

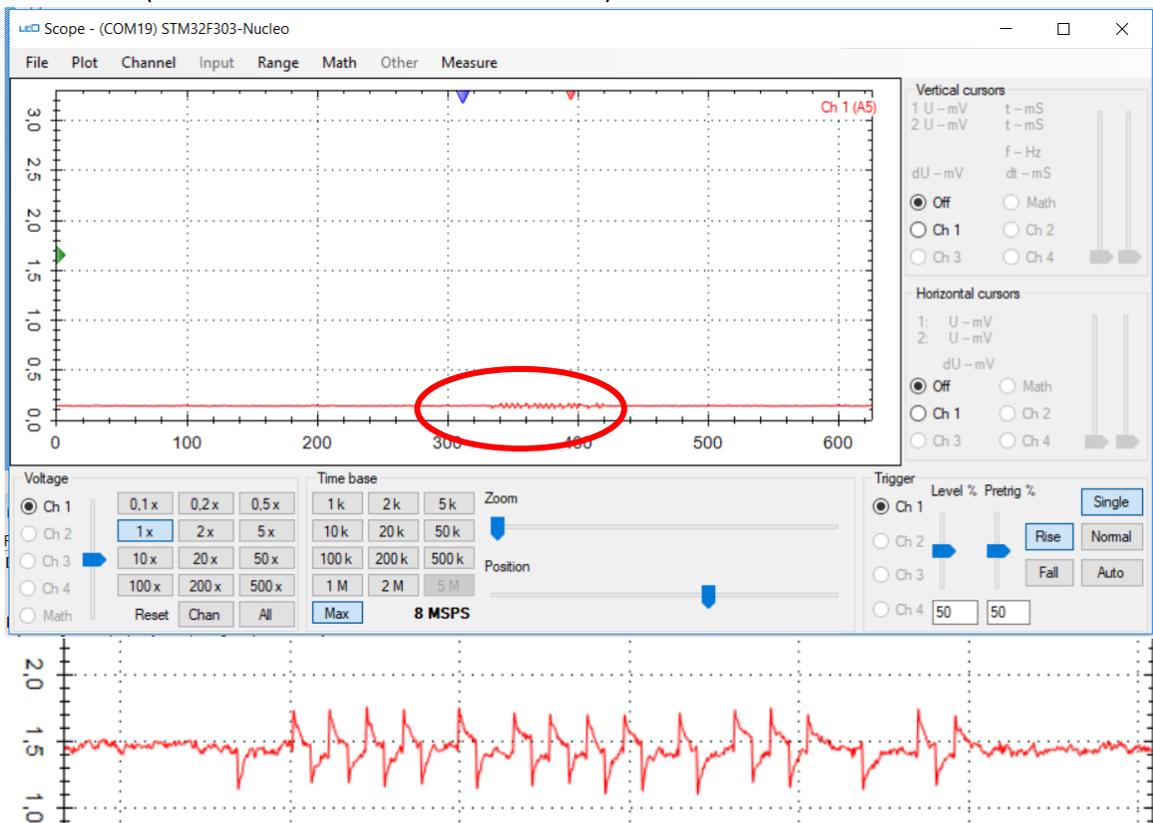
LEO functionality and known limitations in version 2_30a

Voltmeter

- Usually doesn't run at the beginning --> press hold and measure to start
- Sampling 5ksps 200samples
- Voltmeter uses internal reference and reads its calibration from flash. Measured VCC is propagated to other functions like scope and voltage source

Scope

- Other features like generator takes some DMA bandwidth so they might affect the scope transfers especially for higher sampling rates. Scope may have phase shift between channels or signals may be distorted.
- MAX sampling frequency should be used without other features especially generators. (very probable signal distortion)
- Interleaving work only with one channel
- Noise in scope signal is caused by coupling between communication and analog channels on nucleo PCB (UART communication can be decoded)



Counter

- Counter uses async messages to PC so it sometimes got stuck when PC is not able to handle all the messages.
- When scope triggers very often, counter can hardly send messages

Generator

- Loading of the signal uses high communication BW. Is it slower and less reliable if scope is running.
- Generator calculates number of samples to get best frequency fit.

PWM generator

- Like generator but worse. If PWM generator got stuck during signal update, try to disable scope or counter and update the signal again.
- Negative values in signal causes PWM to go to high state
- Sometimes sends XMSG at first update

Logic analyzer

- Not based on scope. Trigger is based on interrupt therefore high frequency signal cause troubles.
- Really buggy 😞