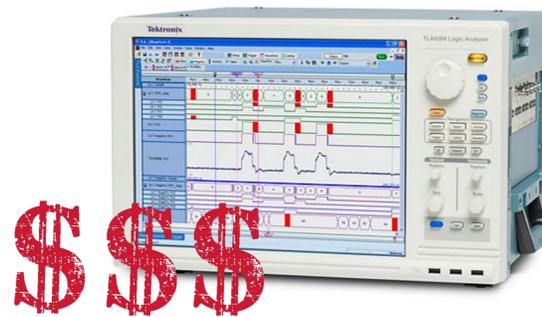


# Enxor Open-source Logic Analyzer

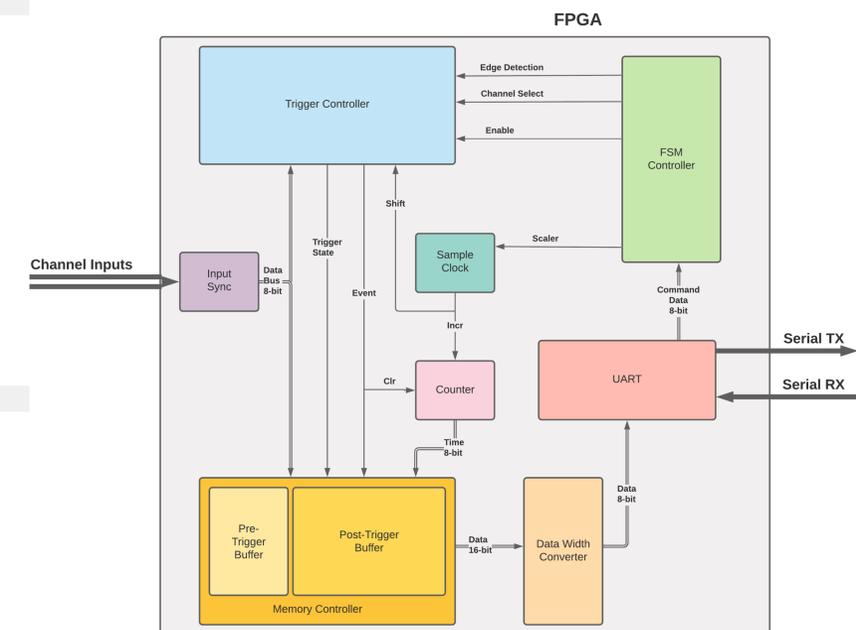
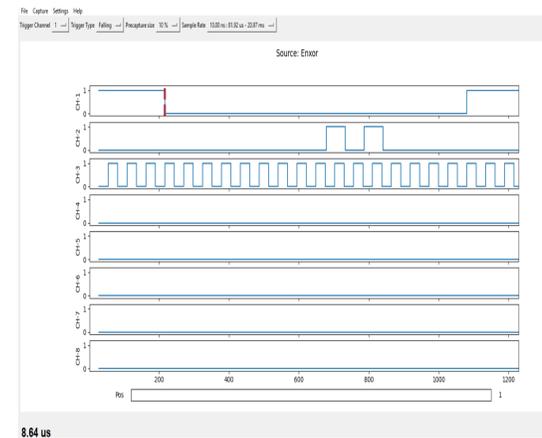
## Project

Professional grade logic analyzers can cost a fortune, putting these devices out of reach from students and electronic hobbyists

- Enxor is an open-source FPGA project allowing anyone to use or customize it
- Enxor can be used to monitor external signals or added as a submodule in a larger FPGA allowing internal signal testing
- No device specific modules allowing Enxor to run on any FPGA
- User interface works on Windows and Linux

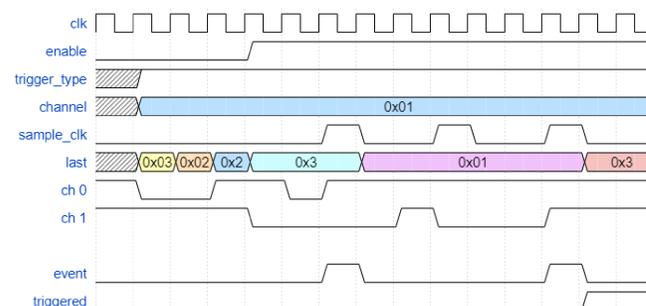


## System



## Methods

- Input data is analyzed for changes, on a change the data is saved to internal memory with a relative timestamp
- Internal memory stores a chunk of data before a trigger condition another chunk after
- Timing diagrams and documentation is included in the repository to allow others to understand and contribute
- Data is sent to the computer to be viewed or saved for later



## Conclusion

- Both the number of input channels and the size of the internal memory could be configured by simply changing the parameter
- Anyone can contribute to the project on GitHub allowing it to expand functionality
- Data can be analyzed and saved to the memory in one clock cycle of the FPGA's system clock.
- Improvements: soft-core processor, external SRAM support, better zoom and pan features, continuous capture, and data compression