UCTRONICS®

24MHZ 8CH
USB Logic Analyzer

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UCTRONICS TEAM

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INTRODUCTION

- The logic analyzer is a kind of waveform test equipment. It collects the specified signal and displays it to the user through graphical or statistical data. The user analyzes the error in the hardware or software according to the protocol through these graphical timing sequence signals.

- This popular low-cost 8-channel analyzer can be used with Sigrok's open source software PulseView, and it is also compatible with copyrighted Saleae logic analysis software. Please be careful to use the copyrighted software.

- When used with logic analysis software such as PulseView, you can capture and decode up to 8 digital channels at a maximum sample rate of 24MHz. The software includes built-in decoders for a variety of protocols including CAN, I2C, JTAG, SPI, UART and more.

- The PulseView software download information can refer to the link: https://sigrok.org/jenkins/job/sigrok-cross-mingw/buildtype=static,debugtype=release,platform=cross-i686-w64-mingw32/lastSuccessfulBuild/artifact/pulseview-NIGHTLY-32bit-static-release-installer.exe

- For more information about the PulseView please visit the sigrok wiki site: https://sigrok.org/wiki/Main_Page

- For more detailed instructions on using the USB Logic Analyzer, please download it from the below link
https://www.uctronics.com/download/Amazon/U6041_PulseView.pdf
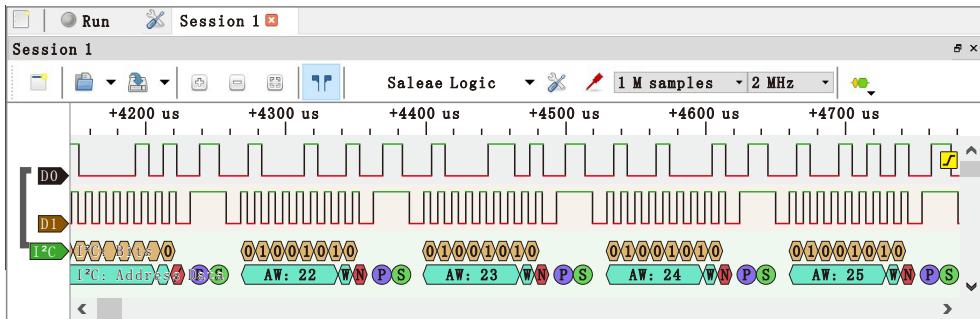https://www.uctronics.com/download/Amazon/U6041_Saleae.pdf

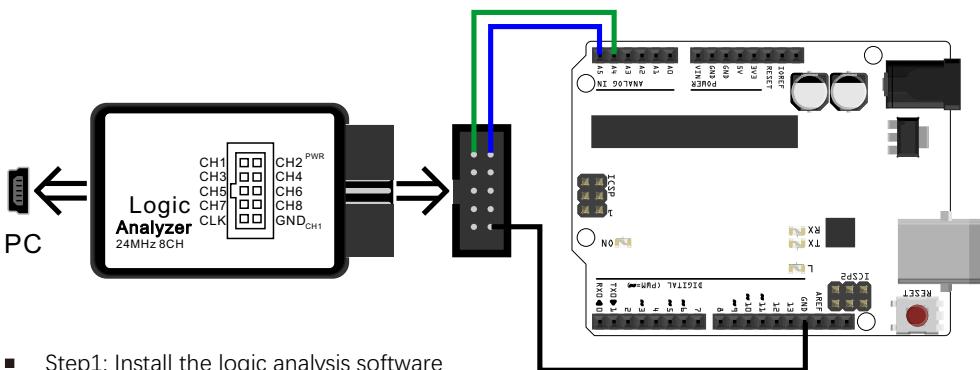**Note: Analysis software from Saleae, the copyright is owned.**

FEATURES

- The number of channels: 8
- Sampling rate: 24MHZ
- Led power indicator
- Led logic level indicator for channel 0
- Powered by USB
- Sampling death: 1T
- Sample rate type: 24MHz, 16MHz, 12MHz, 8MHz, 4MHz, 2MHz, 1MHz, 500KHz, 250KHz, 200KHz, 100KHz, 50KHz, 25KHz
- Voltage range: 0-5.5V Voltage threshold: 1.5V. Below 1.5V will be considered low level, between 1.5V and 5.5V, will be considered high level.
- Sampling rates at 4MHz and above will be dependent on system performance including the speed of your computer and the USB interface it is connected to.

SIGNAL COLLECTION

- Let us take the PulseView as an example.

QUICK START GUIDE

- Step1: Install the logic analysis software
- Step2: Connect the hardware. In the user guide, we connect the A4(UNO) to CH1 and A5(UNO) to CH2 and GND(UNO) to GND. You can refer to the above picture
- Step3: Add protocol decode. In this user guide, we add I2C protocol
- Step4: Set the trigger signal mode
- Step5: Click run to collect signal
- Step6: You can analyzes the i2c data according to the protocol through these graphical timing

TROUBLE SHOOTING

■ In general, as long as your computer is fast enough and there is no interference from other USB devices, there is no problem with the logic analyzer reaching a sampling frequency of 24M. However, if the current USB device is being used by other devices, the maximum sampling frequency may be lower by one or two levels, such as 16M, 12M, and so on.

■ If you want to maximize the sampling rate for your computer, more detailed information Please refer to the Operation Manual.

PRODUCT DISCLAIMER

■ This cost-effective 8-channel analyzer can be used in conjunction with PulseView, an open source software by Signok. It is also compatible with the logic analyzer software Saleae, to which the copyright is owned.