

# Alazar Library Requirements

## Goals

- Create a portable C API to interface to the Alazar card to simplify integration with other languages like Matlab, Python, etc ...
  - Alazar already provides a C library in the form of a dll but the goal of libAlazar is to minimize the buffering and averaging complexity required by the application. The libAlazar processing will encapsulate all of the buffer management, averaging, and decimation
- Mimic the libx6 API as much as possible to keep digitizer interfaces standardized

## Build Requirements

- libAlazar will have its own git repository
- libAlazar will be dynamically linked to the Alazar dll ( can they be statically linked ? TBD)
  - Assumes that the Alazar SDK and drivers have been installed in the correct location [TBD]
- Windows and Linux build environments will be supported with a dll built for Windows and a shared library built for Linux
- libAlazar will be compatible with

## Processing Requirements

## Risks/Issues

- Licensing
  - Can the Alazar dll be kept as a binary in github?
- Linux build will be pending figuring out how to run the Alazar in a Linux environment
- Windows 10 compatability - is the Alazar 6.0.3 driver still compatible