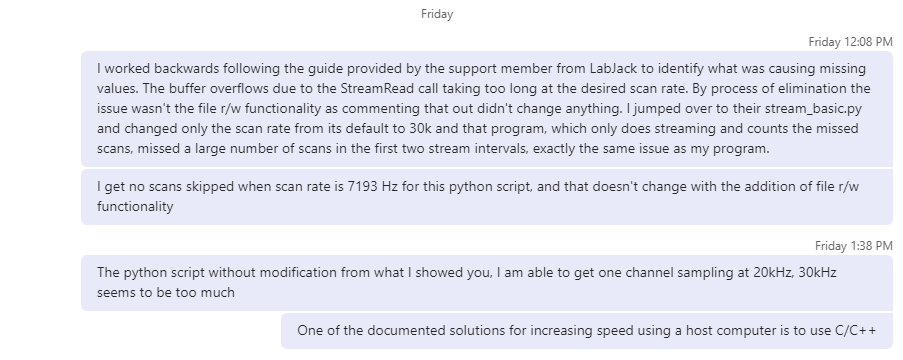
Documentation notes on progress with LabJack T7-PRO

Upon exploring the data rate capabilities of the logger, it is believed that there is some underlying hardware issue that can cause initial stream reads to skip/miss some of the scans/samples from time to time. This corresponds to 1-2 seconds of data where skipped/missing scans occurred for periods of the stream read.

Another downside of the LabJack T7 series is when using stream mode (required for high scan/sample rates), the logger cannot provide timestamp information along with the data. The current version of program works around this, by an initial synchronization of the host computers system time, and the loggers CORE\_TIMER. The timestamps are printed along with the peak values. What is still needed to help ensure accuracy is accounting for clock drift.

The current version still has time to read data grow, but now incredibly slowly. This is still going to be an issue for permanent deployment of the logger because the stream buffer will overflow eventually as a result and end the program from running. At this stage I am stumped with how else to improve the efficiency of the stream reading to remove this growing read time.



A screenshot of a chat

Description automatically generated