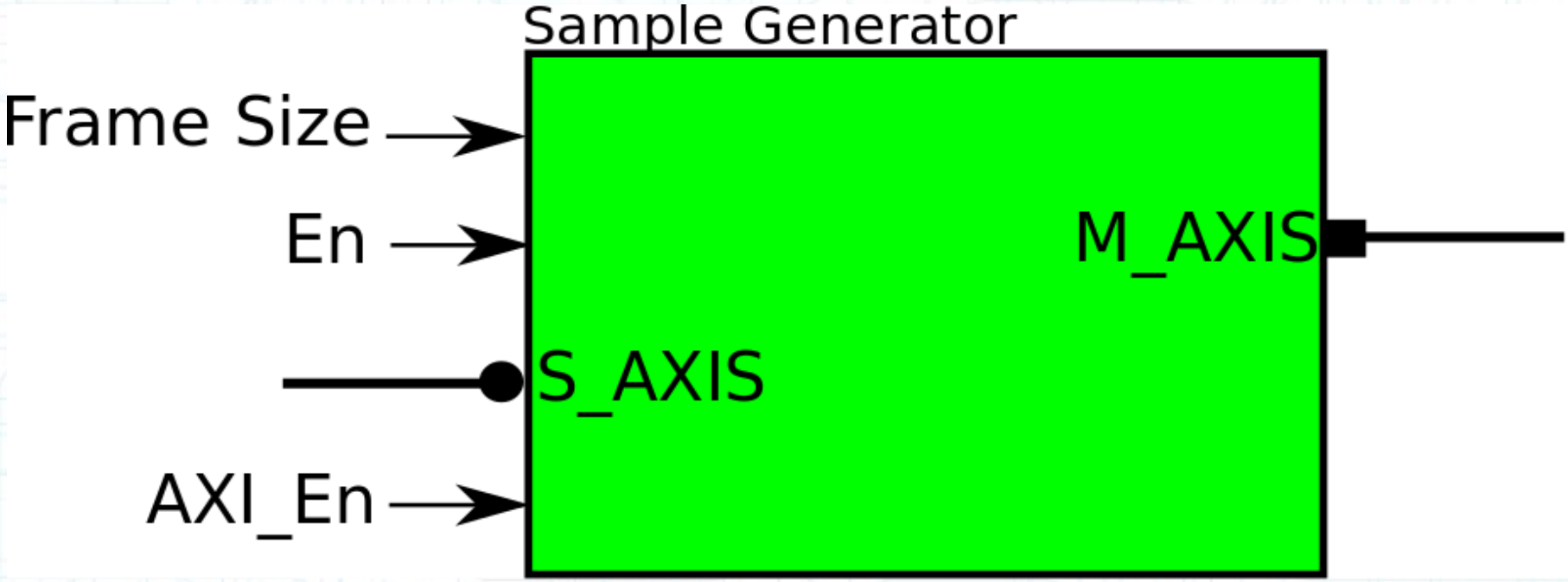
This Lesson

- Create modules with AXI Stream plugs
  - Pure RTL
  - Vivado
- Study the main signals involved
  - Logic simulation
- Create simple AXI stream based architecture

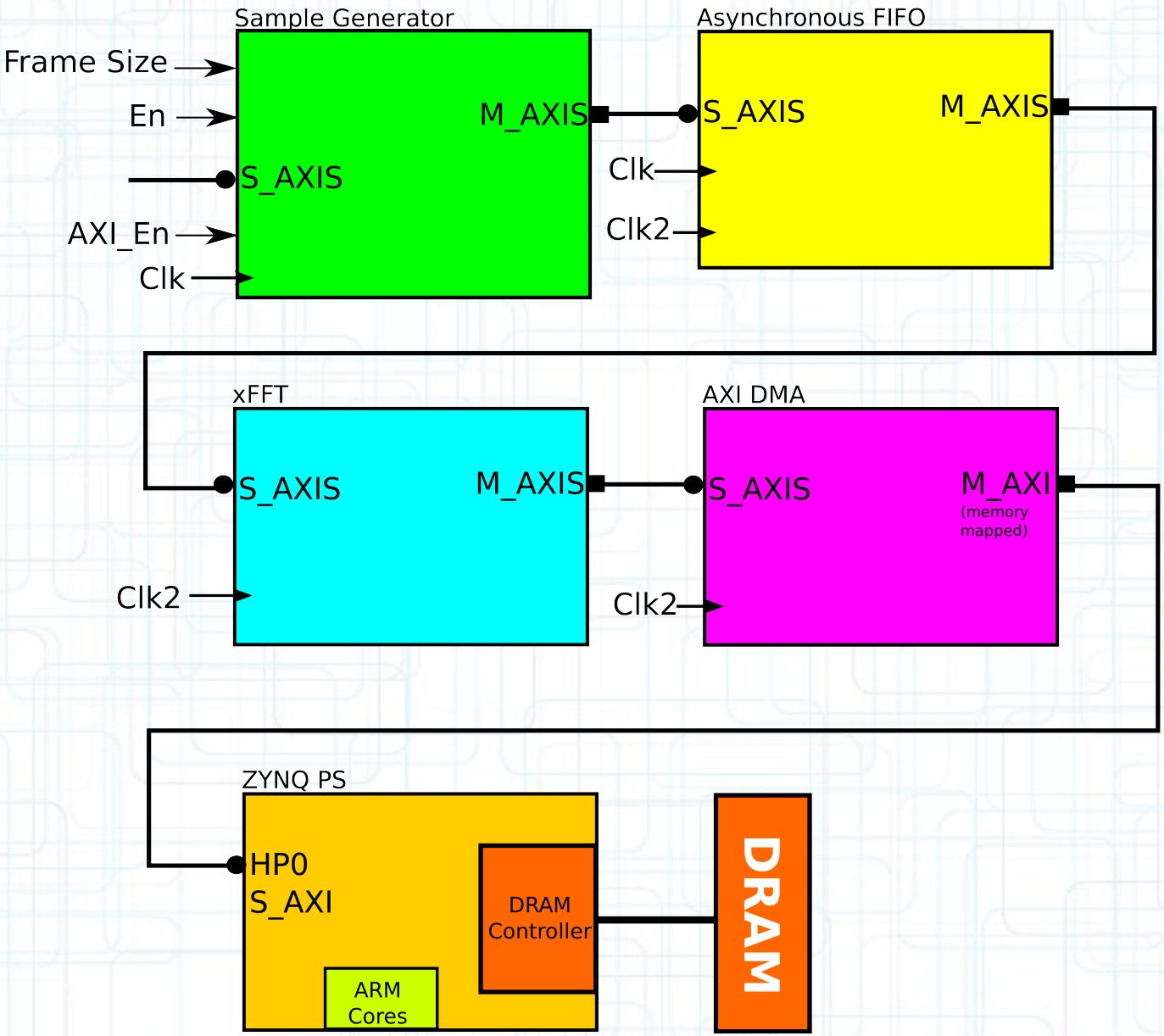
Designing in RTL vs. HLS

- HLS flow:
  - Fast
  - Flexible
- Reasons to use RTL:
  - $$$!
  - Tight constraints on performance
    - The complexity of HLS > RTL
- Best:
  - A mixture of RTL and HLS.

Example Design



Example System



Thanks ...

This is a personal hobby!

Thanks:
- Prof. Luca Benini, ETHZ
- Prof. Norbert Wehn, TU Kaiserslautern

Latest Material ...

My personal web sites :

www.green-electrons.com

www.googoolia.com